



## User Manual

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## I. Prerequisites for PBRs

All of the following prerequisites must be met in order to successfully install and use PBRs. If any of the following requirements are not met, some or all of PBRs's functionalities will not work as designed.

**IMPORTANT:** *You must be logged on to your server or PC as the LOCAL ADMINISTRATOR during installation. You can use the software as a normal user after installation is complete, but we highly recommend that you carry out the installation process as a LOCAL ADMINISTRATOR in order to ensure trouble-free use afterwards.*

### Operating System - (New Installation)

Please ensure at least **ONE** of the following 64 bit Operating Systems is in place with all the latest service packs and/or updates installed. The operating systems listed below are a prerequisite when installing PBRs on a new server.

- Windows 10
- Windows Server 2012
- Windows Server 2012R2
- Windows Server 2016
- Windows Server 2019

### Operating System - (Updating PBRs)

Please ensure at least **ONE** of the following 64-bit Operating Systems are in place with all the latest service packs and/or updates installed. The operating systems listed below are a prerequisite when updating a currently installed PBRs instance.

- Windows 10
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016
- Windows Server 2019

## Operating System - Additional

Please ensure **ALL** of the following are in place:

- .NET Framework 4.6.1 (minimum)
- IIS Version 7 (minimum) - required for the Web Application otherwise not required.
- UAC is switched off during installation, can be switched on after.
- **Minimum Processors/Cores: 4**
- Primary Drive Disk Space
  - **Minimum:** 20 GB free
  - **Recommended:** 200 GB total
- Installed Memory/RAM
  - **Minimum:** 16 GB
  - **Recommended:** 32 GB

*Disk space and Memory/RAM requirements will vary based on report outputs.*

## Microsoft Office

If you will use extended Output functions (e.g. Email, Excel Bursting, Document Properties, etc.), please ensure that **ONE** of the following is in place with all of the latest updates and fixes installed:

- Outlook/Excel/Office 2013 64 Bit Version Only
- Outlook/Excel/Office 2016 64 Bit Version Only
- Outlook/Excel/Office 365 64 Bit Version Only

*If you are using any other versions of Outlook or Office, ensure you have installed the latest service packs and updates.*

## Microsoft Exchange

If you use Exchange to process email, please ensure that the following is in place:

- Any version of Exchange released after January 2006 (Exchange 2007, Exchange 2010, etc.)

*Integration with other versions of Exchange may work even if the latest service packs are not installed, but some functionality may error or be unavailable. For best results, please ensure you have applied the latest service pack and all updates.*



## SMTP Server

If you use SMTP to process email, please ensure that **ALL** of the following are in place:

- You must know your mailbox security credentials.
- Your server must allow relaying.
- The IP address of the PBRs machine is whitelisted on the mail server.

*If you do not know your mailbox security credentials or are unsure if your server allows relaying, please contact your Email Administrator.*

## Windows NT Service Scheduler

PBRs installs a background application scheduler by default. However, if you wish to use the Windows (NT) Service scheduler, you can do so by going to **Options > Scheduling** and clicking the **radio button** next to *Use NT Service*.

Prior to using the NT Service Scheduler, you must ensure **ALL** of the following:

- The Windows Service user has full security rights to the mailbox to be used (if you will be emailing reports).
- The above user has full security rights to network files and folders (if you are reading reports across the network and if you are exporting to network folders).
- The above user has full security rights to any FTP location you may be exporting to.
- The above user has **Log on as service** rights on the local PC.
- The above user has **Act as part of the operating system** rights on the local PC.
- The above user is a **local administrator** (or a member of the local administrator group) of the PC.

*If you need assistance with any of the prerequisites listed above, please contact your system administrator.*

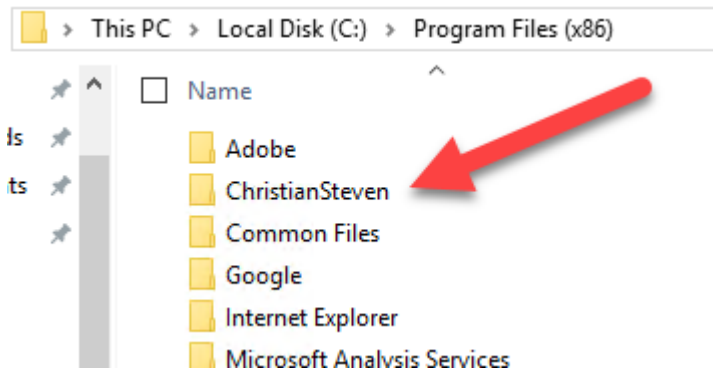
## User Account Controls

At the time PBRs is installed on the machine, it is imperative that the User Account Controls (UAC) on the machine are turned **off**. Please ensure that you or your IT personnel are available to disable this feature until the installation is complete.

Once the installation is finished, these can be turned back on.

## Anti Virus and other Security

Your new software is designed to integrate with your existing systems as well as run unattended. It therefore needs to be whitelisted in all your security systems and anti-virus software. Whitelist the "ChristianSteven" folder that was created by the installation process, its files, sub-folders and contents of the sub-folders.



## I. Before installing the program

Before beginning the installation, please ensure that **ALL** of the pre-requisites listed on the [PBRS Pre-Requisites page](#) have been met. This ensures that PBRS runs as expected. Failure to meet the listed pre-requisites may result in errors occurring.

- A reboot of the PBRS server will be required after installation is complete.
- Please make sure you are using a 64-bit Operating System.
- PBRS DSNs will only support ODBC Data Sources (64-bit).
- Installing Microsoft Office 64-bit is recommended.

## II. Installing PBRS

### Preparing for the Installation

*These steps must be completed **prior** to running the PBRS installer.*

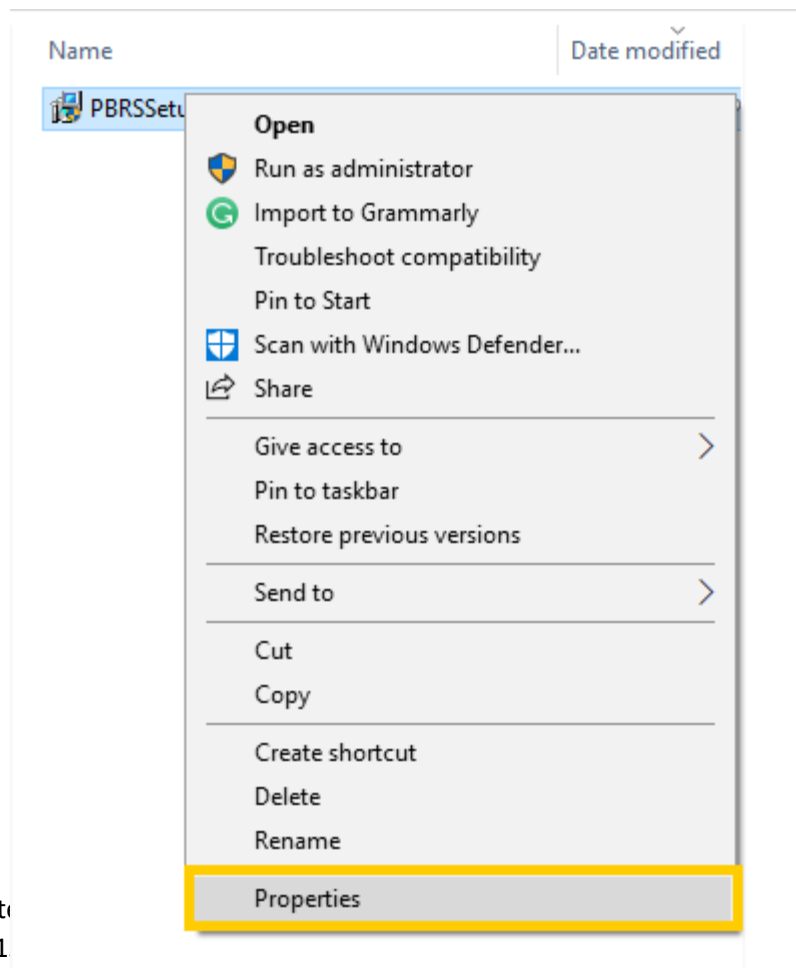
After downloading and extracting the latest build/version of PBRS, perform the following steps:

#### 1. User Account Control

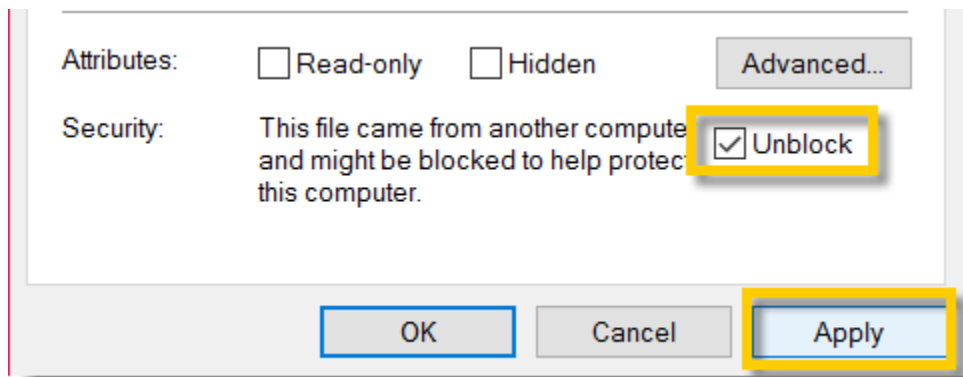
If you are installing PBRS for the first time on this machine, turn off the User Account Control (UAC). You can turn it back on once the installation of PBRS has completed.

#### 2. Unblock the PBRS installer

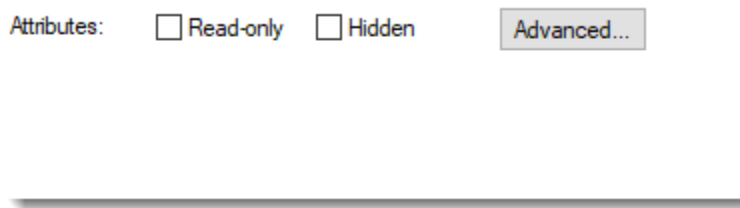
- a. Open the appropriate **PBRS version/build folder**.  
*This is most likely located in your Downloads folder.*
- b. Highlight and then right-click the **PBRSSetup** file.
- c. Click **Properties**.



- d. On the *General* tab, click **Unblock** in the lower right corner.



*If Unblock is not present, the PBRS installer is already unblocked.*



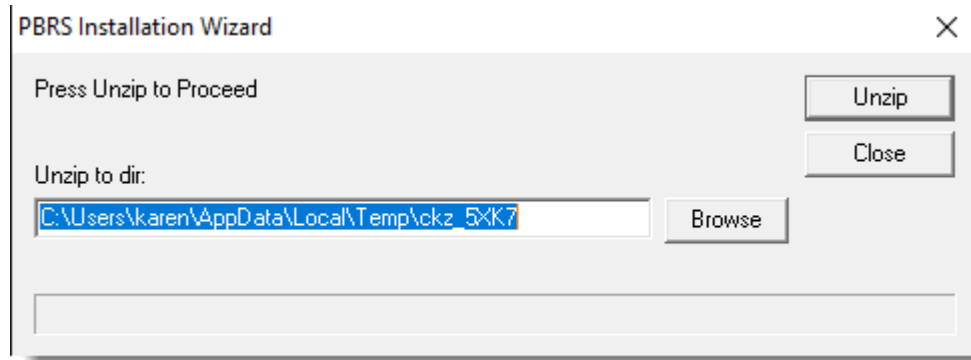
*Some security features, such as Windows SmartScreen, can block certain files or flag them as potentially unwanted. If the PBRS installer is run without being unblocked, PBRS will not run properly.*

- e. Click **Apply**.  
Click **OK**.

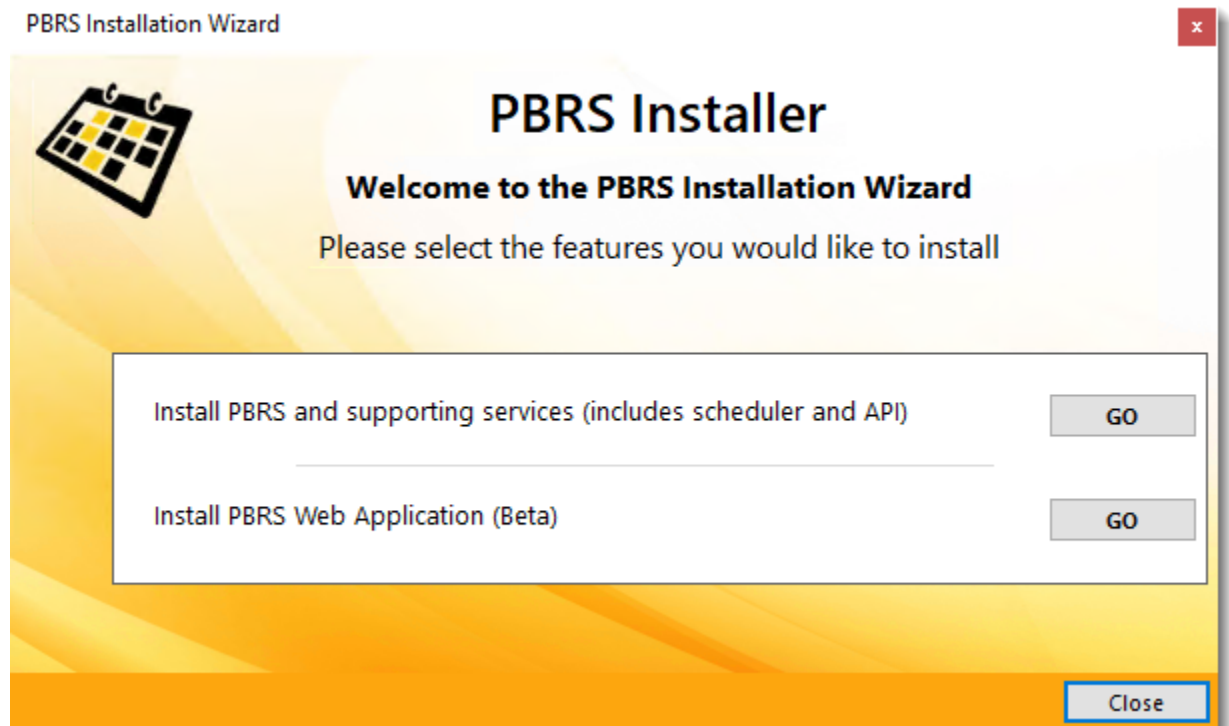
## Beginning the Installation

To install the latest build/version of PBRs, perform the following steps:

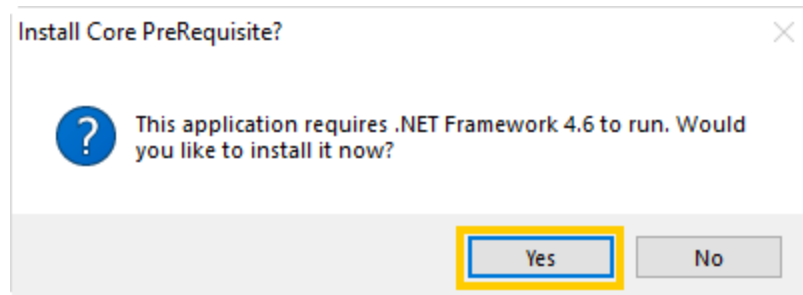
- Double-click the **PBRsSetupX**
- Click **Unzip**.



- PBRs Installation Wizard will appear.



- Click **Go** next to **Install PBRS and supporting services (including scheduler and API)**.
- Click on the **Yes** on the *Install Core PreRequisite?* pop-up window.



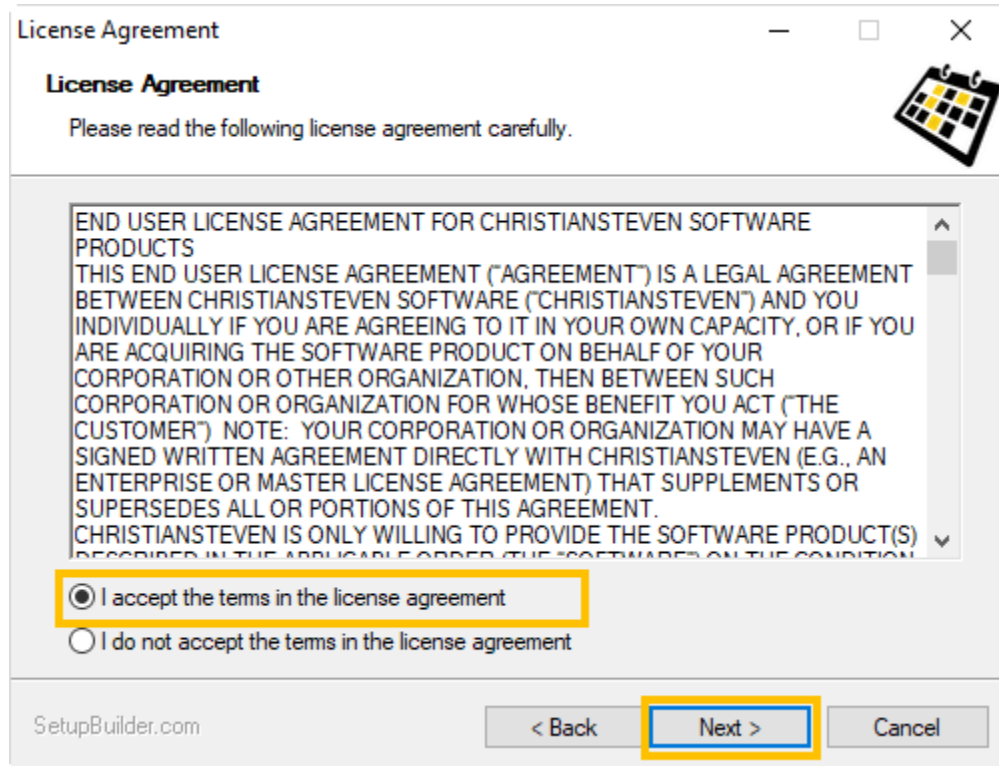
- Click **Next** on the Welcome message.



- Carefully read the License Agreement.

Once you have fully read and understood the License Agreement, check **I accept the terms in the license agreement** checkbox. Then, click **Next**.

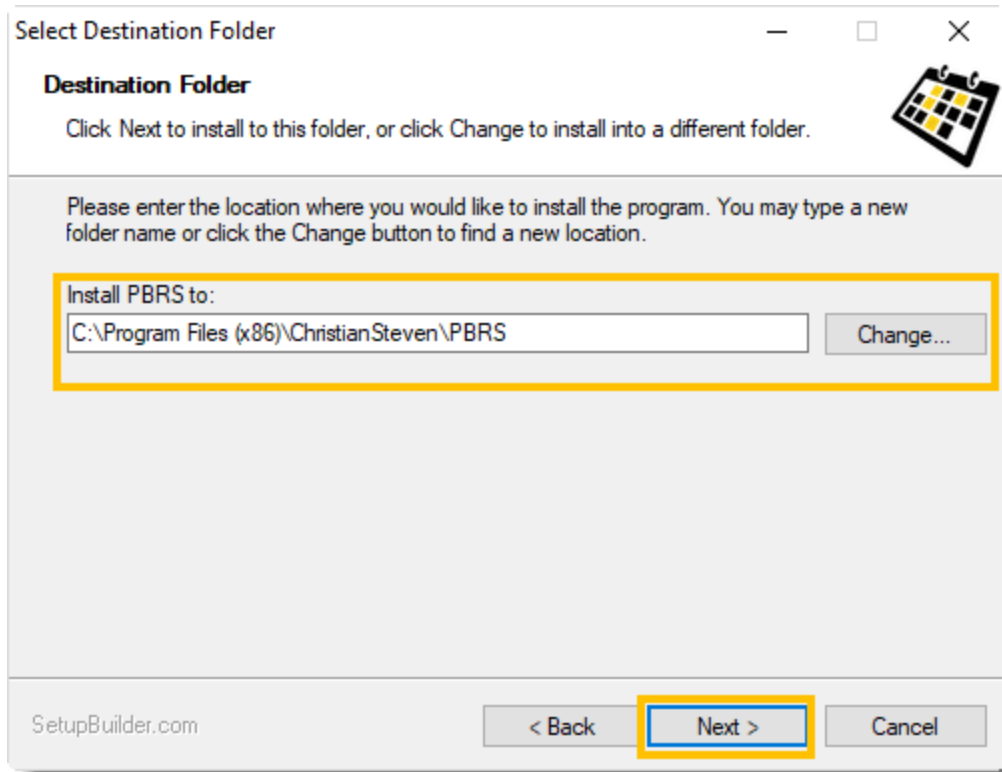
*If you do not accept the terms of the license agreement, you will not be able to proceed with the installation.*



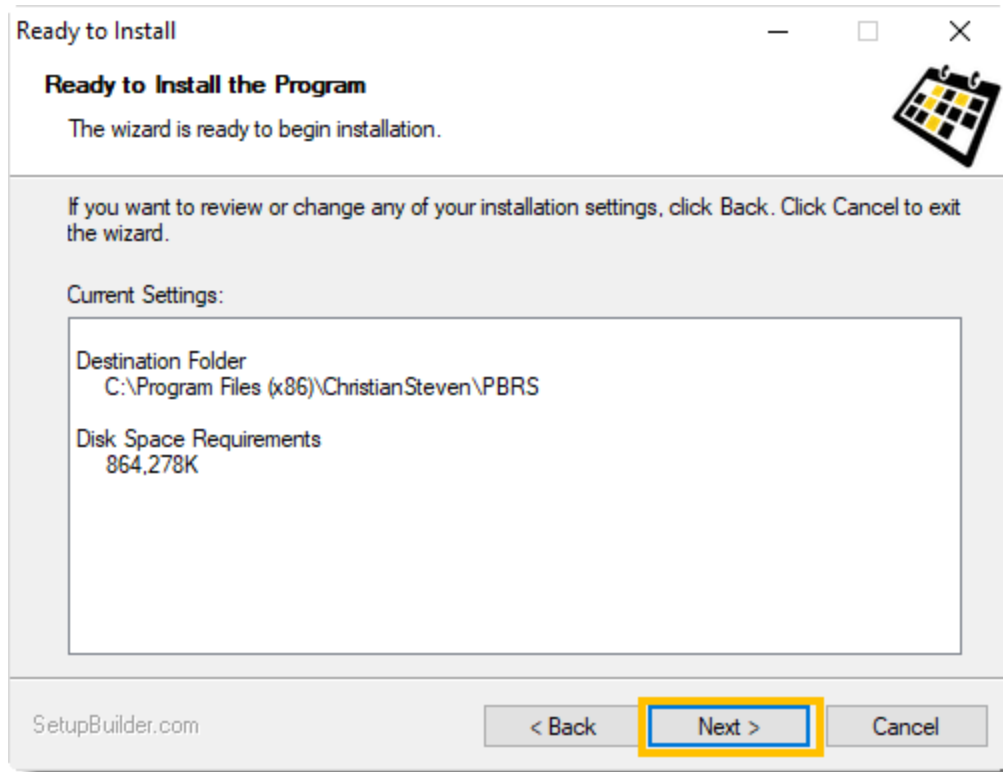
- Now, you will see the *Select Destination Folder* screen. You can choose to leave the default destination folder that is currently listed or select your own. Click **Next**.

*Leaving the default destination as the destination folder is recommended.*



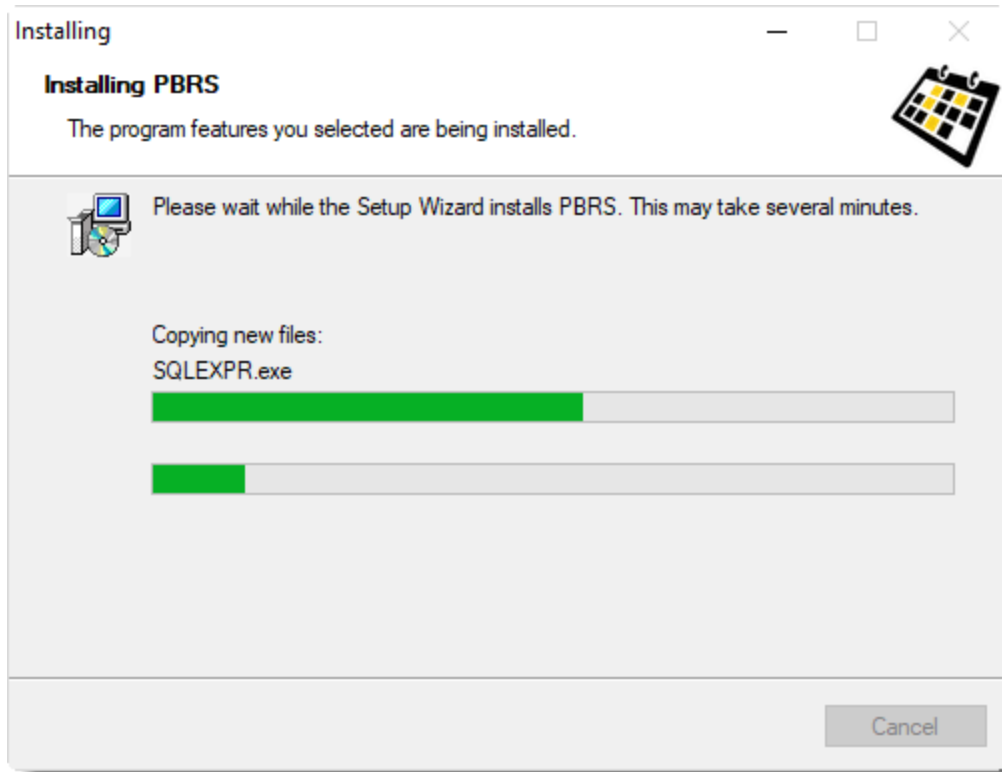


- You should now see a *Ready to Install* window detailing the current settings for the PBRS installation. These details include the destination folder you chose in Step 10, as well as the Disk Space Requirements for the PBRS installation.
  - Click **Next**.

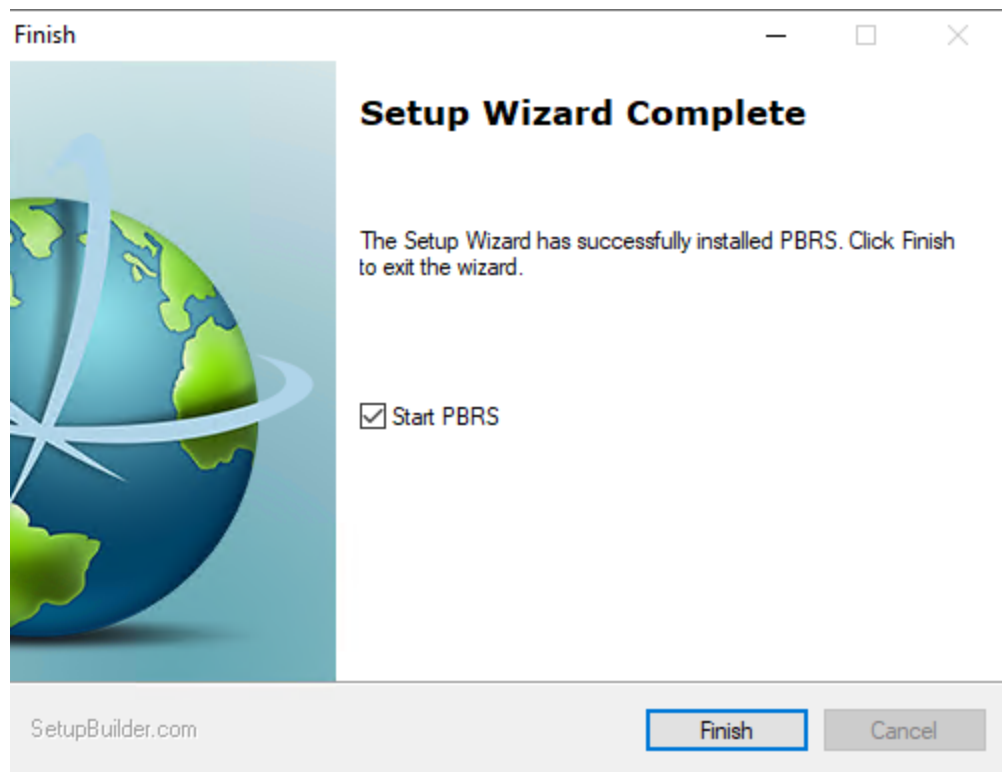


*The Disk Space Requirements will vary from build to build. This is only the amount of disk space that is required for the installation/components of PBRS.*

- Allow the PBRS installation to complete. You do not need to click anything during this process.

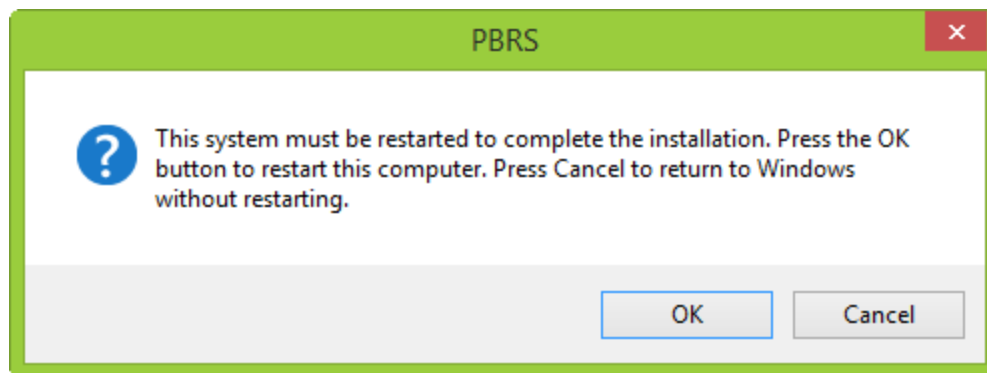


- When the *Setup Wizard Complete* screen appears, click **Finish** and it will start PBRS.

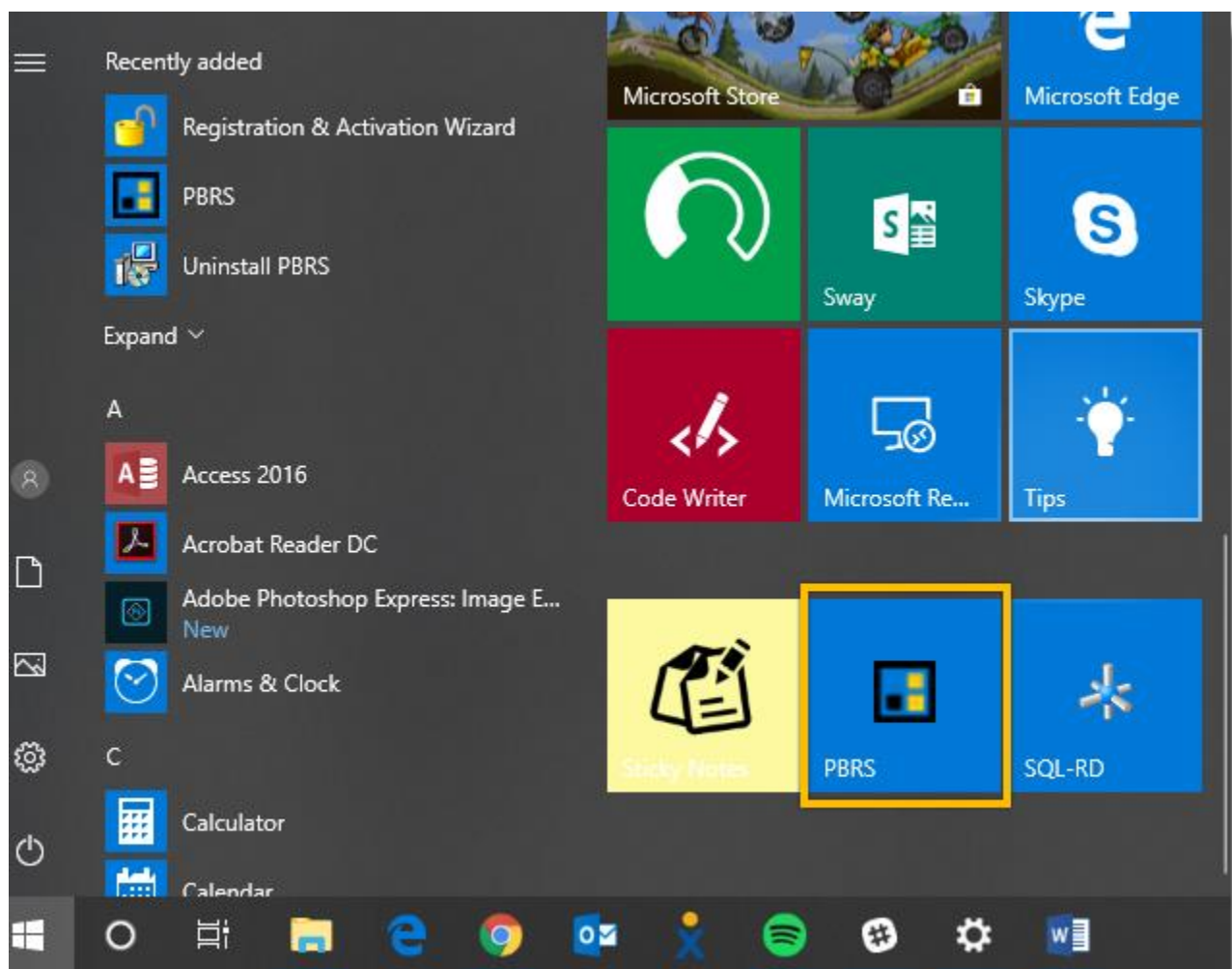


- At this time, you may see a pop-up stating that you will need to restart your computer in order to complete the PBRS installation. Click **OK**.

*Should you not receive this message (below) you will need to manually reboot the server at this time.*



- PBRS is now successfully installed on this server.



## Database Installation



The first time you open PBRs, you will need to configure the PBRs database. This is where PBRs will store the information regarding the schedules you set up within the software.

Select how you want to install the PBRs database to proceed with the database installation steps.

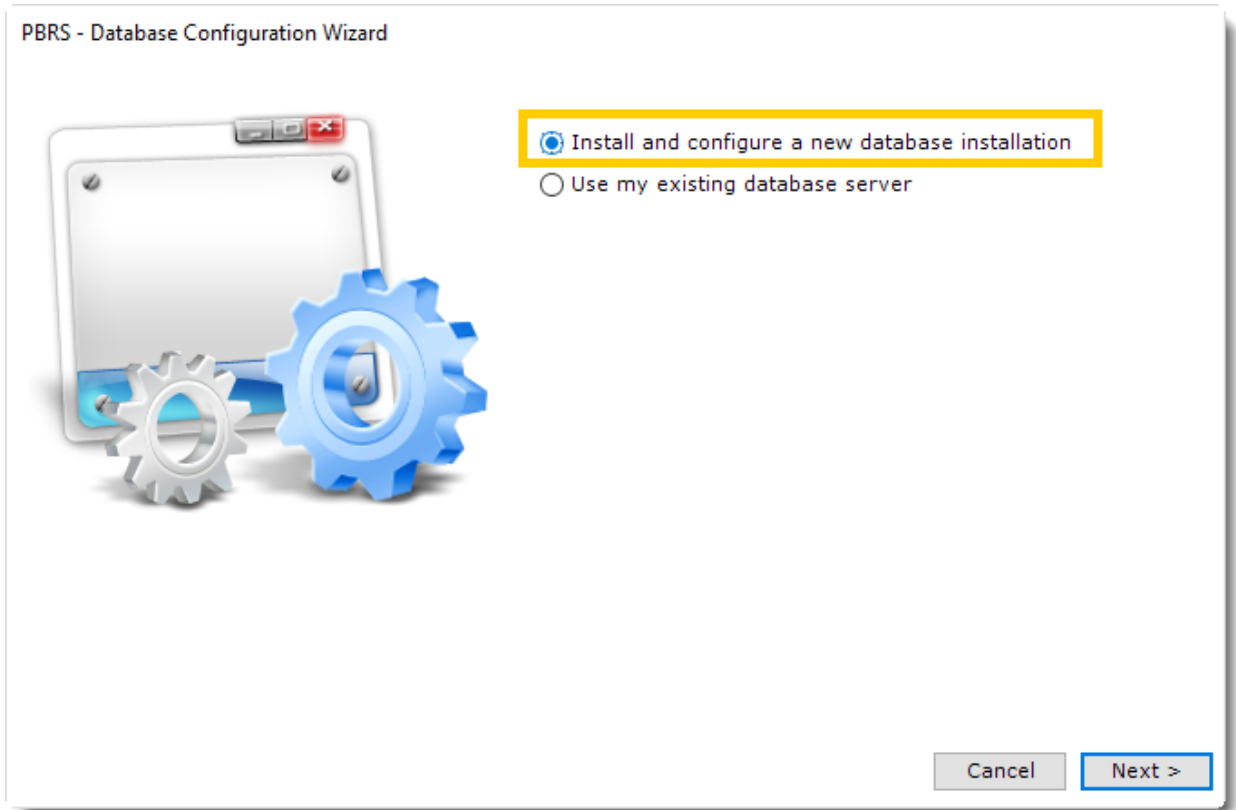
- Option 1: Default PBRs Database Installation.
- Option 2: Use my existing database server.

## Option 1: Default PBRS Database Installation

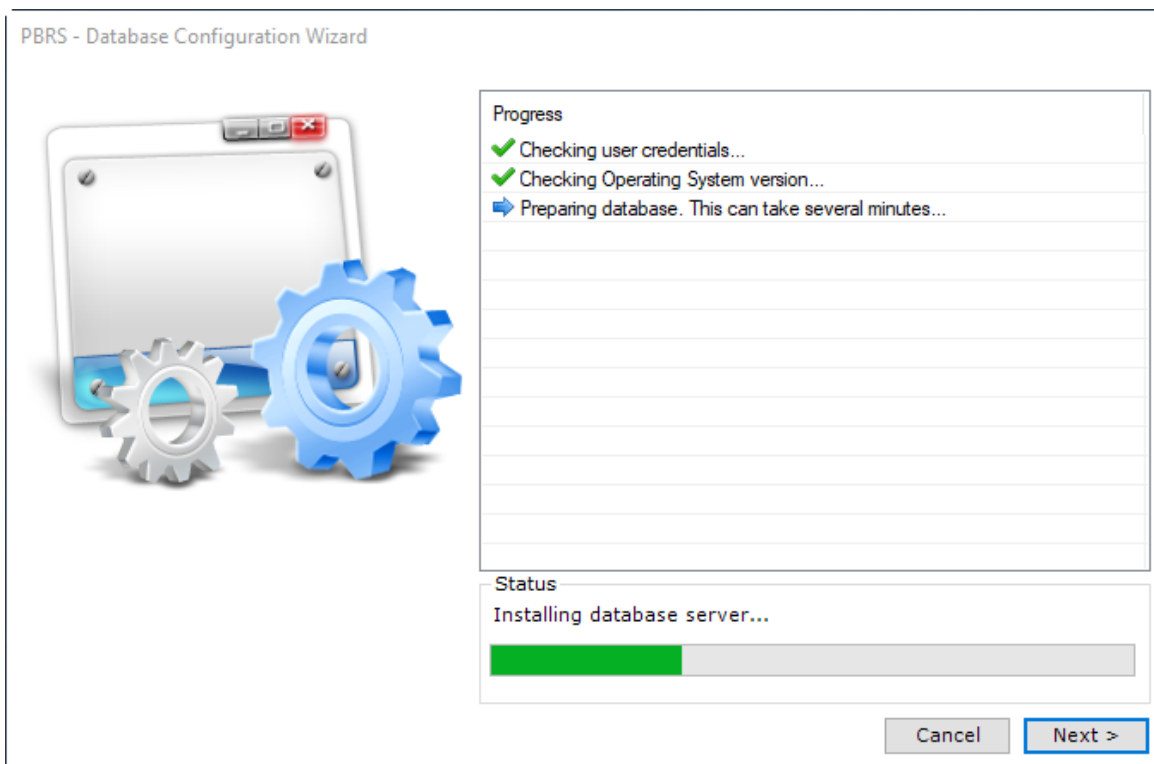
1. Open PBRS
2. You should now see a *Database Configuration Wizard* pop up. Click **Next**.



3. Select **Install and configure a new database installation** and click on the **Next**.

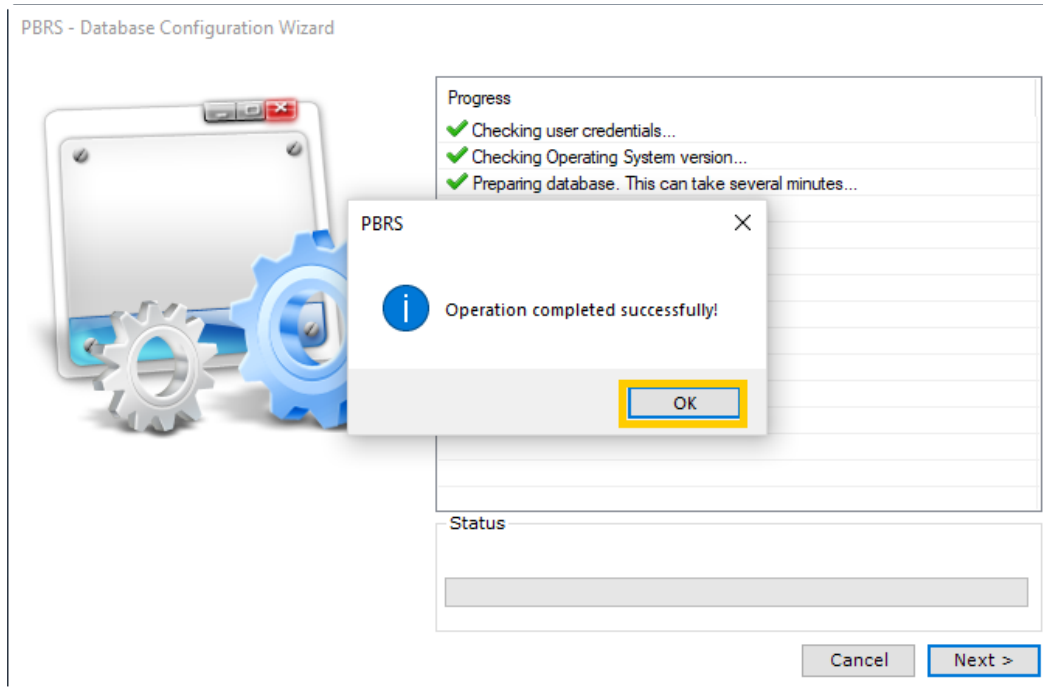


4. The database will now be created. This process can take up to 20 minutes.

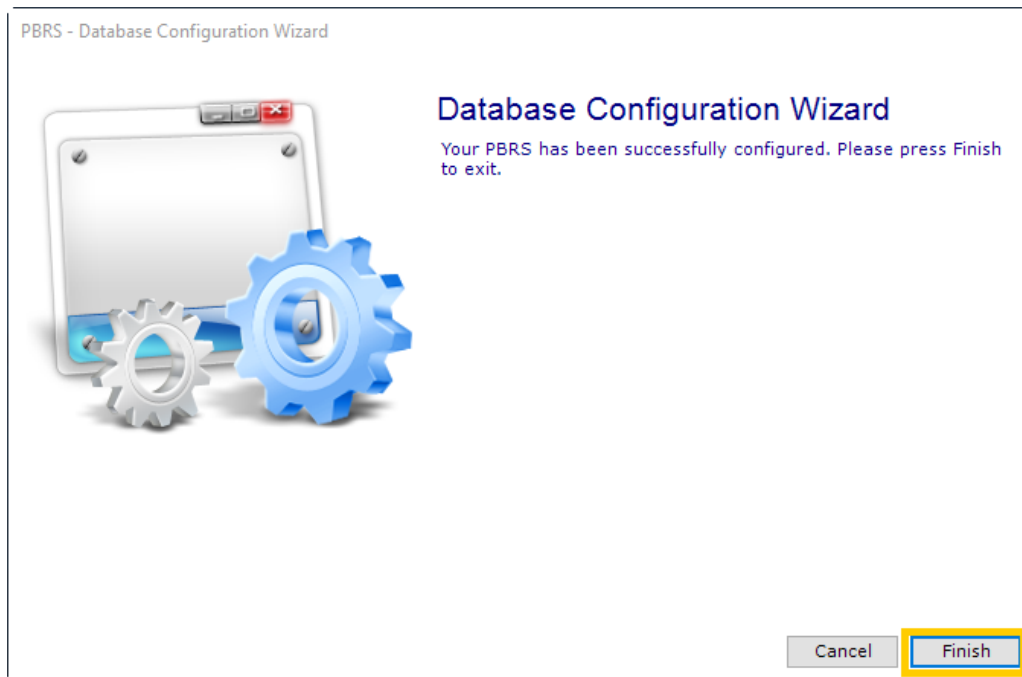


*If the configuration fails, PBRS will offer to install a local Access database. PBRS will operate in this instance. However, advanced users will likely prefer to run PBRS using the SQL Server install. If the configuration fails and you would like to use the SQL Server install, verify that you have met all the PBRS prerequisites.*

5. If successful, pop-up will appear: *Operation completed successfully*. Click **OK**.



6. Click **Finish** to complete the database configuration.





The PBRS installation and database configuration is now complete.

Each time you use PBRS, you will be required to log in. Your security credentials determine what you can and cannot do and what schedules you can see.

*The first time you log in to PBRS, you **must** create an Administrator account.*

Once you are logged on as an Administrator, you can use the User Manager to:

- Set up additional Administrators and Users.
- Set PBRS to log on automatically using a specified user.
- Assign specific folders and schedules to specific users.
- And so much more!

To create an Administrator account, simply fill in the required information in the fields listed on the *Create Admin User* section of the Welcome to PBRS pop-up window (shown below).

*Make note of the username and password you set up as the Administrator. You will need these again to use PBRS. If you forget the administrator credentials, you will have to log a support ticket with our Technical Support Help Desk in order to have the password reset.*

Once you installed the software and set up your database configurations, you may now use it.

#### *Welcome to PBRS*

- Welcome to PBRS Wizard will appear after you set up your database configuration.
- Click on the **Next** button to get started with PBRS.

Welcome to PBRS

### Getting Started with PBRS

Welcome to **PBRS**. This wizard will guide you through:

- Creating a PBRS Admin user
- Configuring your messaging settings for Email
- Registering for our excellent free support



Cancel

Next

Finish

- Once you clicked the next button, the Create an Admin user section will appear.

Welcome to PBRs

Getting Started with PBRs

**Create Admin User**

Configure messaging (optional)

Please set up an administrator user so that you may log into the system

First Name	<input type="text" value="Karen"/>
Last Name	<input type="text" value="Angeles"/>
UserID	<input type="text" value="Kangeles"/>
Password	<input type="password" value="••••••"/>
Confirm Password	<input type="password" value="••••••"/>

- Once you put all the information required, click on the **Save** button and the **Next** button.
- Configure messaging section is to insert the main mail you will use for the software.

Welcome to PBRs

Getting Started with PBRs

Create Admin User

**Configure messaging (optional)**

Mail Type

NONE

MAPI

SMTP

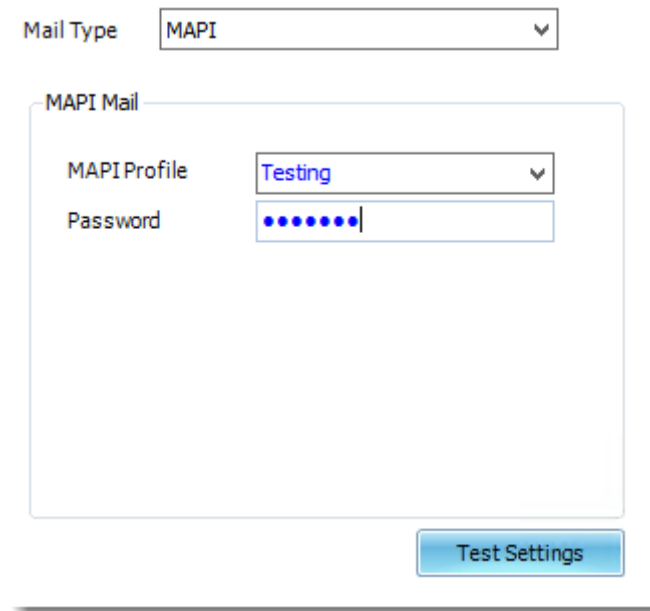
GROUPWISE

NONE

Cancel Next Finish

- The software allows you to put four options of Mail type that are: MAPI, SMTP, GROUPWISE, and NONE. This part is optional; you may skip it by selecting the NONE option and clicking the next button.
- Select the Mail type of your preference.

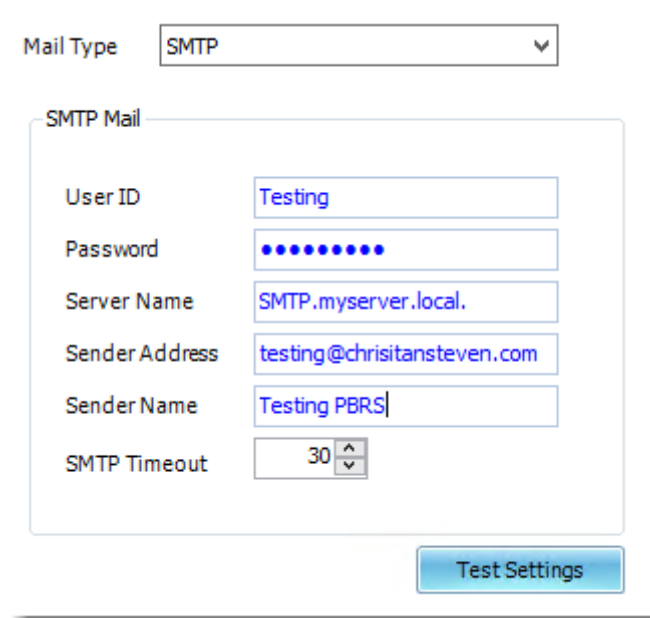
## MAPI



The screenshot shows a configuration window for MAPI Mail. At the top, there is a 'Mail Type' dropdown menu set to 'MAPI'. Below this is a section titled 'MAPI Mail' containing two fields: 'MAPIProfile' with a dropdown menu set to 'Testing', and 'Password' with a text box filled with ten blue dots. At the bottom right of the window is a blue button labeled 'Test Settings'.

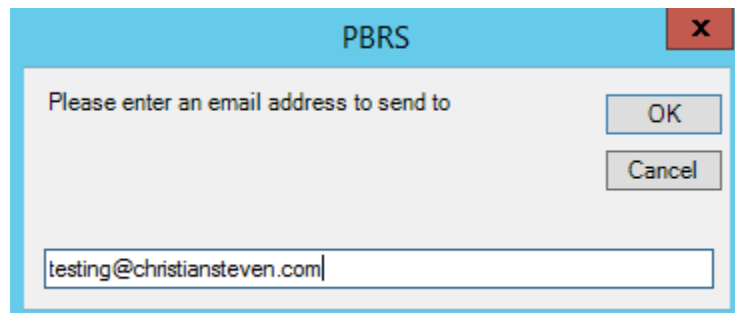
- After putting all the information required, click on the **Test Settings** button.
- After clicking the Test Settings button, a pop-up window will ask you to put a valid email address to send. After entering the email address click on the **OK** button.

## SMTP

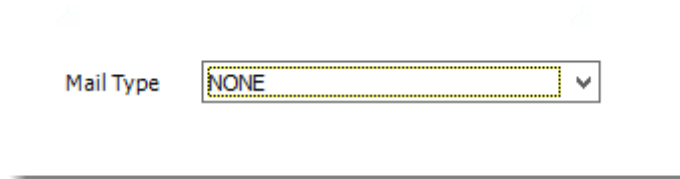


The screenshot shows a configuration window for SMTP Mail. At the top, there is a 'Mail Type' dropdown menu set to 'SMTP'. Below this is a section titled 'SMTP Mail' containing several fields: 'User ID' with a text box containing 'Testing', 'Password' with a text box filled with ten blue dots, 'Server Name' with a text box containing 'SMTP.myserver.local.', 'Sender Address' with a text box containing 'testing@chrisitansteven.com', 'Sender Name' with a text box containing 'Testing PBRS', and 'SMTP Timeout' with a spinner box set to '30'. At the bottom right of the window is a blue button labeled 'Test Settings'.

- After putting all the information required, click on the **Test Settings** button.
- After clicking the Test Settings button, a pop-up window will ask you to put a valid email address to send. After entering the email address click on the **OK** button.



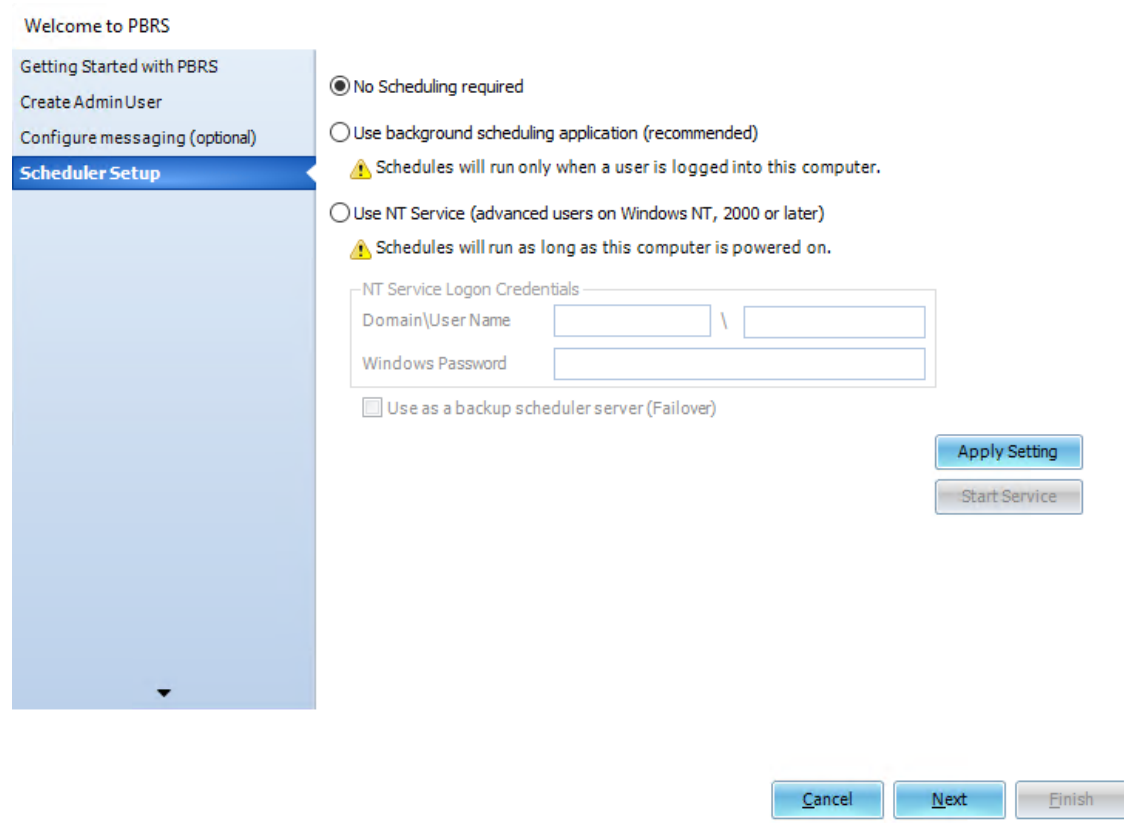
NONE



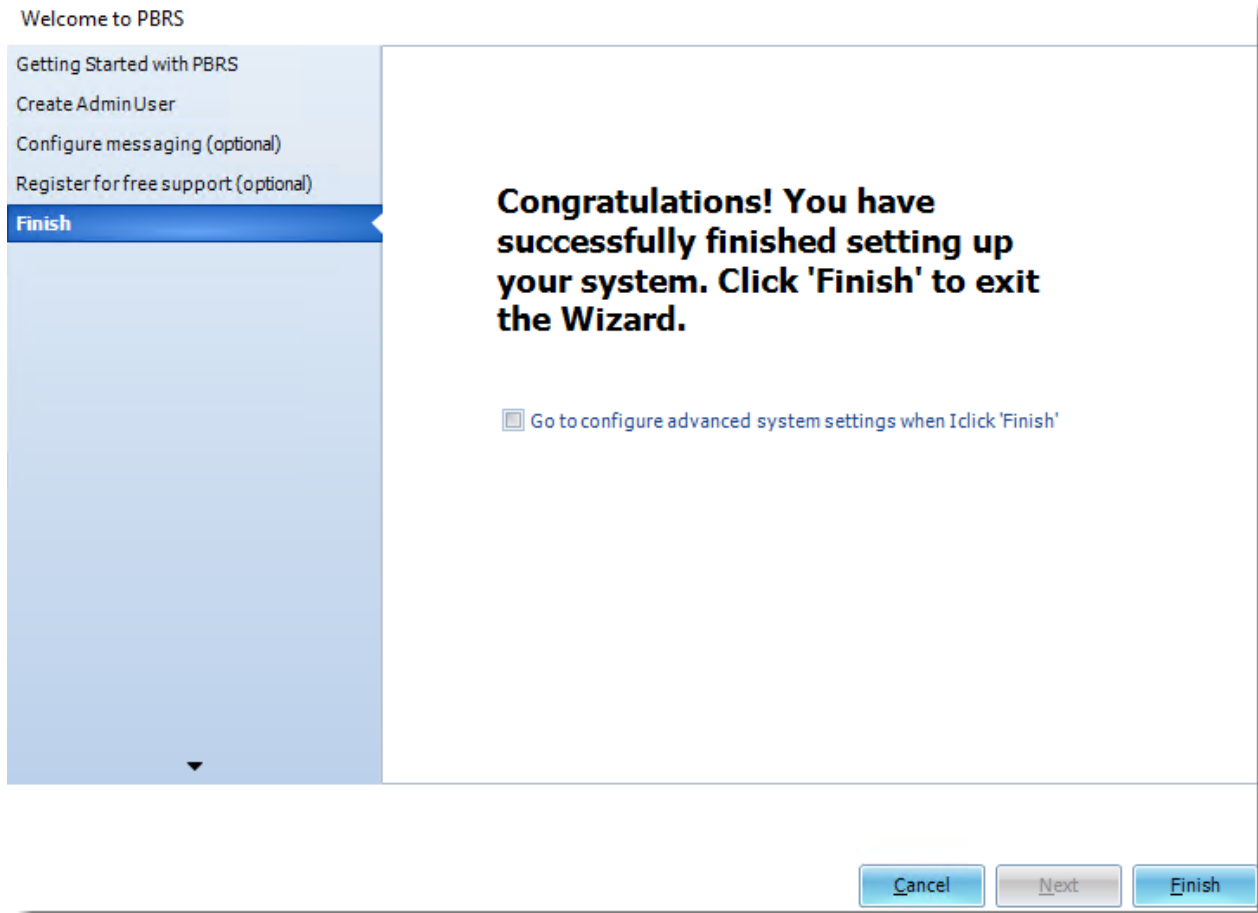
After selecting the Mail type options on Configure messaging, click the OK button.

- Click **Next**

## Scheduler Setup



- You can register for technical support for free.
- Click **Next**.



- The Scheduler is the key function that determines when and how tasks are triggered. Rather than using Windows Task Scheduler, PBRs uses ChristianSteven's proprietary scheduler to execute tasks. This creates a far more reliable, dedicated scheduling system.
- Within PBRs, the following scheduling options are available:

#### *No Scheduling required*

- PBRs can be used as an ad-hoc report managing tool with no scheduling. If you do not want any automated scheduling, select this option. However, this means you will need to execute each schedule manually.
- This option is also used to uninstall any previously installed scheduling services.
- To choose this option, perform the following:
  - Click the radio button next to **No Schedule Required**.
  - Click **Apply Setting**. This will uninstall any previously installed Schedulers and apply the new settings.

### *Use Background Scheduling application (recommended)*

- The background application scheduler is a windows application which monitors PBRs and fires off reports when they become due.

*The background scheduler is an application-independent of PBRs. Therefore, it will stop working if the user logs off or the server is shut down. If you want to be able to log off the server without stopping PBRs scheduling, then you must install and use the Windows (NT) Service Scheduler.*

- To use the background application scheduler, perform the following:
  - Select the radio button next to **Use background scheduling application (recommended)**.
  - Click **Apply Setting**.
  - Click **Start Service** to start the scheduler.

### *Use NT Service (advanced users on Windows NT, 2000 or later)*

The NT service is a Windows service. It installs into the Windows "Services" control panel. As this is a windows service, it will continue to run scheduled reports even when there is no user logged on to the PC.

*The server MUST be powered on in order for the NT Service to work. If the server is not on, the NT Service cannot run and schedules will not kick-off as scheduled.*

## **IMPORTANT**

- Prior to selecting the NT Service option as your Scheduler, you must ensure that the following pre-requisites have been met:
  - You are logged onto the server as the NT Service user.
- The above listed NT Service user has the following windows security rights on the PC you are installing it on:
  - Act as part of the operating system.
  - Log on as a service.
  - Is a member of the Local Administrators security group.
- If you are using MS Exchange Server, the above listed NT Service user must have full rights to the designated email account.
- These security requirements are required by Windows. If you are unsure how to set up Windows security settings, your system administrator will be able to help.

## **WARNING**

*Installing the NT service, and other configuration activities in PBRs, must **NOT** be done by remote control using Windows XP remote capabilities, or Terminal Services. These applications do not save the settings on the PC, only in the virtual "session" you are using at the time. The correct security requirements are therefore not passed to the service or PBRs, and this will cause sporadic results (e.g. Service not polling, or schedules executing at wrong times or on wrong dates). If you must use remote control, we recommend PC Anywhere or VNC.*



## Setting up the NT Service

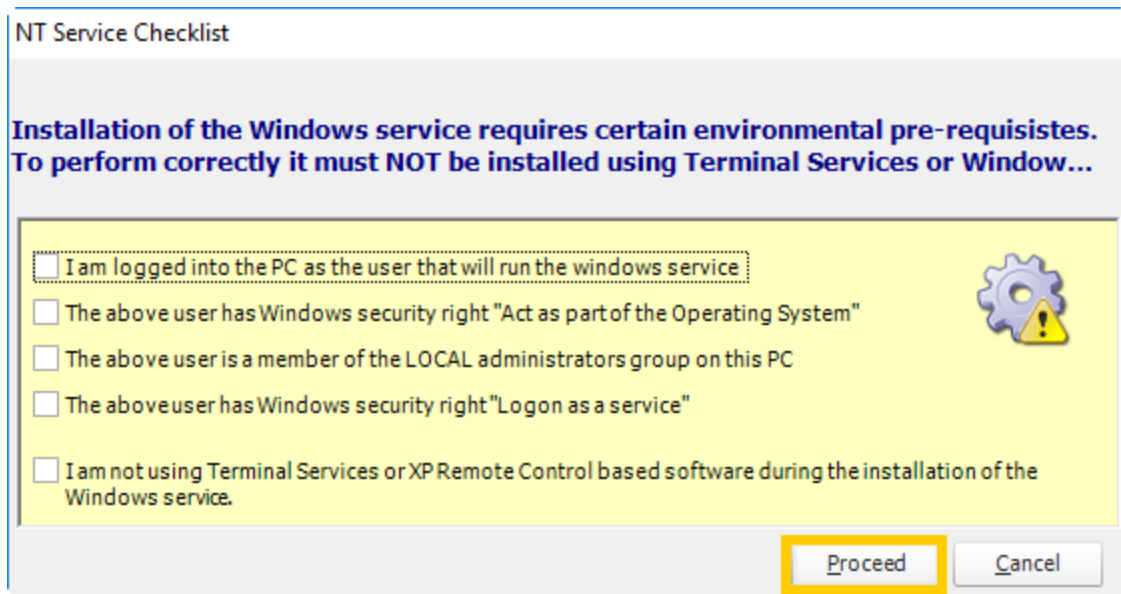
Once you have ensured that the above prerequisites have been met, perform the following:

- Select the radio button next to **Use NT Service (advanced users on Windows NT, 2000 or later)**.
- Enter the following credentials:
  - **Windows Domain:** Type in the Domain name. If you are using MS Exchange Server, then this must be your network domain so that PBRs can connect to your Exchange server.
  - **Windows User Name:** Enter the username for the above user.
  - **Windows Password:** Enter the password for the above user.
- Click **Apply Setting**.

The screenshot shows a configuration window for the NT Service. It has three radio buttons: 'No Scheduling required', 'Use background scheduling application (recommended)', and 'Use NT Service (advanced users on Windows NT, 2000 or later)'. The third option is selected and highlighted with a yellow box. Below this is a section titled 'NT Service Logon Credentials' with two text boxes: 'Domain\User Name' containing 'CHRISTIANSTEVEN \ karen' and 'Windows Password' containing a series of dots. At the bottom left is a checkbox labeled 'Use as a backup scheduler server (Failover)'. On the right side, there are two buttons: 'Apply Setting' (highlighted with a yellow box) and 'Start Service'.

- Verify that each of the requirements listed on the *NT Service Checklist* window have been met. If so, check each of the boxes and click **Proceed**.

*If you have not completed the listed requirements and/or do not check all of the boxes, you will be unable to continue setting up the NT Service.*



- The NT Service will now install. Once completed, the service will be visible in the windows "Services" control panel and will be known as *PBRS*. You should also see *PBRS Monitor*. This is a monitoring service that ensures that the *PBRS* service is continually running.
- If it is not already grayed out, select **Start Service**.

*If any of the above credentials are changed (e.g. the password is changed or times out), **the service will stop running**. Under these circumstances, you will have to uninstall it and re-install it ensuring you enter the new credentials correctly. We recommend that your system administrator ensures that the NT user's credentials never change and never time out.*

- Click **Next**.

Welcome to PBRs

Getting Started with PBRs

Create Admin User

Configure messaging (optional)

Scheduler Setup

**Finish**

First Name \* Last Name \*

Company \*

Email Address \* Website

Phone Number \*

\* required

ChristianSteven is committed to protecting and respecting your privacy, and we'll only use your personal information to administer your account and to provide the products and services you requested from us. For more information on our privacy practices, and how we are committed to protecting and respecting your privacy, please review our [Privacy Policy](#).

☐ Go to configure advanced system settings when I click 'Finish'

Cancel Next Finish

- In the Finish Wizard, please fill the fields with your information.
- **First Name:** Enter your first name.
- **Last Name:** Enter your last name.
- **Company:** Enter your Company name.
- **Email Address:** Enter a valid email address.
- **Website:** Enter your Company website.
- **Phone Number:** Use the drop-down menu to select your area code and enter your phone number in the next empty field.
- Once finished, click **Finish**.

Welcome to PBRs

Getting Started with PBRs

Create Admin User

Configure messaging (optional)

Scheduler Setup

**Finish**

First Name \*  
Karen

Last Name \*  
Test

Company \*  
Testing CSS

Email Address \*  
karen@testing@gmail.com

Website

Phone Number \*  
+1 - United States 789

Registration succeeded!

OK

\* required

ChristianSteven Software  
only use your account and to provide the  
products and services. For more information on our  
privacy policy, please visit our website.

☐ Go to configure advanced system settings when I click 'Finish'

Cancel Next Finish

- Click **OK**.
- You may now use PBRs. Enter your User Name and Password to sign in.

**SIGN IN**

User Name

Password

SIGN IN EXIT

☐ Remember my login information

Evaluation Edition (30 Days Left) 1.0 20180

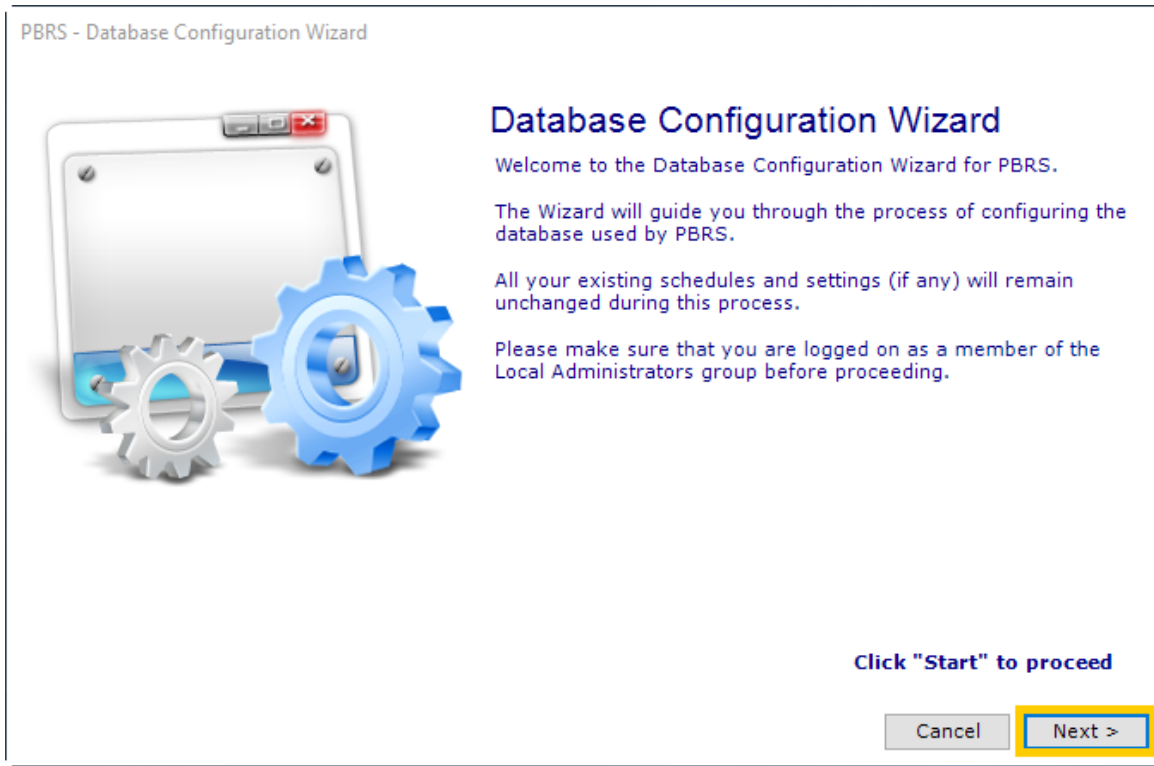


**pbrs**

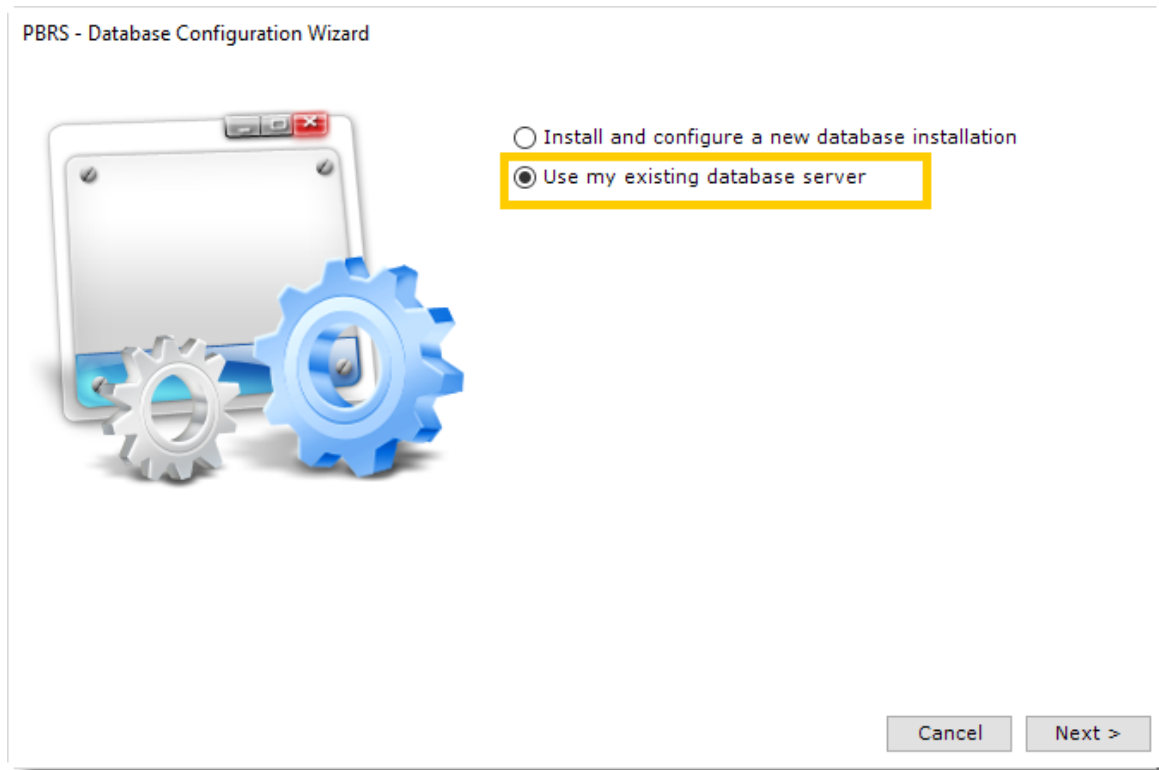
Option 2: Use my existing database server.

You will need to have your SQL Server name and a SQL Server account (username and password) which have read/write/create permissions.

1. Open PBRS
2. You should now see a Database Configuration Wizard pop up. Click **Next**.




3. Select *Use my existing database server* and click on the **Next**.



4. Enter the details of your SQL Server, check the option *Create Database (existing database will be dropped)* and enter the credentials of your SQL Server account. Click **Test**. Once PBRS can successfully connect to your SQL Server, click **Next**.

PBRS - Database Configuration Wizard



Server Name  
TURNWALDIN10\PBRS

Database Name  
PBRS

☒ Create Database (existing database will be dropped)

User Name  
sa

Password  
.....


Test

Cancel Next >

*The SQL Server credentials must have permissions to read/write/create.*

5. Click **OK**.
6. The database is now being created within your own database server.

PBRS - Database Configuration Wizard



Server Name  
TURNWALDIN10\PBRS

Database Name  
PBRS

☒ Create Database (existing database will be dropped)

User Name

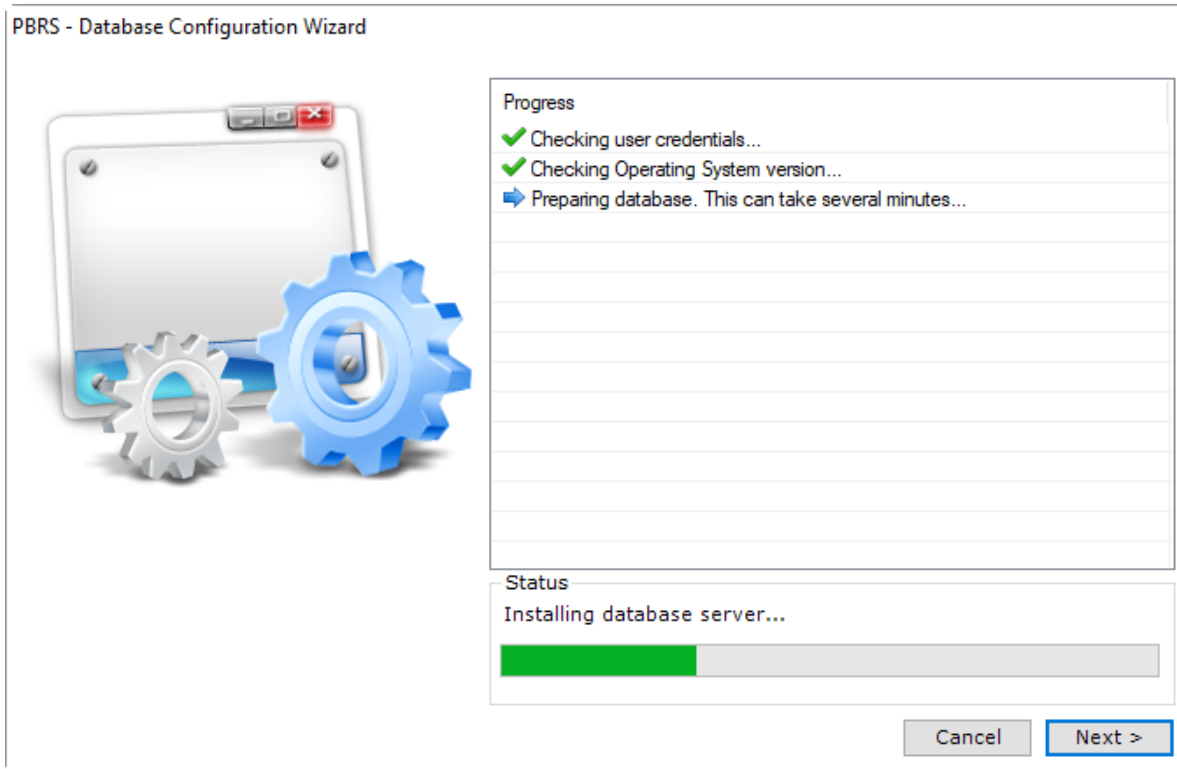
Database Connection Wizard X

Test succeeded!

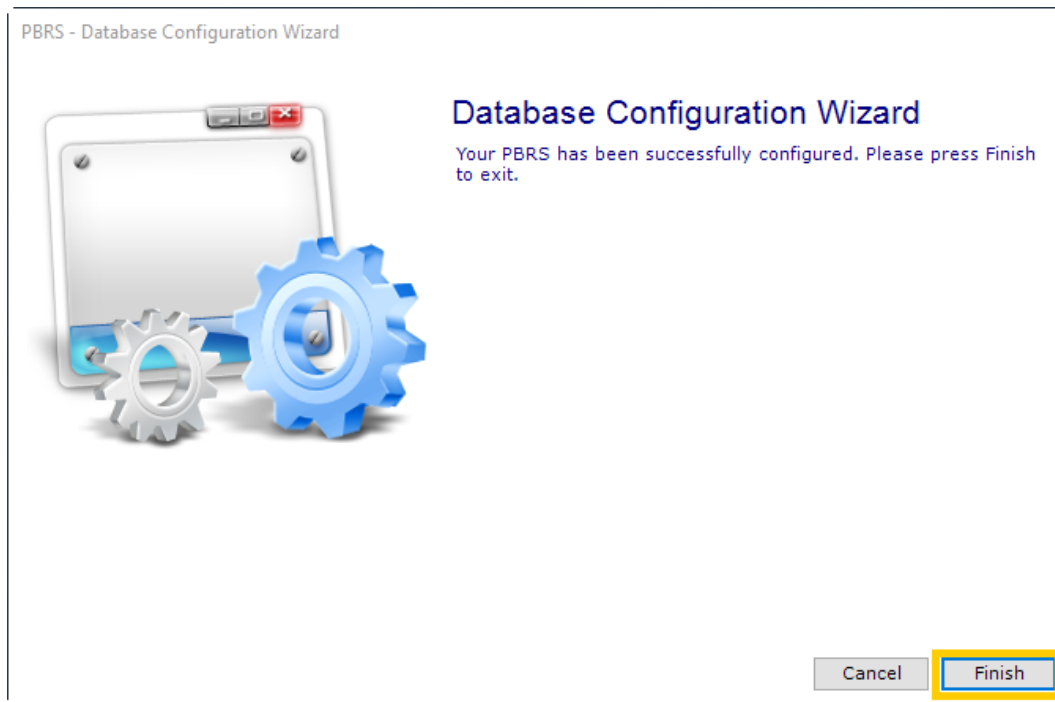
OK

Test

Cancel Next >



7. Click **Finish** when the process is complete.



PBRS is now configured to store the scheduling information in a database on your server.



## How do I upgrade PBRs 32 bit to PBRs 64 bit?

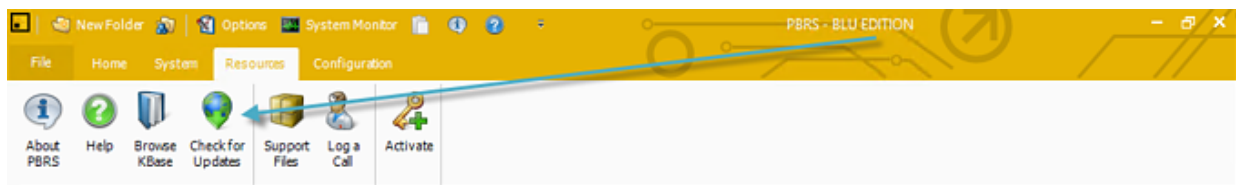
**This is a step by step to upgrade PBRs 32 bit to PBRs 64 bit.**

Before Upgrading...

- Please make sure you are using a 64-bit Operating System.
- PBRs DSNs will only support ODBC Data Sources (64-bit).
- Installing Microsoft Office 64-bit is recommended.

*Download the most current build*

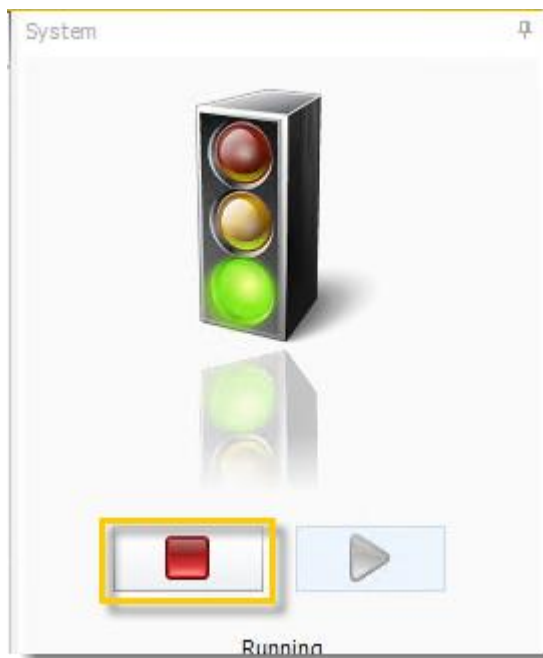
- In order to obtain the link to the most current build, go to **Resources** and select **Check for Updates**.



- You can also obtain the most current build of the software by visiting the [Software Release Announcements Blog](#).

*Stop the Scheduler*

- Click the blue **System bar** on the far right side of the screen.
- Underneath the traffic light image, click the red **Stop button**.



*Perform a backup*

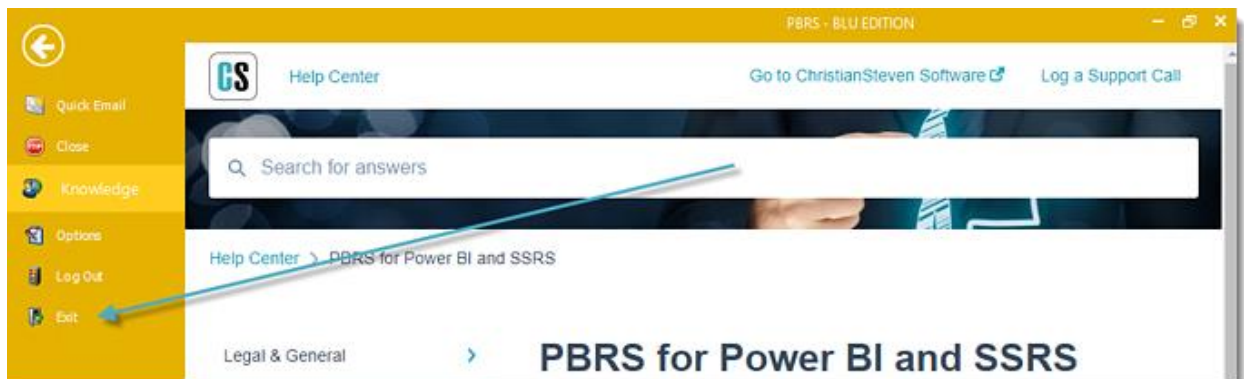
- Go to **System** and select **Backup**.



- Select the location you want to save the backup to.
- Click **OK**.

*Ensure all instances of the software are closed*

- Go to **File** and select **Exit**.

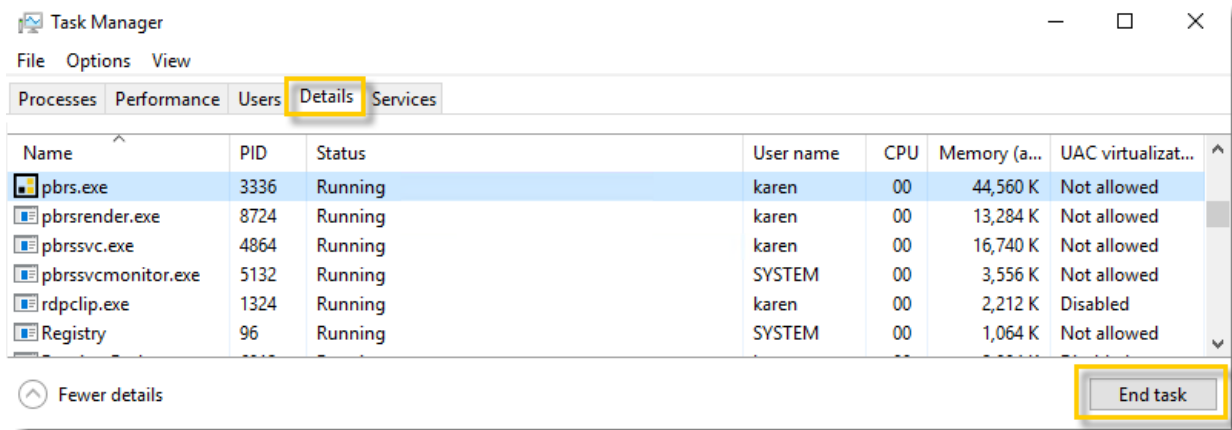


- Right-click on the Windows taskbar at the bottom of your screen.
- Click **Task Manager**.
- Click the **Details** tab.

*If the Details tab is not displayed, you may have to click **More Details** at the bottom of the task manager window.*

- Under the *Name* column, verify that no instances of **pbrs.exe** and **pbrssvcmonitor.exe** appear.

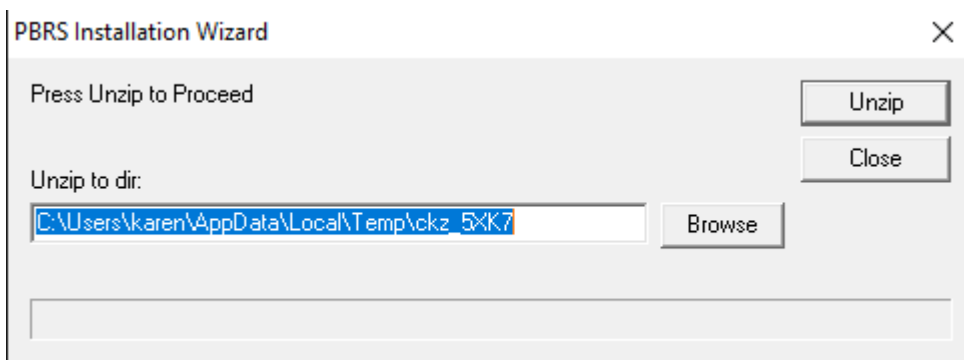
If they do, click on them and select **End Task** in the lower right of the Task Manager window.



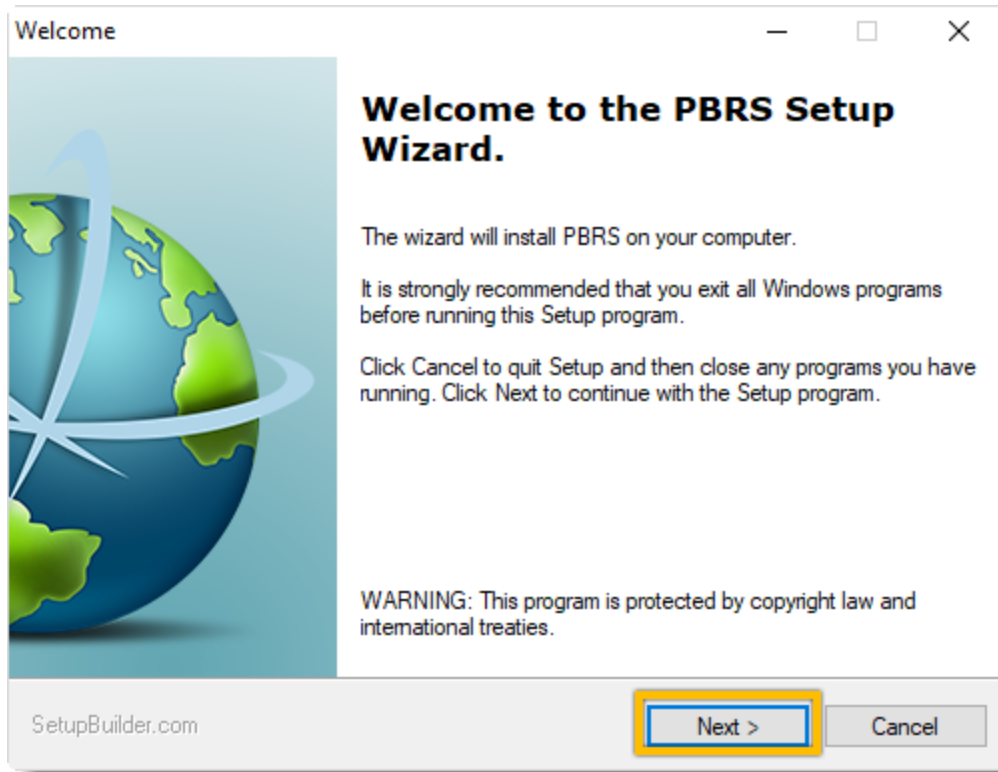
## Upgrading PBRs 32 bit to 64 bit

To upgrade the latest build/version of PBRs, perform the following steps:

- Double-click **PBRSSetupX**.
- Click **Unzip**.



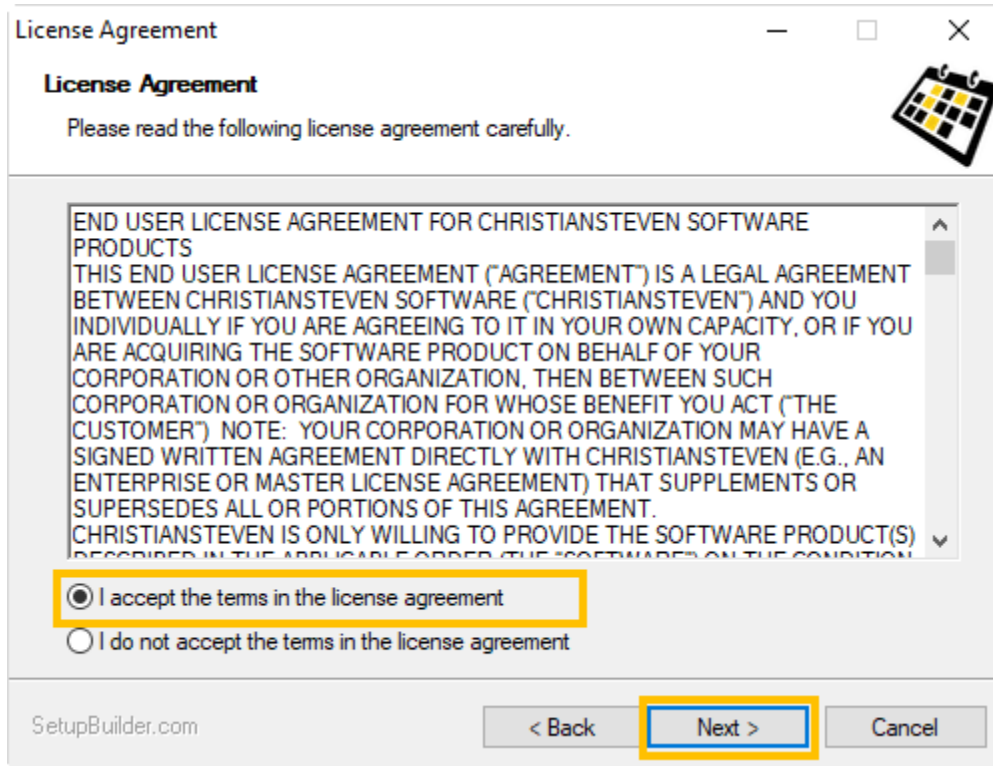
- Click **Next** on the Welcome message.



- Carefully read the License Agreement.

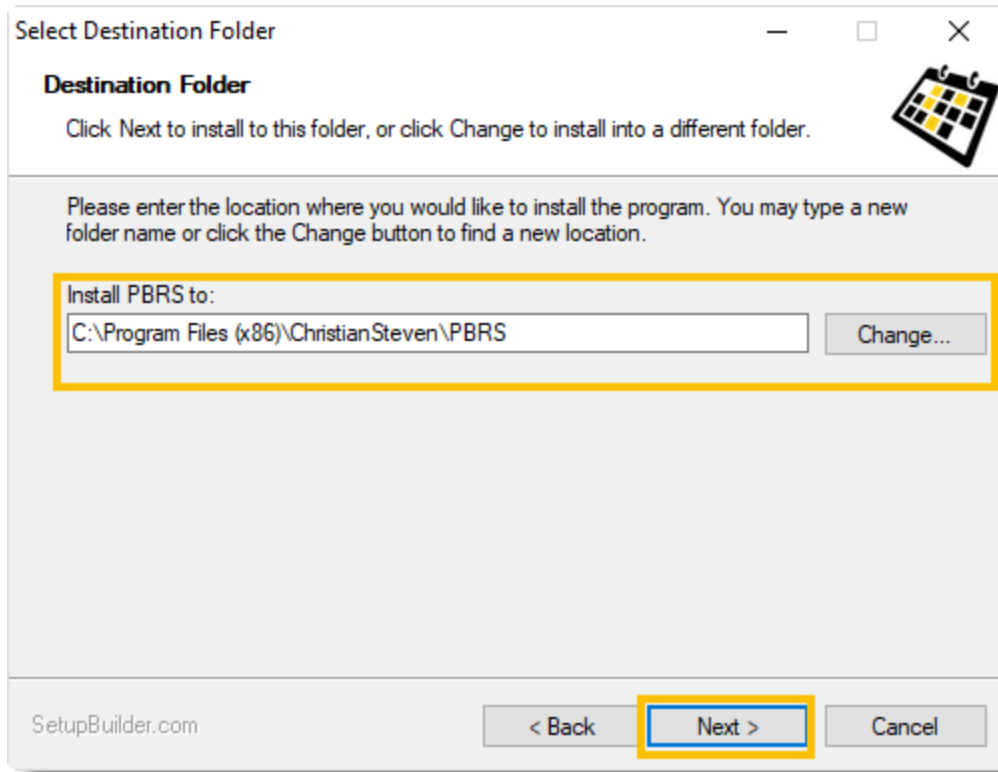
Once you have fully read and understood the License Agreement, check **I accept the terms in the license agreement** checkbox. Then, click **Next**.

*If you do not accept the terms of the license agreement, you will not be able to proceed with the upgrading process.*

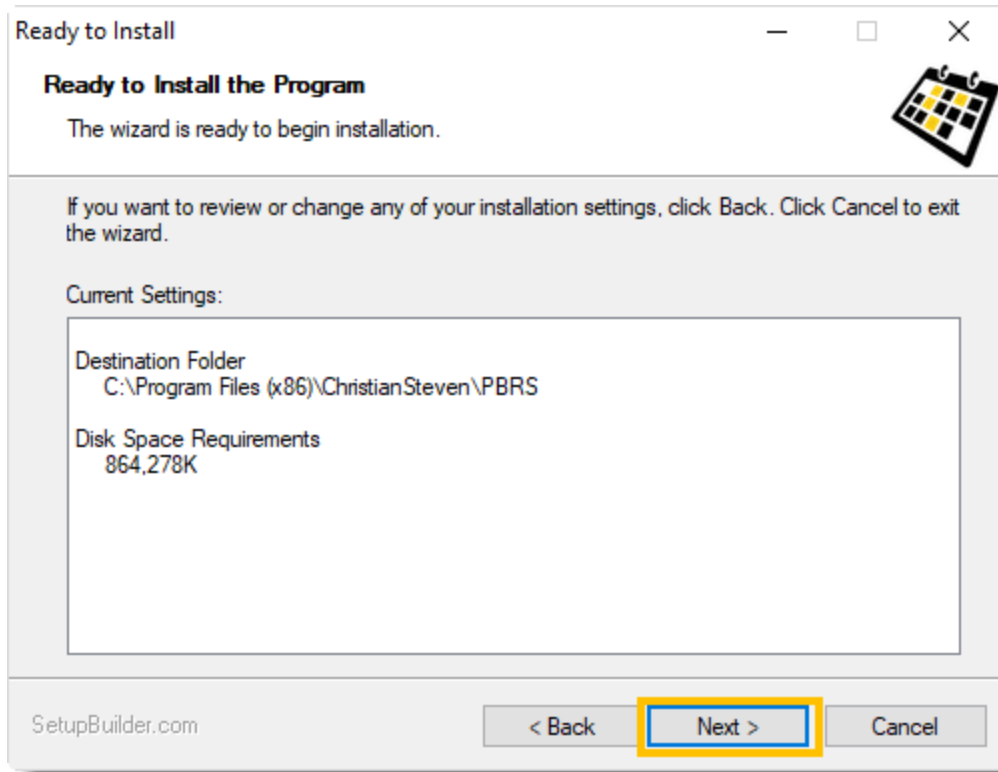


- Now, you will see the *Select Destination Folder* screen. You can choose to leave the default destination folder that is currently listed or select your own. Click **Next**.

*Leaving the default destination as the destination folder is recommended.*

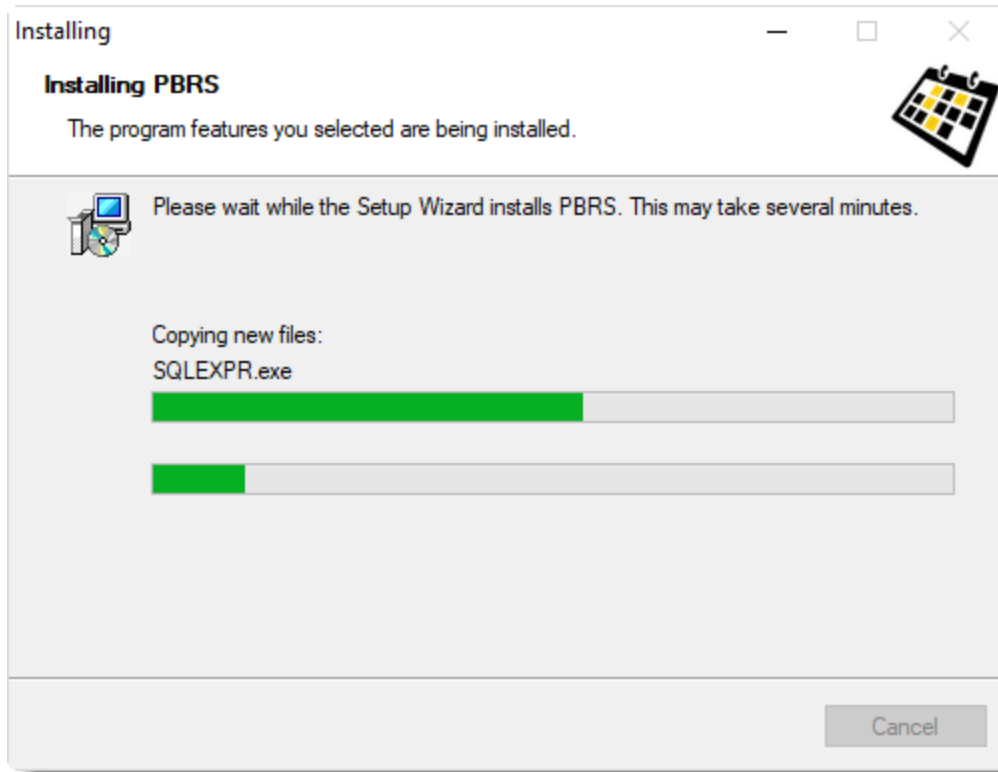


- You should now see a *Ready to Install* window detailing the current settings for the PBRS installation. These details include the destination folder you chose in Step 10, as well as the Disk Space Requirements for the PBRS installation.
  - Click **Next**.

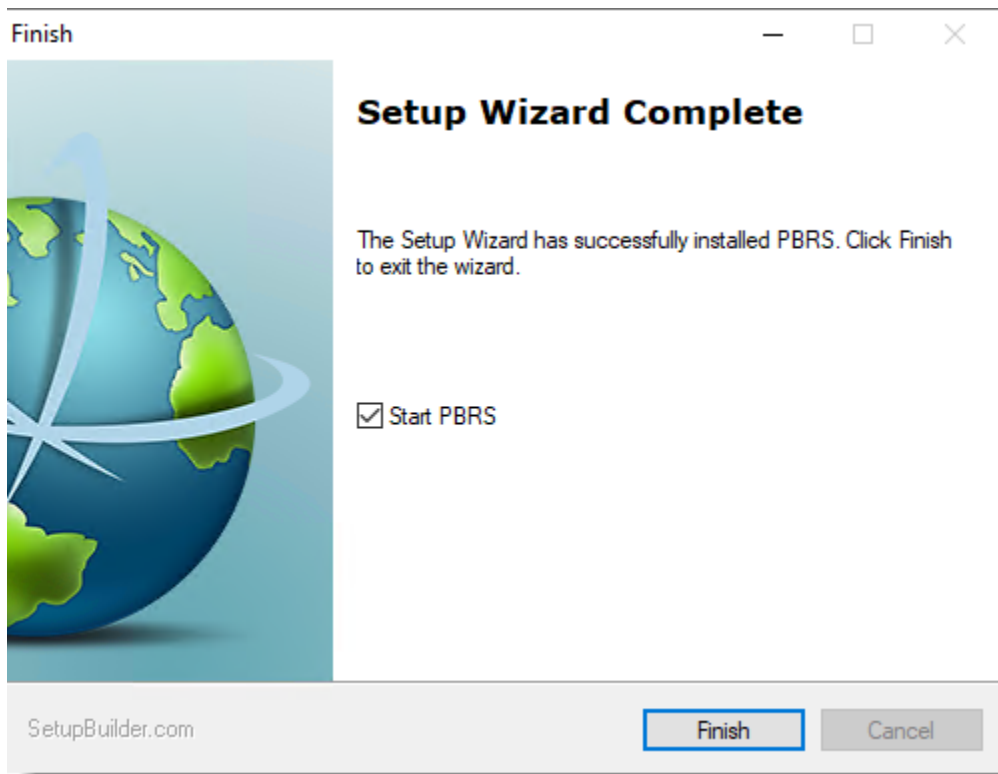


*The Disk Space Requirements will vary from build to build. This is only the amount of disk space that is required for the installation/components of PBRS.*

- Allow the PBRS installation to complete. You do not need to click anything during this process.

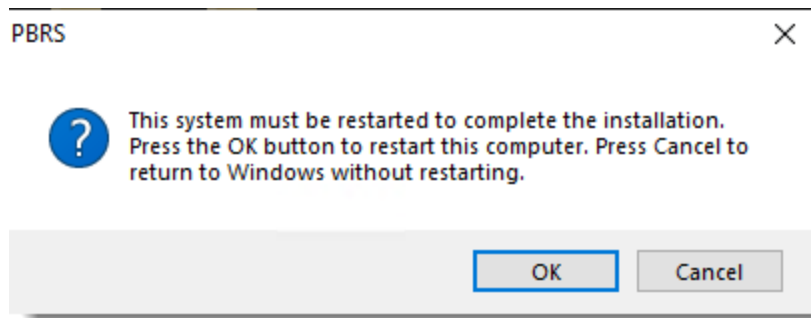


- When the *Setup Wizard Complete* screen appears, click **Finish** and it will start PBRS.

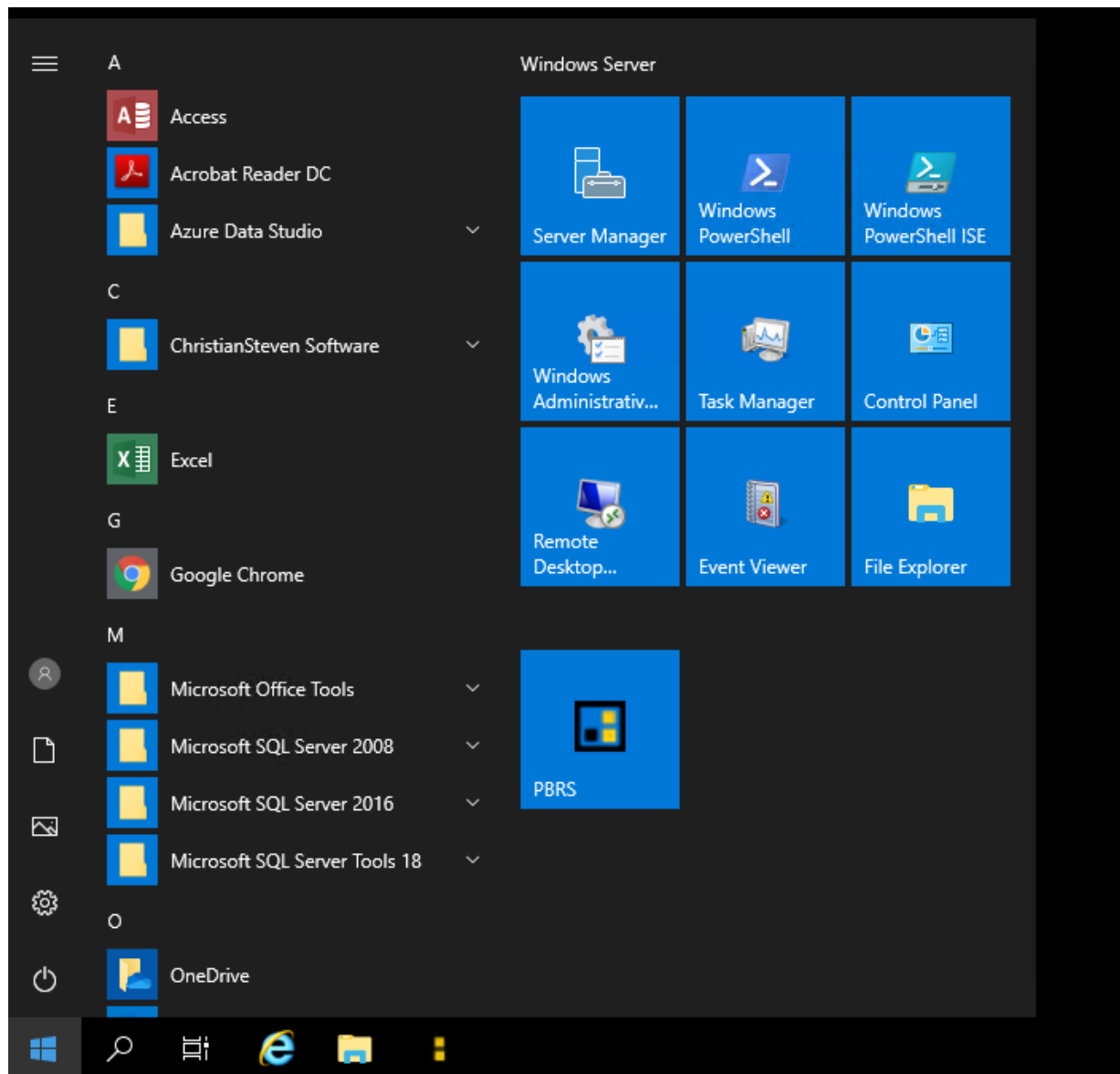




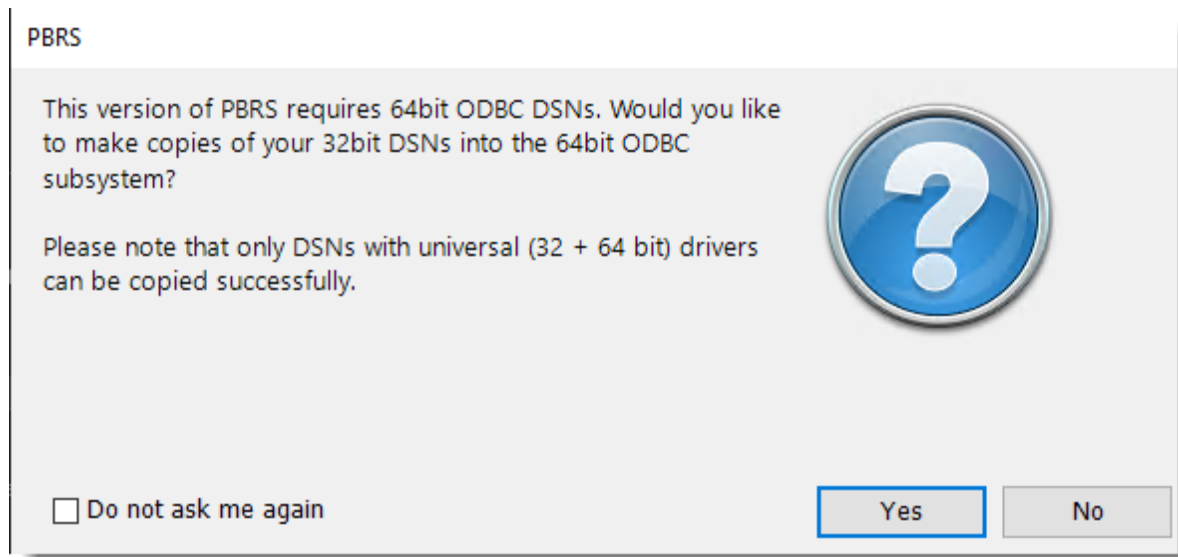
- At this time, you may see a pop-up stating that you will need to restart your computer in order to complete the PBRS installation. Click **OK**.



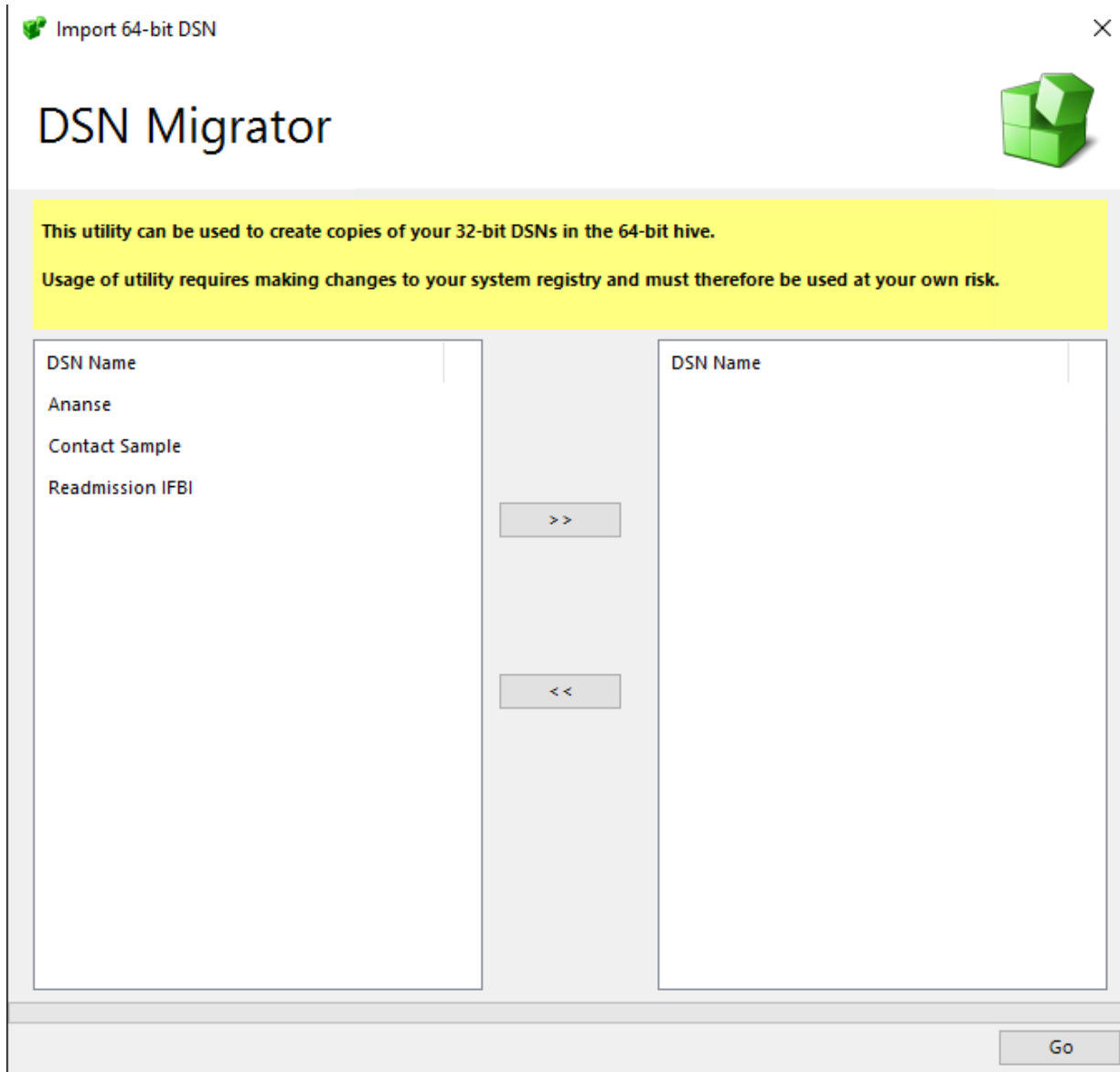
- PBRS is now successfully upgraded on this server.



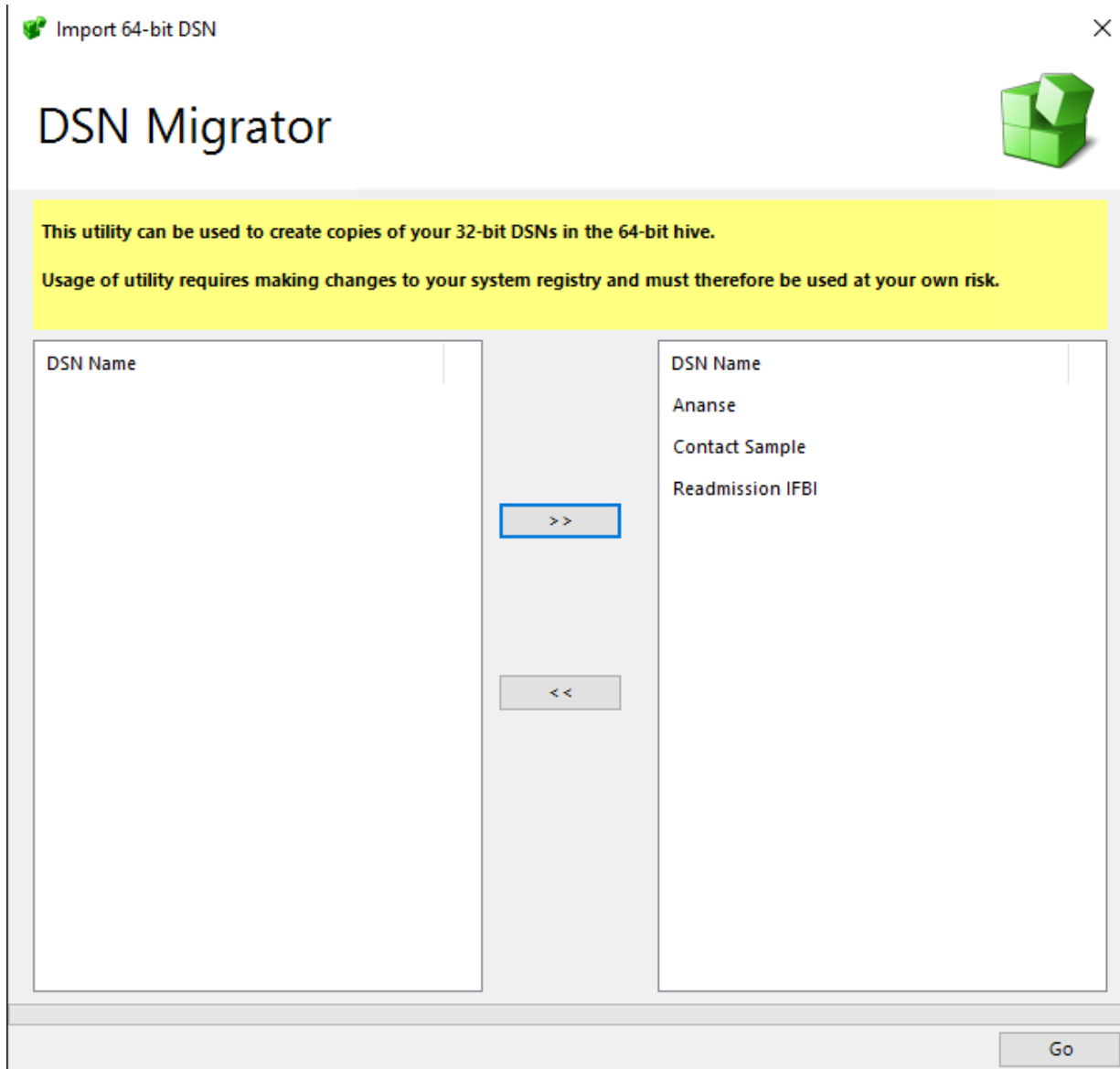
•Open **PBRS**.



- The Registry Migration Wizard will appear for you to copy your 32 bit DSNs into the 64bit ODBC DSN's. Click **Yes**.



- Select the 32-bit DSNs you would like to copy into the 64-bit hive.



- Use the **right arrow button** to move the selected 32-bit DSNs to the right-hand column.
- Click **Go** to create the copies.

# DSN Migrator



This utility can be used to create copies of your 32-bit DSNs in the 64-bit hive.

Usage of utility requires making changes to your system registry and must therefore be used at your own risk.

DSN Name		DSN Name
		Ananse
		Contact Sample

DSN Migrator

⚠ Are you sure you would like to make changes to your system registry? Only proceed at your own risk

Go

- Click **Yes**.

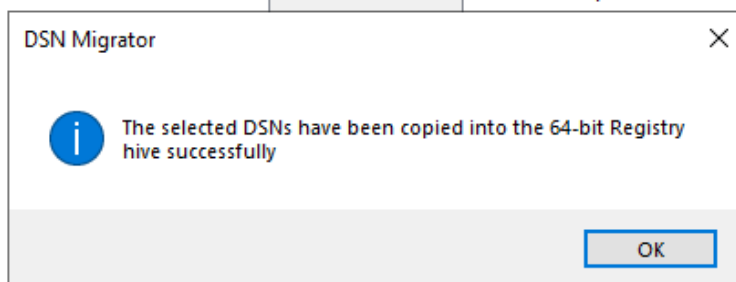
# DSN Migrator



This utility can be used to create copies of your 32-bit DSNs in the 64-bit hive.

Usage of utility requires making changes to your system registry and must therefore be used at your own risk.

DSN Name		DSN Name
		Ananse
		Contact Sample



Go

- Click **OK** and **Exit** the Registration Wizard.
- The selected DSNs have been copied into the 64-bit Registry hive successfully.
- You may now use PBRs with the selected DSNs.

### III. Welcome to PBRs

Each time you use PBRs, you will be required to login. Your security credentials determine what you can and cannot do and what schedules you can see.

The first time you log in to PBRs, you **must** create an Administrator account.

Once you are logged on as an Administrator, you can use the User Manager to:

- Set up additional Administrators and Users.
- Set PBRs to log on automatically using a specified user.
- Assign specific folders and schedules to specific users.
- And so much more!

To create an Administrator account, simply fill in the required information in the fields listed on the *Create Admin User* portion of the Welcome screen (shown below).

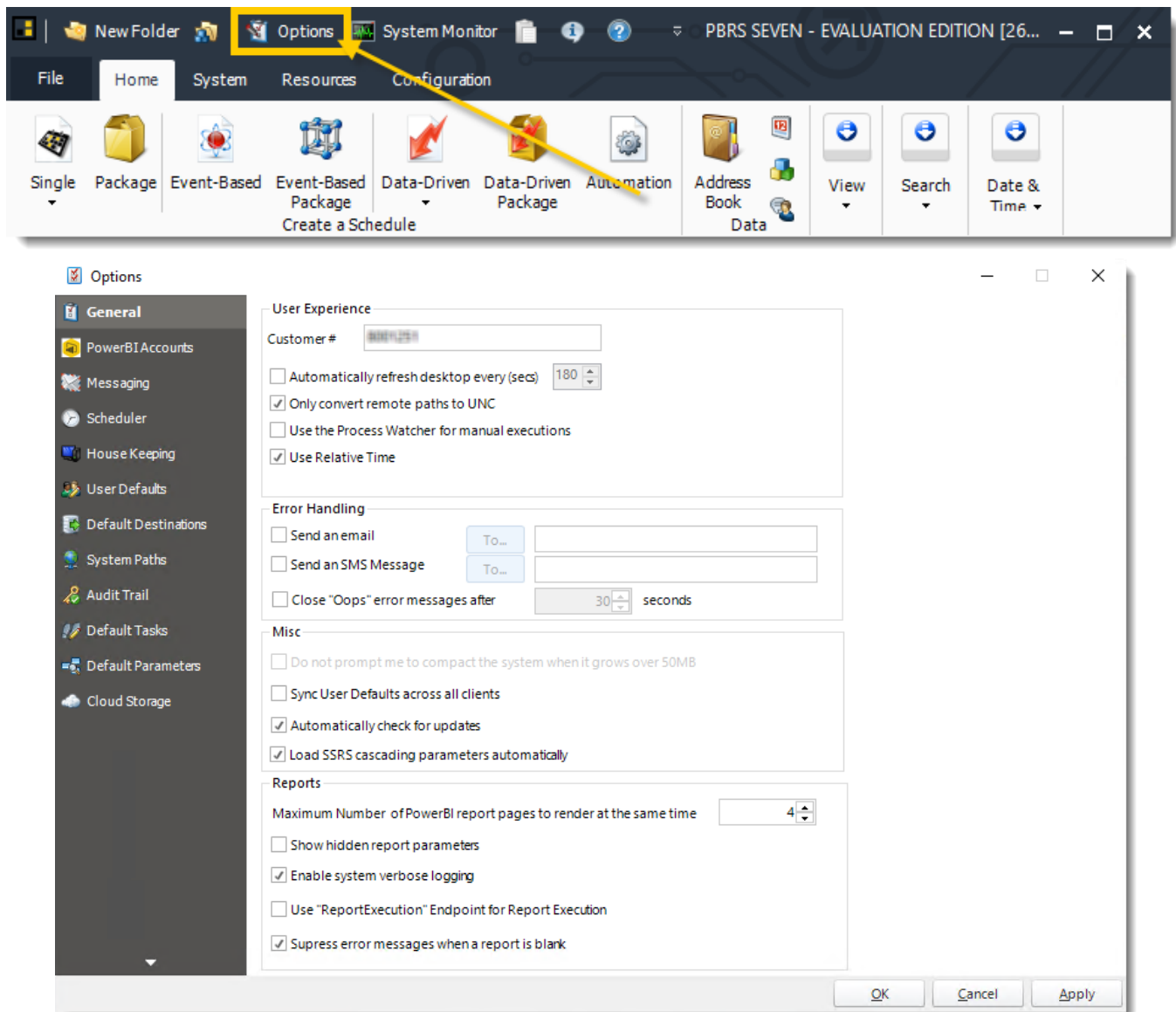
***IMPORTANT:*** *Make note of the username and password you set up as the Administrator. You will need these again to use PBRs. If you forget the administrator credentials, you will have to log a support ticket with our Technical Support Help Desk in order to have the password reset.*



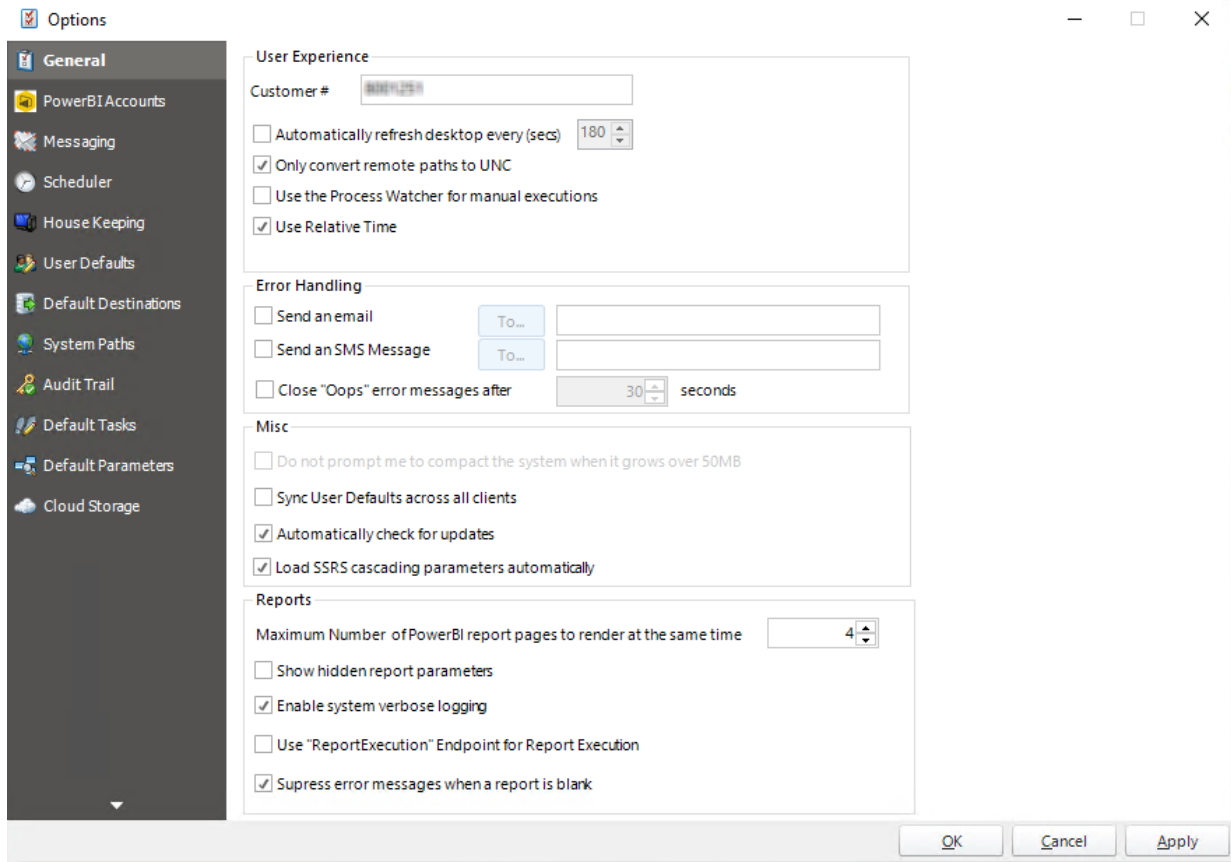
## Options

The Options module allows you to change and customize configuration settings that are used by PBRS. Example: Messaging, Scheduling, Power BI accounts and more.

- Go to **Options**.



## General



In PBRS, you have the option to configure many different aspects of how the software performs. You can access the configuration options by clicking the Options button at the top of PBRS. This will bring up an Options window. The first tab, the General tab, is broken down into four sections: User Experience, Error Handling, Misc. & Reports. Below, we will take a closer look at each of these sections.

### User Experience

- **Customer #:** The value that should be listed here is your individual customer number, which is provided by ChristianSteven when you purchase PBRS. It identifies you in our billing and tech support system and allows you to log support tickets through PBRS itself. Once you receive your customer number from ChristianSteven, you should input it here (if it is not already listed).

*If you are using the free trial version of PBRS, no value will be listed here and this field will be left blank until you purchase PBRS. If you are experiencing issues with PBRS during your free trial, contact your Sales Manager. You will be unable to log a support ticket through PBRS.*

- **Automatically Refresh Desktop:** When viewing the PBRs desktop (especially when using Detail option), this option will refresh the screen at the interval of seconds you specify. This will allow you to see an up to date status of your schedules at a glance without having to refresh the system manually.
- **Only convert remote paths to UNC:** This setting instructs PBRs only to convert remote paths to UNC. This option helps prevent any path resolution problems you may otherwise have. Local paths are not affected if you are a system administrator. (network or shared paths)
- **Use Relative time:** This setting lets you select whether timings should be displayed and saved in the time zone of the scheduler or the time zone of the user (if they are different).

## Error Handling

The Error Handling section tells PBRs what to do when PBRs encounters a problem. You can choose between the following options:

- **Send an Email:** Choose to be notified by email if a report fails to run successfully. You can specify any email address in this field as long as it is valid.
- **Send an SMS:** Choose to receive an SMS text message on your cellphone if a report fails to run successfully. This can be any phone number as long as it is valid.
- **Close Oops Messages after X Seconds:** Automatically close any error messages after a specified amount of time.

*An error log file is stored in the installation folder (typically, Program Files\ChristianSteven\PBRs). You can also view the log file from the System Monitor.*

## Misc.

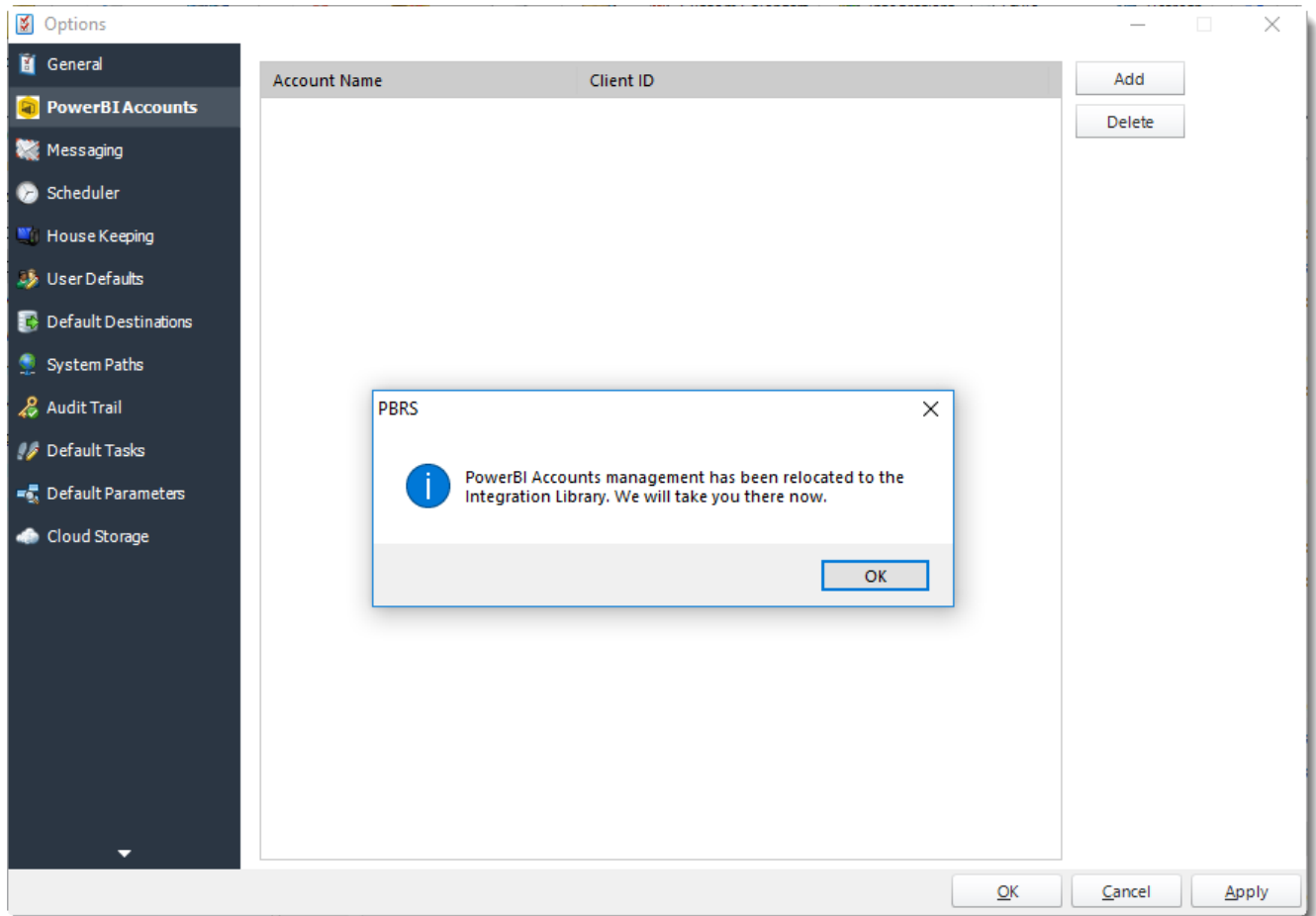
- **Sync User Defaults across all clients:** If you have multiple installations of PBRs and all of them are connected to the same database, you can select this checkbox to sync the User Defaults on this installation of PBRs with the other installations.
- **Automatically check for updates:** Checking this option will ensure that PBRs automatically checks for and alerts you when an update is available. If you do not have this option checked in PBRs, you will need to manually check for updates to PBRs by following our [Product Info & Updates blog](#).
- **Load SSRS cascading parameters automatically:** If you are using Microsoft SQL Server Reporting Services, click on this option to display cascading parameters.
- **Update Power BI embed URL every (Days):** Check this option to automatically update Power BI Reports embed URL.
- **Enable daily automated system backups:** Check this option to enable daily automated system backups.
- **Enable detail view paging in-app window:** Check this option to view PBRs reports by pages.

## Reports

- **Show hidden report parameters (SSRS):** Click on this option to display any hidden parameters contained in SSRS reports.

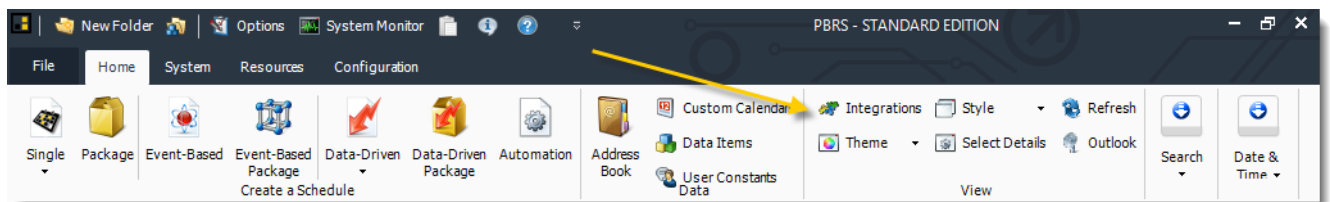
- **Enable system verbose logging:** Verbose logging allows PBRS to record more details regarding schedules, outputs, files, errors, etc. It is especially helpful should PBRS experience issues where technical support or Development would need to troubleshoot. Having this enabled does not impact user functionality in any way. Unless otherwise advised, please leave this option checked.
- **Use "ReportExecution" Endpoint for Report Execution:** When scheduling reports for SSRS, it will tell PBRS to use a different API endpoint for rendering the reports.
- **Suppress error message when a report is blank:** Click on this option to stop displaying the Report is blank message every time you execute a report manually that contains a blank report.
- **Skip SSRS Parameters where the value is an empty string:** Check this option to skip SSRS parameters when the value is an empty string.
- **Set schedule's next run before it runs:** Check this option to set the schedule's next run before it runs by the scheduler.

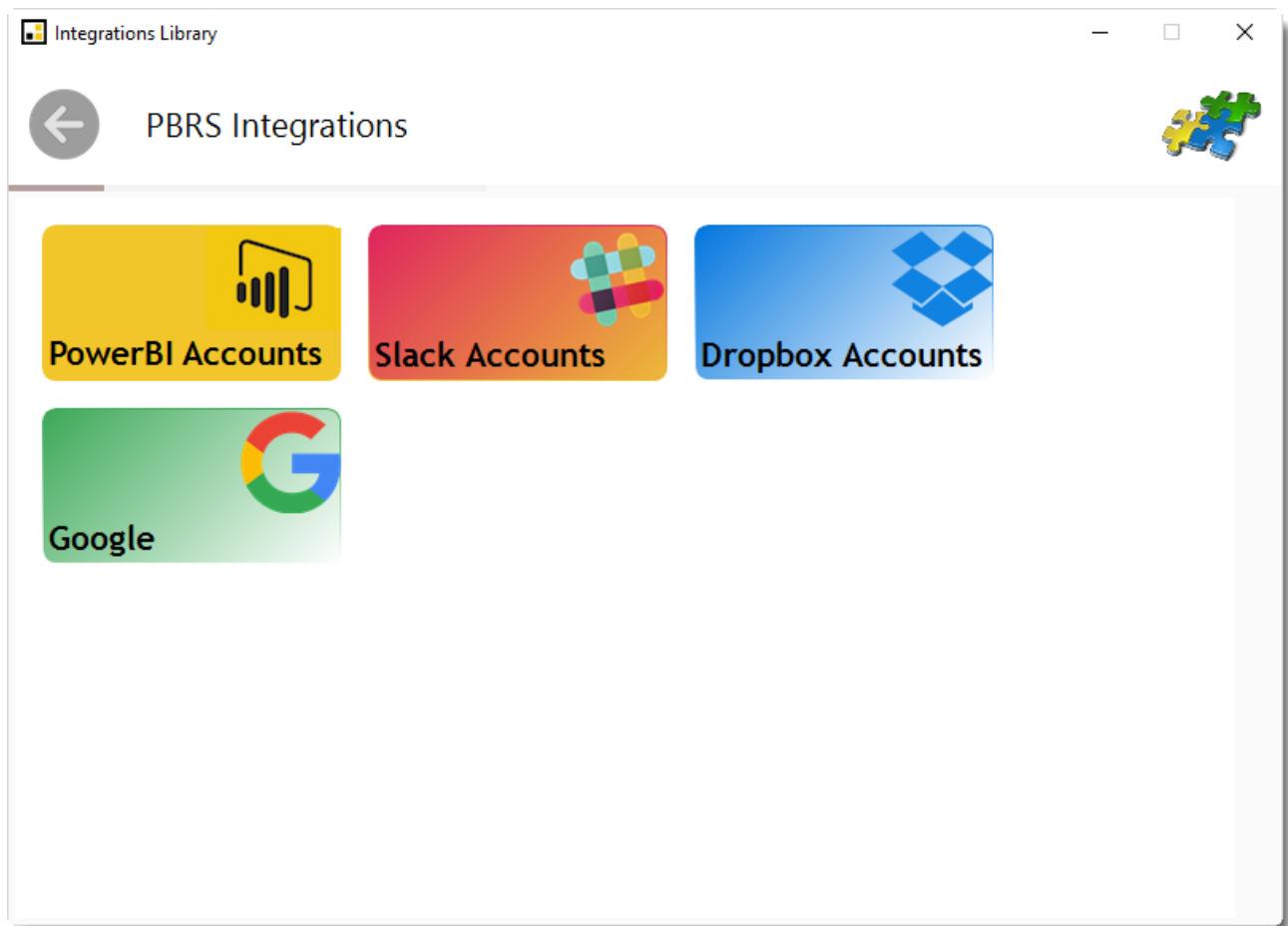
## Power BI Accounts



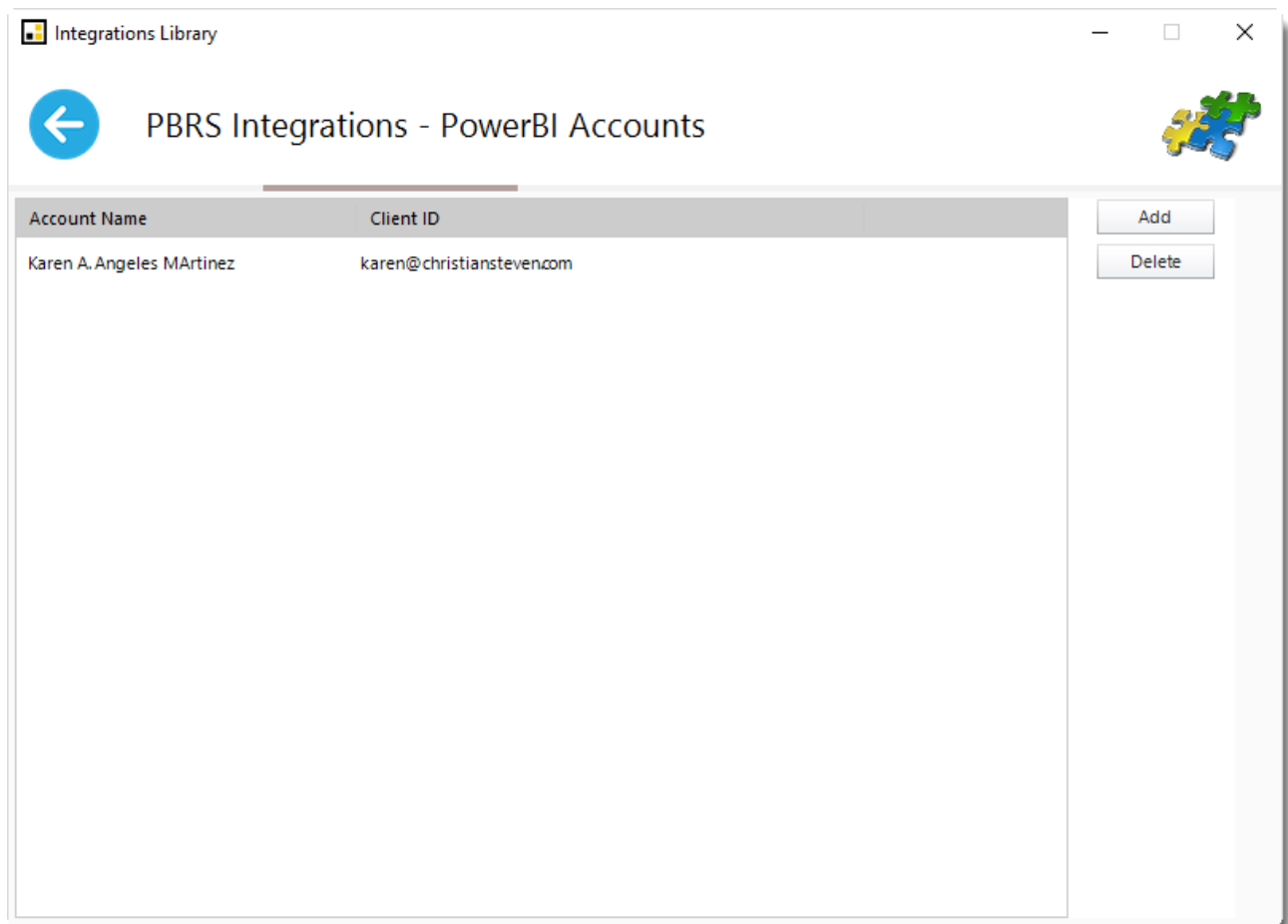
You can also manage [Integrations Library](#) here.

- Or select **Integrations** on the home screen.





- Select **PowerBI Accounts**.




- Click **Add** to add an account.

a. *Adding Office 365 accounts*

- Select **Office 365** as the **Authentication Type**.
- Follow the instructions in the blue section of the *Add a Power BI Account* screen.

PowerBI Account

 Add a PowerBI Account

Account Name

Authentication Type ☒ Office 365 ☐ Azure Active Directory

Username

Password

Client ID

Client Secret

Verify

To register PBRS with Microsoft PowerBI, please follow the steps below:


1. [Click here to go to the PowerBI App Registration Portal](#) and sign in with your account
2. Enter the name of the App as 'PBRS' and type as 'Server-Side Web App'
3. For the Redirect URL, enter `http://localhost`
4. For the Homepage URL, enter `http://localhost`
5. Select all the APIs for access
6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above
7. Hit the verify button and follow the browser to authorize access to PBRS

Cancel Save & Close

- When you have completed the instructions, click **Verify**.



PowerBI Account



## Add a PowerBI Account

Account Name

Authentication Type ☒ Office 365 ☐ Azure Active Directory

Username

Password

Client ID

Client Secret

To register PBRS with Microsoft PowerBI, please follow the steps below:

1. [Click here to go to the PowerBI App Registration Portal](#) and sign in with your account
2. Enter the name of the App as 'PBRS' and type as 'Server-Side Web App'
3. For the Redirect URL, enter `http://localhost`
4. For the Homepage URL, enter `http://localhost`
5. Select all the APIs for access
6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above
7. Hit the verify button and follow the browser to authorize access to PBRS

- If successful, a pop-up will appear: *Power BI account verified successfully*. Click **OK**.

PowerBI Account

## Add a PowerBI Account

Account Name: Karen A. Angeles MARTINEZ

Authentication Type: ☒ Office 365 ☐ Azure Active Directory

Username: karen@christiansteven.com

Password: .....

Client ID: a271848a66-7516-4688-82ac-27f4d3e387a9

Client Secret: .....

Verify

To register PBRS with Micro

1. Click [here](#) to go to the PowerBI account page
2. Enter the name of the App as 'PowerBI Account'
3. For the Redirect URL, enter 'http://localhost:3000/auth/powerbi/callback'
4. For the Homepage URL, enter 'http://localhost:3000'
5. Select all the APIs for access
6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above
7. Hit the verify button and follow the browser to authorize access to PBRS

PowerBI account verified successfully

OK


Cancel Save & Close

- The Power BI account is now added to PBRS.

b. *Adding Azure Active Directory accounts*

- Select **Azure Active Directory** as the **Authentication Type**
- Follow the instructions in the blue section of the *Add a Power BI Account* screen.

PowerBI Account



## Add a PowerBI Account

General | Sharing

Account Name

Authentication Type ☐ Office 365 ☒ Azure ActiveDirectory ☒ Use Code Authorization

**Please read the following before proceeding:**

1. [How do I register an Azure AD app to embed Power BI content for use with PBRs?](#)
2. [How do I add Power BI accounts to PBRs?](#)

Username  Password

Client ID  Azure Tenant ID

Refresh Token

[Whats my Azure Tenant ID?](#)

**To register PBRs with Microsoft PowerBI, please follow the steps below:**

1. [Click here to go to the PowerBI App Registration Portal and sign in with your account](#)
2. Enter the name of the App as 'PBRs' and type as 'Native App'
3. For the Redirect URL, enter <http://localhost>
4. For the Homepage URL, enter <http://localhost>
5. Select all the APIs for access
6. Copy the 'Client ID' code and paste it above
7. Hit the verify button and follow the browser to authorize access to PBRs

*You will need to be an **Azure Global Administrator** to be able to successfully give PBRs the required permissions. If you are not an Azure Global Administrator, your Azure Global Administrator must first register an Azure AD app to embed Power BI content for use with PBRs, and then provide you with the **Client ID** and the **Azure Tenant ID**.*

- When you have completed the instructions, click **Verify**.



## Add a PowerBI Account

General
Sharing

Account Name
Karen A. Angeles Martinez

Authentication Type
☐ Office 365
☒ Azure ActiveDirectory
☒ Use Code Authorization

**Please read the following before proceeding:**

- How do I register an Azure AD app to embed Power BI content for use with PBRs?
- How do I add Power BI accounts to PBRs?

Username
karen@christiansteven.com
Password
.....

Client ID
8f4d4a1b-3285-4725-8888-3f6a0e79a175
Azure Tenant ID
8C9d449d796\_729e46a708a7f4552b40ca13829a066

Refresh Token

[Whats my Azure Tenant ID?](#)
Verify

**To register PBRs with Microsoft PowerBI, please follow the steps below:**

- Click here to go to the PowerBI App Registration Portal and sign in with your account
- Enter the name of the App as 'PBRs' and type as 'Native App'
- For the Redirect URL, enter http://localhost
- For the Homepage URL, enter http://localhost
- Select all the APIs for access
- Copy the 'Client ID' code and paste it above
- Hit the verify button and follow the browser to authorize access to PBRs

Cancel
Save & Close

- If successful, a pop-up will appear: Power BI account verified successfully. Click **OK**.



## Add a PowerBI Account

General | Sharing

Account Name

Authentication Type ☐ Office 365 ☒ Azure ActiveDirectory ☒ Use Code Authorization

**Please read the following before proceeding:**

1. [How do I register an Azure AD app to embed Power BI content for use with PBRS?](#)
2. [How do I add Power BI accounts to PBRS?](#)

Username

Client ID

Refresh Token

[Whats my Azure Tenant ID?](#)

**PBRS**

PowerBI account verified successfully

OK

Verify

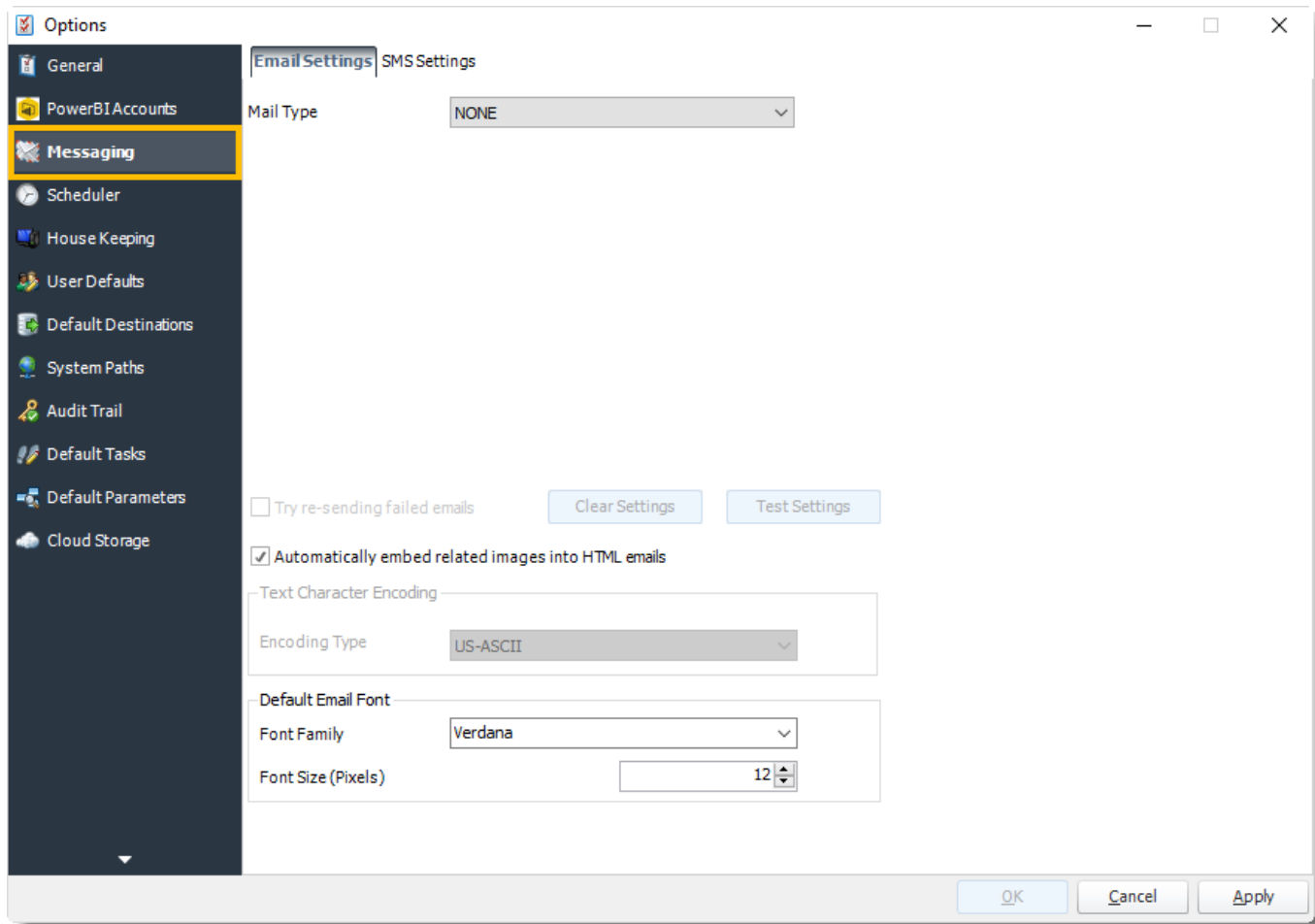
**To register PBRS with Microsoft PowerBI, please follow the steps below:**

1. [Click here to go to the PowerBI App Registration Portal and sign in with your account](#)
2. Enter the name of the App as 'PBRS' and type as 'Native App'
3. For the Redirect URL, enter <http://localhost>
4. For the Homepage URL, enter <http://localhost>
5. Select all the APIs for access
6. Copy the 'Client ID' code and paste it above
7. Hit the verify button and follow the browser to authorize access to PBRS

Cancel Save & Close

- The Power BI account is now added to PBRS.

## Messaging



### a. Email Settings

When you click on the Messaging tab in PBRs's Options window, you will see that you have two separate messaging options (shown on the tabs): Email Settings and SMS Settings. On this page, we will discuss the various email options available to you when using PBRs and how to set them up.

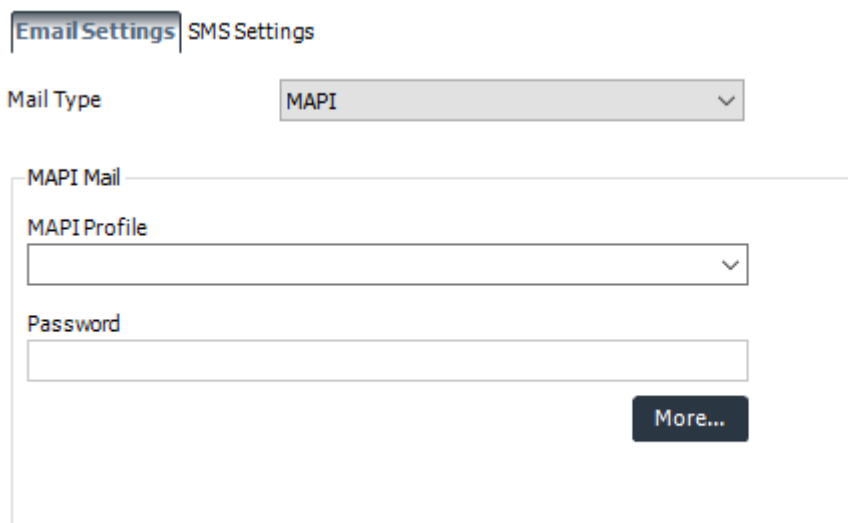
*No separate server is required in order for PBRs to send e-mail. However, if you are unfamiliar with your organization's e-mail settings, you may want to have a system administrator set these for you.*

## MAPI

You should choose MAPI from the Mail Type drop down if your organization uses a MAPI compliant system (such as Outlook or Exchange). In order to utilize the MAPI mail type, you will need to install the Collaboration Data Objects component from your Outlook or Office installation disk.

Once the CDO component is installed, you may need to register them again.

*To verify whether or not you already have the Collaboration Data Objects installed, click the Housekeeping tab on the far left. Then, under the Components tab, verify that Collaboration Data Objects is listed. If it is not, you will need to install them.*



To use the MAPI mail type, use the following credentials:

- **MAPI Profile:** Enter the name of your MAPI Profile.
- **Password:** Enter your password.

The MAPI Profile is how PBRS will communicate with your email system, global address book, and other email functions. Depending on the version of Windows you are running, it may also communicate with your security rights and the service packs you have installed. The drop-down may not show the list of profiles which exist on your PC.

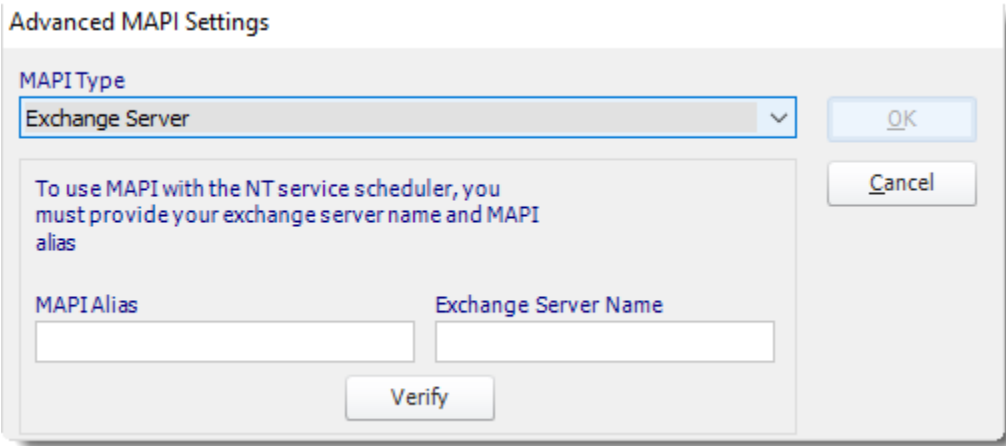
*If you are unsure of your MAPI Profile name, you can find it by going to **Windows Control Panel > Mail** and taking a look to see what your default profile is set to be. Then, simply type this profile's name into the field. More often than not, the profile name will be Outlook or MS Exchange Settings, but this is not always the case.*

In the MAPI Section, click on the **More...** The More button allows you to specify additional settings for the MAPI messaging. You can choose to set PBRS to use the Exchange Server, to email reports using Exchange or Office 365, or to use Stand-Alone Outlook.

## Setting PBRS to use Exchange Server

If you would like to set PBRS to run from just the Exchange Server, perform the following:

1. From the drop-down menu, select **Exchange Server**.

The image shows a Windows-style dialog box titled "Advanced MAPI Settings". At the top, there is a label "MAPI Type" above a drop-down menu that currently displays "Exchange Server". To the right of the drop-down are two buttons: "OK" and "Cancel". Below the drop-down, there is a text instruction: "To use MAPI with the NT service scheduler, you must provide your exchange server name and MAPI alias". Under this instruction, there are two text input fields: "MAPI Alias" on the left and "Exchange Server Name" on the right. Below these fields is a "Verify" button.

2. Once you select the Exchange Server option, enter in the MAPI Alias and your Exchange Server Name in the applicable fields.
3. Click **Verify**.

*You must verify the MAPI Alias and Exchange Server Name or you will be unable to save the settings.*

4. Click **OK** to return the main messaging settings page.
5. Skip to the **Test Settings** section at the bottom of this page to complete the Email Settings configuration.

## Setting PBRS to use the Exchange Web Service

If you would like to set PBRS to use the Exchange Web Service, perform the following:

1. From the drop-down menu, select **Exchange Web Service (2007 or later)**.



Advanced MAPI Settings

MAPI Type  
Exchange Web Service (2007 or later) ▼

Authentication

Domain\UserID

Password

☐ Use Exchange Auto-Discovery for this email address

Go

Server Name/Service URL

Sender Name

Sender Address

OK Cancel

2. Enter the following credentials:
  - **Domain\UserID:** Domain and User ID.  
*Office 365 users should enter their full email address in this field instead.*
  - **Password:** Enter your password.
  - **Use Exchange Auto-Discovery:** This will enable you to automatically gather your exchange server settings. Enter your **Email Address**, click **Go**, and PBRS should return the following settings:
    - **Server Name/Service URL:** The name of your exchange server.
    - **Sender Name:** Your sender name.
    - **Sender Address:** Your sender address.
3. If the settings are correct, click **OK** to save. You can test these settings on the main setup screen.
4. Check the box next to *Use currently logged in user to send emails during manual execution* if you would like PBRS to use the currently logged in Windows account (rather than the MAPI profile you are currently inputting) for emails that are sent when a schedule is manually executed.
5. Skip to the **Test Settings** section at the bottom of this page to complete the Email Settings configuration.

### Setting PBRS to use Stand-Alone Outlook

1. If you want PBRS to interface directly with your Outlook profile, select Stand-Alone Outlook from the drop-down menu.



2. Click **OK**. There is no need to enter in any additional credentials.  
*Using this option, PBRS will not send emails if you are not logged into the machine with Outlook open. This is the case even if you are running PBRS as an NT service.*
3. Skip to the **Test Settings** section at the bottom of this page to complete the Email Settings configuration.

## SMTP

If you wish to connect to an SMTP mail server, perform the following:

1. Then enter the following credentials:
  - **User ID:** Enter the User ID provided by your email administrator.
  - **Password:** Enter the password provided by your email administrator.

- **Server name:** Enter your SMTP server details. You can use the mail server name or the IP address.
  - **Sender Address:** When the email is received, this will be the From address displayed.
  - **Sender Name:** When the email is received, this will be the displayed Sender Name.
  - **SMTP Timeout:** Use this to determine how long PBRs will wait for a connection from your SMTP server before declaring a failure. The default is 30 seconds, but you may need to adjust this depending on your preference.
2. If you would like to set up options such as *POP before SMTP* (if they are required by your SMTP server) or to set your server settings for Read Receipts, click **Advanced**. Then, select the appropriate option from the drop down and enter the requested credentials.

Advanced...

POP Authentication SMTP Security IMAP (Delivery Receipts)

☒ SMTP Server requires POP authentication

POP Details

POP Server

User Name

Password

Port

☒ Use SSL

Verify

OK Cancel

Advanced...

POP Authentication SMTP Security IMAP (Delivery Receipts)

☐ Use SSL Connection

☐ Use "Start TLS"

Authentication Method

OK Cancel

Advanced...

POP Authentication SMTP Security IMAP (Delivery Receipts)

IMAP Server

User Name

Password

Port 143

☐ Use SSL

Test

OK Cancel

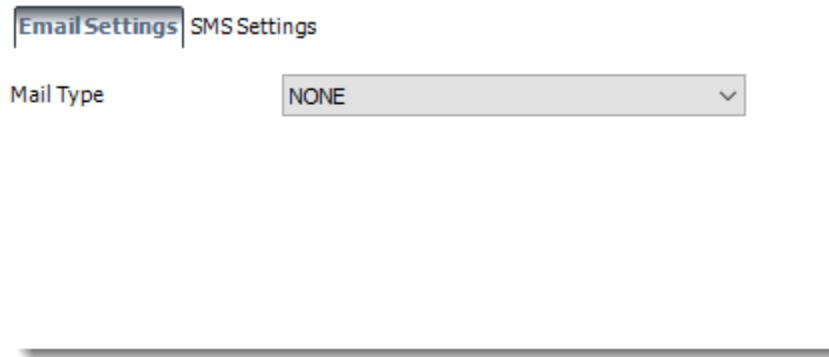
You **must** select **Verify** or **Test** after entering the relevant credentials in the Advanced pop-up window. If you do not verify or test the settings, you will not be able to save them.

3. If you would like PBRs to notify you when an invalid email address is entered, check the box next to **Throw an error if an invalid email is detected**.
4. Skip to the **Test Settings** section at the bottom of this page to complete the Email Settings configuration.

NONE

If you will not be using PBRS to send emails, perform the following:

*This does not affect other aspects of PBRS. You will still be able to use PBRS to print, export to folder, or export to an FTP destination, etc.*

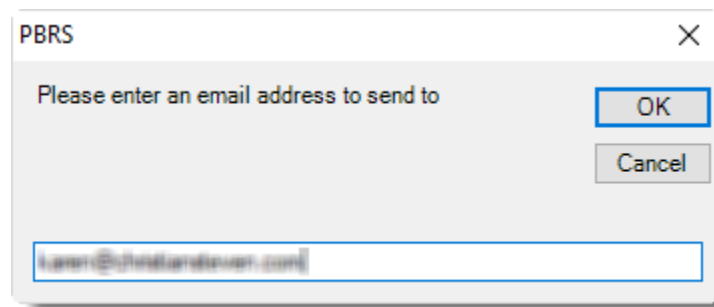


## Test Settings

In this section, we will test your Mail Type settings to verify they work as expected. Testing the settings ensures that PBRS will not encounter errors when trying to send out emails while running schedules. To test the settings, perform the following:

### Verify the settings work

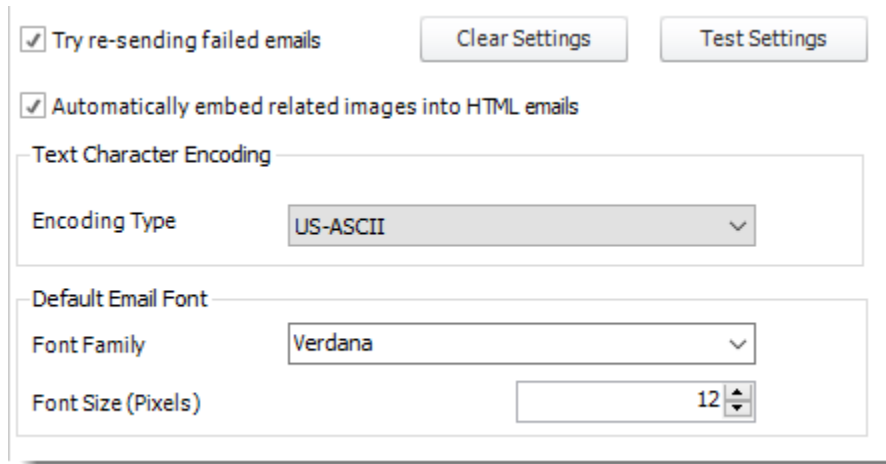
1. Click **Test Settings**



2. Enter an email address to send the test email to.  
Click **OK**.
3. You should receive a pop-up stating "Email sent successfully!".  
Click **OK**.

*If you receive an error message, verify that your server information is listed correctly.*

## Check the appropriate options



The screenshot shows a settings window titled 'Options'. At the top, there are two buttons: 'Clear Settings' and 'Test Settings'. Below these are two checked checkboxes: 'Try re-sending failed emails' and 'Automatically embed related images into HTML emails'. Under the 'Text Character Encoding' section, there is a dropdown menu for 'Encoding Type' currently set to 'US-ASCII'. Under the 'Default Email Font' section, there is a dropdown menu for 'Font Family' set to 'Verdana' and a spinner box for 'Font Size (Pixels)' set to '12'.

- If you wish to clear the currently entered mail settings and start over, click **Clear Settings**.
  - If you would like PBRS to keep trying to send emails after they've failed to send once, click the checkbox next to **Try re-sending failed emails**.
  - If you would like PBRS to **Automatically embed related images into HTML emails**, verify the checkbox next to this option is checked.  
*By default, PBRS will automatically embed an image if the link is placed in the body of an HTML email. Keep this box checked if you wish for this to occur. If you would rather the image link be placed in the HTML email body (rather than the image itself), then uncheck this box.*
  - If you would like to change the **Text Character Encoding**, select the appropriate choice from the drop-down.  
*Encoding is used by Operating Systems to determine how to display emails on the recipient's PC. **US-ASCII** is standard for most languages. However, if you are using Japanese characters, then you should select **ISO-2022-JP**.*
  - If you would like to set or change the **Default Email Font** use this option to set the font family and font size.
1. Click **Apply** at the bottom of the *Options* window.

## b. SMS Settings

**Options**

- General
- PowerBIAccounts
- Messaging**
- Scheduler
- House Keeping
- User Defaults
- Default Destinations
- System Paths
- Audit Trail
- Default Tasks
- Default Parameters
- Cloud Storage

Email Settings **SMS Settings**

☒ Use hardware device to send SMS ☐ Use RedOxygen Web Service to send SMS

Device

Initialization String AT+MS=V22B [Help](#)

Data Format  Speed

☐ Send through GSM phone or SMS device

☒ Send through service provider

SMSC Details

SMSC Number

Provider Protocol

Password (optional)

Sender Number

☐ Use Unicode (to support Arabic, Chinese and other wide style character sets)

### How SMS Works

PBRS sends SMS messages using three different methods: A direct connection to a cell phone or GSM modem, a modem connected to a phone line, or the Red Oxygen Web Service.

#### Direct Connection to a Cell Phone or GSM Modem

If you have a cell phone connected to a COM port on your PC, PBRS can interface directly with the cell phone and send messages.

*Information located on this page may indicate that SMS could be received by PBRS. However, this function has not been enabled in our software. The SMS component within PBRS can only send SMS. It cannot receive and process SMS messages.*

You can use a GSM Modem or GSM Phone for sending SMS messages. However, we recommend a dedicated GSM modem instead of a GSM phone; a GSM modem is more reliable and faster.

PBRS supports the majority of the GSM modems available on the market (although we strongly recommend WaveCom Fastrack GSM Modems) and supports most 'business' GSM phones (i.e. GSM phones that support the AT+C command set).

As mentioned previously, there are many GSM modems and GSM phones available today, and we do support most of these devices. The SMS component manufacturer has successfully tested the following GSM Modems and GSM phones with PBRS:

GSM modems and GSM phones that were successfully tested				
Brand	Type	Send	Receive	Comments
Ericsson	Ericsson T18s	True	True	
	Ericsson T28s	True	True	
	Ericsson T39	True	True	
Iteagno	Iteagno	True	True	Use modem driver and Modem)
Nokia	Nokia 30	True	True	
	Nokia 3310	False	False	
	Nokia 3330	False	False	
	Nokia 3410	False	False	
	Nokia 5110	False	False	
	Nokia 5190	False	False	
	Nokia 5210	False	False	
	Nokia 6110	False	False	
	Nokia 6150	False	False	
	Nokia 6190	False	False	
	Nokia 6210	True	True	
	Nokia 6220	True	True	
	Nokia 6310	True	True	
	Nokia 6310i	True	True	
	Nokia 6600	True	True	
	Nokia 7600	True	True	
	Nokia 8910	True	True	



<b>Siemens</b>	Siemens C25	True	True	
	Siemens C35	True	True	
	Siemens C45	True	True	
	Siemens M35	True	True	
	Siemens M45	True	True	
	Siemens MC35	True	True	
	Siemens S35	True	True	
<b>Sony Ericsson</b>	Siemens TC35	True	True	
	Sony Ericsson T310	True	True	
	Sony Ericsson T610	True	True	
	Sony Ericsson T630	True	True	
<b>WaveCom</b>	Sony Ericsson T68	True	True	
	WaveCom Fastrack M1206B	True	True	Use 'Standard 56000 bps
	WaveCom Fastrack M1306B	True	True	Use 'Standard 56000 bps
	WaveCom Integra	True	True	

*Whilst we have provided information here on the phones which have been tested, ChristianSteven Software makes no guarantee that PBRS will work with any of the above phones or any other phones. We do not advise or train on the installation of GSM modems and phones. For more information, please speak to your telephone system administrator and refer to the user manuals and manufacturer of your phone or GSM modem.*

#### Direct Connection to a Cell Phone or GSM Modem

If you have a cell phone connected to a COM port on your PC, PBRS can interface directly with the cell phone and send messages.

*Information located on this page may indicate that SMS could be received by PBRS. However, this function has not been enabled in our software. The SMS component within PBRS can only send SMS. It cannot receive and process SMS messages.*

You can use a GSM Modem or GSM Phone for sending SMS messages. However, we recommend a dedicated GSM modem instead of a GSM phone; a GSM modem is more reliable and faster.

© ChristianSteven Software

Updated on 15 November 2021

PBRS supports the majority of the GSM modems available on the market (although we strongly recommend WaveCom Fastrack GSM Modems) and supports most 'business' GSM phones (i.e. GSM phones that support the AT+C command set).

To set up a direct connection to a cell phone or GSM modem, perform the following:

1. Click **Use hardware device to send SMS**.
2. From the Device drop-down select your **modem or COM port**.

Email Settings **SMS Settings**

☒ Use hardware device to send SMS ☐ Use RedOxygen Web Service to send SMS

Device:   
COM1   
COM2   
COM3   
COM4

Data Format:   
8,n,1

3. Enter or confirm the relevant **initialization string**, **data format**, and **speed**.

*You may find relevant settings for your specific service provider on the SMS Service Provider Information chart located at the bottom of this page. Alternatively, you can speak with your SMS provider or view your GSM modem or phone's user manual.*

4. Click **Send through GSM phone or SMS device**.

Initialization String AT+MS=V22B [Help](#)

Data Format 8,n,1 Speed 9600

☒ Send through GSM phone or SMS device ☐ Send through service provider

SMSC Details

SMSC Number   
Provider Protocol TAP   
Password (optional)   
Sender Number

☐ Use Unicode (to support Arabic, Chinese and other wide style character sets)

5. If you use Arabic, Chinese, or other wide style character sets, check *Use Unicode*. Otherwise, leave this box unchecked.
6. Click **Apply** then **OK** at the bottom of the Options window.

### Modem Connected to a Phone Line

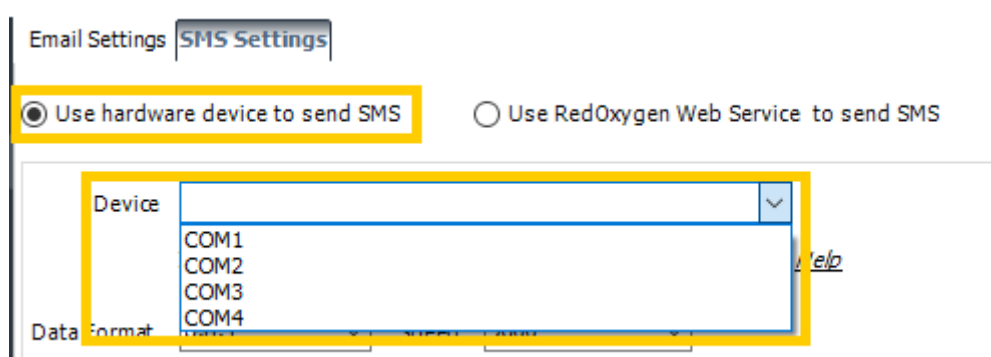
Your cell phone company should have provided you with a special telephone number (SMSC Number). When this number is dialed, an SMS device connects to the line, and PBRs sends the required information to your provider. A normal cell phone works by sending texts to the SMSC number programmed in the phone.

If you use an SMSC dial-in provider to send SMS messages, you just need a standard Hayes compatible modem. Because SMSC centers operate at low speed, you don't need a fast modem. A Standard 96000 bps modem is already sufficient. When moving through the instructions below, ensure you set your modem to use the speed required by your service provider.

*Information located on this page may indicate that SMS could be received by PBRs. However, this function has not been enabled in our software. Even if this function were enabled in PBRs itself, when using an SMSC dial-in provider, you can only send SMS messages.*

To set up a direct connection to a cell phone or GSM modem, perform the following:

1. Click **Use hardware device to send SMS**.
2. From the Device drop-down select your **modem or COM port**.



3. Enter or confirm the relevant **initialization string**, **data format**, and **speed**.

*You may find relevant settings for your specific service provider on the SMS Service Provider Information chart located at the bottom of this page. Alternatively, you can speak with your SMS provider or view your GSM modem or phone's user manual.*

4. Click **Send through service provider**.

Initialization String AT+MS=V22B [Help](#)

Data Format 8,n,1 Speed 9600

☐ Send through GSM phone or SMS device

☒ Send through service provider

SMSC Details

SMSC Number

Provider Protocol TAP

Password (optional)

Sender Number

☐ Use Unicode (to support Arabic, Chinese and other wide style character sets)

5. Enter in the relevant **SMSC Number**, **Provider Protocol**, **Password** (if necessary), and **Sender Number**.

*You may find relevant settings for your specific service provider on the SMS Service Provider Information chart located at the bottom of this page. Alternatively, you can speak with your SMS provider or view your GSM modem or phone's user manual.*

6. If you use Arabic, Chinese, or other wide style character sets, check *Use Unicode*.
7. Click **Apply** then **OK** at the bottom of the Options window.

### Red Oxygen Web Service

Red Oxygen is a 3rd party text messaging provider. If you (or your company) have a Red Oxygen account, it can be connected with PBRS to send text messages. If you do not have an account or need more information, please visit [Red Oxygen](#).

The most basic plan is all that is necessary in order for PBRS to use this feature. However, pricing and plans can vary depending on your required SMS traffic. Please refer to Red Oxygen for further details.

*RedOxygen is not a ChristianSteven Product and is not supported by our technical support team. PBRS is simply compatible with this product. For troubleshooting of Red Oxygen, please refer to Red Oxygen support.*

To connect your RedOxygen account, perform the following:

1. Click *Use RedOxygen Web Service to send SMS*.

Email Settings | **SMS Settings**

☐ Use hardware device to send SMS    ☒ Use RedOxygen Web Service to send SMS

SMS using RedOxygen

Account ID

Account Email Address

Account Password

You may learn more and sign up with the **RedOxygen** SMS service at <http://www.redoxygen.com>

2. Enter in your **Red Oxygen Account ID, Email Address, and Password**.
3. Click **Apply** then click **OK** at the bottom of the Options window. From now on when PBRS sends text messages, it will send them via RedOxygen.

#### SMS Service Provider Information

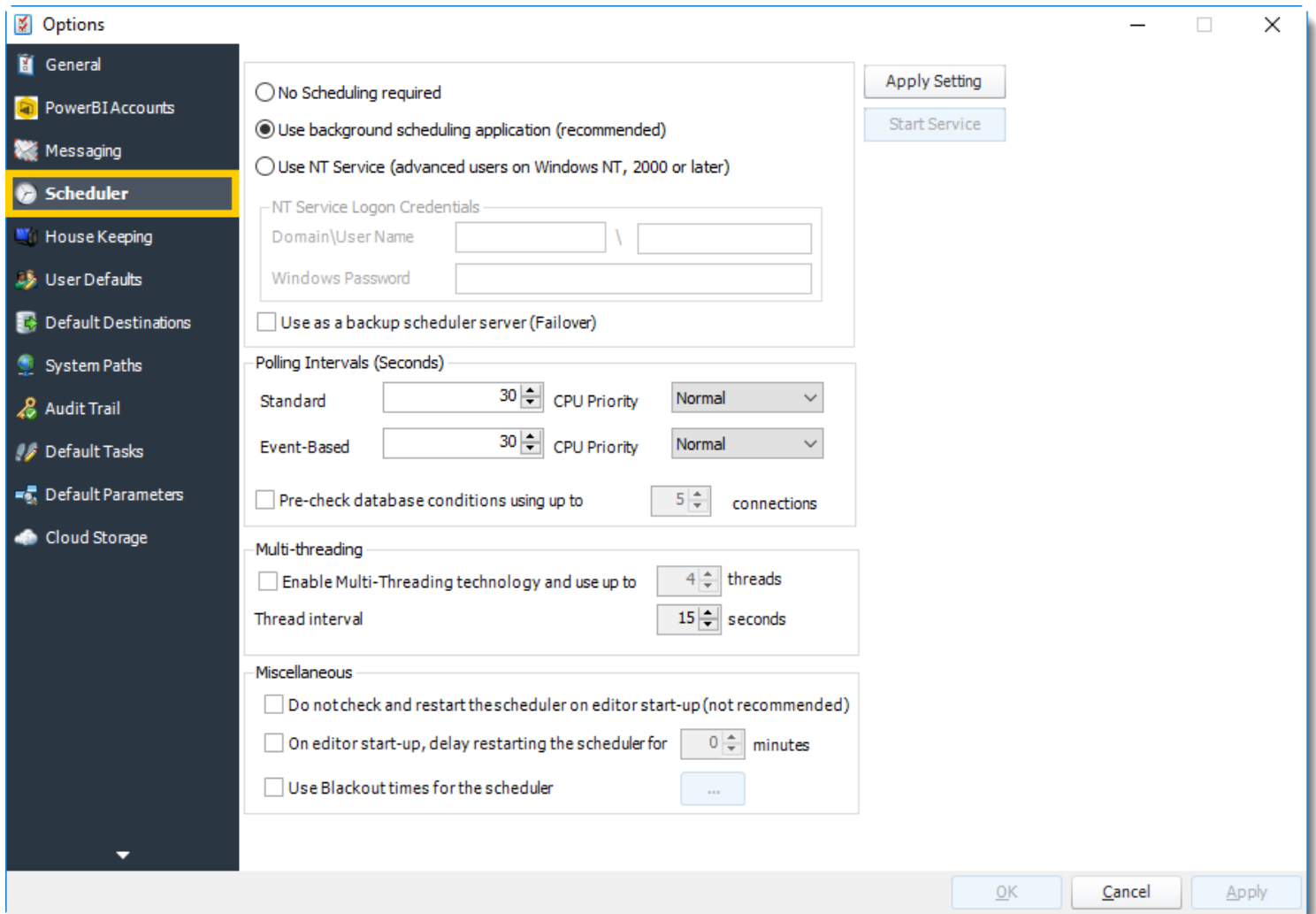
There are many service providers offering pager/SMS services today. At time of publication, we were provided with a list of service providers and the settings they require. However, we cannot guarantee that all of the service providers mentioned below are working fine, or that PBRS will work with your service provider.

For more up to date information, please speak to your own SMS service provider.

Country	Provider	Phone (SMSC #)	Protocol	Modem speed	Modem settings (databits,parity, stopbits)	Password	Comments
<b>Australia</b>	Link	0738326002	TAP	1200	8,n,1		
	Orange	+61 394175949	TAP	9600	8,n,1	REQUIRED	
	Telstra	125107	TAP No EOT	1200	7,e,1	mnmail	
<b>Austria</b>	AirPage	06883322111	TAP	1200	7,e,1		
	CallMe	090066911	TAP	1200	7,e,1		
	Mobilkom	090066914	TAP	2400	Unknown		
<b>Belgium</b>	Mobistar	0495955205	UCP	2400	8,n,1		Not accepting messages to foreign countries.
	Proximus	0475161621	TAP	2400	8,n,1		Accepting messages to local and foreign countries. Foreign addresses must have format like this: 4412345678. Not accepted: 004412345678
<b>Canada</b>	Cantel	5148620630	TAP	1200	7,e,1		Not accepting SMS messages to outside countries
	PageNet1	4167159999	TAP	1200	7,e,1		
	PageNet2	4167912499	TAP	1200	7,e,1		
	Telus	14032532266	TAP	1200	7,e,1		
<b>Denmark</b>	TeleDanmark Mobil	90131201	UCP	1200	8,n,1		
<b>Finland</b>	Sonera	209801	TAP	1200	8,n,1		
<b>Germany</b>	D1 Alpha	01712092522	TAP	2400	8,n,1		
	D2	1722278020	UCP	2400	8,n,1		
	E-Plus	01771167	TAP	2400	7,e,1		
	TelMI	016601010101	TAP	1200	7,e,1		
<b>Iceland</b>	Landssími Íslands	05665395	TAP	2400	8,n,1		
	Landssími Íslands	9541010	UCP	1200	8,n,1		
<b>Ireland</b>	Eircell	0312607000	TAP	1200	7,e,1		
	Esat Digifone	03868525352	TAP	2400	8,n,1		
	Ireland Esat Digifone	868525352	TAP	1200	8,n,1		
<b>Netherlands</b>	KPN	0653141414	UCP	1200	8,n,1		
<b>New Zealand</b>	Telecom Paging	0264001283	TAP	1200	7,e,1		
	Telecom Paging	043844476	TAP	1200	7,e,1		
<b>Norway</b>	N,Telenor,UCP	096890060	UCP	1200	8,n,1		
	NetCom	092000890	TAP	1200	7,e,1		
	Telenor Mobil PS	096890050	TAP	1200	7,e,1		
<b>Portugal</b>	TMN	962113000	UCP	1200	8,n,1		
<b>Sweden</b>	Telia	0740930000	UCP	1200	8,n,1		
<b>Switzerland</b>	Telepage Private	0740900003	TAP	1200	7,e,1		
	Telepage Swiss	0740900103	TAP	1200	7,e,1		
<b>UK</b>	BT EasyReach	09011130000	TAP	1200	7,e,1		
	BT Pager	08457581354	TAP	1200	7,e,1		
	Cellnet	7860980480	TAP	300	8,n,1		
	Hutchison	0941100400	TAP	1200	7,e,1		
	One2One	07956201072	TAP	1200	7,e,1		
	One2One	07958879889	TAP	1200	7,e,1		
	Orange Fleet	07973100601	TAP	1200	8,n,1		
	PageOne	0640900199	TAP	1200	7,e,1		
	VodaZap	07666699699	TAP	2400	8,n,1		

USA	AirTouch	8003260038	TAP	1200	7,e,1		
	Ameritech	13125149243	TAP	2400	7,e,1		
	Bellsouth	18008682835	TAP	300	7,e,1		
	Cellone	18888787727	TAP	1200	7,e,1		
	MetroCall	18009171168	TAP	1200	7,e,1		
	Mobile Comm	18009464644	TAP	1200	7,e,1		
	Mobile Media	18006225742	TAP	1200	7,e,1		
	NexTel1	18013016683	TAP	1200	7,e,1		
	NexTel2	13129076683	TAP	1200	7,e,1		
	PageMart	180084649499	TAP	1200	7,e,1		
	PageNet	18007208398	TAP	1200	7,e,1		
	SkyTel	16013600504	TAP	1200	7,e,1		
	SkyTel	18007596366	TAP	1200	7,e,1		
	Sprint PCS	18886561727	TAP	1200	7,e,1		
	USA Mobile	18005899776	TAP	1200	7,e,1		
	VoiceStream	18009378941	TAP	1200	7,e,1		

## Scheduler



The Scheduler is the key function that determines when and how tasks are triggered. Rather than using Windows Task Scheduler, PBRs uses ChristianSteven's proprietary scheduler to execute tasks. This creates a far more reliable, dedicated scheduling system.

Within PBRs, the following scheduling options are available:

- No Scheduling required
- Use background scheduling application (recommended)
- Use NT Service (advanced users on Windows NT, 2000 or later)



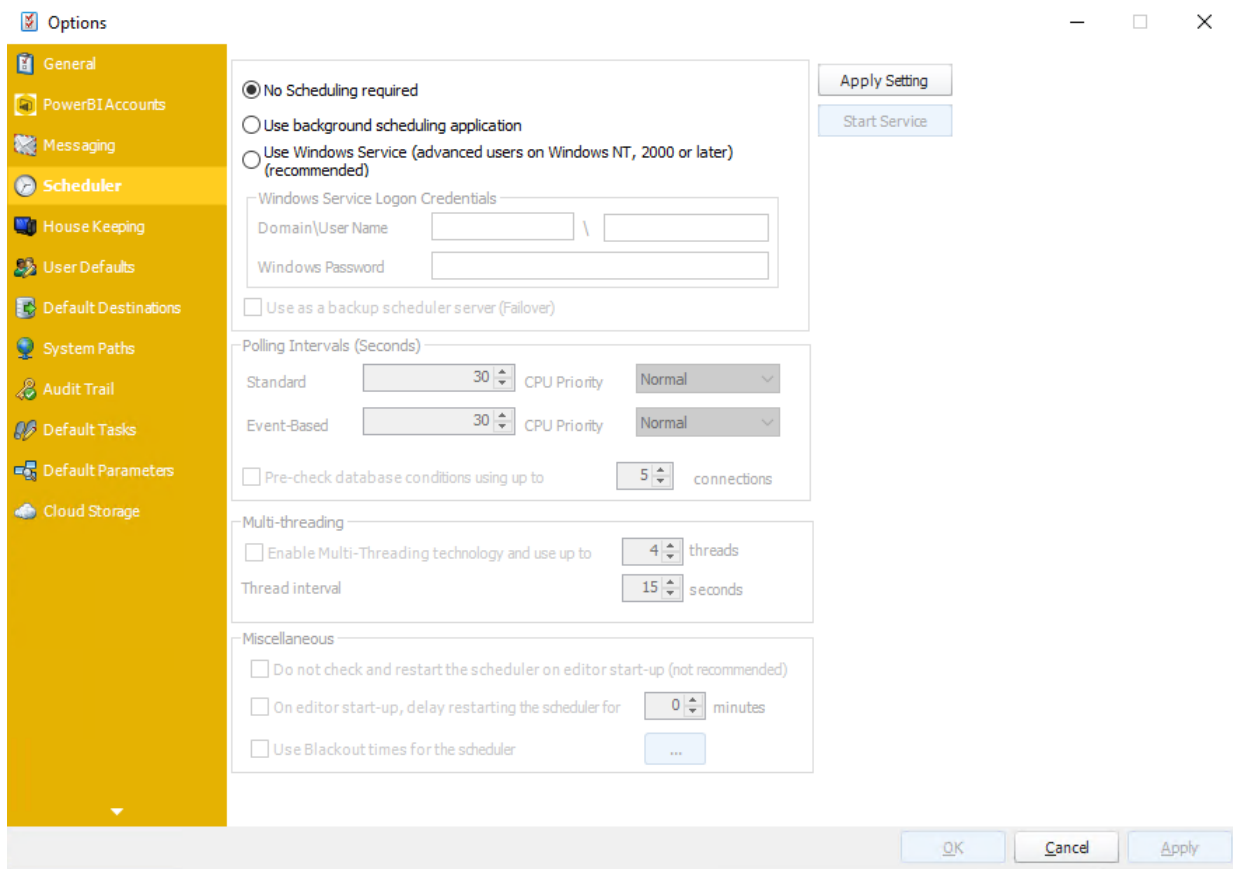
## No Scheduling required

PBRS can be used as an ad-hoc report managing tool with no scheduling. If you do not want any automated scheduling, select this option. However, this means you will need to execute each schedule manually.

This option is also used to uninstall any previously installed scheduling services.

To choose this options, perform the following:

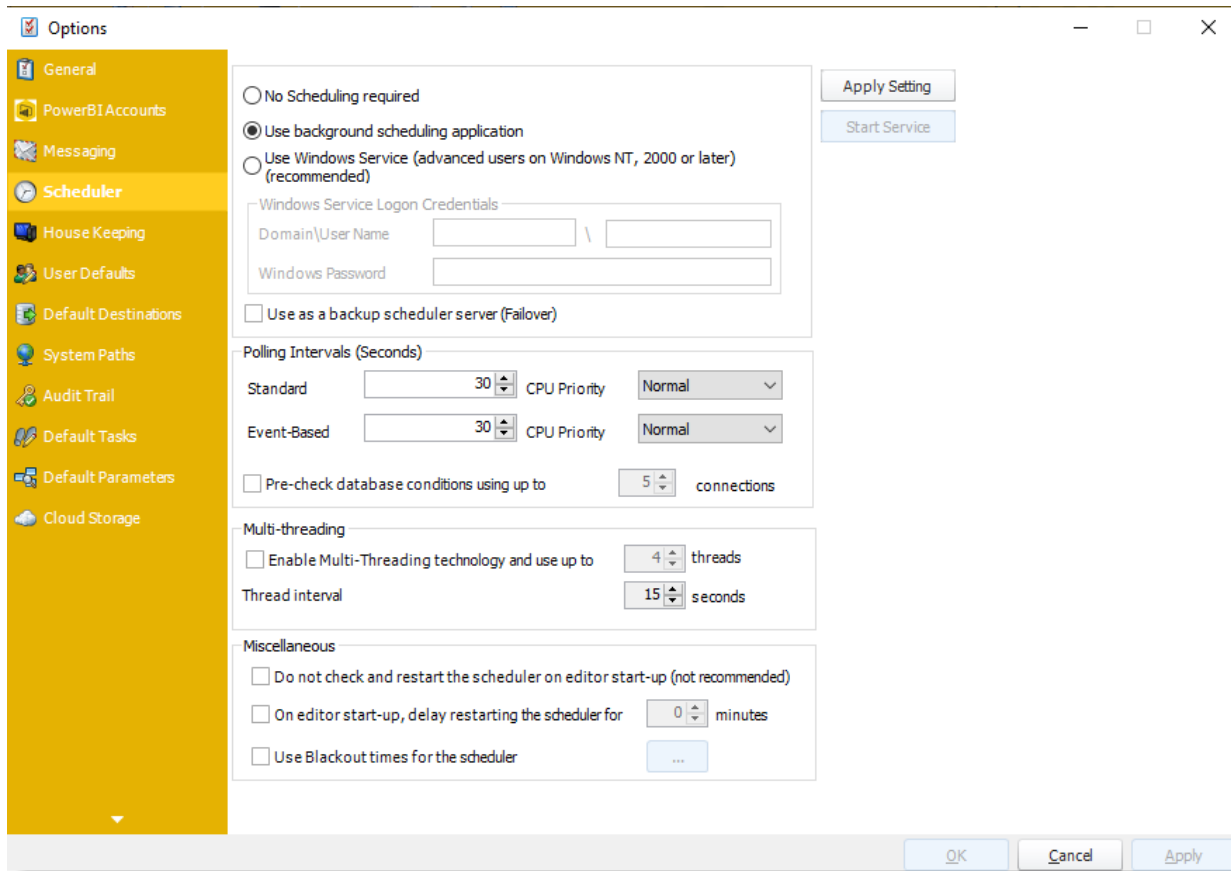
1. Click the radio button next to **No Schedule Required**.
2. Click **Apply Setting**. This will uninstall any previously installed Schedulers and apply the new settings.



### Use Background Scheduling application (recommended)

The background application scheduler is a windows application which monitors PBRS and fires off reports when they become due.

*The background scheduler is an application independent of PBRS. Therefore, it will stop working if the user logs off or the server is shut down. If you want to be able to log off the server without stopping PBRS scheduling, then you must install and use the Windows (NT) Service Scheduler.*



To use the background application scheduler, perform the following:

1. Select the radio button next to **Use background scheduling application (recommended)**.
2. Click **Apply Setting**.
3. Click **Start Service** to start the scheduler.
4. Click **Apply** at the bottom right of the *Options* window.

### *Use NT Service (advanced users on Windows NT, 2000 or later)*

The NT service is a Windows service. It installs into the Windows "Services" control panel. As this is a windows service, it will continue to run scheduled reports even when there is no user logged on to the PC.

*The machine **MUST** be powered on in order for the NT Service to work. If the machine is not on, the NT Service cannot run and schedules will not kick off as scheduled.*

### **IMPORTANT**

Prior to selecting the NT Service option as your Scheduler, you must ensure that the following pre-requisites have been met:

- You are logged onto the machine/server as the NT Service user
- The above listed NT Service user has the following windows security rights on the PC you are installing it on:
  - Act as part of the operating system
  - Log on as a service.
  - Is a member of the Local Administrators security group.
- If you are using MS Exchange Server, the above listed NT Service user must have full rights to the designated email account.

These security requirements are required by Windows. If you are unsure how to set up Windows security settings, your system administrator will be able to help.

### **Setting up the NT Service**

Once you have ensured that the above pre-requisites have been met, perform the following:

1. Select the radio button next to **Use NT Service (advanced users on Windows NT, 2000 or later)**.
2. Enter the following credentials:
  - **Windows Domain:** Type in the Domain name. If you are using MS Exchange Server, then this must be your network domain so that PBRs can connect to your Exchange server.
  - **Windows User Name:** Enter the username for the above user.
  - **Windows Password:** Enter the password for the above user.
3. Click **Apply Setting**.

☐ No Scheduling required  
☐ Use background scheduling application (recommended)  
☒ Use NT Service (advanced users on Windows NT, 2000 or later)

NT Service Logon Credentials

Domain\User Name: CHRISTIANSTEVEN \ karen

Windows Password: .....

☐ Use as a backup scheduler server (Failover)

Apply Setting

Start Service

4. Verify that each of the requirements listed on the *NT Service Checklist* window have been met. If so, check each of the boxes and click **Proceed**.

*If you have not completed the listed requirements and/or do not check all of the boxes, you will be unable to continue setting up the NT Service.*

NT Service Checklist

**Installation of the Windows service requires certain environmental pre-requisites. To perform correctly it must NOT be installed using Terminal Services or Window...**

☐ I am logged into the PC as the user that will run the windows service  
☐ The above user has Windows security right "Act as part of the Operating System"  
☐ The above user is a member of the LOCAL administrators group on this PC  
☐ The above user has Windows security right "Logon as a service"  
☐ I am not using Terminal Services or XP Remote Control based software during the installation of the Windows service.

Proceed Cancel

5. If you have configured PBRs to use MAPI mail, you will be prompted to select the type of email system you are using with PBRs: Stand Alone Outlook, Exchange Server, or Exchange Web Service. Once you have selected the appropriate option from the drop-down menu, click **OK**.



6. The NT Service will now install. Once completed, the service will be visible in the windows "Services" control panel and will be known as *PBRS*. You should also see *PBRS Monitor*. This is a monitoring service which ensures that the PBRS service is continually running.
7. If it is not already grayed out, select **Start Service**.
8. Click **Apply** at the bottom right of the *Options* window, if available.

*If any of the above credentials are changed (e.g. the password is changed or times out), **the service will stop running**. Under these circumstances, you will have to uninstall it and re-install it ensuring you enter the new credentials correctly. We recommend that your system administrator ensures that the NT user's credentials never change and never time out.*

## Additional Scheduling Options

- **Use as Backup Scheduler:** PBRs's Failover module can shunt the processing load from a failing server to a backup server. This option guarantees that your schedules will execute even if the primary server is non-functioning.
  - The primary server must have its scheduler active.
  - The primary PBRs server must have its database stored in an ODBC compliant database.
  - The intended backup installation must be connected to the ODBC compliant database.

## Polling Intervals

- **Standard:** The schedule polls the PBRs schedule database at regular intervals to see if there are any schedules to execute. The polling interval defines how often you wish scheduler to check.

The screenshot shows the 'Options' dialog box with the 'Scheduler' tab selected. The left sidebar lists various settings categories: General, PowerBIAccounts, Messaging, Scheduler (highlighted), House Keeping, User Defaults, Default Destinations, System Paths, Audit Trail, Default Tasks, Default Parameters, and Cloud Storage. The main content area is divided into several sections:

- Scheduling Method:** Three radio buttons are present: 'No Scheduling required', 'Use background scheduling application (recommended)' (which is selected), and 'Use NT Service (advanced users on Windows NT, 2000 or later)'. Below these are fields for 'NT Service Logon Credentials' (Domain\User Name and Windows Password).
- Failover:** A checkbox labeled 'Use as a backup scheduler server (Failover)'.
- Polling Intervals (Seconds):** Two rows are shown. The first row is for 'Standard' polling with a value of 30 and 'CPU Priority' set to 'Normal'. The second row is for 'Event-Based' polling with a value of 30 and 'CPU Priority' set to 'Normal'.
- Connections:** A checkbox 'Pre-check database conditions using up to' followed by a spinner box set to 5 and the text 'connections'.
- Multi-threading:** A checkbox 'Enable Multi-Threading technology and use up to' followed by a spinner box set to 4 and the text 'threads'. Below this is 'Thread interval' with a spinner box set to 15 and the text 'seconds'.
- Miscellaneous:** Three checkboxes: 'Do not check and restart the scheduler on editor start-up (not recommended)', 'On editor start-up, delay restarting the scheduler for' followed by a spinner box set to 0 and the text 'minutes', and 'Use Blackout times for the scheduler' with a button to open a calendar.

At the bottom right of the dialog are buttons for 'Apply Setting', 'Start Service', 'OK', 'Cancel', and 'Apply'.

- **Event Based:** Event-Based Schedules run on their own thread.

- **Pre-Check Database conditions using multiple threads:** Using Multi-threading technology, PBRS will check multiple conditions for multiple schedules using up to 5 threads. This option can increase the speed at which PBRS runs Event Based Schedules.

## Multi-Threading

- This section allows up to 8 reports to be exported simultaneously.

*System resources will be shared, so this will not always mean that reports will take 1/8 the normal time.*

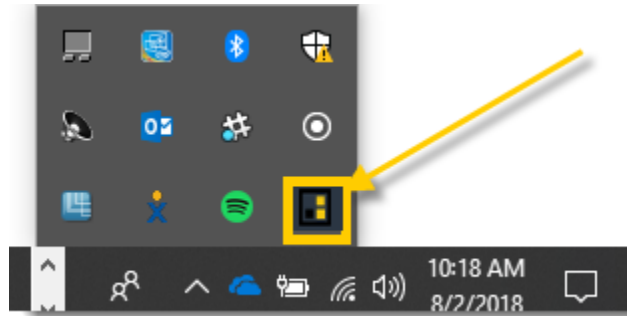
*EXAMPLE: You have 4 reports. Each one takes 15 minutes to export. Using a single thread, It would take 1 hour to complete the export. Using multiple threads, you would expect it to take 15 minutes for all 4. However, the sharing of your system resources by 4 reports may result in each report taking longer than 15 minutes and the total time for 4 reports may be more than 15 minutes, but it will be less than an hour.*

## Miscellaneous

- **Do not check and restart:** Used if multiple people are logging into the machine while using background scheduling.
- **On editor start-up, delay restarting:** When logging into machine should scheduler be delayed to restart.
- **Use blackout times for scheduler:** Set days and times when you do not want the scheduler to run.

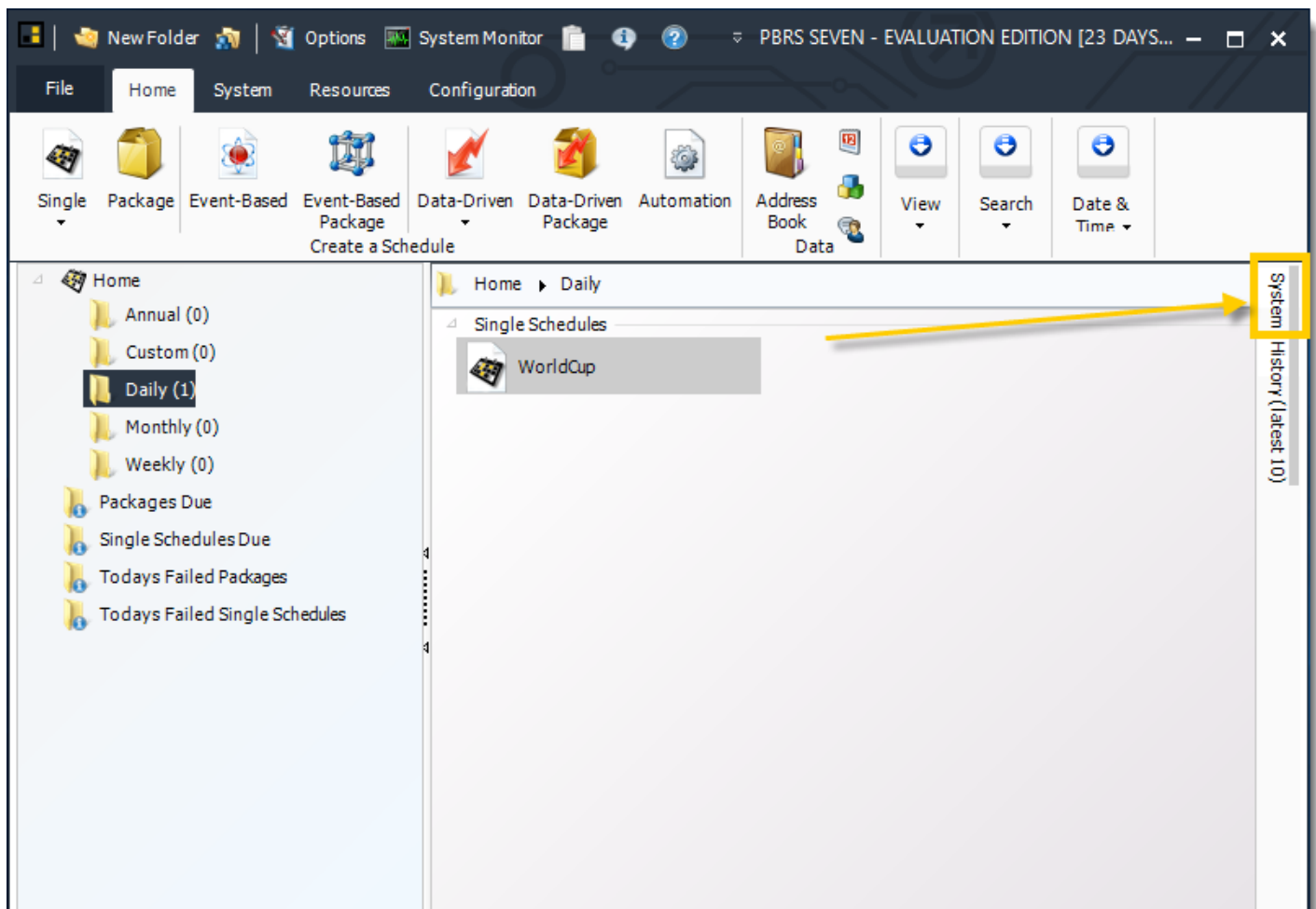
## PBRS/Scheduler Agent

Once you have successfully set up the scheduler you will be using, you will gain access to the PBRS/Scheduler Agent, which gives you easy access to many scheduling options. The PBRS/Scheduler Agent appears as a red and white bell icon that is visible in the system tray (next to the clock) when the Scheduler is running. It looks like this:



Double clicking this icon will bring up the full Scheduler Agent.

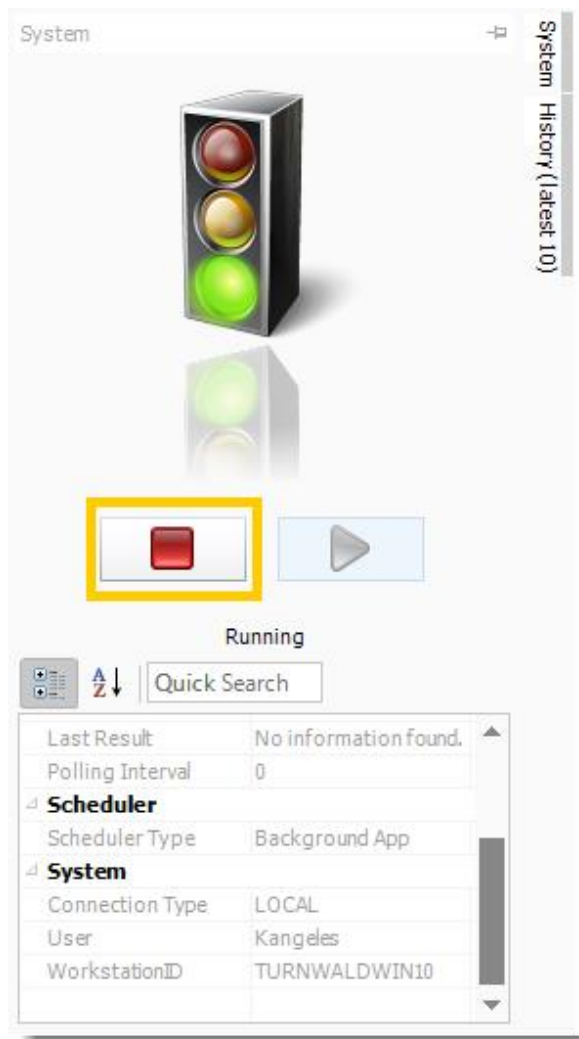
The full Scheduler Agent is also available within PBRS on the right-hand side of the screen (after you click System).





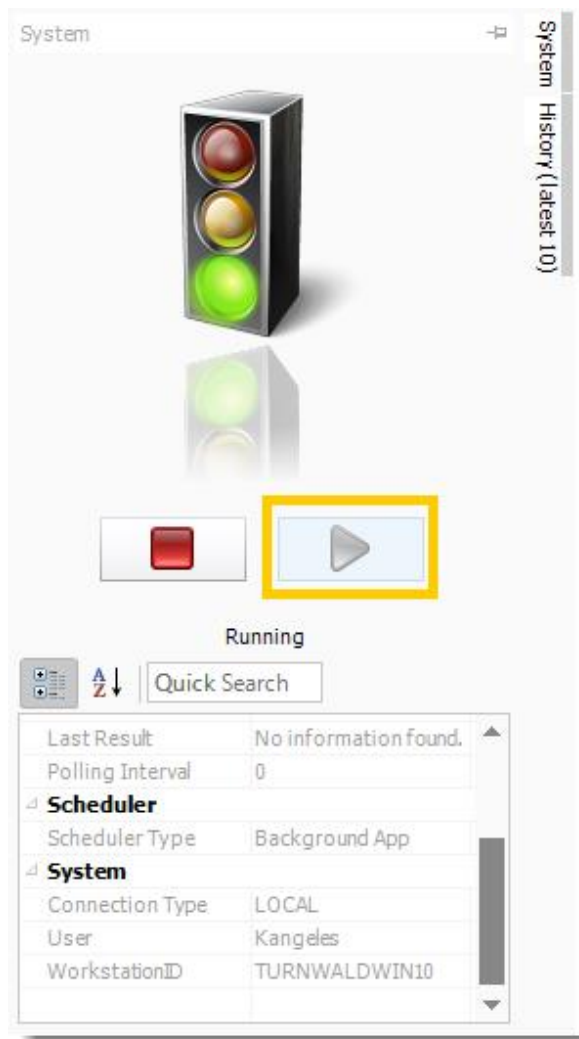


- **Stopping the Scheduler:** To stop the scheduler using the Agent, open the scheduler agent, and click the **Stop** button. The stop light will switch to yellow then red. This will stop the scheduler and no reports or task will execute. If you open PBRS, the scheduler will automatically restart.



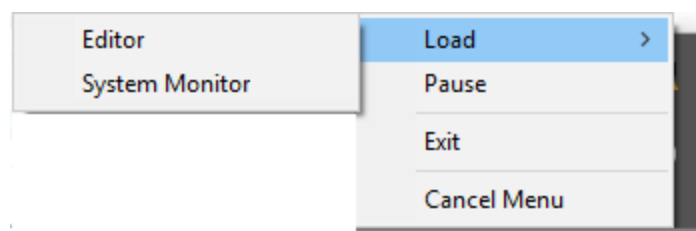
*You can turn off the automatic restart of the Scheduler using the instructions listed in the miscellaneous section above.*

- **Starting the Scheduler:** To start the Scheduler using the Agent, open the Scheduler Agent, and click the **Start** button. The light will switch from red to yellow to green. Once enabled, your schedules will resume their normal running.



You can also review other system information such as the polling interval, the number of schedules found during the last poll, and the type of Scheduler the system is using.

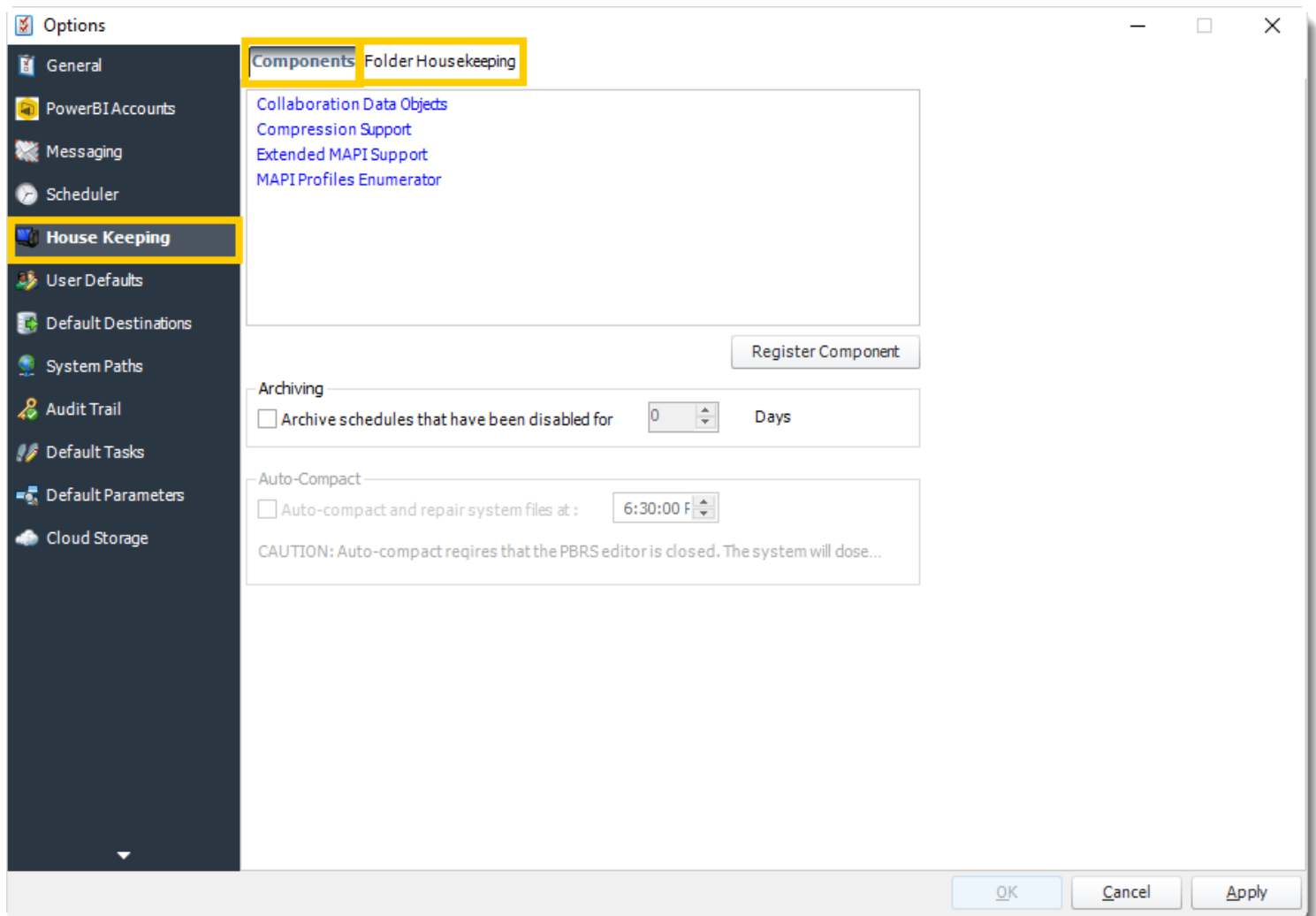
If you do not wish to open the PBR/Scheduler Agent, right-click the system tray icon to gain access to the following functions:



- **Load Editor:** Opens PBR.
- **Load System Monitor:** Opens just the PBR System Monitor.
- **Pause:** Pause the schedule.
- **Exit:** Closes the PBR/Scheduler Agent.

- **Cancel Menu:** Cancel the schedule.

## House Keeping



## Components

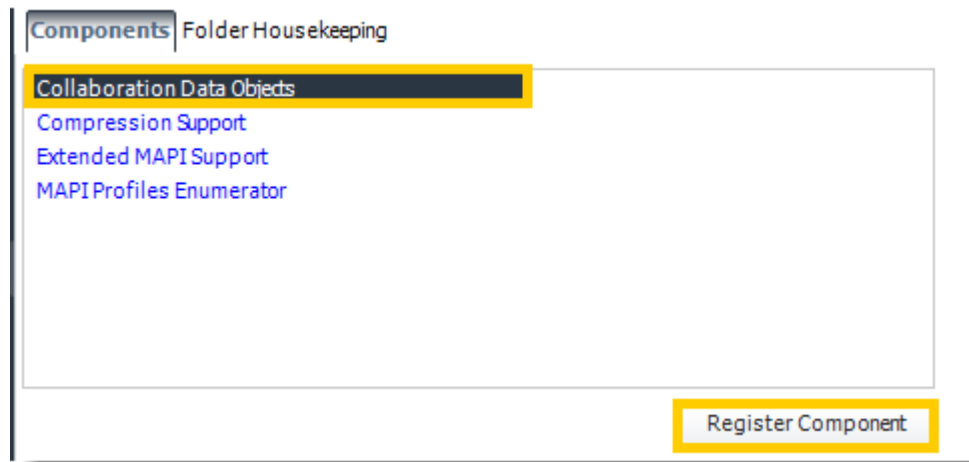
From time to time, the main DLLs required to run PBRS successfully will need to be re-registered into your system registry. This need may arise as a result of the install or uninstall process of other applications you may be running on your PC.

## IMPORTANT

During the component re-registering process, you must ensure that you are logged into the PC as the Local Administrator in order to ensure that you have full security rights to the complete system registry.

To re-register a component, perform the following:

1. Click **Components**.
2. From the list that presents, select the **component** you wish to re-register.  
*Depending on the version of PBRS you have, you may not have all components in the list. Do not worry. Only components relevant to the version of PBRS you are running will appear.*
3. Click **Register Component**.

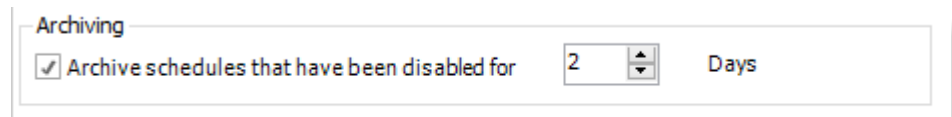


4. Once the component has been re-registered, restart the PC to ensure that the new settings are stored by Windows.

## Archiving

PBRS allows you the option to move disabled schedules to an Archive folder. Schedules moved to the Archive folder can be enabled again and moved to other folders, but this option keeps folders neat and easier to manage.

1. To enable archiving, perform the following:
2. Check *Archive schedules that have been disabled for*.
3. Specify the number of days a disabled schedule can remain at its current location before being moved to the archive folder.
4. Click **Apply** at the bottom right of the Options window.

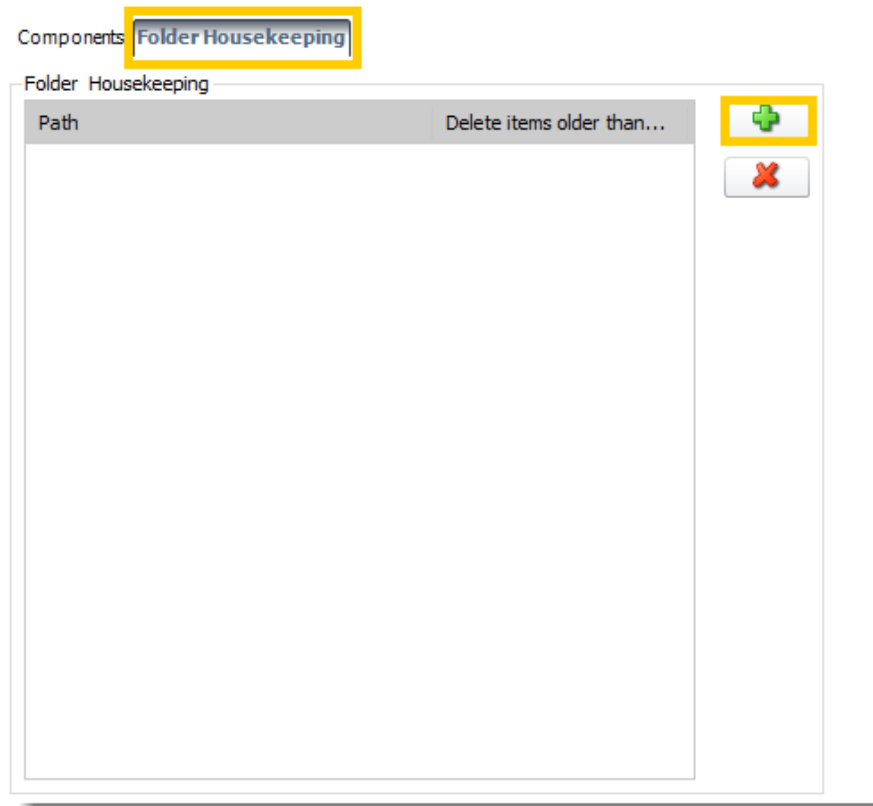


## Folder Housekeeping

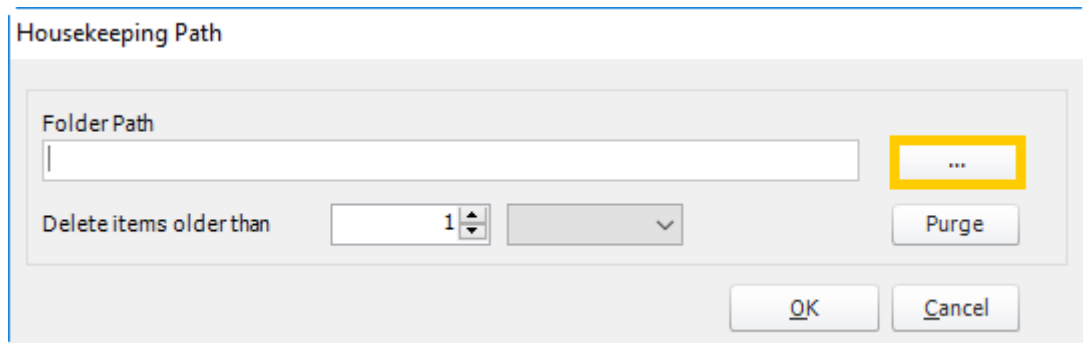
Folder housekeeping is a great way to stop your destination folders from getting too full. Different from the folder housekeeping option found in a schedule, this option can monitor any folder and delete items older than a specified time. Folder Housekeeping is run using the system maintenance thread which runs every 5 to 10 minutes.

To enable Folder Housekeeping, perform the following:

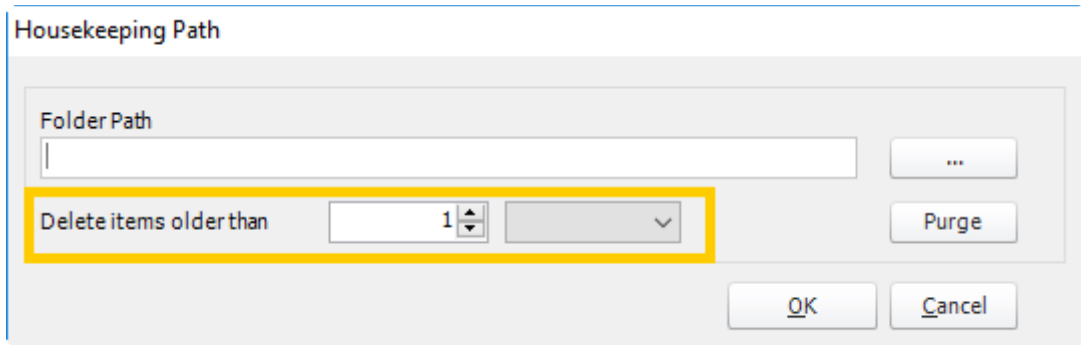
1. Click **green plus button** to add a new folder path.



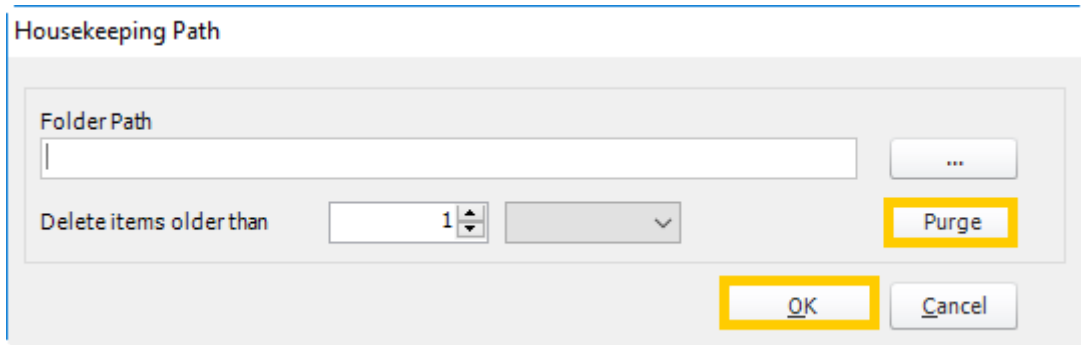
2. Click **(...) button** and navigate to the specific folder you wish to monitor.



3. Once you have selected the folder you wish to monitor, indicate how old items in the folder should be before they are deleted.



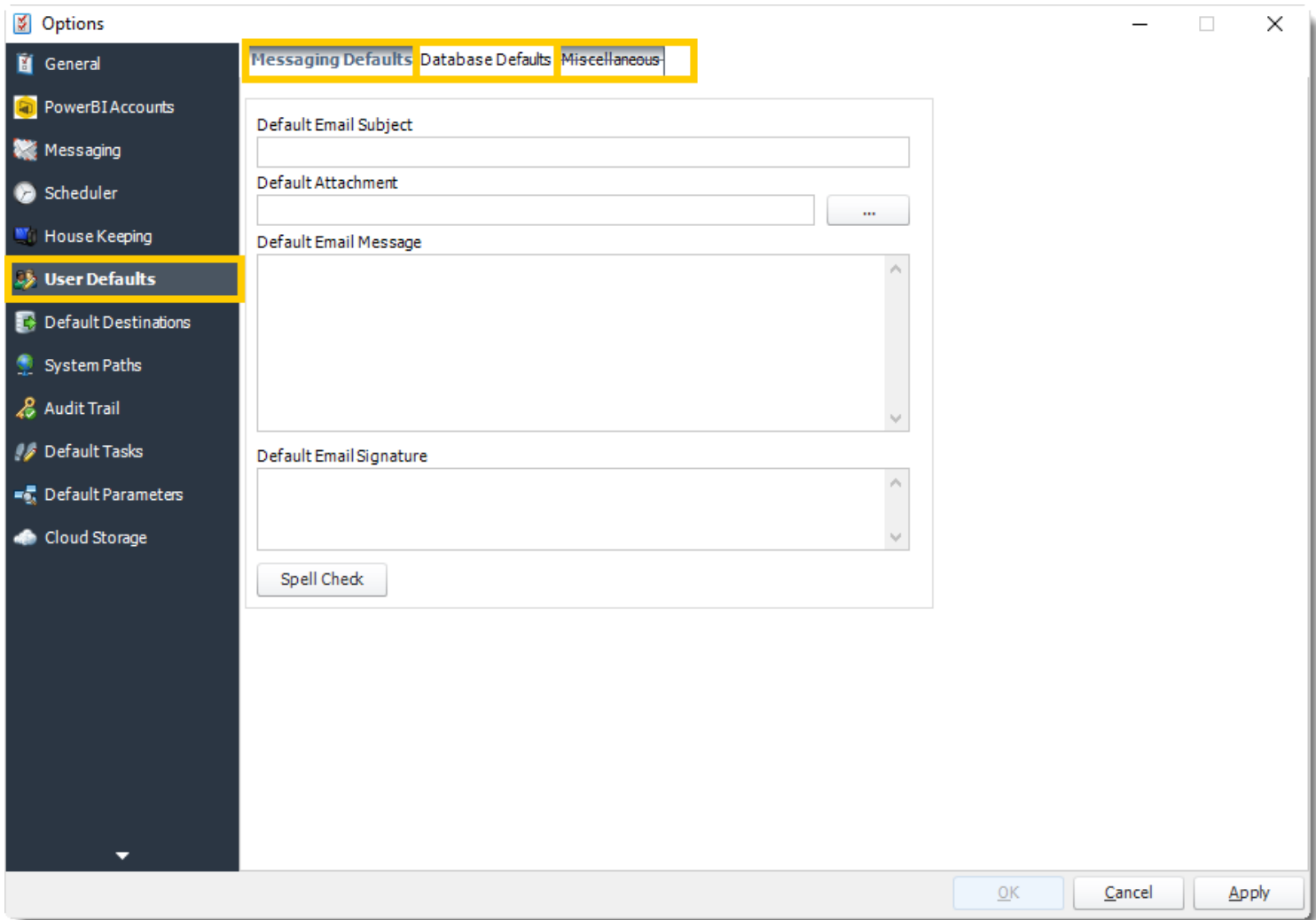
4. If you want to immediately delete all items in the folder that are older than the specified value, click **Purge**. Otherwise, click **OK**.



5. Click **Apply** at the bottom of the Options window.

*You can delete a housekeeping item by selecting the folder path, then clicking the red X button.*

## User Defaults



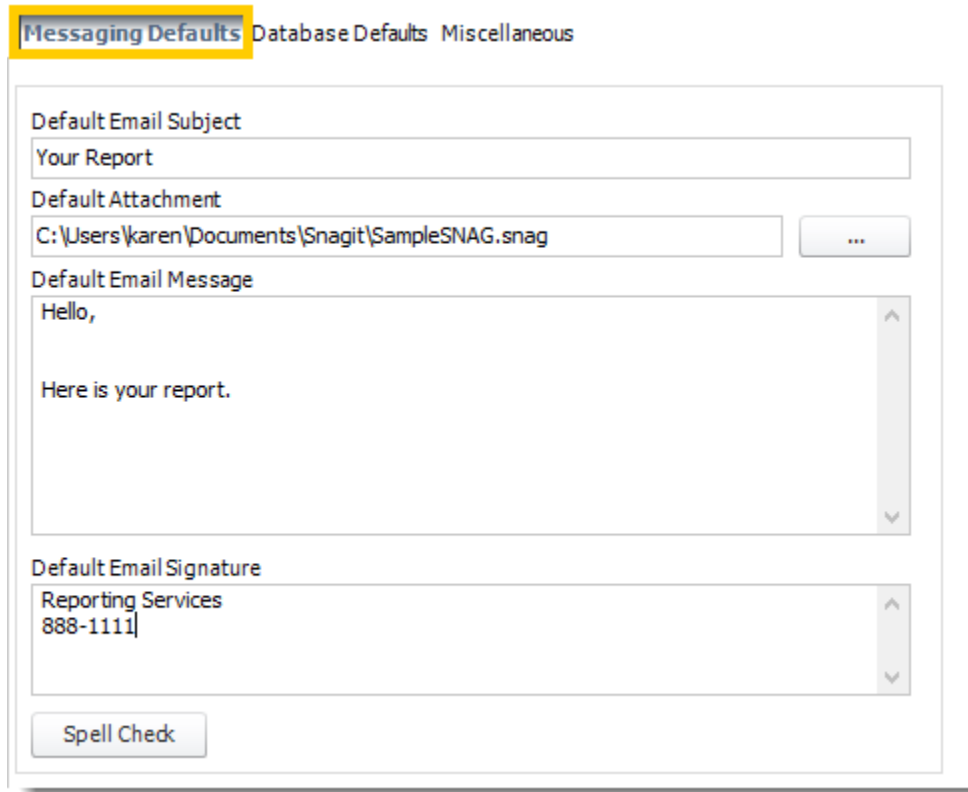
When you first open PBRs's User Defaults window, you will see three tabs: Messaging Defaults, Database Defaults, and Miscellaneous.

### *Messaging Defaults*

Using the Messaging Defaults tab, you can set up a standard email message or signature. Then, you can use that message and signature as the email text for scheduled reports (via the use of an Insert).

1. To set a default Email Subject, Email Message, or Email Signature, simply enter the text you wish to use in the applicable field.

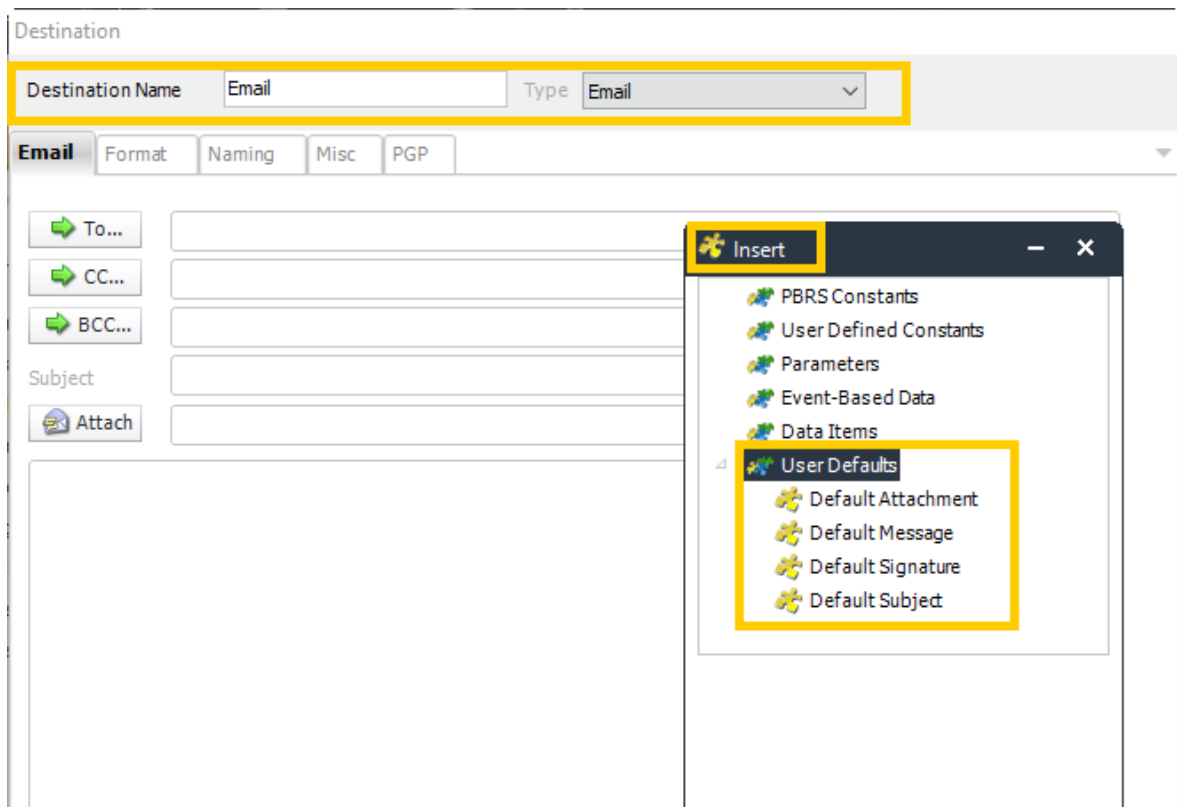




2. To set a default Attachment, click **(...)** button and select the appropriate file. Then, click **Open**.
3. Once the Messaging Defaults have been set, click **Apply**.

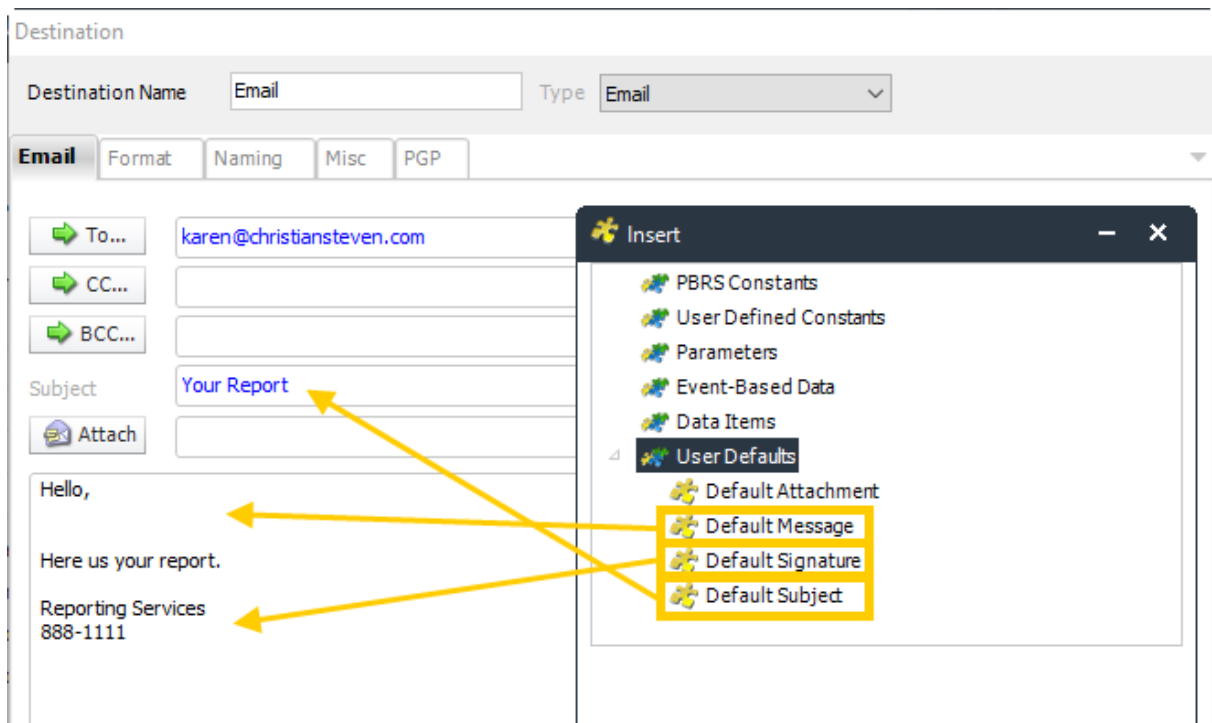
### How to use Messaging Defaults?

Once you have set Messaging Defaults in the *Options* window, they can be used in the email output of your schedule. Defaults are applied on a schedule by schedule basis by using the User Defaults inserts on the **Email Destination** window.



To use the Messaging Defaults inserts, perform the following:

1. In your email output section, go to **User Defaults** in the **Inserts Menu**.
2. Drag and drop the default item to the appropriate field.

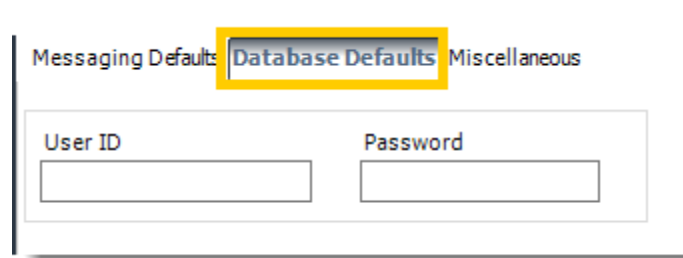


3. You can then edit the default message if needed.

*For each schedule, you can overwrite the default email text and enter your own. For more information on how to do this, see the [Export to Email](#) page.*

#### *Database Defaults (SSRS Only)*

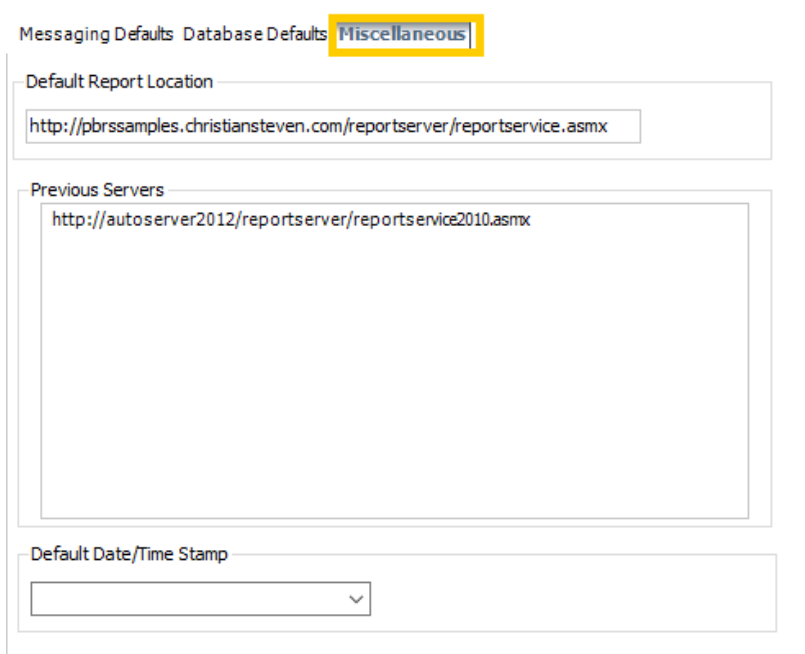
If your SSRS datasets all log into the same database, you can store the database credentials here and save having to enter them into each and every schedule.



The screenshot shows the 'Database Defaults' tab selected in a configuration window. The tab is highlighted with a yellow border. Below the tab, there are two input fields: 'User ID' and 'Password', each with a corresponding text box.

#### *Miscellaneous (SSRS Only)*

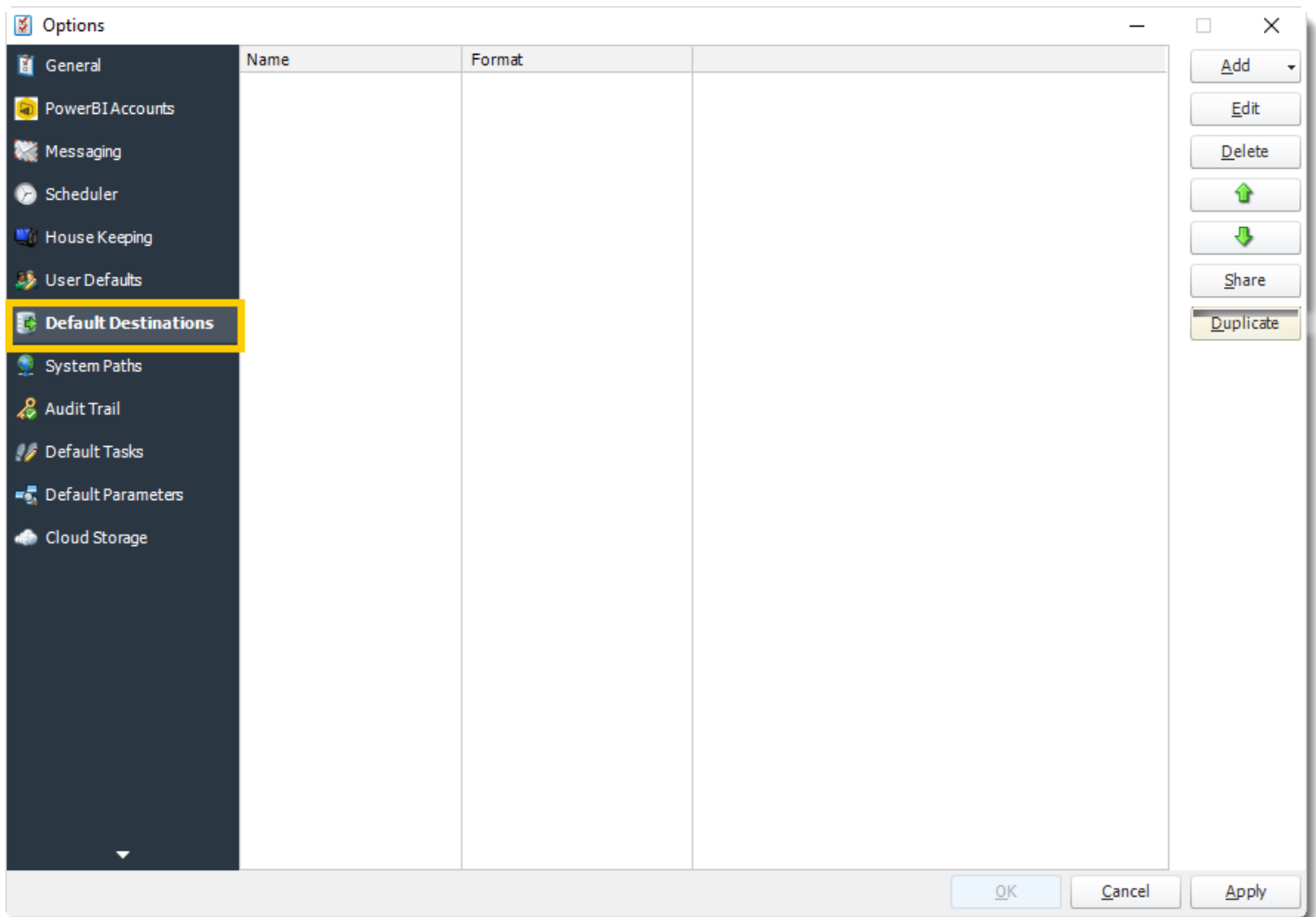
Under the Miscellaneous tab of the User Defaults, you will see two sections: Default Report Location and Default Date Stamp.



The screenshot shows the 'Miscellaneous' tab selected in a configuration window. The tab is highlighted with a yellow border. Below the tab, there are three sections: 'Default Report Location' with a text box containing 'http://pbrssamples.christiansteven.com/reportserver/reportservice.asmx'; 'Previous Servers' with a text box containing 'http://autoserver2012/reportserver/reportservice2010.asmx'; and 'Default Date/Time Stamp' with a dropdown menu.

- **Default Report Location:** is the path PBRS will always take you to when you are browsing for a SSRS report. If this field is blank, PBRS will begin browsing at the last location you selected a report from. If this field has a path listed, PBRS will automatically begin browsing from this location.
- **Default Date/Time Stamp:** will be what is used when you select to append a date/time stamp of a report destination. If this field has a value, this default format will be prefilled in the Append date/time to report output field when it is selected, saving you from having to select a format each time you write a schedule.

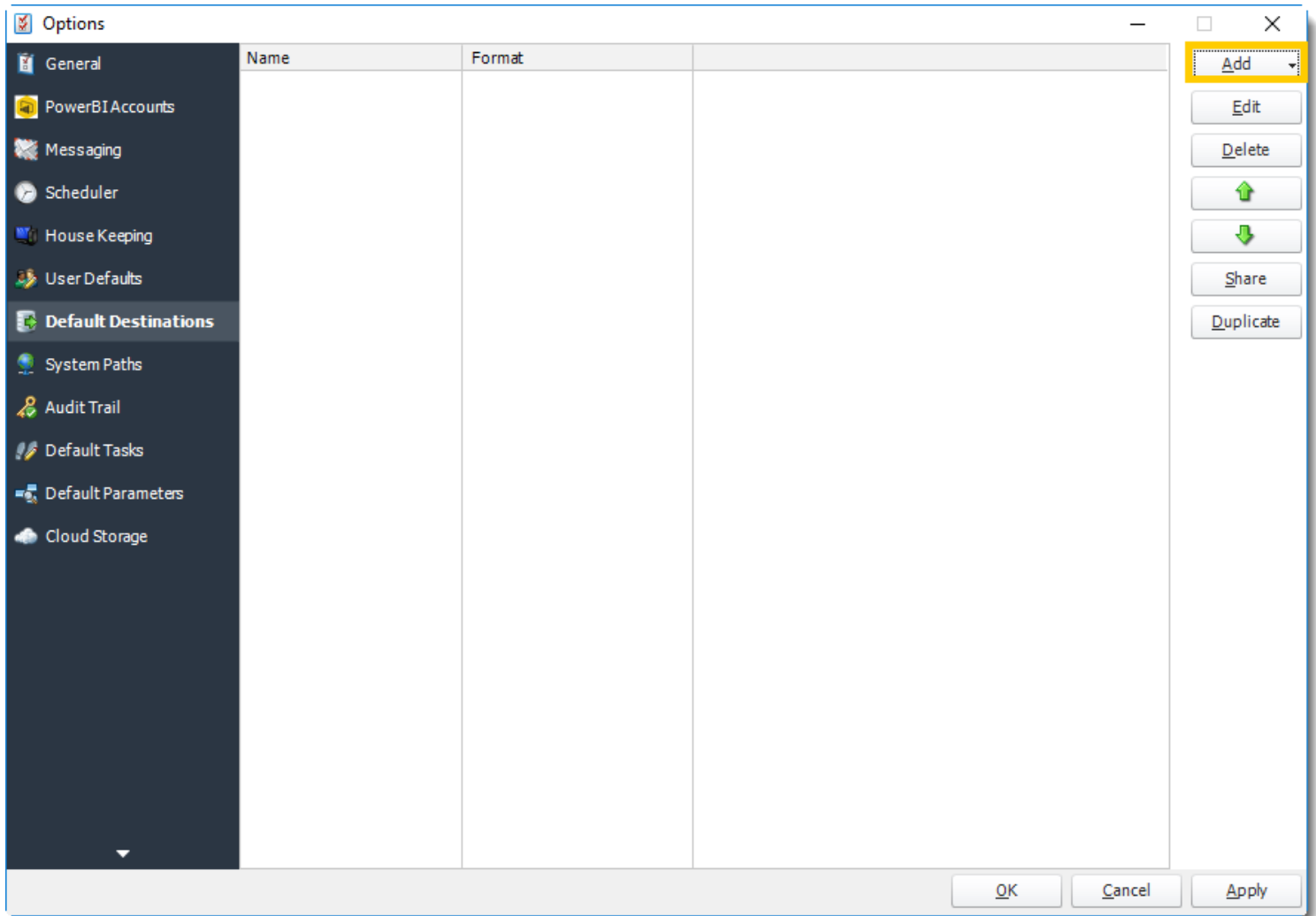
## Default Destinations



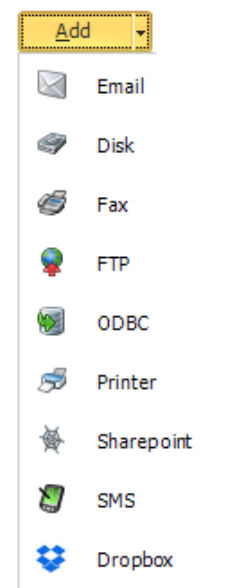
## Adding a Default Destination

To add a Default Destination, perform the following:

1. Click **Add**



2. Select the Type of destination from the drop-down list.





3. Enter the name you wish the destination to be called, click **OK** on the Destination window. Then, click **Apply**.


Destination

Destination Name  Type


**Email** Format Naming Misc PGP







Subject



☐ Embed report

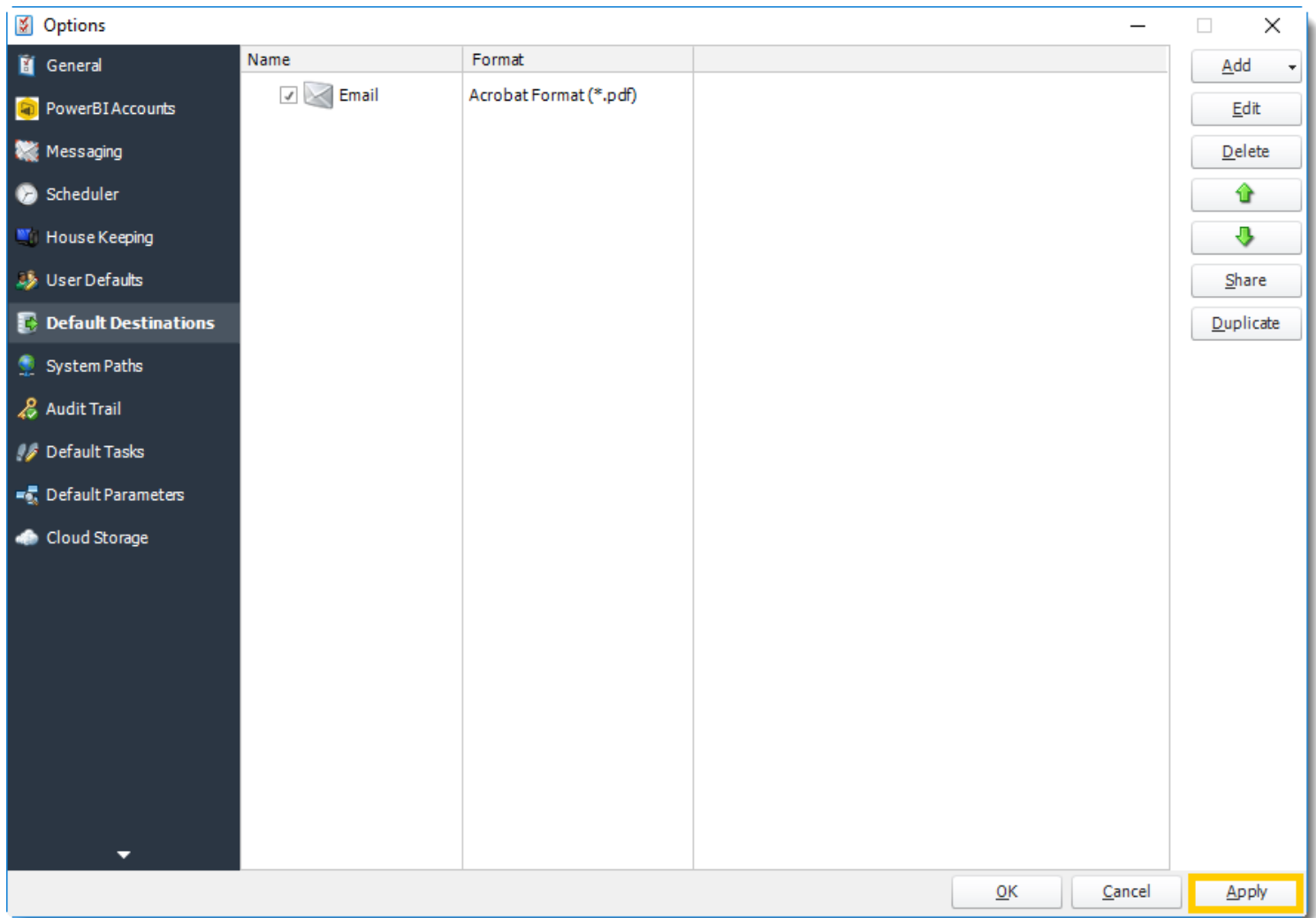
Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:



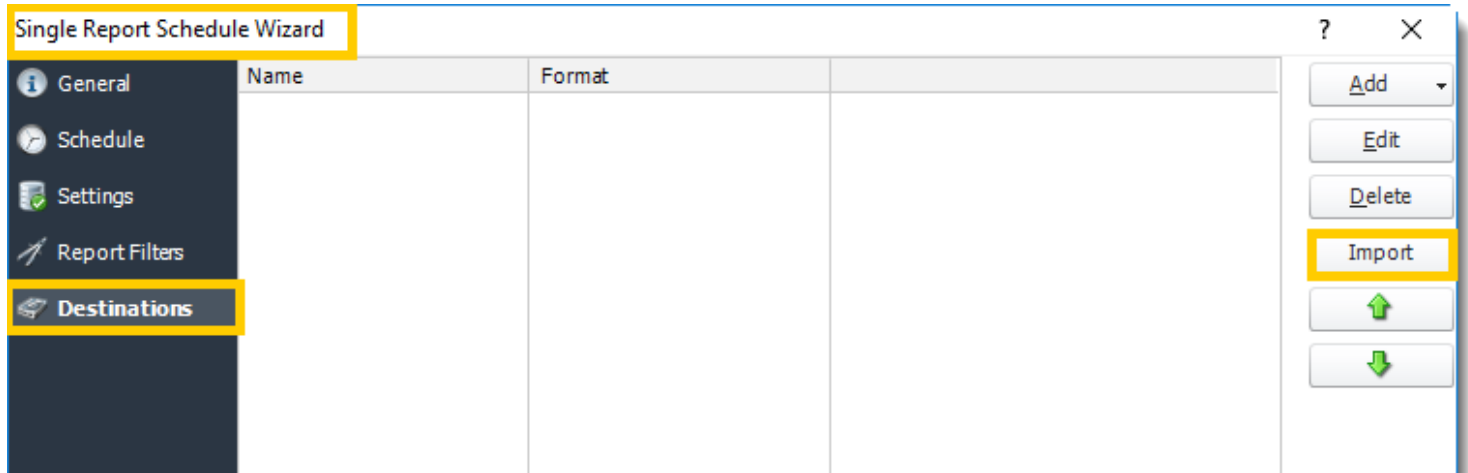
4. The Default Destination has been successfully created.



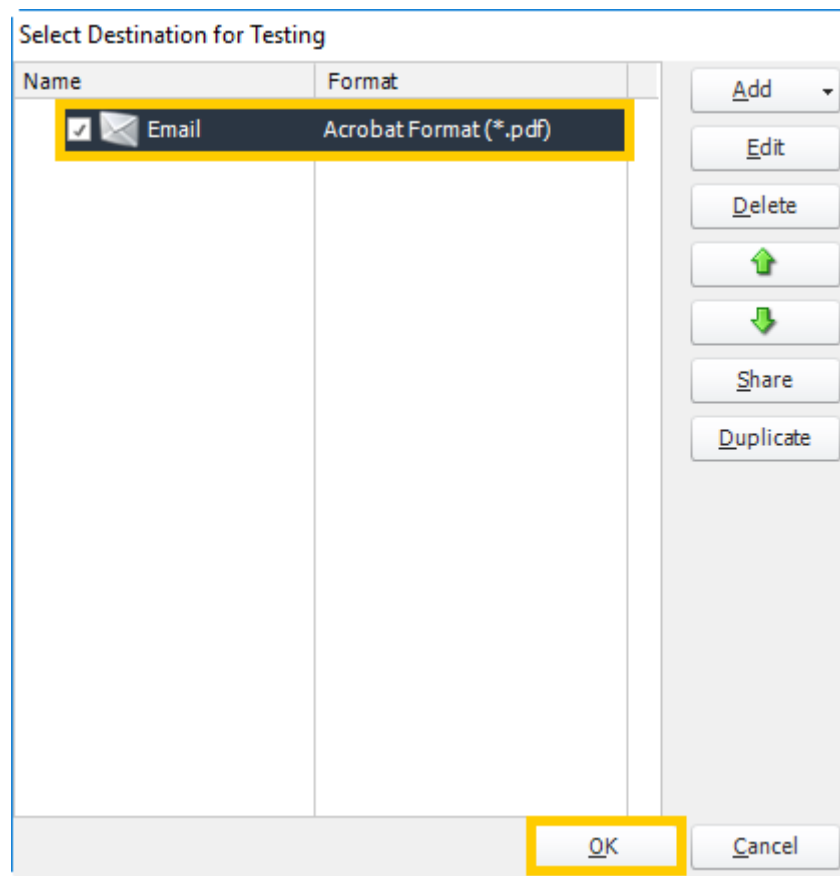
## Using a Default Destination

To add the Default Destination to a schedule, perform the following:

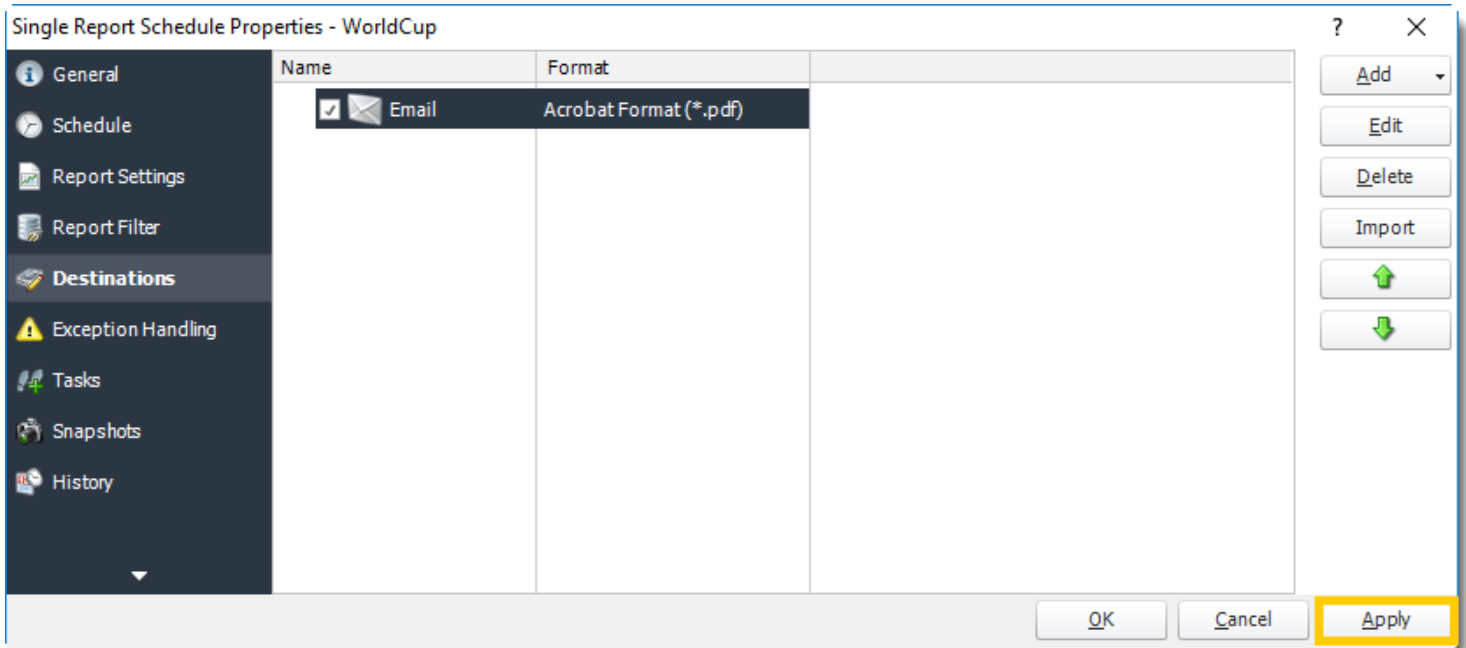
1. Navigate to the **Destinations** tab of the *Schedule Properties* and click **Import**.



2. Select the Default Destination you wish to use and click **OK**.



3. Click **Apply**.



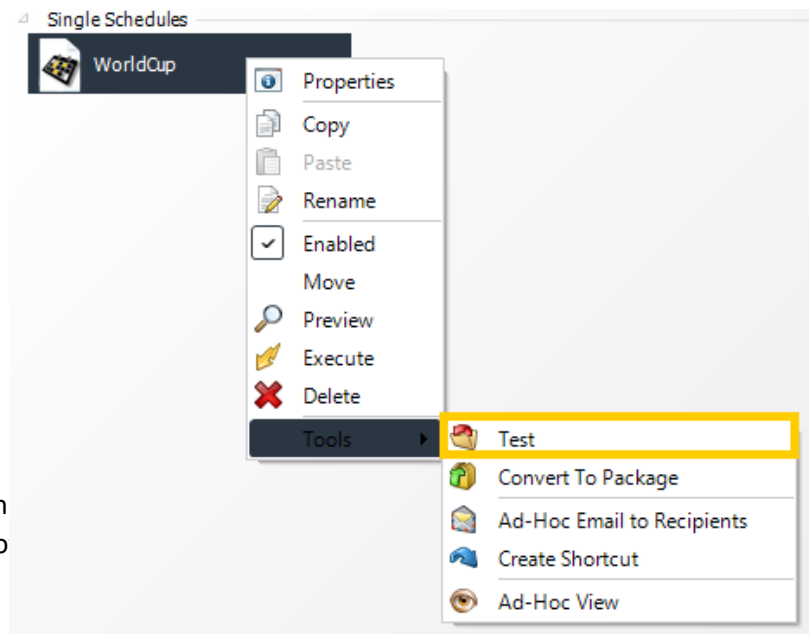
This report will now use the specified default destination without the need to set up the destination specifics.

### Testing Using a Default Destination

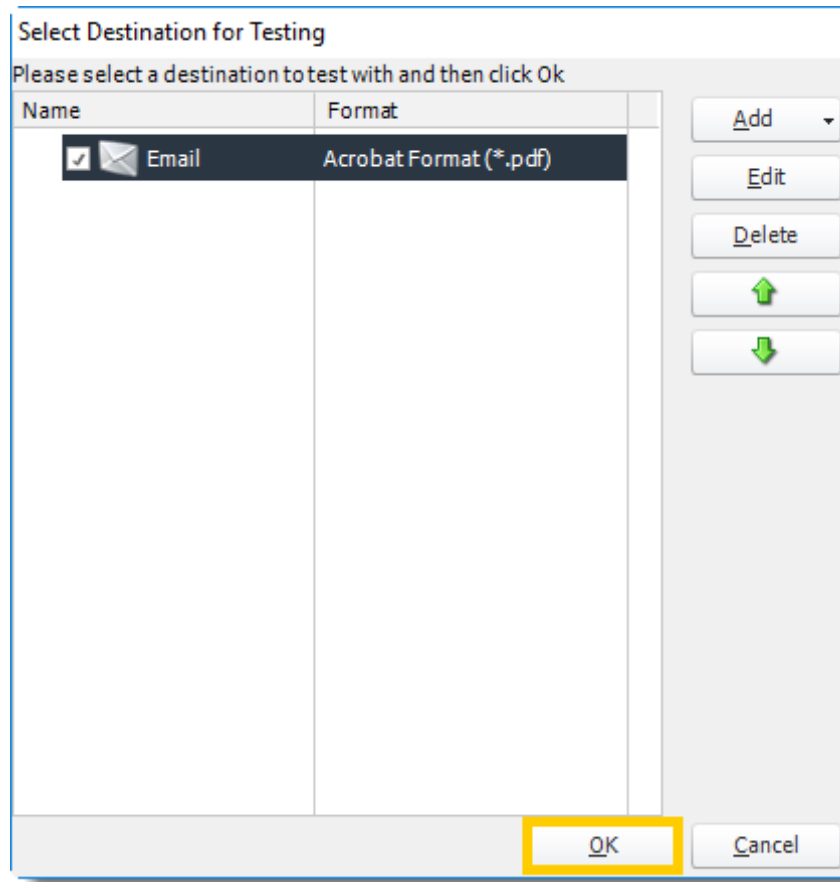
One of the features of PBRs is the ability to set up specific default destinations for testing purposes (such as a test folder on the server's C: drive or a testing e-mail address).

To test a schedule using a default destination instead of the schedule's actual destination, perform the following:

1. Right-click on the schedule you wish to test.
2. Click **Tools**. Then, click **Test**.



3. Click the destination you wish to use from the list of Default Destinations that pops up. Then, click **OK**.

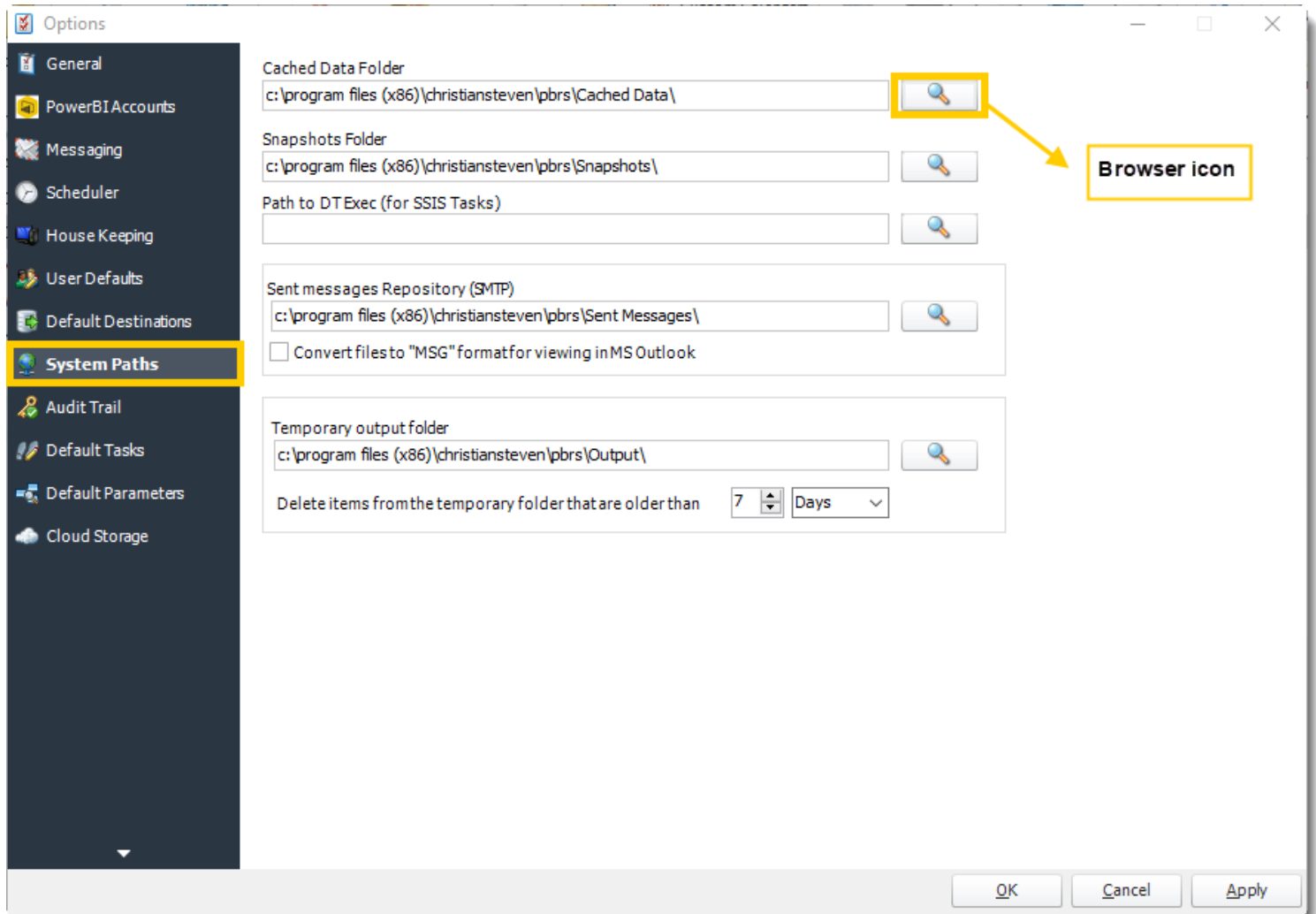


4. Once you click OK, the schedule will automatically execute to the test destination, and you will receive a success or failure message.

### Sharing Default Destinations

Default Destinations can be assigned to specified user groups. These groups are created in the User Manager. If you want to "pre-make" a destination so that a certain group of users can only have schedules export to that location, you can find how to assign them that default destination.

## System Paths



- **Cached Data Folder:** PBRs stores information which is used by event-based and other schedules.
- **Snapshots folder:** This is where Snapshots will be stored.
- **Path to DT Exec (for SSIS Tasks):** Custom Task which runs SSIS on your SQL Server. DT Exec stores all the location of where DT Exec is.
- **Path to Adobe Reader/Acrobat (For Print PDF Tasks):** Enter the Adobe Reader path to use it for Print PDF Tasks.

*You must enter the Adobe Reader / Acrobat path to use the [Print PDF \(Acrobat\)](#) task.*

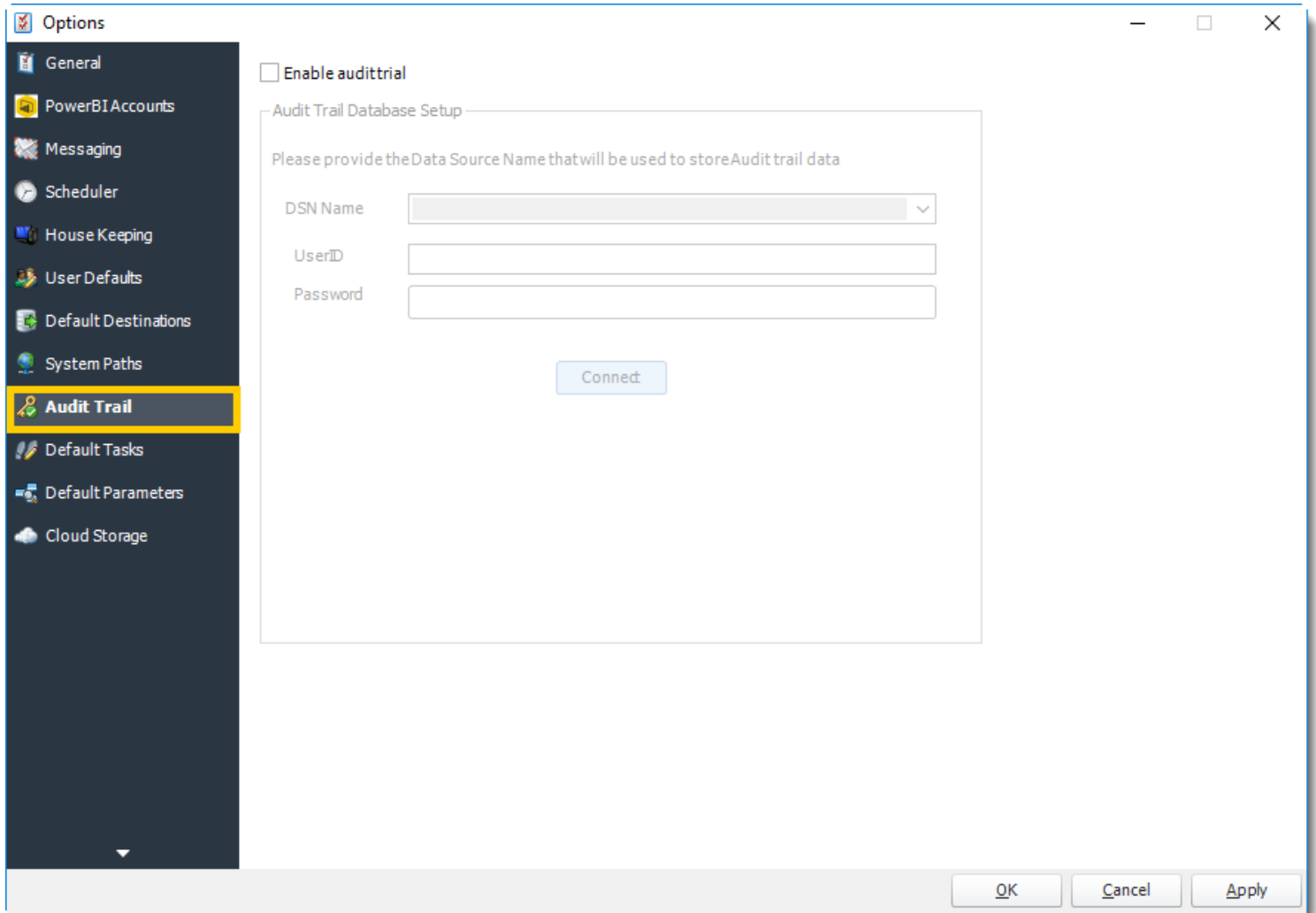
- **Sent Messages Repository (SMTP):** PBRs will use this folder to store information on your sent email messages via your configured SMTP server.

- You can also set PBRs to convert the files to \*.msg format for viewing in MS Outlook. Please note that the files are converted on the fly on viewing them from the sent messages section in the System Monitor.

*If you do not check the box next to "convert files to MSG format", sent messages will save to this folder as .eml files. However, if you navigate to the Email Log in the System Monitor and click on one of the entries, the .eml file will be converted to a .msg file so that it can be viewed successfully.*

- **Temporary Output Folder:** PBRs uses this folder to store temporary files. To automatically clear down this folder so that your PC does not run out of disk space, you can set how long the items in the temporary folder should be kept.

## Audit Trail



An audit trail is a chronological record of changes that have been made to a database or file. PBRS can be configured to create an audit trail that will be stored in a given database.

*Audit information is not stored in PBRS and you must create and designate an external ODBC compliant database for storage.*

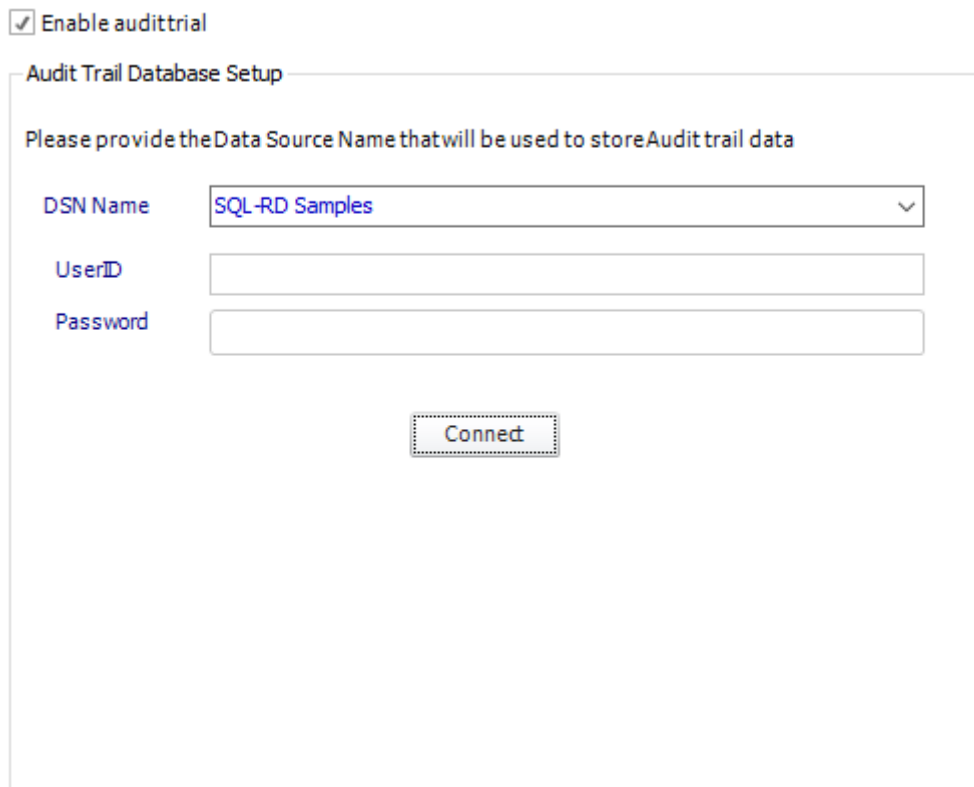
The audit trail will display which users have executed, refreshed, or edited schedules.

This audit trail will show common activities, such as which user executed a given schedule, what the user did, the schedule that was manipulated, and the type of schedule.

## Enabling the Audit Trail

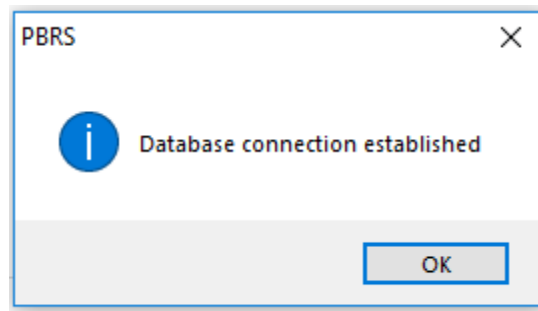
To allow PBRs to create an audit trail, perform the following:

1. On the **Audit Trail** tab of the *Options* window, check the box next to **Enable Audit Trail**. This will enable the Database Setup fields to be modified.
2. Enter the database name and applicable credentials into the **DSN Name**, **UserID**, and **Password** fields. Then, click **Connect**.



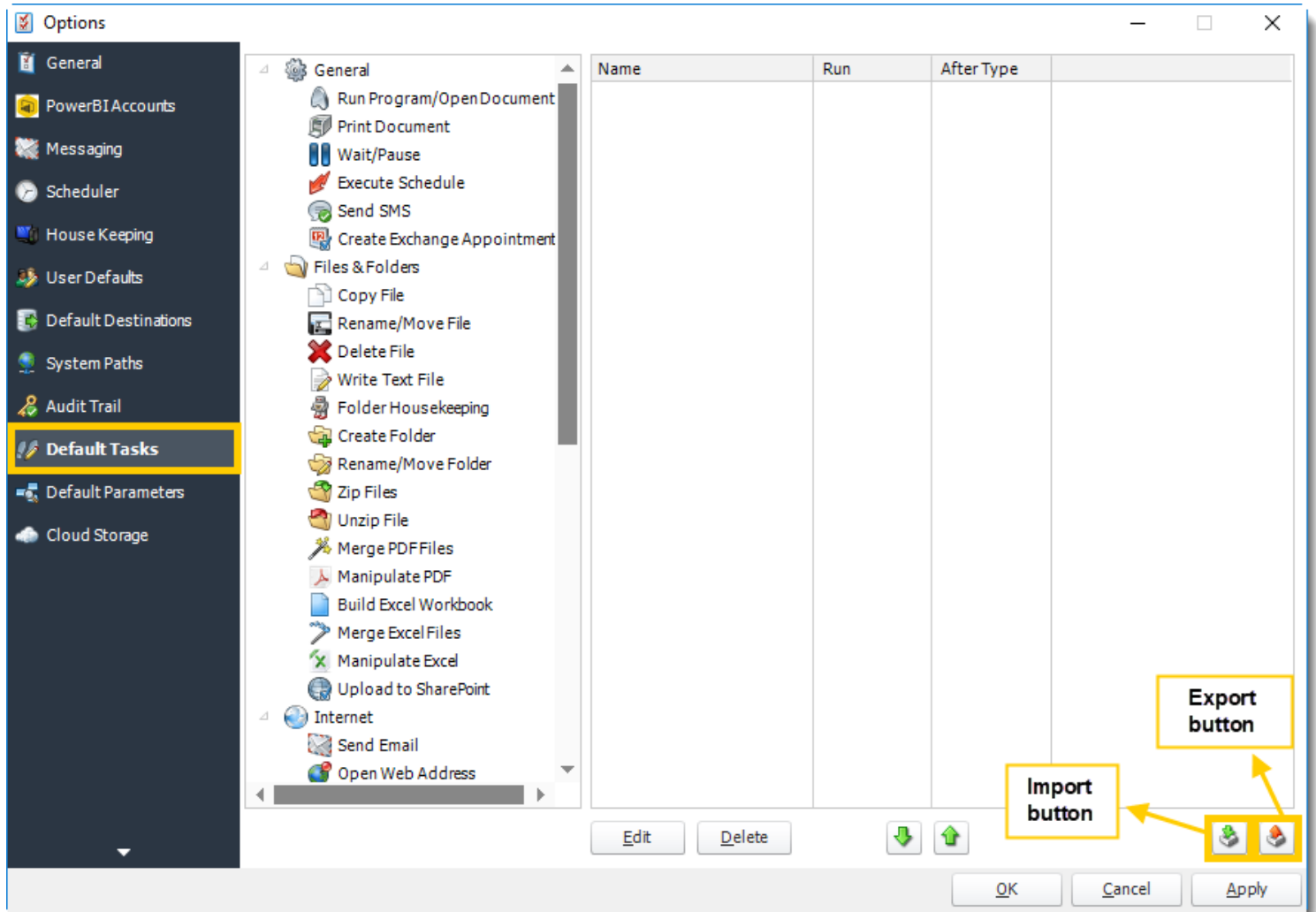
The screenshot shows a dialog box titled "Audit Trail Database Setup". At the top, there is a checkbox labeled "Enable audit trail" which is checked. Below this, a text prompt says "Please provide the Data Source Name that will be used to store Audit trail data". There are three input fields: "DSN Name" with a dropdown menu showing "SQL-RD Samples", "UserID" with an empty text box, and "Password" with an empty text box. At the bottom center is a "Connect" button.

3. If successful, a pop-up will appear: *Database connection established*. Click **OK**.



4. Click **Apply** then at the bottom of the *Options* window to save these settings.

## Default Tasks



Default tasks are custom tasks which can be reused each time you create a schedule (without having to create the same custom task over and over again).

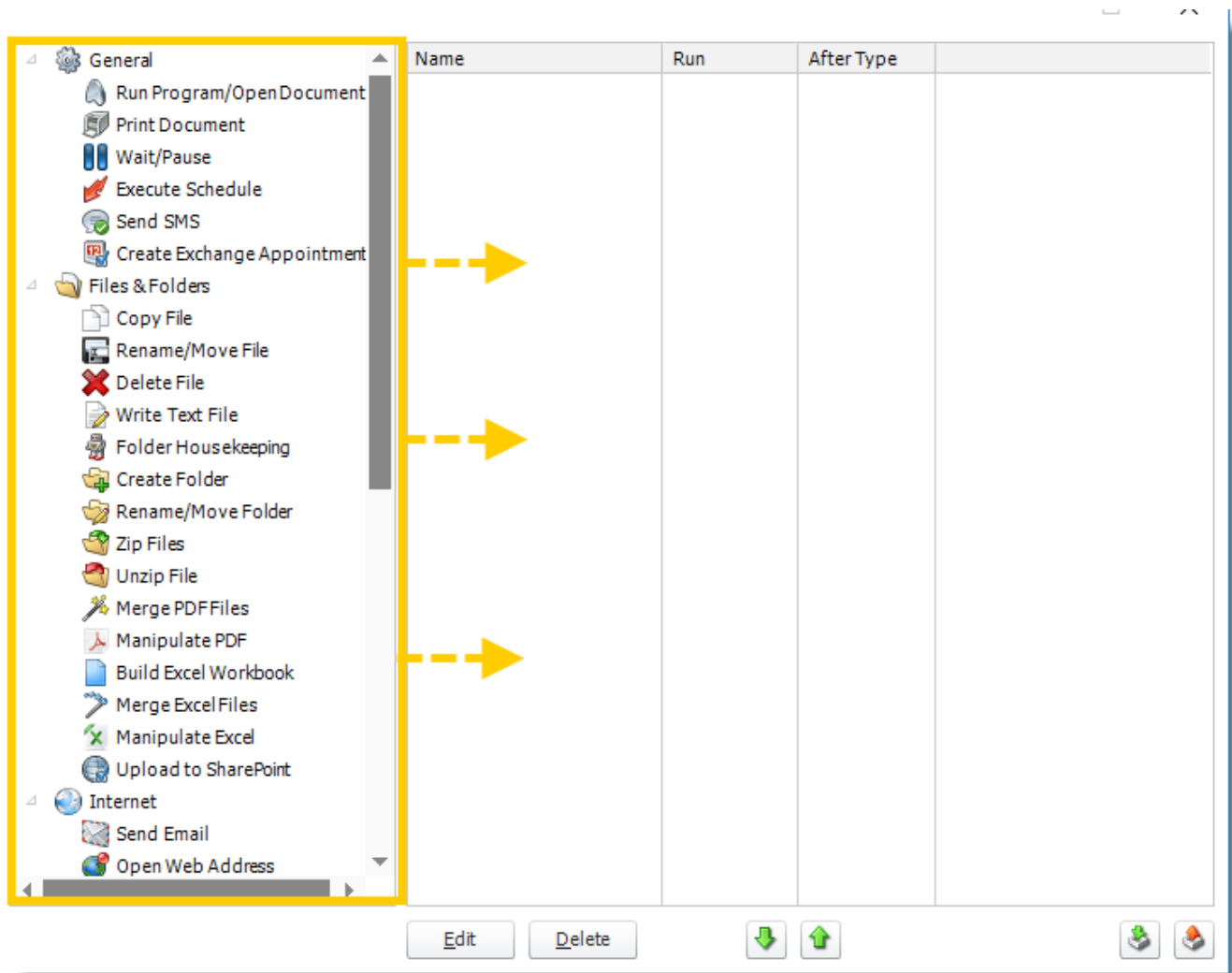
You can use the Default Tasks tab to create and store a copy of those most used custom tasks for easy insertion into schedules.



## Creating a Default Task

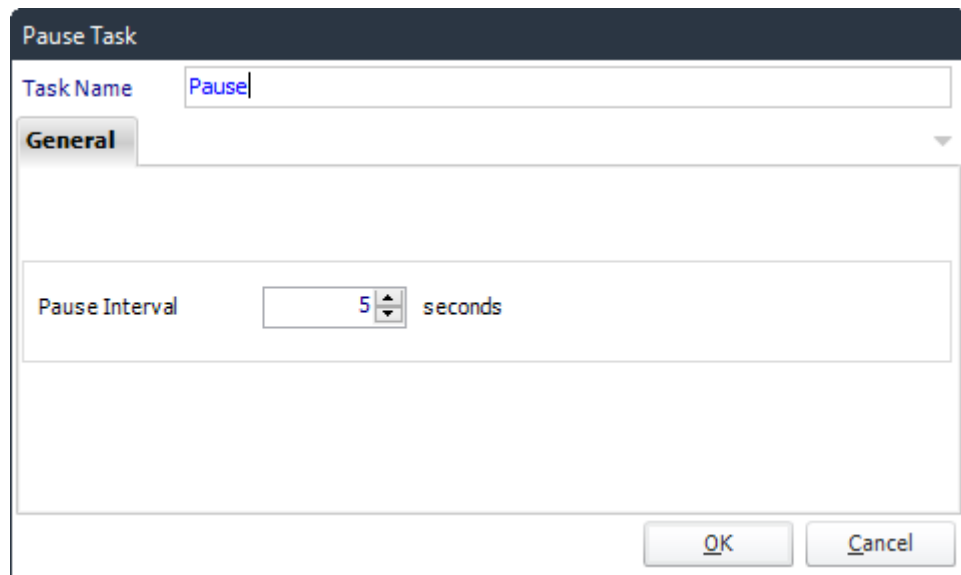
To create a default task, perform the following:

1. From the list of custom tasks, select the one you want to use. Then, drag and drop it into the list.

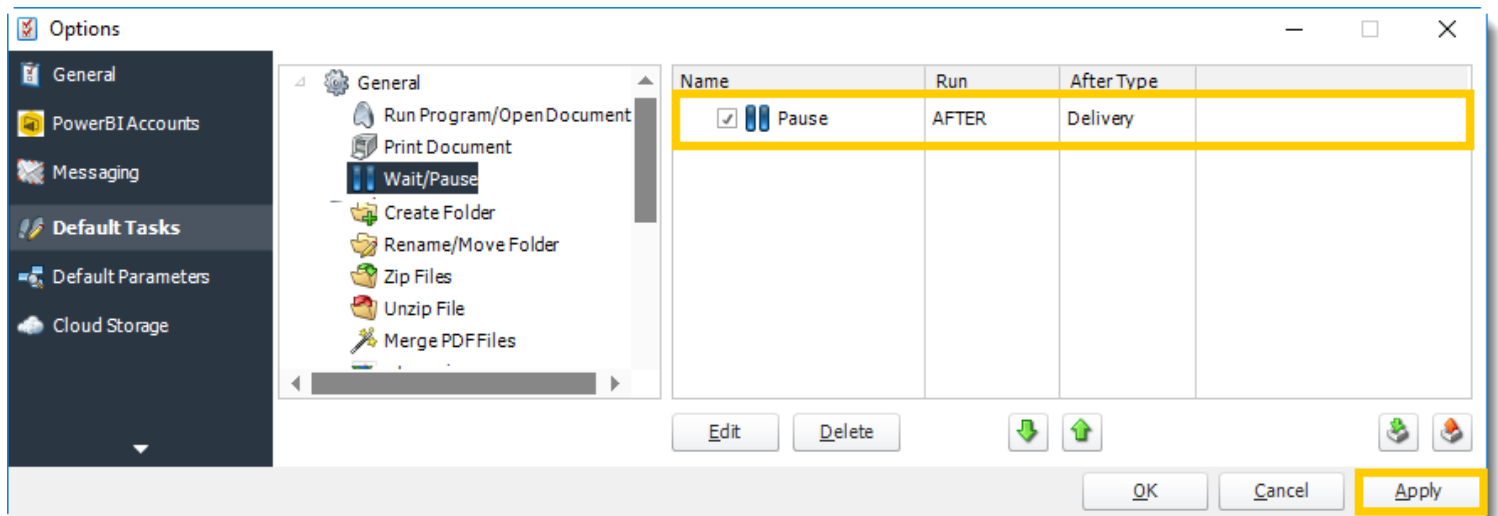


2. This will pop up a window that will allow you to set up the default custom task.

*The picture shown below may differ from the pop-up window you see. This window varies based on the type of custom task you select.*



- Once you have created the default task, it will display in the Custom Tasks window. Click **Apply**.



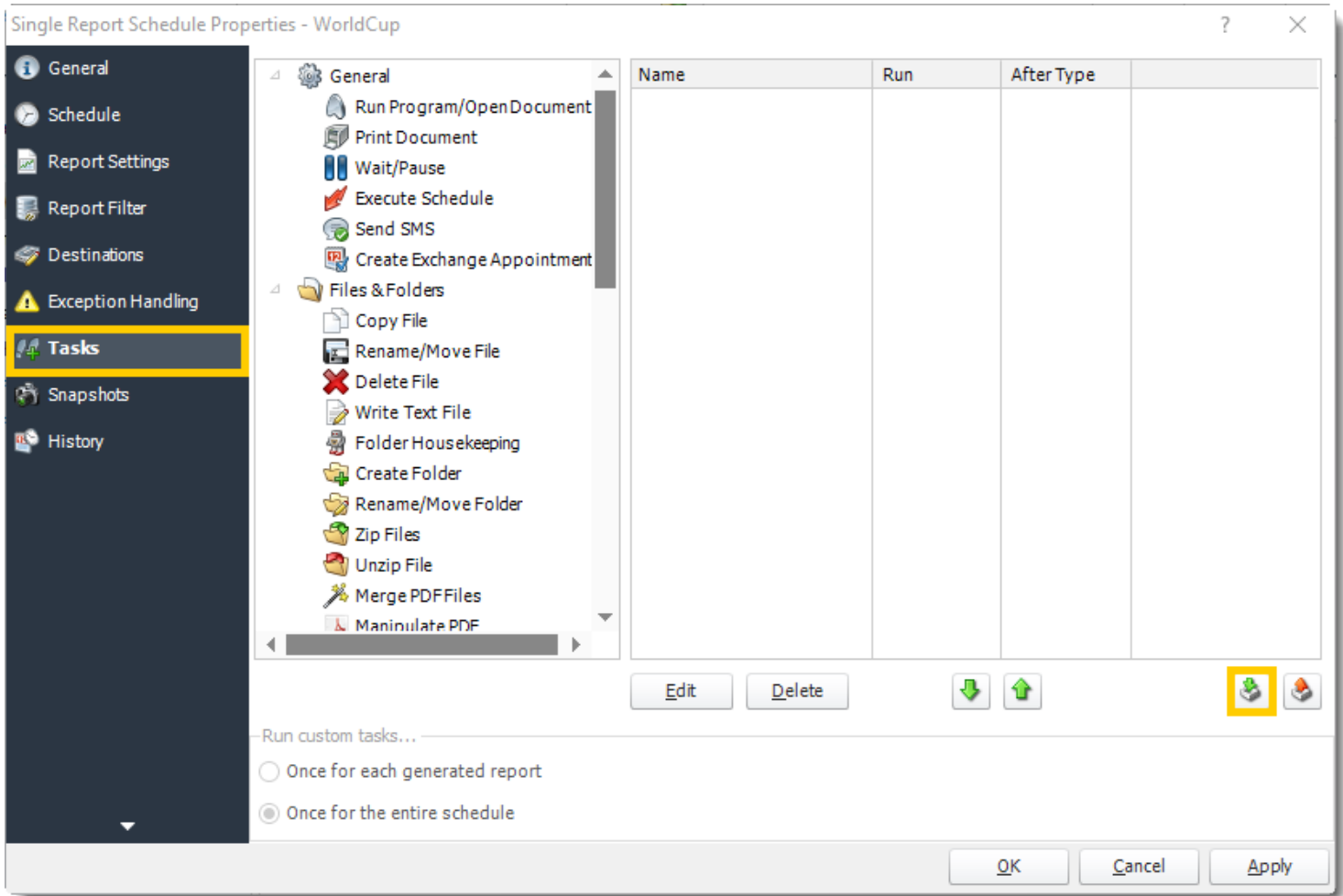
## Importing a Default Task into a Schedule

To import a default task, perform the following:

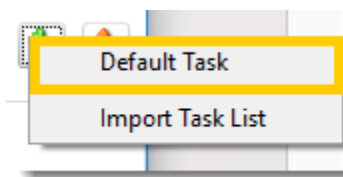
Navigate to the **Tasks** tab of the schedule you wish to add the default task to.

*This can be done by right-clicking the schedule, selecting Properties, and then clicking Tasks.*

1. Click **Import**.

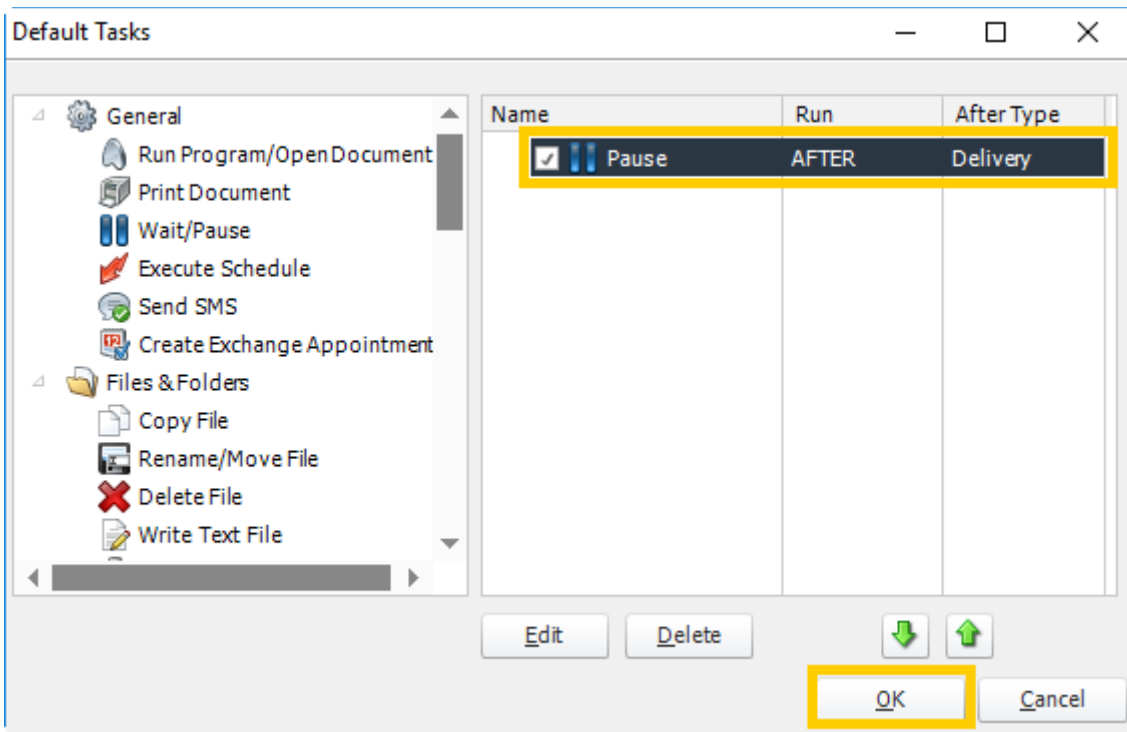


2. From the context menu, select **Default Task**.



3. From the list that displays, click on the default task you would like to add to this schedule. Then, click **OK**.

*You can create additional default tasks in this window as well.*

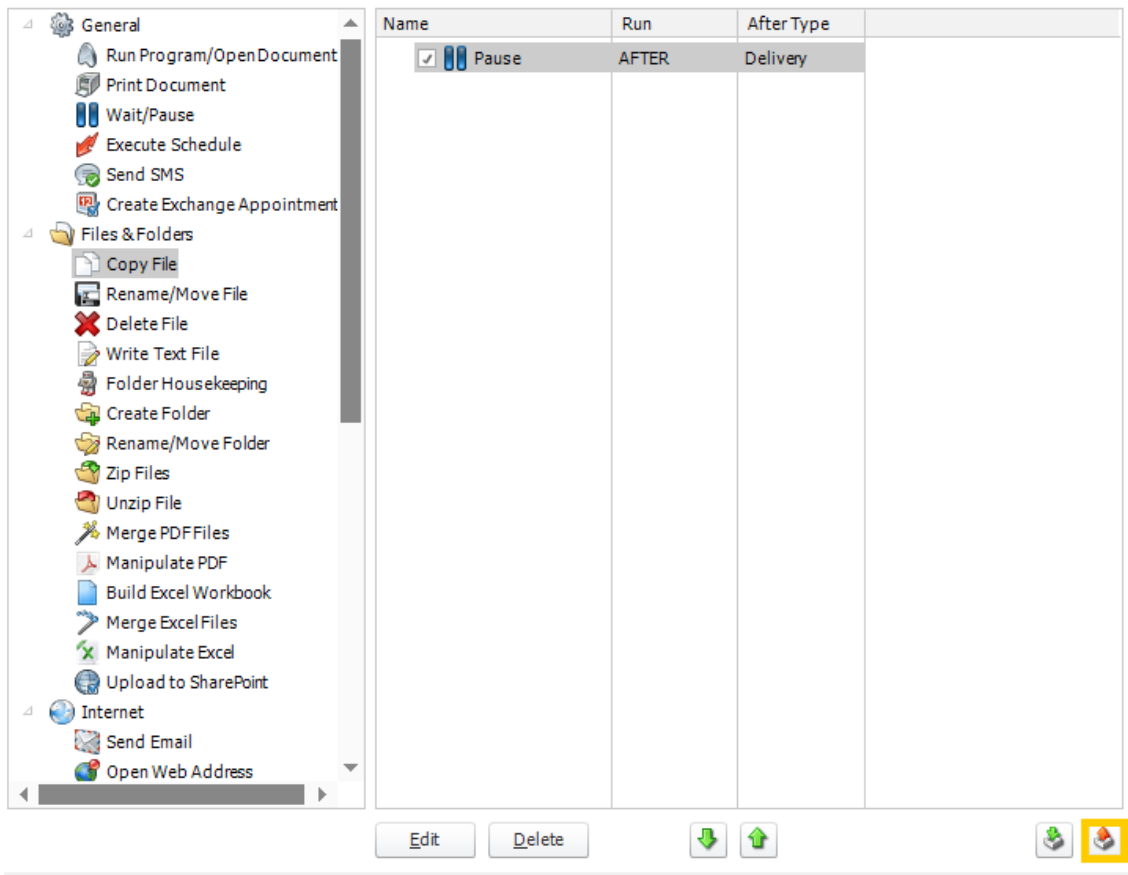


4. The default task will now be added to the schedule as a custom task. Click **Apply**.

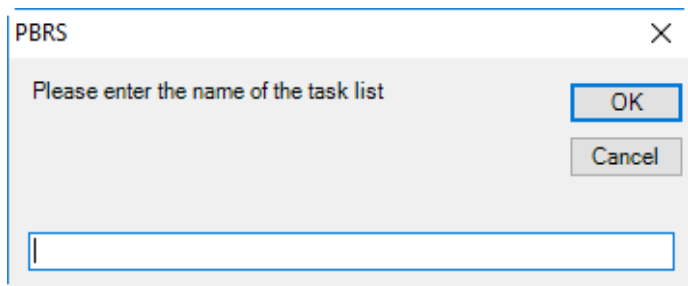
### How to Create a Task List?

Task Lists are a great way to import multiple task groups into a schedule. To create a Task List, perform the following:

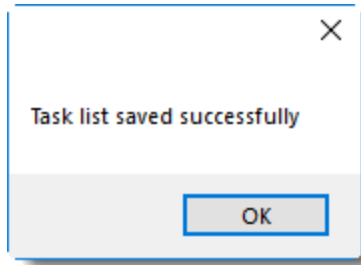
1. On the Default Tasks tab of the Options window, select **Export**.



2. Enter a name for this task list. Then, click **OK**.



3. If the default task list was created successfully, you will see a success message. Click **OK**.

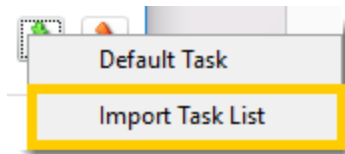


4. The Task list is now saved and can be imported into a schedule.

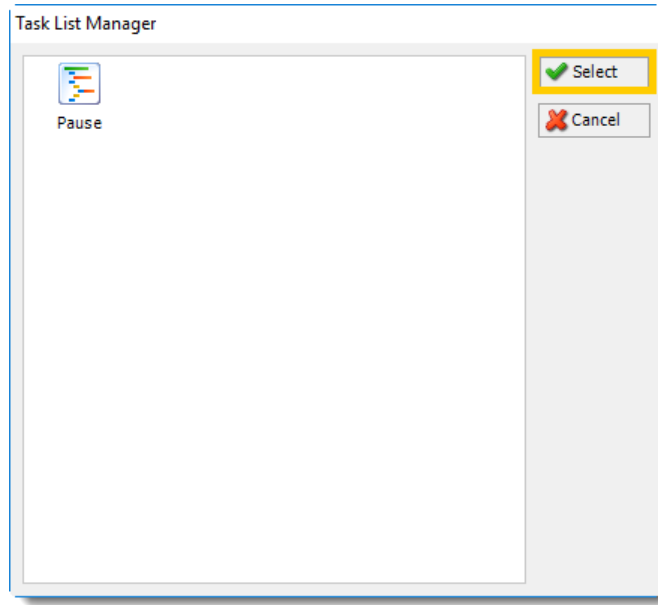
#### *Importing a Default Task List*

To import a default task list, perform the following:

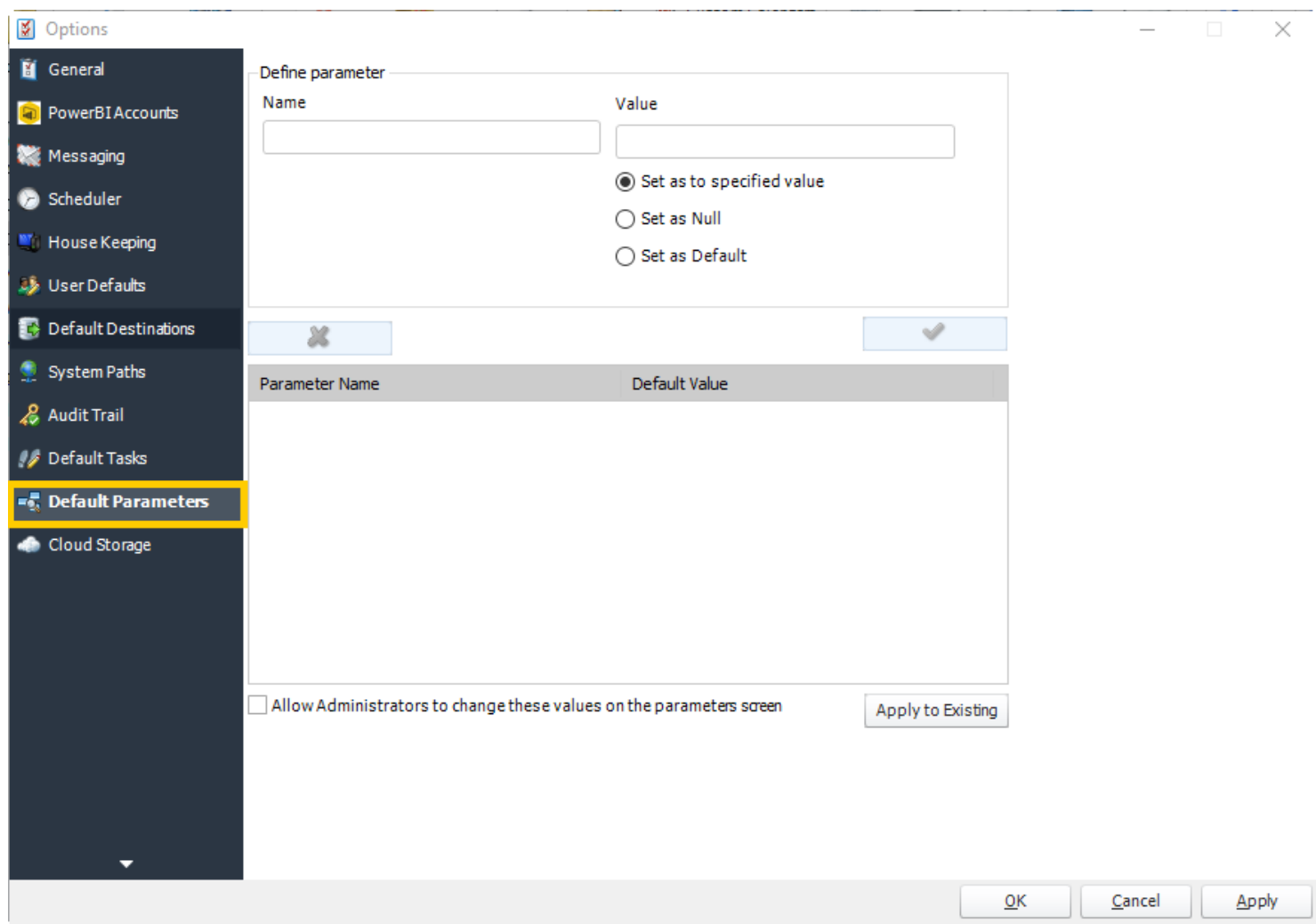
1. Navigate to the Custom Tasks tab of the schedule you wish to add the default task to.  
*This can be done by right-clicking the schedule, selecting Properties, and then clicking Tasks.*
2. Click **Import**.
3. Click **Import Task List**.



4. From the list that appears, click the task list you wish to import for this schedule. Then, click **Select**.
5. All tasks associated with that task list will now be added to the schedule. Click **Apply**.



## Default Parameters



The Default Parameters tab allows you to set default values for specific parameters that you can then assign to any of your schedules.

Default Parameters are useful for PBRs environments where users are assigned schedules with specific parameter settings that need not be tampered with.

### *Creating a Default Parameter*

To create a default parameter, perform the following:

1. On the **Default Parameters** tab, enter the name of the parameter in the *Define parameter - Name* field.



Define parameter

Name

2. For the value, choose one of the following options:
  - **Ignore the parameter** specified.
  - Set its value to **Null**.
  - Set it to a value **you specify** in the *Value* field.

*You can also drag and drop values from the inserts menu (i.e. date parameters or data items) into the Value field.*

Value

☒ Set as to specified value  
☐ Set as Null  
☐ Set as Default

3. Once you are satisfied with the parameter name and value, click the **Check mark** to add it to the Default Parameter list.

Define parameter

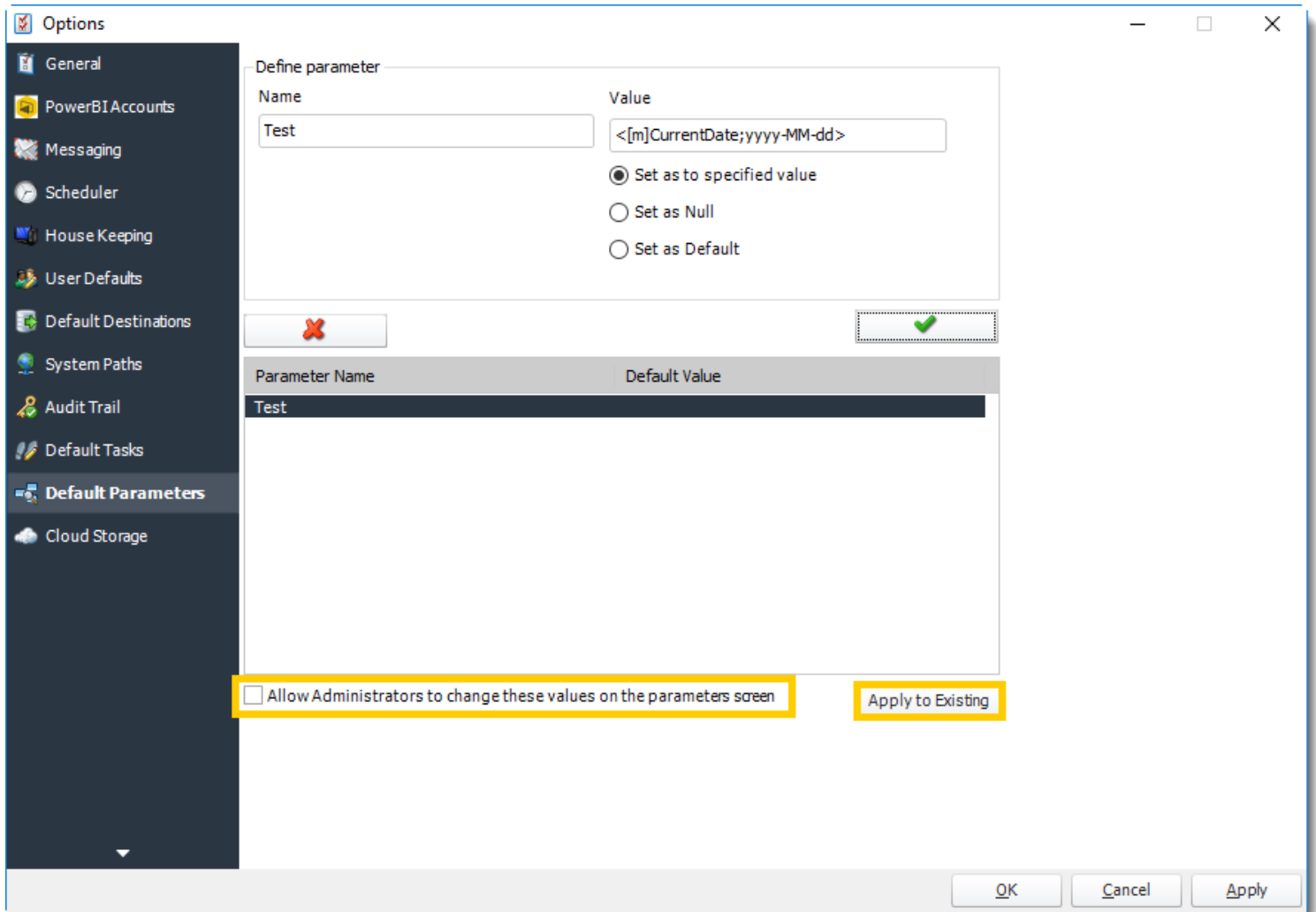
Name	Value
Test	<[m]CurrentDate;yyyy-MM-dd>

☒ Set as to specified value  
☐ Set as Null  
☐ Set as Default

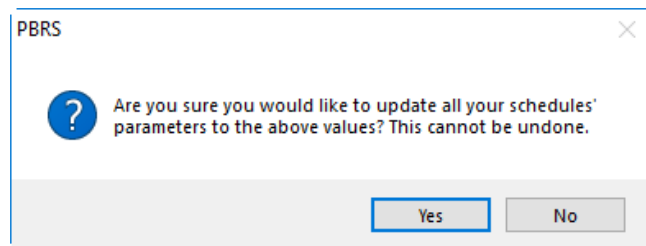
Parameter Name	Default Value
----------------	---------------

☐ Allow Administrators to change these values on the parameters screen

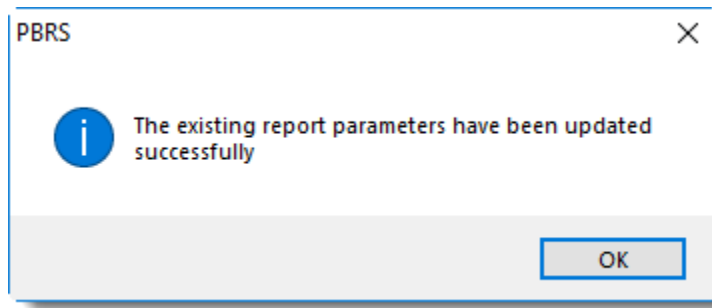
4. Repeat steps 1-3 for the remaining parameters you wish to set.
5. Once you have finished entering in parameters, decide if you would like administrators (or those with similar admin rights) to be able to edit the default parameter values you just set.
  - If you do, check the box next to **Allow Administrators to change these values on the parameters screen**.
6. If you would like to apply these default parameter values to all your currently existing schedules, click **Apply to Existing**.



7. Click **Yes**.



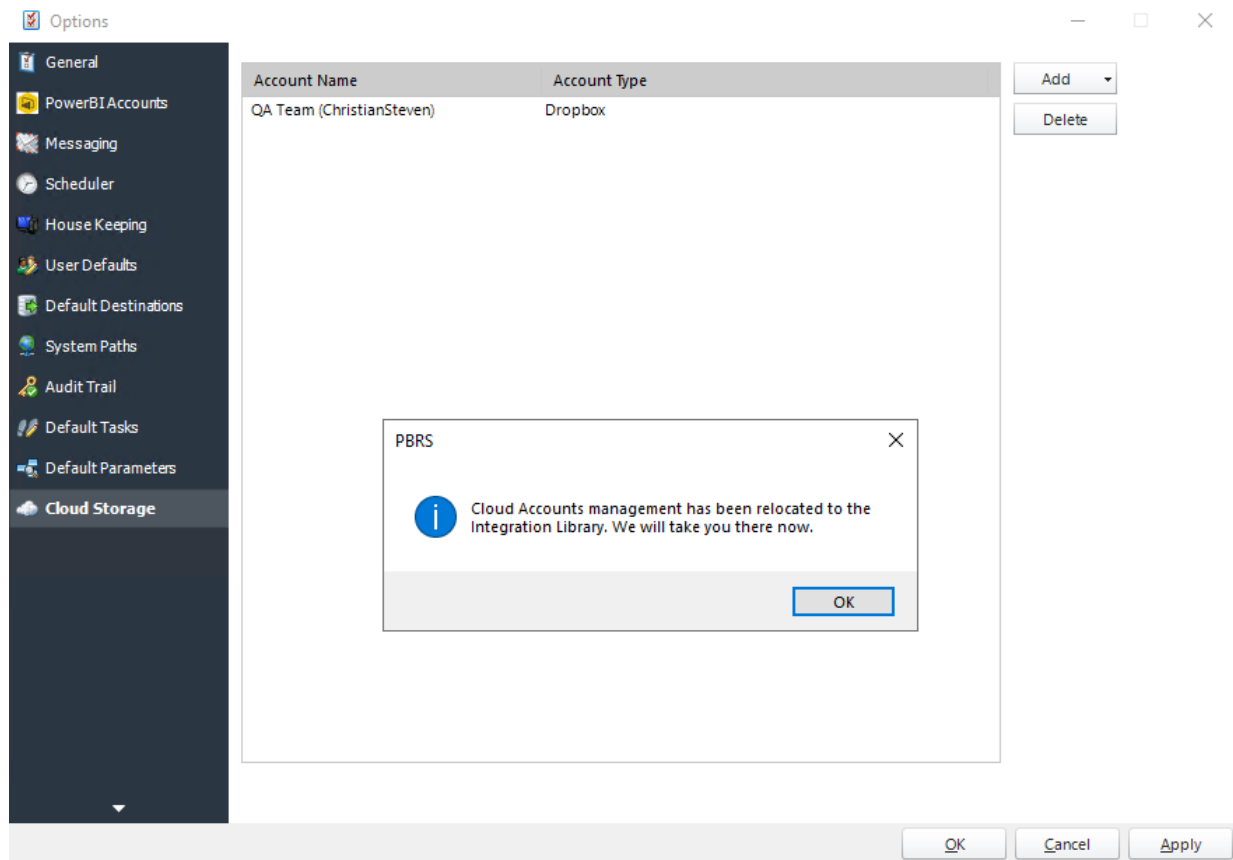
8. Click **OK**.



9. Click **Apply**.

When reports are added to schedules, the parameters specified will now automatically have the default values you configured.

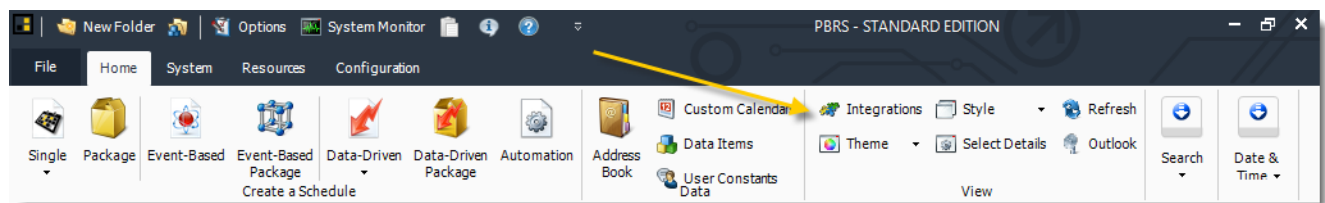
## Cloud Storage

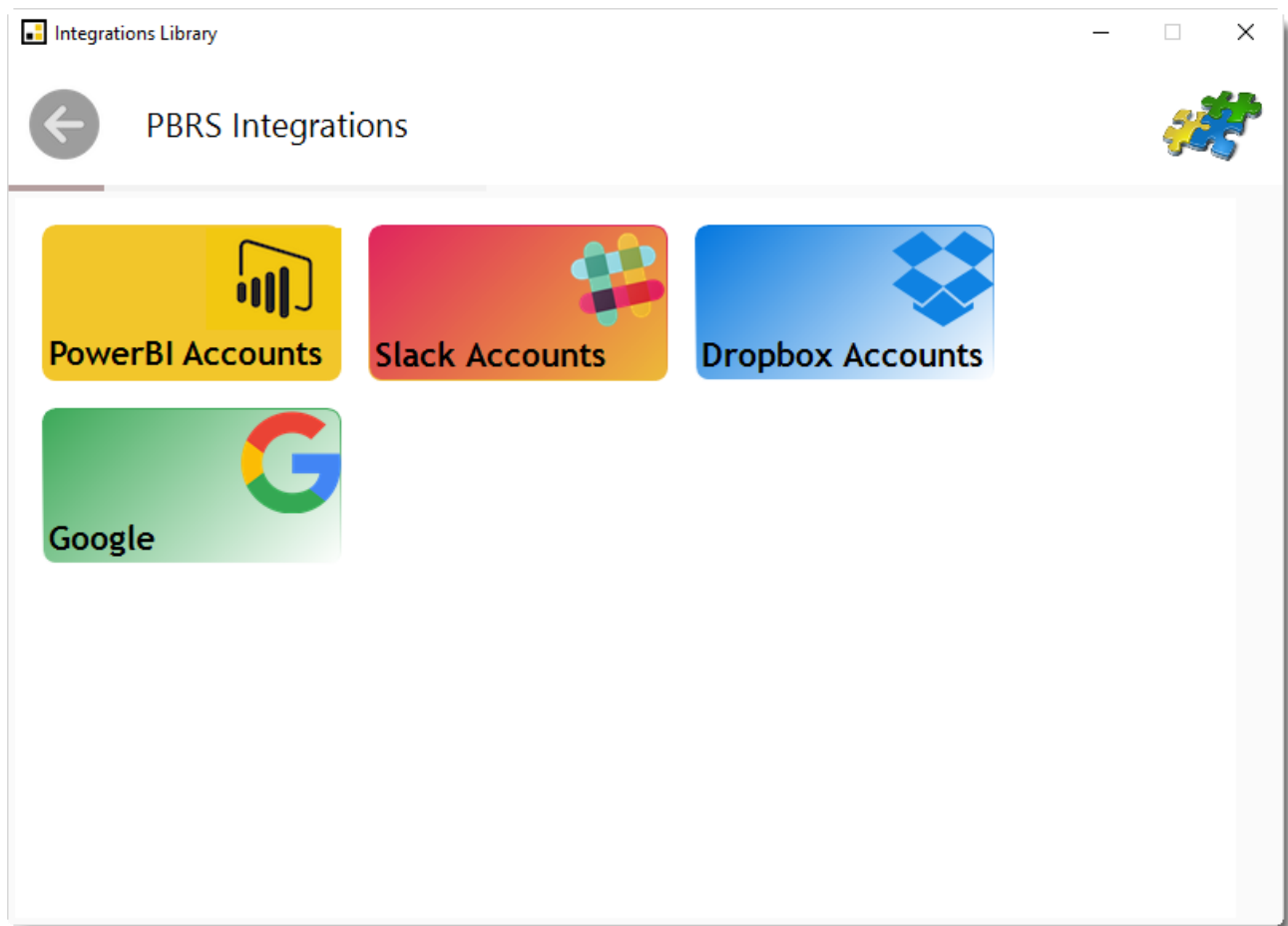


With the Cloud Storage tab, you can export reports to cloud services such as Dropbox. Adding the cloud storage options on this tab will allow you to use them as a destination for reports to export to when you create schedules in PBRS.

You can also manage [Integrations Library](#) here.

- Or select **Integrations** on the home screen.





- Select **Dropbox Account**.

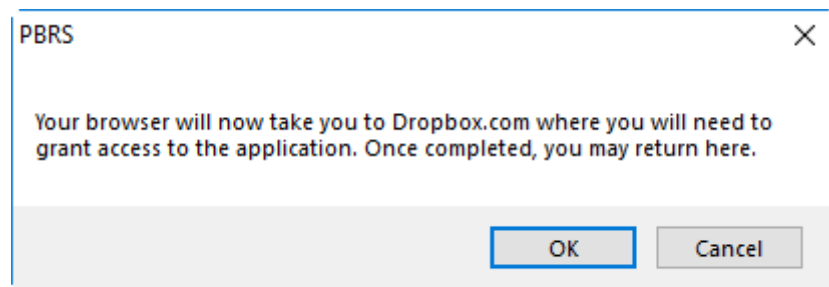


## PBRs Integrations - Dropbox Accounts

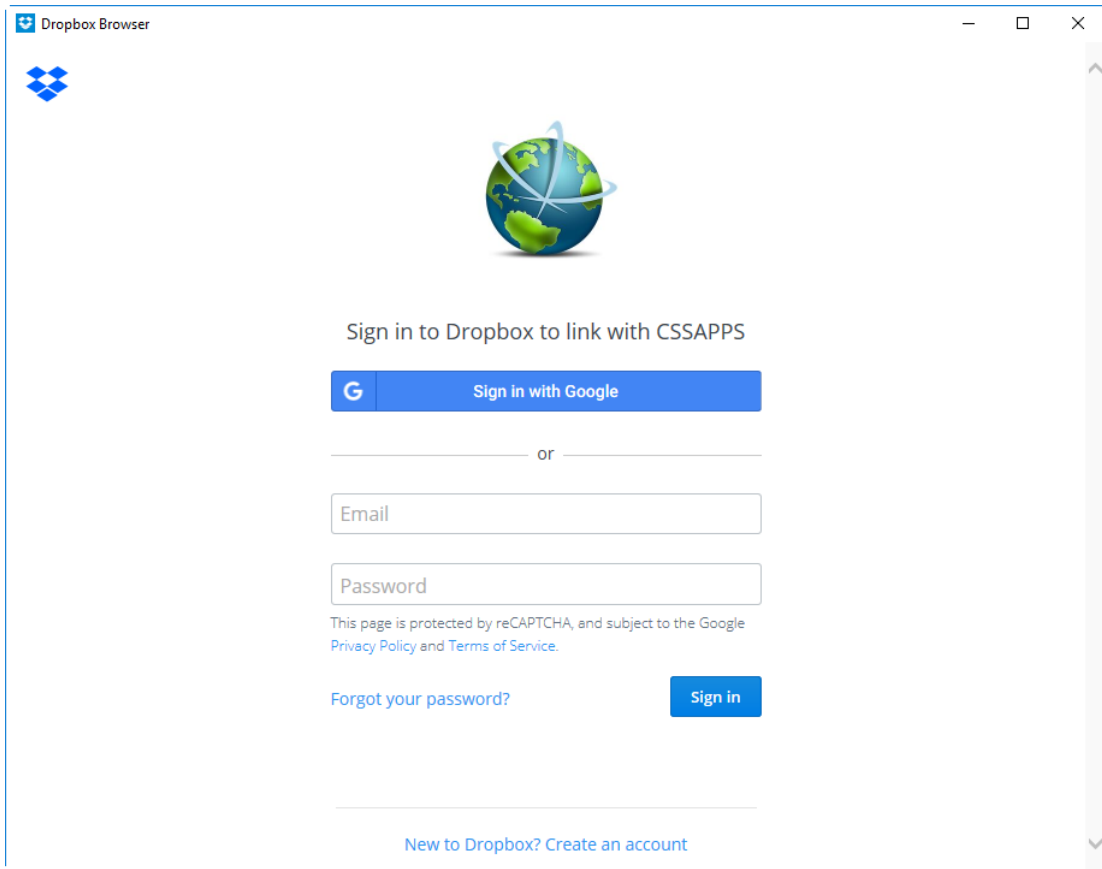


Account Name	Type	
QA Team (ChristianSteven)	Dropbox	<div>Add</div> <div>Delete</div>

- Click **Add**.
- You will see a pop-up advising you that you will now be redirected to Dropbox.com to grant access to PBRs. Click **OK**.



- On the dropbox.com browser window that opens, **sign-in to your Dropbox account**.

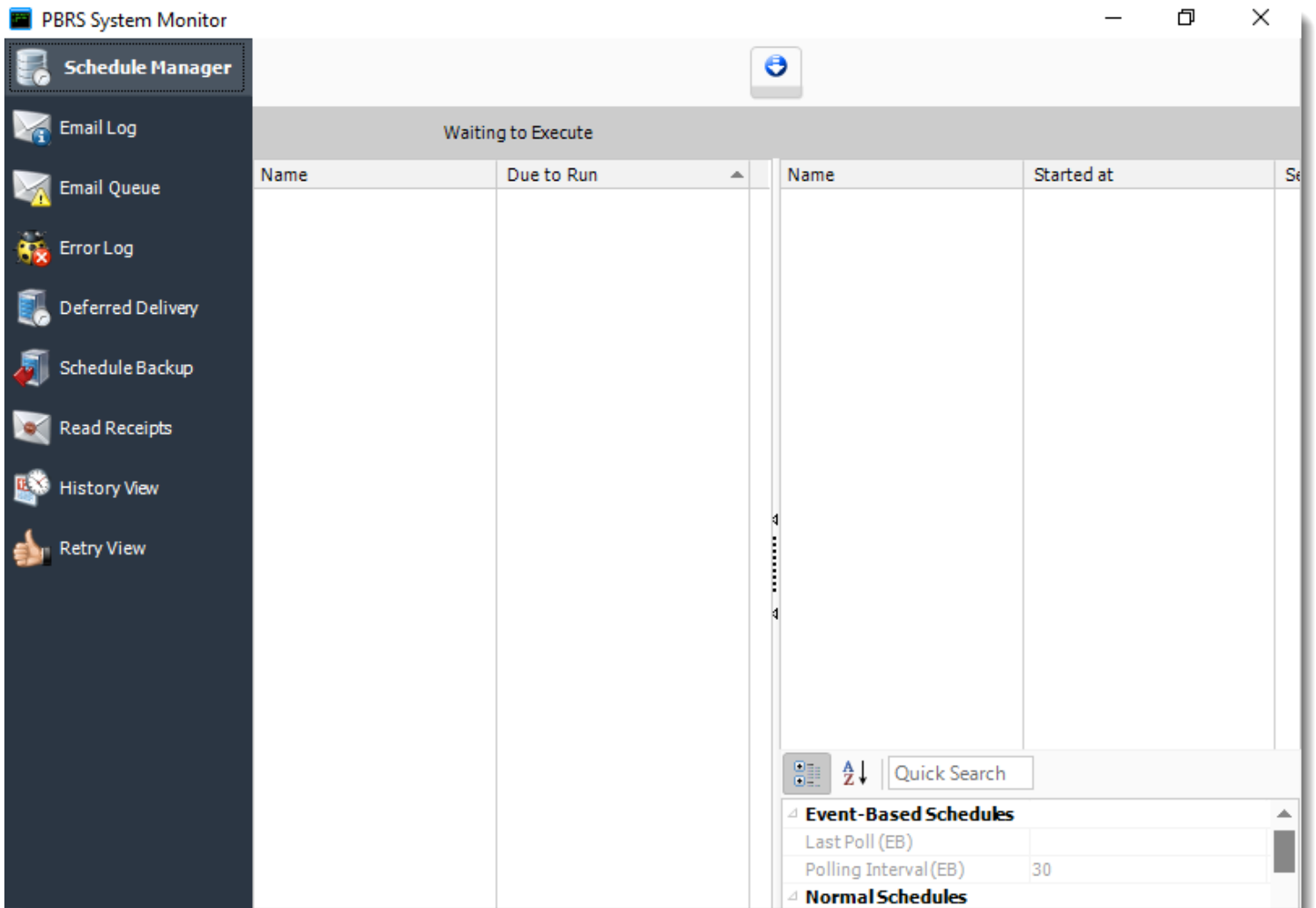
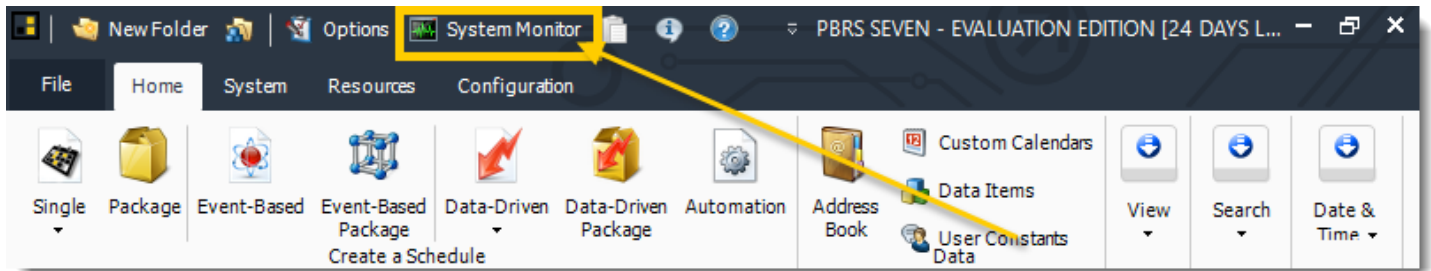


- Navigate back to PBRs. You should now see your Dropbox account listed under the Account Name/Account Type section.

Account Name	Type	Add	
QA Team (ChristianSteven)	Dropbox	Delete	

## System Monitor

The System Monitor is used to view scheduling and other system events and processes. Here's where to find it.





## Scheduler Manager

PBRs System Monitor

**Schedule Manager**

- Email Log
- Email Queue
- Error Log
- Deferred Delivery
- Schedule Backup
- Read Receipts
- History View
- Retry View

Waiting to Execute

Name	Due to Run	Name	Started at	Se
------	------------	------	------------	----

Quick Search

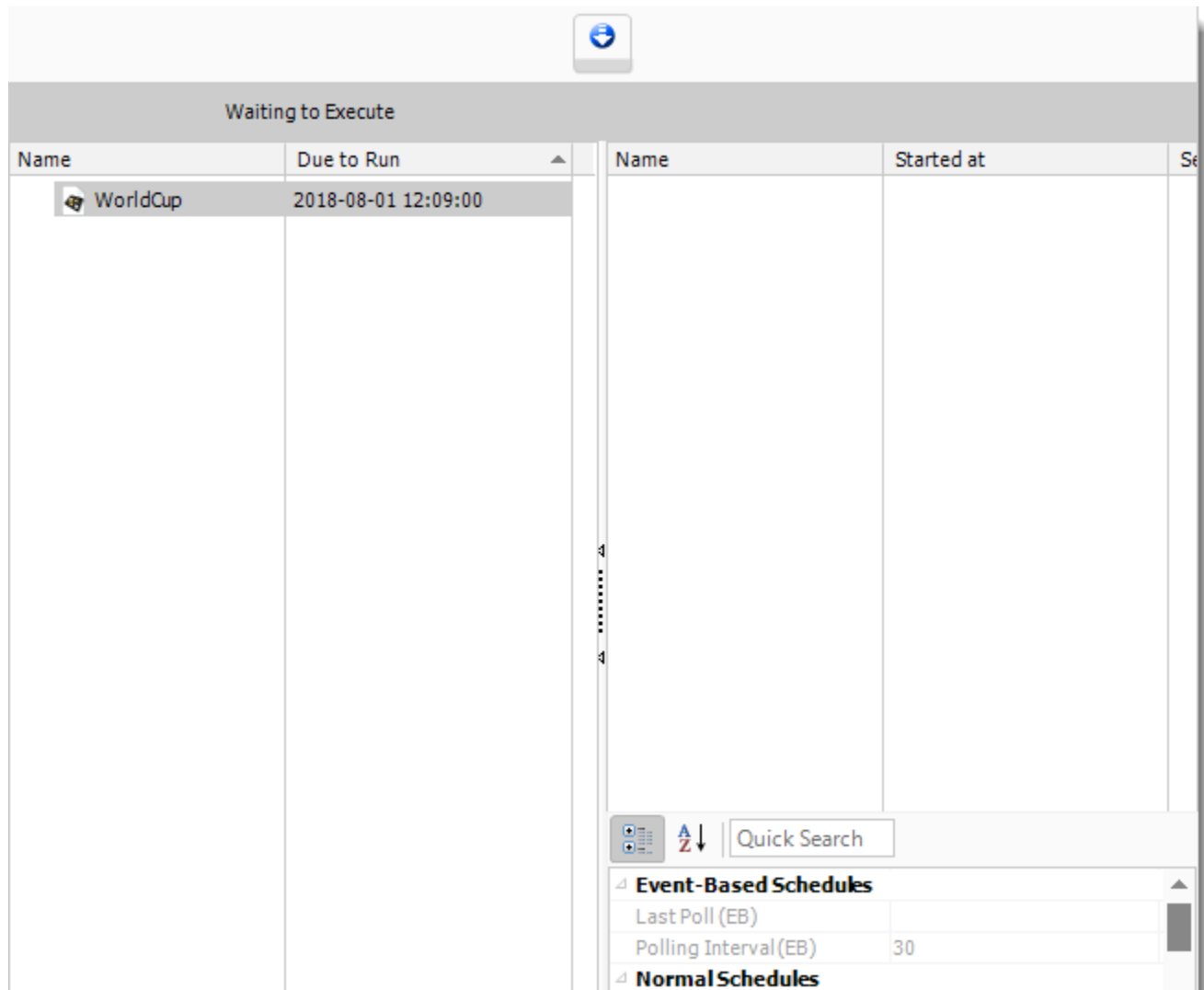
Event-Based Schedules

Last Poll (EB)	
Polling Interval (EB)	30

Normal Schedules

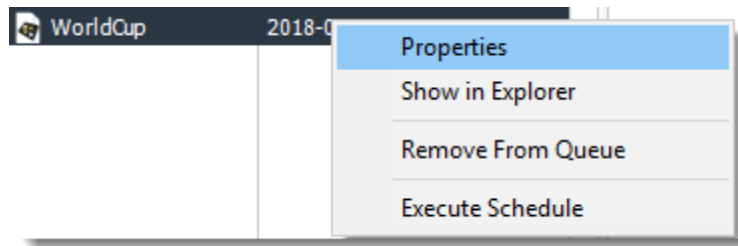
## Schedule Manager

The schedule manager will show currently executing schedules as well as any schedules scheduled to run (based on filter selected). From here you can remove a schedule from the waiting to execute or currently executing section. You can also go to the properties of a schedule by right-clicking the schedule.



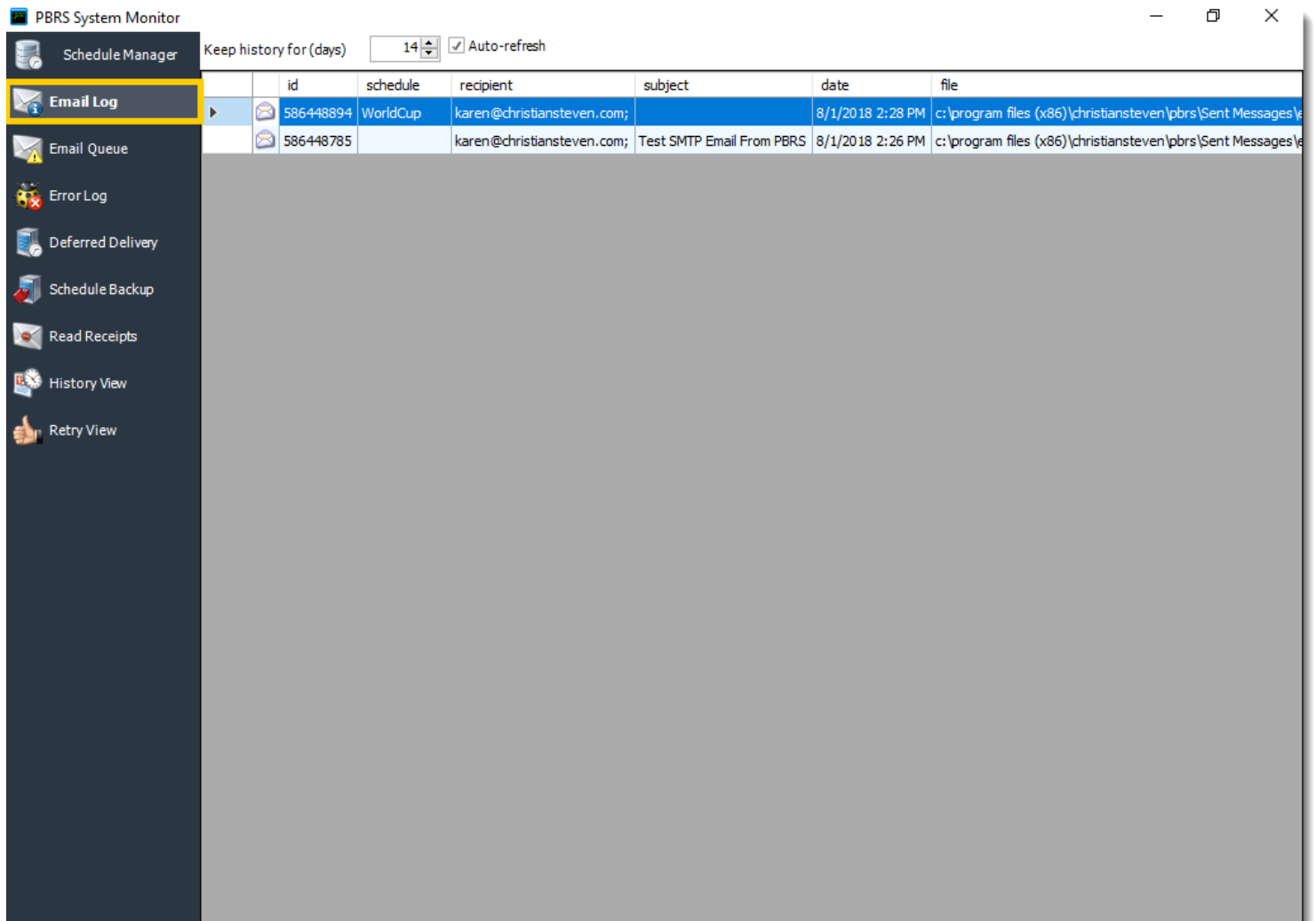
- **Executing:** This screen will display the schedules that are currently executing.
- **Waiting in Queue:** This screen will show the schedules that are waiting in the queue to be executed. You can also group the schedules by Schedule Type.
- **Refreshing the Display:** You can adjust the refresh interval of the schedule manager by using the Refresh Interval scroller which has a range of 2 to 60 seconds.
- **Managing Processes:** The Schedule manager also displays the Process ID which you can use to identify matching processes in the Windows Task Manager.

## Context Menu



- **Properties:** Select the schedule, right-click and select "Open Schedule properties". This opens the schedule properties.
- **Show in Explorer:** Select the schedule, right-click and select "Show the schedule in Explorer". This shows the schedule in the PBRs Explorer.
- **Remove From Queue:** Select the schedule, right-click and select "Remove from Queue". The schedule is removed from the queue.
- **Execute Schedule:** Select the schedule, right-click and select "Execute Schedule". The schedule is executed right away if it was waiting.

## Email Log



PBRS System Monitor

Schedule Manager

Keep history for (days) 14 ☒ Auto-refresh

	id	schedule	recipient	subject	date	file
	586448894	WorldCup	karen@christiansteven.com;		8/1/2018 2:28 PM	c:\program files (x86)\christiansteven\pbrs\Sent Messages\k
	586448785		karen@christiansteven.com;	Test SMTP Email From PBRS	8/1/2018 2:26 PM	c:\program files (x86)\christiansteven\pbrs\Sent Messages\k

Email Log

Email Queue

Error Log

Deferred Delivery

Schedule Backup

Read Receipts

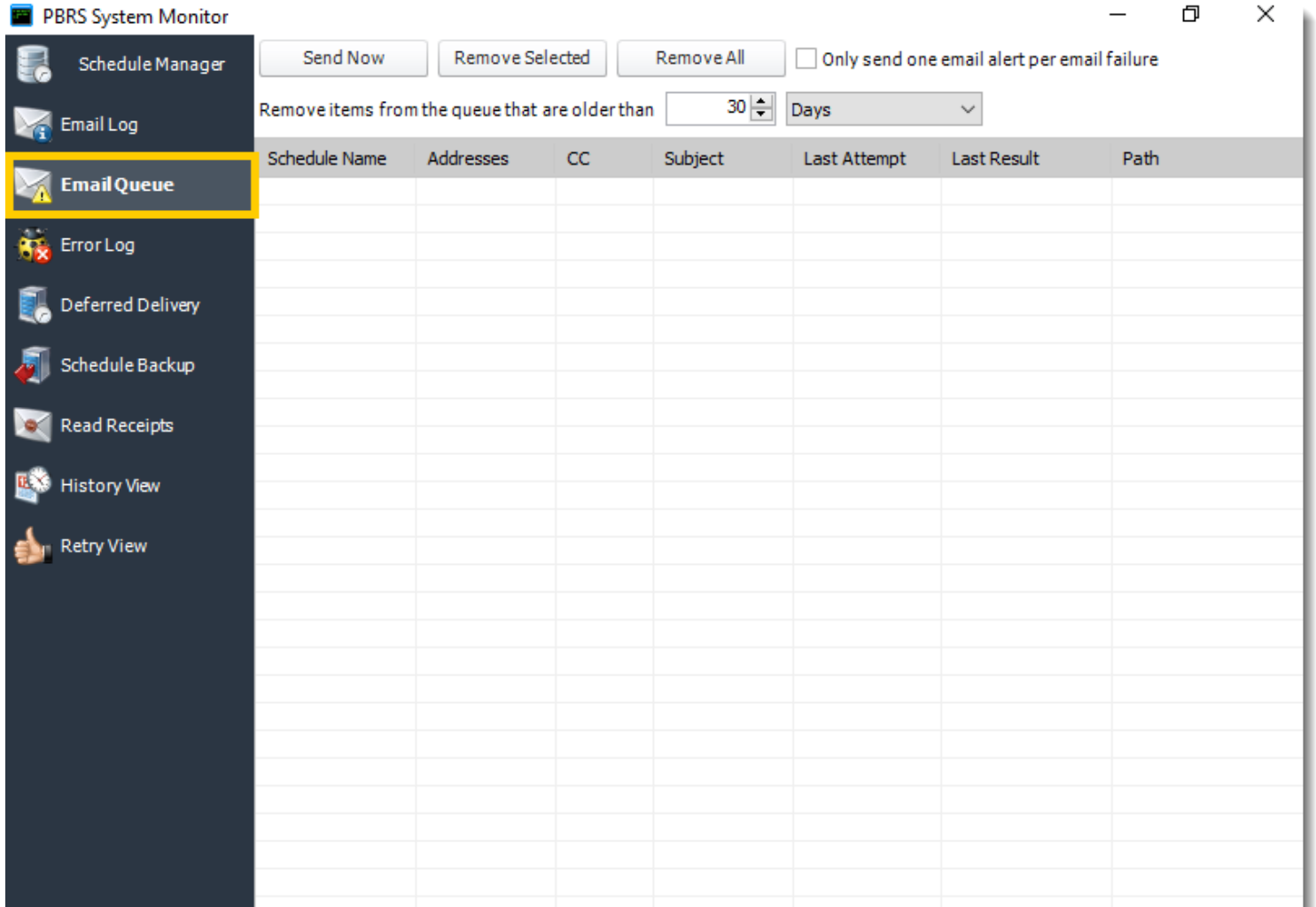
History View

Retry View

The email log will show a list of all emails which have been delivered successfully. You can double click on an email to bring it up in an email client as well as search for a specific email using the search field.

*This functionality works for emails sent by SMTP. For Exchange or Office 365 setups, successful emails will be shown in the "Sent Items" folder of the email account that was used to send the email.*

## Email Queue



This screen shows a list of all failed emails. If "Resend Failed Emails" has been checked in Options, then PBRS will keep retrying the email until it is manually removed from the queue. As an example, if an email address has been misspell (.cmo instead of .com). The queue will show when the last attempt was, and what the result was.

- **Send Now:** Select a message, and click this button to attempt an immediate delivery.
- **Remove Selected:** Select a message and click on this button to delete it from the list.
- **Remove All:** Click this button to clear the queue.
- **Only send one email alert per email failure:** This works in conjunction with the "Try resending failed emails" in Options (Tools > Options). If a message cannot be sent and PBRS is configured to notify you of any email failure, this makes sure an alert is sent to you only once and not every time the email fails due to the configured retry.
- **Remove items from the Queue that are older than:** Use this option to perform housekeeping on the email queue.

## Error Log

**PBRS System Monitor**

Schedule Manager | Search | Keep entries for 30 days

Email Log  
 Email Queue  
**Error Log**  
 Deferred Delivery  
 Schedule Backup  
 Read Receipts  
 History View  
 Retry View

PC Name	Entry Date	Schedule Name
TURNWALDWIN10	7/24/2018 10:02:...	WorldCup
TURNWALDWIN10	7/24/2018 10:02:...	WorldCup
TURNWALDWIN10	7/23/2018 4:07:5...	WorldCup
TURNWALDWIN10	7/23/2018 4:07:5...	WorldCup
TURNWALDWIN10	7/23/2018 4:07:0...	WorldCup
TURNWALDWIN10	7/23/2018 4:07:0...	WorldCup
TURNWALDWIN10	7/23/2018 4:06:5...	World Cup
TURNWALDWIN10	7/23/2018 4:06:5...	World Cup
TURNWALDWIN10	7/20/2018 10:02:...	WorldCup
TURNWALDWIN10	7/20/2018 10:02:...	WorldCup
TURNWALDWIN10	7/19/2018 4:09:4...	
TURNWALDWIN10	7/19/2018 3:52:4...	
TURNWALDWIN10	7/19/2018 3:26:3...	WorldCup
TURNWALDWIN10	7/19/2018 3:11:5...	World Cup
TURNWALDWIN10	7/19/2018 3:11:5...	World Cup
TURNWALDWIN10	7/19/2018 10:01:...	WorldCup
TURNWALDWIN10	7/19/2018 10:01:...	WorldCup
TURNWALDWIN10	7/19/2018 8:59:3...	WorldCup
TURNWALDWIN10	7/19/2018 8:57:0...	World Cup
TURNWALDWIN10	7/19/2018 8:57:0...	World Cup
TURNWALDWIN10	7/18/2018 10:02:...	WorldCup
TURNWALDWIN10	7/18/2018 10:02:...	WorldCup
TURNWALDWIN10	7/18/2018 8:52:0...	WorldCup
TURNWALDWIN10	7/18/2018 8:49:3...	World Cup
TURNWALDWIN10	7/18/2018 8:49:3...	World Cup
TURNWALDWIN10	7/17/2018 2:06:3...	
TURNWALDWIN10	7/17/2018 1:53:2...	
TURNWALDWIN10	7/17/2018 12:50:...	

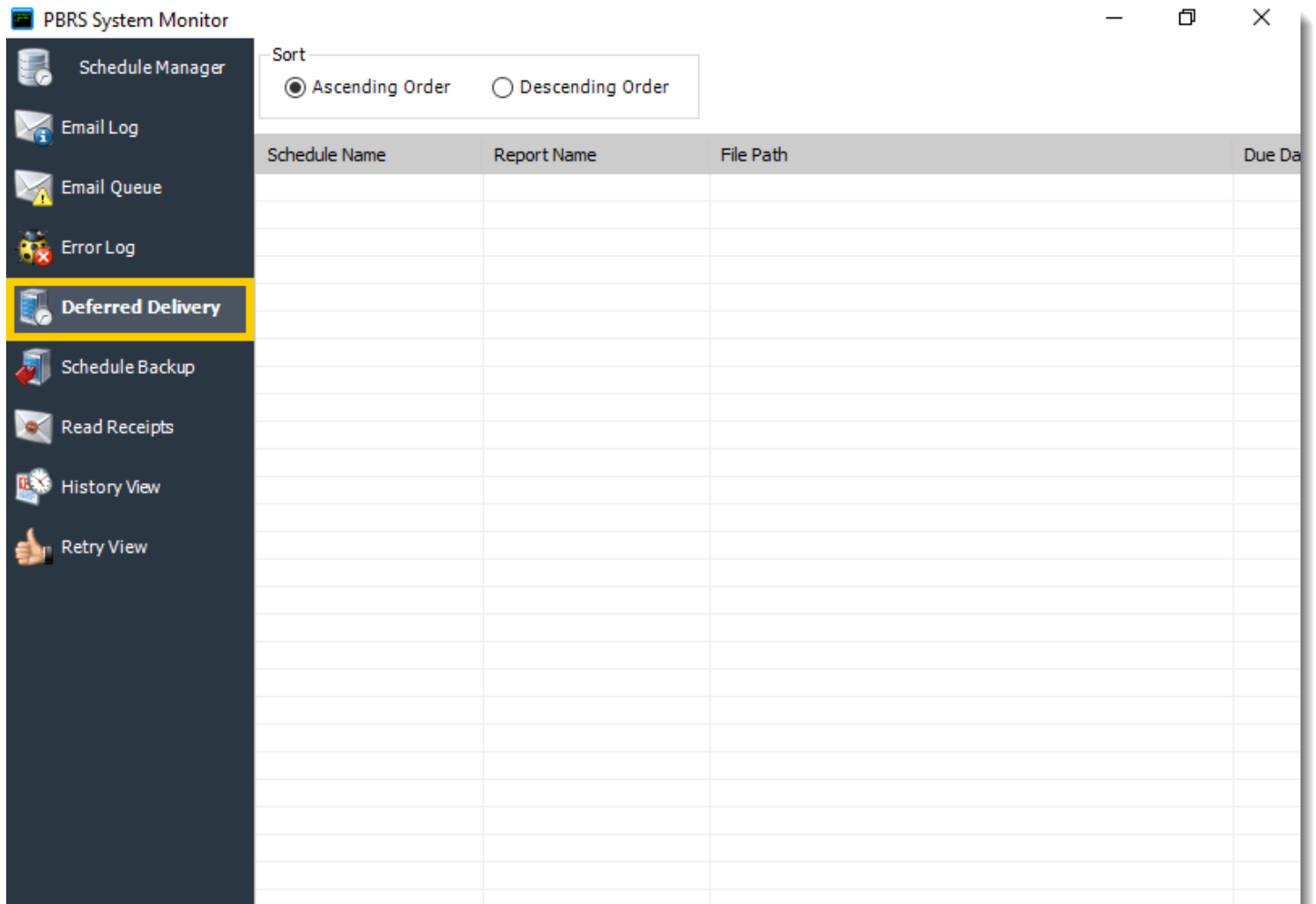
Error Number  
 Error Source: SingleSchedule  
 Line Number: 0  
 Error Description: Destination Error: Email  
 ++++++  
 Error Description: Single Schedule:WorldCup. Report(s) produced successfully but email failed with the following error: ChilkatLog:  
 VerifySmtpConnection:  
 DllDate: Aug 30 2017  
 ChilkatVersion: 9.5.0.69  
 UnlockPrefix: CHRISTMAILQ  
 Architecture: Little Endian; 32-bit  
 Language: .NET 4.6  
 VerboseLogging: 0  
 smtpConnectAndAuthenticate:  
 smtpConnect:  
 Application did not provide an SMTP hostname.  
 --smtpConnect  
 --smtpConnectAndAuthenticate  
 Failed.  
 --VerifySmtpConnection

Suggestion

Copy Error

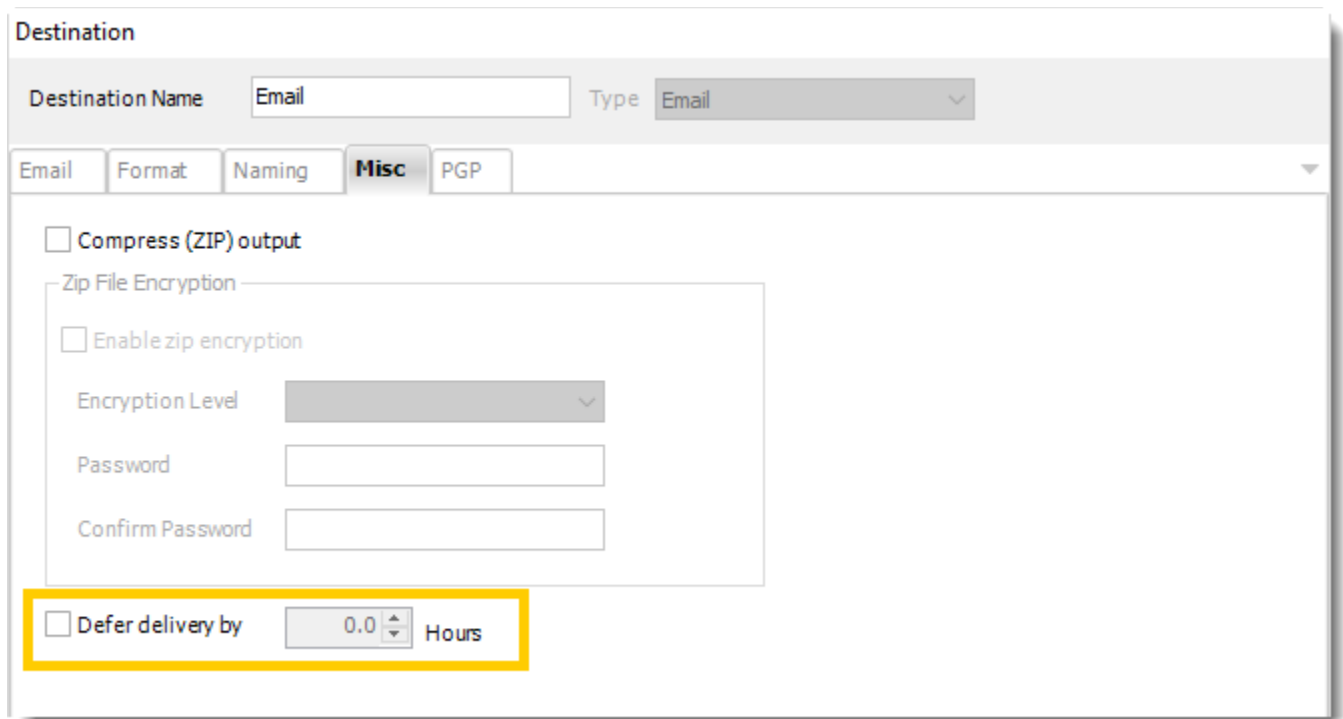
- The error log enables you to view any errors that have been encountered by the system.
- You can filter out the entries displayed by using the search field to specify the keywords to filter by.
- To view the details of an entry simply select it and the details will be shown in the opposite pane.
- This can be very useful for troubleshooting purposes. You can also easily copy the details of a selected error using the "Copy error" button.

## Deferred Delivery



## Deferring your Reports

1. In any scheduled output, go to Destination and select Misc.
2. Check the Deferred delivery box and indicate the length of the delay before delivery.



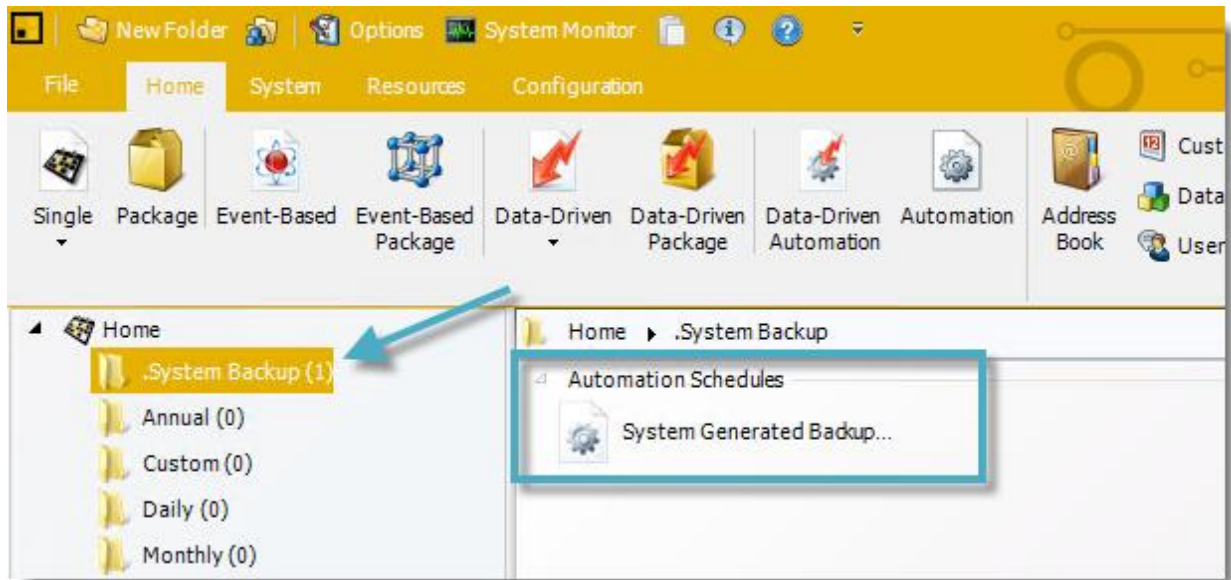
The screenshot shows a 'Destination' configuration window. At the top, 'Destination Name' is 'Email' and 'Type' is 'Email'. Below are tabs for 'Email', 'Format', 'Naming', 'Misc', and 'PGP'. The 'Misc' tab is selected. It contains a 'Compress (ZIP) output' checkbox, a 'Zip File Encryption' section with an 'Enable zip encryption' checkbox, an 'Encryption Level' dropdown, and 'Password' and 'Confirm Password' text boxes. At the bottom, the 'Defer delivery by' checkbox is checked and highlighted with a yellow box, with a value of '0.0' and the unit 'Hours'.

## Schedule Backup

Schedule backups are now configured via [Automation Schedules](#) and [Custom Tasks](#).

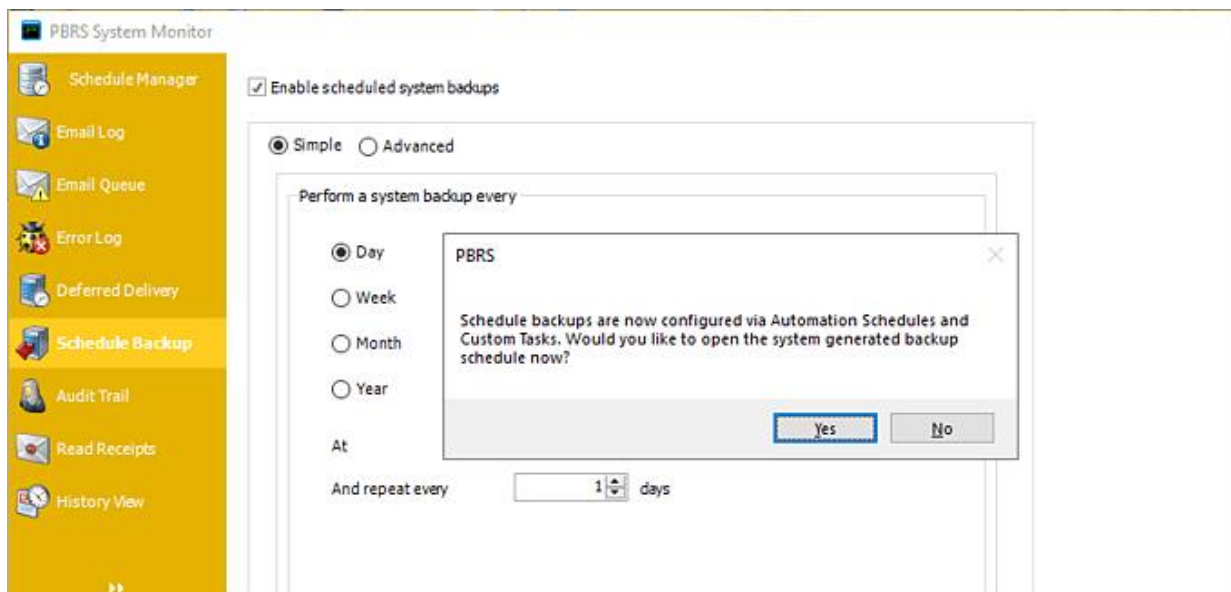
PBRS has created an Automation Schedule with Daily System Backups located in **.System Backup folder** in PBRS Home Screen.





### System Monitor - Schedule Backup

- Go to **System Monitor**.
- Select **Schedule Backup**.



- Click **Yes**.

### System Generated Backup Schedule

*This Automation schedule is created by default when installing or updating PBRS.*

## General Wizard

Automation Schedule Properties - System Generated Backup Schedule

**General**

Location: .System Backup

Schedule Name: System Generated Backup Schedule

Description (optional): Automated system backup

Keywords (Optional):

Unique ID: 654075811

OK Cancel Apply

- You may customize the System Generated Backup Schedule properties.

Automation Schedule Properties - System Generated Backup Schedule

**General** | **Schedule** | History | Tasks | Sharing

Start Date: 09/22/2020 | End Date: 09/22/2120

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 11:00:00 PM | Exception calendar: ☐

Next to run on: 09/23/2020 | 11:00:00 PM

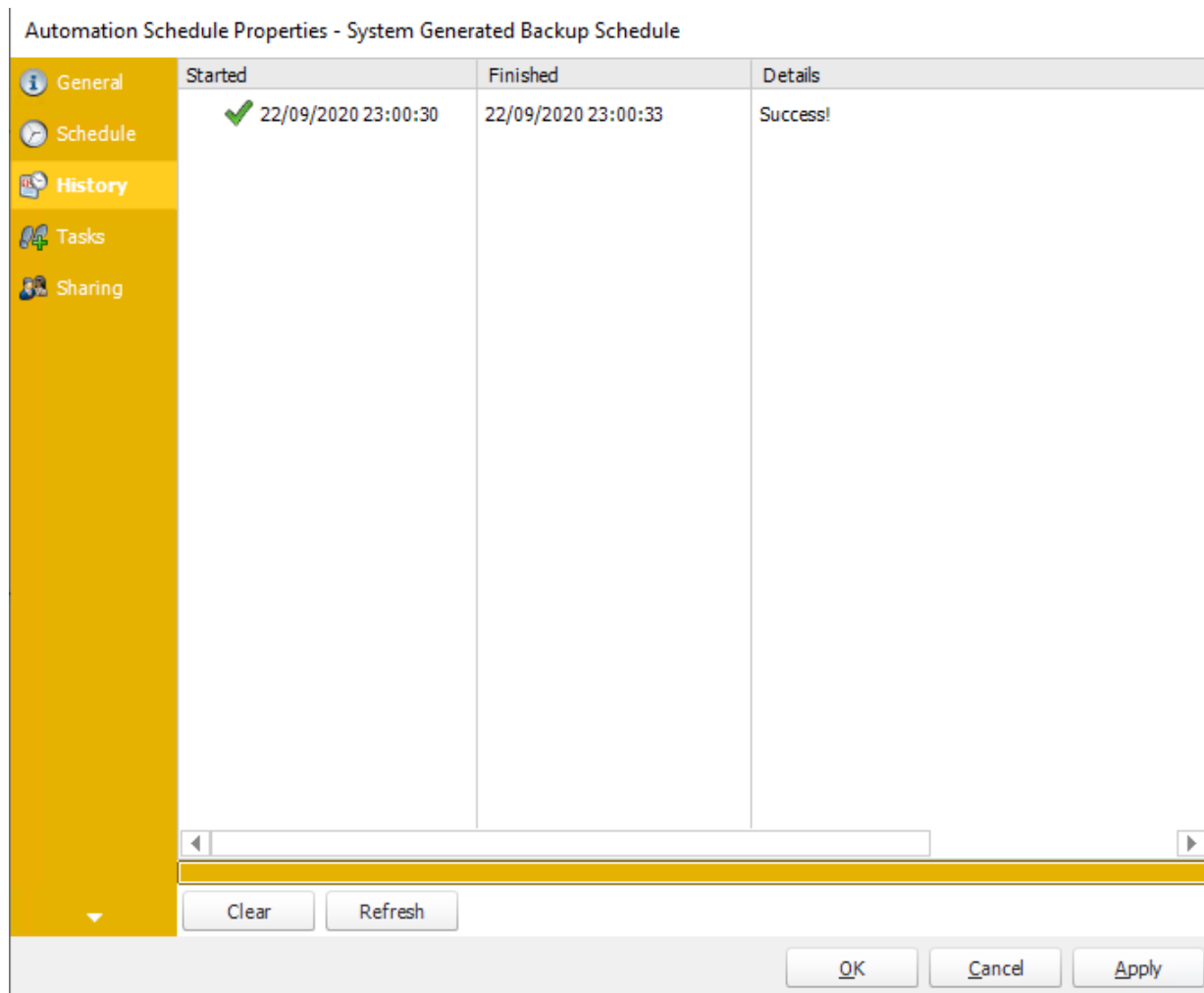
☐ Repeat every: 0.25  until: 11:00:00 PM

☒ Enable this schedule

OK Cancel Apply

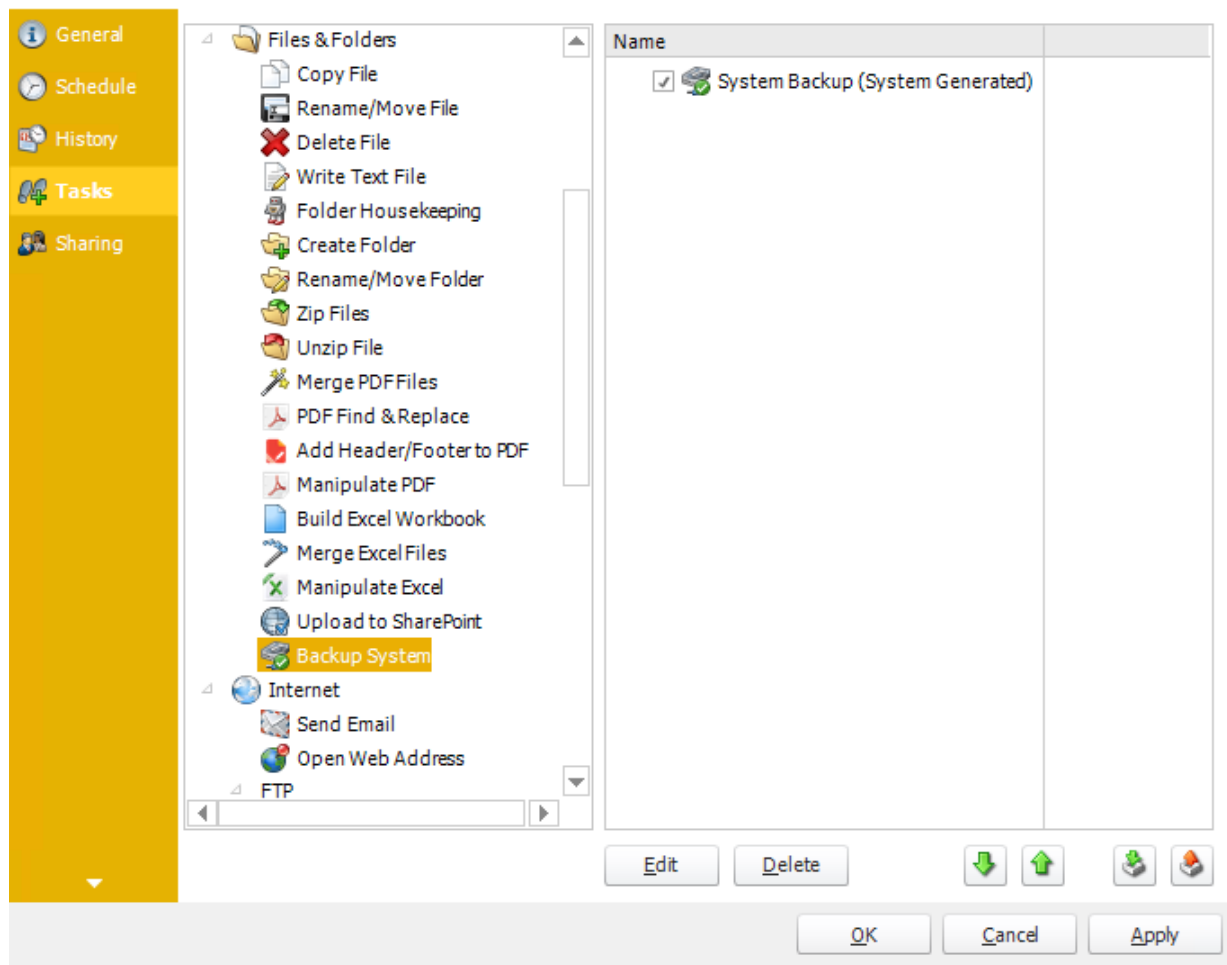
- In this section, you will decide when the System Backup will execute.

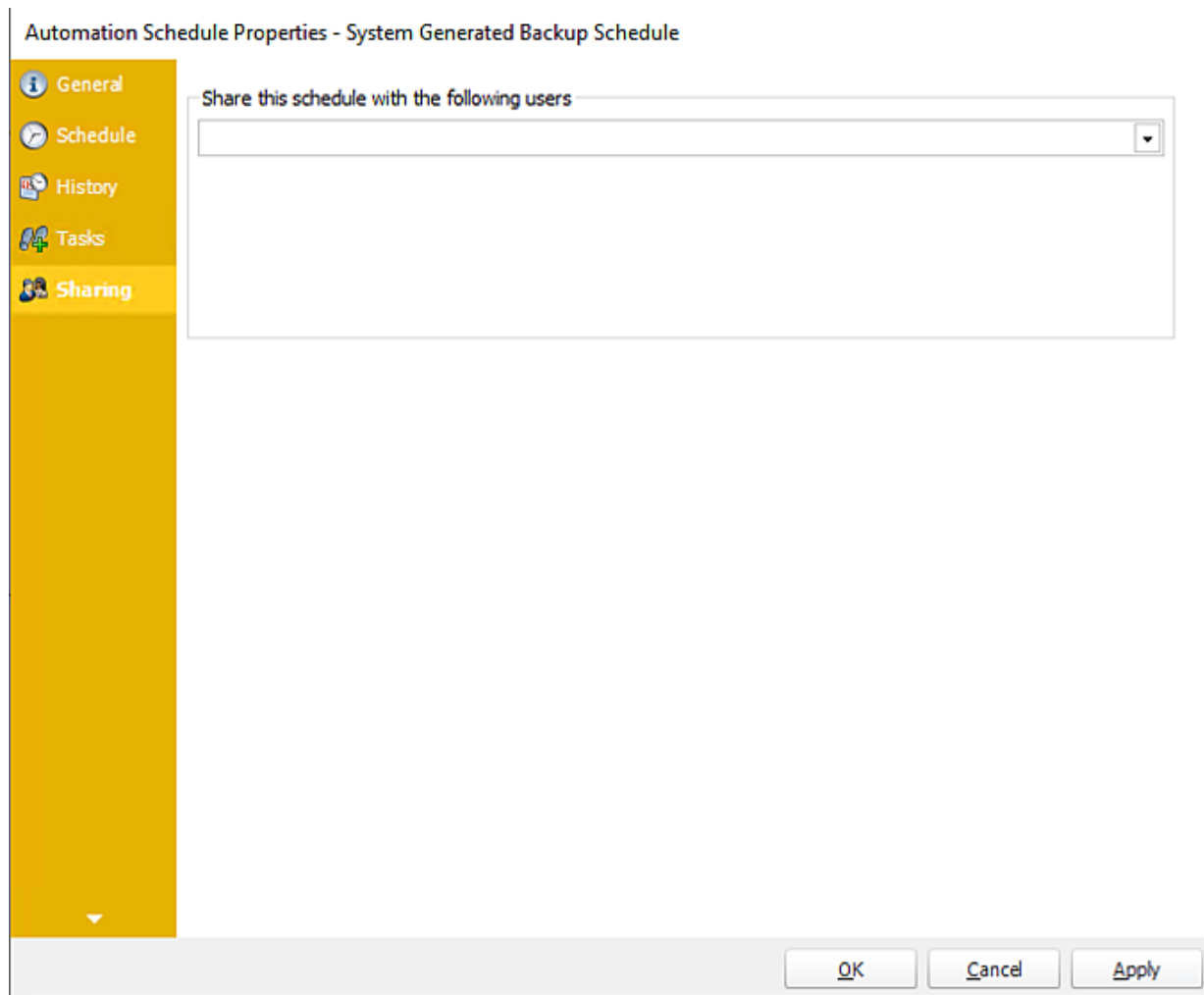
*As much as possible try to schedule backups at times when you do not have schedules running. This is important as backups may cause delays with schedule execution.*



- Review the history of the schedule. Successes, failures and other data is located here.

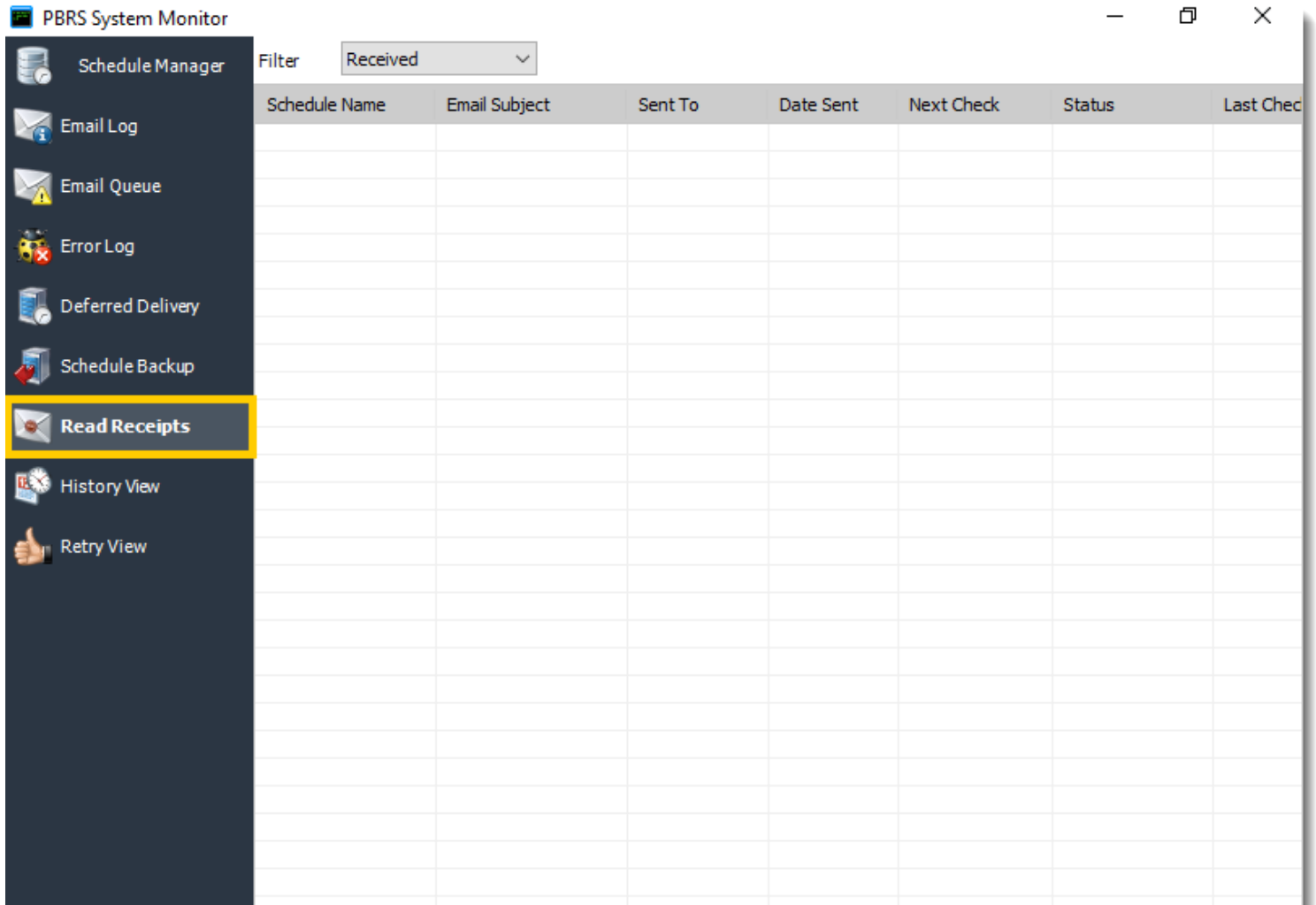
# Automation Schedule Properties - System Generated Backup Schedule





- Here you can share this schedule with multiple users.
- Once finished, click **Apply** and **OK**.

## Read Receipts



Read Receipts Enable you to confirm that the recipient has read an email after it has been sent. Tasks can be executed once or repetitively until the read receipt has been confirmed by PBRS. Read Receipts can be used in most Email Destinations.

*Read Receipts can only be used Exchange email settings.*

All emails that are waiting for a read receipt are displayed here. Clicking on filter you can separate your read receipts by delivered, pending or received.

When the email is sent, you will receive a delivery receipt. Once confirmation that the email has been read is received, you will be notified via email as well.

## Setting Up Read Receipts

1. To set up Read Receipts for an email, click on the associated schedule and go to **Destination**.
2. Double click **Email**.
3. Check **Delivery Receipt** and this enables read receipts for this email destination.

The screenshot shows the 'Destination' dialog box with the 'Email' tab selected. The 'Destination Name' is 'Email' and the 'Type' is 'Email'. The 'Email' tab is active, showing fields for 'To...', 'CC...', 'BCC...', 'Subject', and 'Attach'. The 'To...' field contains 'karen@christiansteven.com'. Below these fields is a large text area. At the bottom, there is a section for 'Embed report' (unchecked), 'Format' (set to 'TEXT'), 'Mail Server' (set to 'Default'), and a checked 'Delivery Receipt' checkbox. The 'Customize sender details (optional)' section has fields for 'Name' and 'Address'. The 'OK' and 'Cancel' buttons are at the bottom right.

Destination

Destination Name: Email Type: Email

Email Format Naming Misc PGP

To... karen@christiansteven.com

CC...

BCC...

Subject

Attach

Embed report

Format: TEXT

Mail Server: Default ☒ Delivery Receipt

Customize sender details (optional)

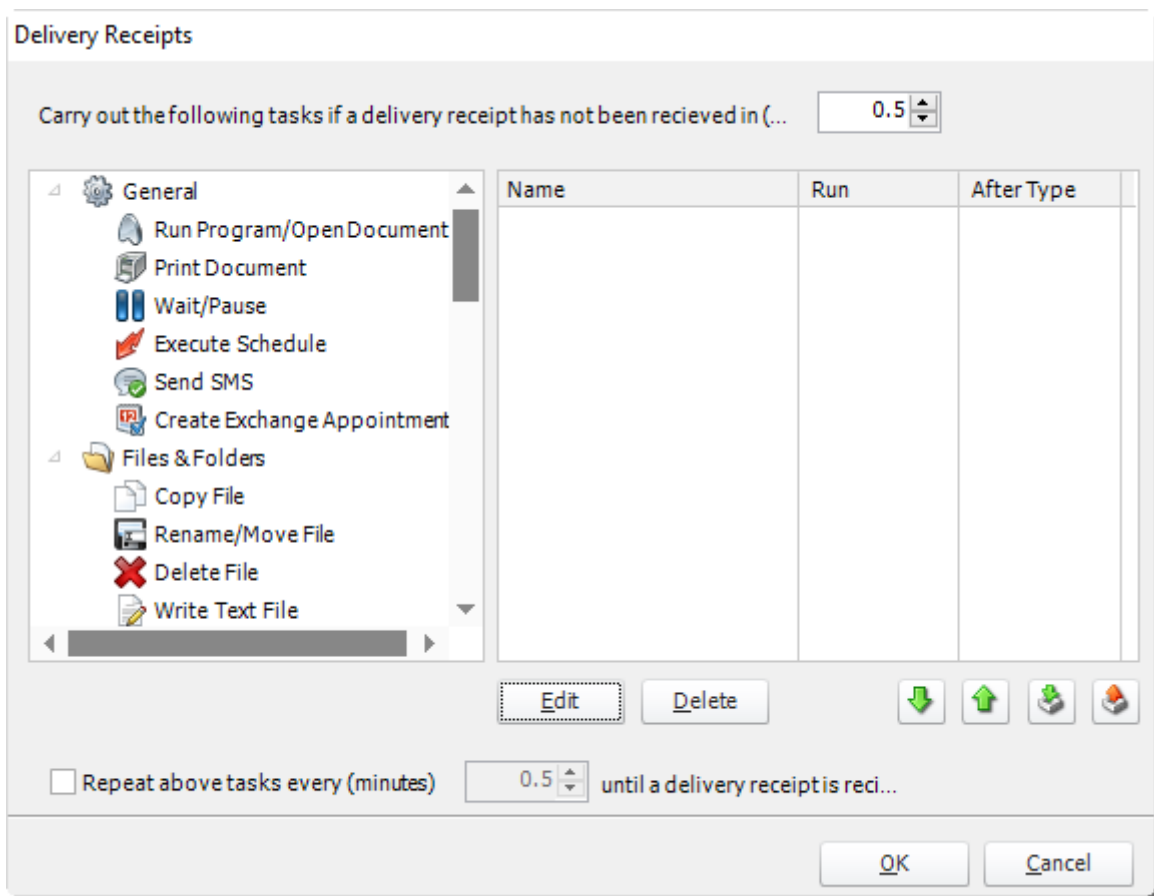
Name:

Address:

OK Cancel



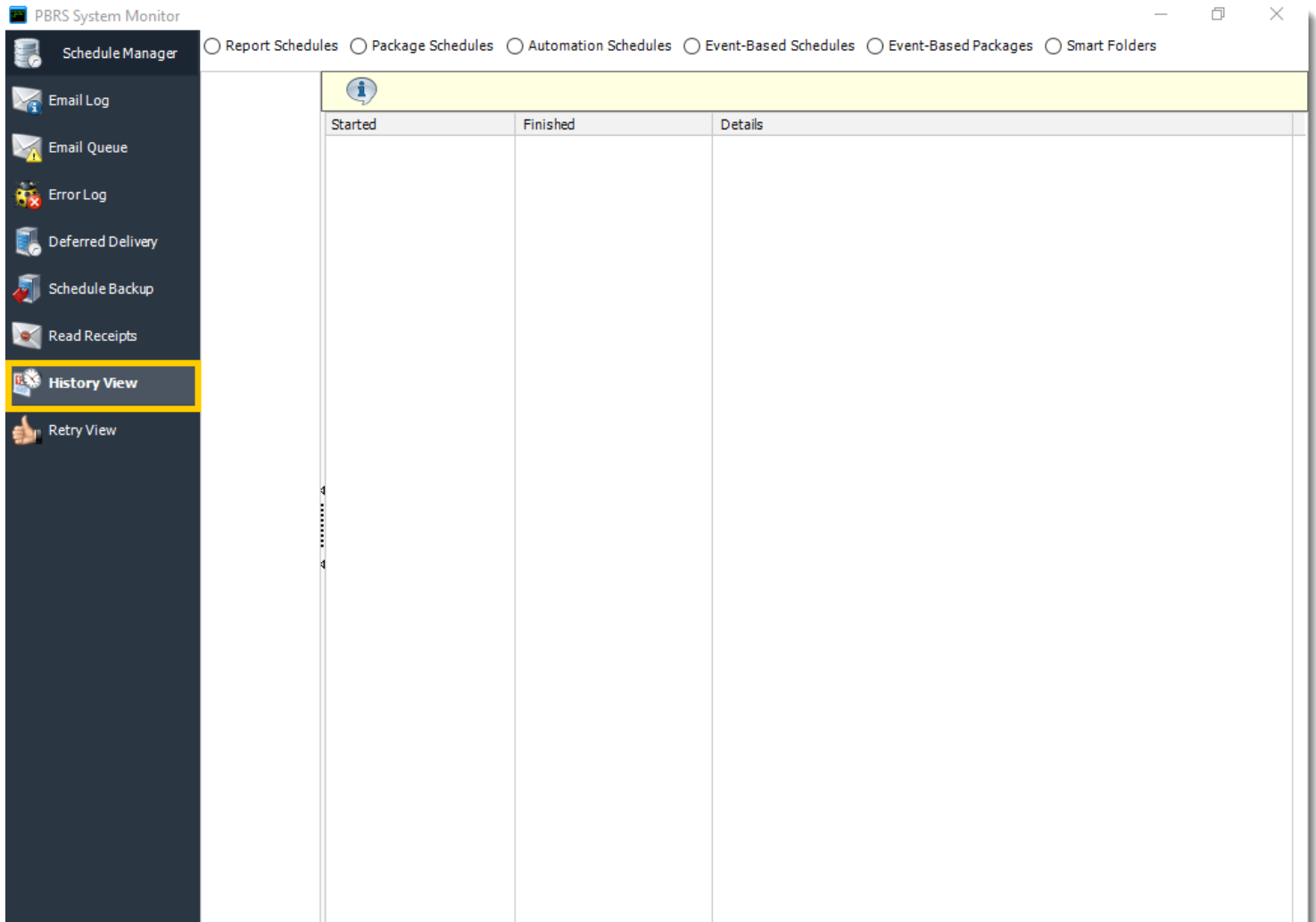
4. By clicking the triple dots box, you can review additional read receipt options.



5. Click **OK** and then, click **Apply**.

- If a read receipt has not been received within a specified amount of time, custom tasks can be executed as a result.
- In schedules that send multiple emails (i.e. a Dynamic Schedule), a read receipt is triggered for each of the emails sent by the schedule.
- Repeat above tasks every X minutes: Any task you have created will be executed at a determined interval until a read receipt is received.

## History View



This screen shows you a history of all schedules (static and dynamic). If one destination out of many fails, the schedule will be marked as a "Partial Success." Expanding the node will reveal which reports or destinations failed.

PBRS System Monitor

☒ Report Schedules
 ☐ Package Schedules
 ☐ Automation Schedules
 ☐ Event-Based Schedules
 ☐ Event-Based Packages
 ☐ Smart Folders

Daily  
 WorldCup

Next to run on 8/2/2018 12:09:00

Started	Finished	Details
✗ 7/31/2018 12:16:4...	7/31/2018 12:17:29 PM	Failure: Single Schedule:WorldCup.Report(s) produced successfully but email failed with t...
✗ 7/31/2018 12:23:1...	7/31/2018 12:23:54 PM	Failure: Single Schedule:WorldCup.Report(s) produced successfully but email failed with t...
✗ 8/1/2018 10:54:30...	8/1/2018 10:55:21 AM	Failure: Single Schedule:WorldCup.Report(s) produced successfully but email failed with t...
✗ 8/1/2018 12:09:19...	8/1/2018 12:10:05 PM	Failure: Single Schedule:WorldCup.Report(s) produced successfully but email failed with t...
✗ 8/1/2018 2:10:50...	8/1/2018 2:16:41 PM	Failure: Single Schedule:WorldCup.Report(s) produced successfully but email failed with t...
✓ 8/1/2018 2:27:29...	8/1/2018 2:28:14 PM	Success!

Clear history thats older than (days)

1. Click **More data** to print, save or manipulate this as a custom report.

Single Schedule History

Print Preview

Print

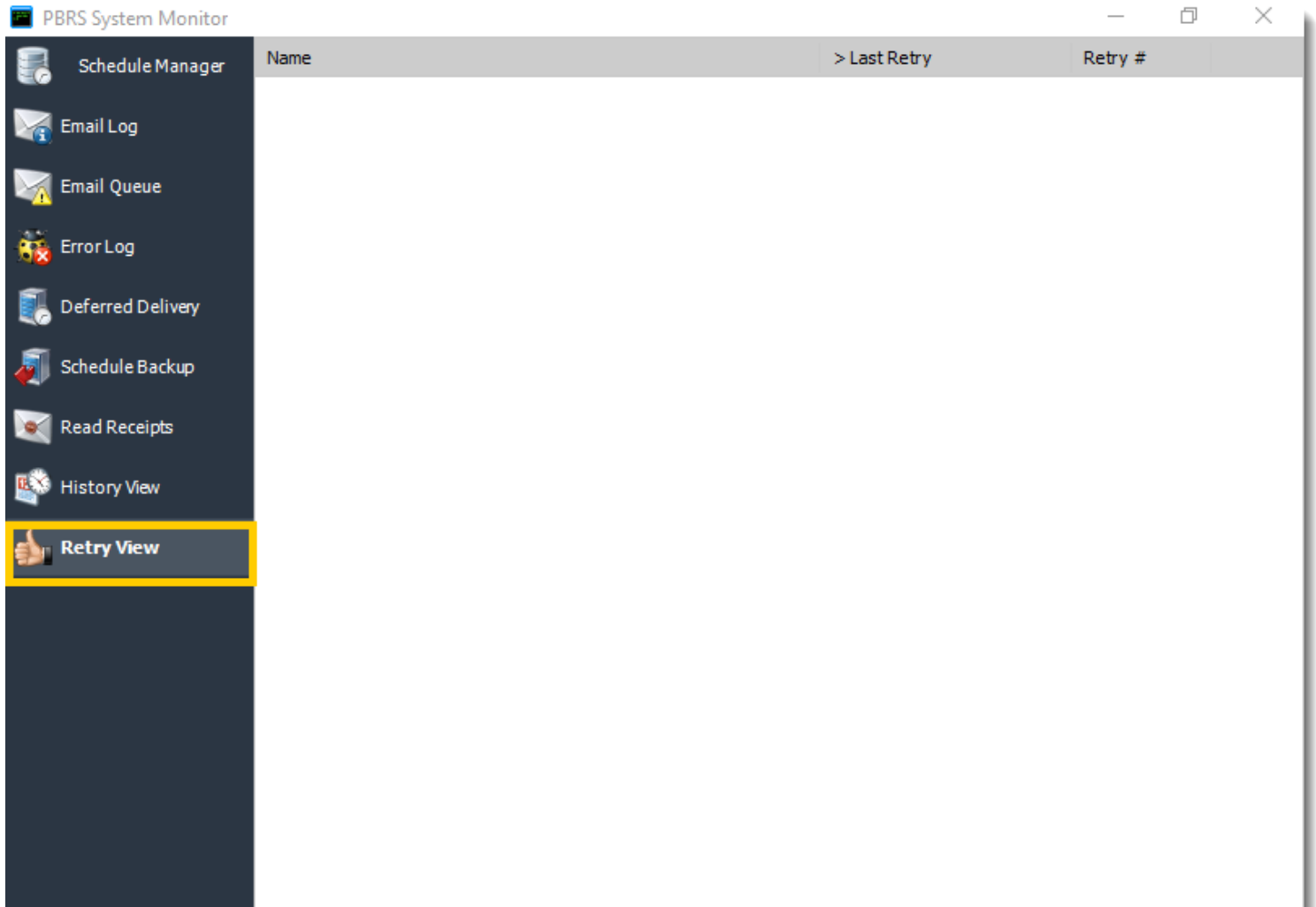
Save to Disk

Custom Report

Field Chooser

Frequency	Name	Recurring			
Enabled	Last Run	Duration	Success	Result	
Frequency : DAILY - 6 item(s)					
Name : WORLDCUP - 6 item(s)					
Recurring : 8/2/2018 12:09:00 PM - 6 item(s)					
<input checked="" type="checkbox"/>	8/1/2018 2:28:14 PM	0.75 seconds	True		
<input checked="" type="checkbox"/>	8/1/2018 2:16:41 PM	5.85 seconds	False	Single Schedule:WorldCup. Report(s) produced successfully but email failed...	
<input checked="" type="checkbox"/>	8/1/2018 12:10:05 PM	0.77 seconds	False	Single Schedule:WorldCup. Report(s) produced successfully but email failed...	
<input checked="" type="checkbox"/>	8/1/2018 10:55:21 AM	0.85 seconds	False	Single Schedule:WorldCup. Report(s) produced successfully but email failed...	
<input checked="" type="checkbox"/>	7/31/2018 12:23:54 PM	0.73 seconds	False	Single Schedule:WorldCup. Report(s) produced successfully but email failed...	
<input checked="" type="checkbox"/>	7/31/2018 12:17:29 PM	0.78 seconds	False	Single Schedule:WorldCup. Report(s) produced successfully but email failed...	

## Retry View

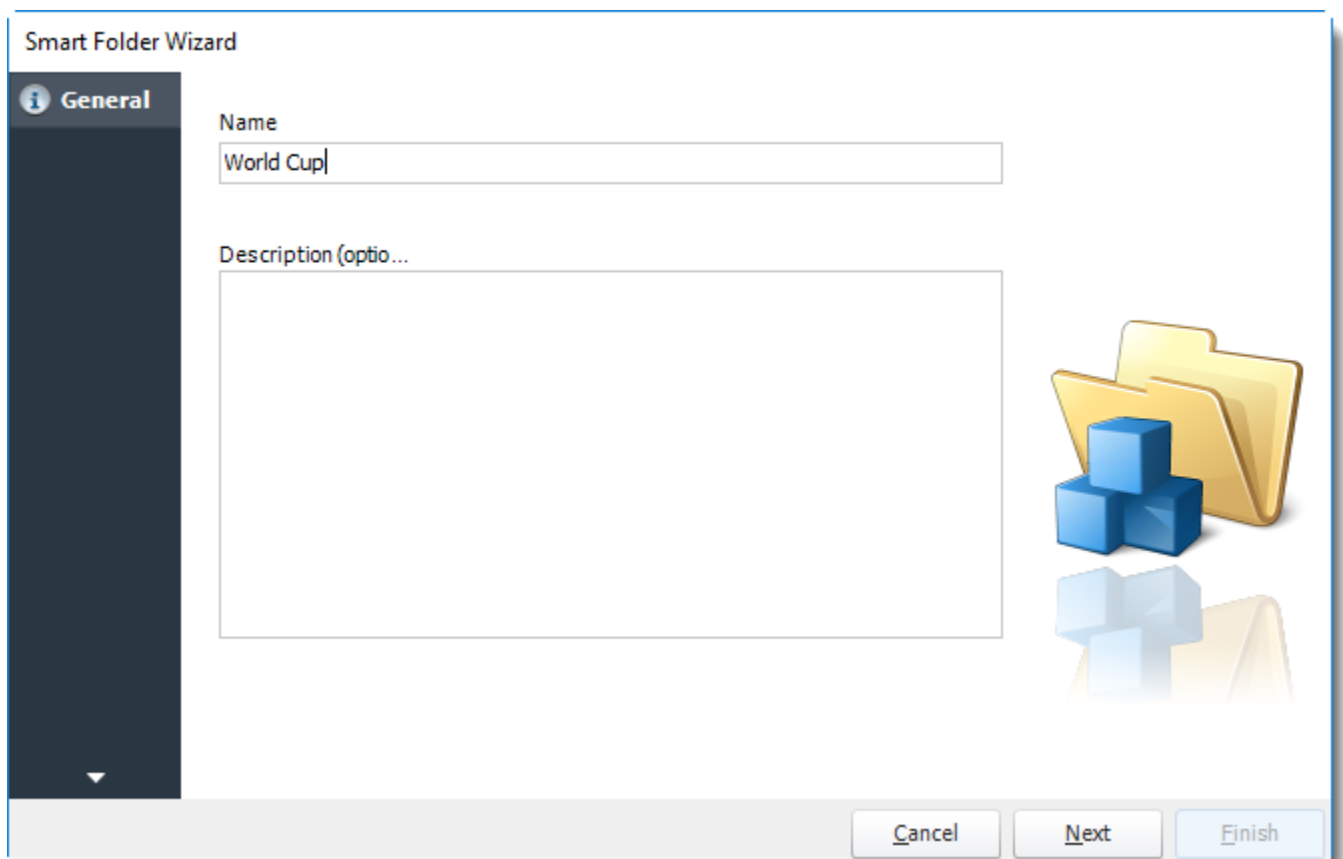
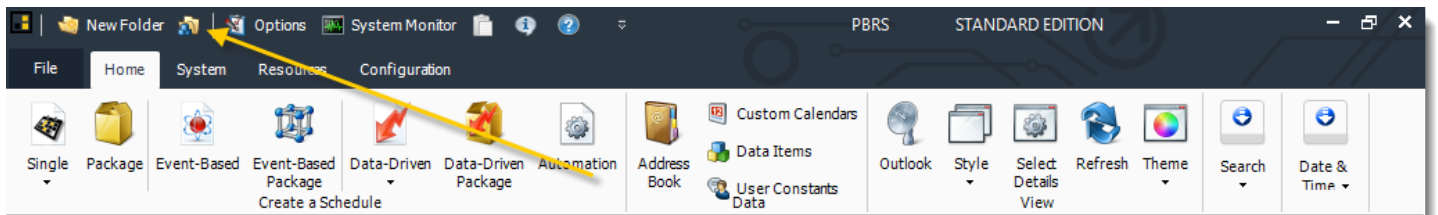


This screen shows you a list of schedules that have failed. If the schedule is set to retry the schedule will continue to show in the list until the schedule is successful or the set retry amount has passed.

## Smart Folders

Smart folders are an easy way to group existing schedules together without re-organizing your original folder structure.

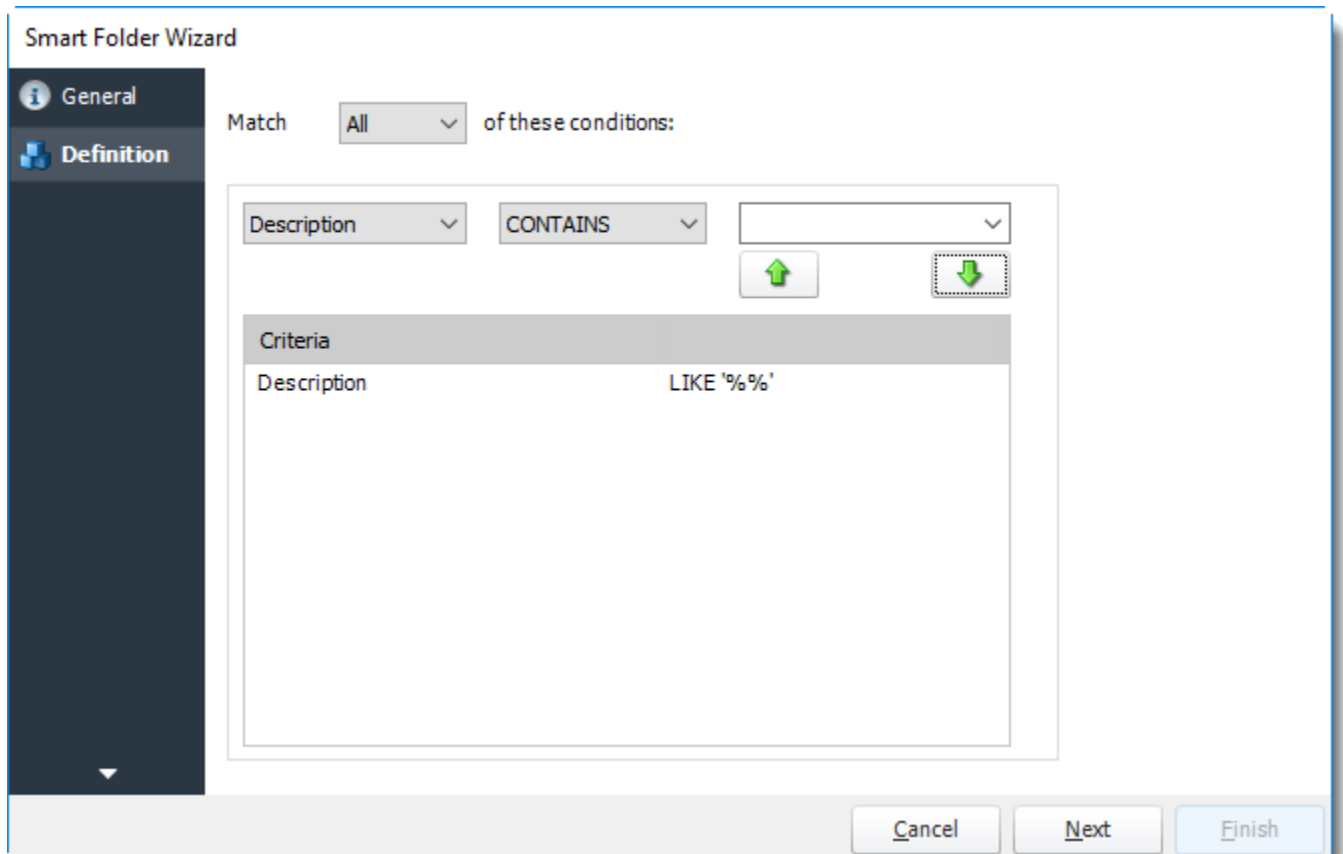
- Go to **Smart Folder**.



## General Wizard

- **Name:** Type in a name for the Smart Folder.
- **Description (optional):** Type in a description to help you identify what this Smart Folder is set up for.

## Definition Wizard



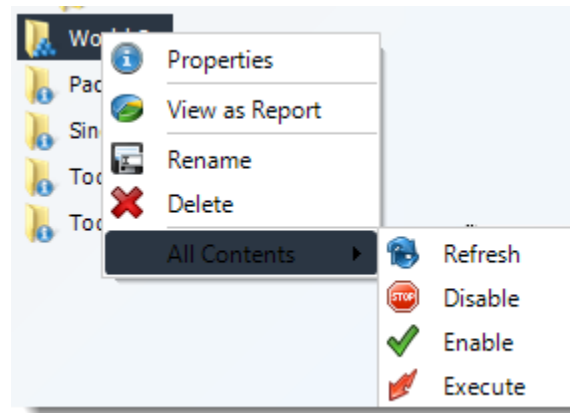
The image shows the 'Smart Folder Wizard' dialog box, specifically the 'Definition' step. The left sidebar has 'General' and 'Definition' tabs, with 'Definition' selected. The main area shows a 'Match' dropdown set to 'All' and a label 'of these conditions:'. Below this is a criteria table with one row: 'Description' and 'LIKE \'%%\''. Above the table are dropdowns for 'Description', 'CONTAINS', and an empty dropdown, along with 'Add' and 'Remove' buttons. At the bottom are 'Cancel', 'Next', and 'Finish' buttons.

Criteria	
Description	LIKE '%%'

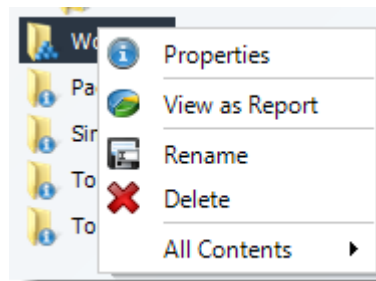
- Set up any other conditions required and click **Finish**.

All schedules, which fulfill these conditions, will be shown in the folder.

## Smart Folder Context Menu



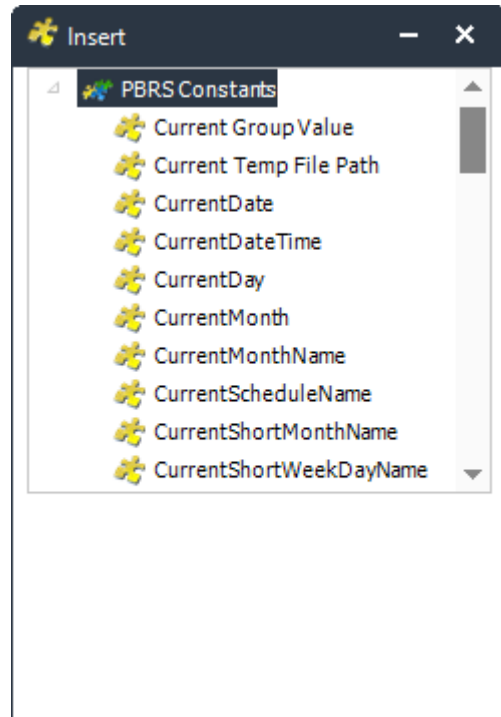
- Right-Click on a schedule to see the following actions:
  - **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
  - **View as Report:** To view the contents of a smart folder as a report.
  - **Rename:** Rename the folder.
  - **Delete:** Selecting this option will delete the folder.
  - **Refresh:** This will refresh the schedules in the folder
  - **Disable:** It will disable all the schedules in the folder.
  - **Enable:** It will enable all the schedules in the folder.
  - **Execute:** This button will execute all schedules immediately.





## Inserts Menu

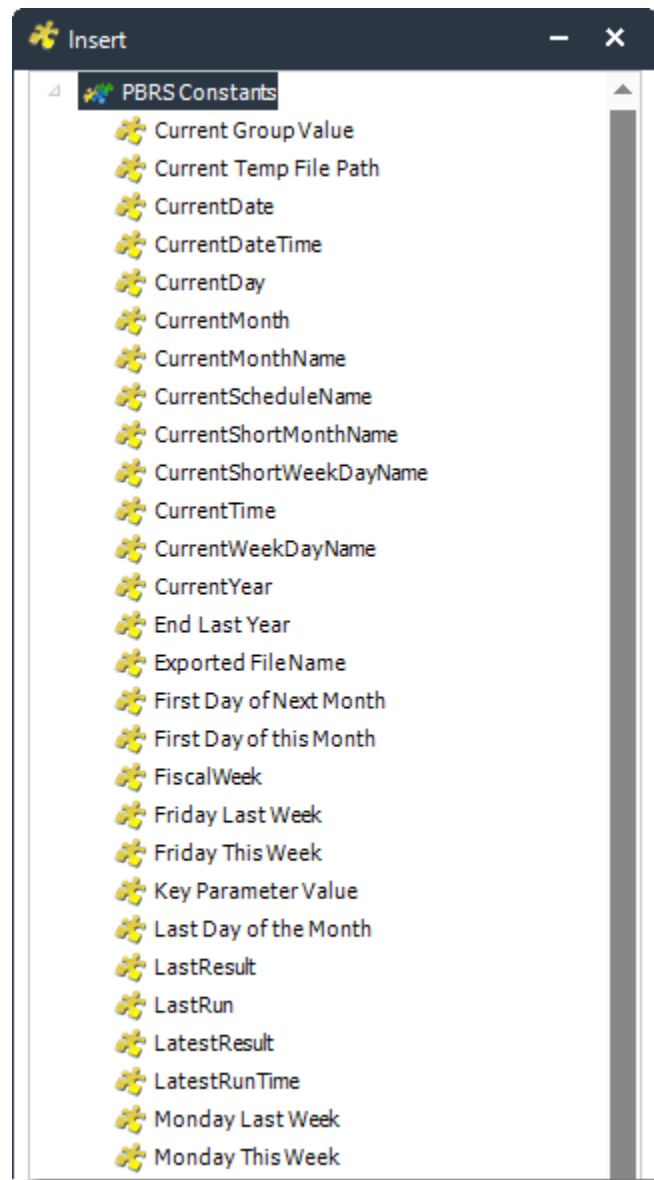
The Inserts module, which pops up automatically, gives you the ability to drag and drop constants, variables, user constants and data items into almost any field in PBRs.

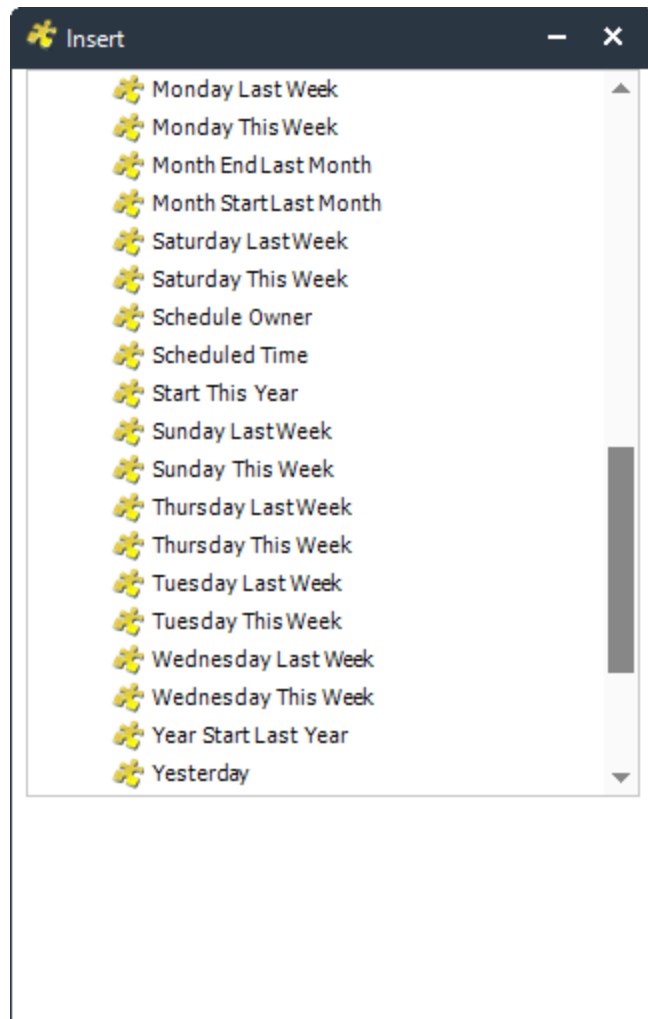


Inserts is arguably one of the most versatile features in PBRs. This feature enables the advanced schedule types to work, deals with variety of parameters, and customizes outputs for recipients.

- The insert function is activated in two ways:
  1. PBRs will automatically launch the insert module at points where it can be used (e.g. in a wizard's parameter screens).
  2. In the field into which you wish to insert a function, right-click and select **Insert**.
- The following types of constants are available:
  - PBRs Constants (@@PBRs Constants)
  - User Defined Constants (@@User Defined Constants)

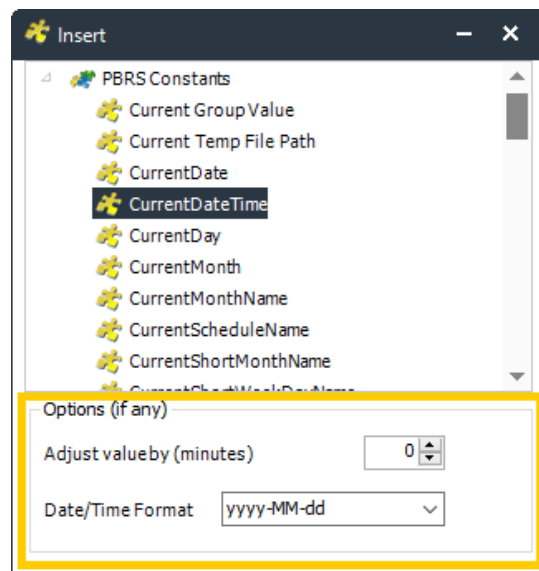
## PBRS Constants



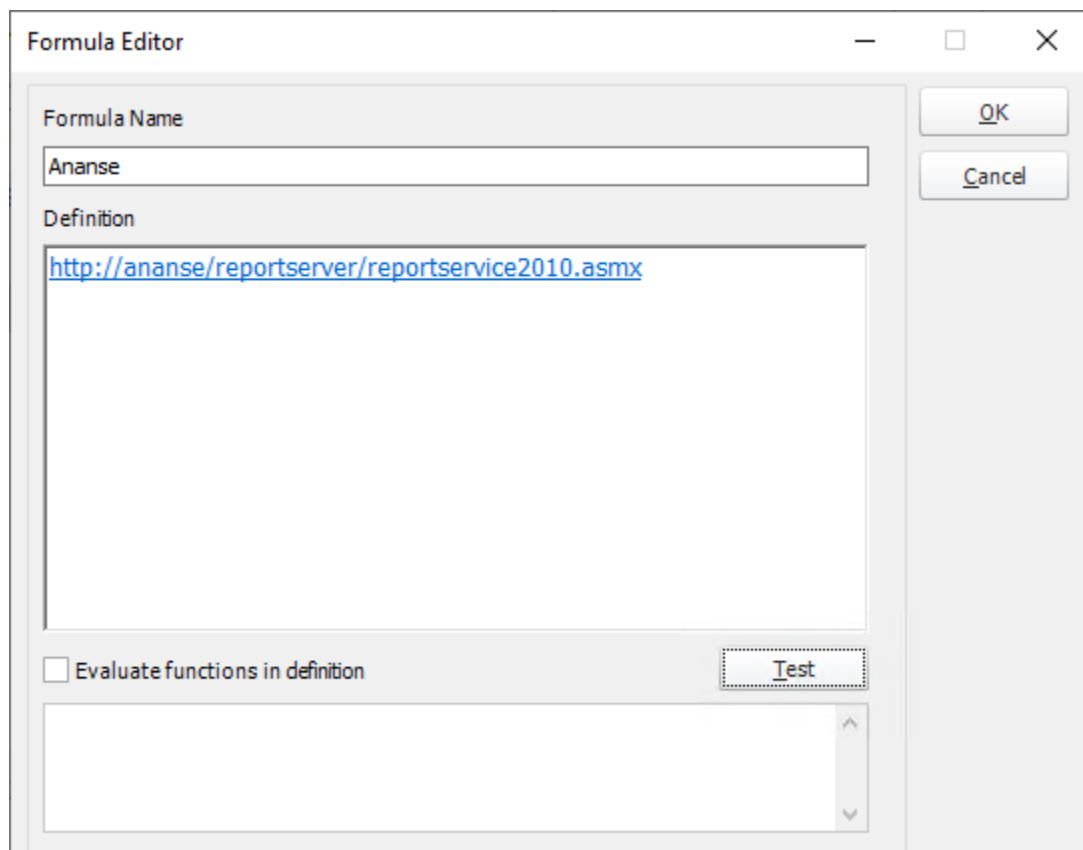
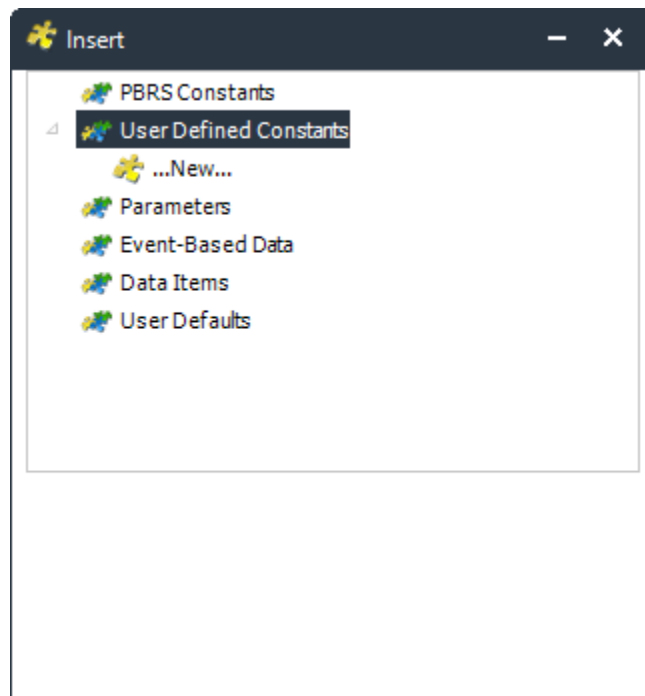


- To use PBRS constants, select **@@PBRS Constants** from the **Type** list and then select the constant you want from the resulting **Name** list. Here is a list of constants to choose from:
  - **Current Group Value**: Return the current group value.
  - **Current Temp File Path**: Return to the temp file path.
  - **CurrentDate**: Returns the current date.
  - **CurrentDateTime**: Returns the current date and time.
  - **CurrentDay**: Returns the current day date.
  - **CurrentMonth**: Returns the current month number.
  - **CurrentMonthName**: Returns the current month name.
  - **CurrentScheduleName**: Returns the name of the current schedule or package.
  - **CurrentShortMonthName**: Returns the name of the short month.
  - **CurrentShortWeekDayName**: Returns the name of the short week.
  - **CurrentTime**: Returns the current time.
  - **CurrentWeekDayName**: Returns the day name of the day the schedule is run.
  - **Current Year**: Returns the current year.
  - **End Last Year**: Returns the date of the last day of last year.
  - **Exported File Name**: Returns to the name of the exported file.

- **First Day of the Next Month:** Returns to the first day of the next month.
- **First Day of this Month:** Returns to the first day of the current month.
- **FiscalWeek:** Returns to the fiscal week.
- **Friday Last Week:** Returns the date for last Friday.
- **Friday This Week:** Returns the date for this Friday.
- **Key Parameter Value:** Returns the current key parameter value in use by a dynamic schedule.
- **Last Day of the Month:** Returns to the last day of the month.
- **LastResult:** Returns to the last result.
- **Last Run:** Returns to the last run of the schedule or package.
- **LastestResult:** Returns to the latest result of the schedule or package.
- **LatestRunTime:** Returns to the latest run time of the schedule or package.
- **Monday Last Week:** Returns the date for last Monday.
- **Monday This Week:** Returns the date for this Monday.
- **MonthEndLastMonth:** Returns the date of the last day of last month.
- **MonthStartLastMonth:** Returns the date of the first day of last month.
- **SaturdayLastWeek:** Returns the date for last Saturday.
- **SaturdayThisWeek:** Returns the date for this Saturday.
- **Schedule Owner:** Returns to the schedule owner.
- **Scheduled Time:** Returns to the scheduled time.
- **StartThisYear:** Returns the date of the first day of this year.
- **SundayLastWeek:** Returns the date for last Sunday.
- **SundayThisWeek:** Returns the date for this Sunday.
- **ThursdayLastWeek:** Returns the date for last Thursday.
- **ThursdayThisWeek:** Returns the date for this Thursday.
- **TuesdayLastWeek:** Returns the date for last Tuesday.
- **TuesdayThisWeek:** Returns the date for this Tuesday.
- **WednesdayLastWeek:** Returns the date for last Wednesday.
- **WednesdayThisWeek:** Returns the date for this Wednesday.
- **Year Start Last Year:** Returns the date of the first day of last year.
- **Yesterday:** Returns the date of before.
- For certain PBRs constants, you can adjust the constant's value by a certain increment (days, hours, minutes etc).

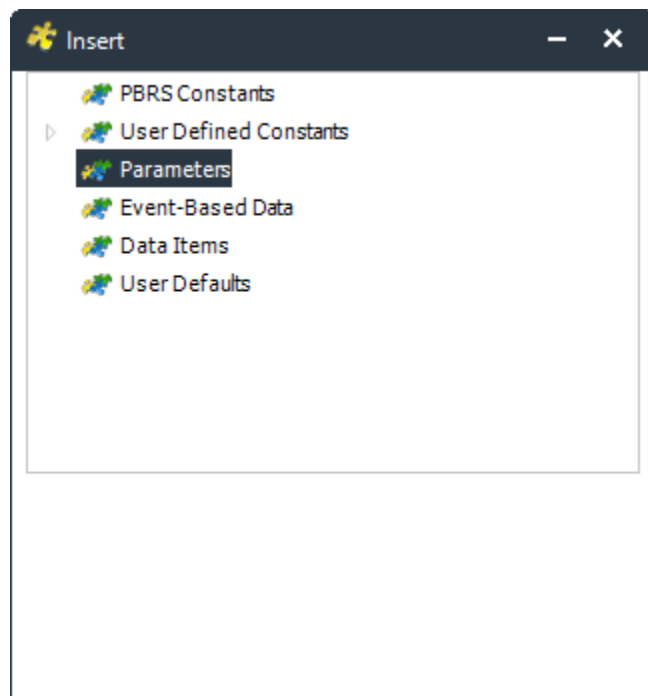


## User Defined Constants



- To use User Defined Constants, select **@@User Defined** Constants from the **Type** list and then select the constant you want from the resulting **Name** list. Or select **New** to create a new constant. You can insert other constants and create a new formula of your own.
- For more information about *User Constants Data*, [click here](#).

## Parameters

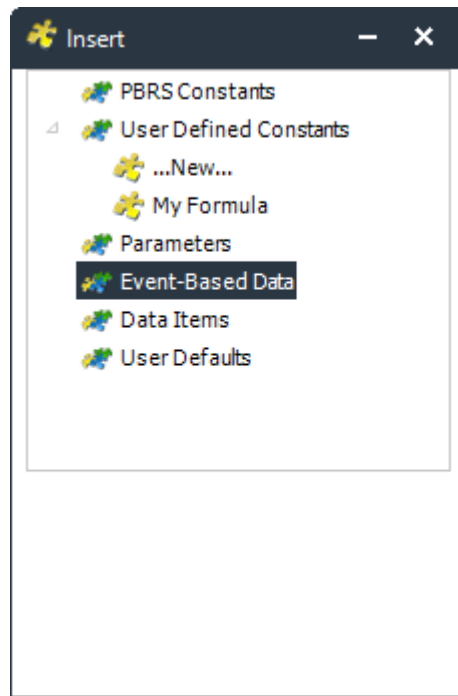


- Use these to insert the current report parameter value into an email, report name, etc.

*Parameters Inserts are only available on Paginated Reports on Premise or SSRS Reports.*

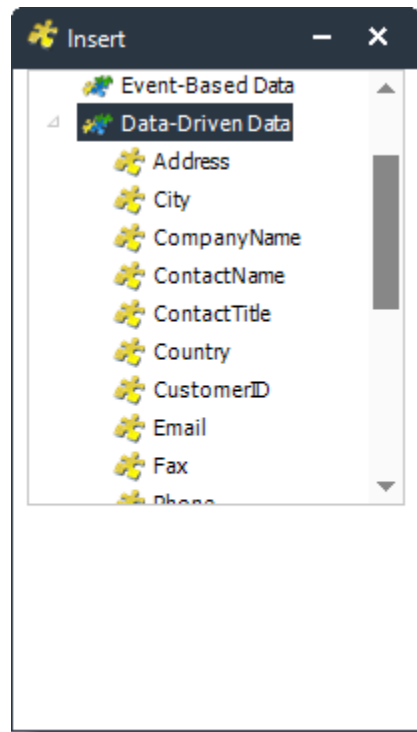
- If the Paginated Reports on Premise or SSRS Reports have parameters, the values of the parameter will appear here.

## Event-Based Data



- Used with event-based schedules.
- Once you set up the Event-Based Condition, the data from the Event-Based Condition will appear here.
- Data from the database record or email body which triggered off the event can be inserted into emails, reports etc.
- For instructions on how to parse the body of an email, see the last section of this page.

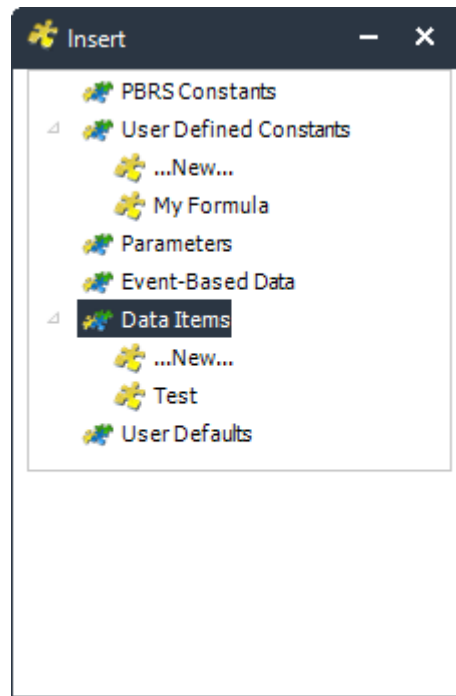
## Data-Driven Data



- Used with data-driven schedules. Data from the data driver can be inserted in all possible areas to drive the schedule.
- For more information on Data-Driven schedules, [click here](#).

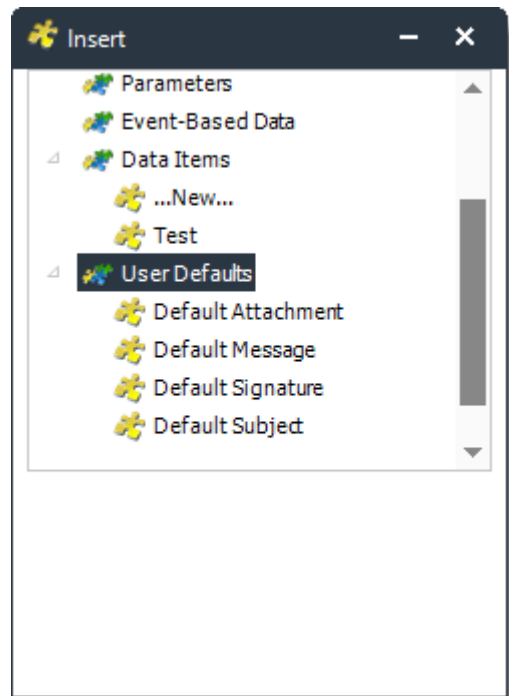


## Data Item



- Construct a SQL statement to collect the information from a database field. Selecting this option will bring up the **Data Items Module**.
  - Here you can pick an already existing SQL script, or construct a new one to query a database and return a specified value.

## User Defaults



- **Default Attachment:** This will insert the attachment in the Default Attachment field from the User Defaults menu (in Options).
- **Default Message:** This will insert the wording in the Default Message field from the User Defaults menu (in Options).
- **Default Signature:** This will insert the wording in the Default Signature field from the User Defaults menu (in Options).
- **Default Subject:** This will insert the wording in the Default Subject field from the User Defaults menu (in Options).
  - For more information on User Defaults, [click here](#).

### How to parse the values in the body of an email and insert them into PBRS fields?

- For an **Unread Email** event, PBRS can read the body text of the email and place selected values into **Event-based constants**.

Here is an example:

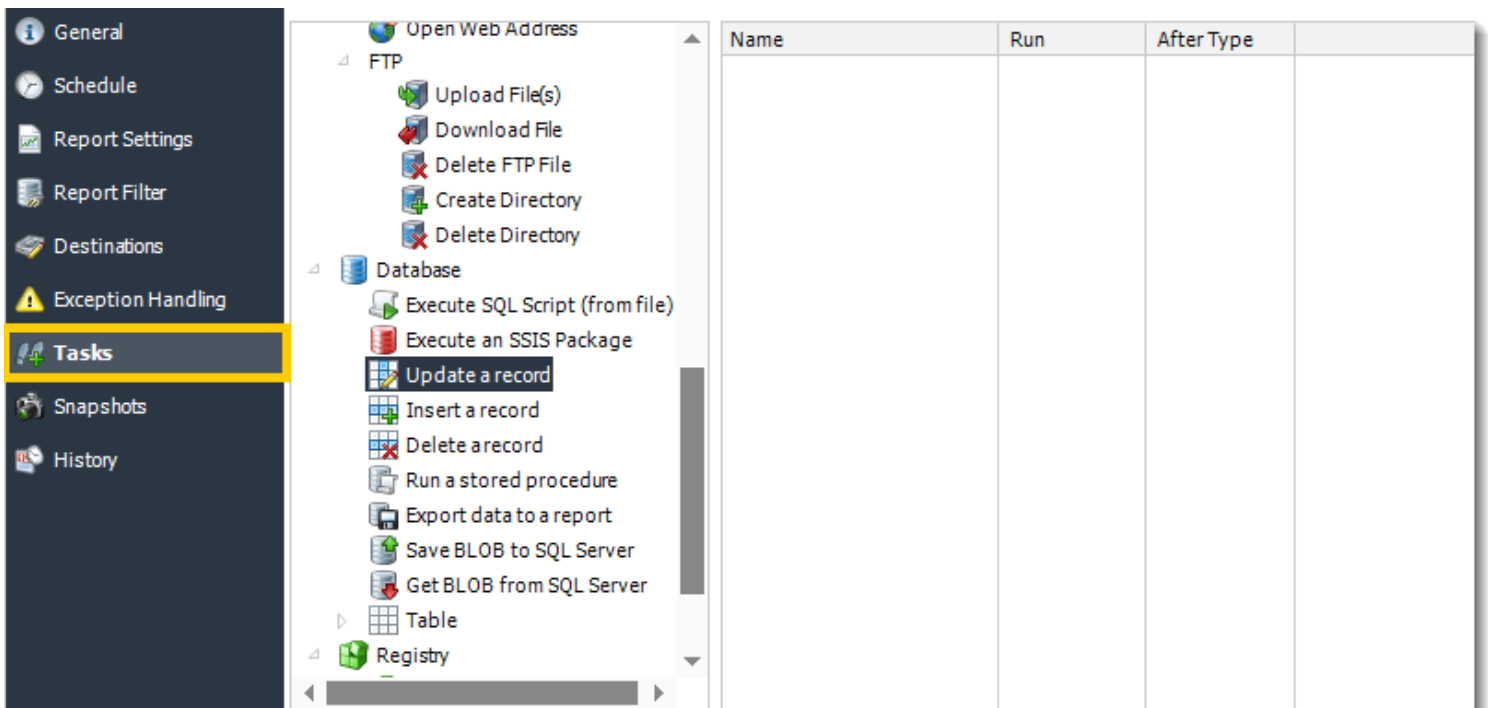
Mary has an email which will contain values, and she wants the values to update a database. Here's how she would set it up in PBRS.

Firstly, PBRS will expect the email text to be in the format [Constant]:[Value]. Here is how Mary will set up her email:

*EmployeeID: xxxxx*  
*EmployeeName:yyyyy*  
*EmployeeStartDate:zzzzzzzz*

As you can see, the required constant is on the left of the colon (:) and the required data is on the right.

To insert the data into her database, Mary uses an "Update a database" custom task as shown below:



She inserts Event-Based Constants, selecting a Custom Constant:

Update database records

Task Name

**General**

Table containing records to update

Update this column

Set its value to

Set

**Insert**

- If Data is present on this port;Extract(LineNumber, Sta
- If Data is present on this port;ReceivedData
- Read My Email;Attachments
- Read My Email;AttachmentsPath
- Read My Email;Bcc
- Read My Email;Cc
- Read My Email;Custom
- Read My Email;DateSent
- Read My Email;From
- Read My Email;Message
- Read My Email;Subject
- Read My Email;To

Options (if any)

She types in the Custom Field Descriptor:

When she drags the Insert, "<[e]Read my Email;To>" is placed in the field:

Update database records

Task Name

**General**

Table containing records to update

Update this column

Set its value to

↑ ↓

Set  
 EmployeeID = <[e]Read My Email;To>

← →

She clicks down arrow to add the statement to the list. And repeats the process for all the custom constants she will need to parse the email.

The above instruction tells PBRS to read the email body text and to place the value to the right of "EmployeeID:" in the database.

*The colon (:) is only required in the email body. It is not used as part of the definition process above, but PBRS will automatically read the value to the left of the colon and apply the data to the right of the colon.*

## Get Values From Database Interface

The "Get Values From Database" interface helps you to connect to and build queries to extract the information you need from a database. It is used in various parts of PBRs where database information is needed.

The screenshot shows a dialog box titled "Get values from database". It contains the following elements:

- DSN Name:** A dropdown menu.
- UserID:** A text input field.
- Password:** A text input field.
- Connect:** A button.
- Please select the table that holds the required data:** Two dropdown menus.
- Simple / Advanced:** Two tabs, with "Simple" selected.
- Only return records where:** Three dropdown menus.
- Logic:** A green up arrow button, a radio button labeled "And", a radio button labeled "Or", and a green down arrow button.
- Where:** A large text area for writing SQL queries.
- Parse:** A button at the bottom right.
- OK / Cancel:** Buttons at the top right.

- **DSN Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions, which Windows places on DSNs.*

*When using Windows Authentication, make sure that the PBRs NT Service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Remember Credentials:** Check this option to remember the UserID and Password of the selected DSN.
- Click **Connect** to connect to the data source.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.

DSN Name

Readmission IFBI

UserID

sa

Password

.....

[Show Password](#)

Query Timeout

30

☐ Remember credentials

Connect

Please select the table that holds the required data

Simple

Advanced

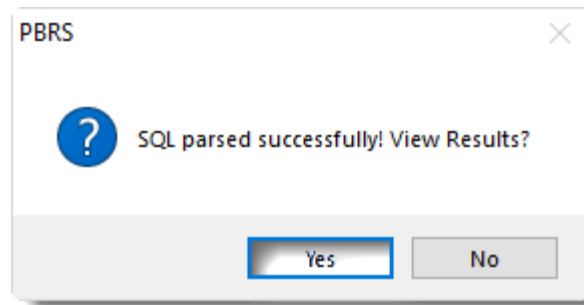
SQL Query

```
SELECT Ethnicity.* FROM Ethnicity
```

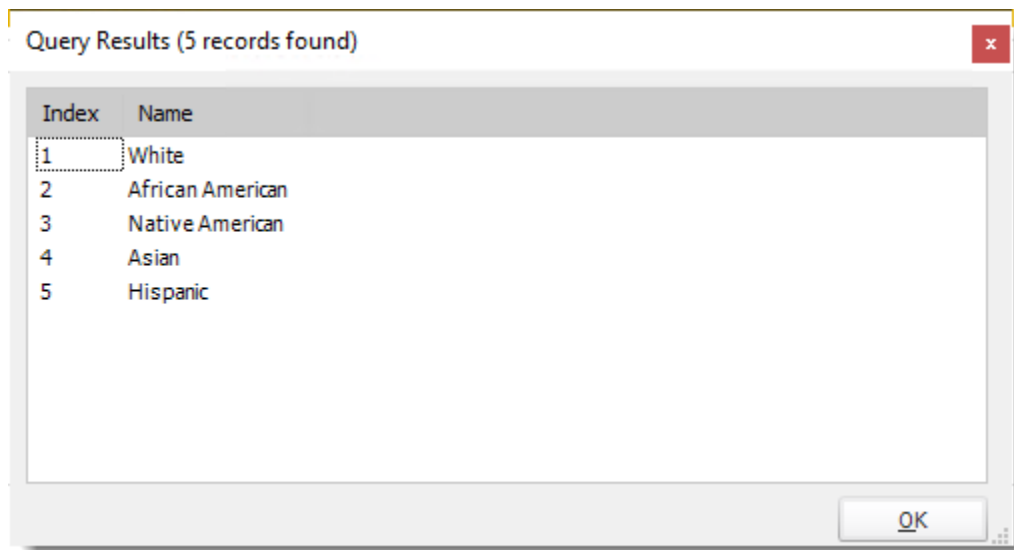
Parse

- Click **Parse**
- PBRS will display a list of results. Based on your Criteria PBRS will use the returned data to run the report.





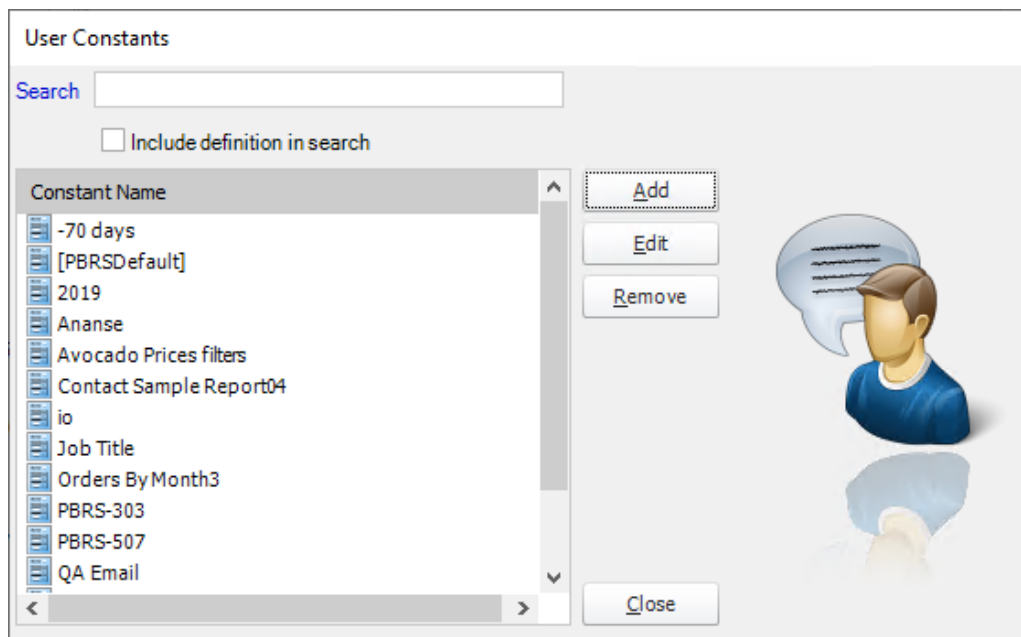
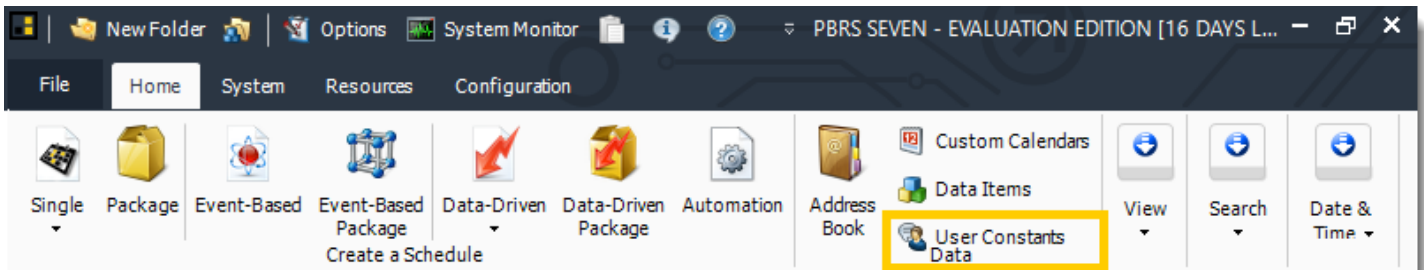
- Click **Yes**



## User Constants

User constants allow you to compose and create your own set of constants. This can be useful in reducing the amount of work you would need to do.

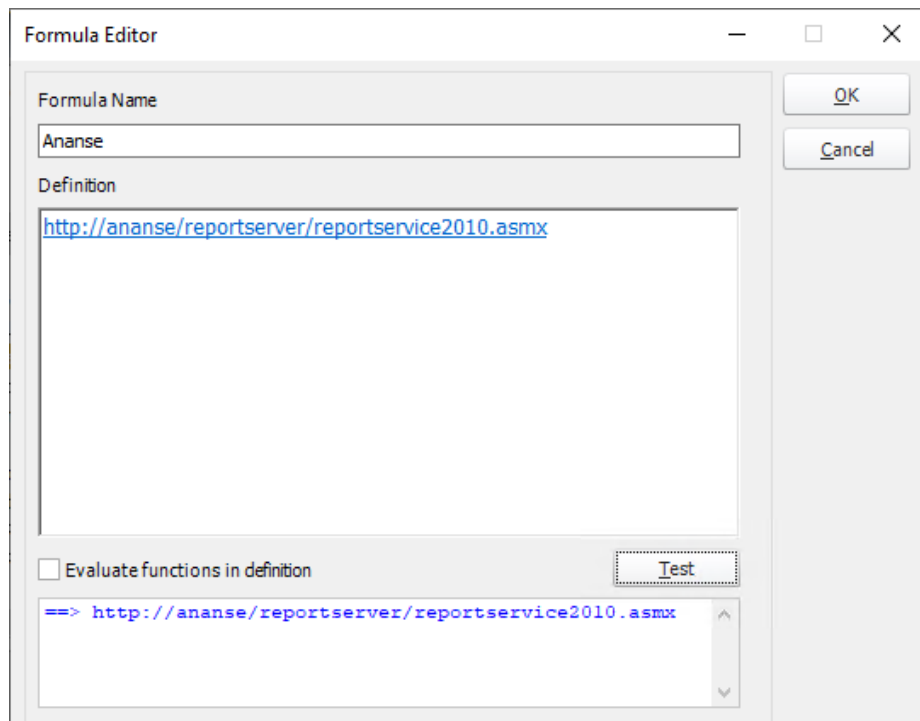
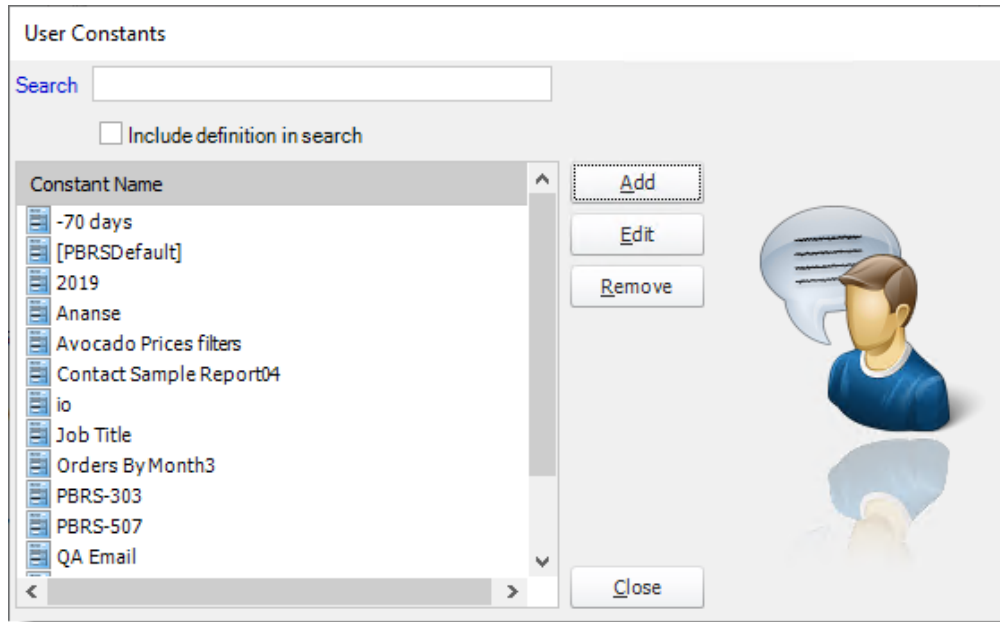
- Go to **User Constants Data**.



- For example, if you have to use several constants to create a report name following a naming convention that is in use in your organization you can create a single User constant that combines these in the format you require and use this constant instead.
- The User Constants module is accessible from the Advanced Toolbar and from the New... drop down item for the @@User Defined Constants in the Insert Menu.
- This module allows you to create your own constants using your own formulas.
- You can use the Insert Menu to enter other constants such as the PBRs Constant for the CurrentDateTime above.
- From the initial screen, you can search and for an existing constant with the option to include the definition of the constant in the search. The matched constants are updated as you type.

## Adding a New User Constants Data

- Click **Add**.

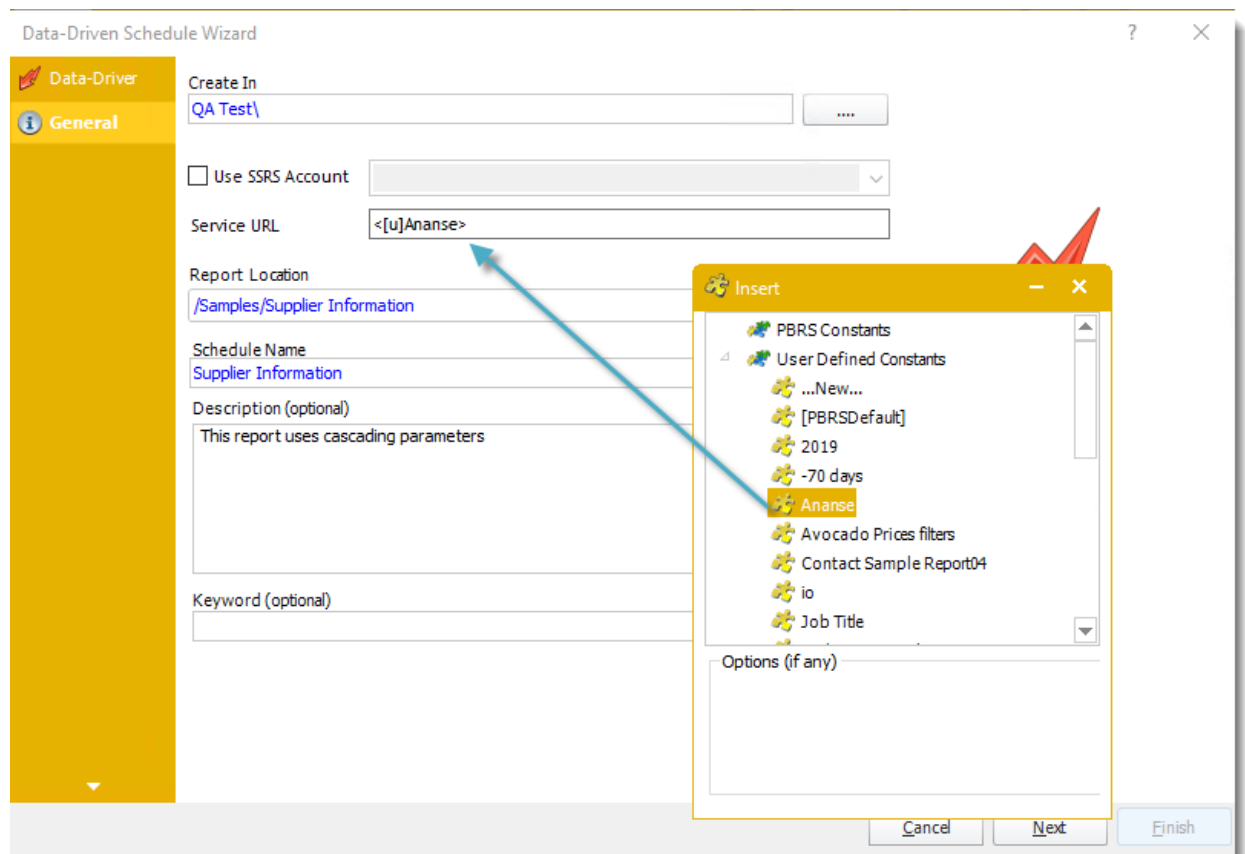


- **Formula Name:** The name of the constant.
- **Definition:** The definition of the formula.
- Click **Test** and then click **OK**.

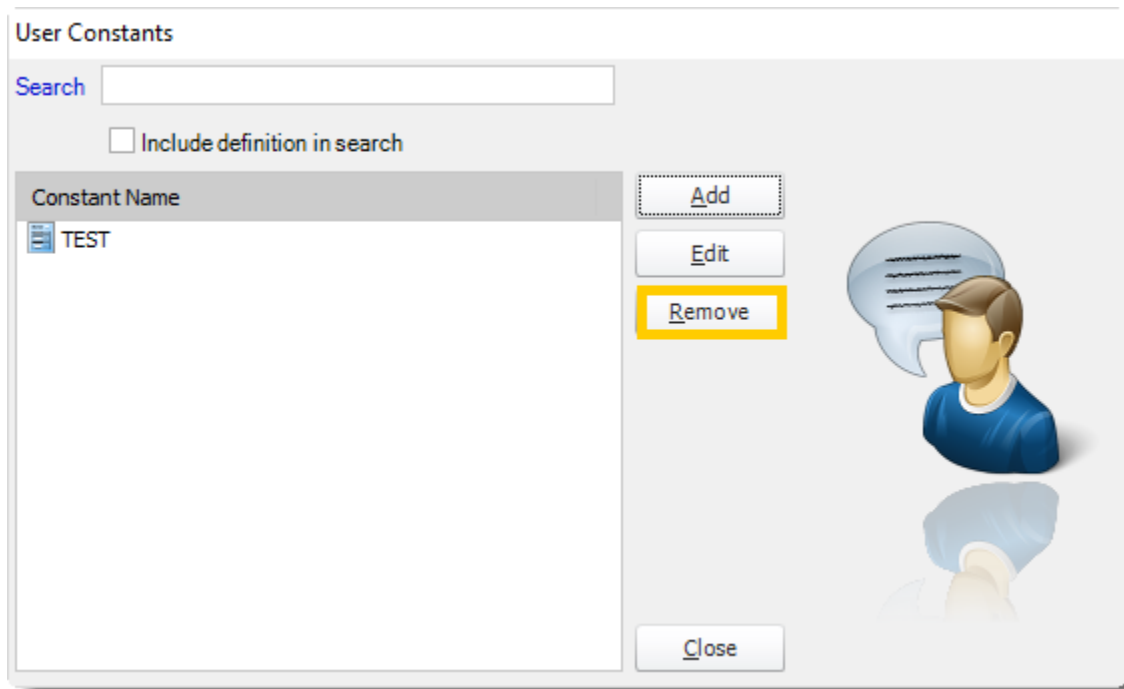
This will then be available for use under the @@User Defined Constants name in the Insert Menu.

### Inserting User Constants

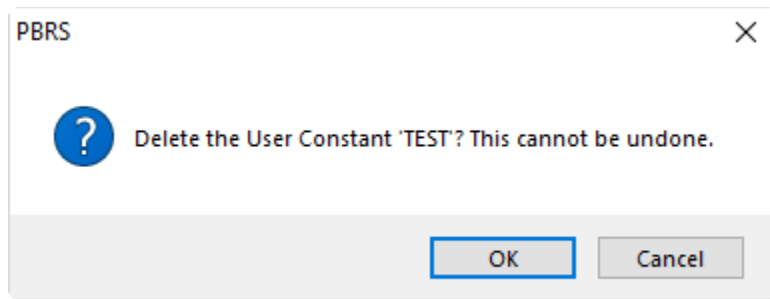
- To insert a user constant, use the inserts feature where available. Select User Constants, then simply drag and drop your desired constant to the desired field.



## Remove a User Defined Constant



- Select the User Defined Constant.
- Click **Remove**.

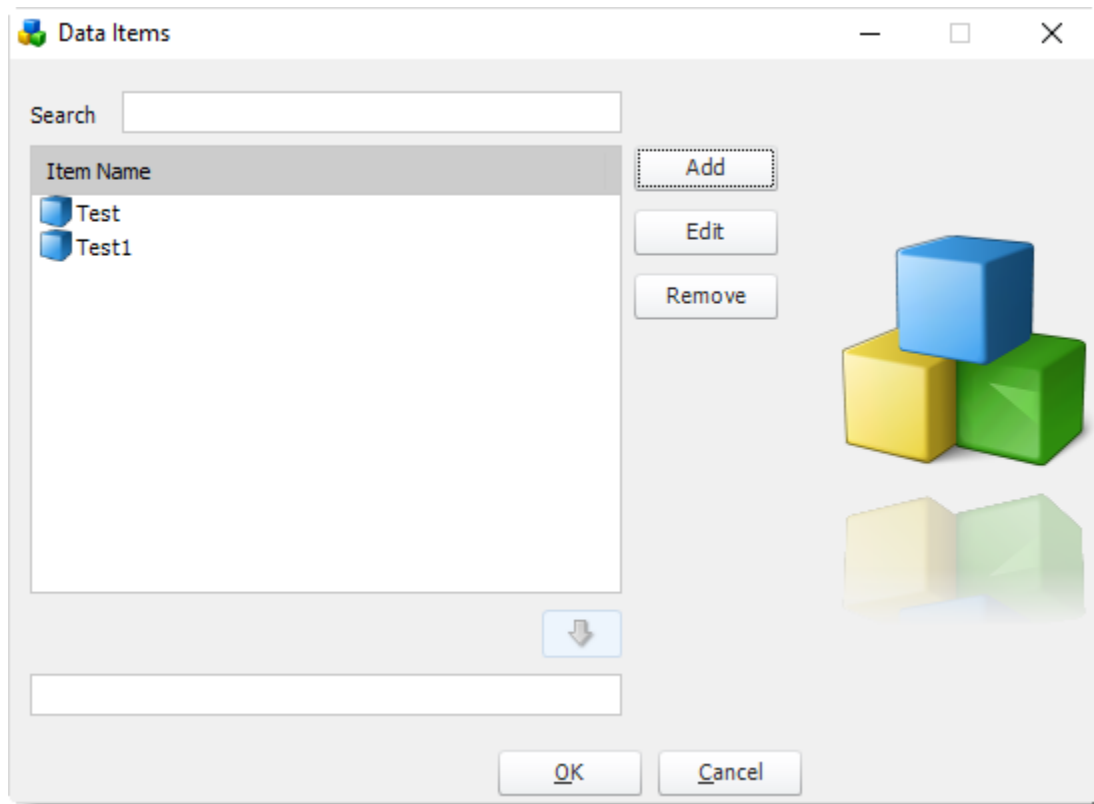
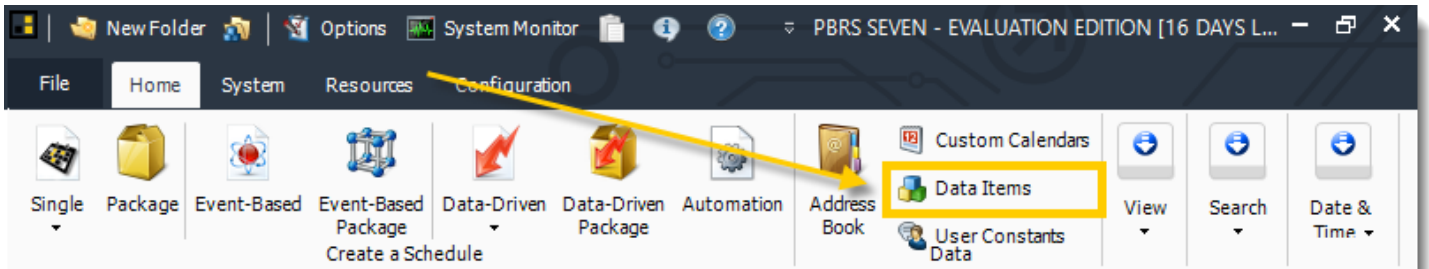


- Click **OK**.

## Data Items

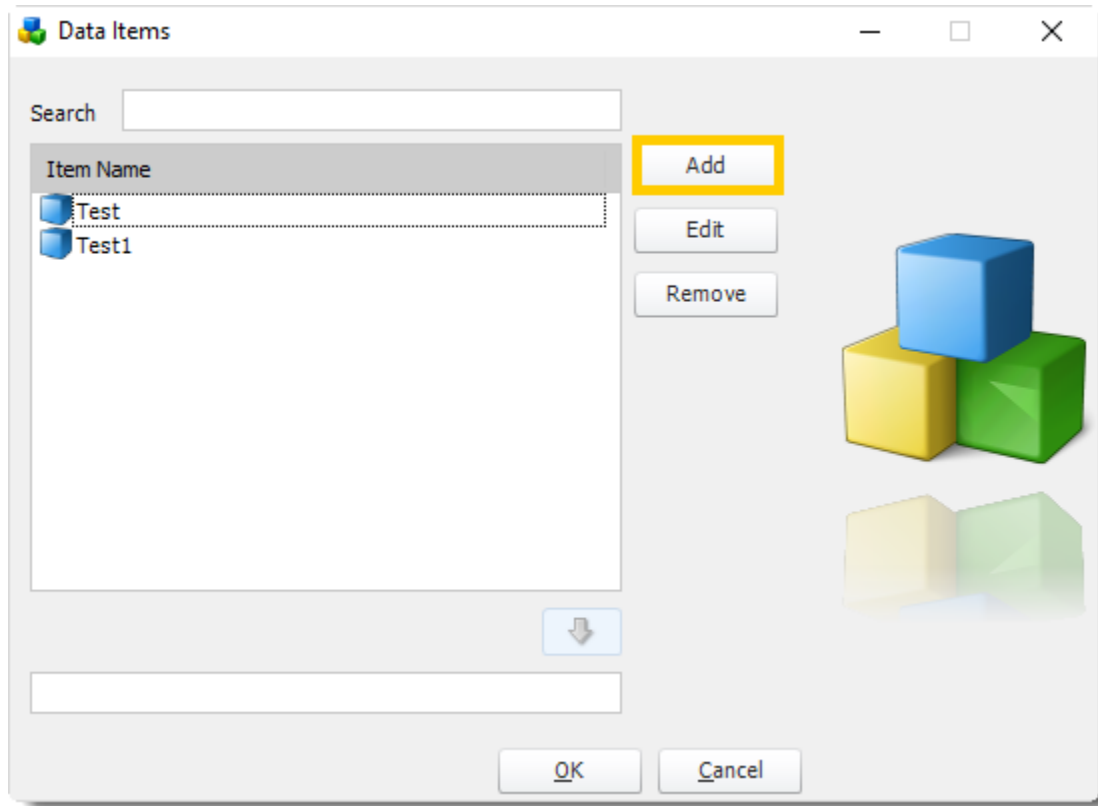
The Data Items button provides the ability to set up a number of data queries that PBRs will then store and allow you to call up for use when required.

- Go to **Data Items**.



Create a new Data Item

- Click **Add**.



- Enter a name for the new data item.
- Select a DSN, provide any necessary credentials and click **Connect**.

## Data Item

Definition Options

Data Item Name  
Blank String

DSN Name

UserID

Password  Query Timeout

☐ Remember credentials

Connect

Query

Build Parse

OK Cancel



Get values from database

OK

Cancel

DSN Name

Readmission IFBI

UserID

sa

Password

.....

Query Timeout

30

☐ Remember credentials

Connect

Select the table and the column that holds the required values

Simple

Advanced

Only return records where

↑

● And ○ Or

↓

Where

Parse

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRS should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.

Get values from database

DSN Name

Readmission IFBI

UserID

sa

Password

.....

Query Timeout

30

☐ Remember credentials

Connect

Select the table and the column that holds the required values

Simple

Advanced

SQL Query

```
SELECT TOP 1 '' As EmptyString From Encounter
```

Parse

Data Item

Definition Options

Data Item Name  
Blank String

DSN Name  
Readmission IFBI

User ID  
sa

Password  
.....

Query Timeout  
30

☒ Remember credentials

Connect

Query

```
SELECT TOP 1 '' As EmptyString From Encounter
```

Build Parse

OK Cancel

**Data Item**

Definition Options

☒ Allow multiple values to be returned by query.  
Values will be separated using

☒ Use multiple values for multi-value parameters in a report

☒ Replace NULL values with the default value of

☒ If no records found then return the default value of

Field delimiter (optional)

OK Cancel

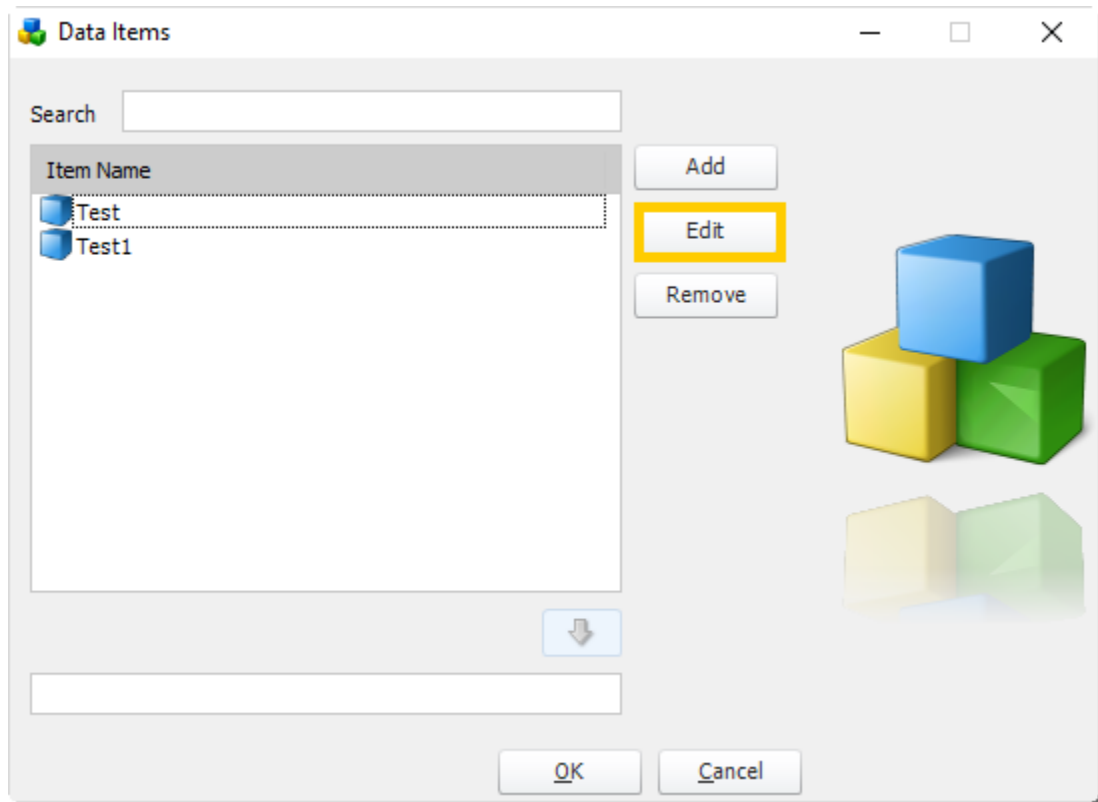
### Options

- **Allow multiples values to be returned by query:** This option will separate different values.
- **Replace NULL values with the default value of (SSRS only):** This option will pass multiple values into SSRS Parameters.
- **If no records found then returned the default value of:** This options is to write a description for the records that will appear in blank.
- **Field delimiter (optional):** The fields will be surrounded with the special characters that you desired.

The Data Item is successfully created.

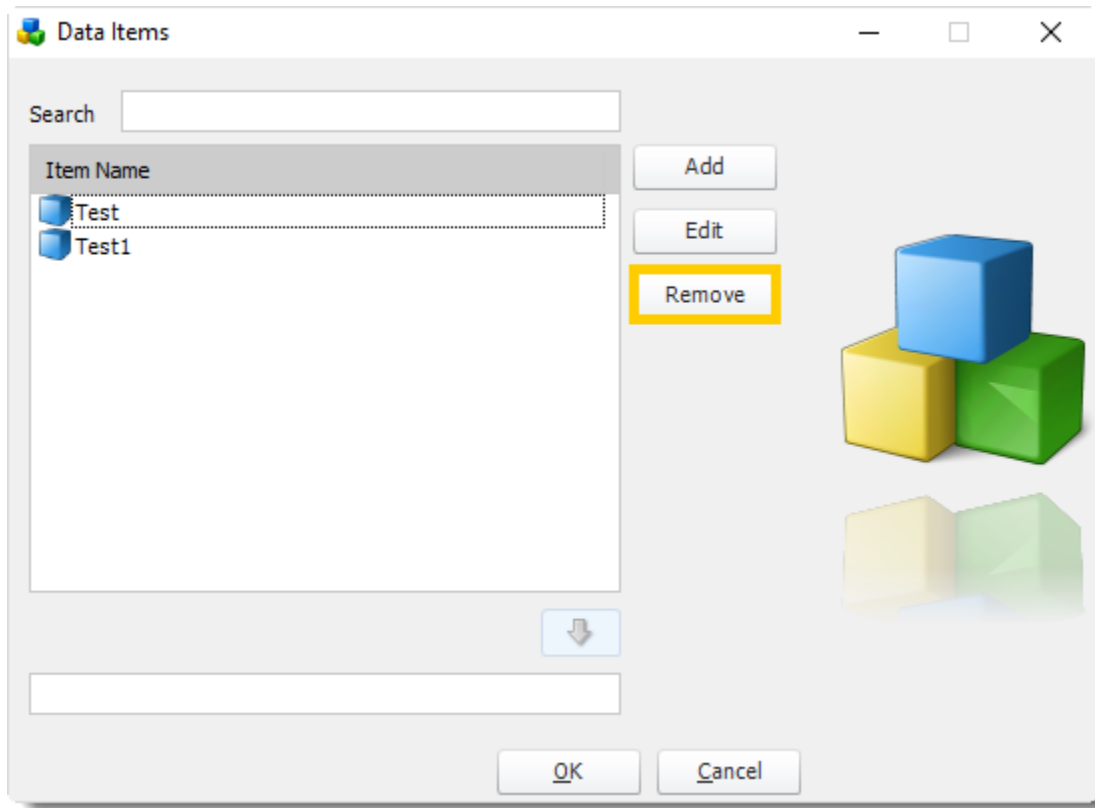
- With the Insert Menu, you can insert data items into various fields in PBRs.
- If you have several data items, you can use the search field to quickly locate the data item you need.

#### Edit a Data Item



- Select a data item and click **Edit**.
- You will be presented with the *Get Values from Database* module where you can modify the query using the intuitive simple setup wizard, or paste in your own query.

## Remove a Data Item



- Select a data item and click **Remove**.

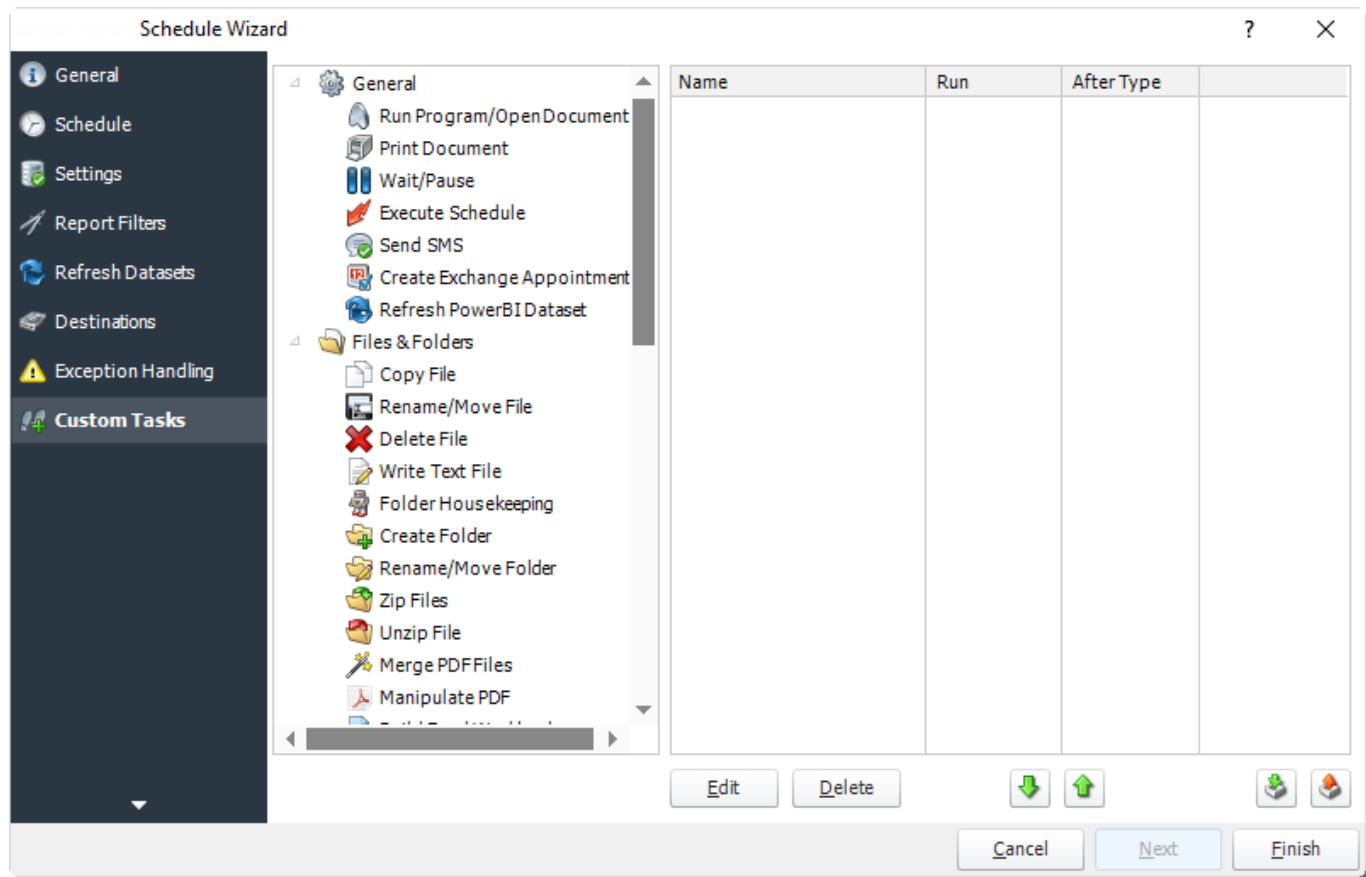
## Using Data Items

- With the Insert Menu, you can insert data items into various fields in PBRs.
- If you have several data items, you can use the search field to quickly locate the data item you need.

## Custom Task

The Custom Tasks module allows you to write a series of automation actions (macros) which can be set to run before a report is run, after a report is run, or both. (Not applicable to Automation Schedules).

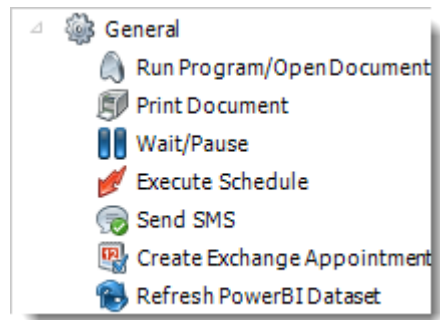
- In the Schedule Wizard, go to **Custom Task**.



- To manage each type of tasks:
  - General
  - Files & Folders
  - Internet
  - Database
  - Registry



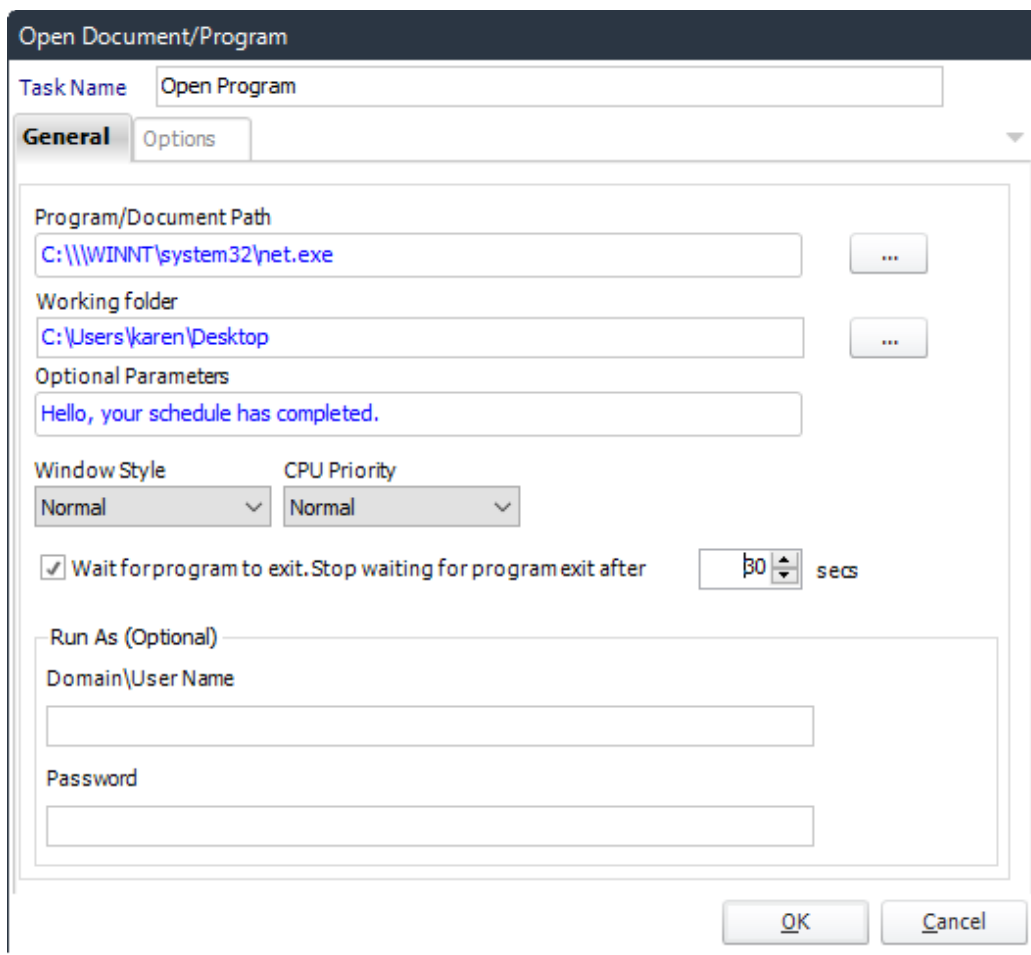
## General Tasks



- With General Tasks, you can perform basic tasks such as printing documents, waiting, or executing other schedules.

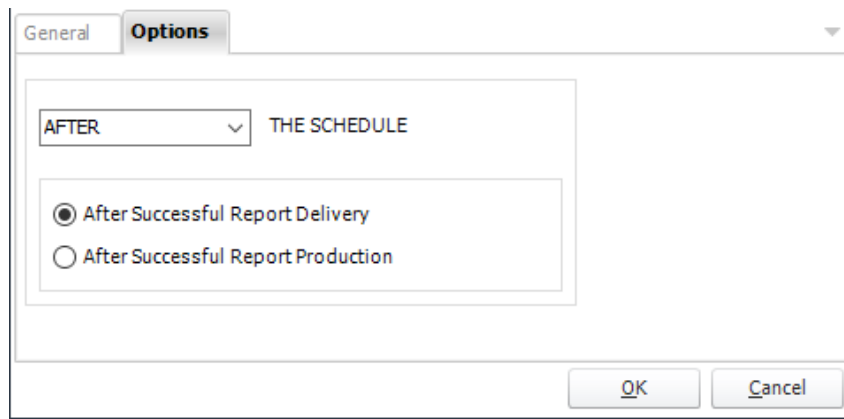
### *Run Program/Open Document*

## General



- Use this task to open a document or run a program or batch file.
  - **Task Name:** Enter a name for the task
  - **Program/Document Path:** Browse to find the path of the program or document
  - **Working Folder:** Browse to find the path of the working folder.
  - **Optional Parameter:** Enter any arguments or parameters
  - **Windows Style:** Choose from Normal, Minimized, Maximized or Hidden.
- You can further instruct PBRS to wait for the program to exit or to stop waiting for the program after a specified amount of time.

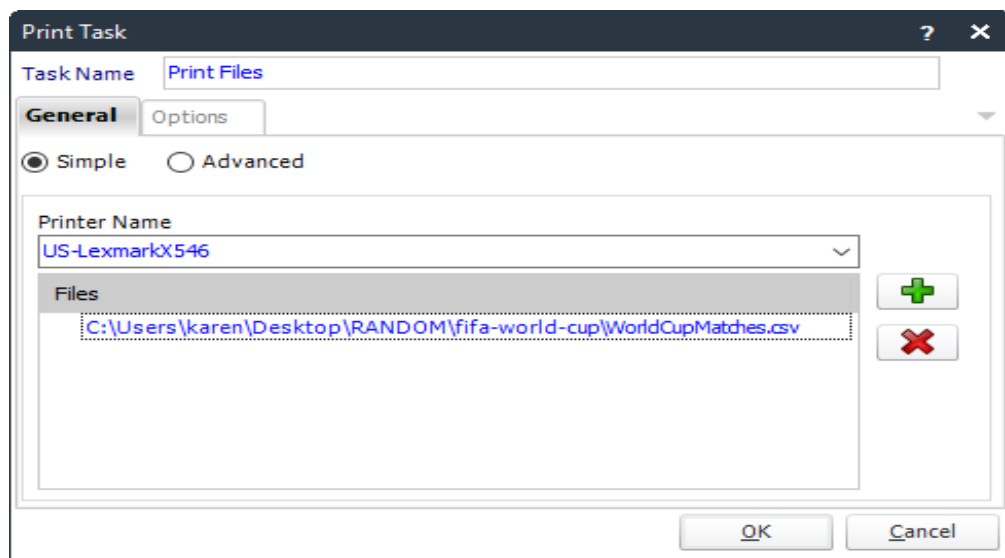
## Options



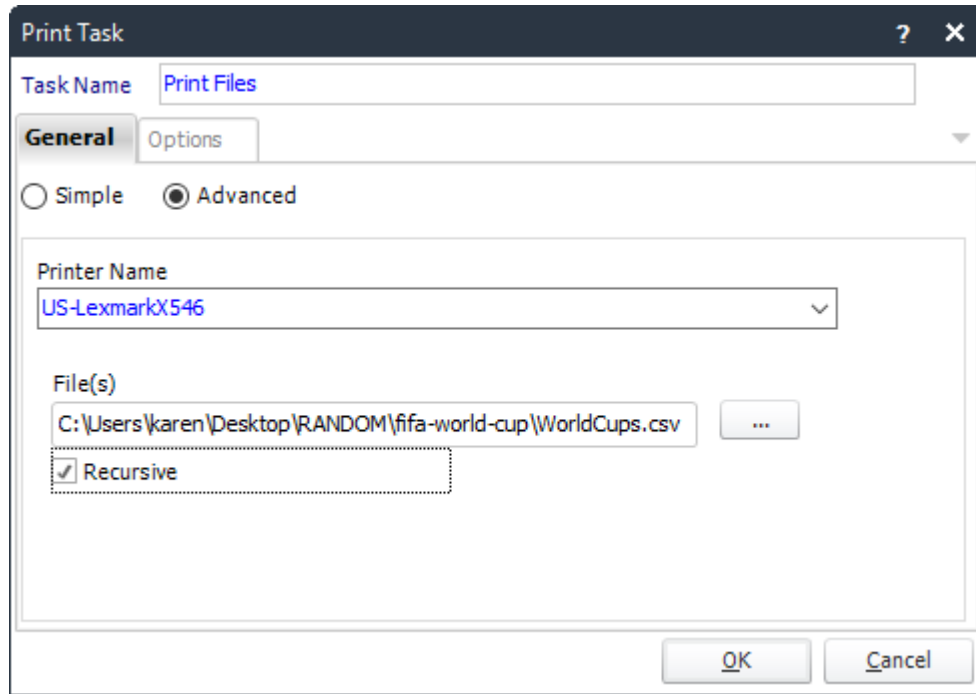
- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Print Document

### General

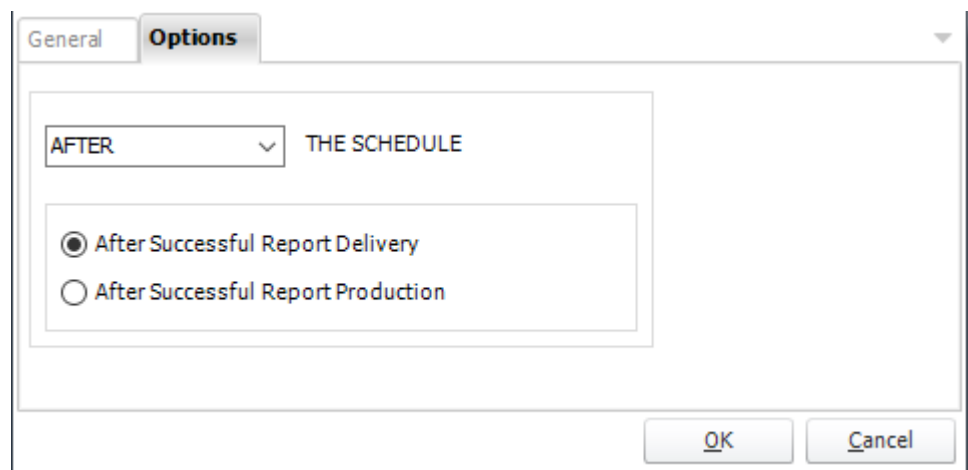


- Use this task to print documents to a specified printer.
  - **Task Name:** Enter a name for the task
  - **Printer Name:** Select a printer or print driver from the list.
  - Click **(+)** button to browse for files to add to the printing list.



- **Printer Name:** Select a printer or print driver from the list.
- **Files:** Use the (...) to browse for the file(s) to be printed
- **Recursive:** Print all folder and/or documents in that path.

#### Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Print PDF (Acrobat)

*To use this task you must set up the path to Adobe Reader in Options. This Print PDF task is only used for Virtual Print Queue.*

### General

Print PDF - Acrobat

Task Name: Print PDF

**General**

Queue Name: Mallard Driver (Optional): Port (Optional): Print Timeout: 10 # of Copies: 1

☒ Print to virtual print queue

☒ Simple ☐ Advanced

Files

C:\Users\karen\Desktop\Sample Reports\Order by Month Sample Report\ANATR.pdf

OK Cancel

- Use this task to print documents to a specified printer.
- **Task Name:** Enter a name for the task.
- **Printer Name:** Select a printer or print driver from the list.
- **Print to virtual print queue:** Check this option if you want to print your reports using Virtual Print Queue.
- **Driver (Optional):** Enter the driver.
- **Port (Optional):** Enter the port of the printer.
- **Print Timeout:** Enter the timeout (secs) print.
- **# of Copies:** Enter the number of copies.
- Click (+) button to browse for files to add to the printing list.

## Advanced

Print PDF - Acrobat

Task Name:

**General**

Printer Name:  Driver (Optional):  Port (Optional):  Print Timeout:  # of Copies:

☐ Print to virtual print queue

☐ Simple ☒ Advanced

File(s):  ...

☐ Recursive

☒ Print using a specific Windows account

Domain and Username:

Password:

Page Range e.g. 1-4:

☐ Fit to page

OK Cancel

- **Printer Name:** Select a printer or print driver from the list.
- **Files:** Use the (...) to browse for the file(s) to be printed
- **Recursive:** Print all folder and/or documents in that path.
- **Print using a specific Windows account:** Check this option to print the report using a Windows account.
- **Page Range:** Enter the page range for the print task.
- **Fit to Page:** Check this option if you want to fit the page your report.

## Wait/Pause

### General

The 'Pause Task' dialog box has a title bar 'Pause Task'. Below it is a 'Task Name' field containing the text 'Pause'. There are two tabs: 'General' (selected) and 'Options'. In the 'General' tab, there is a 'Pause Interval' field with a spinner box containing the number '10' and the text 'seconds' to its right. At the bottom right are 'OK' and 'Cancel' buttons.

- Use this task to create pauses between tasks to ensure that one task is fully complete before the next task in the list is started.
- **Task Name:** Enter a name for the task.
- Select the pause interval to suit your requirements.

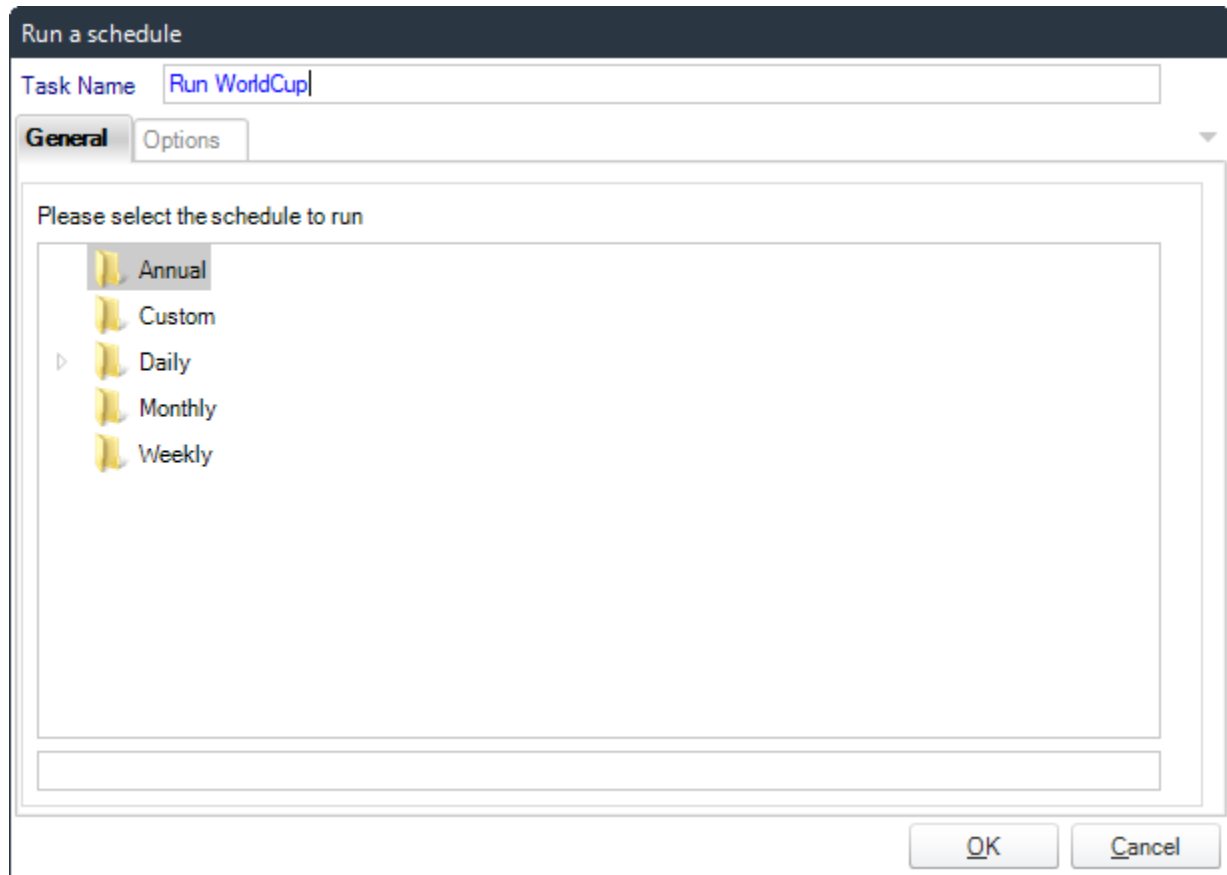
### Options

The 'Options' tab is selected. It contains a dropdown menu with 'AFTER' selected and the text 'THE SCHEDULE' to its right. Below this is a group box containing two radio buttons: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right are 'OK' and 'Cancel' buttons.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Execute Schedule

### General



- This is a useful facility for "chaining" schedules together. Simply select the schedule you want to run from the list and click **OK**.
- **Task Name:** Enter a name for the task.
- **Wait for schedule completion:** Check this option to wait for the selected schedule completion.

## Options

The screenshot shows a dialog box with two tabs: 'General' and 'Options'. The 'Options' tab is active. It contains a dropdown menu set to 'AFTER' followed by the text 'THE SCHEDULE'. Below this, there are two radio button options: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right, there are 'OK' and 'Cancel' buttons.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Send SMS

### General

The screenshot shows a dialog box titled 'Send an SMS Text Message'. It has a 'Task Name' field containing 'Send TXT'. Below this are two tabs: 'General' and 'Options'. The 'General' tab is active. It features an 'SMS' section with a 'To...' field containing the phone number '980-555-8888'. Below the 'To...' field is a large text area containing the message 'Hello, Your Report is ready.'. At the bottom left, it says 'Characters left: 131'. At the bottom right, there are 'OK' and 'Cancel' buttons.



- You can send SMS messages using this task. You will need to make sure your [SMS messaging configuration](#) in Options is functional.

## Options

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Create Exchange Appointment

### General

**Create Exchange Appointment**

Task Name

**General** | Exchange Details | Options

Subject

Location

Attendees (if any)

Start Time  ☐ All Day Event

End Time

Please read attached report before attending meeting.

Reminder  minutes before event

Importance Normal Importance

Files (if Any)

- Use this task to send a meeting request to one person or a group of people.
- **Task Name:** Give the task a name.
- **Subject:** Give the meeting request a title.
- **Location:** Where is the meeting going to be.
- **Attendees:** Enter the email address of required attendees, use inserts to enter email addresses or click on Attendees to bring up different Address book options.

- **Start Time:** Start time of the meeting.
- **End Time:** End time of the meeting.
- **All Day Event:** Check this if the meeting is to last all day.
- **Blank Space:** Free type any additional information about the meeting here. You can use inserts to help compose the meeting request.
- **Reminder:** Set a meeting reminder.
- **Importance:** set an importance level to the meeting if required.
- **Files:** Attach any files required for the meeting here, this may be reports etc.

#### Exchange Details

The screenshot shows a dialog box titled "Create Exchange Appointment". It has three tabs: "General", "Exchange Details" (which is selected), and "Options". In the "General" tab, the "Task Name" is "Create a meeting". In the "Exchange Details" tab, there is an "Authentication" section with a "Domain\UserID" field containing "christiansteven\karen" and a "Password" field with masked characters. Below this is a checkbox labeled "Use Exchange Auto-Discovery for this email address" which is checked. To the right of this checkbox is a "Go" button. Below the checkbox is a "Server Name/Service URL" field. At the bottom right of the dialog are "OK" and "Cancel" buttons.

- You have the option to use the same email address as the one who is connected to the PBRS.

#### Options

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Refresh PowerBI Datasets

### General

Task Name: Refreshing Datasets

**General** | Options

Select datasets to refresh before the report is executed

PowerBI Account: Karen A. Angeles Martinez

Workspace: My Workspace

Dataset: Customer Profitability

Notification Options:

- ☒ Notify on Completion
- ☐ Notify on Failure
- ☐ Do not Notify

Dataset Name	Account	Workspace	Notification
Customer Profitabili...	Karen A. Angele...	My Workspace	MailOnCompl...

After refreshing the datasets above, wait 0 seconds before running other tasks (if any)

OK Cancel

- Use this task to refresh your Power BI Dataset after executing your report.
- **Task Name:** Enter a name for the task.
- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**

### Options

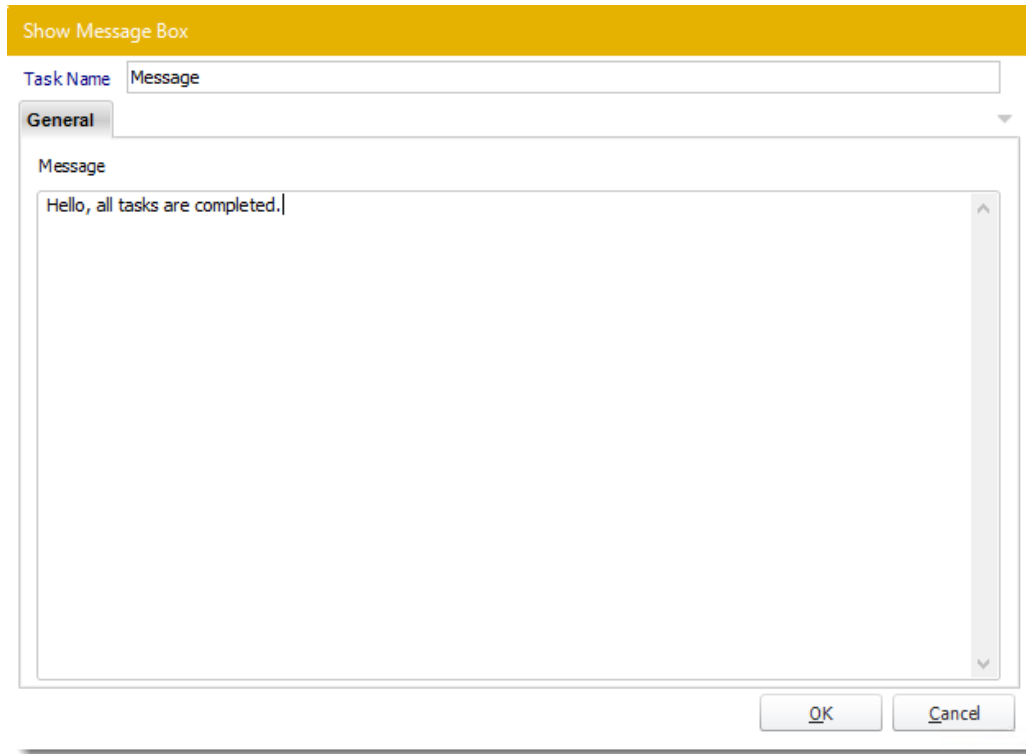
© ChristianSteven Software

Updated on 15 November 2021

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Show Message

### General



The screenshot shows a 'Show Message Box' dialog box. The title bar is yellow and contains the text 'Show Message Box'. Below the title bar, there is a 'Task Name' field with the text 'Message'. Underneath, the 'General' tab is selected, displaying a 'Message' text area. The text area contains the text 'Hello, all tasks are completed.' and has a vertical scrollbar on the right side. At the bottom right of the dialog box, there are two buttons: 'OK' and 'Cancel'.

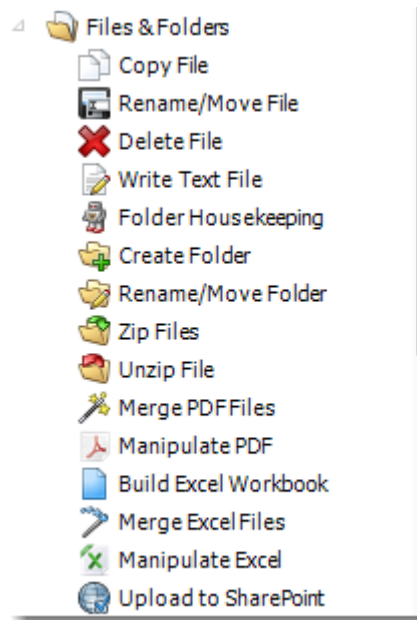
Use this task to show a pop-up message after or before running a schedule.

- **Task Name:** Enter a name for the task.
- **Message:** Enter the message.

### Options

- In this section, you have the option to run this task before, after or both.

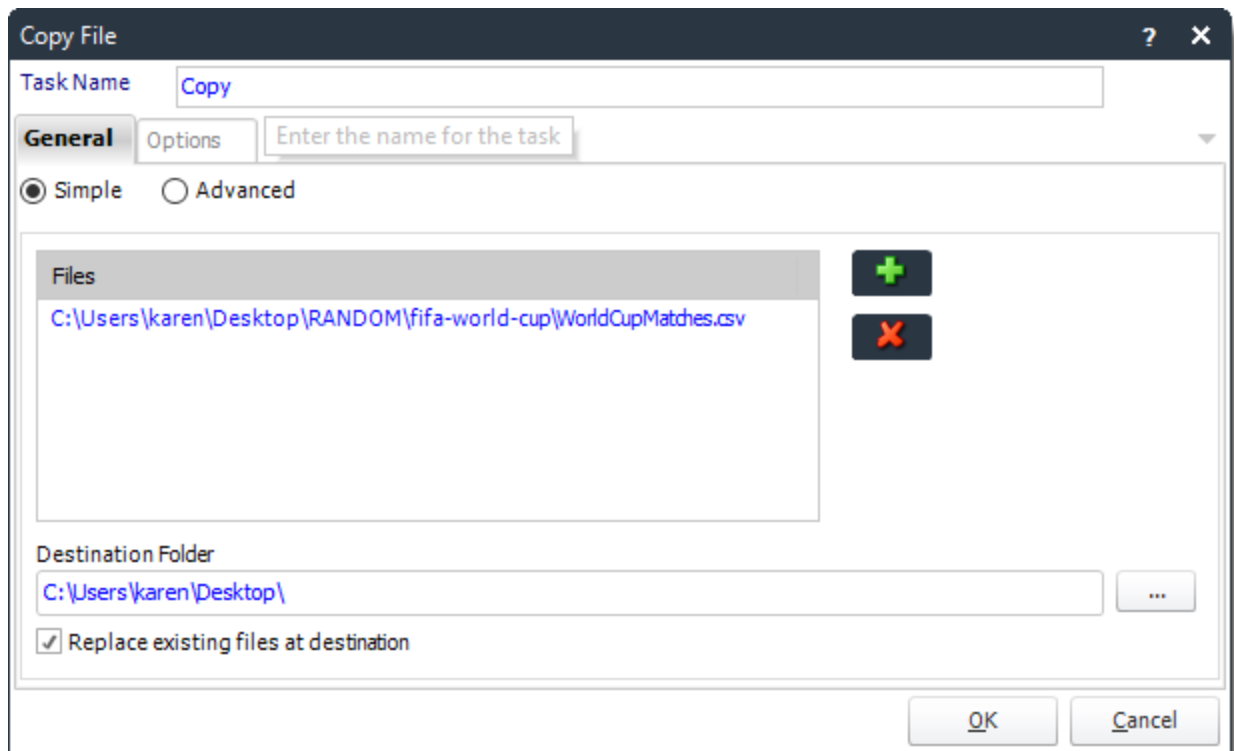
## File & Folders Tasks



- With these tasks you can automatically move and delete files, merge PDF or Excel files, even upload files to SharePoint.

## Copy File

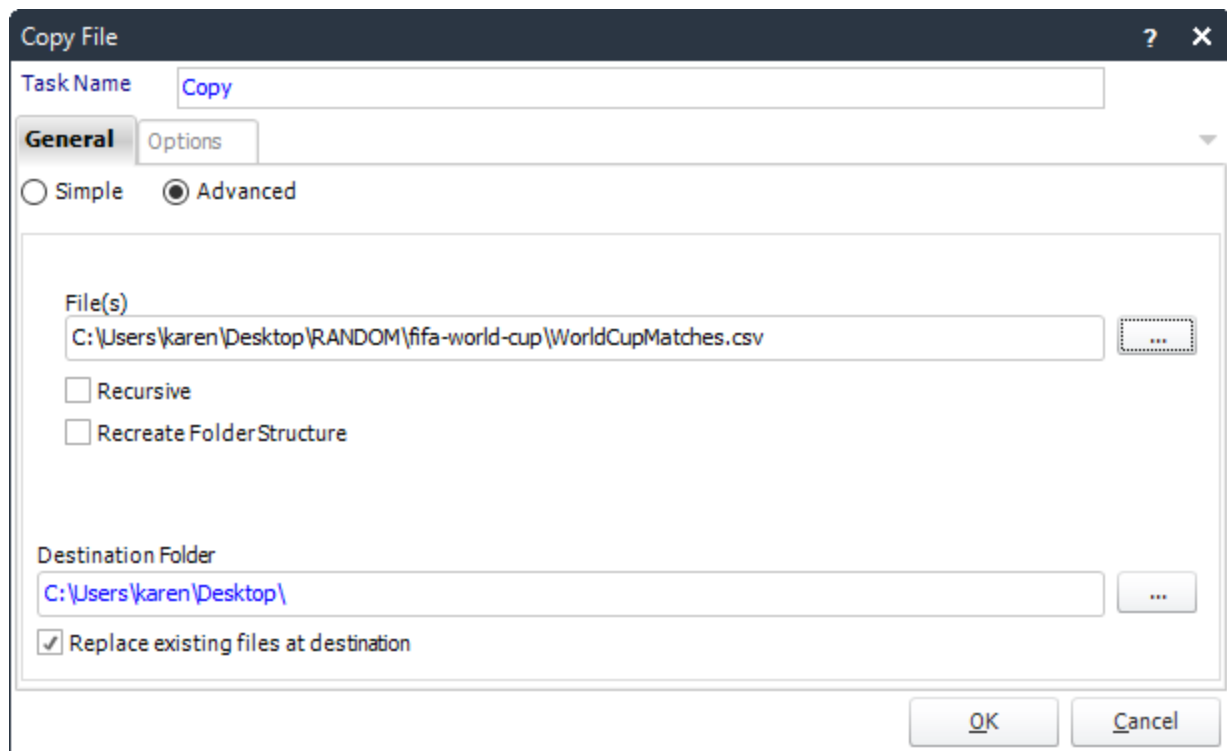
### General



- Use this task to copy one or more files from one location to another.
- **Task Name:** Enter a name for the task.
- **Files:** Click (+) to browse and select files.
- **Destination Folder:** Browse to select the destination folder.

*Tip: You can use Insert Menu to dynamically choose the destination folder.*

- **Replace existing files at destination:** Check this option if the file being copied is to replace an existing file at the specified destination.



- **Task Name:** Enter a name for the task.
- **Files:** Use (...) to browse and select files.
- **Recursive:** Copy all folder and/or documents in that path.
- **Recreate Folder Structure:** Recreate the folder structure.
- **Destination Folder:** Browse to select the destination folder.

*Tip: You can use Insert Menu to dynamically choose the destination folder.*

- **Replace existing files at destination:** Check this option if the file being copied is to replace an existing file at the specified destination.

#### Options

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

#### *Rename/Move File*

#### General

- Use this task to move a file. Keep the old name, or rename it by simply typing in a new name. Check to overwrite existing.



- **Task Name:** Give the task a name
- **Original File Name:** Use (...) to browse to the file that needs to be moved or renamed
- **New File Name:** Use (...) to navigate to the location where the new file will be moved to. Here is where you would also enter the new name for the file.

*Tip: Use Insert Menu to rename the file or navigate to a folder destination*

- **Overwrite Existing:** Check this option if the new file is going to overwrite an existing file at the specified location.

#### Options

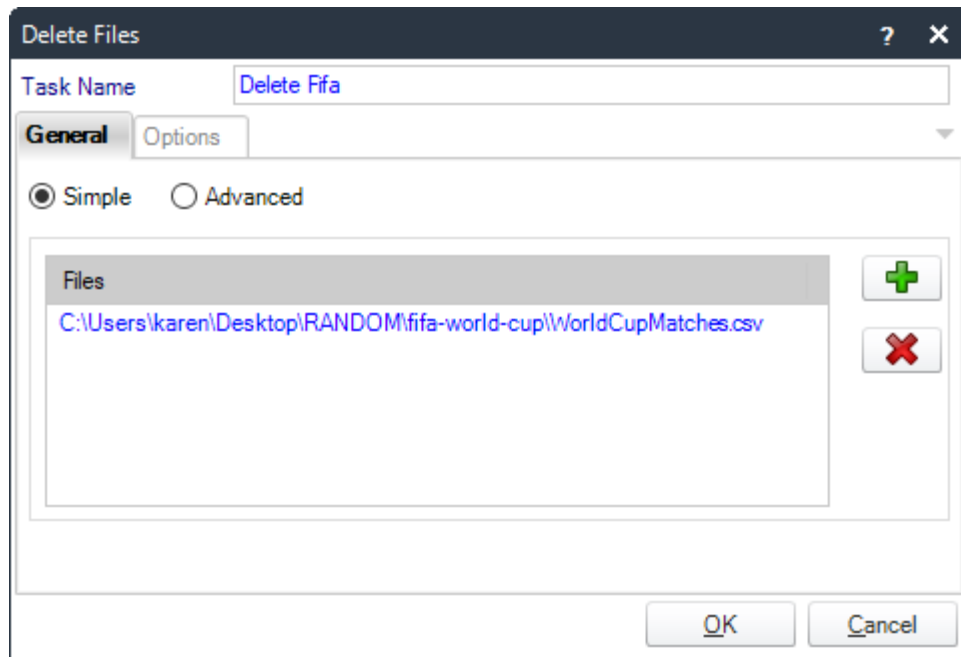
- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

#### *Delete Files*

#### General

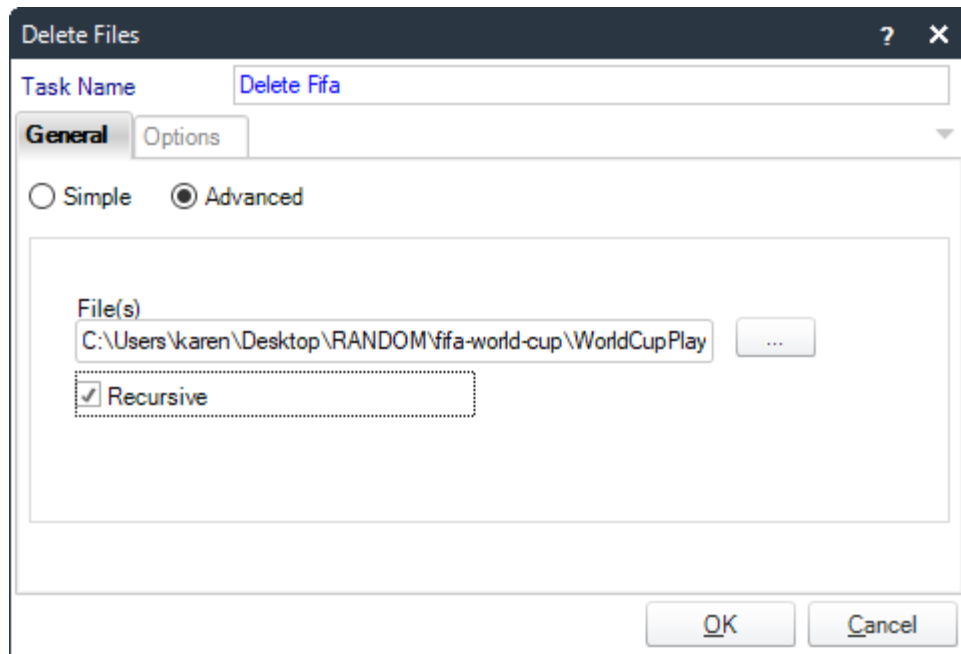
- Use this task to delete old files. This may be used as an alternative to folder housekeeping.





- **Task Name:** Give the task a name.
- **Files:** Use (+) button to navigate to the required file.

*Tip: You can use Insert Menu for the file name if required.*

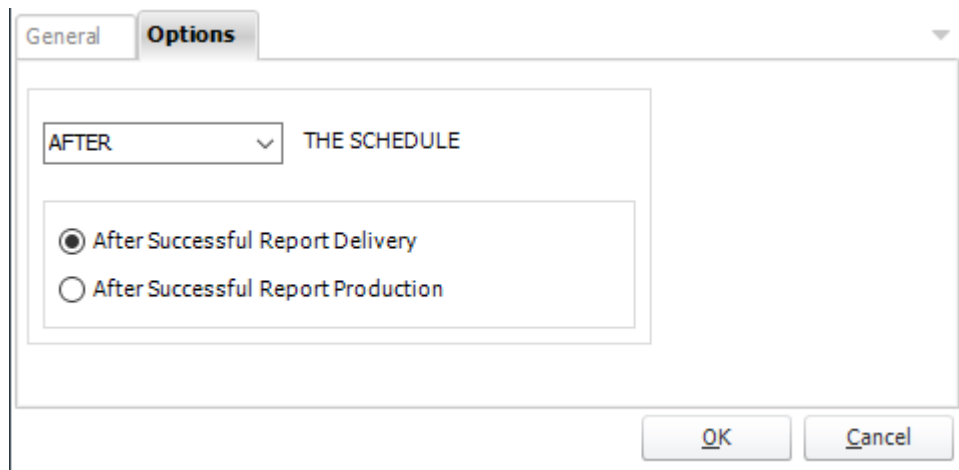


- **Task Name:** Give the task a name.
- **Files:** Use (...) button to navigate to the required file.

*Tip: You can use Insert Menu for the file name if required.*

- **Recursive:** Delete all folder and/or documents in that path.

#### Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Write Text File

### General

- Use this task to create or write to existing text files, or append information and create your own log file.

The screenshot shows the 'Write to File' dialog box with the following details:

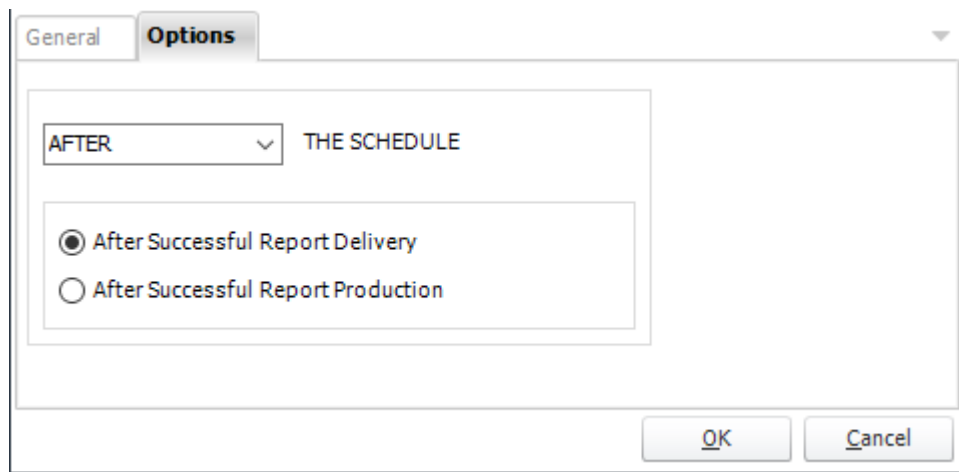
- Task Name:** Write a Text File
- File Name:** C:\Users\karen\Desktop\RANDOM\ fifa-world-cup\WorldCupPlayers.csv
- Text:**  
This is a test test file. Write the infor you desire here.  
Add Inserts like one of these: <[m]CurrentDate:yyyyMMddHHmm>  
Combine with other schedules to build even more powerful functionality!
- If file exists:**  
☐ Overwrite  
☒ Append

- **Task Name:** Give the task a name.
- **File Name:** Use (...) button to navigate to the file that is going to be written to.
- **Text:** Create the text that you want to write to the desired file.

*Tip: Use [Insert Menu](#) to insert constants or database values.*

- If the File exists...
  - **Overwrite:** If this option is selected then the desired file will be overwritten with the text file and content above.
  - **Append:** Select this option to add the text to an existing file.

## Options



General Options

AFTER THE SCHEDULE

☒ After Successful Report Delivery

☐ After Successful Report Production

OK Cancel

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Folder Housekeeping

General

Local Directory

Folder Housekeeping

Task Name: Clean Fifa Folder

General Options

Local Directory Remote (FTP) Directory

Path: C:\Users\karen\Desktop

Delete files older than: 7 Days ☐ Include subfolders

OK Cancel

- Use this task to regularly clear our folders. Sometimes folders used for report outputs can get very large.
- **Task Name:** Give the task a name.
- **Local Directory:** Use (...) to navigate to the folder containing the files that need to be purged.
- **Delete files older than:** Select the desire file life span that will be deleted.
- **Include Subfolders:** Clean any subfolders that contain files older than the specified amount of time.

## Remote (FTP) Directory

The screenshot shows the 'Folder Housekeeping' dialog box with the 'Remote (FTP) Directory' tab selected. The 'Task Name' is 'Clean Fifa Folder'. The 'General' sub-tab is active, showing fields for 'FTP Server' (my.ftpserver.local), 'User Name' (KAngeles), 'Password' (masked with dots), 'FTP Type' (FTP - SSH (FTPS)), 'Port' (22), and 'Remote Directory' (//TPSReports). There are 'Verify' and 'Browse' buttons next to the Remote Directory field. Checkboxes for 'Passive Mode' (checked), 'ASCII mode', and 'Retry uploading if the transaction fails' are present. At the bottom, there is a 'Delete files older than' section with a spinner set to 7, a dropdown set to 'Days', and an unchecked 'Include subfolders' checkbox. 'OK' and 'Cancel' buttons are at the bottom right.

Folder Housekeeping

Task Name: Clean Fifa Folder

General Options

Local Directory Remote (FTP) Directory

General Certificate Proxy Server

FTP Server: my.ftpserver.local

User Name: KAngeles Password: .....

FTP Type: FTP - SSH (FTPS) Port: 22

Remote Directory: //TPSReports [Verify] [Browse]

☒ Passive Mode ☐ ASCII mode ☐ Retry uploading if the transaction fails

Delete files older than: 7 Days ☐ Include subfolders

[OK] [Cancel]

- **Task Name:** Give the task a name.
- **FTP Server:** Enter your FTP Server details and authentication credentials.
- **Remote Directory:** Browse or enter the folder path for the directory that will be purged.
- **Delete files older than:** Select the desire file life span that will be deleted.
- **Include Subfolders:** Clean any subfolders that contain files older than the specified amount of time.

Folder Housekeeping

Task Name

**General** Options

Local Directory Remote (FTP) Directory

General **Certificate** Proxy Server

☒ Use Client Certificate ☐ Use Private Certificate

Certificate File  ...

Private Key File  ...

Certificate Name

Password

☐ Clear Command Channel

Delete files older than  Days ☐ Include subfolders

OK Cancel

- You can set Certificate Settings where applicable.

Folder Housekeeping

Task Name

**General** Options

Local Directory Remote (FTP) Directory

General Certificate **Proxy Server**

☐ Use Proxy Server

Proxy Server

User Name (optional)

Password (optional)

Port

Delete files older than  Days ☐ Include subfolders

OK Cancel

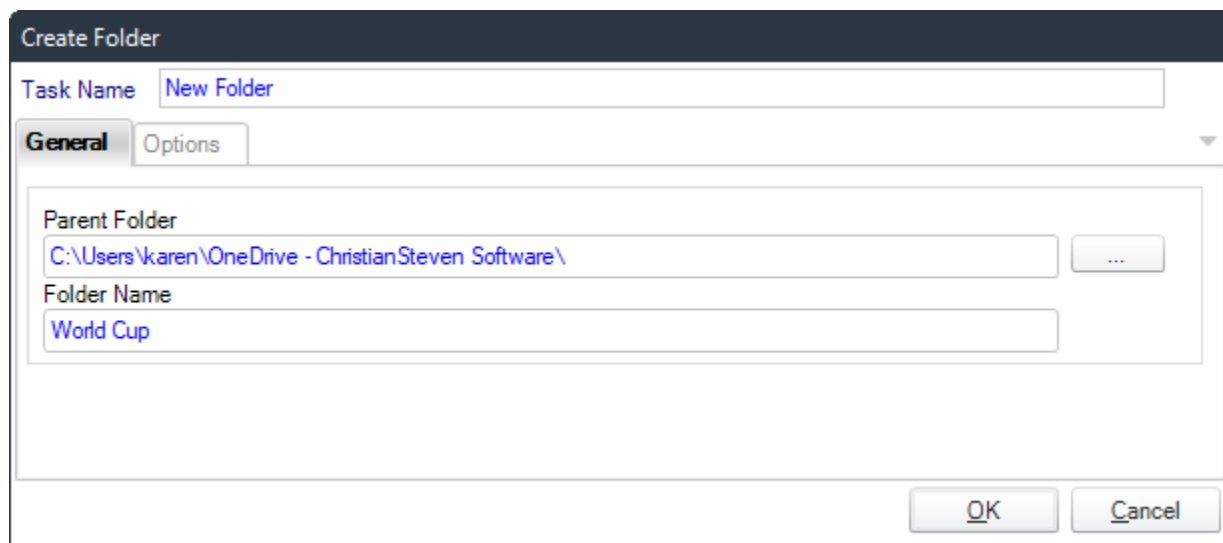
- You can also set Proxy Server details where required. Please make sure to contact your Network Administrator to verify if these are needed.

For more on Folder Housekeeping, [click here](#).

### Create Folder

#### General

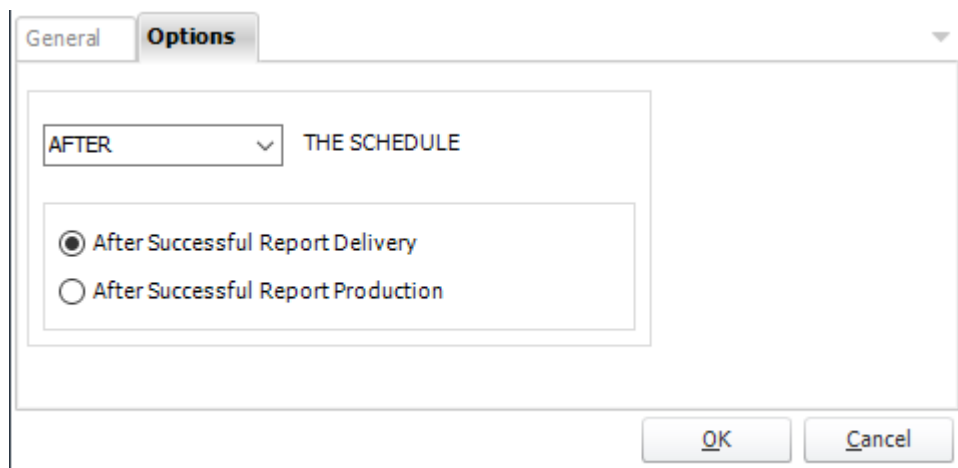
- Use this task to create a new folder. Simply browse for the parent folder, and then tell PBRs what the new folder name should be.



The 'Create Folder' dialog box has a title bar 'Create Folder'. It contains a 'Task Name' field with the text 'New Folder'. Below this are two tabs: 'General' (selected) and 'Options'. In the 'General' tab, there is a 'Parent Folder' field containing the path 'C:\Users\karen\OneDrive - ChristianSteven Software\' followed by a browse button (...). Below that is a 'Folder Name' field containing the text 'World Cup'. At the bottom right are 'OK' and 'Cancel' buttons.

- Task Name:** Give the task a name.
- Parent Folder:** Use (...) button to browse to the parent folder.
- Folder Name:** Enter the name of the new folder that will be created.

#### Options



The 'Options' tab is selected. It contains a dropdown menu set to 'AFTER' followed by the text 'THE SCHEDULE'. Below this is a group box containing two radio buttons: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right are 'OK' and 'Cancel' buttons.



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### *Rename/Move Folder*

General

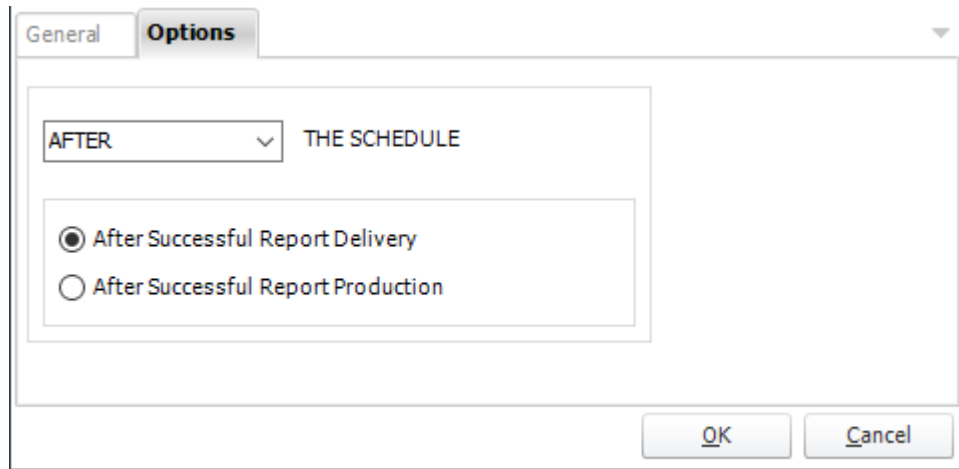
The screenshot shows the 'Rename/Move Folder' dialog box with the 'General' tab selected. The 'Task Name' field is empty. Under the 'General' tab, the 'Move' radio button is selected, and the 'Rename' radio button is unselected. Below the radio buttons, there are two text input fields: 'Select Folder' and 'Destination Folder'. The 'Select Folder' field contains the text 'C:\Users\karen\OneDrive - ChristianSteven Software\' and has a browse button (three dots) to its right. The 'Destination Folder' field contains the text 'C:\Users\karen\Documents\' and also has a browse button to its right. At the bottom right of the dialog box are 'OK' and 'Cancel' buttons.

The screenshot shows the 'Rename/Move Folder' dialog box with the 'General' tab selected. The 'Task Name' field is empty. Under the 'General' tab, the 'Rename' radio button is selected, and the 'Move' radio button is unselected. Below the radio buttons, there are two text input fields: 'Select Folder' and 'New Name'. The 'Select Folder' field contains the text 'C:\Users\karen\OneDrive - ChristianSteven Software\' and has a browse button (three dots) to its right. The 'New Name' field contains the text 'C:\Users\karen\Documents\' and has a browse button (three dots) to its right. At the bottom right of the dialog box are 'OK' and 'Cancel' buttons.

- **Task Name:** Give the task a name.

- **Move:** Click this option to move the folder.
- **Rename:** Click this option to rename a folder.
- **Select Folder:** Use (...) button to browse to the folder you want to move.
- **Destination Folder:** Use (...) button to browse to the location of the new folder.
- **New Name:** Type the new name for the folder.

#### Options



The screenshot shows a dialog box with two tabs: 'General' and 'Options'. The 'Options' tab is active. Inside the 'Options' tab, there is a dropdown menu currently showing 'AFTER' with a downward arrow, followed by the text 'THE SCHEDULE'. Below this, there is a group box containing two radio buttons. The first radio button is selected and is labeled 'After Successful Report Delivery'. The second radio button is unselected and is labeled 'After Successful Report Production'. At the bottom right of the dialog box, there are two buttons: 'OK' and 'Cancel'.

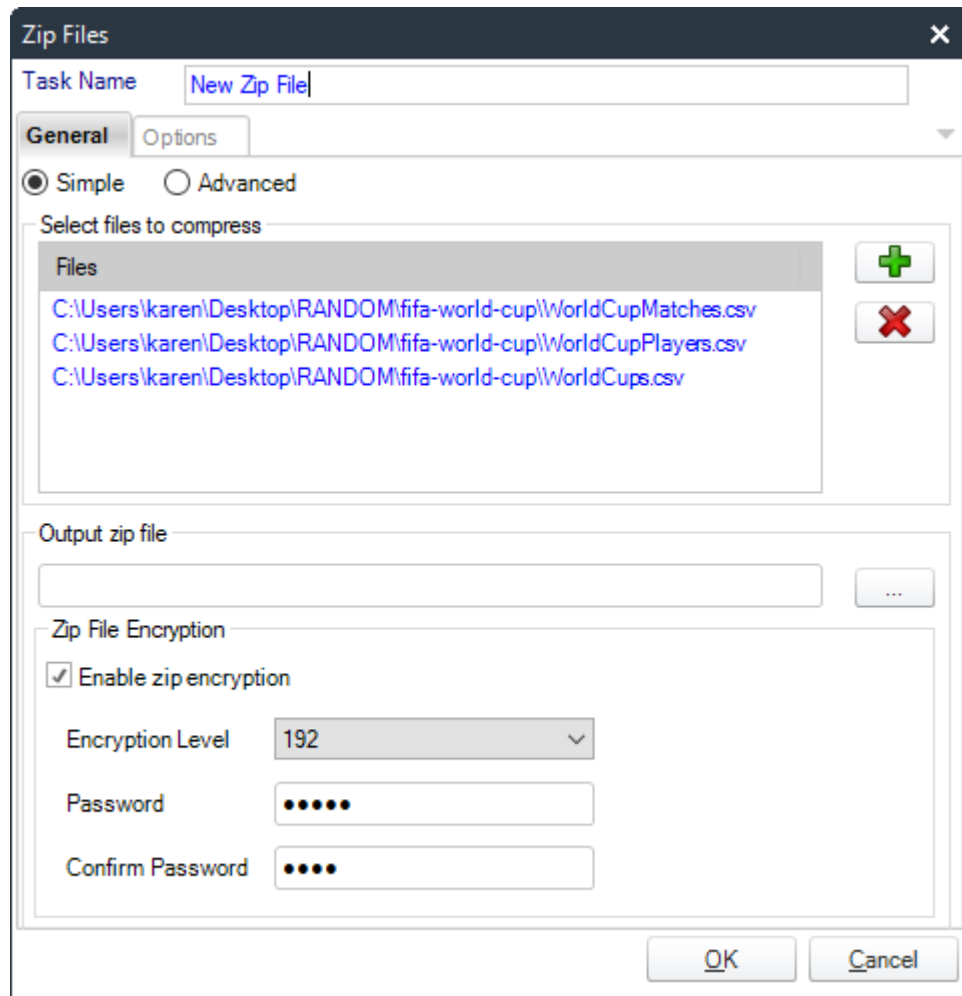
- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Zip Files

General

Simple

- Use this option if you need to zip single files from multiple locations.



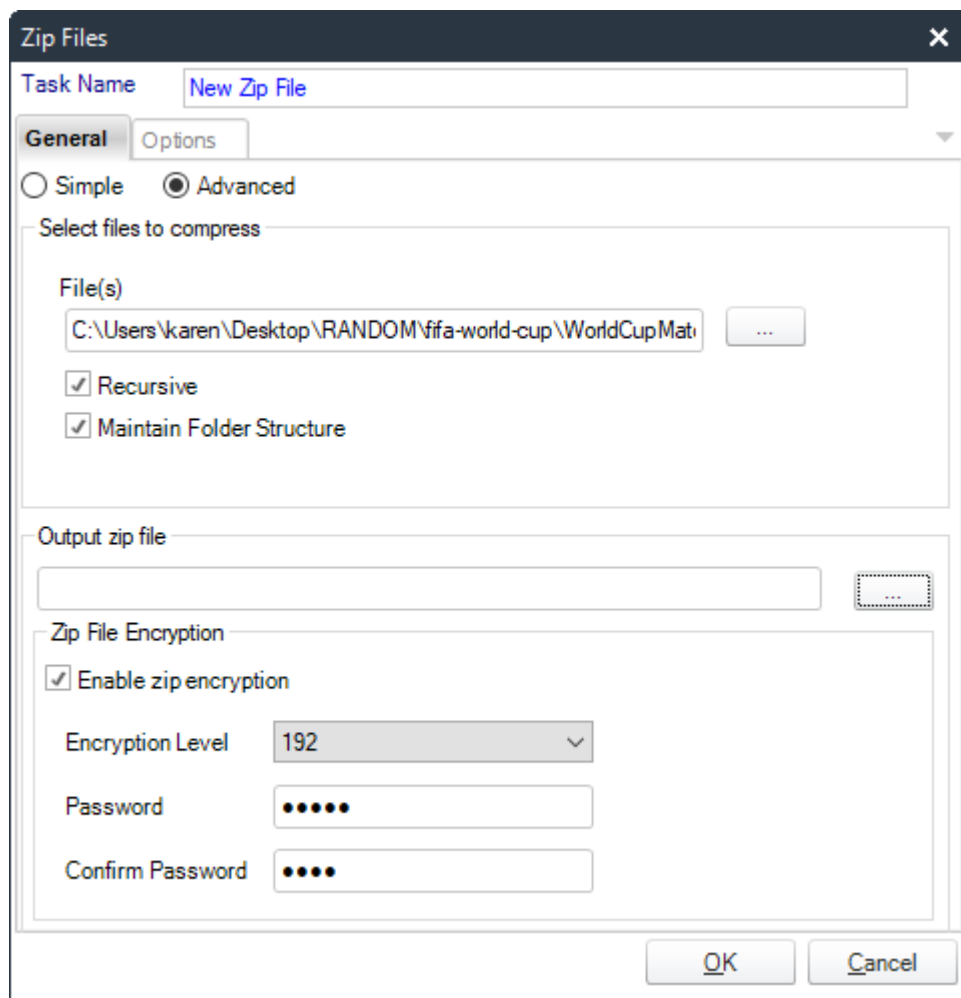
- **Task Name:** Give the task a name.
- **Files:** Use (+) button to select the required files. You can either select a file or specify a path including wildcards e.g. \*.\* to select all files.
- **Output Zip File:** Give the outputted zip file a name.

*Tip: Use Insert Menu in the file name*

- **Zip File Encryption:** Enter the desired Encryption details.

Advanced

- Use this option if you need to zip files in the same folder.

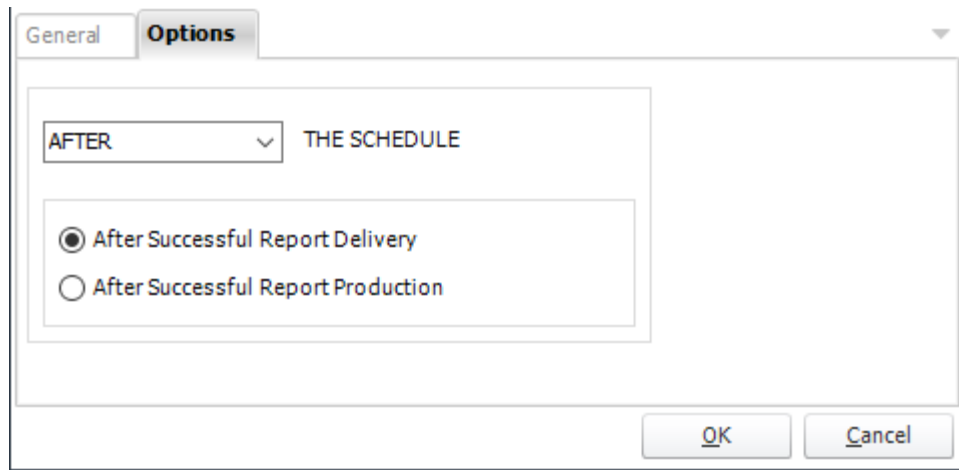


- **Task Name:** Give the task a name.
- **Files:** Use (+) button to select the required files. You can either select a file or specify a path including wildcards e.g. \*.\* to select all files.
- **Recursive:** This will search the folder and all sub folders.
- **Maintain Folder Structure:** Select this to ensure files of the same name are not overwritten and have the folder structure maintained. This is useful when using wildcards.
- **Output Zip File:** Give the outputted zip file a name.

*Tip: Use Insert Menu in the file name.*

- **Zip File Encryption:** Enter the desired Encryption details.

Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### *Unzip File*

General

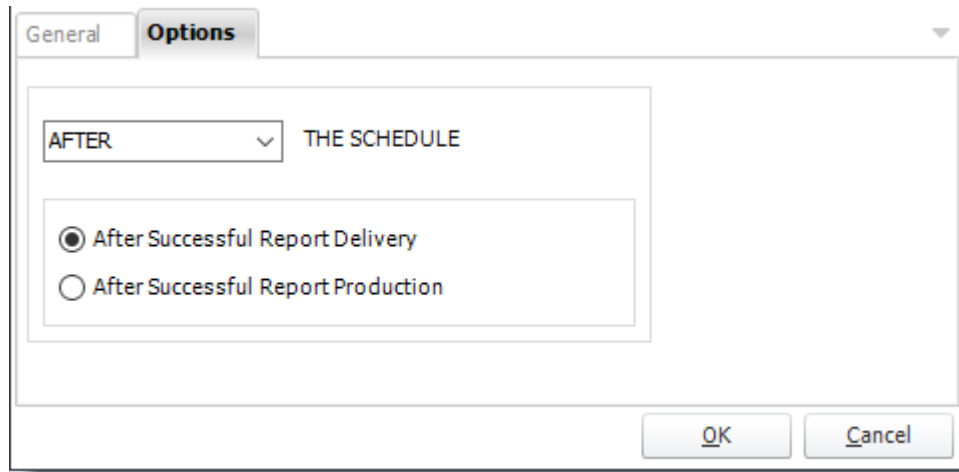
- Use this task to unzip a selected zip file to a specified folder.



- **Task Name:** Give the task a name.
- **Select Zipped File:** Use (...) button to select the required zip file that is to be extracted out.
- **Password:** If your file requires a password enter it here. If your .zip file requires a password, you can enter the password into the Password field.

- **Destination Folder:** Use (...) button to navigate to the required folder where the extracted files will be stored.

Options



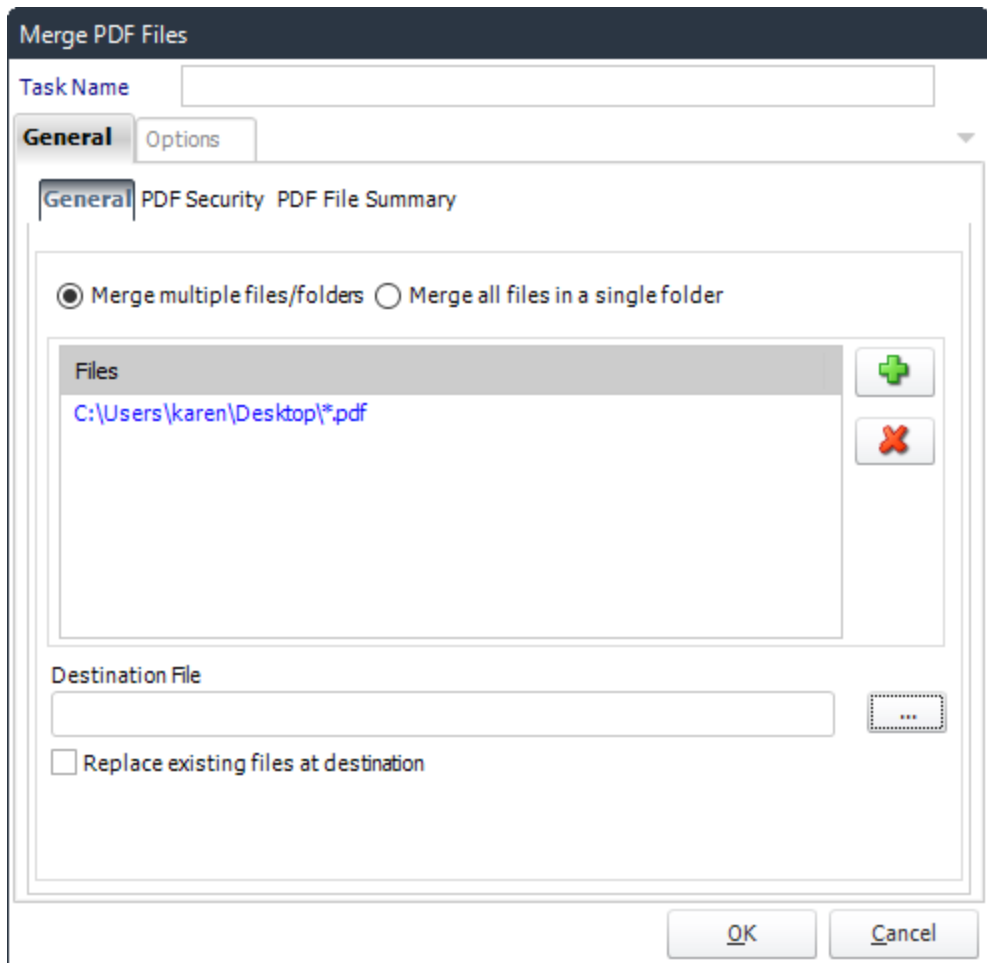
The image shows a software dialog box with two tabs: 'General' and 'Options'. The 'Options' tab is selected. Inside the 'Options' tab, there is a dropdown menu currently set to 'AFTER' with a small downward arrow to its right. To the right of the dropdown is the text 'THE SCHEDULE'. Below these elements is a group box containing two radio buttons. The first radio button is selected (indicated by a black dot) and is labeled 'After Successful Report Delivery'. The second radio button is unselected and is labeled 'After Successful Report Production'. At the bottom right of the dialog box are two buttons: 'OK' and 'Cancel'.

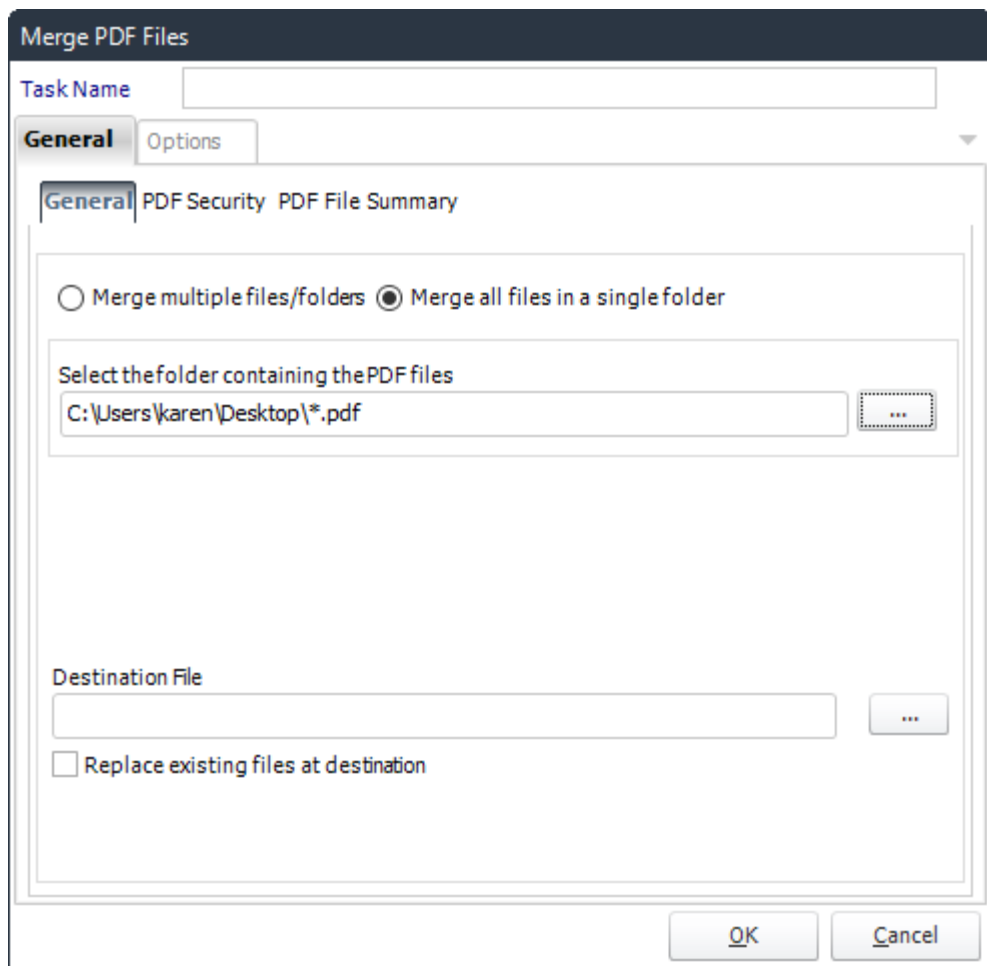
- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Merge PDF Files

### General

- Use this task to merge PDF files. You can select individual PDF files or a folder containing multiple PDF files.

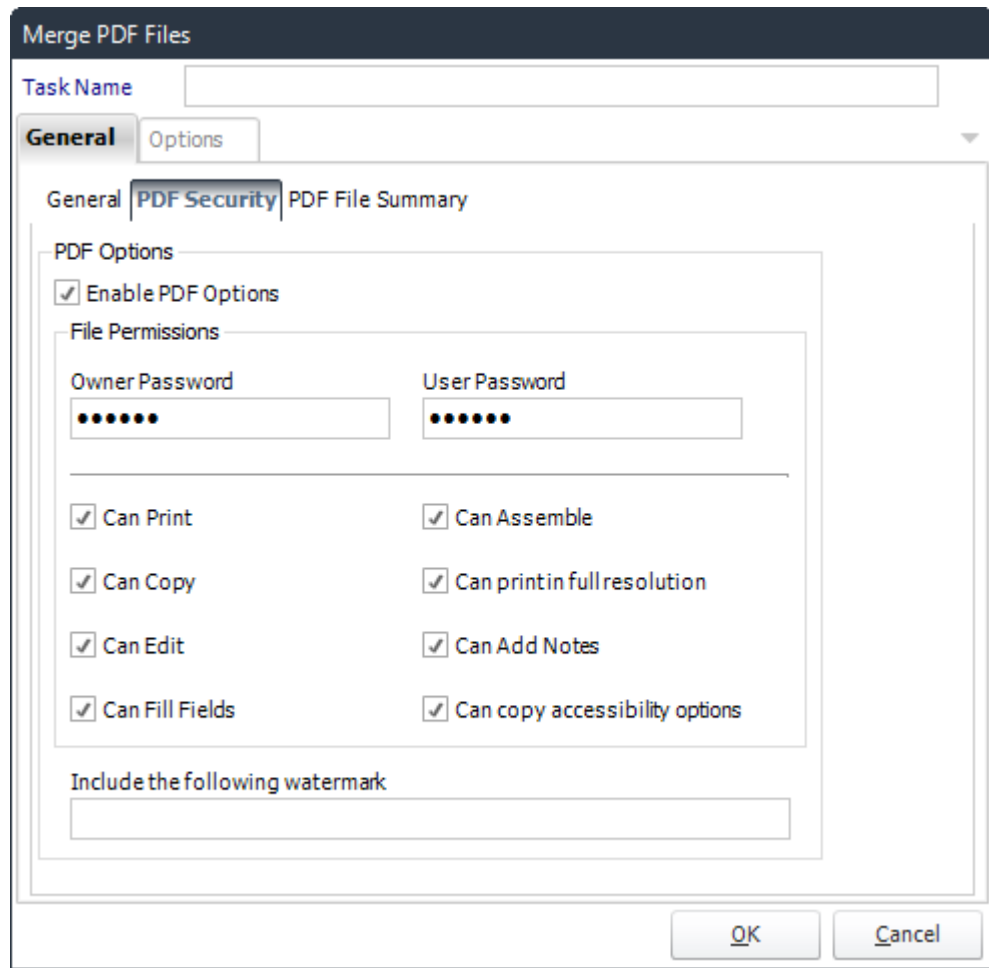




- **Task Name:** Give the task a name.
- **Merge Multiple Files/Folders:** Select this option to merge files located in different folders.
- **Merge all files in a single folder:** Use this option to merge all files stored in the same folder.
- **Destination File:** Select a destination file that the merged file will be saved to.
- **Replace existing files at destination:** Check this option will delete any existing files at the specified location and replace them with these ones.



## PDF Security



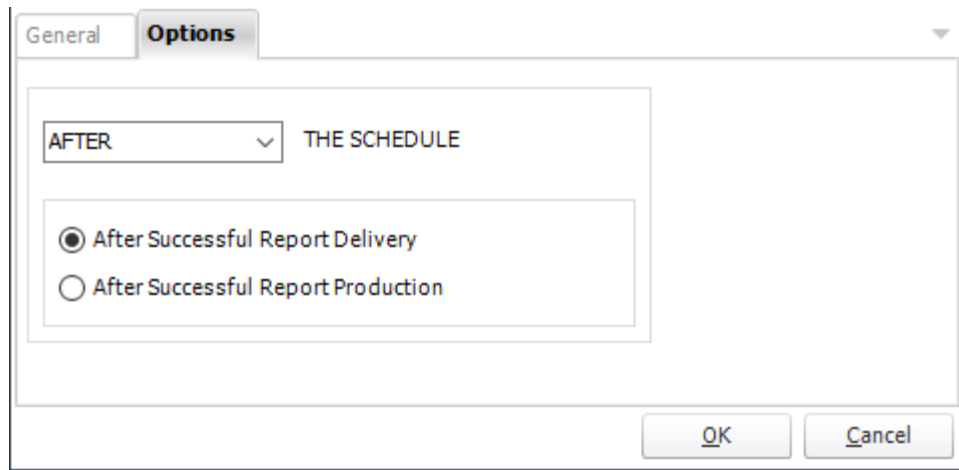
- **Enable PDF Options:** Check this option to be able to set Passwords and user permissions.
- **Include the following watermark:** Type the required watermark here, for example: confidential.

## PDF File Summary

The image shows a software window titled "Merge PDF Files". At the top, there is a "Task Name" label followed by an empty text input field. Below this, there are two tabs: "General" (which is selected and highlighted) and "Options". Inside the "General" tab, there are three sub-tabs: "General", "PDF Security", and "PDF File Summary" (which is currently selected). The "PDF File Summary" sub-tab contains several input fields: "Title", "Author", "Producer", and "Subject" are each followed by a single-line text box. "Date Created" is followed by a date picker showing "Tuesday , August 14, 2018". "Keywords/Comments" is followed by a large, empty text area with a vertical scrollbar. At the bottom right of the window, there are two buttons: "OK" and "Cancel".

- **PDF File Summary:** Any information written here will overwrite the existing file summary

Options

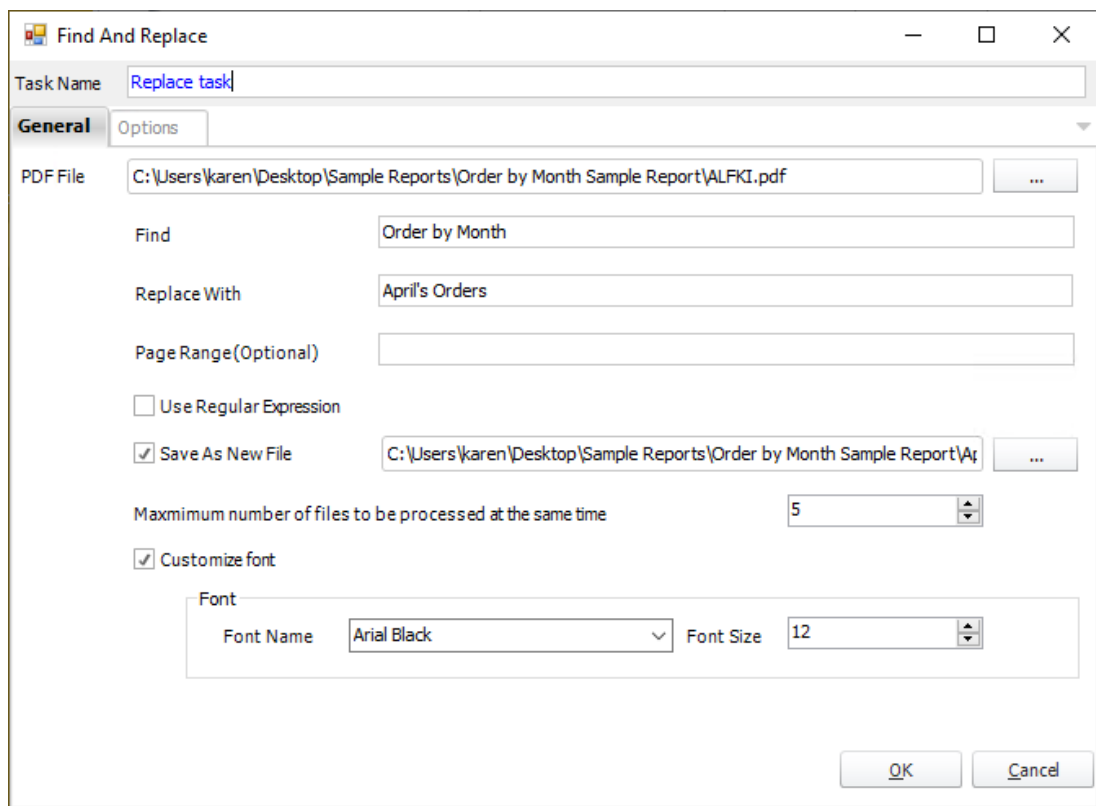


- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## PDF Find & Replace

### *General*

- Use this task to find & replace words in a PDF file.



- **Task Name:** Give the task a name.
- **PDF File:** Use (...) button to browse to the PDF file that you want to manipulate.
- **Find:** Enter the text to find.
- **Replace With:** Enter the text to replace it with.
- **Page Range (Optional):** You can specify a page range e.g 1-5 or specific e.g. 1,3,5.
- **Use Regular Expression:** Check this option to enable regular expression.
- **Save as New File:** Check this option to save the changes on a new file.
- **Maximum number of files to be processed at the same time:** Enter the number of files to be processed at the same time.
- **Customize Font:** Use this option to customize the font and size of the replaced texts.

### *Options*

- In this section, you have the option to run this task before, after or both.

### Add PDF Header/Footer

#### *General*

- Use this task to add a header and footer to a PDF file.

## PDF Header

The screenshot shows a software dialog box titled "Add PDF Header/Footer". At the top, there is a yellow header bar with the title. Below it, a "Task Name" field contains the text "Add Header and Footer". The dialog has two tabs: "General" (selected) and "Options". Under the "General" tab, there is a "PDF File" field with the path "C:\Users\karen\Desktop\QA Test\ReAdmissions Analysis Paginated PBRS-628.pdf" and a browse button "...". Below this are three sub-tabs: "PDF Header" (selected), "PDF Footer", and "PDF Body Text". In the "PDF Header" sub-tab, there is a checked checkbox "Add header to PDF". Below it, the "Header Text" field contains "PBRS Server". The "Text Alignment" dropdown menu is set to "Center". The "Margins" section has "Left" and "Top" fields, both set to "0.0". The "Font" section includes a "Family" dropdown set to "Arial", a "Size" field set to "12.3", and checkboxes for "Bold" and "Italic", both of which are unchecked. The "Color (R,G,B)" field is set to "0,0,0" with a corresponding color swatch. At the bottom of the dialog, there is an unchecked checkbox "Save as new file" with an empty text field and a browse button "...". The "OK" and "Cancel" buttons are at the bottom right.

- **Task Name:** Give the task a name.
- **PDF File:** Use (...) button to browse to the PDF file that you want to manipulate.
- **Add header to PDF:** Check this option to enable Header to PDF configurations.
- **Header Text:** Enter the header text.
- **Text Alignments:** Use the drop-down menu to select the alignment of the header.
- **Margins:** Enter the number of inches for the left and top margin.
- **Font:** Select the font, size, and color of the header text.
- **Save as new file:** Check this option to save the changes to a new file.

## PDF Footer

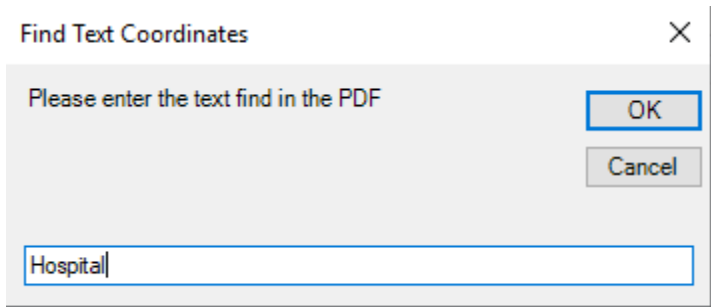
The screenshot shows a dialog box titled "Add PDF Header/Footer" with a yellow header bar. It has two tabs: "General" and "Options". The "General" tab is active. At the top, there is a "Task Name" field with the text "Add Header and Footer". Below this is a "PDF File" field with the path "C:\Users\karen\Desktop\QA Test\ReAdmissions Analysis Paginated PBRS-628.pdf" and a browse button "...". The dialog has three sub-tabs: "PDF Header", "PDF Footer" (which is selected), and "PDF Body Text". In the "PDF Footer" section, there is a checked checkbox "Add footer to PDF". Below it is a "Header Text" field containing "PBRS Server". A "Text Alignment" dropdown menu is set to "Left". A "Margins" section has "Left" and "Bottom" fields, both set to "0.0". A "Font" section includes a "Family" dropdown set to "Arial", a "Size" field set to "12.3", and checkboxes for "Bold" and "Italic", both of which are unchecked. A "Color (R,G,B)" field is set to "0,0,160" with a corresponding blue color swatch. At the bottom of the dialog, there is a "Save as new file" checkbox, an empty text field, and a browse button "...". The "OK" and "Cancel" buttons are at the bottom right.

- **Task Name:** Give the task a name.
- **PDF File:** Use (...) button to browse to the PDF file that you want to manipulate.
- **Add footer to PDF:** Check this option to enable Footer to PDF configurations.
- **Header Text:** Enter the footer text.
- **Text Alignments:** Use the drop-down menu to select the alignment of the footer.
- **Margins:** Enter the number of inches for the left and top margin.
- **Font:** Select the font, size, and color of the footer text.
- **Save as new file:** Check this option to save the changes to a new file.

## PDF Body Text

The screenshot shows the 'Add PDF Header/Footer' dialog box with the 'PDF Body Text' tab selected. The 'Task Name' is 'Add Header and Footer'. The 'PDF File' is 'C:\Users\karen\Desktop\QA Test\ReAdmissions Analysis Paginated PBRS-628.pdf'. The 'Add text to PDF body' checkbox is checked. The 'Body Text' is 'PBRS Server'. The 'Text Alignment' is 'Center'. The 'Position' is X: 74, Y: 682. The 'Font' settings are: Family: Arial, Size: 12.3, Bold: unchecked, Italic: unchecked, Color (R,G,B): 0,0,0. The 'Save as new file' checkbox is checked, and the new file name is 'C:\Users\karen\Desktop\QA Test\Readmission Hospitals.pdf'. The 'OK' and 'Cancel' buttons are at the bottom right.

- **Task Name:** Give the task a name.
- **PDF File:** Use (...) button to browse to the PDF file that you want to manipulate.
- **Add text to PDF body:** Check this option to enable text to the body to PDF configurations.
- **Body Text:** Enter the body text.
- **Text Alignments:** Use the drop-down menu to select the alignment of the footer.
- **Position:** Enter the X and Y coordinates to enter the text. You can use the (...) button to find a text in the file to use the text coordinates.



- **Font:** Select the font, size, and color of the footer text.
- **Save as new file:** Check this option to save the changes to a new file.

### *Options*

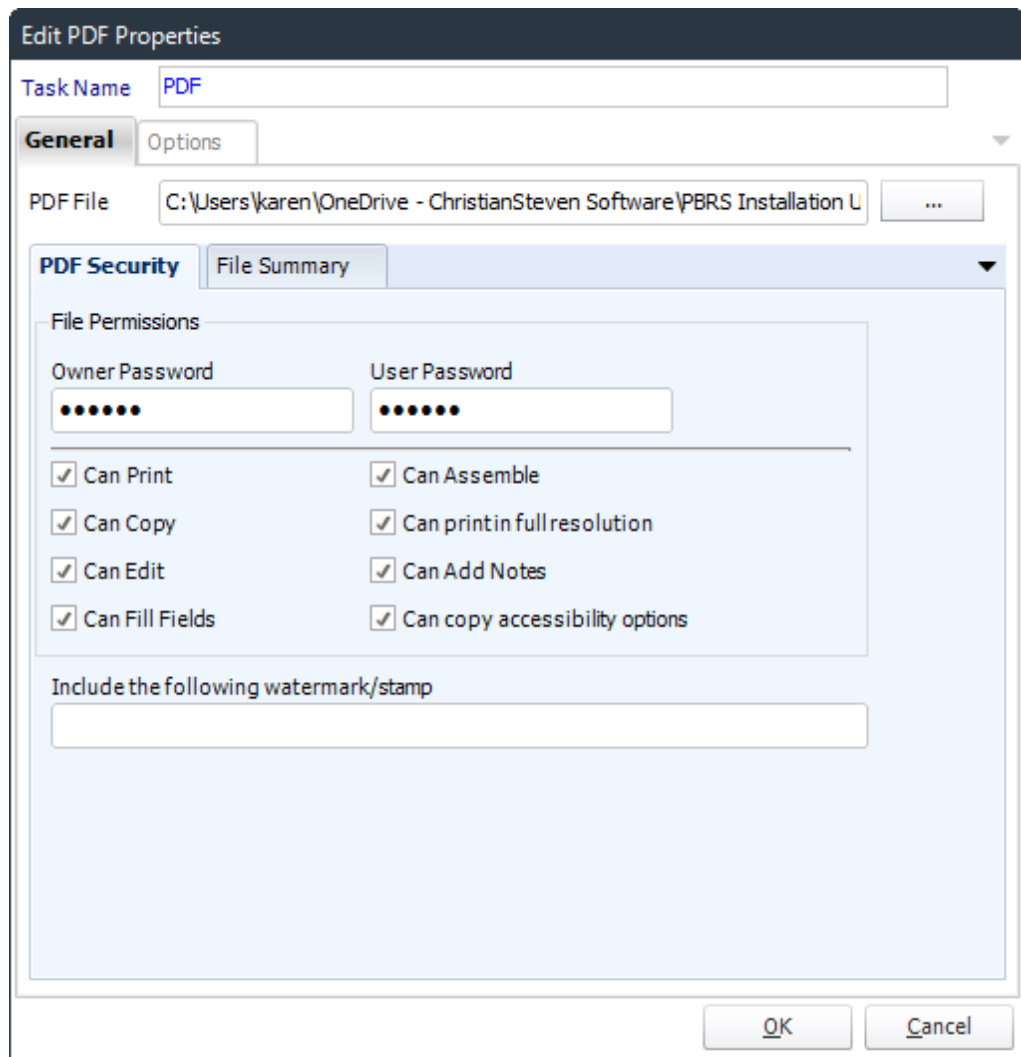
- In this section, you have the option to run this task before, after or both.

### *Manipulate PDF*

#### General

- Use this task to change the PDF Security and File Summary of a PDF file.





PDF Security

- **Task Name:** Give the task a name.
- **PDF File:** Use (...) button to browse to the PDF file that you want to manipulate.
- **Enable PDF Options:** Check this option to be able to set Passwords and user permissions.
- **Include the following watermark:** Type the required watermark here, for example: confidential.

## File Summary

The screenshot shows the 'Edit PDF Properties' dialog box with the 'File Summary' tab selected. The 'Task Name' is 'PDF'. The 'PDF File' path is 'C:\Users\karen\OneDrive - ChristianSteven Software\PBRS Installation U'. The 'File Summary' tab contains fields for Title, Author, Producer, Subject, Date Created (Tuesday, August 14, 2018), and Keywords/Comments. There is also a checkbox for 'PDF Expires On' with a date of Tuesday, August 14, 2018. The 'OK' and 'Cancel' buttons are at the bottom right.

Field	Value
Task Name	PDF
PDF File	C:\Users\karen\OneDrive - ChristianSteven Software\PBRS Installation U
Title	
Author	
Producer	
Subject	
Date Created	Tuesday, August 14, 2018
Keywords/Comments	
PDF Expires On	Tuesday, August 14, 2018

- **PDF File Summary:** Any information written here will overwrite the existing file summary.

General

Build Workbook

Task Name

**General** Options

Add Datasets for worksheets

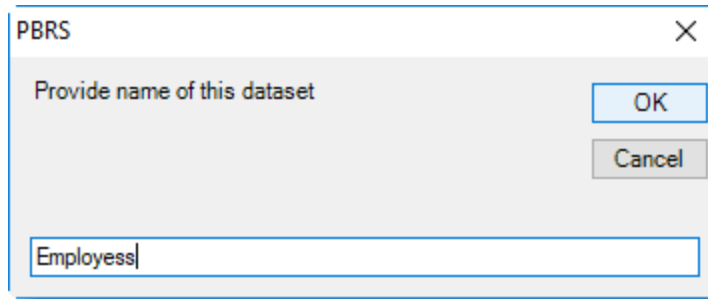
Employess	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>  <input type="button" value="↑"/> <input type="button" value="↓"/>
Location	

Output WorkBook

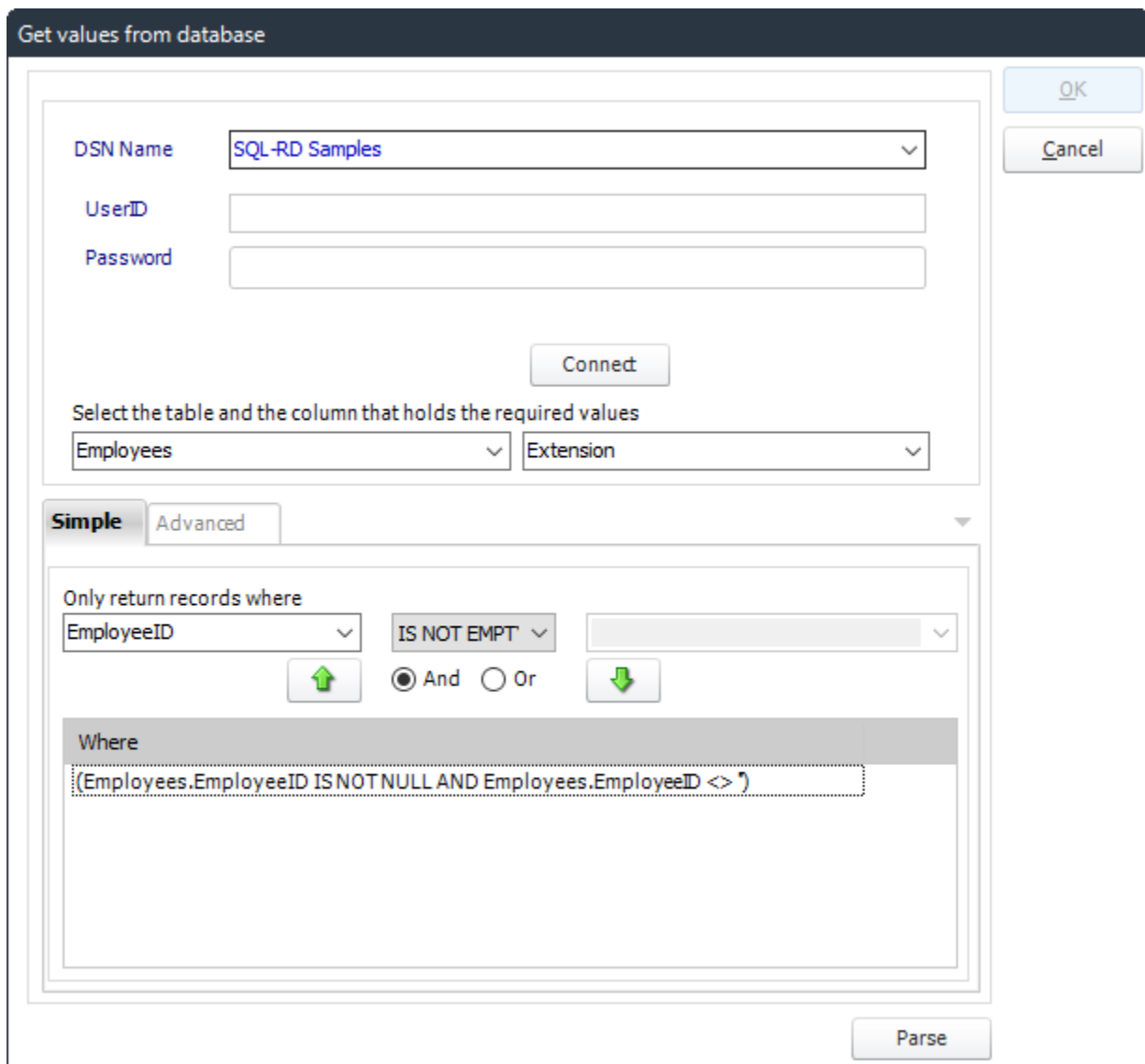
Save File As

☐ Replace if file exists

- **Task Name:** Give the task a name.
- **Save File As:** Use (...) button to navigate to the folder where the workbook will be stored.
- **Replace if File exists:** Check this option if this workbook is going to be replacing one that already exists.
- **Edit:** Edit a Data set for a workbook.
- **Delete:** Deletes a data set from the workbook.
- **Add a Database:**
  - Click **Add**.

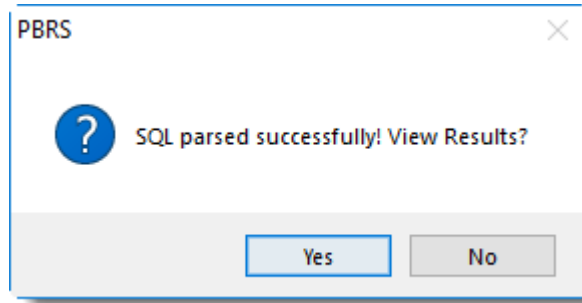


- Click **OK**.
- Name the Data set.



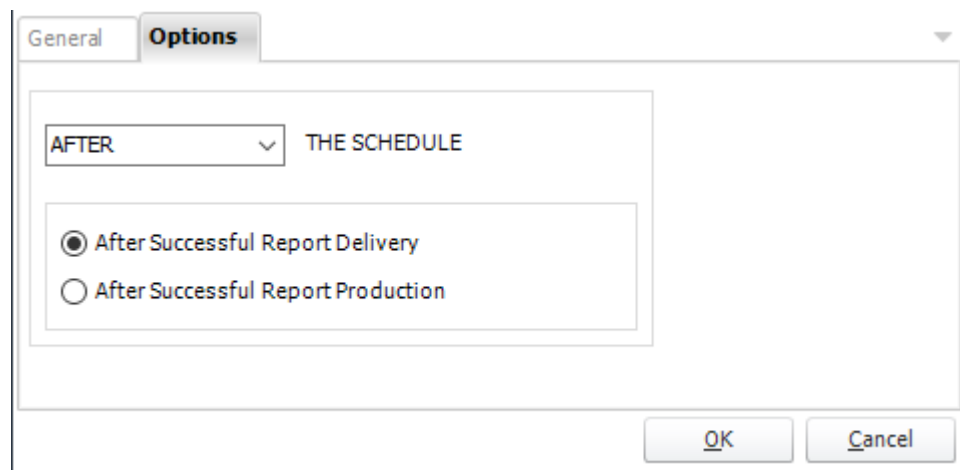
- Use the Query Tool to pull the data from your data source.

- Click **Parse** to review your query results.



- Click **Yes**.
- Continue to add data sets until you have completed your workbook.

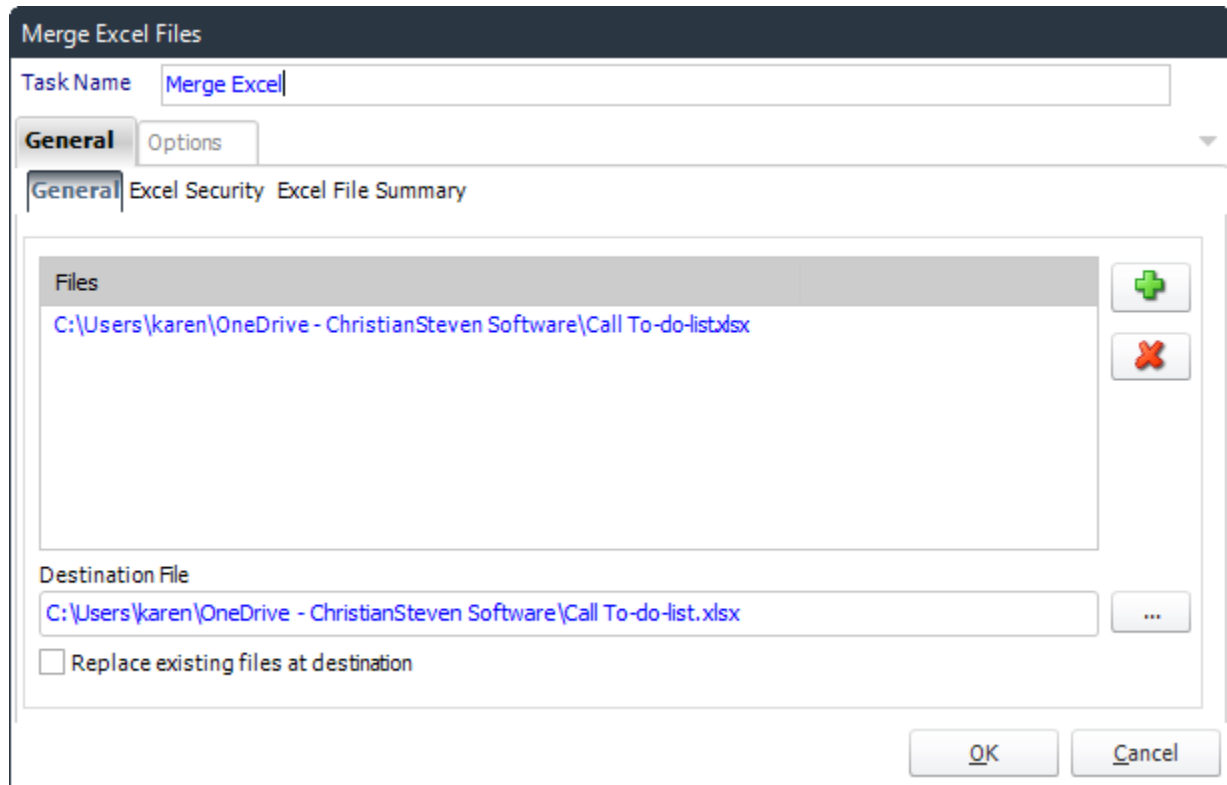
#### Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Merge Excel Files

### General



- With this task, you can merge multiple Excel files into a single workbook.
- **Add Files:** Use (+) button to add Excel files that need to be merged.
- **Delete Files:** Use (X) button to remove any Excel files that you don't want to be merged.
- **Destination File:** Use (...) button to browse to the destination folder where the merged files will be stored.
- **Replace existing files at destination:** Check this option to replace the file at the destination if it already exists.

## Excel Security

The screenshot shows a dialog box titled "Merge Excel Files". At the top, there is a "Task Name" field containing the text "Merge Excel". Below this, there are two tabs: "General" and "Options". The "Excel Security" tab is currently selected, and it contains the following elements:

- A sub-section titled "Excel Options" with a checked checkbox labeled "Password protect workbook".
- A text input field labeled "Owner Password" containing ten black dots, indicating a masked password.

At the bottom right of the dialog box, there are two buttons: "OK" and "Cancel".

- **Password Protect Workbook:** Check this option to enable to password field.
- **Owner Password:** Enter a password for the Excel file.

## Excel File Summary

The screenshot shows the 'Merge Excel Files' dialog box with the 'Excel File Summary' tab selected. The 'Task Name' field is set to 'Merge Excel'. The 'General' tab is active, showing fields for Title, Author, Producer, Subject, Date Created (set to Tuesday, August 14, 2018), and Keywords/Comments. The 'Options' tab is also visible.

- **Excel File Summary:** Any information written here will overwrite the existing Excel File Summary.

## Options

The screenshot shows the 'Merge Excel Files' dialog box with the 'Options' tab selected. The 'General' tab is also visible. The 'Options' tab contains a dropdown menu set to 'AFTER' and a text field 'THE SCHEDULE'. Below this, there are two radio buttons: 'After Successful Report Delivery' (selected) and 'After Successful Report Production'.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

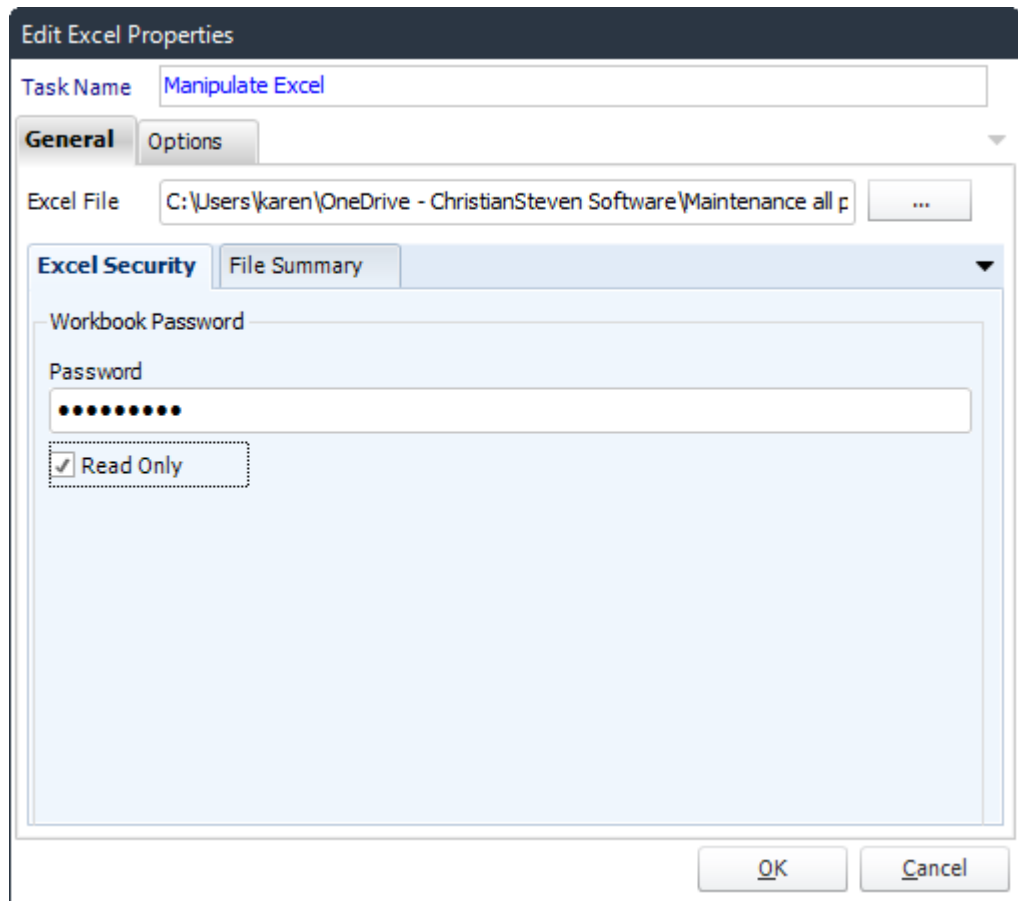


## *Manipulate Excel*

### General

- Use this task to edit the file security and the file summary of an excel file.

### Excel Security



- **Password:** Enter a Password for the Excel File.
- **Read Only:** Check this option if the Excel file will be read only.

## File Summary

The screenshot shows the 'Edit Excel Properties' dialog box with the 'File Summary' tab selected. The 'Task Name' is 'Manipulate Excel'. The 'Excel File' path is 'C:\Users\karen\OneDrive - ChristianSteven Software\Maintenance all p'. The 'File Summary' tab contains fields for Title, Author, Subject, Date Created (set to Tuesday, August 14, 2018), and a large text area for Keywords/Comments. The 'OK' and 'Cancel' buttons are at the bottom right.

- **File Summary:** Any information written here will overwrite the existing file summary of the excel file.

## Options

The screenshot shows the 'Options' tab of the 'Edit Excel Properties' dialog box. It features a dropdown menu set to 'AFTER' followed by the text 'THE SCHEDULE'. Below this are two radio button options: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. The 'OK' and 'Cancel' buttons are at the bottom right.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### *Upload to SharePoint*

#### General

**Upload to Sharepoint**

Task Name  
Upload to SharePoint

**General** Options

Files  
Select file to upload to Sharepoint (you can use wild cards e.g. \*.pdf)  
C:\Users\karen\OneDrive - ChristianSteven Software\ChristianSteven Software Training Agenda.docx

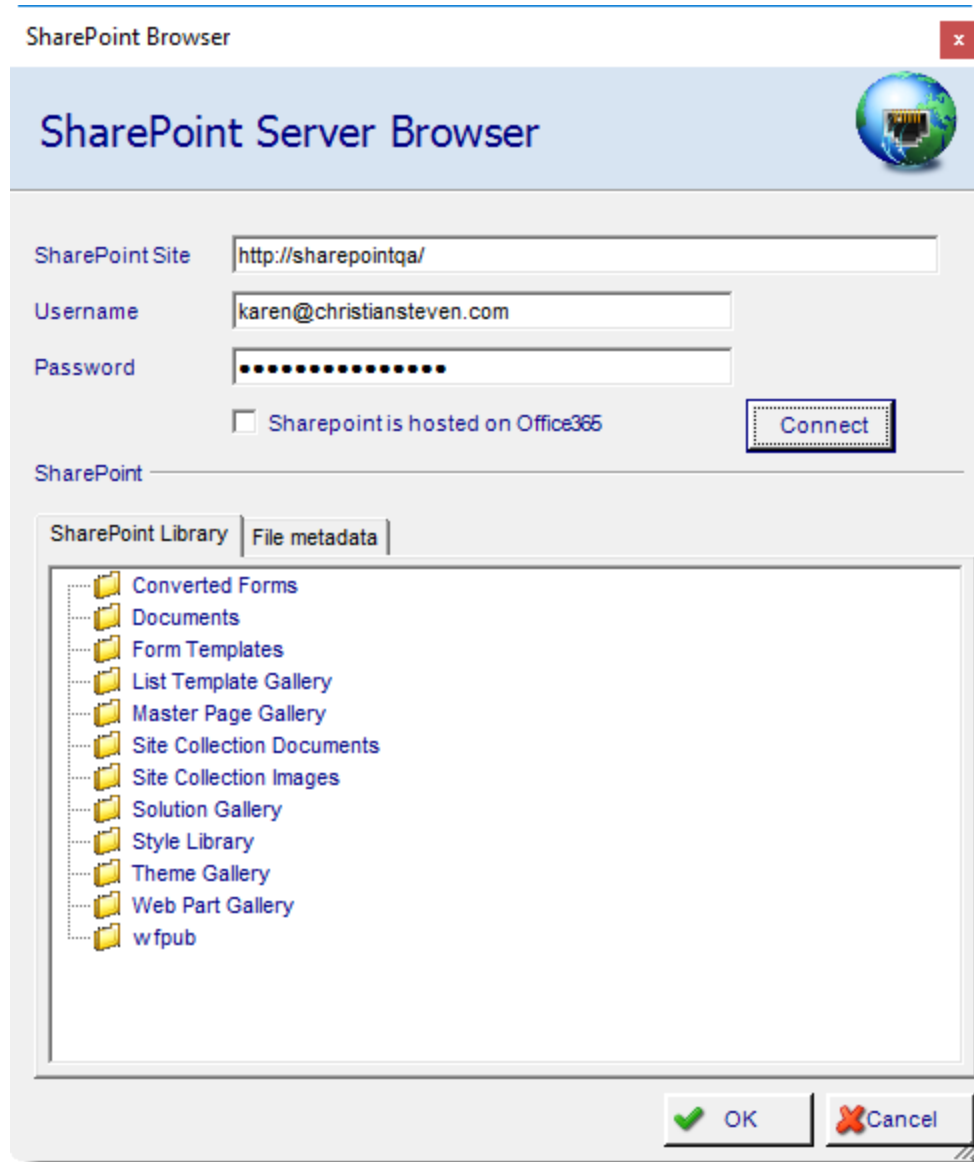
Sharepoint server library  
Sharepoint server  
http://sharepointqa/  
☐ Sharepoint hosted on Office365

Document library  
Form Templates

Metadata

OK Cancel

- **Task Name:** give the task a name.
- **Files:** Use (...) button to navigate to the files that you want to export to the SharePoint Server.
- **SharePoint Server Library:** It will appear the SharePoint Site.
- **SharePoint hosted on Office 365:** Check this option if the SharePoint Server is hosted on office 365.
- **Document Library:** Use (...) button to open the SharePoint Connection Window.



- **SharePoint Server Browser:** Complete the SharePoint Information and navigate to the required Document library.
- **Metadata:** File Metadata Can be uploaded as well. Simply add the column names and values as needed.

**Edit SharePoint folder**

SharePoint Library

File Metadata

Column Name	Column Value

OK Cancel

## Options

General **Options**

AFTER THE SCHEDULE

☒ After Successful Report Delivery  
☐ After Successful Report Production

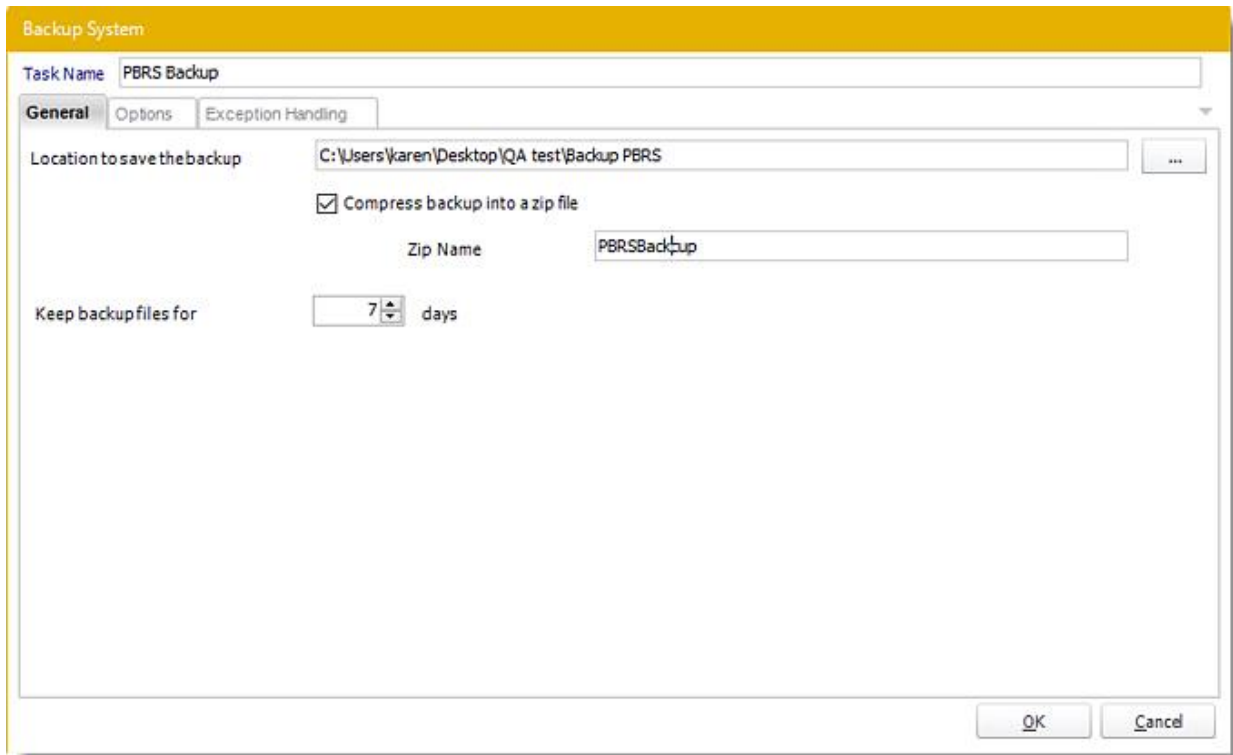
OK Cancel

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Backup System

### General

- Use this task to set up automated system backups.



The screenshot shows the 'Backup System' dialog box with the 'General' tab selected. The 'Task Name' field is set to 'PBRs Backup'. The 'Location to save the backup' field shows the path 'C:\Users\karen\Desktop\QA test\Backup PBRs'. The 'Compress backup into a zip file' checkbox is checked. The 'Zip Name' field is set to 'PBRsBackup'. The 'Keep backup files for' field is set to '7' days. The 'OK' and 'Cancel' buttons are at the bottom right.

- **Task Name:** Give the task a name.
- **Location to save the backup:** Use the (...) button to search for the file location path for the backup.
- **Compress backup into a zip file:** Check this option to compress backup into a zip file.
- **Zip Name:** Enter the Zip file name.
- **Keep backup files for 'X' days:** Enter the number of days to keep the backup files.

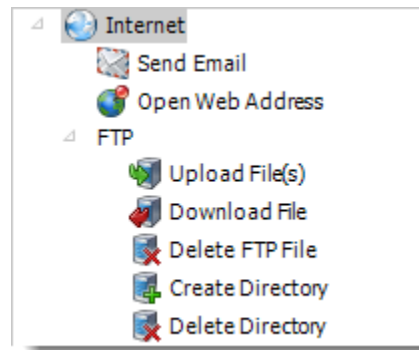
### Options

- In this section, you have the option to run this task before, after or both.

### Exception Handling

- If the System Backup fails, this option will treat the task as an error and follow the appropriate action.
- Select an action from the task list. This task will be executed when the System Backup fails.
  - For more information about tasks, [click here](#).

## Internet Tasks



- The internet module enables you to automate web related tasks. Auto Downloading links, uploading files via FTP, and sending emails can be accomplished here.

## Send Email

**Send an Email**

Task Name:

**General** | Options

To...:

Cc...:

Bcc...:

Attach:

Subject:

Verdana | 12 | **B** *I* U |

Hello,

Here is your daily report of <[m]CurrentDate;yyyyMMddHHmm>.

Sincerely,

**Management Team**

☐ Throw error and do not send the email if attachments are missing

Mail Format:  SMTP Server:

Customize sender details (optional)

Name:

Address:

**Insert**

- PBRs Constants
  - Current Group Value
  - Current Temp File Path
  - CurrentDate**
  - CurrentDateTime
  - CurrentDay
  - CurrentMonth
  - CurrentMonthName
  - CurrentScheduleName
  - CurrentShortMonthName

Options (if any)

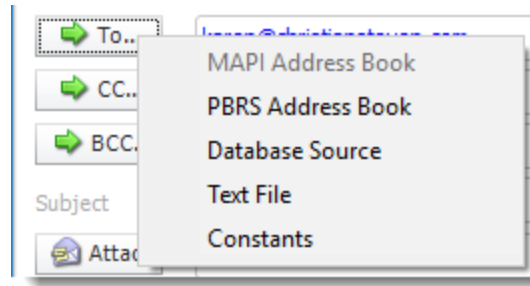
Adjust value by (days):

Date/Time Format:

### General

- **Task Name:** Give the task a name.
- **To, CC, and BCC:**





- Choose from:
  - **MAPI (Outlook) address book (Only available if you are using MAPI):** Select one or more email addresses or groups.
  - **PBRS Address Book:** Select one or more email addresses or groups.
  - **Database Source:** Build a SQL query to pick the email address or addresses from a database.
  - **Text File:** Store your email addresses as a standard mailing list in a text file (Format: no delimiters, each email address on a new line)
  - **Constants**
  - Or simply type in the email address.

You can use [Inserts Menu](#) at any time if required.

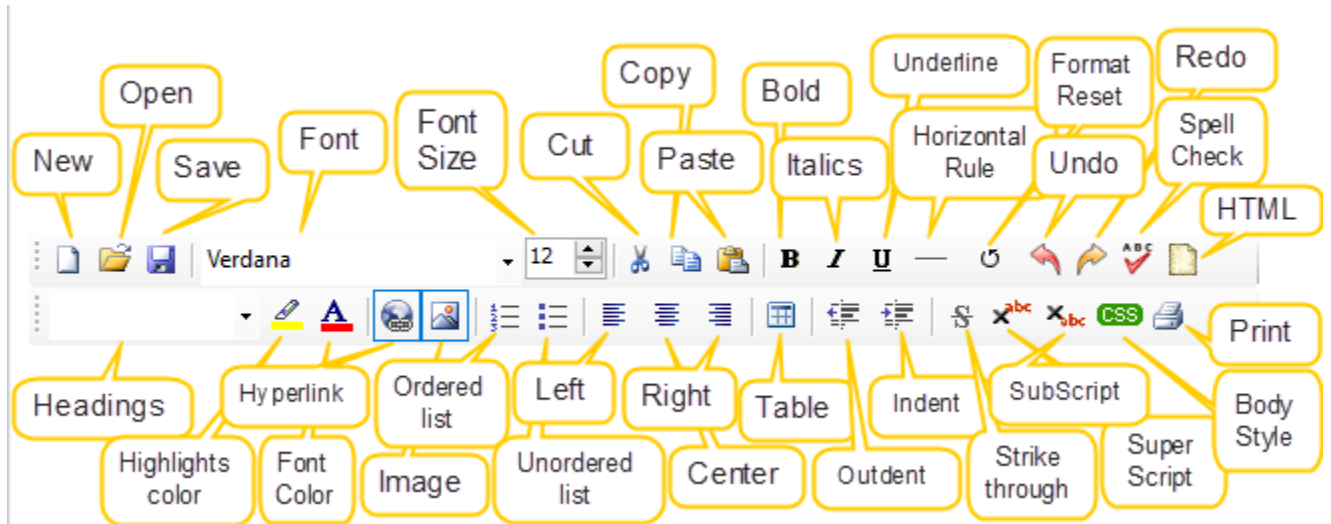
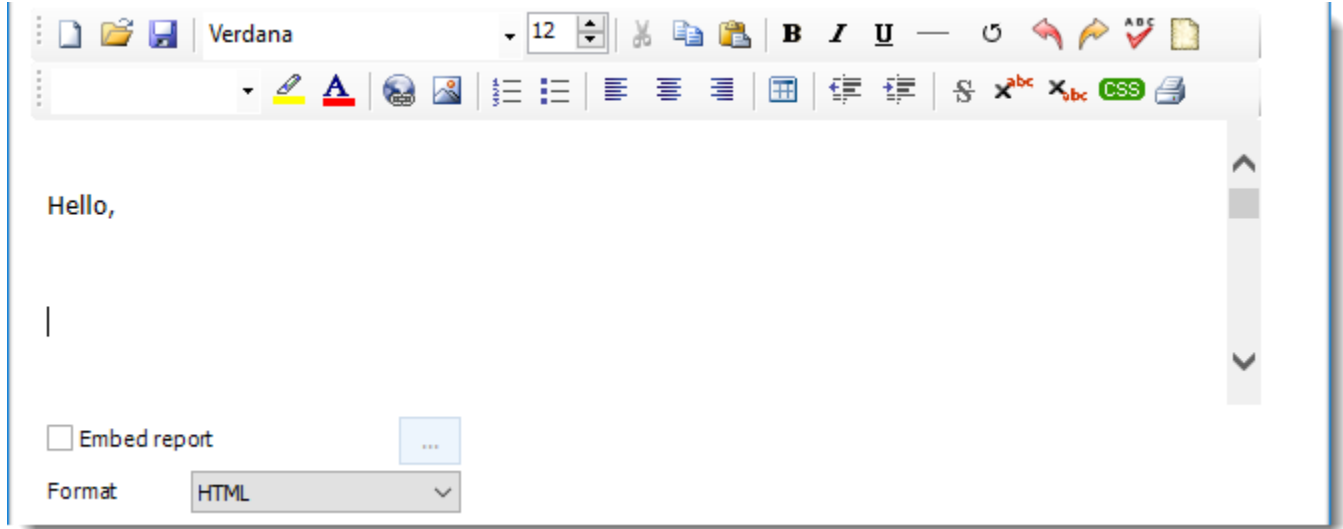
- **Subject:** Enter a subject Or right-click and select Insert to insert constants, database values and defaults.
  - **Attach:** Click to select an attachment. Or right-click and select Insert to insert constants, database values and defaults.
    - *Hint: Web addresses can be attached as well.*
- **Body:** Type in your email. Or right-click and select Insert to insert constants, database values and email defaults. For more information on Insert function, click [here](#).
- **Mail Format:** Choose from HTML or Text.
  - **Text Format:** In this format it will be just plain message.

Hello, |

☐ Embed report

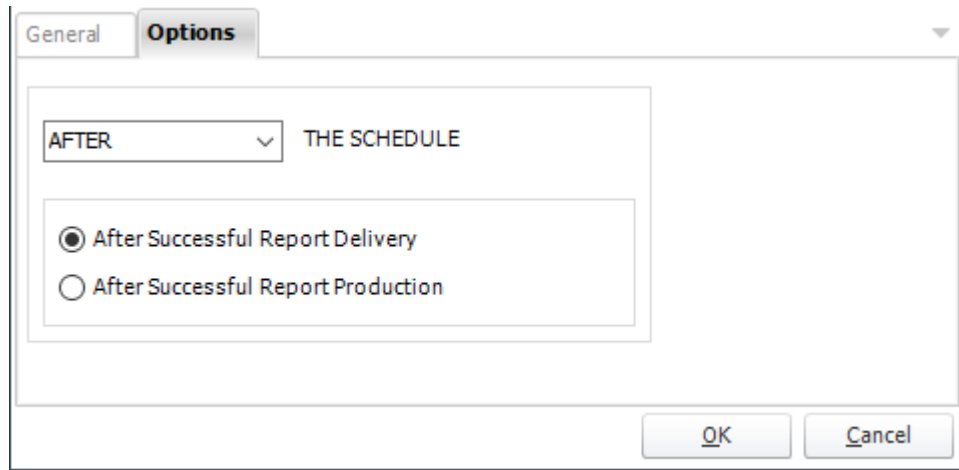
Format: TEXT

- **HTML Format:** In this format, you can format the message.





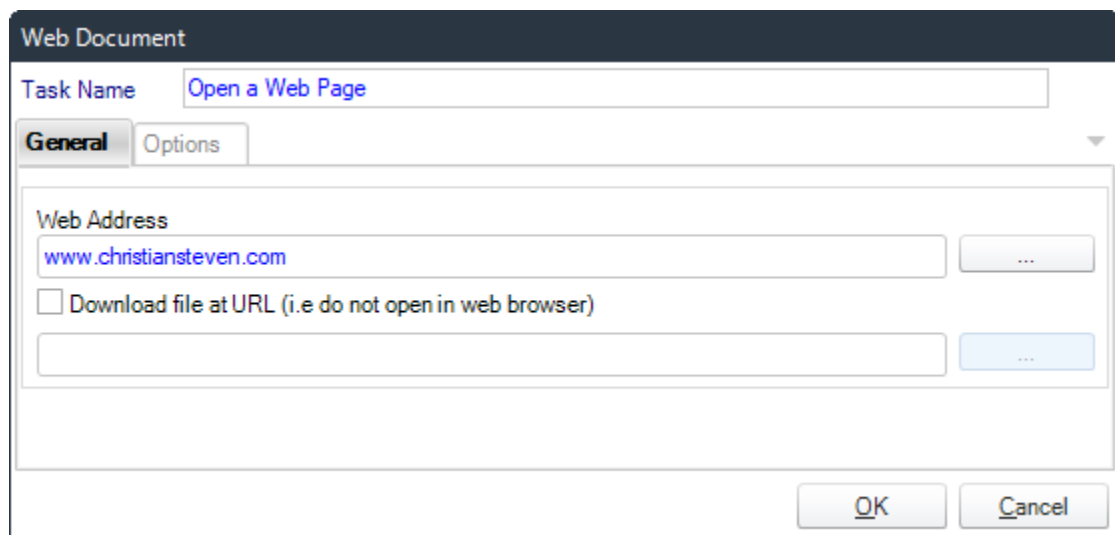
## Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Open Web Address

### General



- Use this task to open a web page.
- **Task Name:** Give the task a name.
- **Web Address:** Enter the Web address of the website that you want to open.

*Tip: If you are not sure the full address, click the browse button. This will start your web browser. Navigate to the page you wish. Exit your browser and the page name will populate the field automatically.*

- **Download file at URL:** Use this option to download a file from a website instead of opening a web page.

Options

The screenshot shows a dialog box with two tabs: 'General' and 'Options'. The 'Options' tab is active. It contains a dropdown menu with 'AFTER' selected, followed by the text 'THE SCHEDULE'. Below this, there are two radio button options: 'After Successful Report Delivery' (selected) and 'After Successful Report Production'. At the bottom right are 'OK' and 'Cancel' buttons.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## FTP

- Use these options to upload and download files from the FTP server. Other options available here are to create directories and delete directories.

### FTP - Upload File(s)

General

Simple

FTP Upload files

Task Name: Upload File

General Options

☒ Simple ☐ Advanced

Files

C:\Users\karen\OneDrive - ChristianSteven Software\PBRS Installation Use...

+ -

Upload to...

General Certificate Proxy Server

FTP Server:

User Name: Password:

FTP Type: Port: 21

Verify

☒ Passive Mode ☐ ASCII mode ☐ Retry uploading if the transaction fails

FTP Directory: ...

OK Cancel

- **Task Name:** Give the task a name.
- Use (+) button to add files you would like to upload.
- **FTP Server:** Enter your FTP Credentials.

- **FTP Directory:** Click the browse button to connect to the server, navigate to the folder you wish to upload the files to.

Advanced

**FTP Upload files**

Task Name: Upload File

**General** Options

☐ Simple ☒ Advanced

File(s): C:\Users\karen\OneDrive - ChristianSteven Software\PBRS Installation User Manual.pdf ...

☒ Recursive

☒ Recreate Folder Structure

Upload to...

**General** Certificate Proxy Server

FTP Server:

User Name: Password:

FTP Type: Port: 21

Verify

☒ Passive Mode ☐ ASCII mode ☐ Retry uploading if the transaction fails

FTP Directory: ...

OK Cancel

- Use the Advanced view to use wildcards when selecting file(s) to be uploaded.
- **Files:** Use the browse button to add files you would like to upload.
- **Recursive:** This will search the folder and all sub folders.
- **Maintain Folder Structure:** Select this to ensure files of the same name are not overwritten and have the folder structure maintained. This is useful when using wildcards
- **FTP Server:** Enter your FTP Credentials.
- **FTP Directory:** Click the browse button to connect to the server, navigate to the folder you wish to upload the files to.

## Options

General Options

AFTER THE SCHEDULE

☒ After Successful Report Delivery

☐ After Successful Report Production

OK Cancel

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.



## FTP Download File

### General

FTP Download

Task Name  
Download FTP Files

General Options

General Certificate Proxy Server

FTP Server: www.myinc.com

User Name: KAngeles Password: .....

FTP Type: FTP - SSH (FTPS) Port: 22

Verify

☒ Passive Mode ☐ ASCII mode ☐ Retry uploading if the transaction fails

FTP Path:  
/Filepath/

Selected File  
Documents

☒ Recursive  
☒ Recreate Folder Structure

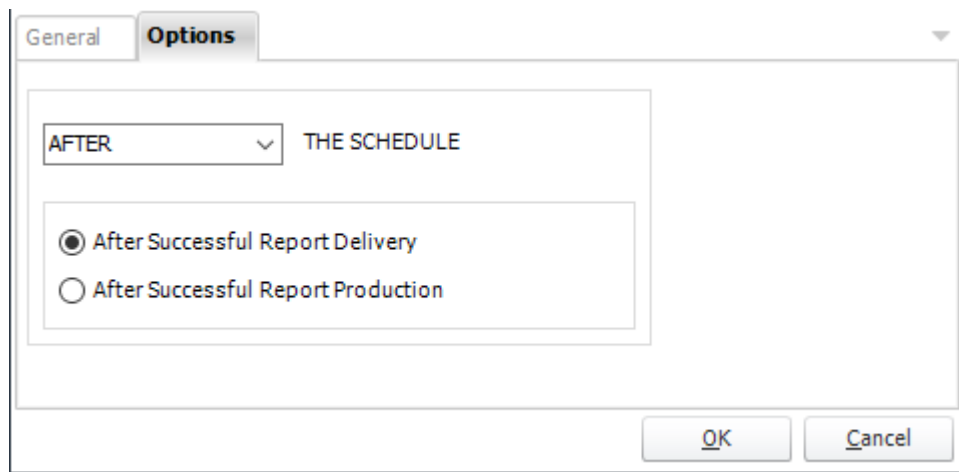
Download to this folder...  
C:\ManualDocumentsDownload

☐ Overwrite existing file

OK Cancel

- **Task Name:** Give the task a name
- **FTP Server:** Enter your FTP Credentials.
- **FTP Path:** Click the browse button to select the FTP path.
- **Selected File:** Select a file or folder or use wildcards to select the files to download.
- **Recursive:** This will search the folder and all sub folders.
- **Maintain Folder Structure:** Select this to ensure files of the same name are not overwritten and have the folder structure maintained. This is useful when using wildcards
- **FTP Directory:** Click the browse button to connect to the server, navigate to the folder you wish to upload the files to.
- **Download to this folder:** Specify which folder the files should be downloaded to.

## Options



General Options

AFTER THE SCHEDULE

☒ After Successful Report Delivery

☐ After Successful Report Production

OK Cancel

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Delete FTP File

### General

The screenshot shows the 'FTP Delete File' dialog box with the 'General' tab selected. The 'Task Name' field contains 'Delete FTP'. Below it, there are sub-tabs: 'General', 'Certificate', and 'Proxy Server'. The 'General' sub-tab is active, showing fields for 'FTP Server' (www.myinc.com), 'User Name' (KAngelos), 'Password' (masked with dots), 'FTP Type' (FTP - SSH (FTPS) with a dropdown arrow), and 'Port' (22 with a spinner). There is a 'Verify' button below the port field. At the bottom of this section are three checkboxes: 'Passive Mode' (checked), 'ASCII mode' (unchecked), and 'Retry uploading if the transaction fails' (unchecked). The 'FTP File Path' field contains '//Documents/' and has a browse button (...). At the bottom right are 'OK' and 'Cancel' buttons.

- Use this task to delete a file on an FTP server.
- **Task Name:** Give the task a name.
- **FTP Server:** Enter your FTP Credentials.
- **Retry uploading if the transaction fails:** this option will retry uploading if the transaction fails automatically.
- **FTP File Path:** Use (...) button to navigate to the files that you want to be deleted.

*Tip: You can right click and insert Constants and database values. You may also use wildcards e.g. my\*abc\*. When doing this please remember that most FTP server are case sensitive.*

### Options

The screenshot shows the 'Options' tab of the 'FTP Delete File' dialog box. It features a dropdown menu set to 'AFTER' followed by the text 'THE SCHEDULE'. Below this are two radio button options: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right are 'OK' and 'Cancel' buttons.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### FTP Create Directory

#### General

The screenshot shows the 'FTP Create Directory' dialog box. At the top, the 'Task Name' is 'Create FTP Directory'. Below this, there are two tabs: 'General' and 'Options'. The 'General' tab is active, showing a sub-dialog with three sub-tabs: 'General', 'Certificate', and 'Proxy Server'. The 'General' sub-tab is active, displaying the following fields: 'FTP Server' (ftpservice.com), 'User Name' (Admin), 'Password' (masked with dots), 'FTP Type' (FTP - SSH (FTPS)), and 'Port' (22). There are also three checkboxes: 'Passive Mode' (checked), 'ASCII mode' (unchecked), and 'Retry uploading if the transaction fails' (unchecked). Below these is a 'Base FTP Directory' field with a browse button (...). At the bottom of the sub-dialog is the 'New Directory Name' field, which contains 'New Folder'. The main dialog has 'OK' and 'Cancel' buttons at the bottom right.

- Use this task to create a folder on an FTP server.
- **Task Name:** Give the task a name.
- **FTP Server:** Enter your FTP Credentials.
- **Retry uploading if the transaction fails:** This option will retry uploading if the transaction fails automatically.
- **Base FTP Directory:** Use (...) button to locate the base FTP Directory.

*Tip: Leave this empty to select the root directory.*

- **New Directory Name:** Specify the name of the directory to create.

## Options

General Options

AFTER THE SCHEDULE

☒ After Successful Report Delivery

☐ After Successful Report Production

OK Cancel

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## FTP - Delete Directory

### General

The screenshot shows the 'FTP Delete Directory' dialog box with the 'General' tab selected. The 'Task Name' field contains 'Delete FTP Directory'. Below it, there are sub-tabs: 'General', 'Certificate', and 'Proxy Server'. The 'General' sub-tab is active, showing fields for 'FTP Server' (ftpserver.com), 'User Name' (Admin), 'Password' (masked with dots), 'FTP Type' (FTP - SSH (FTPS)), and 'Port' (22). There are checkboxes for 'Passive Mode' (checked), 'ASCII mode', and 'Retry uploading if the transaction fails'. A 'Verify' button is also present. At the bottom, there is a field 'Delete this Directory ...' containing '\old reports' and a button with three dots. The 'OK' and 'Cancel' buttons are at the bottom right.

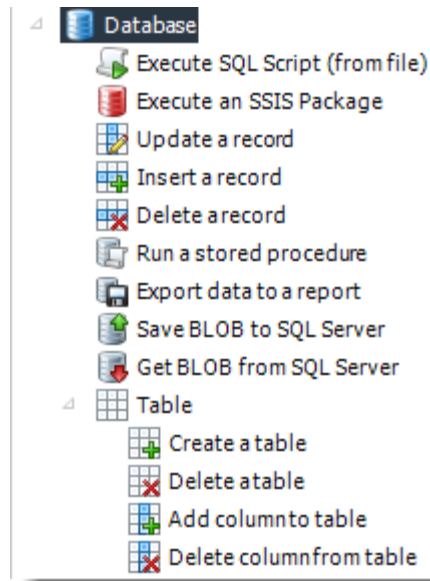
- Use this task to delete a directory on an FTP server.
- **Task Name:** Give the task a name.
- **FTP Server:** Enter your FTP Credentials.
- **Retry uploading if the transaction fails:** This option will retry uploading if the transaction fails automatically.
- **Delete this Directory:** Specify the name of the directory to create.

### Options

The screenshot shows the 'Options' tab of the 'FTP Delete Directory' dialog box. It features a dropdown menu set to 'AFTER' followed by the text 'THE SCHEDULE'. Below this, there are two radio button options: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. The 'OK' and 'Cancel' buttons are at the bottom right.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Database Tasks



- One of the most powerful features in PBRS, The Database module forms a core part of PBRS's Data integration capabilities.
- With the ability to automatically update databases, create tables, and edit records, you can automate thousands of database processes.

*Tip: Combine the Database Tasks with the Event Based Schedule to create database alerts and data migration processes.*

**IMPORTANT:** These tasks will make modifications to database tables which, in some cases, may be irreversible. Please ensure that you review the resulting scripts and test them thoroughly on a Test system before committing them to your production (live) system.

*Make sure you take a full backup of your database before any testing.*

## Execute SQL Script (from file)

SQL Script

Task Name: Execute my SQL Script

General Options

ODBC Datasource Name: SQL-RD Samples

Authentication

User ID: Password:

Connect

Script Location: C:\Users\karen\Downloads\Schedules With Last Run.sql

Preview

```
SELECT "folders"."FolderName", "ScheduleHistory"."EntryDate", "ReportAttr"."ReportName"
FROM "CRD"."dbo"."ScheduleHistory" "ScheduleHistory" INNER JOIN ("CRD"."dbo"."folders" "folders" INNER
JOIN "CRD"."dbo"."ReportAttr" "ReportAttr" ON "folders"."FolderID"="ReportAttr"."Parent") ON
"ScheduleHistory"."ReportID"="ReportAttr"."ReportID"
ORDER BY "folders"."FolderName"
```

OK Cancel

### General

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

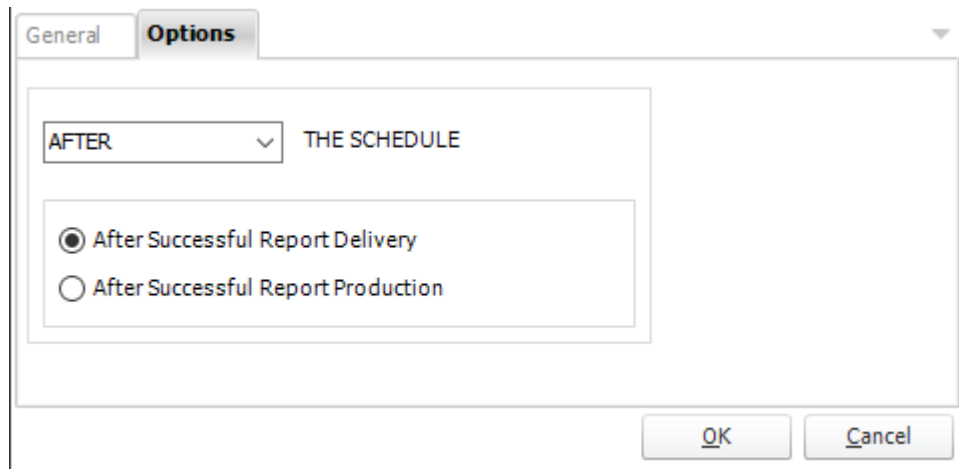
*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*



*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRS should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- **Script Location:** Browse to locate the script.
- Click **OK** to save the script.

Options



The screenshot shows a dialog box with two tabs: 'General' and 'Options'. The 'Options' tab is selected. Inside the 'Options' tab, there is a dropdown menu currently set to 'AFTER' with a downward arrow, followed by the text 'THE SCHEDULE'. Below this, there are two radio button options: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right of the dialog box are 'OK' and 'Cancel' buttons.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Execute an SSIS Package

General

SQL Server

*IMPORTANT: PBRS requires SQL Server Integration Services Standard or Enterprise X86 (32bit) installed on the PBRS machine. \*\*\*64bit is not supported\*\*\**

Execute an SSIS Package

Task Name

General Variables Options

SQL Server DTS Server Local File

SQL Server autoserver2012

User ID heat

Password \*\*\*\*

Package Name TCD\_ORDERS

Package Name Native

OK Cancel

- **Task Name:** Give the task a name.
- **SQL Server:** Enter the SQL Server credentials.
- **Package Name:** Select the package from the drop down list.
- Click **OK** to save.

## DTS Server

The screenshot shows the 'Execute an SSIS Package' dialog box. At the top, there's a 'Task Name' field. Below it are three tabs: 'General', 'Variables', and 'Options'. The 'General' tab is active. Under the 'General' tab, there's a sub-tab selector with 'SQL Server', 'DTS Server', and 'Local File'. The 'DTS Server' sub-tab is selected. In this sub-tab, there are two text input fields: 'DTS Server' containing 'autoserver2012' and 'Package Path' containing 'C:\Autoserver2012\Packages\'. Below these fields is a 'Package Name' label next to a dropdown menu. The dropdown menu is open, showing two options: 'Native' (which is highlighted) and 'DT Exec'. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

- **DTS Server:** Enter the DTS Server credentials.
- **Package Path:** Write down the package location.
- **Package Name:** Select the package from the drop down list.
- Click **OK** to save.

## Local File

The screenshot shows the 'Execute an SSIS Package' dialog box with the 'Local File' tab selected. The 'Task Name' field is empty. The 'Package Path' field contains 'C:\Users\karen\Downloads\SSIS Package.dtsx' and has a browse button (...). The 'Package Name' dropdown menu is set to 'Native'. The 'OK' and 'Cancel' buttons are at the bottom right.

Execute an SSIS Package

Task Name

**General** Variables Options

SQL Server DTS Server **Local File**

Package Path

Package Name

- **Package Path:** Click (...) to search the package location.
- **Package Name:** Select the package from the drop down list.
- Click **OK** to save.

## Variables

The screenshot shows the 'Execute an SSIS Package' dialog box with the 'Variables' tab selected. At the top, there is a 'Task Name' field. Below it are three tabs: 'General', 'Variables', and 'Options'. The 'Variables' tab contains a table with two columns: 'Name' and 'Value'. The first row has 'Customer' in the 'Name' column and 'C' in the 'Value' column. Below the table are two buttons: a red 'X' button and a green '+' button. At the bottom right are 'OK' and 'Cancel' buttons.

Name	Value
Customer	C
Employees	E
Customer	C

- Add and delete variables for the SSIS package.

## Options

The screenshot shows the 'Options' tab of the 'Execute an SSIS Package' dialog box. It features a dropdown menu set to 'AFTER' followed by the text 'THE SCHEDULE'. Below this is a group box containing two radio buttons: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right are 'OK' and 'Cancel' buttons.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Update a record

### General

Update database records

Task Name

**General** Options

DSN Name

UserID

Password

Connect...

← →

Skip OK Cancel

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- Click **green arrow** to continue.

Update database records

Task Name

**General** Options

Table containing records to update

Update this column

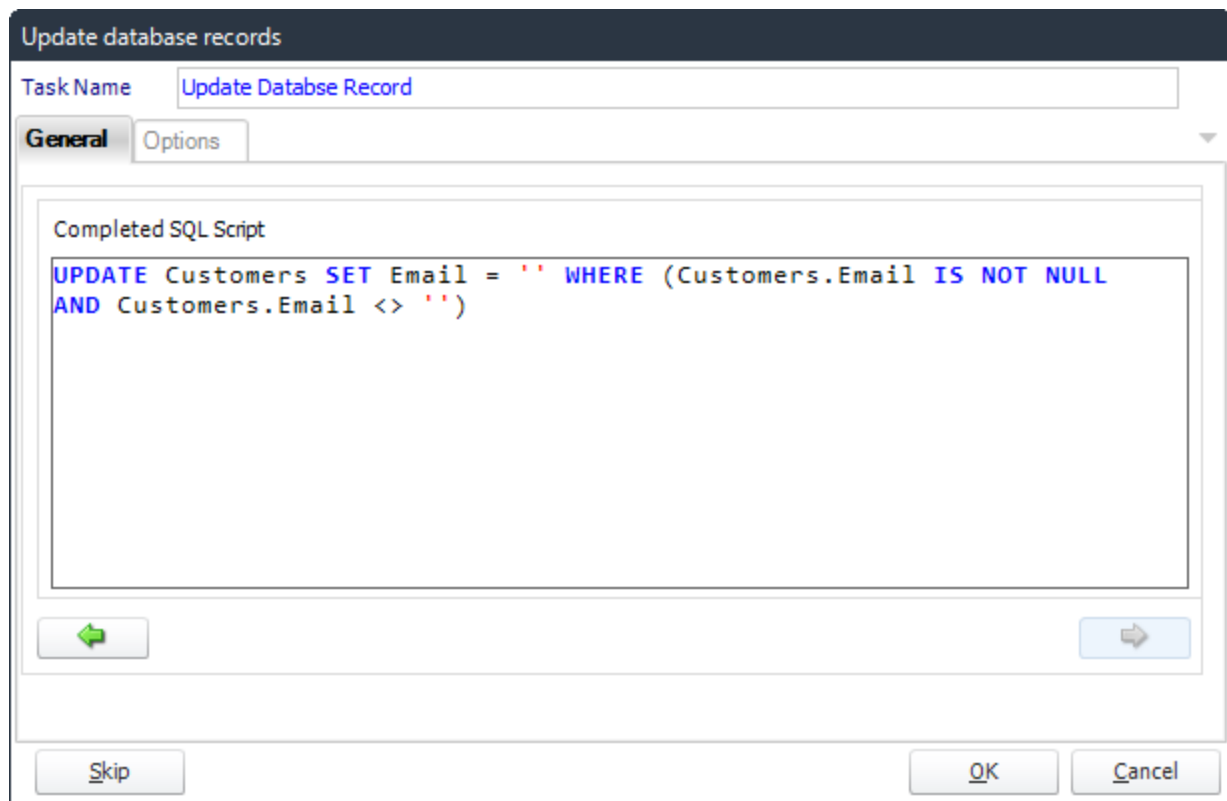
Set its value to

Set
Email = "

- **Table:** Select the table containing the record you wish to update.
- **Update this column:** Select the Column you wish to update.
- **Set its value to:** Enter the new value.

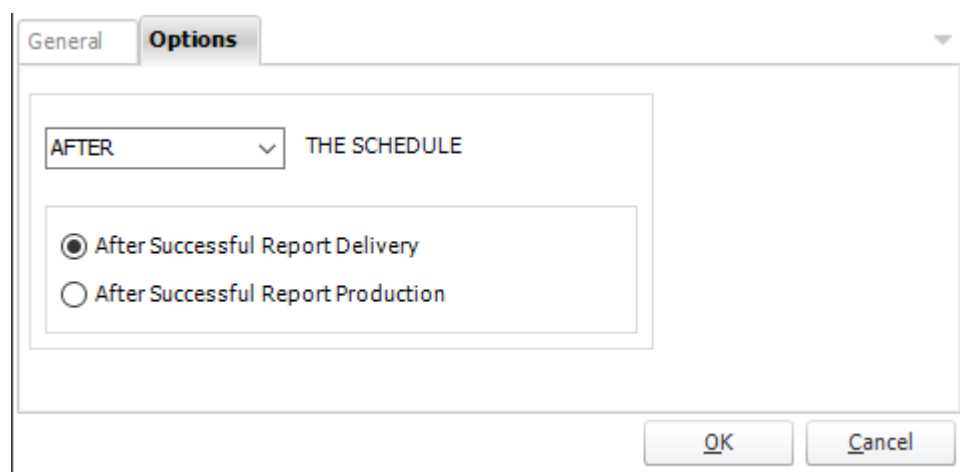
*Tip: Use Event or Data Driven data to update multiple records in the table. It is as easy as drag and drop!*

- Click **green down arrow** to add the change.
- Click **green right arrow** to continue.



- Review the completed script and make any modifications manually where required.
- Click **OK** to save the task.

#### Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.



### Insert a record

#### General

Insert a database record

Task Name

**General** Options

DSN Name

UserID

Password

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions, which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- Click **green arrow** to continue.



**Insert a database record**

Task Name



**General** Options

Table to insert into

Set this column's value  
 =  Value

Column	Value
HireDate	'11/15/1994 12:00:00 AM'
LastName	'Davolio'
FirstName	'Anne'
EmployeeID	3

- **Table:** Select the table to insert the record.
- **Column Value:** Select a column.
- **Value:** Provide a value.
- Click **green down arrow** to add to the list.
- Click **green right arrow** to continue.



Insert a database record

Task Name

**General** Options

Finalised Query

```
INSERT INTO Employees (HireDate, LastName, FirstName, EmployeeID)
VALUES ('11/15/1994 12:00:00 AM', 'Davolio', 'Anne', 3)
```

- Review the SQL statement and make modifications manually where required.
- Click **OK** to save the task.

#### Options

**General** **Options**

THE SCHEDULE

☒ After Successful Report Delivery  
☐ After Successful Report Production

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### *Delete a record*

#### General

The screenshot shows a dialog box titled "Delete database record(s)". It has two tabs: "General" and "Options". The "General" tab is active. Inside the "General" tab, there is a "Task Name" field at the top containing the text "Delete old Employees". Below this, there is a section for database connection details. It includes a "DSN Name" dropdown menu with "SQL-RD Samples" selected. Below the dropdown are two text input fields labeled "UserID" and "Password". A "Connect..." button is located below these fields. At the bottom of the dialog, there are three buttons: "Skip", "OK", and "Cancel". On the right side of the dialog, there is a yellow rectangular box highlighting a green right-pointing arrow button.

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- Click **green arrow** to continue.

Delete database record(s)

Task Name

**General** Options

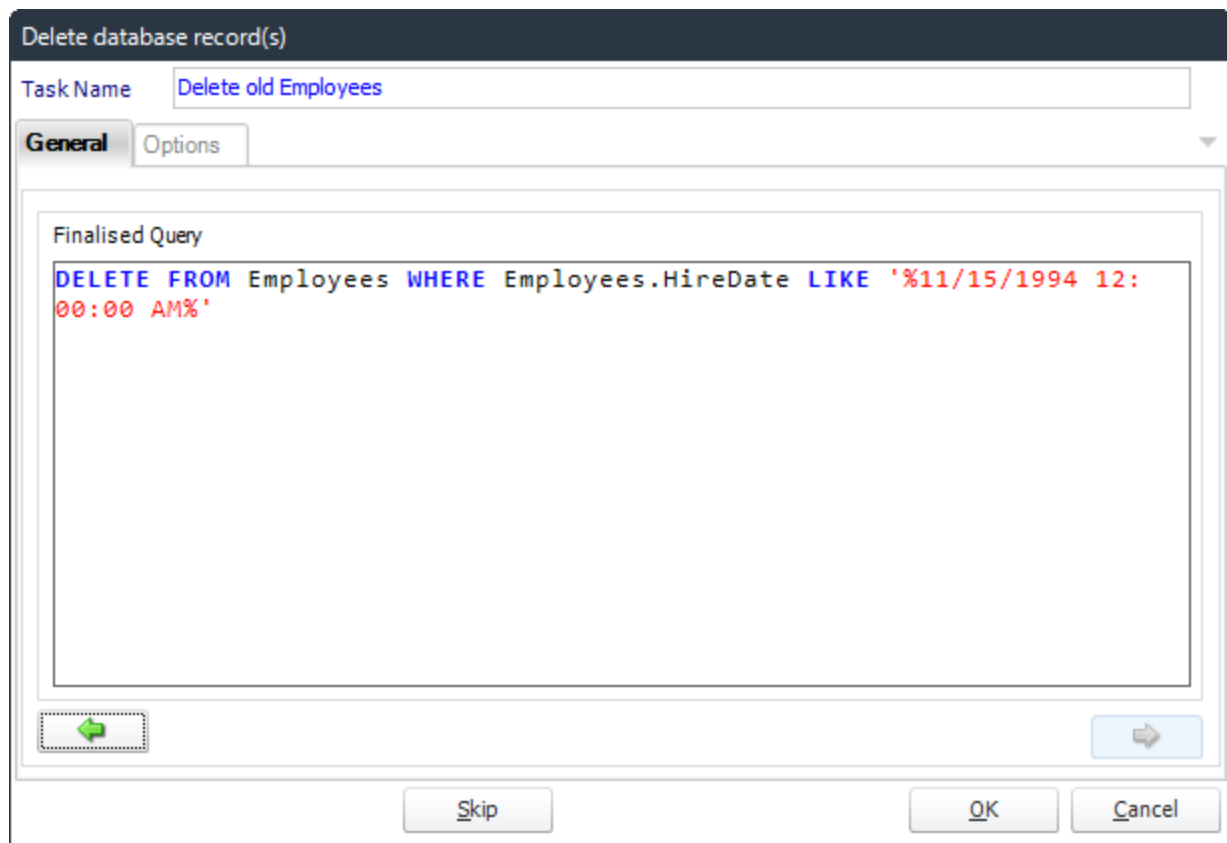
Select the table to delete from

Only delete records where

☒ And ☐ Or

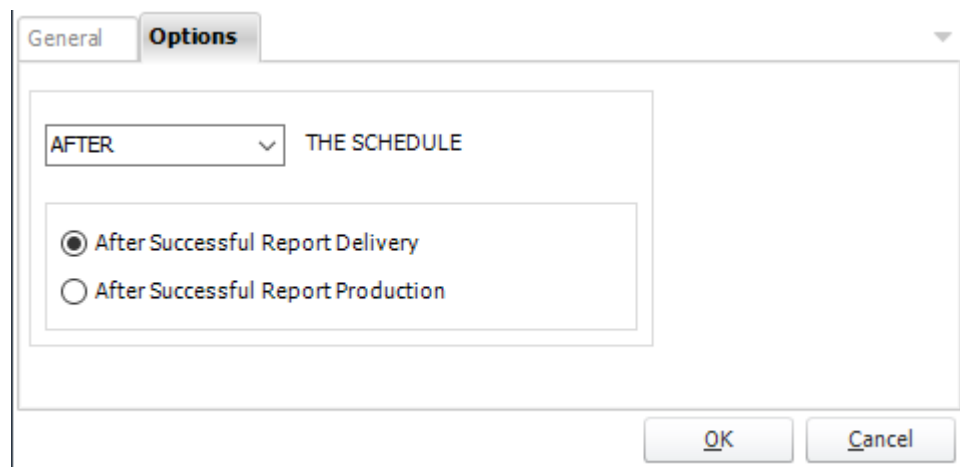
Criteria

- **Table:** Select the table to insert the record.
- **Column Value:** Select a column.
- **Value:** Provide a value.
- Click **green down arrow** to add to the list.
- Click **green right arrow** to continue.



- Review the SQL statement and make modifications manually where required.
- Click OK to save the task.

#### Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Run a stored procedure

### General

Run a SQL Stored Procedure

Task Name: Run my Stored Procedure

General Options

DSN Name: SQL-RD Samples

UserID:

Password:

Connect

Stored Procedure Details

Name: ~sq\_cCustomer Orders~sq\_cCustomer Orders Subform2

Parameters:

Timeout:

OK Cancel

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- Select a Stored Procedure from the list and enter any required parameters.

*For example, if you would normally run your stored procedure by using the query  
execute myproc para1 para2 para3*

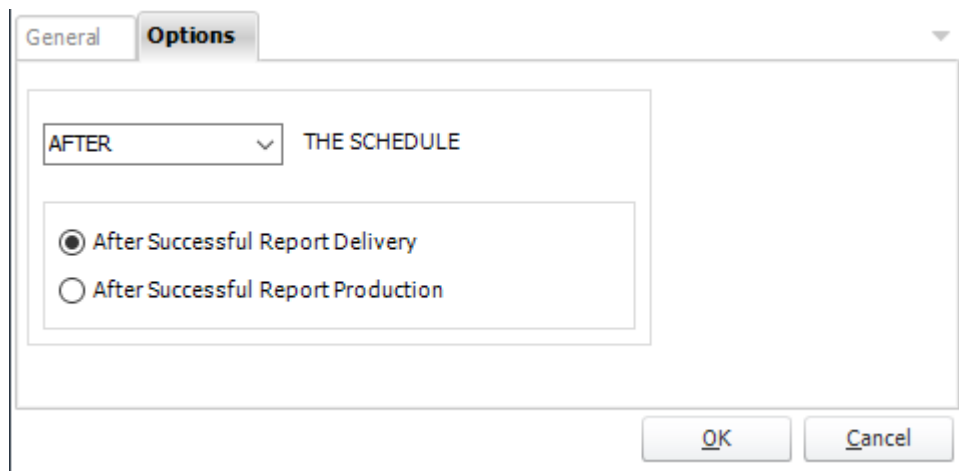
*then*

*Connect to the database and select "myproc" from the list.*

*Enter in the parameters box: para1 para2 para3*

- Click **OK** to save.

Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.



### Export data to a report

#### General

With this task, you can pull data directly from a data source and in any output format, then deliver the report to a destination.

#### Data Source

Export Data from Database

Task Name:

**General** Options

**Data Source** Destination

Data Source

DSN Name:

UserID:

Password:

Connect

SQL Query

Build

OK Cancel

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password*

are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.

Get values from database

DSN Name: SQL-RD Samples

UserID:

Password:

Connect

Select the table and the column that holds the required values

[Alphabetical List of Products] CategoryID

Simple Advanced

Only return records where

ProductName IS NOT EMPTY

And Or

Where

([Alphabetical List of Products].ProductName IS NOT NULL AND [Alphabetical List of...

Parse

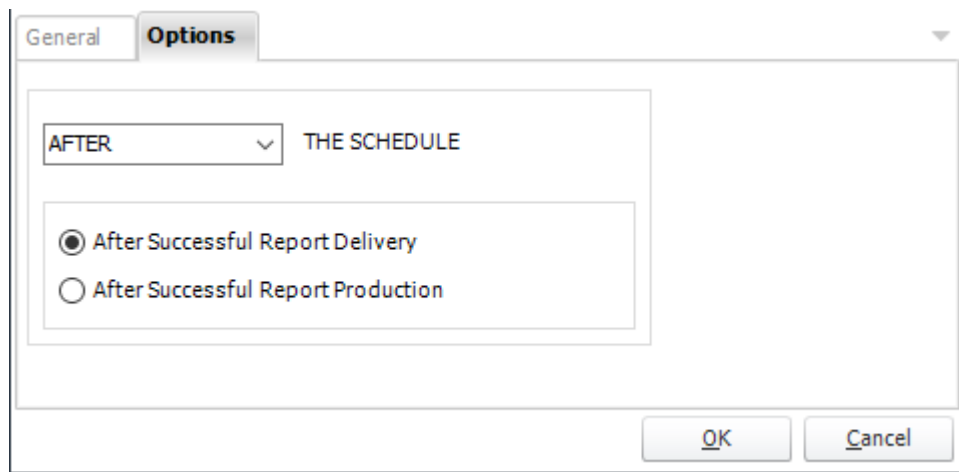
- Build your query using the Query Tool.
- **Parse:** Test the Query.

Destination

The screenshot shows a software window titled "Export Data from Database". At the top, there's a field labeled "Task Name" containing the text "Create a Report from Data". Below this are two tabs: "General" (which is selected) and "Options". Under the "General" tab, there's a section labeled "Data Source" with a dropdown menu currently set to "Destination". The main area of the dialog features a table with three columns: "Name", "Format", and an unlabeled column. To the right of the table is a vertical stack of buttons: "Add" (with a small downward arrow), "Edit", "Delete", "Import", a green upward-pointing arrow button, and a green downward-pointing arrow button. At the bottom right corner, there are "OK" and "Cancel" buttons.

- Go to the Destination Tab. There you can add a destination for the report.
- For more information of Destination, [click here](#).
- For more information of Output Formats, [click here](#).

## Options



General Options

AFTER THE SCHEDULE

☒ After Successful Report Delivery

☐ After Successful Report Production

OK Cancel

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Save BLOB to SQL Server

### General

Save File To SQL Server

Task Name: BLOB

**General** Options

SQL Server Connection Properties

Server Name: autoserver2012 Database: Database  
User Name: heat Password: \*\*\*\* Connect

Data

Select Table: OpportunityBase

Column: ActualCloseDate Value: |

Column	Value
ActualValue	OB-AV

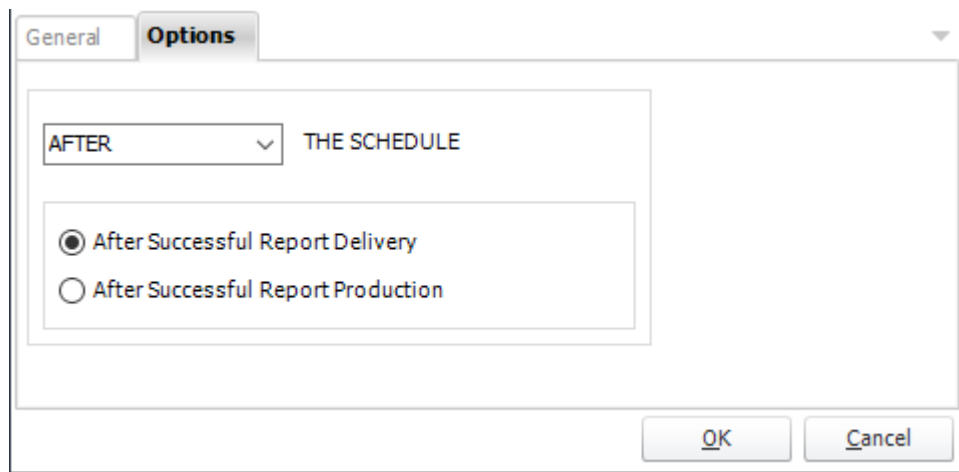
+

-

OK Cancel

- **Task Name:** Give the task a name.
- **SQL-Server Connection properties:** Enter the SQL Server credentials.
- **Table:** Select the table from the drop down list.
- **Column:** Select the column.
- **Value:** set the value of the column.
- Use **(+)** to add more columns a values as required.
- Click **OK** to save.

## Options



General Options

AFTER THE SCHEDULE

☒ After Successful Report Delivery

☐ After Successful Report Production

OK Cancel

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Get BLOB from SQL Server

### General

Download From SQL Server

Task Name

General

Options

SQL Server Connection Properties

Server Name

autoserver2012

Database

User Name

heat

Password

••••

Connect

Data

Select the table and column where the file is stored

Table

TeamBase

Column

Select the record where

Simple

Advanced

Name

=

John

AND

+

×

+

×

Parse

File location

Select where the file should be saved

File path

...

OK

Cancel

Download From SQL Server

Task Name

**General** Options

SQL Server Connection Properties

Server Name  Database

User Name  Password

Connect

Data

Select the table and column where the file is stored

Table  Column

Select the record where

Simple **Advanced**

`SELECT [TeamBase].[ ] FROM TeamBase WHERE Name = 'John'`

Parse

File location

Select where the file should be saved

File path  ...

OK Cancel

- **Task Name:** Give the task a name.
- **SQL-Server Connection properties:** Enter the SQL Server credentials
- **Table:** Select the table from the drop down list.

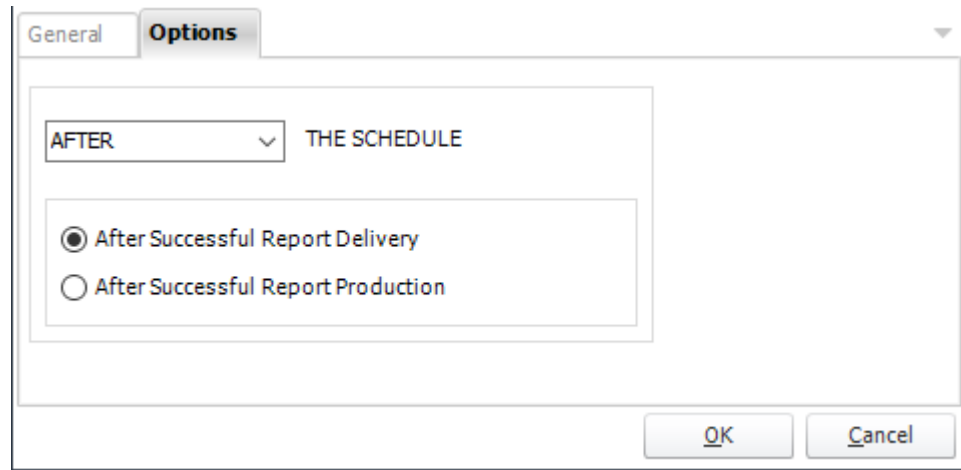
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Updated on 15 November 2021



- **Column:** Select the column.
- **Records:** Define which records are to be downloaded from the table using a SQL Query.
- **Parse:** Test the query, ensure the correct data is being shown.
- **File path:** Use (...) button to navigate to the folder where the data is to be stored.

#### Options



The screenshot shows a dialog box with two tabs: 'General' and 'Options'. The 'Options' tab is active. It contains a dropdown menu with 'AFTER' selected and a downward arrow, followed by the text 'THE SCHEDULE'. Below this, there are two radio button options: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

## Table

### Create a table

#### General

The screenshot shows a 'Create a new table' dialog box. The 'Task Name' field is set to 'Create a table'. The 'General' tab is selected. The 'DSN Name' dropdown is set to 'SQL-RD Samples'. The 'UserID' and 'Password' fields are empty. A 'Connect' button is highlighted with a yellow box. At the bottom right, a green arrow button is also highlighted with a yellow box. At the bottom, there are 'Skip', 'OK', and 'Cancel' buttons.

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRS should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- Click **green arrow** to continue.

The screenshot shows a 'Create a new table' dialog box. The 'Task Name' field contains 'Create a table'. The 'General' tab is selected. The 'Table Name' field contains 'Table Sample'. The 'Column Name' field contains 'Primary Contact', the 'Column Type' dropdown is set to 'TEXT', and the 'Column Size' field contains '30'. A green arrow button is highlighted next to the 'Column Size' field. Below the column information, the 'Column Headers' section shows '[PRIMARY CONTACT] VARCHAR(30)'. At the bottom, a green arrow button is highlighted next to the 'Skip' button.

- **Table Name:** Give the new table a name.
- **Column Name:** Give the column a name.
- **Column Type:** What type of data will be written in the column.
- **Column Size:** How many character allowed in column.
- Click **down arrow** to save the column information. Continue adding as many columns as required.



Create a new table

Task Name

**General** Options

Finalised Query

```
CREATE TABLE TABLE SAMPLE ([PRIMARY CONTACT] VARCHAR(30))
```

- Review the final script and make manual adjustments if required.
- Click **OK** to continue.

#### Options

**General** **Options**

AFTER

☒ After Successful Report Delivery  
☐ After Successful Report Production

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### *Delete a table*

#### General

The screenshot shows a 'Delete table' dialog box. At the top, the 'Task Name' is 'Delete Invoice'. Below this, there are two tabs: 'General' (selected) and 'Options'. In the 'General' tab, there is a 'DSN Name' dropdown menu set to 'SQL-RD Samples', followed by 'UserID' and 'Password' text input fields. A 'Connect' button is located below these fields. At the bottom of the dialog, there is a 'Table Name' dropdown menu set to 'Invoices'. A warning message at the bottom of the dialog states: 'Warning: The selected table will be deleted from the database. This cannot be undone.' The 'OK' and 'Cancel' buttons are at the bottom right.

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- **Table Name:** Select the table you wish to delete from the list.
- Click **OK** to save.

*\*Important\* This operation CANNOT be undone. Be sure of your settings before you commit to this task. It is highly recommended that you backup up database as well.*

Options

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### Add column to table

#### General

The screenshot shows a 'Modify Table' dialog box with a dark title bar. Below the title bar is a 'Task Name' field containing the text 'Add a new column'. There are two tabs: 'General' (selected) and 'Options'. Inside the 'General' tab, there is a 'DSN Name' dropdown menu showing 'SQL-RD Samples'. Below this are 'UserID' and 'Password' text input fields, both of which are empty. A 'Connect' button is centered below these fields. At the bottom of the dialog, there are five buttons: a left-pointing arrow, a right-pointing arrow, a 'Skip' button, an 'OK' button, and a 'Cancel' button.

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.

- Click **green arrow** to continue.

**Modify Table**

Task Name: Add a new column

**General** | Options

Please select the table to modify  
Invoices

How would like to modify the table  
ADD COLUMN

Column Name:

Type: DATETIME

Size: 0

← →

Skip OK Cancel

- **Task Name:** Give the task a name.
- **Table to Modify:** Select the Table that you need to modify.
- **How to modify the Table:** Select ADD COLUMN.
- **Column Name:** Give the column a name.
- **Type:** Select the type of data that will be written in the column.
- **Size:** How many characters should be allowed in the column.
- Click **green arrow** to continue.



Modify Table

Task Name

**General** Options

Finalised Query

```
ALTER TABLE INVOICES ADD COLUMN DATE PROCESSED
```

- Review the script and make modifications manually if required.
- Click **OK** to save.

#### Options

**Options**

AFTER THE SCHEDULE

☒ After Successful Report Delivery  
☐ After Successful Report Production

- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

### *Delete column from table*

General

The screenshot shows a 'Modify Table' dialog box with a dark title bar. Below the title bar is a 'Task Name' text box containing 'Delete column'. Underneath are two tabs: 'General' (selected) and 'Options'. The 'General' tab contains a 'DSN Name' dropdown menu with 'SQL-RD Samples' selected. Below this are 'UserID' and 'Password' text boxes. A 'Connect' button is centered below these fields. At the bottom of the dialog are three buttons: 'Skip', 'OK', and 'Cancel'.

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

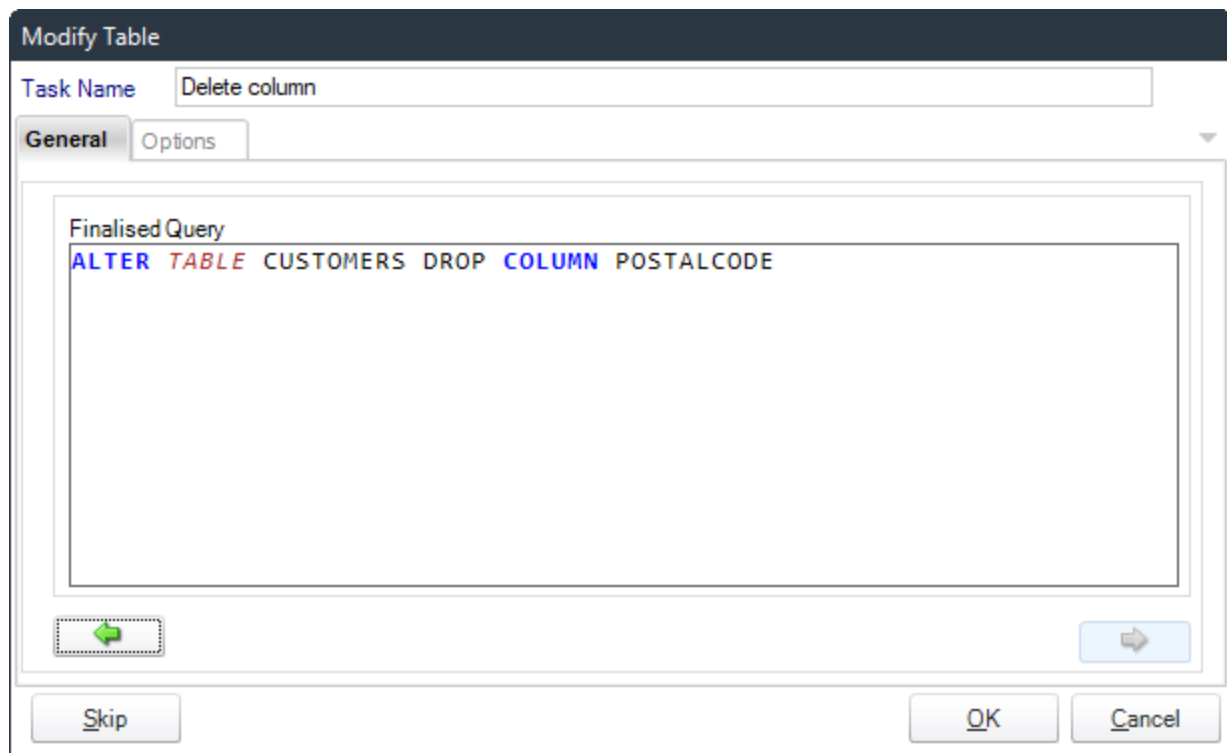
*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- Click **green arrow** to continue.

The screenshot shows a 'Modify Table' dialog box with the following details:

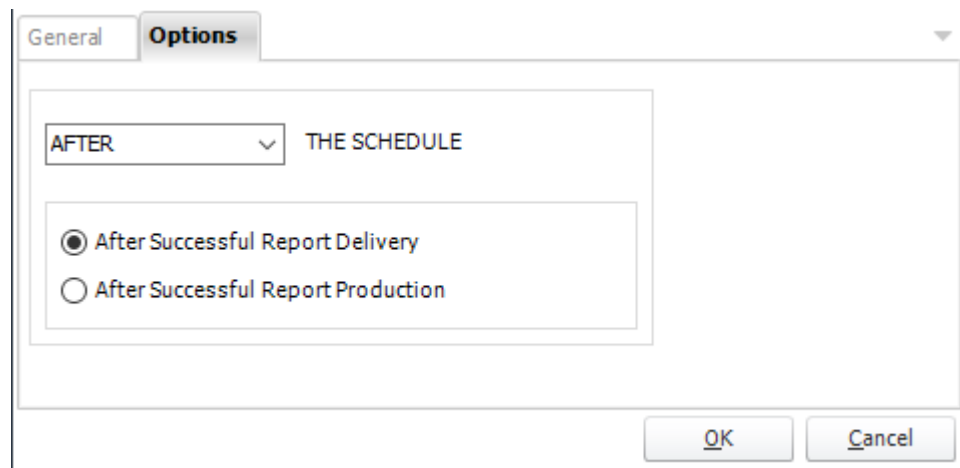
- Task Name:** Delete column
- General Tab:**
  - Please select the table to modify:** Customers
  - How would like to modify the table:** DROP COLUMN
  - Column Name:** PostalCode
  - Type:** (greyed out)
  - Size:** 0 (greyed out)
- Navigation:** Green arrow buttons on the left and right sides.
- Buttons:** Skip, OK, and Cancel at the bottom.

- **Task Name:** Give the task a name.
- **Table to Modify:** Select the Table that you need to modify.
- **How to modify the Table:** Select DROP COLUMN.
- **Column Name:** Select the column that needs to be deleted.
- **Type:** This will be greyed out.
- **Size:** This will be greyed out.
- Click **green arrow** to continue.



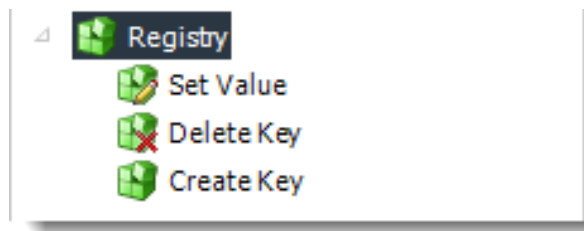
- Review the script and make modifications manually if required.
- Click **OK** to save.

#### Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

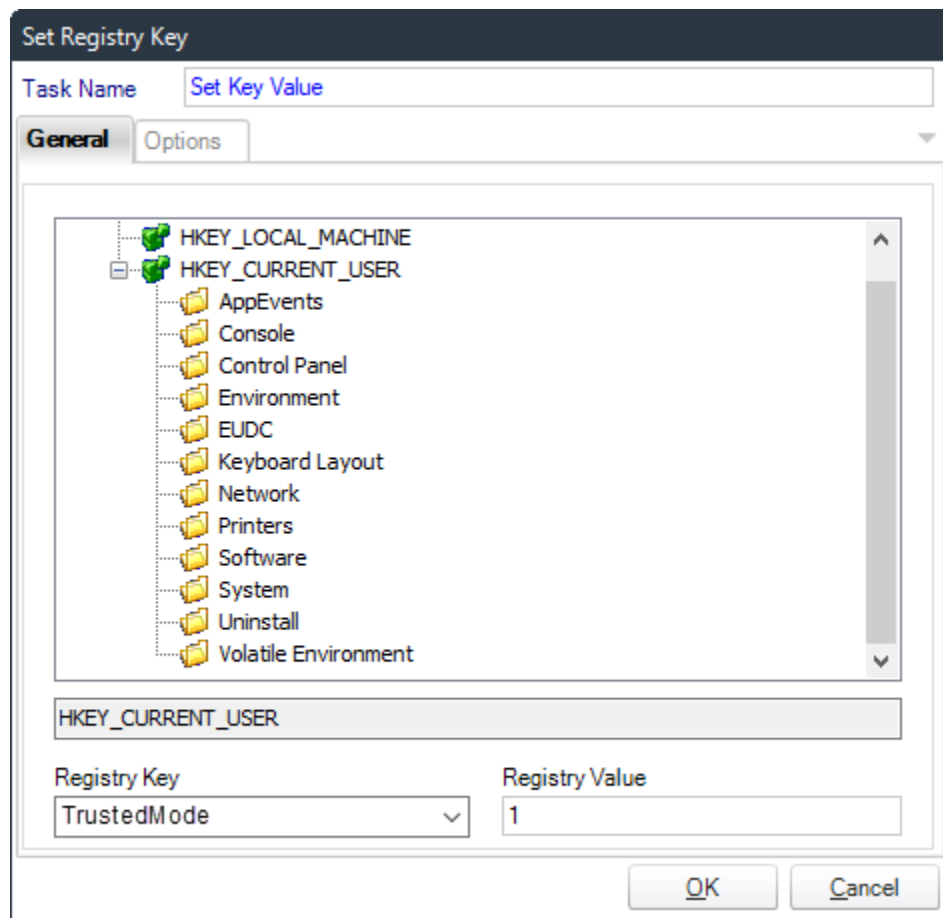
## Registry Tasks



- Registry Tasks enable you to create registry keys, set values, and more. This a powerful module and only those knowledgeable of windows and their systems should use this functionality.

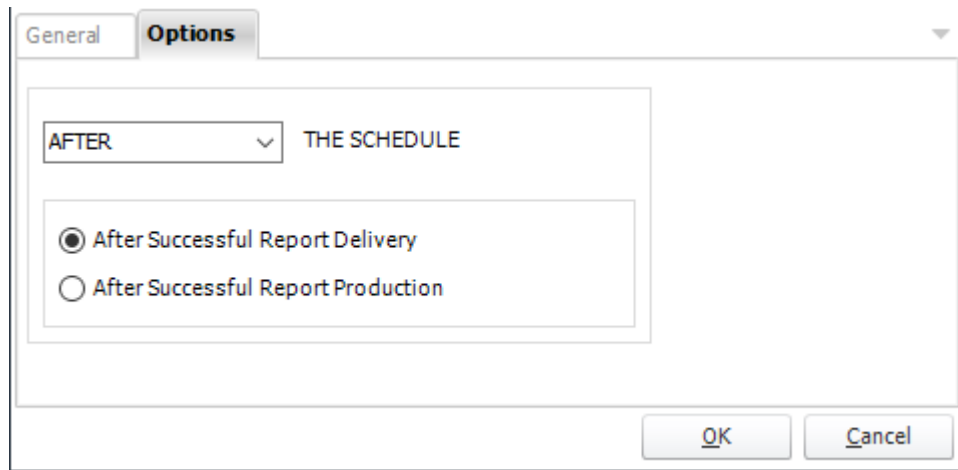
### *Set Value*

#### General



- **Task Name:** Give the Task a name.
- **Registry Key:** Select the registry key from the drop down menu.
- **Registry Value:** Enter the new value.
- Click **OK** to save.

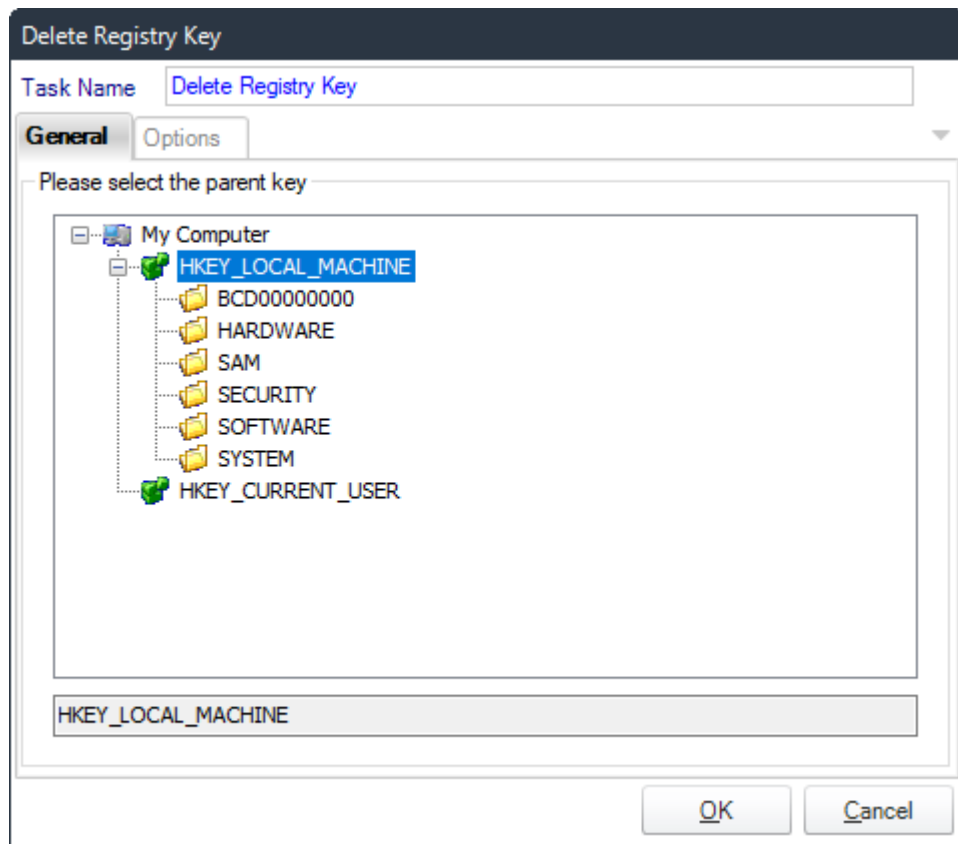
## Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

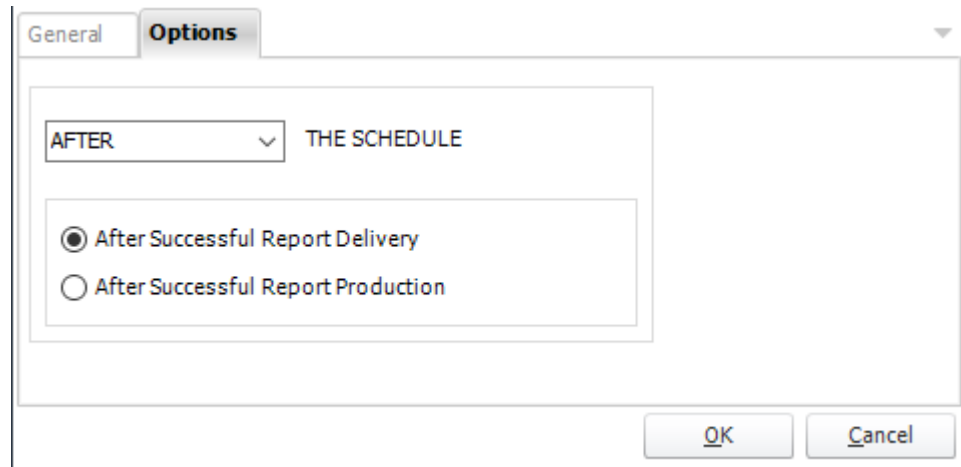
## Delete Key

### General



- **Task Name:** Give the Task a name.
- **General:** navigate to the key that needs to be deleted.
- Click **OK** to save.

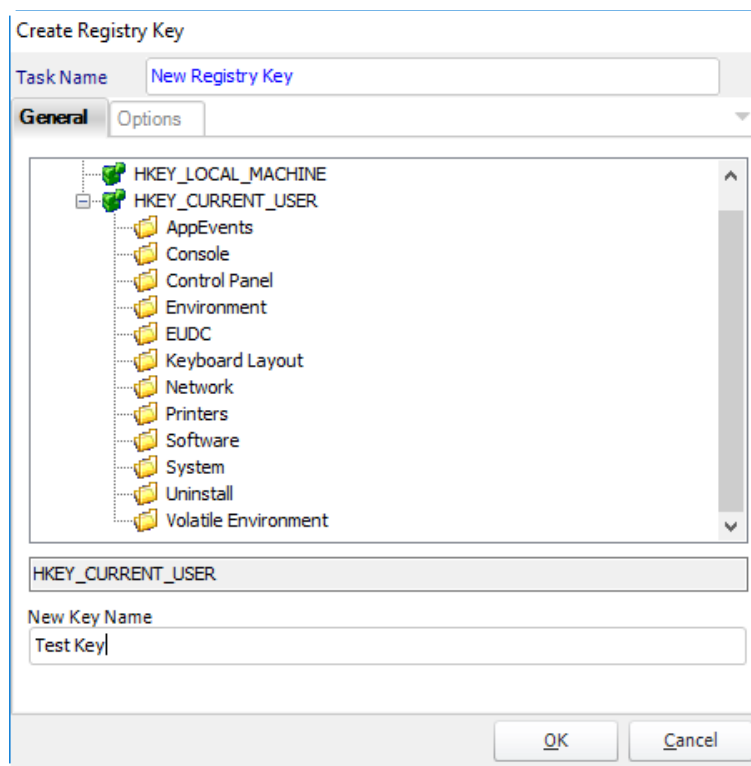
#### Options



- In this section, you have the option to run this task before, after or you can choose both the schedules executes.

#### Create Key

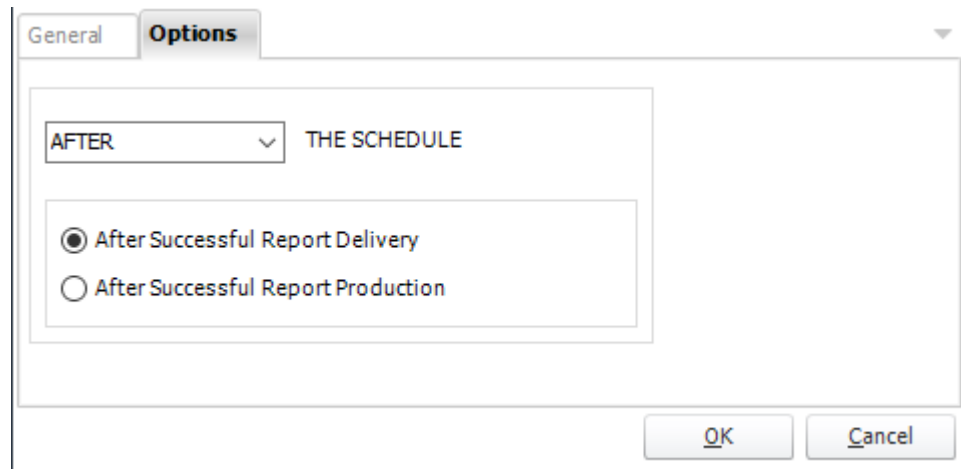
##### General



- **Task Name:** Give the Task a name
- Navigate to the base key you would like to add a sub-key to.
- **New Key Name:** Enter the name for the new key
- Click **OK** when you are done.

*Hint: To create a new key and assign it a value, you must first create the key, then use the Set Value task to set the value for this new key.*

#### Options



The screenshot shows a dialog box with two tabs: 'General' and 'Options'. The 'Options' tab is active. Inside the 'Options' tab, there is a dropdown menu with 'AFTER' selected, followed by the text 'THE SCHEDULE'. Below this, there are two radio button options: 'After Successful Report Delivery' (which is selected) and 'After Successful Report Production'. At the bottom right of the dialog box are 'OK' and 'Cancel' buttons.

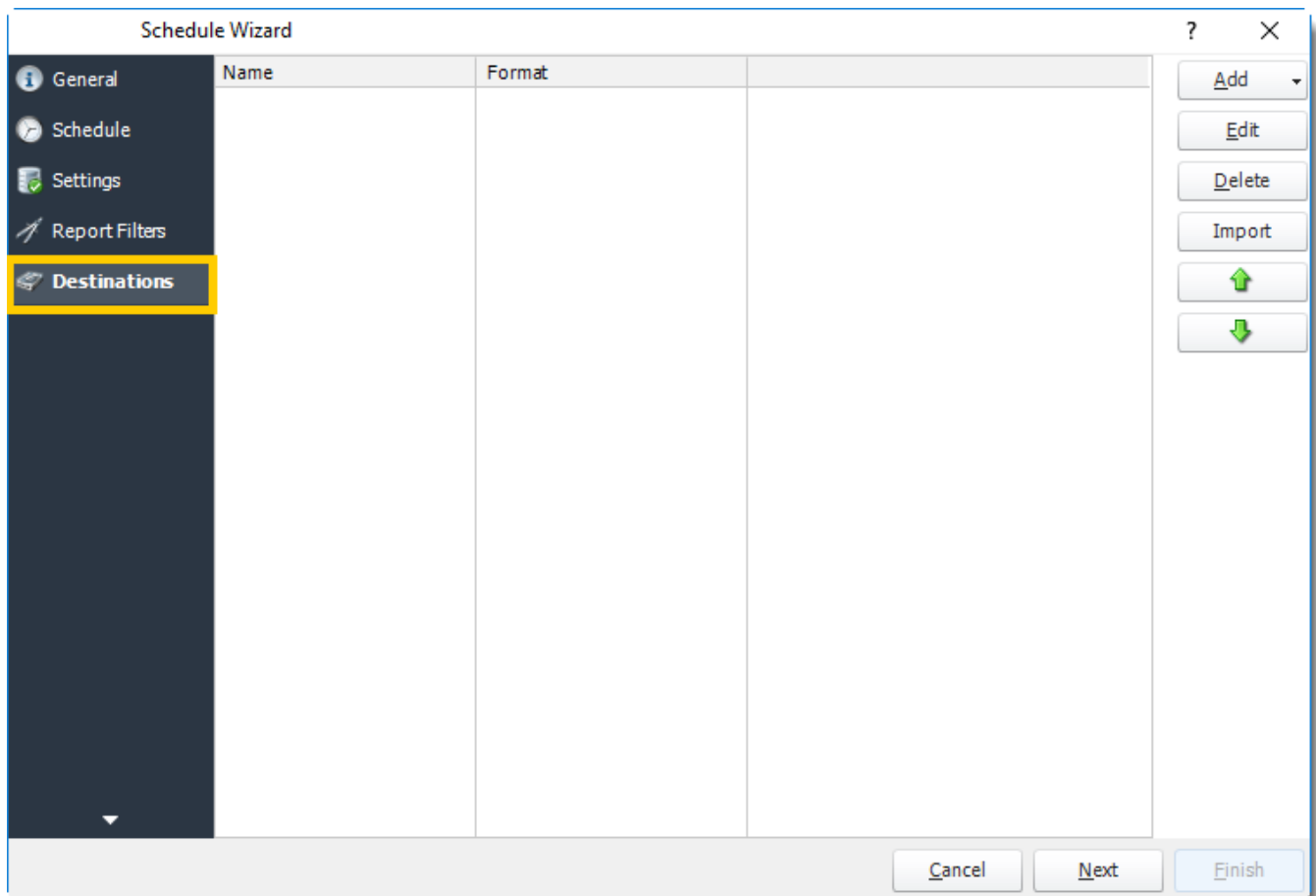
- In this section, you have the option to run this task before, after or you can choose both the schedules executes.



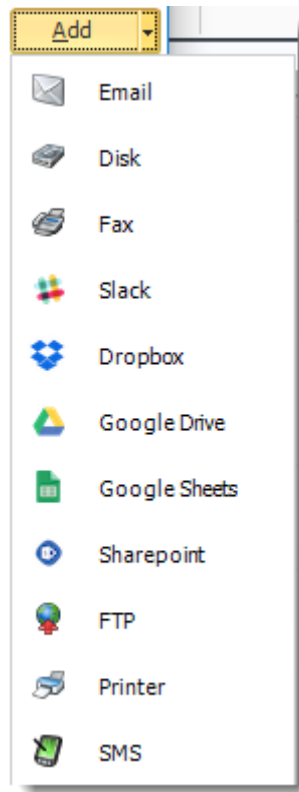
## Destinations

The Destinations tab allows you to determine where you would like your SSRS and Power BI reports to be delivered.

- In the Schedule Wizard, go to **Destinations**.



- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** click here to import from the list of default destinations.

### *Types of Destination*

To manage each Destination:

- Email
- Disk
- Fax
- Slack
- Google Drive
- Google Sheets
- Azure Blob Storage
- FTP
- Printer
- SharePoint
- SMS
- Dropbox

## Email Destination

Using the Email Destination, you can send SSRS & Power BI reports embedded in emails; or send emails in HTML or plain text with reports as attachments. You can use Inserts to customize the message body, use mailing lists & much more.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

## Customize Sender Details

Most mail servers today will no longer allow you to send an email if you attempt to use this function. This restriction is designed to stop spammers from hijacking or spoofing email accounts.


If you use the "Customize sender details" function and find that your emails are not being delivered, your mail server security settings are almost certainly the reason for the failure.

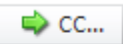
We recommend that, instead of using this function, you set up a number of email accounts [here](#). Then, select the mail server you want from the dropdown in the schedule.

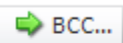
Destination

Destination Name  Type

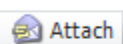
**Email** Format Naming Misc PGP

 To...

 CC...

 BCC...

Subject

 Attach

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

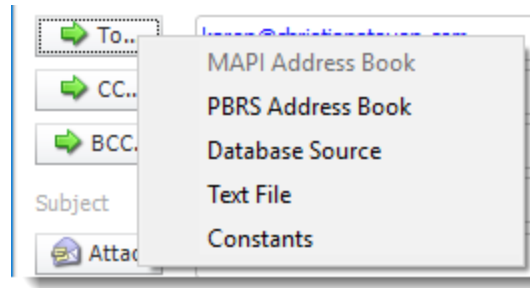
Customize sender details (optional)

Name:

Address:

## Email

To, CC, and BCC:



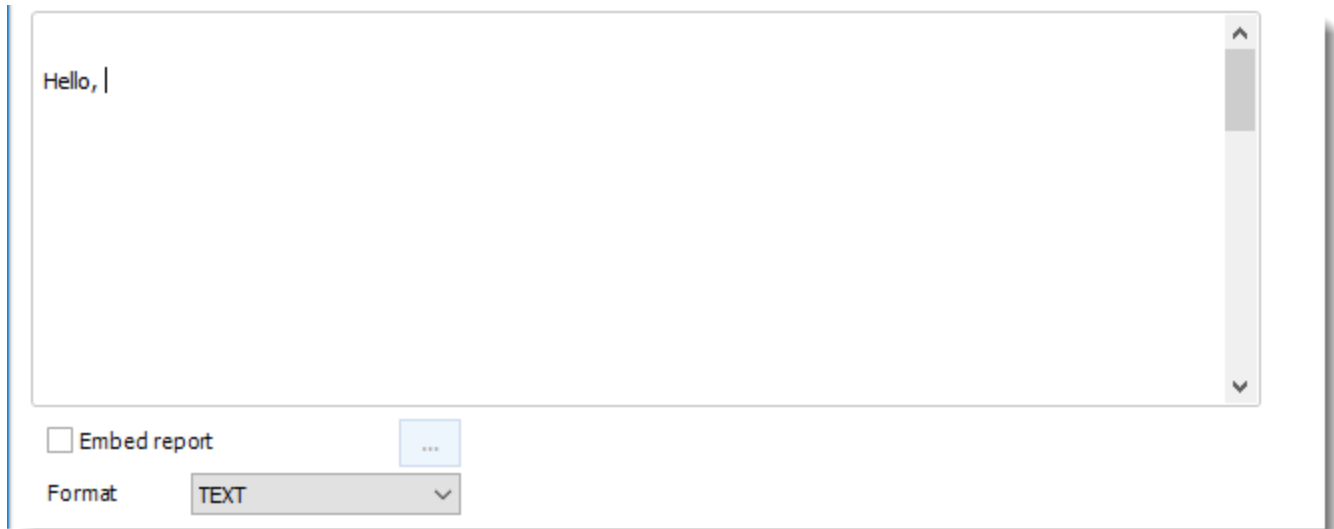
- Choose from:
  - **MAPI (Outlook) address book (Only available if you are using MAPI):** Select one or more email addresses or groups.
  - **PBRs Address Book:** Select one or more email addresses or groups.
  - **Database Source:** Build a SQL query to pick the email address or addresses from a database.
  - **Text File:** Store your email addresses as a standard mailing list in a text file (Format: no delimiters, each email address on a new line)
  - **Constants**
  - Or simply type in the email address.

*You can use "[Inserts](#)" at any time if required.*

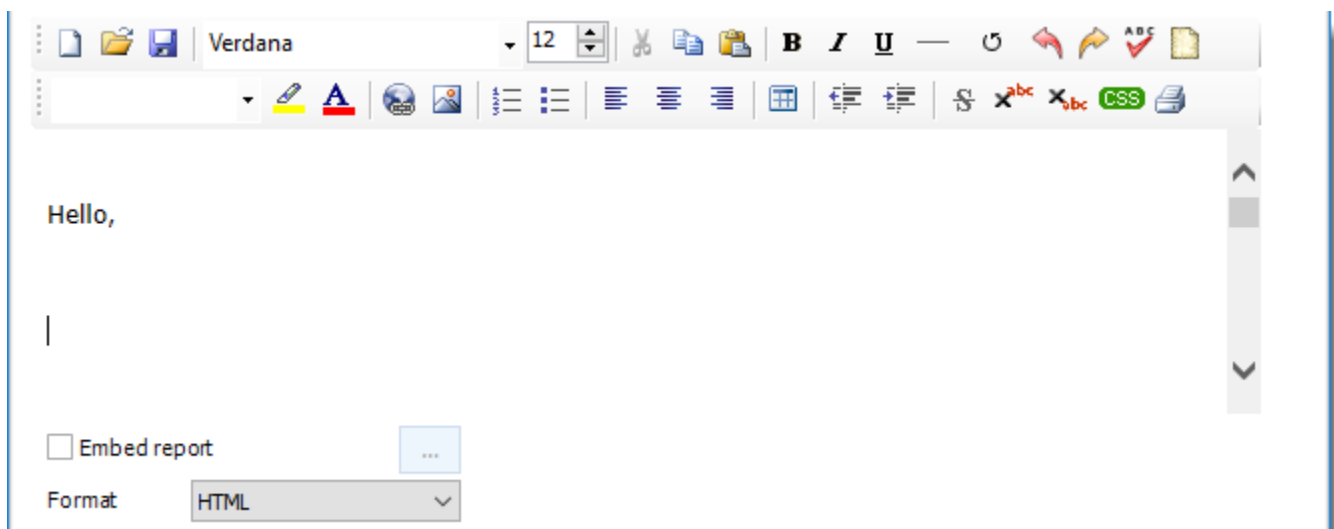
- **Subject:** Enter a subject or right-click and select Insert to insert constants, database values and defaults.
- **Attach:** Click to select an attachment. Or right-click and select Insert to insert constants, database values and defaults.

*Hint: Web addresses can be attached as well.*

- **Body:** Type in your email. Or right-click and select Insert to insert constants, database values and email defaults.
- **Mail Format:** Choose from HTML or Text.
  - **Text Format:** In this format it will be just plain message.



- **HTML Format:** In this format, you can format the message.





Style Builder

Font  
Background  
Text  
Position  
Layout  
Edges  
Lists  
Other

Font name

☒ Family  ...

☐ System font:

Color

Bold

☒ Absolute

☐ Relative

Italic

Size

☒ Specific

☐ Absolute

☐ Relative

Capitalization

Small caps

Effects

☐ None

☐ Underline

☐ Strikethrough

☐ Overline

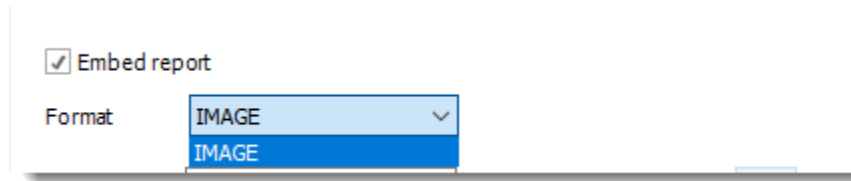
☐ Remove Style (Return Empty String for Style Attribute)

OK Cancel

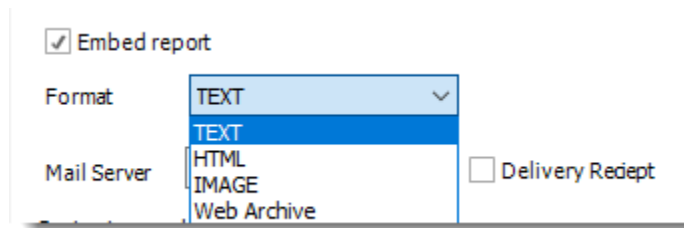
- **Embed Report:** Check this option to embed the report into the email body. When using MAPI messaging you can only embed reports in Text format. To embed reports in HTML format you will need to change your messaging type to SMTP.
  - You can click (...) button to edit the output format options as required.
  - By default, if a report is embedded in the email body, there will be no attachment.
- You can enter an additional text when the embedded report is enabled.
  - If you are uncertain whether the recipient can read html formatted mails, you can click **Include Attachment** so that the recipient receives an additional attachment of the same report in any other format e.g. a PDF, word document, etc.



## Embed Report option for Power BI Reports & Dashboards and Power BI Service Paginated Reports



## Embed Report option for SSRS or Paginated Reports on Premise



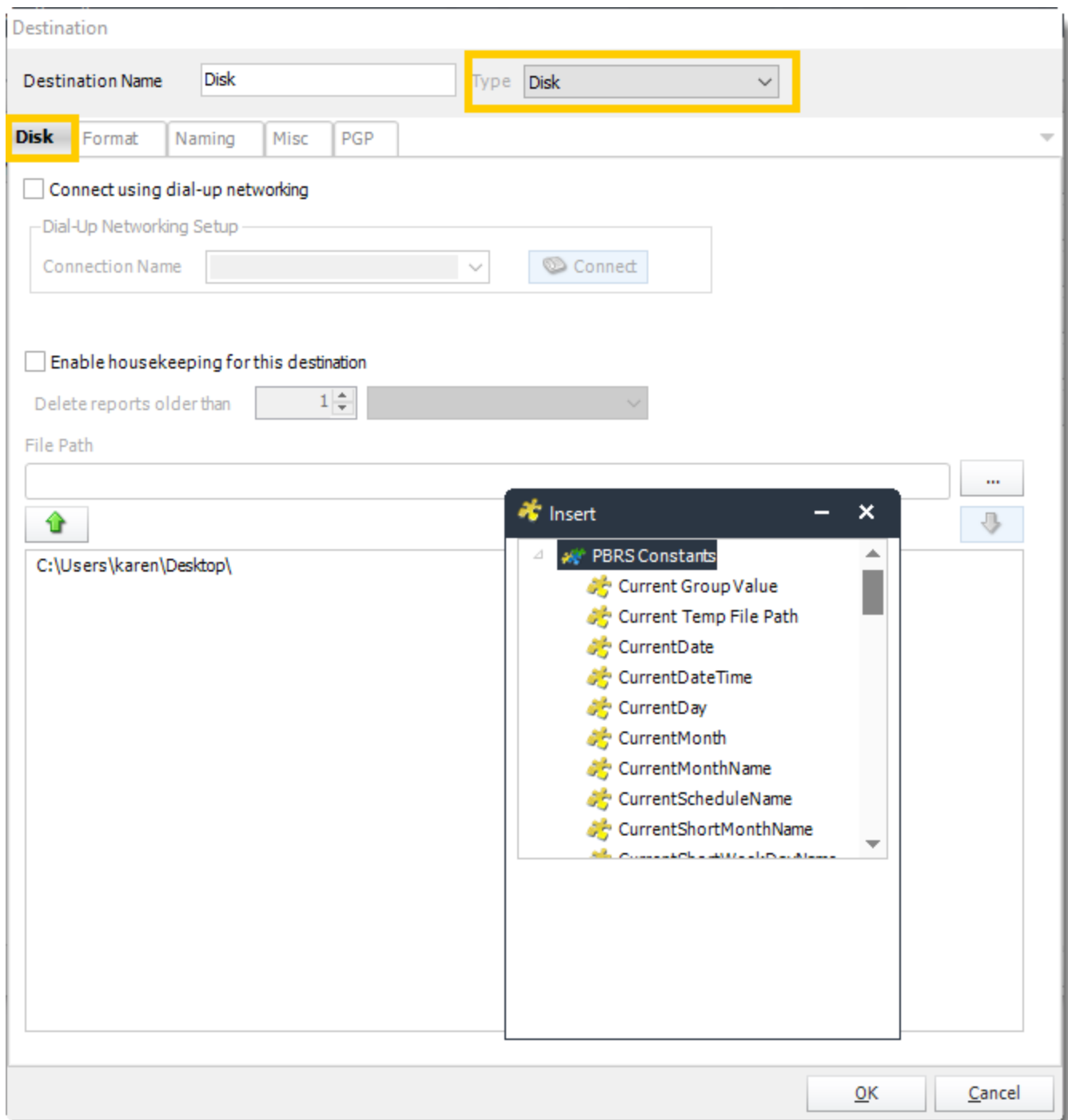
- **Mail Server:** This can be changed if the email is to be sent from a different server than the default one that was originally set up.
- **Delivery receipt:** Check this option if a delivery receipt is required. Use it if you require Custom Actions to be used once a receipt has been/has not been received.
- **Customize Sender Details:** This is where the name of the sender and the sender email may be changed. For example, it could be set to [Donotreply@mycompany.com](mailto:Donotreply@mycompany.com).
  - For information on format tab, [click here](#).

### Disk Destination

The Disk Destination allows you to send exports of SSRS & Power BI reports directly to local or network folders.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)



- **Destination Name:** Give the destination a name.
- **Connect using dial-up networking:** Select this option if you wish to connect to the destination network using Dial-Up Networking or RAS. Select an already existing connection from your existing Windows connections list.
- **Destination Directory:** Browse to select a folder, or type in a path.
- **Enable Housekeeping for this destination:** Check this option if you want to delete reports on a regular basis, which are older than a specified date.

- **Insert:** You can insert constants, formulas and database field values instead of a static "typed in" value.
  - Right-click in the above field to expose the Inserts menu.
  - For information on format tab, [click here](#).

Slack Destination

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

Destination

Destination Name  Type

**Slack** Format Naming Misc PGP

Slack Account

Comment

Deliver to these Channels

OK Cancel

- **Slack Account:** Select the account to export the report.
  - If there's no account added, select **Add New Account**.

*For more information about adding a Slack account, [click here](#).*

- **Comment:** You can write down a message.

*You can use "Inserts" at any time if required. For more information about Inserts, click [here](#).*

- **Deliver these Channels:** Select the Channels you want to deliver the report. You may choose more than one channel.

For information on format tab, [click here](#).

For information on naming tab, [click here](#).

[Google Drive Destination](#)

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)


Destination

Destination Name  Type

**Google Drive** Format Misc PGP

Google Account

Path  
 ...



OK Cancel

- Google Drive allows you to send the report via Google Drive which can be accessed on any server with the user credentials.
- **Google Account:** Select the account.
  - If there's no account added, click **Add New Account**.

For more information about adding a Google Account, [click here](#).



- **Path:** Click (...) button to choose the path or you can enter the path.

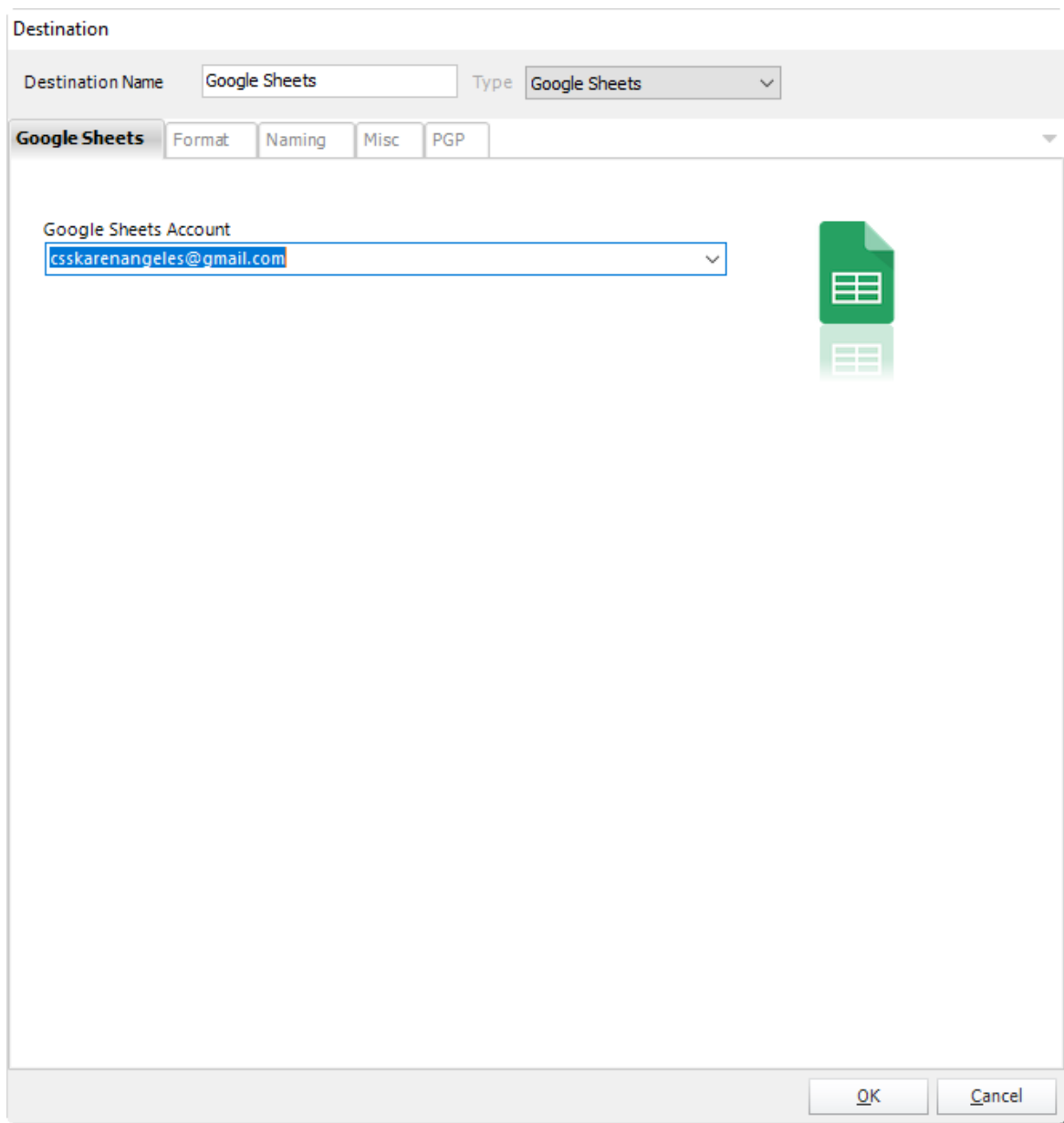
*For information on format tab, [click here](#).*

*For information on naming tab, [click here](#).*

## Google Sheets Destination

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)



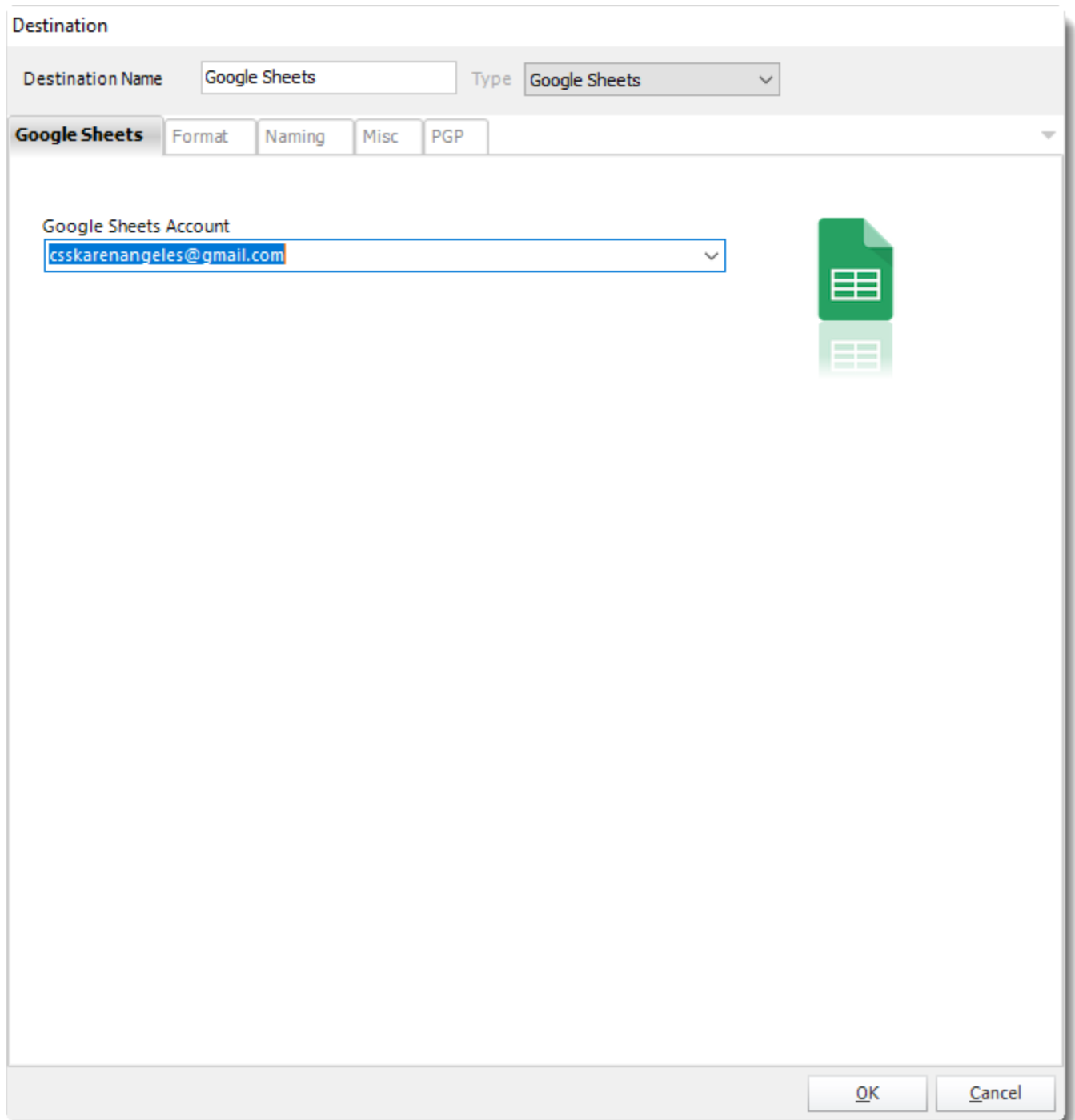
The screenshot shows a 'Destination' dialog box with the following elements:

- Destination Name:** A text field containing 'Google Sheets'.
- Type:** A dropdown menu set to 'Google Sheets'.
- Tabs:** A row of tabs including 'Google Sheets' (selected), 'Format', 'Naming', 'Misc', and 'PGP'.
- Google Sheets Account:** A dropdown menu showing 'csskarenangeles@gmail.com'.
- Icons:** Two green Google Sheets document icons on the right side.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

- Google Sheets allows you to send the report via Google Sheets which can be accessed on any server with the user credentials.
- **Google Sheets Account:** Select the account.

- If there's no account added, click **Add New Account**.

For more information about adding a Google Sheets account, [click here](#).



The screenshot shows a 'Destination' configuration window. At the top, there's a 'Destination Name' field with 'Google Sheets' and a 'Type' dropdown menu also set to 'Google Sheets'. Below this is a tabbed interface with 'Google Sheets' selected, and other tabs for 'Format', 'Naming', 'Misc', and 'PGP'. The main area contains a 'Google Sheets Account' dropdown menu with the email 'csskarenangeles@gmail.com' selected. To the right of the dropdown is a green icon representing a Google Sheet. At the bottom right, there are 'OK' and 'Cancel' buttons.

#### Output Format

The only output format available in Google Sheets destination is Google Sheets.

Destination

Destination Name
Google Sheets
Type
Google Sheets

Google Sheets
Format
Naming
Misc
PGP

Format
Google Sheets

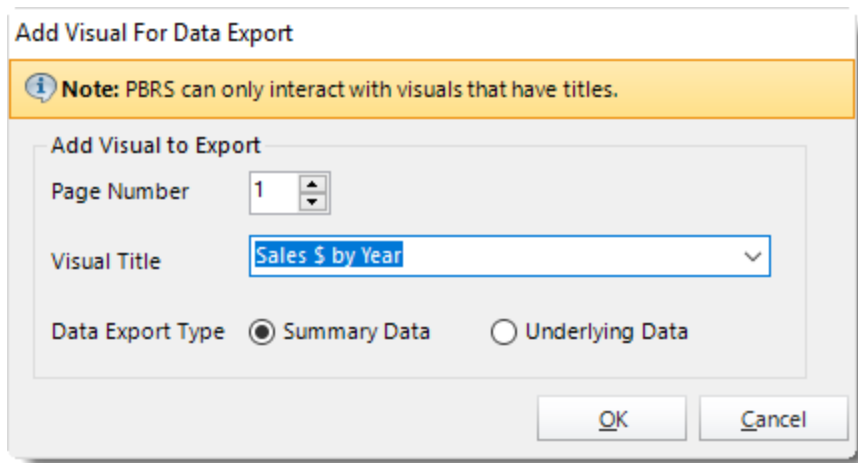
Format Options
Options
File Summary

Add the visual(s) whose data you would like to export. Each visual's data goes into a separate Excel worksheet.

Page	Visual Title	Type	
			Add
			Edit
			Delete

OK
Cancel

- To add visual data click **Add**.



- **Visual Title:** Select the Visual data's titles you want to export.

*In order for PBRS to see a Visual, the Visual **MUST** have a title already set in Power BI.*

- **Data Export Type**
  - **Summarized data:** Select this option if you want to export data for what you see in that visual.
  - **Underlying data:** Select this option if you want to see the data in the visual and additional data from the model.

*For more a more detailed explanation of the Data Export Types, click [here](#).*

- Click **OK**.

### Fax Destination

Automatically FAX your SSRS & Power BI reports.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

Destination

Destination Name  Type

**Fax**

Fax No.

Fax Device

Cover Page

To

From

Comments

Hello,  
 Here is your report dated <[m]CurrentDate;yyyyMMddHHmm>  
 Sincerely,  
 Reporting Team.

**Insert**

PBRs Constants

- Current Group Value
- Current Temp File Path
- CurrentDate**
- CurrentDateTime
- CurrentDay
- CurrentMonth
- CurrentMonthName
- CurrentScheduleName
- CurrentShortMonthName
- CurrentShortWeekDayName

Options (if any)

Adjust value by (days)

Date/Time Format

OK Cancel

- **Destination Name:** Give the destination a name.
- **Fax No:** Click to select a FAX number from the address book, or type one in the space provided.
- **Cover Page:** Enter details as required.

*In order to send a FAX, PBRs requires a V90 Voice Fax Modem installed.*

- You can use [Insert Menu](#) in the fax destination as well. It can be used to customize the cover page for each recipient in Data-driven Schedule. Time, date, and user constants can be inserted as well.

## FTP Destination

Deliver your Power BI reports to FTP & Secure FTP directories.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)



Destination

Destination Name
FTP
Type
FTP

FTP
Format
Naming
Misc
PGP

General
Certificate
Proxy Server

FTP Server

User Name
Password

FTP Type
FTP
Port
21

Remote Directory
Verify
Browse

☒ Passive Mode
☐ ASCII mode
☐ Retry uploading if the transaction fails

Server	User Name	Password	Directory	Type	Passive

OK
Cancel

FTP

General

- **Destination Name:** Give the destination a name.
- **FTP Server:** Type in the FTP server address.
- **FTP Username:** Type in the FTP server user name.
- **FTP Password:** Type in the FTP password.
- **FTP Type:** There are several types of FTP that are supported.

You can also choose whether to use passive or active mode FTP sessions.

The screenshot shows the 'General' tab of an FTP client configuration window. The 'FTP Server' field contains 'MY.FTP.SERVER.COM'. The 'User Name' field contains 'KANGELES'. The 'Password' field is masked with dots. The 'FTP Type' dropdown menu is open, showing options: 'FTP', 'FTP - SSL 3.1 (TLS)', 'FTP - SSL 3.0', 'FTP - SSL 3.0 (Implicit)', and 'FTP - SSH (FTPS)'. The 'Port' field is set to '21'. The 'Remote Directory' field is empty. The 'Passive Mode' checkbox is checked. There are 'Verify' and 'Browse' buttons.

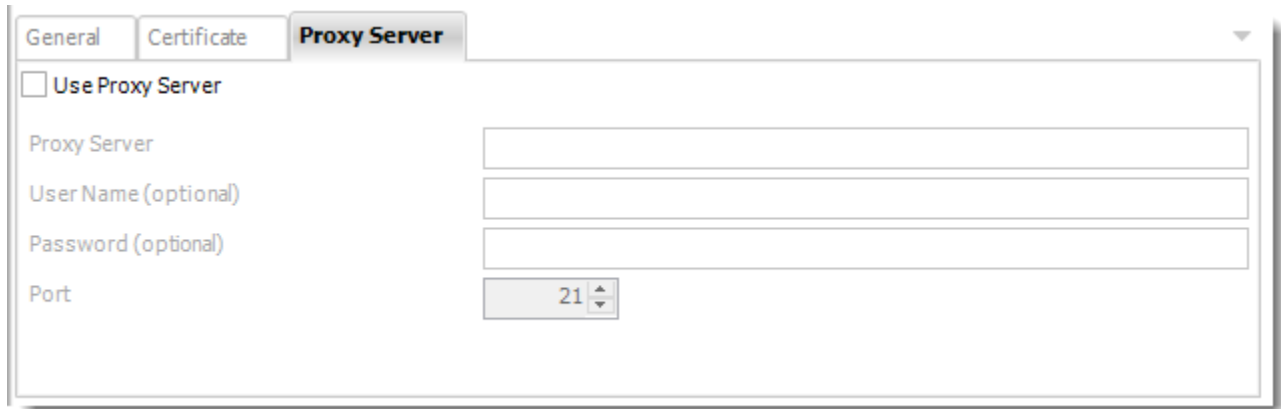
- **Remote Directory:** Enter the directory, or leave blank for the root directory
- **Verify:** Click **Verify** to test your connection.

Certificate

The screenshot shows the 'Certificate' tab of the same FTP client configuration window. It features two radio buttons: 'Use Client Certificate' and 'Use Private Certificate'. Below these are four input fields: 'Certificate File', 'Private Key File', 'Certificate Name', and 'Password'. Each field has a small button with three dots (a browse button) to its right. At the bottom, there is a checkbox labeled 'Clear Command Channel'.

You can set Certificate Settings where applicable.

## Proxy Server



The screenshot shows a configuration window with three tabs: 'General', 'Certificate', and 'Proxy Server'. The 'Proxy Server' tab is selected. Inside the tab, there is a checkbox labeled 'Use Proxy Server'. Below this checkbox are four input fields: 'Proxy Server', 'User Name (optional)', 'Password (optional)', and 'Port'. The 'Port' field is a spinner box currently showing the value '21'.

- You can also set Proxy Server details where required. Please make sure to contact you Network Administrator to verify if these are needed.
  - For information on format tab, [click here](#).

## Printer Destination

Print your SSRS & Power BI reports automatically to local or remote printers.

This article applies to:



- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

Destination

Destination Name  Type

**Printer**

Select Printers

Printer Name	Copies
--------------	--------

OK Cancel

- You can schedule a report to export to a printer or any other print drivers you have installed on the PC e.g. FAX print drivers.
- **Destination Name:** Give the destination a name.
- **Select Printers:** Select a printer from the dropdown list. Click **arrow down button** to add to the list.

Select Printers

US-LexmarkX546  
US-LexmarkX546  
Snagit 10  
Send To OneNote 16  
PDF-XChange 3.0  
Microsoft XPS Document Writer  
Microsoft Print to PDF  
Fax  
CutePDF Writer

Printer Setup

Printer Details

US-LexmarkX546, Lexmark Universal v2, WSD-62a63113-8a

Print Method

Default

# Copies

1

Page Range

☒ All Pages

☐ Page Range

From

0

To

0

OK

Cancel



- Click **OK** when completed.

## SharePoint Destination

Deliver your SSRS & Power BI reports directly to SharePoint libraries and folders.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

Destination

Destination Name  Type

**SharePoint** Format Naming Misc PGP

Server	Library	User Name	
			Add
			Edit
			Remove

OK Cancel

- Exporting to SharePoint allows you to deliver report output to a SharePoint Library.
- You can also select a configured location and click the Edit or Remove to edit or remove the destination respectively.
- Click the **Add** to specify a location to export to.



SharePoint Browser

## SharePoint Browser

**Authentication Type**

☒ Windows authentication ☐ Forms authentication  
☐ Office 365 authentication ☐ Modern authentication

**Connection Credentials**

SharePoint Site   
Username   
Password

**Connect**

**SharePoint Library** **File metadata**

OK Cancel

- **Authentication Type:** Select your SharePoint Authentication type.
- **SharePoint Site:** Enter the path for your SharePoint Site.
- **Domain/Username:** Enter the Domain and username required to connect to the site.
- **Password:** Enter the password for the username specified above.
- Click **Connect**.

## SharePoint Browser



Authentication Type

☐ Windows authentication      ☐ Forms authentication

☒ Office 365 authentication      ☐ Modern authentication

Connection Credentials

SharePoint Site:

Username:

Password:

Connect

SharePoint Library    File metadata

- Action for Meetings
- Agenda for Meetings
- Announcements
- appdata
- appfiles
- Attachment for Meetings
- Company Calendar
- Company Photos
- Composed Looks
- Decision for Meetings
- Document Library
- Form Templates
- fpdatasources
- Fundamental
- List Template Gallery

OK    Cancel

- Once connected you can browse and select the SharePoint Library and path to export to.
- Click **OK** to save the destination.

Destination

Destination Name
Type

SharePoint
Format
Naming
Misc
PGP

Server	Library	User Name	
https://qa.sharepoint.com/	DocumentLibrary/Karen/QA...	karen@christiansteven.com	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Remove"/>

## Using Modern Authentication type in Sharepoint Destination

PBRS has the ability to export reports using modern authentication in the Sharepoint Destination. This Authentication type works for SharePoint Online (Office 365).

*In order to use a modern authentication type in the SharePoint Destination, you must have the App ID and Secret ID created. For more information on how to create App Id and Secret Id for SharePoint, [click here](#).*

- In order to use the modern authentication type in the SharePoint Destination, select **the Modern authentication** option.

## SharePoint Browser



Authentication Type

☐ Windows authentication      ☐ Forms authentication

☐ Office 365 authentication      ☒ Modern authentication

Connection Credentials

SharePoint Site

App Id

App Secret

Connect

SharePoint Library    File metadata

OK    Cancel

- **SharePoint Site:** Enter the path for your SharePoint Site.
- **App Id:** Enter your App ID credentials.
- **App Secret:** Enter your App Secret credentials.
- Click **Connect**.

SharePoint Browser

## SharePoint Browser

Authentication Type

☐ Windows authentication ☐ Forms authentication

☐ Office 365 authentication ☒ Modern authentication

Connection Credentials

SharePoint Site

App Id

App Secret

Connect

SharePoint Library File metadata

- Access Requests
- Action for Meetings
- Agenda for Meetings
- Announcements
- appdata
- appfiles
- Attachment for Meetings
- Company Calendar
- Company Photos
- Composed Looks
- Content type publishing error log
- Converted Forms
- Decision for Meetings
- Document Library
- Form Templates
- fpdatasources
- Fundamental
- List Template Gallery
- Location for Meetings

OK Cancel

- Once connected you can browse and select the SharePoint Library and path to export to.
- Click **OK** to save the destination.

Destination

Destination Name  Type SharePoint ▾

**SharePoint** Format Naming Misc PGP ▾

Server	Library	User Name	
https://qa.sharepoint.com/	Document Library/Karen/QA...	Full Name - Last Name - Initials...	<div>Add</div> <div>Edit</div> <div>Remove</div>

- For information on format tab, [click here](#).

## SMS Destination

Cell Phone Text, or SMS, allows you to send a short SSRS or Power BI report as an informative alert.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

The screenshot shows a 'Destination' dialog box with a title bar. Inside, there's a 'Destination Name' field containing 'SMS' and a 'Type' dropdown menu also set to 'SMS'. Below these are tabs for 'SMS', 'Format', 'Misc', and 'PGP', with 'SMS' being the active tab. A 'To...' button with a green arrow icon is next to a text field containing the phone number '980-555-8888'. Below this is a large text area for the message, which contains the text 'Hello, Here is your report.' and has a vertical scrollbar on the right. At the bottom left, it says 'Characters left: 132'. At the bottom right are 'OK' and 'Cancel' buttons.

- **Destination Name:** Give the destination a name.
- **To:** Click to select a Cell Phone number from the address book, or type one in the space provided.
- **Cover Page:** Enter a short introductory message (if required).
- Please see [SMS Configuration](#) for setting up the SMS destination.
  - For information on format tab, [click here](#).



## Dropbox Destination

The Dropbox Destination allows you to deliver your SSRS & Power BI reports to a dropbox folder. Use in conjunction with the Email Custom Task to send the URL to the file to a recipient.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

Destination

Destination Name  Type

**Dropbox** Format Naming Misc PGP

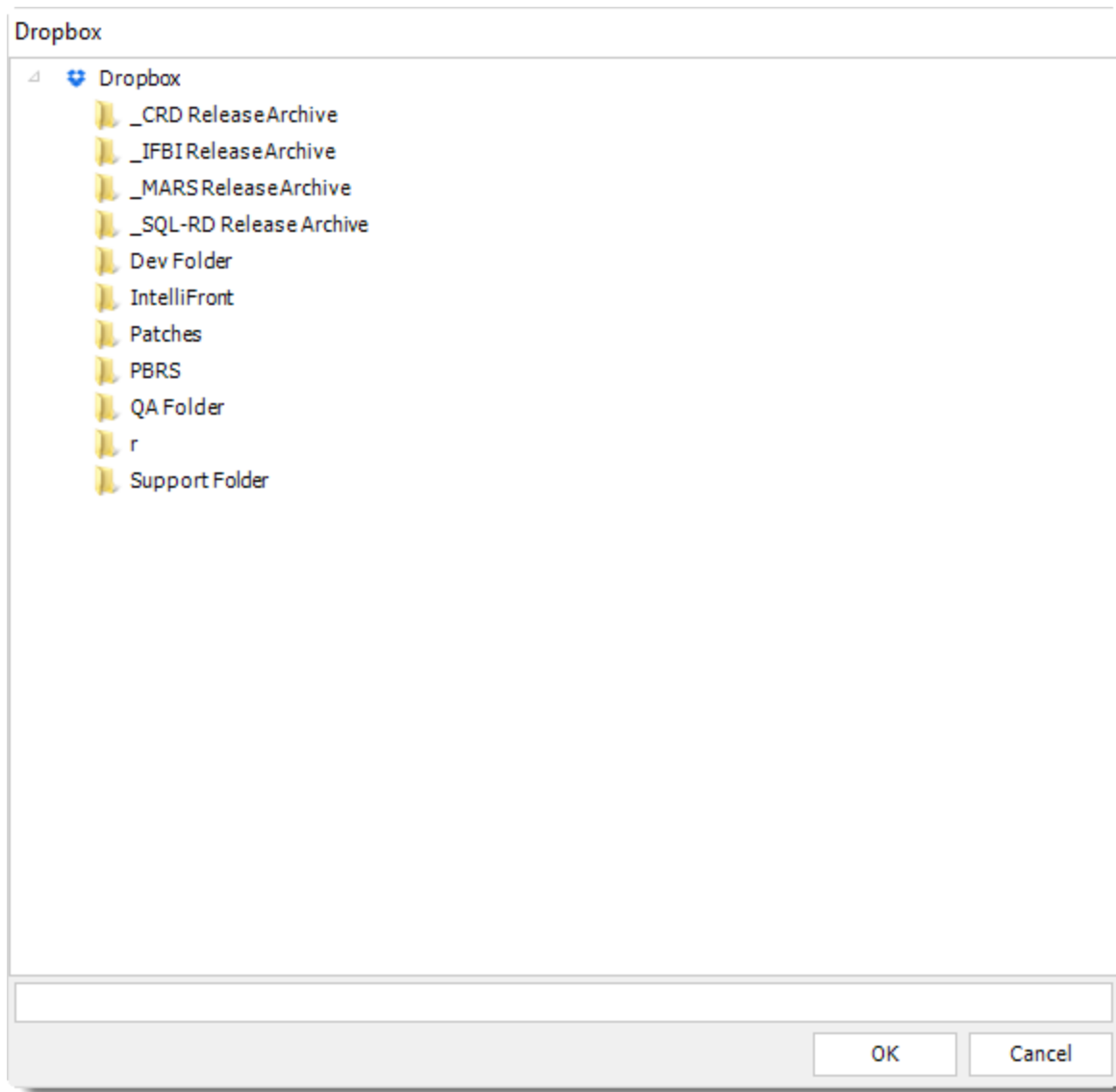
Account Name

Folder

- Dropbox allows you to send the report via Dropbox which can be accessed on any machine with the user credentials.
- A Dropbox account must be set up in Options settings at Cloud Storage section before using as a destination.
- Select the Account name.
- Click (...) to search the folder.

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Updated on 15 November 2021



- Click **OK**.

Destination

Destination Name  Type

**Dropbox** Format Naming Misc PGP

Account Name

Folder

- For information on format tab, [click here](#).

## How do I set up Azure Blob Storage Destination in PBRs?

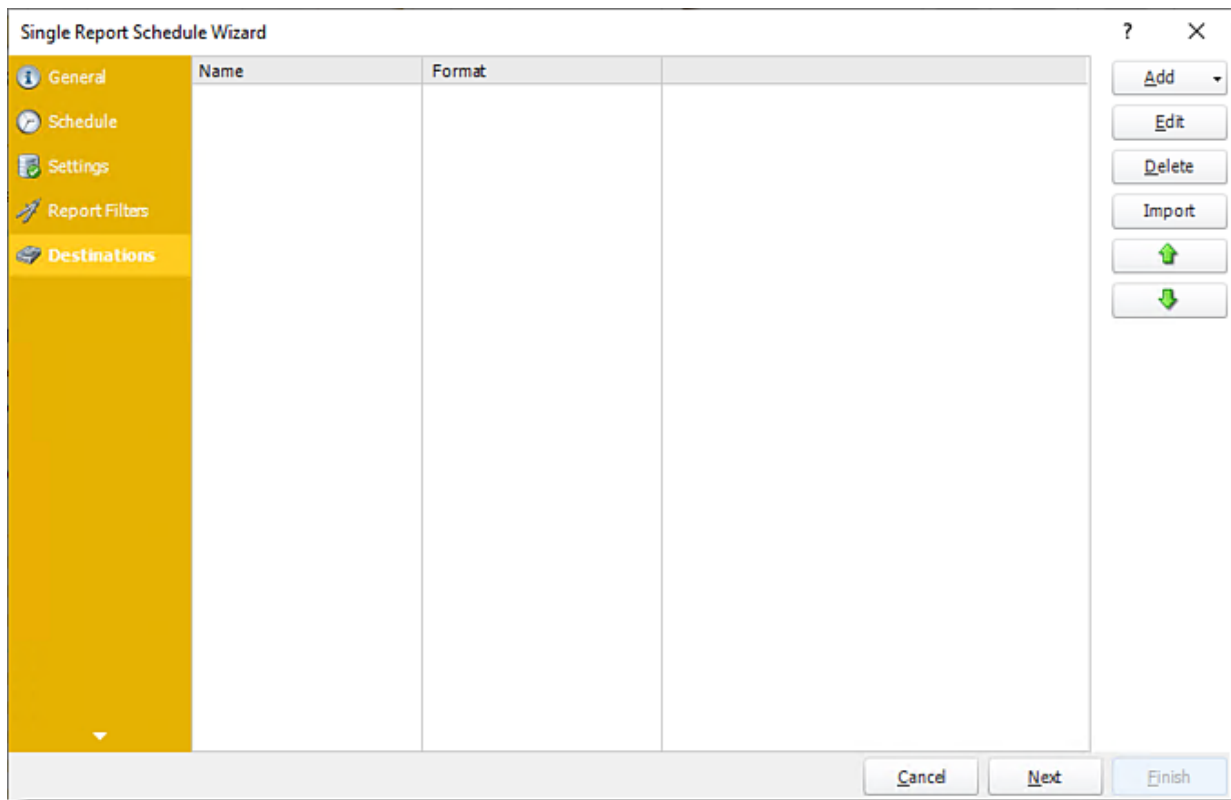
**The Azure Blob Storage allows you to deliver your Power BI Reports, Paginated Reports & SSRS reports to a container.**

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

### Destinations - Azure Blob Storage

- In the Schedule Wizard, go to **Destinations**.



- Click **Add** and select **Azure Blob Storage**.



Destination

Destination Name  Type

**Azure Blob Storage** Format Naming Misc PGP

Blob Storage Account

Container Name

OK Cancel

- The Azure Blob Storage allows you to deliver your Power BI Reports, Paginated Reports & SSRS reports to a container.
- Blob Storage Account:** Use the drop-down menu to select the Blob Storage Account.
- Container Name:** Select the container name to export the report.

## How do I set up Amazon S3 Destination in PBRs?

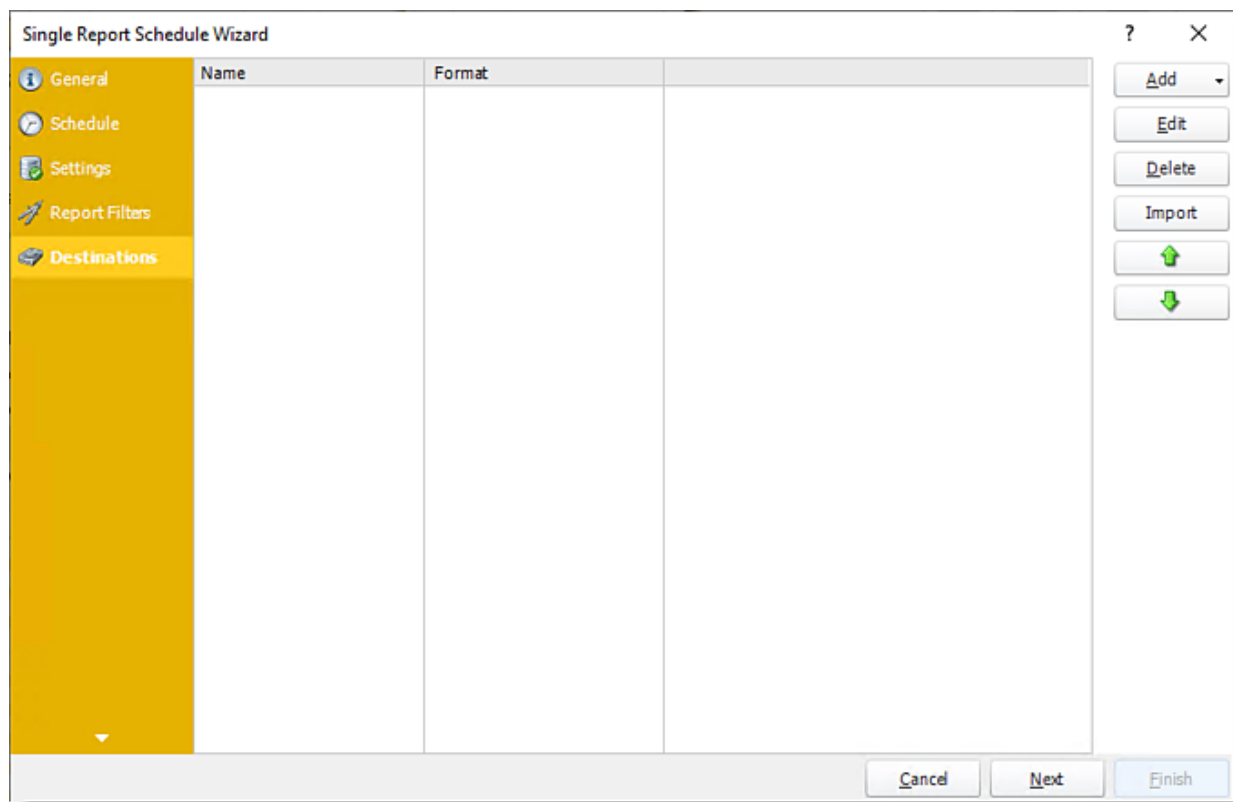
**The Amazon S3 allows you to deliver your Power BI Reports, Paginated Reports & SSRS reports to a container.**

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

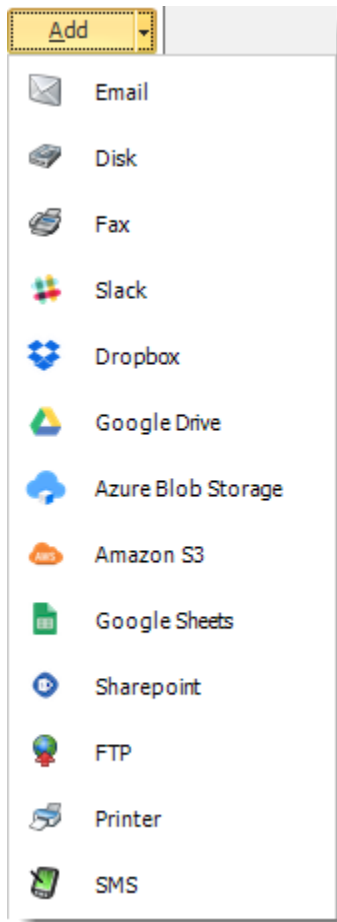
### Destinations - Amazon S3

- In the Schedule Wizard, go to **Destinations**.



- Click **Add** and select **Amazon S3**.





Destination

Destination Name  Type

**Amazon S3** Format Naming Misc PGP

Amazon AWS Account

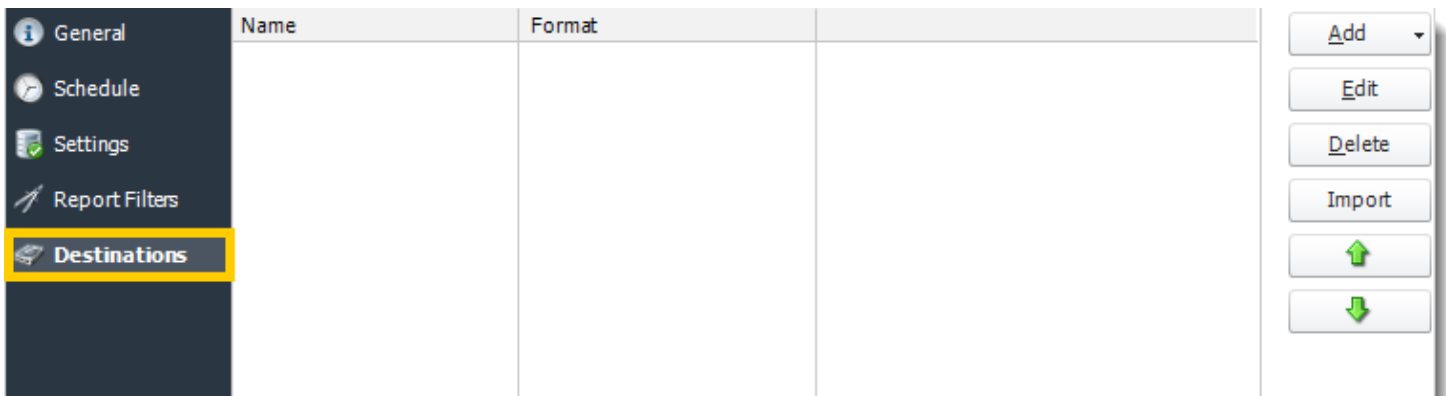
Amazon S3 Bucket

- The Amazon S3 allows you to deliver your Power BI Reports, Paginated Reports & SSRS reports to a container.
- Amazon AWS Account:** Use the drop-down menu to select the Amazon AWS Account.
- Amazon S3 Bucket:** Select the bucket name to export the report.

## Output Formats

Reports may be exported to the following formats. Some formats have advanced options to help provide richer functionality and greater customization of the exported report.

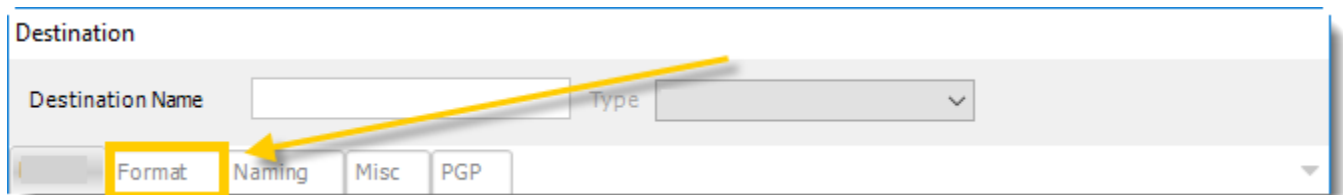
- Go to **Destination**
- Select the type of destination.



The screenshot shows a sidebar on the left with navigation links: General, Schedule, Settings, Report Filters, and Destinations (highlighted with a yellow box). The main area contains a table with columns 'Name' and 'Format'. To the right of the table are buttons: Add (with a dropdown arrow), Edit, Delete, Import, and two green arrows (up and down) for reordering.

Name	Format
------	--------

- Select **Format**.



The screenshot shows the 'Destination' configuration form. It has a 'Destination Name' text field and a 'Type' dropdown menu. Below these are four tabs: Format (highlighted with a yellow box), Naming, Misc, and PGP. A yellow arrow points from the 'Format' tab to the 'Type' dropdown menu.

The image shows a software dialog box titled "Destination". At the top, there is a "Destination Name" text field and a "Type" dropdown menu. Below these, there is a tabbed interface with four tabs: "Format" (which is selected and highlighted in dark blue), "Naming", "Misc", and "PGP". Under the "Format" tab, there is a "Format" dropdown menu. Below the "Format" tab, there is another tabbed interface with two tabs: "Format Options" (which is selected and highlighted in light blue) and "Options". The "Format Options" tab is currently empty. At the bottom right of the dialog box, there are "OK" and "Cancel" buttons.

Most of the Destinations have the Format section in order to select the output format and select the desired properties of this output.

To manage each section:

For Power BI:

Destination

Destination Name  Type

**Format** Naming Misc PGP

Format

**Format Option**

- Acrobat Format (\*.pdf)
- CSV (\*.csv)
- Epub (\*.epub)
- HTML (\*.html)
- JPG (\*.jpg)
- MS Excel - Data Only (\*.xlsx)
- MS Excel (\*.xlsx)
- MS Word (\*.doc)
- MS Word (\*.docx)
- PDF - Data Only (\*.pdf)
- PNG (\*.png)
- PowerPoint (\*.pptx)

- [Acrobat Format \(\\*.pdf\)](#)
- [CSV \(\\*.csv\)](#)
- [Epub \(\\*.epub\)](#)
- [HTML \(\\*.html\)](#)
- [JPG \(\\*.jpg\)](#)
- [MS Excel - Data Only \(\\*.xlsx\)](#)
- [MS Excel \(\\*.xlsx\)](#)
- [MS Word \(\\*.doc\)](#)
- [MS Word \(\\*.docx\)](#)
- [PDF - Data Only \(\\*.pdf\)](#)
- [PNG \(\\*.png\)](#)
- [PowerPoint \(\\*.pptx\)](#)

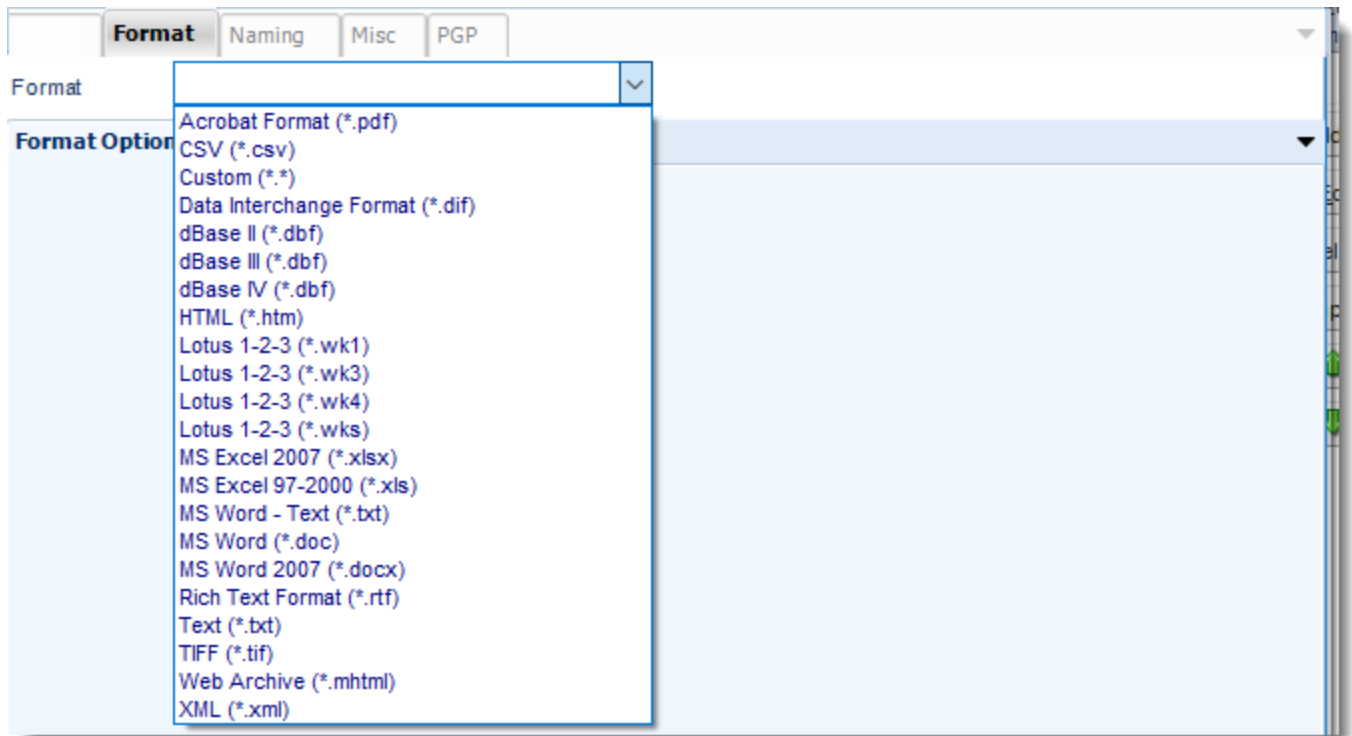
For Paginated Reports:

Most of the Destinations have the Format section in order to select the output format and select the desired properties of this output.

- To manage each section:

1. Acrobat Format (\*.pdf)
2. CSV (\*.csv)
3. MS Excel 2007 (\*.xlsx)
4. MS PowerPoint (\*.pptx)
5. MS Word 2007 (\*.docx)
6. Web Archive (\*.mhtml)
7. XML (\*.xml)

For SSRS:



- [PDF](#)
- [CSV](#)
- [Custom](#)
- [Data Interchange Format](#)
- [dBase II](#)
- [dBase III](#)
- [dBase IV](#)
- [HTML](#)
- [Lotus 1-2-3 \(wk1\)](#)
- [Lotus 1-2-3 \(wk3\)](#)
- [Lotus 1-2-3 \(wk 4\)](#)
- [Lotus 1-2-3 \(wks\)](#)
- [MS Excel 2007](#)
- [MS Excel 97 - 2000](#)
- [MS Word - Text](#)
- [MS Word](#)
- [MS Word 2007](#)
- [Rich Text Format](#)
- [Text](#)
- [Tiff](#)
- [Web Archive](#)
- [XML](#)

## For PowerBI Dashboards and Reports on Premise

Most of the Destinations have the Format section in order to select the output format and select the desired properties of this output.

- To manage each section:

1. Acrobat Format PDF (\*.pdf)
2. Epub (\*.epub)
3. HTML (\*.html)
4. JPG (\*.jpg)
5. MS Excel (\*.xlsx)
6. MS Word (\*.doc, \*.docx)
7. PNG (\*.png)
8. PowerPoint (\*.pptx)

## Acrobat Format (\*.pdf) outputs for Power BI & SSRS

Export Power BI & SSRS reports to PDF & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations. PBRs lets you customize them before delivery. Here's how.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
  - Power BI Paginated Reports (Cloud - Power BI Service)
  - Power BI Reports & Dashboards (On Premise - Power BI Report Server)
  - Power BI Paginated Reports (On Premise - Power BI Report Server)
  - Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)
- 
- To export to Acrobat Format (\*.pdf) in Power BI and SSRS follow the following steps:



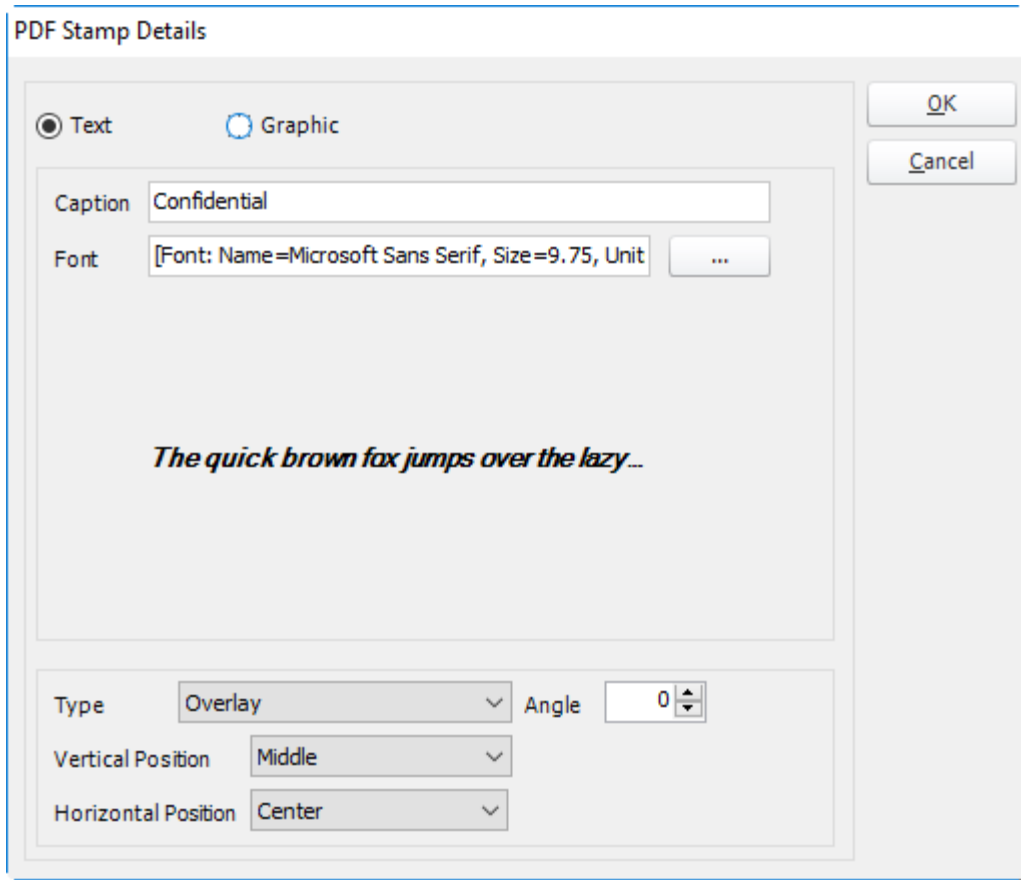
## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

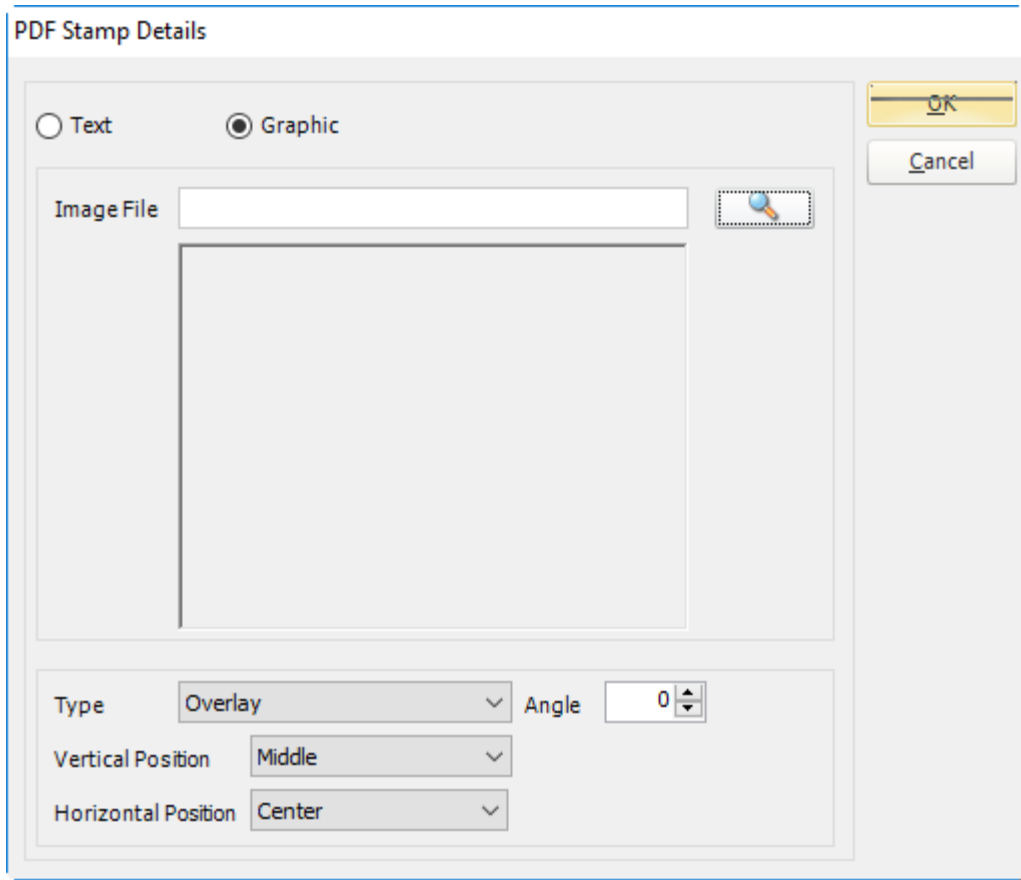
### Format Options

PBRS can export your report in PDF Format. Additionally, you can customize your PDF output by using the options below.

- **Enable PDF options:** You can enable extra PDF options. If you choose not to use the options, a standard pdf file will be exported.
- **File Permissions:** Enter passwords and select the options you require. Files will be encrypted using pdf 128 Bit encryption. The resulting files can only be opened with versions of Acrobat which can handle this level of encryption e.g. Acrobat 6 and above.
- **Include the following watermark/stamp:** You can include a watermark or stamp to be inserted in the PDF document. Click (...) button for more options.



- Your Watermark can be a graphic such as a corporate logo.



## Options



- Use this option to select to export all pages or just a selection.

## File Summary

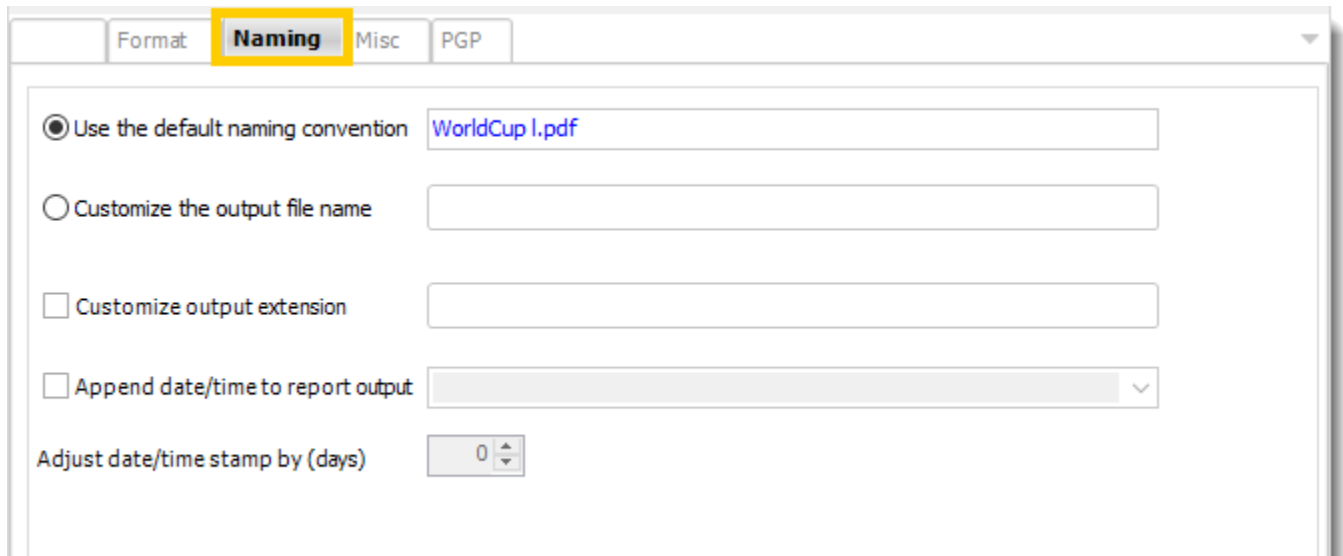
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A text area with up and down arrows.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018".
- 8/1/2018: A text input field below the PDF Expiry Date date picker.
- PDF Expiry Message: A text area with up and down arrows.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be name:



The screenshot shows a software window with four tabs: 'Format', 'Naming' (highlighted with a yellow border), 'Misc', and 'PGP'. The 'Naming' tab contains the following options:

- ☒ Use the default naming convention: A text field containing 'WorldCup I.pdf'.
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A numeric spinner set to '0'.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☒ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

## PDF - Data Only (\*.pdf) outputs for Power BI

- To export to PDF - Data Only (\*.pdf) in Power BI follow the following steps:

The screenshot shows the 'Format' tab of a configuration window. At the top, there are tabs for 'Format', 'Naming', 'Misc', and 'PGP'. Below these, a dropdown menu is set to 'PDF - Data Only (\*.pdf)'. Underneath, there are tabs for 'PowerBI Visuals', 'Format Options', and 'File Summary'. The 'PowerBI Visuals' tab is active, displaying the instruction: 'Add the visual(s) whose data you would like to export. Each visual's data goes into a separate Excel worksheet.' Below this is a table with three columns: 'Page', 'Visual Title', and 'Type'. To the right of the table are three buttons: 'Add', 'Edit', and 'Delete'.

### Format

The output format is selected as part of the *Destinations* setup for each destination type. The tab above can be found in the *Destinations* section of a schedule.

- PDF - Data Only exports data from specified visuals to PDF.
- To add visual data click **Add**.

This screenshot is identical to the one above, showing the 'Format' tab of the configuration window. It displays the 'Format' dropdown set to 'PDF - Data Only (\*.pdf)', the 'PowerBI Visuals' tab selected, and the instruction to add visuals for export. The table with columns 'Page', 'Visual Title', and 'Type' is present, along with 'Add', 'Edit', and 'Delete' buttons.

Add Visual For Data Export

**Note:** PBRS can only interact with visuals that have titles.

General Style

Add Visual to Export

Page Number 1

Visual Title WorldCup Finals

Data Export Type ☒ Summary Data ☐ Underlying Data

☒ Add Row Totals ☐ Add Column Totals

OK Cancel

## General

- **Visual Title:** Select the Visual data's titles you want to export.

Visual Title WorldCup Finals

WorldCups

WorldCup Finals

In order for PBRS to see a Visual, the Visual **MUST** have a title already set in Power BI.

- **Data Export Type**
  - **Summarized data:** Select this option if you want to export data for what you see in that visual.



- **Underlying data:** Select this option if you want to see the data in the visual and additional data from the model.

For more a more detailed explanation of the Data Export Types, click [here](#).

## Style

Add Visual For Data Export

**Note:** PBRS can only interact with visuals that have titles.

General Style

	Font Weight	Forecolor	Background Color
<b>Header</b>	<input checked="" type="checkbox"/> Bold	<input type="text"/>	<input type="text" value="Blue"/>
<b>Column Totals</b>	<input checked="" type="checkbox"/> Bold	<input type="text"/>	<input type="text" value="Blue"/>
<b>Row Totals</b>	<input checked="" type="checkbox"/> Bold	<input type="text"/>	<input type="text" value="Blue"/>
<b>Odd Rows</b>	<input type="checkbox"/> Bold	<input type="text" value="Black"/>	<input type="text" value="White"/>
<b>Even Rows</b>	<input type="checkbox"/> Bold	<input type="text" value="Black"/>	<input type="text" value="Light Blue"/>

Styles

Import Style  
Export Style

OK Cancel

- In this section, you may modify the font weight and colors of that visual.
- **Styles:** You can import and/or export style to be used in other destinations and schedules.

*This option can only be used in PDF - Data Only (\*.pdf) for Power BI.*

- Click **OK**.

Format PDF - Data Only (\*.pdf) ▼

**PowerBI Visuals** Format Options File Summary ▼

Add the visual(s) whose data you would like to export. Each visual's data goes into a separate Excel worksheet.

Page	Visual Title	Type	
1	Soccer Tournament 1872 to 2019	SUMMARY	<div>Add</div> <div>Edit</div> <div>Delete</div>
1	Country	SUMMARY	

## Options

Format Options **Options** File Summary ▼

Export Page Ranges

☒ All Pages

☐ Page Range

From 0 ▼ To 0 ▼

Append to existing file

☐ Append to file if one already exists (disk destination)

- Use this option to select to export all pages or just a selection.

## File Summary

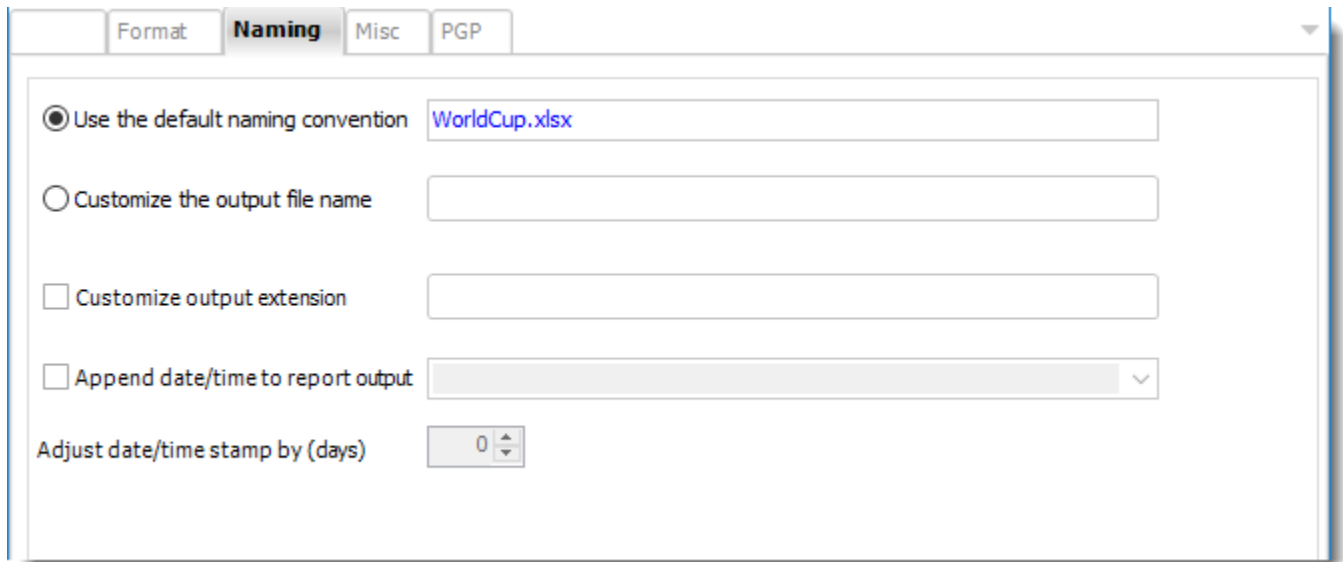
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A text area with up and down arrows.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018".
- 8/1/2018: A text input field below the PDF Expiry Date date picker.
- PDF Expiry Message: A text area with up and down arrows.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The 'Naming' tab is selected. It contains the following options:

- ☒ Use the default naming convention: WorldCup.xlsx
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

CSV (\*.csv) outputs in Power BI

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export CSV outputs in Power BI, follow these steps:

The screenshot shows the 'Add Visual For Data Export' dialog box. At the top, there is a yellow banner with a note: 'Note: PBRS can only interact with visuals that have titles.' Below this, the 'General' tab is selected. The 'Add Visual to Export' section contains a 'Page Number' spinner set to 2, a 'Visual Title' dropdown menu showing 'Avocado Prices', and 'Data Export Type' radio buttons for 'Summary Data' (selected) and 'Underlying Data'. Below these are two text boxes for specifying rows and columns to summarize. The 'Use an Excel template' checkbox is unchecked. The bottom section, 'Insert/Append into the following worksheet', includes a worksheet name dropdown, a 'Starting at cell' section with 'Column' and 'Row' options (both set to 'Next available'), and 'OK' and 'Cancel' buttons at the bottom right.

## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

CSV exports data from specified visuals to CSV file.

- To add visual data click **Add**.
- **Visual Title**: Select the Visual data's titles you want to export.

In order for PBRS to see a Visual (for exporting to CSV or Excel), the Visual **MUST** have a title already set in Power BI.

- **Data Export Type**
  - **Summarized data**: Select this option if you want to export data for what you see in that visual.
  - **Underlying data**: Select this option if you want to see the data in the visual and additional data from the model.
- Click **OK**.

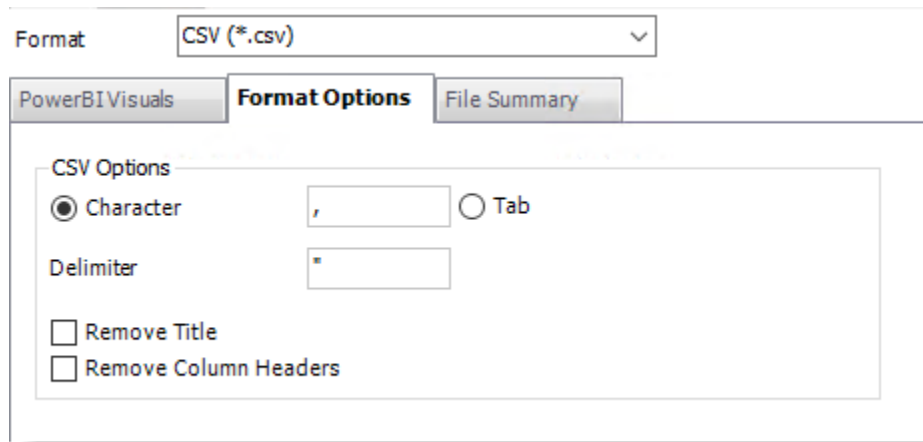
Format:

**PowerBI Visuals** |  |

Add the visual(s) whose data you would Like To export. Each visual's data will be exported to an individual CSV file.

Page	Visual Title	Type	
2	Avocado Prices	SUMMARY	<input type="button" value="Add"/> <input type="button" value="Edit"/>
1	Total Bags by type	SUMMARY	<input type="button" value="Delete"/>

## CSV Options

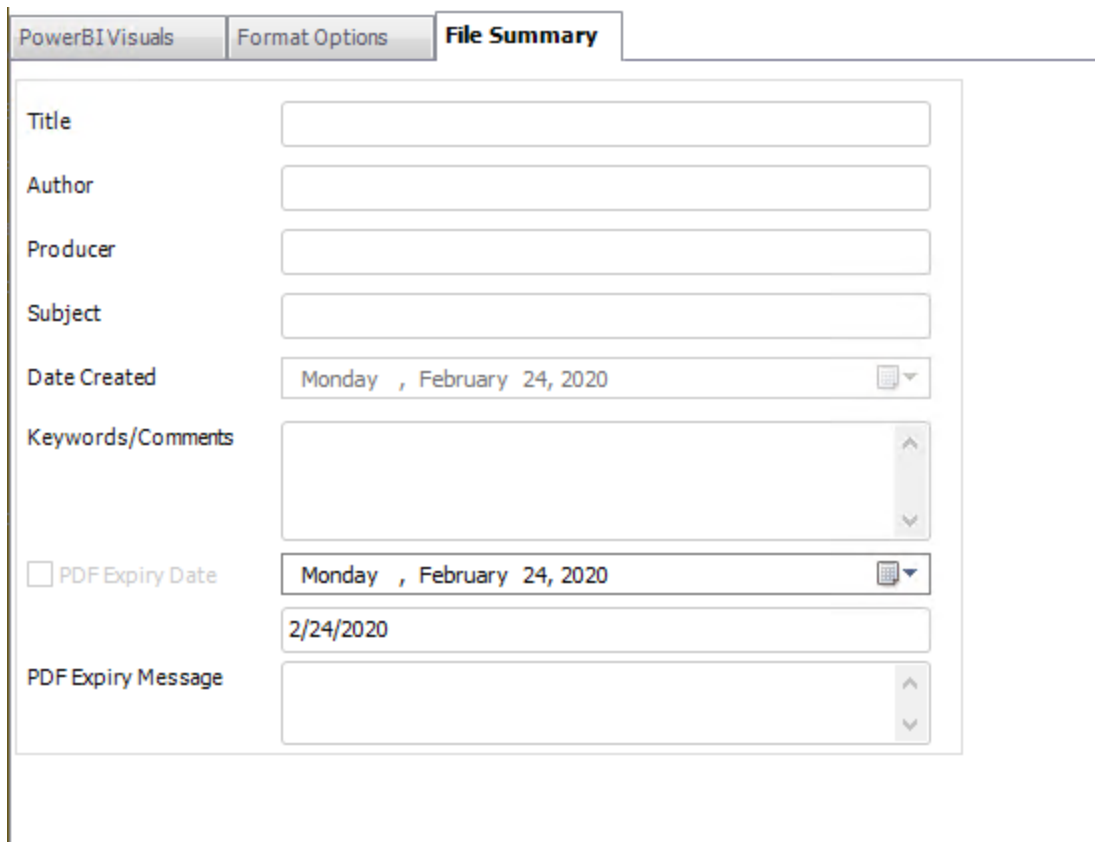


The screenshot shows a dialog box with three tabs: "PowerBIVisuals", "Format Options", and "File Summary". The "Format Options" tab is selected. At the top, there is a "Format" dropdown menu set to "CSV (\*.csv)". Below the tabs, the "CSV Options" section contains the following controls:

- A radio button labeled "Character" is selected, followed by a text input field containing a comma (",").
- A radio button labeled "Tab" is unselected.
- A label "Delimiter" is followed by a text input field containing a double quote ("").
- A checkbox labeled "Remove Title" is unselected.
- A checkbox labeled "Remove Column Headers" is unselected.

- You can enter any character or use tab as separator.
- You can enter any character as Delimiter.
- **Remove Title:** Check this option to remove the title.
- **Remove Column Headers:** Check this option to remove Columns Headers.

## File Summary



The screenshot shows a dialog box with three tabs: "PowerBIVisuals", "Format Options", and "File Summary". The "File Summary" tab is selected. The dialog contains the following fields and controls:

- "Title": A text input field.
- "Author": A text input field.
- "Producer": A text input field.
- "Subject": A text input field.
- "Date Created": A date picker showing "Monday , February 24, 2020".
- "Keywords/Comments": A text area with up and down arrow buttons on the right.
- "PDF Expiry Date": An unchecked checkbox followed by a date picker showing "Monday , February 24, 2020".
- A text input field below the date picker containing "2/24/2020".
- "PDF Expiry Message": A text area with up and down arrow buttons on the right.



## Naming

These options determine how the exported file will be named:

The screenshot shows a software window with a tabbed interface. The tabs are 'Email', 'Format', 'Naming', 'Misc', and 'PGP'. The 'Naming' tab is selected. Inside the 'Naming' tab, there are four radio buttons for file naming options. The first radio button, 'Use the default naming convention', is selected and has a text field next to it containing 'WorldCups.csv'. The second radio button is 'Customize the output file name' with an empty text field. The third is 'Customize output extension' with an empty text field. The fourth is 'Append date/time to report output' with a dropdown menu. Below these radio buttons is a label 'Adjust date/time stamp by (days)' followed by a numeric input field with the value '0'.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

The screenshot shows a software window with four tabs: 'Format', 'Naming', 'Misc' (selected), and 'PGP'. In the 'Misc' tab, there is a checked checkbox for 'Compress (ZIP) output'. Below this is a section titled 'Zip File Encryption' which contains a checked checkbox for 'Enable zip encryption'. Underneath this checkbox are three input fields: 'Encryption Level' (a dropdown menu), 'Password' (a text box), and 'Confirm Password' (a text box). At the bottom of the 'Misc' tab, there is a checkbox for 'Defer delivery by' followed by a numeric input field set to '0.0' and the unit 'Hours'.

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

CSV (\*.csv) outputs in SSRS

To export CSV outputs in SSRS, follow these steps:

The screenshot shows the 'Format' tab in the SSRS configuration window. The 'Format' dropdown is set to 'CSV (\*.csv)'. Below it, the 'Format Options' section is active, showing 'Export Engine' as a dropdown, 'Separator' with radio buttons for 'Character' (selected) and 'Tab', and a 'Delimiter' text box. There is also an 'Ignore Header' checkbox.

- You can enter any character or tab as separator.
- You can enter any character as Delimiter.

## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Format Option

- **Export Engine:** You can choose between Standard and Excel.

## Options

The screenshot shows the 'Options' tab in the SSRS configuration window. The 'Export Page Ranges' section has radio buttons for 'All Pages' (selected) and 'Page Range'. Below 'Page Range' are 'From' and 'To' spin boxes, both set to 0. The 'Append to existing file' section has a checkbox labeled 'Append to file if one already exists (disk destination)' which is checked.

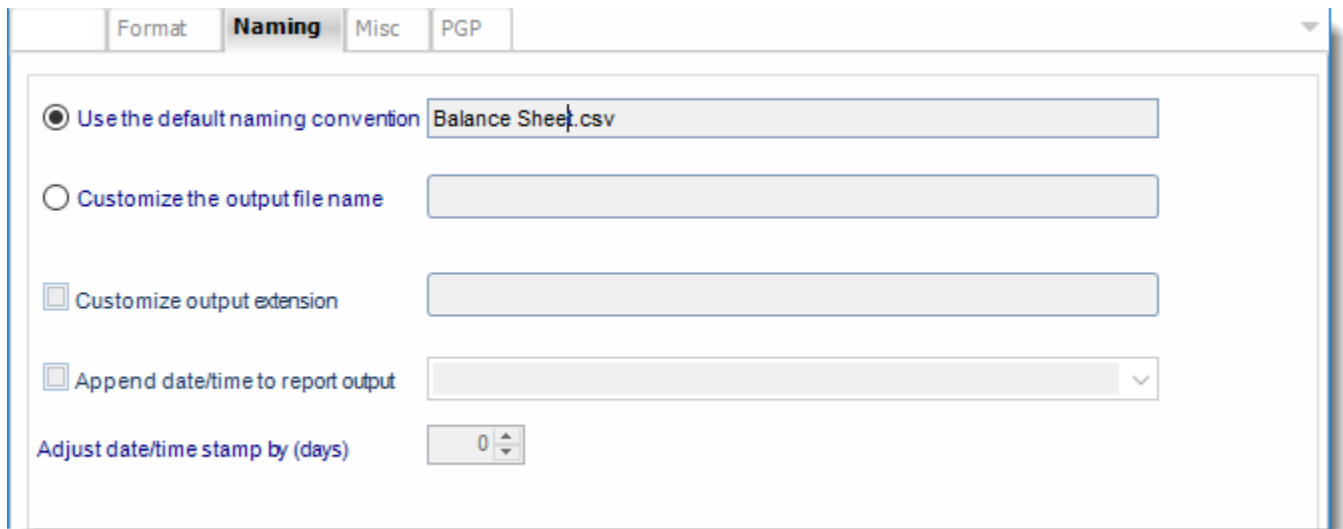
- **Append to existing file:** Determine whether to append to a file if one already exists at the disk destination.

## File Summary

Format Options	Options	File Summary
Title	<input type="text"/>	
Author	<input type="text"/>	
Producer	<input type="text"/>	
Subject	<input type="text"/>	
Date Created	<input type="text" value="Tuesday , August 7, 2018"/>	
Keywords/Comments	<div><input type="text"/></div>	
<input type="checkbox"/> PDF Expiry Date	<input type="text" value="Tuesday , August 7, 2018"/>	
	<input type="text"/>	
PDF Expiry Message	<div><input type="text"/></div>	

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: 'Format', 'Naming' (which is selected), 'Misc', and 'PGP'. The 'Naming' tab contains several options for file naming:

- ☒ **Use the default naming convention**: A text field contains 'Balance Sheet.csv'.
- ☐ **Customize the output file name**: An empty text field.
- ☐ **Customize output extension**: An empty text field.
- ☐ **Append date/time to report output**: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days)**: A numeric spinner set to '0'.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

The screenshot shows a software window with four tabs: 'Format', 'Naming', 'Misc' (selected), and 'PGP'. The 'Misc' tab contains the following options:

- ☒ **Compress (ZIP) output**
- Zip File Encryption**
  - ☒ **Enable zip encryption**
  - Encryption Level**: A dropdown menu.
  - Password**: A text input field.
  - Confirm Password**: A text input field.
- ☐ **Defer delivery by**: A numeric input field with '0.0' and a 'Hours' label.

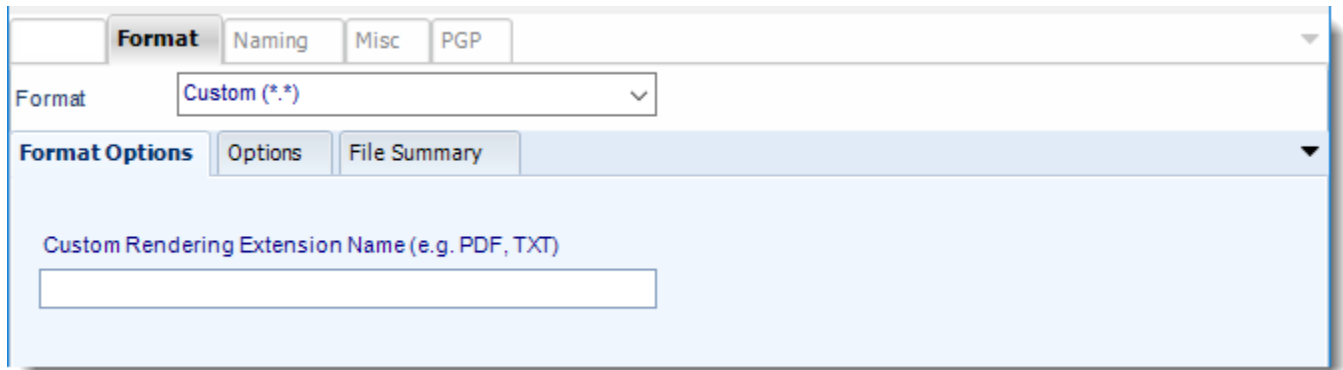
- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

## Custom (\*.\*) outputs in SSRS

Export SSRS reports to custom format & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)
- To export Custom outputs in SSRS, follow these steps:



The screenshot shows the 'Format' tab of the 'Format Options' dialog box in SSRS. The 'Format' dropdown menu is set to 'Custom (\*.\*)'. Below this, the 'Format Options' section has two tabs: 'Options' and 'File Summary'. The 'Options' tab is active, showing a text input field labeled 'Custom Rendering Extension Name (e.g. PDF, TXT)'.

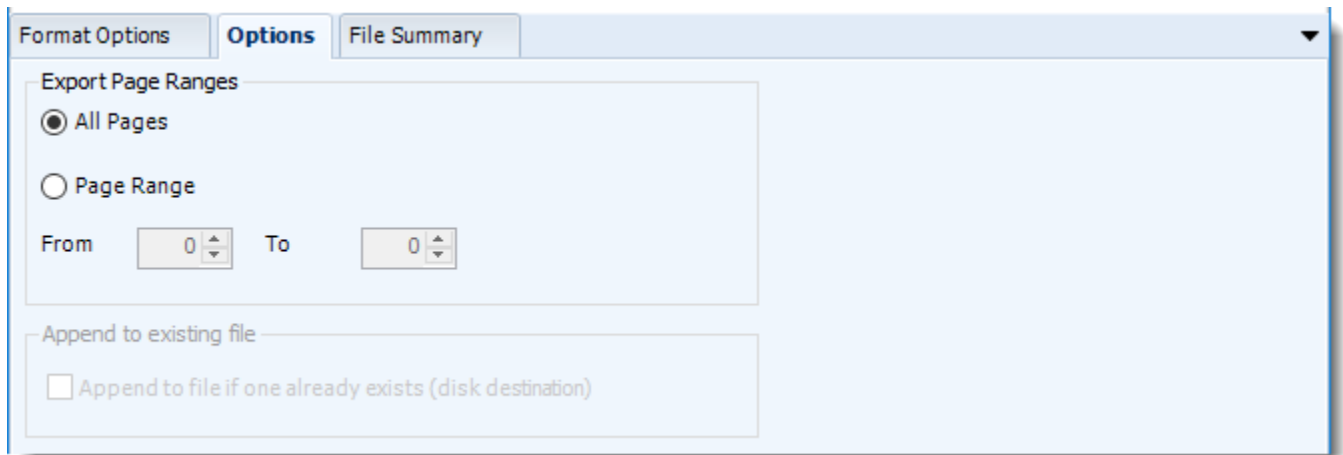
### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Format Option

- Custom Rendering Extension Name (e.g PDF, TXT): Choose any extension name you want to export the report.

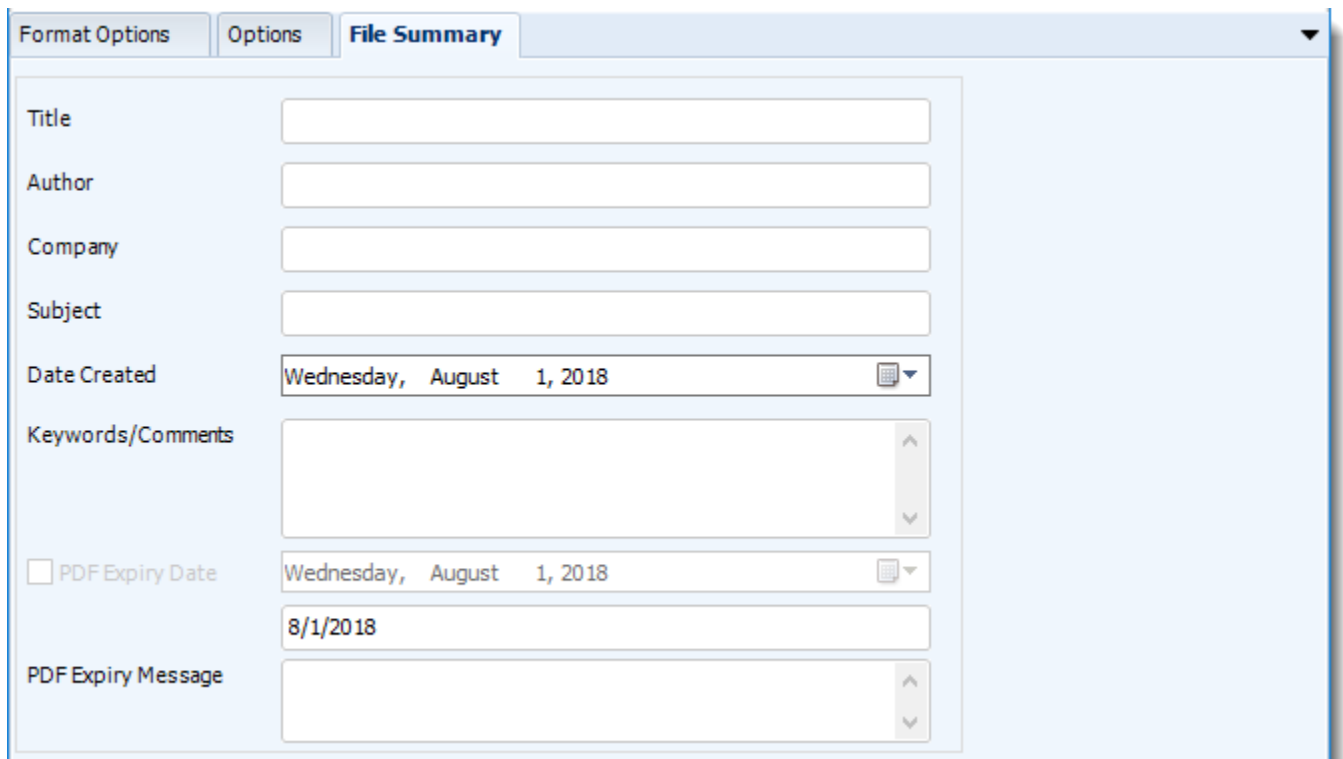
## Option



The screenshot shows a software window with three tabs: 'Format Options', 'Options' (selected), and 'File Summary'. The 'Options' tab contains two main sections. The first section, 'Export Page Ranges', has two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below these are two numeric input fields labeled 'From' and 'To', both containing the value '0'. The second section, 'Append to existing file', contains a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary



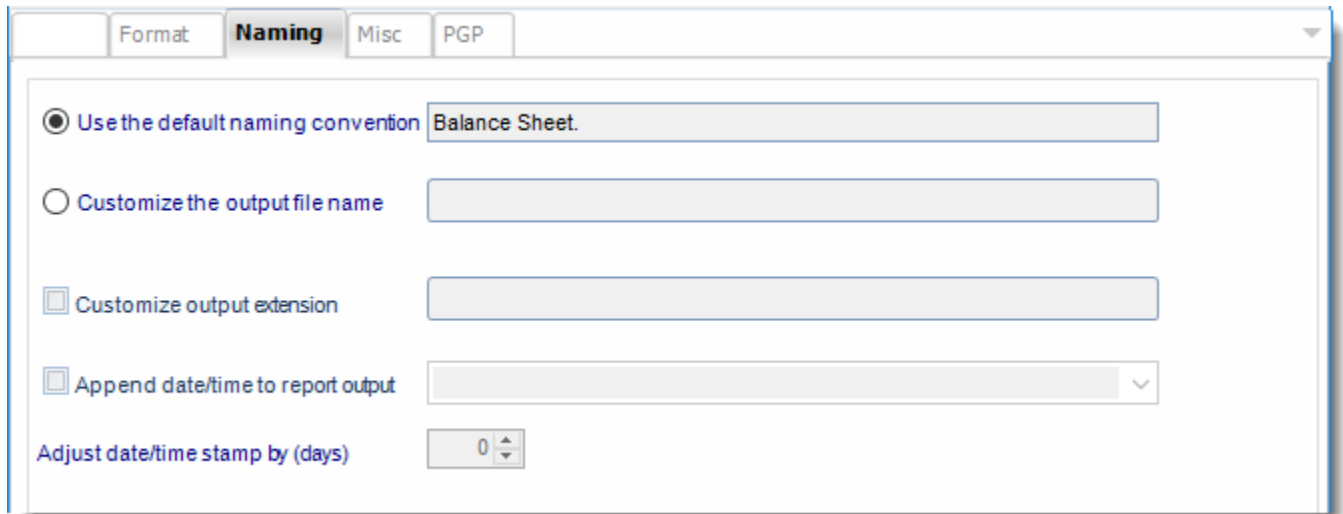
The screenshot shows the same software window with the 'File Summary' tab selected. This tab contains several form fields for metadata. The fields are: 'Title', 'Author', 'Company', 'Subject', 'Date Created' (set to 'Wednesday, August 1, 2018'), 'Keywords/Comments' (a large text area), 'PDF Expiry Date' (set to 'Wednesday, August 1, 2018'), a date field containing '8/1/2018', and 'PDF Expiry Message' (a text area). There is also an unchecked checkbox for 'PDF Expiry Date'.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.



## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: A text field containing "Balance Sheet."
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A numeric spinner set to 0.

- This is the option where you named the output file.
- Default Naming Convention: PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- Customize the output file name: Choose your own filename or right-click and use the Insert Function to insert a value.
- Customize output extension: Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- Append date/time: This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

The screenshot shows a software window with four tabs: 'Format', 'Naming', 'Misc' (selected), and 'PGP'. In the 'Misc' tab, there is a checked checkbox for 'Compress (ZIP) output'. Below this is a 'Zip File Encryption' section containing a checked checkbox for 'Enable zip encryption', a dropdown menu for 'Encryption Level', and two text input fields for 'Password' and 'Confirm Password'. At the bottom of the 'Misc' tab, there is a checkbox for 'Defer delivery by' followed by a numeric input field set to '0.0' and the word 'Hours'.

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Custom (\*.\*) outputs in Power BI Reports & Dashboards and Power BI Service Paginated Reports

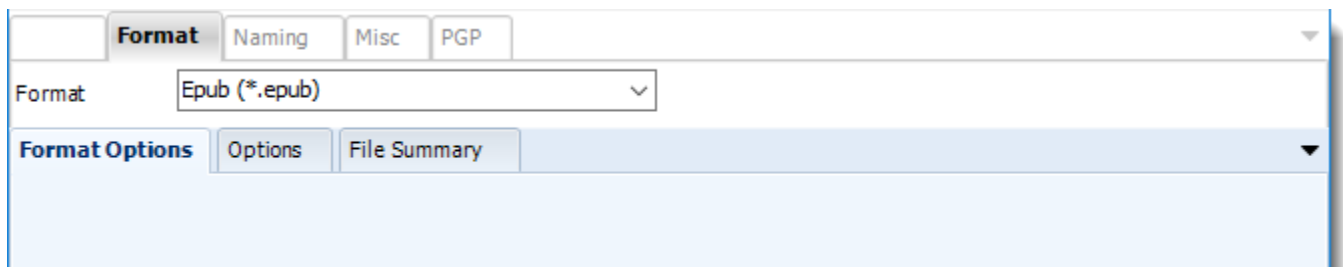
Custom as an export format is currently not available for Power BI Reports.

## EPUB (\*.epub) outputs in Power BI

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)

EPUB is an e-book file format. EPUB files can be read on smartphones, tablets etc. Export Power BI reports to EPUB & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

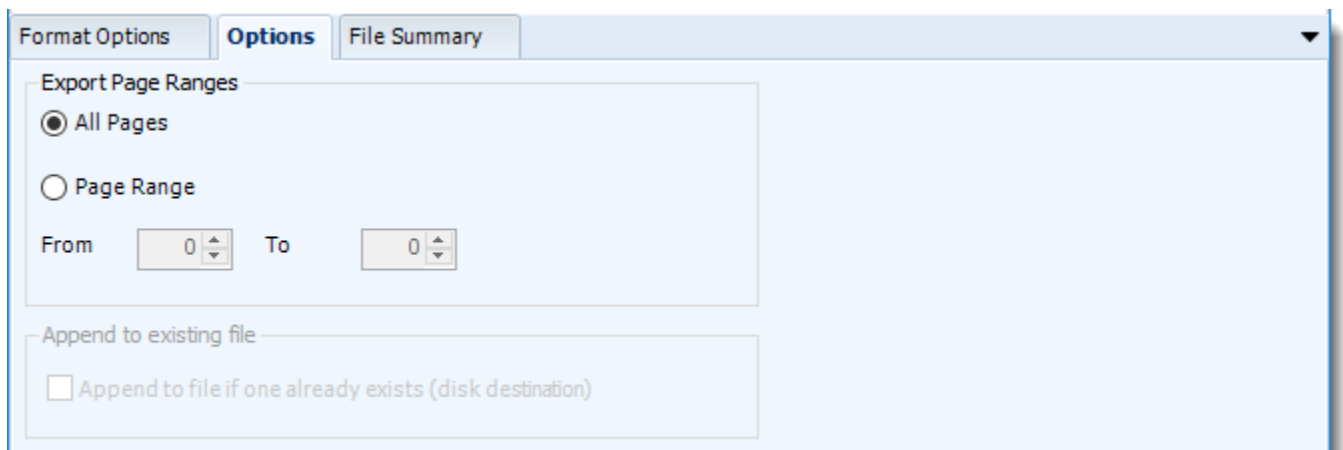


The screenshot shows a tabbed interface with four tabs: 'Format', 'Naming', 'Misc', and 'PGP'. The 'Format' tab is selected. Below the tabs, there is a 'Format' label and a dropdown menu showing 'Epub (\*.epub)'. Below this, there is another set of tabs: 'Format Options', 'Options', and 'File Summary'. The 'Format Options' tab is selected.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Options



The screenshot shows the 'Options' tab in the export configuration. It contains two main sections. The first section is 'Export Page Ranges', which has two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below the 'Page Range' option are two spin boxes labeled 'From' and 'To', both set to '0'. The second section is 'Append to existing file', which contains a checkbox labeled 'Append to file if one already exists (disk destination)'. This checkbox is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

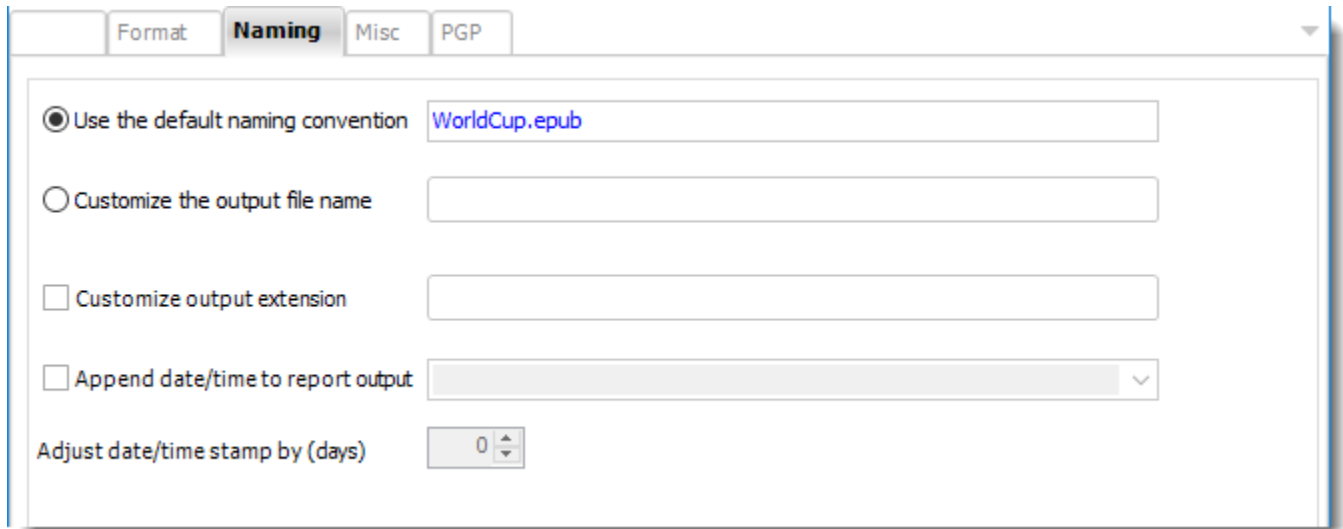
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title: A single-line text input field.
- Author: A single-line text input field.
- Company: A single-line text input field.
- Subject: A single-line text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A multi-line text area with up and down arrow buttons on the right.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018".
- Below the PDF Expiry Date date picker is a single-line text input field containing "8/1/2018".
- PDF Expiry Message: A multi-line text area with up and down arrow buttons on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a dialog box with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: WorldCup.epub
- ☐ Customize the output file name: [Empty text box]
- ☐ Customize output extension: [Empty text box]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): 0 [Spin box]

- Default Naming Convention: PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- Customize the output file name: Choose your own filename or right-click and use the Insert Function to insert a value.
- Customize output extension: Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- Append date/time: This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

EPUB (\*.epub) outputs in Paginated Reports or SSRS

Epub as an export format is currently not available for Paginated Reports or SSRS reports.

## MS Excel - Data Only (\*.xlsx) outputs for Power BI Service Reports and Dashboards

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export Power BI reports to MS Excel - Data Only, follow these steps:

Format: MS Excel - Data Only (\*.xlsx) ▼

**PowerBI Visuals** | Format Options | File Summary ▼

Add the visual(s) whose data you would like to export. Each visual's data goes into a separate Excel worksheet.

Page	Visual Title	Type	
2	Avocado Prices	SUMMARY	<div>Add</div> <div>Edit</div> <div>Delete</div>

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

- MS Excel - Data Only exports data from specified visuals to Excel.
- To add visual data click **Add**.

## Add Visual For Data Export

**Note:** PBRS can only interact with visuals that have titles.

General | Style | Column Formatting

Add Visual to Export

Page Number: 2

Visual Title: Avocado Prices

Data Export Type: ☒ Summary Data ☐ Underlying Data

☐ Add Row Totals ☐ Add Column Totals

Only summarize the following rows (comma delimited)

Only summarize the following columns (comma delimited)

☐ Use an Excel template

Insert/Append into the following worksheet

Starting at cell

Column: ☒ Next available column ☐ [ ]

Row: ☒ Next available row ☐ [ ]

OK Cancel

### General

- **Visual Title:** Select the Visual data's titles you want to export.
- **Page Number:** Enter the page number where the visual title is located.

In order for PBRS to see a Visual (for exporting to CSV or Excel), the Visual **MUST** have a title already set in Power BI.



- **Data Export Type**

Data Export Type ☒ Summary Data ☐ Underlying Data

☒ Add Row Totals ☒ Add Column Totals

Only summarize the following rows (comma delimited)  
 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,

Only summarize the following columns (comma delimited)  
 C,D,E,F,G,H,I,K,L,M,N

- **Summarized data:** Select this option if you want to export data for what you see in that visual.
- **Underlying data:** Select this option if you want to see the data in the visual and additional data from the model.
- **Add Row Totals:** Select this option if you want to add row totals in that visual.
- **Only summarize the following rows (comma delimited):** If you don't want to add all rows total in the visual worksheet, enter the number of the row where you want the total of the row in the visual worksheet.

*You must have checked Add Row Totals to use this option.*

- **Add Column Totals:** Select this option if you want to add column totals in that visual.
- **Only summarize the following columns (comma delimited):** If you don't want to add all column totals in the visual worksheet, enter the letter of the column where you want the total of the column.

*You must have checked Add Column Totals to use this option.*

For more a more detailed explanation of the Data Export Types, click [here](#).

## Excel Template

☒ Use an Excel template

C:\Users\karen\Desktop\QA test\Template PBRS-687.xlsx ...

Insert/Append into the following worksheet Sheet1

Starting at cell

Column

☐ Next available column

☒ C

Row

☐ Next available row

☒ 1

- Use this option if you want to export the Power BI Visual to an excel template already created.
- Once you check **Use an Excel template**, use the (...) button to browse the excel template.
- Once the excel template is selected, select the worksheet you want to export the Power BI Visual.
- You have the option to select the specific column and row for the Power BI Visual or select the next available column and row.

## Style

Add Visual For Data Export

**Note:** PBRS can only interact with visuals that have titles.

General Style

	Font Weight	Forecolor	Background Color
<b>Header</b>	<input checked="" type="checkbox"/> Bold	<input type="text"/>	<input type="text"/>
<b>Column Totals</b>	<input checked="" type="checkbox"/> Bold	<input type="text"/>	<input type="text"/>
<b>Row Totals</b>	<input checked="" type="checkbox"/> Bold	<input type="text"/>	<input type="text"/>
<b>Odd Rows</b>	<input type="checkbox"/> Bold	<input type="text"/>	<input type="text"/>
<b>Even Rows</b>	<input type="checkbox"/> Bold	<input type="text"/>	<input type="text"/>

Styles

Import Style

Export Style

OK Cancel

- In this section, you may modify the font weight and colors of that visual.

- **Styles:** You can import and/or export style to be used in other destinations and schedules.

*This option can only be used in MS Excel - Data Only (\*.xlsx) for Power BI Service Reports and Dashboards.*

## Column Formatting

Add Visual For Data Export

**Note:** PBRS can only interact with visuals that have titles.

General Style **Column Formatting**

Header Name Data Type Custom Format

Date Date/Time dd-MM-yyyy Add

Name	Custom Format	Type	Delete
4046	\$#,#.00	Numeric	
Total Volume	\$#,.	Numeric	
AveragePrice	%	Numeric	
4225	\$#,#.00	Numeric	
4770	\$#,#.00	Numeric	
Date	dd-MM-yyyy	Date/Time	

OK Cancel

- In this section, you can specify the type of format string to the data type of your column.

- **Header Name:** Enter the column header name.
- **Data Type:** Select the data type.
- **Custom Format:** Enter the format string.
- Click **Add**.
- Click **OK**.

Format: MS Excel - Data Only (\*.xlsx) ▼

**PowerBI Visuals** | Format Options | File Summary ▼

Add the visual(s) whose data you would like to export. Each visual's data goes into a separate Excel worksheet.

Page	Visual Title	Type	
2	Avocado Prices	SUMMARY	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>
1	Total Bags by type	SUMMARY	
1	Avocado Types by Year	SUMMARY	
1	Avocados Nutritional types	SUMMARY	

☐ Place all visuals into a single worksheet

- **Place all visuals into a single worksheet:** Select this option to place all Power BI Visual's data into a single worksheet.

*Leaving this option unchecked, each Power BI Visual's data will be exported to its own tab (worksheet) in the Excel file (workbook).*



## Options



The screenshot shows a software window with three tabs: 'Format Options', 'Options' (which is selected and highlighted in blue), and 'File Summary'. The 'Options' tab contains two main sections. The first section, titled 'Export Page Ranges', has two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below the 'Page Range' option are two spin boxes labeled 'From' and 'To', both containing the number '0'. The second section, titled 'Append to existing file', contains a single checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

Format Options	Options	File Summary
Title	<input type="text"/>	
Author	<input type="text"/>	
Company	<input type="text"/>	
Subject	<input type="text"/>	
Date Created	Wednesday, August 1, 2018 	
Keywords/Comments	<input type="text"/>	
<input type="checkbox"/> PDF Expiry Date	Wednesday, August 1, 2018 	
	<input type="text" value="8/1/2018"/>	
PDF Expiry Message	<input type="text"/>	

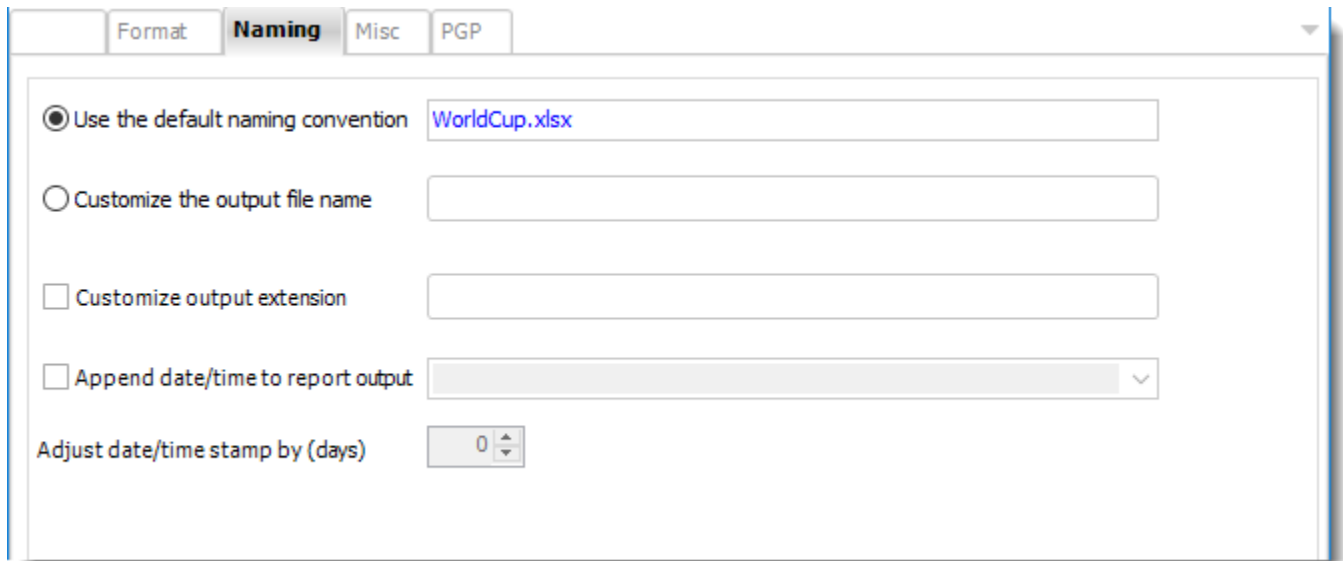
- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

© ChristianSteven Software

Updated on 15 November 2021

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: 'Format', 'Naming', 'Misc', and 'PGP'. The 'Naming' tab is active. It contains the following controls:

- ☒ Use the default naming convention: A text field containing 'WorldCup.xlsx'.
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu.
- Adjust date/time stamp by (days): A spinner box with the value '0'.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

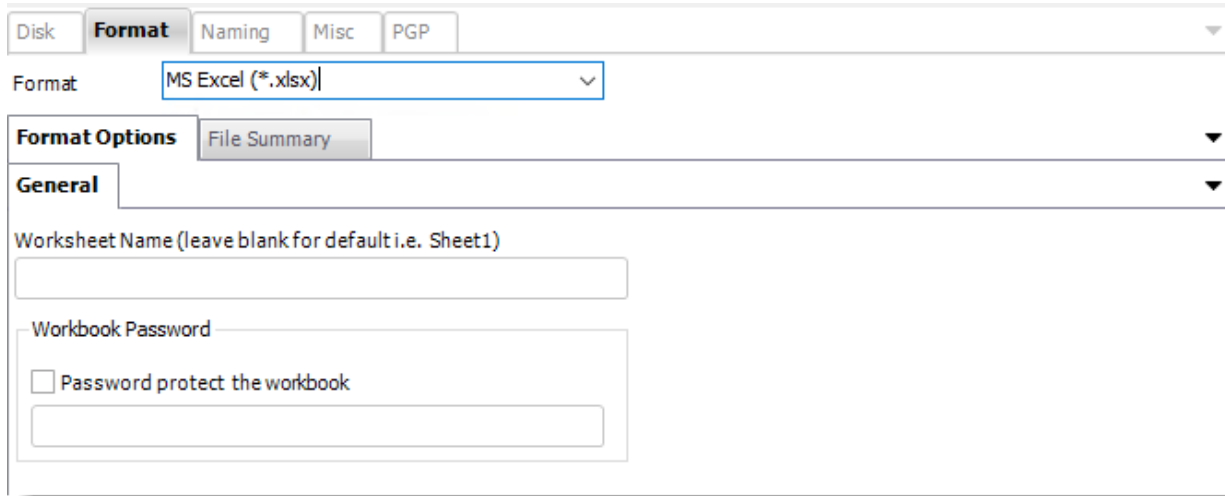
The screenshot shows a software window with three tabs: 'Format', 'Misc' (selected), and 'PGP'. In the 'Misc' tab, there is a checkbox labeled 'Compress (ZIP) output' which is checked. Below this is a section titled 'Zip File Encryption' containing a checkbox 'Enable zip encryption' which is unchecked. Under this checkbox are three input fields: 'Encryption Level' (a dropdown menu), 'Password' (a text box), and 'Confirm Password' (a text box). At the bottom of the 'Misc' tab is a checkbox 'Defer delivery by' which is unchecked, followed by a numeric input field showing '0.0' and the unit 'Hours'.

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)



## MS Excel (\*.xlsx) outputs for Power BI Service Reports and Dashboards

To export MS Excel in Power BI follow the following steps:



The screenshot shows the 'Format' tab of the export options dialog. The 'Format' dropdown is set to 'MS Excel (\*.xlsx)'. Below it, the 'Format Options' section is expanded, showing the 'General' tab. The 'Worksheet Name' field is empty, with a hint '(leave blank for default i.e. Sheet1)'. The 'Workbook Password' section has a checkbox for 'Password protect the workbook' which is unchecked, and an empty password field below it.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Format Option

- **Worksheet Name:** Write the name of the worksheet if not it will go by default as Sheet1.
- **Workbook Password:** Here you may have the option to create a password for the format.

### Options



The screenshot shows the 'Options' tab of the export options dialog. The 'Export Page Ranges' section has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below 'Page Range' are 'From' and 'To' spinner boxes, both set to 0. The 'Append to existing file' section has a checkbox for 'Append to file if one already exists (disk destination)' which is unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

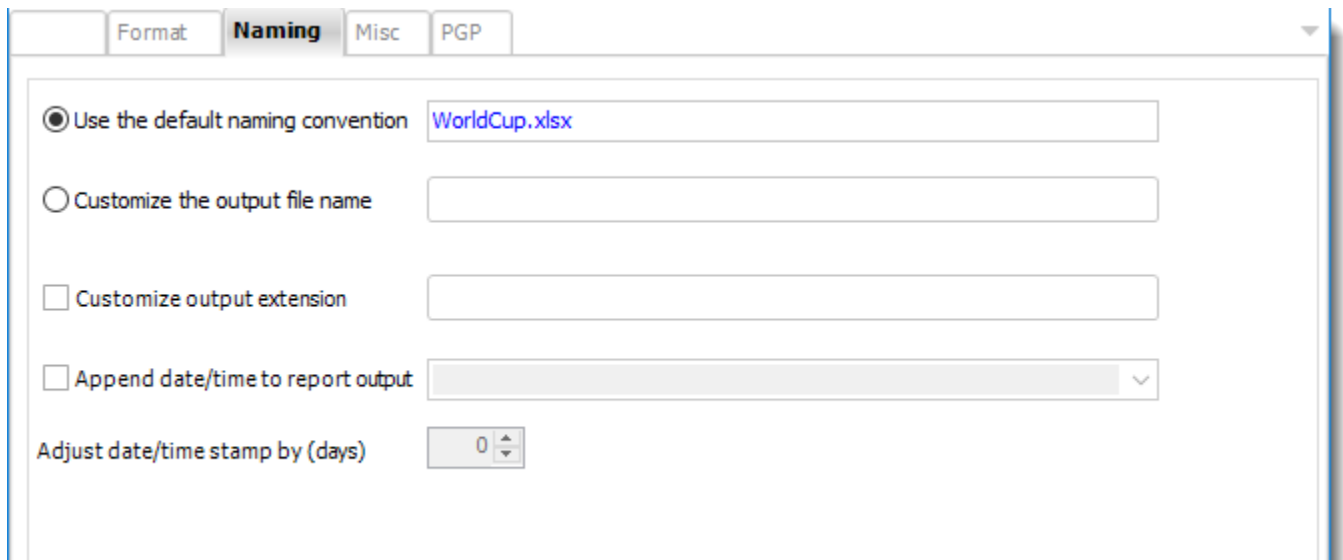
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title:** A text input field.
- Author:** A text input field.
- Company:** A text input field.
- Subject:** A text input field.
- Date Created:** A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments:** A large text area with up and down arrows on the right side.
- PDF Expiry Date:** A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018". Below the date picker is a text input field containing "8/1/2018".
- PDF Expiry Message:** A text input field with up and down arrows on the right side.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The Naming tab is active. It contains the following options:

- ☒ Use the default naming convention: WorldCup.xlsx
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- This is the option where you named the output file.
- Default Naming Convention: PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- Customize the output file name: Choose your own filename or right-click and use the Insert Function to insert a value.
- Customize output extension: Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- Append date/time: This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

MS Excel 2007 (\*.xlsx) outputs for Paginated Reports or SSRS

The screenshot shows a software interface with a top navigation bar containing tabs: 'Email', 'Format' (selected), 'Naming', 'Misc', and 'PGP'. Below the navigation bar, the 'Format' section is active, showing a dropdown menu set to 'MS Excel 2007 (\*.xlsx)'. Underneath, there are two sub-tabs: 'Format Options' (selected) and 'File Summary'. The 'Format Options' sub-tab is further divided into a 'General' section. Within 'General', there is a text input field for 'Worksheet Name (leave blank for default i.e. Sheet1)' and a 'Workbook Password' section. The 'Workbook Password' section includes a checkbox labeled 'Password protect the workbook' and an empty text input field for the password.

## Format

*The output format is selected as part of the Destinations setup for each destination type.  
The tab above can be found in the Destinations section of a schedule.*

## Format Option

- **Worksheet Name:** Write the name of the worksheet if not it will go by default as Sheet1.
- **Workbook Password:** Here you may have the option to create a password for the format.

## Options

The screenshot shows the 'Options' tab of a software window. It contains two main sections. The first section, 'Export Page Ranges', has two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below these are 'From' and 'To' fields, both containing the number '0'. The second section, 'Append to existing file', has a checkbox labeled 'Append to file if one already exists (disk destination)' which is currently unchecked.

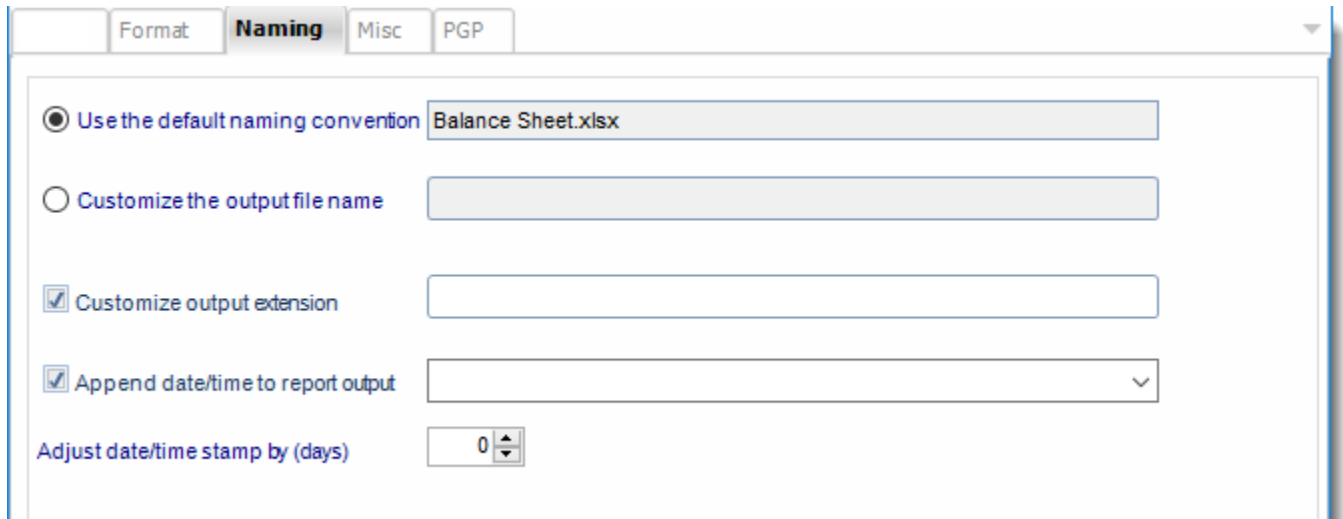
## File Summary

The screenshot shows the 'File Summary' tab of the same software window. It contains several input fields for file metadata: 'Title', 'Author', 'Company', and 'Subject' are all empty text boxes. 'Date Created' is a date picker showing 'Wednesday, August 1, 2018'. 'Keywords/Comments' is a large text area with up and down arrows on the right. Below this is a checkbox for 'PDF Expiry Date' which is unchecked, followed by another date picker showing 'Wednesday, August 1, 2018'. Below that is a text box containing '8/1/2018'. Finally, 'PDF Expiry Message' is a large text area with up and down arrows on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a dialog box with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.xlsx
- ☐ Customize the output file name: [Empty text box]
- ☒ Customize output extension: [Empty text box]
- ☒ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [0] [Up/Down arrows]

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by 0.0 Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)



MS Excel 97-2000 (\*.xls) for Paginated Reports on Premise or SSRS

The screenshot shows the 'Format' tab selected in the 'Destinations' section of a report schedule. The 'Format' dropdown menu is set to 'MS Excel 97-2000 (\*.xls)'. Below this, the 'Format Options' section is expanded, showing the 'General' tab. The 'Worksheet Name' field is empty, with a hint '(leave blank for default i.e. Sheet1)'. The 'Workbook Password' section is also visible, with a checkbox for 'Password protect the workbook' which is currently unchecked, and an empty password field below it.

## Format

*The output format is selected as part of the Destinations setup for each destination type.  
The tab above can be found in the Destinations section of a schedule.*

## Format Option

- **Worksheet Name:** Write the name of the worksheet if not it will go by default as Sheet1.
- **Workbook Password:** Here you may have the option to create a password for the format.

## Options

The 'Options' tab is active, showing settings for exporting page ranges. It includes a section for 'Export Page Ranges' with radio buttons for 'All Pages' (selected) and 'Page Range'. Below these are 'From' and 'To' spinners, both set to 0. There is also a section for 'Append to existing file' with a checkbox labeled 'Append to file if one already exists (disk destination)' which is currently unchecked.

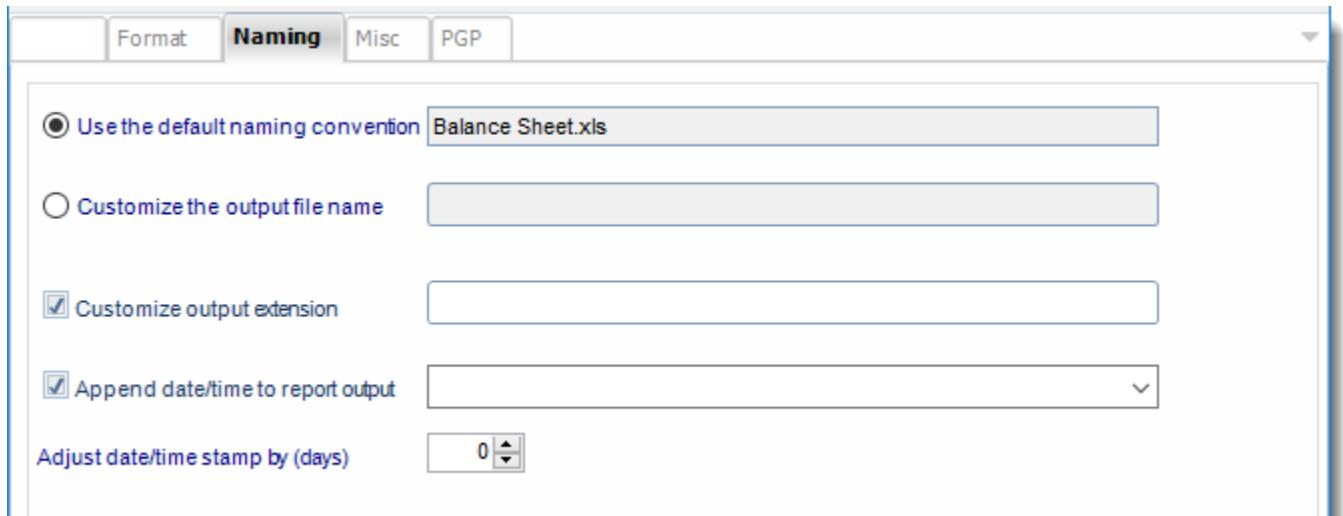
## File Summary

The 'File Summary' tab is active, showing a form for entering file metadata. The fields include: 'Title', 'Author', 'Company', 'Subject', 'Date Created' (set to Wednesday, August 1, 2018), 'Keywords/Comments' (a text area), 'PDF Expiry Date' (checked, set to Wednesday, August 1, 2018), and 'PDF Expiry Message' (set to 8/1/2018). Each text input field and the expiry date field has a calendar icon on the right side.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a dialog box with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.xls
- ☐ Customize the output file name: [Empty text box]
- ☒ Customize output extension: [Empty text box]
- ☒ Append date/time to report output: [Empty text box with a dropdown arrow]
- Adjust date/time stamp by (days): [0] [Up/Down arrows]

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

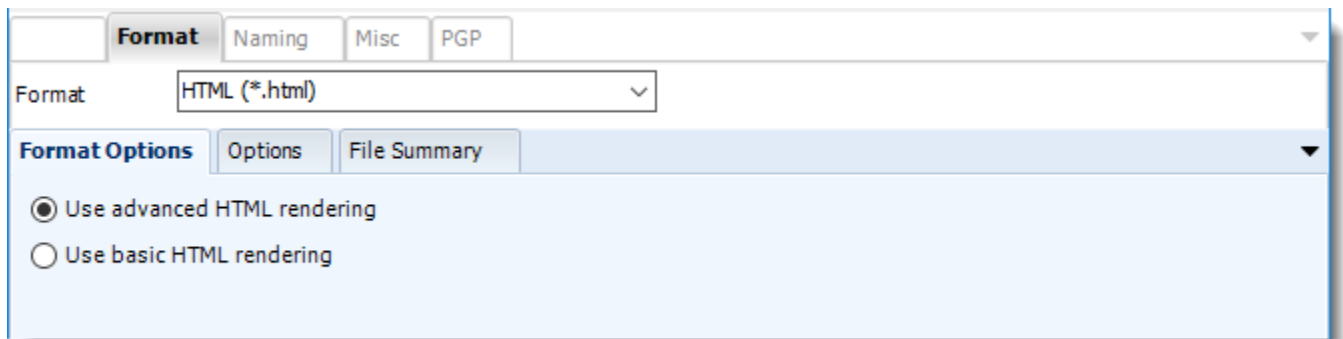
## HTML (\*.html) outputs for Power BI

HTML is the standard markup language for creating web pages and web applications. Export Power BI & SSRS reports to HTML & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export HTML (\*.html) in Power BI follow these steps:

The image shows a screenshot of the 'Format' tab in a Power BI export configuration window. The 'Format' dropdown menu is set to 'HTML (\*.html)'. Below this, the 'Format Options' section is expanded, showing two radio button options: 'Use advanced HTML rendering' (which is selected) and 'Use basic HTML rendering'. The window has tabs for 'Format', 'Naming', 'Misc', and 'PGP' at the top, and 'Format Options' and 'File Summary' at the bottom of the expanded section.

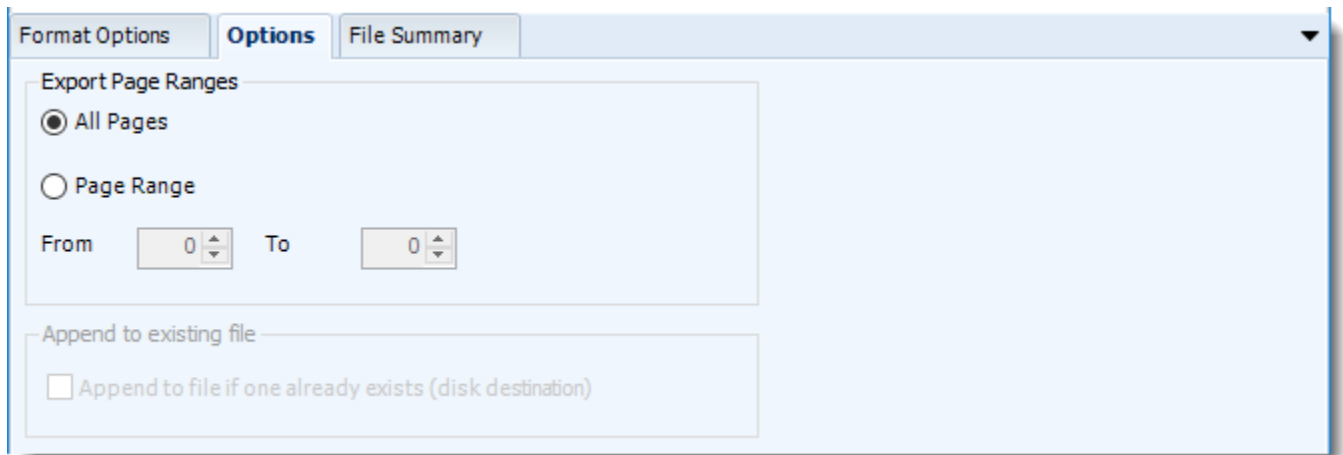
### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Format Options

- Use advanced HTML rendering
- Use basic HTML rendering

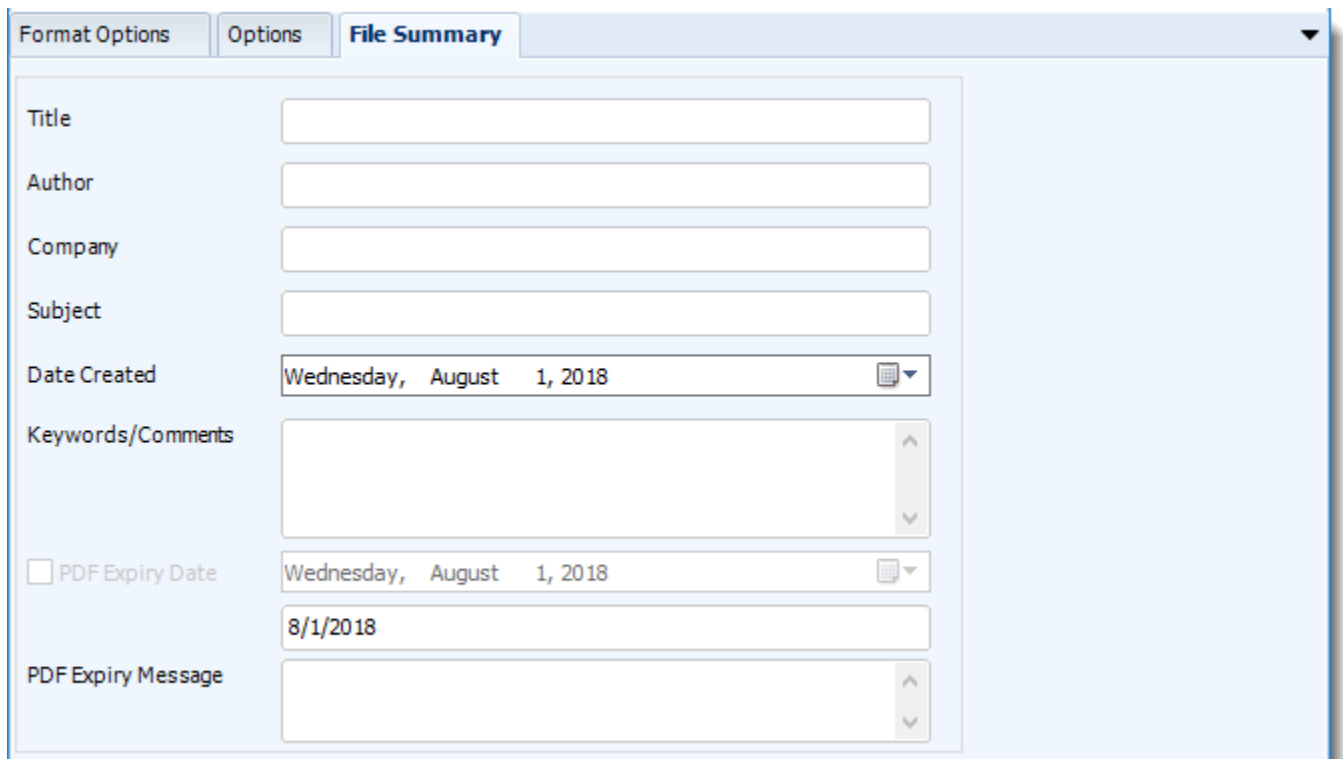
## Options



The screenshot shows the 'Options' tab of a software interface. It has three tabs: 'Format Options', 'Options' (selected), and 'File Summary'. The 'Options' tab contains two sections. The first section, 'Export Page Ranges', has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below 'Page Range' are 'From' and 'To' fields, both containing the number '0'. The second section, 'Append to existing file', has a checkbox labeled 'Append to file if one already exists (disk destination)' which is currently unchecked.

- Use this option to select to export all pages or just a selection.

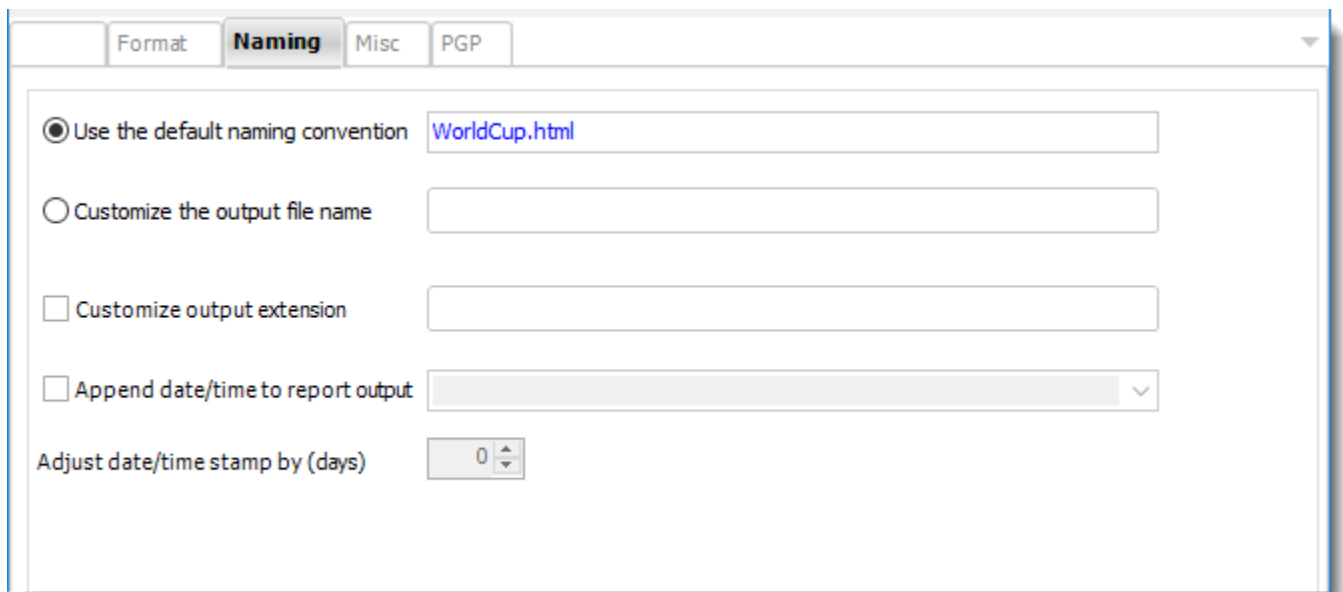
## File Summary



The screenshot shows the 'File Summary' tab of the same software interface. It has three tabs: 'Format Options', 'Options', and 'File Summary' (selected). The 'File Summary' tab contains several input fields. 'Title', 'Author', 'Company', and 'Subject' are simple text boxes. 'Date Created' is a date picker showing 'Wednesday, August 1, 2018'. 'Keywords/Comments' is a text area with up and down arrows. 'PDF Expiry Date' is a date picker showing 'Wednesday, August 1, 2018', with a checkbox to its left. Below it is a text box containing '8/1/2018'. 'PDF Expiry Message' is a text area with up and down arrows.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The 'Naming' tab is selected. It contains the following options:

- ☒ Use the default naming convention: WorldCup.html
- ☐ Customize the output file name: [text box]
- ☐ Customize output extension: [text box]
- ☐ Append date/time to report output: [dropdown menu]
- Adjust date/time stamp by (days): [spin box with 0]

- This is the option where you name the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by 0.0 Hours

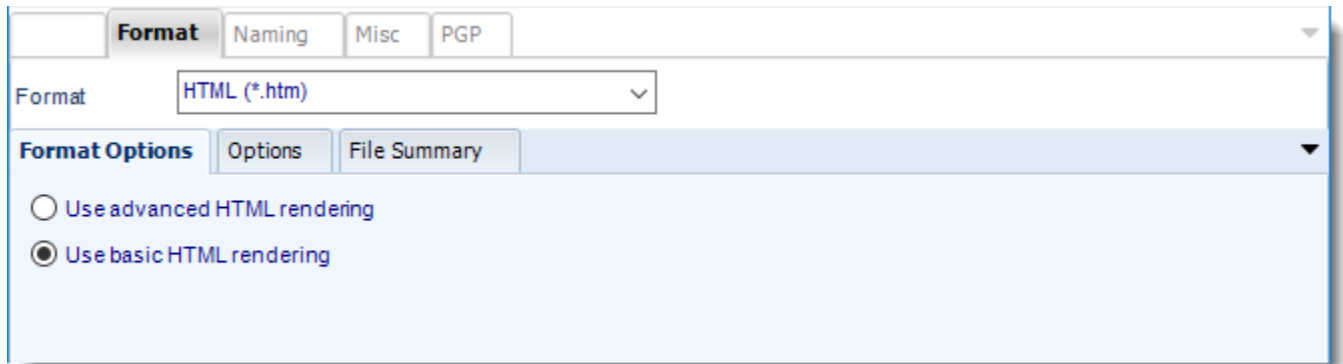
- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)



## HTML (\*.htm) outputs in Paginated Reports on Premise or SSRS

HTML is the standard markup language for creating web pages and web applications. Export Power BI & SSRS reports to HTML & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

To export HTML (\*.htm) in SSRS follow these steps:

The image shows a screenshot of the 'Format' tab in the SSRS 'Format Options' dialog box. The 'Format' dropdown menu is set to 'HTML (\*.htm)'. Below this, the 'Format Options' section has two tabs: 'Options' and 'File Summary'. The 'Options' tab is active, showing two radio button options: 'Use advanced HTML rendering' (which is unselected) and 'Use basic HTML rendering' (which is selected with a black dot).

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Format Options

- Use advanced HTML rendering
- Use basic HTML rendering

## Options

The screenshot shows the 'Options' tab of a software interface. It has three tabs: 'Format Options', 'Options' (selected), and 'File Summary'. The 'Options' tab contains two sections. The first section, 'Export Page Ranges', has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below these are two spin boxes labeled 'From' and 'To', both set to '0'. The second section, 'Append to existing file', has a checkbox labeled 'Append to file if one already exists (disk destination)' which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

The screenshot shows the 'File Summary' tab of the same software interface. It has three tabs: 'Format Options', 'Options', and 'File Summary' (selected). The 'File Summary' tab contains several input fields. 'Title', 'Author', 'Company', and 'Subject' are text boxes. 'Date Created' is a date picker showing 'Wednesday, August 1, 2018'. 'Keywords/Comments' is a text area with up and down arrows. 'PDF Expiry Date' is a date picker showing 'Wednesday, August 1, 2018', with a checkbox to its left. Below it is a text box containing '8/1/2018'. 'PDF Expiry Message' is a text area with up and down arrows.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

The screenshot shows a software window with a tabbed interface. The 'Naming' tab is selected, showing options for naming output files. The 'Format' tab is also visible. The 'Naming' tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.htm
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- This is the option where you name the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by  Hours

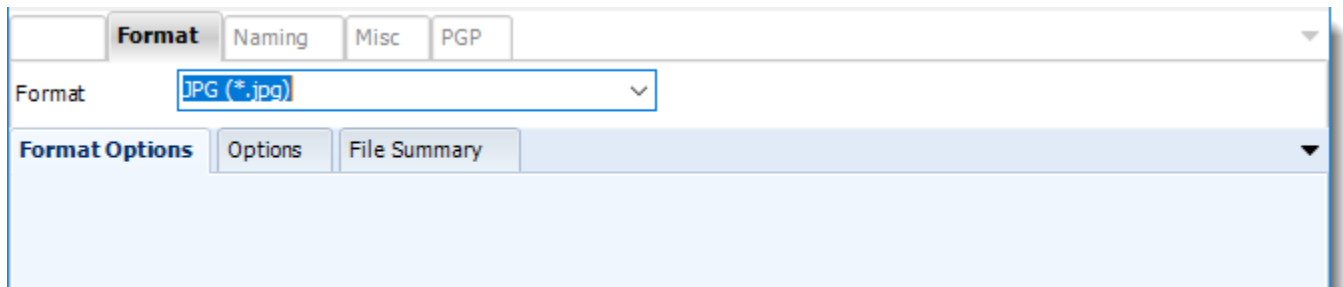
- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

## JPG (\*.jpg) outputs for Power BI Reports and Dashboards

JPEG is a commonly used method of lossy compression for digital images. Export Power BI reports to JPG & automatically deliver them to an FTP site, embed them in an email body, or deliver them in a PDF, DOCX or PPT document.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)

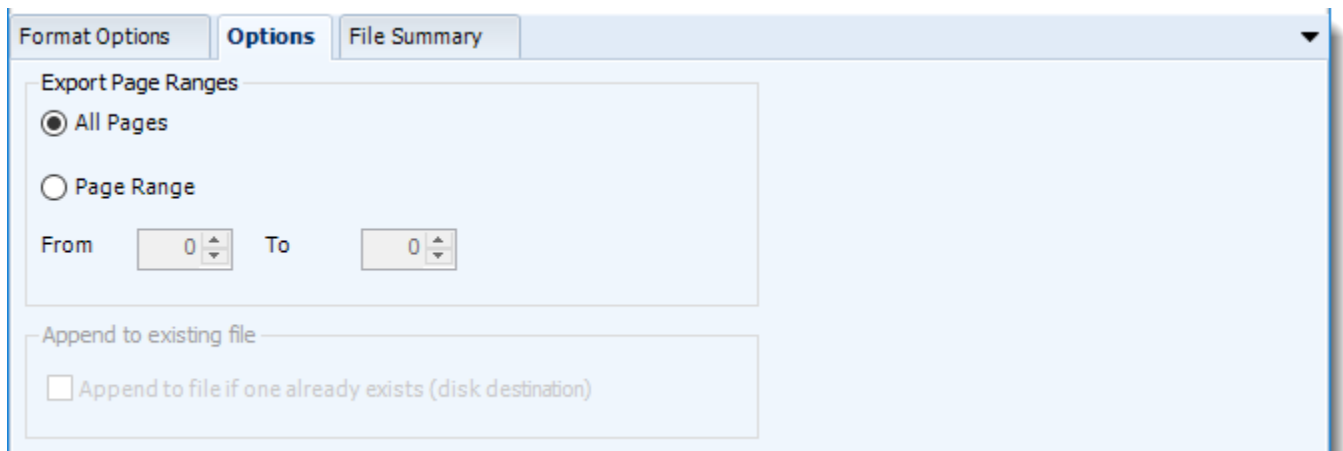


The screenshot shows the 'Format' tab selected in a settings panel. Below the tab, there is a 'Format' dropdown menu currently set to 'JPG (\*.jpg)'. Below this, there are three sub-tabs: 'Format Options', 'Options', and 'File Summary'. The 'Format Options' sub-tab is currently active.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Options



The screenshot shows the 'Options' sub-tab selected within the 'Format Options' section. It contains two main settings areas. The first, 'Export Page Ranges', has two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below 'Page Range' are 'From' and 'To' spinners, both set to '0'. The second area, 'Append to existing file', contains a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

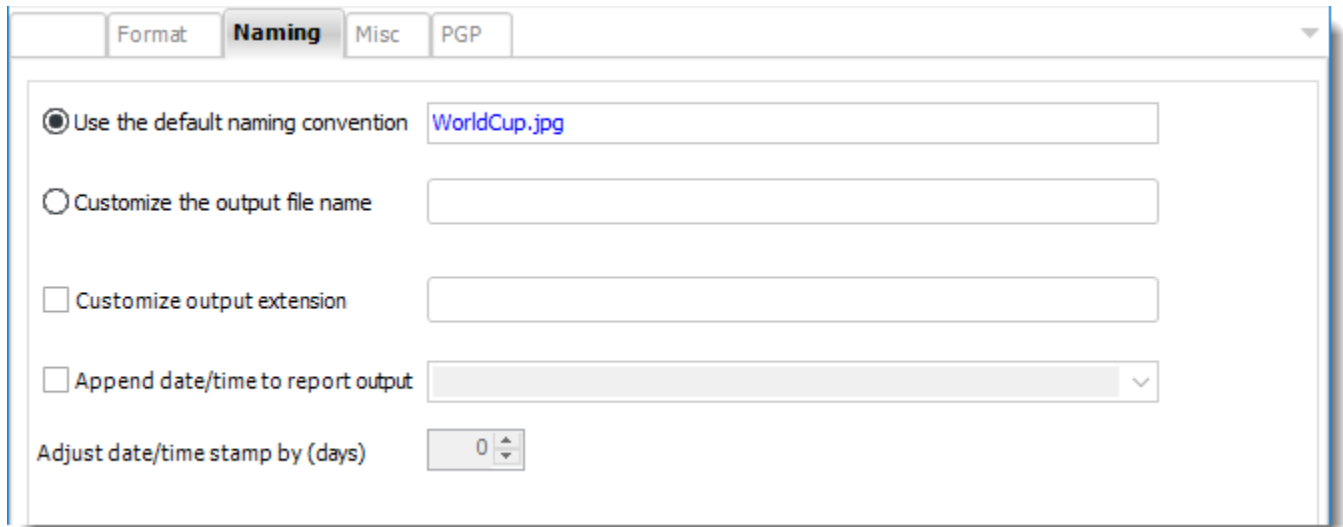
The screenshot shows a software window with three tabs: 'Format Options', 'Options', and 'File Summary'. The 'File Summary' tab is selected and contains the following fields:

- Title:** A text input field.
- Author:** A text input field.
- Company:** A text input field.
- Subject:** A text input field.
- Date Created:** A date picker showing 'Wednesday, August 1, 2018'.
- Keywords/Comments:** A text area with up and down arrows on the right.
- PDF Expiry Date:** A date picker showing 'Wednesday, August 1, 2018'.
- PDF Expiry Date (sub-field):** A text input field showing '8/1/2018'.
- PDF Expiry Message:** A text area with up and down arrows on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: WorldCup.jpg
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with 0]

- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

JPG (\*.jpg) outputs for Paginated Reports or SSRS

JPG as an export format is currently not available for Paginated Reports or SSRS reports.

MS Word (\*.doc) outputs

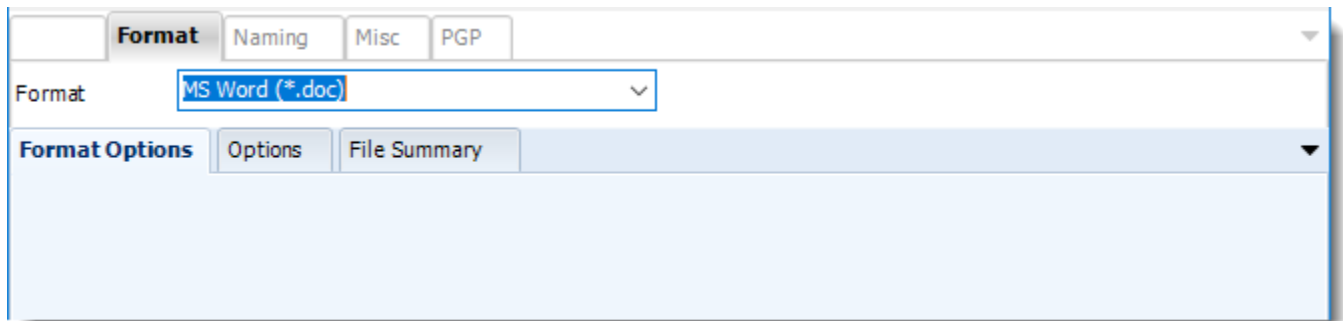
Export Power BI & SSRS reports to MS Word & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations. PBRs lets you customize them before delivery.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)



To export MS Word (\*.doc) for Power BI and SSRS, follow these steps:



The screenshot shows a software interface with a tabbed menu at the top. The tabs are 'Format', 'Naming', 'Misc', and 'PGP'. The 'Format' tab is selected and highlighted. Below the tabs, there is a 'Format' label followed by a dropdown menu that currently displays 'MS Word (\*.doc)'. Below this, there is another set of tabs: 'Format Options', 'Options', and 'File Summary'. The 'Format Options' tab is selected and highlighted.

## Format

*The output format is selected as part of the Destinations setup for each destination type.  
The tab above can be found in the Destinations section of a schedule.*

## Options



The screenshot shows the 'Options' tab selected in the software interface. The tabbed menu at the top now shows 'Format Options', 'Options' (selected), and 'File Summary'. The main area of the 'Options' tab contains two sections. The first section is titled 'Export Page Ranges' and contains two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below the 'Page Range' radio button, there are two input fields labeled 'From' and 'To', both containing the number '0'. The second section is titled 'Append to existing file' and contains a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

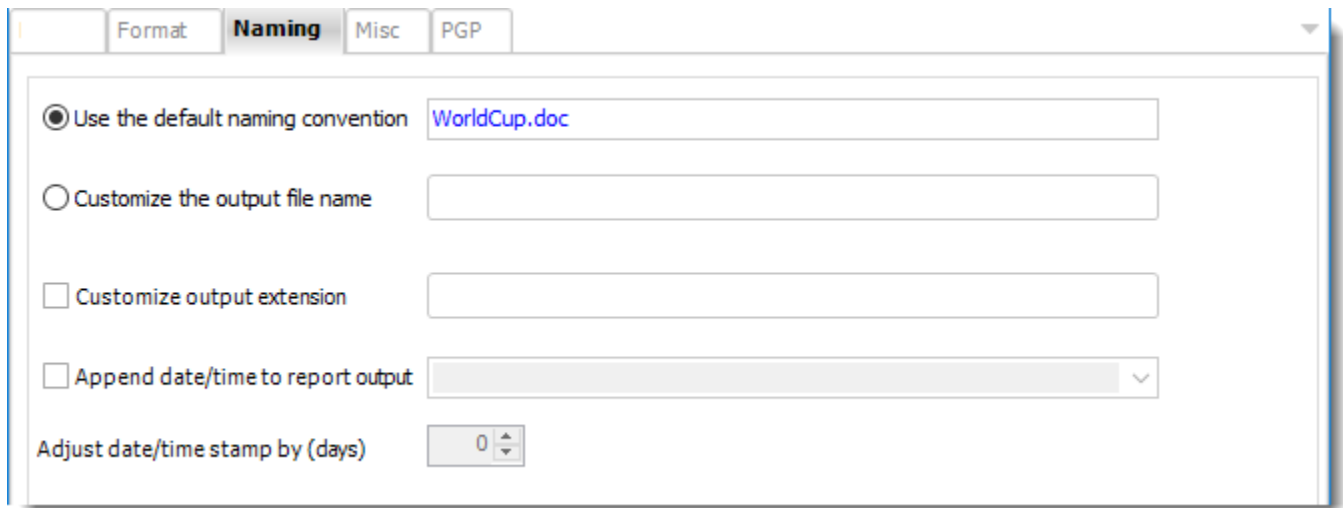
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A text area with up and down arrows.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018".
- 8/1/2018: A text input field below the date picker.
- PDF Expiry Message: A text area with up and down arrows.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with a tabbed interface. The 'Naming' tab is selected, showing options for file naming. The 'Format' tab is also visible. The 'Naming' tab contains the following options:

- ☒ Use the default naming convention: WorldCup.doc
- ☐ Customize the output file name: [Text box]
- ☐ Customize output extension: [Text box]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- This is the option where you named the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

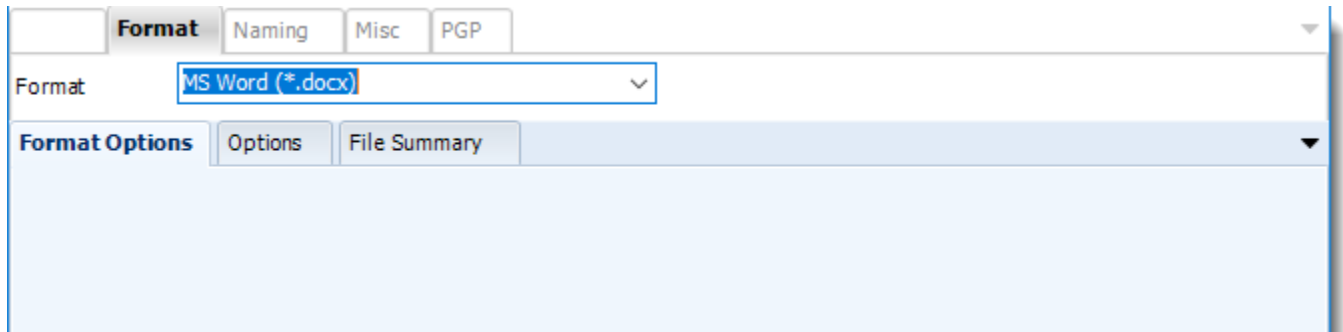
☐ Defer delivery by 0.0 Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

## MS Word (\*.docx) outputs for Power BI Reports and Dashboards

Export Power BI & SSRS reports to MS Word & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations. PBRS lets you customize them before delivery.

To export MS Word (\*.docx) in Power BI, follow these steps:

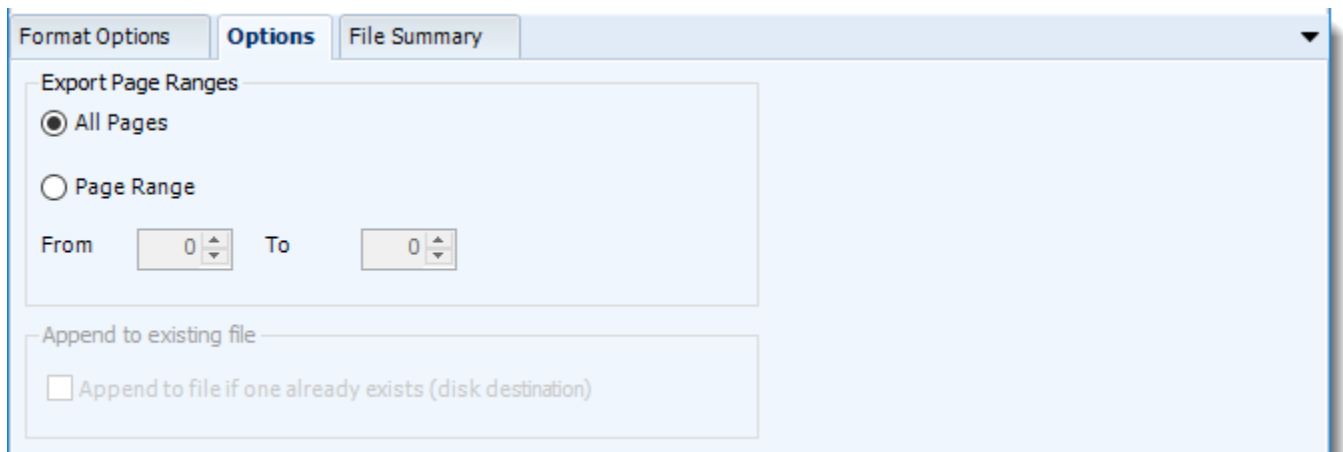


The screenshot shows the 'Format' tab selected in the PBRS interface. The 'Format' dropdown menu is set to 'MS Word (\*.docx)'. Below the dropdown, the 'Format Options' section is visible, with the 'Options' sub-tab selected. The 'File Summary' sub-tab is also visible.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Options



The screenshot shows the 'Options' tab selected in the PBRS interface. The 'Export Page Ranges' section has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below the 'Page Range' radio button, there are 'From' and 'To' dropdown menus, both set to '0'. The 'Append to existing file' section has a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

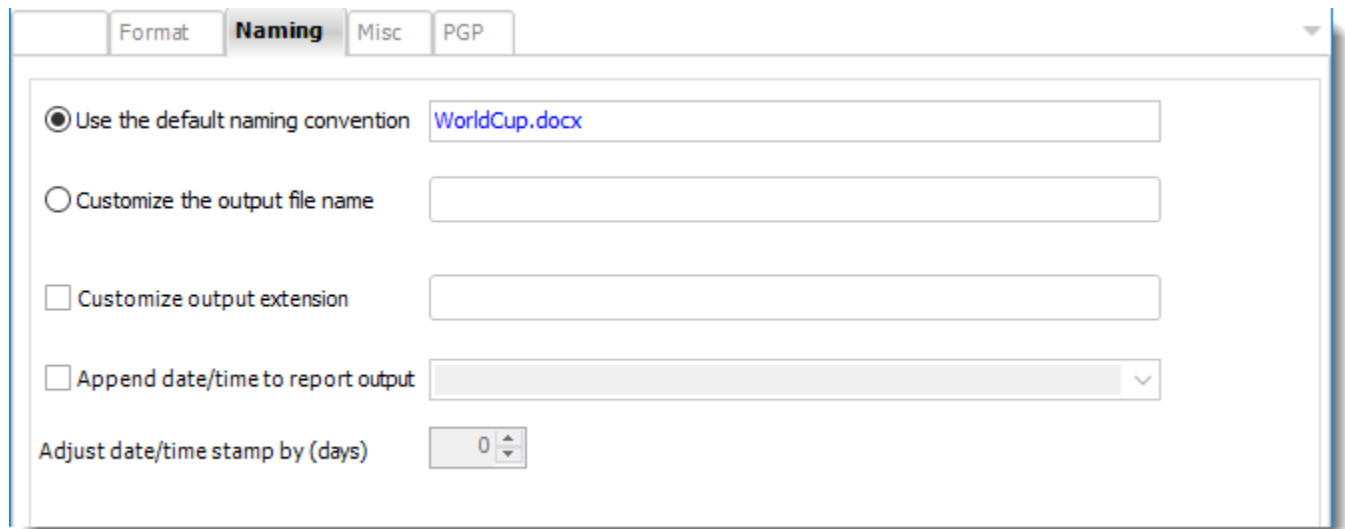
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains the following fields:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A text area with up and down arrows on the right.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018". Below this is a text input field containing "8/1/2018".
- PDF Expiry Message: A text area with up and down arrows on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: WorldCup.docx
- ☐ Customize the output file name: [Text box]
- ☐ Customize output extension: [Text box]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with 0]

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by  Hours

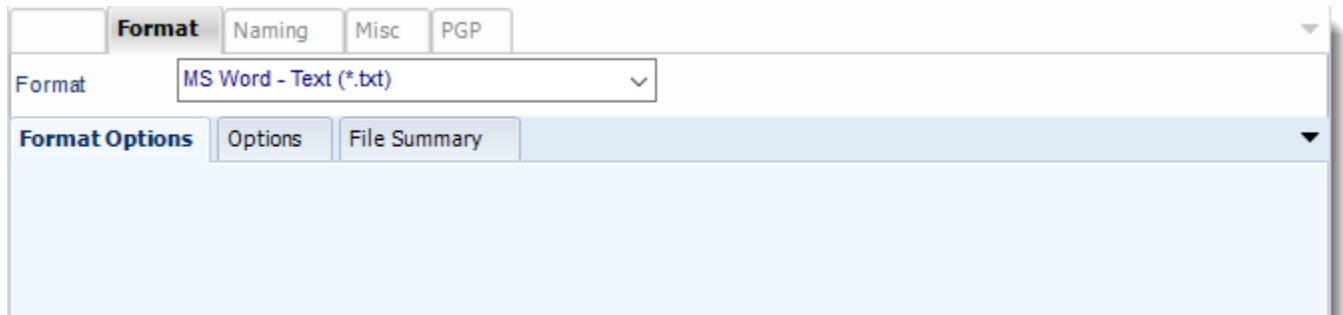
- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
- For more information, go to [Deferred Delivery](#)



## MS Word - Text (\*.txt) outputs for Paginated Reports on Premise or SSRS

Export Power BI & SSRS reports to MS Word & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations. PBRS lets you customize them before delivery.

To export MS Word - Text in SSRS, follow these steps:



The screenshot shows the 'Format' tab in the SSRS configuration interface. It includes sub-tabs for 'Format', 'Naming', 'Misc', and 'PGP'. The 'Format' sub-tab is active, showing a dropdown menu set to 'MS Word - Text (\*.txt)'. Below this, there are sub-tabs for 'Format Options', 'Options', and 'File Summary'. The 'Format Options' sub-tab is currently selected.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Options



The screenshot shows the 'Options' tab in the SSRS configuration interface. It includes sub-tabs for 'Format Options', 'Options', and 'File Summary'. The 'Options' sub-tab is active. It contains two main sections: 'Export Page Ranges' and 'Append to existing file'. In the 'Export Page Ranges' section, the 'All Pages' radio button is selected, and the 'Page Range' section is disabled. The 'From' and 'To' fields are both set to 0. In the 'Append to existing file' section, the checkbox 'Append to file if one already exists (disk destination)' is unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

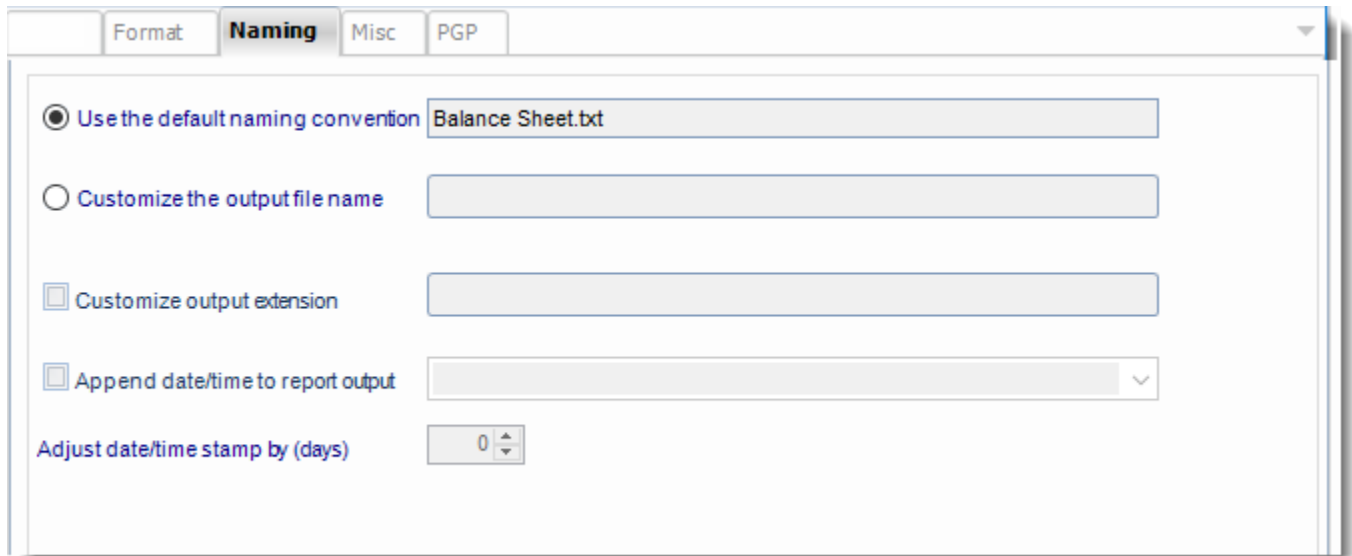
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A large text area with up and down arrows on the right.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018".
- Below the PDF Expiry Date date picker is a text input field containing "8/1/2018".
- PDF Expiry Message: A text area with up and down arrows on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The 'Naming' tab is active. It contains the following options:

- ☒ Use the default naming convention: A text field containing 'Balance Sheet.txt'.
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A spinner box with the value '0'.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

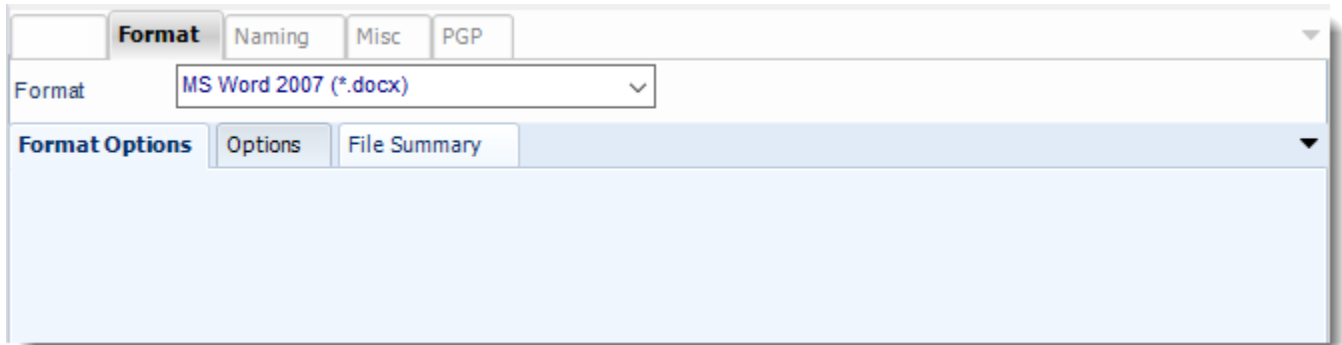
☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

MS Word 2007 (\*.docx) outputs for Power BI Service Paginated Reports, Power BI Paginated Reports on Premise or SSRS.

Export Power BI & SSRS reports to MS Word & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations. PBRs lets you customize them before delivery.

To export MS Word 2007 in SSRS, follow these steps:



The screenshot shows the 'Format' tab selected within the 'Format Options' section of the SSRS report configuration. The 'Format' dropdown menu is set to 'MS Word 2007 (\*.docx)'. The 'Format Options' section has tabs for 'Options' and 'File Summary', with 'Options' currently active.

## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Options



The screenshot shows the 'Options' tab selected within the 'Format Options' section. The 'Export Page Ranges' section has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below 'Page Range' are 'From' and 'To' spin boxes, both set to 0. The 'Append to existing file' section has a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

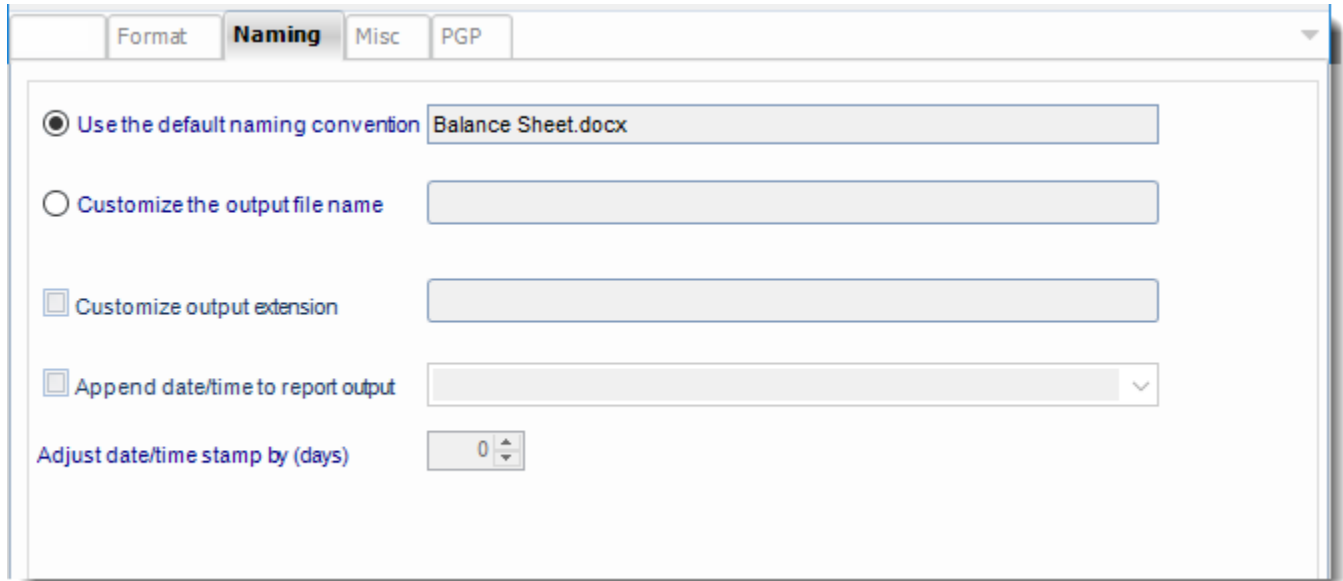
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A text area with up and down arrow buttons on the right.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018". Below this is a text input field containing "8/1/2018".
- PDF Expiry Message: A text area with up and down arrow buttons on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with a tabbed interface. The 'Naming' tab is selected, showing options for file naming. The 'Format' tab is also visible. The 'Naming' tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.docx
- ☐ Customize the output file name: [Text field]
- ☐ Customize output extension: [Text field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

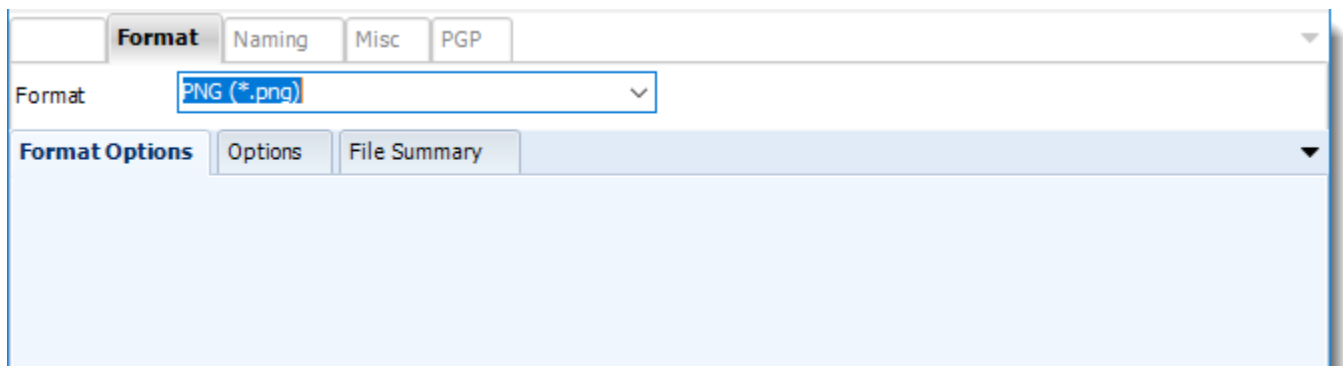


## PNG (\*.png) outputs for Power BI

PNG's compression is among the best that can be had without losing image information. Export Power BI reports to PNG & automatically deliver them to an FTP site, embed them in an email body, or deliver them in a PDF, DOCX or PPT document.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)

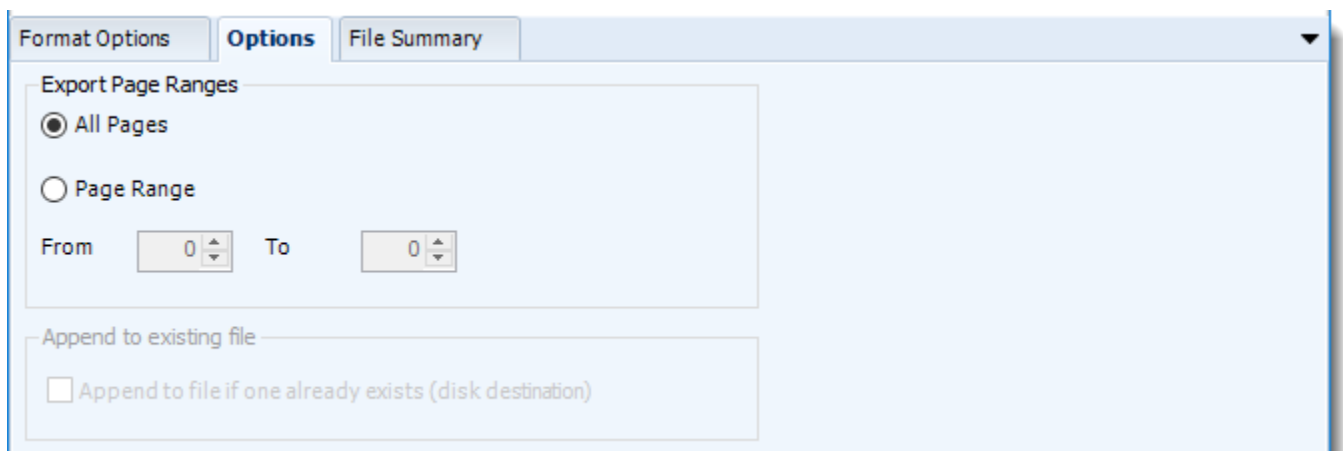


The screenshot shows the 'Format' tab selected in a settings panel. Below the tab, there is a 'Format' dropdown menu currently set to 'PNG (\*.png)'. Below this, there are three sub-tabs: 'Format Options' (which is active), 'Options', and 'File Summary'. The 'Format Options' sub-tab is currently empty.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Options



The screenshot shows the 'Options' tab selected in the settings panel. Under the 'Export Page Ranges' section, the 'All Pages' radio button is selected. Below this, there are 'From' and 'To' numeric input fields, both currently set to '0'. In the 'Append to existing file' section, there is an unchecked checkbox labeled 'Append to file if one already exists (disk destination)'.

- Use this option to select to export all pages or just a selection.

## File Summary

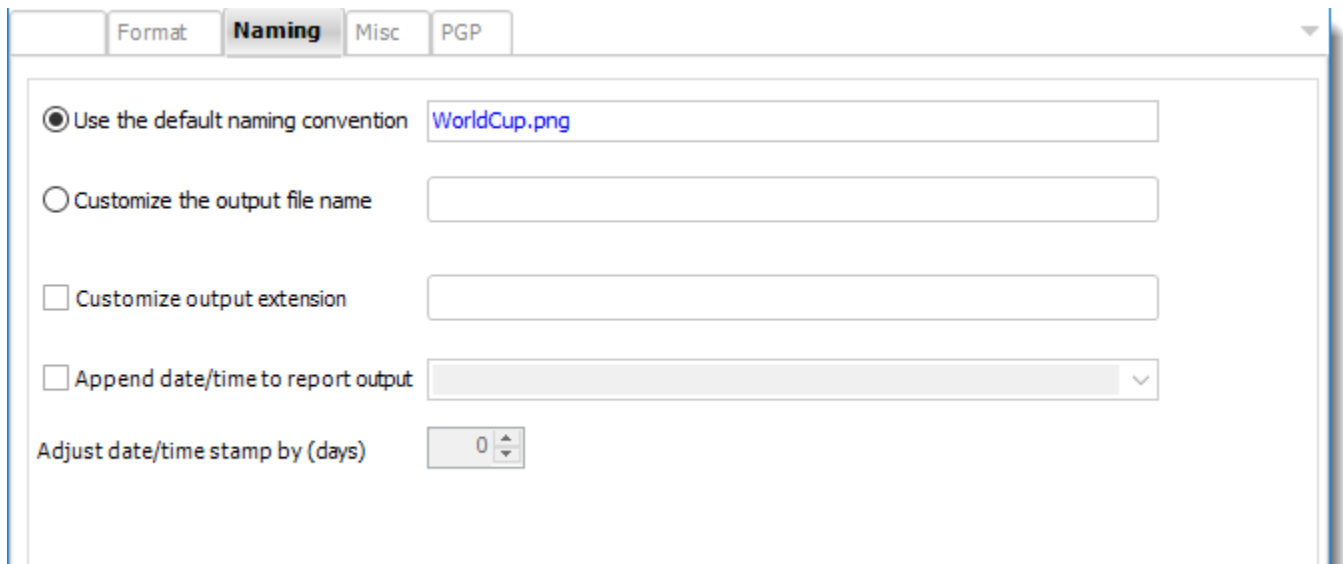
The screenshot shows a software window with three tabs: 'Format Options', 'Options', and 'File Summary'. The 'File Summary' tab is selected. It contains the following fields:

- Title:** A text input field.
- Author:** A text input field.
- Company:** A text input field.
- Subject:** A text input field.
- Date Created:** A date picker showing 'Wednesday, August 1, 2018'.
- Keywords/Comments:** A text area with up and down arrows on the right.
- PDF Expiry Date:** A date picker showing 'Wednesday, August 1, 2018'.
- PDF Expiry Message:** A text input field showing '8/1/2018'.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The Naming tab is active. It contains the following options:

- ☒ Use the default naming convention: WorldCup.png
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

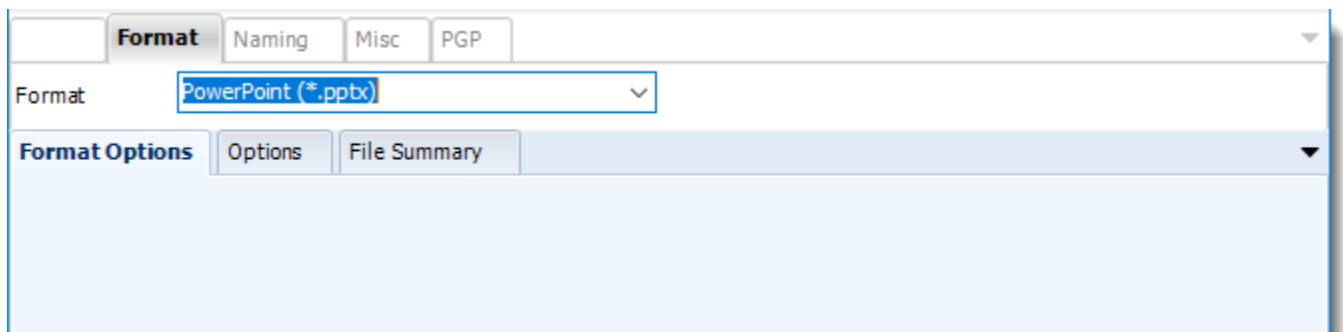
- **Compress (ZIP) Output:** Zips the output file before delivery.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

## Power Point (\*.pptx) outputs for Power BI

Looking for the analytical power of Power BI combined with the presentation features of PowerPoint? Export Power BI reports to PowerPoint & automatically send them in emails, or deliver them to any number of other destinations.

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Service)
- Power BI Paginated Reports (Cloud - Power BI Service)
- Power BI Reports & Dashboards (On Premise - Power BI Report Server)

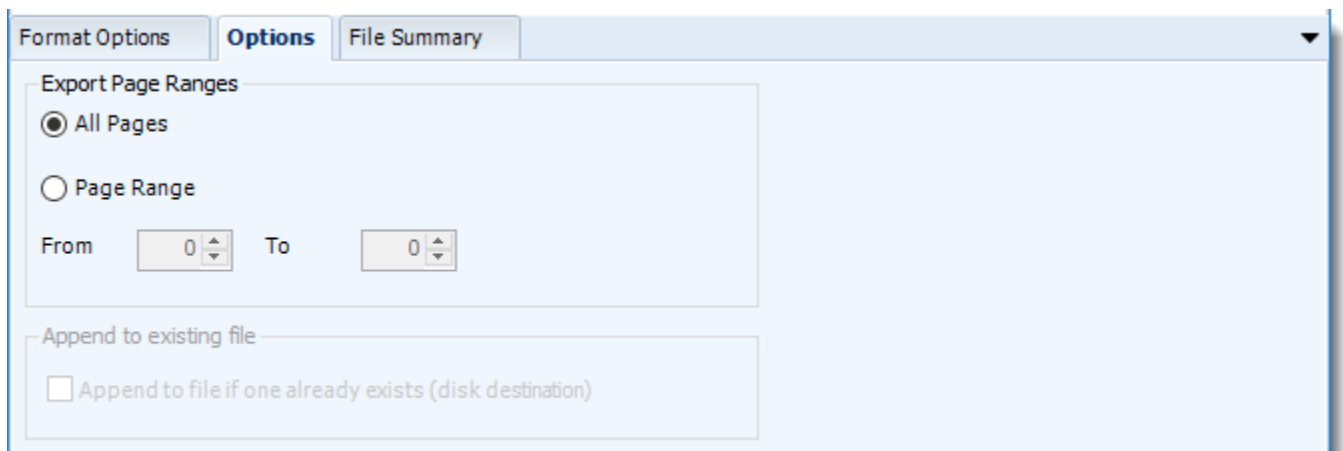


The screenshot shows the 'Format' tab selected in a settings panel. Below the tab, there is a 'Format' dropdown menu currently set to 'PowerPoint (\*.pptx)'. Below this, there is a 'Format Options' section with two sub-tabs: 'Options' and 'File Summary'. The 'Options' sub-tab is currently active.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Options



The screenshot shows the 'Options' tab selected in the 'Format Options' section. It contains two main settings: 'Export Page Ranges' and 'Append to existing file'. Under 'Export Page Ranges', there are two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below the 'Page Range' option, there are 'From' and 'To' dropdown menus, both currently set to '0'. Under 'Append to existing file', there is a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

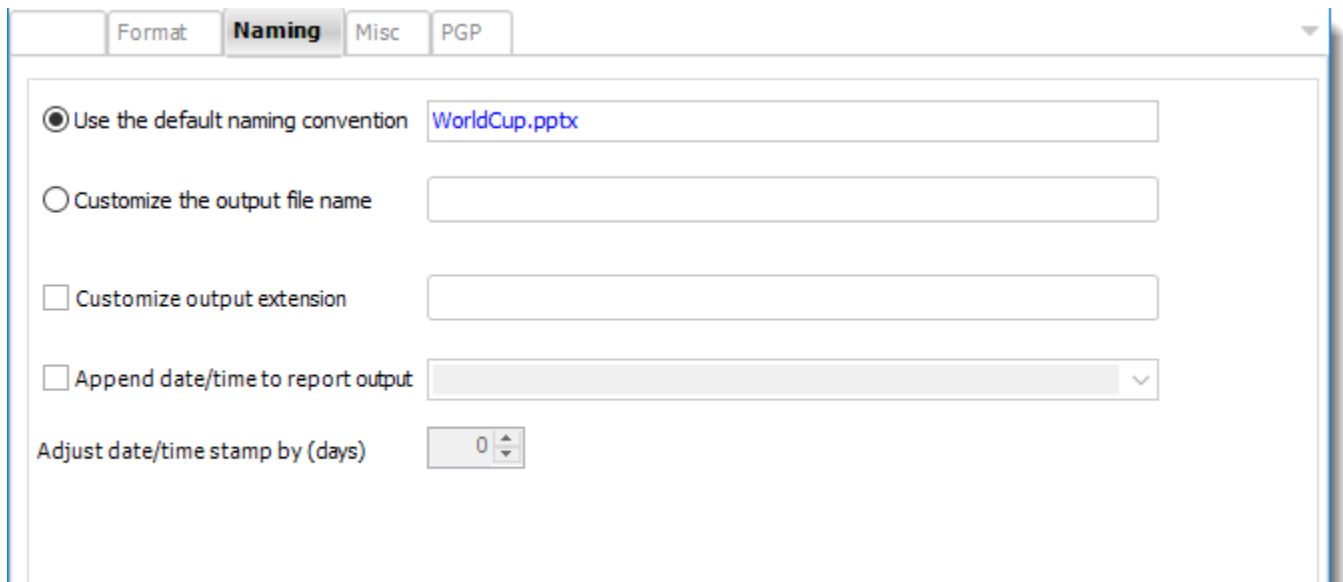
The screenshot shows a software window with three tabs: 'Format Options', 'Options', and 'File Summary'. The 'File Summary' tab is selected. It contains the following fields:

- Title: [Empty text box]
- Author: [Empty text box]
- Company: [Empty text box]
- Subject: [Empty text box]
- Date Created: [Wednesday, August 1, 2018] (with a calendar icon)
- Keywords/Comments: [Empty text box with scrollbars]
- ☐ PDF Expiry Date: [Wednesday, August 1, 2018] (with a calendar icon)
- [8/1/2018] (text box below the checkbox)
- PDF Expiry Message: [Empty text box with scrollbars]

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: WorldCup.pptx
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

PowerPoint (\*.pptx) outputs for Paginated Reports on Premise & SSRS

PowerPoint as an export format is currently not available for Paginated Reports on Premise & SSRS reports.



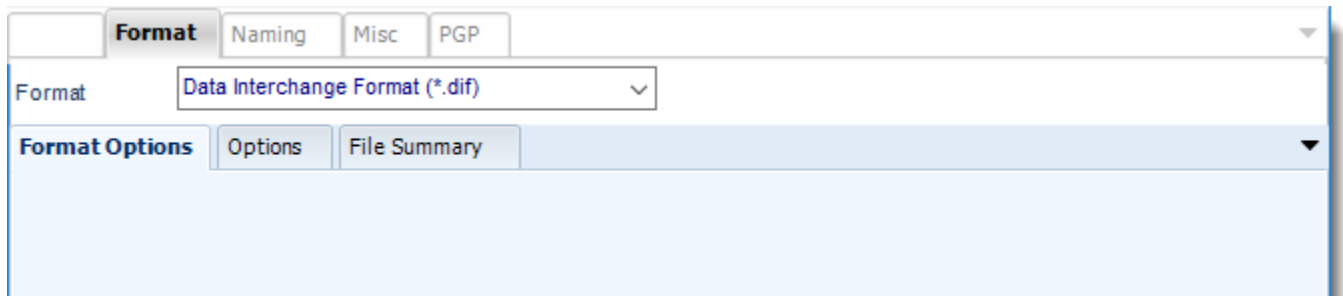
## Data Interchange Format (\*.dif) for SSRS

Data Interchange Format (.dif) is a text file format used to import/export single spreadsheets between spreadsheet programs. Export SSRS reports to DIF & automatically deliver them to an FTP site, send them in emails, and more.

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export Data Interchange Format, follow these steps:



The screenshot shows the 'Format' tab of the SSRS report export dialog. The 'Format' dropdown menu is set to 'Data Interchange Format (\*.dif)'. Below the dropdown, there are two sub-tabs: 'Format Options' and 'File Summary'. The 'Format Options' sub-tab is currently selected.

### Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Options



The screenshot shows the 'Options' tab of the SSRS report export dialog. The 'Export Page Ranges' section has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below the 'Page Range' radio button, there are two spin boxes labeled 'From' and 'To', both set to '0'. The 'Append to existing file' section has a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

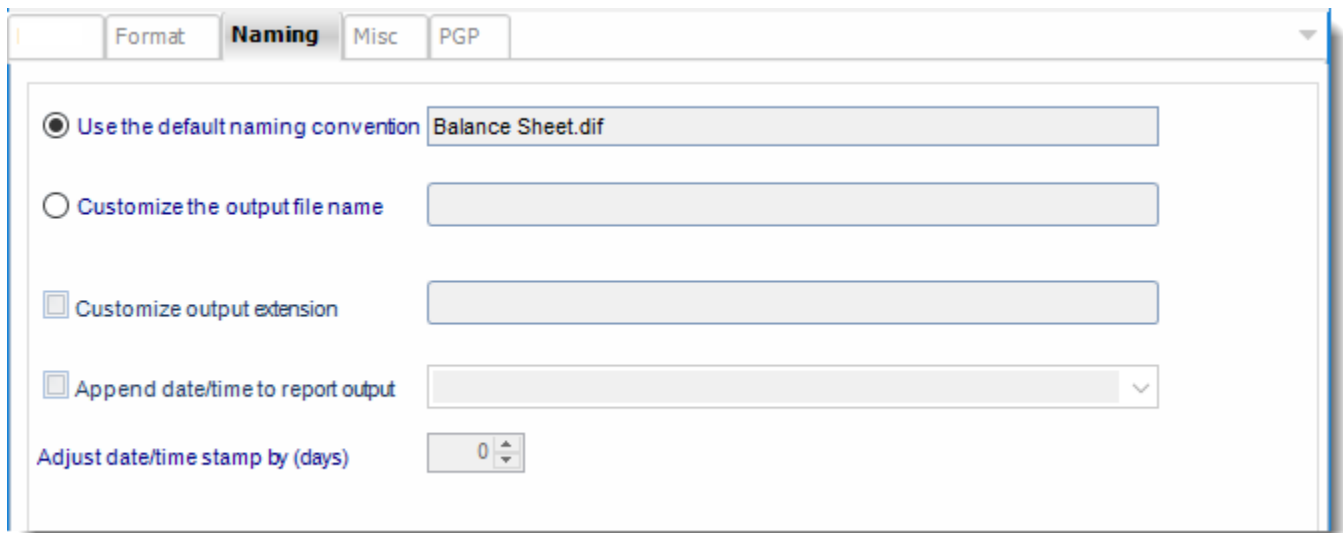
The screenshot shows a software window with three tabs: 'Format Options', 'Options', and 'File Summary'. The 'File Summary' tab is selected. It contains a form with the following fields:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing 'Wednesday, August 1, 2018'.
- Keywords/Comments: A text area with up and down arrows on the right.
- PDF Expiry Date: A checkbox followed by a date picker showing 'Wednesday, August 1, 2018'.
- 8/1/2018: A text input field below the PDF Expiry Date.
- PDF Expiry Message: A text area with up and down arrows on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with a tabbed interface. The 'Naming' tab is selected, showing options for file naming. The 'Format' tab is also visible. The 'Naming' tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.dif
- ☐ Customize the output file name: [Text field]
- ☐ Customize output extension: [Text field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with 0]

- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

The screenshot shows a software window with a tabbed interface. The 'Misc' tab is selected, showing options for email delivery. The 'Email' tab is also visible. The 'Format' tab is selected, showing options for email format. The 'Naming' tab is selected, showing options for email naming. The 'Misc' tab is selected, showing options for email delivery. The 'PGP' tab is also visible. The 'Misc' tab contains the following options:

- ☒ Compress (ZIP) output
- Zip File Encryption**
  - ☒ Enable zip encryption
  - Encryption Level:
  - Password:
  - Confirm Password:
- ☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Export SSRS reports to dBase & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

dBase II outputs for Paginated Reports on Premise or SSRS

The screenshot shows the 'Format' tab selected in a report configuration window. The 'Format' dropdown menu is set to 'dBase II (\*.dbf)'. Below this, the 'Format Options' section is expanded, showing 'Options' and 'File Summary' sub-tabs. The 'Options' sub-tab is currently active, displaying a large, empty light blue area for configuration.

dBase III outputs for Paginated Reports on Premise or SSRS

The screenshot shows the 'Format' tab selected in a report configuration window. The 'Format' dropdown menu is set to 'dBase III (\*.dbf)'. Below this, the 'Format Options' section is expanded, showing 'Options' and 'File Summary' sub-tabs. The 'Options' sub-tab is currently active, displaying a large, empty light blue area for configuration.

dBase IV outputs for Paginated Reports on Premise or SSRS

Format

dBase IV (\*.dbf)

Format Options

Options File Summary

## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Options

Format Options

Options File Summary

Export Page Ranges

☒ All Pages

☐ Page Range

From 0 To 0

Append to existing file

☐ Append to file if one already exists (disk destination)

- Use this option to select to export all pages or just a selection.

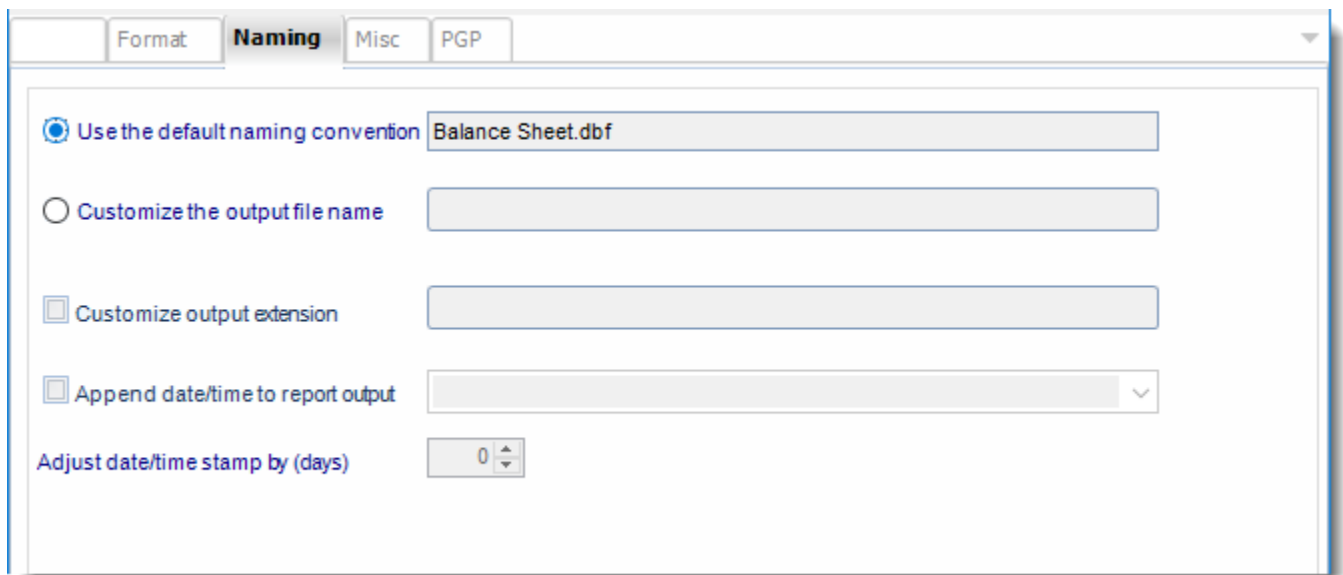
## File Summary

The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains several input fields for file metadata:

- Title: A single-line text input field.
- Author: A single-line text input field.
- Company: A single-line text input field.
- Subject: A single-line text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A multi-line text area with up and down arrow buttons on the right.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018".
- Below the PDF Expiry Date date picker is a single-line text input field containing "8/1/2018".
- PDF Expiry Message: A multi-line text area with up and down arrow buttons on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.dbf
- ☐ Customize the output file name: [Empty text box]
- ☐ Customize output extension: [Empty text box]
- ☐ Append date/time to report output: [Empty dropdown menu]
- Adjust date/time stamp by (days): [0] [Up/Down arrows]

- This is the option where you name the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.



## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
- For more information, go to [Deferred Delivery](#)

Lotus 1-2-3 (\*.wk1) outputs for Paginated Reports on Premise or SSRS

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

Export SSRS reports to Lotus 1-2-3 & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

The screenshot shows the 'Format' tab selected in a configuration window. The 'Format' dropdown menu is set to 'Lotus 1-2-3 (\*.wk1)'. Below the dropdown, there are two sub-tabs: 'Format Options' (selected) and 'File Summary'. The 'Format Options' sub-tab is currently empty.

## Format



*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Options

The screenshot shows the 'Options' sub-tab selected under the 'Format Options' section. It contains two main settings:

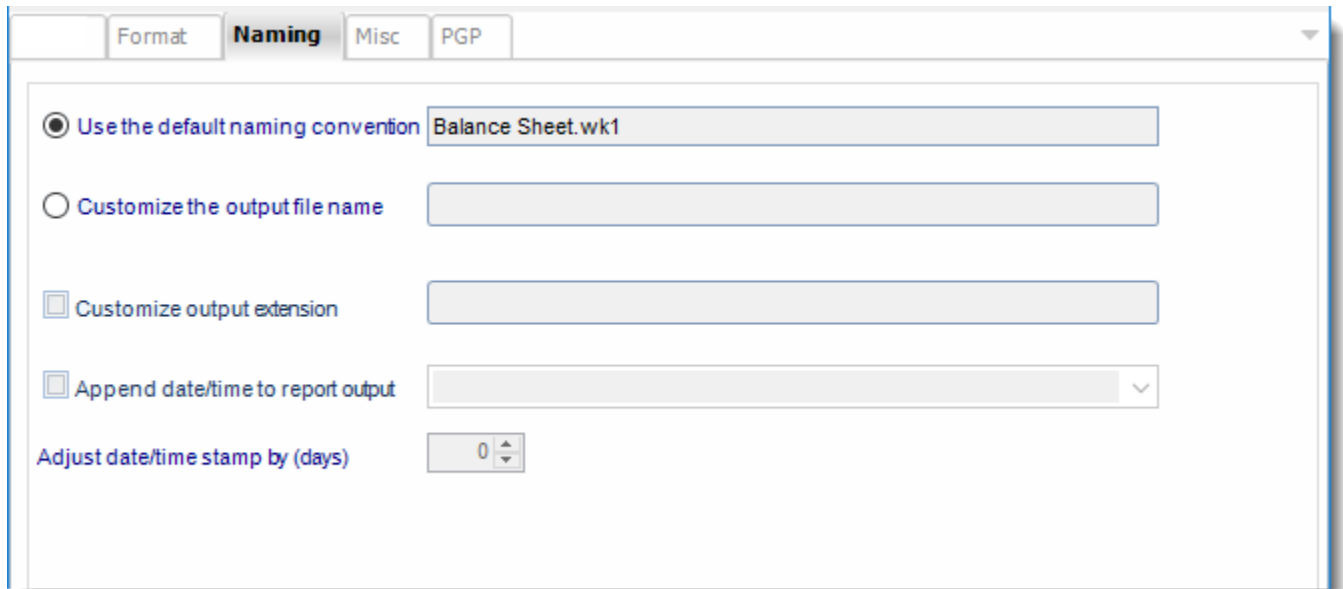
- Export Page Ranges:** This section has two radio buttons. 'All Pages' is selected. Below it, the 'Page Range' option is available with 'From' and 'To' spinners, both currently set to 0.
- Append to existing file:** This section has a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

## File Summary

Format Options	Options	File Summary
Title	<input type="text"/>	
Author	<input type="text"/>	
Producer	<input type="text"/>	
Subject	<input type="text"/>	
Date Created	<input type="text" value="Tuesday , August 7, 2018"/> 	
Keywords/Comments	<div><input type="text"/></div> <div>^</div> <div>v</div>	
<input type="checkbox"/> PDF Expiry Date	<input type="text" value="Tuesday , August 7, 2018"/> 	
	<input type="text"/>	
PDF Expiry Message	<div><input type="text"/></div> <div>^</div> <div>v</div>	

## Naming

These options determine how the exported file will be name:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: A text field containing "Balance Sheet.wk1".
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A spinner box set to 0.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

The screenshot shows a software configuration window with four tabs: Format, Naming, Misc (selected), and PGP. In the Misc tab, the 'Compress (ZIP) output' checkbox is checked. Below it, the 'Zip File Encryption' section is expanded, containing a dashed border box with the 'Enable zip encryption' checkbox checked. Below this box are three fields: 'Encryption Level' (a dropdown menu), 'Password' (a text input field), and 'Confirm Password' (a text input field). At the bottom of the Misc tab, the 'Defer delivery by' checkbox is unchecked, followed by a numeric input field showing '0.0' and the unit 'Hours'.

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
- For more information, go to [Deferred Delivery](#)

Lotus 1-2-3 (\*.wk3) outputs for Paginated Reports on Premise or SSRS

Export SSRS reports to Lotus 1-2-3 & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

The screenshot shows a configuration window with a tabbed interface. The top row of tabs includes 'Format' (selected), 'Naming', 'Misc', and 'PGP'. Below the tabs, the 'Format' section contains a dropdown menu currently set to 'Lotus 1-2-3 (\*.wk3)'. Below this, there is another set of tabs: 'Format Options' (selected), 'Options', and 'File Summary'. The 'Format Options' tab is currently empty.



## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Options

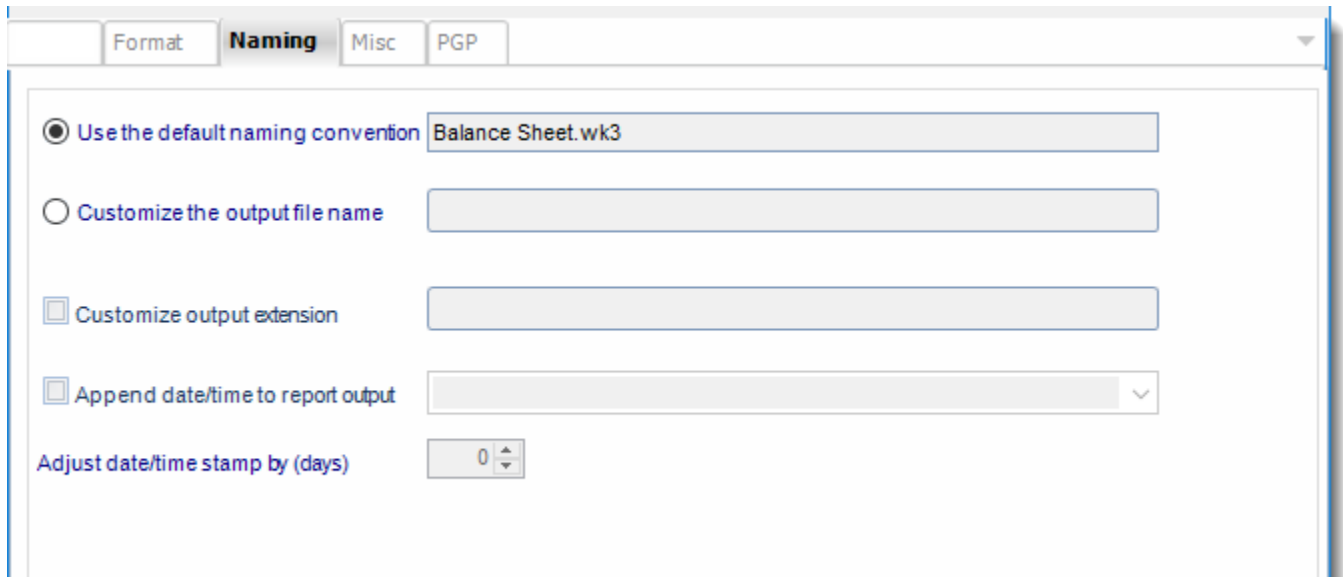
The screenshot shows the 'Options' tab selected within the 'Format Options' section. The 'Export Page Ranges' group contains two radio buttons: 'All Pages' (selected) and 'Page Range'. Below the 'Page Range' option are 'From' and 'To' numeric input fields, both containing the value '0'. The 'Append to existing file' group contains a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

## File Summary

Format Options	Options	File Summary
Title	<input type="text"/>	
Author	<input type="text"/>	
Producer	<input type="text"/>	
Subject	<input type="text"/>	
Date Created	<input type="text" value="Tuesday , August 7, 2018"/> 	
Keywords/Comments	<div><input type="text"/></div> <div>^</div> <div>v</div>	
<input type="checkbox"/> PDF Expiry Date	<input type="text" value="Tuesday , August 7, 2018"/> 	
	<input type="text"/>	
PDF Expiry Message	<div><input type="text"/></div> <div>^</div> <div>v</div>	

## Naming

These options determine how the exported file will be name:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: A text field containing "Balance Sheet.wk3".
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A numeric spinner set to 0.

- This is the option where you name the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.



## Misc

The screenshot shows a software configuration window with tabs for 'Format', 'Naming', 'Misc', and 'PGP'. The 'Misc' tab is active. It features a 'Compress (ZIP) output' checkbox which is checked. Below this is a 'Zip File Encryption' section containing an 'Enable zip encryption' checkbox (checked), an 'Encryption Level' dropdown menu, and two empty text boxes for 'Password' and 'Confirm Password'. At the bottom of the window, there is a 'Defer delivery by' checkbox (unchecked), a spinner box set to '0.0', and the unit 'Hours'.

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Lotus 1-2-3 (\*.wk4) outputs for Paginated Reports on Premise or SSRS

Export SSRS reports to Lotus 1-2-3 & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

The screenshot shows a configuration window with a tabbed interface. The top row of tabs includes 'Format' (selected), 'Naming', 'Misc', and 'PGP'. Below the tabs, the 'Format' dropdown menu is set to 'Lotus 1-2-3 (\*.wk4)'. A second row of tabs, labeled 'Format Options', includes 'Options' and 'File Summary'. The 'Options' tab is currently selected, and the main content area below it is empty.



## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Options

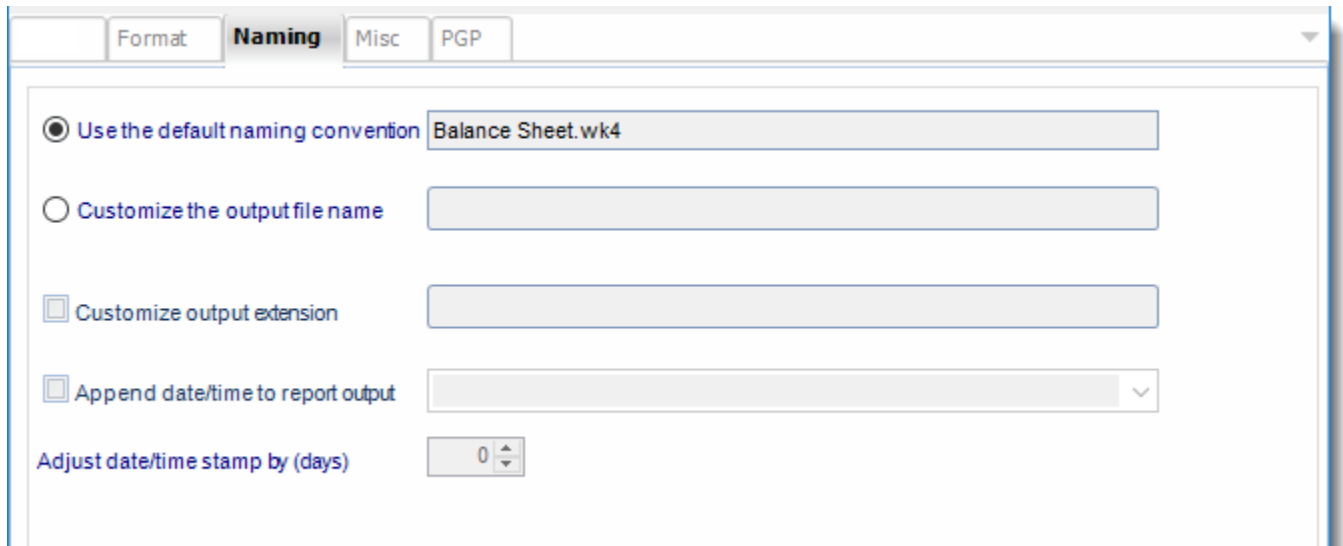
The screenshot shows the 'Options' tab selected within the 'Format Options' section. The 'Export Page Ranges' group contains two radio buttons: 'All Pages' (selected) and 'Page Range'. Below these, there are 'From' and 'To' numeric input fields, both containing the value '0'. The 'Append to existing file' group contains a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

## File Summary

Format Options	Options	File Summary
Title	<input type="text"/>	
Author	<input type="text"/>	
Producer	<input type="text"/>	
Subject	<input type="text"/>	
Date Created	<input type="text" value="Tuesday , August 7, 2018"/> 	
Keywords/Comments	<div><input type="text"/></div> <div>^</div> <div>v</div>	
<input type="checkbox"/> PDF Expiry Date	<input type="text" value="Tuesday , August 7, 2018"/> 	
	<input type="text"/>	
PDF Expiry Message	<div><input type="text"/></div> <div>^</div> <div>v</div>	

## Naming

These options determine how the exported file will be name:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: A text field containing "Balance Sheet.wk4".
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A numeric spinner set to 0.

- This is the option where you name the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

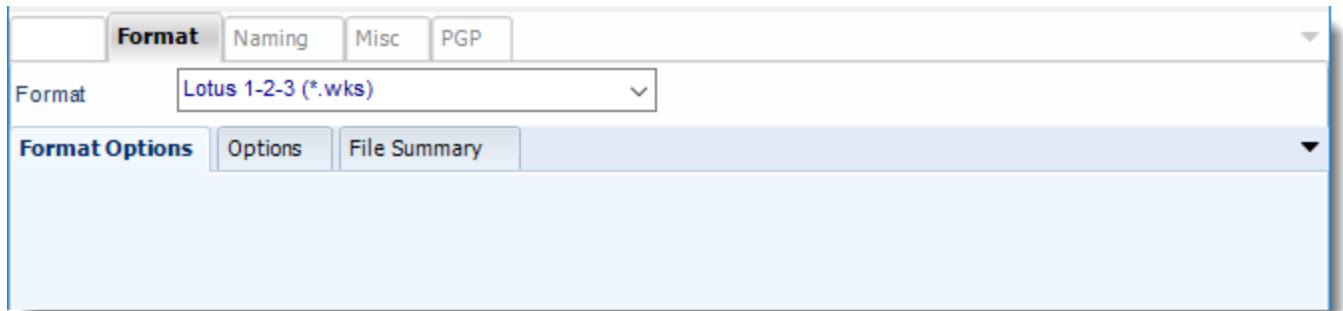
The screenshot shows a software configuration window with tabs for 'Format', 'Naming', 'Misc', and 'PGP'. The 'Misc' tab is active. It contains the following options:

- ☒ Compress (ZIP) output
- Zip File Encryption**
  - ☒ Enable zip encryption
  - Encryption Level:
  - Password:
  - Confirm Password:
- ☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Lotus 1-2-3 (\*.wks) outputs for Paginated Reports on Premise or SSRS

Export SSRS reports to Lotus 1-2-3 & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.



The screenshot shows the 'Format' tab selected in a configuration window. The 'Format' dropdown menu is set to 'Lotus 1-2-3 (\*.wks)'. Below the dropdown, there are two sub-tabs: 'Format Options' (selected) and 'Options'. The 'Format Options' sub-tab is currently empty.

## Format



*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Options



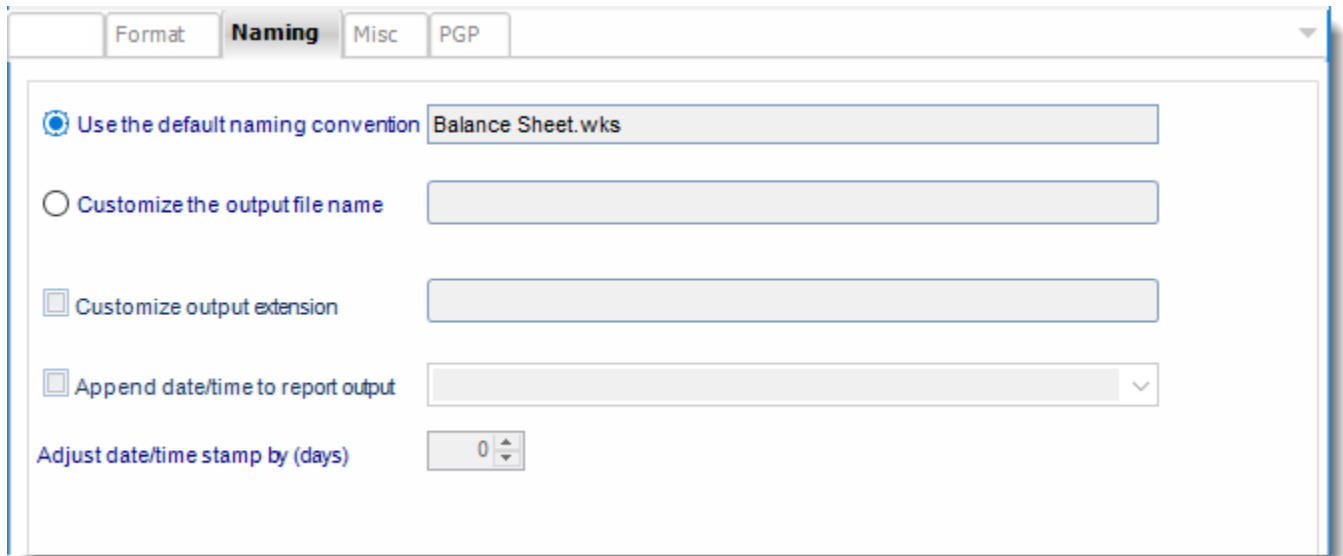
The screenshot shows the 'Options' tab selected in the configuration window. The 'Options' sub-tab is active, showing two sections: 'Export Page Ranges' and 'Append to existing file'. In the 'Export Page Ranges' section, the 'All Pages' radio button is selected. Below it, the 'Page Range' section is visible with 'From' and 'To' spinners both set to 0. In the 'Append to existing file' section, the checkbox 'Append to file if one already exists (disk destination)' is unchecked.

## File Summary

Format Options	Options	File Summary
Title	<input type="text"/>	
Author	<input type="text"/>	
Producer	<input type="text"/>	
Subject	<input type="text"/>	
Date Created	<input type="text" value="Tuesday , August 7, 2018"/> 	
Keywords/Comments	<div><input type="text"/></div> <div>^</div> <div>v</div>	
<input type="checkbox"/> PDF Expiry Date	<input type="text" value="Tuesday , August 7, 2018"/> 	
	<input type="text"/>	
PDF Expiry Message	<div><input type="text"/></div> <div>^</div> <div>v</div>	

## Naming

These options determine how the exported file will be name:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The 'Naming' tab is selected and highlighted. Inside the Naming tab, there are four main options, each with a corresponding input field:

- ☒ Use the default naming convention: The input field contains the text "Balance Sheet.wks".
- ☐ Customize the output file name: An empty text input field.
- ☐ Customize output extension: An empty text input field.
- ☐ Append date/time to report output: A dropdown menu showing a downward arrow.

Below these options is a label "Adjust date/time stamp by (days)" followed by a small numeric input field containing the value "0".

- This is the option where you named the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.



## Misc

The screenshot shows a software configuration window with tabs for 'Format', 'Naming', 'Misc', and 'PGP'. The 'Misc' tab is active. It contains the following options:

- ☒ Compress (ZIP) output
- Zip File Encryption**
  - ☒ Enable zip encryption
  - Encryption Level: [Dropdown menu]
  - Password: [Text input field]
  - Confirm Password: [Text input field]
- ☐ Defer delivery by [0.0] Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Lotus 1-2-3 outputs for Power BI Service Reports

Lotus 1-2-3 as an export format is currently not available for Power BI Service reports.

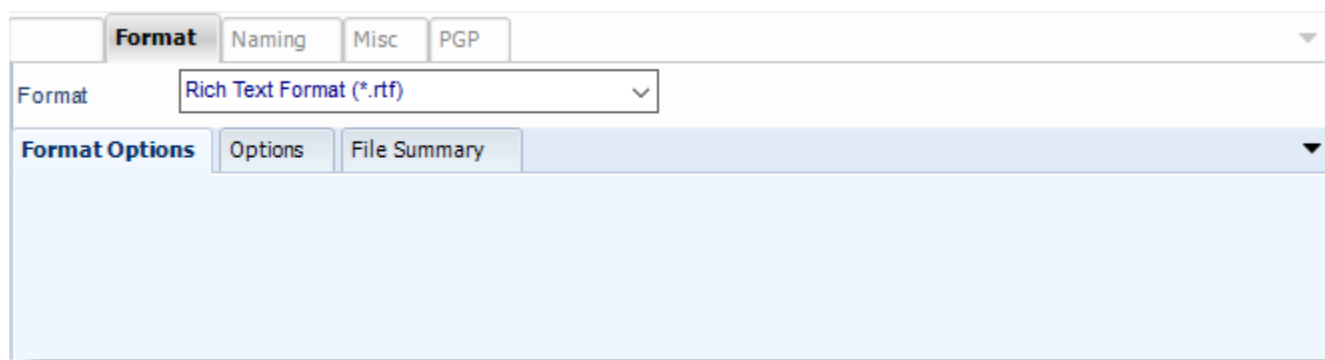
Rich Text Format (\*.rtf) outputs for SSRS

RTF is a text file format used by Microsoft products, such as Word and Office. Export SSRS reports to RTF & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export Rich Text format in SSRS, follow these steps:

A screenshot of the SSRS configuration interface. At the top, there are four tabs: 'Format' (selected), 'Naming', 'Misc', and 'PGP'. Below the tabs, the 'Format' dropdown menu is set to 'Rich Text Format (\*.rtf)'. Underneath, there are two sub-tabs: 'Format Options' (selected) and 'Options'. The 'Format Options' section is currently empty.

## Format

*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

## Options

A screenshot of the SSRS configuration interface, specifically the 'Options' tab. The 'Format Options' tab is also visible. The 'Options' section contains two main groups. The first group, 'Export Page Ranges', has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below 'Page Range' are 'From' and 'To' spinners, both set to '0'. The second group, 'Append to existing file', has a checkbox labeled 'Append to file if one already exists (disk destination)' which is currently unchecked.

- Use this option to select to export all pages or just a selection.

## File Summary

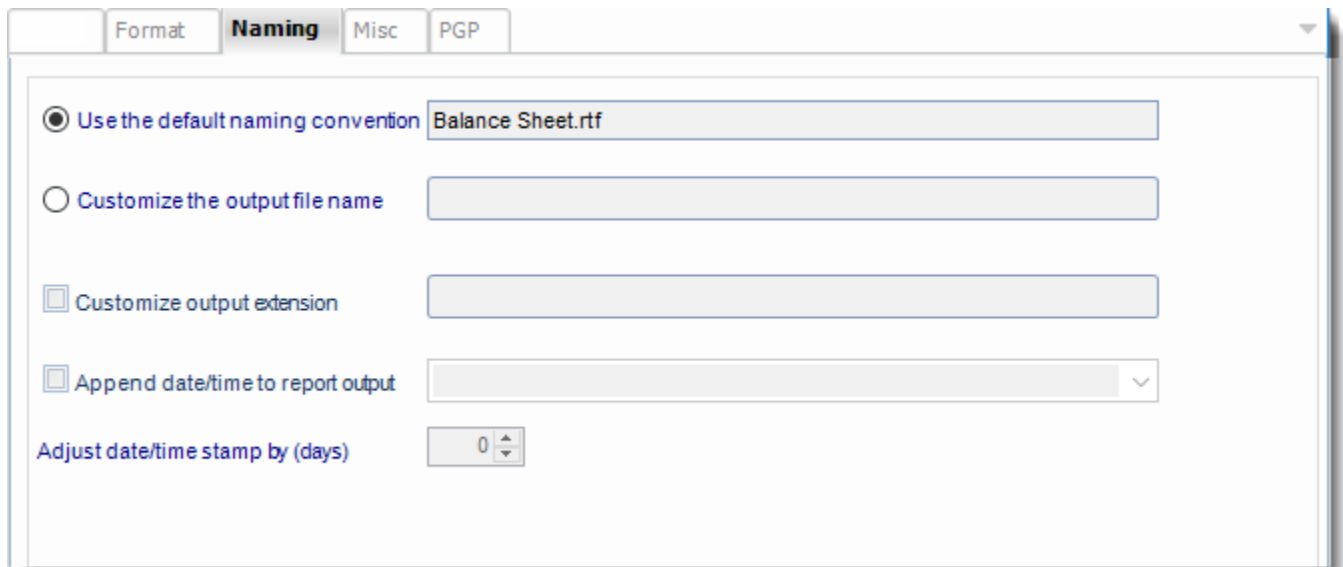
The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active. It contains the following fields:

- Title: A text input field.
- Author: A text input field.
- Company: A text input field.
- Subject: A text input field.
- Date Created: A date picker showing "Wednesday, August 1, 2018".
- Keywords/Comments: A text area with up and down arrows on the right.
- PDF Expiry Date: A checkbox labeled "PDF Expiry Date" followed by a date picker showing "Wednesday, August 1, 2018". Below this is a text input field containing "8/1/2018".
- PDF Expiry Message: A text area with up and down arrows on the right.

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.

## Naming

These options determine how the exported file will be named:



The screenshot shows a dialog box with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.rtf
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- This is the option where you name the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Rich Text Format (\*.rft) outputs for Power BI Reports Service

Rich Text Format as an export format is currently not available for Power BI Service reports.

## Text (\*.txt) outputs for SSRS

Export SSRS reports to TXT & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

This article applies to:

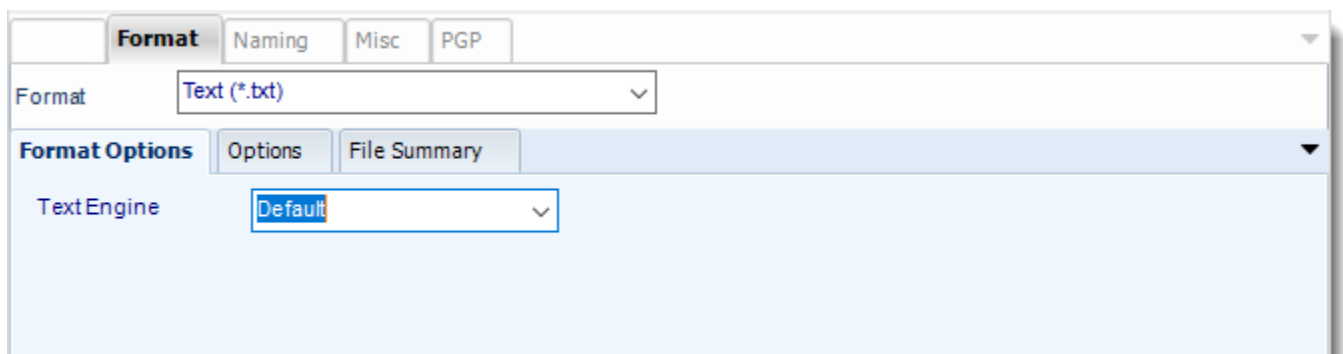
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export Text format in SSRS, follow these steps:

### Format

*The output format is selected as part of the Destinations setup for each destination type.  
The tab above can be found in the Destinations section of a schedule.*

### Format Options



The screenshot shows the 'Format Options' dialog box in SSRS. At the top, there are four tabs: 'Format', 'Naming', 'Misc', and 'PGP'. The 'Format' tab is selected. Below the tabs, there is a 'Format' dropdown menu set to 'Text (\*.txt)'. Underneath, there is a section titled 'Format Options' with two sub-tabs: 'Options' and 'File Summary'. The 'Options' sub-tab is selected. In this section, there is a 'TextEngine' dropdown menu set to 'Default'.

Format: Text (\*.txt)

**Format Options**

TextEngine: Mirapladid

Dots per inch (dpi): 96

Seconds/Page: 1

☐ Use Mirapladid Driver Defaults

Formatting style: Formatted

Character Set: Default ANSI

End-of-line style: Windows (\r\n)

Whitespace size: 10

☐ Insert page breaks

[Powered by Mirapladid](#)

- **Mirapladid:** Extract a text from a document. By selecting this option, you can arrange the formatting style, character set, end of line style, and white space size of the text.

## Options

**Options**

Export Page Ranges

☒ All Pages

☐ Page Range

From: 0 To: 0

Append to existing file

☐ Append to file if one already exists (disk destination)

- Use this option to select to export all pages or just a selection.

## File Summary

The screenshot shows a software window titled "File Summary" with three tabs: "Format Options", "Options", and "File Summary". The "File Summary" tab is active and contains the following fields:

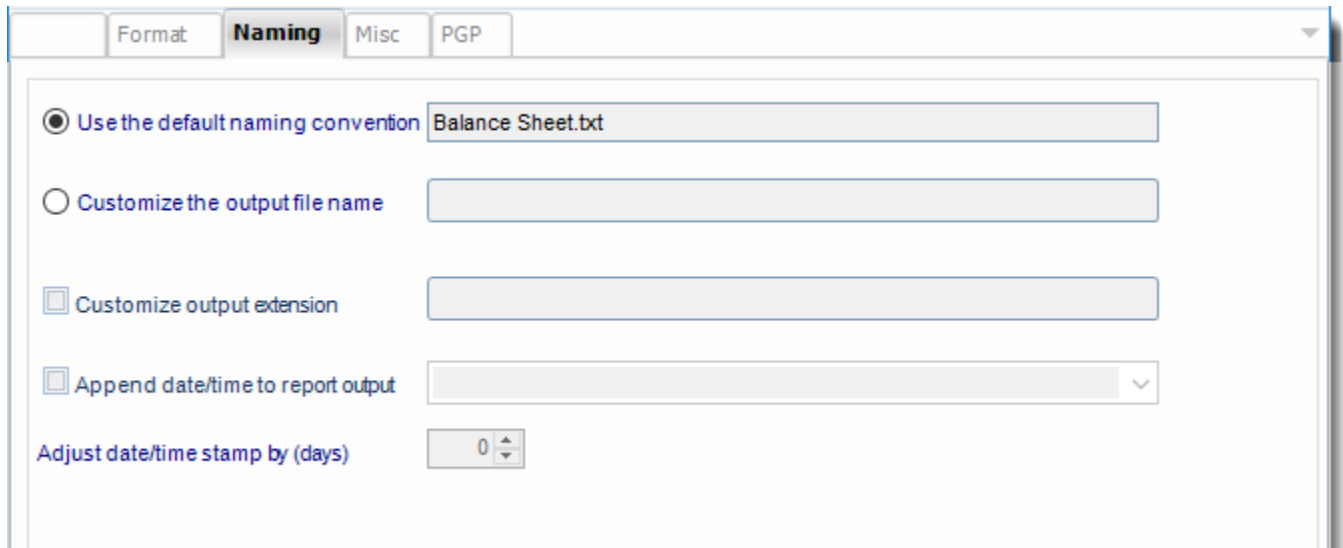
- Title: [Empty text box]
- Author: [Empty text box]
- Company: [Empty text box]
- Subject: [Empty text box]
- Date Created: [Wednesday, August 1, 2018] (with a calendar icon)
- Keywords/Comments: [Empty text box with scrollbars]
- ☐ PDF Expiry Date: [Wednesday, August 1, 2018] (with a calendar icon)
- PDF Expiry Message: [8/1/2018] (with a scroll button)

- Determine file summary by filling in the required properties as illustrated above.
- If properties are not filled in or are left blank, the original properties which exist in the exported report will be preserved. To overwrite these with a blank, enter a space in the field you wish to overwrite.



## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming (selected), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: Balance Sheet.txt
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- This is the option where you named the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Text (\*.txt) outputs for Power BI Service Reports

Text as an export format is currently not available for Power BI Service.

## TIFF (\*.tif) outputs for SSRS

The TIFF format is perhaps the most versatile and diverse bitmap format in existence. Export SSRS reports to TIFF & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export TIFF in SSRS, follow these steps:

### Format

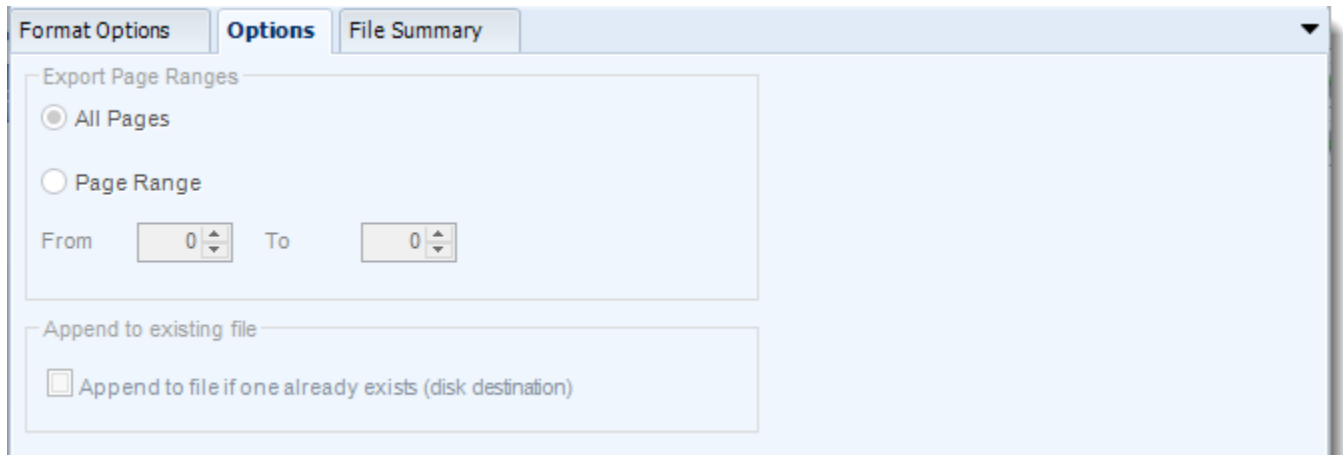
*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Format Option

The screenshot shows the 'Format' tab of the SSRS 'Format Options' dialog box. The 'Format' dropdown is set to 'TIFF (\*.tif)'. The 'Format Options' section has two sub-tabs: 'Options' (selected) and 'File Summary'. Under 'Options', there is a checkbox for 'Use PBRs's default format' which is unchecked. Below this is a 'Compression' section with several radio button options: 'Uncompressed TIFF file' (selected), 'CCITT modified Huffman RLE', 'Lempel-Ziv & Welch (LZW)', 'CCITT Group 3 fax encoding', 'Macintosh RLE', 'CCITT Group 4 fax encoding', '204x98 ClassF TIFF file, Fax machine compatible', and '204x196 ClassF TIFF file, Fax machine compatible'. There are also sections for 'Color Depth' with a dropdown set to '24-bit color' and a checkbox for 'Convert to 8-bit grayscale' (unchecked), and 'Page Range' with radio buttons for 'All Pages' (selected) and 'Page Range', followed by 'From' and 'to' numeric input fields both set to '1'.

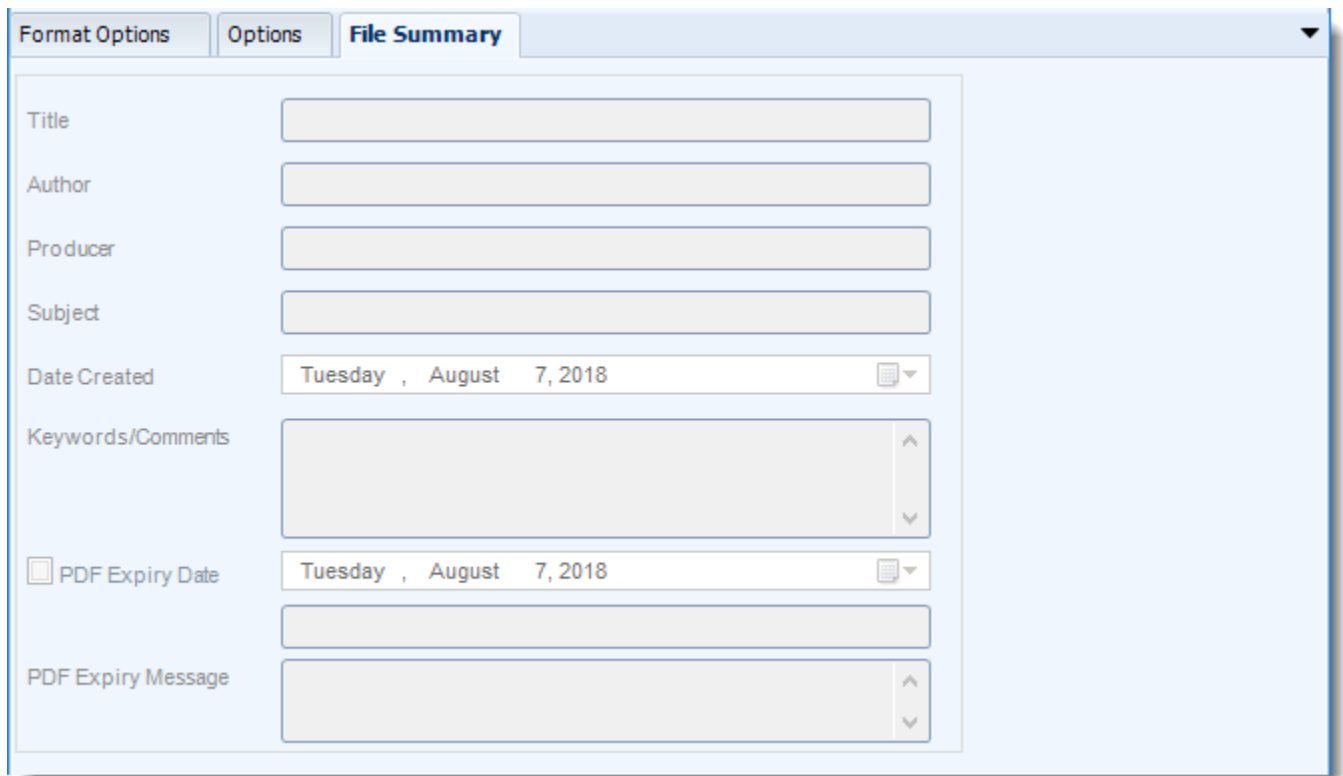
- You can use PBRs's default formatting options for TIFF (.tif) files or specify your own settings for the output.

## Options



The screenshot shows the 'Options' tab of a software interface. It contains two main sections: 'Export Page Ranges' and 'Append to existing file'. In the 'Export Page Ranges' section, the 'All Pages' radio button is selected, and the 'Page Range' section is disabled. The 'From' and 'To' fields both show the value '0'. In the 'Append to existing file' section, the checkbox 'Append to file if one already exists (disk destination)' is unchecked.

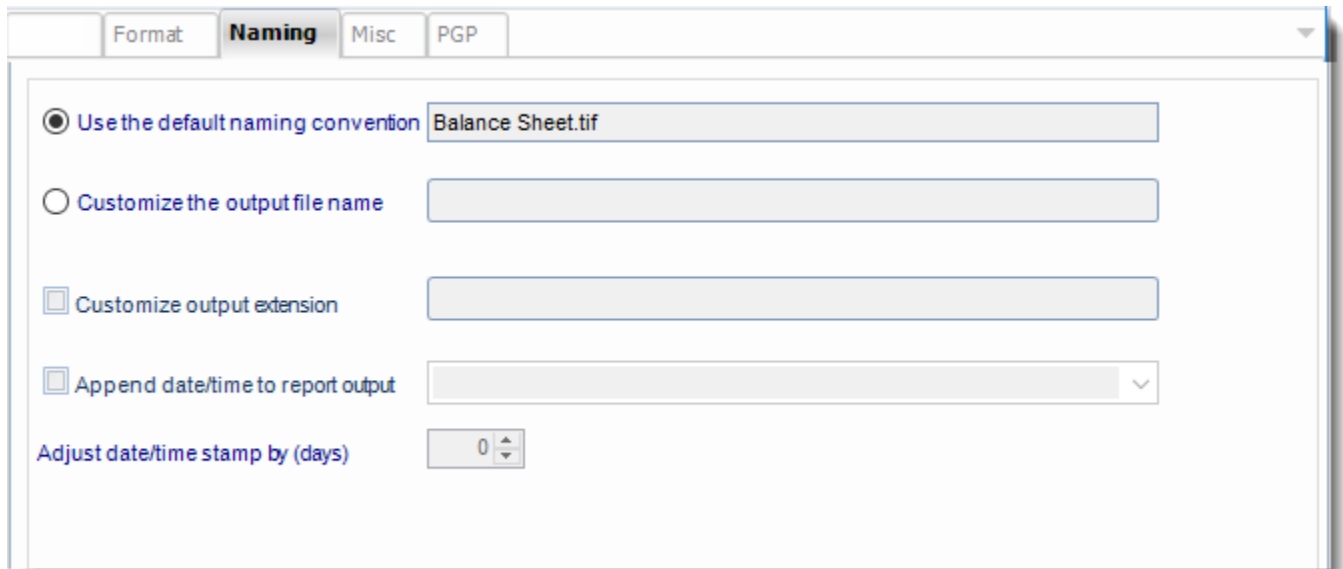
## File Summary



The screenshot shows the 'File Summary' tab of the same software interface. It contains several input fields for metadata: 'Title', 'Author', 'Producer', and 'Subject' are all empty text boxes. 'Date Created' is a date picker showing 'Tuesday , August 7, 2018'. 'Keywords/Comments' is a large text area. 'PDF Expiry Date' is a date picker showing 'Tuesday , August 7, 2018'. Below it is an empty text box. 'PDF Expiry Message' is a large text area. The 'Format Options' and 'Options' tabs are visible to the left.

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The Naming tab is active. It contains the following options:

- ☒ Use the default naming convention: A text field containing "Balance Sheet.tif".
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A spinner box with the value "0".

- This is the option where you named the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level ▼

Password

Confirm Password

☐ Defer delivery by 0.0 Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

### TIFF (\*.tif) outputs for Power BI Service Reports

- TIFF as an export format is currently not available for Power BI Service reports.

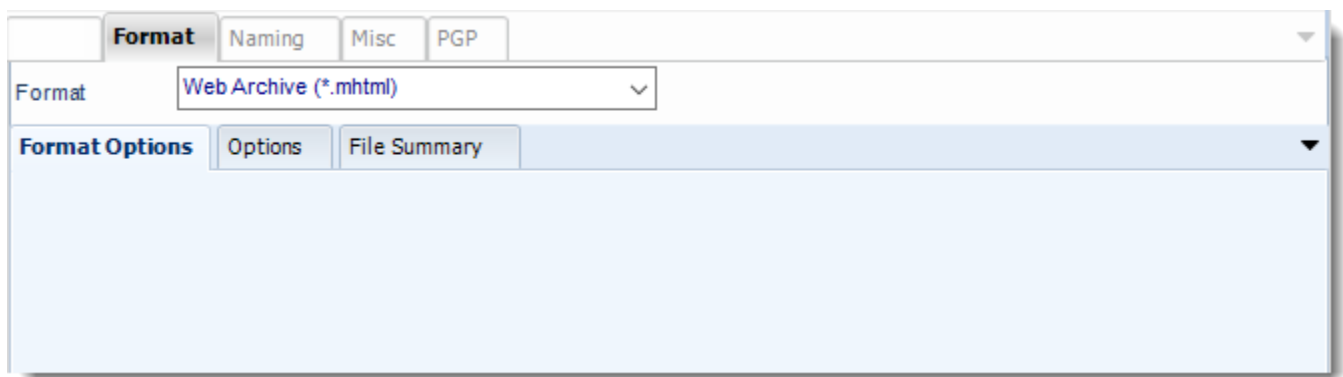
## Web Archive (\*.mhtml) outputs for SSRS

The web Archive format differs from a standalone HTML file because it also saves linked files such as images, CSS, and JavaScript. Export SSRS reports to Web Archive & automatically deliver them to any number of standard destinations.

This article applies to:

- Power BI Service Paginated Reports (Cloud - Power BI Service)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export Web Archive in SSRS, follow these steps:



The screenshot shows the SSRS report configuration interface. At the top, there are four tabs: 'Format', 'Naming', 'Misc', and 'PGP'. The 'Format' tab is selected. Below the tabs, there is a 'Format' dropdown menu set to 'Web Archive (\*.mhtml)'. Below this, there is a 'Format Options' section with two sub-tabs: 'Options' and 'File Summary'. The 'Options' sub-tab is selected, and the area below it is currently empty.

### Format

*The output format is selected as part of the Destinations setup for each destination type.  
The tab above can be found in the Destinations section of a schedule.*

## Options

The screenshot shows a software window with three tabs: 'Format Options', 'Options' (which is selected and highlighted in blue), and 'File Summary'. The 'Options' tab contains two main sections. The first section, titled 'Export Page Ranges', has two radio buttons: 'All Pages' (which is selected) and 'Page Range'. Below these are two numeric input fields labeled 'From' and 'To', both containing the value '0'. The second section, titled 'Append to existing file', contains a single checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

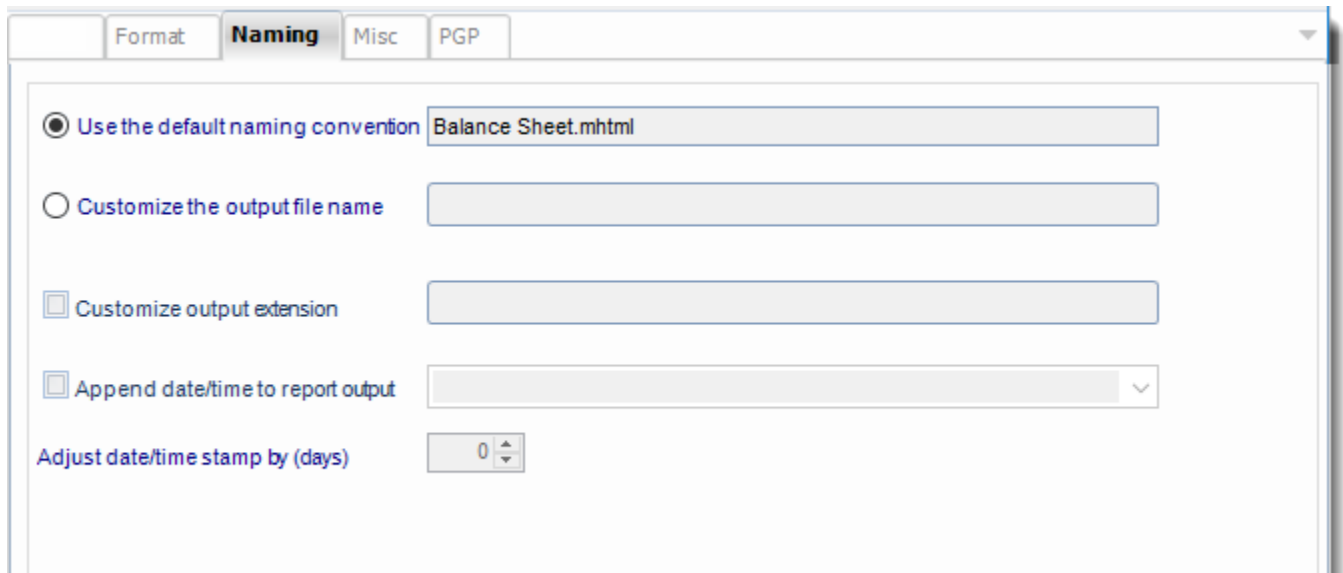
## File Summary

The screenshot shows the same software window with the 'File Summary' tab selected and highlighted in blue. This tab contains several input fields for file metadata. The fields are: 'Title', 'Author', 'Producer', and 'Subject', each with a text input box. 'Date Created' has a date picker showing 'Tuesday , August 7, 2018'. 'Keywords/Comments' has a large text area with up and down arrow controls on the right. 'PDF Expiry Date' has a date picker showing 'Tuesday , August 7, 2018' and is preceded by an unchecked checkbox. Finally, 'PDF Expiry Message' has a text input box with up and down arrow controls on the right.



## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The Naming tab is active. It contains the following options:

- ☒ Use the default naming convention: A text field containing "Balance Sheet.mhtml".
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A numeric spinner set to 0.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☐ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

Web Archive (\*.mhtml) outputs for Power BI Service Reports & Dashboards

Web Archive as an export format is currently not available for Power BI Service Reports & Dashboards.

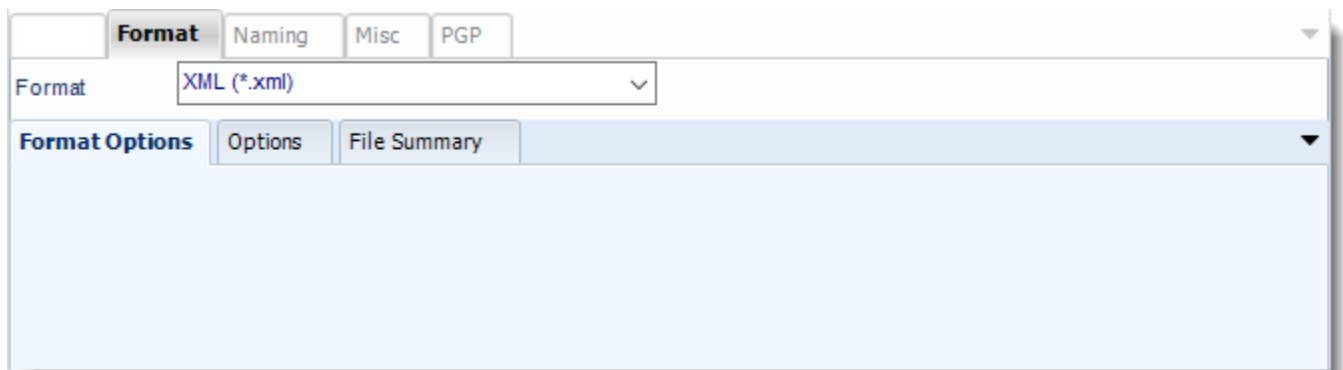
## XML (\*.xml) outputs for SSRS

Export SSRS reports to XML & automatically deliver them to an FTP site, send them in emails, or deliver them to any number of other destinations.

This article applies to:

- Power BI Service Paginated Reports (Cloud - Power BI Service)
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

To export XML outputs in SSRS, follow these steps:



The screenshot shows the 'Format' tab in the SSRS configuration interface. The 'Format' dropdown menu is set to 'XML (\*.xml)'. Below the dropdown, there are two sub-tabs: 'Options' and 'File Summary'. The 'Options' sub-tab is currently selected, and the 'File Summary' sub-tab is also visible.

### Format



*The output format is selected as part of the Destinations setup for each destination type. The tab above can be found in the Destinations section of a schedule.*

### Option



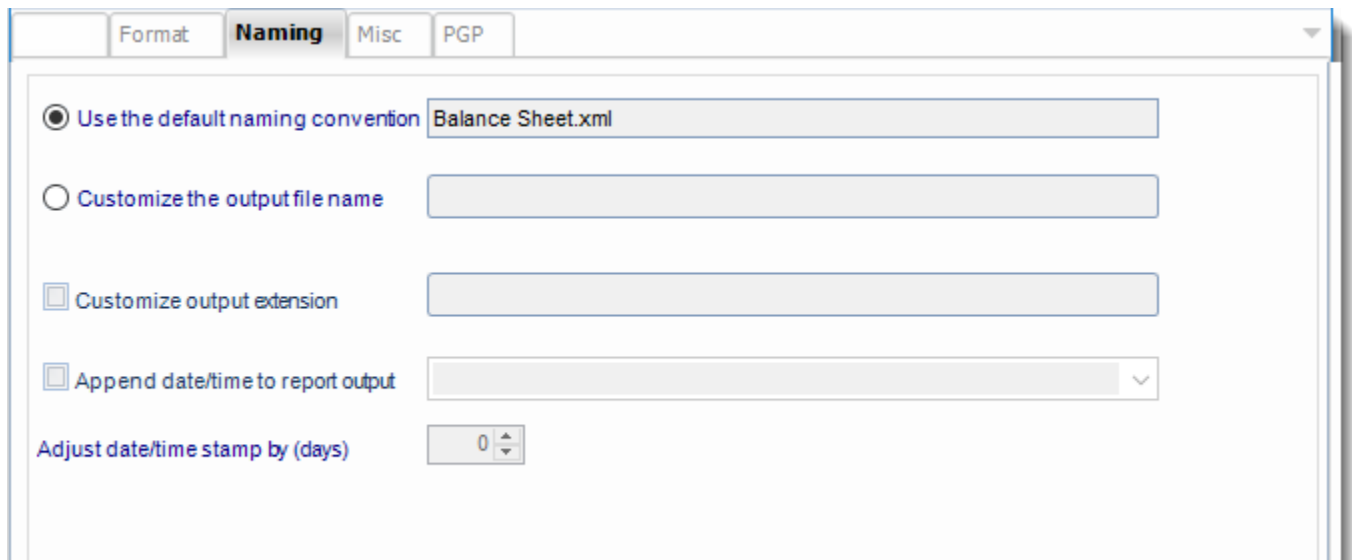
The screenshot shows the 'Options' sub-tab in the SSRS configuration interface. The 'Export Page Ranges' section has two radio buttons: 'All Pages' (selected) and 'Page Range'. Below the 'Page Range' radio button, there are two input fields: 'From' and 'To', both set to '0'. The 'Append to existing file' section has a checkbox labeled 'Append to file if one already exists (disk destination)', which is currently unchecked.

## File Summary

Format Options	Options	File Summary
Title	<input type="text"/>	
Author	<input type="text"/>	
Producer	<input type="text"/>	
Subject	<input type="text"/>	
Date Created	<input type="text" value="Tuesday , August 7, 2018"/> 	
Keywords/Comments	<div><input type="text"/></div> <div>^</div> <div>v</div>	
<input type="checkbox"/> PDF Expiry Date	<input type="text" value="Tuesday , August 7, 2018"/> 	
	<input type="text"/>	
PDF Expiry Message	<div><input type="text"/></div> <div>^</div> <div>v</div>	

## Naming

These options determine how the exported file will be named:



The screenshot shows a software window with four tabs: Format, Naming, Misc, and PGP. The Naming tab is active. It contains the following options:

- ☒ Use the default naming convention: A text field containing "Balance Sheet.xml".
- ☐ Customize the output file name: An empty text field.
- ☐ Customize output extension: An empty text field.
- ☐ Append date/time to report output: A dropdown menu with a downward arrow.
- Adjust date/time stamp by (days): A numeric spinner set to 0.

- This is the option where you named the output file.
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Misc

Format Naming **Misc** PGP

☒ Compress (ZIP) output

Zip File Encryption

☒ Enable zip encryption

Encryption Level

Password

Confirm Password

☐ Defer delivery by  Hours

- **Compress (ZIP) Output:** Zips the output. Ability to use .zip encryption as well.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)

XML (\*.xml) outputs for Power BI Service Reports & Dashboards

XML as an export format is currently not available for Power BI Service Reports & Dashboards.

## How do I customize the name or extension of the output file in PBRs?

In PBRs, you can customize the name of the output file in the "Naming" tab of the "Destinations" section of the report schedule.

### Naming

*The Naming tab is selected as part of the Destinations setup for each destination type. The tab below can be found in the Destinations section of a schedule.*

The screenshot shows a configuration window with four tabs: Format, Naming (highlighted with a yellow box), Misc, and PGP. The Naming tab contains the following options:

- ☒ Use the default naming convention: WorldCup I.pdf
- ☐ Customize the output file name: [Text input field]
- ☐ Customize output extension: [Text input field]
- ☐ Append date/time to report output: [Dropdown menu]
- Adjust date/time stamp by (days): [Spin box with value 0]

- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. *Catalog Report.pdf*.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

How do I use PBRS to zip up Power BI Reports, Paginated Reports, and SSRS report exports before delivery?

**PBRS gives you the ability to zip up your Power BI Reports, Paginated Reports & SSRS report exports before delivery by email or to other destinations e.g folder & FTP. Here's how to do it.**

Misc

*The Misc tab is selected as part of the Destinations setup for each destination type. The tab below can be found in the Destinations section of a schedule.*

The screenshot shows the 'Misc' tab in a software interface. At the top, there are three tabs: 'Format', 'Misc' (which is selected and highlighted), and 'PGP'. Below the tabs, there are several settings:

- A checked checkbox labeled 'Compress (ZIP) output'.
- A section titled 'Zip File Encryption' containing:
  - A checked checkbox labeled 'Enable zip encryption'.
  - A dropdown menu labeled 'Encryption Level'.
  - A text input field labeled 'Password'.
  - A text input field labeled 'Confirm Password'.
- A checkbox labeled 'Defer delivery by' followed by a numeric input field showing '0.0' and a unit label 'Hours'.

- **Compress (ZIP) Output:** Zips the output file before delivery.
- **Zip File Encryption:** Check the option to encrypt and password protect the zip file.
- **Defer Delivery:** The report will be generated at the scheduled time, but will not be delivered to the specified destination until later.
  - For more information, go to [Deferred Delivery](#)



## Single Reports Schedule for Power BI Service Reports and Dashboards.

The Single Schedule is the simplest and easiest way to schedule a report for delivery. It involves defining the report you wish to schedule, determine its timing, selecting parameters (if any), and setting the destination (s) of the report.

*Example: Jamie is a reports developer that must send a daily report to management detailing the number of support tickets currently open. She requires a report to be sent in PDF format at 8:30AM to three individuals.*

### How to Create a Single Schedule Report for Power BI Service Reports and Dashboards?

- Go to **Single**.
- Select **For Power BI**.



## General Wizard

Single Report Schedule Wizard

**General**

Create In: Sample Reports

PowerBI Account: Karen A. Angeles Martinez

☒ Reports ☐ Dashboards

Select Report: My Workspace Avocado Prices

Schedule Name: Avocado Prices

Description (optional):

Keyword (optional):

Calendar icon

Cancel Next Finish

- **Create In:** This section is for select the folder where you want to create the single report in.
- **Power BI Account:** In this section is to select what Power BI Account you want to create the single report. In this section, you may add a new account in the Add New button.
- **Select Report:** Click on the drop-down menus to navigate to the required report.
- **Schedule Name:** Write in the name of the schedule.
- **Description (optional):** you may write a short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Single Report Schedule Wizard

General Start Date 29/12/2020 End Date 29/12/3019

Schedule Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 11:40:00 Exception calendar

Next to run on 29/12/2020 11:40:00

Repeat every 0.25 until 11:40:00

Enable this schedule

Cancel Next Finish

In this section, you will decide when the report will execute. There are varieties of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.
  - **On:** Select the specific days of the week the schedule will run. If only once a week select only the day of the week it will run.

*Example: Run the schedule every 2 Weeks.*

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every  weeks

on

☒ Monday
 ☒ Tuesday
 ☒ Wednesday
 ☒ Thursday
 ☒ Friday

☒ Saturday
 ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other

Specify the 'nth' or 'last' working day of the month

☒ nth 
☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

The screenshot shows a software interface with a top navigation bar containing the following tabs: Daily, Weekly, Week Days, Working Day, Monthly, Annual, Custom Calendar, and Other. The 'Monthly' tab is highlighted with a yellow border. Below the tabs, there is a checkbox labeled 'Use the following options' which is checked. Under this checkbox, the text 'The' is followed by a dropdown menu showing 'Second', then 'Monday', and finally 'of the month'. Below this, there is a grid of 12 checkboxes, each followed by a month name: January, April, July, October, February, May, August, November, March, June, September, and December. All 12 checkboxes are checked.

- **Annual:** Run the schedule every year at a specified time.

The screenshot shows the same software interface as the previous one, but the 'Annual' tab in the top navigation bar is now highlighted with a yellow border. The rest of the interface is empty.

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

The screenshot shows the same software interface, but the 'Custom Calendar' tab in the top navigation bar is now highlighted with a yellow border. Below the tabs, there is a label 'Calendar Name' followed by a dropdown menu. The dropdown menu is open, showing two options: '[New...]' and 'Business Days'.

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other**

Run schedule every 1 Minutes

- Minutes
- Hours
- Days
- Weeks
- Months
- Years

- **None:** No scheduling is required for this item.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **None**

Run schedule every

- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Settings Wizard

Single Report Schedule Wizard

General Schedule **Settings**

☐ Use JSON string for rendering settings

Settings JSON

Quick Search

**Page Setup**

Left margin (% of width)	0
Page Height (pixels)	800
Page Width (pixels)	1300
Right margin (% of width)	0

**PDF Cropping**

Crop PDF	<input type="checkbox"/> False
Crop Bottom	0
Crop Left	0
Crop Right	0
Crop Top	0

**Pages To Render**

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

☐ Enable snapshots and keep snapshots for 1 Days

Preview Cancel Next Finish

- In this section, you may set up the dashboard/report.
- *Settings and JSON Rendering settings may overwrite each other so it is best to only set one or the other.*
- **Left margin (% of width):** The size of the left margin as a percentage of the page width.
- **Page Height (pixels):** The height of the rendered file.
- **Page width (pixels):** The width of the rendered file.
- **PDF Cropping:** You may crop your reports by page height (pixels) and page width (pixels).
- **Right margin (% of width):** The size of the right margin as a percentage of the page width.
- **Maximum Loading Time (secs):** The maximum amount of time that the renderer will wait before timing out.
- **Minimum Loading Time (secs):** The amount of time that PBRS will wait for the dashboard/report to load before rendering it to file.
- **PDF Compression:** Select PDF compression levels.
- **Rendering Method:** Select the rendering method type for your Power BI report.
- **Transparent Background:** You have the option to have your Power BI report in a transparent background.
- **View Style:** How the report fits on the page: Fit to Page, Fit to Width, or Actual Size.

- **Page To Render:** The Power BI page(s) to render. Only applicable to Power BI reports. Leave blank for all report pages or you can specify a page range e.g 1-5 or specific e.g. 1,3,5. You can enter page names e.g. Monthly Report Page, Weekly Summary Reports.

You can drag and drop Inserts constants into Pages To Render textbox.

- **Enable snapshots and keep snapshots for "X" Days.**
- **Preview:** By clicking here you may see the preview dashboard/report.

Click **Next** to continue to the next wizard section.

## JSON

Single Report Schedule Wizard

General Schedule **Settings**

☒ Use JSON string for rendering settings

JSON

```

1 {
2
3   "RenderingMethodString": "Method 2",
4
5   "RenderingMethod": 1,
6
7   "CropPDF": false,
8
9   "CropLeft": 0,
10
11  "CropTop": 0,
12
13  "CropRight": 0,
14
15  "CropBottom": 0,
16
17  "MinLoadTime": 5,
18

```

Pages To Render

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

☐ Enable snapshots and keep snapshots for 1 Days

Preview Cancel Next Finish

- **Use JSON string for rendering settings:** Check this option to use JSON string for the rendering settings.
- Enter the JSON string.

You can drag and drop Inserts constants into JSON textbox.

Click **Next** to continue to the next wizard section.



## Report Filters Wizard

The screenshot shows the 'Single Report Schedule Wizard' window, specifically the 'Report Filters' section. On the left is a yellow sidebar with navigation links: 'General', 'Schedule', 'Settings', and 'Report Filters' (which is highlighted). The main area has two tabs: 'Filters' and 'Bookmarks'. The 'Filters' tab is active, showing a list of filters (currently empty) and buttons 'Add', 'Delete', and 'Save Filter' at the bottom. To the right is a 'Filter Definition' panel with two sub-tabs: 'Filter Definition' and 'Filter Level'. The 'Filter Definition' sub-tab is active. It contains the following controls: 'Filter Type' with radio buttons for 'Basic Filter' (selected), 'Advanced Filter', and 'Filter Function'; an unchecked checkbox for 'Ignore filter when insert values are blank'; a text input for 'Filter using this field (Table.column)'; a dropdown for 'Field Data Type' set to 'String'; a section 'Show items when the value matches' with a dropdown set to 'In', a text input, and 'Add' and 'Remove' buttons; and a 'Values' list box which is currently empty. At the bottom right of the wizard are 'Cancel', 'Next', and 'Finish' buttons. A 'Preview' button is also visible above the 'Next' button.

- In this section, you will determine the parameters for your report (if any). If your report has no parameters, you may skip this section by clicking next.
- **Preview:** View the dashboard/report output given the selected filters.
- **Filter Type:** You may choose between Basic Filter, Advanced Filter or Filter Function.
- **Filter using this field (Table.column):** Choose the table and column you would like to set up the filter.
- **Ignore filter when insert values are blank:** Check this option when the filter values are blank.

## Basic Filter

The screenshot shows a 'Basic Filter' dialog box. At the top, there are three radio buttons: 'Basic Filter' (selected), 'Advanced Filter', and 'Filter Function'. Below them is a checkbox labeled 'Ignore filter when insert values are blank'. The main section is titled 'Filter using this field (Table.column)' and 'Field Data Type'. The first dropdown menu shows 'avocado.type' and the second shows 'String'. Below this is a section titled 'Show items when the value matches'. It contains a dropdown menu with 'In' selected, an empty text input field, an 'Add' button, and a small icon of a document with a plus sign. Below this is a list box titled 'Values' containing the word 'organic'. At the bottom right is a 'Save Filter' button.

- Click **Add**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- Select an **operator** in Show items when the value matches.
- Show items when the value matches:** Insert the value you would like to add and then click **Add**.
- Click **Save Filter**.

## Advanced Filter

The screenshot shows the 'Advanced Filter' dialog box. At the top, there are three radio buttons: 'Basic Filter' (unselected), 'Advanced Filter' (selected), and 'Filter Function' (unselected). Below them is a checkbox labeled 'Ignore filter when insert values are blank' which is unchecked. The 'Filter using this field (Table.column)' section has a text box containing 'avocado.Date'. The 'Field Data Type' section has a dropdown menu showing 'Date'. The 'Show items when the value:' section contains two rows. The first row has a dropdown menu showing 'StartsWith', a text box with '2019-02-22T00:00:00.000Z', and a small icon. The second row has a dropdown menu showing 'LessThan', a text box with '2020-02-23T00:00:00.000Z', and a small icon. Between the two rows are radio buttons for 'And' (selected) and 'Or' (unselected). At the bottom right is a 'Save Filter' button.

- Click **Add**.
- Select **Advanced Filter**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- Show Items when the value:** In this option, you have the option to show items and select an option from the drop-down menu.

The screenshot shows the 'Show items when the value:' dropdown menu. The dropdown is open, showing a list of filter options. The first option, 'Contains', is highlighted in blue. The other options listed are 'LessThan', 'LessThanOrEqual', 'GreaterThan', 'GreaterThanOrEqual', 'DoesNotContain', 'StartsWith', 'DoesNotStartWith', 'Is', 'IsNot', 'IsBlank', and 'IsNotBlank'.

- Click **Save Filter** to add the filter.

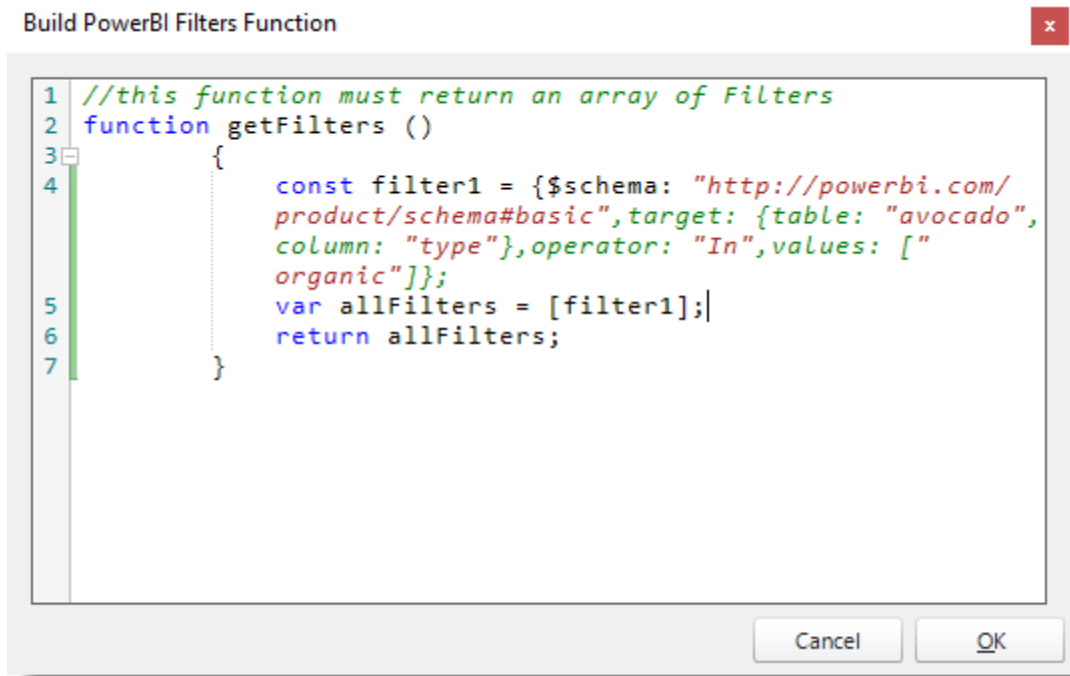
## Filter Function

The screenshot shows a dialog box titled "Filter Function". At the top, there are three radio buttons under the label "Filter Type": "Basic Filter", "Advanced Filter", and "Filter Function". The "Filter Function" option is selected. Below this is a checkbox labeled "Ignore filter when insert values are blank", which is currently unchecked. Under the heading "Filter using this field (Table.column)", there is a text input field containing "{JsonFilter}". To the right, under "Field Data Type", is a dropdown menu showing "Date". The main area of the dialog is a code editor with a light blue background and a vertical line number margin on the left (1-5). It contains the following code:

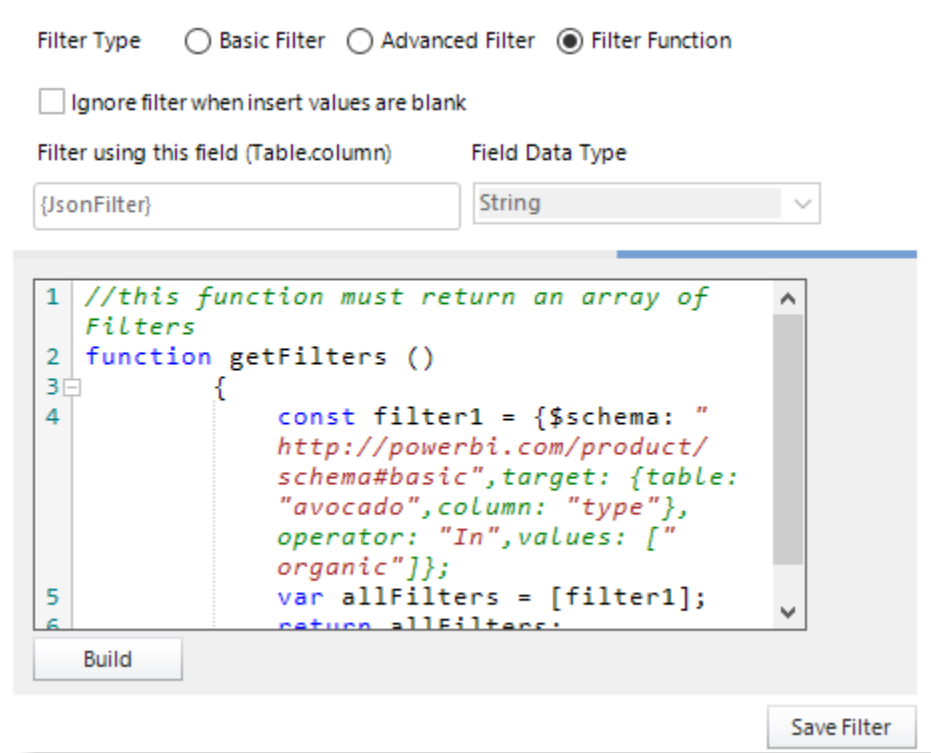
```
1 //this function must return an array of
  Filters
2 function getFilters () {
3 //add your filters definition here
4 //return your filters array
5 }
```

At the bottom left of the dialog is a "Build" button, and at the bottom right is a "Save Filter" button.

- Select the Filter Function option to enter an advanced Filter JSON string so you don't have to manually configure filters in PBRs.
- Click **Build**.
- Enter the Filter JSON string.



•Click **OK**.



•Click **Save Filter**.

## Filter Level

The screenshot shows the 'Filter Level' tab of a settings window. It has two tabs: 'Filter Definition' and 'Filter Level'. Under 'Filter Level', there are two radio buttons: 'Report' (which is selected) and 'Slicer'. Below these, there is a section titled 'Slicer selection based on' which contains two radio buttons: 'Visual Title' (selected) and 'Filter Field'. Below these radio buttons is a dropdown menu that is currently empty.

- **Report:** Check this option to filter the level of the report based on the filter field (Table.Column) value.
- **Slicer:** Check this option to filter the report based on the slicer visual icon and the filter field value. Using Slicer, all the values of the slicer will be displayed and only the entered value on Filter Field will appear checked.

*In order to use the Slicer filter, you must have a Slicer visual in your Power BI Report.*

## Slicer

This screenshot is similar to the one above, showing the 'Filter Level' tab. However, the 'Slicer' radio button is now selected instead of 'Report'. The 'Slicer selection based on' section remains the same, with 'Visual Title' selected and an empty dropdown menu.

## Visual Title

- **Visual Title:** Using this option, you can select the slicer selection based on the Visual Title of the report. Select the slicer visual title using the drop-down menu.
- Click **Save Filter**.

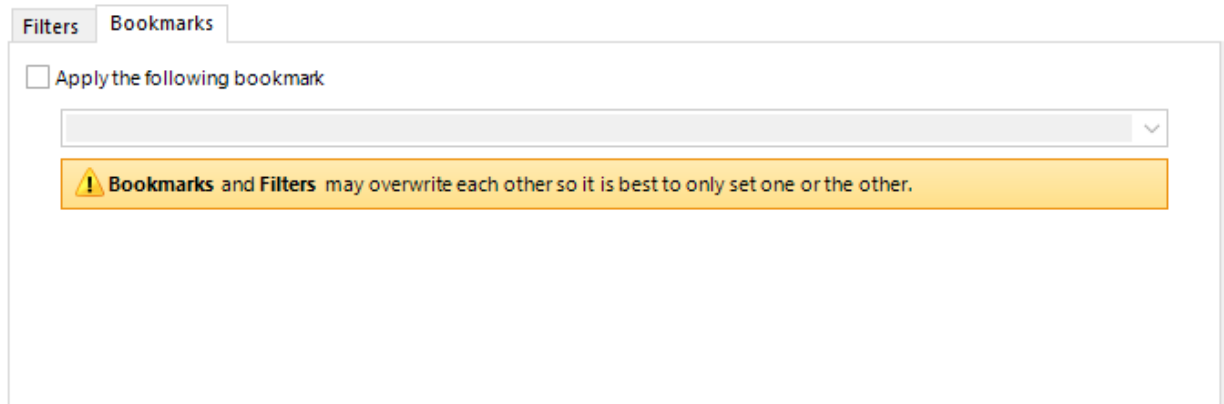
The screenshot shows the 'Filter Definition' tab with the 'Slicer' option selected. The 'Slicer selection based on' section has 'Visual Title' selected. A dropdown menu is open, showing 'Ethnicity' as the selected option.

## Filter Field

- **Filter Field:** Using this option, you can select the slicer selection based on the Filter Field (Table.Column).
- Click **Save Filter**.

The screenshot shows the 'Filter Definition' tab with the 'Slicer' option selected. The 'Slicer selection based on' section has 'Filter Field' selected. A dropdown menu is open, showing 'Ethnicity.Name' as the selected option.

## Bookmarks



Filters Bookmarks

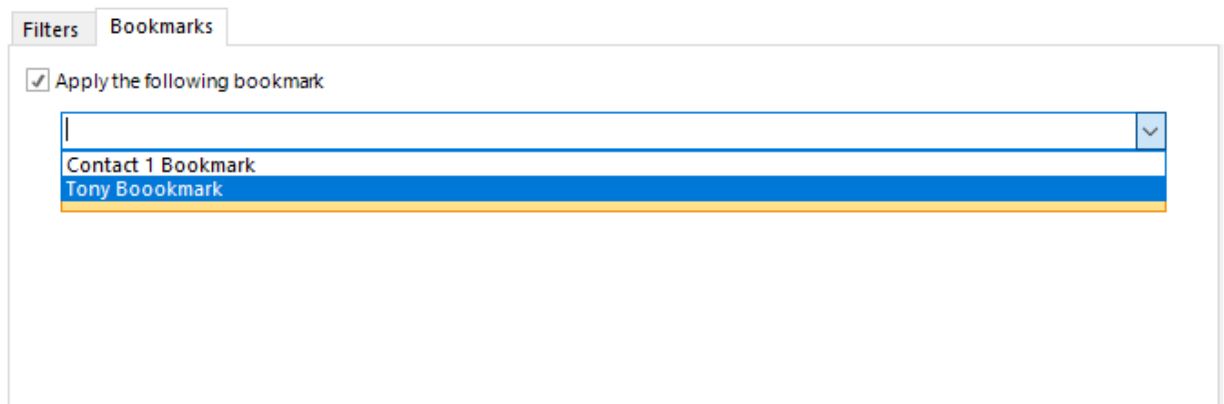
☐ Apply the following bookmark

▼

**!** Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

*Bookmark and Filters may overwrite each other so it is best to only set one or the other.*

- If you have a Bookmark in the report you have the ability to select the bookmark using the drop-down menu.
- Check **Apply the following bookmark** to enable the Bookmarks option.
- Select the bookmark from the drop-down menu.



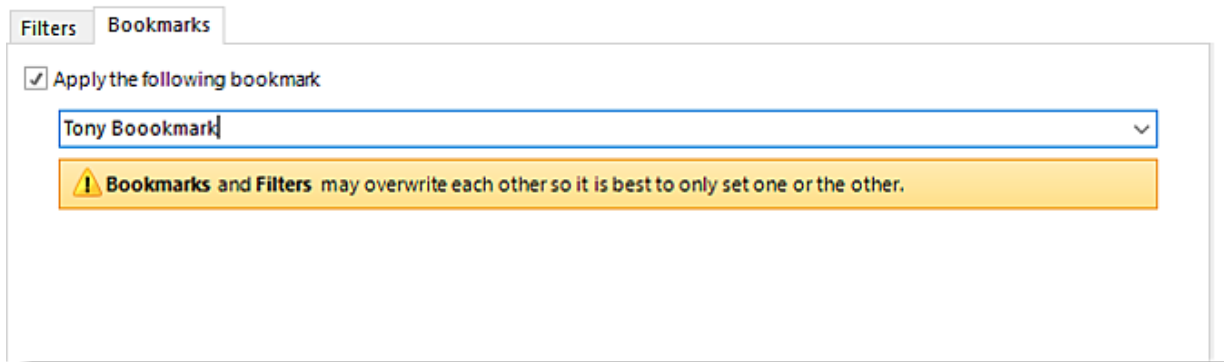
Filters Bookmarks

☒ Apply the following bookmark

▼

Contact 1 Bookmark

Tony Bookmark



Filters Bookmarks

☒ Apply the following bookmark

Tony Bookmark ▼

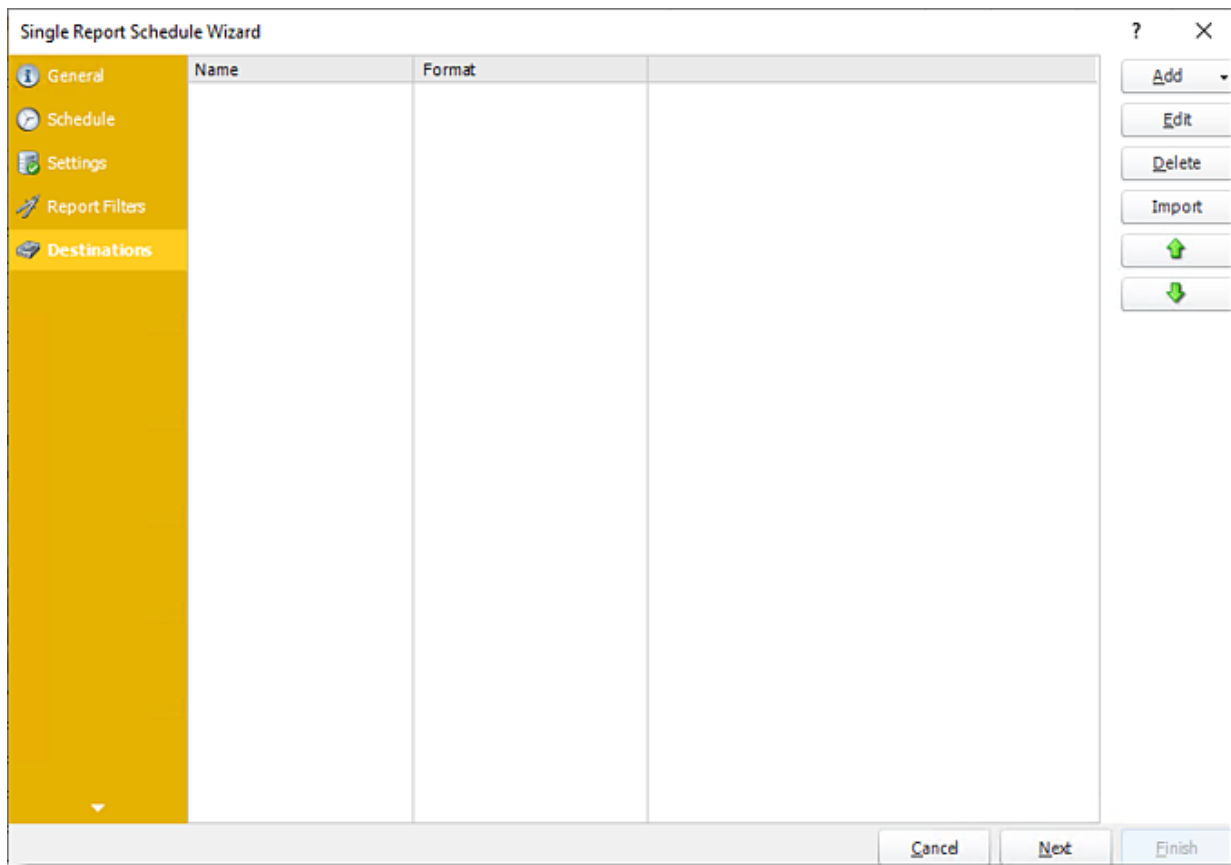
**!** Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

Click **Next** to continue to the next wizard section.

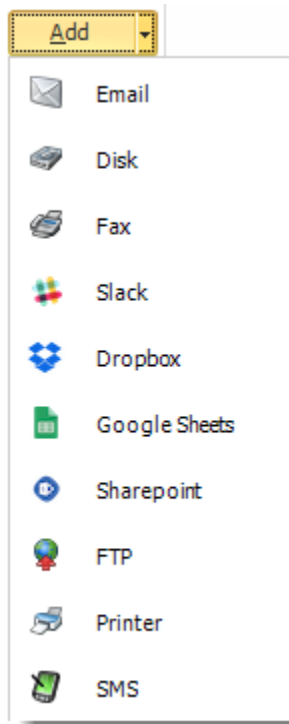


## Destination Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.



- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.
- For more information about Type of Destinations, click [here](#).
- For more information about Output Formats, click [here](#).

Click **Next** to continue to the next wizard section.

## Exception Handling Wizard

Single Report Schedule Wizard

General Schedule Settings Report Filters Destinations **Exception Handling**

Treat as "error" if not completed in 30.00 mins. ☒ Auto-calculate

On error, retry executing schedule every 0 mins up to 3 times.

☒ Run custom tasks when the following exception occurs

☐ Report is blank ☐ Report export fails

**Actions** Blank Report Check Method

Name
------

Edit Delete

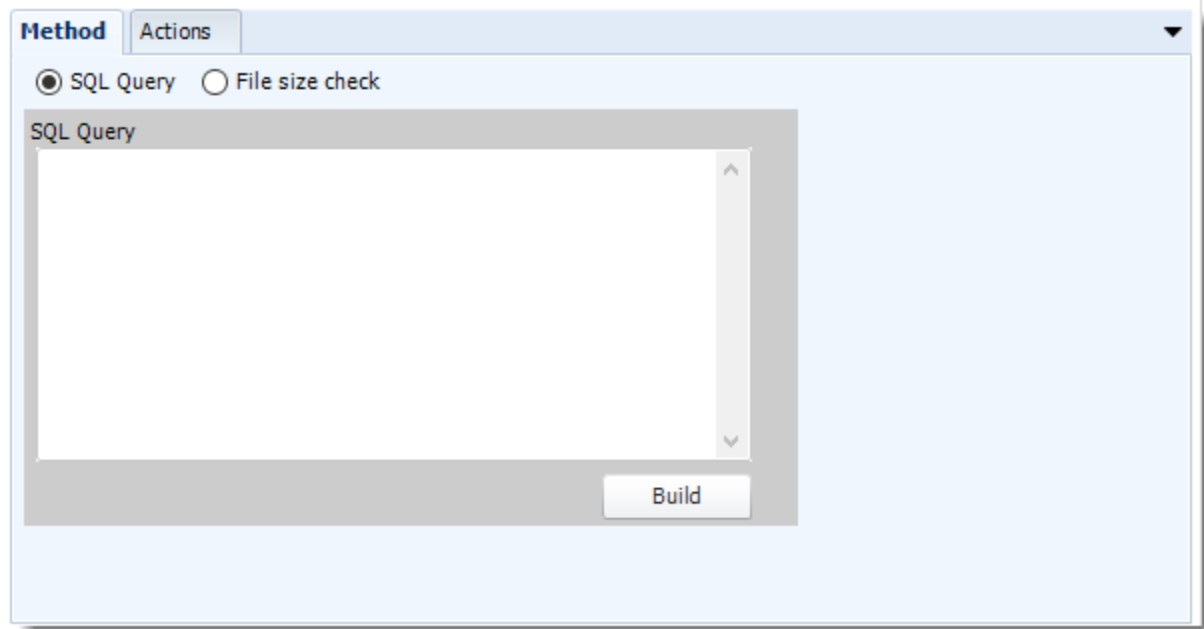
Cancel Next Finish

- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Check if the Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.
- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.

## Method



The screenshot shows a software window titled 'Method'. It has two tabs: 'Method' and 'Actions'. The 'Method' tab is active. Inside this tab, there are two radio buttons: 'SQL Query' (selected) and 'File size check'. Below these is a large text area labeled 'SQL Query' with a vertical scrollbar. At the bottom right of the text area is a 'Build' button.

- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

OK Cancel

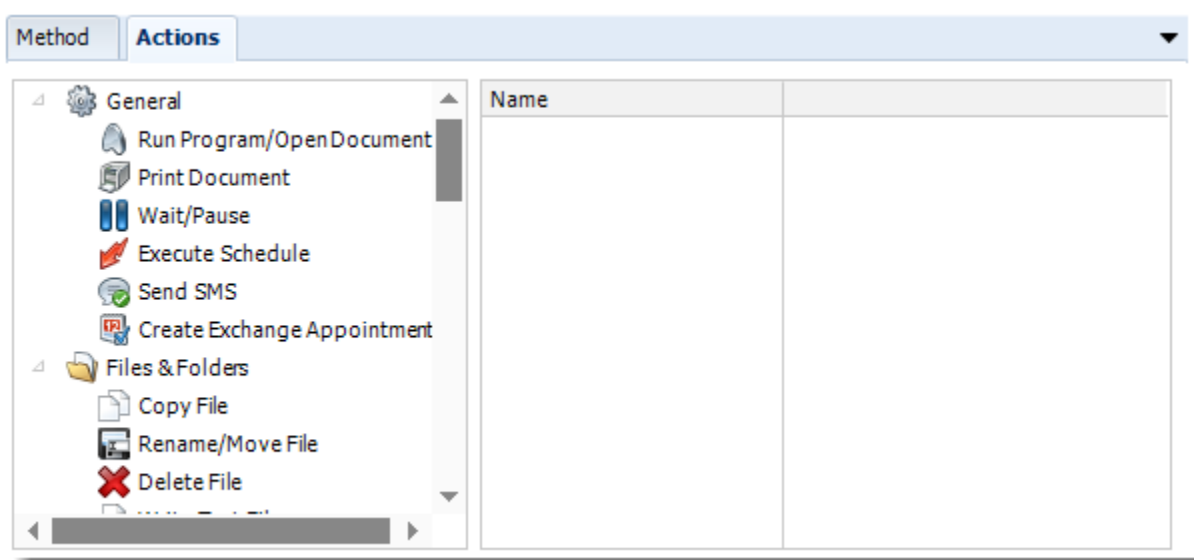
- **File size check:** Assume report is blank if size is under "X" bytes.

Method Actions

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*Tip: You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

Click **Next** to continue to the next wizard section.

## Refresh Datasets Wizard

The screenshot shows the 'Single Report Schedule Wizard' window, specifically the 'Refresh Datasets' step. The left sidebar has a yellow background and contains the following menu items: General, Schedule, Settings, Report Filters, Destinations, Exception Handling, and Refresh Datasets (which is highlighted). The main area is titled 'Select datasets to refresh before the report is executed'. It contains three dropdown menus: 'PowerBI Account', 'Workspace', and 'Dataset'. To the right of these dropdowns are 'Add >' and '< Delete' buttons. Below the dropdowns is a 'Notification Options' section with three radio buttons: 'Notify on Completion' (selected), 'Notify on Failure', and 'Do not Notify'. On the right side of the main area is a table with the following headers: 'Dataset Name', 'Account', 'Workspace', and 'Notification'. The table is currently empty. At the bottom of the main area, there is a text label 'After refreshing the datasets above, wait' followed by a spinner box containing the number '0' and the text 'seconds before running the report.'. At the bottom right of the window are three buttons: 'Cancel', 'Next', and 'Finish'.

Single Report Schedule Wizard

Select datasets to refresh before the report is executed

PowerBI Account Add >  
< Delete

Workspace

Dataset

Notification Options

☒ Notify on Completion  
☐ Notify on Failure  
☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

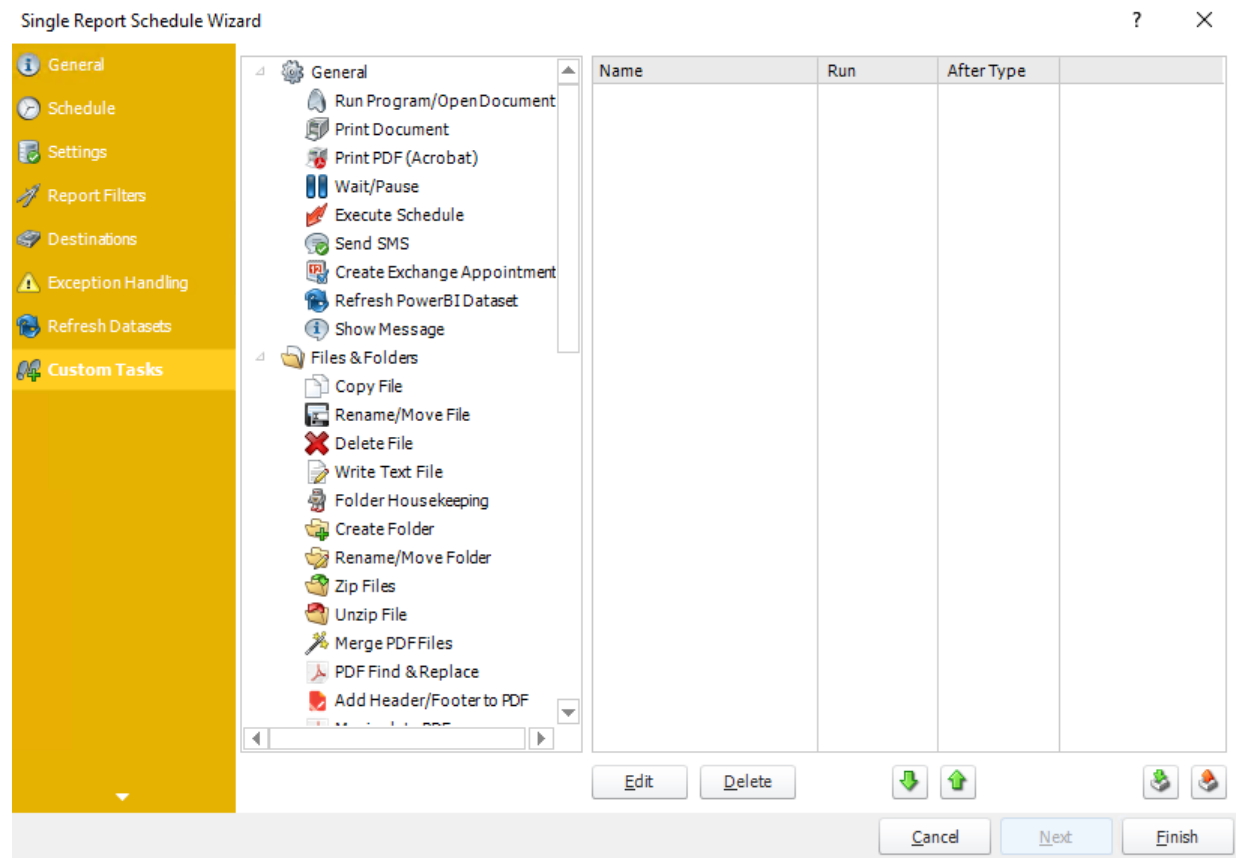
After refreshing the datasets above, wait  seconds before running the report.

Cancel Next Finish

- In this section select the datasets to refresh before the report is executed.
- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**

Click **Next** to continue to the next wizard section.

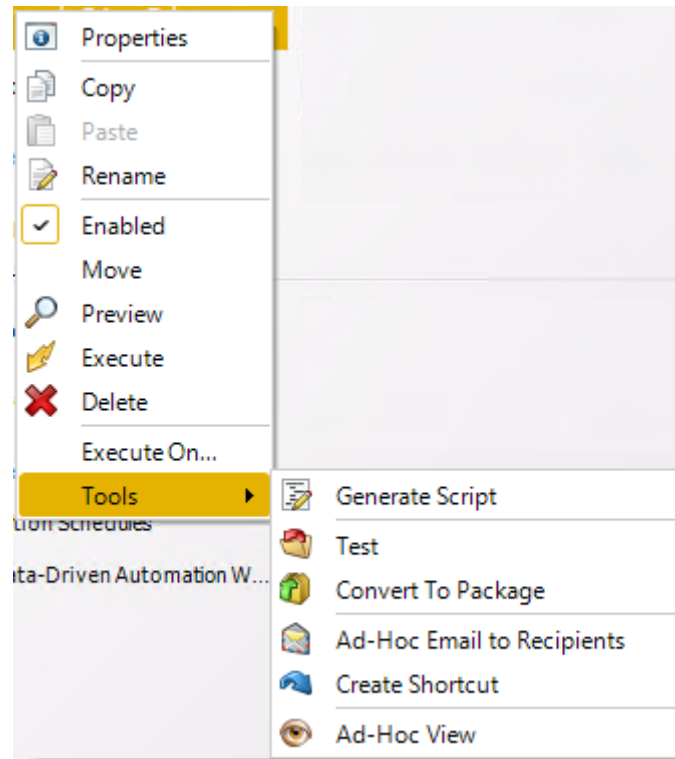
## Custom Tasks Wizard



- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.



## Single Report Schedule Context Menu

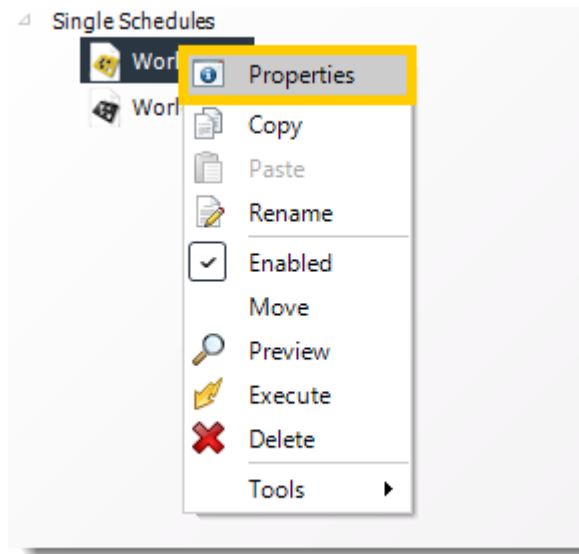


Right-Click on a schedule to see the following actions:

- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Preview:** Preview the report before execution.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test:** Use this option to test the schedule and export it to selected "test" destinations.
- **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.

- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.
- **Ad-Hoc View:** This button allows you to preview the report.

### *Single Report Schedule Properties*



- To access your schedule properties, right click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.

## General

You can edit the general information of your schedule from here.

Single Report Schedule Properties - WorldCup2018

**General**

Schedule Name: WorldCup2018

Create In: Daily

PowerBI Account: Karen A. Angeles MArtinez

☒ Reports ☐ Dashboards

Select Report: My Workspace WorldCup

Description (optional)

Keyword (optional)

OK Cancel Apply

## Schedule

You can edit your schedule time from here.

Single Report Schedule Properties - WorldCup2018

**General**  
**Schedule**  
Report Settings  
Report Filter  
Refresh Datasets  
Destinations  
Exception Handling  
Tasks  
Snapshots  
History

Start Date: 10/22/2018 End Date: 10/18/3004

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every: 1 weeks

on

☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday  
☐ Saturday ☐ Sunday

Schedule time: 10:11:00 AM ☐ Exception calendar:

Next to run on: 10/29/2018 10:11:00 AM

☐ Repeat every: 0.25 hours until: 3:40:54 PM

☒ Enable this schedule and execute it on: DEFAULT

OK Cancel Apply

## Report Settings

You can edit report settings from here.

Single Report Schedule Properties - Avocado Prices PBR5-972

General Schedule **Report Settings** Report Filter Destinations Exception Handling Refresh Datasets Tasks Sharing Snapshots History

☐ Use JSON string for rendering settings

Settings JSON

Quick Search

**Page Setup**

Left margin (% of width)	0
Page Height (pixels)	800
Page Width (pixels)	1300
Right margin (% of width)	0

**PDF Cropping**

Crop PDF	<input checked="" type="checkbox"/> True
Crop Bottom	200
Crop Left	55
Crop Right	70
Crop Top	300

**Rendering**

Maximum Loading Time(secs)	60
----------------------------	----

**Pages To Render**

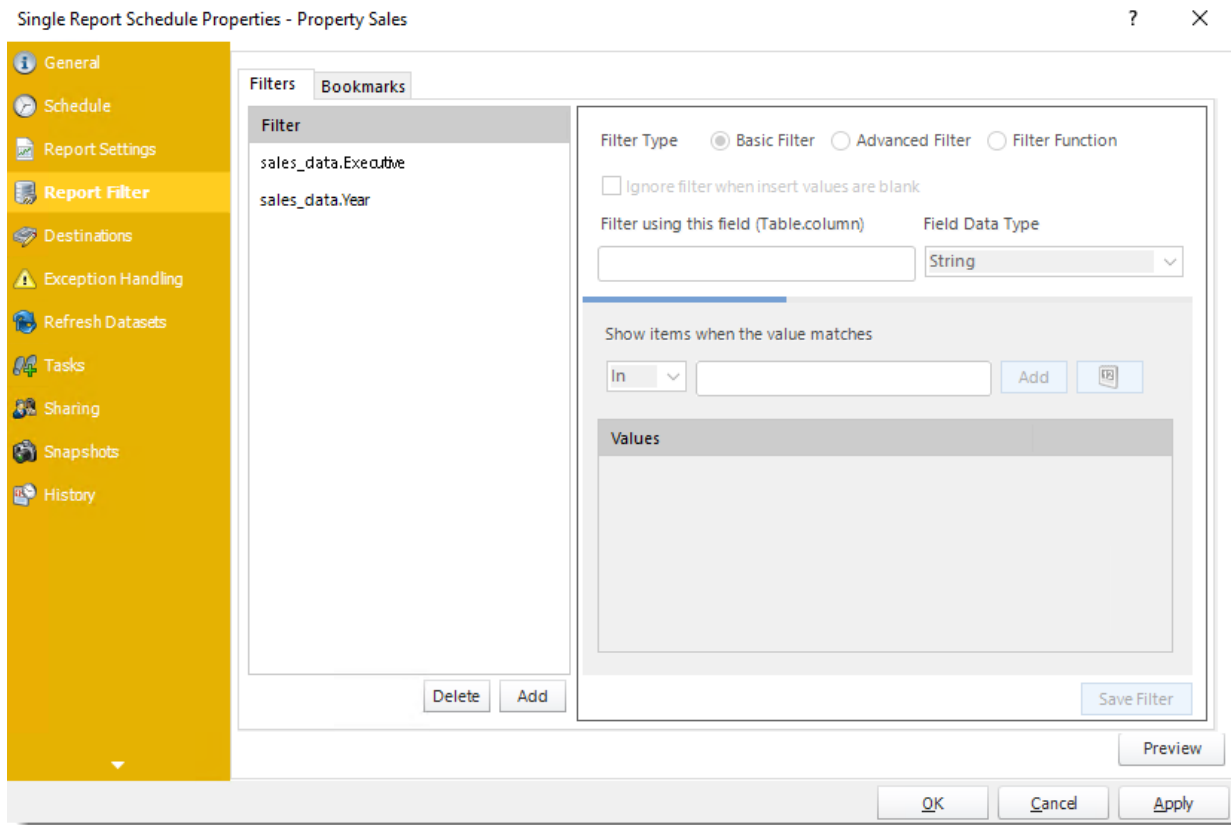
The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

2

OK Cancel Apply

## Report Filter

You can add, edit, or delete report filters from here.



## Refresh Datasets

You can add, edit, or delete datasets from here.

Single Report Schedule Properties - WorldCup2018

Select datasets to refresh before the report is executed

PowerBI Account: Karen A. Angeles MARTINEZ

Workspace: My Workspace

Dataset: WorldCup Matches

Notification Options:

- ☒ Notify on Completion
- ☐ Notify on Failure
- ☐ Do not Notify

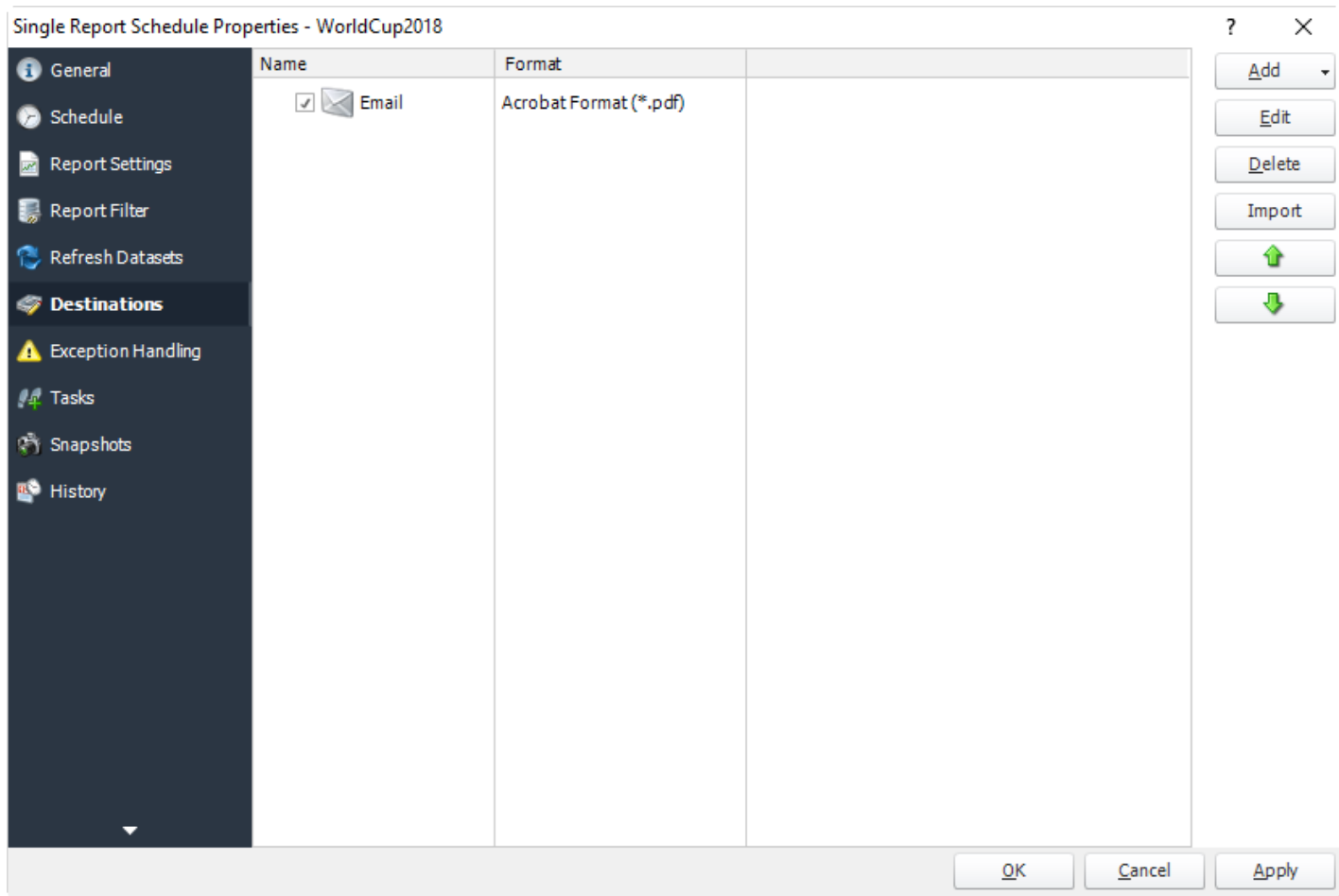
Dataset Name	Account	Workspace	Notification
WorldCup Matches	Karen A. Angele...	My Workspace	MailOnCompl...

After refreshing the datasets above, wait 1 seconds before running the report.

OK Cancel Apply

## Destinations

You can add, edit, or delete destination from here.





## Exception Handling

You can edit exception-handling options from here.

The screenshot shows the 'Single Report Schedule Properties - WorldCup2018' dialog box. The left sidebar contains a list of tabs: General, Schedule, Report Settings, Report Filter, Refresh Datasets, Destinations, **Exception Handling** (selected), Tasks, Snapshots, and History. The main area is divided into two sections. The top section contains settings for error handling: 'Treat as "error" if not completed in' (30.00 mins), 'On error, retry executing schedule every' (0 mins up to 3 times), and checkboxes for 'Auto-calculate', 'Fail if not completed in (mins)', 'Check if the report is blank', and 'Ignore the report and subsequent tasks'. The bottom section is titled 'Method' and 'Actions'. Under 'Method', there are two radio buttons: 'SQL Query' (selected) and 'File size check'. Below this is a large text area for the 'SQL Query' with a 'Build' button at the bottom right. At the bottom of the dialog are 'OK', 'Cancel', and 'Apply' buttons.

Single Report Schedule Properties - WorldCup2018

General Schedule Report Settings Report Filter Refresh Datasets Destinations **Exception Handling** Tasks Snapshots History

Treat as "error" if not completed in 30.00 mins. ☐ Auto-calculate

On error, retry executing schedule every 0 mins up to 3 times.

☒ Fail if not completed in (mins)

☒ Check if the report is blank

☐ Ignore the report and subsequent tasks

Method Actions

☒ SQL Query ☐ File size check

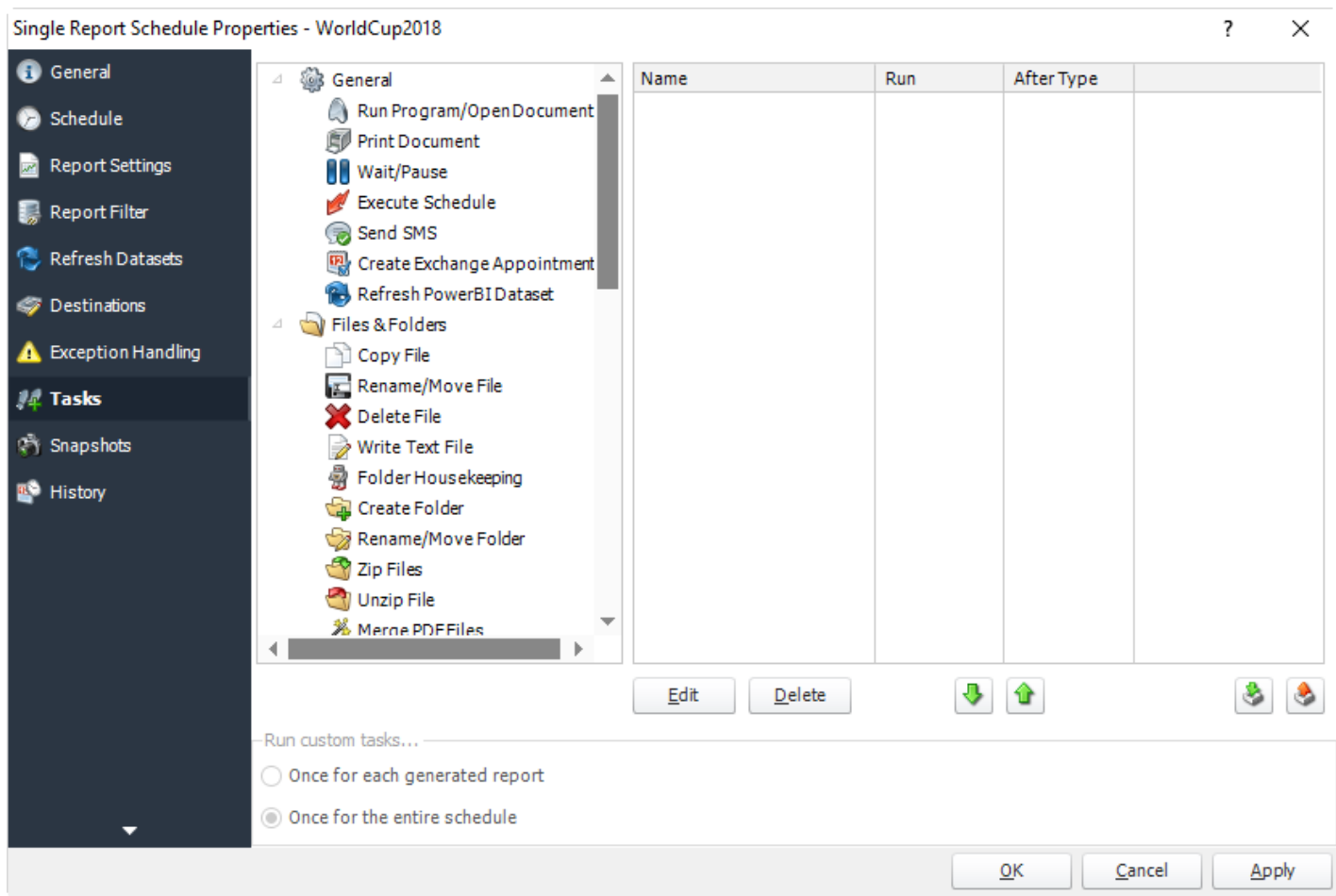
SQL Query

Build

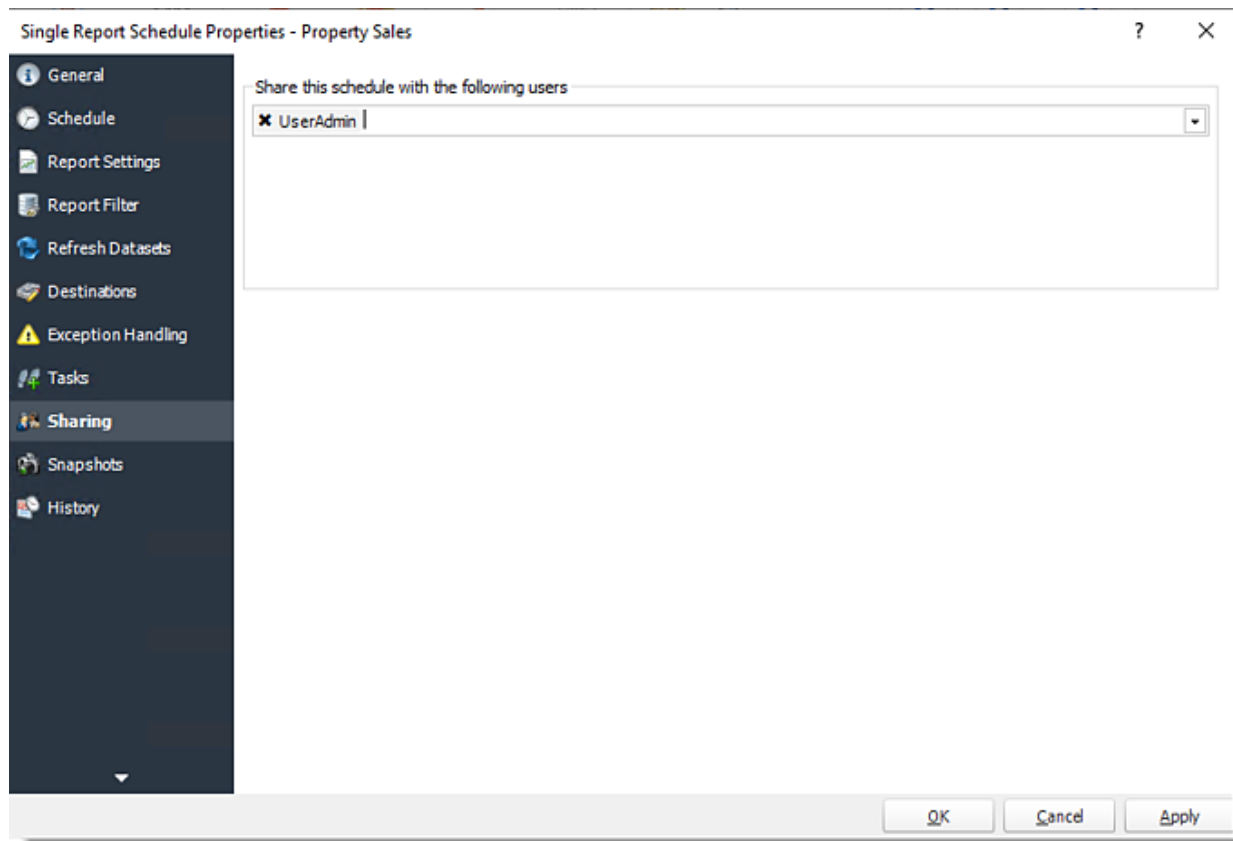
OK Cancel Apply

## Task

You can add, edit, or delete tasks from here.

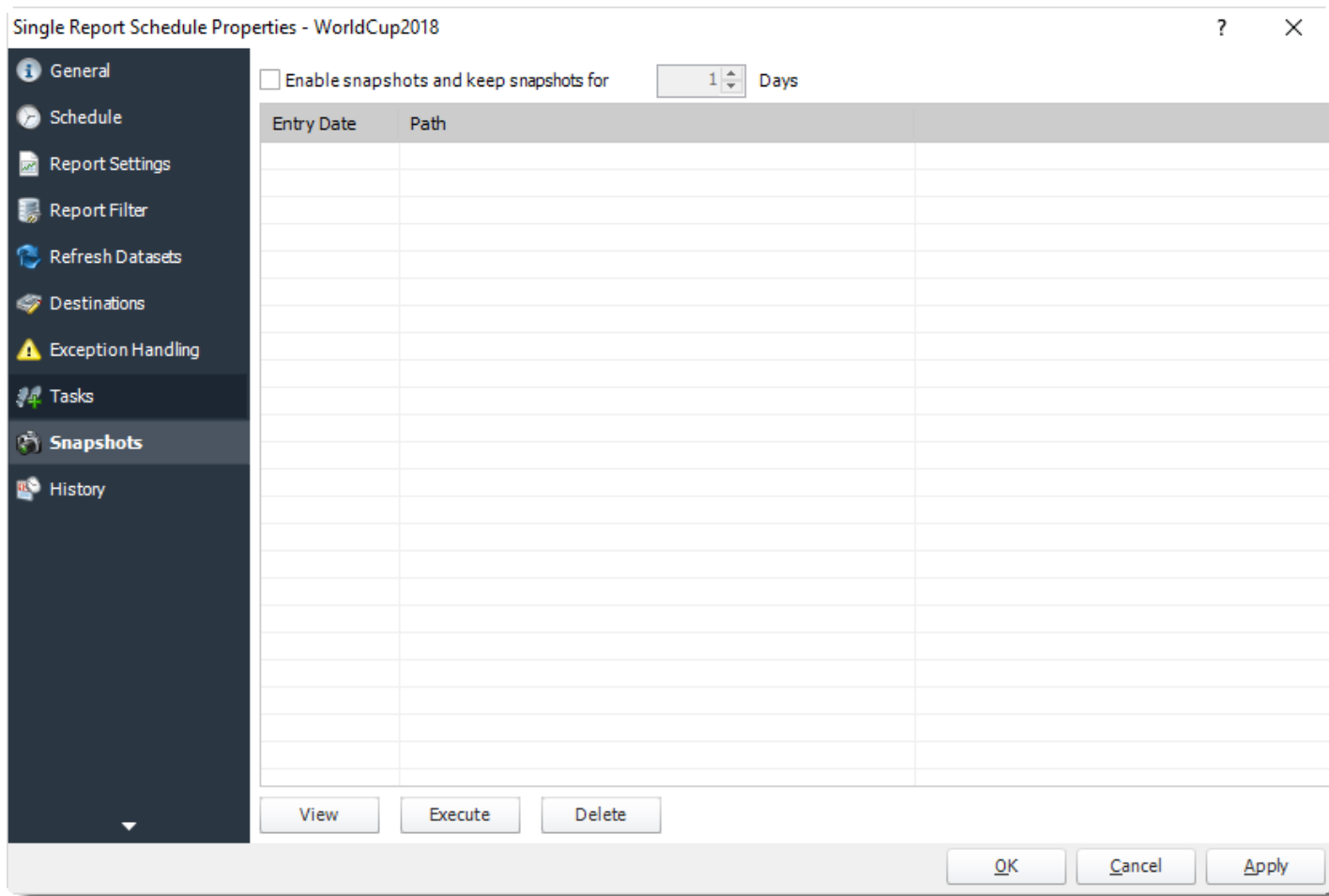


- Sharing:** Here you can share this schedule with multiple users.

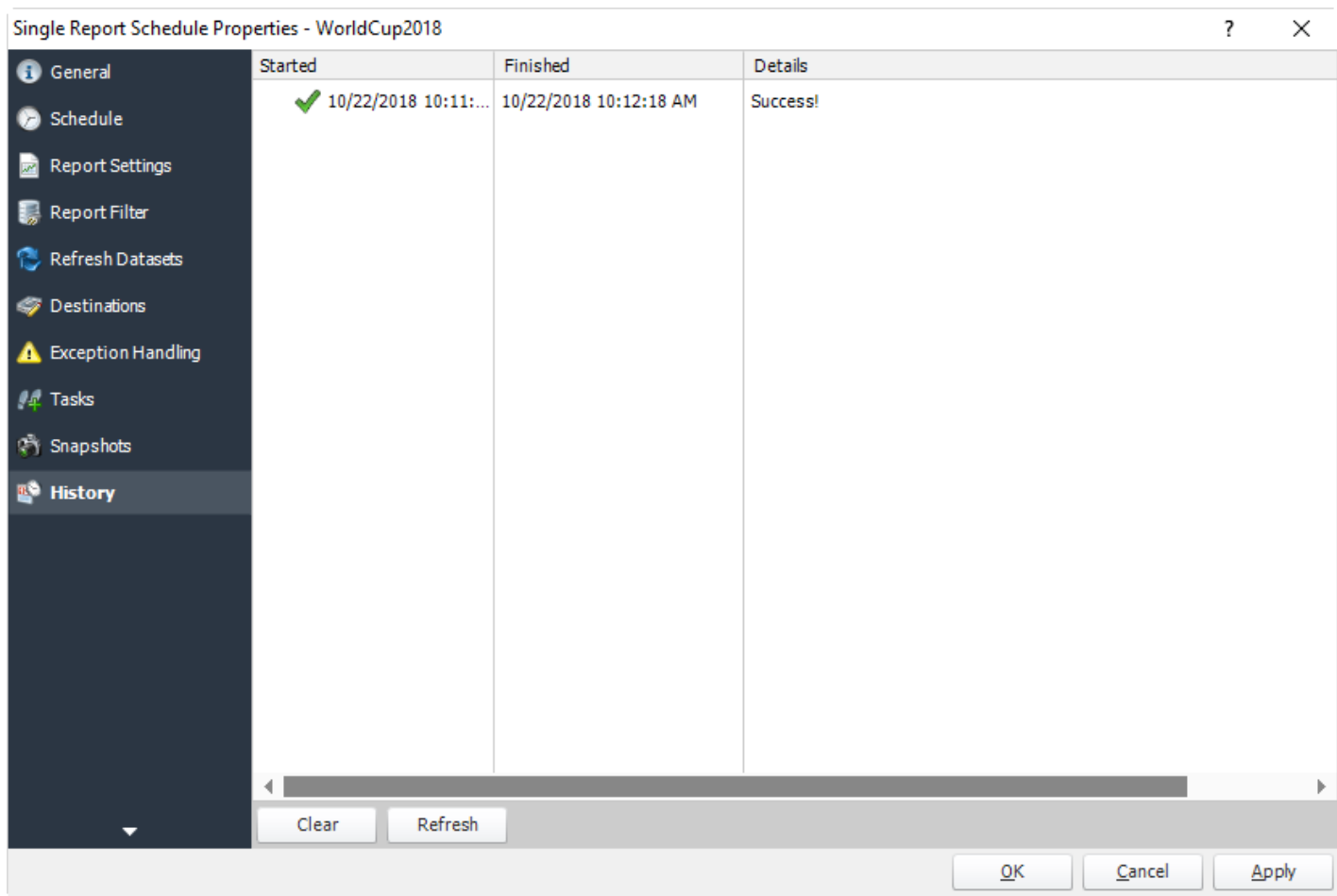


**Snapshots:** A snapshot is a copy of each report a schedule or a package generates. Keeping snapshots enables you to resend past reports without generating them afresh - especially if the data has changed in the meantime.

Simply select the number of days to keep the snapshots.



**History:** Review the schedules history. Successes, failures, and other data is located here.

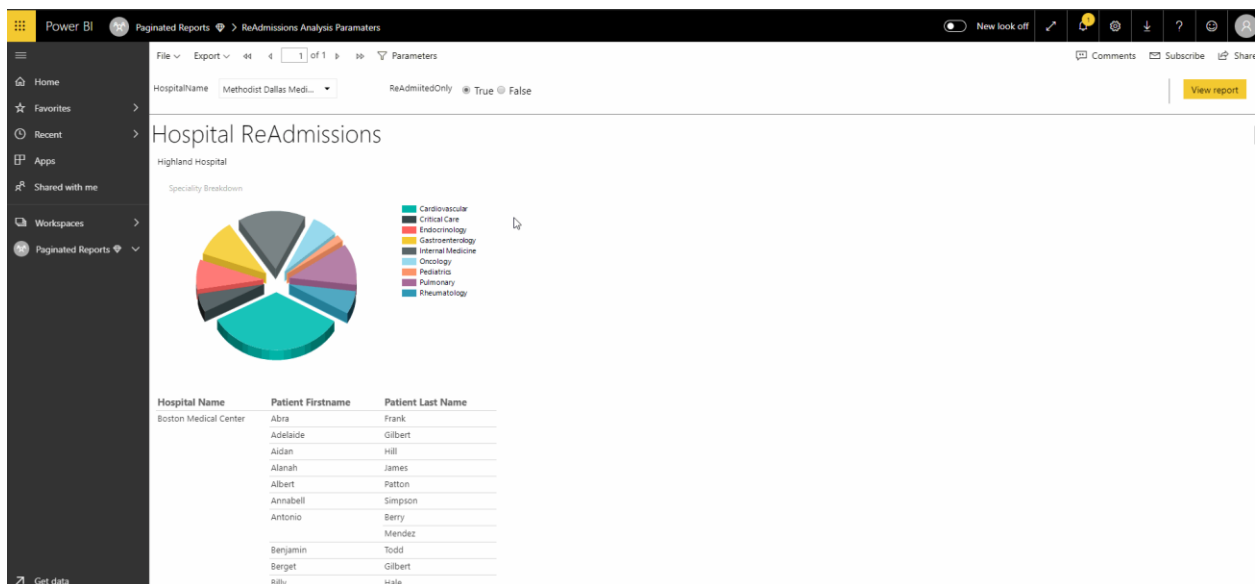


How do I setup a Single Report Schedule for Paginated Reports for Power BI Service in PBRs?

**The Single Schedule is the simplest and easiest way to schedule a Power BI report for delivery.**

This article applies to:

- Power BI Paginated Reports (Cloud - Power BI Service)



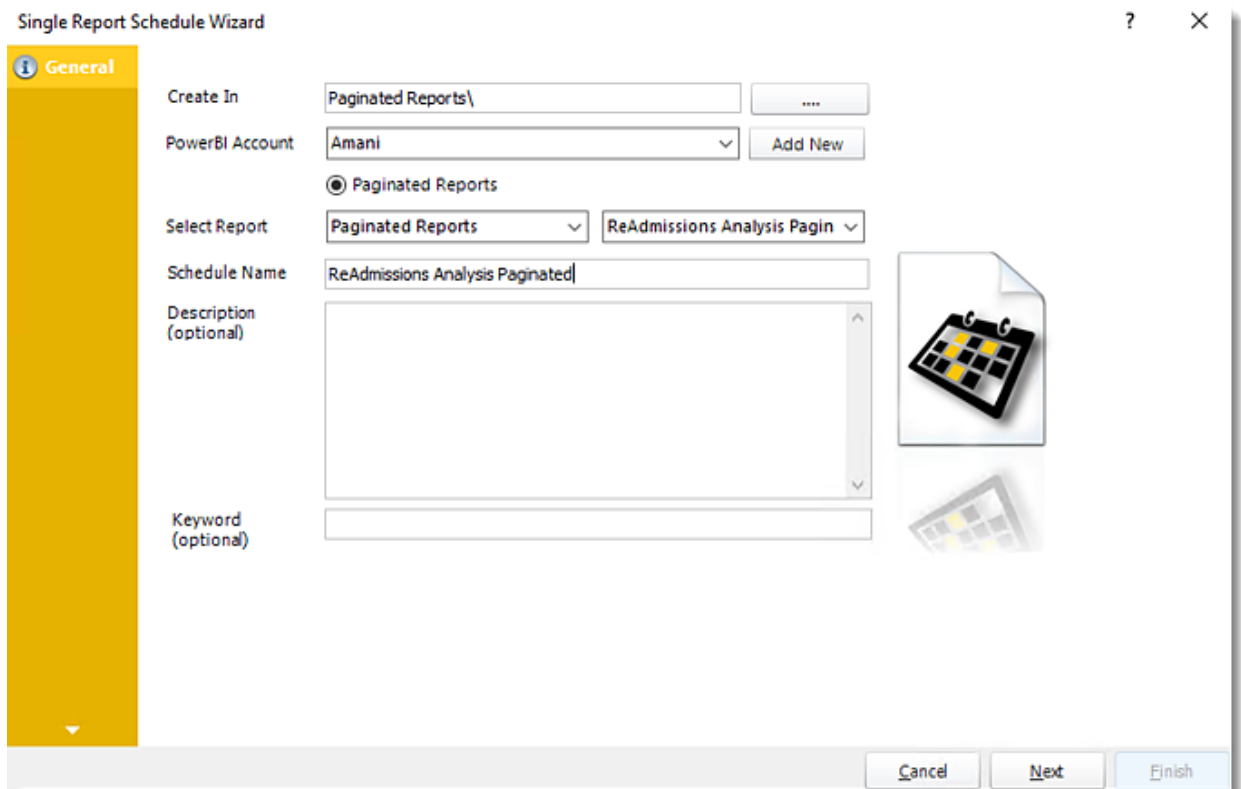
Single Reports Schedule for Power BI Paginated Reports Service.

The Single Schedule is the simplest and easiest way to schedule a report for delivery. It involves defining the report you wish to schedule, determine its timing, selecting parameters (if any), and setting the destination (s) of the report.

*Example: Jamie is a reports developer that must send a daily report to management detailing the number of support tickets currently open. She requires a report to be sent in PDF format at 8:30AM to three individuals.*

How to Create a Single Schedule Report for Power BI Paginated Reports?

- Go to **Single**.
- Go to **For PowerBI Service** and select **Paginated Reports**.



## Single Report Schedule Wizard for Power BI General Wizard

- **Create In:** This section is to select the folder where you want to create the single report in.
- **Power BI Account:** In this section is to select what Power BI Account you want to create the single report. In this section, you may add a new account in the Add New button.
- **Select Report:** Click on the drop-down menus to navigate to the required report.
- **Schedule Name:** Write in the name of the single schedule.
- **Description (optional):** You may write a short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Single Report Schedule Wizard

**General** | **Schedule**

Start Date: 2/18/2020 | End Date: 2/18/3019

**Schedule** | Daily | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 11:15:50 AM | Exception calendar: [v]

Next to run on: 2/18/2020 | 11:15:50 AM

☐ Repeat every: 0.25 | [v] until: 11:15:50 AM

☒ Enable this schedule

Cancel | Next | Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.



Example: Run every Monday, Wednesday, and Friday.

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

☒ Saturday ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other >>

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other >>

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other >>

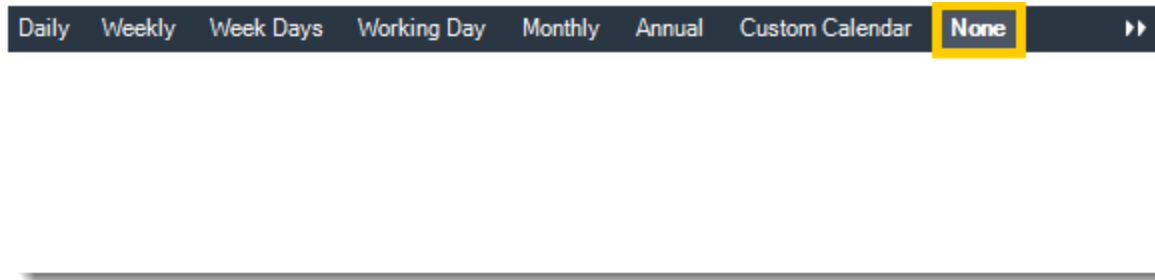
Calendar Name

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other** >>

Run schedule every

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Parameter Wizard

Single Report Schedule Wizard

General Schedule **Parameters**

Parameter Name: States Parameter Value: North Carolina Parameter Type: String Add

☐ Null

Name	Value	Type	IsNull
States	North Carolina	String	False

Delete Import

Insert

- PBRS Constants
- User Defined Constants
- Parameters
- Event-Based Data
- Data Items
- User Defaults

Preview

Cancel Next Finish

- In this section, you will determine the parameters for your report (if any). If your report has no parameters, you may skip this section by clicking next.
- **Parameter Name:** Enter the parameter name of your report.
- **Parameter Value:** Enter the parameter value of your report.
- **Parameter Type:** Use the drop-down menu to select the parameter.
- Click **Add** to add the parameter value.
- **Import:** Use this option to add parameter values using a URL from Power BI Service to import a parameter to this report.

Import Parameters From PowerBI URL

Please paste in the URL from the PowerBI Service

OK Cancel

rdlreports/aebe0617-58f3-45fc-82ca-84ba14f6093d?rp:State=Georgia

- Click **OK**.

Single Report Schedule Wizard

General Schedule Parameters

Parameter Name: State Parameter Value: Georgia Parameter Type: String

☐ Null

Name	Value	Type	IsNull
State	Georgia	String	False

Buttons: Add, Delete, Import

- Preview:** View the report output given the selected parameters.

Click **Next** to continue to the next wizard section.

## Destination Wizard

Single Report Schedule Wizard

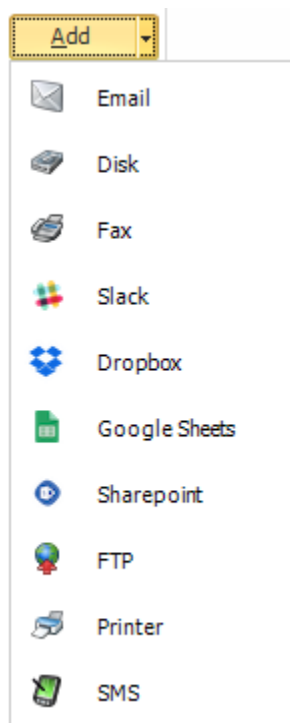
General Schedule Parameters Destinations

Name	Format
------	--------

Buttons: Add, Edit, Delete, Import, Up, Down

Buttons: Cancel, Next, Finish

- Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.



- Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- Delete:** Select a destination and click this button to delete it.
- Import:** Click here to import from the list of default destinations.
- For more information about Type of Destinations, click [here](#).
- For more information about Output Formats, click [here](#).

Click **Next** to continue to the next wizard section.

## Exception Handling Wizard

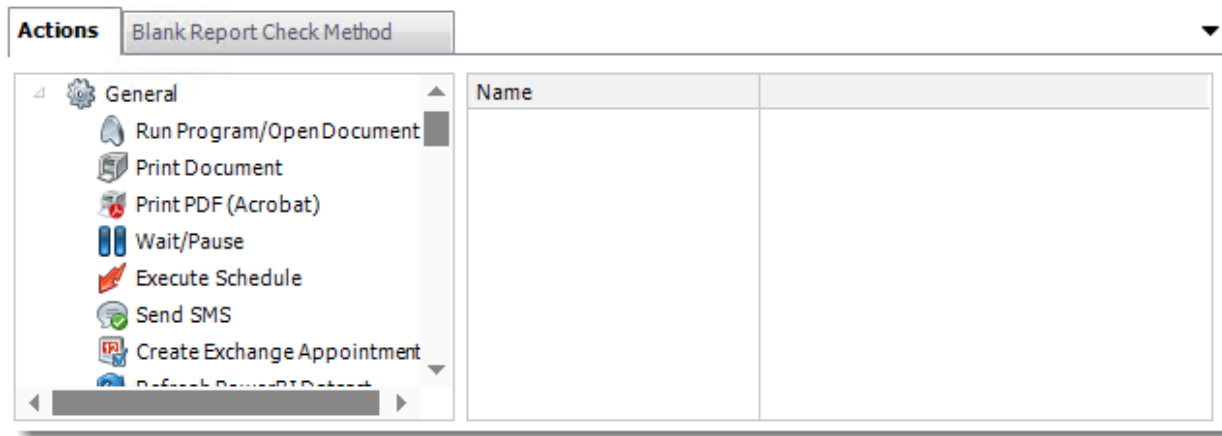
The screenshot shows the 'Single Report Schedule Wizard' window, specifically the 'Exception Handling' tab. The left sidebar has a yellow background and contains icons for 'General', 'Schedule', 'Parameters', 'Destinations', and 'Exception Handling' (which is highlighted). The main area has a white background. At the top, there are two rows of settings: 'Treat as "error" if not completed in' with a spinner set to '30.00' and 'mins.', and a checked 'Auto-calculate' checkbox; and 'On error, retry executing schedule every' with a spinner set to '0' and 'mins up to' with a spinner set to '3' and 'times.'. Below these are two unchecked checkboxes: 'Run custom tasks when the following exception occurs', 'Report is blank', and 'Report export fails'. Under the 'Actions' section, there is a dropdown menu currently showing 'Blank Report Check Method'. Below this is a list of actions: 'General', 'Run Program/Open Document', 'Print Document', 'Print PDF (Acrobat)', 'Wait/Pause', 'Execute Schedule', 'Send SMS', 'Create Exchange Appointment', 'Refresh PowerBI Dataset', and 'Show Message'. To the right of this list is a table with a 'Name' column and an empty body. At the bottom of the list are 'Edit' and 'Delete' buttons. To the right of the table are 'Add' (down arrow), 'Remove' (up arrow), and 'Import/Export' (disk icons) buttons. At the very bottom of the window are 'Cancel', 'Next', and 'Finish' buttons.

- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.
  - **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.
  - **Report exports fail:** If a report export fails, you can receive a notification or run a tasks that the report failed to execute.

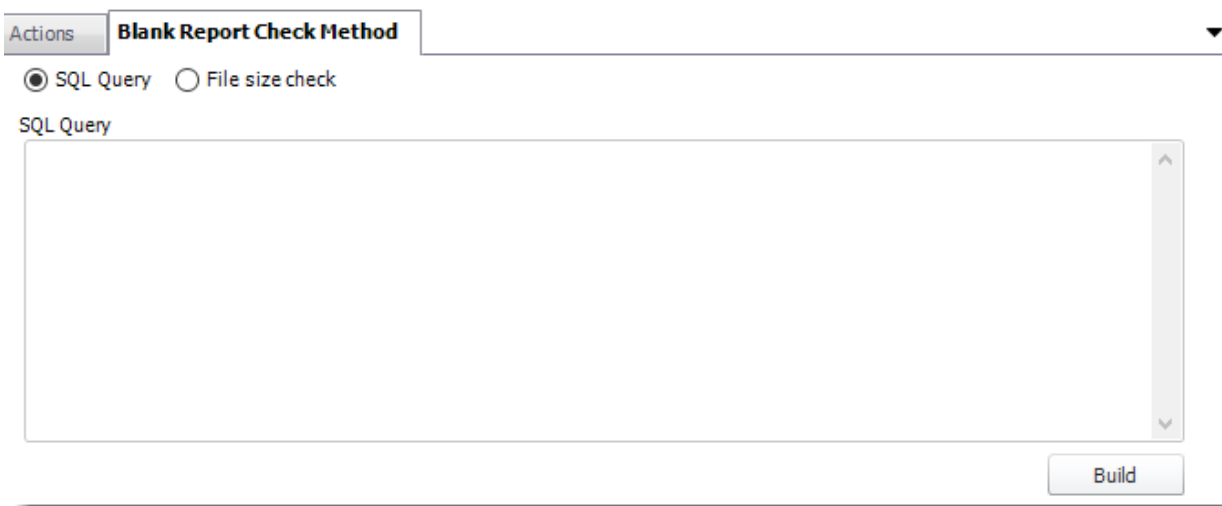
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

## Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).



Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

OK Cancel

- **File size check:** Assume reports is blank if size is under "X" bytes.

Click **Next** to continue to the next wizard section.

## Refresh Datasets Wizard

The screenshot shows the 'Single Report Schedule Wizard' window, specifically the 'Refresh Datasets' step. The left sidebar has a yellow background and contains icons for 'General', 'Schedule', 'Parameters', 'Destinations', 'Exception Handling', and 'Refresh Datasets' (which is highlighted). The main area is titled 'Select datasets to refresh before the report is executed'. It features three dropdown menus: 'PowerBI Account', 'Workspace', and 'Dataset'. To the right of these are 'Add >' and '< Delete' buttons. Below the dropdowns is a 'Notification Options' section with three radio buttons: 'Notify on Completion' (selected), 'Notify on Failure', and 'Do not Notify'. On the right side of the window is a table with columns 'Dataset Name', 'Account', 'Workspace', and 'Notification'. The table is currently empty. At the bottom, there is a text field 'After refreshing the datasets above, wait' followed by a spinner box set to '0' and the text 'seconds before running the report.'. At the very bottom are 'Cancel', 'Next', and 'Finish' buttons.

Single Report Schedule Wizard

Select datasets to refresh before the report is executed

PowerBI Account  
Workspace  
Dataset

Add >  
< Delete

Notification Options

☒ Notify on Completion  
☐ Notify on Failure  
☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

After refreshing the datasets above, wait 0 seconds before running the report.

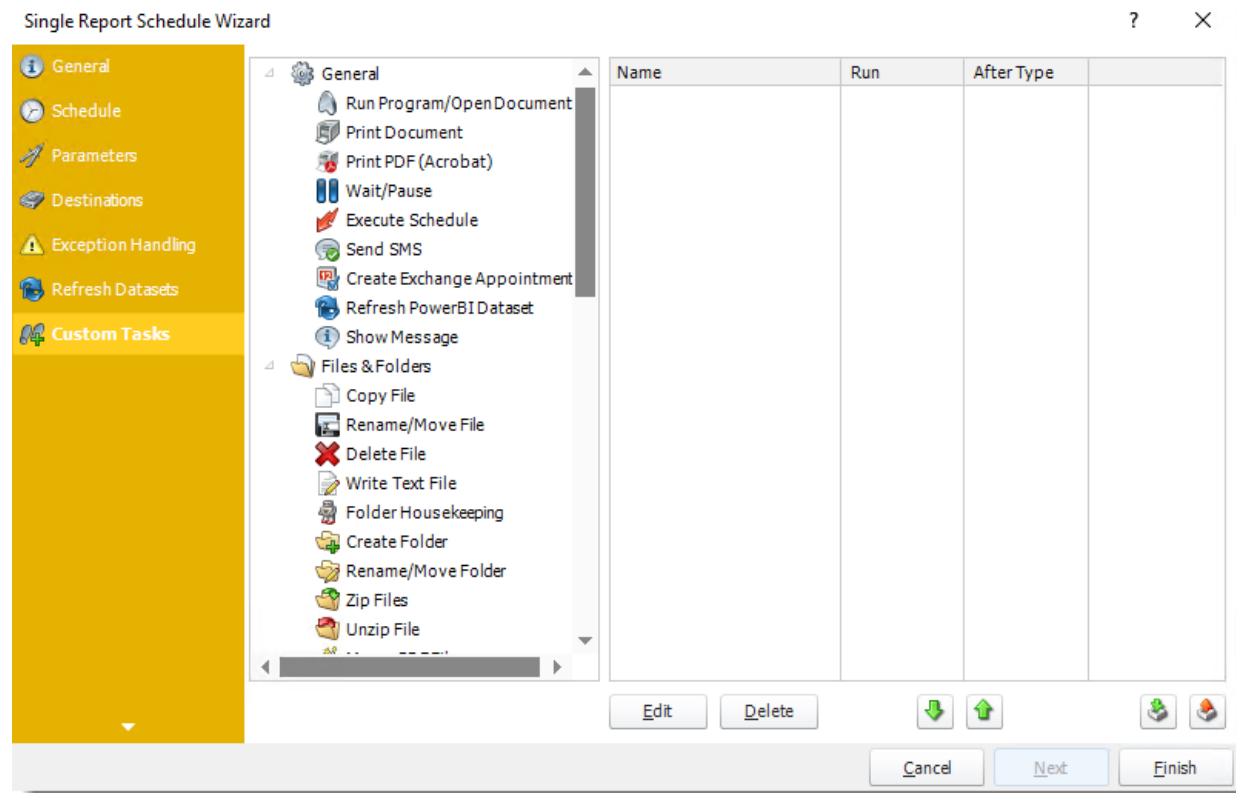
Cancel Next Finish

In this section select the datasets to refresh before the report is executed.

- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**

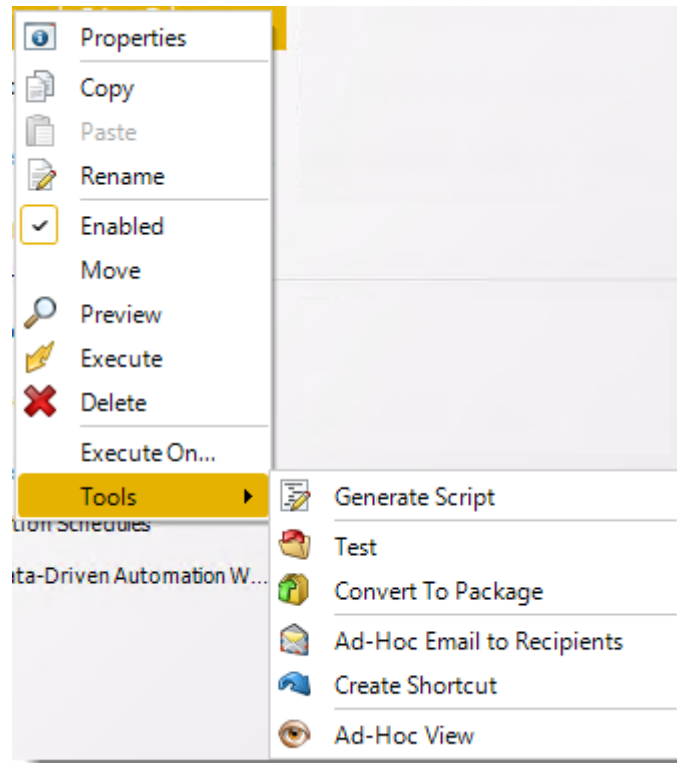
Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



- In the section, you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

## Single Report Schedule Context Menu

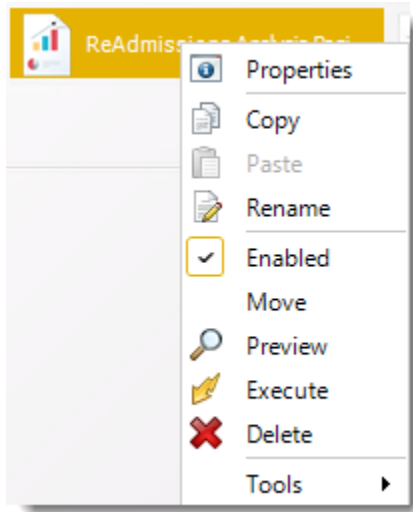


- Right-Click on a schedule to see the following actions:

- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Preview:** Preview the report before execution.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test:** Use this option to test the schedule and export it to selected "test" destinations.
- **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.
- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.

- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.
- **Ad-Hoc View:** This button allows you to preview the report.
- **General Script:** You can create SQL File and add the SQL File schedule in your PBRs database from another server.

### *Single Report Schedule Properties*



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedules such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

Single Report Schedule Properties - ReAdmissions Analysis Paginated

**General**

Schedule Name  
ReAdmissions Analysis Paginated

Create In  
Paginated Reports

PowerBI Account  
Amani Add New

☒ Paginated Reports

Select Report  
Paginated Reports ReAdmissions Analysis Pagin

Description (optional)

Keyword (optional)

Unique ID  
635346424

OK Cancel Apply

•Schedule

**General** | **Schedule** | Parameters | Destinations | Exception Handling | Refresh Datasets | Tasks | Sharing | Snapshots | History

Start Date: 2/18/2020 | End Date: 2/18/3019

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 11:15:00 AM | Exception calendar: ☐ ▼

Next to run on: 2/19/2020 | 11:15:00 AM

☐ Repeat every: 0.25 hours until: 11:15:00 AM

☒ Enable this schedule

OK Cancel Apply

## •Parameters

**General** | **Schedule** | **Parameters** | Destinations | Exception Handling | Refresh Datasets | Tasks | Sharing | Snapshots | History

Parameter Name:  | Parameter Value:  | Parameter Type: ▼ | Add

☐ Null ⓘ

Name	Value	Type	IsNull	
State	Georgia	String	False	Delete Import

Preview

OK Cancel Apply

## •Destinations

Name	Format
<input checked="" type="checkbox"/> Disk	Acrobat Format (*.pdf)

Buttons on the right: Add, Edit, Delete, Import, Up Arrow, Down Arrow.

Buttons at the bottom: OK, Cancel, Apply.



## Exception Handling

Treat as "error" if not completed in  mins. ☐ Auto-calculate

On error, retry executing schedule every  mins up to  times.

☒ Run custom tasks when the following exception occurs

☒ Report is blank ☐ Report export fails

☐ Ignore the report and subsequent tasks

**Actions** Blank Report Check Method

Name	
Run Program/Open Document	
Print Document	
Print PDF (Acrobat)	
Wait/Pause	
Execute Schedule	
Send SMS	
Create Exchange Appointment	
Refresh PowerBI Dataset	

Edit Delete

OK Cancel Apply

## Refresh Datasets

Select datasets to refresh before the report is executed

PowerBI Account Add >

Workspace < Delete

Dataset

Notification Options

☒ Notify on Completion

☐ Notify on Failure

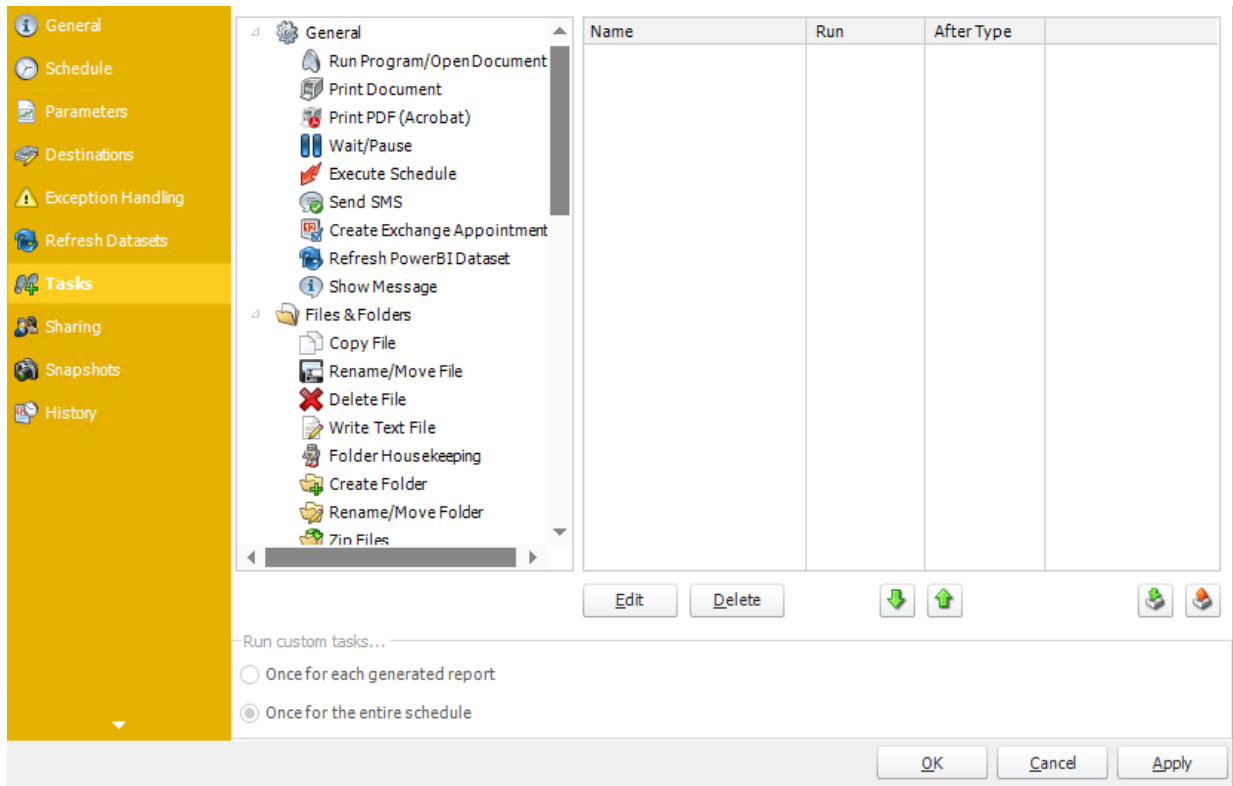
☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

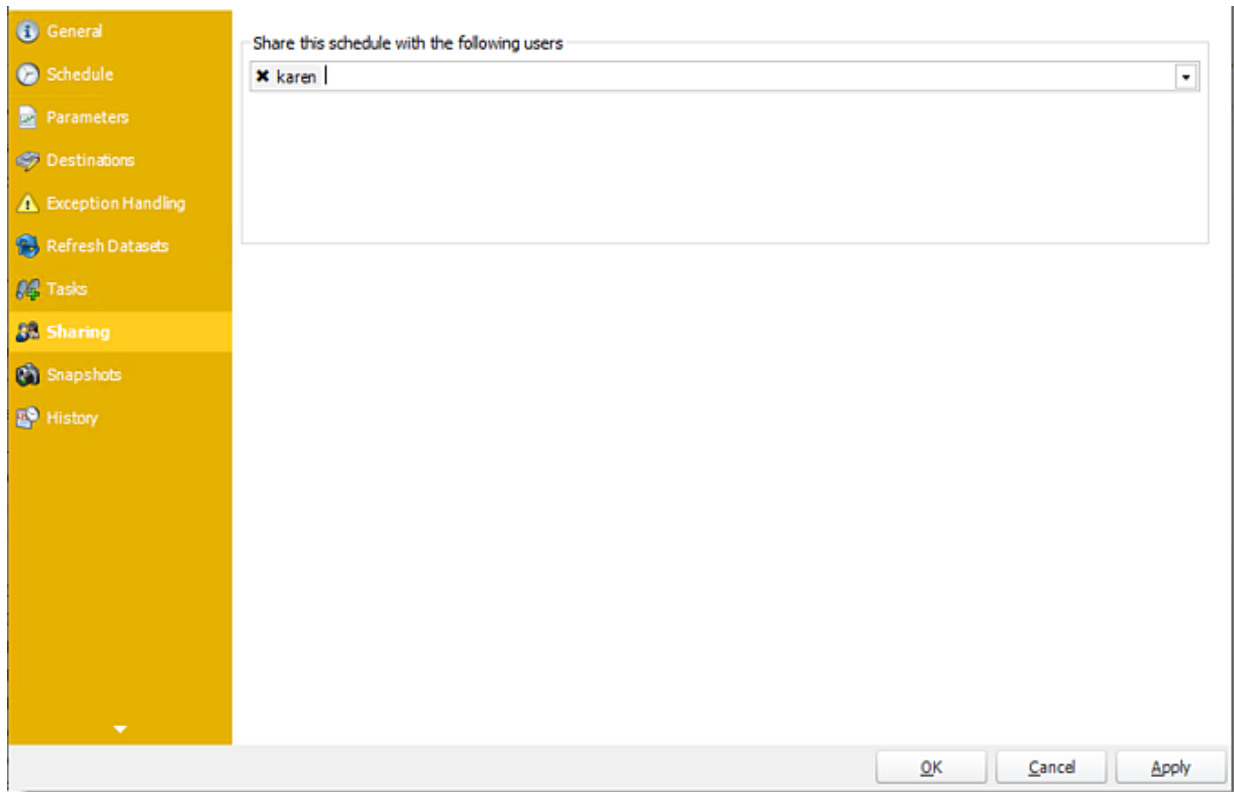
After refreshing the datasets above, wait  seconds before running the report.

OK Cancel Apply

## Tasks

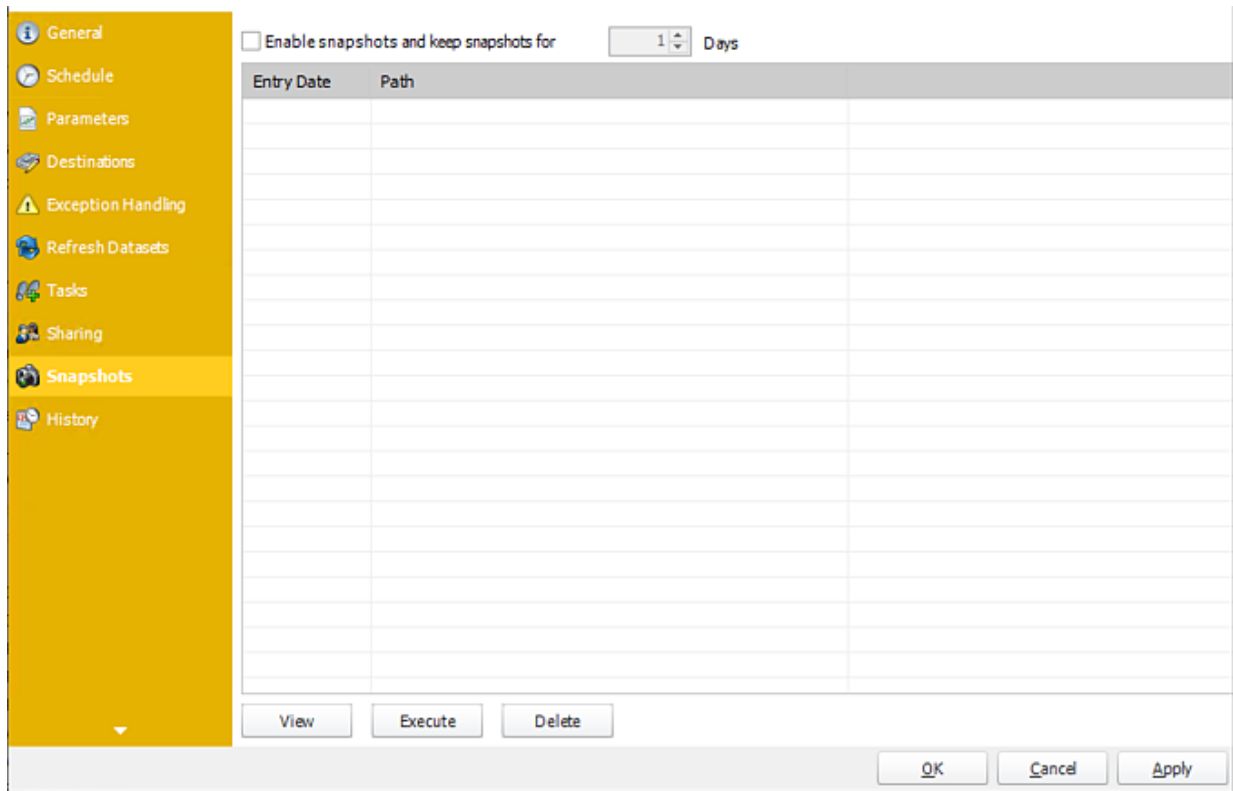


**Sharing:** Here you can share this schedule with multiple users.

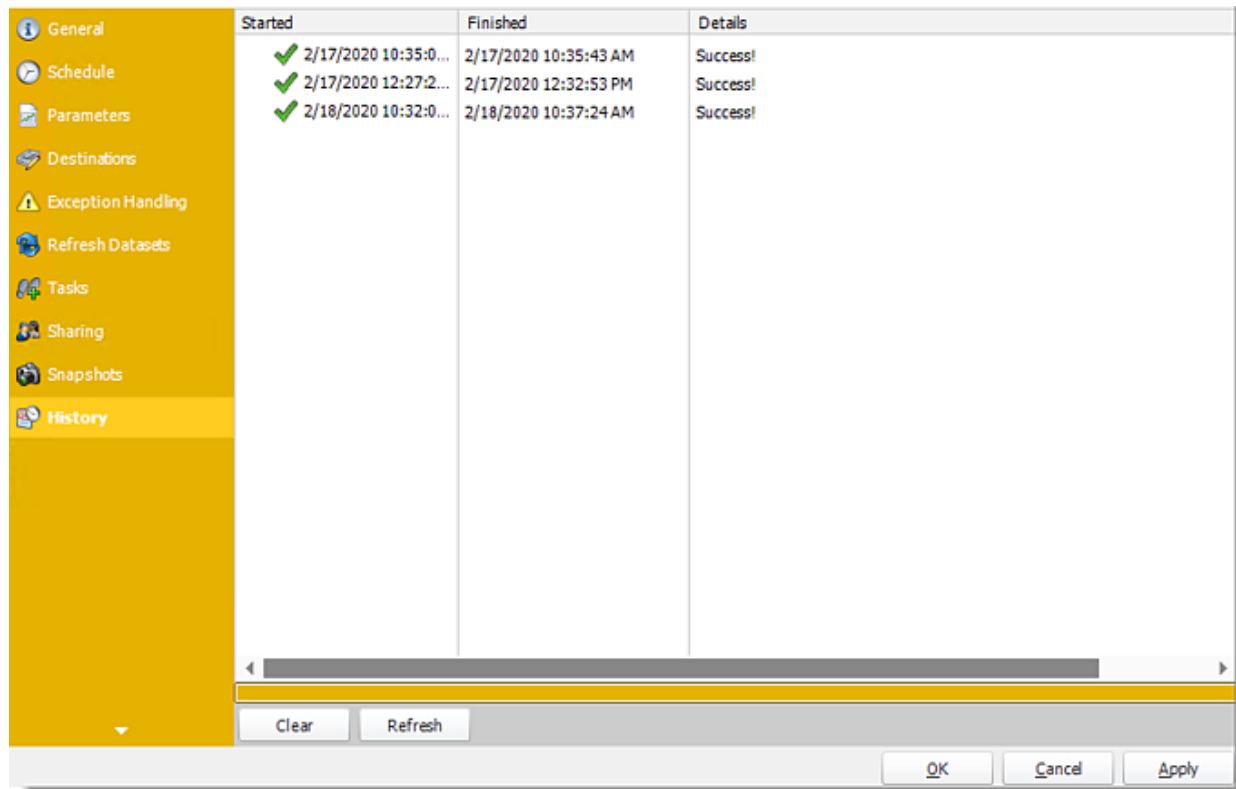


**Snapshots:** A snapshot is a copy of each report a schedule or a package generates. Keeping snapshots enables you to resend past reports without generating them afresh - especially if the data has changed in the meantime.

- - Simply select the number of days to keep the snapshots.



**History:** Review the schedule's history. Successes, failures, and other data is located here.



Started	Finished	Details
✓ 2/17/2020 10:35:0...	2/17/2020 10:35:43 AM	Success!
✓ 2/17/2020 12:27:2...	2/17/2020 12:32:53 PM	Success!
✓ 2/18/2020 10:32:0...	2/18/2020 10:37:24 AM	Success!

How do I setup Single Report Schedule for Power BI Paginated on Premise or SSRS reports in PBRs?

**The Single Schedule is the simplest and easiest way to schedule a Power BI Paginated report or SSRS report for delivery.**

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

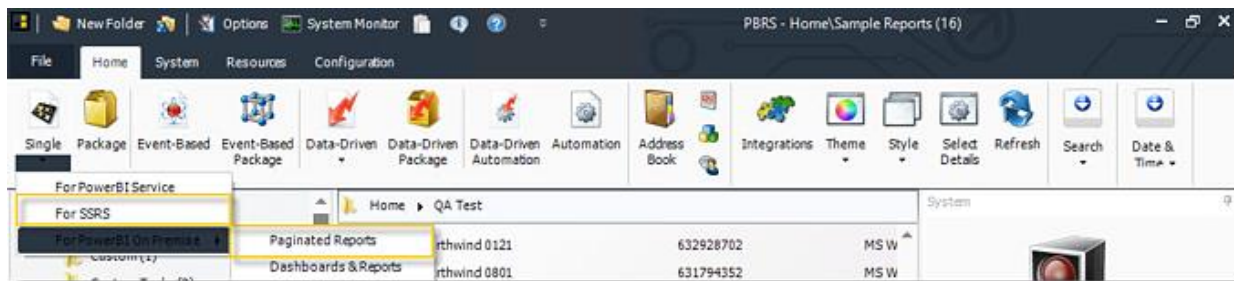
Single Reports Schedule for Power BI Paginated Reports on Premise or SSRS Reports.

The Single Schedule is the simplest and easiest way to schedule a report for delivery. It involves defining the report you wish to schedule, determine its timing, selecting parameters (if any), and setting the destination (s) of the report.

*Example: Jamie is a reports developer that must send a daily report to management detailing the number of support tickets currently open. She requires a report to be sent in PDF format at 8:30AM to three individuals.*

How to Create a Single Schedule Report for Power BI Paginated Reports on Premise or SSRS Reports?

- Go to **Single**.
- Select **For SSRS** or **Paginated Reports**.



Single Report Schedule Wizard

**General**

Create In:

☐ Use SSRS Account

Service URL:

Report Location:  ...

Schedule Name:

Description (optional):

Keyword (optional):

Cancel Next Finish

## General Wizard

- **Create In:** This section is for selecting the folder where you want to create the single report in.
- **Use SSRS Account:** Select the SSRS Account where your report server is located, and then click on (...) button next in **Report Location**.

☒ Use SSRS Account

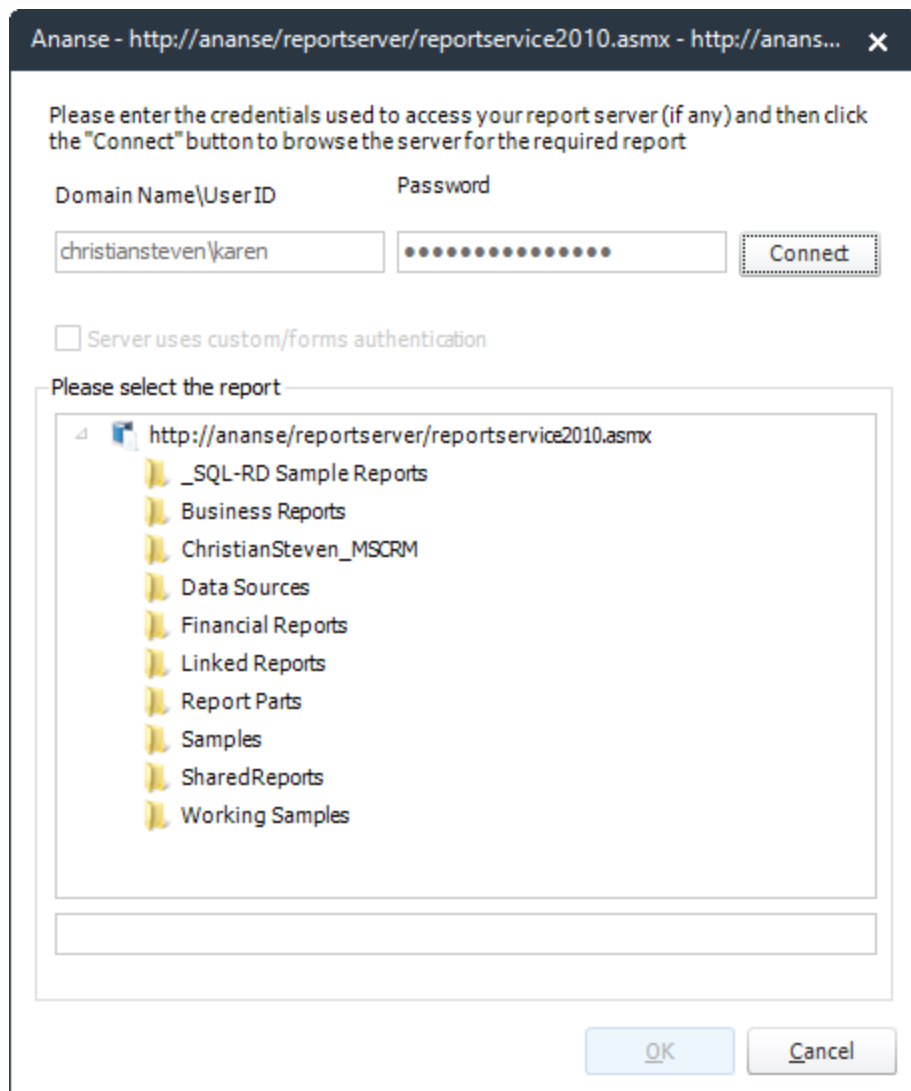
New...

Ananse

Isaiah

*Hint: SQL Azure Reporting Services- when writing your report, make sure you have enabled Forms Authentication. You should use the 2010 .asmx address for your reporting service URL.*





- **Service URL:** Uncheck '*Use SSRS Account*' checkbox, to enter the address of your reporting services server.
- **Report Location:** Browse through the report server browser to select the desired report. Authenticate to the reports server if necessary.
- **Schedule Name:** Write in the name of the package.
- **Description (optional):** You may write a short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Single Report Schedule Wizard

General | Schedule

Start Date: 8/28/2018 | End Date: 8/28/3017

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 3:07:33 PM | Exception calendar: [v]

Next to run on: 8/28/2018 3:07:33 PM

☐ Repeat every: 0.25 [v] until: 3:07:33 PM

☒ Enable this schedule and execute it on: DEFAULT [v]

Cancel | Next | Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

The screenshot shows a scheduling interface with a dark blue header bar containing tabs: Daily, Weekly, Week Days, Working Day, Monthly, Annual, Custom Calendar, and Other. The 'Weekly' tab is highlighted with a yellow border. Below the header, the text 'Repeat every' is followed by a spinner box set to '1' and the word 'weeks'. Underneath, the word 'on' is followed by a grid of checkboxes for the days of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. The checkboxes for Monday, Wednesday, and Friday are checked.

- **Week Days:** Run the schedule Monday through Friday.

The screenshot shows the same scheduling interface as before, but the 'Week Days' tab is now highlighted with a yellow border. The content area below the header is empty.

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

The screenshot shows the scheduling interface with the 'Working Day' tab highlighted in yellow. Below the header, the text 'Specify the 'nth' or 'last' working day of the month' is displayed. Below this text, there are two radio buttons: 'nth' (which is selected) and 'Last'. To the right of the 'nth' radio button is a spinner box set to '1'.

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other

Calendar Name

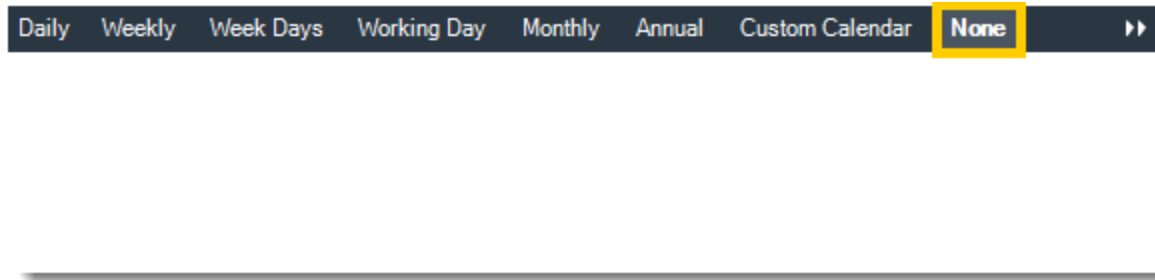
- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other**

Run schedule every

Minutes  
 Hours  
 Days  
 Weeks  
 Months  
 Years

- **None:** No scheduling is required for this item.



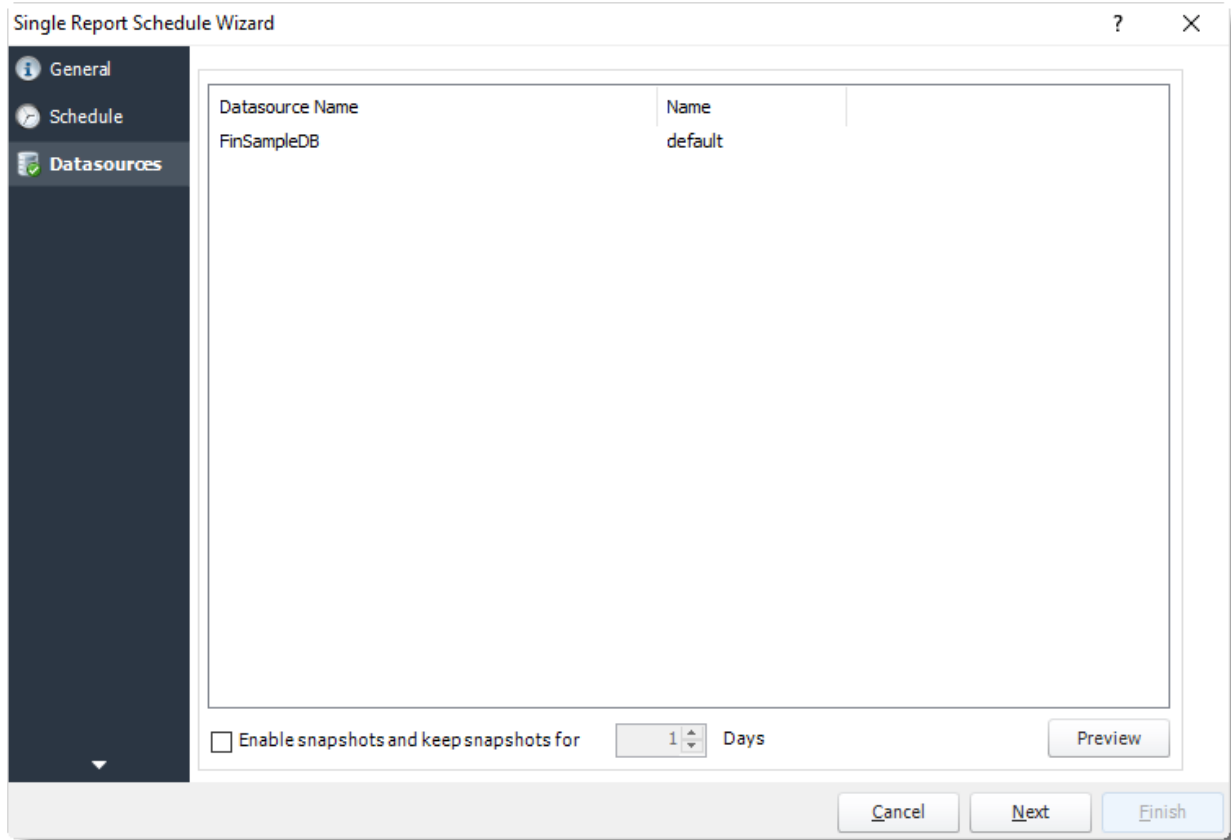
- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Datasources Wizard



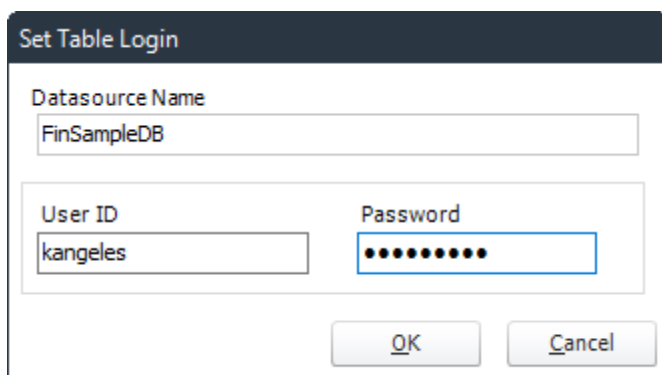
The image shows the 'Single Report Schedule Wizard' window, specifically the 'Datasources' tab. The left sidebar has three tabs: 'General', 'Schedule', and 'Datasources', with 'Datasources' being the active tab. The main area contains a table with two columns: 'Datasource Name' and 'Name'. The first row has 'FinSampleDB' under 'Datasource Name' and 'default' under 'Name'. Below the table, there is a checkbox labeled 'Enable snapshots and keep snapshots for' followed by a spinner box set to '1' and the text 'Days'. To the right of this is a 'Preview' button. At the bottom of the window are three buttons: 'Cancel', 'Next', and 'Finish'.

Datasource Name	Name
FinSampleDB	default

☐ Enable snapshots and keep snapshots for 1 Days Preview

Cancel Next Finish

- In this section you will authenticate to the database what the report runs against, set snapshots, and other options.
- **Login Required:** Set the authentication information for the report.



The image shows a 'Set Table Login' dialog box. It has a title bar 'Set Table Login'. Inside, there is a 'Datasource Name' field with 'FinSampleDB' entered. Below that are two fields: 'User ID' with 'kangeles' entered and 'Password' with a masked password (represented by dots). At the bottom are 'OK' and 'Cancel' buttons.

Datasource Name: FinSampleDB

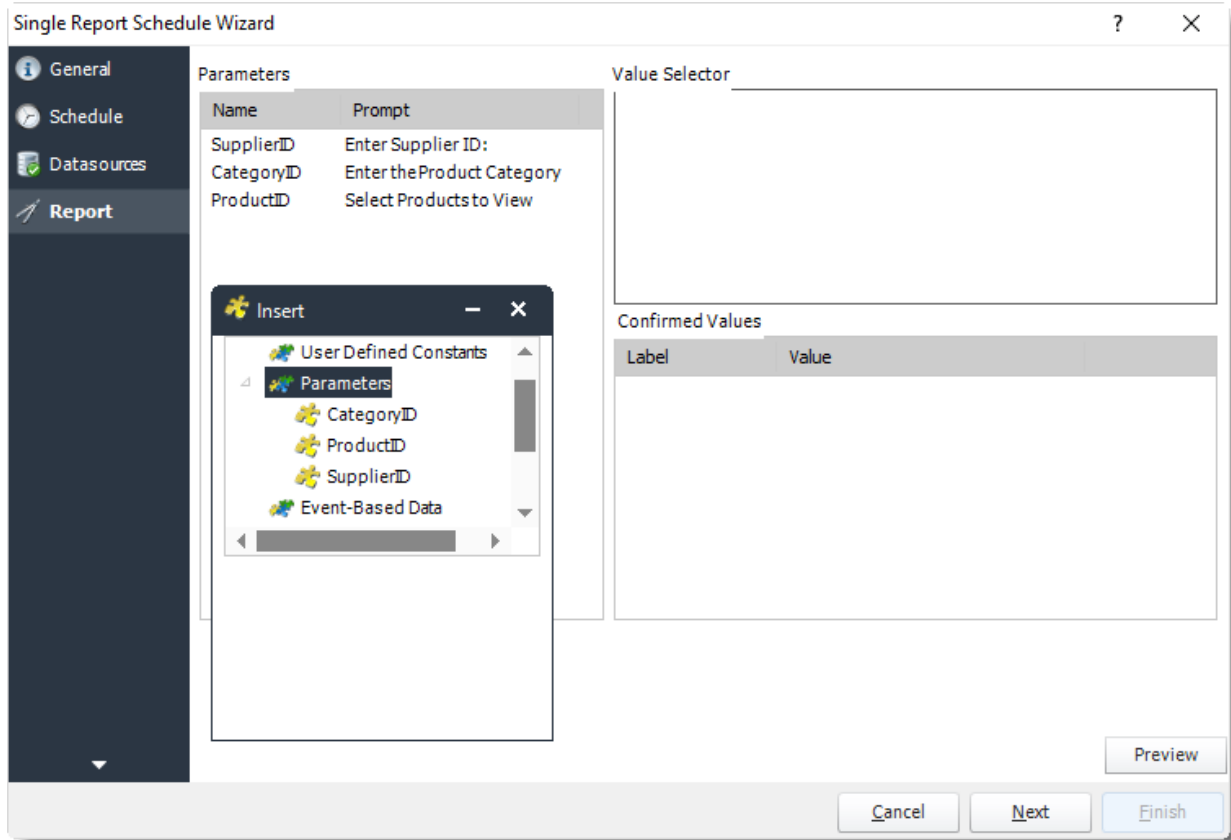
User ID: kangeles Password: .....

OK Cancel

- **Enable Snapshots and keep snapshot for X Days:** Save a Picture of the report as it is produced. Choose the amount of time will be stored in the system before deletion.
- **Preview:** View the report prior to execution.

Click **Next** to continue to the next wizard section.

## Report Wizard



- In this section, you will determine the parameters for your report (if any). If your report has no parameters, you may skip this section by clicking next.
- There are 3 requirements in order for PBRS to detect your SSRS Report parameters and their parameter values:
  - The parameter must be in use in the report.
  - The parameter must be visible.
  - The parameter must be set to be prompted at run time.
- If these three requirements are achieved, you should see the parameters in your report listed in this screen.
- For each parameter, select from the drop down list the value the report must use. In a single schedule, only one parameter value can be run at a time per parameter. You can type a value into the field, or drag and drop an "insert".

Name	Prompt
SupplierID	Enter Supplier ID:
CategoryID	Enter the Product Category
ProductID	Select Products to View

Value Selector	
Enter Supplier ID: (SupplierID)	
Exotic Liquids	<input type="button" value="Add"/> <input type="button" value="OK"/>
<input type="checkbox"/> Select All <input checked="" type="radio"/> Specified Value <input type="radio"/> Null Value <input type="radio"/> Default Value <input type="radio"/> All Values (at runtime)	
Confirmed Values	
Label	Value
Exotic Liquids	1

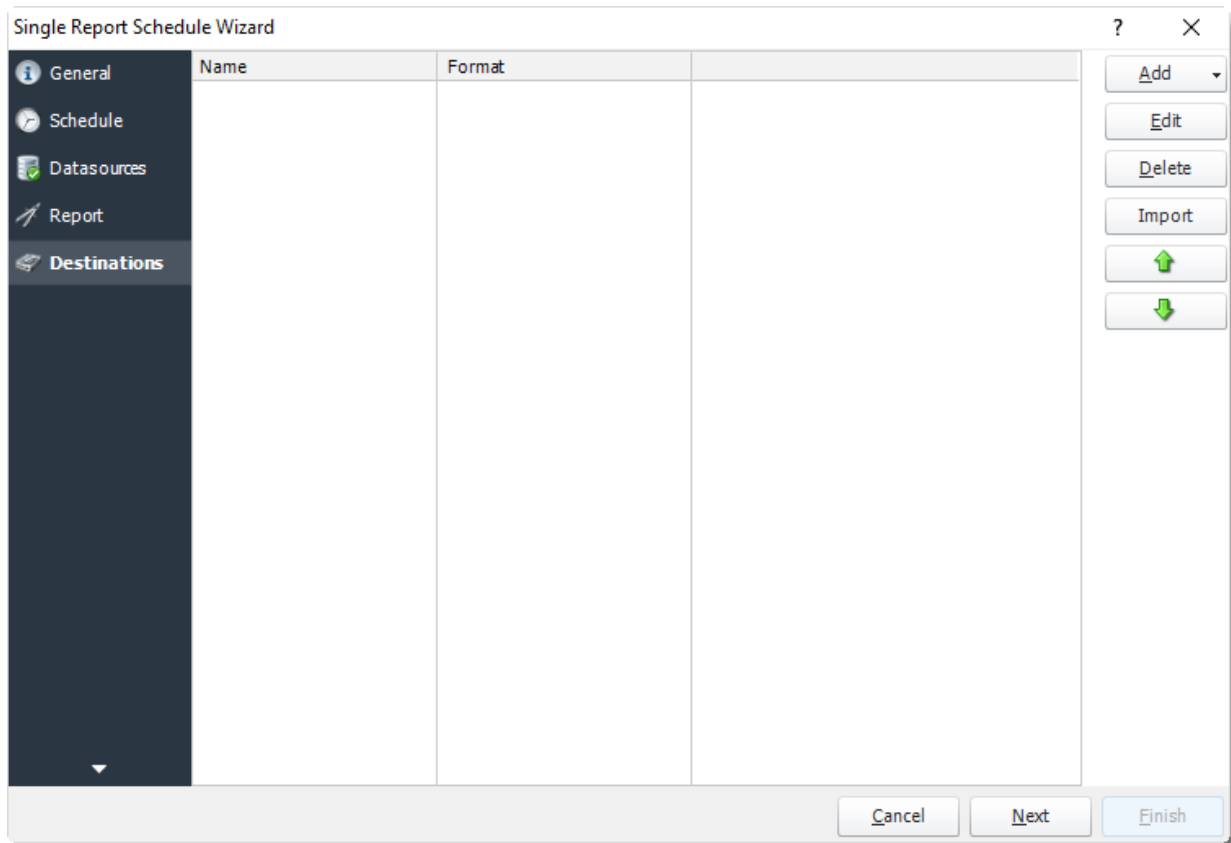
- PBRs can handle SSRS Reports with Cascading parameters, or reports where you can select multiple parameter values.
- Select All:** Selecting All Available Values will run the report given all the values.
- Specified Value:** Select the value you want in your report.
- Null Value:** Set no value for this parameter.
- Default Value:** It will select the default value.
- All Values (at run time):** Any new values will automatically will be included at run time.

*Tip: If you are looking to Dynamically populate parameter values, the better choice is Data-Driven Schedule.*

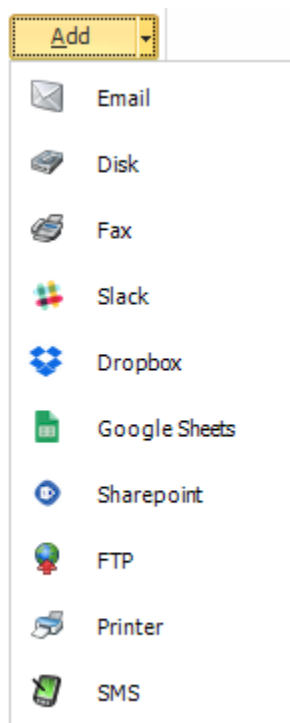
## Destination Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.





- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.
- For more information about Type of Destinations, click [here](#).
- For more information about Output Formats, click [here](#).

Click **Next** to continue to the next wizard section.

## Exception Handling Wizard

The screenshot shows the 'Single Report Schedule Wizard' window with the 'Exception Handling' tab selected in the left sidebar. The main area contains the following settings:

- Treat as "error" if not completed in:** 30.00 mins. ☒ Auto-calculate
- On error, retry executing schedule every:** 0 mins up to 3 times.
- ☒ Check if the report is blank
  - ☒ Ignore the report and subsequent tasks
- Method:** ☒ SQL Query ☐ File size check
- SQL Query:** A large text area for entering a SQL query, with a 'Build' button at the bottom right.

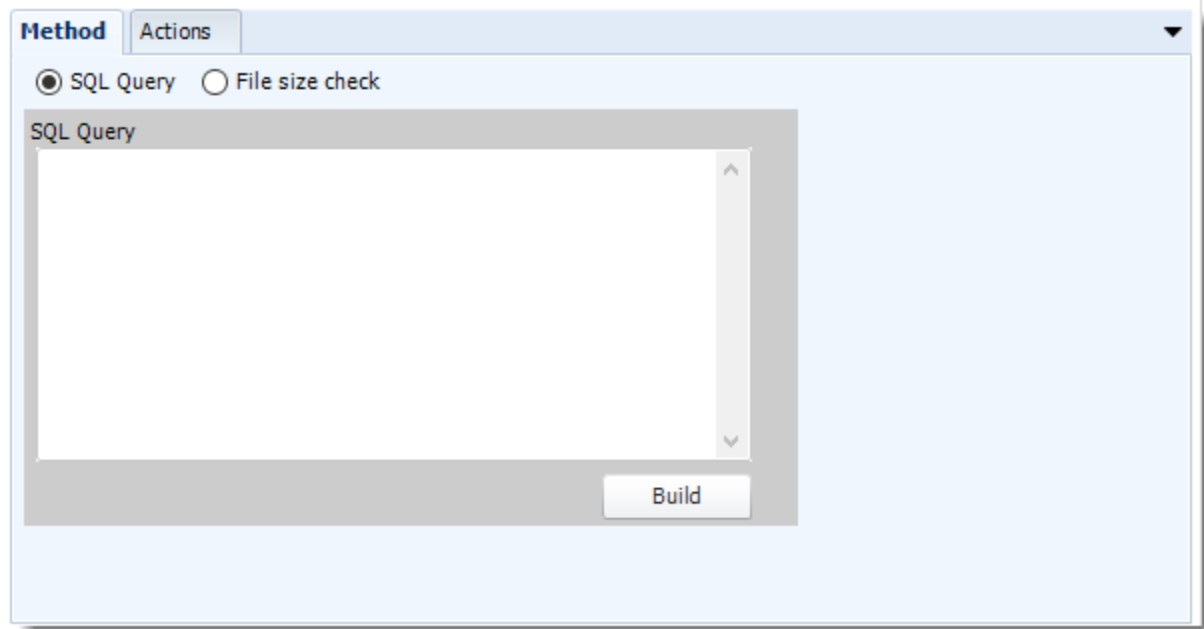
At the bottom of the window are 'Cancel', 'Next', and 'Finish' buttons.

- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRs to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRs will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRs how many times you want it to retry running the report before declaring it as "Failed."
- **Check if the Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRs on what to do with them.
- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.

## Method



The screenshot shows a software window titled 'Method'. It has two tabs: 'Method' and 'Actions'. The 'Method' tab is active, showing two radio buttons: 'SQL Query' (selected) and 'File size check'. Below these is a large text area labeled 'SQL Query' with a vertical scrollbar. At the bottom right of the text area is a 'Build' button.

- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple

Only return records where

☒ And ☐ Or

Where

Parse

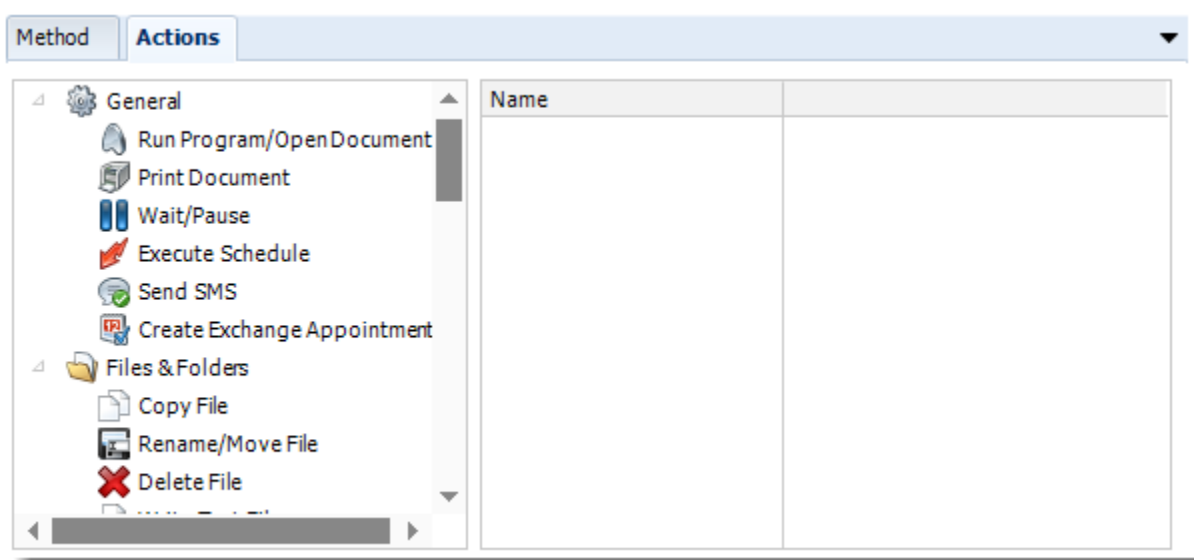
- **File size check:** Assume reports is blank if size is under "X" bytes.

Method

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

## Actions

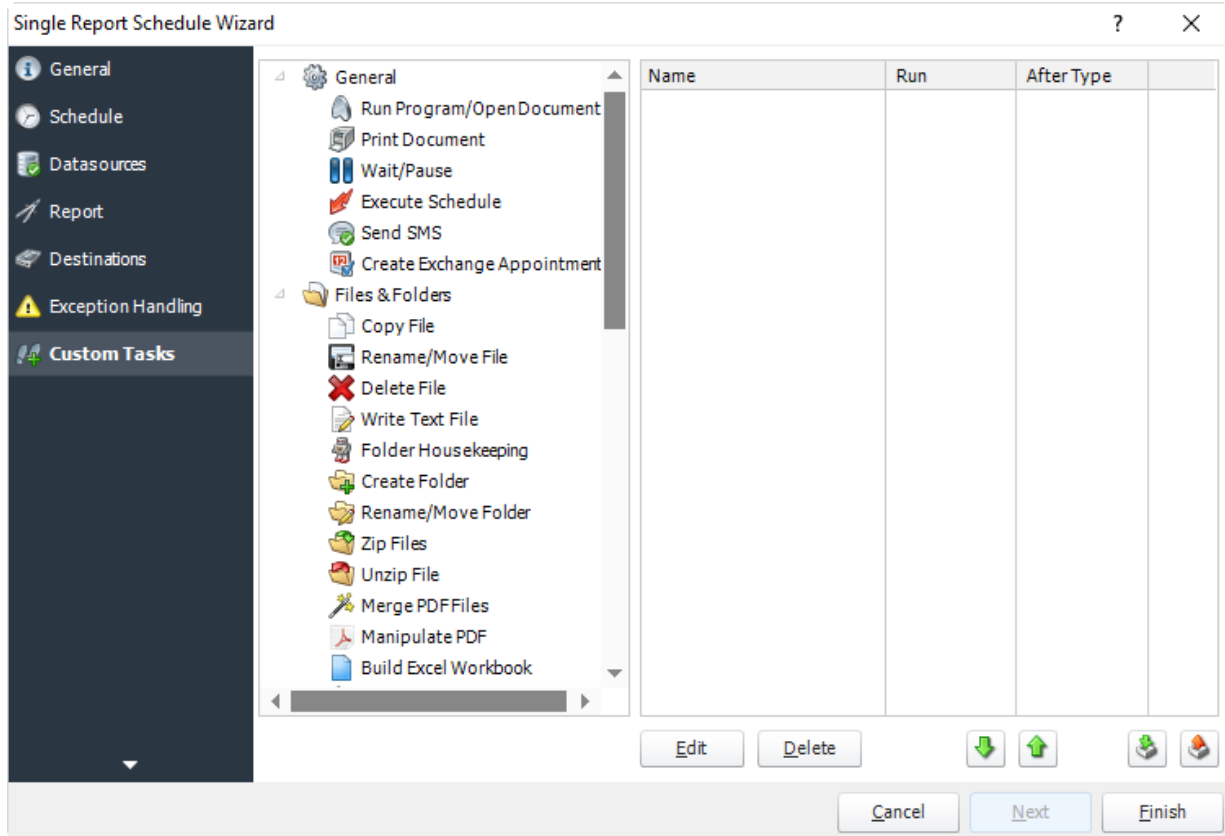


- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*Tip: You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

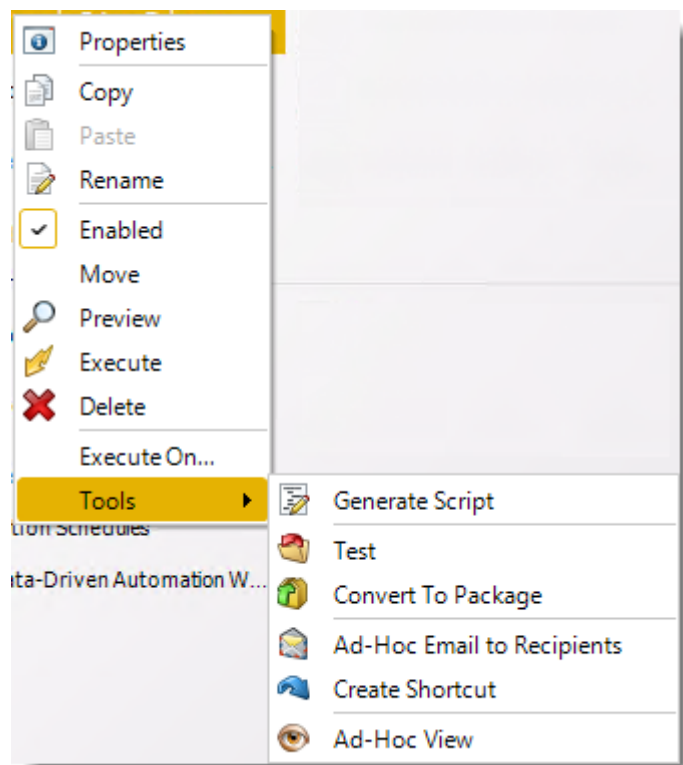
Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

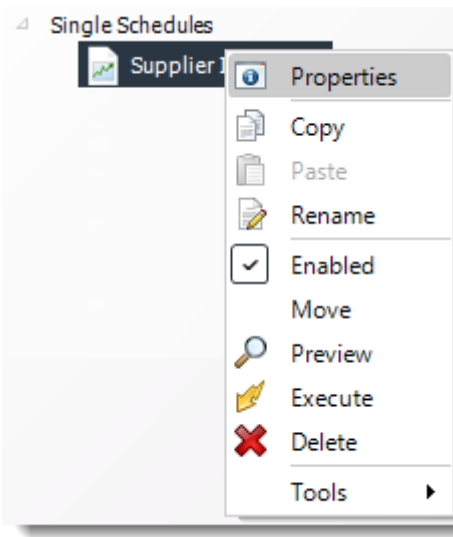
## Single Report Schedule Context Menu



- Right-Click on a schedule to see the following actions:
  - **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
  - **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
  - **Rename:** Rename the package.
  - **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
  - **Move:** Use this option to move the report into an existing package.
  - **Preview:** Preview the report before execution.
  - **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
  - **Delete:** Selecting this option will delete the schedule.
  - **Execute On:** Use to option to execute the schedule to another [collaboration](#) server.
  - **Test:** Use this option to test the schedule and export it to selected "test" destinations.
  - **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.
  - **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
  - **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRS.
  - **Ad-Hoc View:** This button allows you to preview the report.



### Single Report Schedule Properties



- To access your schedule properties, right click on a schedule and select **properties**.
- Similar to the schedule wizard, you can adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

Single Report Schedule Properties - Supplier Information Sample Report

**General**

Schedule Name  
Supplier Information Sample Report

Create In  
Sample Reports

☒ Use SSRS Account Ananse

Service URL  
http://ananse/reportserver/reportservice2010.asmx

Virtual Directory  
reports

Report Location  
/Working Samples/Supplier Information

Description (optional)

Keyword (optional)

Unique ID  
617970035

OK Cancel Apply

•Schedule

Single Report Schedule Properties - Supplier Information Sample Report

General

Start Date 8/ 1/2019 End Date 8/ 1/3018

Schedule

Report Options

Report

Destinations

Exception Handling

Tasks

Sharing

Snapshots

History

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 10:19:00 AM Exception calendar

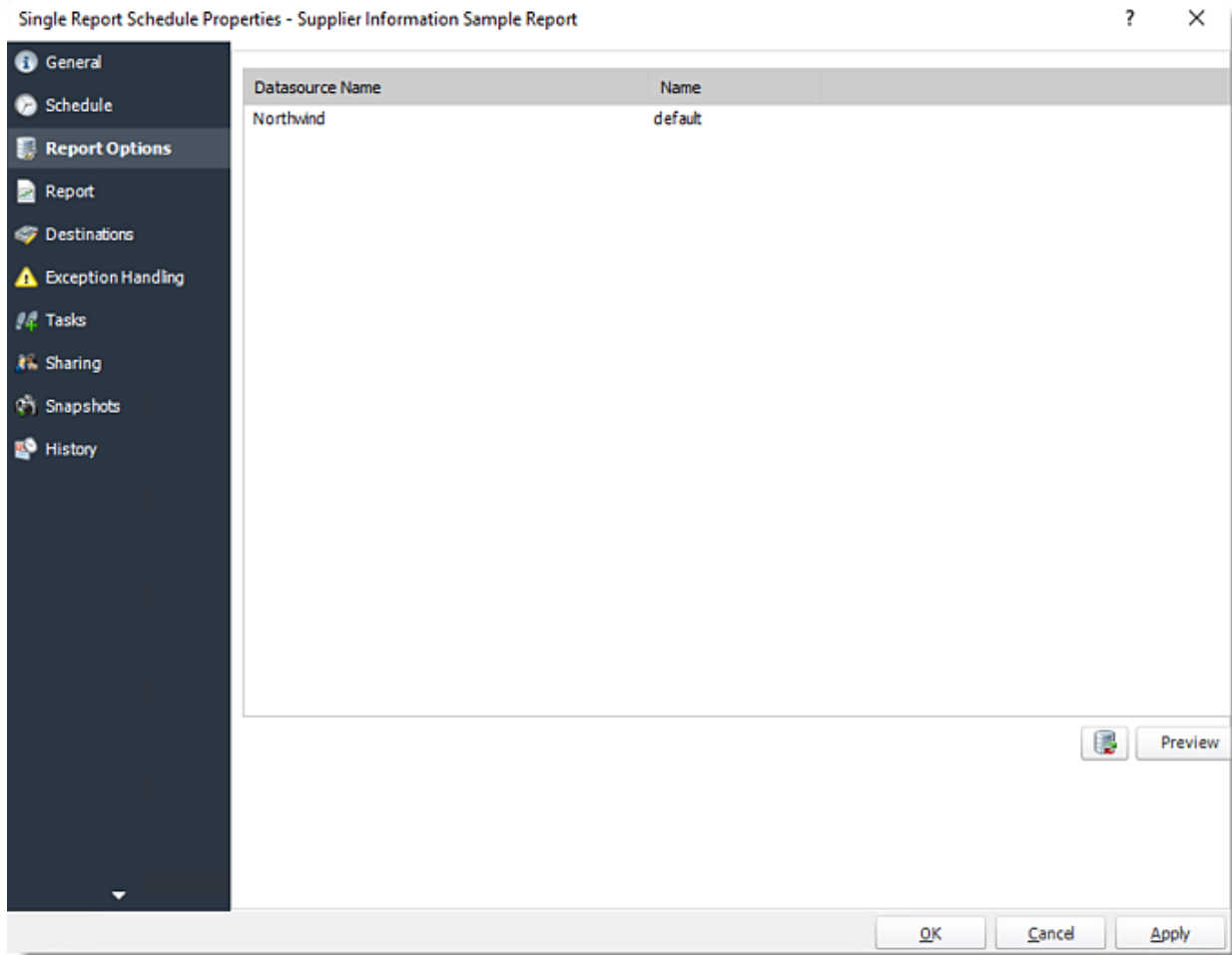
Next to run on 1/11/2020 10:19:00 AM

Repeat every 0.25 hours until 10:19:00 AM

Enable this schedule

OK Cancel Apply

## •Report Options



- Report

Single Report Schedule Properties - Supplier Information Sample Report

General

Schedule

Report Options

**Report**

Destinations

Exception Handling

Tasks

Sharing

Snapshots

History

Parameters

Name	Prompt
SupplierID	Enter Supplier ID:
CategoryID	Enter the Product Category
ProductID	Select Products to View

Value Selector

Confirmed Values

Label	Value

Clear

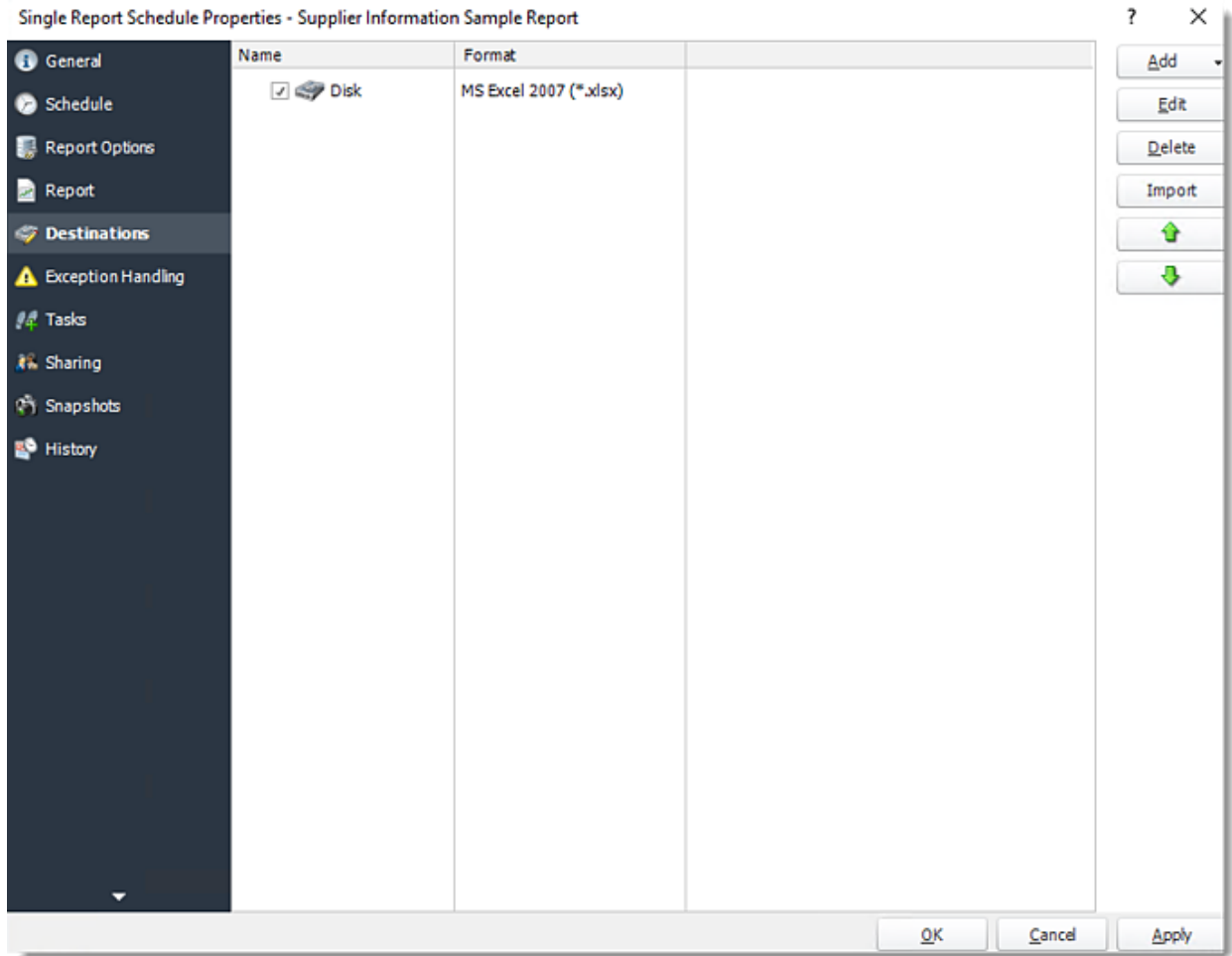
☐ Resume failed/errored schedules with cached data
 

Expire dynamic cached data after  minutes

Preview

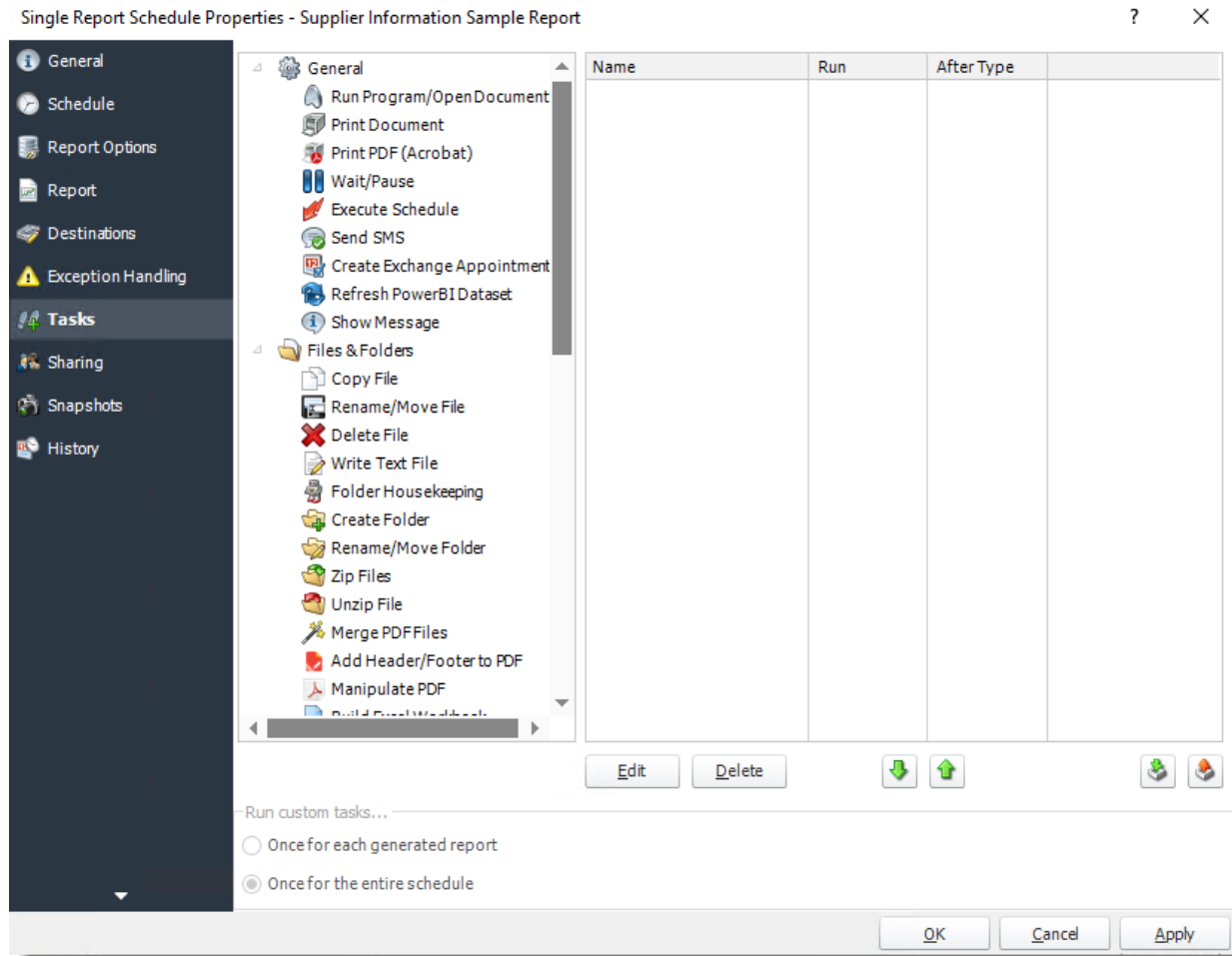
OK Cancel Apply

## •Destinations



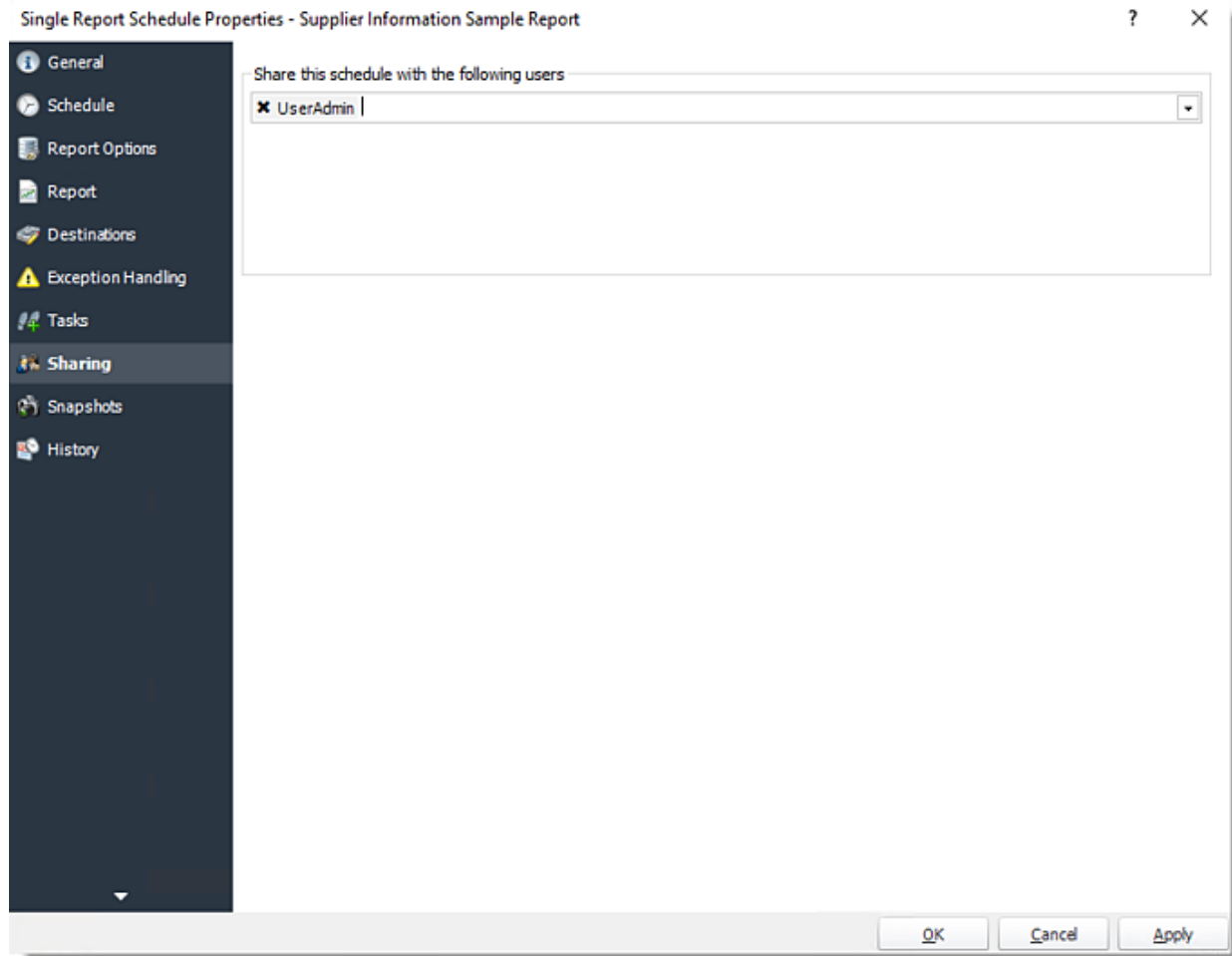
- Exception Handling



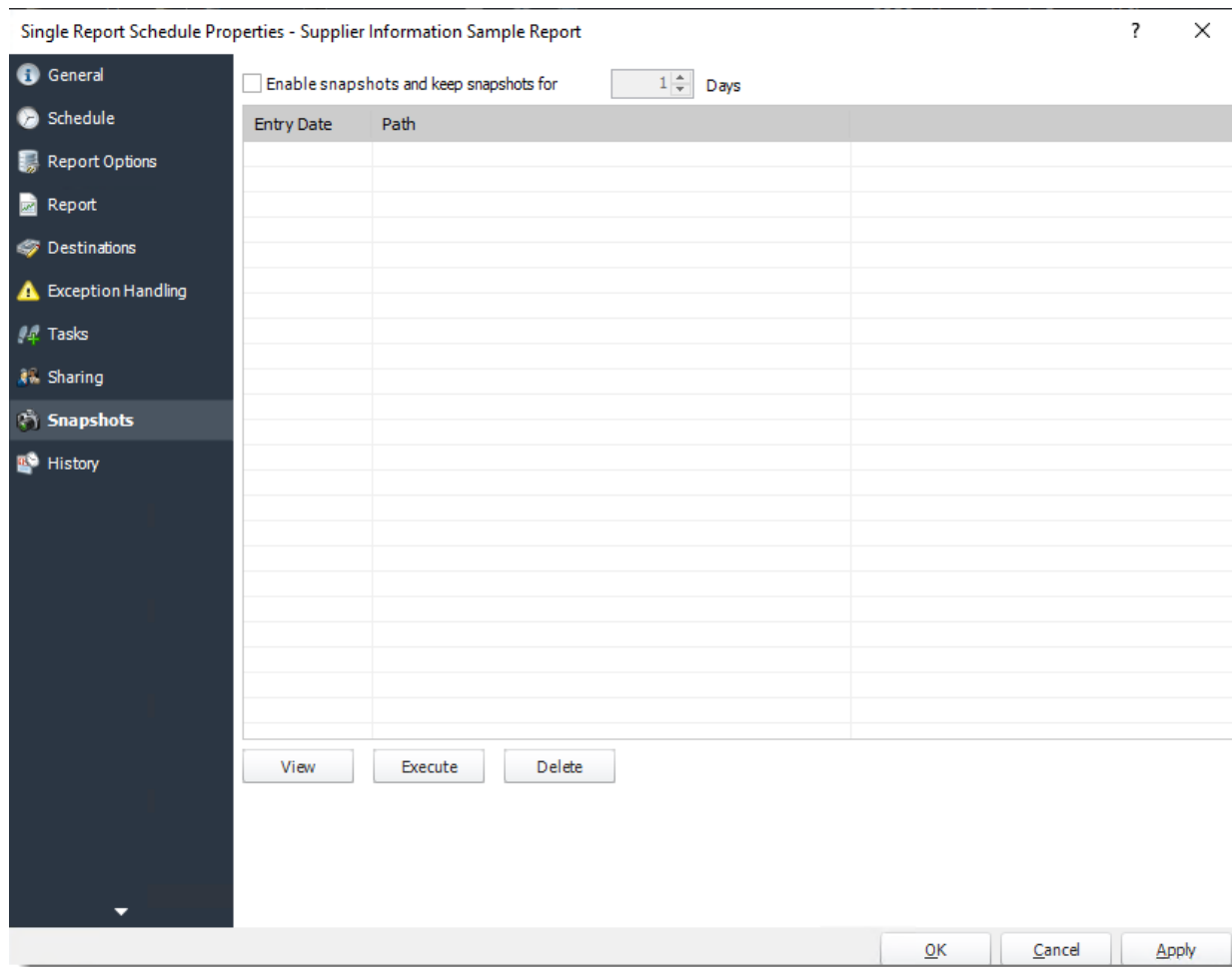


- **Sharing:** Here you can share this schedule with multiple users.





- **Snapshots:** A snapshot is a copy of each report a schedule or a package generates. Keeping snapshots enables you to resend past reports without generating them afresh - especially if the data has changed in the meantime.
  - Simply select the number of days to keep the snapshots.



- **History:** Review the schedule's history. Successes, failures, and other data is located here.

Single Report Schedule Properties - Supplier Information Sample Report				?	×
General	Started	Finished	Details		
Schedule	✓ 12/20/2019 10:16:...	12/20/2019 10:16:25 AM	Success!		
Report Options	✓ 12/21/2019 1:06:4...	12/21/2019 1:06:59 PM	Success!		
Report	✓ 12/22/2019 12:59:...	12/22/2019 12:59:55 PM	Success!		
Destinations	✓ 12/23/2019 1:06:1...	12/23/2019 1:06:22 PM	Success!		
Exception Handling	✓ 12/24/2019 1:00:2...	12/24/2019 1:00:33 PM	Success!		
Tasks	✓ 12/25/2019 1:10:3...	12/25/2019 1:10:42 PM	Success!		
Sharing	✓ 12/26/2019 1:02:3...	12/26/2019 1:02:49 PM	Success!		
Snapshots	✓ 12/28/2019 1:02:5...	12/28/2019 1:02:59 PM	Success!		
History	✓ 12/29/2019 1:06:0...	12/29/2019 1:06:16 PM	Success!		
	✓ 12/30/2019 12:59:...	12/30/2019 1:00:02 PM	Success!		
	✓ 1/1/2020 12:59:07...	1/1/2020 12:59:17 PM	Success!		
	✓ 1/2/2020 1:06:27 PM	1/2/2020 1:06:38 PM	Success!		
	✓ 1/3/2020 11:08:45...	1/3/2020 11:08:58 AM	Success!		
	✓ 1/7/2020 12:43:42...	1/7/2020 12:43:50 PM	Success!		
	✓ 1/7/2020 12:47:34...	1/7/2020 12:47:44 PM	Success!		
	✓ 1/9/2020 11:12:08...	1/9/2020 11:12:18 AM	Success!		
	✓ 1/10/2020 11:30:4...	1/10/2020 11:31:44 AM	Success!		
				Clear	Refresh
				OK	Cancel
				Apply	

## How do I setup Single Report Schedule for Power BI Dashboards & Reports on Premise in PBRs?

**The Single Schedule is the simplest and easiest way to schedule a Power BI Dashboards & Reports report for delivery.**

This article applies to:

- Power BI Reports & Dashboards (On Premise - Power BI Report Server)

Single Reports Schedule for Power BI Reports & Dashboards on Premise.

The Single Schedule is the simplest and easiest way to schedule a report for delivery. It involves defining the report you wish to schedule, determine its timing, selecting parameters (if any), and setting the destination (s) of the report.

*Example: Jamie is a reports developer that must send a daily report to management detailing the number of support tickets currently open. She requires a report to be sent in PDF format at 8:30AM to three individuals.*

### How to Create a Single Schedule Report for Power BI Reports & Dashboards on Premise?

- Go to **Single**.
- Go to **PowerBI on Premise** and select **Dashboards & Reports**.



Single Report Schedule Wizard (PBIRS)

**General**

Create In:

☒ Use SSRS Account:

Service URL:

Report Location:

Schedule Name:

Description (optional):

Keyword(optional):

Calendar icon, Report icon

Cancel Next Finish

## General Wizard

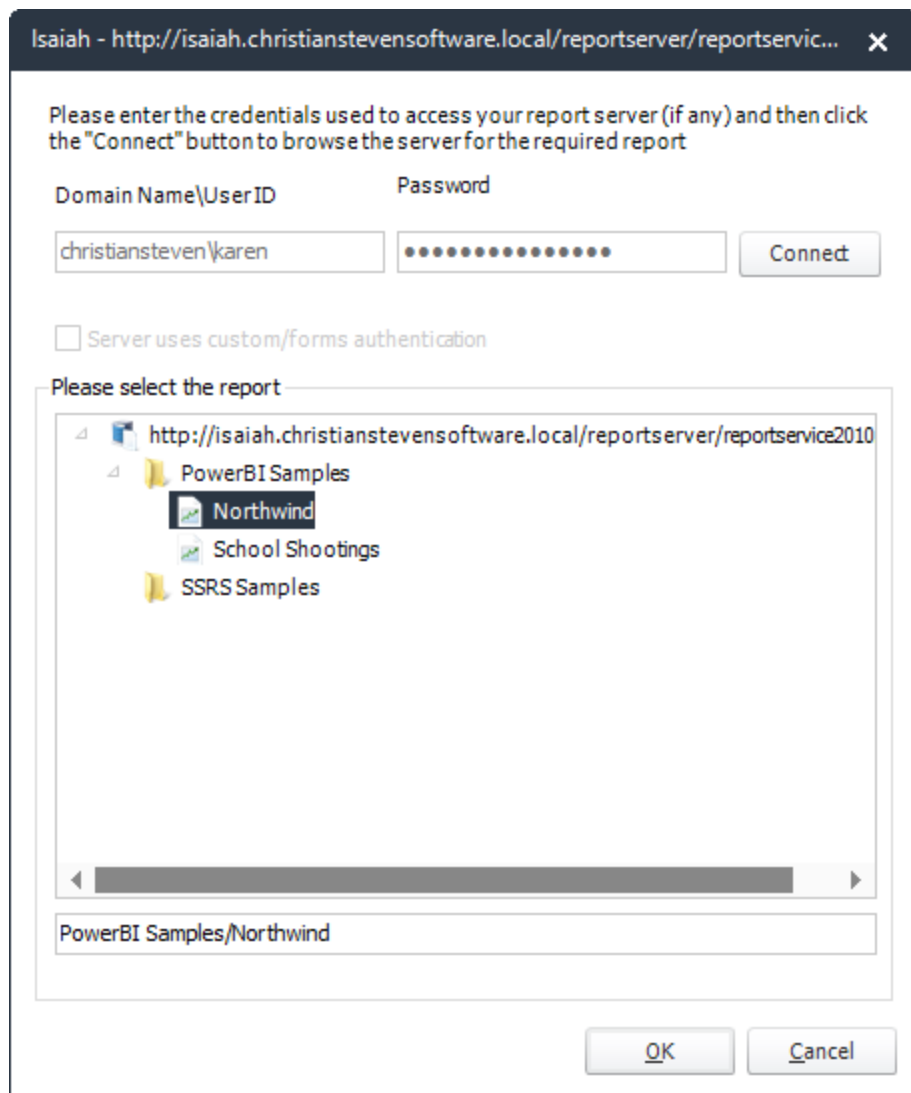
- **Create In:** This section is for selecting the folder where you want to create the single report in.
- **Use SSRS Account:** Select the SSRS Account where your report server is located, and then click on the (...) button next in **Report Location**.

☒ Use SSRS Account

New...

Ananse

Isaiah



- **Service URL:** Uncheck '*Use SSRS Account*' checkbox, to enter the address of your reporting services server.
- **Report Location:** Browse through the report server browser to select the desired report. Authenticate to the reports server if necessary.
- **Schedule Name:** Write in the name of the package.
- **Description (optional):** You may write a short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Single Report Schedule Wizard (PBIRS)

General | **Schedule**

Start Date: 7/ 8/2019 | End Date: 7/ 8/3018

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 3:00:26 PM | Exception calendar: [v]

Next to run on: 7/ 8/2019 | 3:00:26 PM

☐ Repeat every: 0.25 | until: 3:00:26 PM

☒ Enable this schedule and execute it on: DEFAULT

Cancel | Next | **Finish**

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

Example: Run every Monday, Wednesday, and Friday.

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

<input checked="" type="checkbox"/> Monday	<input checked="" type="checkbox"/> Tuesday	<input checked="" type="checkbox"/> Wednesday	<input checked="" type="checkbox"/> Thursday	<input checked="" type="checkbox"/> Friday
<input checked="" type="checkbox"/> Saturday	<input checked="" type="checkbox"/> Sunday			

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.



Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other

☒ Use the following options

The  of the month  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other

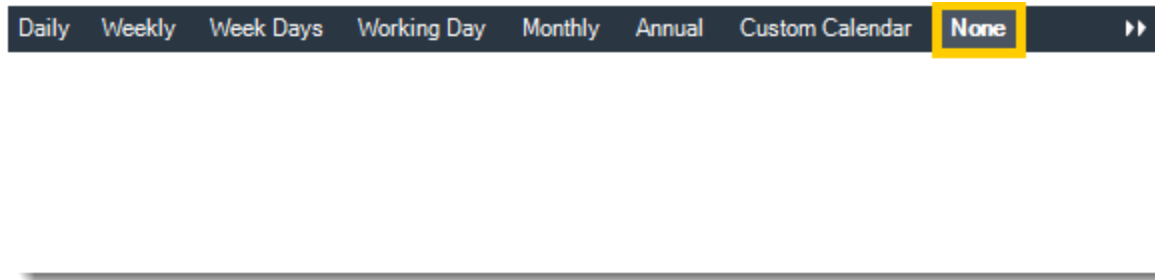
Calendar Name

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other**

Run schedule every

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Settings Wizard

Single Report Schedule Wizard (PBIRS)

General Schedule **Settings**

☐ Use JSON string for rendering settings

Settings JSON

Quick Search

**Page Setup**

Left margin (% of width)	0
Page Height (pixels)	800
Page Width (pixels)	1300
Right margin (% of width)	0

**PDF Cropping**

Crop PDF	<input type="checkbox"/> False
Crop Bottom	0
Crop Left	0
Crop Right	0
Crop Top	0

**Rendering**

Maximum Loading Time(secs)	60
----------------------------	----

Pages To Render

Enter the title of the report page(s) to render. You can use pipe (|) to specify multiple pages. Leave blank for the currently selected page.

Cancel Next Finish

<b>Rendering</b>	
Maximum Loading Time(secs)	60
Minimum Loading Time (secs)	10
Minimum Report Size (Bytes - Optional)	-1
PDF Compression	NONE
Rendering Method	Method 1
Transparent Background	<input checked="" type="checkbox"/> True
View Style	ACTUALSIZE

- In this section, you may set up the dashboard/report.

*Settings and JSON Rendering settings may overwrite each other so it is best to only set one or the other.*

### Settings

- **Left margin (% of width):** The size of the left margin as a percentage of the page width.
- **Page Height(pixels):** The height of the rendered file.
- **Page width (pixels):** The width of the rendered file.
- **Right margin (% of width):** The size of the right margin as a percentage of the page width.

- **PDF Cropping:** You may crop your reports by page height (pixels) and page width (pixels).
- **Maximum Loading Time(secs):** The maximum amount of time that the renderer will wait before timing out.
- **Minimum Loading Time(secs):** The amount of time that PBRS will wait for the dashboard/report to load before rendering it to file.
- **PDF Compression:** Select PDF compression levels.
- **Rendering Method:** Select the rendering method type for your Power BI report.
- **Transparent Background:** You have the option to have your Power BI report in a transparent background.
- **View Style:** How the report fits on the page: Fit to Page, Fit to Width, or Actual Size.
- **Pages To Render:** Enter the title of the report page(s) to render. You can use pipe (|) to specify multiple pages. Leave blank for the currently selected page.

## JSON

Single Report Schedule Wizard (PBIRS)

☒ Use JSON string for rendering settings

JSON

```

1 {
2   "MinLoadingTime": 10,
3   "MaxLoadingTime": 60,
4   "PageWidth": 1300,
5   "PageHeight": 800,
6   "PagesToRender": "1",
7   "MarginLeft": 0,
8   "MarginRight": 0,
9   "ViewStyle": 0,
10  "RenderingMethod": 2,
11  "TransparentBackground": true,
12  "MinReportSize": -1,
13  "CropPdf": true,
14  "PDFCompression": 0,
15  "CropLeft": 55,
16  "CropRight": 70,
17  "CropTop": 300,
18  "CropBottom": 200
19 }
20

```

Pages To Render

Enter the title of the report page(s) to render. You can use pipe (|) to specify multiple pages. Leave blank for the currently selected page.

Cancel Next Finish

- **Use JSON string for rendering settings:** Check this option to use JSON string for the rendering settings.
- Enter the JSON string.

Click **Next** to continue to the next wizard section.

## Filters Wizard

Single Report Schedule Wizard (PBIRS)

General Schedule Settings **Filters**

Filter Target (e.g Table/Column) = Filter Value Filter Type String Add

Target	Operator	Value	Type	Delete
customers/customerID	=	ANTON	String	

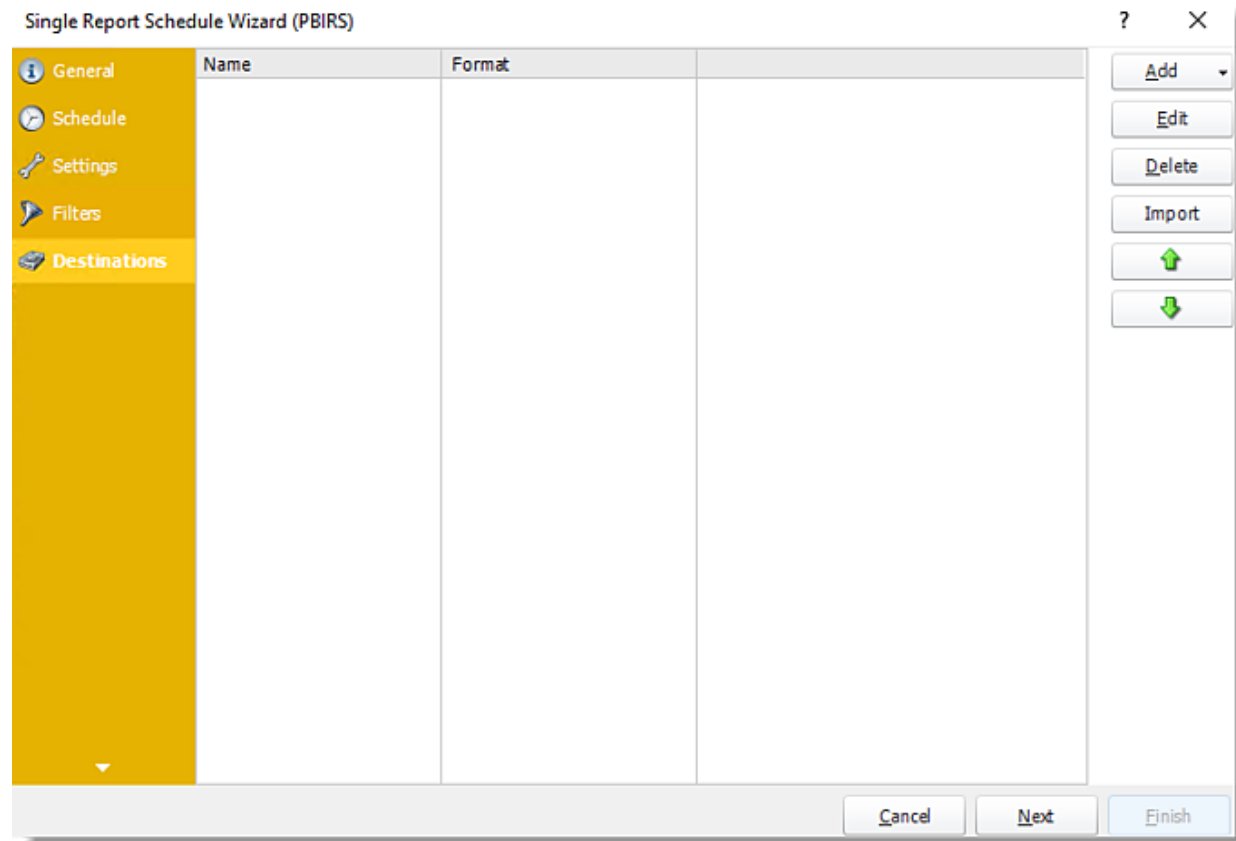
Preview Cancel Next Finish

- In this section, you will determine the filters for your report (if any). If your report has no filters, you may skip this section by clicking next.
- **Filter Target (e.g Table/Column):** Choose the table and column you would like to set up the filter.
- **Filter Value:** Enter the filter value of your report.
- **Filter Type:** Use the drop-down menu to select the parameter.
- Click **Add** to add the filter value.
- **Preview:** You can view the report.

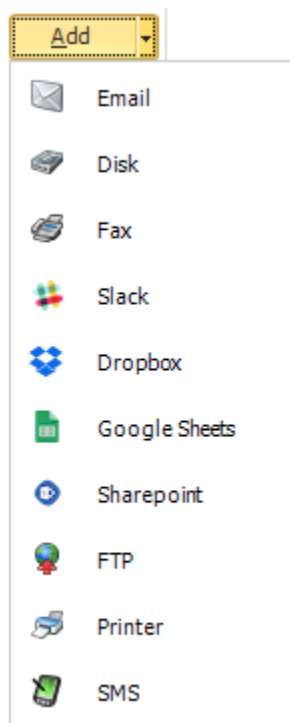
Click **Next** to continue to the next wizard section.

## Destinations Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.



- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.
- For more information about Type of Destinations, click [here](#).
- For more information about Output Formats, click [here](#).

Click **Next** to continue to the next wizard section.

## Exception Handling Wizard

The screenshot shows the 'Exception Handling' tab of the 'Single Report Schedule Wizard (PBIRS)'. The left sidebar has a yellow background and lists several tabs: General, Schedule, Settings, Filters, Destinations, and Exception Handling (which is highlighted with a yellow background and a warning icon). The main area contains the following settings:

- 'Treat as "error" if not completed in' is set to 30.00 mins. The 'Auto-calculate' checkbox is checked.
- 'On error, retry executing schedule every' is set to 0 mins up to 5 times.
- There is a checkbox for 'Run custom tasks when the following exception occurs' which is currently unchecked. Below it are two sub-options: 'Report is blank' and 'Report export fails', both also unchecked.
- The 'Actions' section shows a list of available actions on the left: General, Run Program/Open Document, Print Document, Print PDF (Acrobat), Wait/Pause, Execute Schedule, Send SMS, Create Exchange Appointment, Refresh PowerBI Dataset, and Show Message. The 'Blank Report Check Method' is selected in the 'Actions' dropdown. To the right of this list is a table with two columns: 'Name' and an empty column. Below the table are buttons for 'Edit', 'Delete', and two arrow buttons (down and up). At the bottom of the wizard are 'Cancel', 'Next', and 'Finish' buttons.

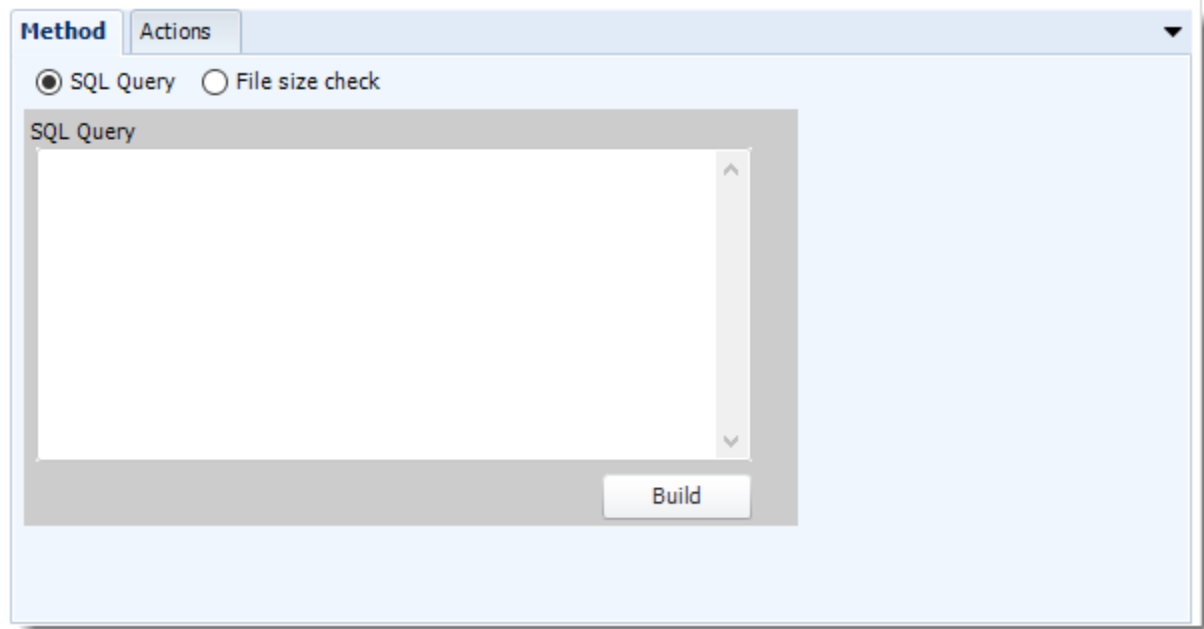
- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Check if the Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.
- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.



## Method



The screenshot shows a software window titled 'Method'. It has two tabs: 'Method' and 'Actions'. The 'Method' tab is active. Inside this tab, there are two radio buttons: 'SQL Query' (selected) and 'File size check'. Below these is a large text area labeled 'SQL Query' with a vertical scrollbar. At the bottom right of the text area is a 'Build' button.

- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

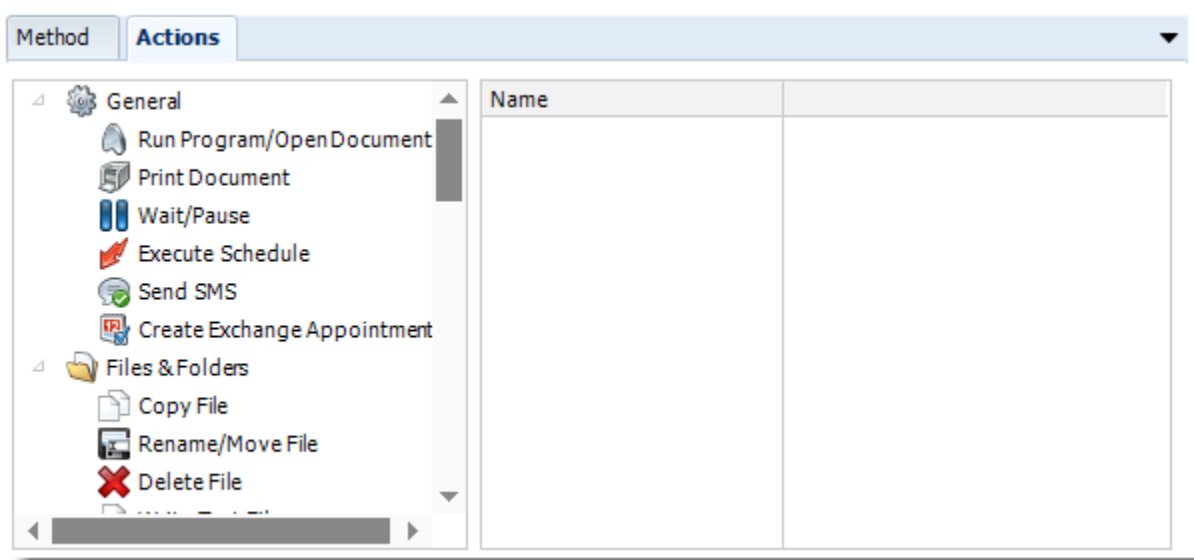
- **File size check:** Assume reports are blank if size is under "X" bytes.

Method Actions

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

## Actions

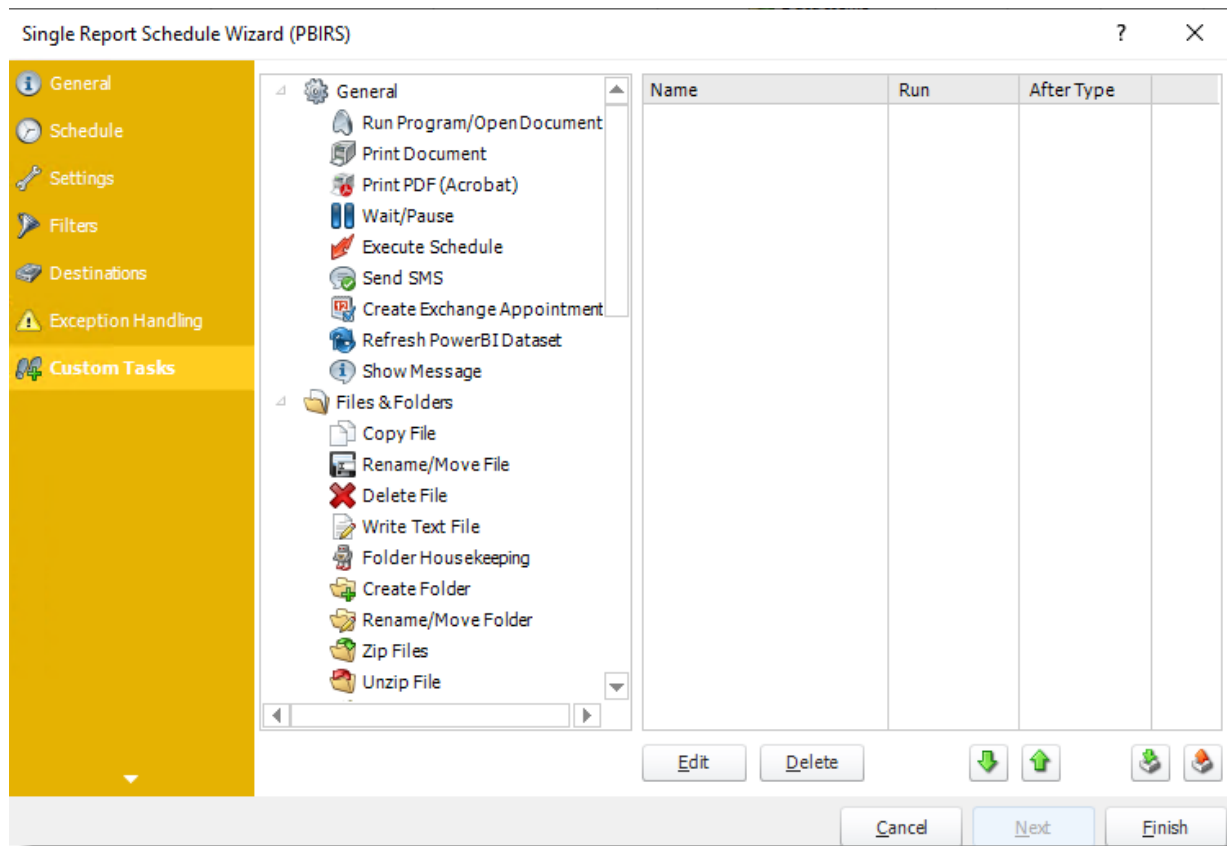


- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

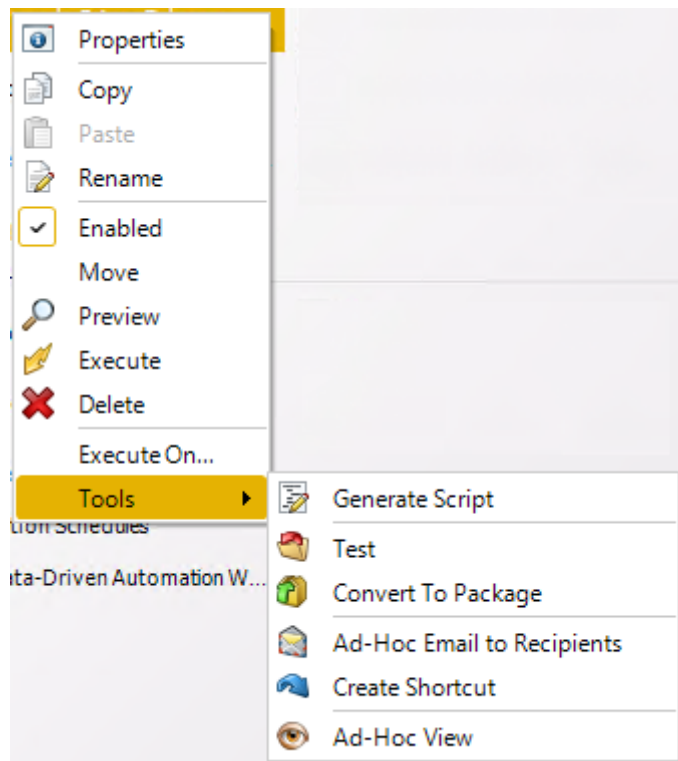
*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



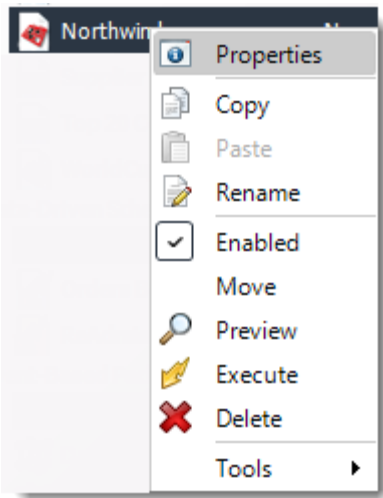
- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.



Single Report Schedule Context Menu

- Right-Click on a schedule to see the following actions:
  - **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
  - **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
  - **Rename:** Rename the package.
  - **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
  - **Move:** Use this option to move the report into an existing package.
  - **Preview:** Preview the report before execution.
  - **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
  - **Delete:** Selecting this option will delete the schedule.
  - **Execute On:** Use to option to execute the schedule to another collaboration server.
  - **Test:** Use this option to test the schedule and export it to selected "test" destinations.
  - **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.
  - **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
  - **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.
  - **Ad-Hoc View:** This button allows you to preview the report.

### Single Report Schedule Properties



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

Single Report Schedule Properties - Northwind Sample Report

**General**

Schedule Name  
Northwind Sample Report

Create In  
Sample Reports

☒ Use SSRS Account  
Isaiah

Service URL  
http://isaiah.christianstevensoftware.local/reportserver/reportservice20

Virtual Directory  
reports

Report Location  
/PowerBI Samples/Northwind

Description (optional)

Keyword (optional)

Unique ID  
617970095

OK Cancel Apply

•Schedule

Single Report Schedule Properties - Northwind Sample Report

Start Date 08/01/2019 End Date 08/01/30 18

**Schedule** Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 10:20:00 AM Exception calendar

Next to run on 05/29/2020 10:20:00 AM

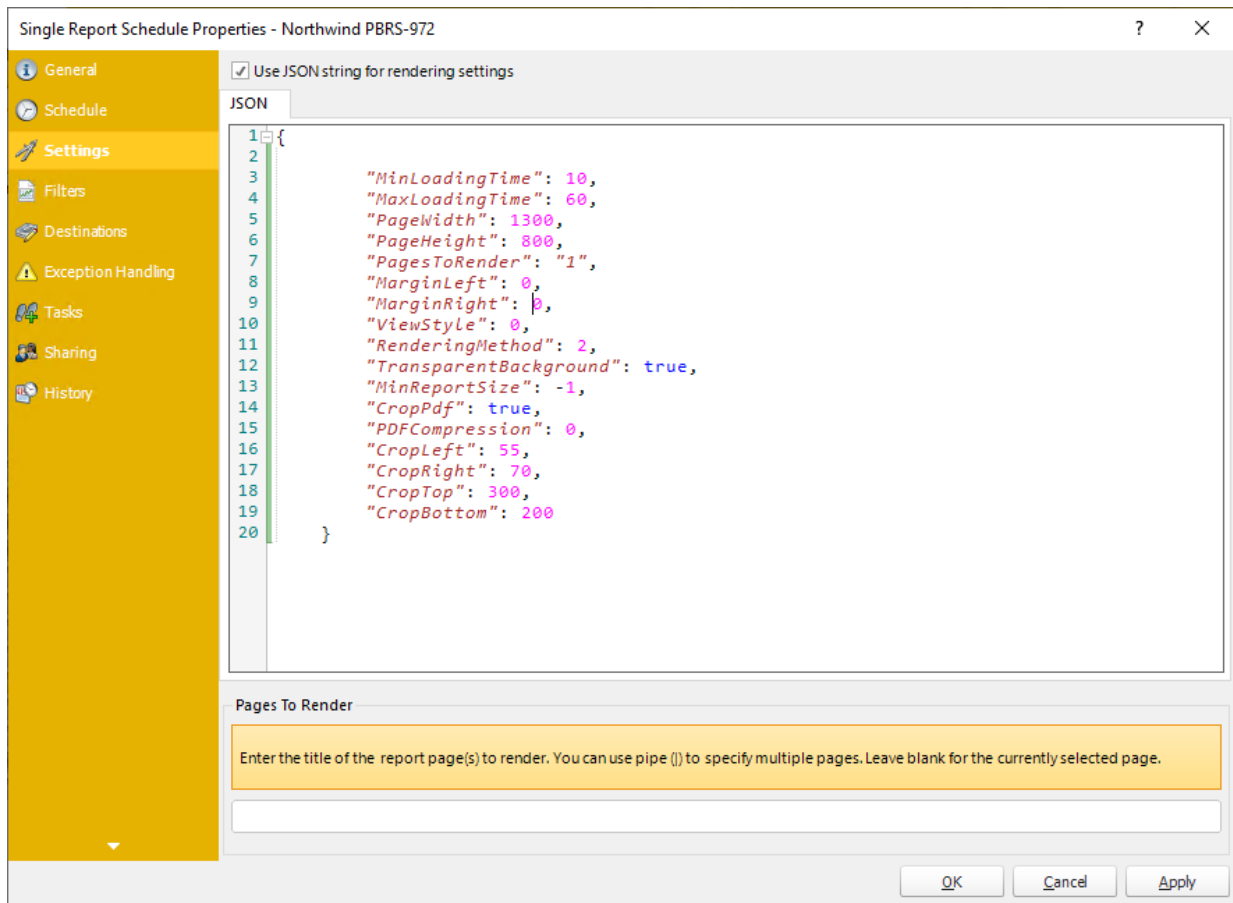
Repeat every 0.25 hours until 10:20:00 AM

Enable this schedule

OK Cancel Apply

## •Settings





## •Filters

Single Report Schedule Properties - Northwind Sample Report

General Schedule Settings Filters Destinations Exception Handling Tasks Sharing History

Filter Target (e.g Table/Column) Filter Value Filter Type

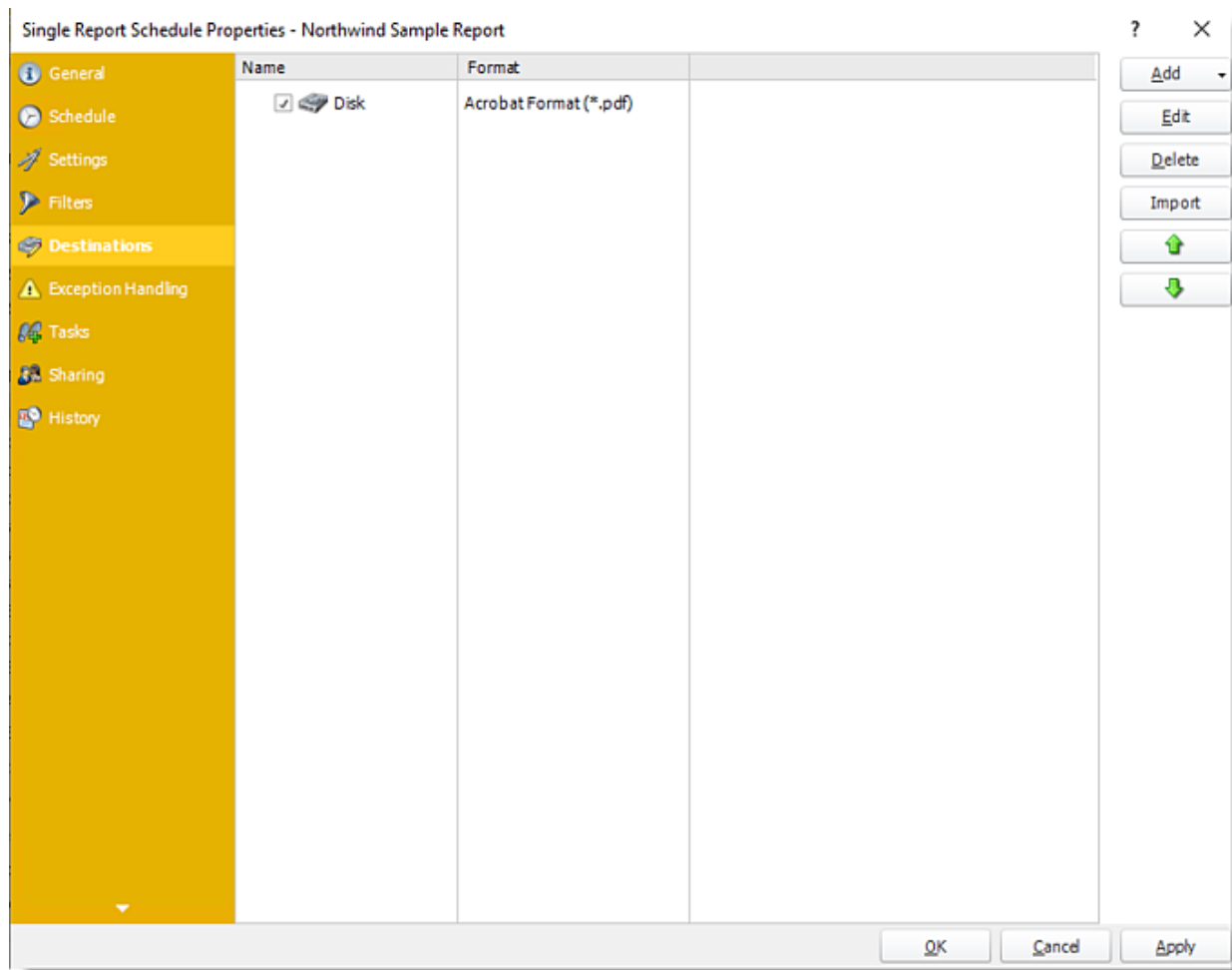
String Add

Target	Operator	Value	Type	Delete

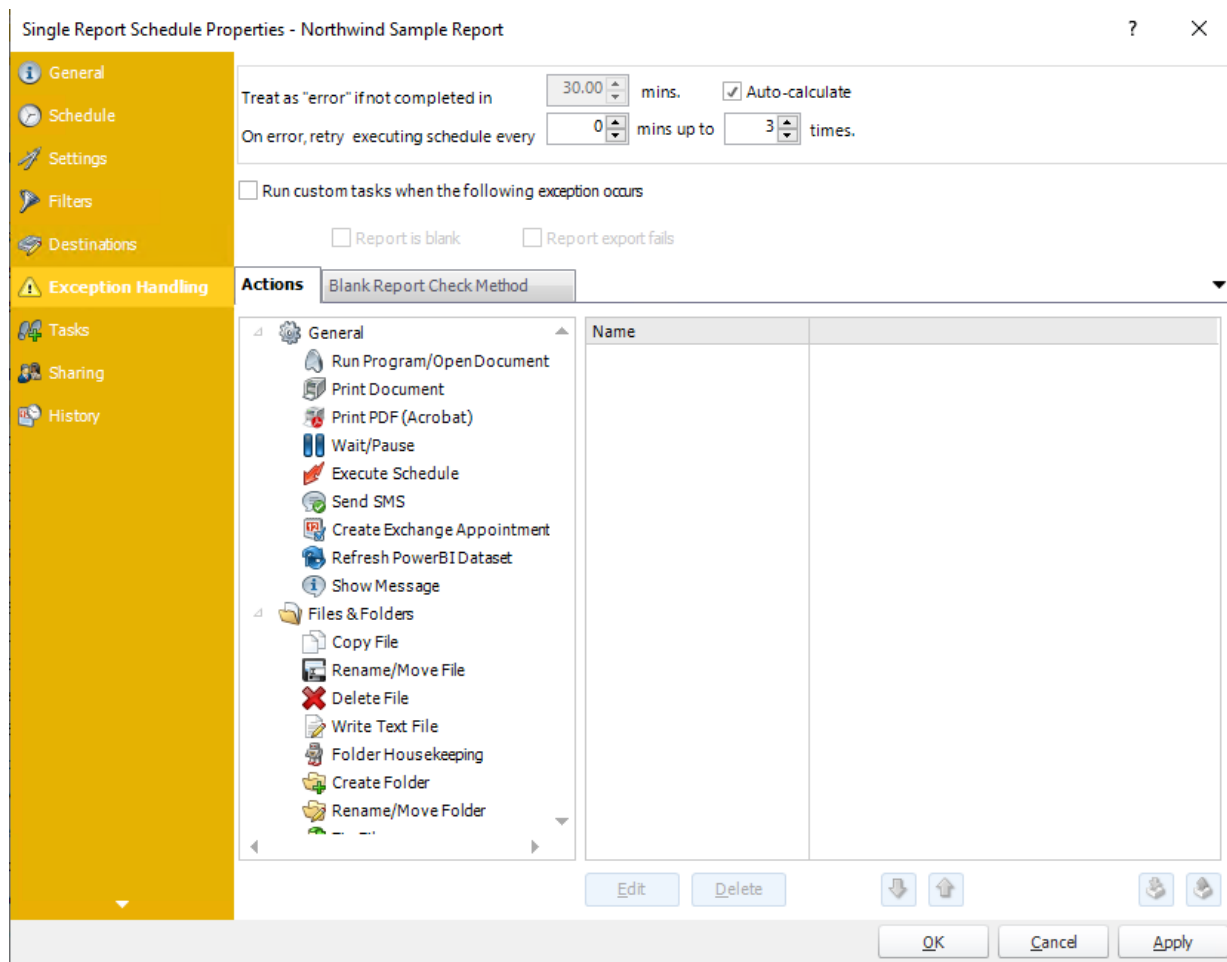
Preview

OK Cancel Apply

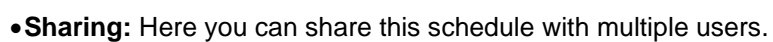
## •Destinations

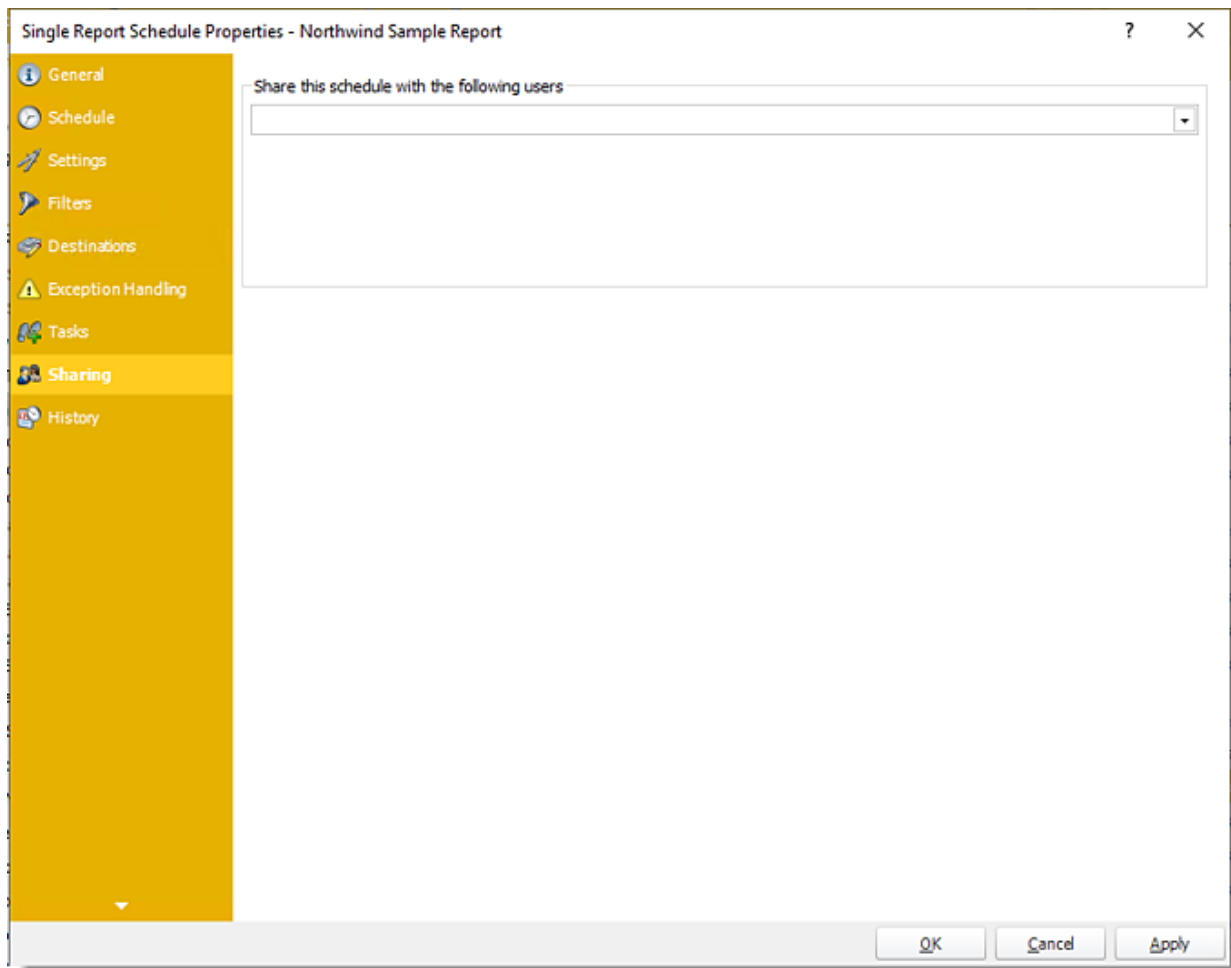


- Exception Handling



## •Tasks





- **History:** Review the schedule's history. Successes, failures, and other data is located here.

Single Report Schedule Properties - Northwind Sample Report

?

X

	Started	Finished	Details
General			
Schedule			
Settings			
Filters			
Destinations			
Exception Handling			
Tasks			
Sharing			
History			

Clear Refresh

OK Cancel Apply

## Package Report Schedule for Power BI Service Reports and Dashboards.

**The purpose of the wizard will be to guide you through the process of setting up a number of reports to be generated at defined intervals and delivered to one or more defined destinations - together.**

This article applies to:

- Power BI Reports & Dashboards (Cloud - Power BI Report Server)

### Package Report Schedule for Power BI Service Reports & Dashboards.

The purpose of the wizard will be to guide you through the process of setting up a number of reports to be generated at defined intervals and delivered to one or more defined destinations - together.

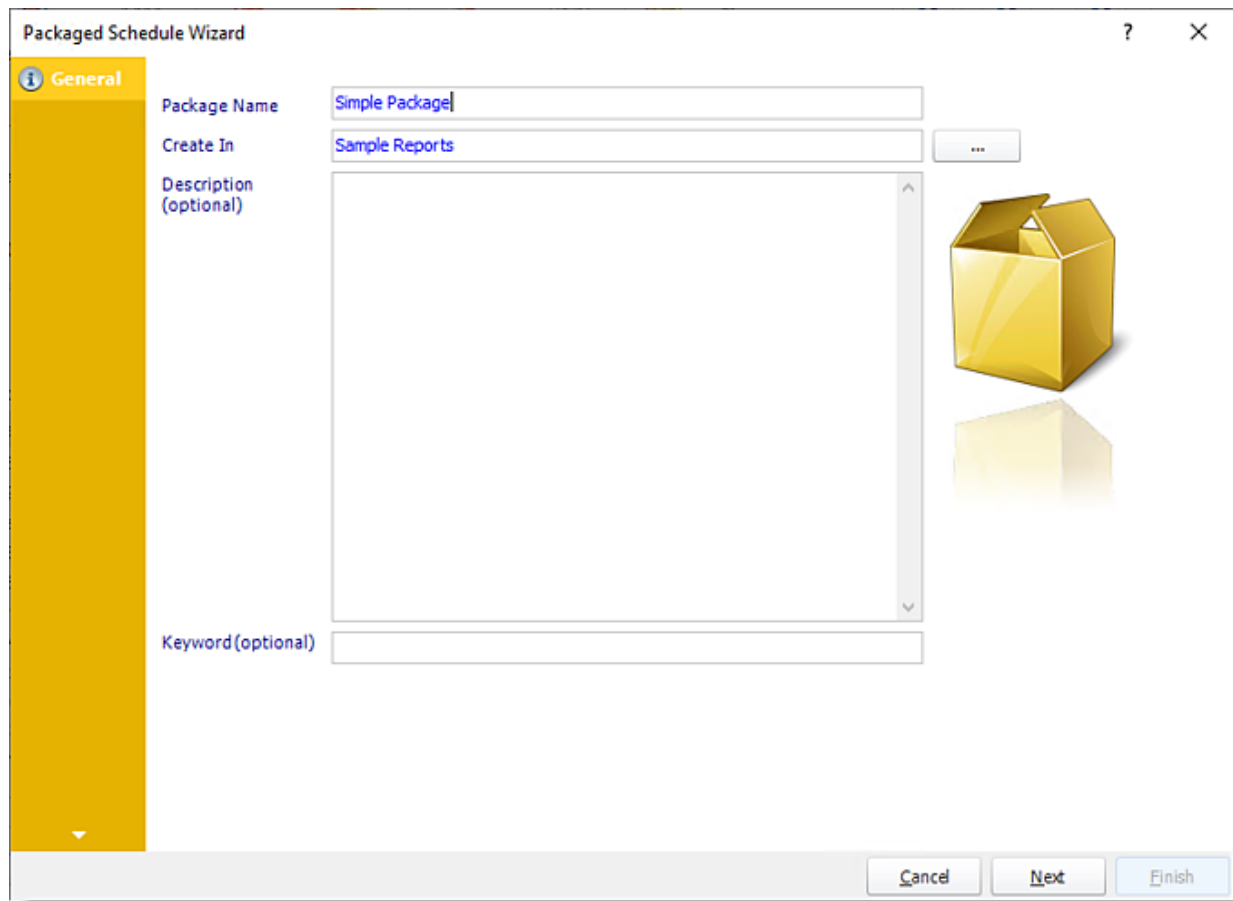
*Example: Your entire monthly report pack (consisting of a number of reports) can be sent to a recipient with all reports attached to the single email. You can also zip up the reports into a single zip file, or export them out to a single Excel workbook, or export them in a single PDF file.*

### How to Create a Package Schedule Report for Power BI Service Reports & Dashboards?

- Go to **Package**.





The image shows a Windows-style dialog box titled "Packaged Schedule Wizard". It has a yellow sidebar on the left with a tab labeled "General". The main area contains four input fields: "Package Name" with the text "Simple Package", "Create In" with the text "Sample Reports" and a browse button "...", "Description (optional)" which is a large empty text area, and "Keyword (optional)" which is an empty text field. To the right of the description field is a 3D yellow box icon. At the bottom right are three buttons: "Cancel", "Next", and "Finish".

Packaged Schedule Wizard

**General**

Package Name: Simple Package

Create In: Sample Reports

Description (optional):

Keyword (optional):

Cancel Next Finish

## General Wizard

- **Package Name:** The name of the package.
- **Create In:** The PBRs folder where the package is stored.
- **Description:** A short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword:** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Packaged Schedule Wizard

General | **Schedule**

Start Date: 29/12/2020 | End Date: 29/12/3019

Frequency: **Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 13:55:09 | Exception calendar: [v]

Next to run on: 29/12/2020 | 13:55:09

Repeat every: 0.25 | until: 13:55:09

☒ Enable this schedule

Cancel | Next | Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday
 ☒ Tuesday
 ☒ Wednesday
 ☒ Thursday
 ☒ Friday
 ☐ Saturday
 ☐ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth 
☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other

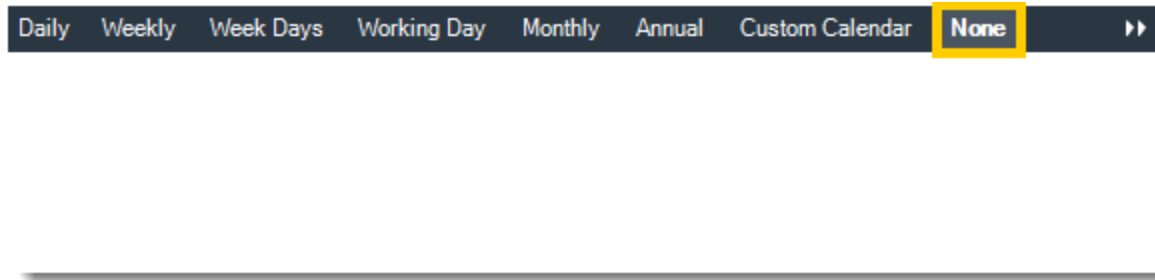
Calendar Name

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other**

Run schedule every

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

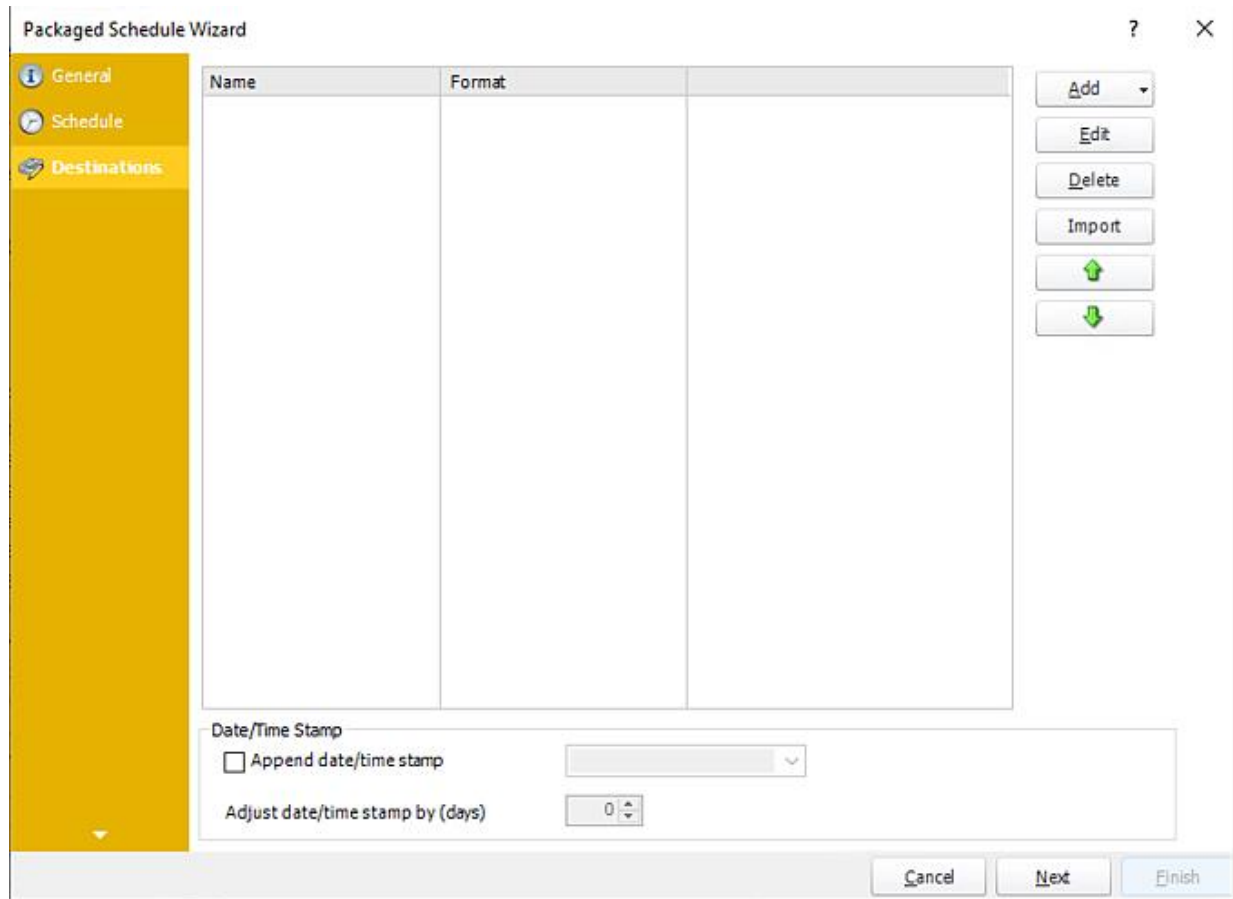
*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Destinations Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.



The image shows a screenshot of the 'Packaged Schedule Wizard' window, specifically the 'Destinations' tab. The window has a yellow sidebar on the left with three tabs: 'General', 'Schedule', and 'Destinations'. The 'Destinations' tab is selected. The main area contains a table with two columns: 'Name' and 'Format'. To the right of the table are several buttons: 'Add', 'Edit', 'Delete', 'Import', and two green arrows (up and down) for reordering. Below the table, there is a section for 'Date/Time Stamp' with a checkbox 'Append date/time stamp' and a dropdown menu. Below that is a section for 'Adjust date/time stamp by (days)' with a spinner box set to '0'. At the bottom right are 'Cancel', 'Next', and 'Finish' buttons.

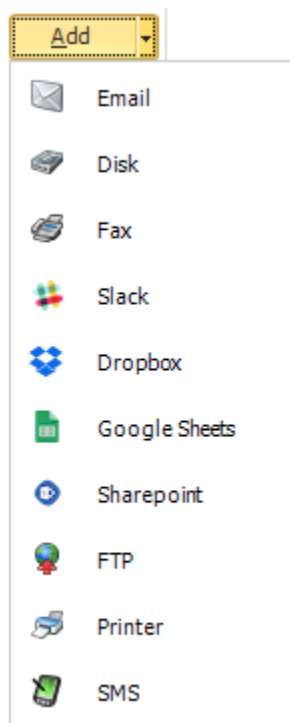
Name	Format
------	--------

Buttons: Add, Edit, Delete, Import, Up Arrow, Down Arrow

Date/Time Stamp  
☐ Append date/time stamp  
Adjust date/time stamp by (days): 0

Buttons: Cancel, Next, Finish

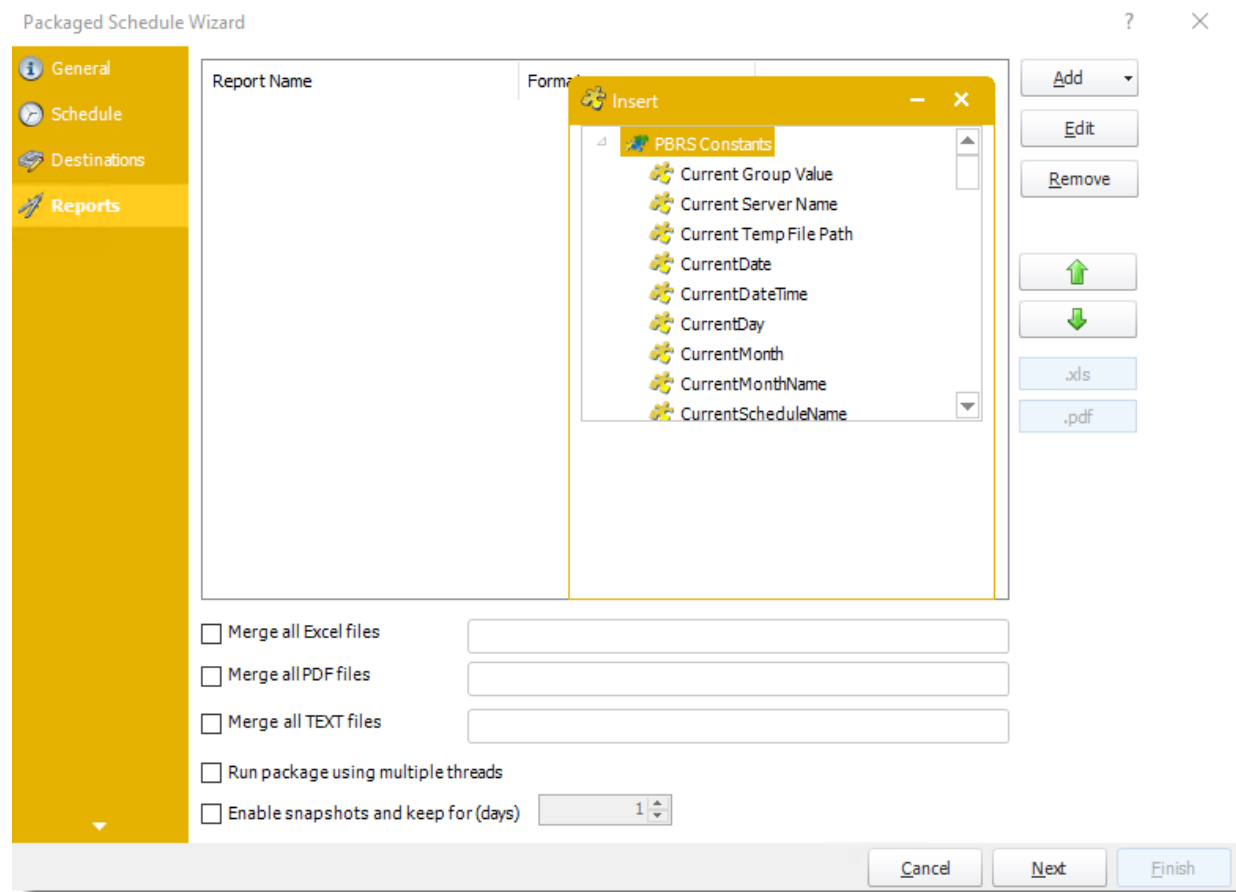
- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.
- For more information about Type of Destinations, click [here](#).
- For more information about Output Formats, click [here](#).

Click **Next** to continue to the next wizard section.

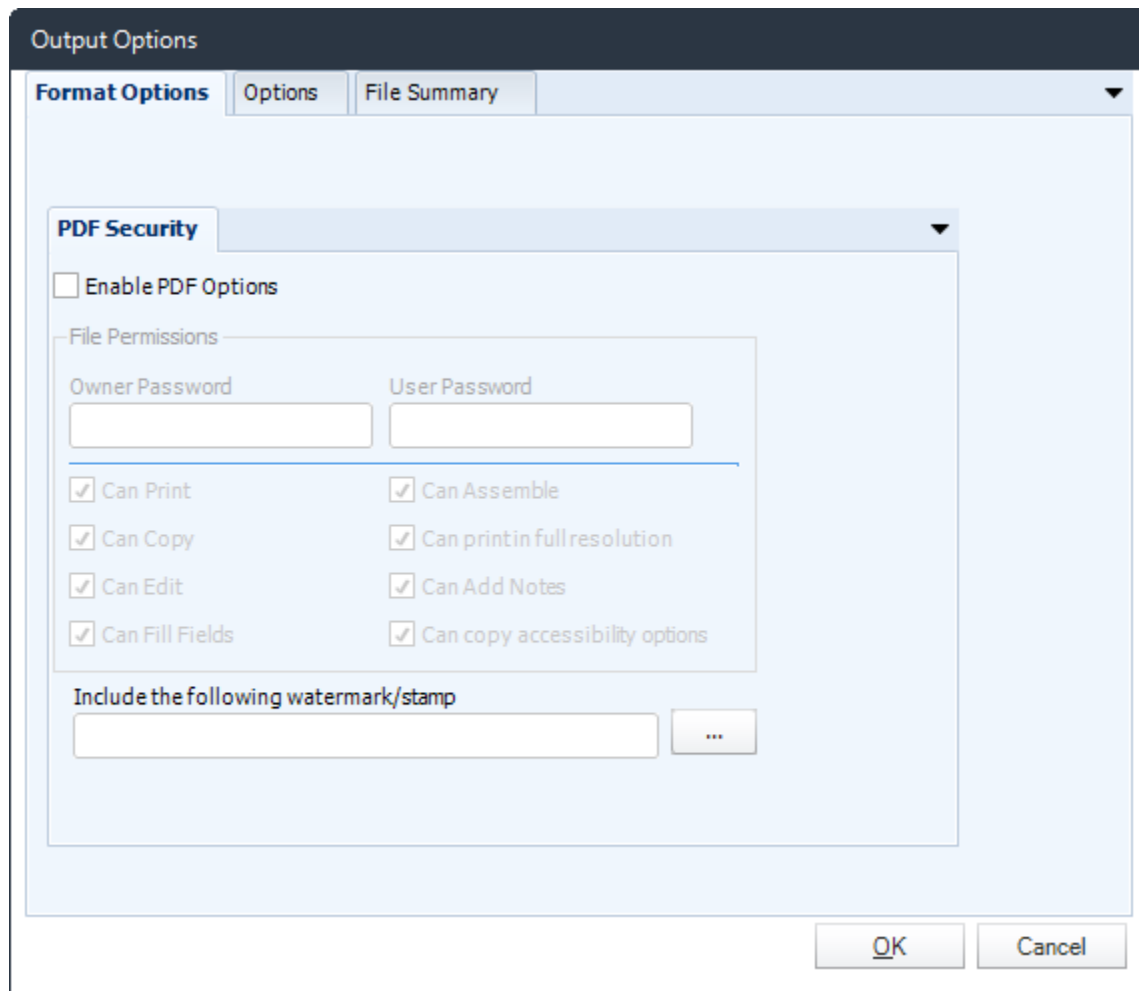
## Reports Wizard



A package may be created with no constituent reports and then the reports can be added later. However, you may also add reports at this stage in the wizard - and amend, delete or add some more later.

- **Merge all Text Files:** Check this option to merge all text files and give the file a name.
- **Merge all PDF Files:** Merge PDF outputs into a single PDF file. The reports will appear in the merged PDF in the order they are displayed in the package schedule. Checking this box will bring up additional PDF Options.





- **Merge all Excel Files:** PBRS will then merge all excel outputs in the package into a single excel file.

**Output Options**

**Format Options** | Options | File Summary

**General**

Worksheet Name (leave blank for default i.e. Sheet1)

Workbook Password

☐ Password protect the workbook

OK Cancel

*HINT: Add Password Protection to this section in this option window rather than the individual report in the package. This will password protect the entire merged workbook.*

- **Run Package using Multiple threads:** This allows up to 8 reports to be exported simultaneously.
  - Each report in the package can run concurrently.
  - See [Multi-threading](#) for more info.
- **Enable snapshots and keep them for (days):** Keep a copy of the report for how many days.

*System resources will be shared so this will not always mean that reports will take 1/4 the normal time. Example: You have 4 reports. Each one takes 15 minutes to export. Using a single thread, it would take 1 hour to complete the export. Using multiple threads, you would expect it to take 15 minutes for all 4. However, the sharing of your system resources by 4 reports may result in each report taking longer than 15 minutes and the total time for 4 reports may be more than 15 minutes, but it will be less than an hour*

- Click **Add** and go **For Power BI** and select **Reports & Dashboards**.



- Package Report Properties will appear on.

### *Package Report Properties Report Wizard*

Packaged Report Properties

**Report**  
Output Format  
Report Filter  
Report Settings  
Naming (Optional)  
Exception Handling  
Refresh Datasets

PowerBI Account: Karen A. Angeles Martinez Add New  
☒ Reports ☐ Dashboards  
Select Report: My Workspace Avocado Prices  
Report Name: Avocado Prices  
☒ Enabled

OK
Cancel

- Power BI Account:** Add the account to send the report.
- Select Report:** The path to the required report.
- Report Name:** Enter a name for the report.
- Enabled:** Enable or Disable this specific report in the Package.

## Output Format Wizard

Packaged Report Properties

Report

Output Format

Report Filter

Report Settings

Naming (Optional)

Exception Handling

Refresh Datasets

Format: Acrobat Format (\*.pdf)

Format Options

File Summary

PDF Security

☐ Enable PDF Options

File Permissions

Owner Password

User Password

☒ Can Print

☒ Can Assemble

☒ Can Copy

☒ Can print in full resolution

☒ Can Edit

☒ Can Add Notes

☒ Can Fill Fields

☒ Can copy accessibility options

Include the following watermark/stamp

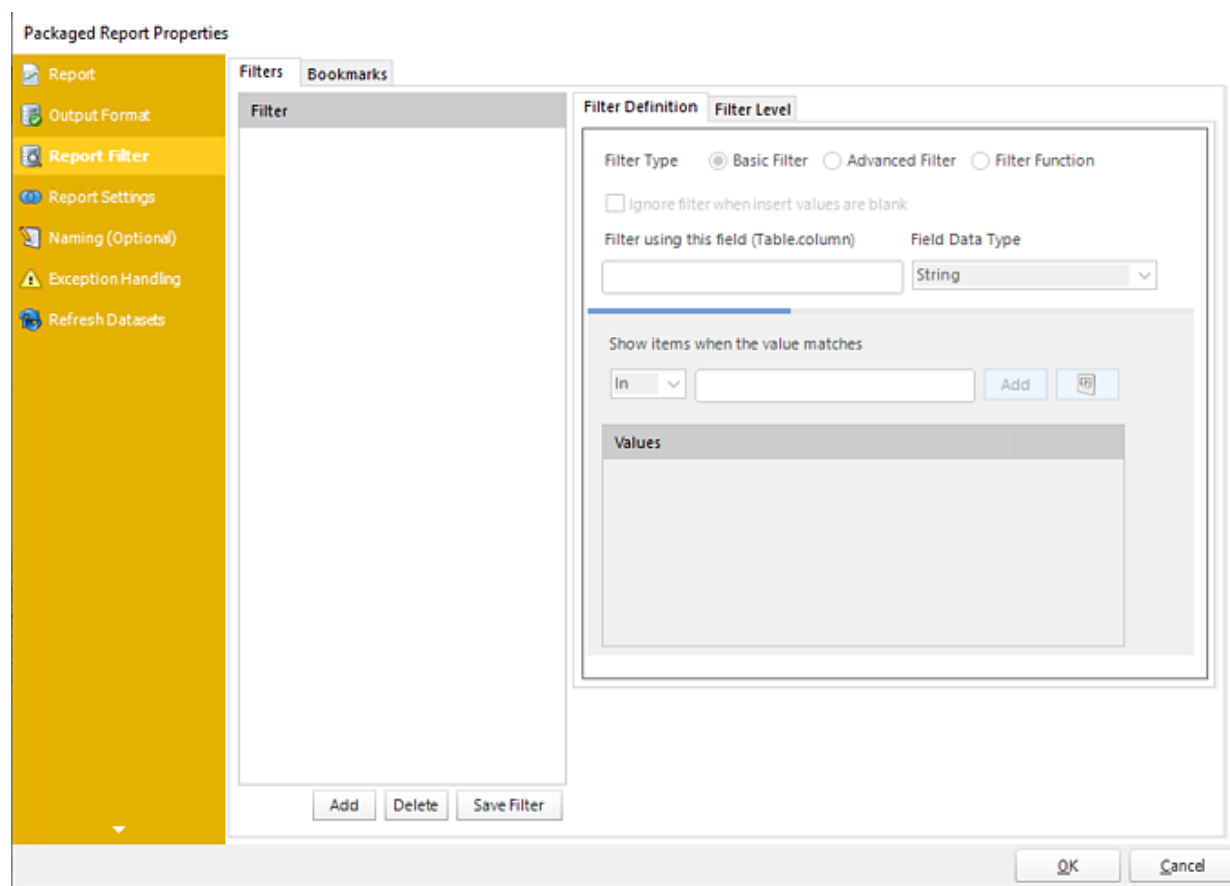
Preview

OK

Cancel

- In this section, you will select the output format of the report.
- For more information on Output Format, [click here](#).

## Report Filter Wizard



- In this section, you will determine the filters for your report (if any). If your report has no parameters, you may skip this section by clicking next.

For more information about Report Filters Wizard, click [here](#).

### Filters

#### Filter Definition

- **Filter Type:** You may choose between Basic Filter, Advanced Filter, or Filter Function.
- **Ignore filter when insert values are blank:** Check this option when the filter values are blank.
- **Preview:** View the dashboard/report output given the selected filters.
- **Filter using this field (Table.column):** Choose the table and column you would like to set up the filter.

## Basic Filter

The screenshot shows a 'Basic Filter' dialog box. At the top, there are three radio buttons: 'Basic Filter' (selected), 'Advanced Filter', and 'Filter Function'. Below them is a checkbox labeled 'Ignore filter when insert values are blank'. The main section is titled 'Filter using this field (Table.column)' and 'Field Data Type'. The first dropdown menu shows 'avocado.type' and the second shows 'String'. Below this is a section titled 'Show items when the value matches'. It contains a dropdown menu with 'In' selected, an empty text input field, an 'Add' button, and a small icon of a document with a plus sign. Below this is a list box titled 'Values' containing the word 'organic'. At the bottom right is a 'Save Filter' button.

- Click **Add**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- Select an **operator** in Show items when the value matches.
- **Show items when the value matches:** Insert the value you would like to add and then click **Add**.
- Click **Save Filter**.

### Advanced Filter

The screenshot shows the 'Advanced Filter' dialog box. At the top, there are three radio buttons: 'Basic Filter' (unselected), 'Advanced Filter' (selected), and 'Filter Function' (unselected). Below them is a checkbox labeled 'Ignore filter when insert values are blank' which is unchecked. The 'Filter using this field (Table.column)' section has a text box containing 'avocado.Date'. The 'Field Data Type' section has a dropdown menu showing 'Date'. The 'Show items when the value:' section contains two rows. The first row has a dropdown set to 'StartsWith' and a text box with '2019-02-22T00:00:00.000Z'. The second row has a dropdown set to 'LessThan' and a text box with '2020-02-23T00:00:00.000Z'. Between these two rows are radio buttons for 'And' (selected) and 'Or' (unselected). At the bottom right is a 'Save Filter' button.

- Click **Add**.
- Select **Advanced Filter**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- **Show Items when the value:** In this option, you have the option to show items and select the option from the drop-down menu.

This screenshot shows the dropdown menu for the 'Show items when the value:' section. The menu is open, displaying a list of filter operators. 'Contains' is currently selected and highlighted in blue. Other visible options include 'LessThan', 'LessThanOrEqual', 'GreaterThan', 'GreaterThanOrEqual', 'DoesNotContain', 'StartsWith', 'DoesNotStartWith', 'Is', 'IsNot', 'IsBlank', and 'IsNotBlank'.

- Click **Save Filter** to add the filter.

## Filter Function

The screenshot shows a configuration window for a 'Filter Function'. At the top, there are three radio buttons: 'Basic Filter', 'Advanced Filter', and 'Filter Function', with 'Filter Function' being selected. Below this is a checkbox labeled 'Ignore filter when insert values are blank'. Underneath, there are two fields: 'Filter using this field (Table.column)' containing the text '{JsonFilter}' and 'Field Data Type' which is a dropdown menu currently showing 'Date'. The main part of the window is a text editor with a light blue border, containing a JavaScript function template. The text in the editor is as follows:

```
1 //this function must return an array of
  Filters
2 function getFilters () {
3 //add your filters definition here
4 //return your filters array
5 }
```

At the bottom left of the window is a 'Build' button, and at the bottom right is a 'Save Filter' button.

- Select the Filter Function option to enter an advanced Filter JSON string so you don't have to manually configure filters in PBRS.
- Click **Build**.
- Enter the Filter JSON string.



### Build PowerBI Filters Function

```

1 //this function must return an array of Filters
2 function getFilters ()
3 {
4     const filter1 = {$schema: "http://powerbi.com/
      product/schema#basic",target: {table: "avocado",
      column: "type"},operator: "In",values: ["
5     organic"]};
6     var allFilters = [filter1];
7     return allFilters;
  
```

Cancel

OK

•Click **OK**.

Filter Type ☐ Basic Filter ☐ Advanced Filter ☒ Filter Function

☐ Ignore filter when insert values are blank

Filter using this field (Table.column)

Field Data Type

{JsonFilter}

String

```

1 //this function must return an array of
  Filters
2 function getFilters ()
3 {
4     const filter1 = {$schema: "
      http://powerbi.com/product/
      schema#basic",target: {table:
      "avocado",column: "type"},
      operator: "In",values: ["
5     organic"]};
6     var allFilters = [filter1];
      return allFilters;
  
```

Build

Save Filter

•Click **Save Filter**.

## Filter Level

The screenshot shows the 'Filter Level' tab of a dialog box. The 'Report' radio button is selected. Below it, the 'Slicer' radio button is unselected. A section titled 'Slicer selection based on' contains two radio buttons: 'Visual Title' (selected) and 'Filter Field' (unselected). Below these is a dropdown menu.

- **Report:** Check this option to filter the level of the report based on the filter field (Table.Column) value.
- **Slicer:** Check this option to filter the report based on the slicer visual icon and the filter field value. Using Slicer, all the values of the slicer will be displayed and only the entered value on Filter Field will appear checked.

*In order to use the Slicer filter, you must have a Slicer visual in your Power BI Report.*

## Slicer

The screenshot shows the 'Filter Level' tab of a dialog box. The 'Slicer' radio button is selected. Below it, the 'Report' radio button is unselected. A section titled 'Slicer selection based on' contains two radio buttons: 'Visual Title' (selected) and 'Filter Field' (unselected). Below these is a dropdown menu.

## Visual Title

- **Visual Title:** Using this option, you can select the slicer selection based on the Visual Title of the report. Select the slicer visual title using the drop-down menu.
- Click **Save Filter**.

Filter Definition   Filter Level

☐ Report

☒ Slicer

Slicer selection based on

☒ Visual Title   ☐ Filter Field

Ethnicity

### Filter Field

- **Filter Field:** Using this option, you can select the slicer selection based on the Filter Field (Table.Column).
- Click **Save Filter**.

Filter Definition   Filter Level

☐ Report

☒ Slicer

Slicer selection based on

☐ Visual Title   ☒ Filter Field

Ethnicity.Name

### Bookmarks

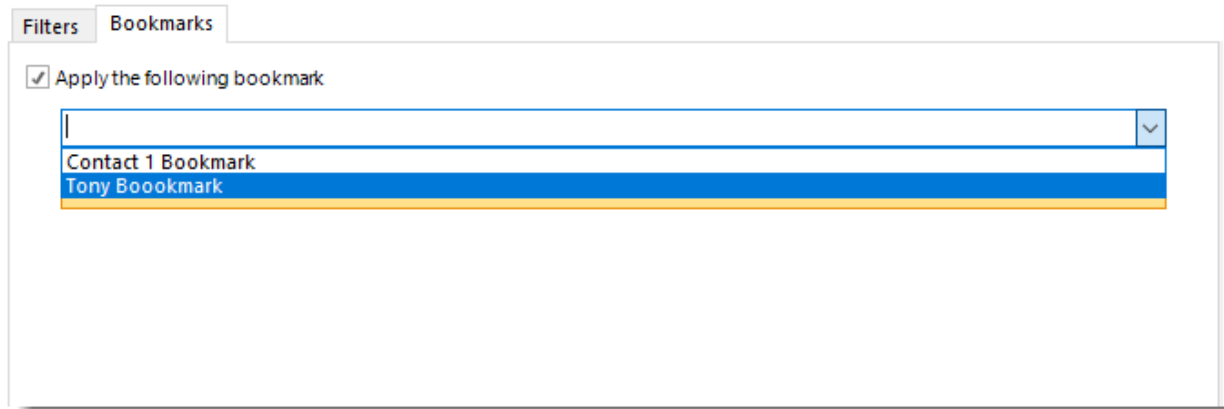
Filters   Bookmarks

☐ Apply the following bookmark

Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

*Bookmark and Filters may overwrite each other so it is best to only set one or the other.*

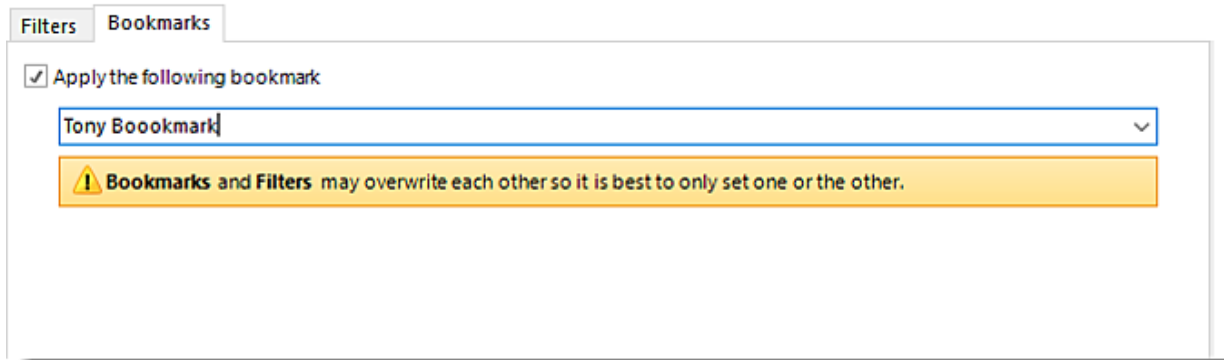
- If you have a Bookmark in the report you have the ability to select the bookmark using the drop-down menu.
- Check **Apply the following bookmark** to enable the Bookmarks option.
- Select the bookmark from the drop-down menu.



Filters Bookmarks

☒ Apply the following bookmark

Contact 1 Bookmark  
 Tony Boobookmark



Filters Bookmarks

☒ Apply the following bookmark

Tony Boobookmark

⚠ Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

- Click **Save Filter** to add the filter.

## Report Settings Wizard

Packaged Report Properties

☐ Use JSON string for rendering settings

Settings **JSON**

Quick Search

Page Setup	
Left margin (% of width)	0
Page Height (pixels)	800
Page Width (pixels)	1300
Right margin (% of width)	0
PDF Cropping	
Crop PDF	<input type="checkbox"/> False
Crop Bottom	0
Crop Left	0
Crop Right	0
Crop Top	0
Rendering	
Maximum Loading Time(secs)	60
Minimum Loading Time (secs)	10
Minimum Report Size (Bytes - Optional)	-1
PDF Compression	NONE

Pages To Render

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

OK Cancel

- In this section, you may set up the dashboard/report.

*Settings and JSON Rendering settings may overwrite each other so it is best to only set one or the other.*

### Settings

- **Left margin (% of width):** The size of the left margin as a percentage of the page width.
- **Page Height(pixels):** The height of the rendered file.
- **Page width (pixels):** The width of the rendered file.
- **Right margin (% of width):** The size of the right margin as a percentage of the page width.
- **PDF Cropping:** You may crop your reports by page height (pixels) and page width (pixels).
- **Maximum Loading Time(secs):** The maximum amount of time that the renderer will wait before timing out.
- **Minimum Loading Time(secs):** The amount of time that PBRS will wait for the dashboard/report to load before rendering it to file.
- **PDF Compression:** Select PDF compression levels.
- **Rendering Method:** Select the rendering method type for your Power BI report.
- **Transparent Background:** You have the option to have your Power BI report in a transparent background.
- **View Style:** How the report fits on the page: Fit to Page, Fit to Width, or Actual Size.

- **Page To Render:** The Power BI page(s) to render. Only applicable to Power BI reports. Leave blank for all report pages or you can specify a page range e.g 1-5 or specific e.g. 1,3,5. You can enter page names e.g. Monthly Report Page, Weekly Summary Reports.

You can drag and drop Inserts constants into Pages To Render textbox.

## JSON

Packaged Report Properties

☒ Use JSON string for rendering settings

JSON

1 <[u]Rendering Settings JSON>

Pages To Render

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

1

OK Cancel

- **Use JSON string for rendering settings:** Check this option to use JSON string for the rendering settings.
- Enter the JSON string.

You can drag and drop Inserts constants into JSON textbox.

## Naming (Optional)

Packaged Report Properties

Report

Output Format

Report Filter

Report Settings

**Naming (Optional)**

Exception Handling

Refresh Datasets

☒ Use the default naming convention

☐ Customize the output file name

☐ Customize output extension

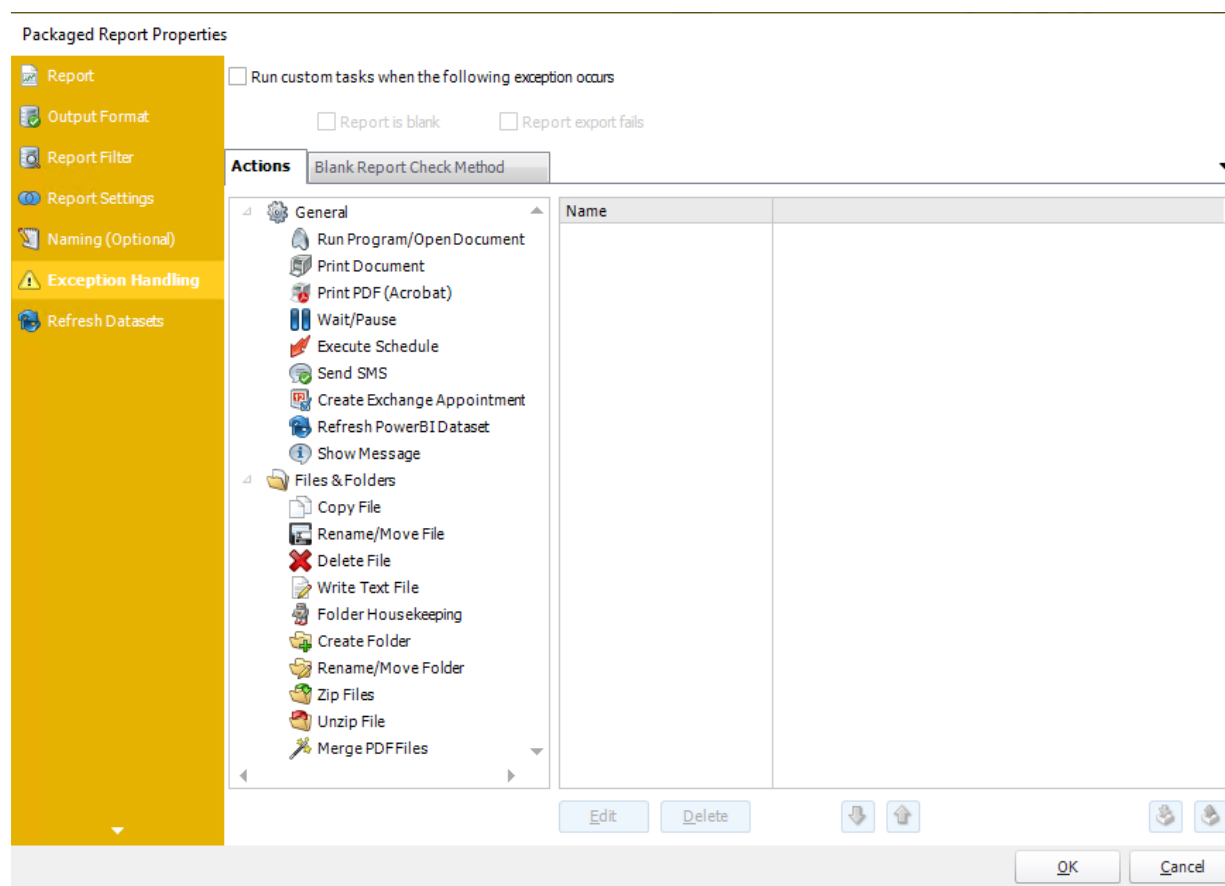
☐ Append date/time to report output

Adjust date/time stamp by (days)

OK Cancel

- **Default Naming Convention:** PBRS will name the output file in the following format: *reportname.format extension*, e.g. *Catalog Report.pdf*.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

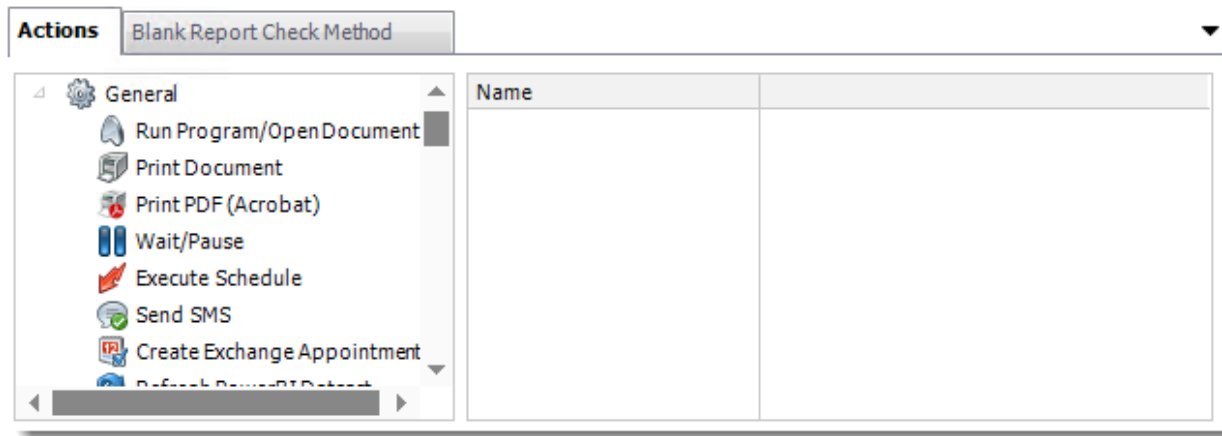
## Exception Handling Wizard



- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRs on what to do with them.
  - **Report exports fail:** If a report export fails, you can receive a notification or run a tasks that the report failed to execute.
  - **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.



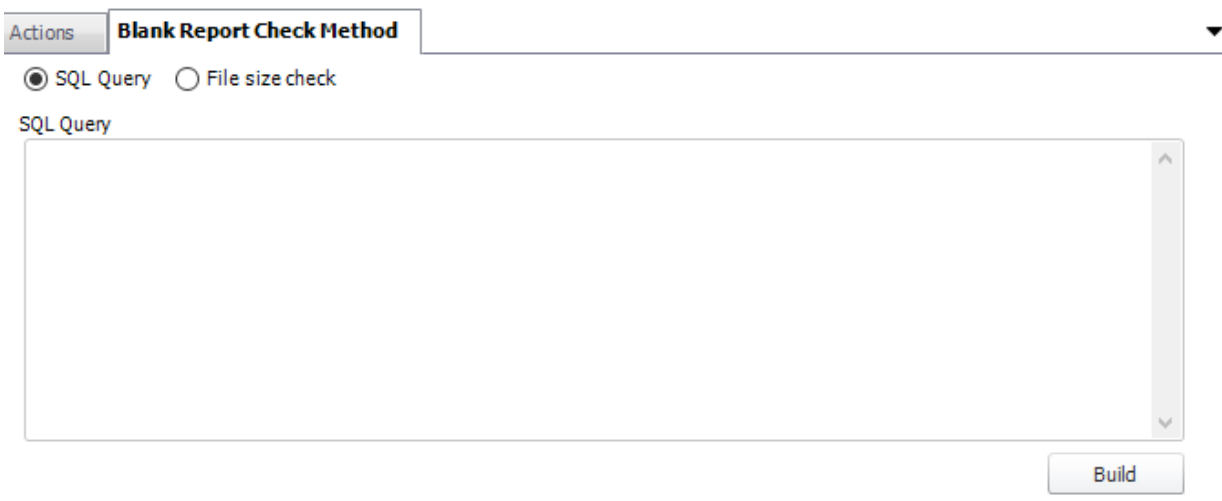
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

## Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

OK Cancel

- **File size check:** Assume reports are blank if size is under "X" bytes.
- Click **OK**.

## Refresh Datasets

Packaged Report Properties

Select datasets to refresh before the report is executed

PowerBI Account

Workspace

Dataset

Notification Options

☒ Notify on Completion

☐ Notify on Failure

☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

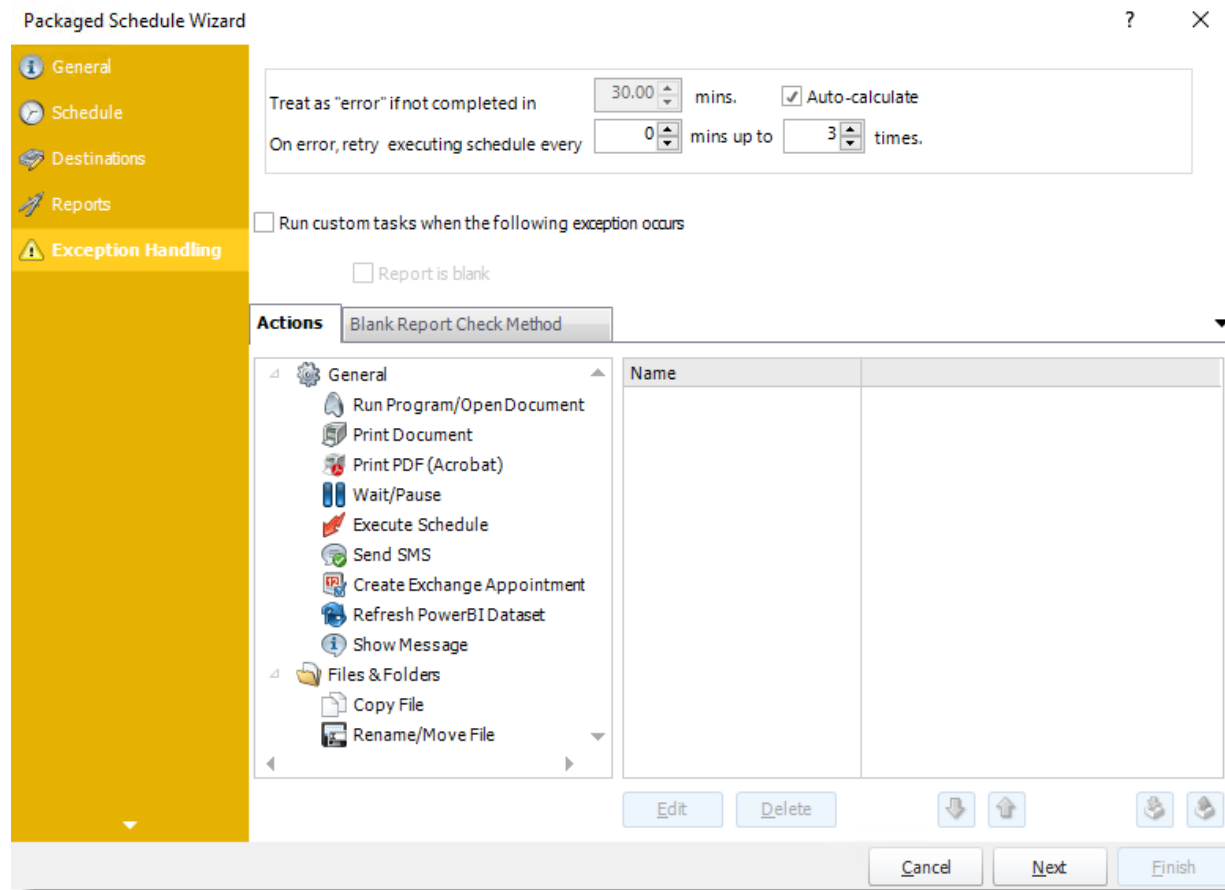
After refreshing the datasets above, wait  seconds before running the report.

OK Cancel

In this section select the datasets to refresh before the report is executed.

- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**

## Exception Handling Wizard



Packaged Schedule Wizard

General | Schedule | Destinations | Reports | **Exception Handling**

Treat as "error" if not completed in  mins. ☒ Auto-calculate

On error, retry executing schedule every  mins up to  times.

☐ Run custom tasks when the following exception occurs

☐ Report is blank

**Actions** Blank Report Check Method

Name
------

General

- Run Program/Open Document
- Print Document
- Print PDF (Acrobat)
- Wait/Pause
- Execute Schedule
- Send SMS
- Create Exchange Appointment
- Refresh PowerBI Dataset
- Show Message

Files & Folders

- Copy File
- Rename/Move File

Edit Delete

Cancel Next Finish

- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRs to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRs will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRs how many times you want it to retry running the report before declaring it as "Failed."
- **Run custom tasks when the following exception occurs:** Check this option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRs on what to do with them.

- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.

### Actions

Name
------

- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

### Blank Report Check Method

☒ SQL Query    ☐ File size check

SQL Query

Build

- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.

- Click **Build**.
- Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

- **File size check:** Assume reports are blank if size is under "X" bytes.

Blank Report Check Method

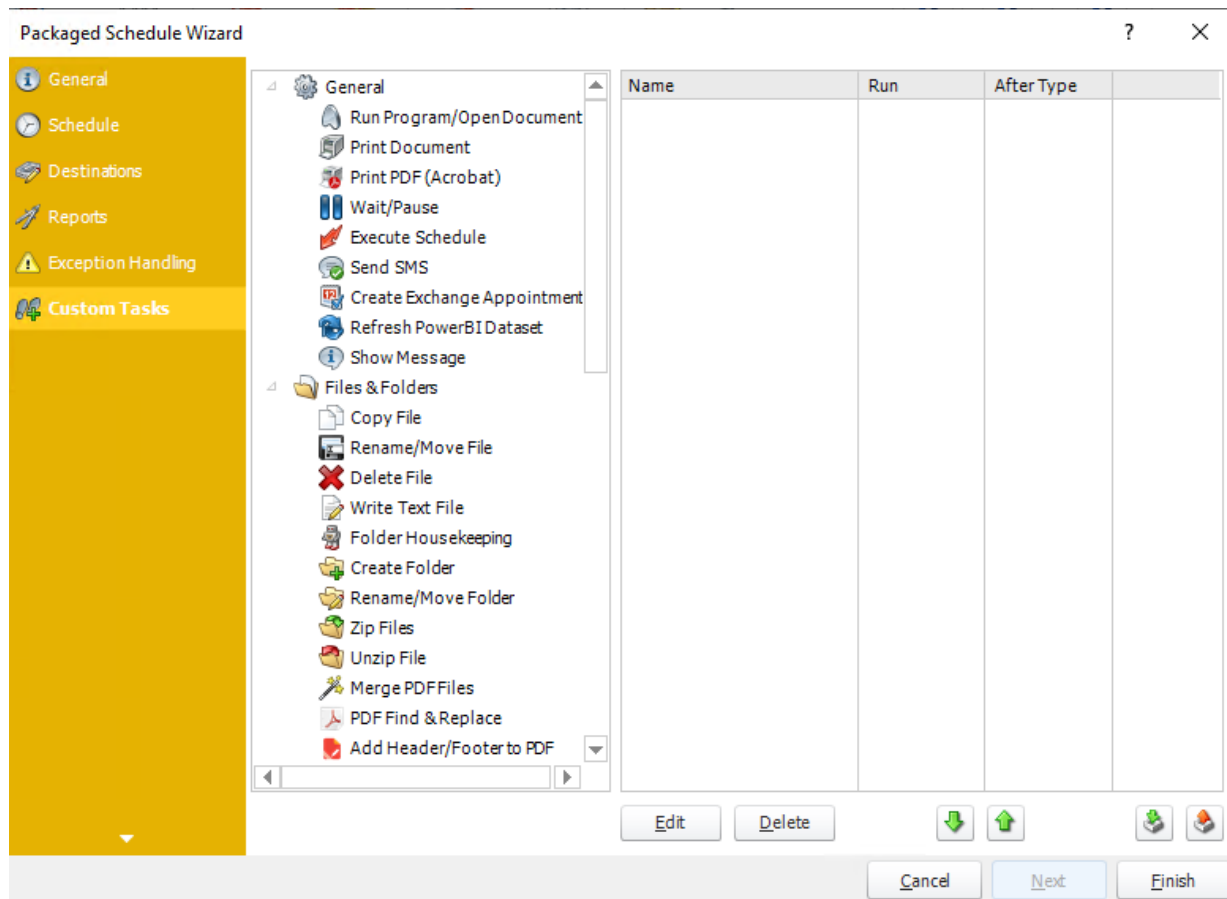
☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

- Click **OK**.

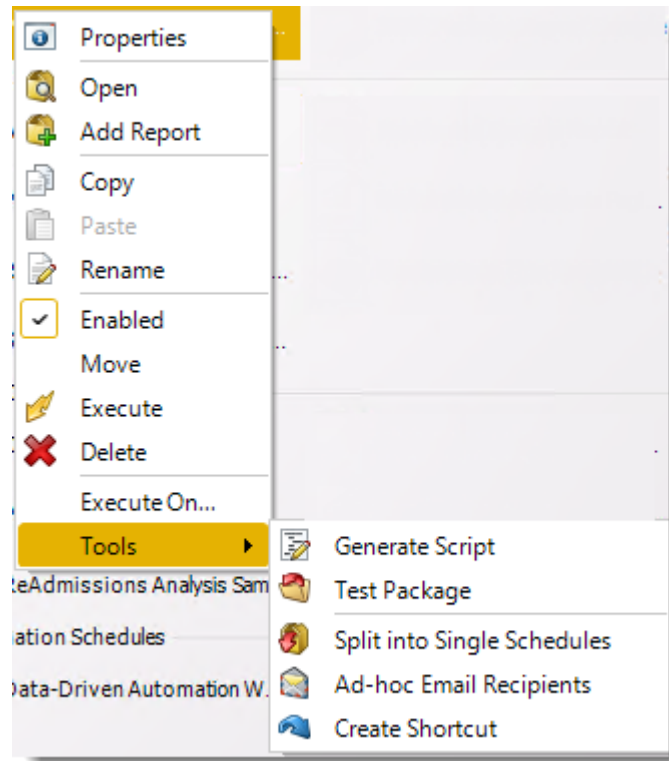
Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto-triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

## Package Report Schedule Context Menu



Right-Click on a schedule to see the following actions:

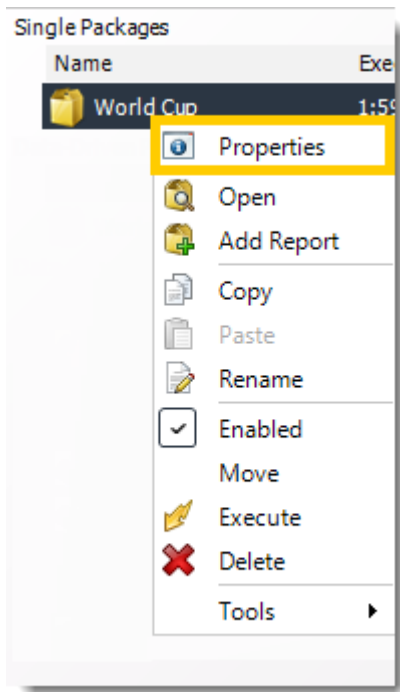
- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Open:** This will open the package and show its constituent reports.
- **Add Report:** Use this to add one or more reports to an existing package.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers .
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use this option to execute the schedule to another collaboration server.
- **Test Package:** Use this option to test the schedule and export it to selected "test" destinations.
- **Split into Single Schedules:** This will split all the constituent reports in the package into Single Report Schedules.

*This process will automatically delete the package once the splitting process is completed.*



- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.

#### *Package Report Schedule Properties*



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

Package Properties - PowerBI Package Sample Report

**General**

Schedule

Reports

Destinations

Exception Handling

History

Tasks

Sharing

Snapshots

Package Name  
PowerBI Package Sample Report

Create In  
Sample Reports

Description (optional)

Keyword (optional)

Unique ID  
617981939

OK Cancel Apply

•Schedule

Package Properties - PowerBI Package Sample Report

General

Schedule

Reports

Destinations

Exception Handling

History

Tasks

Sharing

Snapshots

Start Date 8/ 1/2019 End Date 8/ 1/3018

Repeat every 1 days

Schedule time 1:36:00 PM Exception calendar

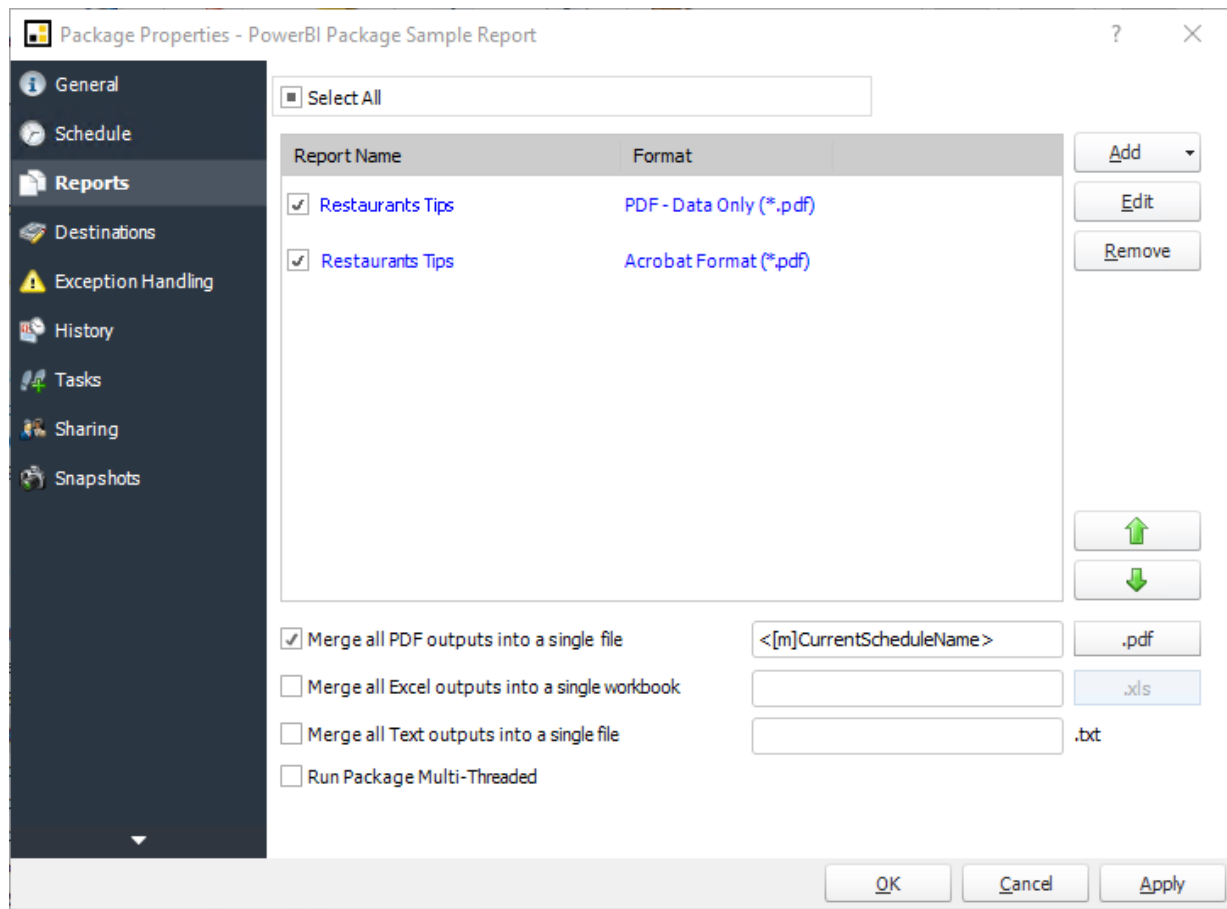
Next to run on 1/15/2020 1:36:00 PM

Repeat every 0.25 hours until 1:36:00 PM

Enable this schedule

OK Cancel Apply

## •Reports



### •Destinations

**Package Properties - PowerBI Package Sample Report** ? X

General  
Schedule  
Reports  
**Destinations**  
Exception Handling  
History  
Tasks  
Sharing  
Snapshots

Name	Format
<input checked="" type="checkbox"/> Disk	Package (*.*)

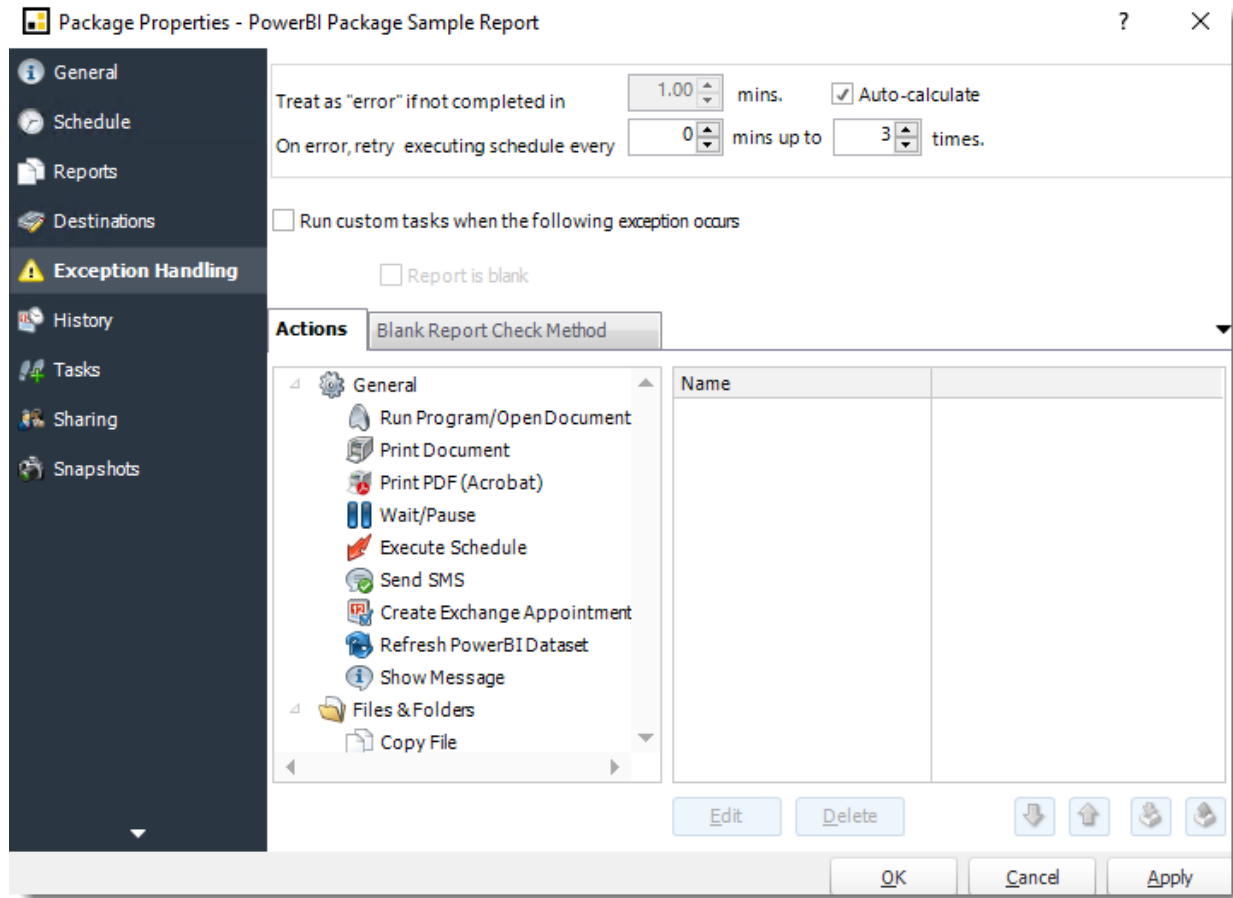
☐ Resume with cached data  
☐ Resume failed/errored schedule with cached data  
Expire dynamic cached data after  minutes

☐ Append date/time stamp   
Adjust date/time stamp by (days)

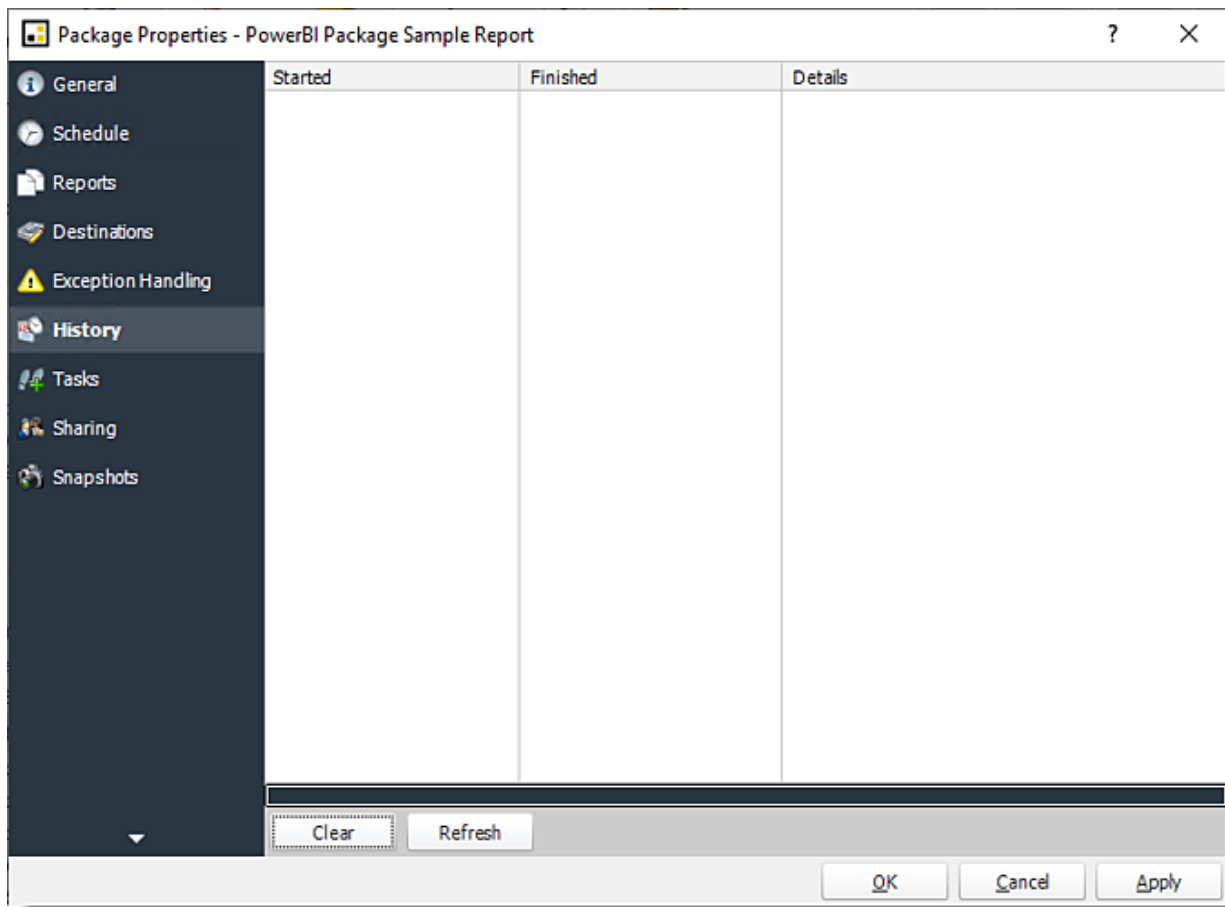
Add  
Edit  
Delete  
Import  
↑  
↓

OK Cancel Apply

### •Exception Handling



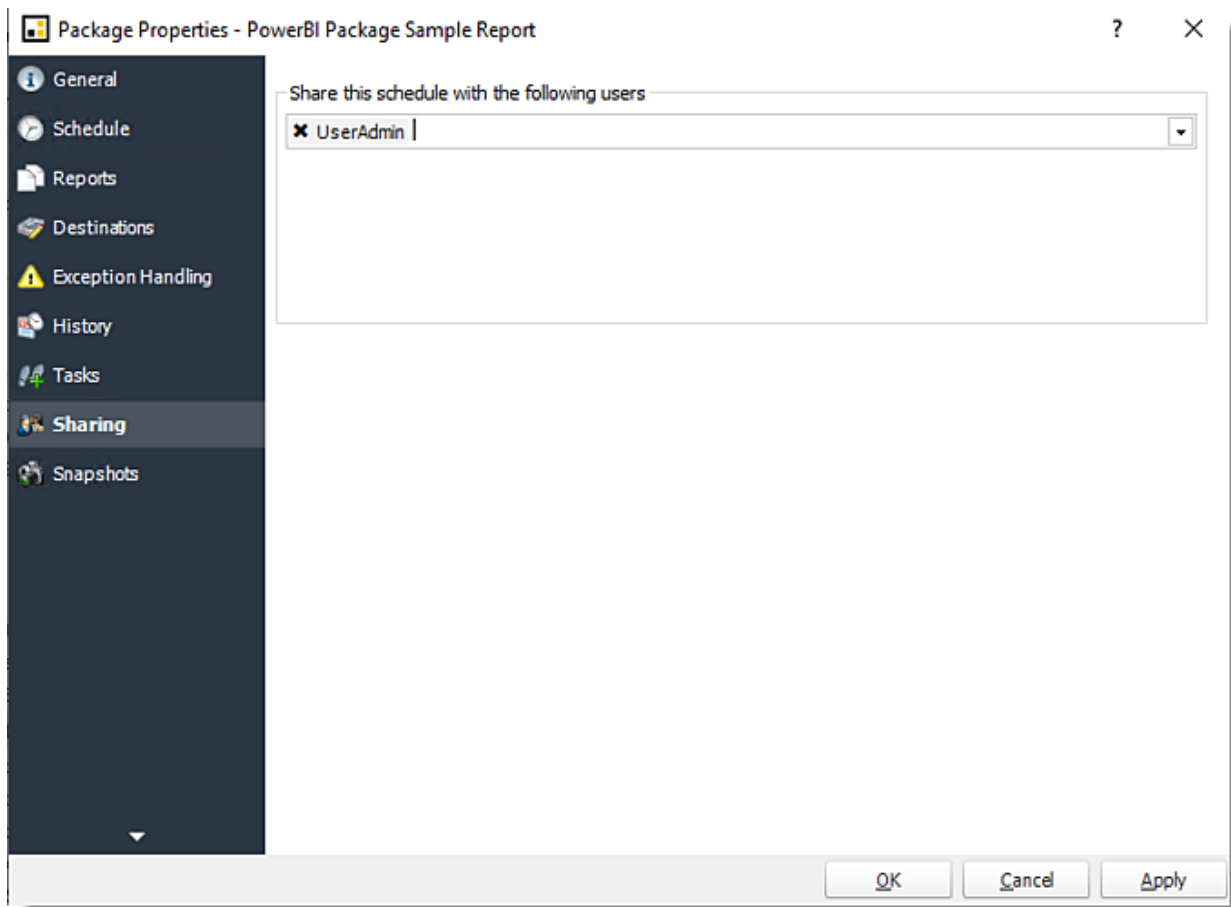
- **History:** Review the schedule's history. Successes, failures, and other data is located here.



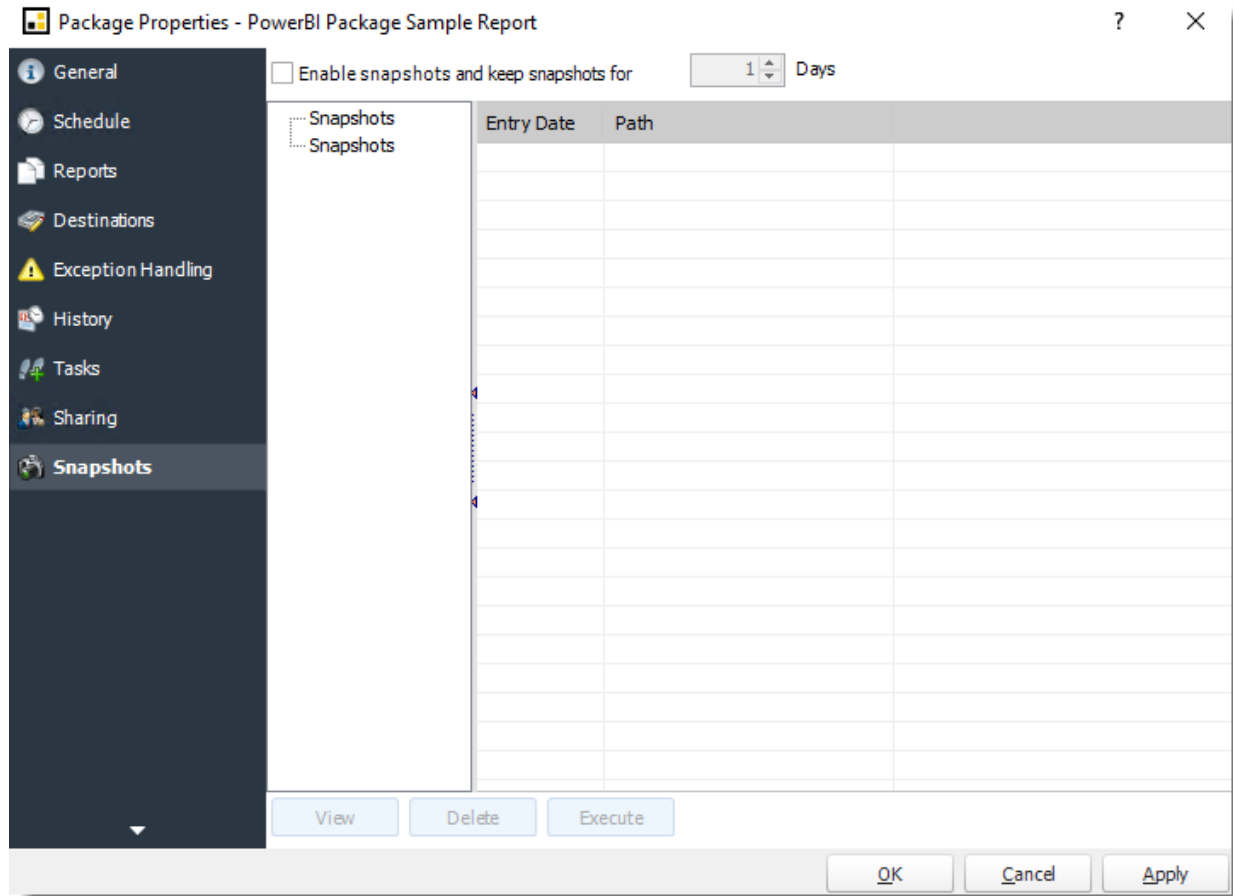
•Tasks







- **Snapshots:** A snapshot is a copy of each report a schedule or a package generates. Keeping snapshots enables you to resend past reports without generating them afresh - especially if the data has changed in the meantime.
  - Simply select the number of days to keep the snapshots.



How do I setup Event Based Schedules in PBRs?

**Event Based Schedules give you the ability to run any already existing schedule (enabled or disabled) when an event occurs.**

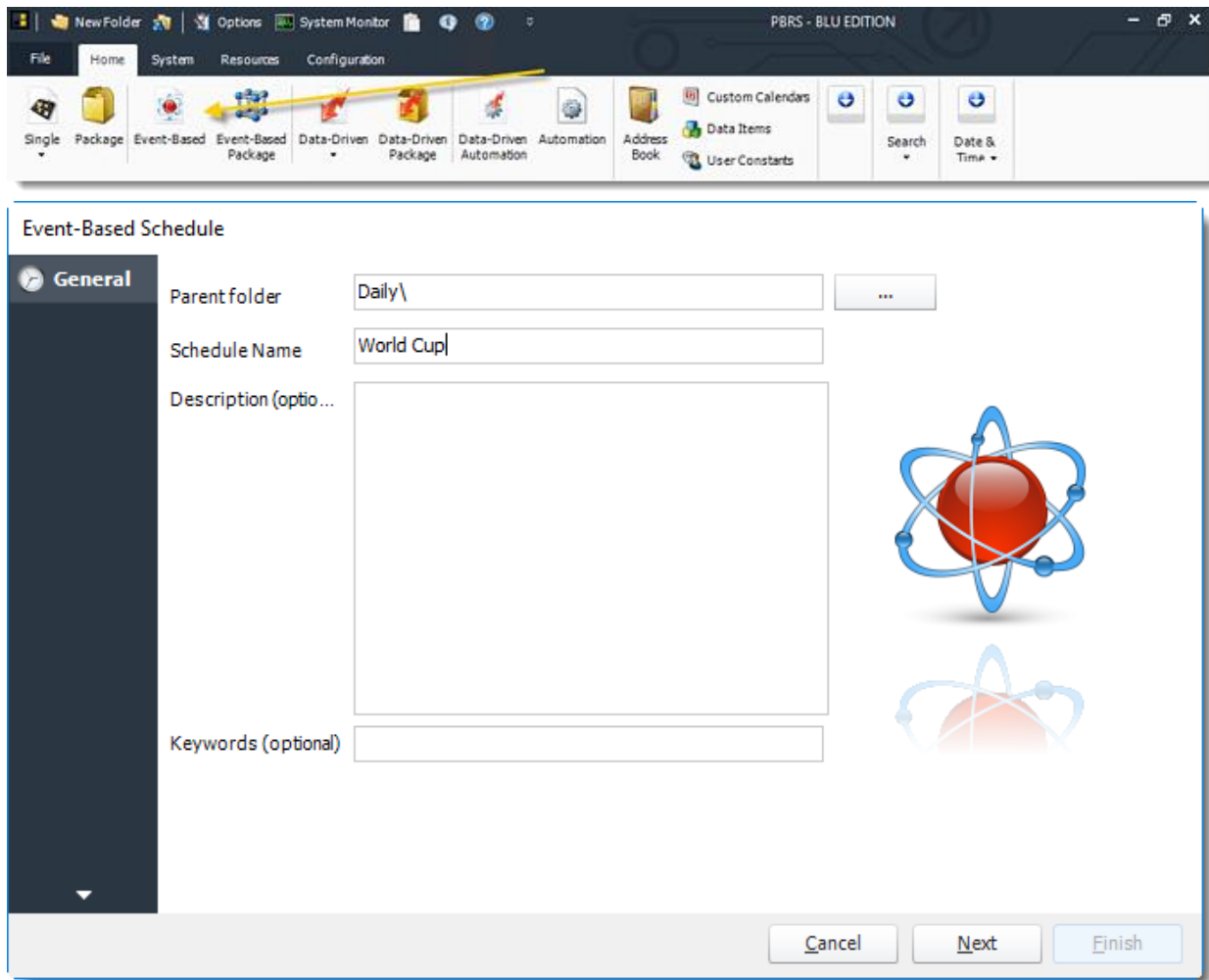
Event-Based Schedule for Power BI Service Reports, Paginated Reports on Premise & SSRS Reports.

Event-Based Schedules give you the ability to run an already existing schedule (enabled or disabled) when an event occurs. The purpose of the wizard will be to guide you through the process of setting up an Event-Based Schedule. Use this schedule on its own, or in addition to a regular time-based schedule for the same report.

With Event-Based Schedules, you can unlock the power of PBRs's process scheduling engine. Combine Event-Based schedules with Custom tasks to automate processes such as updating databases, server management, or system alerts.

How to Create an Event-Based Schedule for Power BI & SSRS?

- Go to **Event-Based**.



## General Wizard

- **Parent Folder:** The PBRS folder where the schedule is stored.
- **Schedule Name:** The name of the schedule.
- **Description:** A short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword:** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Conditions Wizard

The screenshot shows the 'Event-Based Schedule' dialog box with the 'Conditions' tab selected. The 'Fulfill' dropdown is set to 'ANY'. The main area contains a table with columns 'Name', 'Condition', and 'Run If'. To the right of the table are buttons for 'Add', 'Edit', 'Delete', 'Refresh', and two arrow buttons for moving items. At the bottom left, there is a checkbox labeled 'Enabled' which is checked. At the bottom right, there are 'Cancel', 'Next', and 'Finish' buttons.

Name	Condition	Run If
------	-----------	--------

☒ Enabled

- **Fulfill:**
  - **ANY:** The schedule will work if ANY of the conditions are met.
  - **ALL:** The schedule will only work if ALL of the specified conditions are met.
- **Enabled:** Check this option to enable or disable the schedule.
- Click **Add** to see all the Conditions type.

A list of condition types, each with an icon and a text label.

Condition Type
Database Record Exists
Database Record has been Modified
File Exists
File has been Modified
Process Exists
Window is present
Unread mail is present
Data is received on a port

### Database Record Exists

- This condition will cause the schedule to be executed if a database record exists.
- If set to **True**, the schedule will be executed if the record exists e.g. when it is created.
- If set to **False**, the condition will be executed if the record does not exist.
- **ODBC DSN Name:** Check this option to use the ODBC Account. Use the drop-down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must set up a system DSN to the database before you can use this facility.*

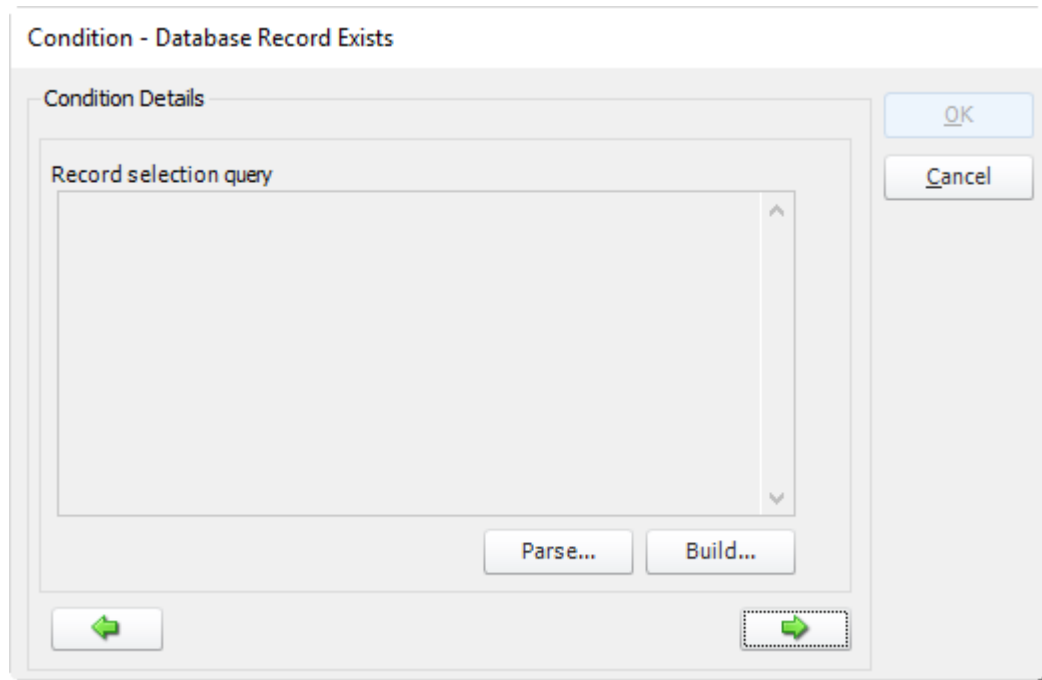
*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- Click **Connect**.
- Click the **green arrow** to continue.



- Click **Build**.

### Get values from database

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account  
Northwind

Connect

Please select the table that holds the required data  
Customers \*

Simple **Advanced**

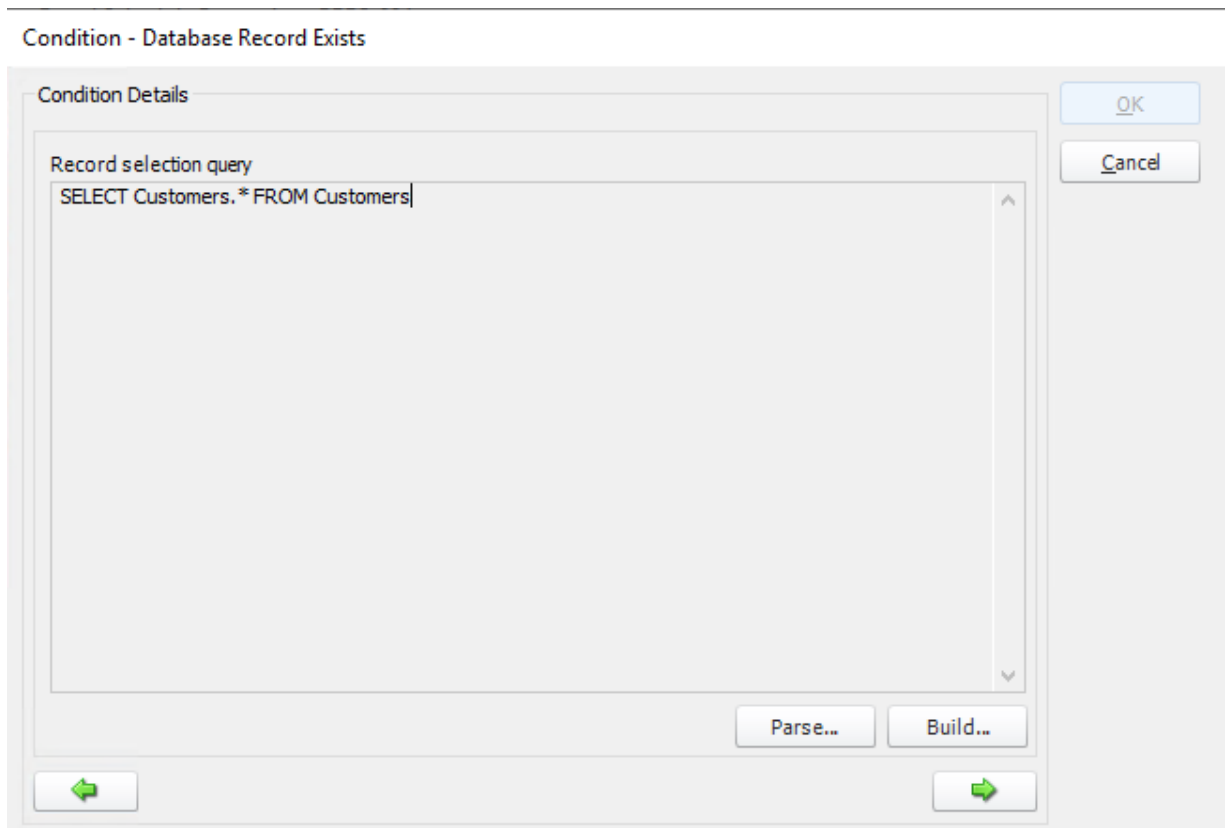
SQL Query  
SELECT Customers.\* FROM Customers

Parse

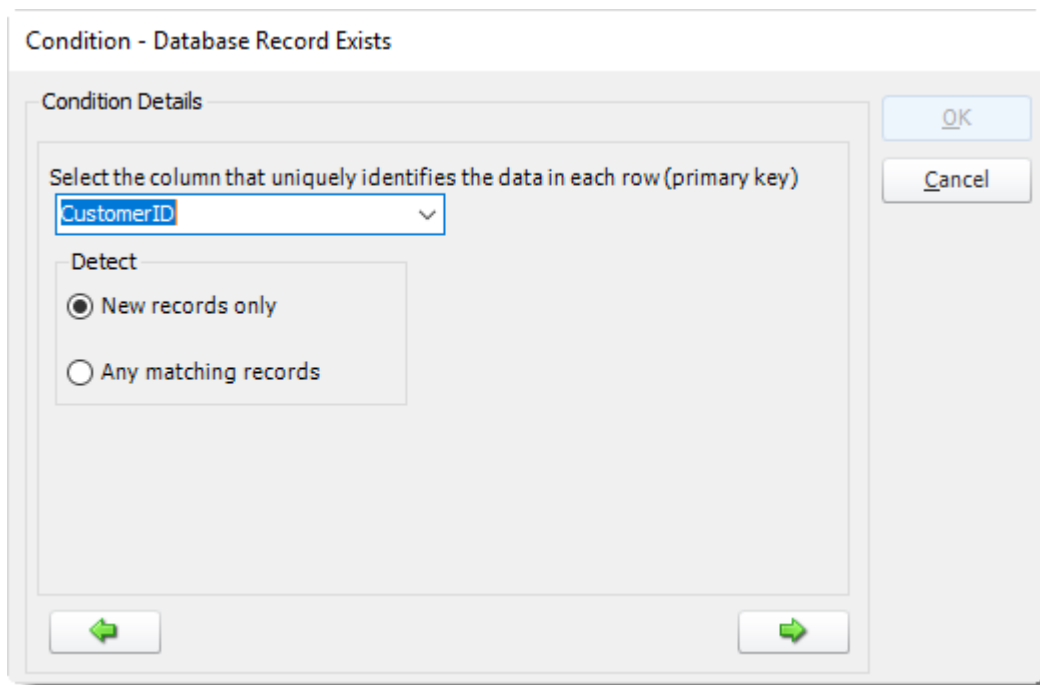
OK  
Cancel

- It will appear by default the selected database for the condition.
- **ODBC Datasource Name:** Drop down and select a DSN.
  - **UserID:** Enter the User ID PBRS should use to log on to the database.
  - **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Select your SQL Server Account.
- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using simple or advanced tabs.
- Click **Parse**.
- For more information of the "Get Values From Database" interface, [click here](#).





- Click **green arrow** to continue.



- Select the Column that identifies the data in each row. This must be unique. It is typically referred to as the Primary key.
- Detect - New Records Only:** The schedule will only act on records that were created after you wrote the schedule and the schedule will only be fired once for each record. After the first run, it is deemed not to be new anymore and the schedule will not fire.
- Detect - Any Matching Records:** If this option is selected you should ensure that your query limits the returned values to just the record you are after. You must also write a custom action to update the database so that this record no longer fulfills the condition once the schedule has been executed, otherwise the schedule will continue to run each time it finds the same record.

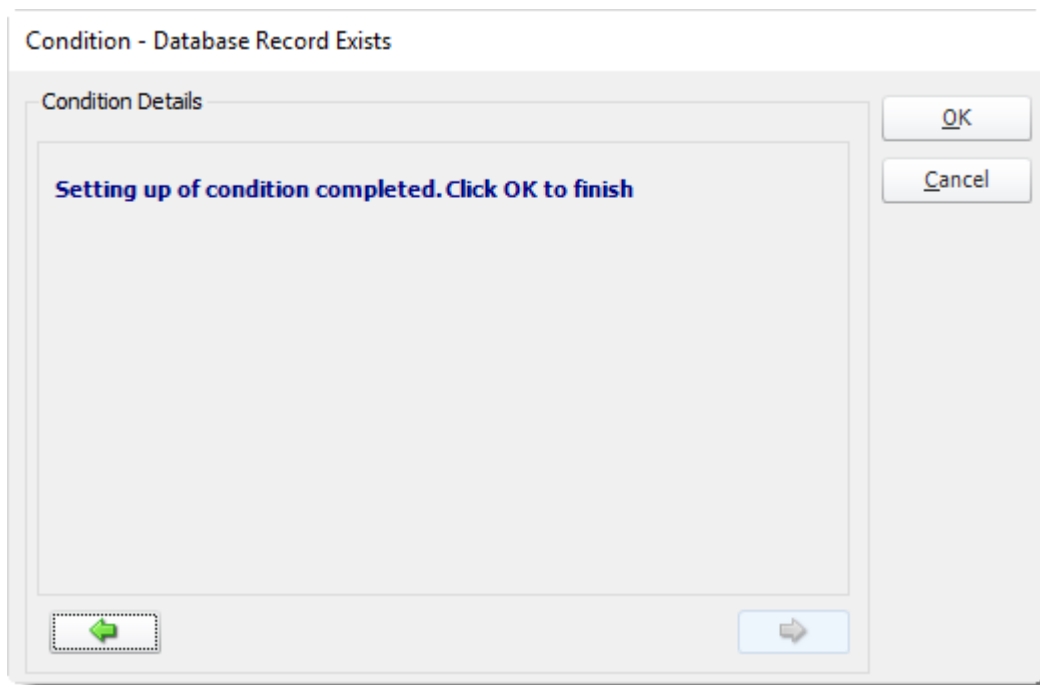
For example:

*The schedule should execute when a new sale over \$1000 is entered: Select order id from sale stable where amount >= 1000 Now limit the query further by adding a second condition: Select order id from sale stable where amount >= 1000 and schedule sent <> 'T'.*

*The schedule will only execute if it finds a sale over \$1000 and the schedule sent field is not "t".*

*Now write a custom Task to update the database record and set schedule sent to 'T'. Update sale stable set schedule sent = 'T' where amount >= 1000 and schedule sent <> 'T'.*

- When the schedule has executed, it will mark the record and thus ensure that the schedule does not repeat itself each time PBRs polls the database.
- Click the **green arrow** to continue.



- Click **OK**.

### Database Record Has Been Modified

Condition - Database Record Modified

Condition Details

Name

If database record has changed =

☒ ODBC DSN ☐ SQL Server Account

DSN Name

UserID

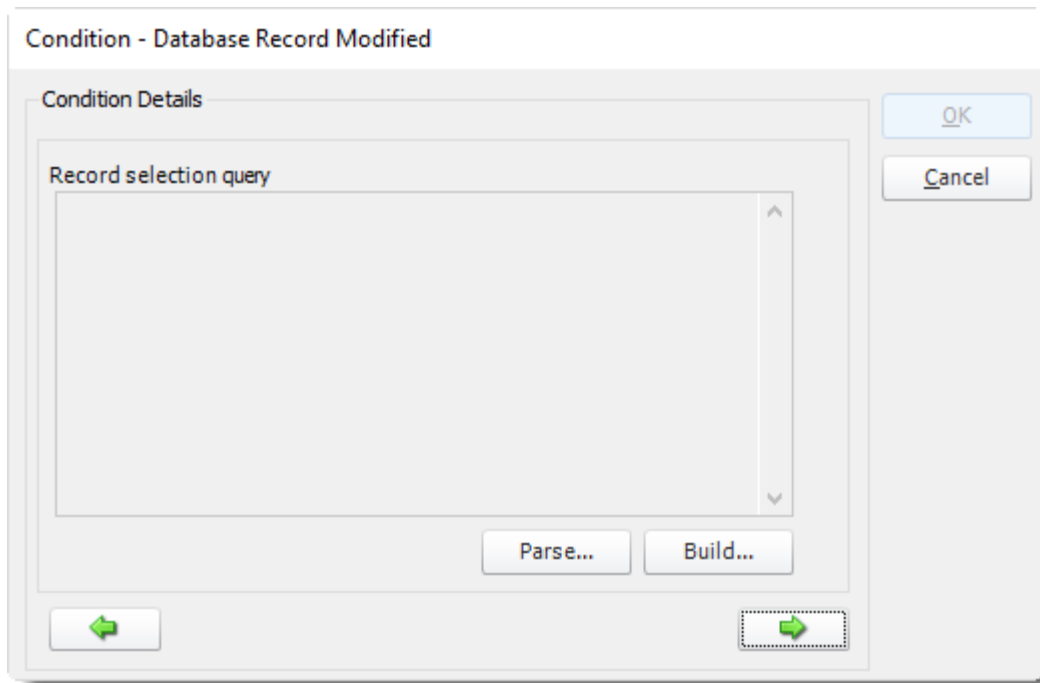
Password  Query Timeout

[Show Password](#) ☐ Remember credentials

- This condition will cause the schedule to be executed if a database record exists.
- If set to **True**, the schedule will be executed if the record exists e.g. when it is created.
- If set to **False**, the condition will be executed if the record does not exist.
- **ODBC DSN Name**: Drop down and select a DSN.
  - **UserID**: Enter the User ID PBRs should use to log on to the database
  - **Password**: Enter the password associated with the above user.
- **SQL Server Account**: Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- Click **Connect**.
- Click **green arrow** to continue.



- Click **Build**.

### Get values from database

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account  
Northwind

Connect

Please select the table that holds the required data  
Customers \*

Simple **Advanced**

SQL Query  
SELECT Customers.\* FROM Customers

Parse

OK  
Cancel

- It will appear by default the selected database for the condition.
- **ODBC Datasource Name:** Drop down and select a DSN.
  - **UserID:** Enter the User ID PBRs should use to log on to the database.
  - **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Select your SQL Server Account.
- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using simple or advanced tabs.
- Click **Parse**.
- For more information of the "Get Values From Database" interface, [click here](#).

Condition - Database Record Modified

Condition Details

Record selection query

```
SELECT Custs.* FROM Custs
```

Parse... Build...

← →

OK Cancel

- Click the **green arrow** to continue.

Condition - Database Record Modified

Condition Details

Select the column that uniquely identifies the data in each row (primary key)

CustomerID

☒ Detect inserted and deleted records

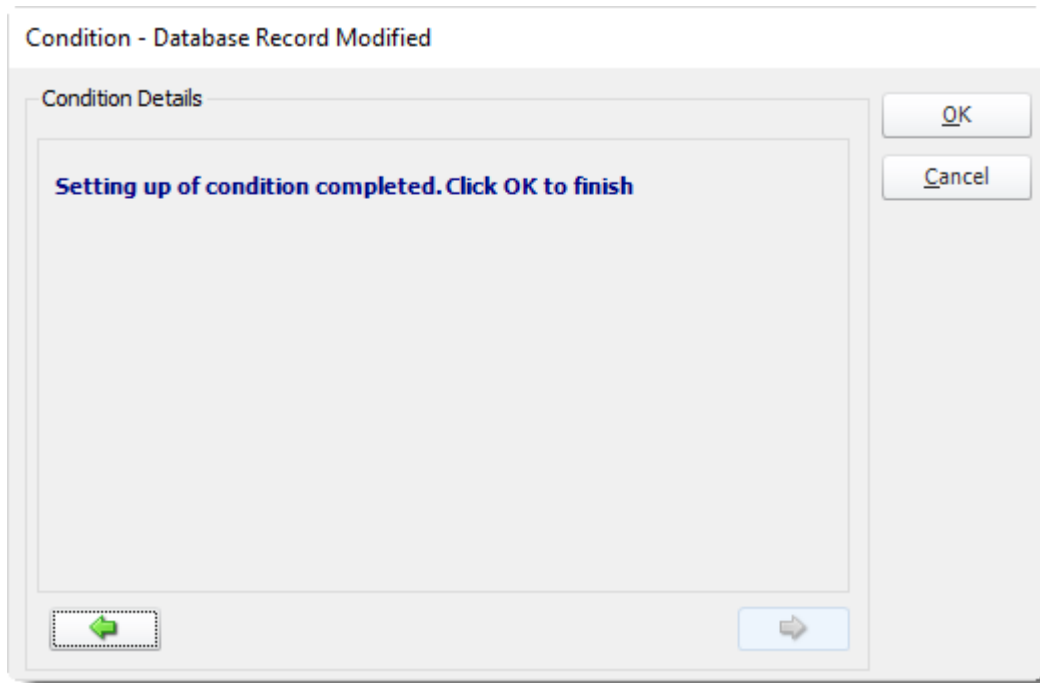
☐ Only match the condition if record has been/not been modified in

0 minutes ☐ Run once only

← →

OK Cancel

- Select the Column that identifies the data in each row. This must be unique. It is typically referred to as the Primary key.
- Detect Inserted and deleted Rows:** PBRs will monitor for inserted and deleted rows as well as data that has been modified.
- If Database Record has been/has not been modified:** Check for records that have been/have not been changed within a set time frame.
- Click the **green arrow** to continue.



- Click **OK**.

### File Exists

Condition - File Exists

Name: File Exists

If file exists =: TRUE

☒ Run once for all files found ☐ Run for each file found

File Details

Local File Remote (FTP) File

C:\Users\karen\Downloads\SSIS Package.dtsx

OK Cancel

- This condition will cause the schedule to be executed if a file exists.
- If set to **True**, the schedule will be executed if the file exists e.g. when it is created.
- If set to **False**, the condition will be executed if the file does not exist e.g. if it is deleted.
- **Run once for all files found**: The schedule will perform the specified actions once for each file found that matches the criteria.
- **Run for each file found**: The schedule will perform the specified actions **ONCE** only irrespective of how many files are found.

### File Details:

- **Local File**: Monitor for files on Local File.

*Hint: You can use the insert menu to create an ever-changing file name.*

File Details

Local File Remote (FTP) File

C:\Users\karen\Downloads\SSIS Package.dtsx

- **Remote (FTP) File**: Event-Based Schedule can also monitor for files on an FTP server.



File Details

Local File **Remote (FTP) File**

**General** Certificate Proxy Server

FTP Server MY.FTP.SERVER.COM

User Name KANGELES Password .....

FTP Type FTP Port 21

Remote File

☒ Passive Mode ☐ ASCII mode ☐ Retry uploading if the transaction fails

- Enter the FTP Server Information.
- Verify:** Authenticate to the server and enter the path where the file should be located.

*Hint: Combine this feature with Custom Actions FTP and FTP Folder Housekeeping to set up automatic FTP maintenance.*

*File has been modified*

Condition - File has been modified

Name File Modified

If file has been modified = TRUE

☒ Run once for all files found ☐ Run for each file found

File Details

**Local File**

C:\Users\karen\Downloads\SSIS Package.dtsx

- This condition will cause the schedule to be executed if a file has been modified.
- If set to **True**, the schedule will be executed if the file exists e.g. when it is created.
- If set to **False**, the condition will be executed if the file does not exist e.g. if it is deleted.

- **Run once for all files found:** The schedule will perform the specified actions once for each file found that matches the criteria.
- **Run for each file found:** The schedule will perform the specified actions **ONCE** only irrespective of how many files are found.

*Hint: You can use the insert menu to create an ever-changing file name.*

#### Process Exists

Condition - Process Exists

Name: Process Exists

If process exists =: TRUE

Process Name: slack

OK Cancel

- This condition will cause the schedule to be executed if a process exists.
- If set to **True**, the schedule will be executed if the process exists.
- If set to **False**, the condition will be executed if the process does not exist.
- Type the name of the process in the drop-down box or use the drop-down arrow to select from a list of currently running processes.

*Tip: Try setting up the schedule that will monitor for certain key processes on your machine. If those process are not running then PBRS can automatically restart them.*

#### Window is Present

Condition - Window Exists

Name: Window is present

If window is present =: TRUE

Window Caption: Microsoft Edge

OK Cancel

- This condition will cause the schedule to be executed if a window is present.
- If set to **True**, the schedule will be executed if the window is present.
- If set to **False**, the condition will be executed if the window is not present.
- Type in the window name, or use the drop-down to pick from a list of currently open windows.

*Tip: Try setting up the schedule that will monitor for certain open Windows on your machine. If those process are running then PBRS can automatically stop them.*

### Unread Email Exists

- Users can send report requests to a specified email address. PBRS will read the email, and, if the conditions are met, fire off the specified report.

Condition - Unread Email Exists

Condition Details

Name: Read My Email

If unread email exists: TRUE

Server Type: IMAP4

Server details

Server Address: smtp.office365.com Port: 993

User ID: karen@christiansteven.com

Password: .....

☒ This server requires an encrypted connection (SSL)

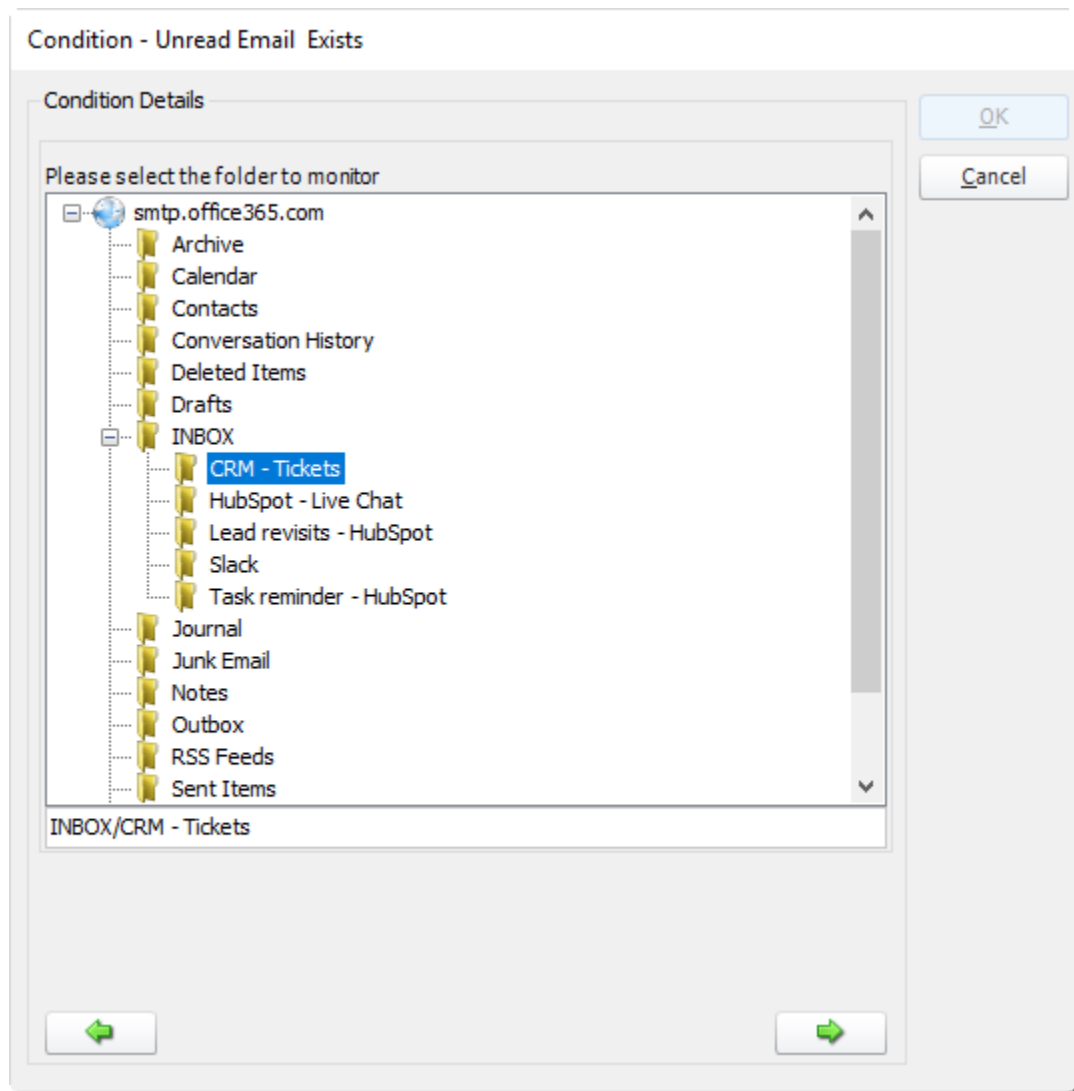
Test

Mailbox Polling

Poll mailbox every (minutes): 5

OK Cancel

- Fill in your server credentials.
- Click **Test**.
- If you have entered them correctly, the green arrow will become available.



- Select the folder that will be monitored.

Condition - Unread Email Exists

Condition Details

Match **ALL** of the following criteria

☐ Match exact phrase

Email Field: **Message** = Search value: **CRM**

Message = CRM

☐ Forward the email ...

☐ Redirect the email To:

☐ Save Attachments To:

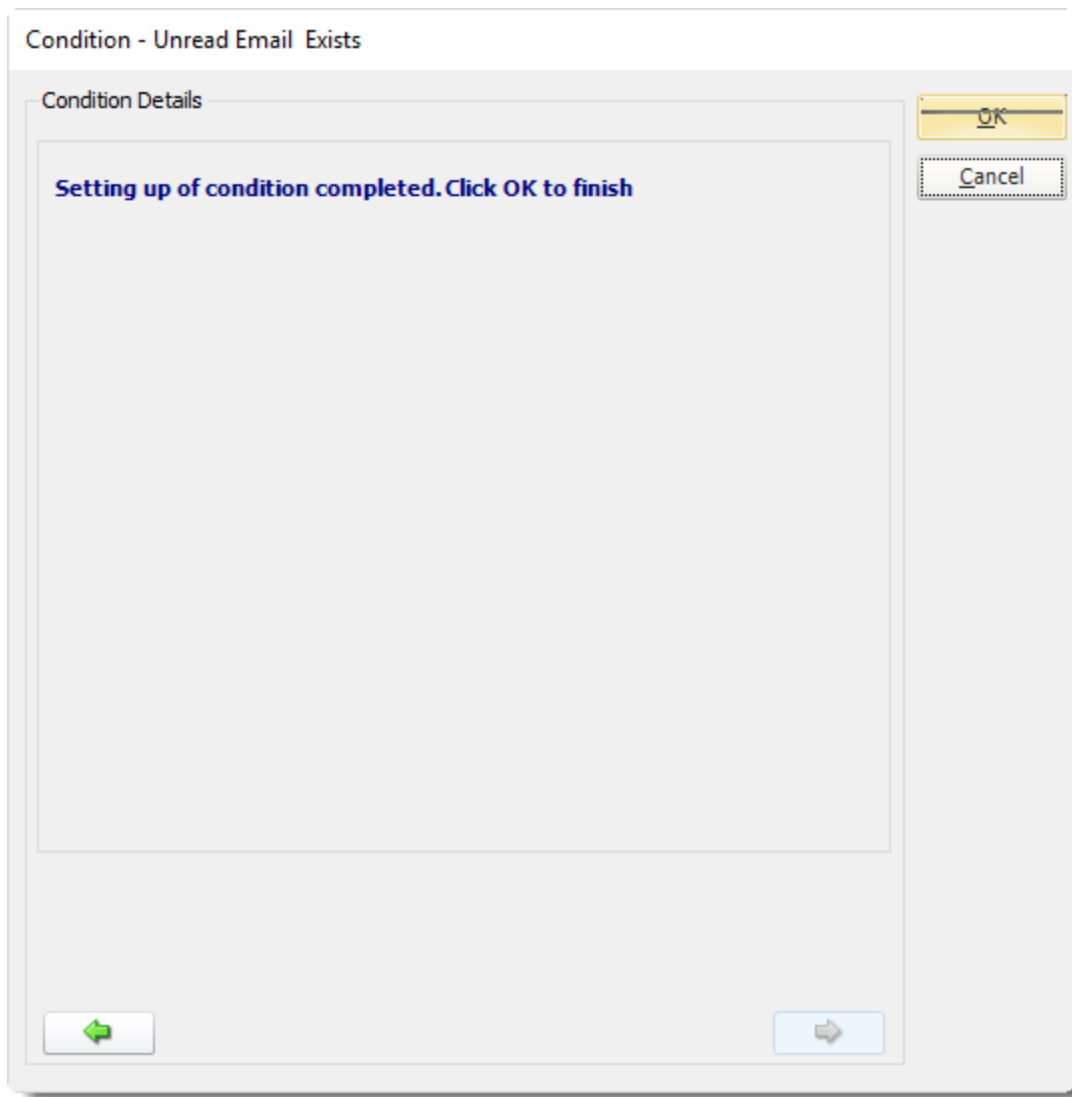
☐ Save entire email to file

☐ Remove matched mail from server

☐ Ignore original text from reply messages

OK Cancel

- Specify the condition. Select the email fields to determine what would meet your requirements.
- **Forward the Email:** Forward the email to another address.
- **Redirect the Email:** Send the incoming mail directly to another address instead of keeping it in the inbox.
- **Save Attachments:** Pull attachments from the email and save them directly to a folder.
- **Remove Matched mail from Server:** Choose to clear the email from the inbox once PBRS has processed it.
- If you do use this function with the condition set to false, then be sure to remove the found email from the mailbox so that the report doesn't get fired off again (each time read emails are found).



- Click **OK**.

How to parse the values in the body of an email and insert them into PBRs fields?

- For an "Unread Email" event, PBRs can read the body text of the email and place selected values into Event-based constants.
- You can also use the "Exact Match" option which will match the Case of the email text. In addition, when this option is used, spaces before and after the phrase are NOT removed and form part of the matching string.

Here is an example:

- Mary has an email that will contain values, and she wants the values to update a database. Here's how she would set it up in PBRs.
- Firstly, PBRs will expect the email text to be in the format [Constant]:[Value]. Here is how Mary will set up her email:

EmployeeID: xxxxx  
EmployeeName:yyyyy

EmployeeStartDate:zzzzzzzz

- As you can see, the required constant is on the left of the colon (:) and the required data is on the right.
- To insert the data into her database, Mary uses an "Update a database" custom task as shown below:

Update database records

Task Name: Update a Record Using Email Data

**General**

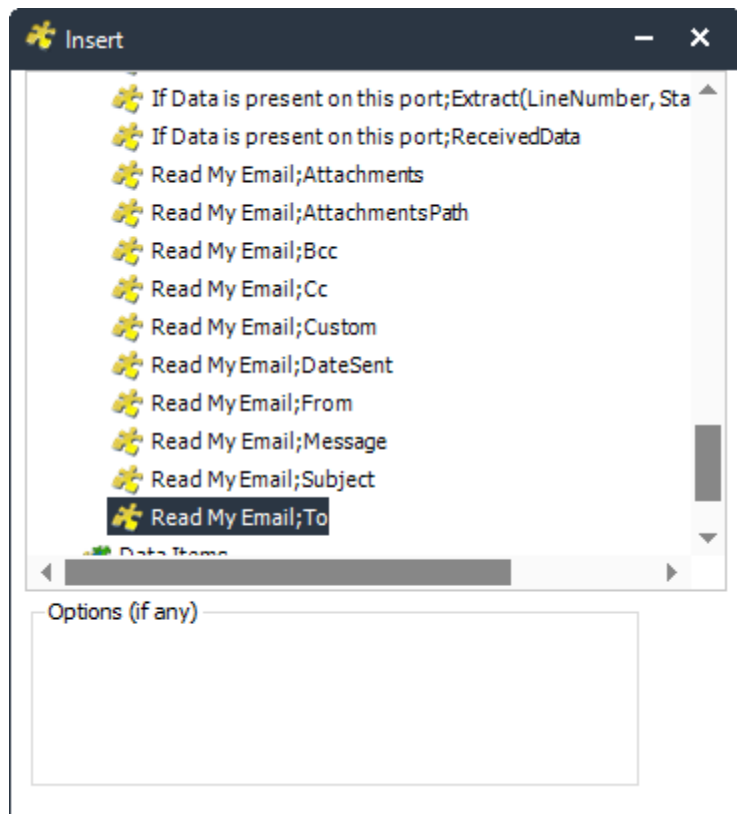
Table containing records to update: Employees

Update this column: EmployeeID = Set its value to: [ ]

Set

Buttons: Skip, OK, Cancel

- She inserts Event-Based Constants, selecting a Custom Constant:



- She types in the Custom Field Descriptor:
- When she drags the Insert, "<[e]Read my Email;To>" is placed in the field:



Update database records

Task Name

**General**

Table containing records to update

Update this column

Set its value to

↑ ↓

Set  
 EmployeeID = <[e]Read My Email;To>

← →

- She clicks the **down arrow** to add the statement to the list. And repeats the process for all the custom constants she will need to parse the email.
- The above instruction tells PBRS to read the email body text and to place the value to the right of "EmployeeID:" in the database.

*The colon (:) is only required in the email body. It is not used as part of the definition process above, but PBRS will automatically read the value to the left of the colon and apply the data to the right of the colon.*

*Tip: Use email body parsing to customize other tasks! Pull information from one email and send an email using the data. Use it to create new database records, and much more!*

### Data received on a port

Condition - Data received on a port

Condition Details

Name

If data has been received

Data is received on the following

Port Number

☐ Monitor on a specific IP address

Recvd data

☒ Match ALL of the following ☐ Match ANY of the following

- PBRs can monitor specified ports for data and then execute tasks such as reports or database updates.
- Name:** Name the Condition.
- If data has been received:** Select true if you wish to monitor for data in the given port, or false if you wish to monitor for the absence of data in the given port.
- Data is received on the following:
  - **Port Number:** Enter the port number that will be monitored.
  - **Monitor on a Specific IP address:** Enter the IP address that will be monitored.
  - **Received Data:** Select the data criteria using the lower menu. PBRs will monitor this data for any data matching your criteria.

## Report Type Wizard

Event-Based Schedule

General

Conditions

Report Type

☒ New Reports

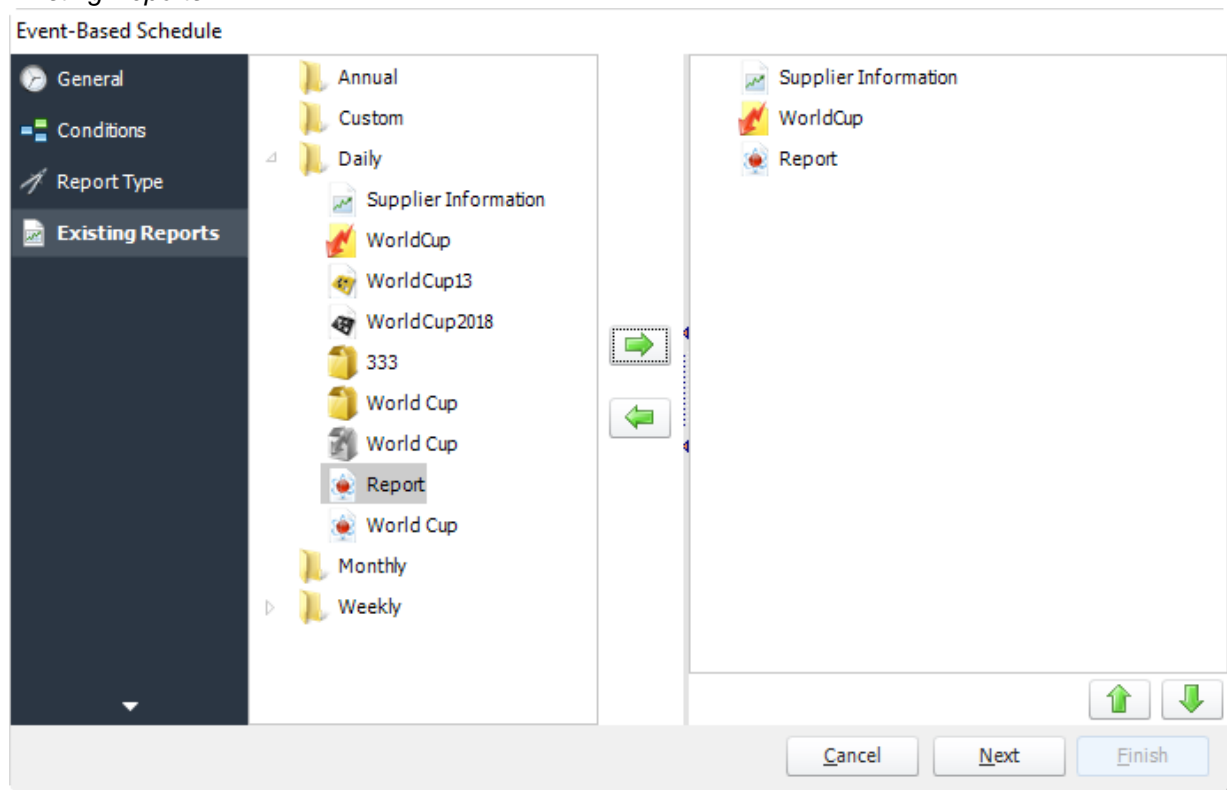
☐ Existing schedules ☐ Execute schedules asynchronously. Use up to  threads

☐ None

Cancel Next Finish

- **New Reports:** Display a screen where you can create a new reports schedule.
  - To add a new Power BI report, [click here](#).
  - To add a new SSRS report, [click here](#).
- **Existing Schedules:** Displays a list of existing schedules in PBRs for you to choose from.
- **None:** Select this option if no schedules are to be ran if the conditions are met and only Customs Actions will be used.

## Existing Reports



- A list of existing schedules will be displayed in the left-hand pane.
- Click on the schedule that needs to run if the conditions are met and use the green arrow to select it.
- Schedules that are going to run if the conditions are met are shown in the right-hand pane.
- Click **Next** to continue.

## Exception Handling Wizard

Event-Based Schedule

General

Conditions

Report Type

Existing Reports

**Exception Handling**

Exception Handling

Treat as "error" if not completed in 30.00 mins. ☒ Auto-calculate

On error, retry executing schedule every 0 mins up to 3 times.

Hours of Operation

☒ Use custom hours of operation Business Hours

Schedule Priority

Set the priority of this schedules to

3 - Normal

1 - High

2 - Above Normal

3 - Normal

4 - Below Normal

5 - Low

Cancel Next Finish

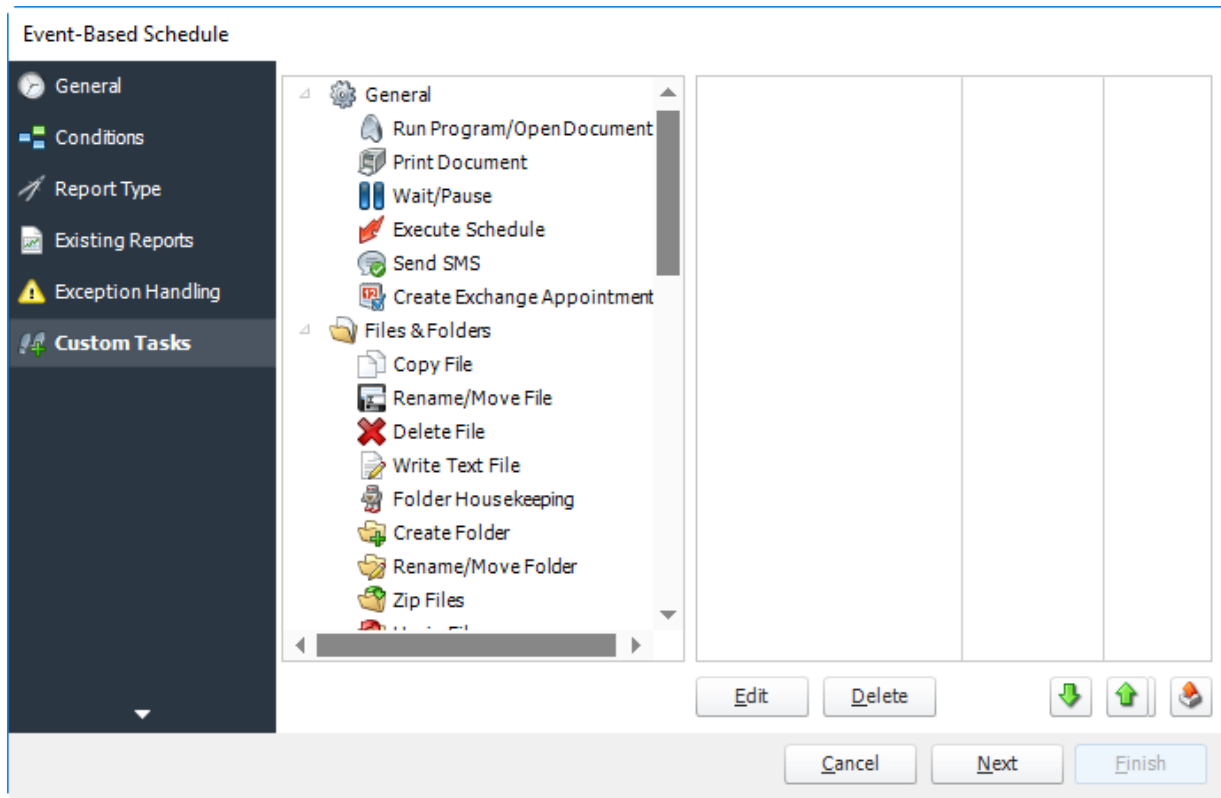
- Reports fail for any number of reasons - database connectivity issues, database busy, network issues, and more. This screen gives you the ability to tell PBRS what to do if it encounters an error.
- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Hours of Operation:** Event-based schedules can poll 24 hours a day if required. Checking this option will allow you to set a specific time frame for when the event-based schedule should run.
- **Schedule Priority:** Set the priority level of the schedule. This will come into play when other schedules are running at the same time. If the priority is set to High then the event-based schedule will take priority over other schedules in the queue.
- If the priority level is set to low then it will be at the bottom of the queue and the other schedules will be ran first.

- Click **Next** to continue.

## Custom Tasks Wizard



- In the section, you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto-triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **Next**.
- In the Event-Based Schedule, you can select a custom task to run as a result of any of the conditions being met.

For Example:

- Select the DSN name you want to update.

*Hint: In Event-Based, you can select another DSN to run tasks.*

Update database records

Task Name

**General**

DSN Name

UserID

Password

Update database records



Task Name

**General**



Table containing records to update

Update this column

Set its value to

Set  
SupplierID = <[e]Reports Exists;[CustomerID]>



Update database records

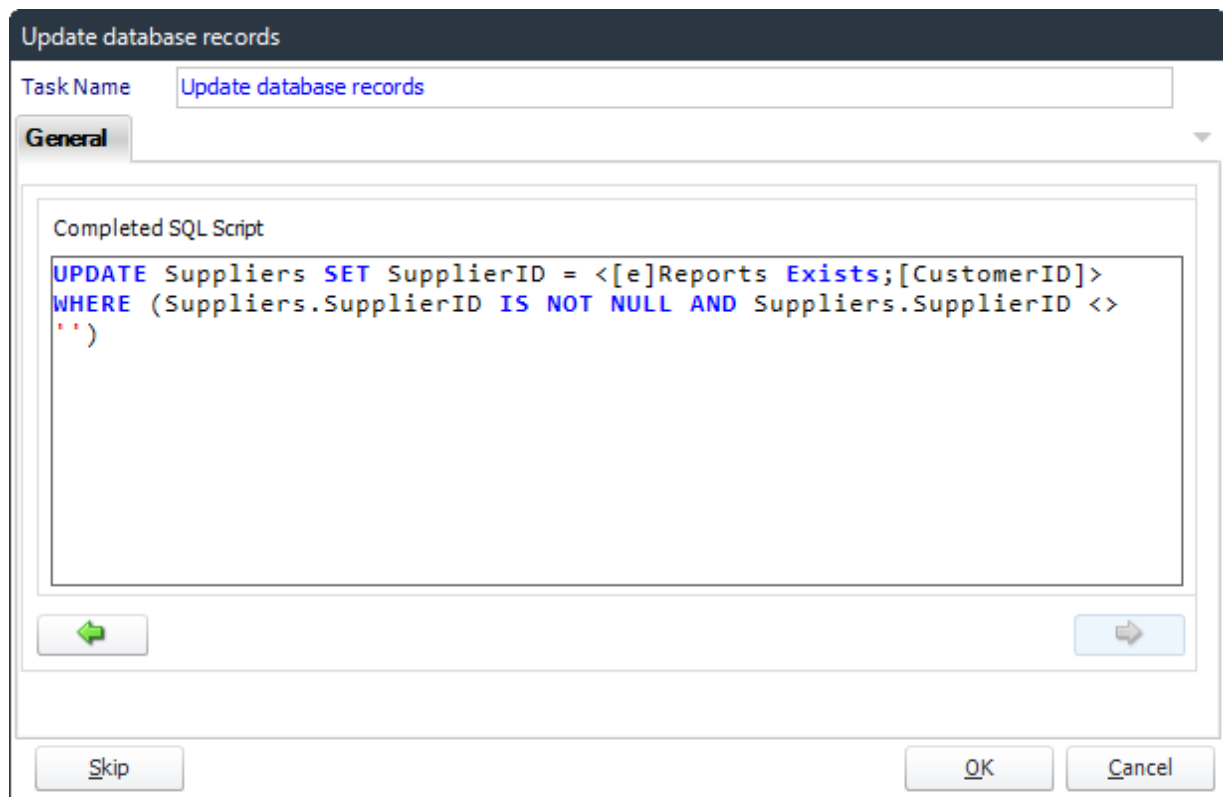
Task Name

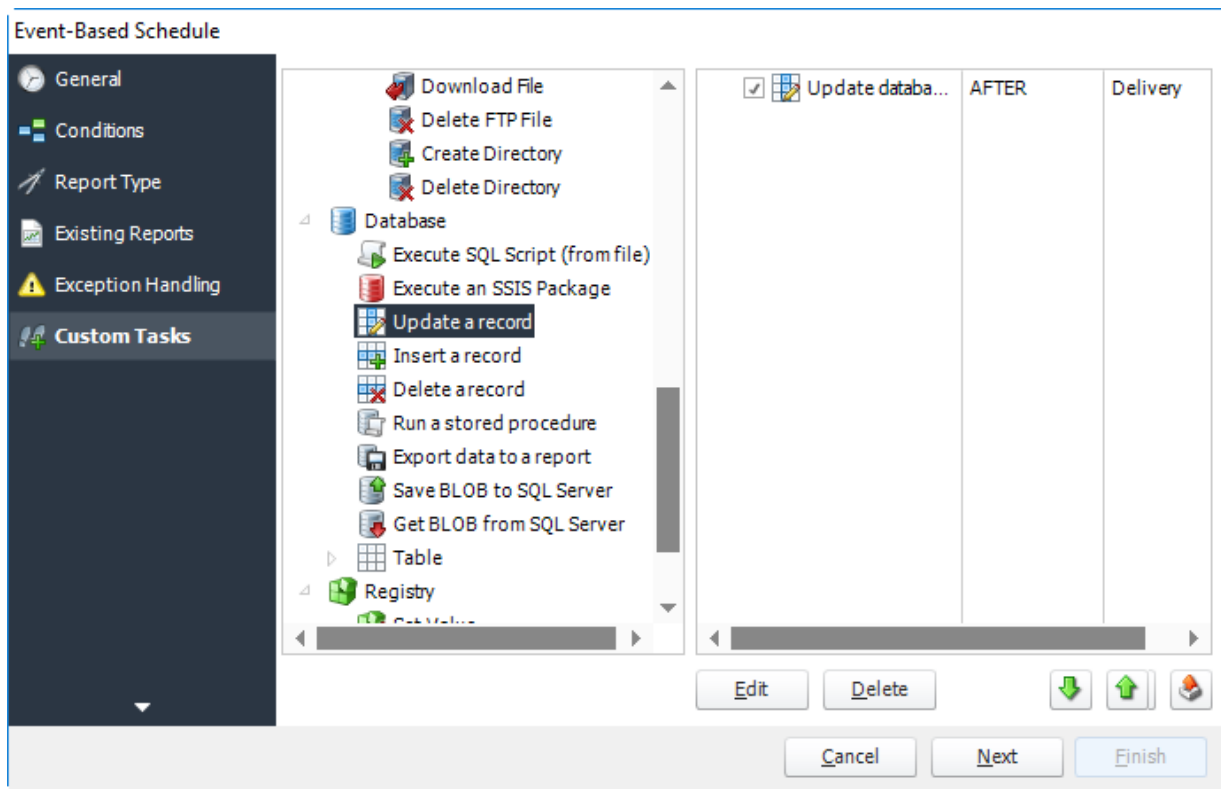
**General**

Only update records where

☒ And ☐ Or


Where





*Hint: When sending an email you can use Event-Based inserts to reference the condition that triggered the email.*

- For Example:

 Send an Email

Task Name

**General**

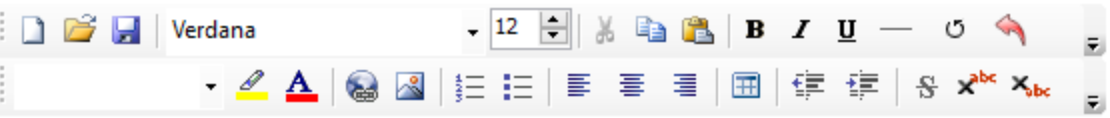
To...

Cc...

Bcc...

Attach

Subject



Hello,

New Customer Record

<[e]DBR;[ContactName]>  
 <[e]DBR;[ContactTitle]>  
 <[e]DBR;[Email]>  
 <[e]DBR;[Phone]>

☐ Throw error and do not send the email if attachments are missing

Mail Format  SMTP Server

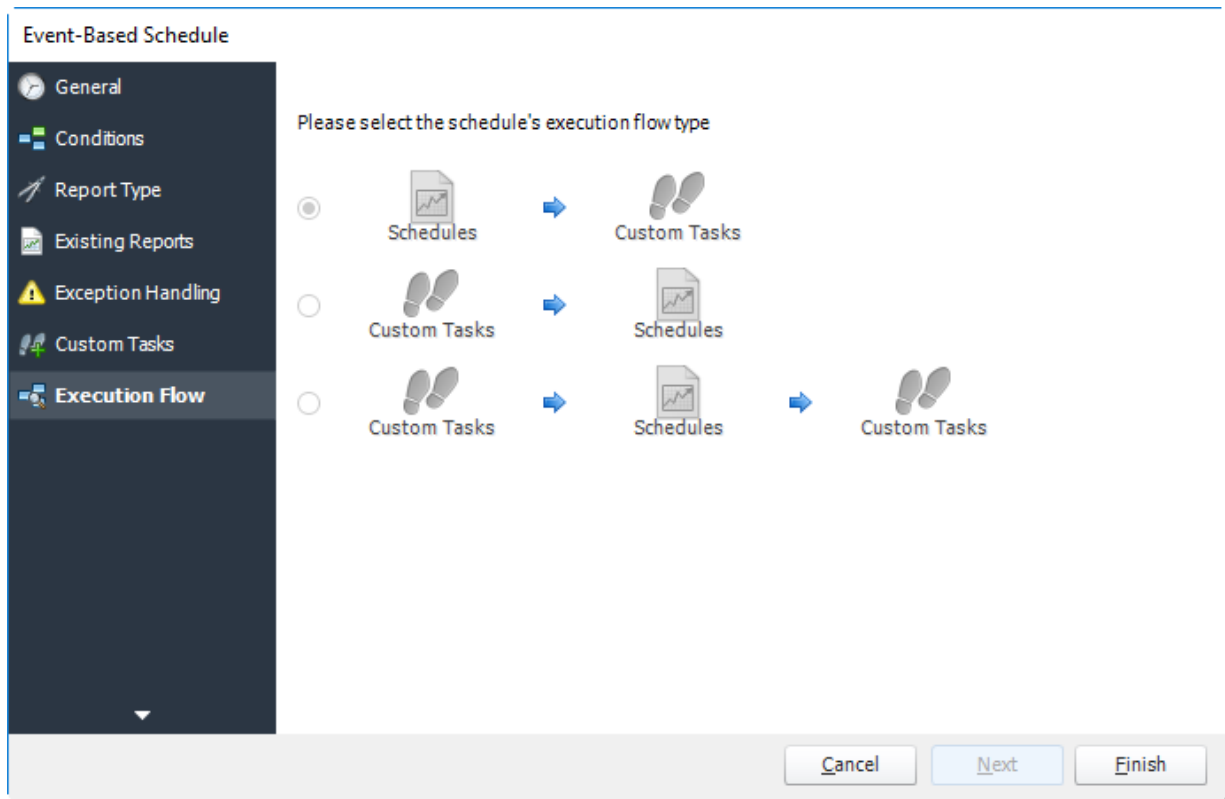
Customize sender details (optional)

Name:

Address:

- After adding all the required Custom Actions, click **Next** to continue.

## Execution Flow



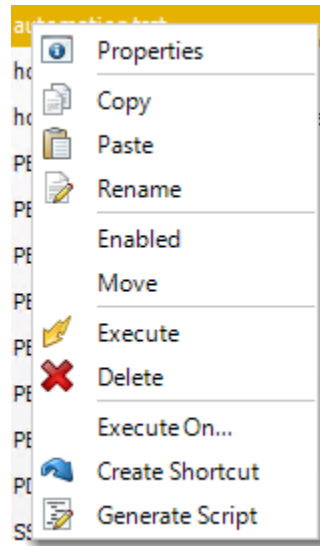
- If you have schedules AND tasks being executed as part of the event-based schedule you can determine the order.
- For Example:

Run Schedules then the Custom Actions  
OR

Run the Custom Actions first, then the schedules, then run the Custom Actions again.

- Click **Finish**.

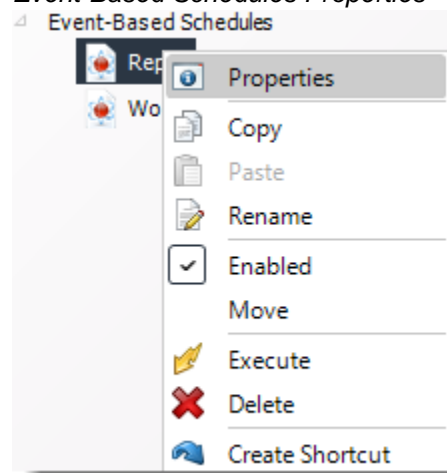
## Event Based Schedule Context Menu



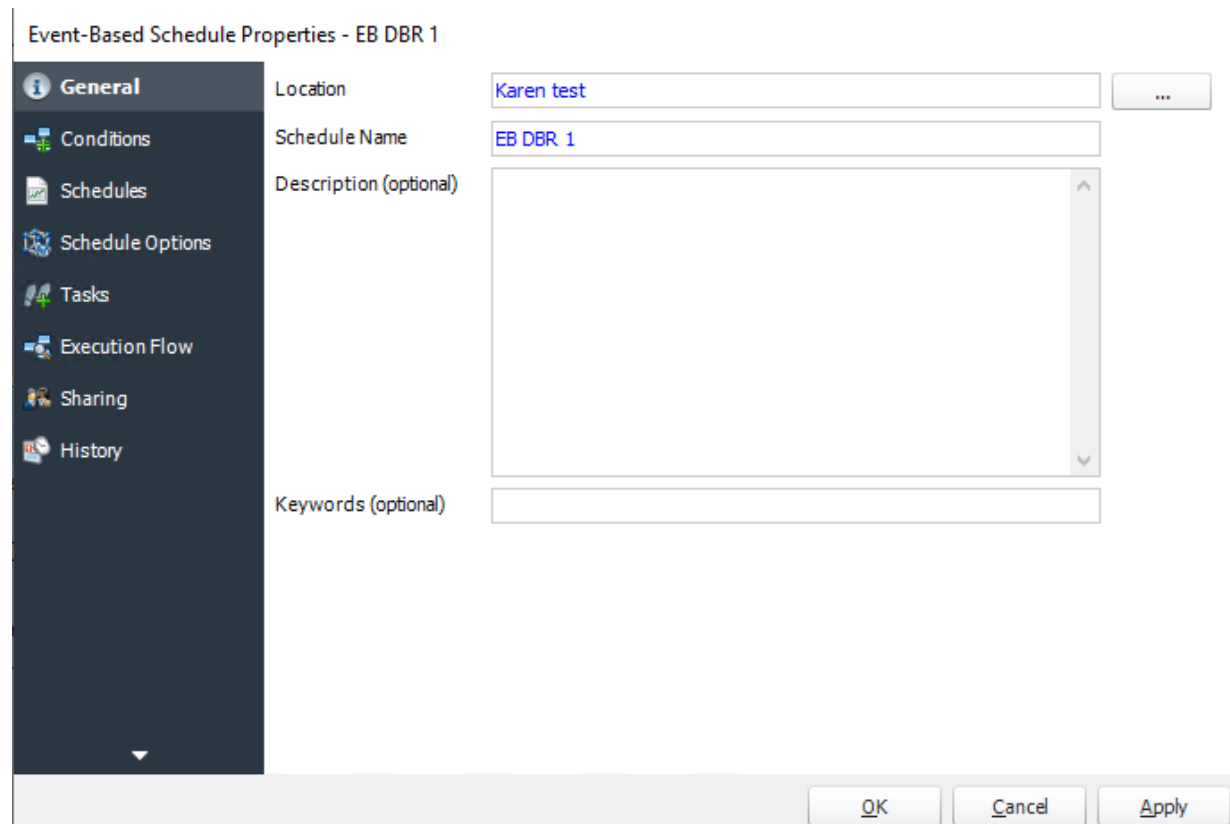
Right-Click on a schedule to see the following actions.

- **Properties:** Access the schedule set up for editing. Or you can just double click on the schedule.
- **Copy:** Use this to copy an existing schedule. You can then paste it into another folder or the same folder. Simply open the folder you wish to paste to, right-click in the "white" space and select "Paste". Follow the on-screen instructions to complete the process.
- **Paste:** Paste a previously copied schedule.
- **Rename:** Rename a schedule.
- **Enabled:** Schedules are enabled when there is a check beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check. Disabled schedules will not run till they are enabled again.
- **Execute:** This will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. This only moves on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.

### Event-Based Schedules Properties



- To access your schedule properties, right click on a schedule and select properties.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**



- **Conditions**

Event-Based Schedule Properties - EB DBR 1

**General**

Fulfill ANY of the following conditions

Name	Condition	Run If
asd	DATABASE RECORD EXISTS	TRUE

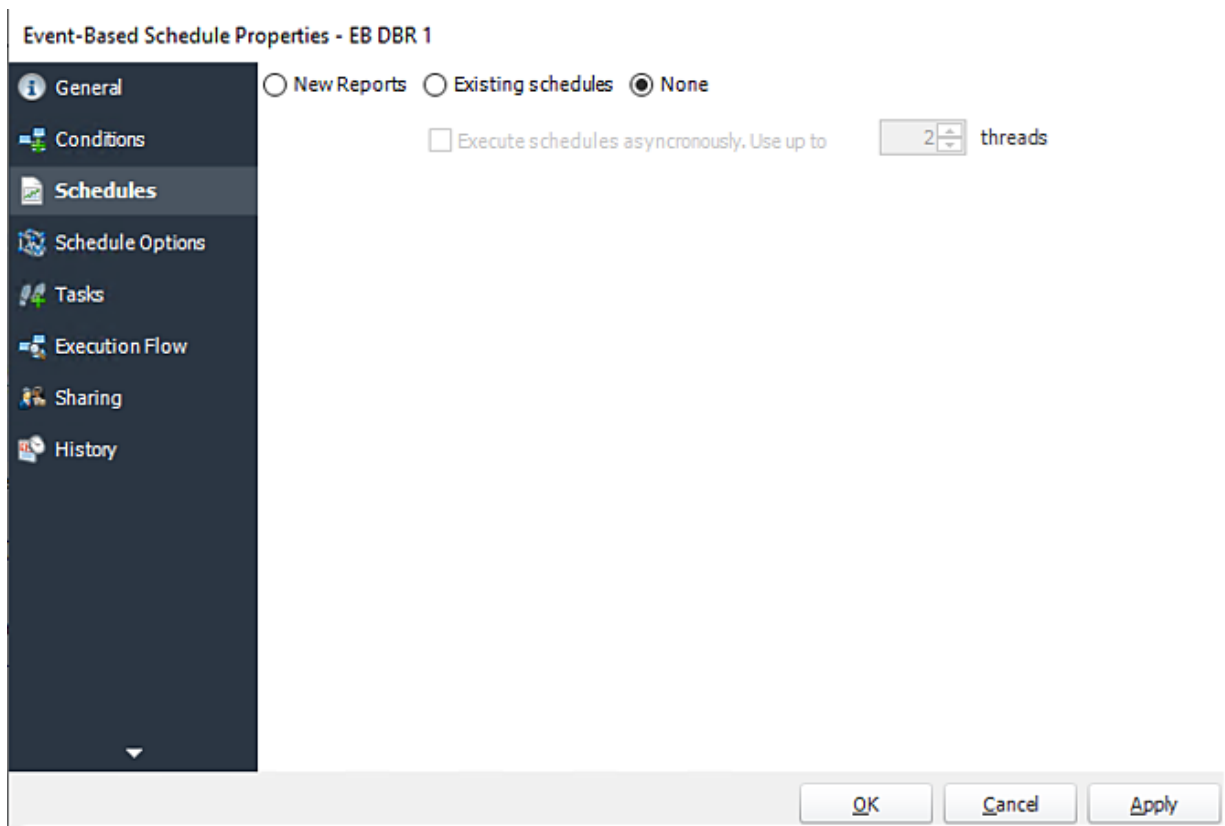
Add  
Edit  
Delete  
Refresh

☐ Enabled

OK Cancel Apply

## •Reports





- Schedule Options

Event-Based Schedule Properties - EB DBR 1

**General**

**Conditions**

**Schedules**

**Schedule Options**

**Tasks**

**Execution Flow**

**Sharing**

**History**

Exception Handling

Treat as "error" if not completed in  mins. ☒ Auto-calculate

On error, retry executing schedule every  mins up to  times.

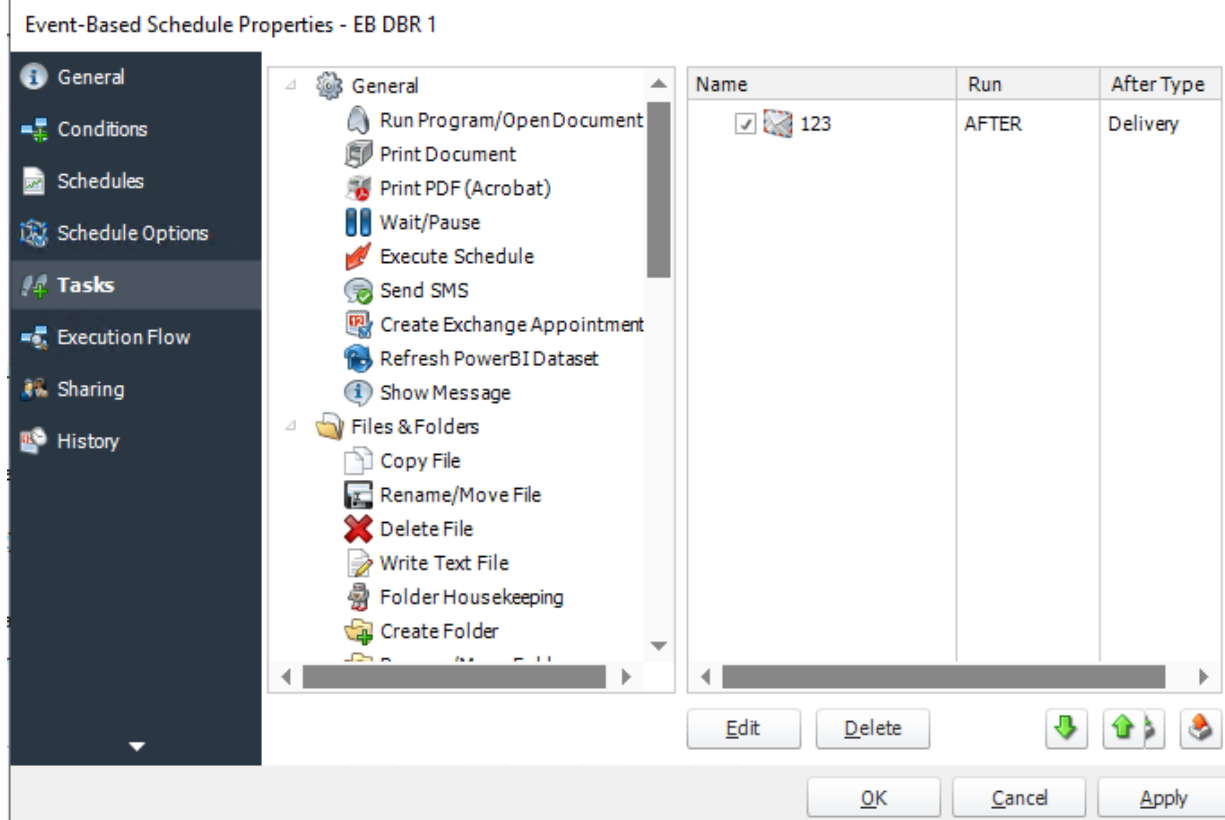
Hours of Operation

☐ Use custom hours of operation

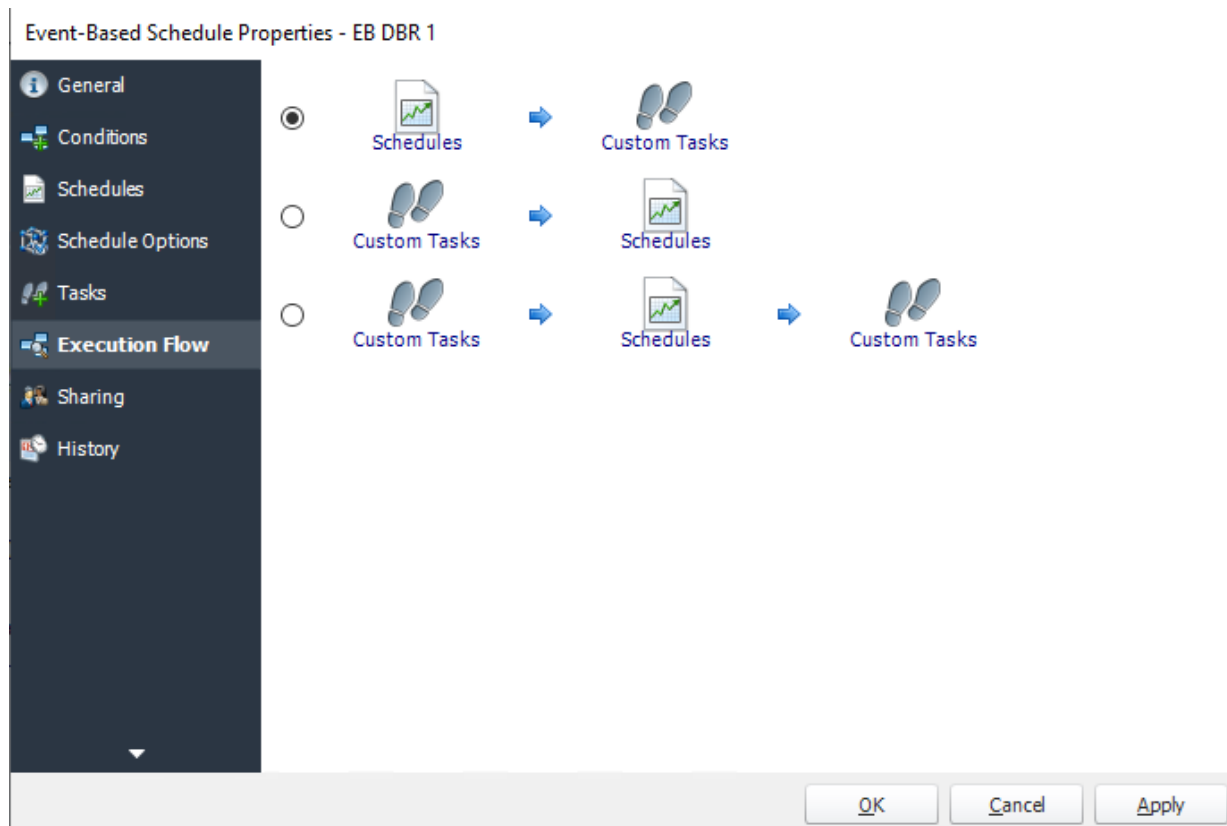
Schedule Priority

Set the priority of this schedules to

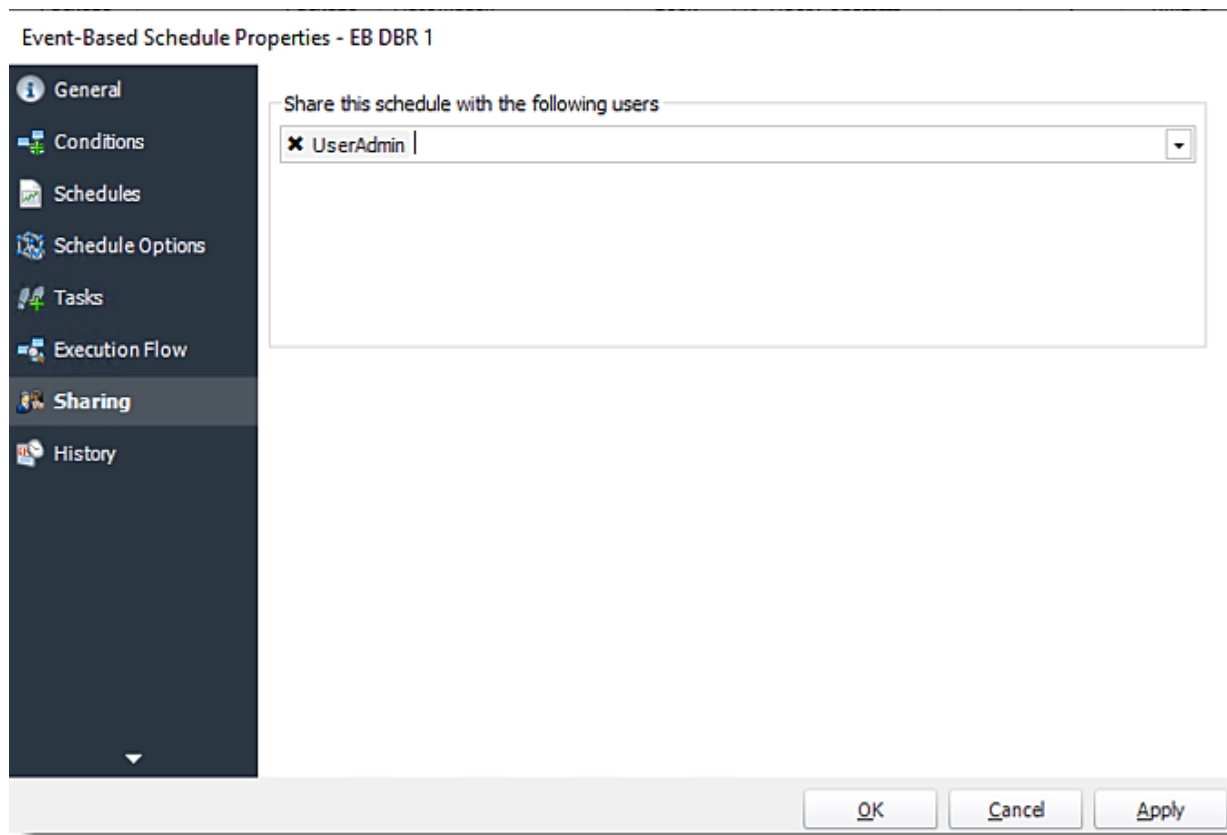
•Tasks



### •Execution Flow



- **Sharing:** Here you can share this schedule with multiples users.



- **History:** Review the schedule's history. Successes, failures, and other data is located here.

Event-Based Schedule Properties - EB DBR 1

	Started	Finished	Details
<div><div>General</div><div>Conditions</div><div>Schedules</div><div>Schedule Options</div><div>Tasks</div><div>Execution Flow</div><div>Sharing</div><div>History</div></div>			

Clear

Refresh

OK

Cancel

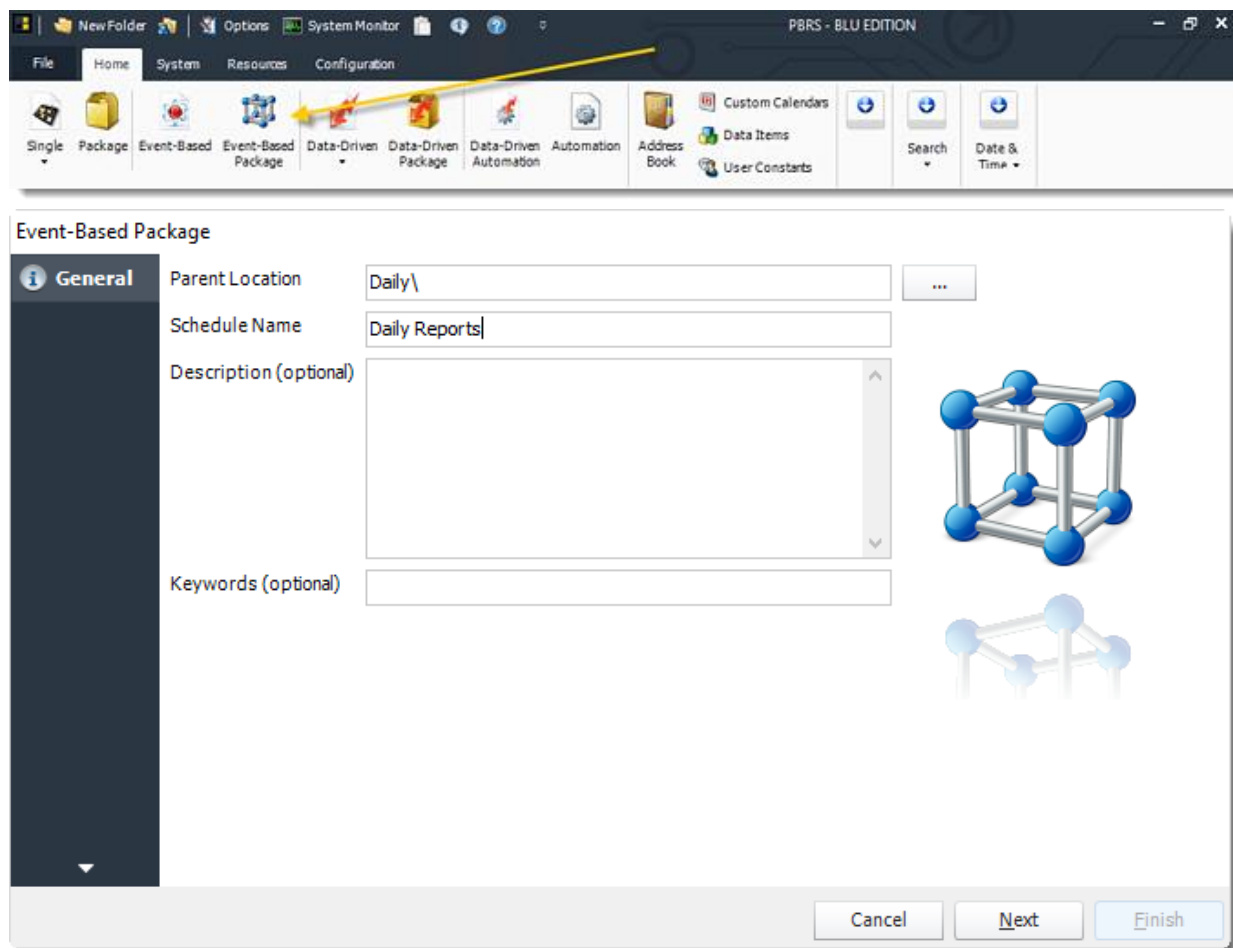
Apply

How do I setup Event Based Packages in PBRs?

**An Event Based Package Schedule allows you to run several Event Based schedules at the same time. It also allows you to determine the timing and order of execution of the Event Based schedules in the package.**

How do I create Event Based Package in PBRs?

- Go to **Event Based Package**.



General Wizard

- Package Name:** The name of the package.
- Create In:** The PBRs folder where the package is stored.
- Description:** A short description to help other users identify exactly what this schedule is and what it is expected to do.
- Keyword:** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Event-Based Package

**General**

Start Date: 9/24/2018 ☐ End Date: 9/24/3017 ☐

**Schedule**

Repeat every: 1 days

Schedule time: 11:29:37 AM ☐ Exception calendar:

Next to run on: 9/24/2018 11:29:37 AM

☐ Repeat every: 0.25 until: 11:29:36 AM

☒ Enable this schedule and execute it on: DEFAULT

Cancel Next Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*



Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday
 ☒ Tuesday
 ☒ Wednesday
 ☒ Thursday
 ☒ Friday

☒ Saturday
 ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth 
☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other >>

☒ Use the following options

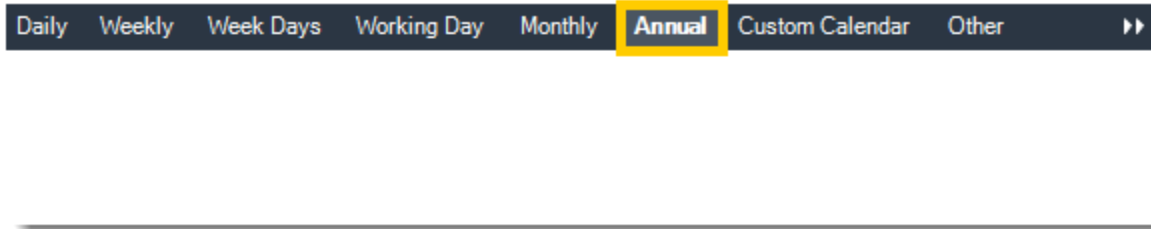
The  of the month

☒ January
 ☒ April
 ☒ July
 ☒ October

☒ February
 ☒ May
 ☒ August
 ☒ November

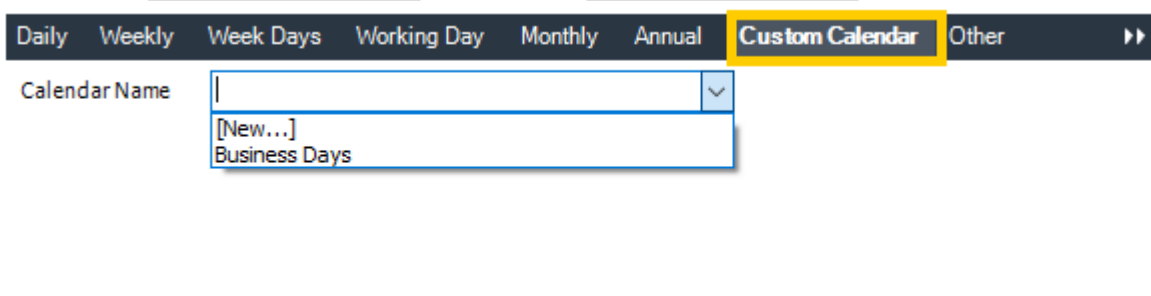
☒ March
 ☒ June
 ☒ September
 ☒ December

- **Annual:** Run the schedule every year at a specified time.



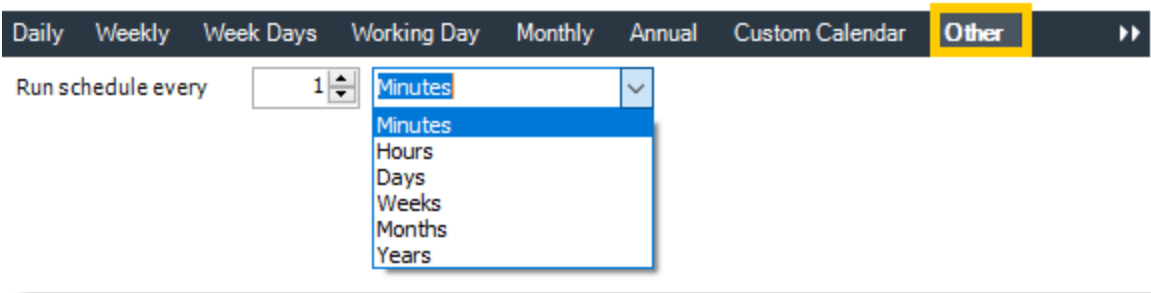
A screenshot of a software interface showing a horizontal menu with options: Daily, Weekly, Week Days, Working Day, Monthly, Annual, Custom Calendar, and Other. The 'Annual' option is highlighted with a yellow border. Below the menu is a large empty rectangular area.

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.



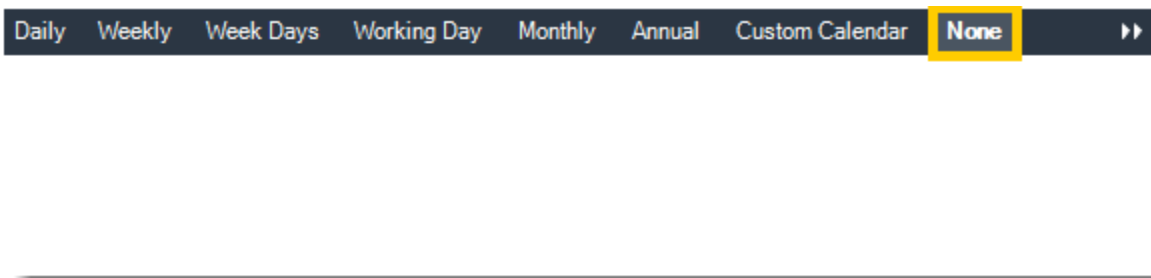
A screenshot of a software interface showing a horizontal menu with options: Daily, Weekly, Week Days, Working Day, Monthly, Annual, Custom Calendar, and Other. The 'Custom Calendar' option is highlighted with a yellow border. Below the menu, there is a label 'Calendar Name' followed by a text input field and a dropdown arrow. A dropdown menu is open, showing the options '[New...]' and 'Business Days'.

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.



A screenshot of a software interface showing a horizontal menu with options: Daily, Weekly, Week Days, Working Day, Monthly, Annual, Custom Calendar, and Other. The 'Other' option is highlighted with a yellow border. Below the menu, there is a label 'Run schedule every' followed by a numeric input field containing '1' and a unit dropdown menu. The dropdown menu is open, showing the options: Minutes, Hours, Days, Weeks, Months, and Years.

- **None:** No scheduling is required for this item.



A screenshot of a software interface showing a horizontal menu with options: Daily, Weekly, Week Days, Working Day, Monthly, Annual, Custom Calendar, and None. The 'None' option is highlighted with a yellow border. Below the menu is a large empty rectangular area.

- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Schedules Wizard

Event-Based Package

The screenshot shows the 'Schedules Wizard' window for an 'Event-Based Package'. On the left is a dark sidebar with three tabs: 'General' (with an info icon), 'Schedule' (with a clock icon), and 'Schedules' (with a gear icon). The 'Schedules' tab is selected. The main area has a header 'Schedule Name' above a large white text input field. To the right of this field is a yellow 'Add' button with a dropdown arrow, which is open, showing 'New' and 'Existing' options. Below the text field are two buttons with green up and down arrows. At the bottom right of the window are three buttons: 'Cancel', 'Next', and 'Finish'.

- Click **Add**.

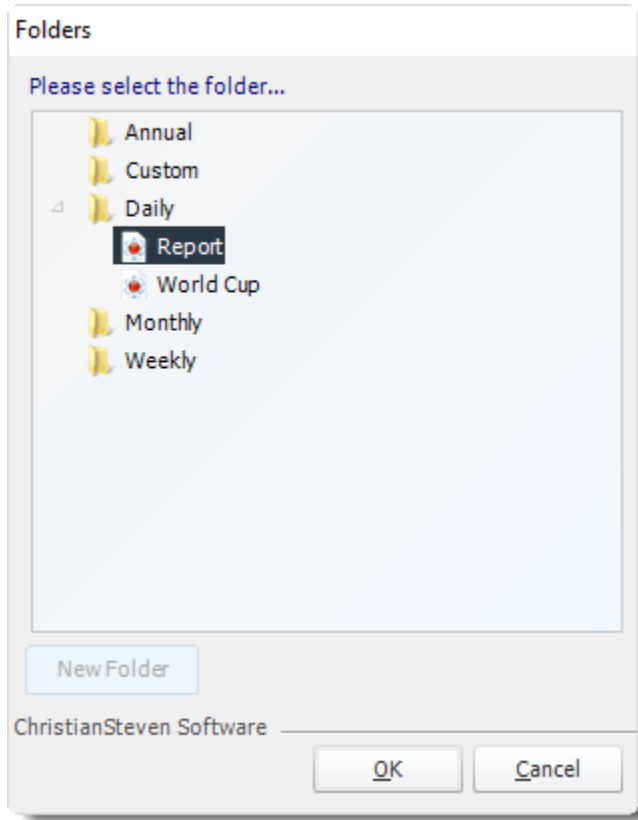
## New Reports

- Display a screen where you can create a new reports schedule.

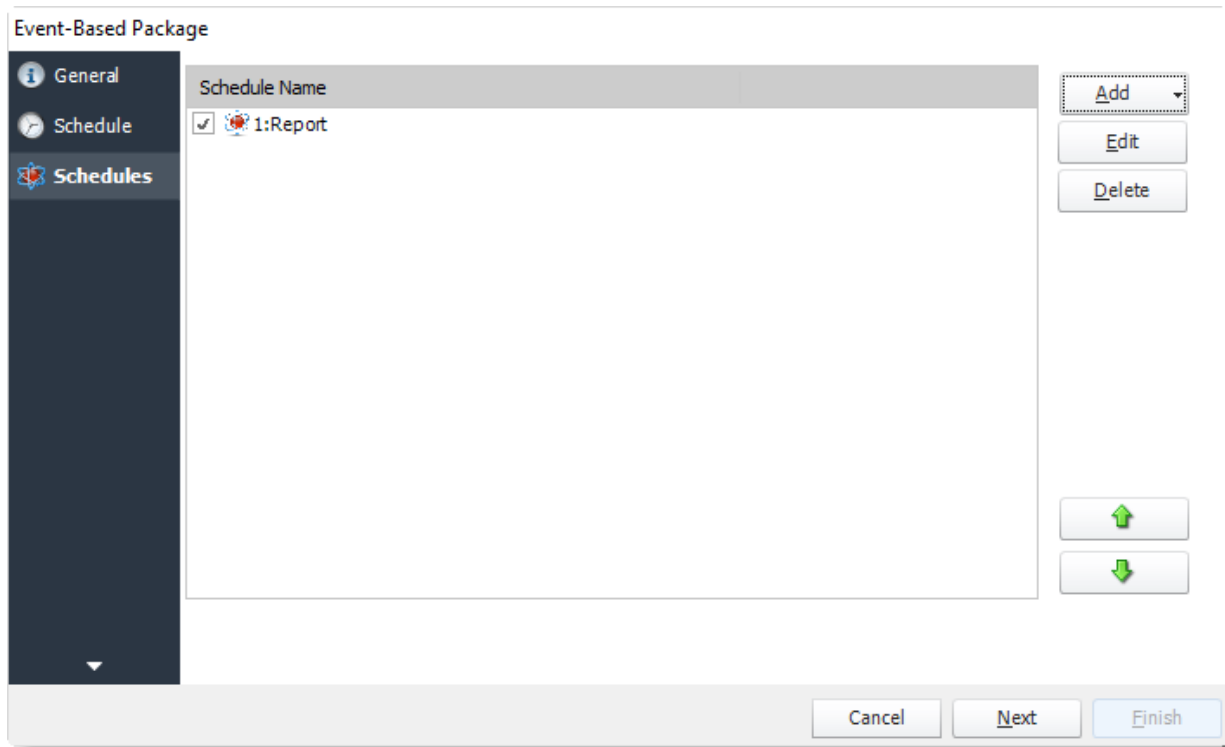
- To add a new Event Based Report, [click here](#).

#### *Existing Schedules*

- Displays a list of existing schedules in PBRS for you to choose from.

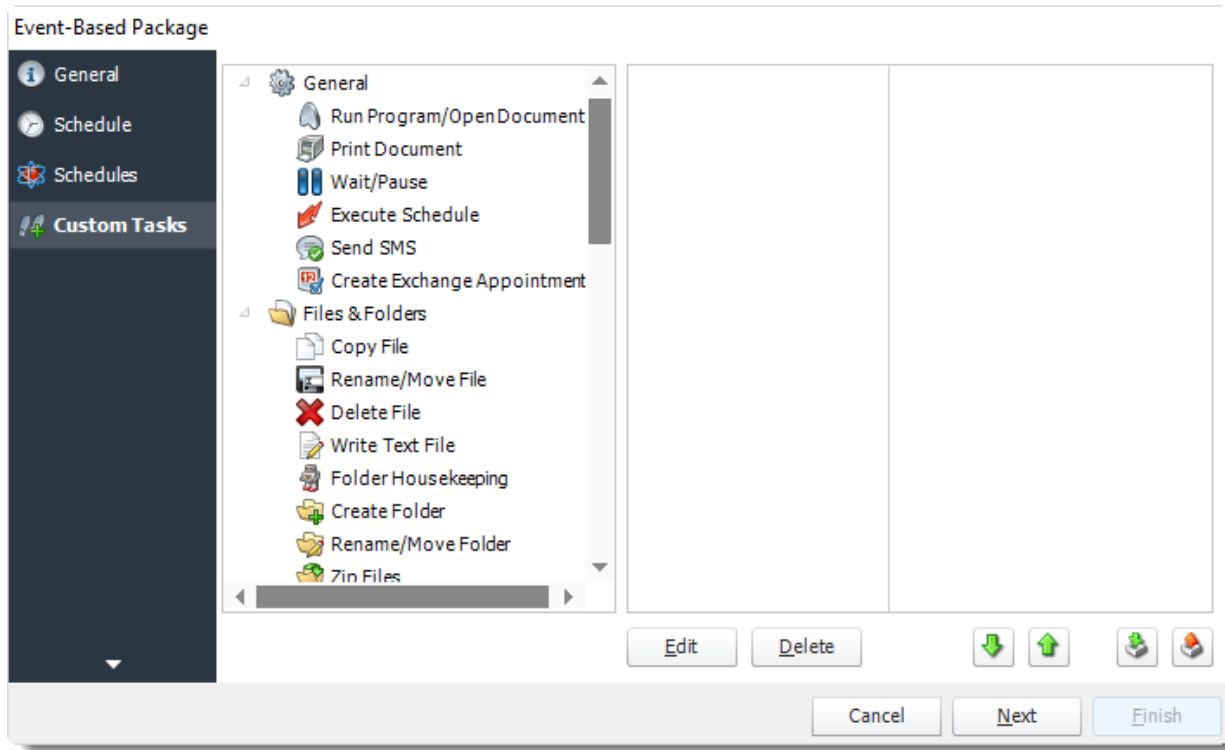


- Select the schedule and click **OK**.



- Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **next**.

Click **Next** to continue to the next wizard section.

## Execution Path Wizard

Event-Based Package

General  
Schedule  
Schedules  
Custom Tasks  
**Execution Path**

☒ Schedules → Custom Tasks  
☐ Custom Tasks → Schedules  
☐ Custom Tasks → Schedules → Custom Tasks

Exception Handling

Treat as "error" if not completed in  minutes

Cancel Next Finish

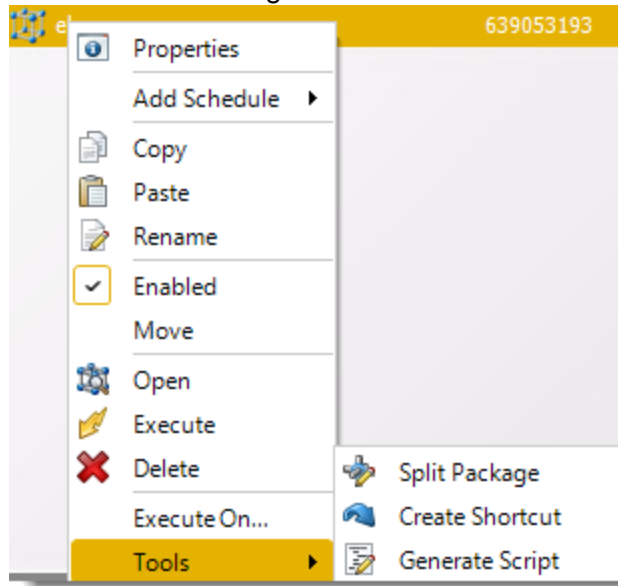
- If you have schedules AND tasks being executed as part of the event based schedule you can determine the order.
- For Example:

Run Schedules then the Custom Actions  
OR

Run the Custom Actions first, then the schedules, then run the Custom Actions again.

- Click **Finish**.

## Event Based Package Schedule Context Menu



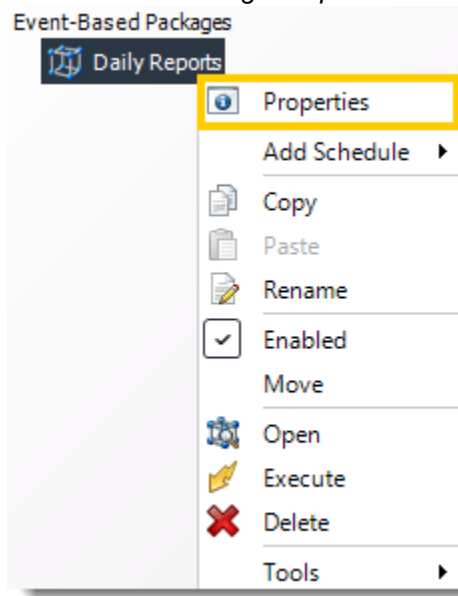
Right-Click on a schedule to see the following actions:

- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Add Schedule:** You may add new reports or existing.
- **Copy:** Use this to copy an existing schedule. You can then paste it into another folder or the same folder. Simply open the folder you wish to paste to, right-click in the "white" space and select "Paste". Follow the on-screen instructions to complete the process.
- **Paste:** Paste a previously copied schedule.
- **Rename:** Rename a schedule.
- **Enabled:** Schedules are enabled when there is a check beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check. Disabled schedules will not run till they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Open:** This will open the package and show its constituent reports.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Split Package:** This will split all the constituent reports in the package.

*This process will automatically delete the package once the splitting process is completed.*

- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRS.

### Event-Based Package Properties



- To access your schedule properties, right click on a schedule and select properties.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**



Event-Based Package

**General**

Location: QA Test

Schedule Name: EB Package 0801

Description (optional):

Keywords (optional):

OK Cancel Apply

•Schedule

Event-Based Package

General

Start Date 1/ 8/2020 End Date 1/ 8/3019

Schedule

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 2:30:00 PM Exception calendar

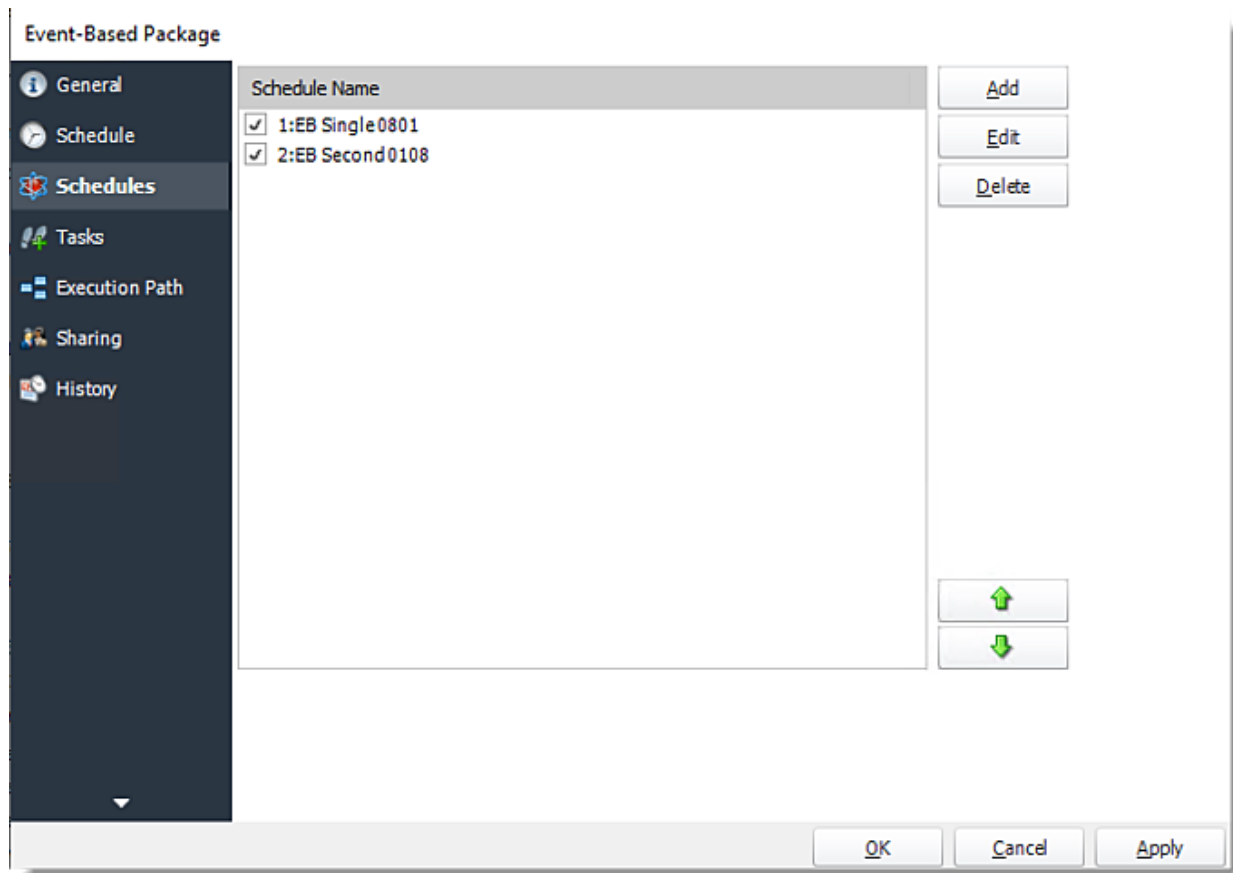
Next to run on 1/10/2020 2:30:00 PM

Repeat every 0.25 hours until 2:10:00 PM

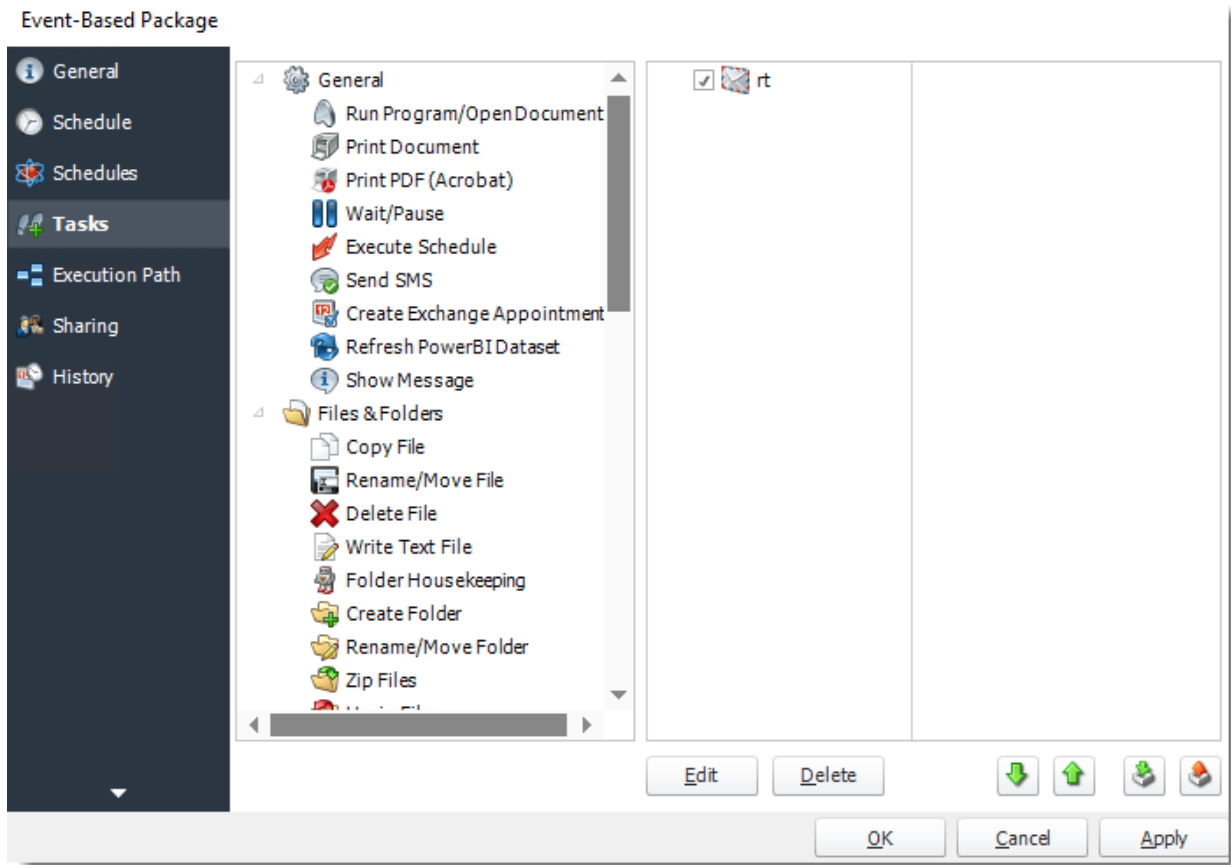
Enable this schedule

OK Cancel Apply

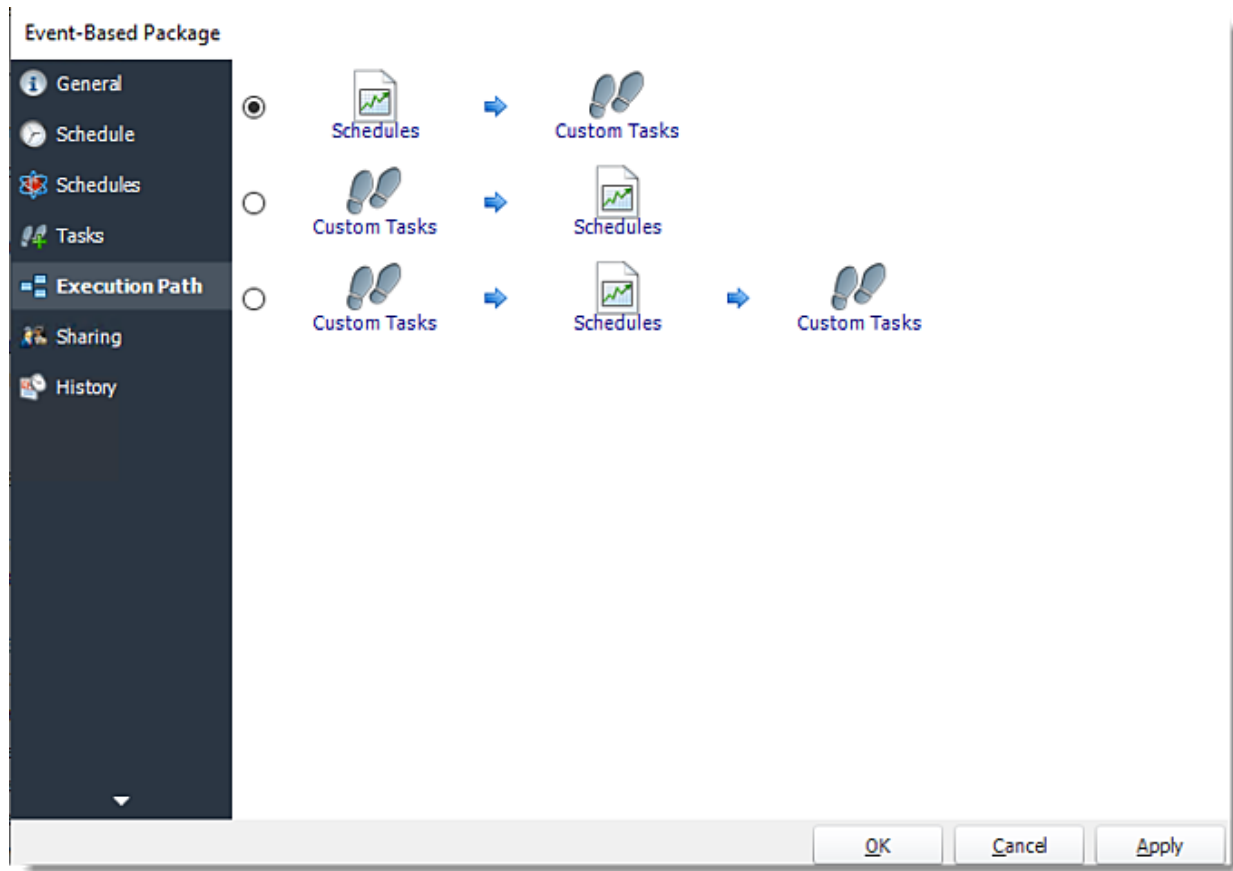
## • Schedules



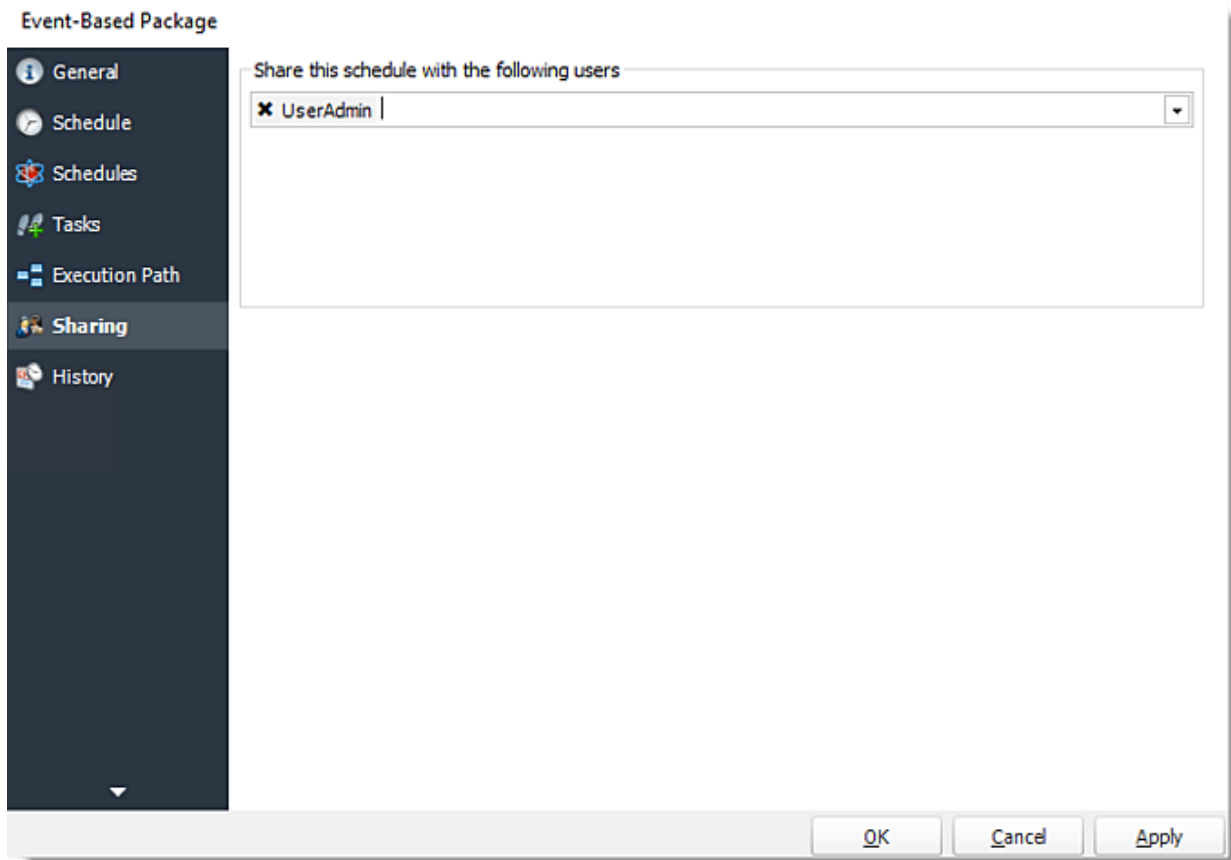
•Tasks



- Execution Path



- **Sharing:** Here you can share this schedule with multiples users.



- **History:** Review the schedules history. Successes, failures, and other data is located here.

Event-Based Package

General

Schedule

Schedules

Tasks

Execution Path

Sharing

History

Started	Finished	Details
✓ 1/8/2020 2:37:31 PM	1/8/2020 2:37:48 PM	Success!
✓ 1/9/2020 4:38:17 PM	1/9/2020 4:38:36 PM	Success!

Clear

Refresh

OK

Cancel

Apply

## How do I use Data Driven Schedules for Power BI Service Reports & Dashboards in PBRs?

**A data-driven schedule allows you to drive all variables of your reporting requirements (filters, destinations, output formats, etc.) from database tables and queries at run time. Burst your reports out to multiple formats and recipients.**

This article applies to:

- Power BI Service Reports & Dashboards (Cloud - Power BI Service)

### Data-Driven Schedules for Power BI Service Reports & Dashboards

A data-driven schedule allows you to drive all variables of your reporting requirements (filters, destinations, output formats, etc.) from database tables and queries at run time. You can also use static text and default values should you wish. You can use Data-Driven schedules for a number of scenarios. Use a data-driven schedule for bursting reports based on filter values to specific formats like PDF, Excel and so on.

*Here are some examples:*

- Distribute a report to a fluctuating list of recipients. For example, you can distribute a report throughout a large organization where recipients vary from one month to the next, or use other criteria that determines group membership from an existing set of users. E.g. select \* from mytable where firstname = 'john' will generate the report and distribute only for records where the recipient's first name is John.
- Filter the report output using report filter values that are retrieved at run time. For example, the filter value returned from the table for the Last Name will be "Doe" for John Doe and "Smith" for John Smith.
- Determine the delivery type and report format dynamically at run time. For example, John Smith gets the report as a PDF file by email with a customized email body and John Doe gets the report as an excel spreadsheet by FTP upload to his webserver.

The following simple example will illustrate the process of creating a Data-Driven Schedule.

*Scenario: You have a report which has a large number of filter and destination combinations. Representing the combinations in a table may look something like the example below (Yellow = filters)*

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe		<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co</a>	<a href="#">jwu</a>

- You need to have the report run once for each record. The filter values entered in the table above should populate the filters in the report and the report should be delivered to the destinations shown in the table.



- Please note that with the above data when the schedule runs, the following will occur:
  - John Doe will receive only one email for the reports from sectors 1 and 3. He will also get the reports from sectors 2, 3 and 34 delivered to his reports disk location.
  - Peter Crimble will have his report printed on the Printer he specified.
  - Jorge Minola will have a copy of his report sent to John Doe to the disk location he specified and a copy uploaded to his FTP server and folder.
  - Anil Maharaja will receive an email as requested.
  - John Wu will have his report delivered to his email and FTP server as requested.

*Note that as the data changes in the database to reflect the requirements, the reports will be delivered as necessary without requiring any changes to the schedule in PBRS.*

*Using a Data Driven schedule PBRS will reel through the database table and generate and deliver a report for each record using the information provided.*

*The data driver allows for bursting reports to different formats and different destinations as well as defining other more traditional values like filters.*

How do I create Data-Driven Schedule for Power BI Service Reports & Dashboards?

- Go to **Data-Driven** and go to **For Power BI Service** and select **Reports & Dashboards**.



## Building a Data Driver Wizard

The screenshot shows a window titled "Data-Driven Schedule Wizard" with a yellow sidebar on the left labeled "Data-Driver". In the main area, there are two radio buttons: "SQL Data Driver" (which is selected) and "JSON Data Driver". Below these is a large rectangular box labeled "SQL Data selection criteria". Underneath this box is a "Key Column" label followed by a dropdown menu. To the right of the dropdown is a "Build" button. Below the "Key Column" section, there is a checkbox labeled "Use up to" followed by a spinner box containing the number "8" and the text "threads to run this schedule". Below that is another checkbox labeled "Group reports together by email address (email destination only)". At the bottom right of the window are three buttons: "Cancel", "Next", and "Finish".

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes. You can either select SQL Data-Driver or JSON Data-Driver.

## SQL Data Driver

Get values from database

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple Advanced

Only return records where

And Or

Where

Parse

OK Cancel

- **ODBC Datasource Name:** Check this option to sue ODBC DSN. Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs*

(more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRS should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information on the "Get Values From Database" interface, [click here](#).
- Click **OK**.

The screenshot shows the 'Data-Driven Schedule Wizard' window. The title bar reads 'Data-Driven Schedule Wizard'. On the left is a yellow sidebar with a 'Data-Driver' icon. The main window area is titled 'Data selection criteria' and contains a text box with the SQL query 'SELECT Contacts.\* FROM Contacts'. Below the text box is a 'Key Column' dropdown menu and a 'Build' button. At the bottom, there are two checkboxes: 'Use up to 8 threads to run this schedule' (checked) and 'Group reports together by email address (email destination only)' (checked). The bottom right corner has 'Cancel', 'Next', and 'Finish' buttons.

- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.
- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is

uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.

### JSON Data-Driver

The screenshot shows the 'Data-Driven Schedule Wizard' window with the 'JSON Data Driver' selected. The 'JSON Data Collection' text area contains a JSON array with four objects, each having 'ID' and 'Job Title' fields. Below the text area is a 'Row Identifier' dropdown menu and a 'Validate' button. At the bottom, there are checkboxes for 'Use up to 8 threads to run this schedule' and 'Group reports together by email address (email destination only)', along with 'Cancel', 'Next', and 'Finish' buttons.

Data-Driven Schedule Wizard

**Data-Driver** ☐ SQL Data Driver ☒ JSON Data Driver

JSON Data Collection

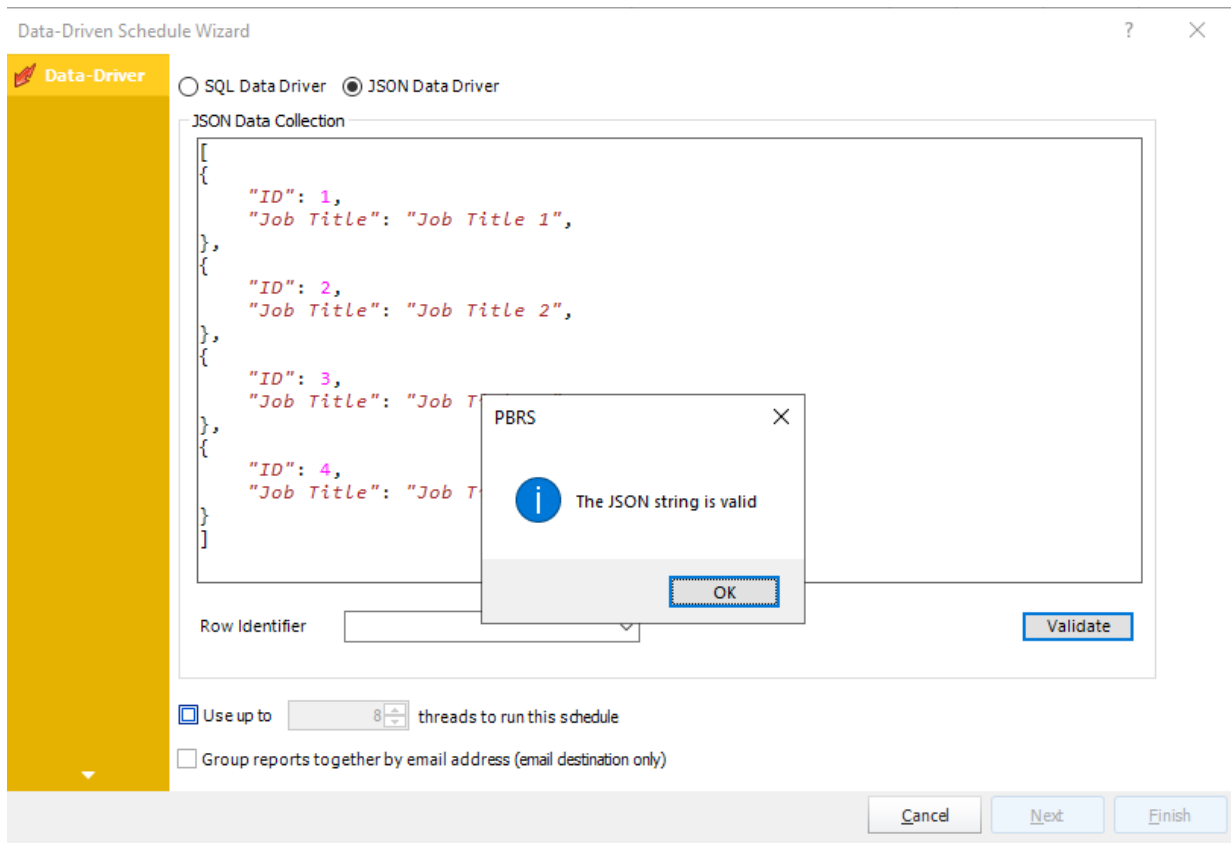
```
[
  {
    "ID": 1,
    "Job Title": "Job Title 1",
  },
  {
    "ID": 2,
    "Job Title": "Job Title 2",
  },
  {
    "ID": 3,
    "Job Title": "Job Title 3",
  },
  {
    "ID": 4,
    "Job Title": "Job Title 4",
  }
]
```

Row Identifier

☒ Use up to  threads to run this schedule

☐ Group reports together by email address (email destination only)

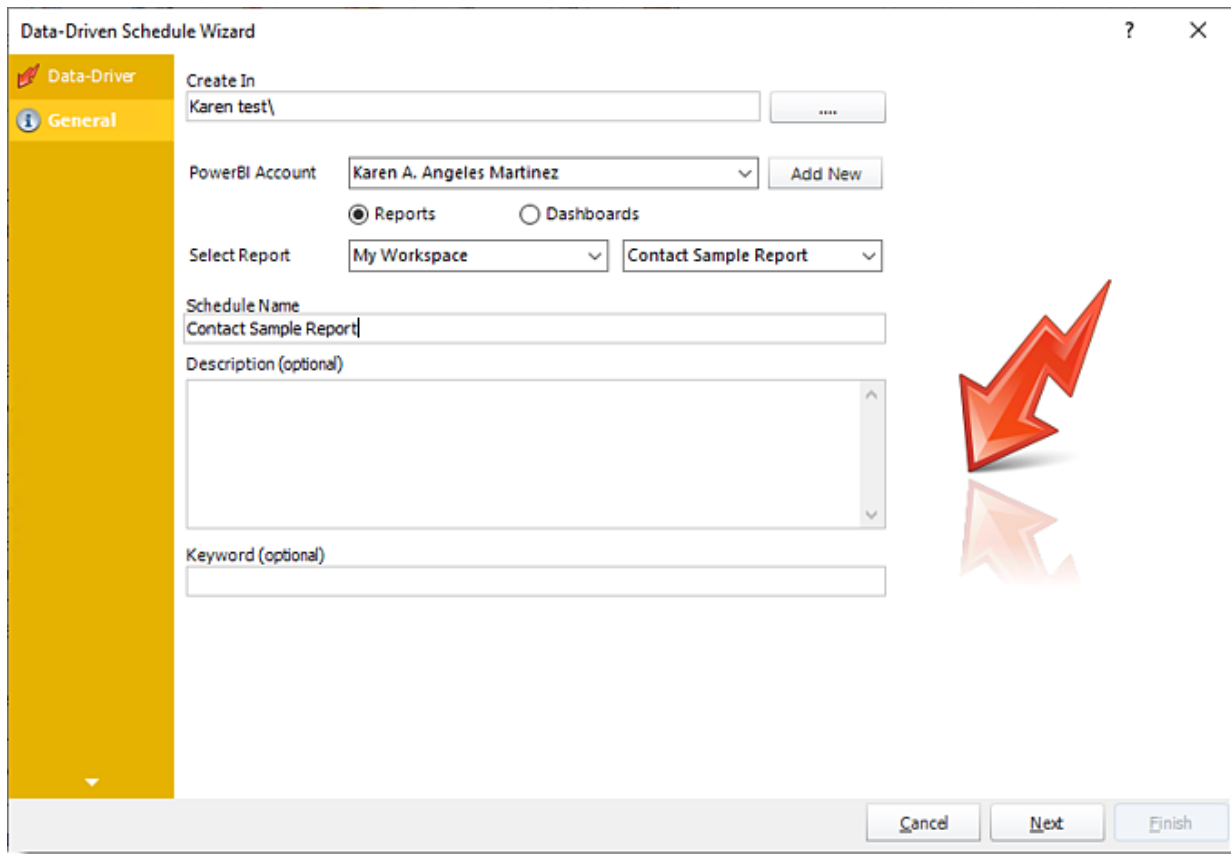
- Enter your JSON string and click **Validate**.



- **Row Identifier:** Select the row identifier for the data collection for the reports. The information that drives the schedule is required to have a row identifier so that each row in the table is uniquely identified by the value in this column. The row identifier is there as an identifier that is used to troubleshoot in cases where there is a problem with one of the collections.
- **Use up to 'x' threads to run this schedule:** Check this option to allow x amount of threads to be exported simultaneously.
- **Group reports by email address:** You can instruct PBRS to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.

Click **Next** to continue to the next wizard section.

## General Wizard



**Data-Driven Schedule Wizard**

**Data-Driven**

**General**

Create In: Karen test\

PowerBI Account: Karen A. Angeles Martinez Add New

☒ Reports ☐ Dashboards

Select Report: My Workspace Contact Sample Report

Schedule Name: Contact Sample Report

Description (optional):

Keyword (optional):

Cancel Next Finish

- **Create In:** This section is for selecting the folder where you want to create the single report in.
- **Power BI Account:** This section is to select what Power BI Account you want to create the single report in. In this section, you may add a new account in the Add New button.
- **Select Report:** Click on the drop-down menus to navigate to the required report.
- **Schedule Name:** Write in the name of the package.
- **Description (optional):** You may write a short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Data-Driven Schedule Wizard

Start Date: 29/12/2020 End Date: 29/12/3019

General Schedule

Frequency: Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every: 1 days

Schedule time: 16:05:13 Exception calendar: [dropdown]

Next to run on: 29/12/2020 16:05:13

Repeat every: 0.25 [dropdown] until: 16:05:13

☒ Enable this schedule

Cancel Next Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

Frequency: Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.



*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

☒ Saturday ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

The screenshot shows the 'Monthly' tab selected in a scheduling menu. Below the menu, there is a checkbox labeled 'Use the following options' which is checked. Underneath, it says 'The Second of the month' with 'Second' and 'Monday' in dropdown menus. Below this, there is a grid of 12 checkboxes, one for each month of the year, all of which are checked.

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

The screenshot shows the 'Annual' tab selected in the scheduling menu. The area below the menu is currently empty.

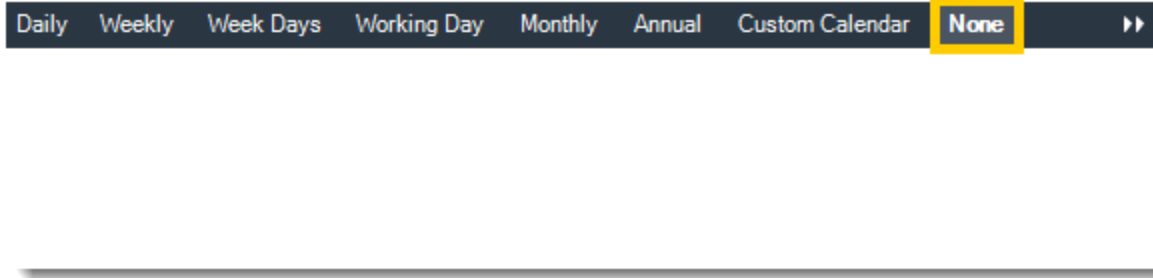
- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

The screenshot shows the 'Custom Calendar' tab selected. Below the menu, there is a 'Calendar Name' label followed by a text input field and a dropdown arrow. The dropdown menu is open, showing two options: '[New...]' and 'Business Days'.

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

The screenshot shows the 'Other' tab selected. Below the menu, there is a 'Run schedule every' label followed by a numeric input field containing the number '1' and a dropdown menu. The dropdown menu is open, showing a list of time units: Minutes, Hours, Days, Weeks, Months, and Years. 'Minutes' is currently selected and highlighted.

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Report Setting Wizard

Data-Driven Schedule Wizard

☐ Use JSON string for rendering settings

Settings **JSON**

Quick Search

<b>Page Setup</b>	
Left margin (% of width)	0
Page Height (pixels)	800
Page Width (pixels)	1300
Right margin (% of width)	0
<b>PDF Cropping</b>	
Crop PDF	<input type="checkbox"/> False
Crop Bottom	0
Crop Left	0
Crop Right	0

Pages To Render

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

☐ Enable snapshots and keep snapshots for 1 Days

Preview

Cancel Next Finish

<b>Rendering</b>	
Maximum Loading Time(secs)	60
Minimum Loading Time (secs)	10
Minimum Report Size (Bytes - Optional)	-1
PDF Compression	NONE
Rendering Method	Method 1
Transparent Background	<input checked="" type="checkbox"/> True
View Style	ACTUALSIZE

- In this section, you may set up the dashboard/report.

*Settings and JSON Rendering settings may overwrite each other so it is best to only set one or the other.*

### Settings

- **Left margin (% of width):** The size of the left margin as a percentage of the page width.
- **Page Height(pixels):** The height of the rendered file.
- **Page width (pixels):** The width of the rendered file.
- **Right margin (% of width):** The size of the right margin as a percentage of the page width.
- **PDF Cropping:** You may crop your reports by page height (pixels) and page width (pixels).

- **Maximum Loading Time(secs):** The maximum amount of time that the renderer will wait before timing out.
- **Minimum Loading Time(secs):** The amount of time that PBRS will wait for the dashboard/report to load before rendering it to file.
- **PDF Compression:** Select PDF compression levels.
- **Rendering Method:** Select the rendering method type for your Power BI report.
- **Transparent Background:** You have the option to have your Power BI report in a transparent background.
- **View Style:** How the report fits on the page: Fit to Page, Fit to Width, or Actual Size.
- **Page To Render:** The Power BI page(s) to render. Only applicable to Power BI reports. Leave blank for all report pages or you can specify a page range e.g 1-5 or specific e.g. 1,3,5. You can enter page names e.g. Monthly Report Page, Weekly Summary Reports.

You can drag and drop Inserts constants into Pages To Render textbox.

- **Enable snapshots and keep snapshots for "X" Days.**
- **Preview:** By clicking here you may see the preview dashboard/report.

## JSON

The screenshot shows the 'Data-Driven Schedule Wizard' window. On the left is a sidebar with icons for 'Data-Driven', 'General', 'Schedule', and 'Report Settings'. The 'Report Settings' tab is selected. In the main area, the 'JSON' tab is active, displaying a JSON string for rendering settings. Below the JSON editor is a 'Pages To Render' section with a text box and a description. At the bottom, there is a checkbox for 'Enable snapshots and keep snapshots for' followed by a spinner set to '1' and the word 'Days'. Navigation buttons 'Cancel', 'Next', and 'Finish' are at the bottom right, along with a 'Preview' button.

**Data-Driven Schedule Wizard**

☒ Use JSON string for rendering settings

**JSON**

```

1 {
2   "RenderingMethodString": "<[r]RenderingMethodString>",
3   "RenderingMethod": "<[r]RenderingMethod>" ,
4   "CropPDF": "<[r]CropPDF>" ,
5   "CropLeft": "<[r]CropLeft>" ,
6   "CropTop": "<[r]CropTop>" ,
7   "CropRight": "<[r]CropRight>" ,
8   "CropBottom": "<[r]CropBottom>" ,
9   "MinLoadTime": "<[r]MinLoadTime>" ,
10
11 }

```

**Pages To Render**

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

☐ Enable snapshots and keep snapshots for  Days

Preview

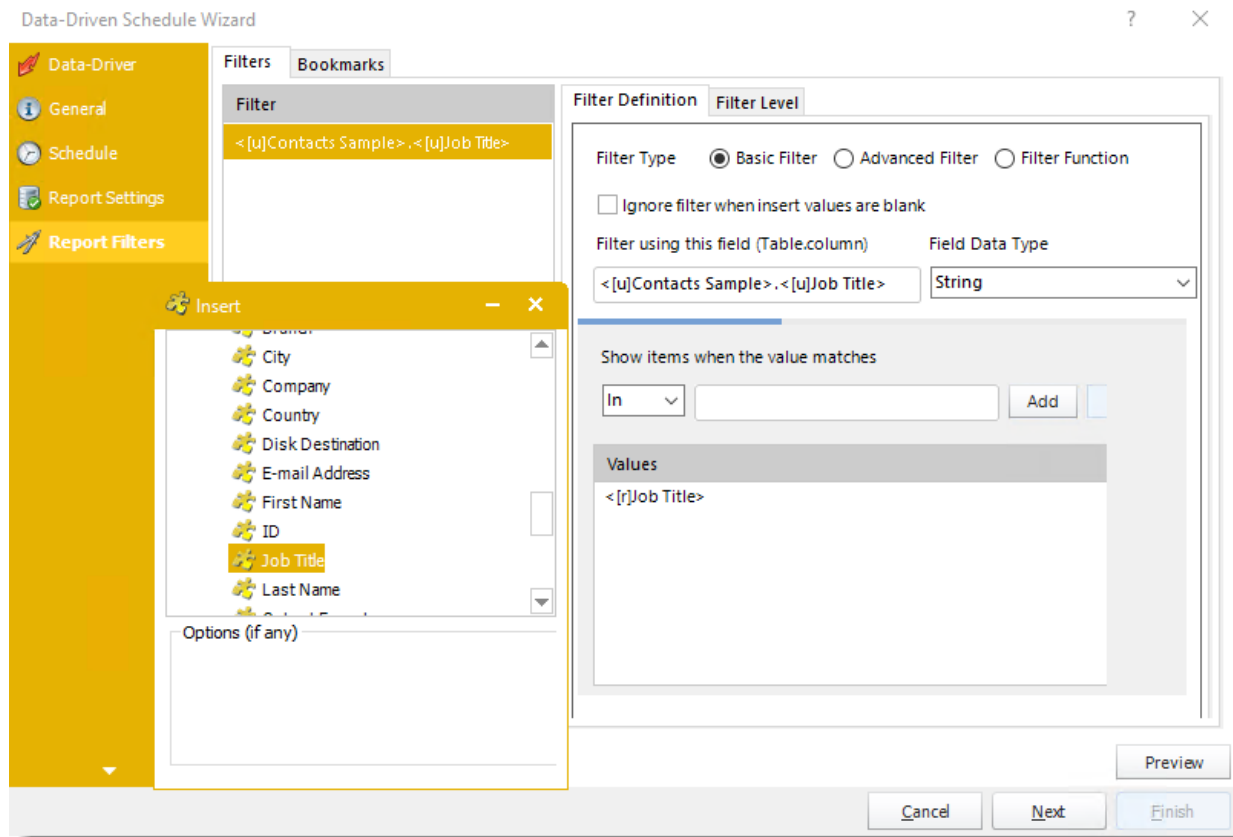
Cancel Next Finish

- **Use JSON string for rendering settings:** Check this option to use JSON string for the rendering settings.
- Enter the JSON string.

You can drag and drop Inserts constants into JSON textbox.

Click **Next** to continue to the next wizard section.

## Report Filters Wizard



- In this section, you will determine the filters for your report (if any). If your report has no filters, you may skip this section by clicking next.
- With PBRs, you can Data Drive any filter in your report. Ensure the filter values for each record are listed in your database.
- Using Data-Driven Inserts you can pull these values into your report.
- Drag and drop your **Data-Driven inserts** into the desired filter fields. If you do not wish to enter a data-driven value in your filter, you can still manually type a value or select them from the drop-down box.
- You can also use Inserts Constants to filter the table and column.

For more information about Report Filters Wizard, click [here](#).

### Filters

#### Filter Definition

- **Filter Type:** You may choose between Basic Filter, Advanced Filter, or Filter Function.
- **Ignore filter when insert values are blank:** Check this option when the filter values are blank.
- **Preview:** View the dashboard/report output given the selected filters.

- **Filter using this field (Table.column):** Choose the table and column you would like to set up the filter.

#### Basic Filter

Filter Type ☒ Basic Filter ☐ Advanced Filter ☐ Filter Function

☐ Ignore filter when insert values are blank

Filter using this field (Table.column) Field Data Type

<[u]Contacts Sample>.<[u]Job Title> String

Show items when the value matches

In

Add

Values

<[r]Job Title>

Save Filter

- Click **Add**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- Select an **operator** in Show items when the value matches.
- **Show items when the value matches:** Insert the value you would like to add and then click **Add**.
- Click **Save Filter**.

### Advanced Filter

Filter Type ☐ Basic Filter ☒ Advanced Filter ☐ Filter Function

☐ Ignore filter when insert values are blank

Filter using this field (Table.column) Field Data Type

<[u]Contacts Sample>.E-mail Address String

Show items when the value:

Contains

<[r]E-mail Address>

☒ And ☐ Or

Contains

<[r]E-mail Address>

Save Filter

- Click **Add**.
- Select **Advanced Filter**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- **Show items when the value:** In this option, you have the option to show items and select the option from the drop-down menu.

Show items when the value:

Contains

LessThan

LessThanOrEqual

GreaterThan

GreaterThanOrEqual

DoesNotContain

StartsWith

DoesNotStartWith

Is

IsNot

IsBlank

IsNotBlank



- Click **Save Filter** to add the filter.

#### Filter Function

The screenshot shows a dialog box for configuring a filter. At the top, there are three radio buttons under the label "Filter Type": "Basic Filter", "Advanced Filter", and "Filter Function". The "Filter Function" option is selected. Below this is a checkbox labeled "Ignore filter when insert values are blank". Underneath, there are two labels: "Filter using this field (Table.column)" and "Field Data Type". The first label has a text input field containing "{JsonFilter}". The second label has a dropdown menu showing "Date". Below these fields is a large text area for writing a function. It contains a template with line numbers 1 through 5 and green italicized comments. The code is: 1 //this function must return an array of Filters, 2 function getFilters () {, 3 //add your filters definition here, 4 //return your filters array, 5 }. At the bottom left is a "Build" button, and at the bottom right is a "Save Filter" button.

Filter Type ☐ Basic Filter ☐ Advanced Filter ☒ Filter Function

☐ Ignore filter when insert values are blank

Filter using this field (Table.column)  Field Data Type

```
1 //this function must return an array of Filters
2 function getFilters () {
3 //add your filters definition here
4 //return your filters array
5 }
```

- Select the Filter Function option to enter an advanced Filter JSON string so you don't have to manually configure filters in PBRs.
- Click **Build**.
- Enter the Filter JSON string.

### Build PowerBI Filters Function

```

1 //this function must return an array of Filters
2 function getFilters ()
3 {
4     const filter1 = {$schema: "http://powerbi.com/
      product/schema#basic",target: {table: "avocado",
      column: "type"},operator: "In",values: ["
5     organic"]};
6     var allFilters = [filter1];
7     return allFilters;
  }

```

Cancel

OK

- Click **OK**.

Filter Type ☐ Basic Filter ☐ Advanced Filter ☒ Filter Function

☐ Ignore filter when insert values are blank

Filter using this field (Table.column)

Field Data Type

{JsonFilter}

String

```

1 //this function must return an array of
  Filters
2 function getFilters ()
3 {
4     const filter1 = {$schema: "
      http://powerbi.com/product/
      schema#basic",target: {table:
      "avocado",column: "type"},
      operator: "In",values: ["
5     organic"]};
6     var allFilters = [filter1];
      return allFilters;
  }

```

Build

Save Filter

- Click **Save Filter**.

## Filter Level

The screenshot shows the 'Filter Level' tab in the Power BI Filter pane. It has two tabs: 'Filter Definition' and 'Filter Level'. Under 'Filter Level', there are two radio buttons: 'Report' (selected) and 'Slicer'. Below the 'Slicer' option, there is a section titled 'Slicer selection based on' which contains two radio buttons: 'Visual Title' (selected) and 'Filter Field'. Below these is a dropdown menu that is currently empty.

- **Report:** Check this option to filter the level of the report based on the filter field (Table.Column) value.
- **Slicer:** Check this option to filter the report based on the slicer visual icon and the filter field value. Using Slicer, all the values of the slicer will be displayed and only the entered value on Filter Field will appear checked.

*In order to use the Slicer filter, you must have a Slicer visual in your Power BI Report.*

## Slicer

This screenshot is identical to the one above, showing the 'Filter Level' tab. In this instance, the 'Slicer' radio button is selected instead of 'Report'. The 'Slicer selection based on' section remains the same, with 'Visual Title' selected and an empty dropdown menu.

## Visual Title

- **Visual Title:** Using this option, you can select the slicer selection based on the Visual Title of the report. Select the slicer visual title using the drop-down menu.
- Click **Save Filter**.

Filter Definition   Filter Level

☐ Report

☒ Slicer

Slicer selection based on

☒ Visual Title   ☐ Filter Field

Ethnicity

### Filter Field

- **Filter Field:** Using this option, you can select the slicer selection based on the Filter Field (Table.Column).
- Click **Save Filter**.

Filter Definition   Filter Level

☐ Report

☒ Slicer

Slicer selection based on

☐ Visual Title   ☒ Filter Field

Ethnicity.Name

### Bookmarks

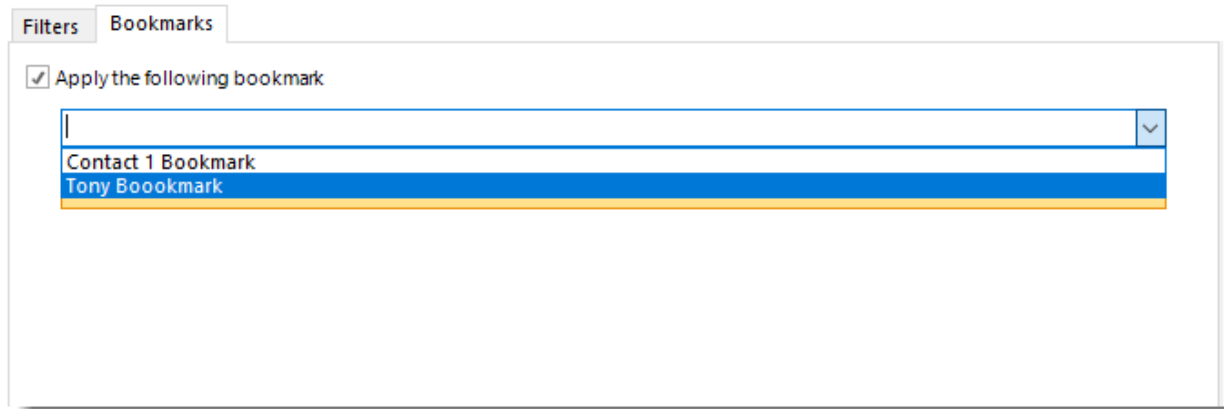
Filters   Bookmarks

☐ Apply the following bookmark

Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

*Bookmark and Filters may overwrite each other so it is best to only set one or the other.*

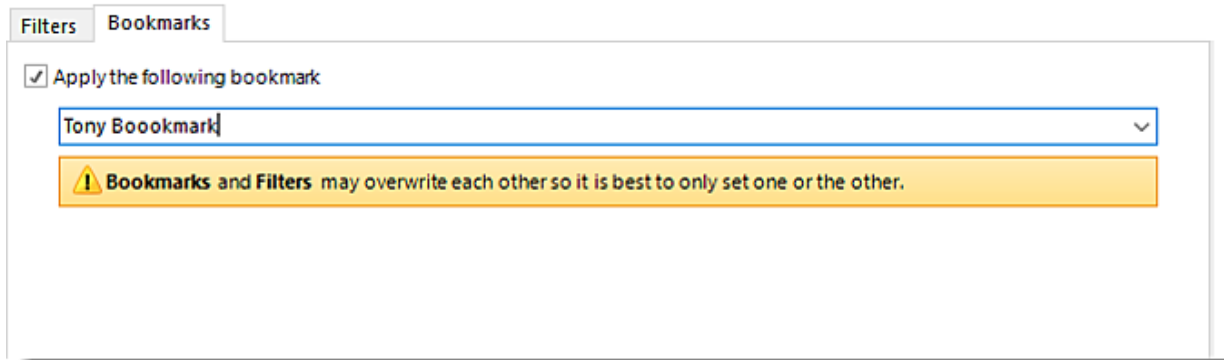
- If you have a Bookmark in the report you have the ability to select the bookmark using the drop-down menu.
- Check **Apply the following bookmark** to enable the Bookmarks option.
- Select the bookmark from the drop-down menu.



Filters Bookmarks

☒ Apply the following bookmark

Contact 1 Bookmark  
 Tony Boobookmark



Filters Bookmarks

☒ Apply the following bookmark

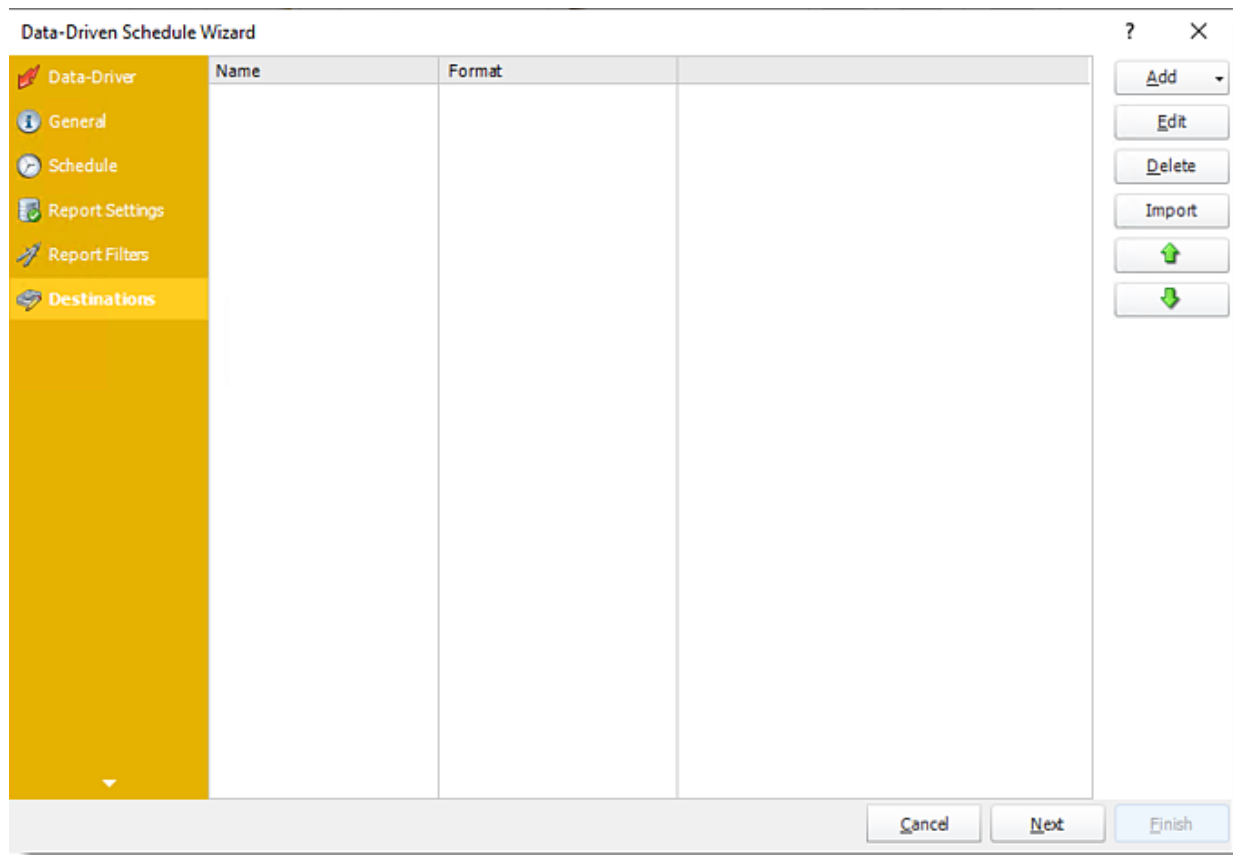
Tony Boobookmark

⚠ Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

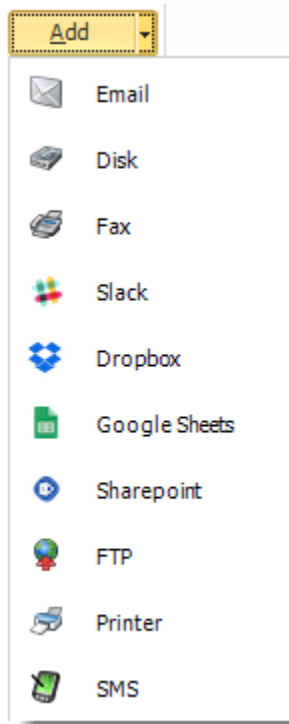
Click **Next** to continue to the next wizard section.

## Destination Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.



- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.
  - For more information of adding destinations, [click here](#).
  - For more information about Output Formats, [click here](#).



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.

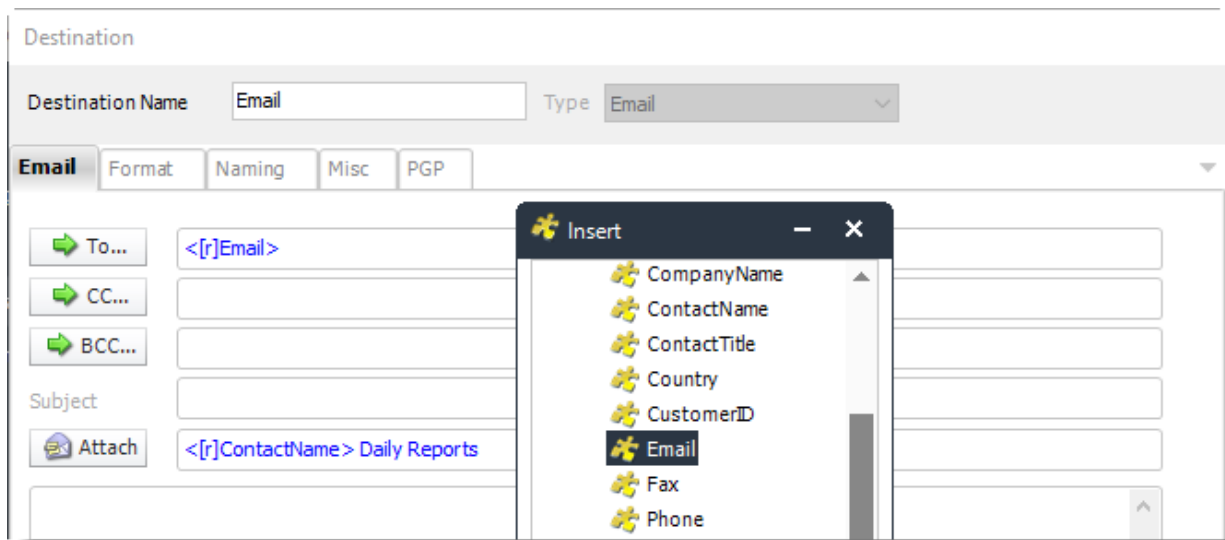
### Customizing the Destination

With the Data Driven Schedule, you can determine the delivery method of your report based on your data. In your table, specify the delivery method by creating a column for each delivery type (FTP, SharePoint, Email etc.). For each record specify their email, fax number, and so on.

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co.jp</a>	<a href="#">jwu</a>

*Tip: For email destinations, simply add a semicolon after an email address to send the same instance of the report to another email address.*

- Data driving the Report's Distribution
- As mentioned above, PBRs will pull delivery data from your database.
- In this example, we will be using email addresses found in the table.
- With Data Driven inserts, simply drag and drop the field that indicates your desired destination (*email in this case*).



- Now PBRS will deliver a unique report based on a corresponding email address.

#### *Customize Recipient Messaging*

- You can also customize the messaging the recipient receives. Using Data Driven Inserts, PBRS will automatically pull data from your table and use it to customize the subject, body or report format.



Destination

Destination Name  Type

**Email** Format Naming Misc PGP

To...

CC...

BCC...

Subject

Attach

Dear <[r]CustomerID>,  
Here is your report of <[m]CurrentScheduleName>.  
Thank you.

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:

**Insert**

- Data-Driven Data
  - Address
  - City
  - CompanyName
  - ContactName
  - ContactTitle
  - Country
  - CustomerID**
  - Email
  - Fax
  - Phone
  - PostalCode
  - Region

Options (if any)

- Simply drag and drop fields from your table to the desired position.

*For example, to customize an email greeting, type the greeting, and add the recipients name as shown above.*

Click **Next** to continue to the next wizard section.

## Exception Handling Wizard

Data-Driven Schedule Wizard

**Exception Handling**

Treat as "error" if not completed in  mins. ☒ Auto-calculate

On error, retry executing schedule every  mins up to  times.

☐ Run custom tasks when the following exception occurs

☐ Report is blank ☐ Report export fails

**Actions** Blank Report Check Method

General	Name
Run Program/Open Document	
Print Document	
Print PDF (Acrobat)	
Wait/Pause	
Execute Schedule	
Send SMS	
Create Exchange Appointment	
Refresh PowerBI Dataset	
Show Message	
Files & Folders	

Edit Delete

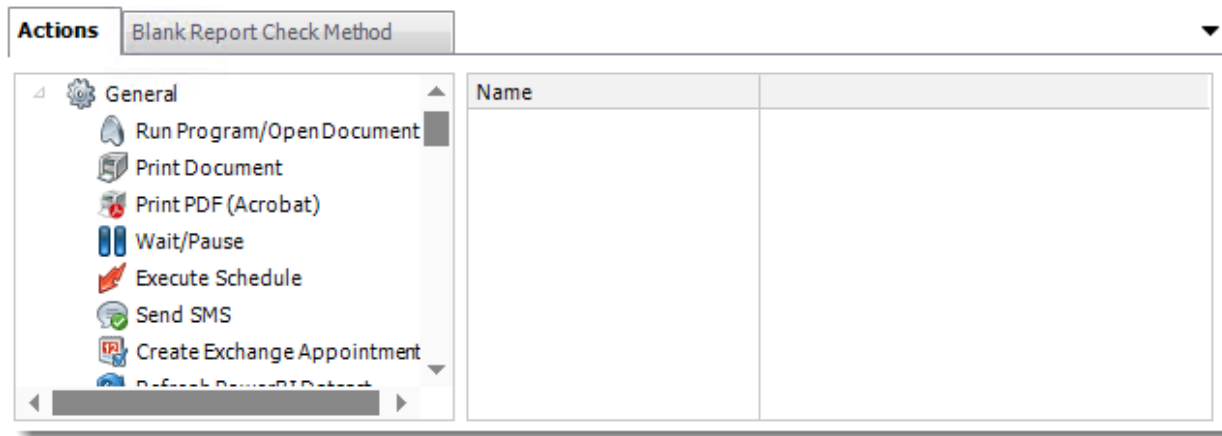
Cancel Next Finish

- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRs to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRs will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRs how many times you want it to retry running the report before declaring it as "Failed."
- **Run custom tasks when the following exception occurs:** Check this option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRs on what to do with them.
  - **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.
  - **Report exports fail:** If a report export fails, you can receive a notification or run a task that the report failed to execute.

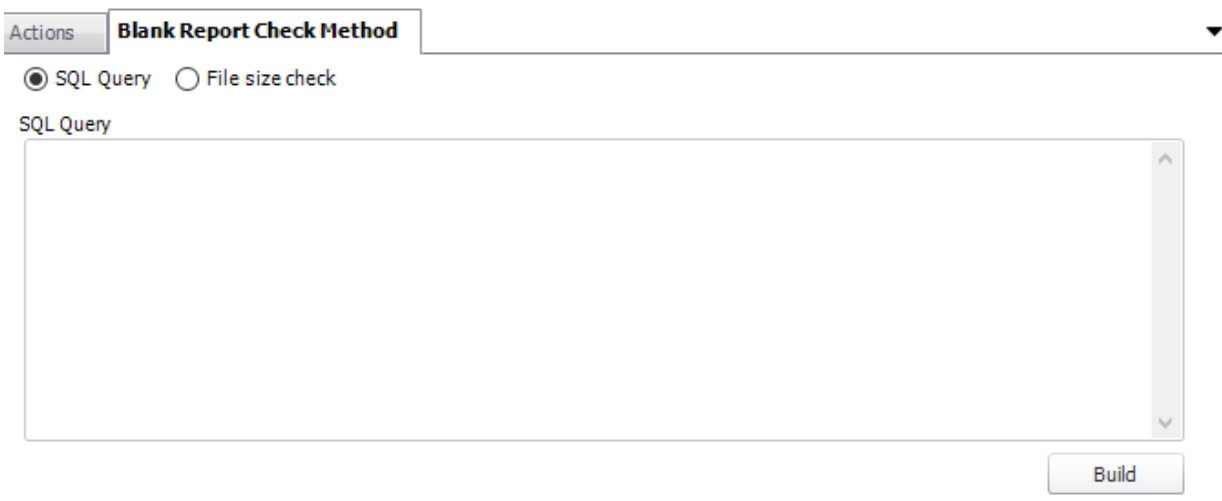
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

## Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

- **File size check:** Assume reports is blank if size is under "X" bytes.

Actions **Blank Report Check Method**

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

Click **Next** to continue to the next wizard section.

## Refresh Datasets Wizard

Data-Driven Schedule Wizard

Select datasets to refresh before the report is executed

PowerBI Account:  Add > < Delete

Workspace:

Dataset:

Notification Options

☒ Notify on Completion

☐ Notify on Failure

☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

After refreshing the datasets above, wait  seconds before running the report.

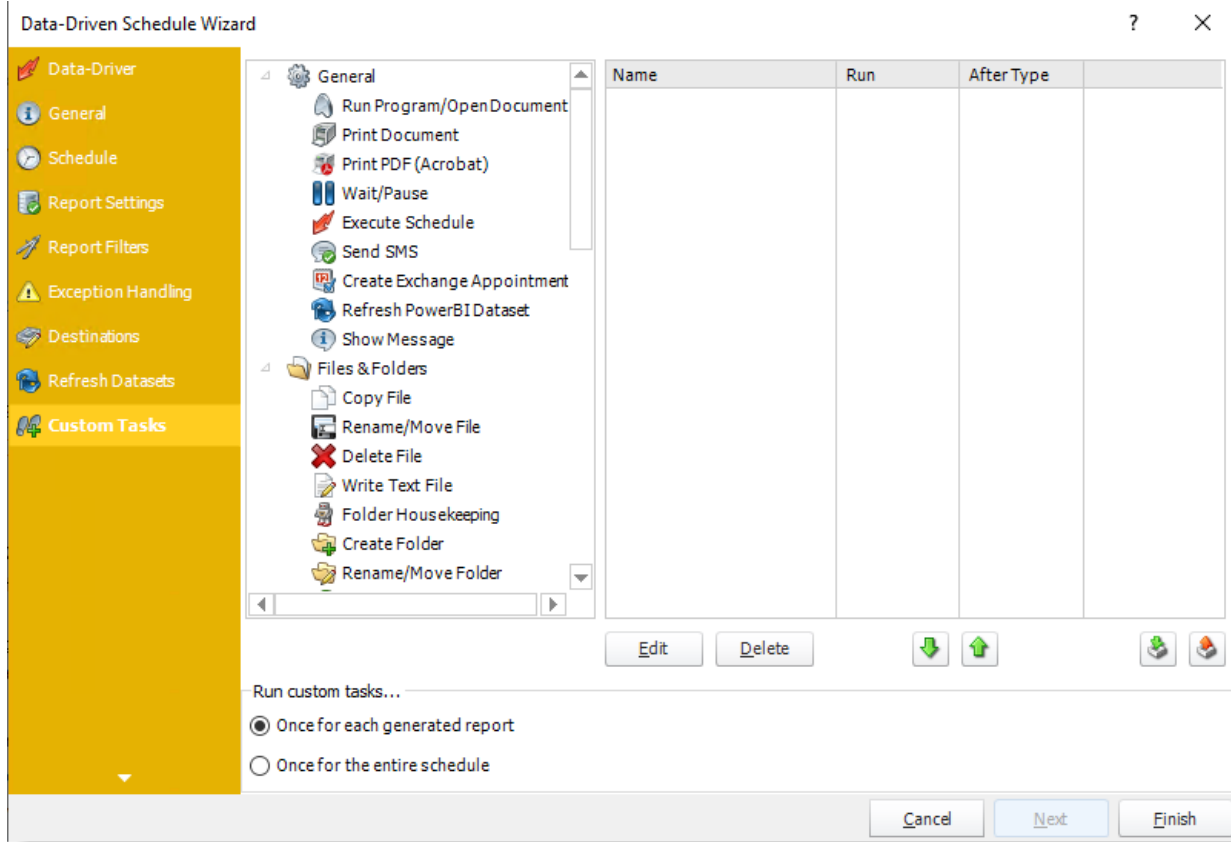
Cancel Next Finish

In this section select the datasets to refresh before the report is executed.

- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**

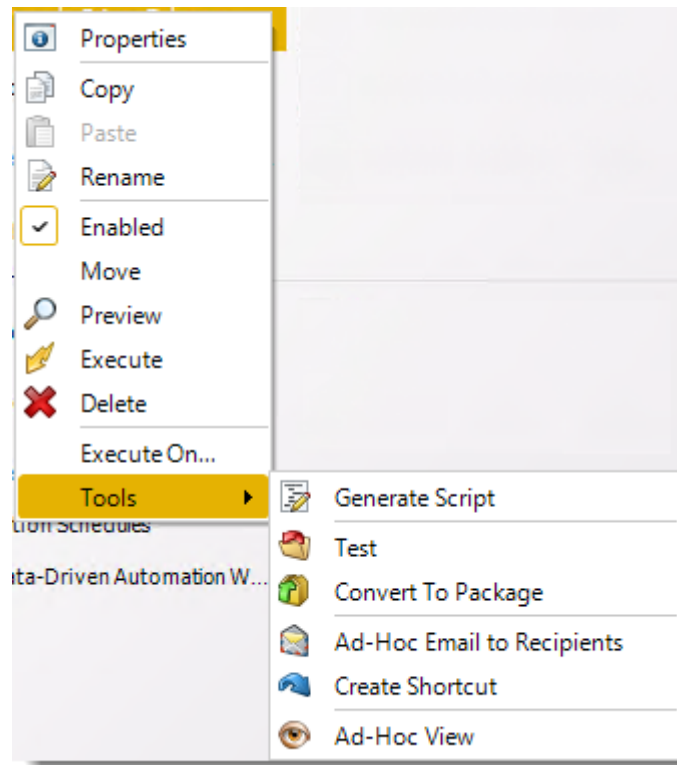
Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



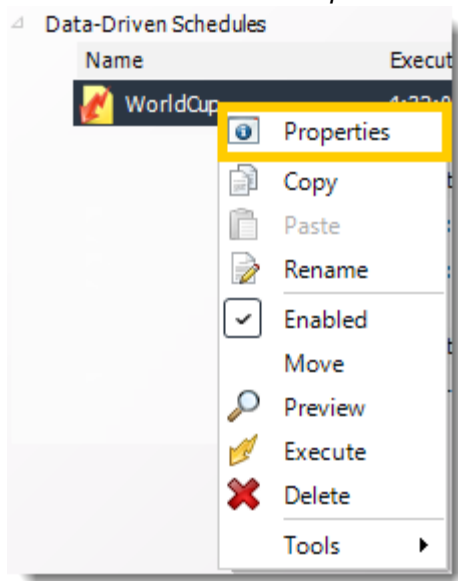
- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto-triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

## Data-Driven Schedule Context Menu



- Right-Click on a schedule to see the following actions:
- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Preview:** Preview the report before execution.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test:** Use this option to test the schedule and export it to selected "test" destinations.
- **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.
- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.
- **Ad-Hoc View:** This button allows you to preview the report.

### Data-Driven Schedules Properties



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedules such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.



**Data-Driven Schedule Properties** ? X

**General**

Schedule Name  
Contact Sample Report

Create In  
Sample Reports ...

PowerBI Account  
Karen A. Angeles Martinez Add New

☒ Reports ☐ Dashboards

Select Report  
My Workspace Contact Sample Report

Description (optional)

Keyword (optional)

Unique ID  
619541054

OK Cancel Apply

•Schedule

Data-Driven Schedule Properties ? X

General

**Schedule**

Report Settings

Report Filter

Refresh Datasets

Destinations

Exception Handling

Tasks

Sharing

Snapshots

History

Data Driver

Start Date   ☐ End Date

**Daily** Weekly Week Days Working Day Monthly Annual Custom Calendar Other »»

Repeat every    days

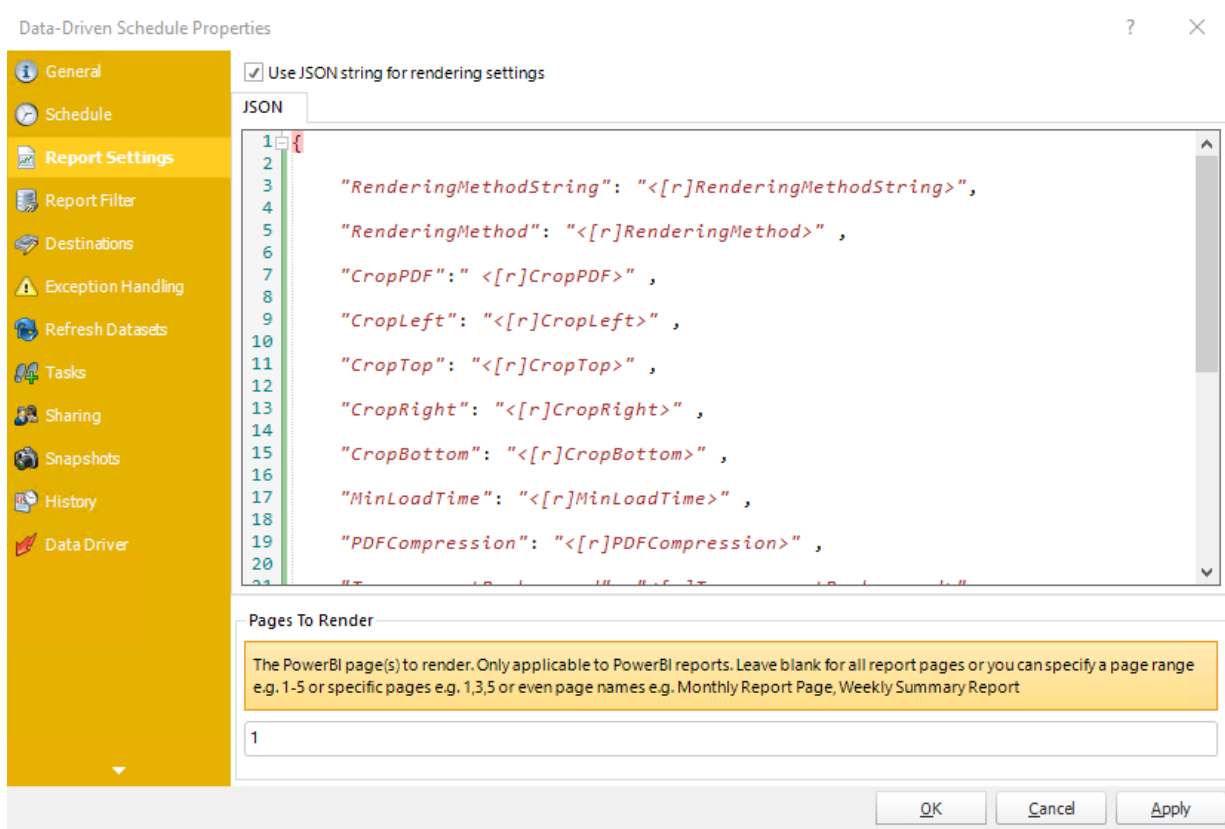
Schedule time    ☐ Exception calendar

Next to run on

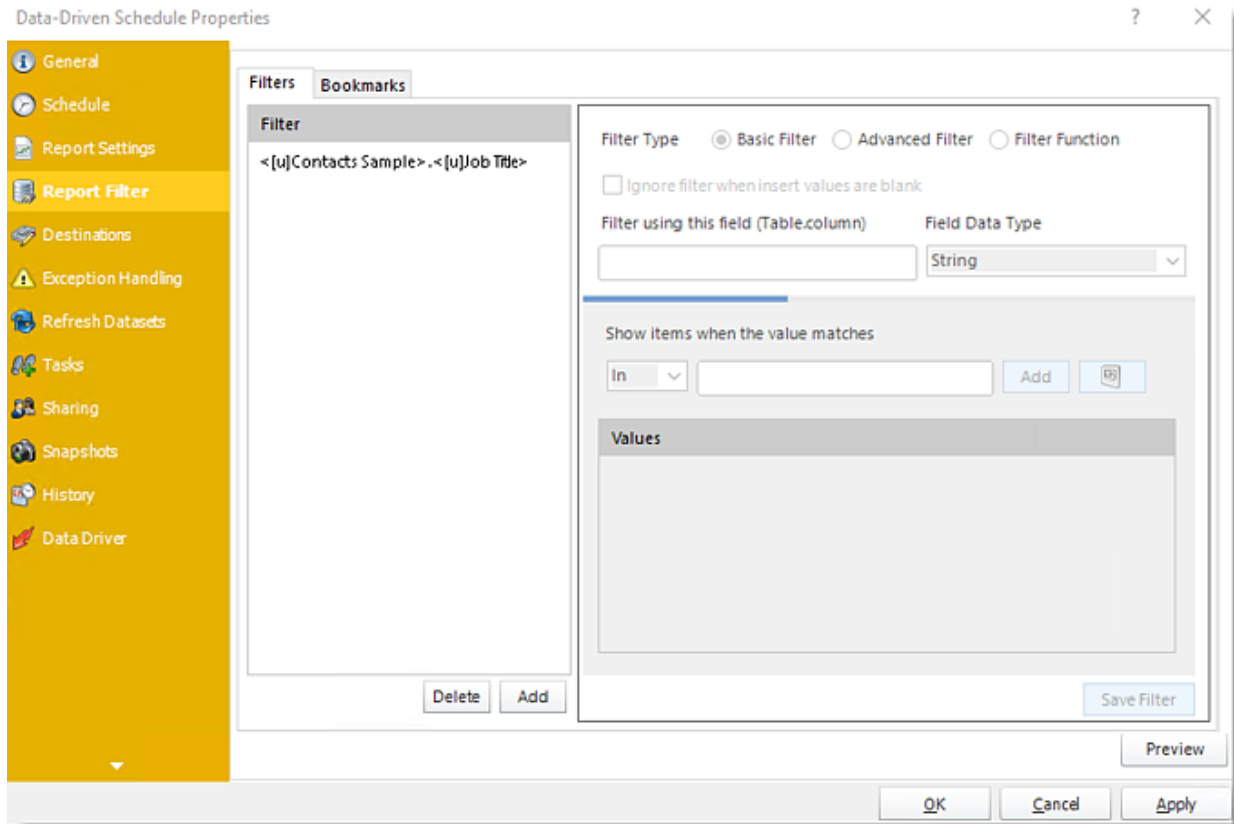
☐ Repeat every    hours  until

☒ Enable this schedule

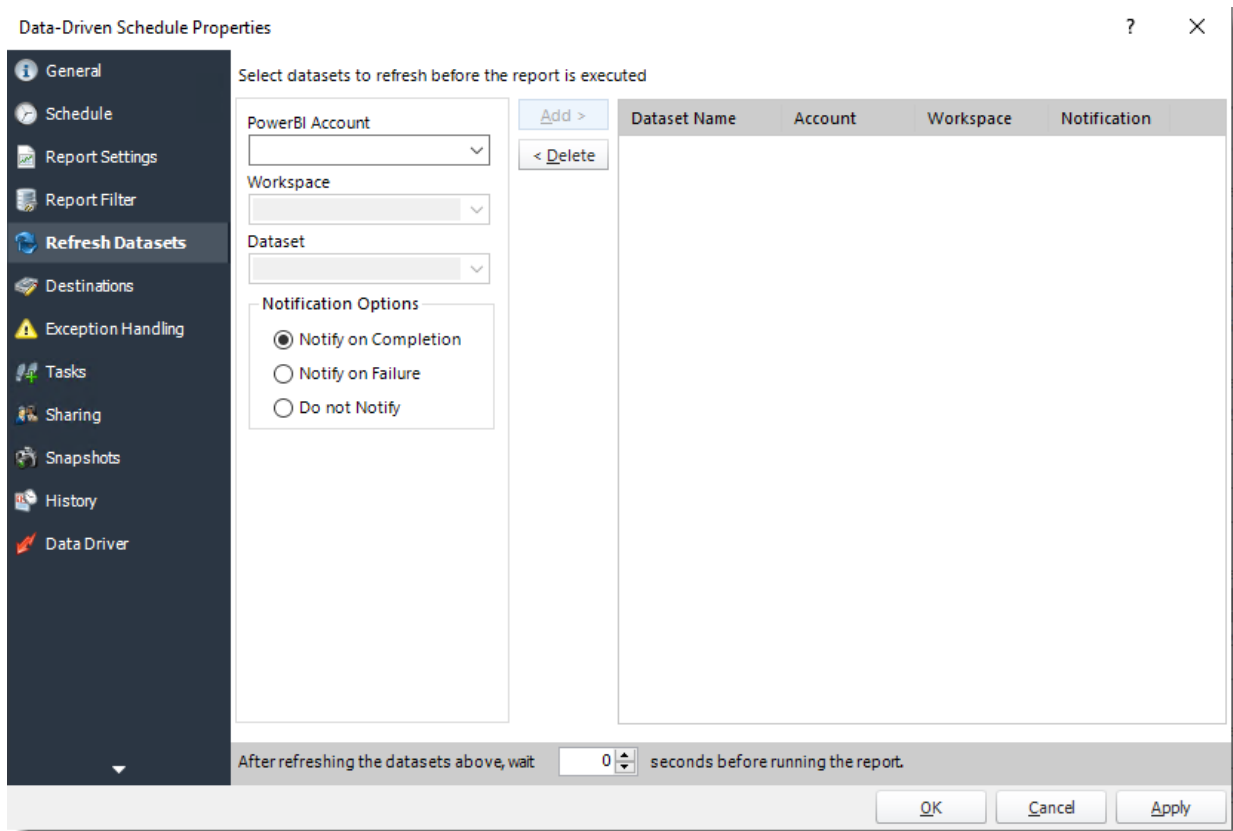
## •Report Settings



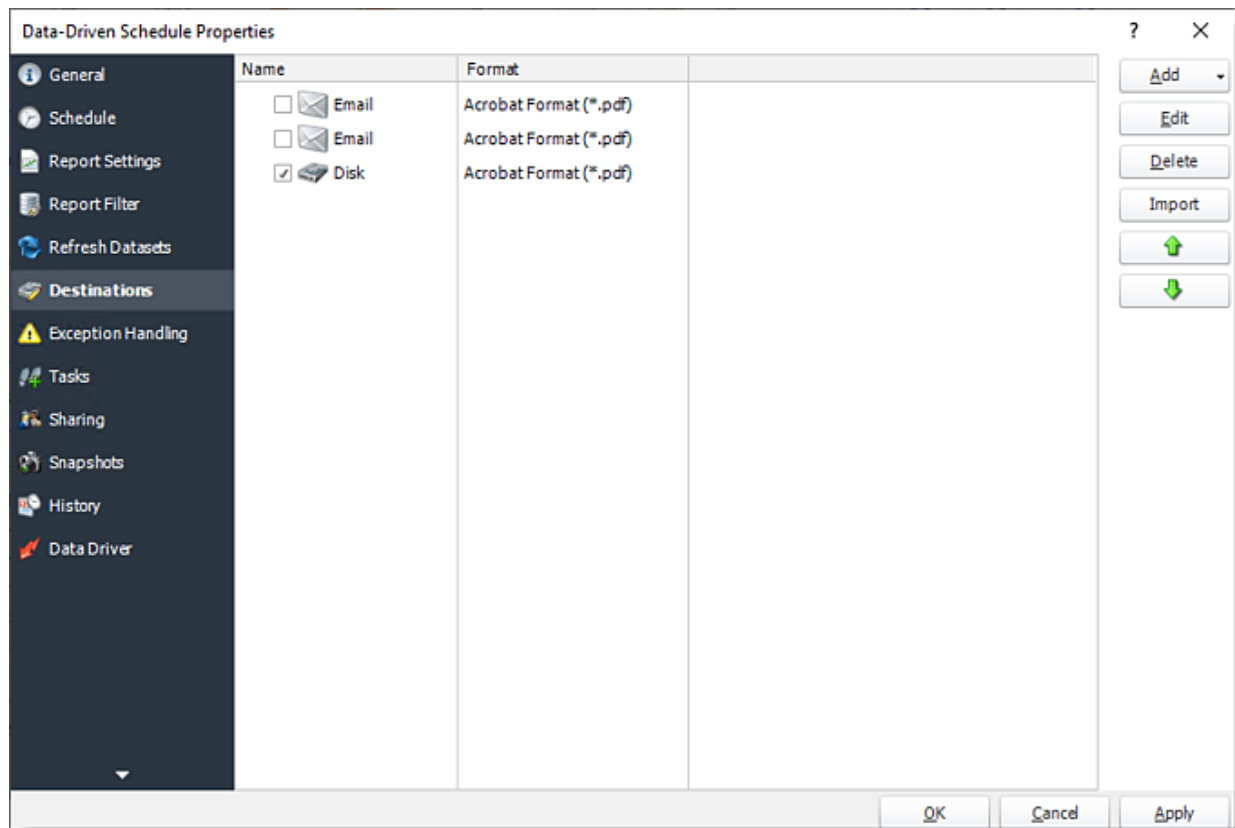
## •Report Filter



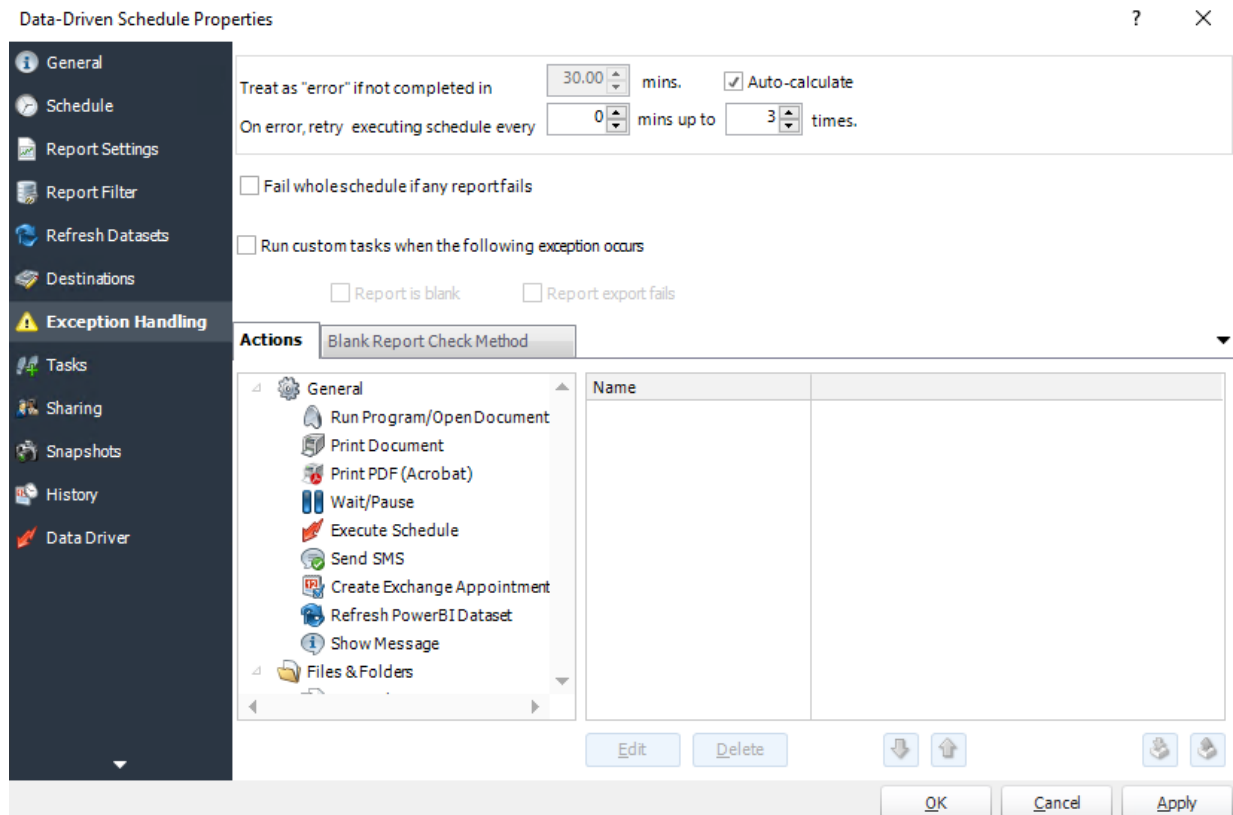
- **Refresh Datasets**



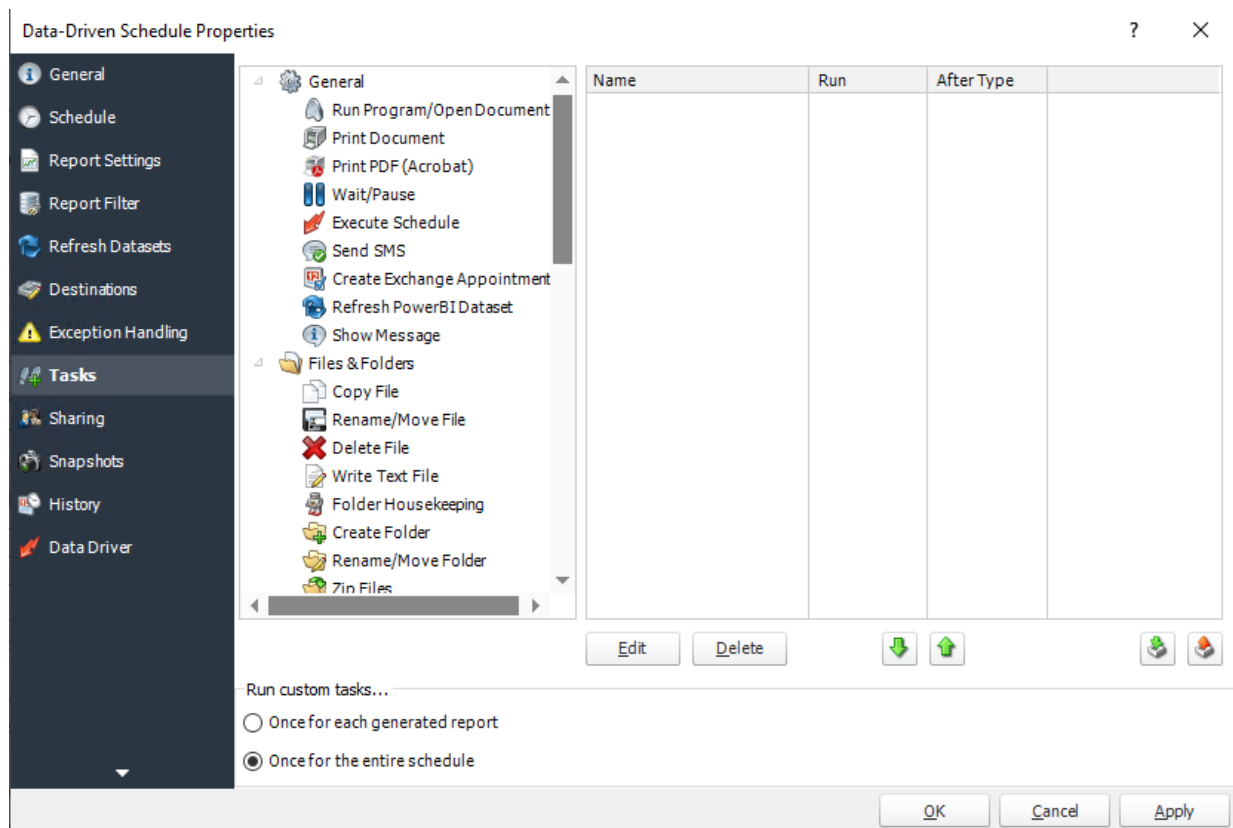
## •Destinations



- Exception Handling

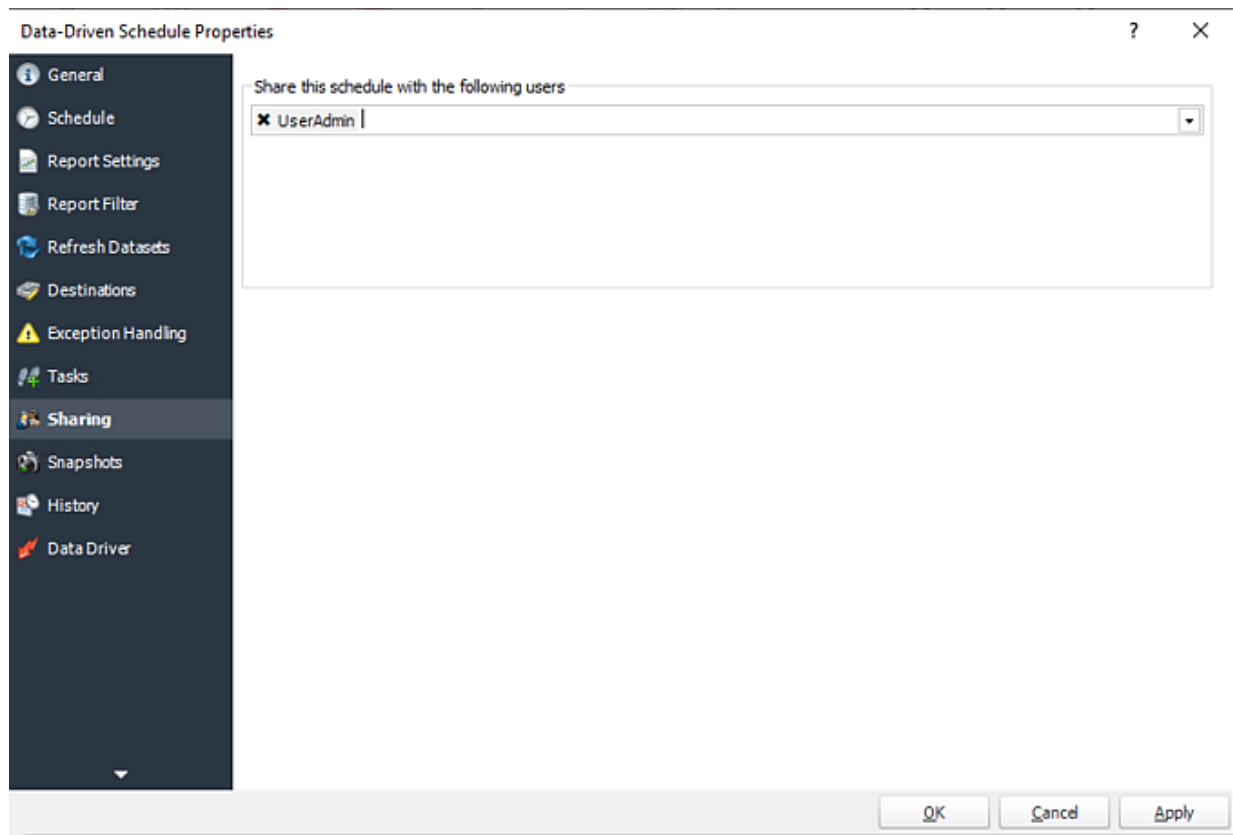


- **Tasks**

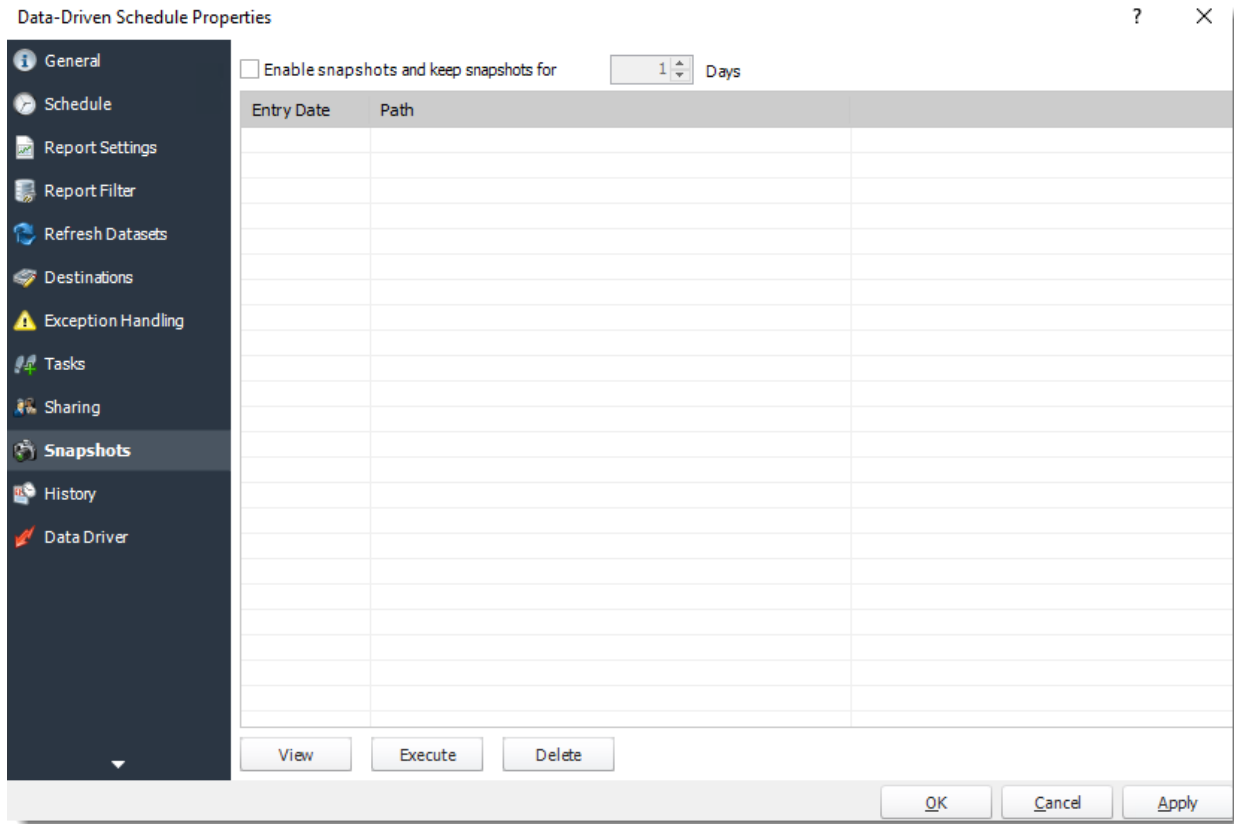


- **Sharing:** Here you can share this schedule with multiple users.

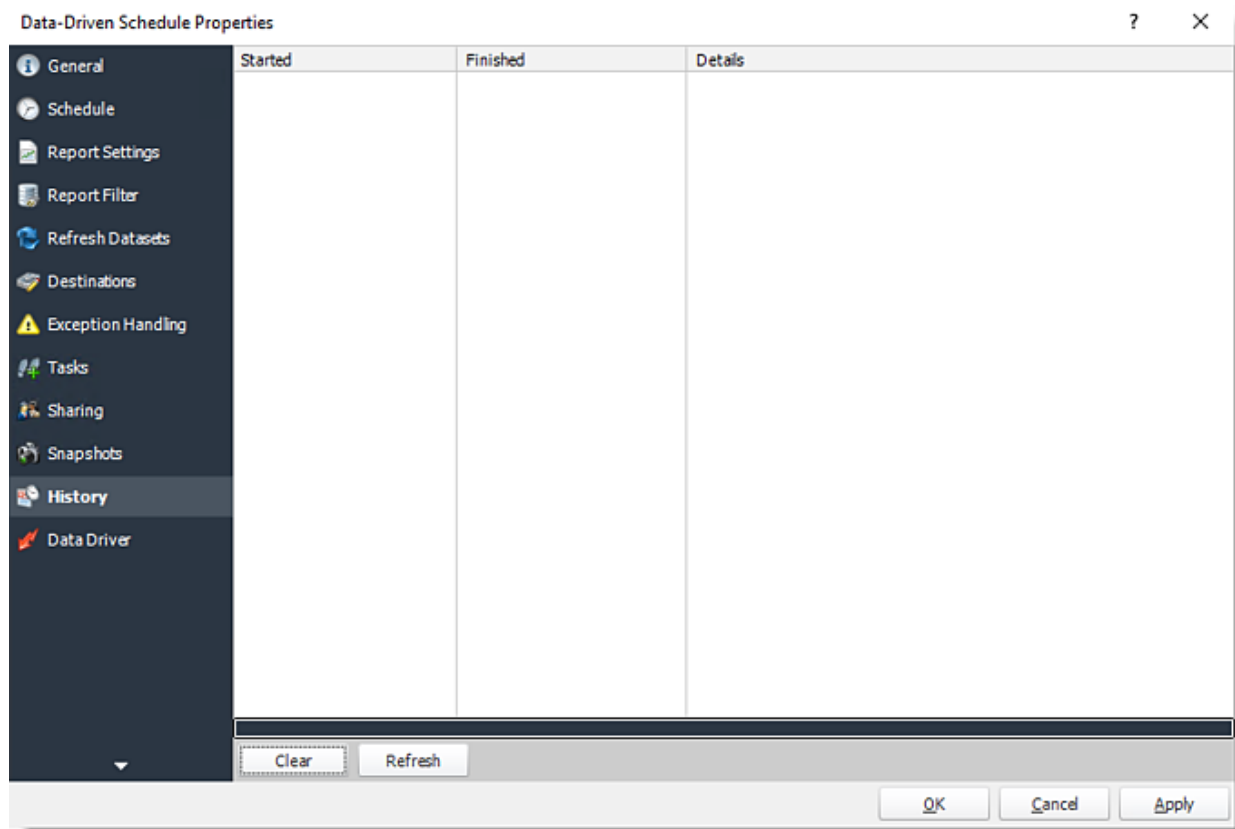




- **Snapshots:** A snapshot is a copy of each report a schedule or a package generates. Keeping snapshots enables you to resend past reports without generating them afresh - especially if the data has changed in the meantime.
  - Simply select the number of days to keep the snapshots.



- **History:** Review the schedule's history. Successes, failures, and other data is located here.



- Data Driver

Data-Driven Schedule Properties

☒ SQL Data Driver ☐ JSON Data Driver

Database Connection Setup

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account

PBRS Contact Sample

Connect

Data selection criteria

SELECT top 5 Contacts.\* FROM Contacts

Build

Key Column ID

☐ Group reports together by email address (email destination only)

☒ Use up to 8 threads to run this schedule

OK Cancel Apply

## How do I use Data-Driven Schedules for Power BI Service Paginated Reports in PBRs?

**A data-driven schedule allows you to drive all variables of your reporting requirements (filters, destinations, output formats, etc.) from database tables and queries at run time. Burst your reports out to multiple formats and recipients.**

This article applies to:

- Power BI Service Paginated Reports (Cloud - Power BI Service)

### Data-Driven Schedules for Power BI Service Paginated Reports

A data-driven schedule allows you to drive all variables of your reporting requirements (filters, destinations, output formats, etc.) from database tables and queries at run time. You can also use any static text and default values should you wish. You can use Data-Driven schedules for a number of scenarios. Use a data-driven schedule for bursting reports based on filter values to specific formats like PDF, Excel and so on.

*Here are some examples:*

- Distribute a report to a fluctuating list of recipients. For example, you can distribute a report throughout a large organization where recipients vary from one month to the next, or use other criteria that determines group membership from an existing set of users. E.g. select \* from mytable where firstname = 'john' will generate the report and distribute only for records where the recipient's first name is John.
- Filter the report output using report filter values that are retrieved at run time. For example, the filter value returned from the table for the Last Name will be "Doe" for John Doe and "Smith" for John Smith.
- Determine the delivery type and report format dynamically at run time. For example, John Smith gets the report as a PDF file by email with a customized email body and John Doe gets the report as an excel spreadsheet by FTP uploaded to his webserver.

The following simple example will illustrate the process of creating a Data-Driven Schedule.

*Scenario: You have a report which has a large number of filter and destination combinations. Representing the combinations in a table may look something like the example below (Yellow = filters)*

Region	Area	Country	Sectc	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe		<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.com</a>	<a href="#">jwu</a>

- You need to have the report run once for each record. The filter values entered in the table above should populate the filters in the report and the report should be delivered to the destinations shown in the table.
- Please note that with the above data when the schedule runs, the following will occur:
  - John Doe will receive only one email for the reports from sectors 1 and 3. He will also get the reports from sectors 2, 3 and 34 delivered to his reports disk location.
  - Peter Crimble will have his report printed on the Printer he specified.
  - Jorge Minola will have a copy of his report sent to John Doe to the disk location he specified and a copy uploaded to his FTP server and folder.
  - Anil Maharaja will receive an email as requested.
  - John Wu will have his report delivered to his email and FTP server as requested.

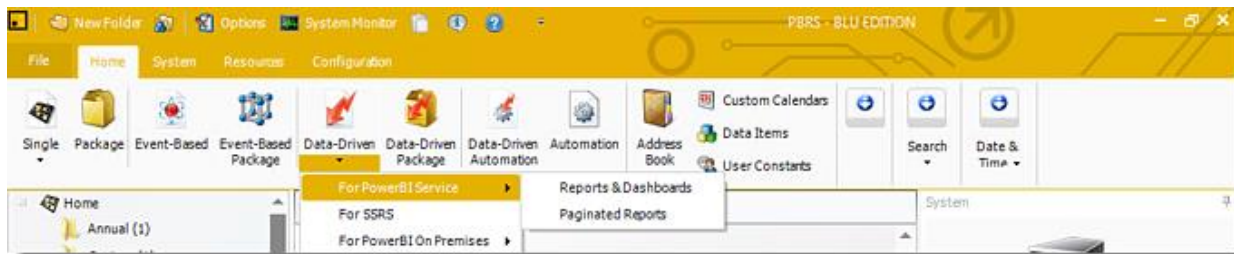
*Note that as the data changes in the database to reflect the requirements, the reports will be delivered as necessary without requiring any changes to the schedule in PBRS.*

*Using a Data Driven schedule PBRS will reel through the database table and generate and deliver a report for each record using the information provided.*

*The data driver allows for busting reports to different formats and different destinations as well as defining other more traditional values like filters.*

How do I create Data-Driven Schedule for Power BI Service Paginated Reports?

- Go to **Data-Driven** and go to **For Power BI Service** and select **Paginated Reports**.



## Building a Data Driver Wizard

The screenshot shows a window titled "Data-Driven Schedule Wizard" with a yellow sidebar on the left labeled "Data-Driver". Inside the main area, there are two radio buttons: "SQL Data Driver" (selected) and "JSON Data Driver". Below these is a large empty rectangular box labeled "SQL Data selection criteria". At the bottom left of this box is a "Key Column" label and a dropdown menu. To the right of the box is a "Build" button. Below the box, there is a checkbox labeled "Use up to" followed by a spinner box containing the number "8" and the text "threads to run this schedule". Below that is another checkbox labeled "Group reports together by email address (email destination only)". At the bottom right of the window are three buttons: "Cancel", "Next", and "Finish".

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes. You can either select SQL Data-Driver or JSON Data-Driver

## SQL Data-Driver

Get values from database

☐ ODBC DSN    ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple    Advanced

Only return records where

And    Or

Where

Parse

OK

Cancel

- **ODBC Datasource Name:** Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background*



application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **Connect:** Click Connect to connect to the Database.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.

Data-Driven Schedule Wizard

**Data-Driven**

Data selection criteria

```
SELECT States.* FROM States WHERE (States.StateName IS NOT NULL AND States.StateName <> '')
```

Key Column: StateName

☒ Group reports together by email address (email destination only)

Build

Cancel Next Finish

- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.
- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is

uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.

### JSON Data Driver

The screenshot shows the 'Data-Driven Schedule Wizard' window with the 'JSON Data Driver' selected. The 'JSON Data Collection' text area contains a JSON array of state names. The 'Row Identifier' dropdown is set to 'State'. The 'Validate' button is visible. At the bottom, there are checkboxes for 'Use up to 8 threads to run this schedule' and 'Group reports together by email address (email destination only)', along with 'Cancel', 'Next', and 'Finish' buttons.

Data-Driven Schedule Wizard

☒ SQL Data Driver ☒ JSON Data Driver

JSON Data Collection

```
[  
  {  
    "State": "Alabama",  
  },  
  {  
    "State": "Alaska",  
  },  
  {  
    "State": "Arizona",  
  },  
  {  
    "State": "Arkansas",  
  },  
]
```

Row Identifier: State

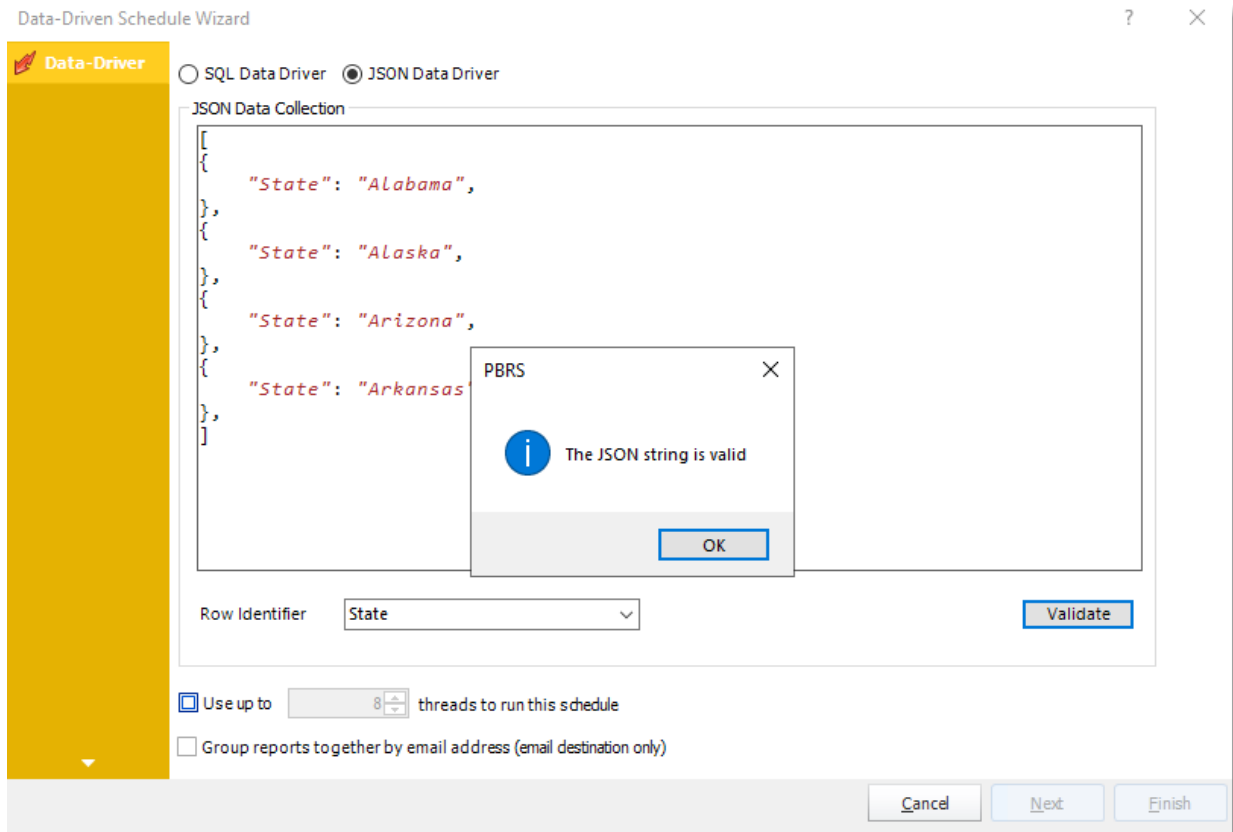
Validate

☒ Use up to 8 threads to run this schedule

☐ Group reports together by email address (email destination only)

Cancel Next Finish

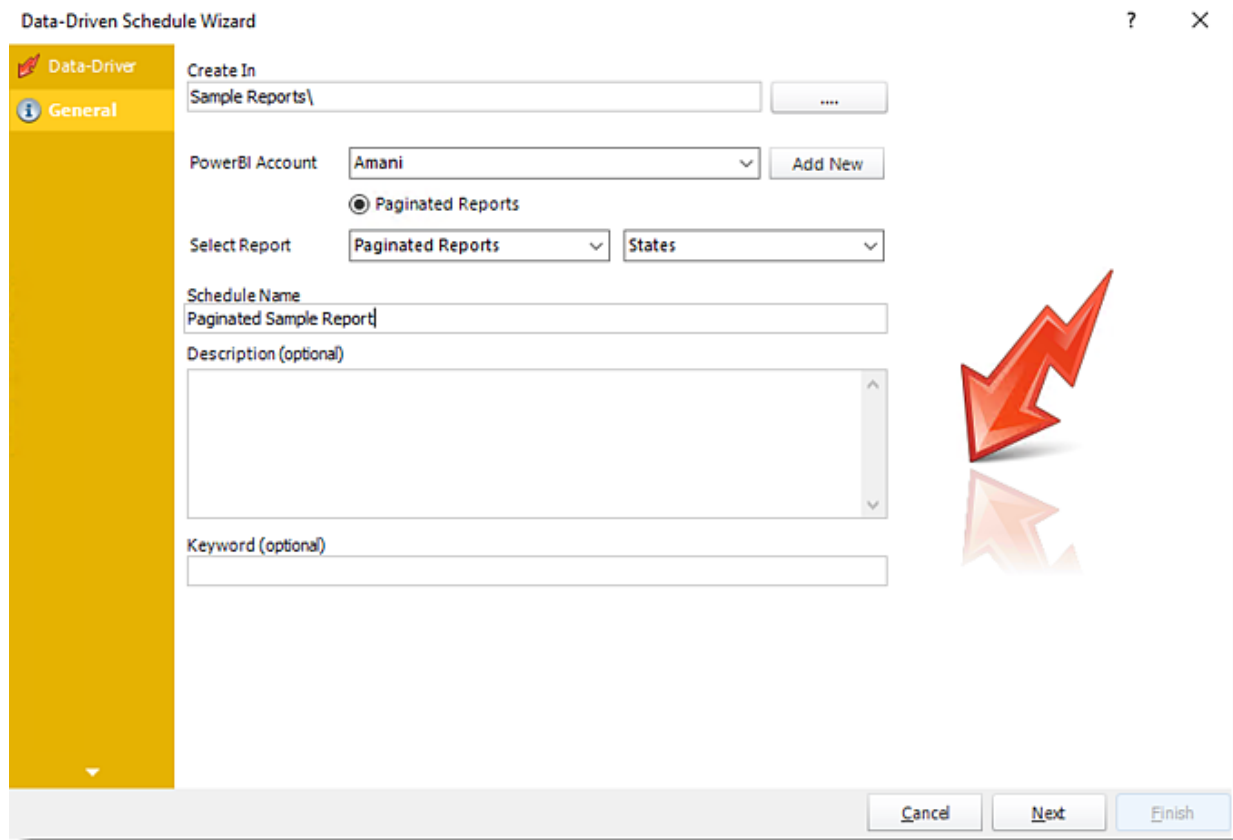
- Enter your JSON string and click **Validate**.



- **Row Identifier:** Select the row identifier for the data collection for the reports. The information that drives the schedule is required to have a row identifier so that each row in the table is uniquely identified by the value in this column. The row identifier is there as an identifier that is used to troubleshoot in cases where there is a problem with one of the collections.
- **Use up to 'x' threads to run this schedule:** Check this option to allow x amount of threads to be exported simultaneously.
- **Group reports by email address:** You can instruct PBRS to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.

Click **Next** to continue to the next wizard section.

## General Wizard



**Data-Driven Schedule Wizard**

**General**

Create In: Sample Reports\

PowerBI Account: Amani

☒ Paginated Reports

Select Report: Paginated Reports States

Schedule Name: Paginated Sample Report

Description (optional):

Keyword (optional):

Cancel Next Finish

- **Create In:** This section is to select the folder where you want to create a single report in.
- **Power BI Account:** This section is to select what Power BI Account you want to create the single report in. In this section, you may add a new account in the Add New button.
- **Select Report:** Click on the drop-down menus to navigate to the required report.
- **Schedule Name:** Write in the name of the single schedule.
- **Description (optional):** You may write a short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Data-Driven Schedule Wizard

Start Date: 2/28/2020 End Date: 2/28/3019

General | **Schedule**

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 12:30:20 PM Exception calendar: [v]

Next to run on: 2/28/2020 12:30:20 PM

Repeat every: 0.25 days until: 12:30:20 PM

☒ Enable this schedule

Cancel Next Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

<input checked="" type="checkbox"/> Monday	<input checked="" type="checkbox"/> Tuesday	<input checked="" type="checkbox"/> Wednesday	<input checked="" type="checkbox"/> Thursday	<input checked="" type="checkbox"/> Friday
<input checked="" type="checkbox"/> Saturday	<input checked="" type="checkbox"/> Sunday			

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other

Calendar Name

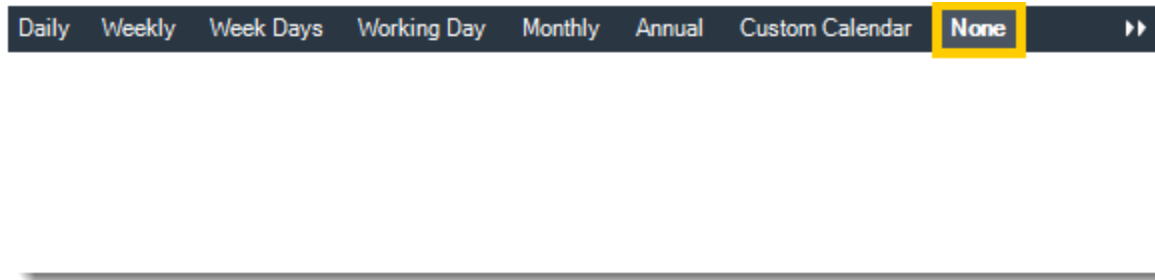
- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other**

Run schedule every

Minutes  
 Hours  
 Days  
 Weeks  
 Months  
 Years

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

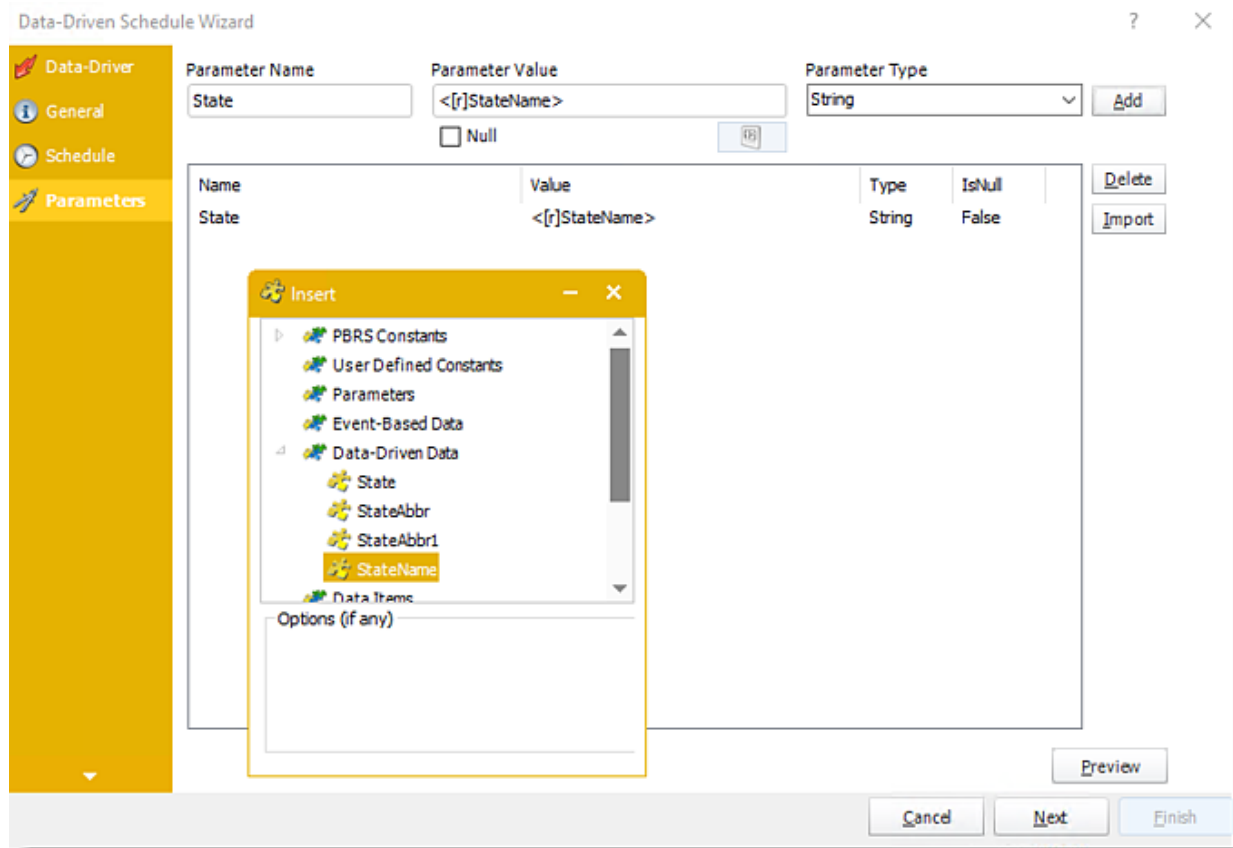
*For example, you can set up a daily package to run every day at 8 am and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

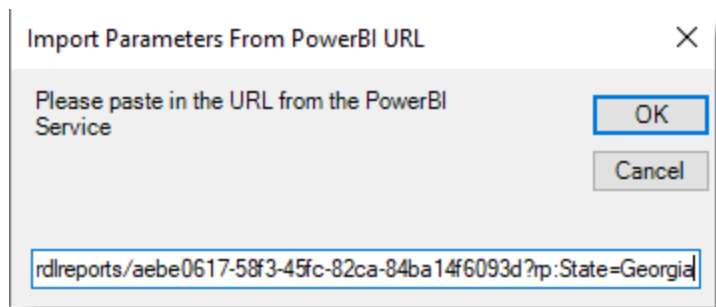
Click **Next** to continue to the next wizard section.



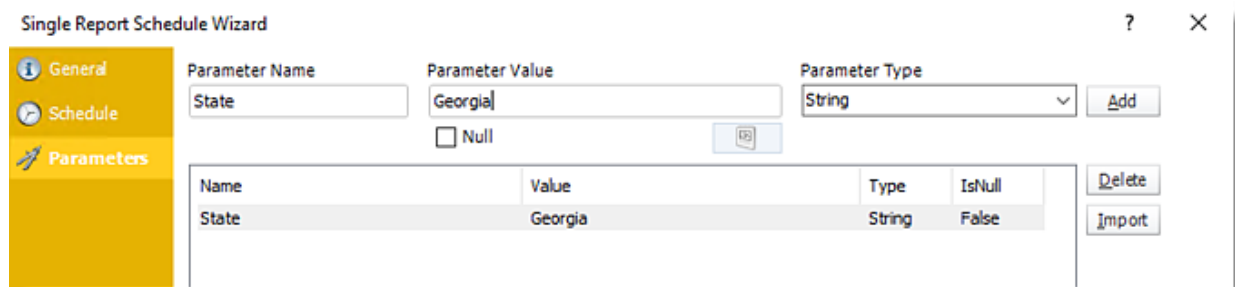
## Parameters Wizard



- In this section, you will determine the parameters for your report (if any). If your report has no parameters, you may skip this section by clicking next.
- With PBRs, you can Data Drive any parameter in your report. Ensure the filter values for each record are listed in your database.
- Using Data-Driven Inserts you can pull these values into your report.
- Drag and drop your **Data-Driven inserts** into the desired filter fields. If you do not wish to enter a data-driven value in your filter, you can still manually type a value.
- **Parameter Name:** Enter the parameter name of your report.
- **Parameter Value:** Enter the parameter value of your report.
- **Parameter Type:** Use the drop-down menu to select the parameter.
- Click **Add** to add the parameter value.
- **Import:** Use this option to add parameter values using a URL from Power BI Service to import a parameter to this report.



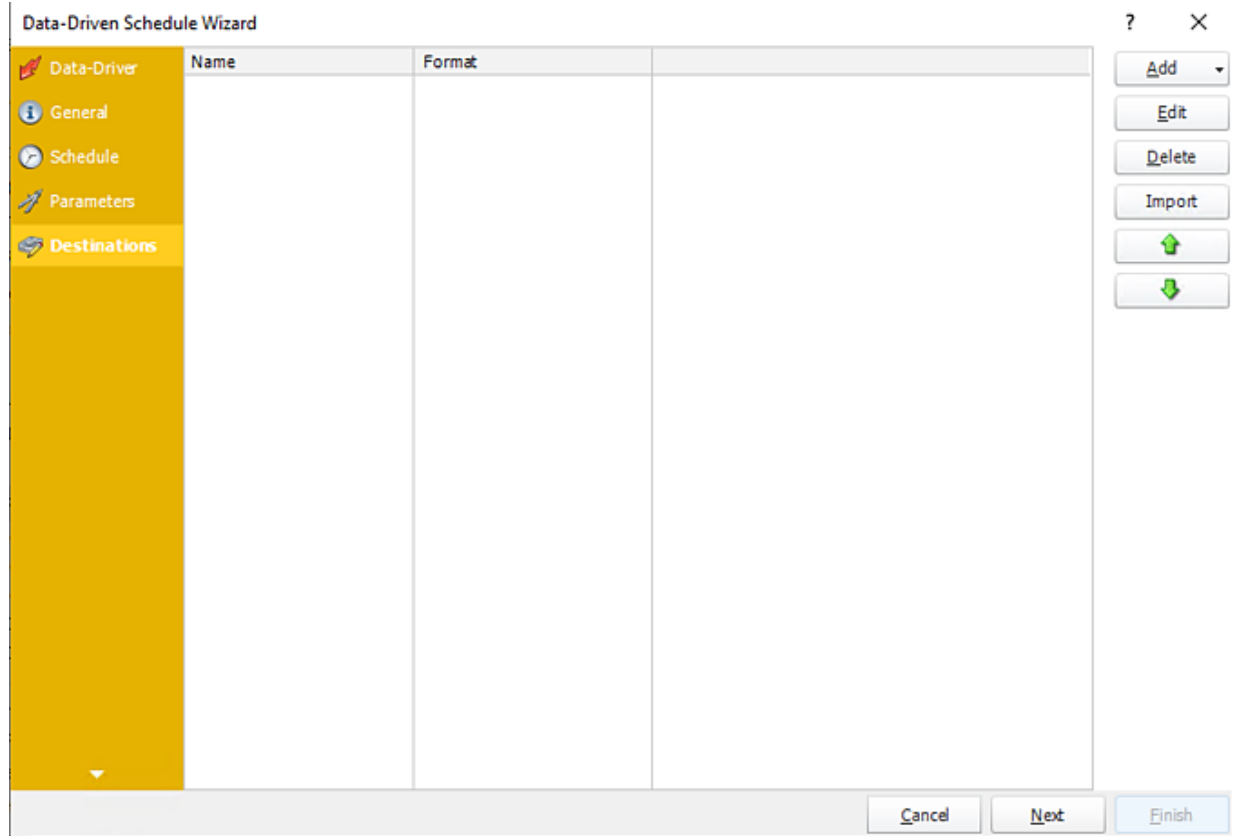
- Click **OK**.



- Preview:** View the report output given the selected parameters.

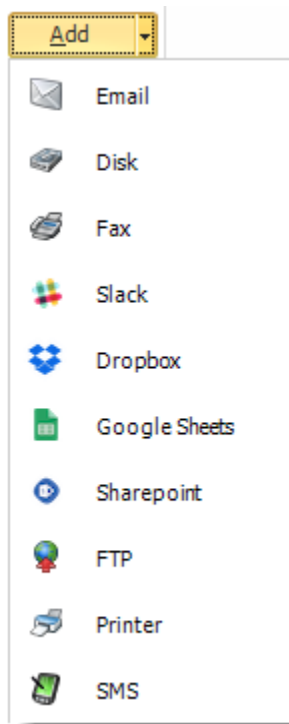
Click **Next** to continue to the next wizard section.

## Destination Wizard



In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.

- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.
  - For more information of adding destinations, [click here](#).
  - For more information about Output Formats, [click here](#).



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.

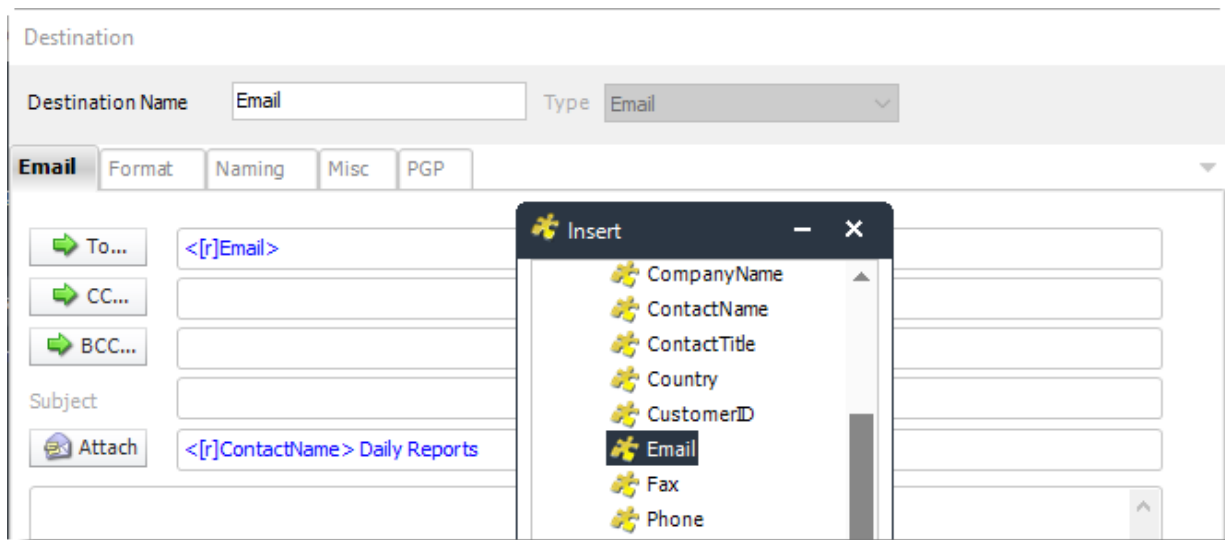
### Customizing the Destination

With the Data-Driven Schedule, you can determine the delivery method of your report based on your data. In your table, specify the delivery method by creating a column for each delivery type (FTP, SharePoint, Email etc.). For each record specify their email, fax number, and so on.

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co.jp</a>	<a href="#">jwu</a>

*Tip: For email destinations, simply add a semicolon after an email address to send the same instance of the report to another email address.*

- Data driving the Report's Distribution.
- As mentioned above, PBRs will pull delivery data from your database.
- In this example, we will be using email addresses found in the table.
- With Data Driven inserts, simply drag and drop the field that indicates your desired destination (*email in this case*).



- Now PBRS will deliver a unique report based on a corresponding email address.

#### *Customize Recipient Messaging*

- You can also customize the messaging the recipient receives. Using Data-Driven Inserts, PBRS will automatically pull data from your table and use it to customize the subject, body or report format.

Destination

Destination Name  Type

**Email** Format Naming Misc PGP

To...

CC...

BCC...

Subject

Attach

Dear <[r]CustomerID>,  
Here is your report of <[m]CurrentScheduleName>.  
Thank you.

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:

**Insert**

- Data-Driven Data
  - Address
  - City
  - CompanyName
  - ContactName
  - ContactTitle
  - Country
  - CustomerID**
  - Email
  - Fax
  - Phone
  - PostalCode
  - Region

Options (if any)

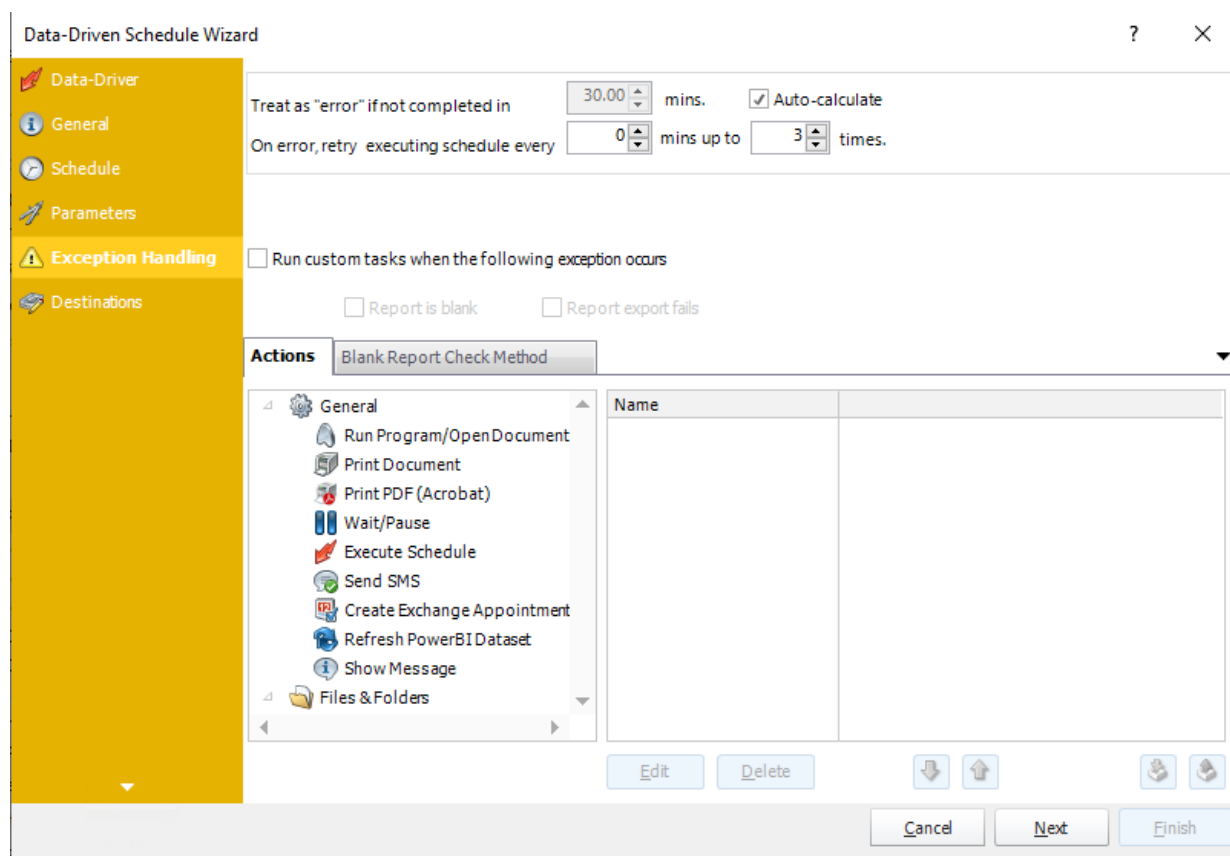
OK Cancel

- Simply drag and drop fields from your table to the desired position.

*For example, to customize an email greeting, type the greeting, and add the recipient's name as shown above.*

Click **Next** to continue to the next wizard section.

## Exception Handling Wizard



**Data-Driven Schedule Wizard**

Treat as "error" if not completed in  mins. ☒ Auto-calculate

On error, retry executing schedule every  mins up to  times.

☐ Run custom tasks when the following exception occurs

☐ Report is blank ☐ Report export fails

**Actions** Blank Report Check Method

**General**

- Run Program/Open Document
- Print Document
- Print PDF (Acrobat)
- Wait/Pause
- Execute Schedule
- Send SMS
- Create Exchange Appointment
- Refresh PowerBI Dataset
- Show Message
- Files & Folders

**Name**

Name	Action
------	--------

Edit Delete

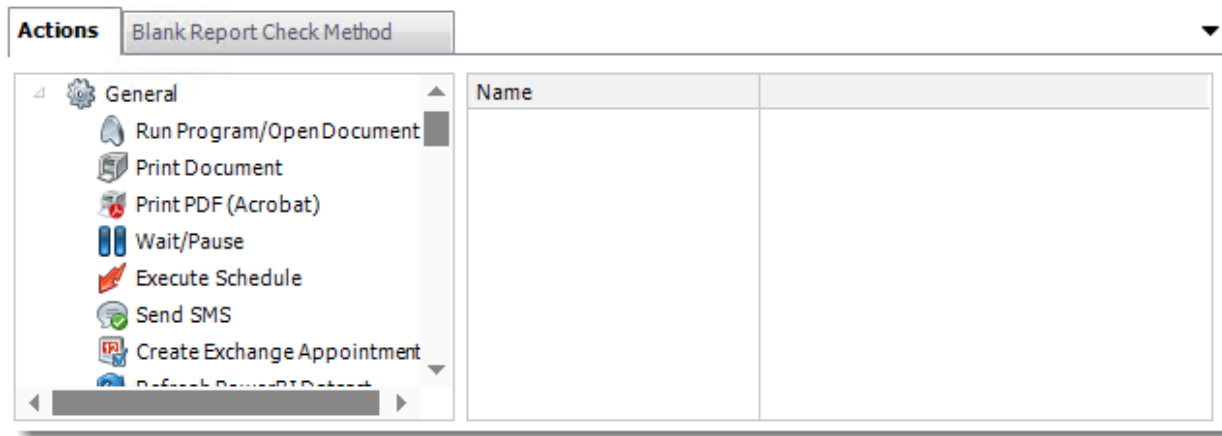
Cancel Next Finish

**Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.
  - **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.
  - **Report exports fail:** If a report export fails, you can receive a notification or run a tasks that the report failed to execute.

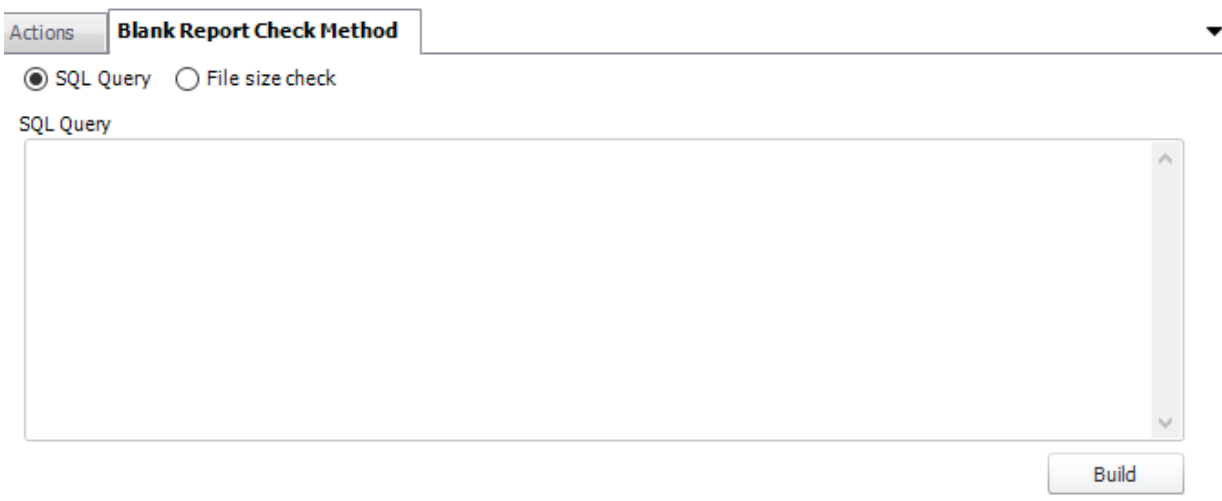
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

## Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).



Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

OK Cancel

- **File size check:** Assume reports are blank if size is under "X" bytes.

Click **Next** to continue to the next wizard section.

## Refresh Datasets Wizard

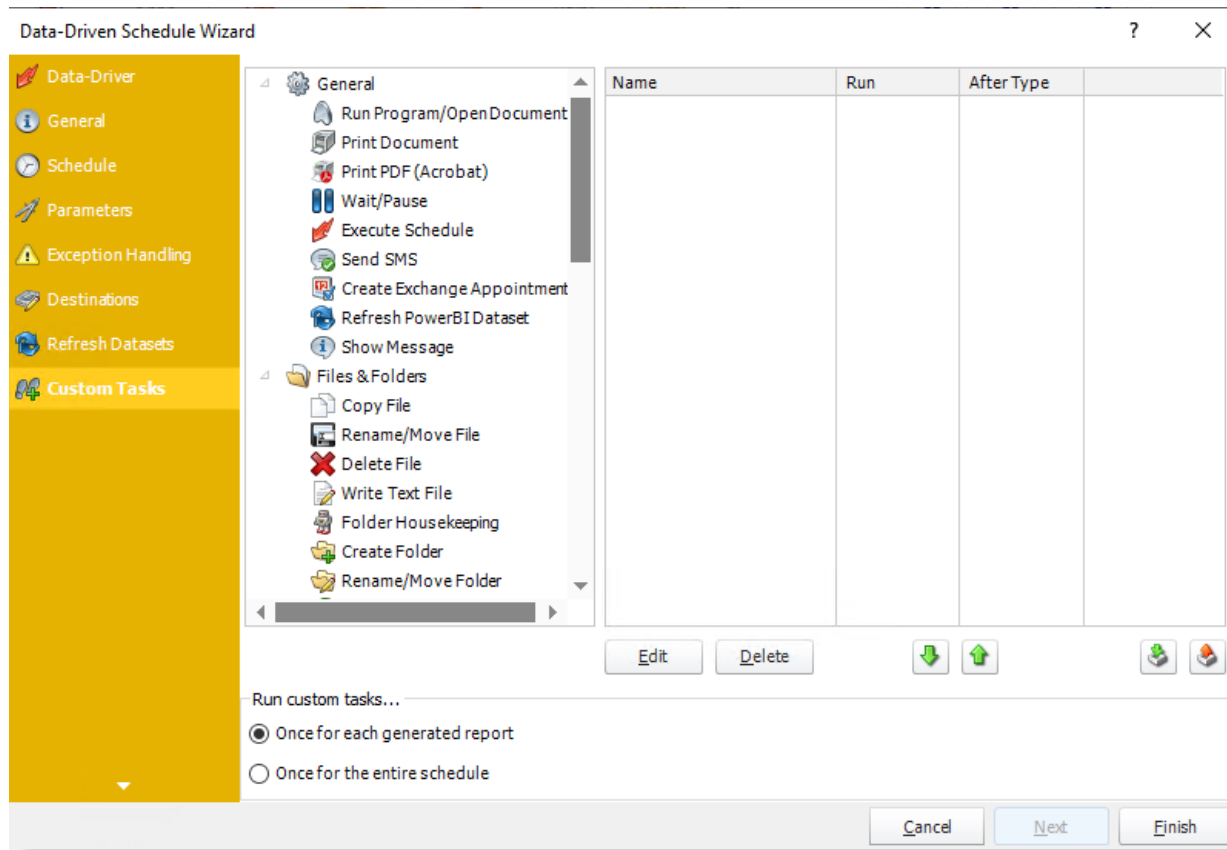
The screenshot shows the 'Data-Driven Schedule Wizard' window, specifically the 'Refresh Datasets' step. The left sidebar has a yellow background and contains the following options: Data-Driven (with a red arrow icon), General (with an 'i' icon), Schedule (with a clock icon), Parameters (with a pencil icon), Exception Handling (with a warning icon), Destinations (with a cloud icon), and Refresh Datasets (with a blue refresh icon and highlighted in yellow). The main area is titled 'Select datasets to refresh before the report is executed'. It contains three dropdown menus: 'PowerBI Account', 'Workspace', and 'Dataset'. To the right of these are 'Add >' and '< Delete' buttons. Below the dropdowns is a 'Notification Options' section with three radio buttons: 'Notify on Completion' (selected), 'Notify on Failure', and 'Do not Notify'. On the right side of the main area is a table with the following headers: 'Dataset Name', 'Account', 'Workspace', and 'Notification'. The table is currently empty. At the bottom of the main area, there is a text field with the label 'After refreshing the datasets above, wait' followed by a spinner box containing the number '0' and the text 'seconds before running the report.'. At the bottom right of the window are three buttons: 'Cancel', 'Next', and 'Finish'.

In this section select the datasets to refresh before the report is executed.

- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**

Click **Next** to continue to the next wizard section.

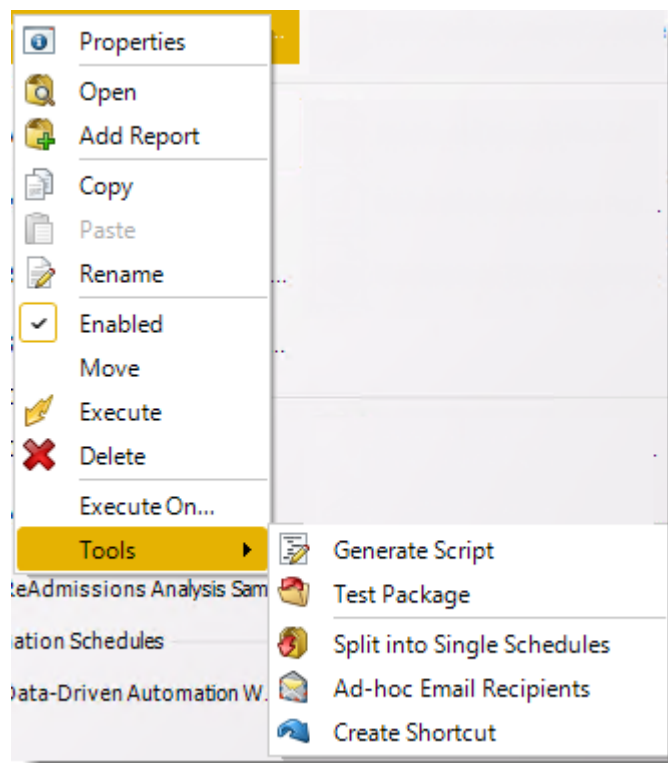
## Custom Task Wizard



In the section, you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto-triggered before or after a report runs.

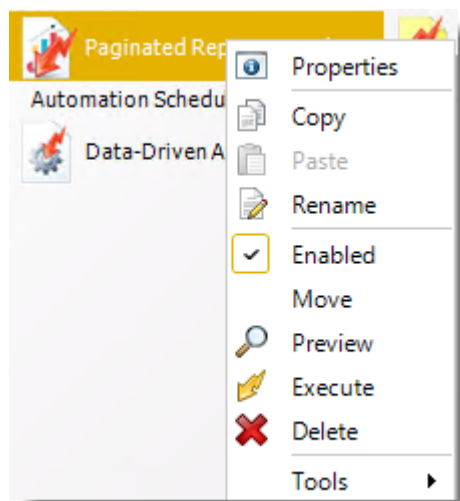
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

## Data-Driven Schedule Context Menu



- **Right-Click** on a schedule to see the following actions:
- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Preview:** Preview the report before execution.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test:** Use this option to test the schedule and export it to selected "test" destinations.
- **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.
- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.
- **Ad-Hoc View:** This button allows you to preview the report.

## Data-Driven Schedules Properties



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedules such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

A screenshot of the 'Data-Driven Schedule Properties' dialog box, specifically the 'General' tab. The dialog has a yellow sidebar on the left with icons for General, Schedule, Parameters, Destinations, Exception Handling, Refresh Datasets, Tasks, Sharing, Snapshots, History, and Data Driver. The main area contains the following fields:

- Schedule Name:** A text box containing 'Paginated Reports Sample'.
- Create In:** A text box containing 'Sample Reports' and a button with three dots.
- PowerBI Account:** A dropdown menu showing 'Amani' and an 'Add New' button.
- Report Type:** A radio button selected for 'Paginated Reports'.
- Select Report:** Two dropdown menus, the first showing 'Paginated Reports' and the second showing 'States'.
- Description (optional):** A large text area.
- Keyword (optional):** A text box.
- Unique ID:** A text box containing '636208163'.

At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

## •Schedule

Data-Driven Schedule Properties ? ×

**General** **Schedule** Parameters Destinations Exception Handling Refresh Datasets Tasks Sharing Snapshots History Data Driver

Start Date   ☐ End Date

**Daily** Weekly Week Days Working Day Monthly Annual Custom Calendar Other **▶▶**

Repeat every    days

Schedule time    ☐ Exception calendar

Next to run on

☐ Repeat every    hours  until

☒ Enable this schedule

## •Parameters

Data-Driven Schedule Properties

General Schedule **Parameters** Destinations Exception Handling Refresh Datasets Tasks Sharing Snapshots History Data Driver

Parameter Name Parameter Value Parameter Type Add

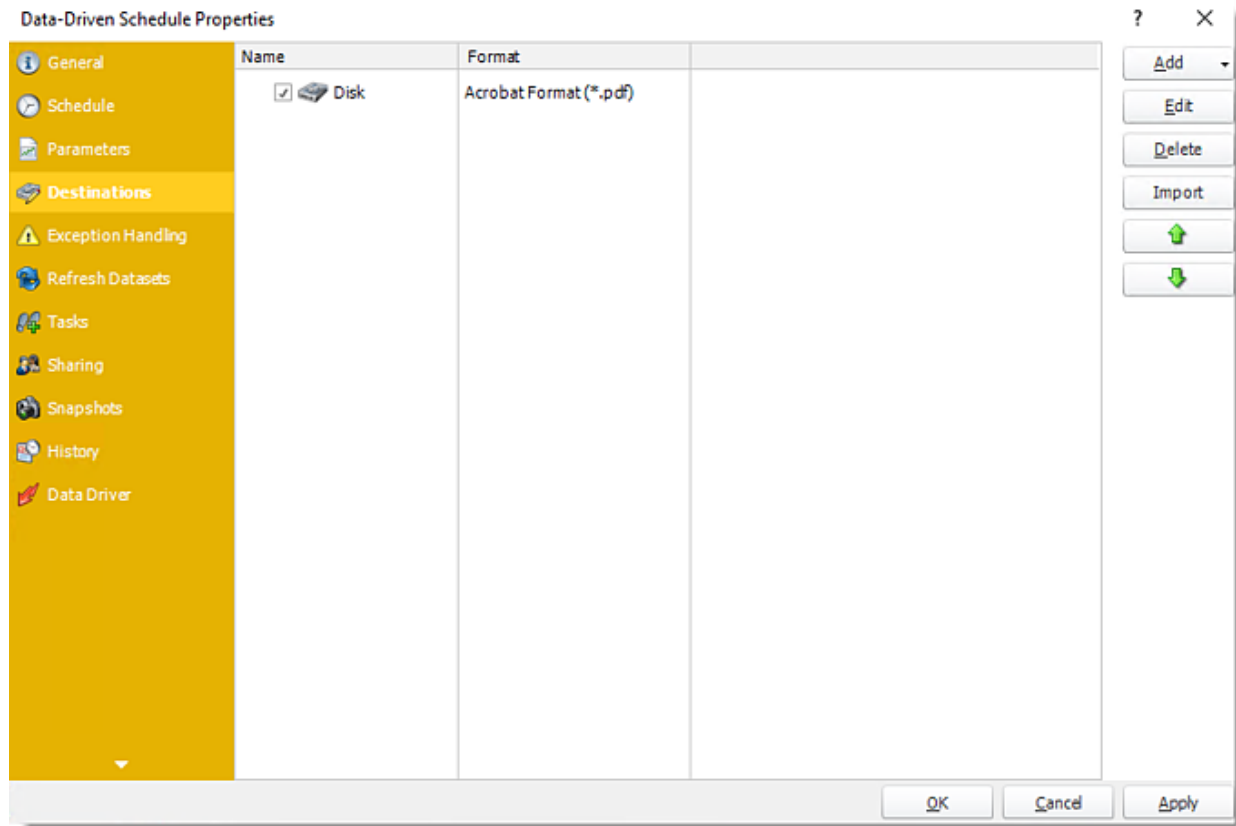
☐ Null

Name	Value	Type	IsNull	
State	<[r]StateName>	String	False	Delete Import

Preview

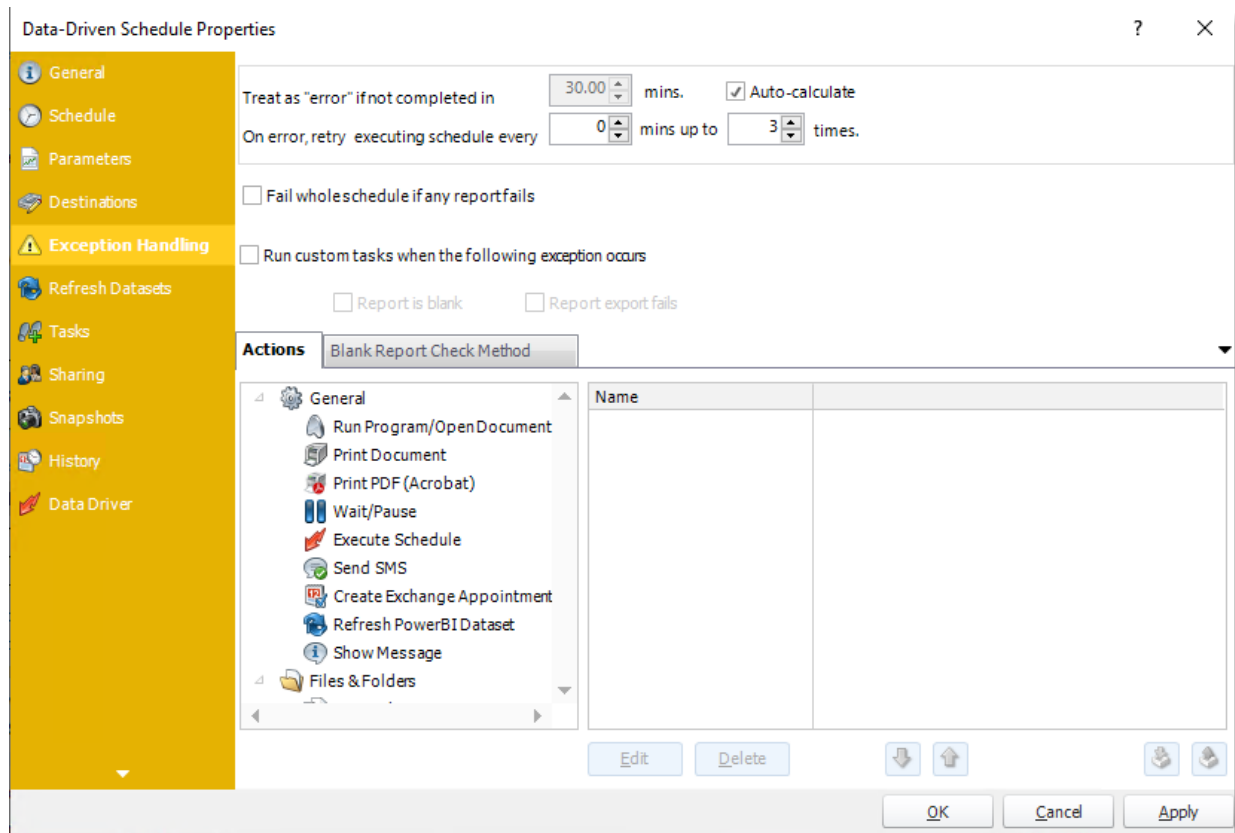
OK Cancel Apply

•Destinations



## •Exception Handling





## •Refresh Datasets

Data-Driven Schedule Properties

General Schedule Parameters Destinations Exception Handling Refresh Datasets Tasks Sharing Snapshots History Data Driver

Select datasets to refresh before the report is executed

PowerBI Account Add >

Workspace < Delete

Dataset

Notification Options

☒ Notify on Completion

☐ Notify on Failure

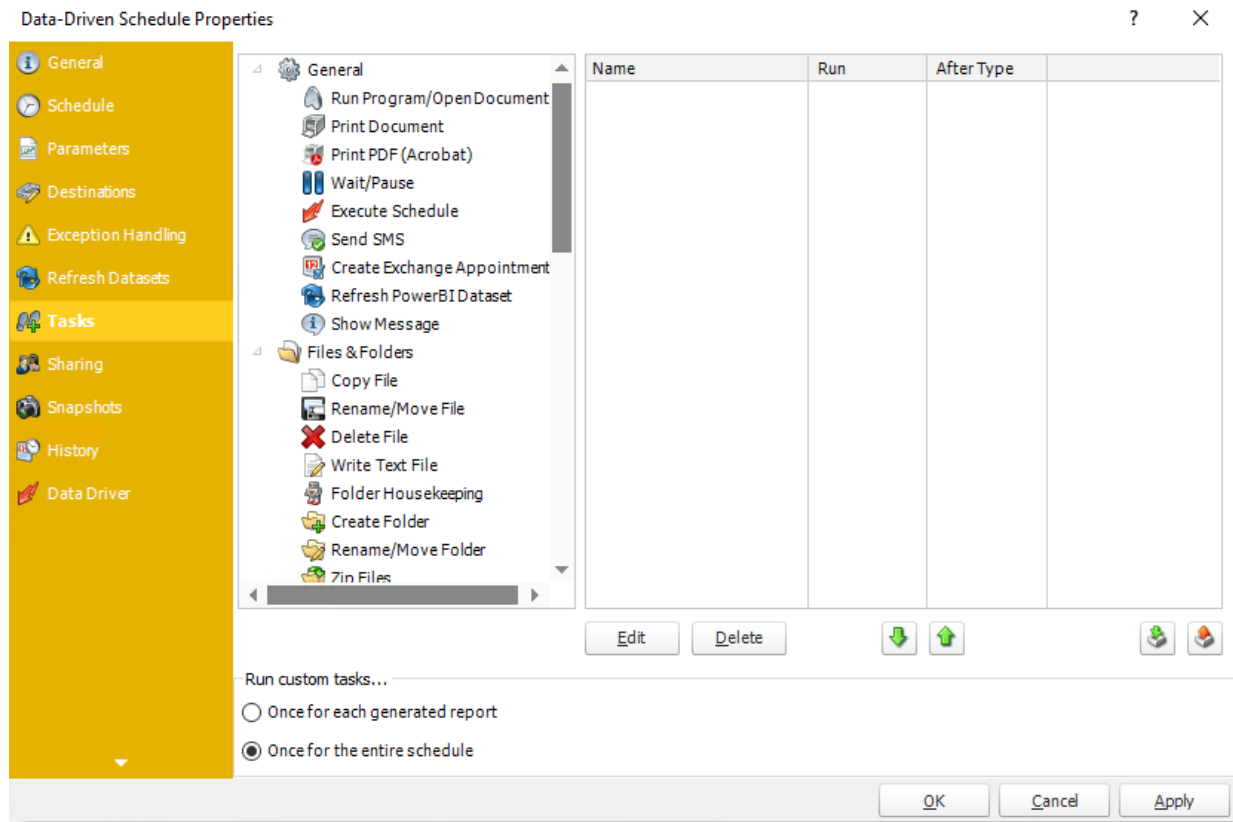
☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

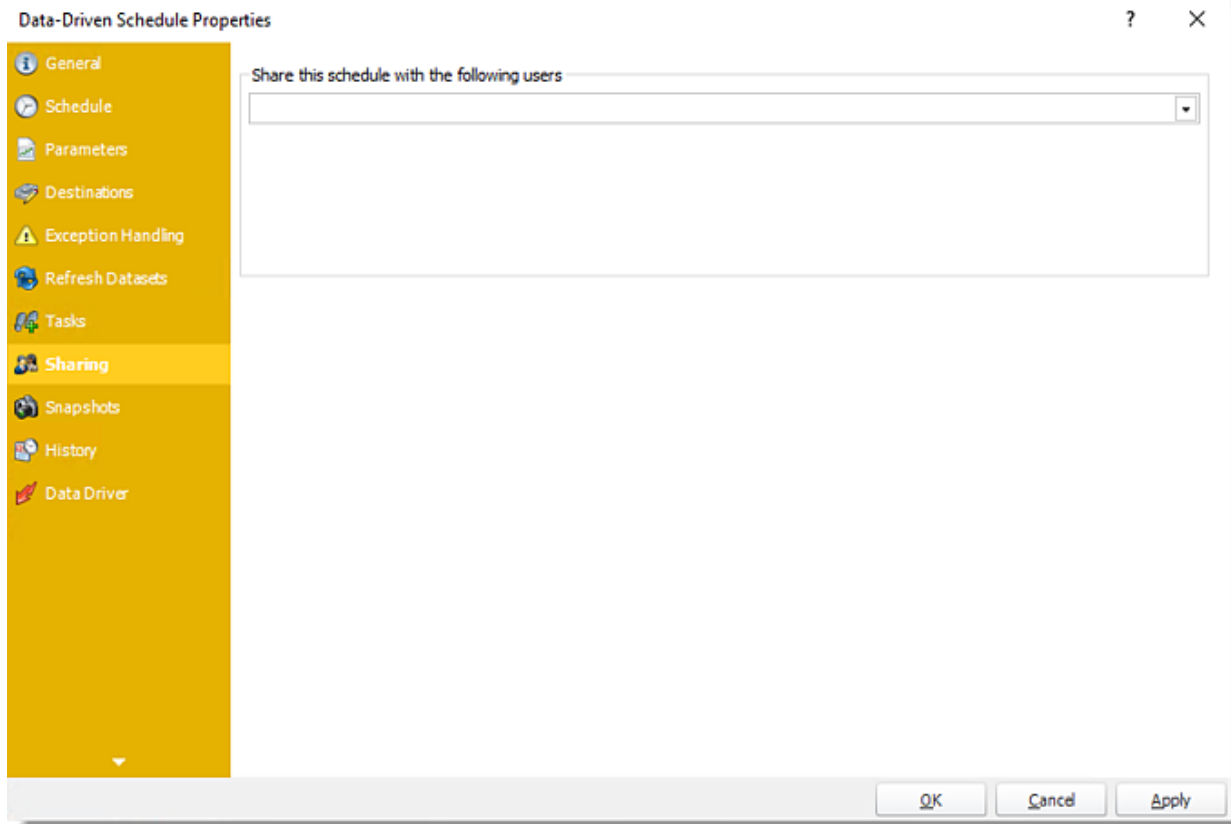
After refreshing the datasets above, wait 0 seconds before running the report.

OK Cancel Apply

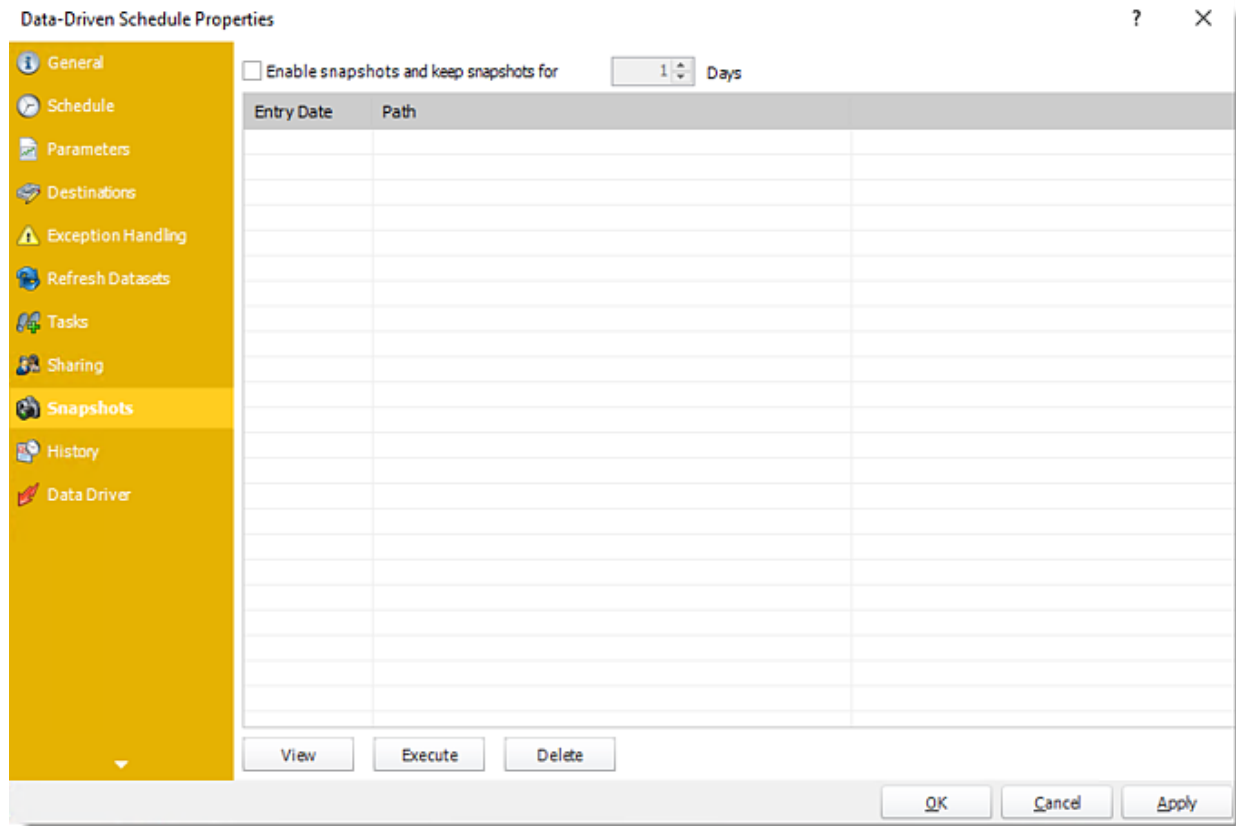
## •Tasks



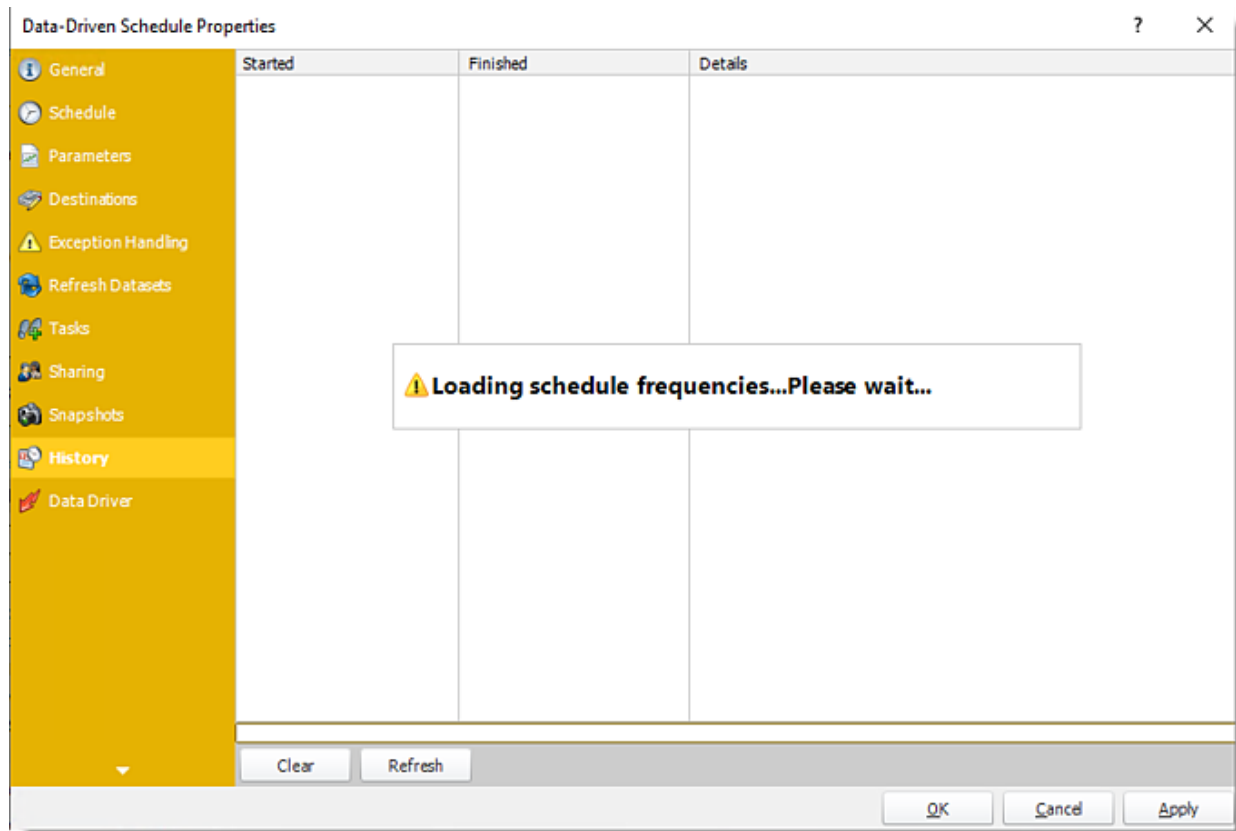
- Sharing:** Here you can share this schedule with multiple users.



- **Snapshots:** A snapshot is a copy of each report a schedule or a package generates. Keeping snapshots enables you to resend past reports without generating them afresh - especially if the data has changed in the meantime.
  - Simply select the number of days to keep the snapshots.



- **History:** Review the schedule's history. Successes, failures, and other data is located here.



- **Data-Driver**

**Data-Driven Schedule Properties** ? X

**General**  
Schedule  
Parameters  
Destinations  
Exception Handling  
Refresh Datasets  
Tasks  
Sharing  
Snapshots  
History  
**Data Driver**

☒ SQL Data Driver ☐ JSON Data Driver

Database Connection Setup

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account  
Tarkin Northwind

Connect

Data selection criteria  
SELECT top 3 States.\* FROM States

Build

Key Column StateName

☐ Group reports together by email address (email destination only)

☒ Use up to 8 threads to run this schedule

OK Cancel Apply

## How do I use Data-Driven Schedules for Paginated Reports on Premise or SSRS reports in PBRs?

**A data-driven schedule allows you to drive all variables of your reporting requirements (parameters, destinations, output formats, etc.) from database tables and queries at run time. Burst your reports out to multiple formats & recipients.**

This article applies to:

- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

### Data-Driven Schedules for Paginated Reports on Premise or SSRS Reports

A data-driven schedule allows you to drive all variables of your reporting requirements (parameters, destinations, output formats, etc.) from database tables and queries at run time. You can also use static text and default values should you wish. You can use Data-Driven schedules for a number of scenarios. Use a data-driven schedule for bursting reports based on parameter values to specific formats like PDF, Excel and so on.

*Here are some examples:*

- Distribute a report to a fluctuating list of recipients. For example, you can distribute a report throughout a large organization where recipients vary from one month to the next, or use other criteria that determines group membership from an existing set of users. E.g. select \* from mytable where firstname = 'john' will generate the report and distribute only for records where the recipient's first name is John.
- Filter the report output using report parameter values that are retrieved at run time. For example, the parameter value returned from the table for Last Name will be "Doe" for John Doe and "Smith" for John Smith.
- Determine the delivery type and report format dynamically at run time. For example, John Smith gets the report as a PDF file by email with a customized email body and John Doe gets the report as an excel spreadsheet by FTP uploaded to his webserver.

The following simple example will illustrate the process of creating a Data-Driven Schedule.

*Scenario: You have a report which has a large number of parameter and destination combinations. Representing the combinations in a table may look something like the example below (Yellow = parameters)*

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe		\\myserver\myreports\jdoe			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	\\myserver\myreports\jdoe			
Americas	North	Canada	1	Peter	Crimble			HP2003sUpstairs		
Americas	South	Brazil	34	Jorge	Minola		\\myserver\myreports\jdoe		myftpserver.com	jminola
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			myotherftpserver.coi	jwu



- You need to have the report run once for each record. The parameter values entered in the table above should populate the parameters in the report and the report should be delivered to the destinations shown in the table.
- Please note that with the above data when the schedule runs, the following will occur:
  - John Doe will receive only one email for the reports from sectors 1 and 3. He will also get the reports from sectors 2, 3 and 34 delivered to his reports disk location.
  - Peter Crimble will have his report printed on the Printer he specified.
  - Jorge Minola will have a copy of his report sent to John Doe to the disk location he specified and a copy uploaded to his FTP server and folder.
  - Anil Maharaja will receive an email as requested.
  - John Wu will have his report delivered to his email and FTP server as requested.

*Note that as the data changes in the database to reflect the requirements, the reports will be delivered as necessary without requiring any changes to the schedule in PBRS.*

*Using a Data Driven schedule PBRS will reel through the database table and generate and deliver a report for each record using the information provided.*

*The data driver allows for bursting reports to different formats and different destinations as well as defining other more traditional values like parameters.*

How do I create Data-Driven Schedule for Paginated Reports on Premise or SSRS Reports?

- Go to **Data-Driven** and select **For SSRS** or **Paginated Reports**.



Get values from database

☐ ODBC DSN
 ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple Advanced

Only return records where

☒ And
 ☐ Or

Where

Parse

OK Cancel

## Building a Data Driver Wizard

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes.
- **ODBC Datasource Name:** Check this option to use ODBC DSN. Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.  
All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRS NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRS should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.

The screenshot shows the 'Data-Driven Schedule Wizard' window. The 'Data selection criteria' section contains the SQL query: `SELECT Contacts.* FROM Contacts`. Below this, there is a 'Key Column' dropdown menu and a 'Build' button. At the bottom of the window, there are two checked options: 'Use up to 8 threads to run this schedule' and 'Group reports together by email address (email destination only)'. The bottom right corner features 'Cancel', 'Next', and 'Finish' buttons.

- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.

- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.
- **Use up to 'x' threads to run this schedule:** Check this option to allow x amount of threads to be exported simultaneously.
- **Group reports by email address:** You can instruct PBRS to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.

Click **Next** to continue to the next wizard section.

## General Wizard



**Data-Driven Schedule Wizard**

**General**

Create In:

☒ Use SSRS Account:

Service URL:

Report Location:

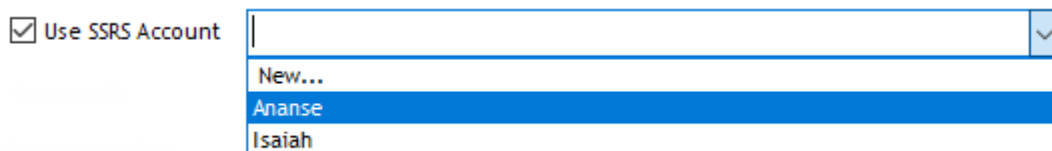
Schedule Name:

Description (optional):

Keyword (optional):

**Next**

- **Create in:** The PBRS folder where the schedule is stored.
- **Use SSRS Account:** Select the SSRS Account where your report server is located, and then click on (...) button next in **Report Location**.



☒ Use SSRS Account

New...

Ananse

Isaiah

*Hint: SQL Azure Reporting Services- when writing your report, make sure you have enabled Forms Authentication. You should use the 2010 .asmx address for your reporting service URL.*

Ananse - http://ananse/reportserver/reportservice2010.asmx - http://anans...

Please enter the credentials used to access your report server (if any) and then click the "Connect" button to browse the server for the required report

Domain Name\UserID Password

christiansteven\karen .....

Connect

☐ Server uses custom/forms authentication

Please select the report

- http://ananse/reportserver/reportservice2010.asmx
  - \_SQL-RD Sample Reports
  - Business Reports
  - ChristianSteven\_MSCRM
  - Data Sources
  - Financial Reports
  - Linked Reports
  - Report Parts
  - Samples
  - SharedReports
  - Working Samples

OK Cancel

- **Service URL:** Uncheck 'Use SSRS Account' checkbox, to enter the address of your reporting services server.
- **Report Location:** Browse through the report server browser to select the desired report. Authenticate to the reports server if necessary.
- **Schedule Name:** The name of the schedule.
- **Description:** A short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Data-Driven Schedule Wizard

Start Date: 8/30/2018 End Date: 8/30/3017

General Schedule

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every: 1 days

Schedule time: 4:32:35 PM Exception calendar:

Next to run on: 8/30/2018 4:32:35 PM

Repeat every: 0.25 until: 4:32:35 PM

Enable this schedule and execute it on: DEFAULT

Cancel Next Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

The screenshot shows a scheduling interface with a dark blue header bar containing tabs: Daily, Weekly, Week Days, Working Day, Monthly, Annual, Custom Calendar, and Other. The 'Weekly' tab is highlighted with a yellow border. Below the header, there is a section for repeating the schedule. It includes a 'Repeat every' field with a spinner set to '1' and the unit 'weeks'. Below this, there is a section labeled 'on' with a grid of checkboxes for the days of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. The checkboxes for Monday, Wednesday, and Friday are checked.

- **Week Days:** Run the schedule Monday through Friday.

The screenshot shows the same scheduling interface as before, but with the 'Week Days' tab highlighted in the header bar. The content area below the header is empty.

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

The screenshot shows the scheduling interface with the 'Working Day' tab highlighted. Below the header, there is a section titled 'Specify the 'nth' or 'last' working day of the month'. It contains two radio buttons: 'nth' (which is selected) and 'Last'. Next to the 'nth' radio button is a spinner field set to '1'.

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other

Calendar Name

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

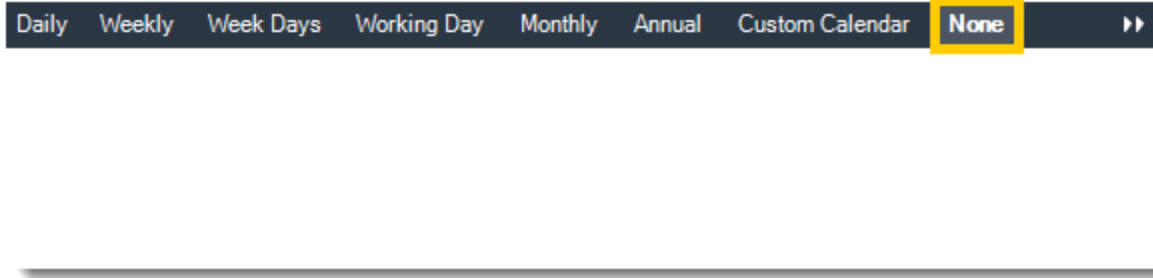
Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other**

Run schedule every

Minutes  
 Hours  
 Days  
 Weeks  
 Months  
 Years



- **None:** No scheduling is required for this item.



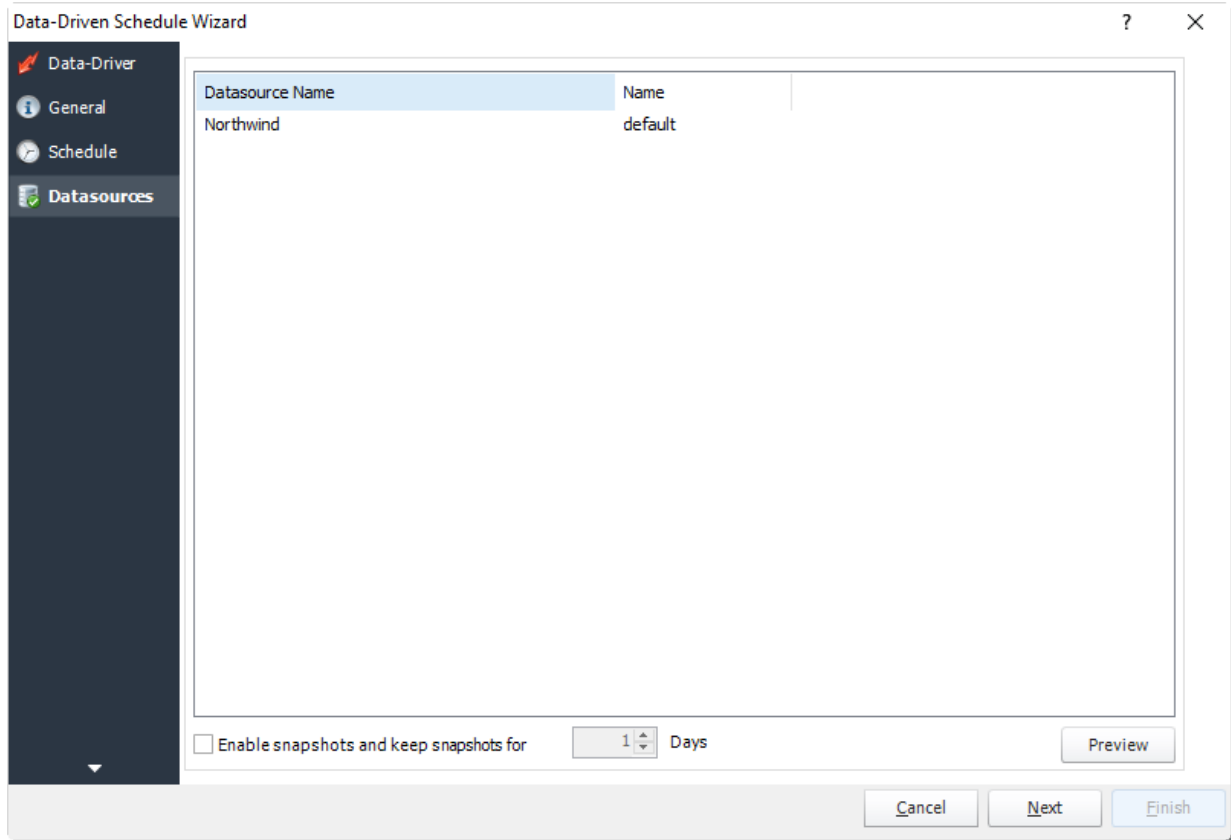
- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Datasources Wizard



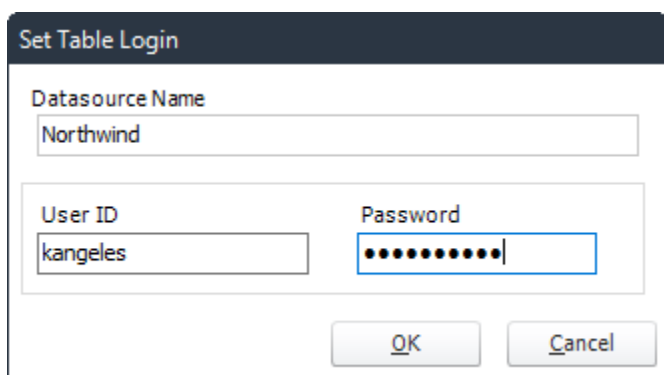
The screenshot shows the 'Data-Driven Schedule Wizard' window with the 'Datasources' tab selected in the left sidebar. The main area contains a table with two columns: 'Datasource Name' and 'Name'. The first row has 'Northwind' under 'Datasource Name' and 'default' under 'Name'. Below the table, there is a checkbox labeled 'Enable snapshots and keep snapshots for' followed by a spinner box set to '1' and the text 'Days'. To the right of this is a 'Preview' button. At the bottom right of the window are three buttons: 'Cancel', 'Next', and 'Finish'.

Datasource Name	Name
Northwind	default

☐ Enable snapshots and keep snapshots for  Days Preview

Cancel Next Finish

- In this section you will authenticate to the database what the report runs against, set snapshots, and other options.
- **Login Required:** Set the authentication information for the report.



The 'Set Table Login' dialog box has a title bar with the same name. It contains three input fields: 'Datasource Name' with the value 'Northwind', 'User ID' with the value 'kangeles', and 'Password' which is masked with dots. At the bottom are 'OK' and 'Cancel' buttons.

Datasource Name: Northwind

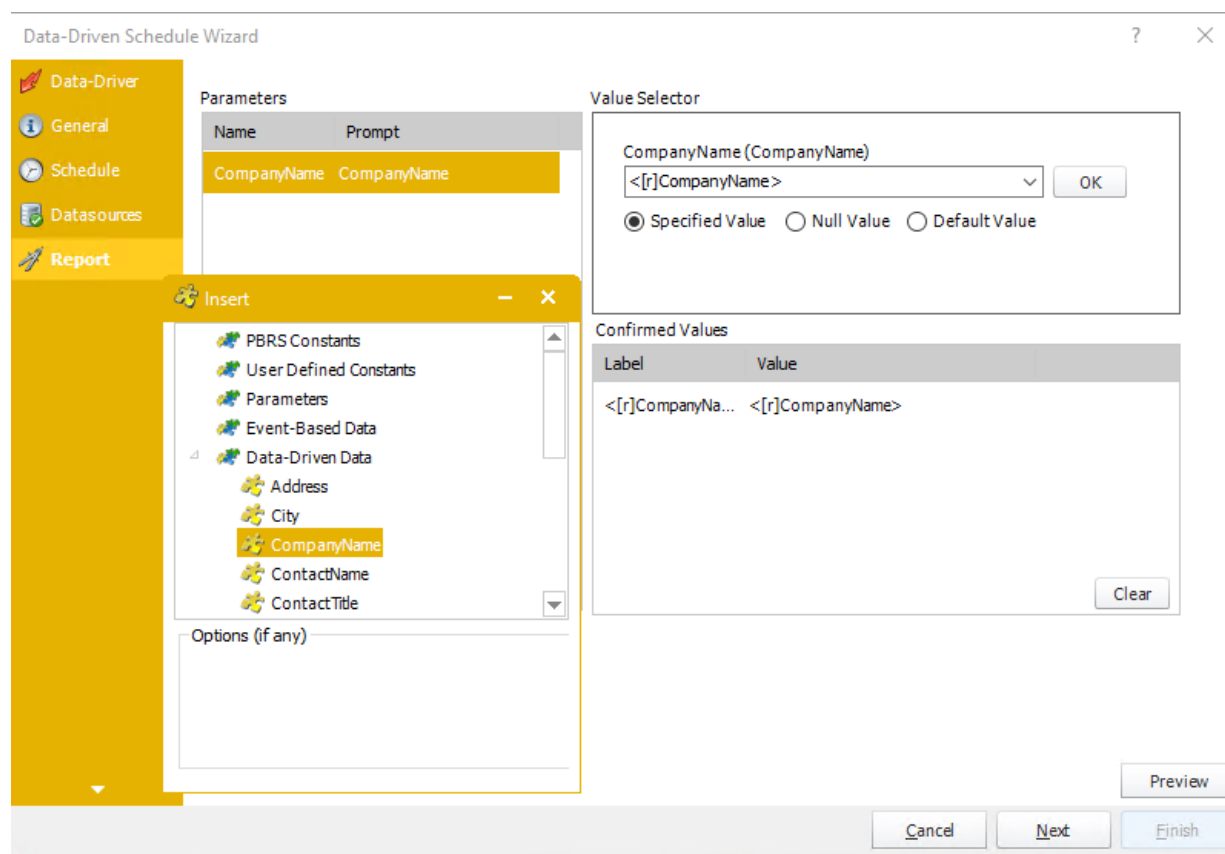
User ID: kangeles Password: .....

OK Cancel

- **Enable Snapshots and keep snapshot for X Days:** Save a Picture of the report as it is produced. Choose the amount of time will be stored in the system before deletion.
- **Preview:** View the report prior to execution.

Click **Next** to continue to the next wizard section.

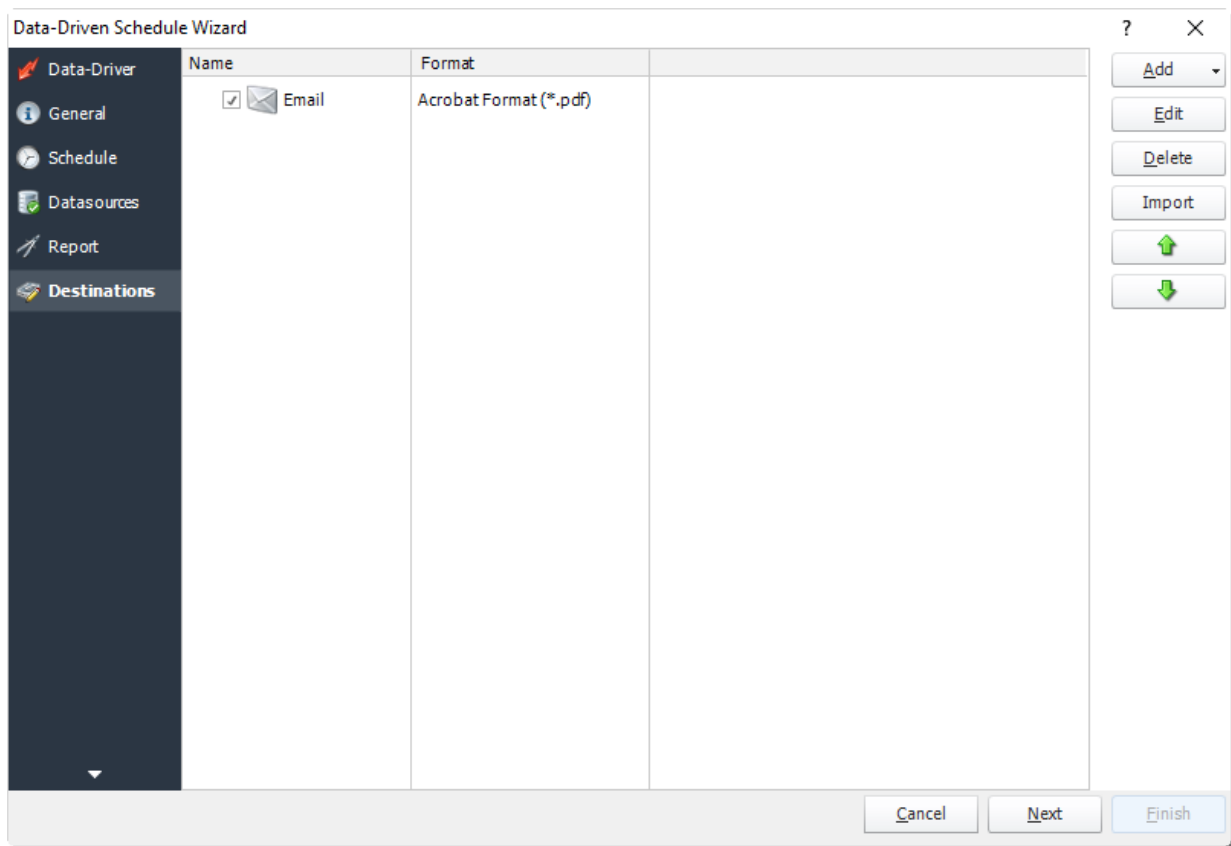
## Report Wizard



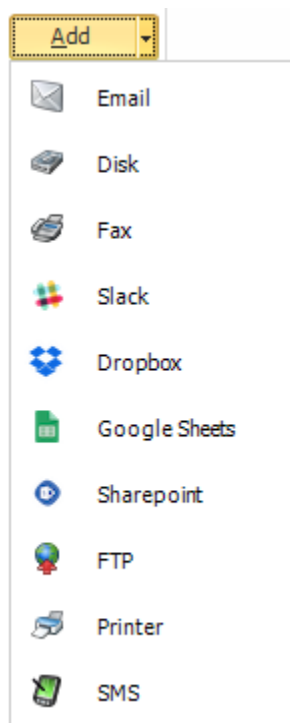
- In this section, you will determine the parameters for your report (if any). If your report has no parameters, you may skip this section by clicking next.
- Drag and drop Data-Driven Inserts into the Value Selector textbox.
- There are 3 requirements in order for PBRs to detect your SSRS Report parameters and their parameter values:
  - The parameter must be in use in the report.
  - The parameter must be visible.
  - The parameter must be set to be prompted at run time.
- If these three requirements are achieved, you should see the parameters in your report listed in this screen.
- For each parameter, select from the drop-down list the value the report must use. In a single schedule, only one parameter value can be run at a time per parameter. You can type a value into the field, or drag and drop an "insert".
- PBRs can handle SSRS Reports with Cascading parameters, or reports where you can select multiple parameter values.
- **Specified Value:** Select the value you want in your report.
- **Null Value:** Set no value for this parameter.
- **Default Value:** It will select the default value.
- **All Values (at run time):** Any new values will automatically will be included at run time.

## Destination Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.



- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.
  - For more information of adding destinations, [click here](#).
  - For more information about Output Formats, [click here](#).



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.

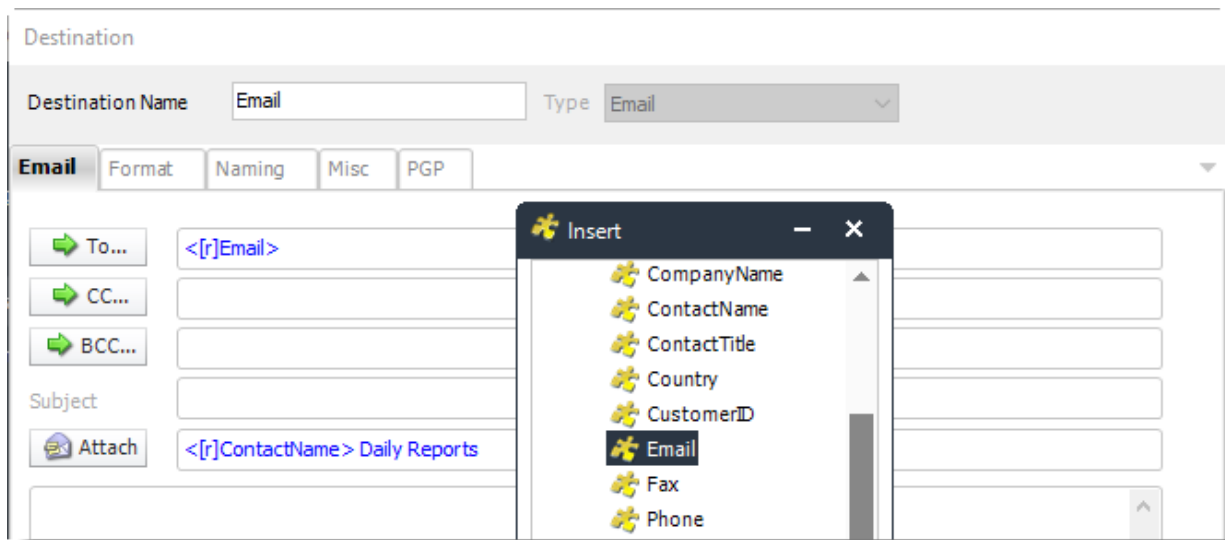
### Customizing the Destination

With the Data Driven Schedule, you can determine the delivery method of your report based on your data. In your table, specify the delivery method by creating a column for each delivery type (FTP, SharePoint, Email etc.). For each record specify their email, fax number, and so on.

Region	Area	Country	Sectc	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="\\myserver\myreports\jdoe">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="\\myserver\myreports\jdoe">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="\\myserver\myreports\jdoe">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co.jp</a>	<a href="#">jwu</a>

*Tip: For email destinations, simply add a semicolon after an email address to send the same instance of the report to another email address.*

- Data driving the Report's Distribution
- As mentioned above, PBRs will pull delivery data from your database.
- In this example, we will be using email addresses found in the table.
- With Data Driven inserts, simply drag and drop the field that indicates your desired destination (*email in this case*).



- Now PBRS will deliver a unique report based on a corresponding email address.

#### *Customize Recipient Messaging*

- You can also customize the messaging the recipient receives. Using Data Driven Inserts, PBRS will automatically pull data from your table and use it to customize the subject, body or report format.

Destination

Destination Name  Type

**Email** Format Naming Misc PGP

To...

CC...

BCC...

Subject

Attach

Dear <[r]CustomerID>,  
Here is your report of <[m]CurrentScheduleName>.  
Thank you.

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:

**Insert**

- Data-Driven Data
  - Address
  - City
  - CompanyName
  - ContactName
  - ContactTitle
  - Country
  - CustomerID**
  - Email
  - Fax
  - Phone
  - PostalCode
  - Region

Options (if any)

OK Cancel

- Simply drag and drop fields from your table to the desired position.

*For example, to customize an email greeting, type the greeting, and add the recipient's name as shown above.*

Click **Next** to continue to the next wizard section.

## Exception Handling

The screenshot shows the 'Data-Driven Schedule Wizard' window with the 'Exception Handling' tab selected in the left sidebar. The main area contains the following settings:

- Treat as "error" if not completed in:** 30.00 mins. ☒ Auto-calculate
- On error, retry executing schedule every:** 0 mins up to 3 times.
- ☒ Fail if not completed in (mins)
- ☐ Check if the report is blank
- ☐ Ignore the report and subsequent tasks

Below these settings are two tabs: 'Method' and 'Actions'. The 'Method' tab is active, showing two radio buttons: 'SQL Query' (selected) and 'File size check'. Below the radio buttons is a text area labeled 'SQL Query' with a 'Build' button at the bottom right. At the bottom of the window are 'Cancel', 'Next', and 'Finish' buttons.

- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRs to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRs will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRs how many times you want it to retry running the report before declaring it as "Failed."
- **Check if the Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRs on what to do with them.
- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.



## Method

The screenshot shows a software window titled 'Method'. It has two tabs: 'Method' and 'Actions'. The 'Method' tab is active, showing two radio buttons: 'SQL Query' (selected) and 'File size check'. Below these is a large text area labeled 'SQL Query' with a vertical scrollbar. At the bottom right of the text area is a 'Build' button.

- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
- Click **Build**.
- Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

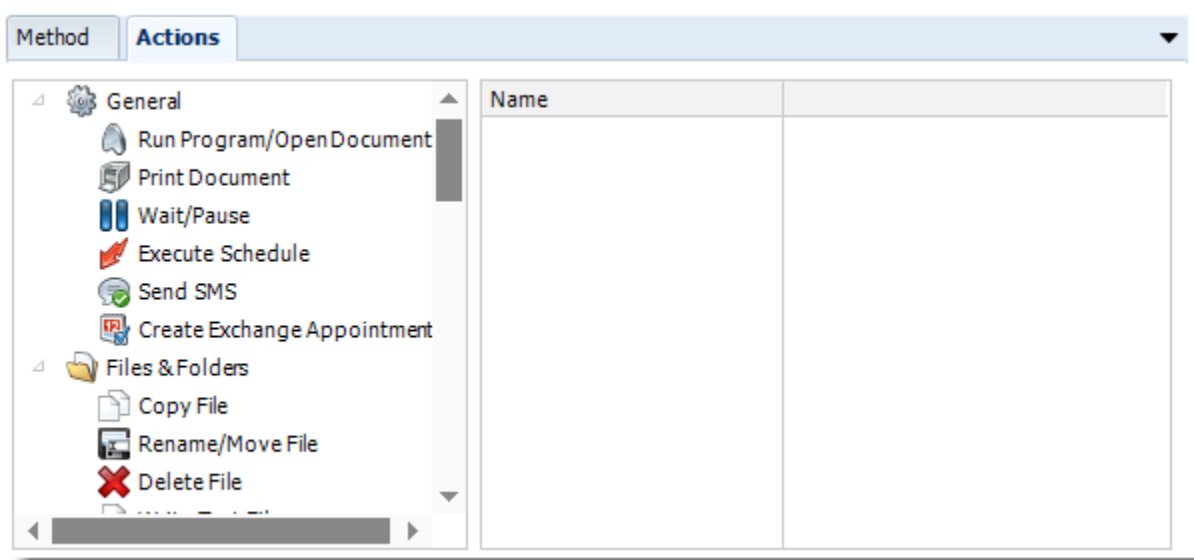
- **File size check:** Assume reports is blank if size is under "X" bytes.

Method Actions

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

## Actions

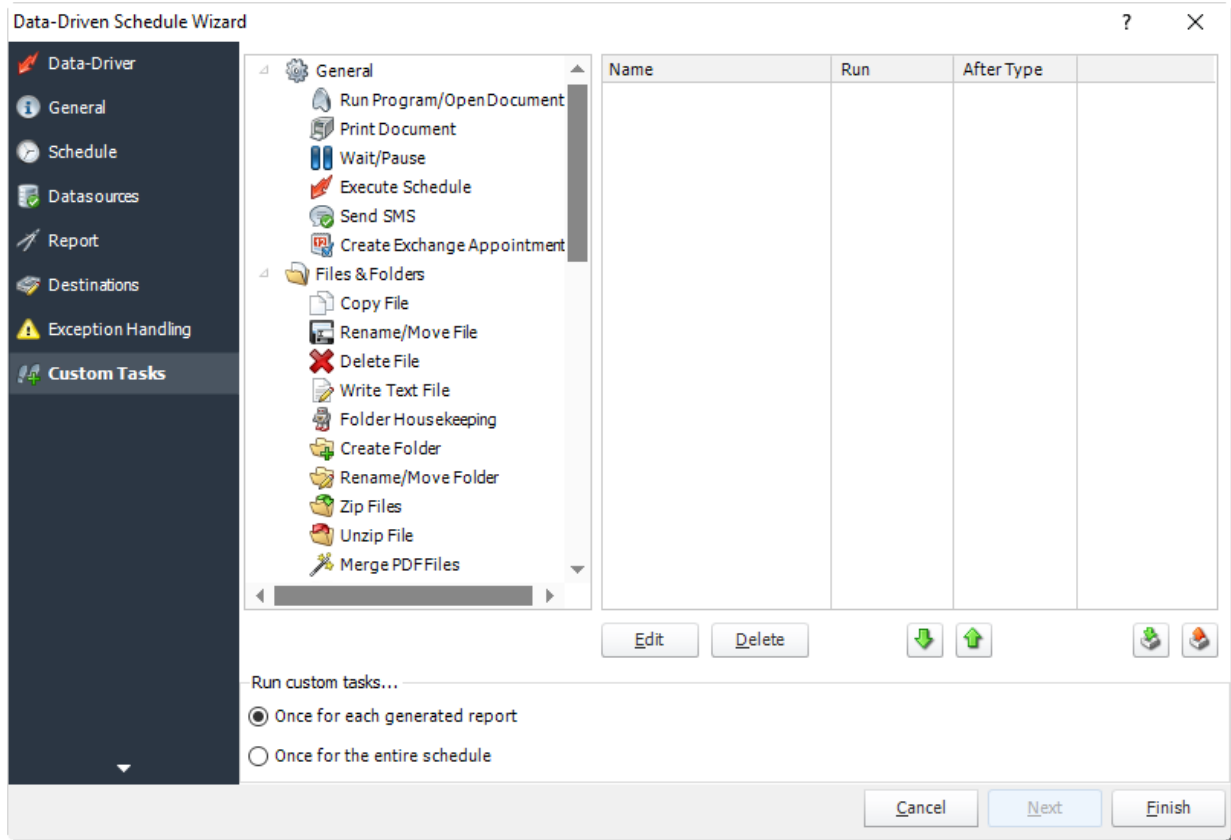


- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*Tip: You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

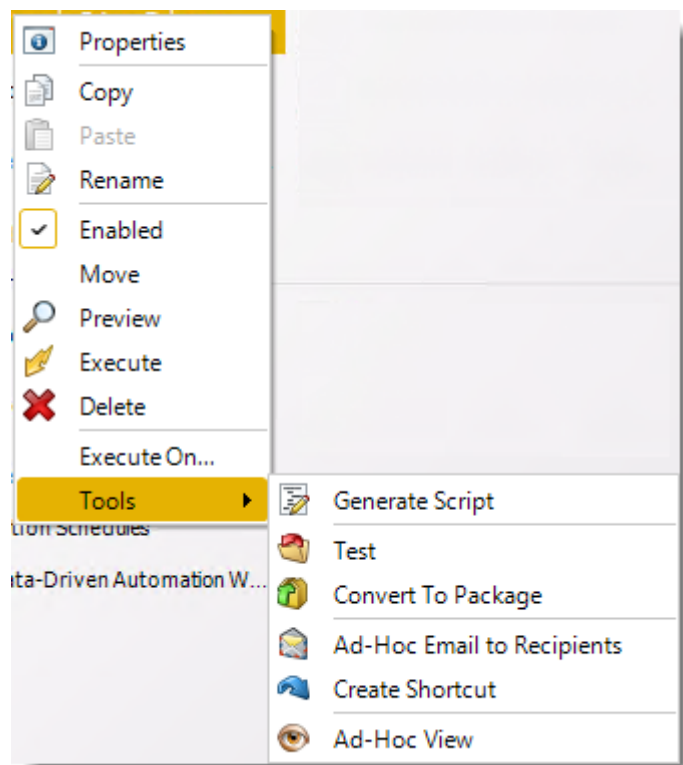
Click **Next** to continue to the next wizard section.

## Custom Tasks



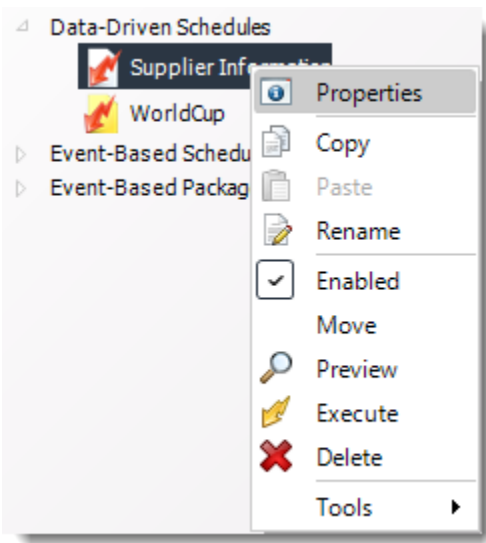
- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

## Data-Driven Schedule Context Menu



- Right-Click on a schedule to see the following actions:
- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Preview:** Preview the report before execution.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another [collaboration](#) server.
- **Test:** Use this option to test the schedule and export it to selected "test" destinations.
- **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.
- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.
- **Ad-Hoc View:** This button allows you to preview the report.

## Data-Driven Schedules Properties



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

Data-Driven Schedule Properties

**General**

Schedule Name  
Order by Month Sample Report

Create In  
Sample Reports

☒ Use SSRS Account Ananse

Service URL  
http://ananse/reportserver/reportservice2010.asmx

Virtual Directory  
reports

Report Location  
/Working Samples/Orders By Month

Description (optional)

Keyword (optional)

Unique ID  
619285551

OK Cancel Apply

•Schedule

Data-Driven Schedule Properties

Start Date 7/25/2019 End Date 9/25/3004

**Schedule** Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 11:16:12 AM Exception calendar

Next to run on 1/23/2020 11:16:12 AM

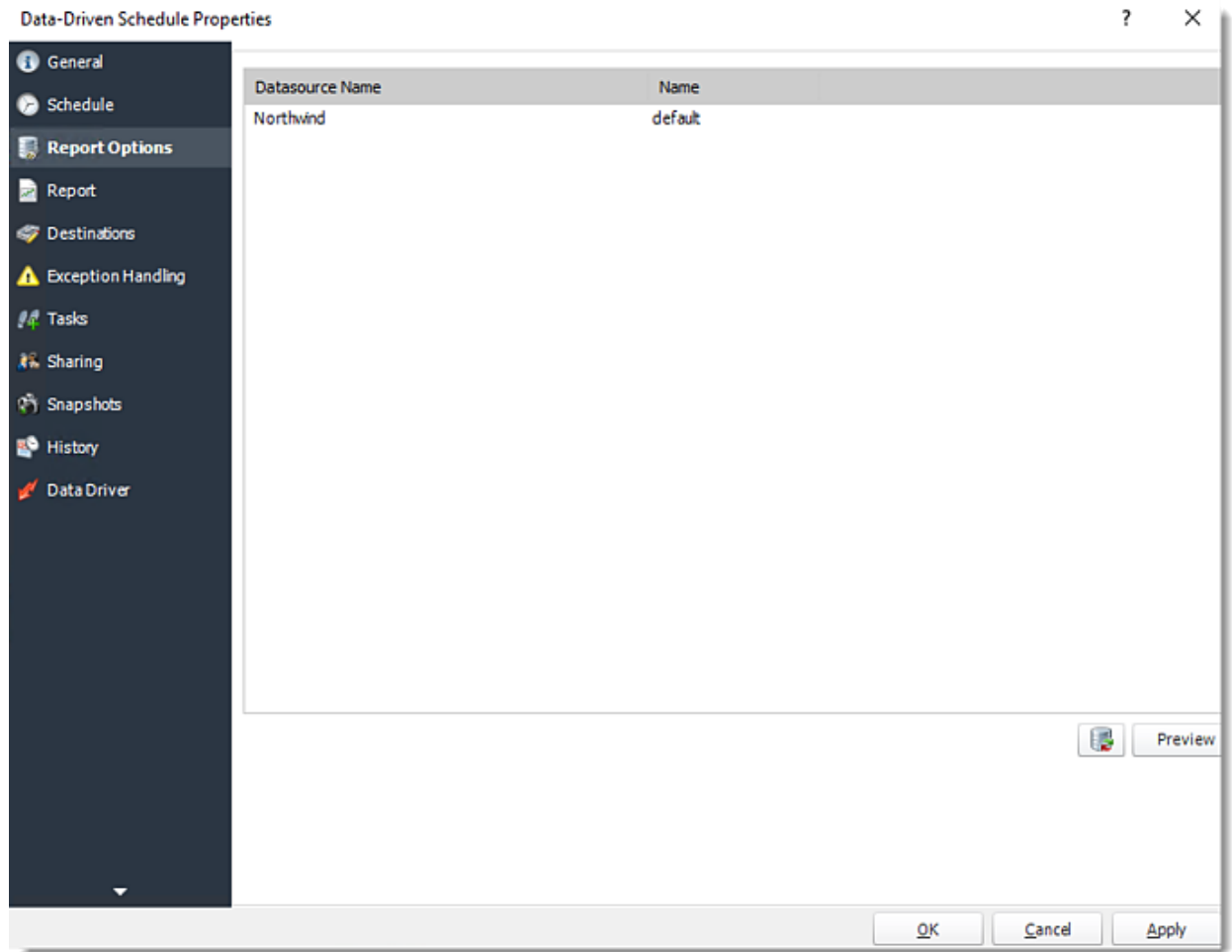
Repeat every 0.25 hours until 8:16:00 AM

☒ Enable this schedule

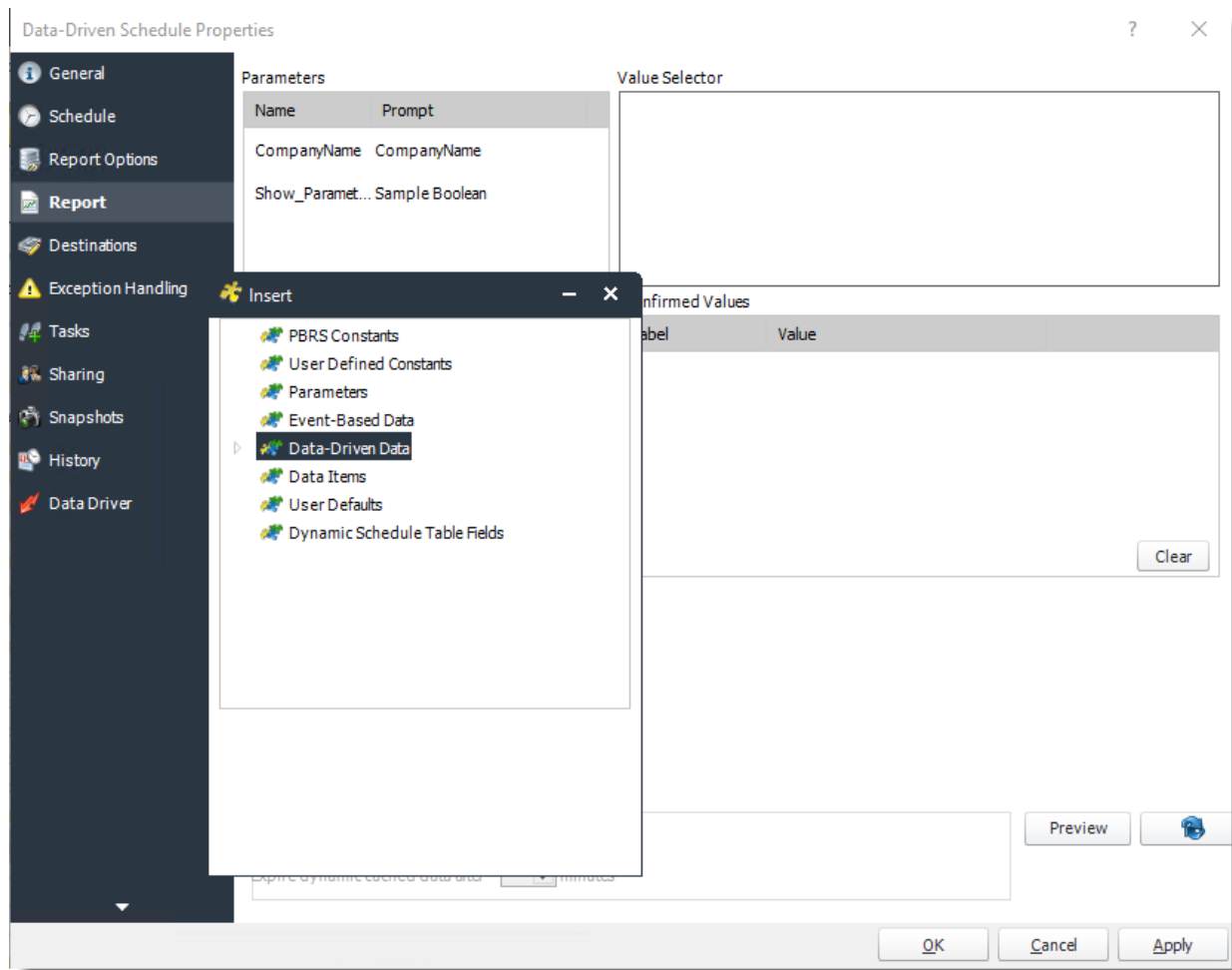
OK Cancel Apply

## •Report Options

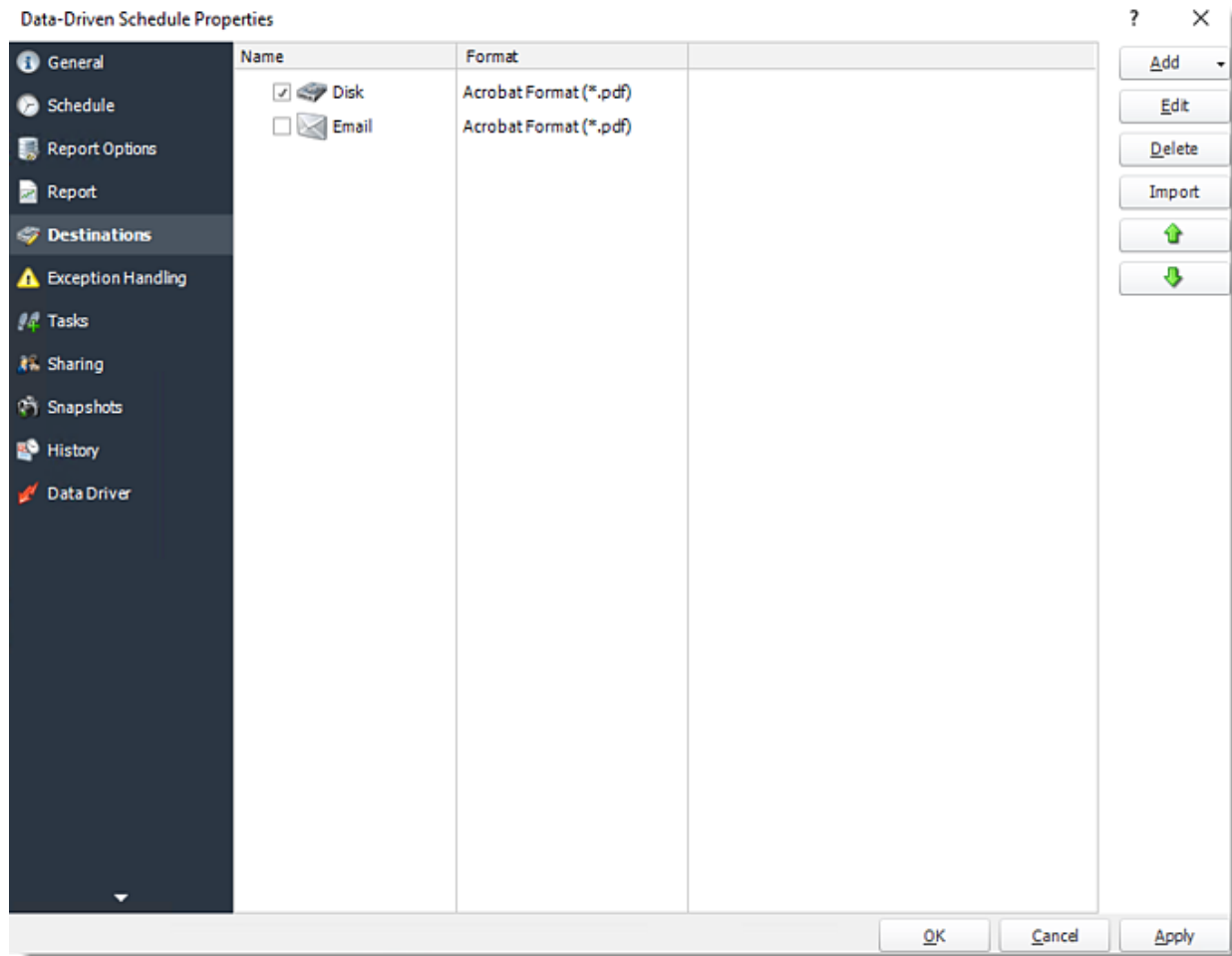




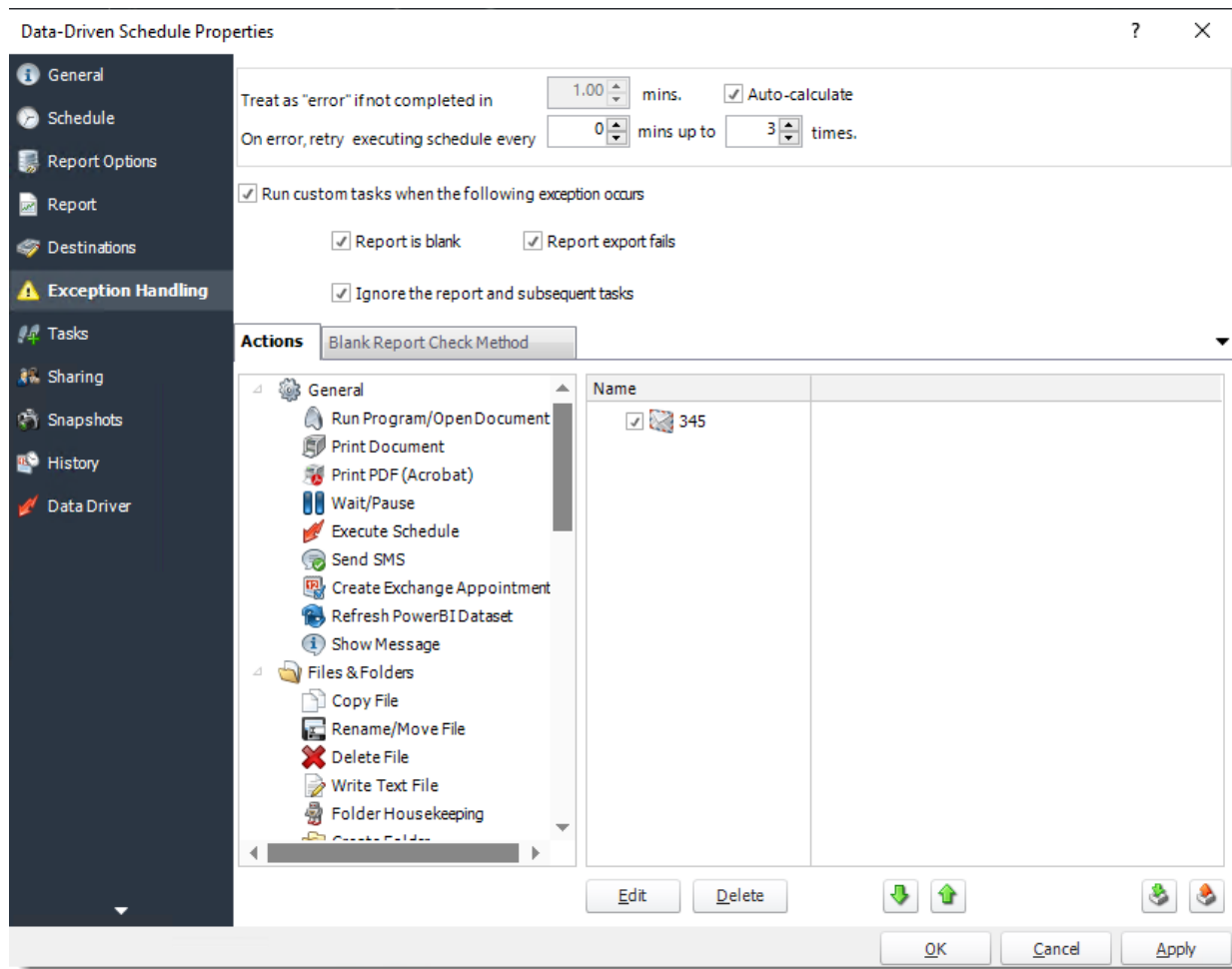
- Report



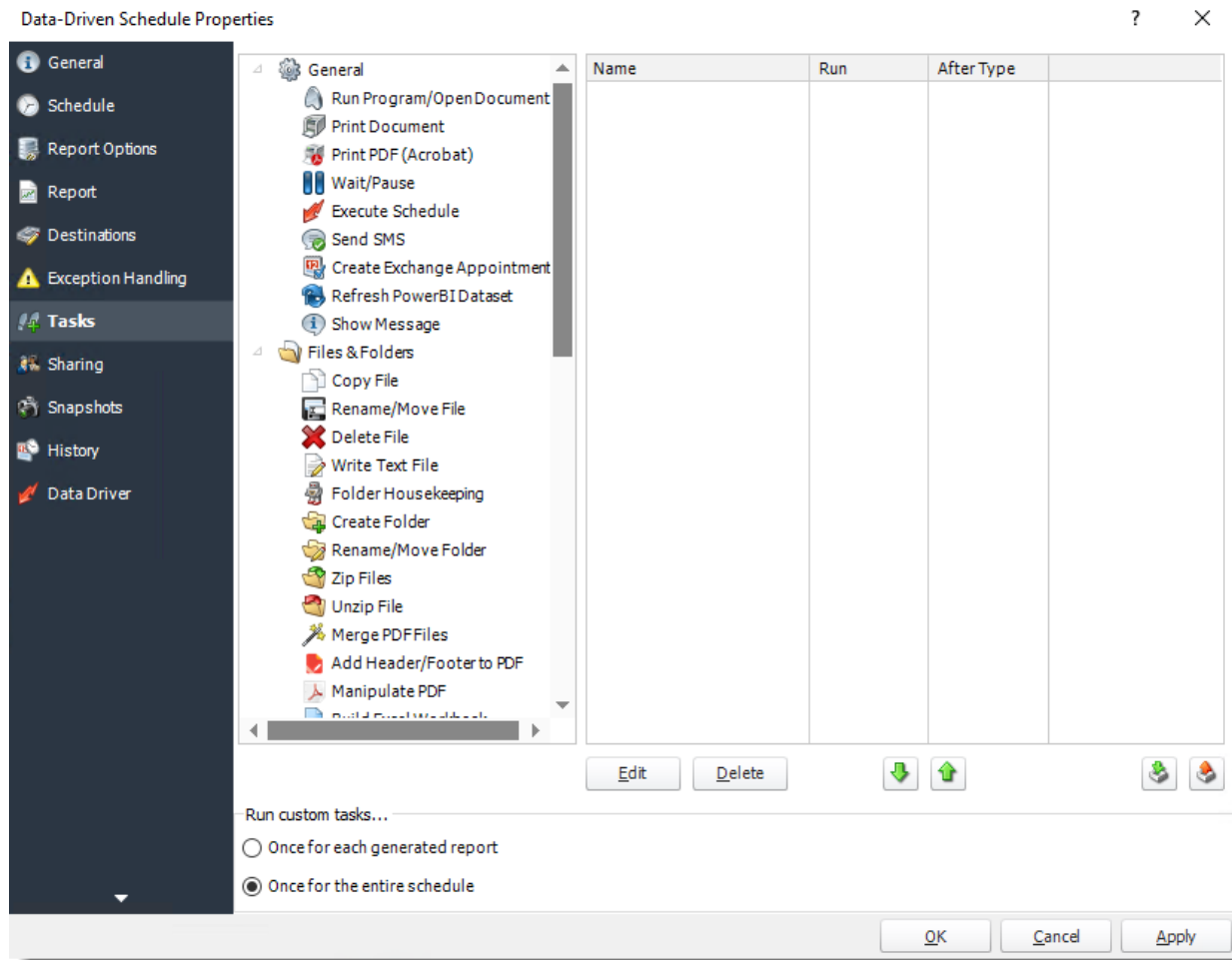
## •Destinations



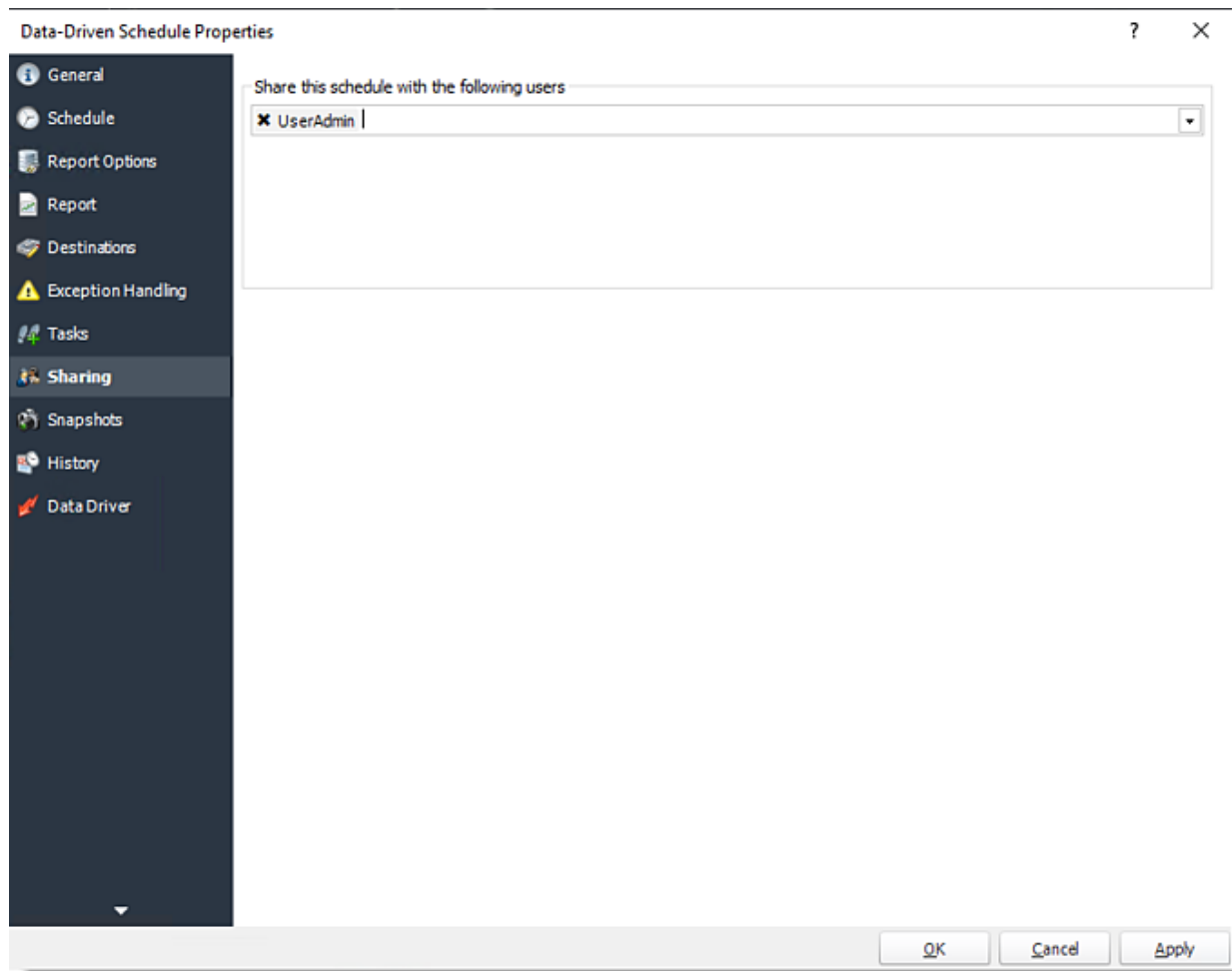
- **Exception Handling**



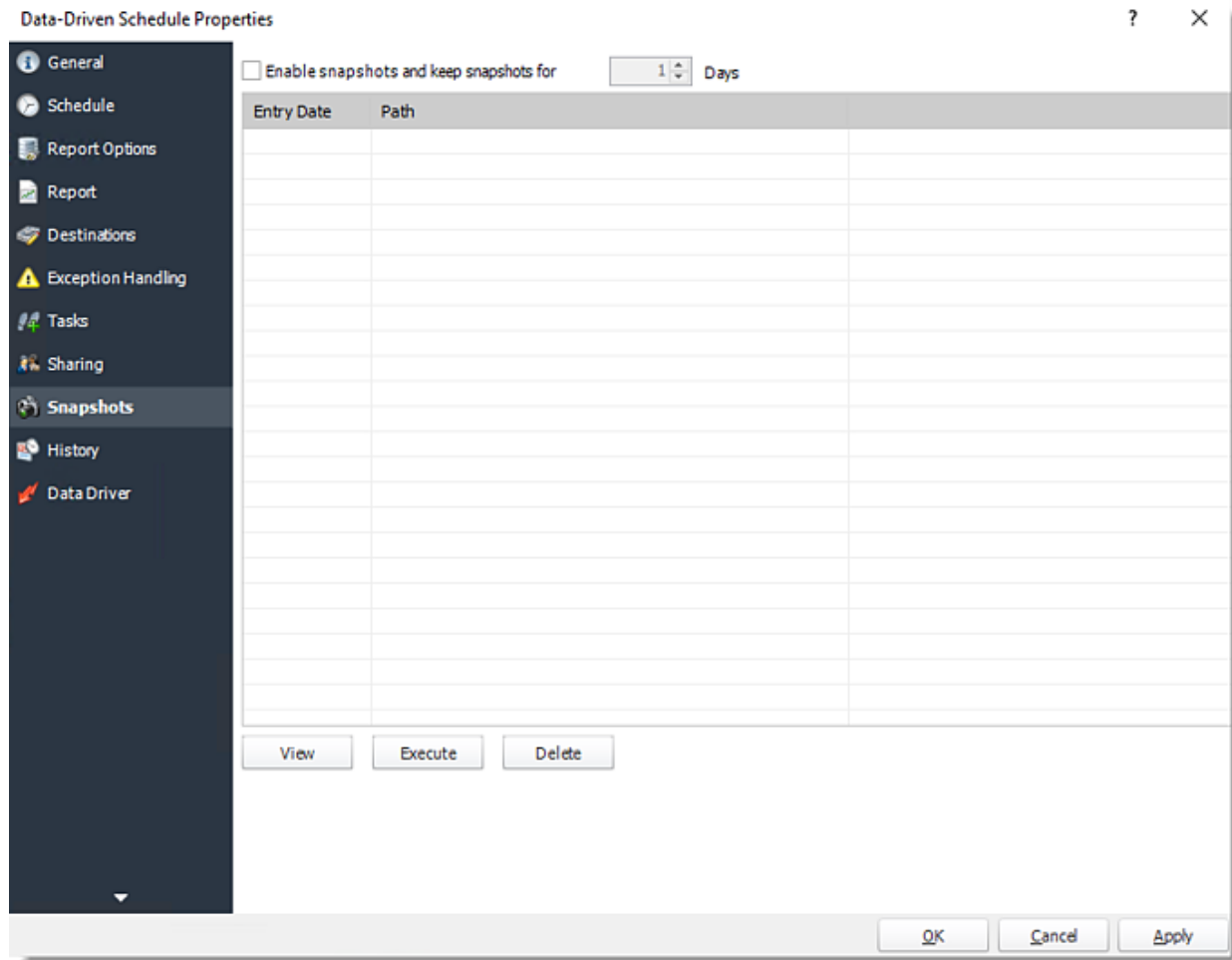
## •Tasks



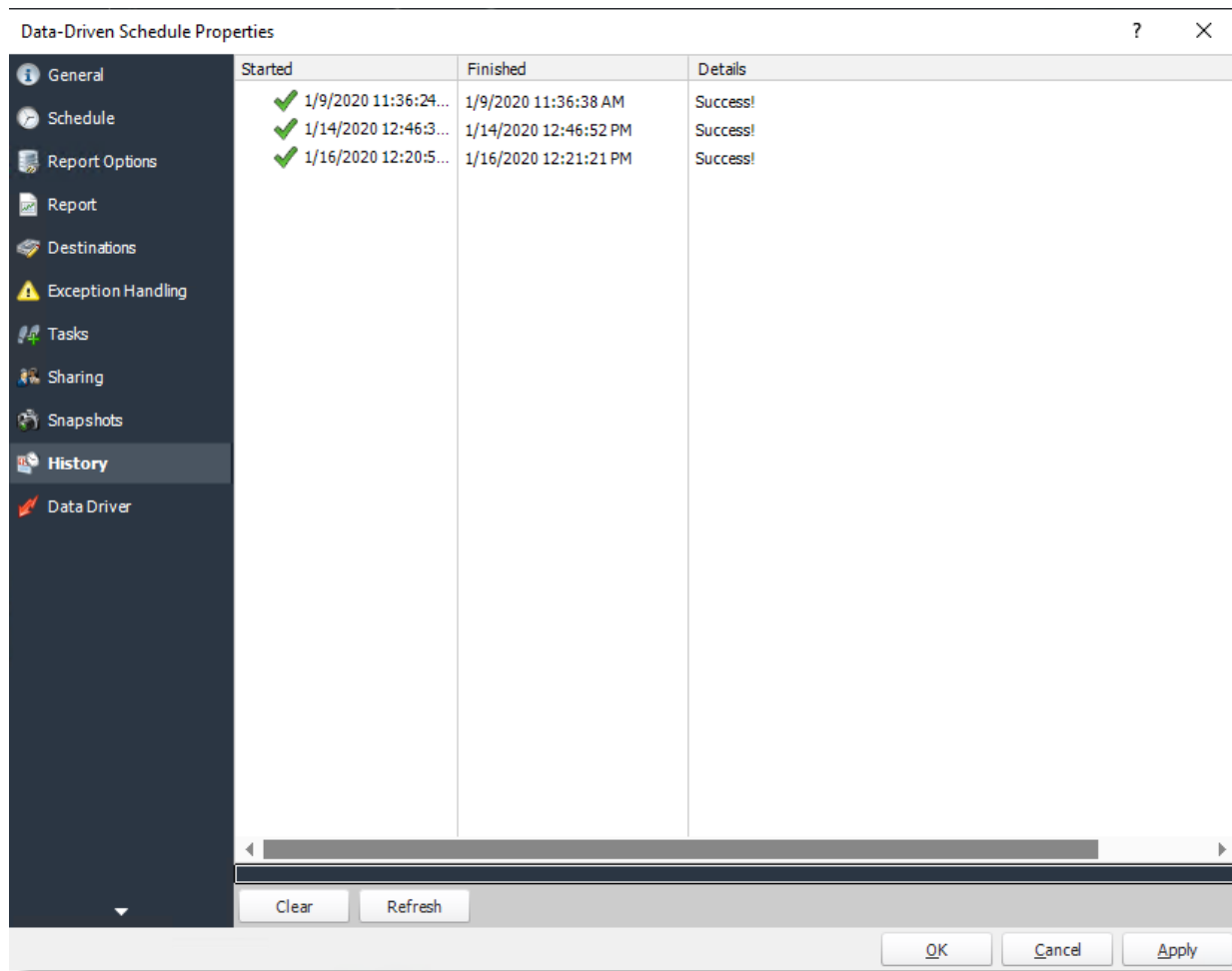
- **Sharing:** Here you can share this schedule with multiple users.



- **Snapshots:** A snapshot is a copy of each report a schedule or a package generates. Keeping snapshots enables you to resend past reports without generating them afresh - especially if the data has changed in the meantime.
  - Simply select the number of days to keep the snapshots.



- **History:** Review the schedule's history. Successes, failures, and other data is located here.



- Data Driver



Data-Driven Schedule Properties

General  
Schedule  
Report Options  
Report  
Destinations  
Exception Handling  
Tasks  
Sharing  
Snapshots  
History  
**Data Driver**

Database Connection Setup

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account

Northwind

Connect

Data selection criteria

SELECT Customers.\* FROM Customers WHERE (CustomerID='AROUT')

Build

Key Column CustomerID

☒ Group reports together by email address (email destination only)

☐ Use up to 8 threads to run this schedule

OK Cancel Apply

## How do I use Data-Driven Schedules for Power BI Dashboards & Reports on Premise in PBRs?

**A data-driven schedule allows you to drive all variables of your reporting requirements (filters, destinations, output formats, etc.) from database tables and queries at run time. Burst your reports out to multiple formats and recipients.**

This article applies to:

- Power BI Reports & Dashboards (On Premise - Power BI Report Server)

### Data-Driven Schedules for Power BI Dashboards & Reports on Premise

A data-driven schedule allows you to drive all variables of your reporting requirements (filters, destinations, output formats, etc.) from database tables and queries at run time. You can also use static text and default values should you wish. You can use Data-Driven schedules for a number of scenarios. Use a data-driven schedule for bursting reports based on filter values to specific formats like PDF, Excel and so on.

*Here are some examples:*

- Distribute a report to a fluctuating list of recipients. For example, you can distribute a report throughout a large organization where recipients vary from one month to the next, or use other criteria that determines group membership from an existing set of users. E.g. select \* from mytable where firstname = 'john' will generate the report and distribute only for records where the recipient's first name is John.
- Filter the report output using report filter values that are retrieved at run time. For example, the filter value returned from the table for the Last Name will be "Doe" for John Doe and "Smith" for John Smith.
- Determine the delivery type and report format dynamically at run time. For example, John Smith gets the report as a PDF file by email with a customized email body and John Doe gets the report as an excel spreadsheet by FTP upload to his webserver.

The following simple example will illustrate the process of creating a Data-Driven Schedule.

*Scenario: You have a report which has a large number of filter and destination combinations. Representing the combinations in a table may look something like the example below (Yellow = filters)*

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe		<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.coi</a>	<a href="#">jwu</a>

- You need to have the report run once for each record. The filter values entered in the table above should populate the filters in the report and the report should be delivered to the destinations shown in the table.
- Please note that with the above data when the schedule runs, the following will occur:
  - John Doe will receive only one email for the reports from sectors 1 and 3. He will also get the reports from sectors 2, 3 and 34 delivered to his reports disk location.
  - Peter Crimble will have his report printed on the Printer he specified.
  - Jorge Minola will have a copy of his report sent to John Doe to the disk location he specified and a copy uploaded to his FTP server and folder.
  - Anil Maharaja will receive an email as requested.
  - John Wu will have his report delivered to his email and FTP server as requested.

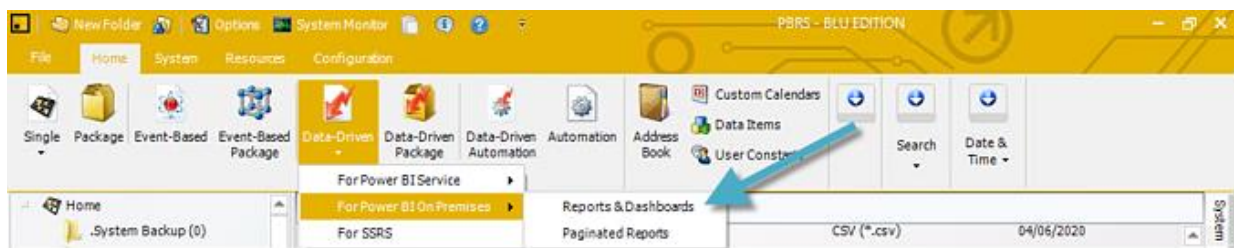
*Note that as the data changes in the database to reflect the requirements, the reports will be delivered as necessary without requiring any changes to the schedule in PBRs.*

*Using a Data Driven schedule PBRs will reel through the database table and generate and deliver a report for each record using the information provided.*

*The data driver allows for busting reports to different formats and different destinations as well as defining other more traditional values like filters.*

How do I create Data-Driven Schedule for Power BI Dashboards & Reports on Premise?

- Go to **Data-Driven** and go to **For Power BI on Premise** and select **Reports & Dashboards**.



Get values from database

☐ ODBC DSN
 ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple Advanced

Only return records where

☒ And
 ☐ Or

Where

Parse

## Building a Data Driver Wizard

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes.
- ODBC Datasource Name:** Check this option to select ODBC DSN. Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

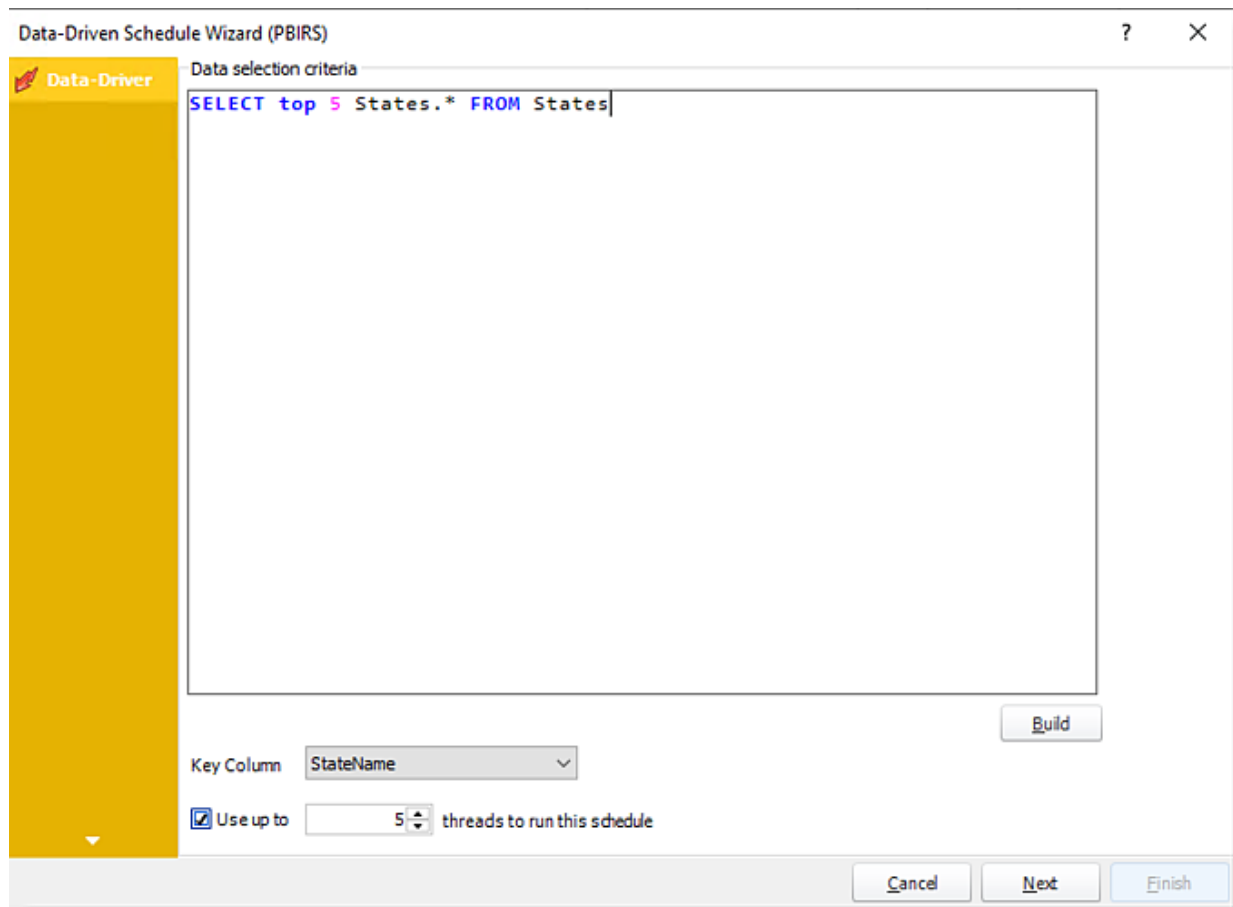
*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.*

*When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").*

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

*You must add the SQL Server Account in Integrations.*

- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.



- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.
- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.
- **Use up to 'x' threads to run this schedule:** Check this option to allow x amount of threads to be exported simultaneously.
- **Group reports by email address:** You can instruct PBRS to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.

Click **Next** to continue to the next wizard section.

## General Wizard

Data-Driven Schedule Wizard (PBIRS)

**General**

Create In: Sample Reports

☒ Use SSRS Account: Isaiah

Service URL: http://isaiah.christianstevensoftware.local/reportserver/reportservice2010.a

Virtual Directory: reports

Report Location: /PowerBI Samples/Northwind

Schedule Name: Northwind Data-Driven

Description (optional):

Keyword (optional):

Cancel Next Finish

- **Create In:** This section is for selecting the folder where you want to create the single report in.
- **Use SSRS Account:** Select the SSRS Account where your report server is located, and then click on (...) button next in **Report Location**.

☒ Use SSRS Account

New...

Ananse

Isaiah

Isaiah - http://isaiah.christianstevensoftware.local/reportserver/reportservic... X

Please enter the credentials used to access your report server (if any) and then click the "Connect" button to browse the server for the required report

Domain Name\User ID Password

christianstevens\karen .....

Connect

☐ Server uses custom/forms authentication

Please select the report

http://isaiah.christianstevensoftware.local/reportserver/reportservice2010.as

- PowerBI Samples
- SSRS Samples

/PowerBI Samples/Northwind

OK Cancel

- **Service URL:** Uncheck 'Use SSRS Account' checkbox, to enter the address of your reporting services server.
- **Report Location:** Browse through the report server browser to select the desired report. Authenticate to the reports server if necessary.
- **Schedule Name:** Write in the name of the package.
- **Description (optional):** You may write a short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword (optional):** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.



## Schedule Wizard

Data-Driven Schedule Wizard (PBIRS)

Start Date 01/04/2021 End Date 01/04/3020

General Schedule

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 3:23:26 PM Exception calendar

Next to run on 01/04/2021 3:23:26 PM

Repeat every 0.25 until 12:23:26 PM

Enable this schedule

Cancel Next Finish

In this section, you will decide when the report will execute. There are a variety of options:

- Daily:** Run a report every day or at a frequency of days.
  - Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

- Weekly:** Run a report on a weekly time frame.
  - Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

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Updated on 15 November 2021

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

☒ Saturday ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other >>

☒ Use the following options  
 The Second of the month Monday

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- **Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other >>

- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other >>

Calendar Name [New...]  
 Business Days

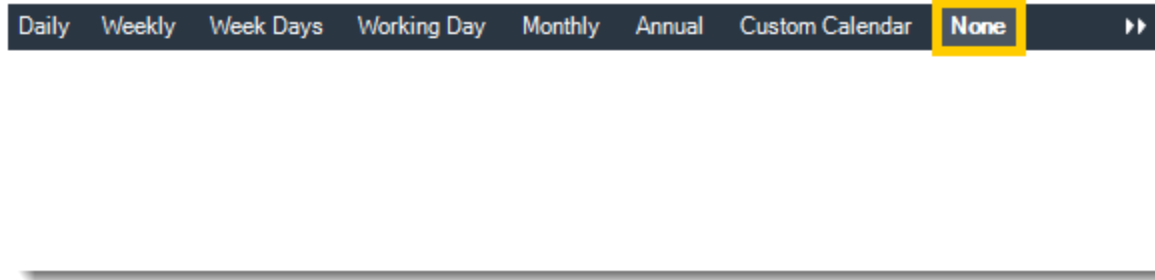
- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other** >>

Run schedule every 1 Minutes

- Minutes
- Hours
- Days
- Weeks
- Months
- Years

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Settings Wizard

Data-Driven Schedule Wizard (PBIRS)

☐ Use JSON string for rendering settings

Settings JSON

Quick Search

**Page Setup**

Left margin (% of width)	0
Page Height (pixels)	800
Page Width (pixels)	1300
Right margin (% of width)	0

**PDF Cropping**

Crop PDF	<input type="checkbox"/> False
Crop Bottom	0
Crop Left	0
Crop Right	0
Crop Top	0

**Rendering**

Maximum Loading Time(secs)	60
----------------------------	----

Pages To Render

Enter the title of the report page(s) to render. You can use pipe (|) to specify multiple pages. Leave blank for the currently selected page.

Cancel Next Finish

<b>Rendering</b>	
Maximum Loading Time(secs)	60
Minimum Loading Time (secs)	10
Minimum Report Size (Bytes - Optional)	-1
PDF Compression	NONE
Rendering Method	Method 1
Transparent Background	<input checked="" type="checkbox"/> True
View Style	ACTUALSIZE

- In this section, you may set up the dashboard/report.

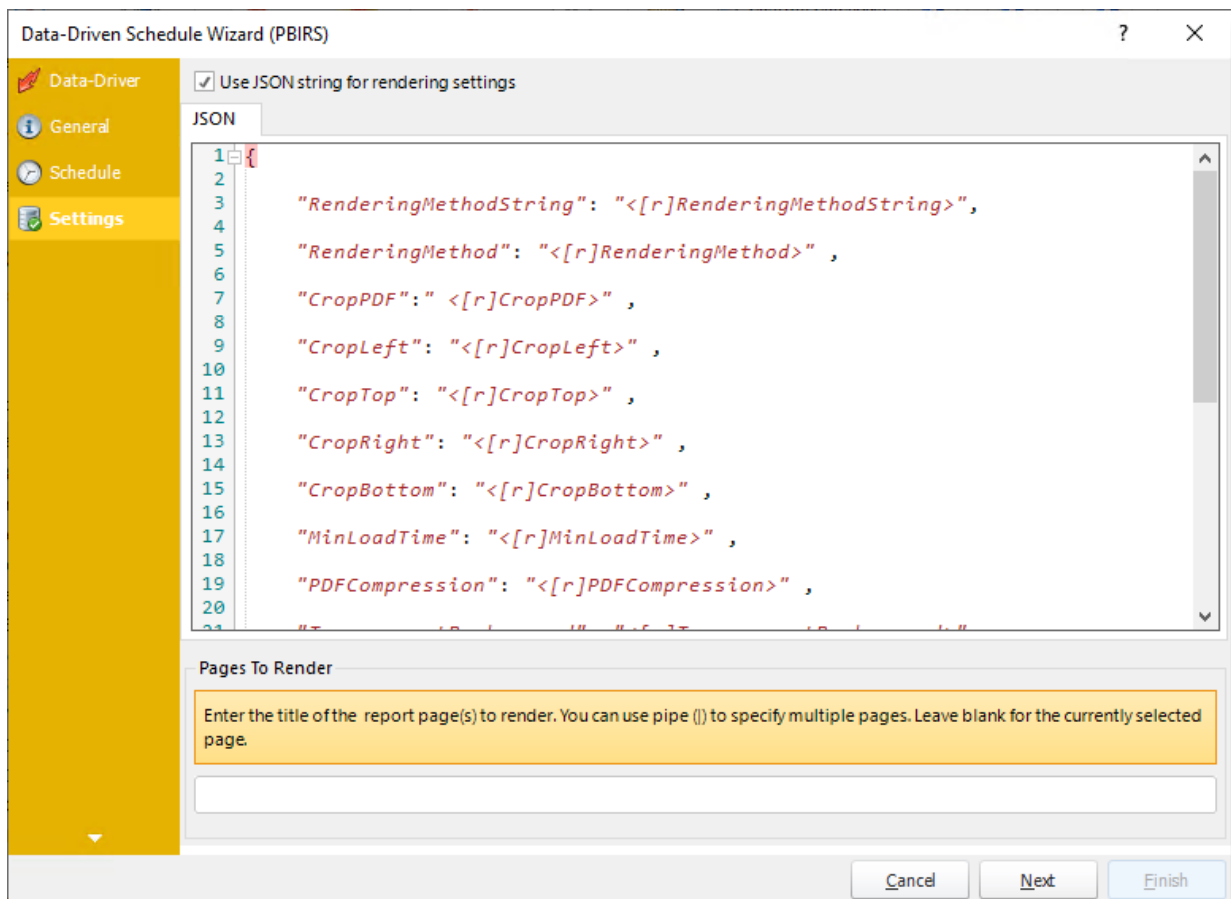
*Settings and JSON Rendering settings may overwrite each other so it is best to only set one or the other.*

### Settings

- **Left margin (% of width):** The size of the left margin as a percentage of the page width.
- **Page Height(pixels):** The height of the rendered file.

- **Page width (pixels):** The width of the rendered file.
- **Right margin (% of width):** The size of the right margin as a percentage of the page width.
- **PDF Cropping:** You may crop your reports by page height (pixels) and page width (pixels).
- **Maximum Loading Time(secs):** The maximum amount of time that the renderer will wait before timing out.
- **Minimum Loading Time(secs):** The amount of time that PBRS will wait for the dashboard/report to load before rendering it to file.
- **PDF Compression:** Select PDF compression levels.
- **Rendering Method:** Select the rendering method type for your Power BI report.
- **Transparent Background:** You have the option to have your Power BI report in a transparent background.
- **View Style:** How the report fits on the page: Fit to Page, Fit to Width, or Actual Size.
- **Pages To Render:** Enter the title of the report page(s) to render. You can use pipe (|) to specify multiple pages. Leave blank for the currently selected page.

## JSON

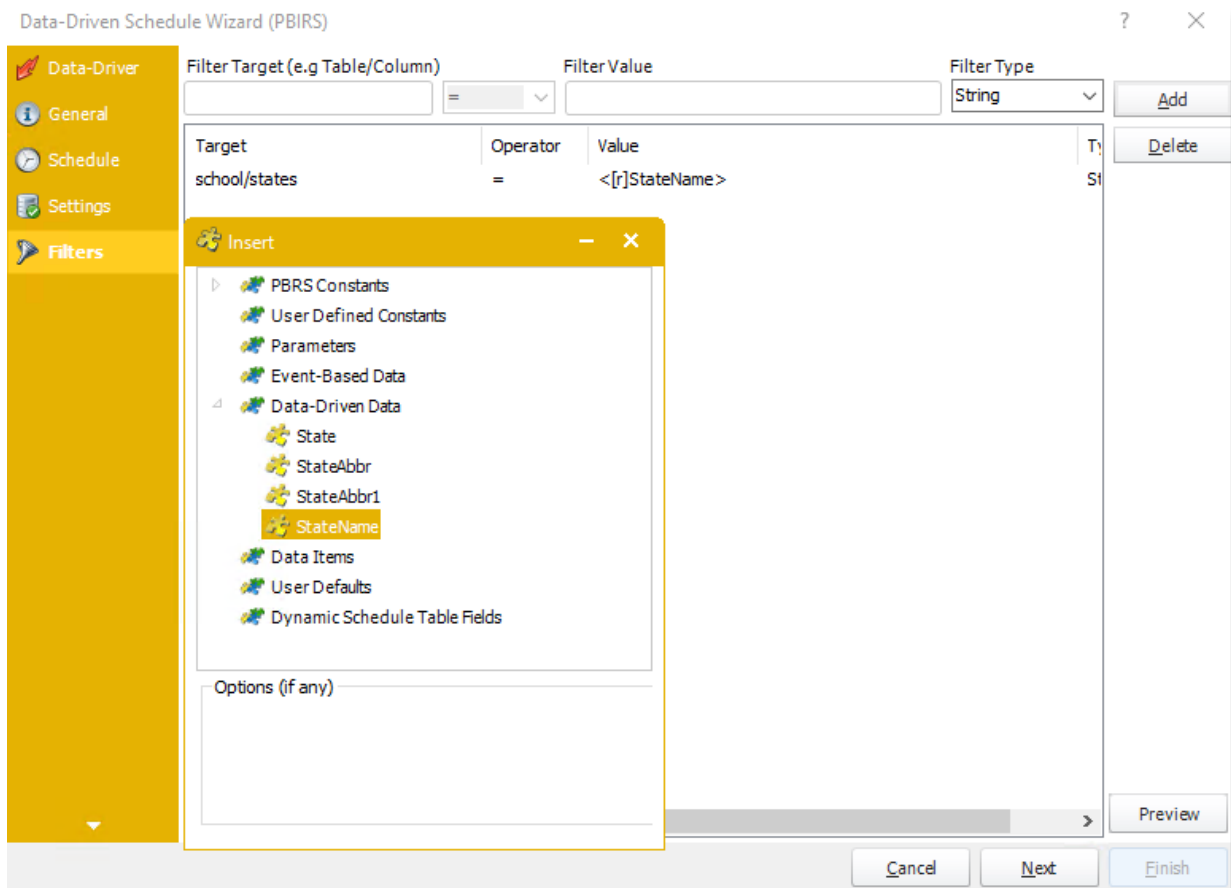


- **Use JSON string for rendering settings:** Check this option to use JSON string for the rendering settings.
- **Enter the JSON string.**

You can drag and drop Inserts constants into JSON textbox.

Click **Next** to continue to the next wizard section.

## Filters Wizard

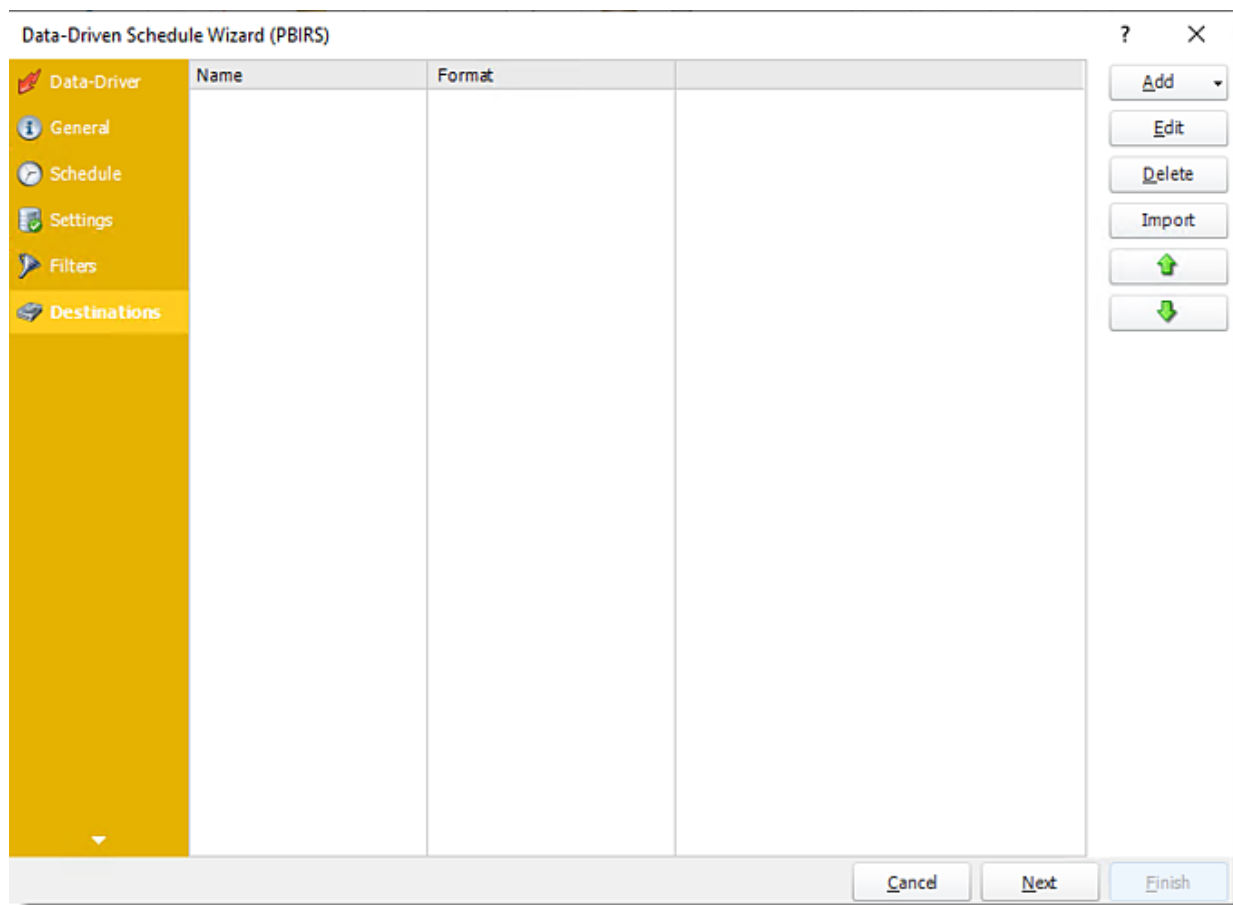


- In this section, you will determine the filters for your report (if any). If your report has no filters, you may skip this section by clicking next.
- With PBRS, you can Data Drive any filter in your report. Ensure the filter values for each record are listed in your database.
- Using Data-Driven Inserts you can pull these values into your report.
- Drag and drop your **Data-Driven inserts** into the desired filter fields. If you do not wish to enter a data-driven value in your filter, you can still manually type a value or select them from the drop-down box.
- You can also use Inserts Constants to filter the table and column.
- **Filter Target (e.g Table/Column):** Choose the table and column you would like to set up the filter.
- **Filter Value:** Enter the filter value of your report.
- **Filter Type:** Use the drop-down menu to select the parameter.
- Click **Add** to add the filter value.
- **Preview:** You can view the report.

Click **Next** to continue to the next wizard section.

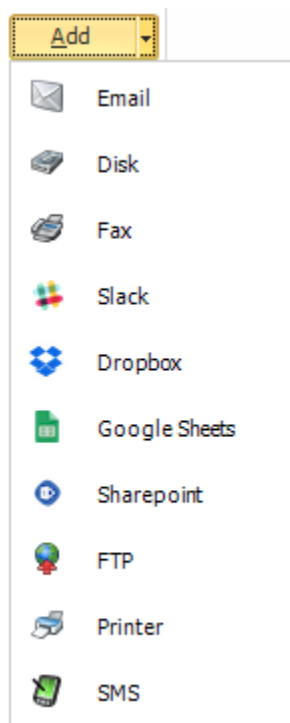
## Destinations Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.



- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.
  - For more information of adding destinations, [click here](#).
  - For more information about Output Formats, [click here](#).





- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.

### Customizing the Destination

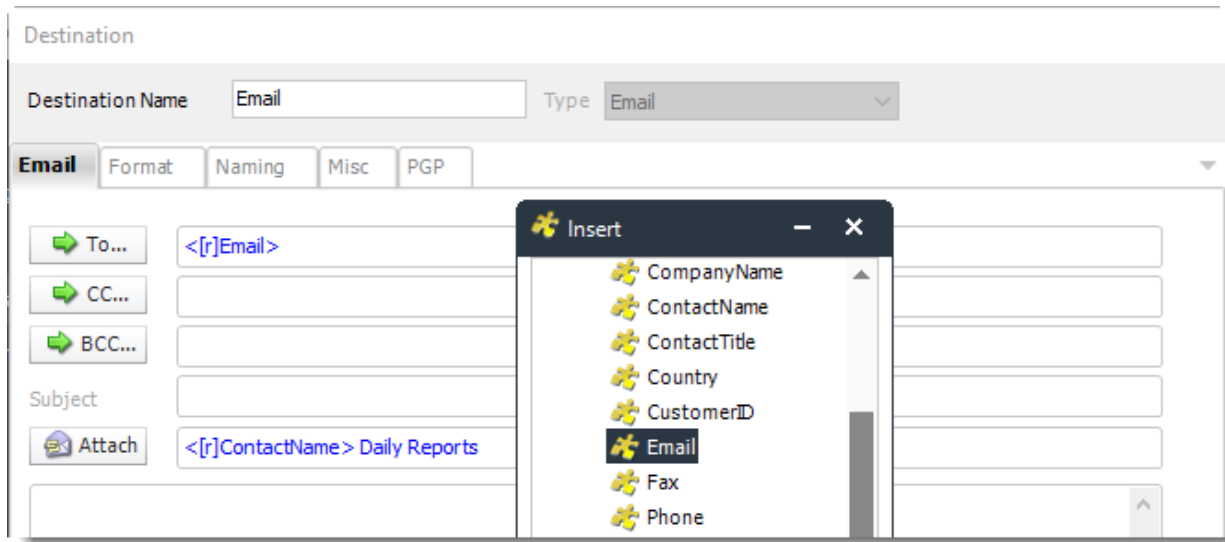
With the Data-Driven Schedule, you can determine the delivery method of your report based on your data. In your table, specify the delivery method by creating a column for each delivery type (FTP, SharePoint, Email etc.). For each record specify their email, fax number, and so on.

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co.jp</a>	<a href="#">jwu</a>

*Tip: For email destinations, simply add a semicolon after an email address to send the same instance of the report to another email address.*

- Data driving the Report's Distribution
- As mentioned above, PBRs will pull delivery data from your database.
- In this example, we will be using email addresses found in the table.

- With Data Driven inserts, simply drag and drop the field that indicates your desired destination (*email in this case*).



- Now PBRS will deliver a unique report based on a corresponding email address.

#### *Customize Recipient Messaging*

- You can also customize the messaging the recipient receives. Using Data Driven Inserts, PBRS will automatically pull data from your table and use it to customize the subject, body or report format.

Destination

Destination Name  Type

**Email** Format Naming Misc PGP

To...

CC...

BCC...

Subject

Attach

Dear <[r]CustomerID>,  
Here is your report of <[m]CurrentScheduleName>.  
Thank you.

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:

**Insert**

Data-Driven Data

- Address
- City
- CompanyName
- ContactName
- ContactTitle
- Country
- CustomerID**
- Email
- Fax
- Phone
- PostalCode
- Region

Options (if any)

OK Cancel

- Simply drag and drop fields from your table to the desired position.

*For example, to customize an email greeting, type the greeting, and add the recipients name as shown above.*

Click **Next** to continue to the next wizard section.

## Exception Handling Wizard

The screenshot shows the 'Data-Driven Schedule Wizard (PBIRS)' window with the 'Exception Handling' tab selected. The left sidebar contains icons for Data-Driver, General, Schedule, Settings, Filters, Destinations, and Exception Handling. The main area has a top section with settings: 'Treat as "error" if not completed in' (30.00 mins), 'Auto-calculate' (checked), 'On error, retry executing schedule every' (0 mins), and 'up to' (8 times). Below this are checkboxes for 'Run custom tasks when the following exception occurs', 'Report is blank', and 'Report export fails'. The 'Actions' section shows a list of tasks under 'General' and 'Files & Folders'. A table with 'Name' is empty. At the bottom are 'Edit', 'Delete', and navigation buttons.

Data-Driven Schedule Wizard (PBIRS)

Treat as "error" if not completed in 30.00 mins. ☒ Auto-calculate

On error, retry executing schedule every 0 mins up to 8 times.

☐ Run custom tasks when the following exception occurs

☐ Report is blank ☐ Report export fails

Actions: Blank Report Check Method

General

- Run Program/Open Document
- Print Document
- Print PDF (Acrobat)
- Wait/Pause
- Execute Schedule
- Send SMS
- Create Exchange Appointment
- Refresh PowerBI Dataset
- Show Message

Files & Folders

- Copy File
- Remove/Move File

Name

Edit Delete

Cancel Next Finish

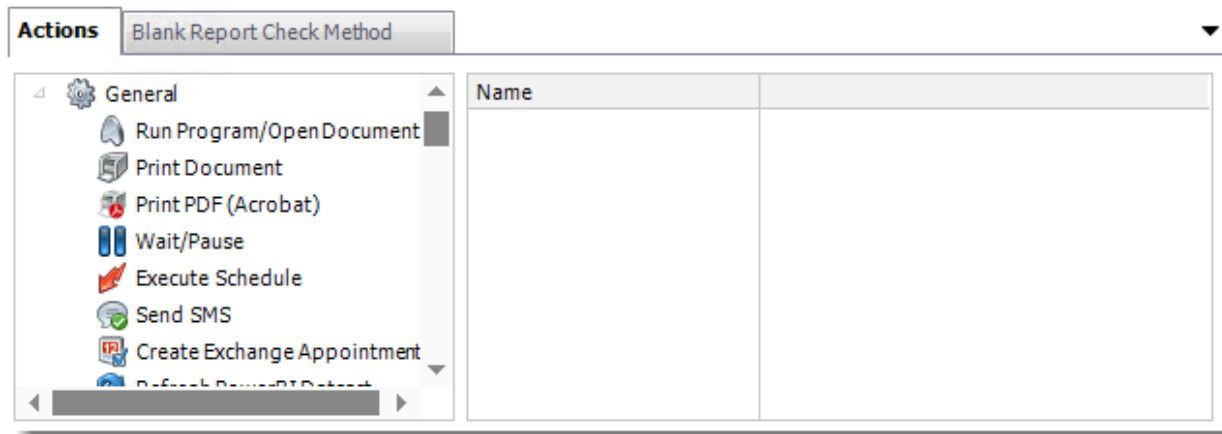
- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.

- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.
- **Report exports fail:** If a report export fails, you can receive a notification or run a tasks that the report failed to execute.

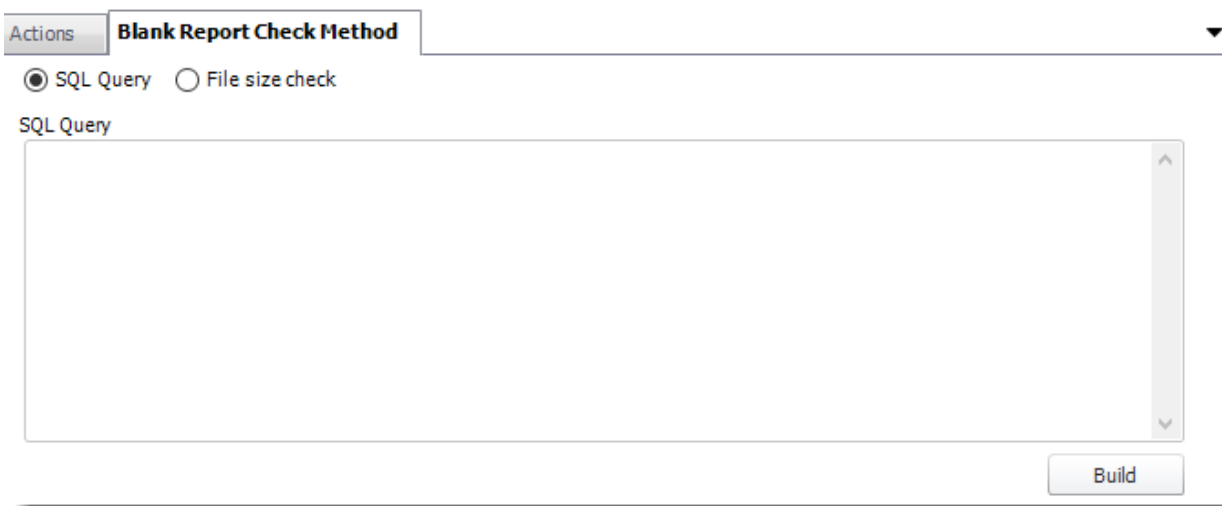
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

## Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

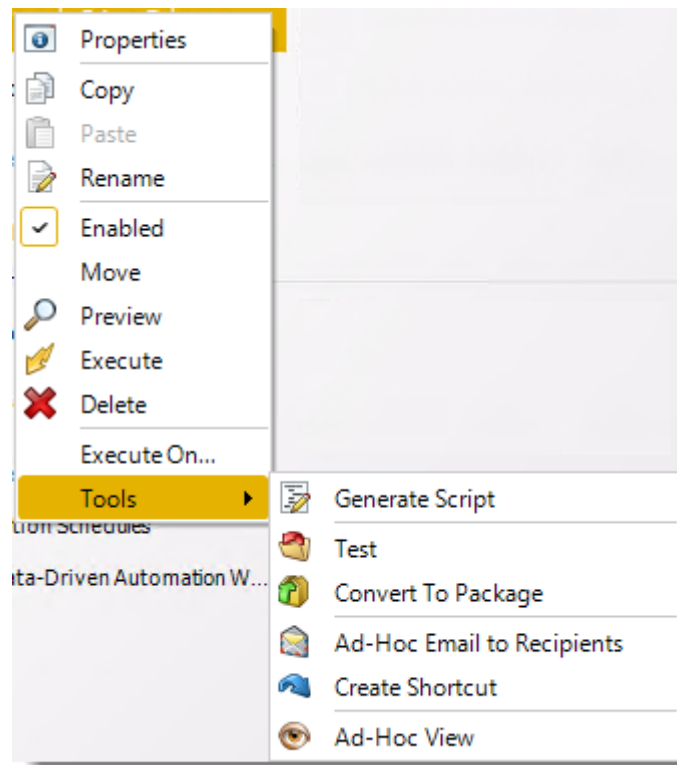
Where

Parse

- File size check:** Assume reports is blank if size is under "X" bytes.



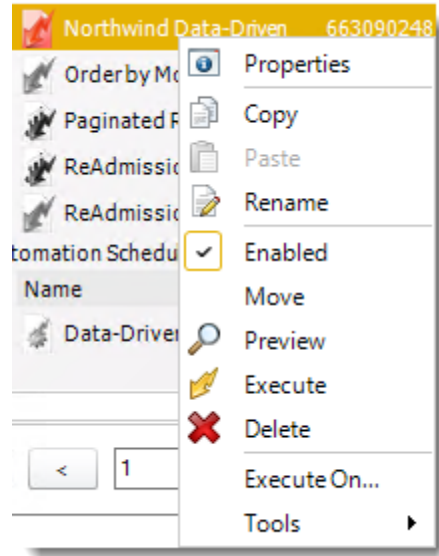
## Data-Driven Schedule Context Menu



- Right-Click on a schedule to see the following actions:
- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Preview:** Preview the report before execution.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test:** Use this option to test the schedule and export it to selected "test" destinations.
- **Convert To Package:** This button will move this report into a package. The package will have the name of the single schedule report.
- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.
- **Ad-Hoc View:** This button allows you to preview the report.



## Data-Driven Schedules Properties



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedules such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

Data-Driven Schedule Properties

**General**

Schedule Name  
Northwind Data-Driven

Create In  
Sample Reports

☒ Use SSRS Account  
Isaiah

Service URL  
http://isaiah.christianstevensoftware.local/reportserver/reportservice20

Virtual Directory  
reports

Report Location  
/PowerBI Samples/Northwind

Description (optional)

Keyword (optional)

Unique ID  
663090248

OK Cancel Apply

## •Schedule

**Data-Driven Schedule Properties** ? X

**General** | **Schedule** | Settings | Filters | Destinations | Exception Handling | Tasks | Sharing | History | Data Driver

Start Date: 01/04/2021 | End Date: 01/04/3020

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 3:23:00 PM | Exception calendar: ☐

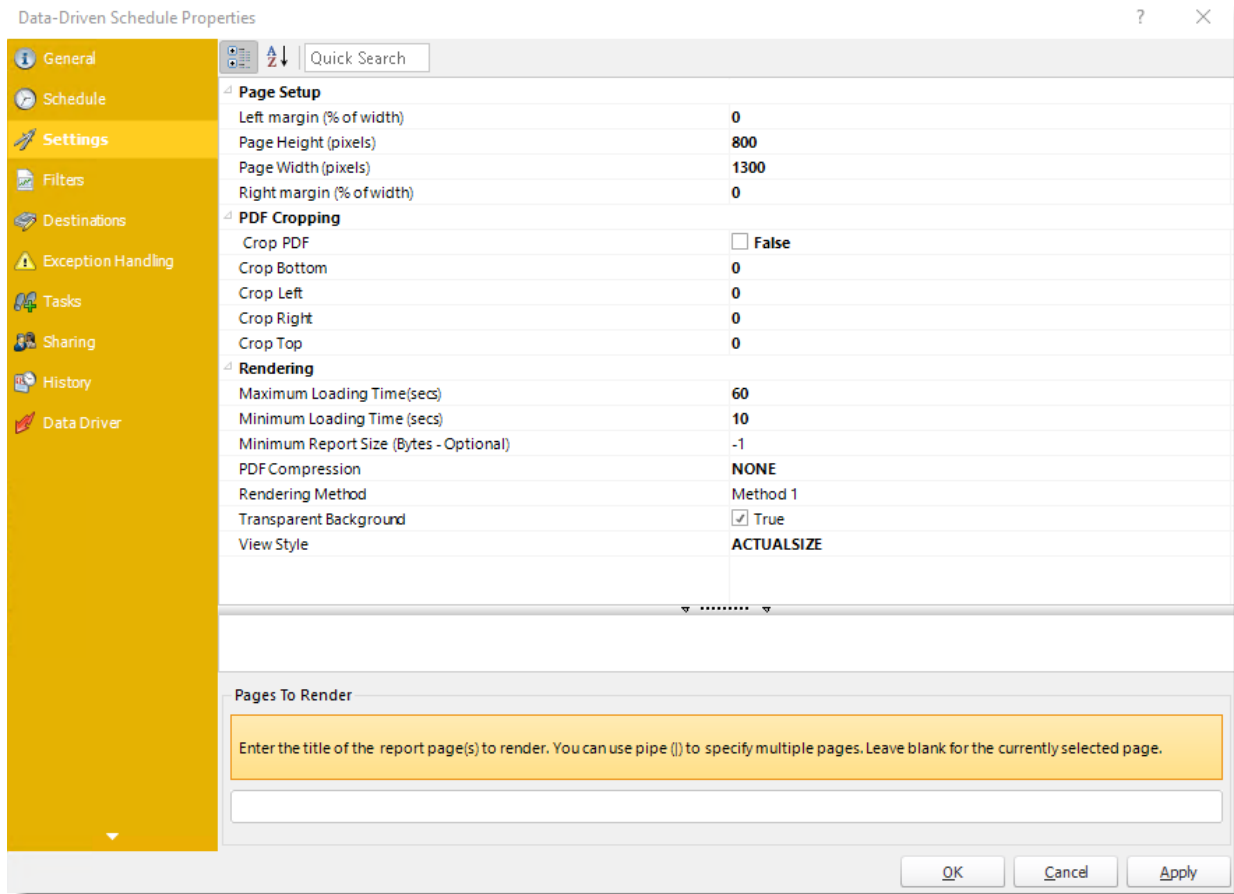
Next to run on: 01/04/2021 | 3:23:26 PM

☐ Repeat every: 0.25 hours until: 3:23:00 PM

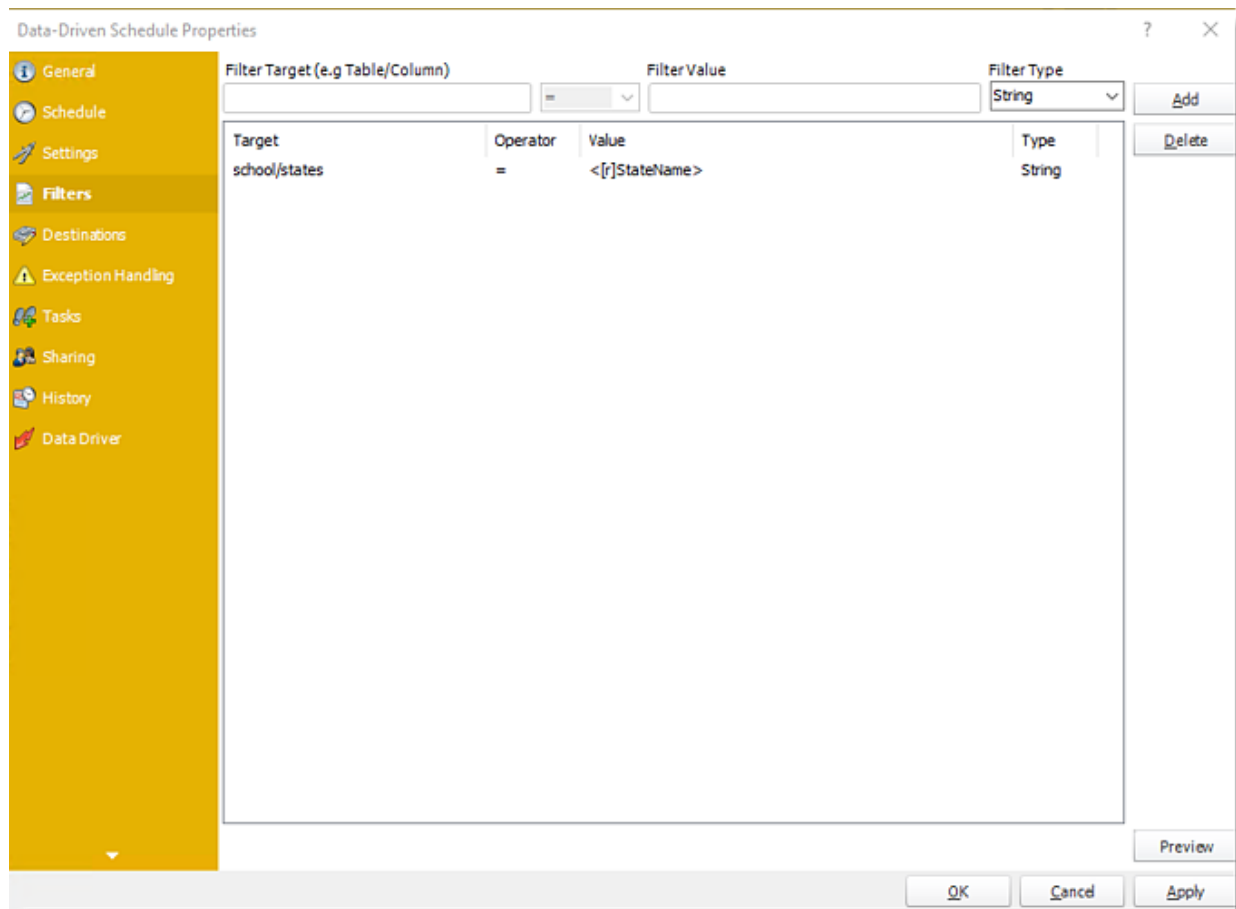
☒ Enable this schedule

OK Cancel Apply

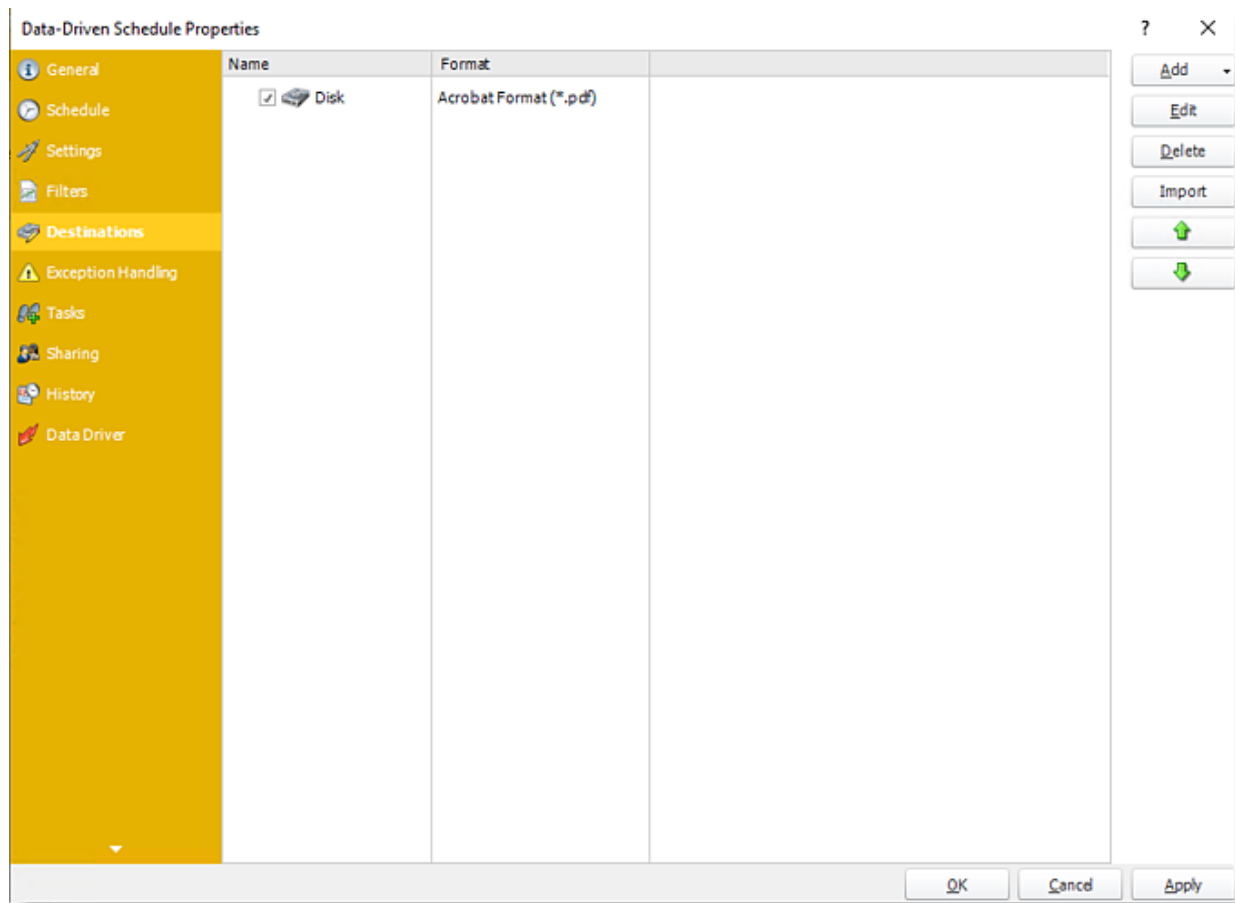
## Settings



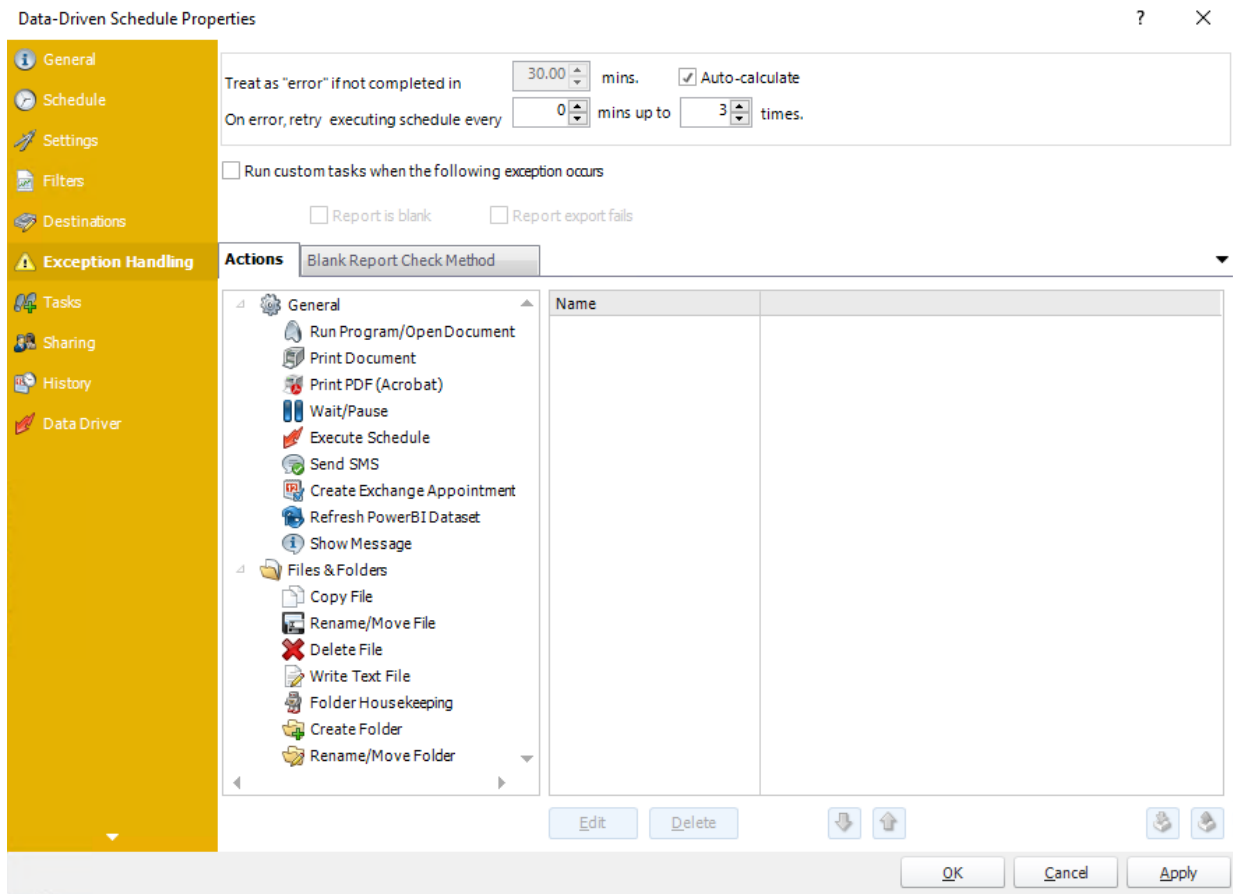
## Filters



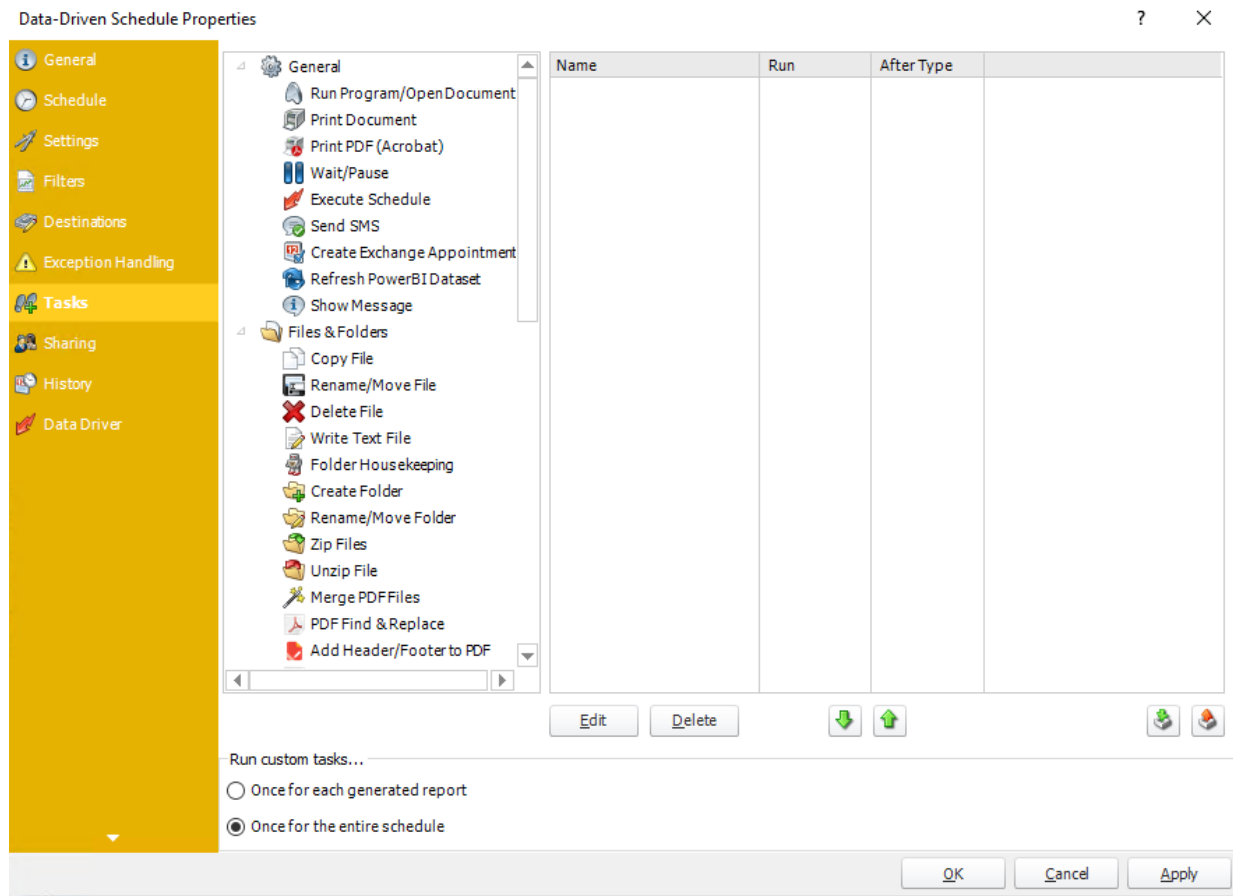
## Destinations



## Exception Handling

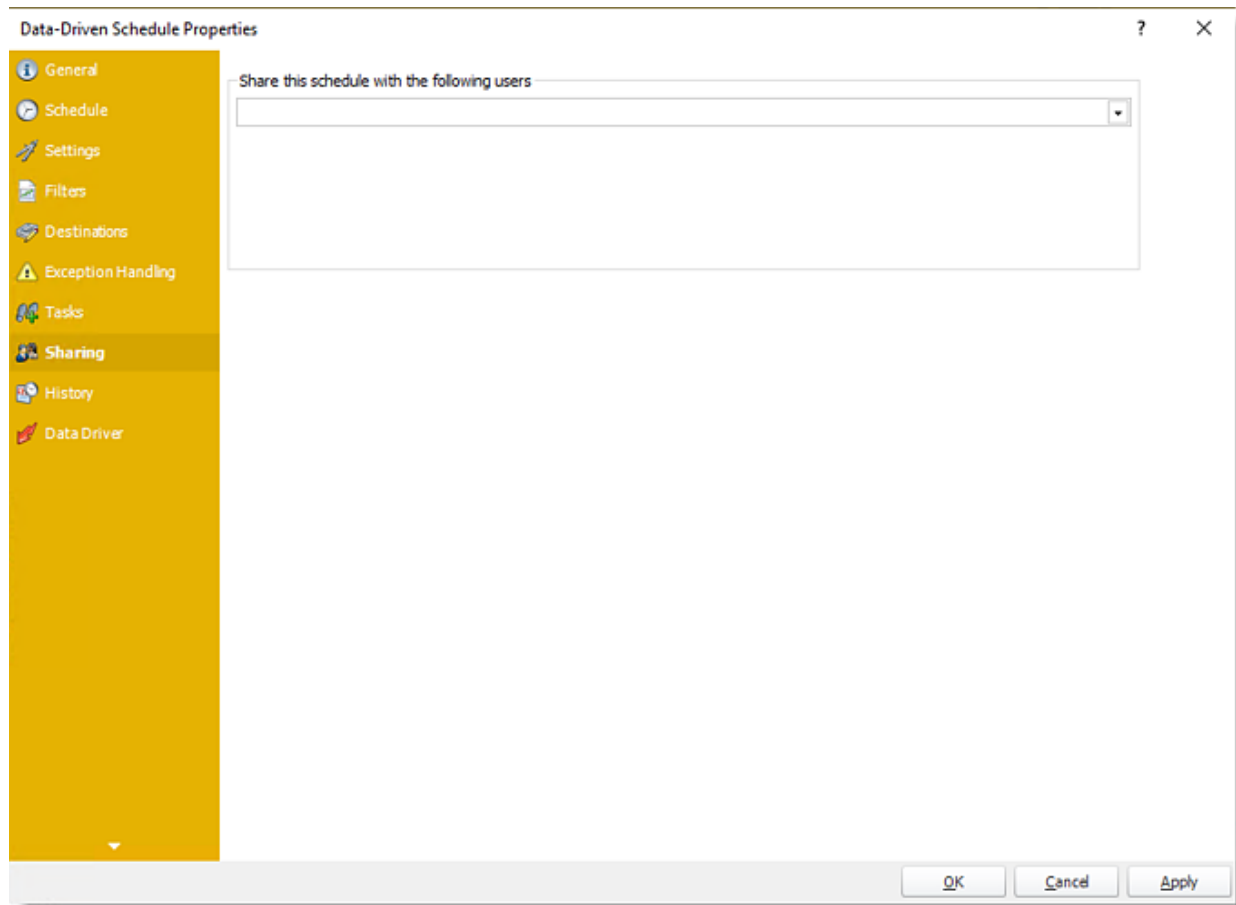


## Tasks

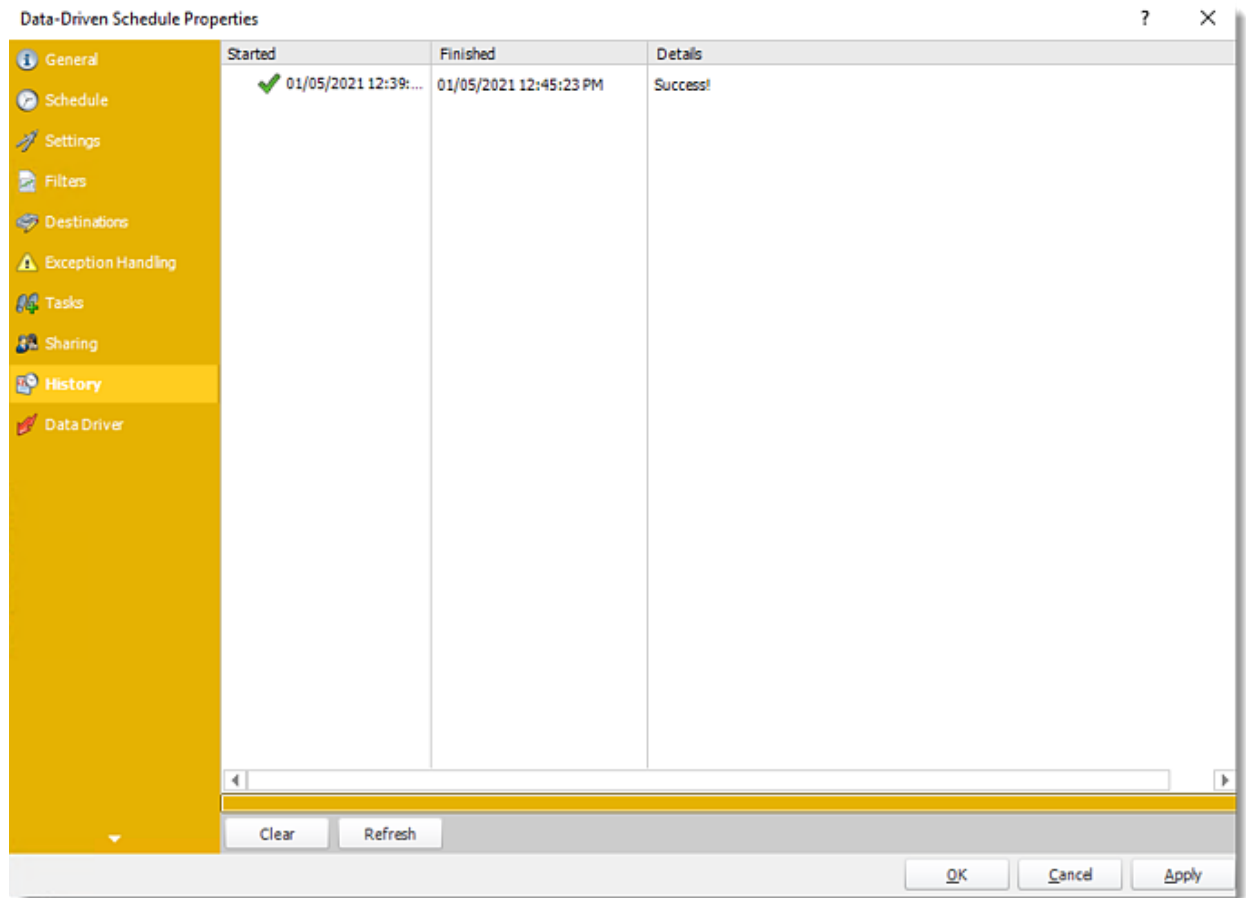


**Sharing:** Here you can share this schedule with multiple users.





**History:** Review the schedule's history. Successes, failures, and other data is located here.



## Data Driver

Data-Driven Schedule Properties

General  
Schedule  
Settings  
Filters  
Destinations  
Exception Handling  
Tasks  
Sharing  
History  
Data Driver

Database Connection Setup

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account

Tarkin Northwind

Connect

Data selection criteria

SELECT top 3 States.\* FROM States

Build

Key Column StateName

☐ Group reports together by email address (email destination only)

☐ Use up to 8 threads to run this schedule

OK Cancel Apply

## How do I use Data-Driven Package Schedules for Power BI Service Reports & Dashboards in PBRs?

**Unlike a Data Driven Schedule, a Data Driven Package will determine the data driver further into the schedule. A Data-Driven Package allows you to send a package of reports to an individual or group from one schedule.**

This article applies to:

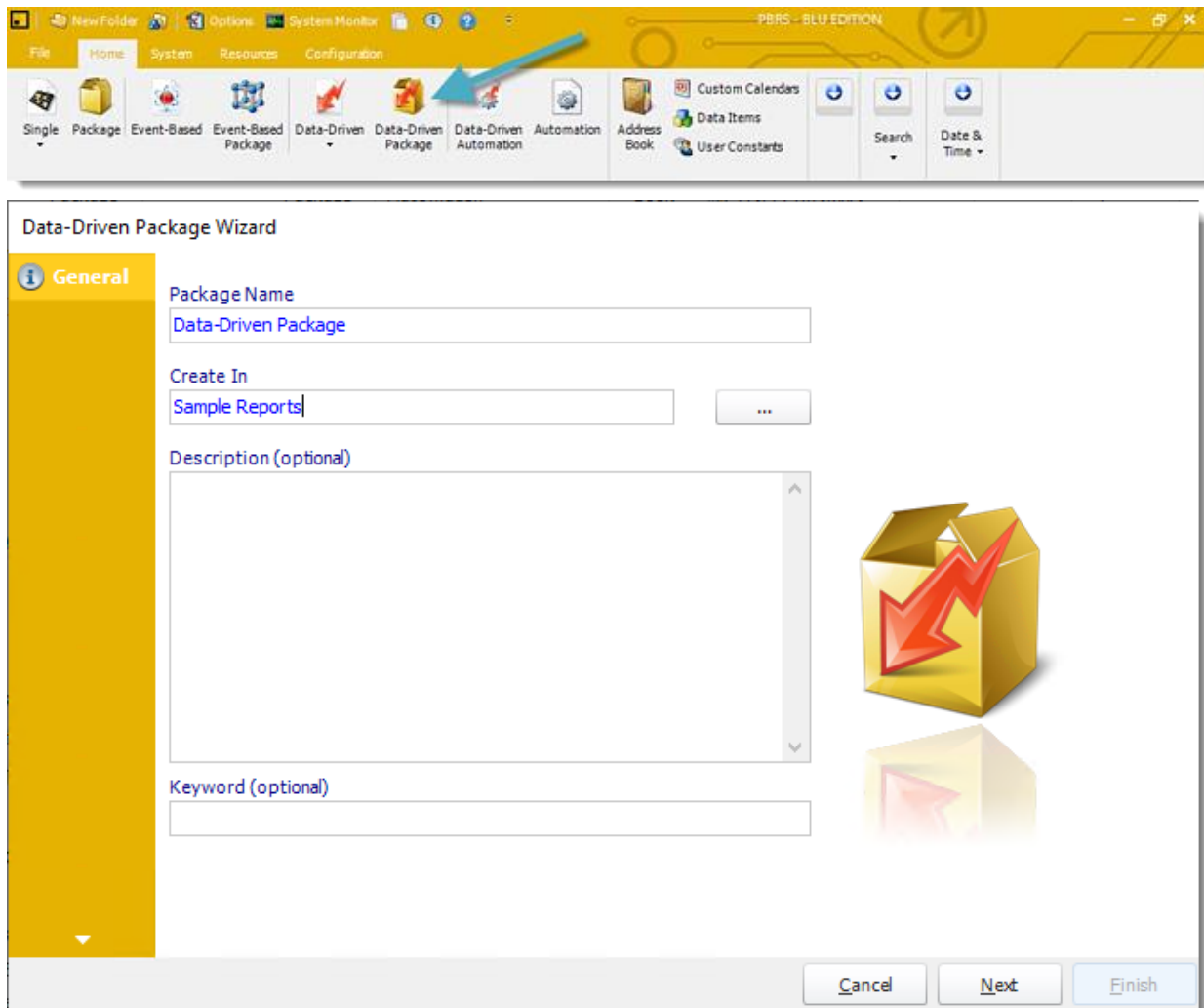
- Power BI Reports & Dashboards (Cloud - Power BI Service)

Data-Driven Package Report Schedule for Power BI Service Reports & Dashboards.

Unlike a Data-Driven Schedule, a Data-Driven Package will determine the data driver further into the schedule. A Data-Driven Package allows you to send a package of reports to an individual or group from one schedule. In this section, we will define the general properties of the package.

How to Create a Data-Driven Package Schedule Report for Power BI Service Reports & Dashboards?

- Go to **Data-Driven Package**.



## General Wizard

- **Package Name:** The name of the package.
- **Create In:** The PBRs folder where the package is stored.
- **Description:** A short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword:** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Data-Driven Package Wizard

**General** | **Schedule**

Start Date: 29/12/2020 | End Date: 29/12/3019

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 16:38:41 | Exception calendar: ☐   
Next to run on: 29/12/2020 | 16:38:41

☐ Repeat every: 0.25 until: 16:38:41

☒ Enable this schedule

Cancel | Next | Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

☒ Saturday ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other

- Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other

Calendar Name

[New...]  
Business Days

- Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

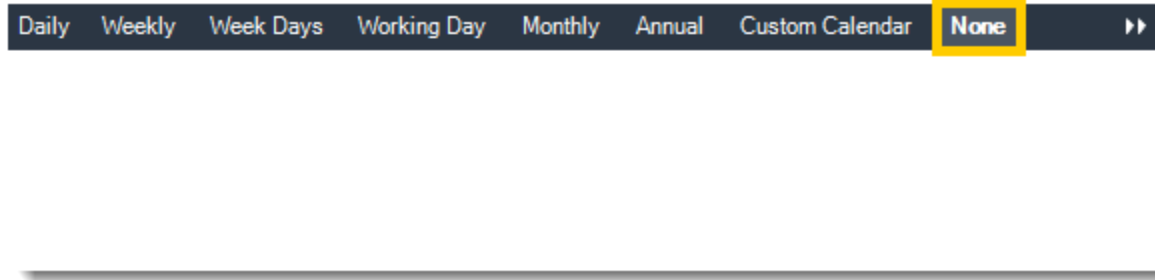
Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other**

Run schedule every

Minutes  
Hours  
Days  
Weeks  
Months  
Years



- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Building a Data Driver Wizard

The screenshot shows the 'Data-Driven Package Wizard' window, specifically the 'Data-Driver' step. On the left is a yellow sidebar with three tabs: 'General', 'Schedule', and 'Data-Driver' (which is selected and highlighted). The main area contains the following elements:

- At the top, two radio buttons: 'SQL Data Driver' (selected) and 'JSON Data Driver'.
- A large rectangular box labeled 'SQL data selection criteria'.
- A 'Build' button located at the bottom right of the 'SQL data selection criteria' box.
- A 'Key Column' label followed by a dropdown menu.
- A checked checkbox labeled 'Group reports together by email address/directory (email/disk destination only)'.
- Below the checked checkbox are two unchecked checkboxes:
  - 'Merge the group into a single PDF file:' followed by an empty text input field.
  - 'Merge the group into a single Excel Workbook:' followed by an empty text input field.
- At the bottom right are three buttons: 'Cancel', 'Next', and 'Finish'.

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes. You can either select SQL Data Driver or JSON Data Driver.

## SQL Data Driver

Get values from database

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple Advanced

Only return records where

And Or

Where

Parse

OK Cancel

- **ODBC Datasource Name:** Check this option for ODBC DSN. Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRS (more secure) and overcomes a large number of security restrictions which*

Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.

The screenshot shows the 'Data-Driven Package Wizard' window. On the left is a yellow sidebar with three tabs: 'General' (with an 'i' icon), 'Schedule' (with a clock icon), and 'Data-Driver' (with a red arrow icon). The 'Data-Driver' tab is selected. The main area is titled 'Data selection criteria' and contains a text box with the SQL query: `SELECT Ethnicity.* FROM Ethnicity`. Below the text box is a 'Build' button. Underneath is a 'Key Column' dropdown menu. At the bottom, there are three checkboxes: the first is checked and labeled 'Group reports together by email address/directory (email/disk destination only)'; the second is unchecked and labeled 'Merge the group into a single PDF file:'; the third is unchecked and labeled 'Merge the group into a single Excel Workbook:'. To the right of the last two checkboxes are empty text input fields. At the very bottom of the window are three buttons: 'Cancel', 'Next', and 'Finish'.

- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.

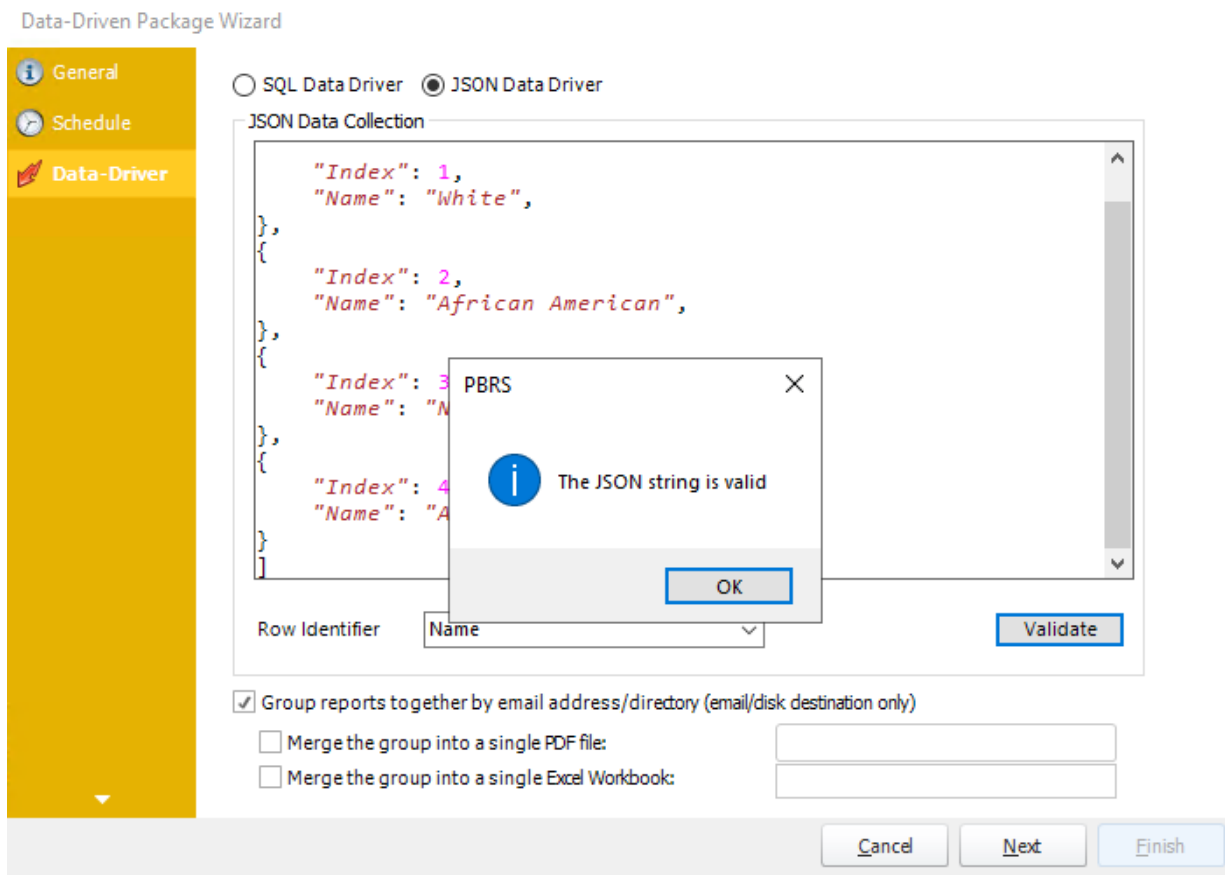
- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.

### JSON Data Driver

The screenshot shows the 'Data-Driven Package Wizard' dialog box. On the left is a yellow sidebar with three tabs: 'General', 'Schedule', and 'Data-Driver'. The 'Data-Driver' tab is selected. In the main area, there are two radio buttons: 'SQL Data Driver' and 'JSON Data Driver'. The 'JSON Data Driver' is selected. Below this is a text area labeled 'JSON Data Collection' containing a JSON array of four objects. Each object has an 'Index' and a 'Name' property. Below the text area is a 'Row Identifier' dropdown menu with 'Name' selected, and a 'Validate' button. At the bottom, there are three checkboxes: 'Group reports together by email address/directory (email/disk destination only)' (checked), 'Merge the group into a single PDF file:', and 'Merge the group into a single Excel Workbook:'. The bottom right has 'Cancel', 'Next', and 'Finish' buttons.

```
[{"Index": 1, "Name": "White"}, {"Index": 2, "Name": "African American"}, {"Index": 3, "Name": "Native American"}, {"Index": 4, "Name": "Asian"}]
```

- Enter your JSON string and click **Validate**.



- **Row Identifier:** Select the row identifier for the data collection for the reports. The information that drives the schedule is required to have a row identifier so that each row in the table is uniquely identified by the value in this column. The row identifier is there as an identifier that is used to troubleshoot in cases where there is a problem with one of the collections.
- **Group reports by email address:** You can instruct PBRs to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.
  - **Merging Multiple Reports:** Where the reports are grouped you can also instruct PBRs to optionally merge the output of the grouped reports into a single file (PDF and MS Excel formats only). Selecting each option will bring up the options for the output format that you can further customize.

## Destination Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.

**Data-Driven Package Wizard**

**Destinations**

Name	Format
------	--------

**Date/Time Stamp**

☐ Append date/time stamp

Adjust date/time stamp by (days): 0

Buttons: Add, Edit, Delete, Import, Up Arrow, Down Arrow, Cancel, Next, Finish

- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.
  - For more information of adding destinations, [click here](#).
  - For more information about Output Formats, [click here](#).



- Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- Delete:** Select a destination and click this button to delete it.
- Import:** Click here to import from the list of default destinations.

### Customizing the Destination

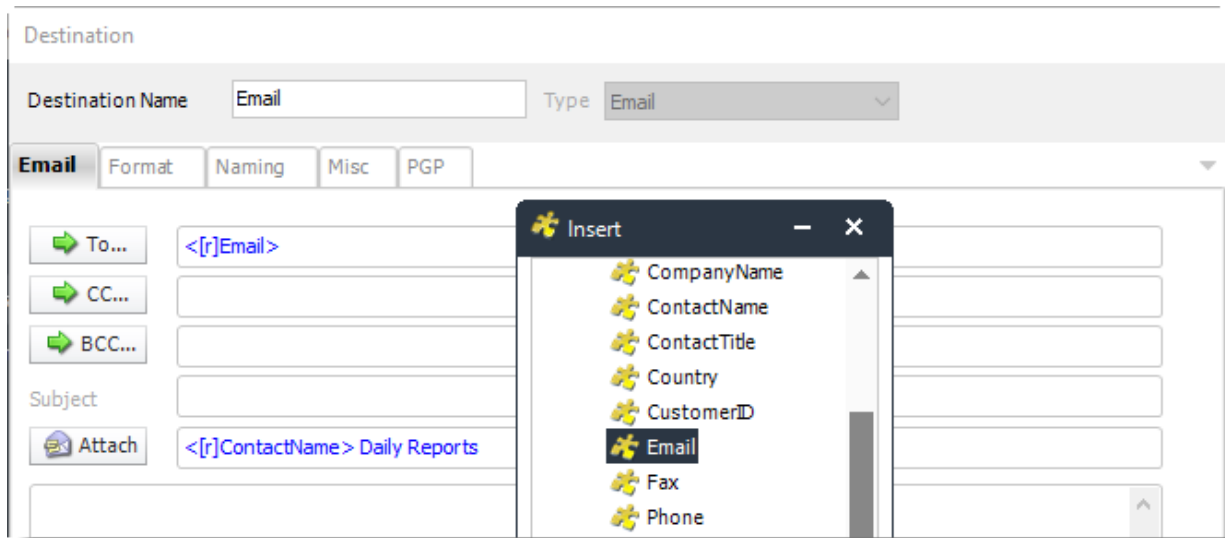
With the Data-Driven Schedule, you can determine the delivery method of your report based on your data. In your table, specify the delivery method by creating a column for each delivery type (FTP, SharePoint, Email, etc.). For each record specify their email, fax number, and so on.

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co.jp</a>	<a href="#">jwu</a>

**Tip:** For email destinations, simply add a semicolon after an email address to send the same instance of the report to another email address.

- Data driving the Report's Distribution
- As mentioned above, PBRs will pull delivery data from your database.
- In this example, we will be using email addresses found in the table.
- With Data-Driven inserts, simply drag and drop the field that indicates your desired destination (email in this case).





- Now PBRs will deliver a unique report based on a corresponding email address.

#### *Customize Recipient Messaging*

- You can also customize the messaging the recipient receives. Using Data-Driven Inserts, PBRs will automatically pull data from your table and use it to customize the subject, body or report format.

Destination

Destination Name  Type

**Email** Format Naming Misc PGP

To...

CC...

BCC...

Subject

Attach

Dear <[r]CustomerID>,  
Here is your report of <[m]CurrentScheduleName>.  
Thank you.

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:

**Insert**

- Data-Driven Data
  - Address
  - City
  - CompanyName
  - ContactName
  - ContactTitle
  - Country
  - CustomerID**
  - Email
  - Fax
  - Phone
  - PostalCode
  - Region

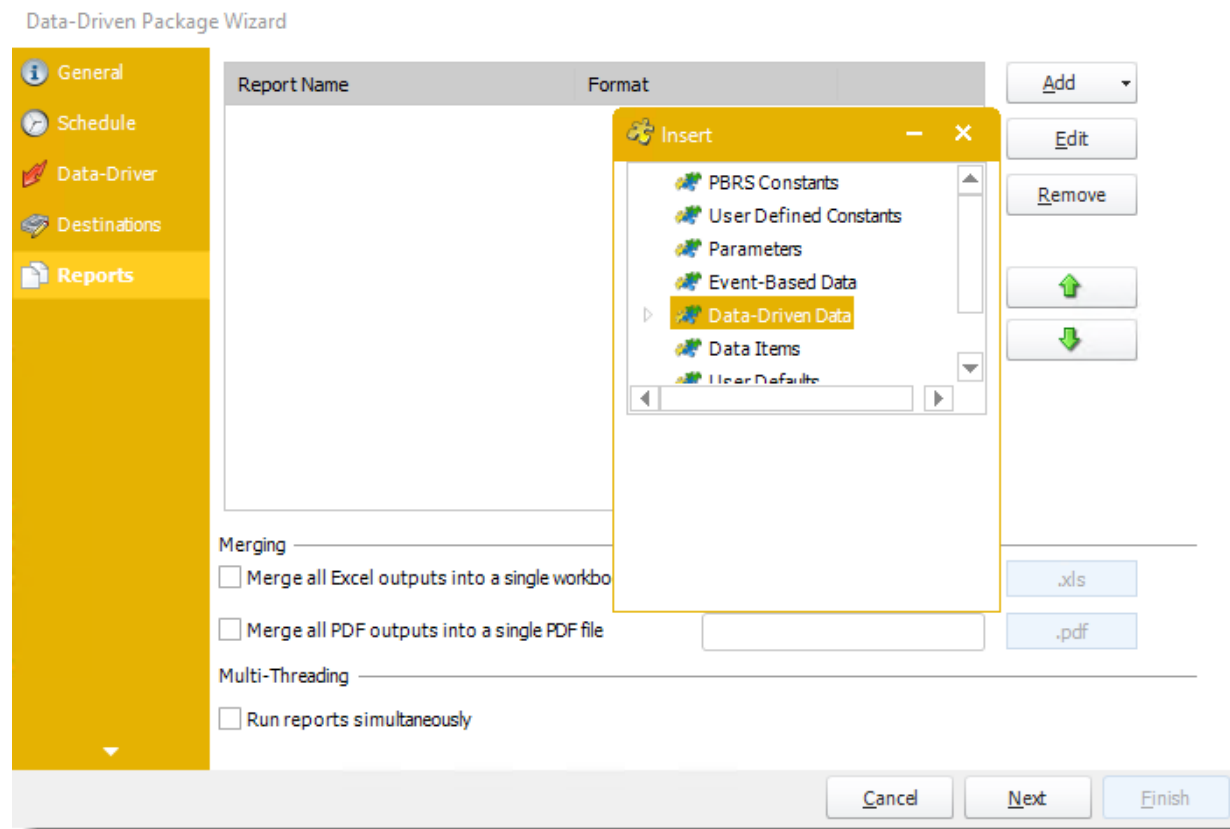
Options (if any)

- Simply drag and drop fields from your table to the desired position.

*For example, to customize an email greeting, type the greeting, and add the recipient's name as shown above.*

Click **Next** to continue to the next wizard section.

## Reports Wizard



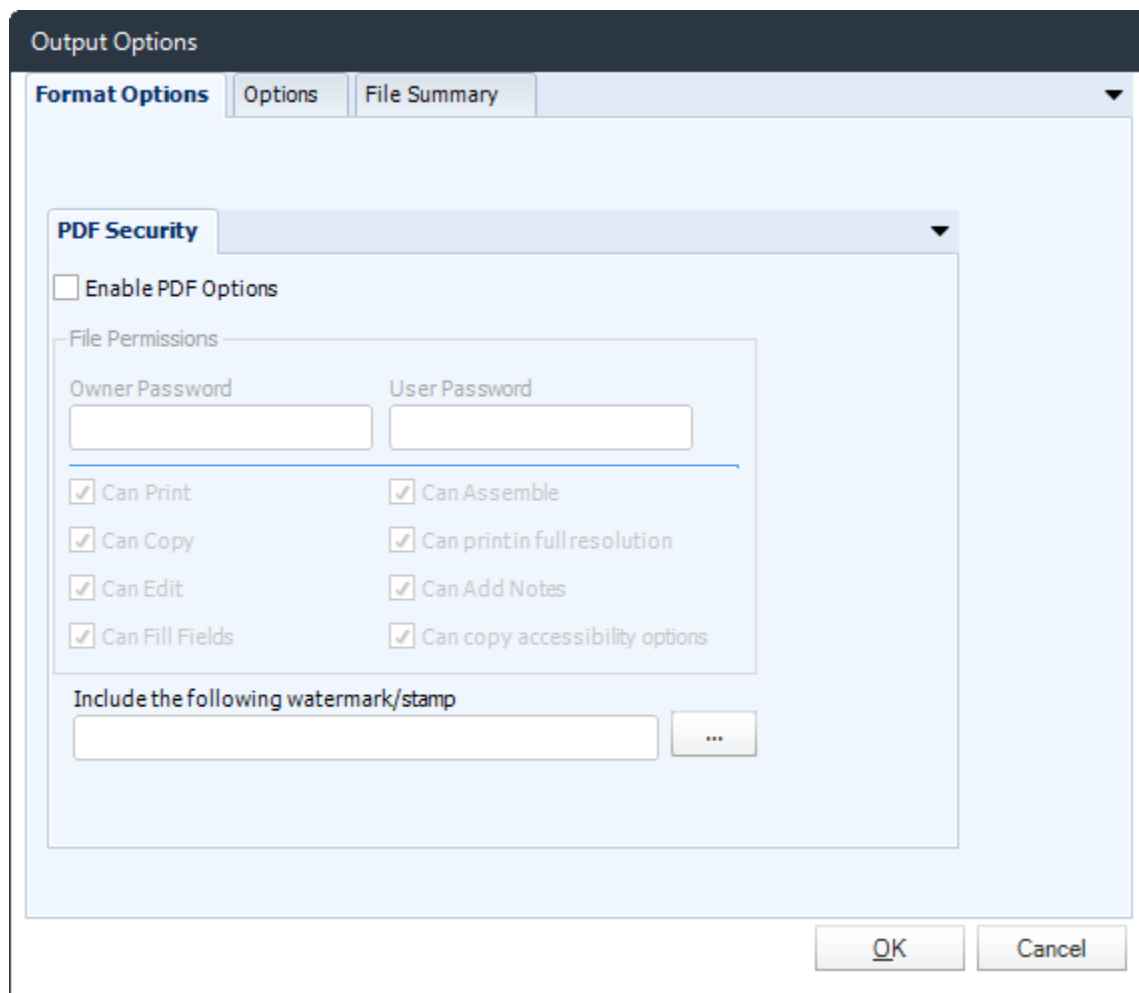
A package may be created with no constituent reports and then the reports can be added later. However, you may also add reports at this stage in the wizard - and amend, delete or add some more later.

- **Merge all Excel Files:** PBRs will then merge all excel outputs in the package into a single excel file.

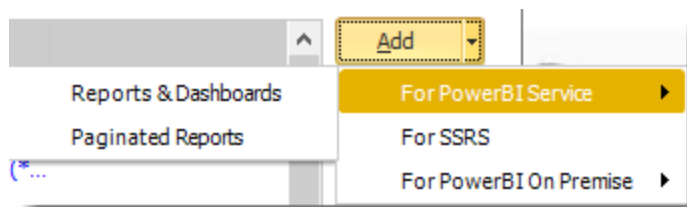
The screenshot shows a dialog box titled "Output Options" with three tabs: "Format Options", "Options", and "File Summary". The "Format Options" tab is active. Inside this tab, there is a section titled "General" with a dropdown arrow. Below "General", there is a text input field labeled "Worksheet Name (leave blank for default i.e. Sheet1)". Below that is a section titled "Workbook Password" which contains a checkbox labeled "Password protect the workbook" and an empty text input field. At the bottom right of the dialog box are "OK" and "Cancel" buttons.

*HINT: Add Password Protection to this section in this option window rather than the individual report in the package. This will password protect the entire merged workbook.*

- **Merge all PDF Files:** Merge PDF outputs into a single PDF file. The reports will appear in the merged PDF in the order they are displayed in the package schedule. Checking this box will bring up additional PDF Options.



- Click **Add** and go **For Power BI** and select **Reports & Dashboards**.



- Package Report Properties will appear on.

## Package Report Properties Report Wizard

Packaged Report Properties

**Report**

Output Format

Report Filter

Report Settings

Naming (Optional)

Exception Handling

Refresh Datasets

PowerBI Account: Karen A. Angeles Martinez

☒ Reports ☐ Dashboards

Select Report: My Workspace Avocado Prices

Report Name: Avocado Prices

☒ Enabled

- **Power BI Account:** Add the account to send the report.
- **Select Report:** The path to the required report.
- **Report Name:** Enter a name for the report.
- **Enabled:** Enable or Disable this specific report in the Package.

## Output Format Wizard

Packaged Report Properties

Report

Output Format

Report Filter

Report Settings

Naming (Optional)

Exception Handling

Refresh Datasets

Format: Acrobat Format (\*.pdf)

Format Options

File Summary

PDF Security

☐ Enable PDF Options

File Permissions

Owner Password

User Password

☒ Can Print

☒ Can Assemble

☒ Can Copy

☒ Can print in full resolution

☒ Can Edit

☒ Can Add Notes

☒ Can Fill Fields

☒ Can copy accessibility options

Include the following watermark/stamp

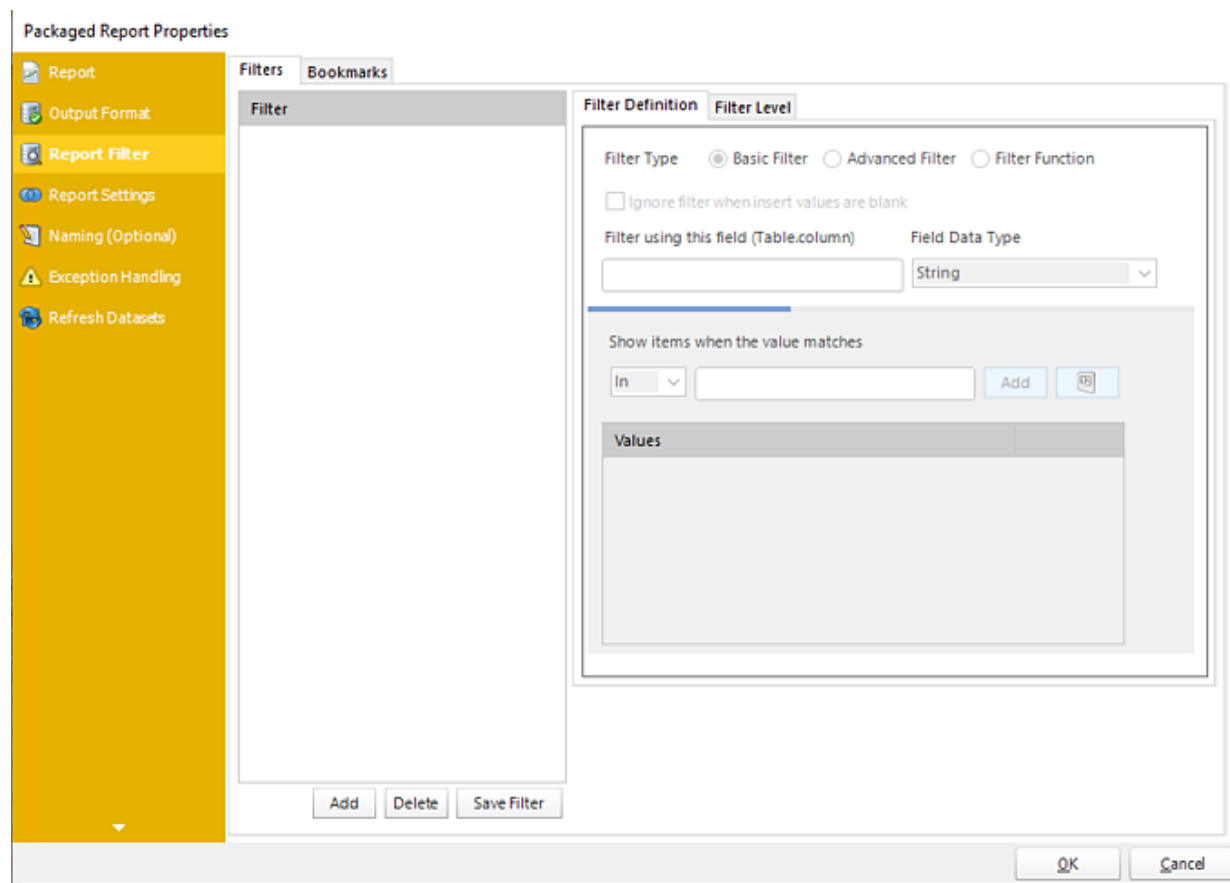
Preview

OK

Cancel

- In this section, you will select the output format of the report.
- For more information on Output Format, [click here](#).

## Report Filter Wizard



- In this section, you will determine the filters for your report (if any). If your report has no filters, you may skip this section by clicking next.
- With PBRs, you can Data Drive any filter in your report. Ensure the filter values for each record are listed in your database.
- Using Data-Driven Inserts you can pull these values into your report.
- Drag and drop your **Data-Driven inserts** into the desired filter fields. If you do not wish to enter a data-driven value in your filter, you can still manually type a value or select them from the drop-down box.
- You can also use Inserts Constants to filter the table and column.

### Filters

#### Filters Definition

- **Filter Type:** You may choose between Basic Filter, Advanced Filter, or Filter Function.
- **Ignore filter when insert values are blank:** Check this option when the filter values are blank.
- **Preview:** View the dashboard/report output given the selected filters.
- **Filter using this field (Table.column):** Choose the table and column you would like to set up the filter.



## Basic Filter

Filter Type ☒ Basic Filter ☐ Advanced Filter ☐ Filter Function

☐ Ignore filter when insert values are blank

Filter using this field (Table.column)  Field Data Type

Show items when the value matches

Values

<[r]Job Title>

- Click **Add**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- Select an **operator** in Show items when the value matches.
- Show items when the value matches:** Insert the value you would like to add and then click **Add**.
- Click **Save Filter**.

## Advanced Filter

The screenshot shows the 'Advanced Filter' dialog box. At the top, there are three radio buttons: 'Basic Filter' (unselected), 'Advanced Filter' (selected), and 'Filter Function' (unselected). Below these is a checkbox labeled 'Ignore filter when insert values are blank' which is unchecked. The 'Filter using this field (Table.column)' section has a text box containing '<[u]Contacts Sample>.E-mail Address' and a 'Field Data Type' dropdown menu set to 'String'. The 'Show items when the value:' section contains two identical filter rules. Each rule has a dropdown menu set to 'Contains' and a text box containing '<[r]E-mail Address>'. Between the two rules are radio buttons for 'And' (selected) and 'Or' (unselected). At the bottom right is a 'Save Filter' button.

- Click **Add**.
- Select **Advanced Filter**.
- Enter the **Table.Column names** in Filter using this field textbox.
- Select the **Field Data Type**.
- **Show Items when the value:** In this option, you have the option to show items when the value and select the option from the drop-down menu.

This screenshot shows the dropdown menu for the 'Show items when the value:' section. The menu is open, displaying a list of filter operators. The 'Contains' option is currently selected and highlighted in blue. The list of options includes: 'Contains', 'LessThan', 'LessThanOrEqual', 'GreaterThan', 'GreaterThanOrEqual', 'DoesNotContain', 'StartsWith', 'DoesNotStartWith', 'Is', 'IsNot', 'IsBlank', and 'IsNotBlank'.

- Click **Save Filter** to add the filter.

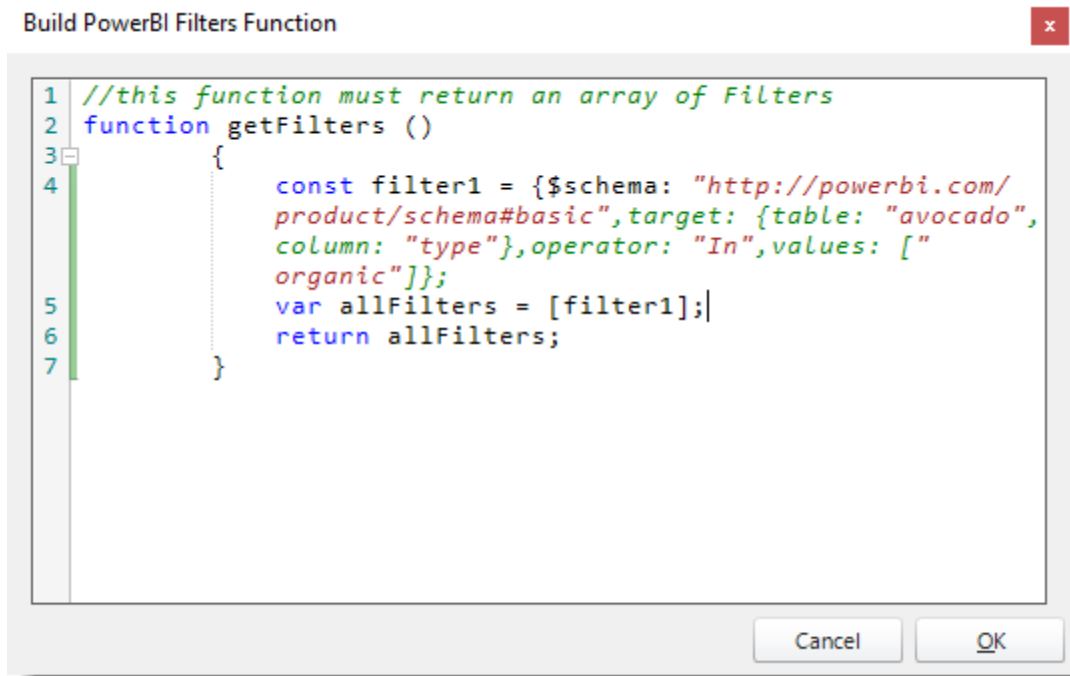
### *Filter Function*

The screenshot shows a dialog box for configuring a filter. At the top, there are three radio buttons under the label "Filter Type": "Basic Filter", "Advanced Filter", and "Filter Function". The "Filter Function" option is selected. Below this is a checkbox labeled "Ignore filter when insert values are blank". Under the heading "Filter using this field (Table.column)", there is a text input field containing "{JsonFilter}". To the right, under "Field Data Type", there is a dropdown menu showing "Date". The main area of the dialog is a code editor with a light blue background and a line number margin on the left (1-5). It contains the following code:

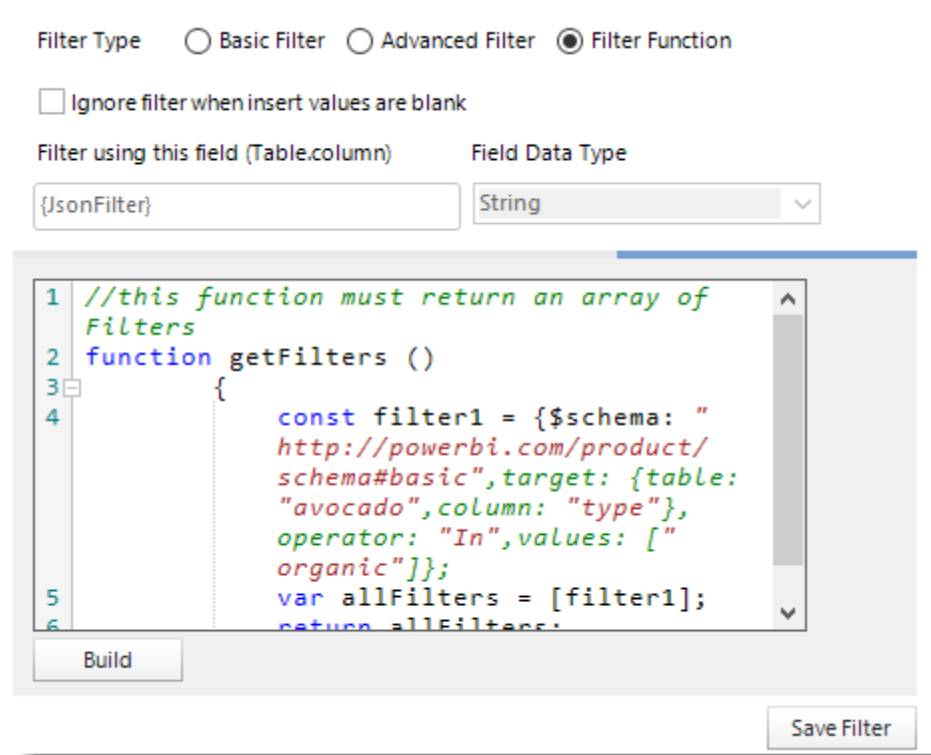
```
1 //this function must return an array of
  Filters
2 function getFilters () {
3 //add your filters definition here
4 //return your filters array
5 }
```

At the bottom left of the dialog is a "Build" button, and at the bottom right is a "Save Filter" button.

- Select the Filter Function option to enter an advanced Filter JSON string so you don't have to manually configure filters in PBRs.
- Click **Build**.
- Enter the Filter JSON string.



•Click **OK**.



•Click **Save Filter**.

## Filter Level

The screenshot shows the 'Filter Level' tab of the 'Filter Definition' dialog. The 'Report' radio button is selected. Below it, the 'Slicer selection based on' section has 'Visual Title' selected and a dropdown menu.

- **Report:** Check this option to filter the level of the report based on the filter field (Table.Column) value.
- **Slicer:** Check this option to filter the report based on the slicer visual icon and the filter field value. Using Slicer, all the values of the slicer will be displayed and only the entered value on Filter Field will appear checked.

*In order to use the Slicer filter, you must have a Slicer visual in your Power BI Report.*

## Slicer

The screenshot shows the 'Filter Level' tab of the 'Filter Definition' dialog. The 'Slicer' radio button is selected. Below it, the 'Slicer selection based on' section has 'Visual Title' selected and a dropdown menu.

## Visual Title

- **Visual Title:** Using this option, you can select the slicer selection based on the Visual Title of the report. Select the slicer visual title using the drop-down menu.
- Click **Save Filter**.

Filter Definition   Filter Level

☐ Report

☒ Slicer

Slicer selection based on

☒ Visual Title   ☐ Filter Field

Ethnicity

### Filter Field

- **Filter Field:** Using this option, you can select the slicer selection based on the Filter Field (Table.Column).
- Click **Save Filter**.

Filter Definition   Filter Level

☐ Report

☒ Slicer

Slicer selection based on

☐ Visual Title   ☒ Filter Field

Ethnicity.Name

### Bookmarks

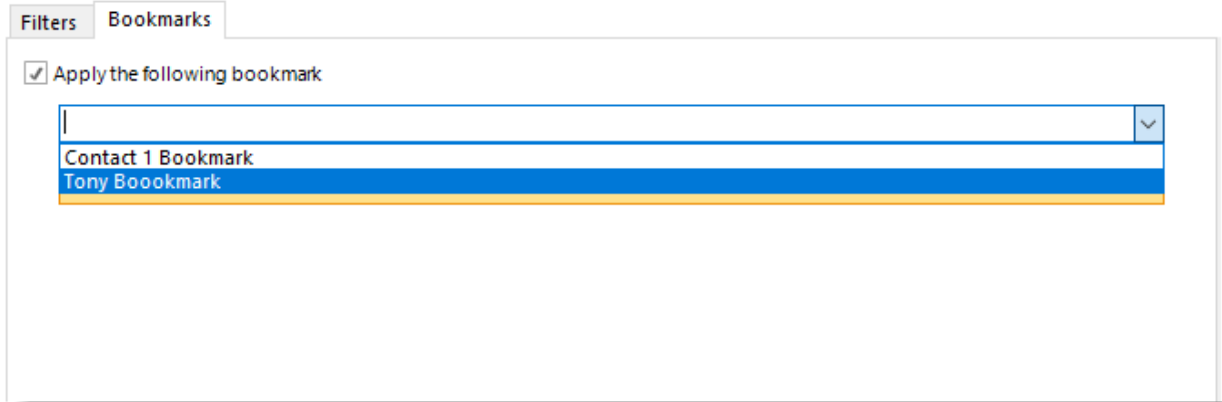
Filters   Bookmarks

☐ Apply the following bookmark

Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

*Bookmark and Filters may overwrite each other so it is best to only set one or the other.*

- If you have a Bookmark in the report you have the ability to select the bookmark using the drop-down menu.
- Check **Apply the following bookmark** to enable the Bookmarks option.
- Select the bookmark from the drop-down menu.

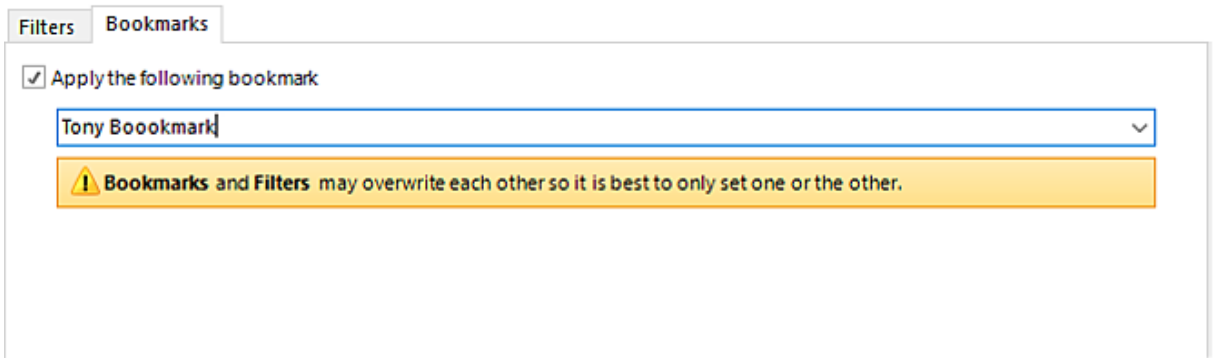


Filters Bookmarks

☒ Apply the following bookmark

Contact 1 Bookmark

Tony Boobookmark



Filters Bookmarks

☒ Apply the following bookmark

⚠ Bookmarks and Filters may overwrite each other so it is best to only set one or the other.

- Click **Save Filter** to add the filter.

## Report Settings Wizard

Packaged Report Properties

☐ Use JSON string for rendering settings

Settings **JSON**

Quick Search

**Page Setup**

Left margin (% of width)	0
Page Height (pixels)	800
Page Width (pixels)	1300
Right margin (% of width)	0

**PDF Cropping**

Crop PDF	<input type="checkbox"/> False
Crop Bottom	0
Crop Left	0
Crop Right	0
Crop Top	0

**Rendering**

Maximum Loading Time(secs)	60
Minimum Loading Time (secs)	10
Minimum Report Size (Bytes - Optional)	-1
PDF Compression	NONE

**Pages To Render**

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

OK Cancel

- In this section, you may set up the dashboard/report.

*Settings and JSON Rendering settings may overwrite each other so it is best to only set one or the other.*

### Settings

- **Left margin (% of width):** The size of the left margin as a percentage of the page width.
- **Page Height(pixels):** The height of the rendered file.
- **Page width (pixels):** The width of the rendered file.
- **Right margin (% of width):** The size of the right margin as a percentage of the page width.
- **PDF Cropping:** You may crop your reports by page height (pixels) and page width (pixels).
- **Maximum Loading Time(secs):** The maximum amount of time that the renderer will wait before timing out.
- **Minimum Loading Time(secs):** The amount of time that PBRS will wait for the dashboard/report to load before rendering it to file.
- **PDF Compression:** Select PDF compression levels.
- **Rendering Method:** Select the rendering method type for your Power BI report.



- **Transparent Background:** You have the option to have your Power BI report in a transparent background.
- **View Style:** How the report fits on the page: Fit to Page, Fit to Width, or Actual Size.
- **Page To Render:** The Power BI page(s) to render. Only applicable to Power BI reports. Leave blank for all report pages or you can specify a page range e.g 1-5 or specific e.g. 1,3,5. You can enter page names e.g. Monthly Report Page, Weekly Summary Reports.

You can drag and drop Inserts constants into Pages To Render textbox.

## JSON

**Packaged Report Properties**

☒ Use JSON string for rendering settings

**JSON**

```
1 <[u]Rendering Settings JSON>
```

**Pages To Render**

The PowerBI page(s) to render. Only applicable to PowerBI reports. Leave blank for all report pages or you can specify a page range e.g. 1-5 or specific pages e.g. 1,3,5 or even page names e.g. Monthly Report Page, Weekly Summary Report

1

OK Cancel

- **Use JSON string for rendering settings:** Check this option to use JSON string for the rendering settings.
- Enter the JSON string.

You can drag and drop Inserts constants into JSON textbox.

## Naming (Optional)

Packaged Report Properties

Report  
Output Format  
Report Filter  
Report Settings  
**Naming (Optional)**  
Exception Handling  
Refresh Datasets

☒ Use the default naming convention

☐ Customize the output file name

☐ Customize output extension

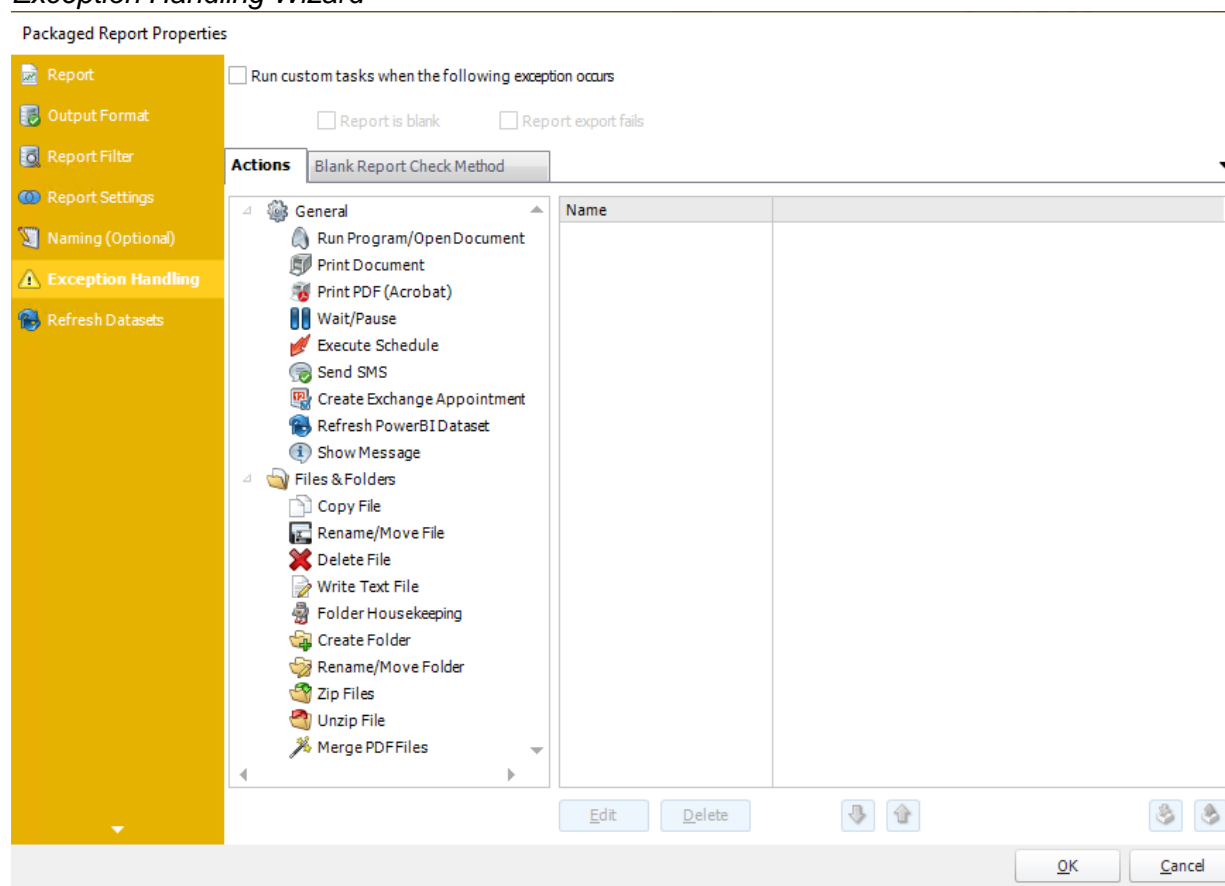
☐ Append date/time to report output

Adjust date/time stamp by (days)

OK Cancel

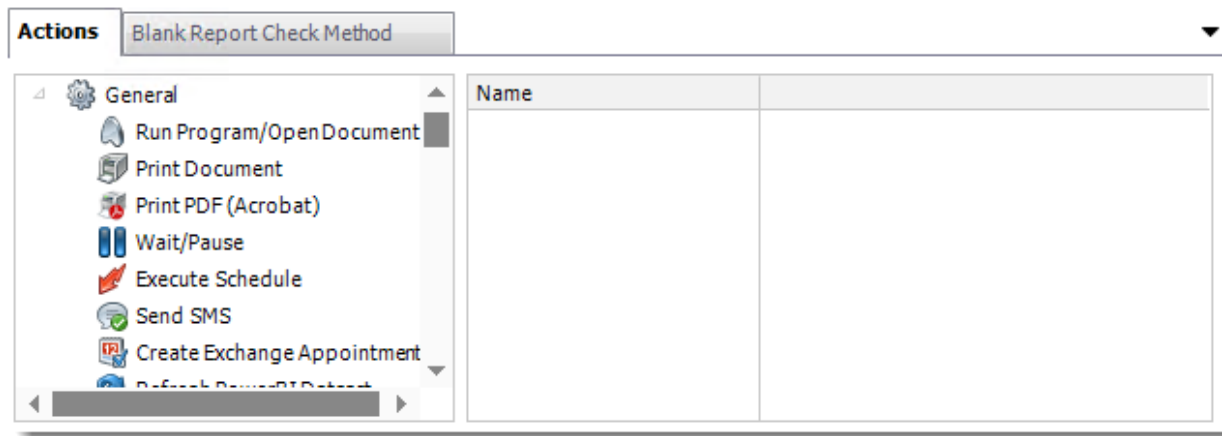
- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Exception Handling Wizard



- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.
  - **Report exports fail:** If a report export fails, you can receive a notification or run a tasks that the report failed to execute.
  - **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.

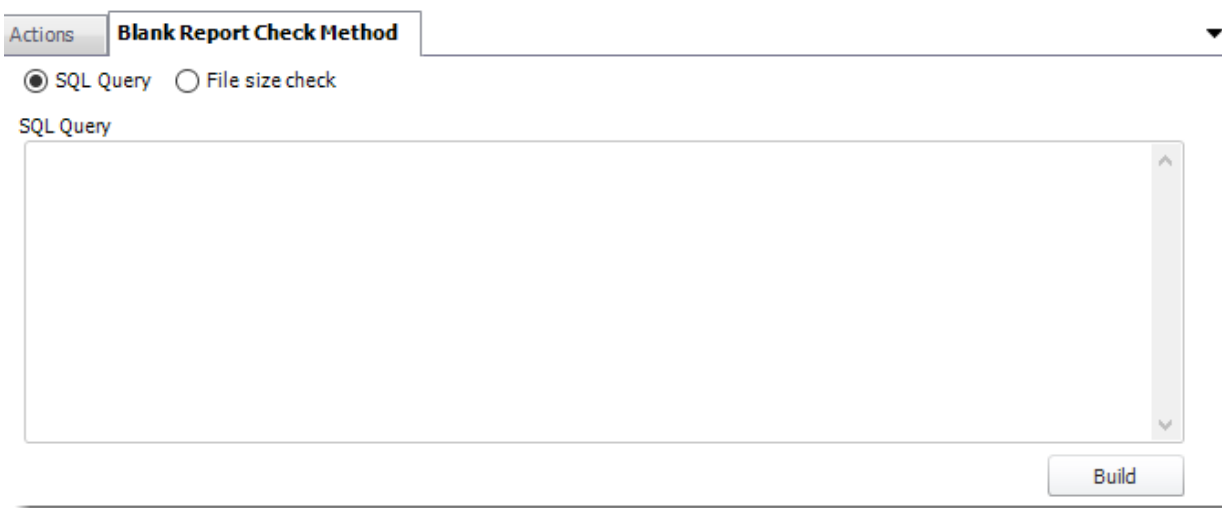
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

### Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
- Click **Build**.
- Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

OK Cancel

- **File size check:** Assume reports is blank if size is under "X" bytes.

Actions Blank Report Check Method

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

- Click OK.

## Refresh Datasets

Packaged Report Properties

Select datasets to refresh before the report is executed

PowerBI Account

Workspace

Dataset

Notification Options

☒ Notify on Completion

☐ Notify on Failure

☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

After refreshing the datasets above, wait  seconds before running the report.

In this section select the datasets to refresh before the report is executed.

- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**

## Exception Handling Wizard

**Data-Driven Package Wizard**

**Exception Handling**

Treat as "error" if not completed in  mins. ☒ Auto-calculate

On error, retry executing schedule every  mins up to  times.

☐ Run custom tasks when the following exception occurs

☐ Report is blank

**Actions** Blank Report Check Method

General

- Run Program/Open Document
- Print Document
- Print PDF (Acrobat)
- Wait/Pause
- Execute Schedule
- Send SMS
- Create Exchange Appointment
- Refresh PowerBI Dataset

Name
------

Edit Delete

Cancel Next Finish

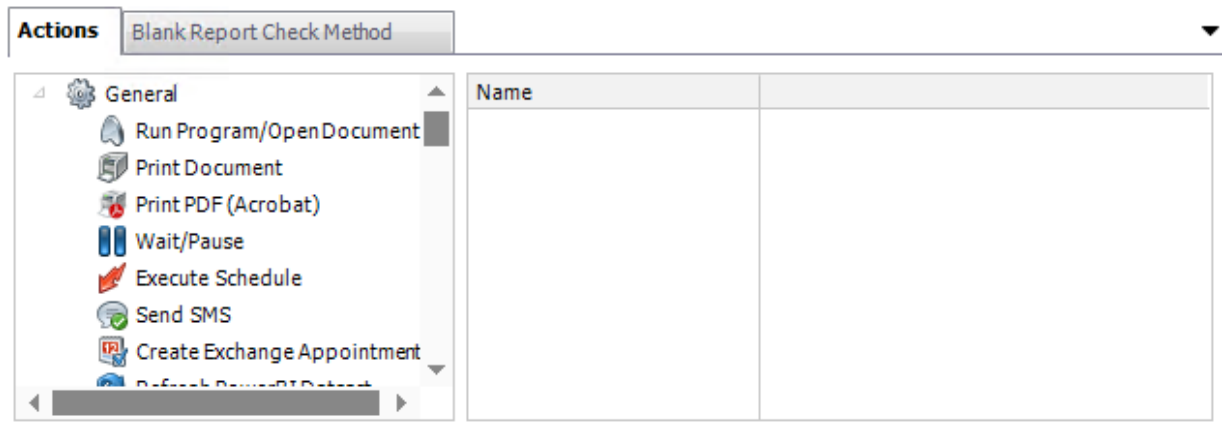
- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS to automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.

- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.

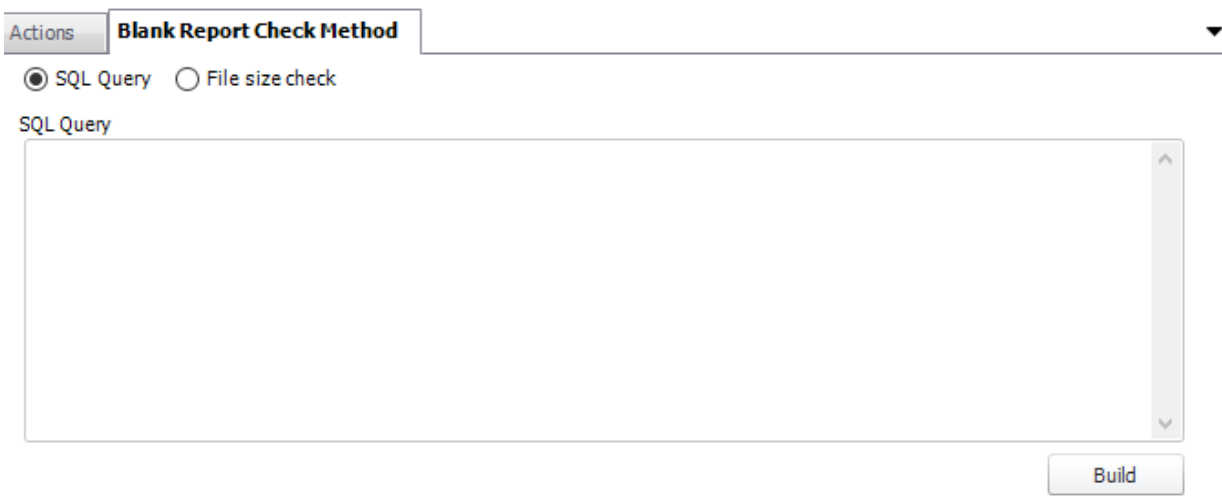
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

## Blank Report Check Method



- Select the Method that will determine whether a report is blank.



- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

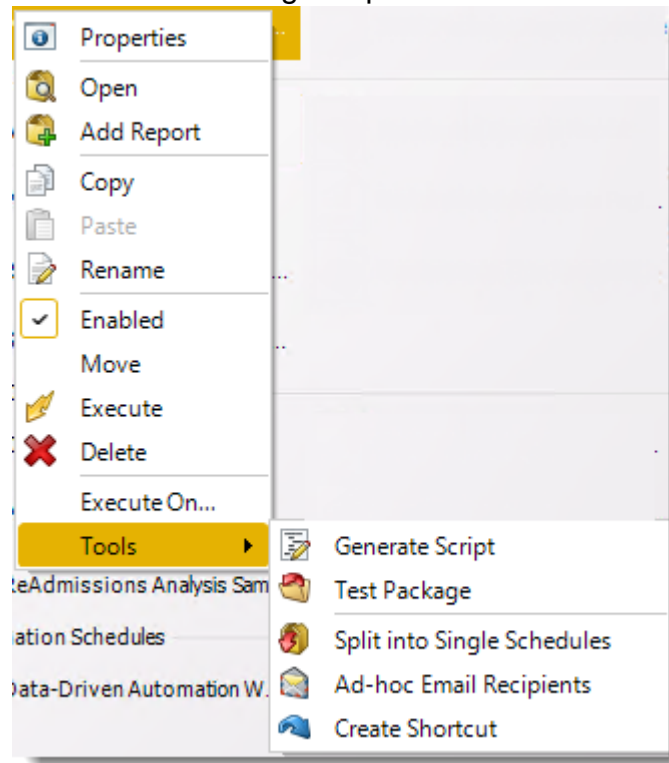
Where

Parse

- **File size check:** Assume reports is blank if size is under "X" bytes.



## Data-Driven Package Report Schedule Context Menu



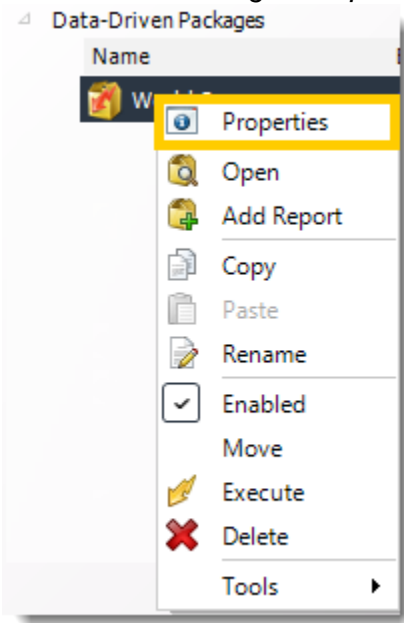
Right-Click on a schedule to see the following actions:

- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Open:** This will open the package and show its constituent reports.
- **Add Report:** Use this to add one or more reports to an existing package.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers .
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test Package:** Use this option to test the schedule and export it to selected "test" destinations.
- **Split into Single Schedules:** This will split all the constituent reports in the package into Single Report Schedules.

*This process will automatically delete the package once the splitting process is completed.*

- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.

#### *Data-Driven Packages Properties*



- To access your schedule properties, right click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

**Data-Driven Package Properties** ? X

**General**

**Schedule**

**Reports**

**Destinations**

**Exception Handling**

**History**

**Tasks**

**Sharing**

**Data-Driven**

**Package Name**  
Data-Driven PowerBI Package Sample

**Create In**  
Sample Reports ...

**Description (optional)**

**Keyword (optional)**

**Unique ID**  
619286164

OK Cancel Apply

•Schedule

**Data-Driven Package Properties** ? X

**General** | **Schedule** | Reports | Destinations | Exception Handling | History | Tasks | Sharing | Data-Driven

Start Date: 8/ 6/2019 | End Date: 8/16/3004

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 11:51:56 AM | Exception calendar: ☐

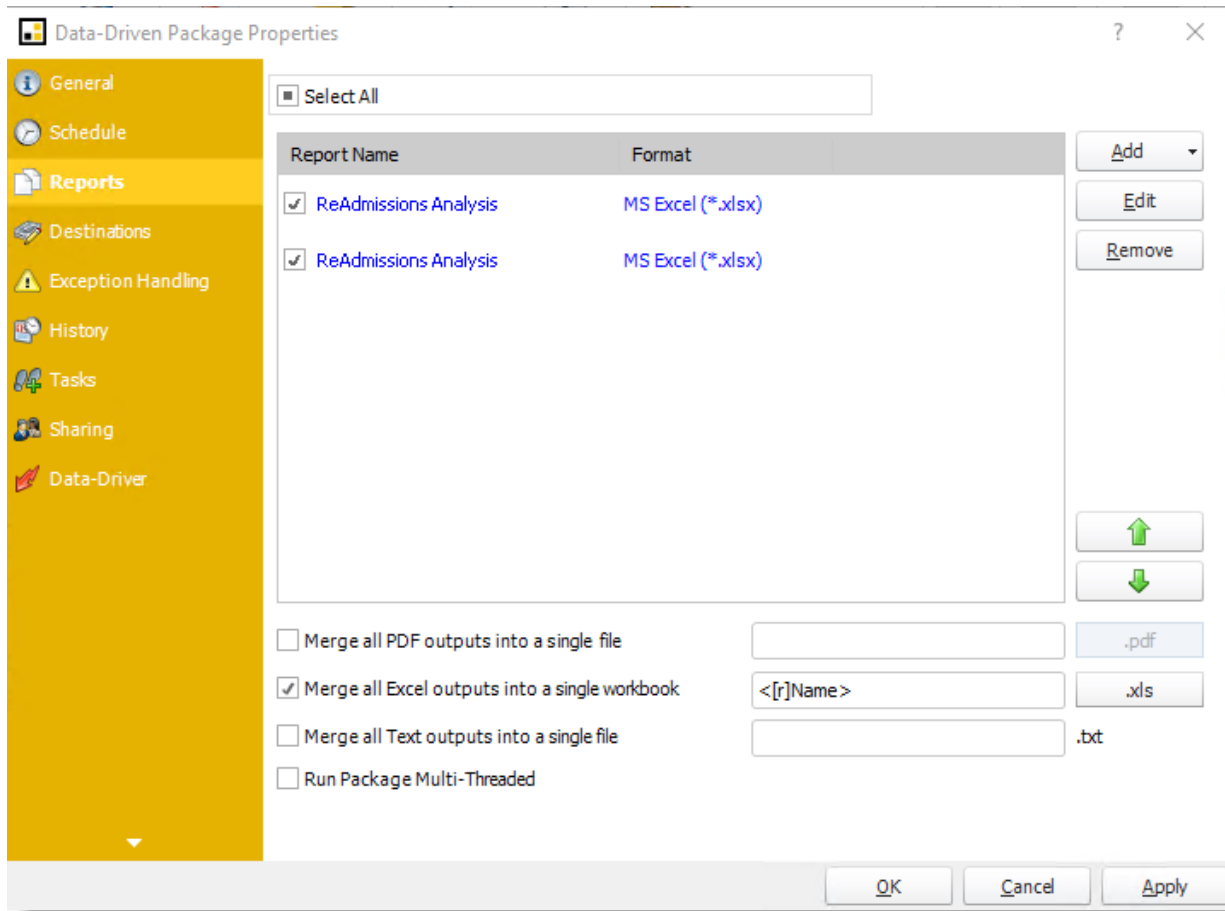
Next to run on: 1/24/2020 | 11:51:56 AM

☐ Repeat every: 0.25 hours until: 3:51:41 PM

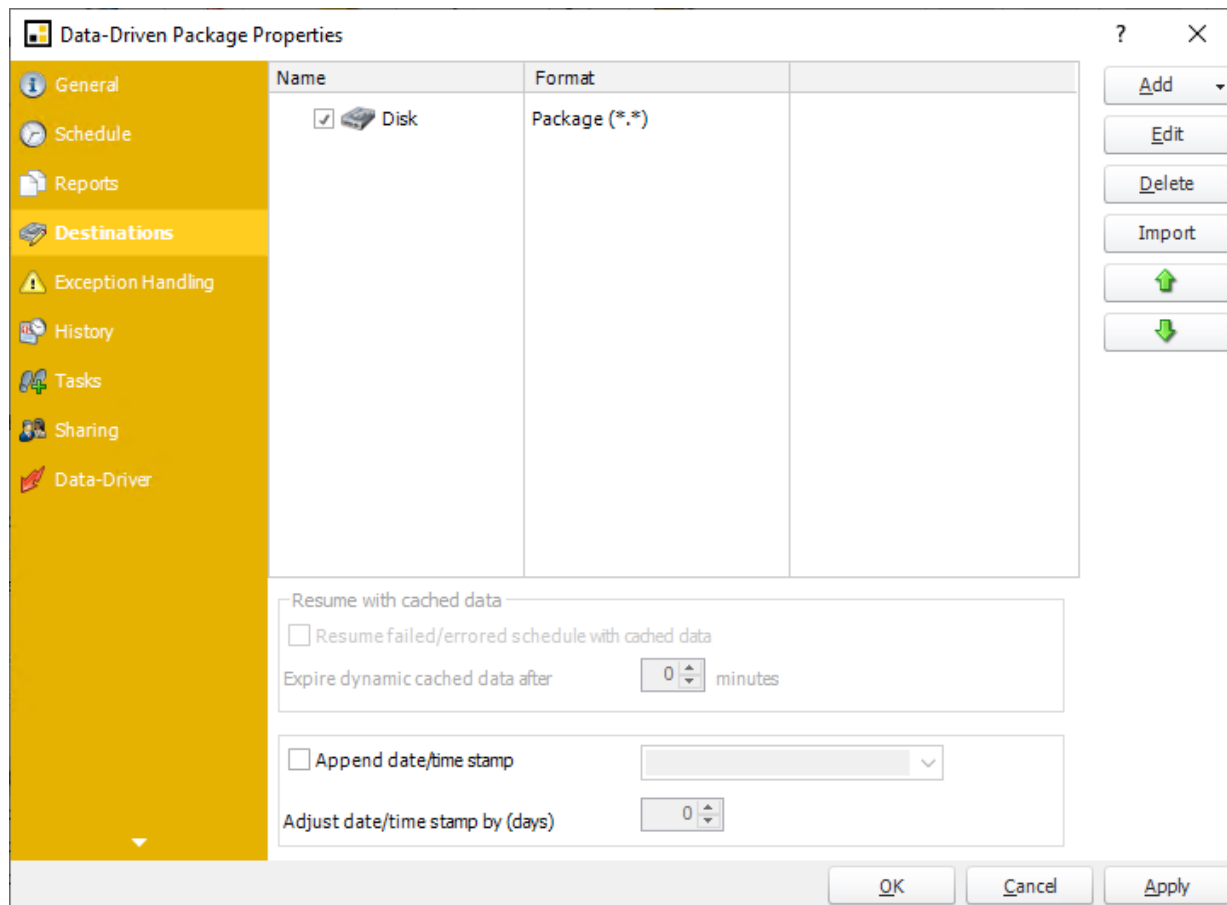
☒ Enable this schedule

OK Cancel Apply

## •Reports

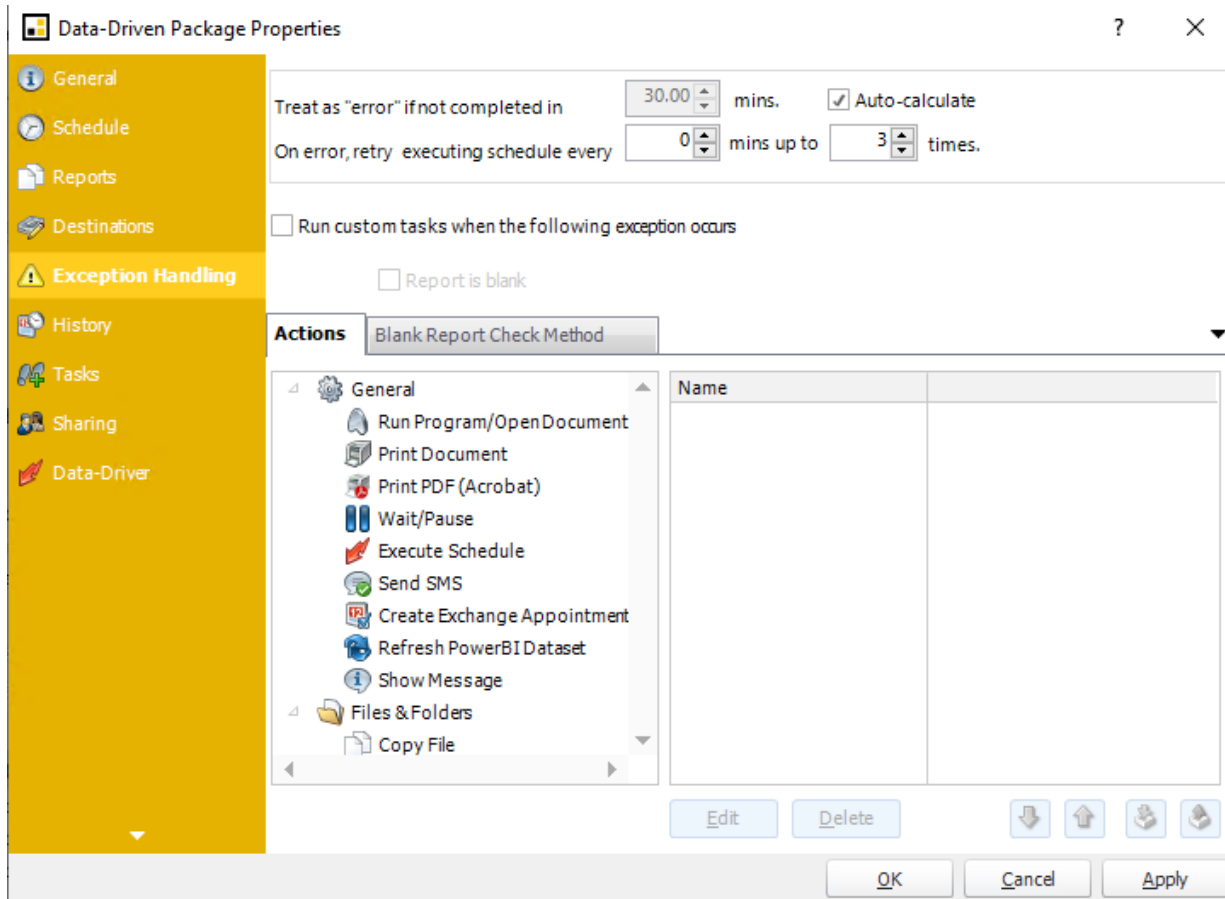


## •Destinations

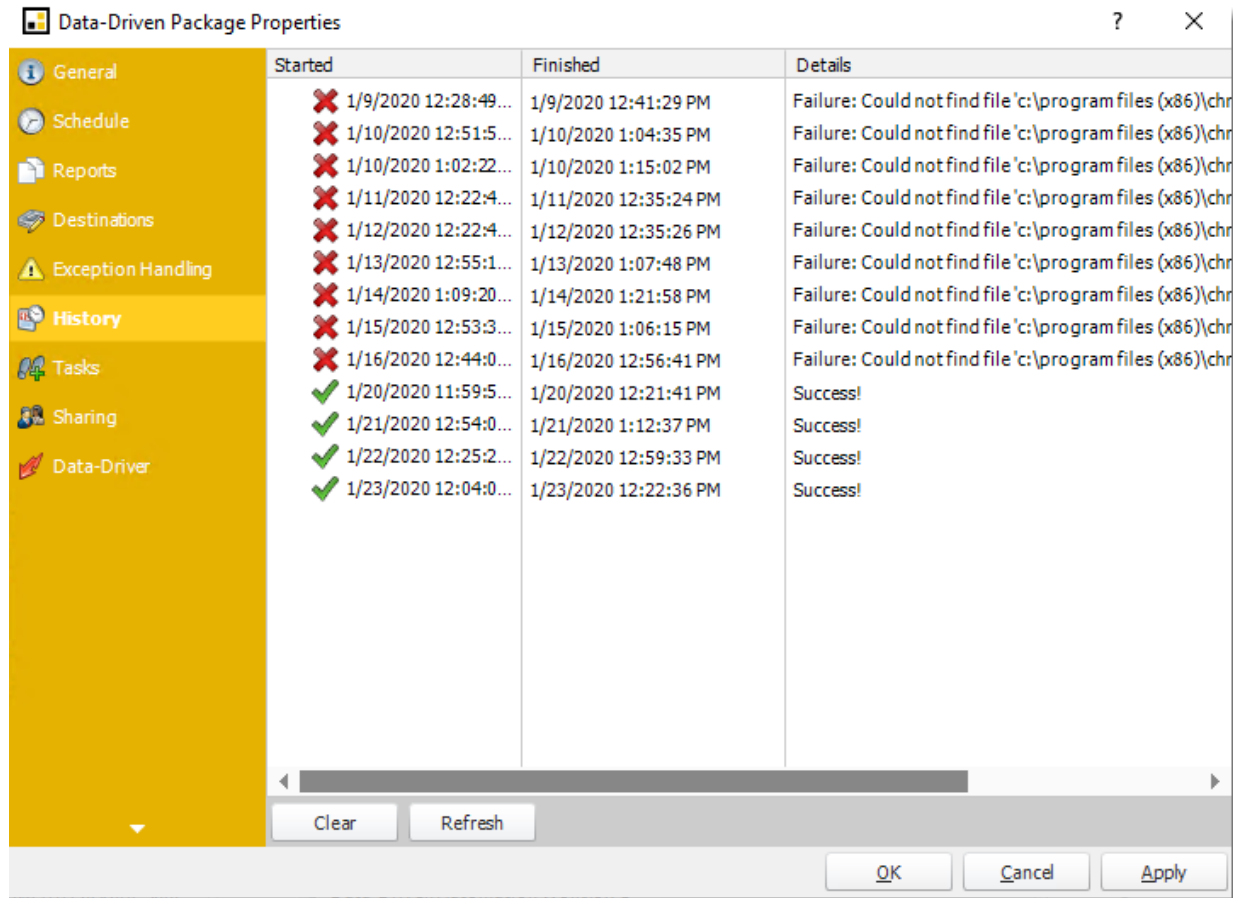


### •Exception Handling

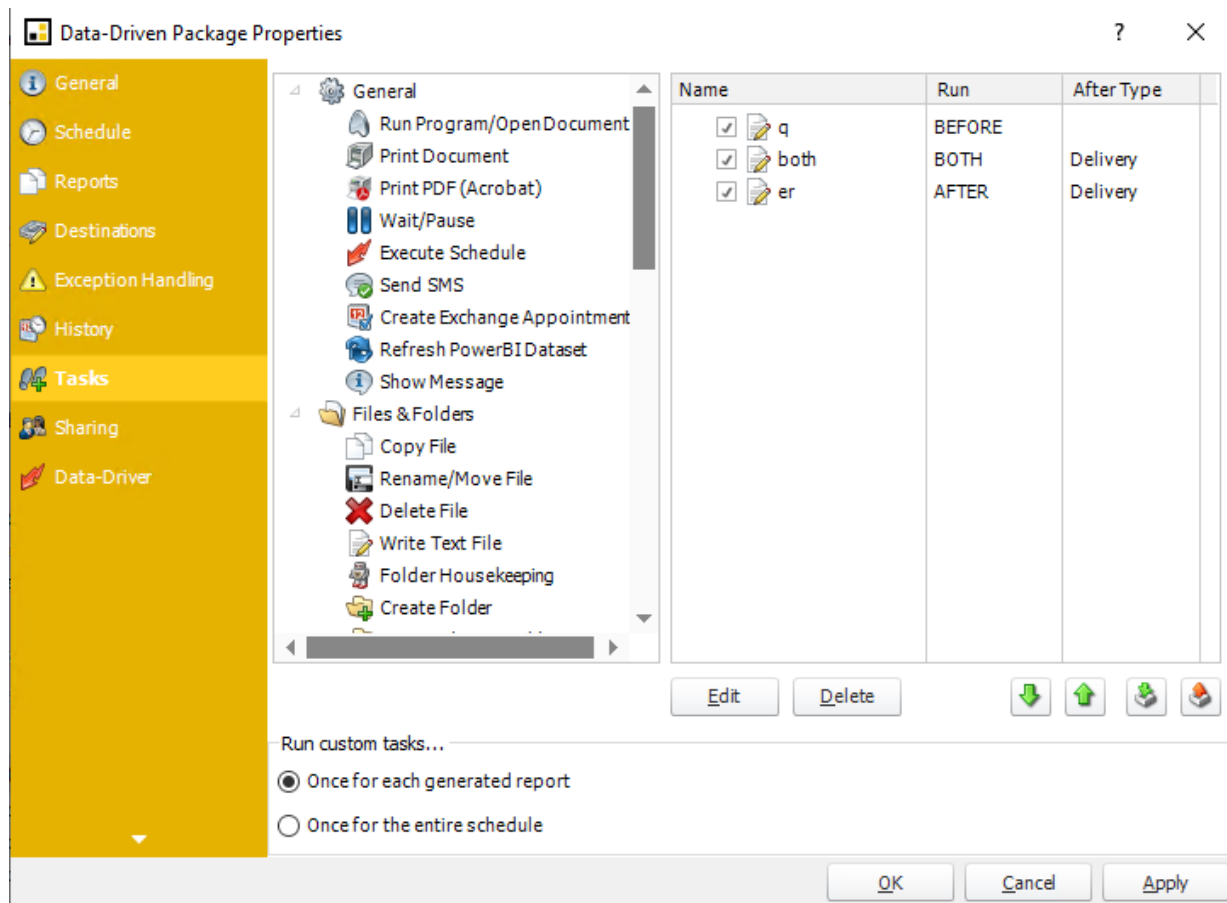




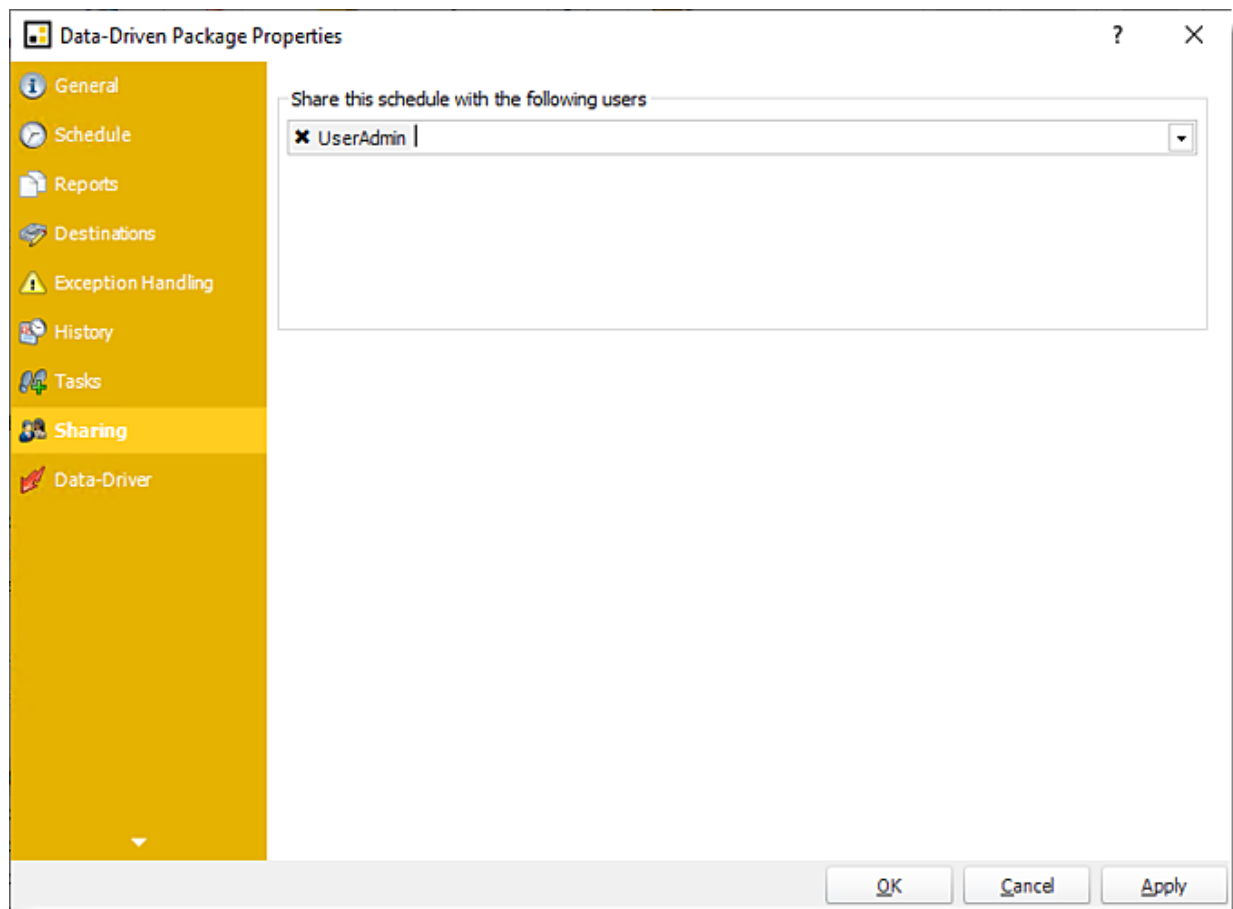
## •History



## •Tasks



- **Sharing:** Here you can share this schedule with multiple users.



- Data-Driver

**Data-Driven Package Properties** ? X

**General**  
Schedule  
Reports  
Destinations  
Exception Handling  
History  
Tasks  
Sharing  
**Data-Driver**

☒ SQL Data Driver ☐ JSON Data Driver

Database Connection Setup

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account  
Northwind

Connect

Data selection criteria

```
SELECT Customers.* FROM Customers WHERE (CustomerID='AROUT' OR CustomerID='BOTTM' OR CustomerID='QUICK')
```

Build

Key Column CustomerID

☒ Group reports together by email address/directory (email/disk destination only)

☐ Merge the group into a single PDF file:

☐ Merge the group into a single Excel Workbook:

OK Cancel Apply

## How do I use Data-Driven Package Schedules for Power BI Service Paginated Reports in PBRs?

**Unlike a Data-Driven Schedule, a Data-Driven Package will determine the data driver further into the schedule. A Data-Driven Package allows you to send a package of reports to an individual or group from one schedule.**

This article applies to:

- Power BI Paginated Reports (Cloud - Power BI Service)

Data-Driven Package Report Schedule for Power BI Service Paginated Reports.

Unlike a Data-Driven Schedule, a Data-Driven Package will determine the data driver further into the schedule. A Data-Driven Package allows you to send a package of reports to an individual or group from one schedule. In this section, we will define the general properties of the package.

How to Create a Data-Driven Package Schedule Report for Power BI Service Paginated Reports?

- Go to **Data-Driven Package**.



Data-Driven Package Wizard


**General**

Package Name  
Data-Driven Paginated Reports Package

Create In  
Sample Reports\

Description (optional)

Keyword (optional)



Cancel Next Finish

## General Wizard

- **Package Name:** The name of the package.
- **Create In:** The PBRs folder where the package is stored.
- **Description:** A short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword:** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Data-Driven Package Wizard

**General** | **Schedule**

Start Date: 2/28/2020 | End Date: 2/28/3019

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 2:34:03 PM | Exception calendar: [v]

Next to run on: 2/28/2020 | 2:34:03 PM

☐ Repeat every: 0.25 | until: 2:34:03 PM

☒ Enable this schedule

Cancel | Next | Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*



- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

☒ Saturday ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

The screenshot shows the 'Monthly' tab selected in a scheduling interface. Below the tab bar, there is a checkbox labeled 'Use the following options' which is checked. Underneath, it says 'The Second of the month' with dropdown menus for 'Second' and 'Monday'. At the bottom, there is a grid of 12 checkboxes, one for each month of the year, all of which are checked.

- **Annual:** Run the schedule every year at a specified time.

The screenshot shows the 'Annual' tab selected in the scheduling interface. The area below the tab bar is currently empty, indicating that specific annual scheduling options are not yet defined or are to be configured in a subsequent step.

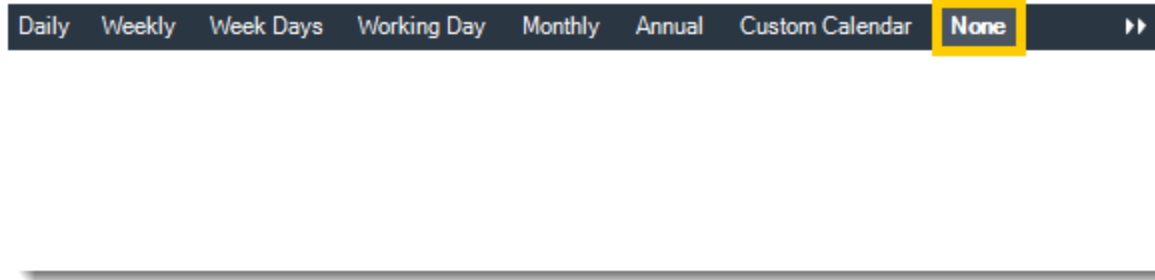
- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

The screenshot shows the 'Custom Calendar' tab selected. Below the tab bar, there is a 'Calendar Name' label followed by a dropdown menu. The dropdown menu is open, showing two options: '[New...]' and 'Business Days'.

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

The screenshot shows the 'Other' tab selected. Below the tab bar, there is a 'Run schedule every' label followed by a numeric input field containing the number '1' and a dropdown menu. The dropdown menu is open, showing a list of time units: Minutes, Hours, Days, Weeks, Months, and Years.

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Building a Data Driver Wizard

The screenshot shows the 'Data-Driven Package Wizard' window, specifically the 'Data-Driver' step. On the left is a yellow sidebar with three tabs: 'General', 'Schedule', and 'Data-Driver' (which is selected and highlighted). The main area has a title bar 'Data-Driven Package Wizard' and a subtitle 'Data-Driver'. Below the subtitle are two radio buttons: 'SQL Data Driver' (selected) and 'JSON Data Driver'. A large text area labeled 'SQL data selection criteria' is empty. Below this is a 'Key Column' dropdown menu. At the bottom, there are three checkboxes: 'Group reports together by email address/directory (email/disk destination only)' (checked), 'Merge the group into a single PDF file:' (unchecked), and 'Merge the group into a single Excel Workbook:' (unchecked). To the right of the last two checkboxes are empty text input fields. At the bottom right are three buttons: 'Cancel', 'Next', and 'Finish'. A 'Build' button is located at the bottom right of the 'SQL data selection criteria' text area.

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes. You can either select SQL Data Driver or JSON Data Driver.

## SQL Data Driver

Get values from database

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple Advanced

Only return records where

And Or

Where

Parse

OK Cancel

- **ODBC Datasource Name:** Check this option for ODBC DSN. Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be*

stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.

Data-Driven Package Wizard

General

Schedule

**Data-Driven**

Data selection criteria

```
SELECT DISTINCT States.* FROM States WHERE (States.StateName IS NOT NULL AND States.StateName <> ' ')
```

Build

Key Column State

☒ Group reports together by email address/directory (email/disk destination only)

☐ Merge the group into a single PDF file:☐ Merge the group into a single Excel Workbook:

Cancel

Next

Finish

- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.
- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.

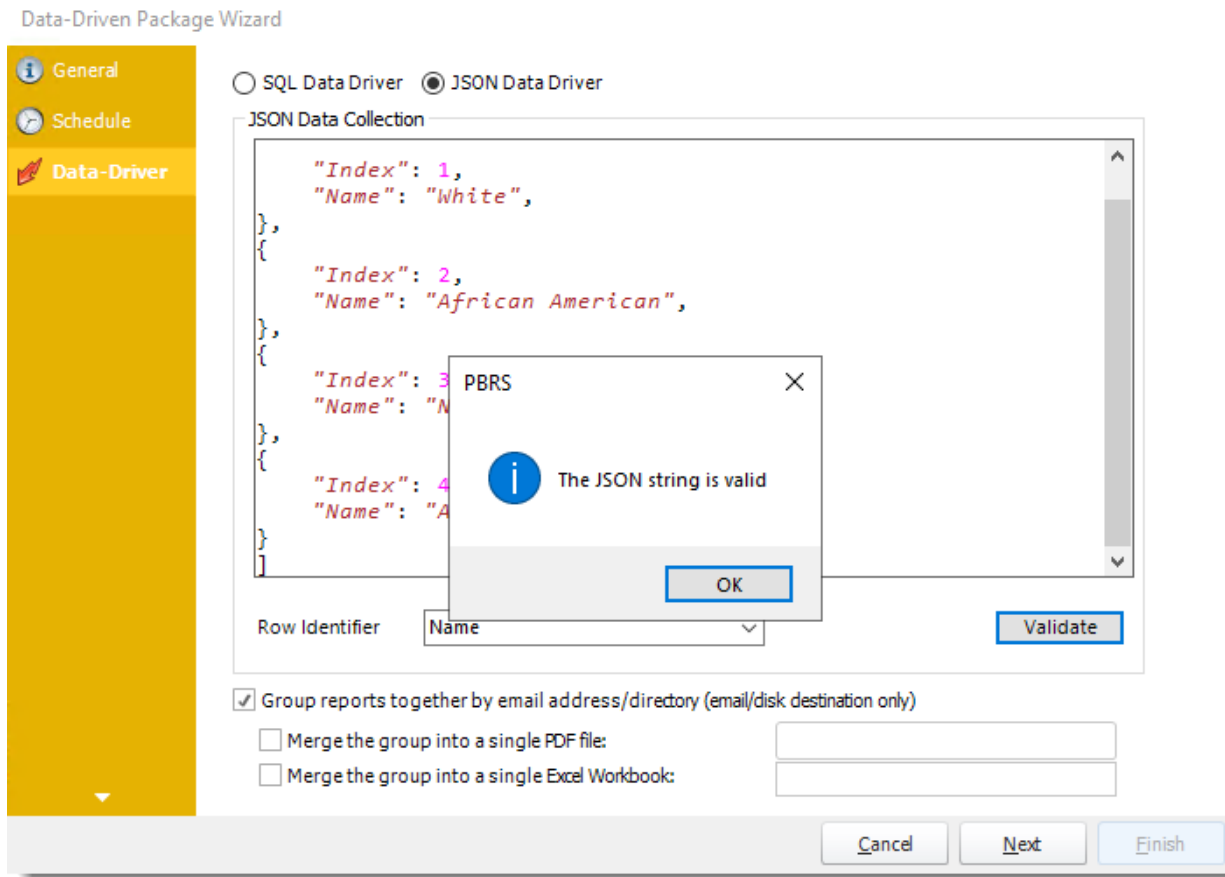
### JSON Data Driver

The screenshot shows the 'Data-Driven Package Wizard' window with the 'JSON Data Driver' selected. The 'JSON Data Collection' text area contains the following JSON string:

```
[
  {
    "Index": 1,
    "Name": "White",
  },
  {
    "Index": 2,
    "Name": "African American",
  },
  {
    "Index": 3,
    "Name": "Native American",
  },
  {
    "Index": 4,
    "Name": "Asian",
  }
]
```

Below the text area, the 'Row Identifier' is set to 'Name'. A 'Validate' button is present. At the bottom, there are checkboxes for 'Group reports together by email address/directory (email/disk destination only)', 'Merge the group into a single PDF file:', and 'Merge the group into a single Excel Workbook:'. The 'Cancel', 'Next', and 'Finish' buttons are at the bottom right.

- Enter your JSON string and click **Validate**.



- **Row Identifier:** Select the row identifier for the data collection for the reports. The information that drives the schedule is required to have a row identifier so that each row in the table is uniquely identified by the value in this column. The row identifier is there as an identifier that is used to troubleshoot in cases where there is a problem with one of the collections.
- **Group reports by email address:** You can instruct PBRS to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.
  - **Merging Multiple Reports:** Where the reports are grouped you can also instruct PBRS to optionally merge the output of the grouped reports into a single file (PDF and MS Excel formats only). Selecting each option will bring up the options for the output format that you can further customize.

Click **Next** to continue to the next wizard section.



## Destination Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.

**Data-Driven Package Wizard**

**Destinations**

Name	Format
------	--------

**Date/Time Stamp**

☐ Append date/time stamp

Adjust date/time stamp by (days) 0

Buttons: Add, Edit, Delete, Import, Up Arrow, Down Arrow, Cancel, Next, Finish

- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.
  - For more information of adding destinations, [click here](#).
  - For more information about Output Formats, [click here](#).



- **Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- **Delete:** Select a destination and click this button to delete it.
- **Import:** Click here to import from the list of default destinations.

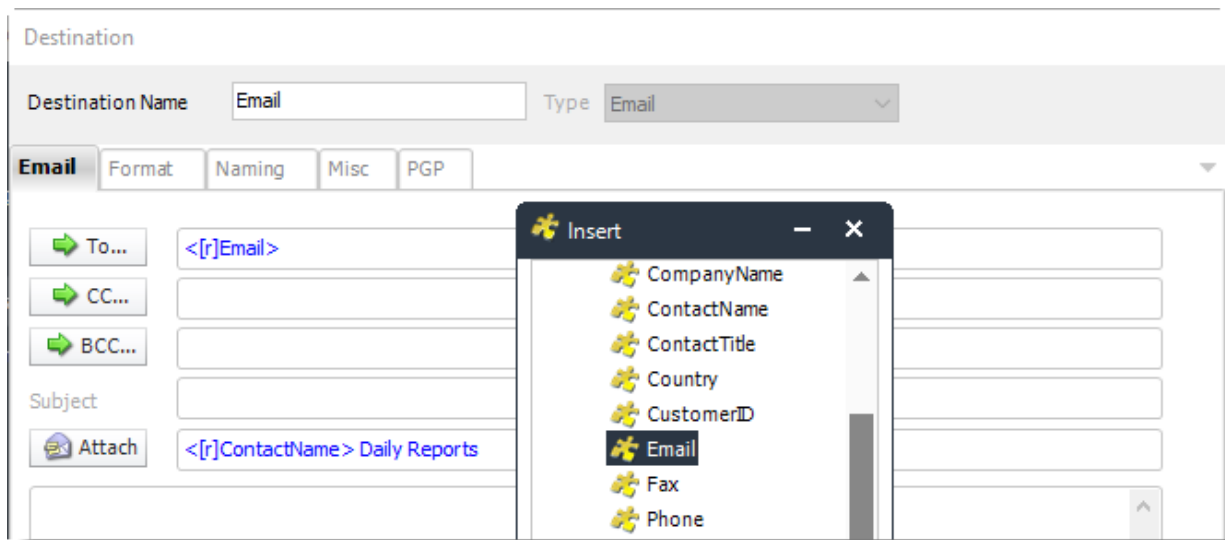
### Customizing the Destination

With the Data-Driven Schedule, you can determine the delivery method of your report based on your data. In your table, specify the delivery method by creating a column for each delivery type (FTP, SharePoint, Email, etc.). For each record specify their email, fax number, and so on.

Region	Area	Country	Sect	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co.jp</a>	<a href="#">jwu</a>

**Tip:** For email destinations, simply add a semicolon after an email address to send the same instance of the report to another email address.

- Data driving the Report's Distribution
- As mentioned above, PBRs will pull delivery data from your database.
- In this example, we will be using email addresses found in the table.
- With Data-Driven inserts, simply drag and drop the field that indicates your desired destination (email in this case).



- Now PBRs will deliver a unique report based on a corresponding email address.

#### *Customize Recipient Messaging*

- You can also customize the messaging the recipient receives. Using Data-Driven Inserts, PBRs will automatically pull data from your table and use it to customize the subject, body or report format.

Destination

Destination Name  Type

**Email** Format Naming Misc PGP

To...

CC...

BCC...

Subject

Attach

Dear <[r]CustomerID>,  
Here is your report of <[m]CurrentScheduleName>.  
Thank you.

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:

**Insert**

Data-Driven Data

- Address
- City
- CompanyName
- ContactName
- ContactTitle
- Country
- CustomerID**
- Email
- Fax
- Phone
- PostalCode
- Region

Options (if any)

- Simply drag and drop fields from your table to the desired position.

*For example, to customize an email greeting, type the greeting, and add the recipient's name as shown above.*

Click **Next** to continue to the next wizard section.

## Reports Wizard

Data-Driven Package Wizard

General

Schedule

Data-Driver

Destinations

**Reports**

Report Name	Format
-------------	--------

Add

Edit

Remove

↑

↓

Merging

☐ Merge all Excel outputs into a single workbook

.xls

☐ Merge all PDF outputs into a single PDF file

.pdf

Multi-Threading

☐ Run reports simultaneously

Cancel

Next

Finish

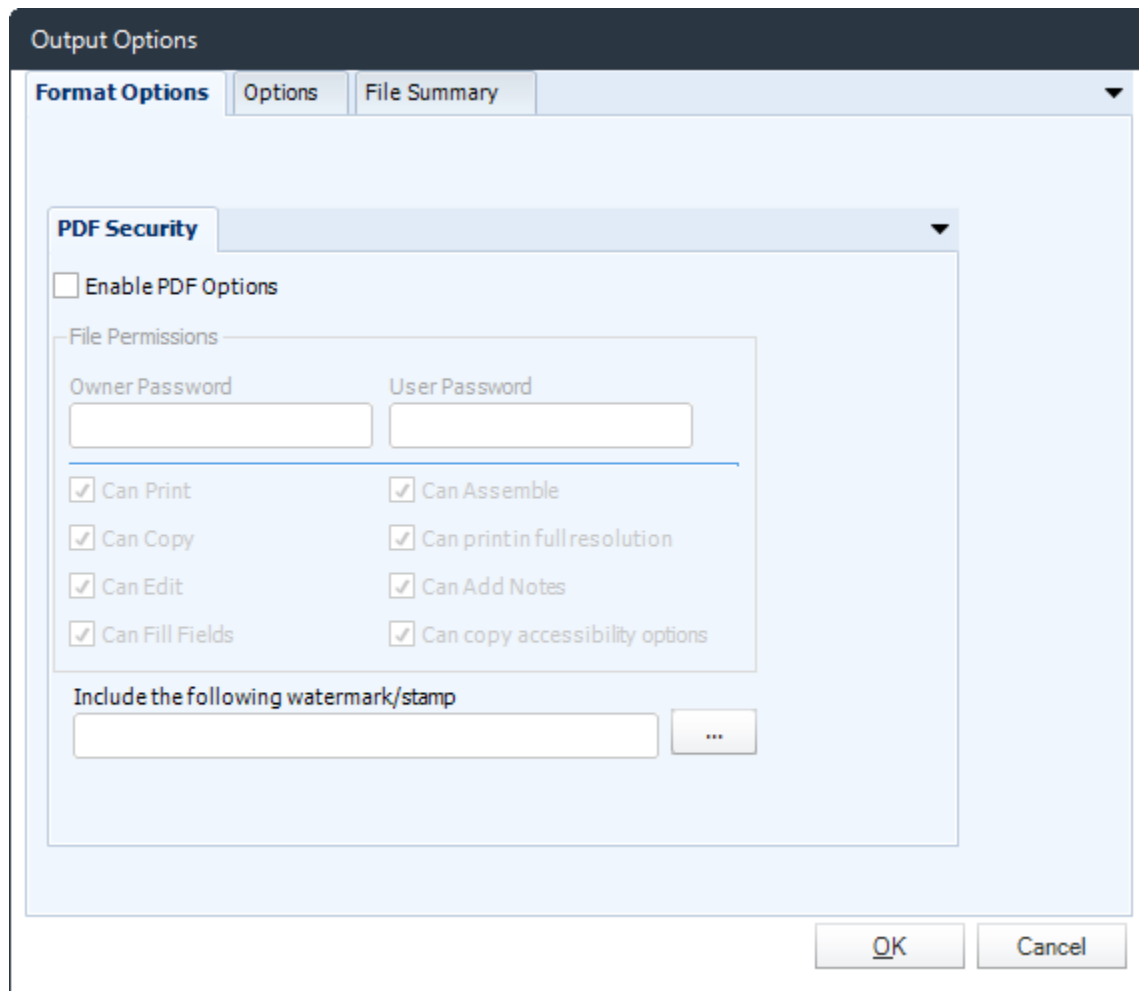
A package may be created with no constituent reports and then the reports can be added later. However, you may also add reports at this stage in the wizard - and amend, delete or add some more later.

- **Merge all Excel Files:** PBRS will then merge all excel outputs in the package into a single excel file.

The screenshot shows a software window titled "Output Options". It has three tabs: "Format Options" (which is selected), "Options", and "File Summary". Inside the "Format Options" tab, there is a sub-section titled "General". This section contains a text input field labeled "Worksheet Name (leave blank for default i.e. Sheet1)". Below this is a "Workbook Password" section, which includes a checkbox labeled "Password protect the workbook" and an empty text input field. At the bottom right of the dialog box are "OK" and "Cancel" buttons.

*HINT: Add Password Protection to this section in this option window rather than the individual report in the package. This will password protect the entire merged workbook.*

- **Merge all PDF Files:** Merge PDF outputs into a single PDF file. The reports will appear in the merged PDF in the order they are displayed in the package schedule. Checking this box will bring up additional PDF Options.



- Click **Add** and go **For Power BI** and select **Paginated Reports**.



- Package Report Properties will appear on.

## Package Report Properties Report Wizard

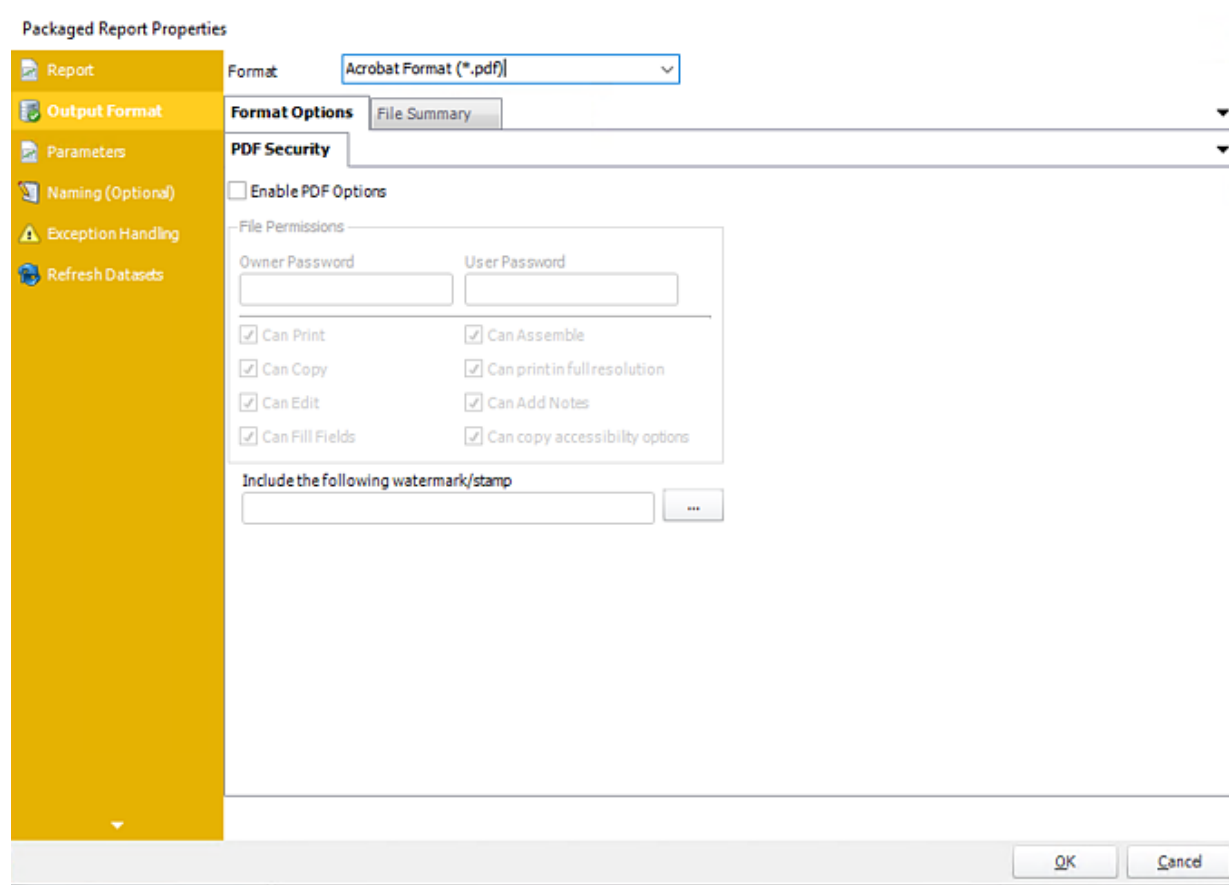
The screenshot shows the 'Packaged Report Properties' dialog box. On the left is a yellow sidebar with a tree view containing the following items: 'Report' (selected), 'Output Format', 'Parameters', 'Naming (Optional)', 'Exception Handling', and 'Refresh Datasets'. The main content area is white and contains the following fields and controls:

- PowerBI Account:** A dropdown menu showing 'Amani' with an 'Add New' button to its right.
- Select Report:** A radio button labeled 'Paginated Reports' is selected. Below it are two dropdown menus: the first shows 'Paginated Reports' and the second shows 'States'.
- Report Name:** A text input field containing the word 'States'.
- Enabled:** A checkbox with a checkmark, labeled 'Enabled', located at the bottom left of the main area.
- Buttons:** 'OK' and 'Cancel' buttons are located at the bottom right of the dialog.

- **Power BI Account:** Add the account to send the report.
- **Select Report:** The path to the required report.
- **Report Name:** Enter a name for the report.
- **Enabled:** Enable or Disable this specific report in the Package.

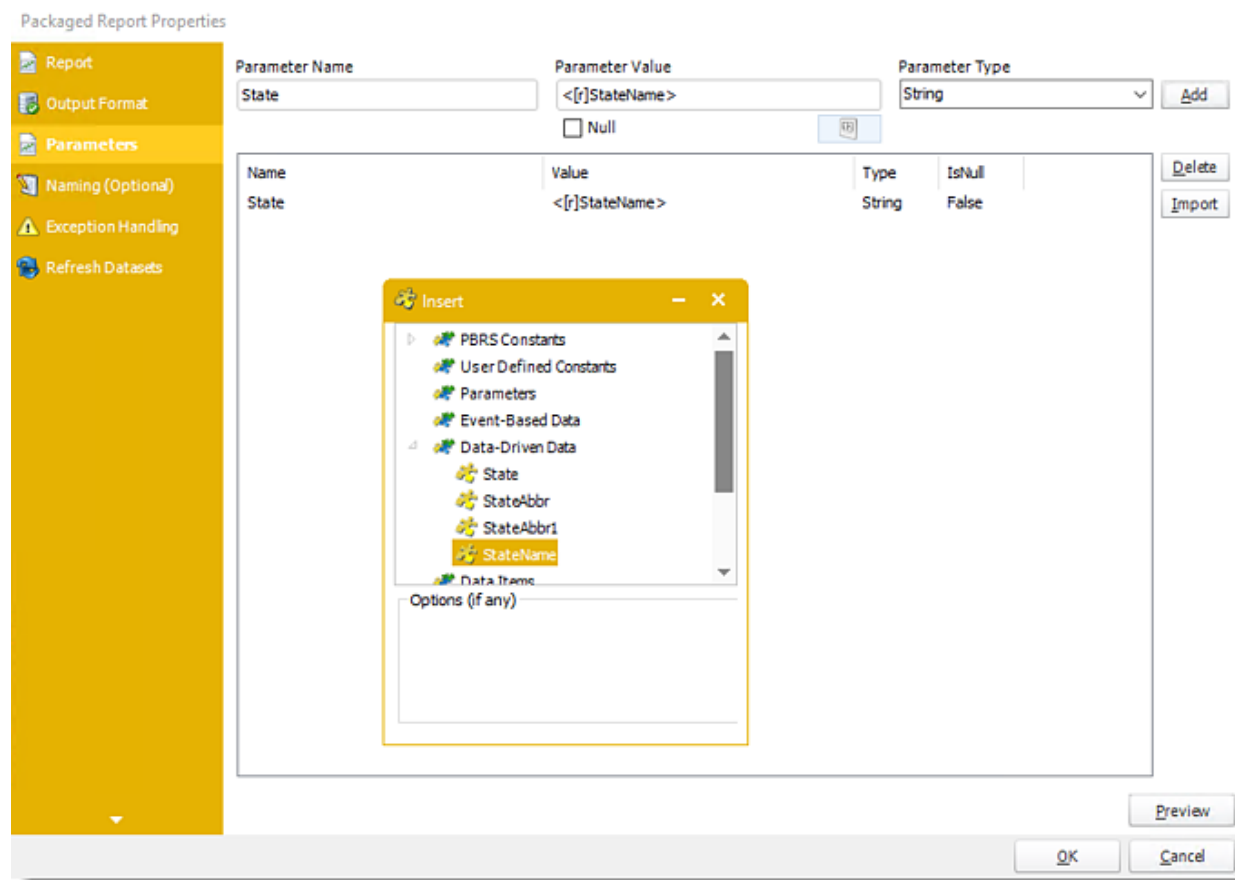


## Output Format



- In this section, you will select the output format of the report.
- For more information on Output Format, [click here](#).

## Parameters



- In this section, you will determine the parameters for your report (if any). If your report has no parameters, you may skip this section by clicking next.
- With PBRs, you can Data Drive any parameter in your report. Ensure the filter values for each record are listed in your database.
- Using Data-Driven Inserts you can pull these values into your report.
- Drag and drop your **Data-Driven inserts** into the desired filter fields. If you do not wish to enter a data-driven value in your filter, you can still manually type a value.
- **Parameter Name:** Enter the parameter name of your report.
- **Parameter Value:** Enter the parameter value of your report.
- **Parameter Type:** Use the drop-down menu to select the parameter.
- Click **Add** to add the parameter value.
- **Import:** Use this option to add parameter values using a URL from Power BI Service to import a parameter to this report.

Import Parameters From PowerBI URL

Please paste in the URL from the PowerBI Service

OK

Cancel

rdlreports/aebe0617-58f3-45fc-82ca-84ba14f6093d?rp:State=Georgia

- Click **OK**.

Single Report Schedule Wizard

General

Schedule

Parameters

Parameter Name: State

Parameter Value: Georgia

Parameter Type: String

☐ Null

Add

Name	Value	Type	IsNull
State	Georgia	String	False

Delete

Import

- Preview:** View the report output given the selected parameters.

## Naming (Optional)

Packaged Report Properties

Report

Output Format

Parameters

**Naming (Optional)**

Exception Handling

Refresh Datasets

☒ Use the default naming convention

☐ Customize the output file name

☐ Customize output extension

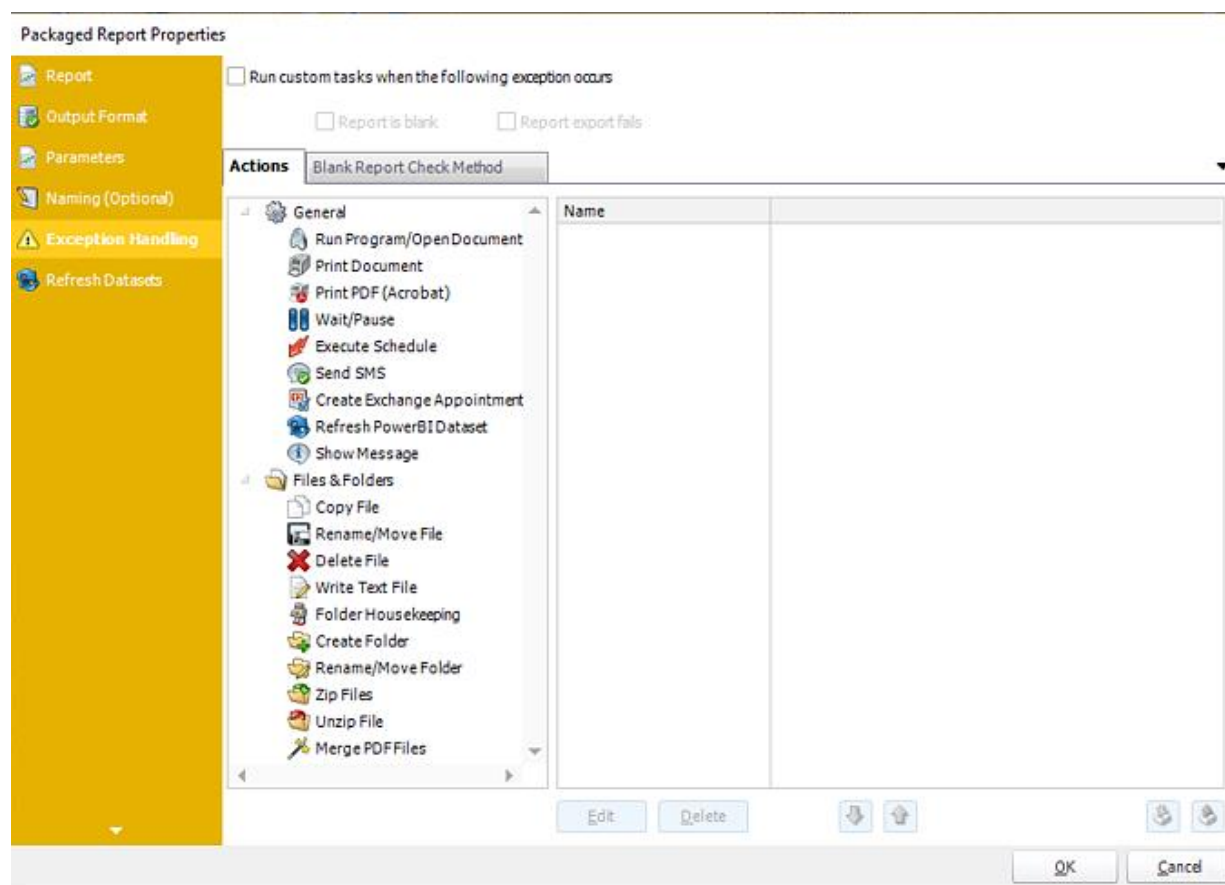
☐ Append date/time to report output

Adjust date/time stamp by (days)

OK Cancel

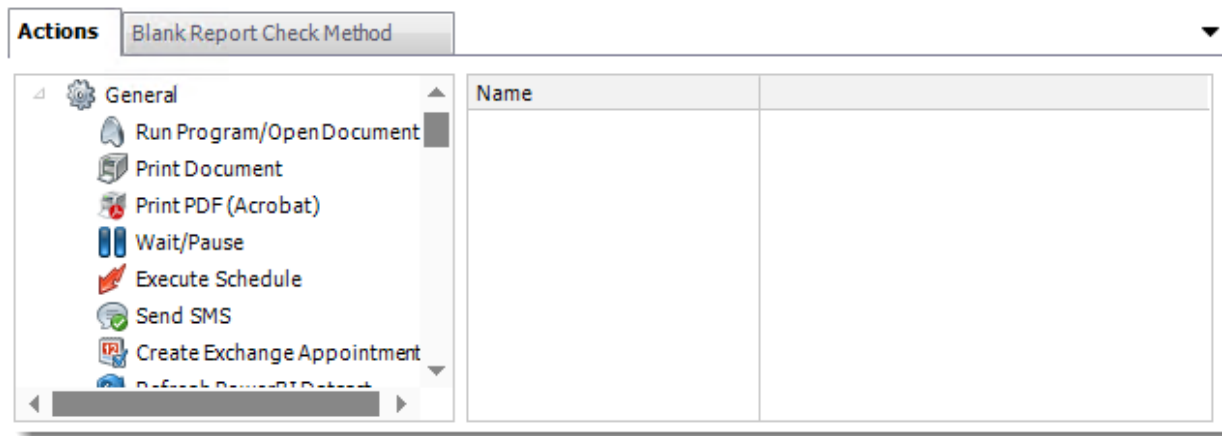
- **Default Naming Convention:** PBRs will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Exception Handling



- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRs on what to do with them.
  - 
  - **Report exports fail:** If a report export fails, you can receive a notification or run a tasks that the report failed to execute.

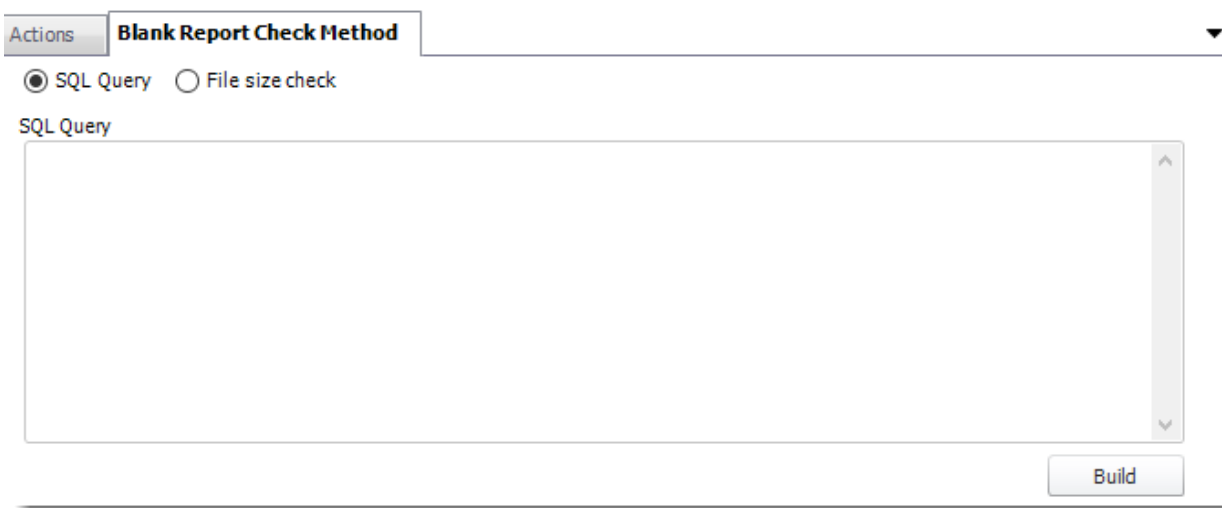
## Actions



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

### Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

OK Cancel

- **File size check:** Assume reports is blank if size is under "X" bytes.
- Click **OK**.

## Refresh Datasets

Packaged Report Properties

Select datasets to refresh before the report is executed

PowerBI Account Add >  
< Delete

Workspace

Dataset

Notification Options

☒ Notify on Completion  
☐ Notify on Failure  
☐ Do not Notify

Dataset Name	Account	Workspace	Notification
--------------	---------	-----------	--------------

After refreshing the datasets above, wait  seconds before running the report.

OK Cancel

In this section select the datasets to refresh before the report is executed.

- **Power BI Account:** Select the account to refresh datasets.
- **Workspace:** The path to the required report.
- **Dataset:** Select the dataset.
- **Notification Options:** Receive a notification after the report is executed, the report failed to execute, or do not receive a notification.
- **After refreshing the datasets above, wait 'X' seconds before running the report.**
- Click **OK**.



## Exception Handling Wizard

Data-Driven Package Wizard

General Schedule Data-Driver Destinations Reports **Exception Handling**

Treat as "error" if not completed in 30.00 mins. ☒ Auto-calculate

On error, retry executing schedule every 0 mins up to 3 times.

☐ Run custom tasks when the following exception occurs

☐ Report is blank

Blank Report Check Method

General

- Run Program/Open Document
- Print Document
- Print PDF (Acrobat)
- Wait/Pause
- Execute Schedule
- Send SMS
- Create Exchange Appointment
- Refresh PowerBI Dataset

Name
------

Edit Delete

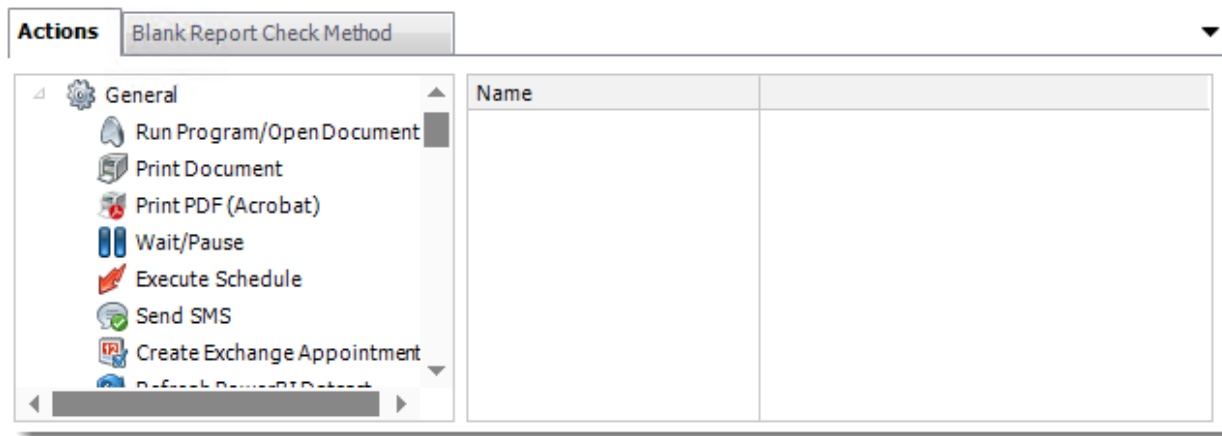
Cancel Next Finish

- **Treat as "error" if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The "Auto-calculate" option instructs PBRS automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double-check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Run custom tasks when the following exception occurs:** Check this is option to enable the following options.
  - **Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.

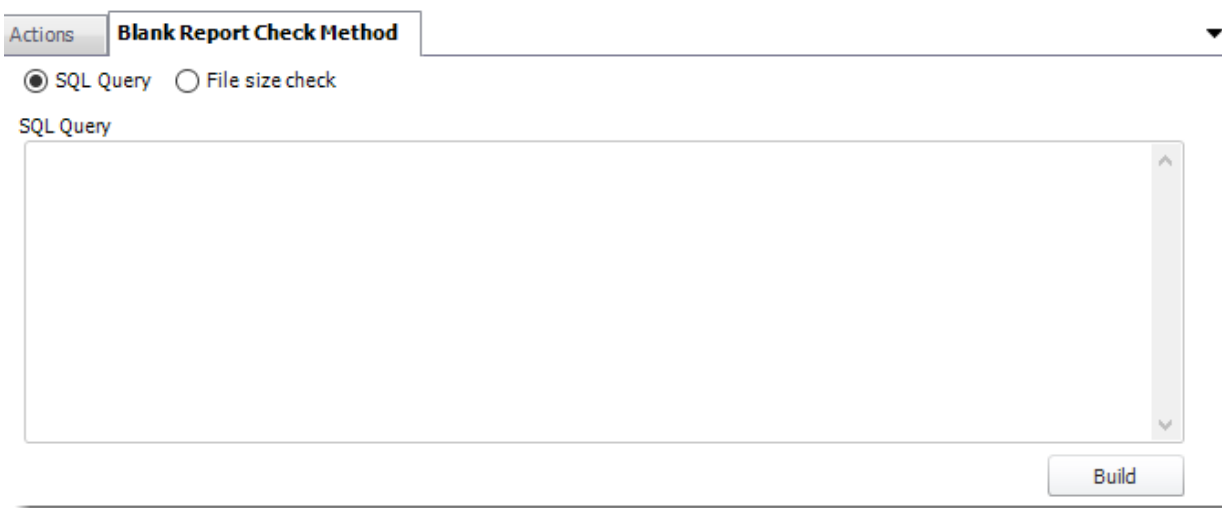
## Actions



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- For more information about tasks, [click here](#).

*You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

### Blank Report Check Method



- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
  - Click **Build**.
  - Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

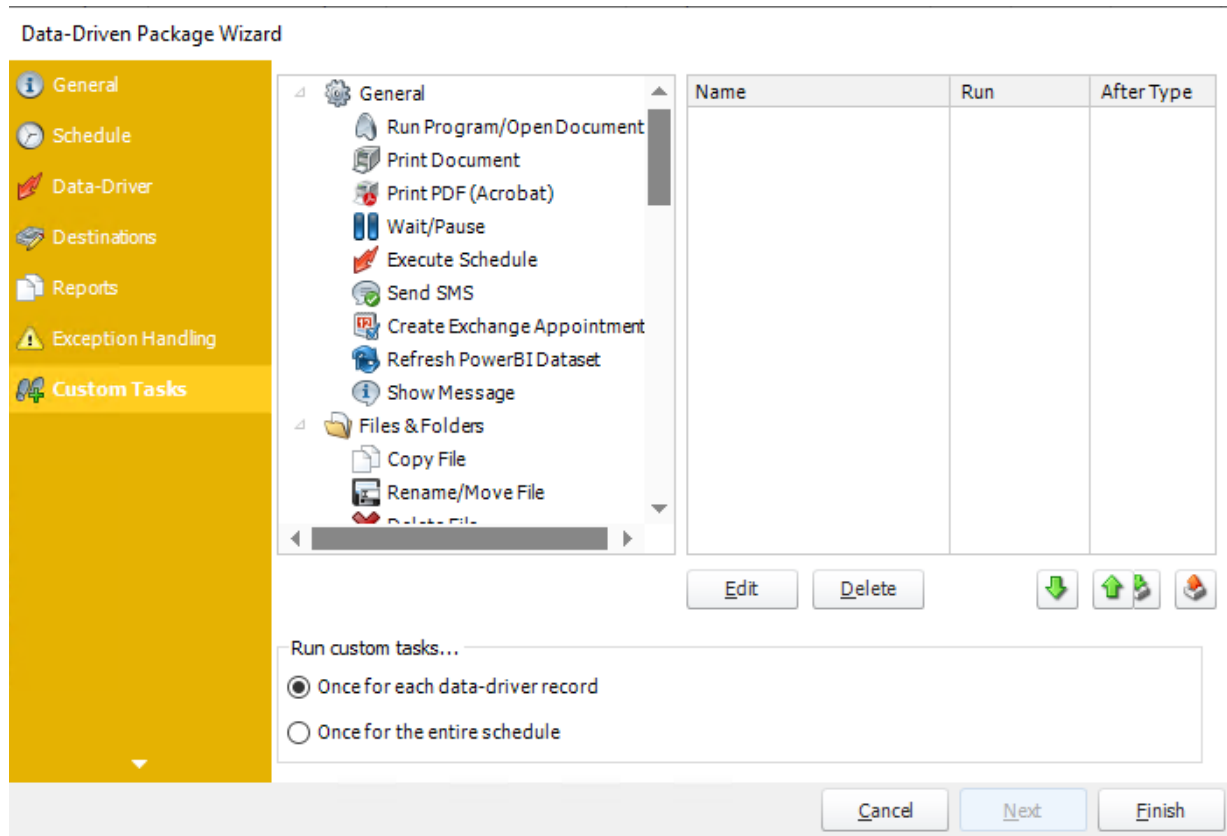
Parse

OK Cancel

- **File size check:** Assume reports is blank if size is under "X" bytes.

Click **Next** to continue to the next wizard section.

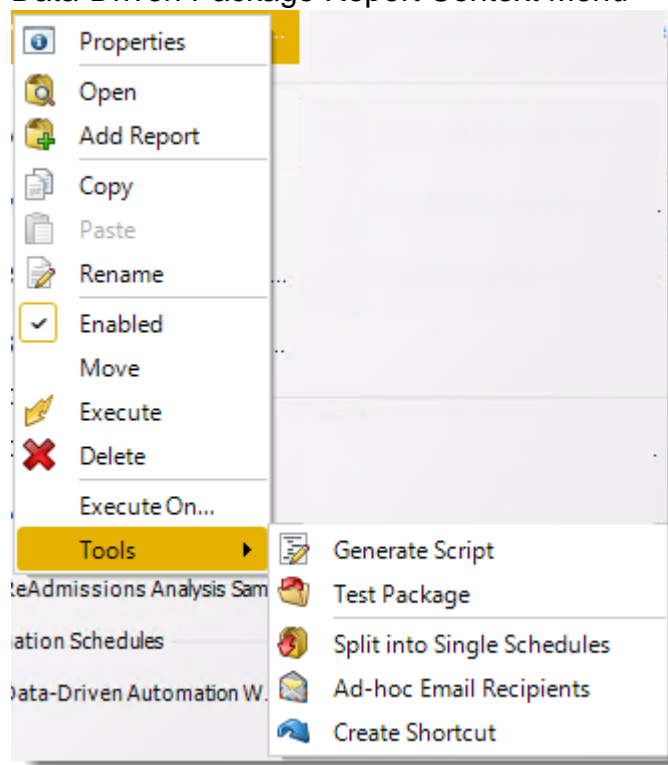
## Custom Tasks



In the section, you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto-triggered before or after a report runs.

- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

## Data-Driven Package Report Context Menu



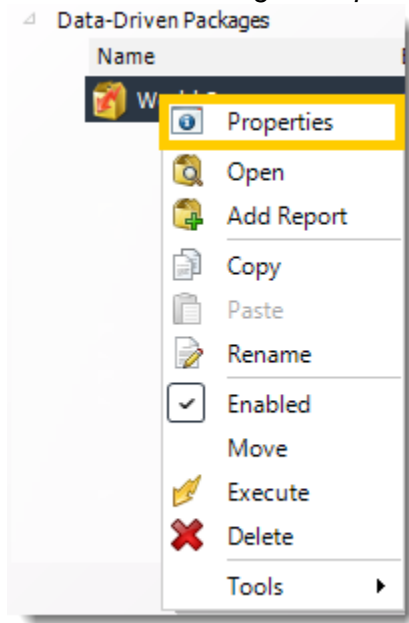
Right-Click on a schedule to see the following actions:

- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Open:** This will open the package and show its constituent reports.
- **Add Report:** Use this to add one or more reports to an existing package.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test Package:** Use this option to test the schedule and export it to selected "test" destinations.
- **Split into Single Schedules:** This will split all the constituent reports in the package into Single Report Schedules.

*This process will automatically delete the package once the splitting process is completed.*

- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.

#### *Data-Driven Packages Properties*



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedule such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

**Data-Driven Package Properties** ? X

**General**

**Schedule**

**Reports**

**Destinations**

**Exception Handling**

**History**

**Tasks**

**Sharing**

**Data-Driven**

**Package Name**  
Data-Driven PowerBI Package Sample

**Create In**  
Sample Reports ...

**Description (optional)**

**Keyword (optional)**

**Unique ID**  
619286164

OK Cancel Apply

•Schedule

**Data-Driven Package Properties** ? X

**General** | **Schedule** | Reports | Destinations | Exception Handling | History | Tasks | Sharing | Data-Driven

Start Date: 8/ 6/2019 | End Date: 8/16/3004

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 11:51:56 AM | Exception calendar: ☐

Next to run on: 1/24/2020 | 11:51:56 AM

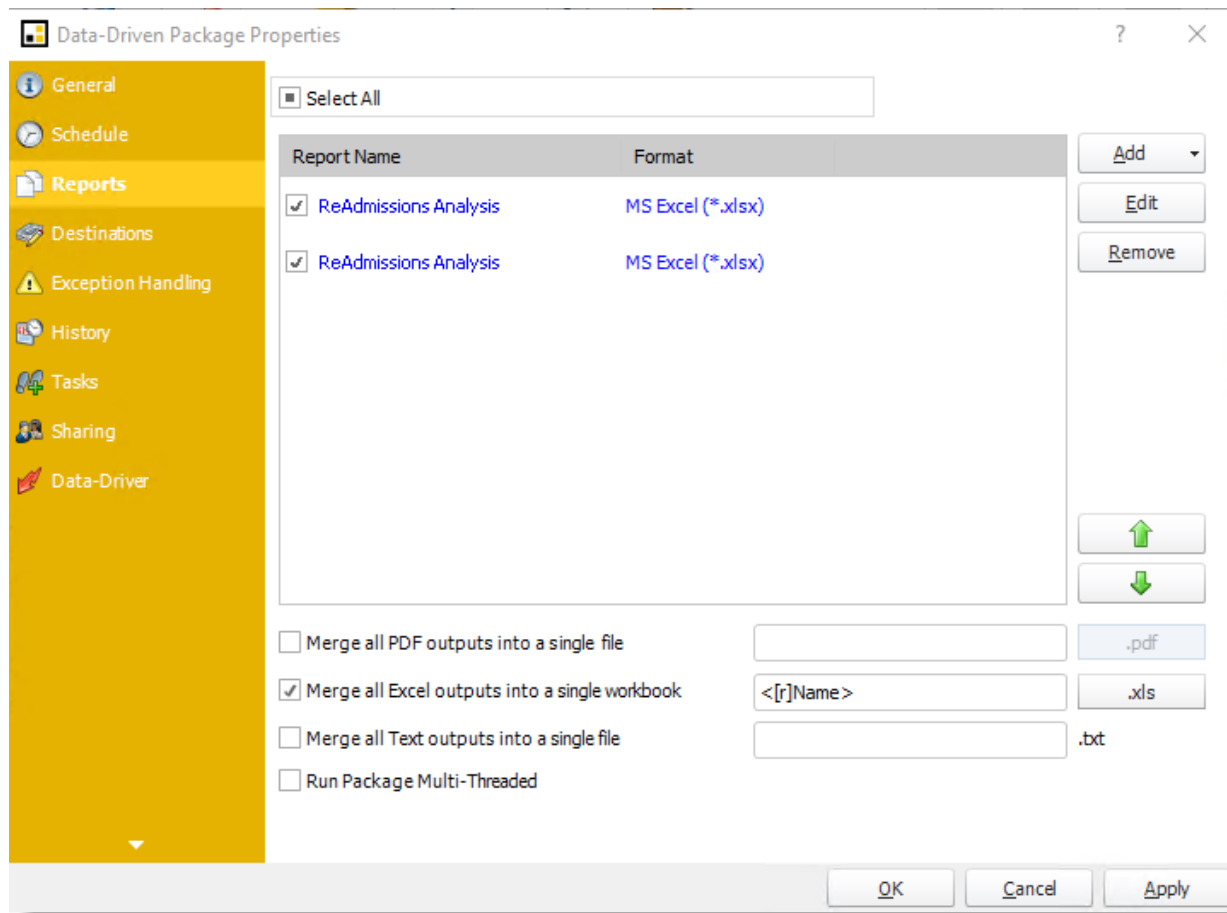
☐ Repeat every: 0.25 hours until: 3:51:41 PM

☒ Enable this schedule

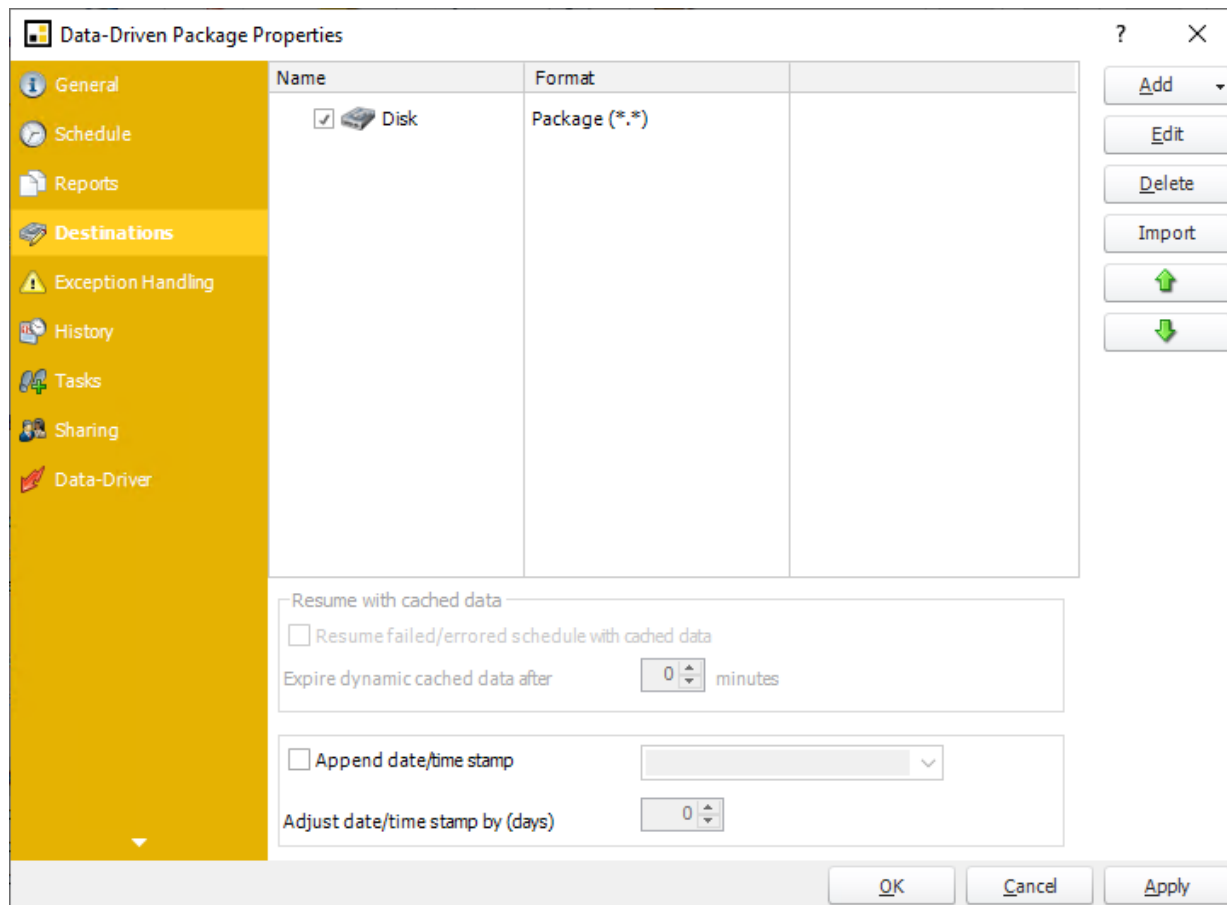
OK Cancel Apply

## •Reports

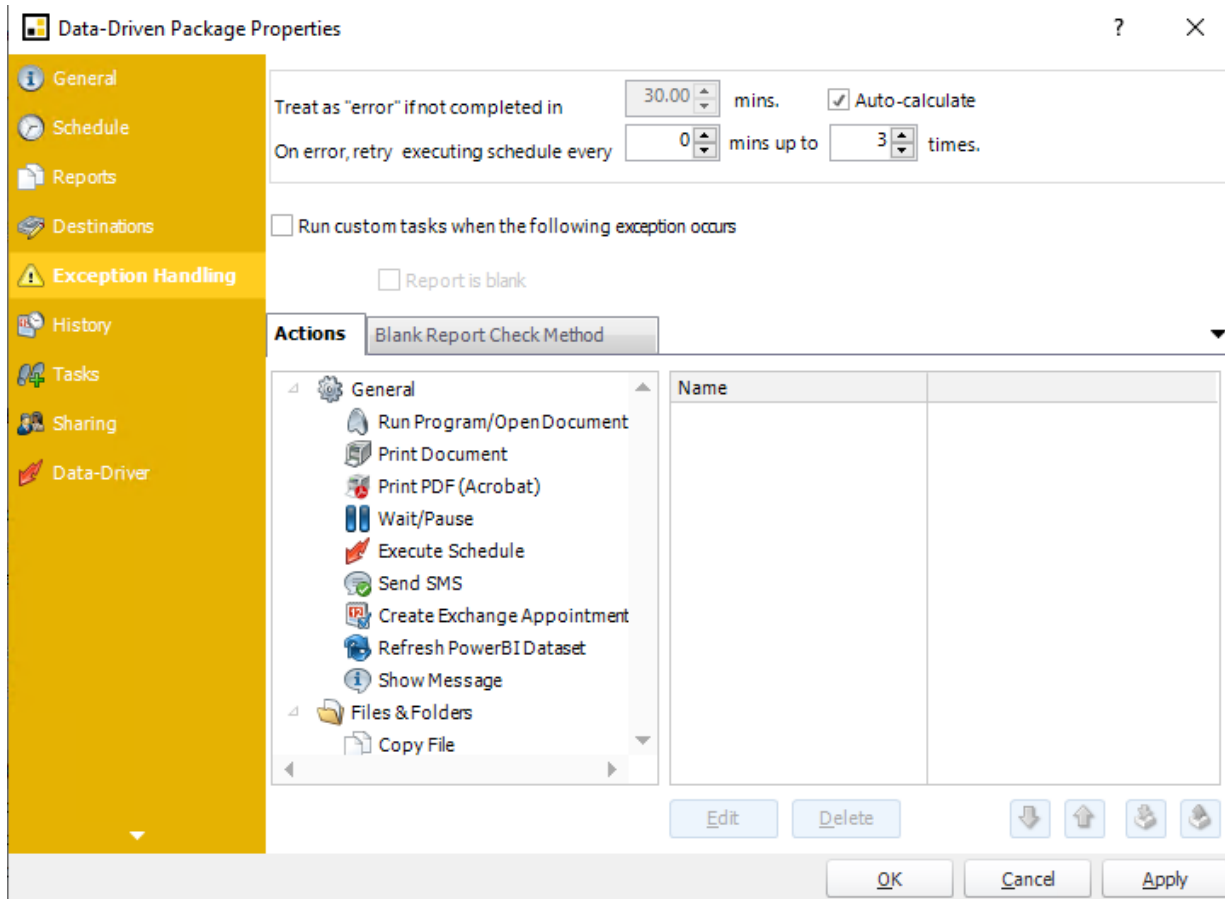




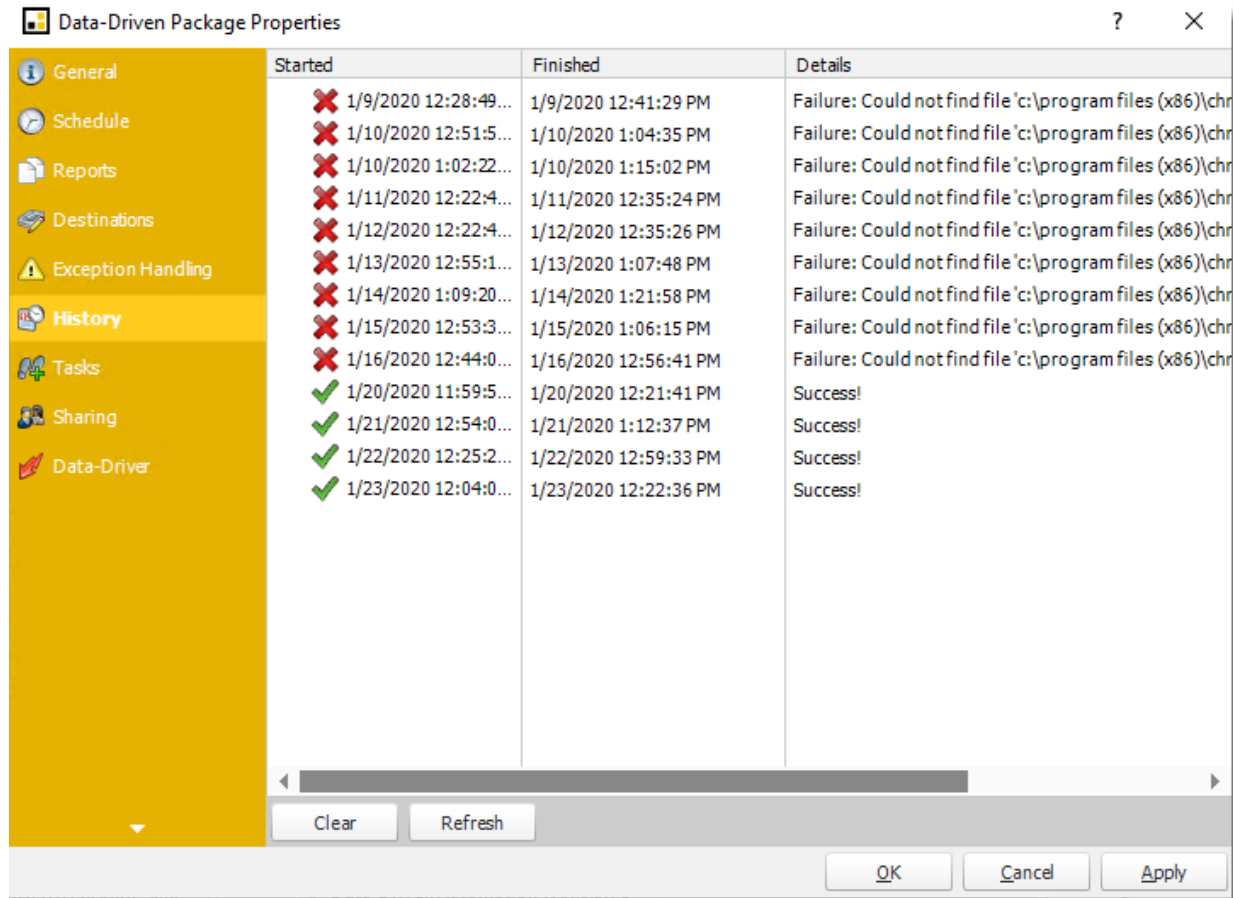
## •Destinations



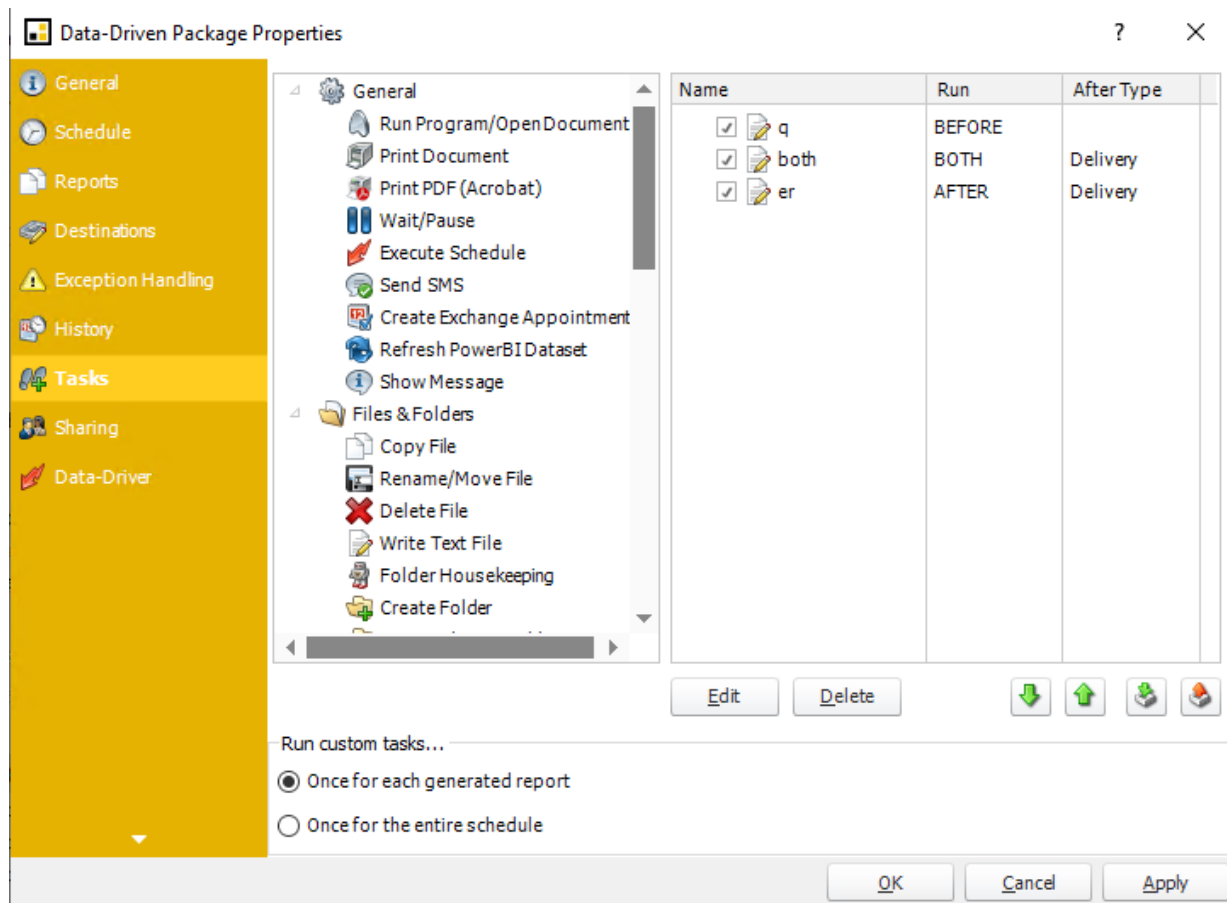
## •Exception Handling



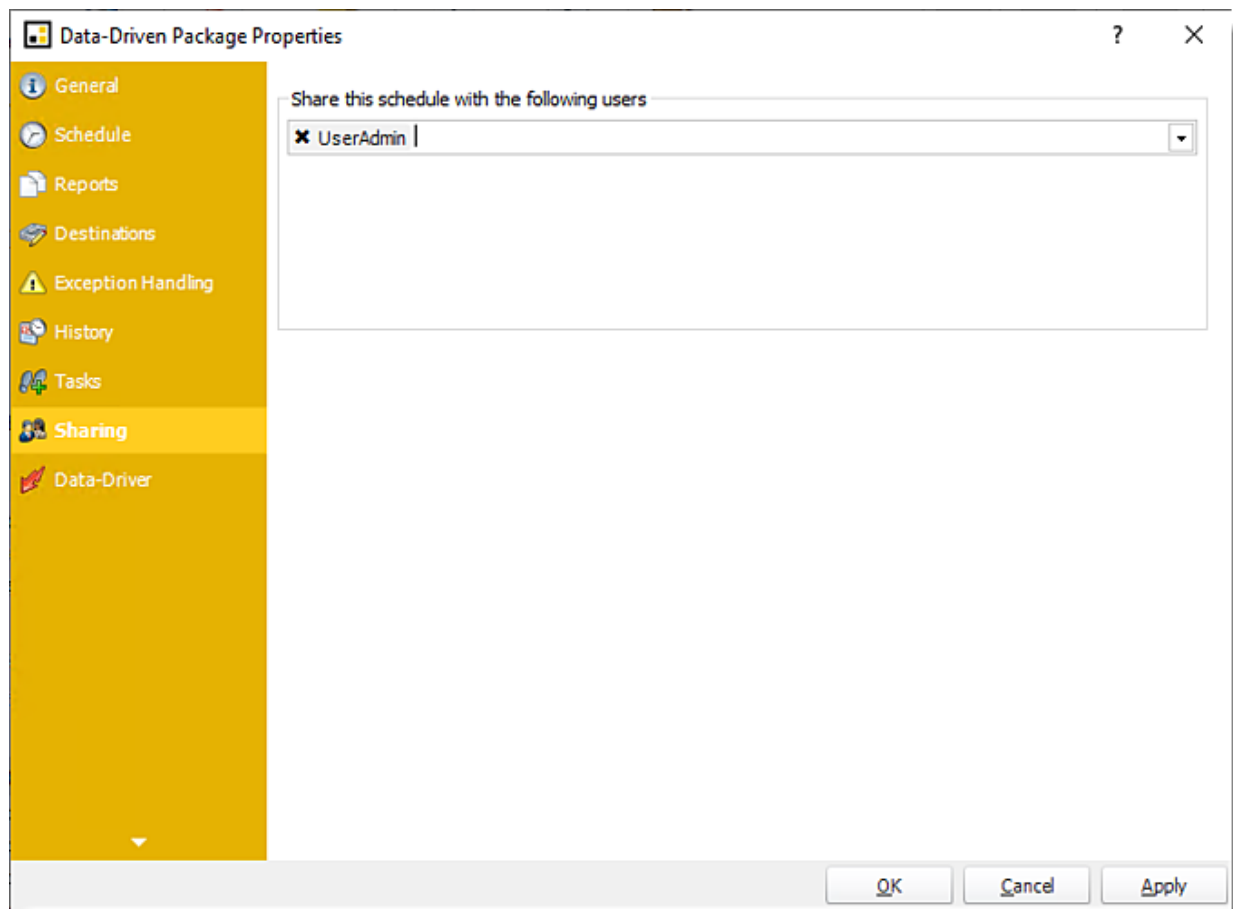
- **History:** Review the schedule's history. Successes, failures, and other data is located here.



## •Tasks



- **Sharing:** Here you can share this schedule with multiple users.



- Data-Driver

**Data-Driven Package Properties** ? X

**General**  
Schedule  
Reports  
Destinations  
Exception Handling  
History  
Tasks  
Sharing  
**Data-Driver**

☒ SQL Data Driver ☐ JSON Data Driver

Database Connection Setup

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account  
Northwind

Connect

Data selection criteria

```
SELECT Customers.* FROM Customers WHERE (CustomerID='AROUT' OR CustomerID='BOTTM' OR CustomerID='QUICK')
```

Build

Key Column CustomerID

☒ Group reports together by email address/directory (email/disk destination only)

☐ Merge the group into a single PDF file:

☐ Merge the group into a single Excel Workbook:

OK Cancel Apply

## How do I use Data-Driven Package Schedules for Paginated Reports on Premise or SSRS reports in PBRs?

**Unlike a Data Driven Schedule, a Data Driven Package will determine the data driver further into the schedule. A Data-Driven Package allows you to send a package of reports to an individual or group from one schedule.**

This article applies to:

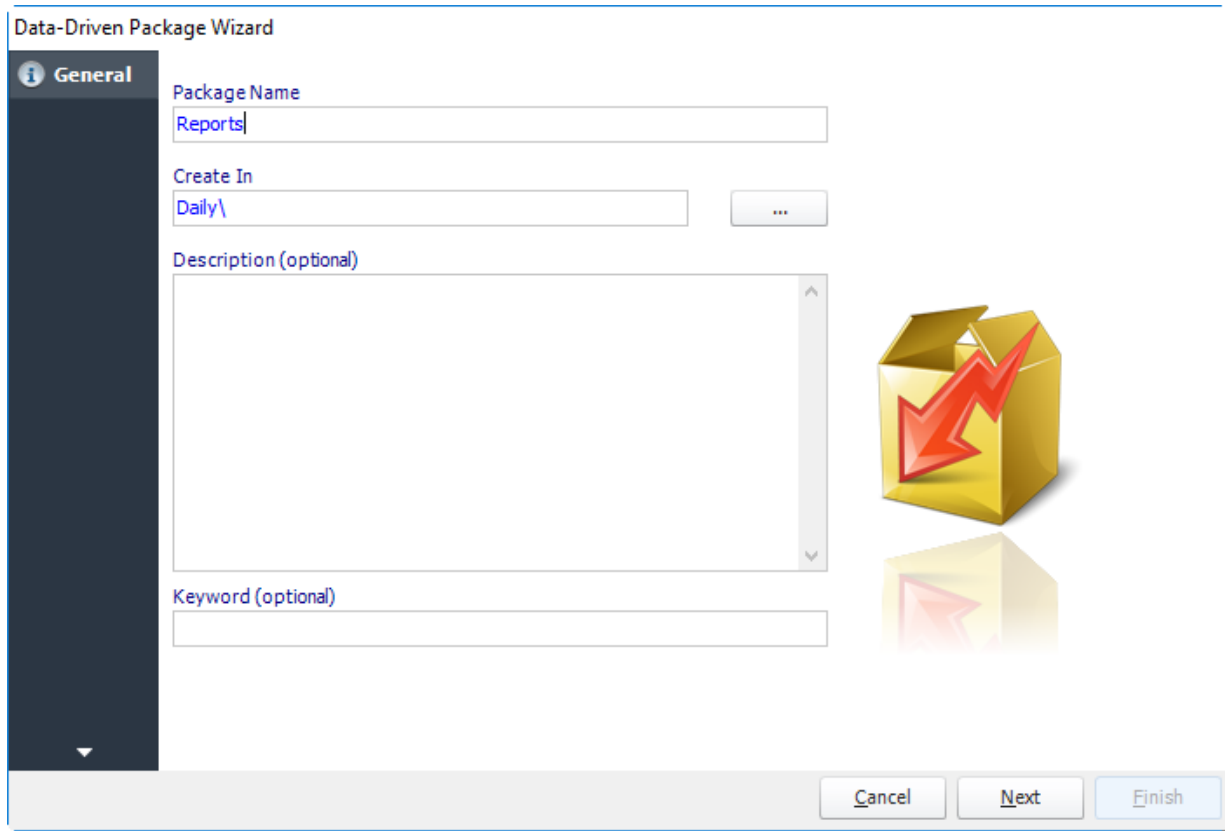
- Power BI Paginated Reports (On Premise - Power BI Report Server)
- Microsoft SSRS Reports (On Premise - SQL Server Reporting Services)

### How to Create a Data-Driven Package Schedule Report for Paginated Reports on Premise or SSRS Reports?

- Go to **Data-Driven Package**.







Data-Driven Package Wizard

**General**

Package Name  
Reports

Create In  
Daily\

Description (optional)

Keyword (optional)

Cancel Next Finish

## General Wizard

- **Package Name:** The name of the package.
- **Create In:** The PBRs folder where the package is stored.
- **Description:** A short description to help other users identify exactly what this schedule is and what it is expected to do.
- **Keyword:** Enter some keywords which can be used later by Smart Folders to identify this schedule.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Data-Driven Package Wizard

**General** | **Schedule**

Start Date: 8/31/2018 | End Date: 8/31/3017

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 10:37:06 AM | Exception calendar: [ ]

Next to run on: 8/31/2018 | 10:37:06 AM

☐ Repeat every: 0.25 days until: 10:37:06 AM

☒ Enable this schedule and execute it on: DEFAULT

Cancel | Next | Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  weeks

on

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

☒ Saturday ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other >>

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other >>

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

The screenshot shows the 'Monthly' tab selected in a scheduling interface. The top navigation bar includes 'Daily', 'Weekly', 'Week Days', 'Working Day', 'Monthly' (highlighted), 'Annual', 'Custom Calendar', and 'Other'. Below the tabs, there is a checkbox labeled 'Use the following options' which is checked. Under this checkbox, the text 'The' is followed by a dropdown menu showing 'Second', then 'Monday', and 'of the month'. Below this, there is a grid of 12 checkboxes, each followed by a month name: January, April, July, October, February, May, August, November, March, June, September, and December. All checkboxes are checked.

- **Annual:** Run the schedule every year at a specified time.

The screenshot shows the 'Annual' tab selected in the scheduling interface. The top navigation bar is the same as the previous screenshot, with 'Annual' highlighted. The main content area below the tabs is currently empty.

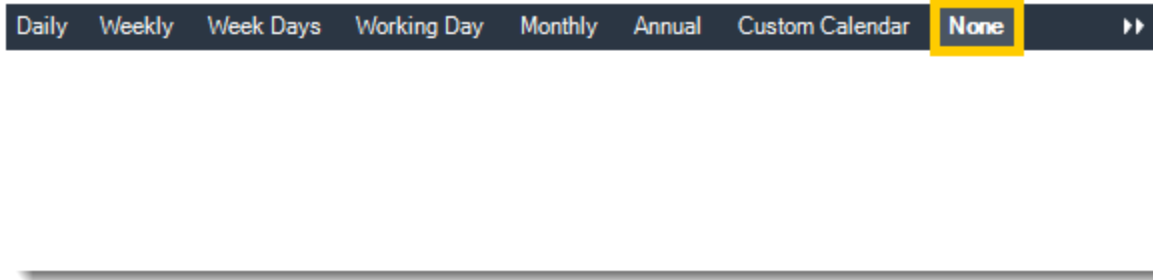
- **Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

The screenshot shows the 'Custom Calendar' tab selected in the scheduling interface. The top navigation bar has 'Custom Calendar' highlighted. Below the tabs, there is a label 'Calendar Name' followed by a dropdown menu. The dropdown menu is open, showing two options: '[New...]' and 'Business Days'.

- **Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

The screenshot shows the 'Other' tab selected in the scheduling interface. The top navigation bar has 'Other' highlighted. Below the tabs, there is a label 'Run schedule every' followed by a numeric input field containing the number '1' and a dropdown menu. The dropdown menu is open, showing a list of time units: 'Minutes', 'Hours', 'Days', 'Weeks', 'Months', and 'Years'. 'Minutes' is currently selected and highlighted in blue.

- **None:** No scheduling is required for this item.



- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Data-Driver Wizard

### SQL Data Driver

The screenshot shows the 'Data-Driven Package Wizard' window with the 'SQL Data Driver' selected. The left sidebar has three tabs: 'General', 'Schedule', and 'Data-Driver' (which is highlighted in orange). The main area has two radio buttons: 'SQL Data Driver' (selected) and 'JSON Data Driver'. Below them is a large empty box labeled 'SQL data selection criteria' with a 'Build' button at the bottom right. Underneath this box is a 'Key Column' dropdown menu. At the bottom, there are three checkboxes: 'Group reports together by email address/directory (email/disk destination only)' (checked), 'Merge the group into a single PDF file:' (unchecked), and 'Merge the group into a single Excel Workbook:' (unchecked). The bottom of the window has 'Cancel', 'Next', and 'Finish' buttons.

- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.

Get values from database

☐ ODBC DSN
 ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple Advanced

Only return records where

☒ And
 ☐ Or

Where

Parse

OK Cancel

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes.
- ODBC Datasource Name:** Check this option to select ODBC DSN. Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRS even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

*When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be*

stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.
- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.
- **Group reports by email address:** You can instruct PBRs to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.
  - **Merging Multiple Reports:** Where the reports are grouped you can also instruct PBRs to optionally merge the output of the grouped reports into a single file (PDF and MS Excel formats only). Selecting each option will bring up the options for the output format that you can further customize.



## JSON Data Driver

The screenshot shows the 'Data-Driven Package Wizard' window. On the left is a yellow sidebar with three tabs: 'General', 'Schedule', and 'Data-Driver'. The 'Data-Driver' tab is selected. In the main area, there are two radio buttons: 'SQL Data Driver' (unselected) and 'JSON Data Driver' (selected). Below them is a 'JSON Data Collection' text area containing a JSON array of four objects. Each object has an 'Index' and a 'Name'. Below the text area is a 'Row Identifier' dropdown menu set to 'Name' and a 'Validate' button. At the bottom, there are three checkboxes: 'Group reports together by email address/directory (email/disk destination only)' (checked), 'Merge the group into a single PDF file:' (unchecked), and 'Merge the group into a single Excel Workbook:' (unchecked). The bottom right has 'Cancel', 'Next', and 'Finish' buttons.

Data-Driven Package Wizard

☐ SQL Data Driver ☒ JSON Data Driver

JSON Data Collection

```
[{"Index": 1, "Name": "White"}, {"Index": 2, "Name": "African American"}, {"Index": 3, "Name": "Native American"}, {"Index": 4, "Name": "Asian"}]
```

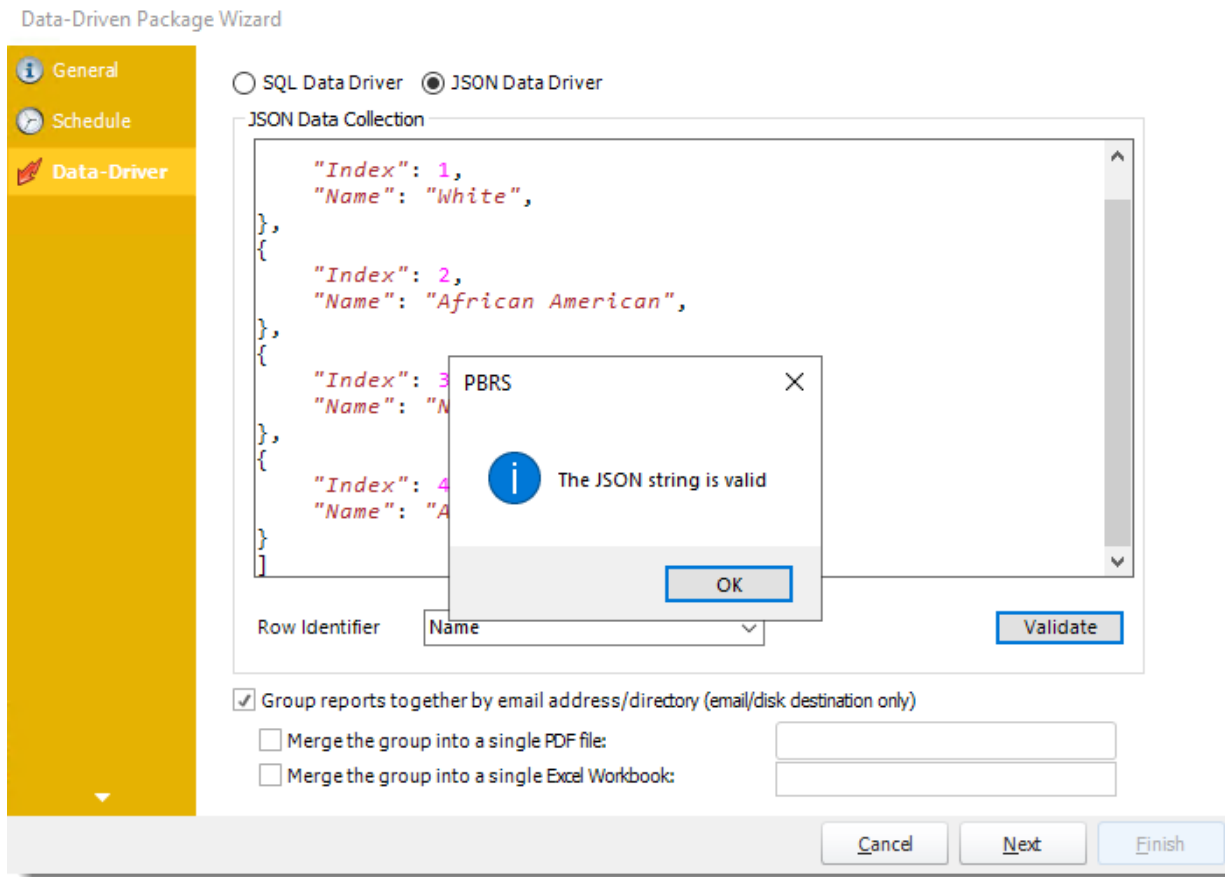
Row Identifier:

☒ Group reports together by email address/directory (email/disk destination only)

☐ Merge the group into a single PDF file:

☐ Merge the group into a single Excel Workbook:

- Enter your JSON string and click **Validate**.



- **Row Identifier:** Select the row identifier for the data collection for the reports. The information that drives the schedule is required to have a row identifier so that each row in the table is uniquely identified by the value in this column. The row identifier is there as an identifier that is used to troubleshoot in cases where there is a problem with one of the collections.
- **Group reports by email address:** You can instruct PBRS to group reports that are sent to the same email address. Please note that enabling this option disables the ability to embed the reports in the email body for email destinations.
  - **Merging Multiple Reports:** Where the reports are grouped you can also instruct PBRS to optionally merge the output of the grouped reports into a single file (PDF and MS Excel formats only). Selecting each option will bring up the options for the output format that you can further customize.

Click **Next** to continue to the next wizard section.

## Destination Wizard

In this section, you will decide where your schedule will be delivered. The list in the center will display the list of destinations you have added to the schedule. You can organize the various destinations' order by clicking on the green up and down arrows.

**Data-Driven Package Wizard**

**Destinations**

Name	Format
------	--------

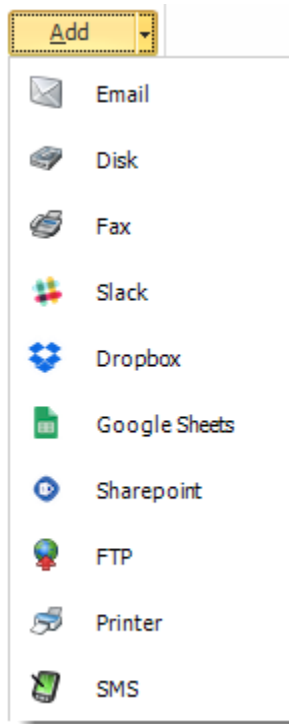
**Date/Time Stamp**

☐ Append date/time stamp

Adjust date/time stamp by (days) 0

Buttons: Add, Edit, Delete, Import, Up Arrow, Down Arrow, Cancel, Next, Finish

- **Add:** Click here to add a destination. You have several options which are: Email, Disk, Fax, FTP, ODBC, Printer, Sharepoint, SMS, and Dropbox.
  - For more information of adding destinations, [click here](#).
  - For more information about Output Formats, [click here](#).



- Edit:** Select a destination and click to edit its properties. Or simply double-click on the destination.
- Delete:** Select a destination and click this button to delete it.
- Import:** Click here to import from the list of default destinations.

### *Customizing the Destination*

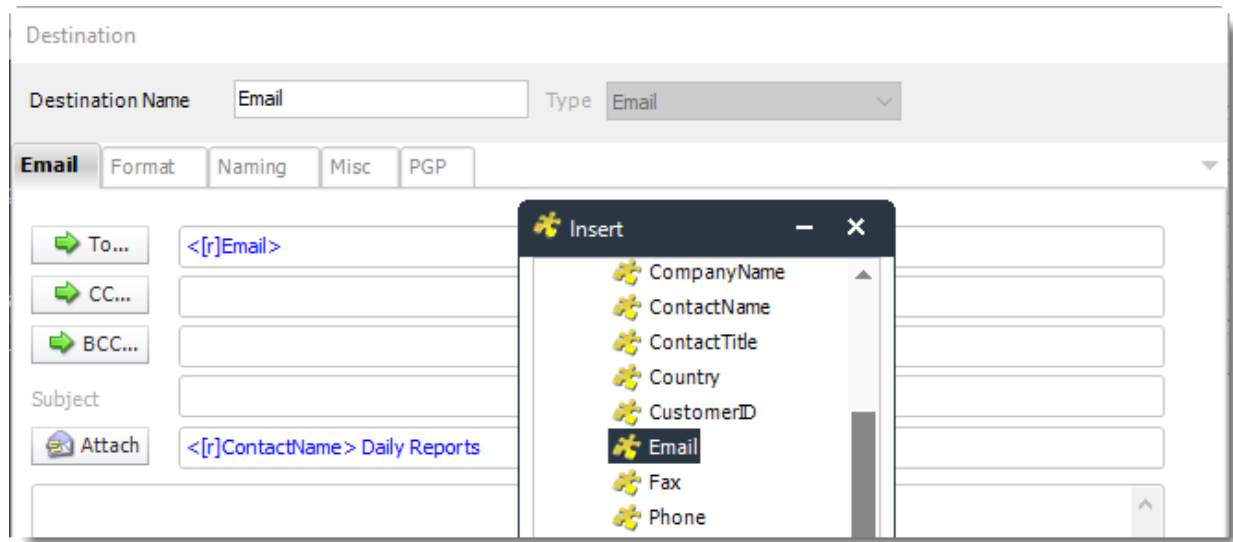
With the Data-Driven Schedule, you can determine the delivery method of your report based on your data. In your table, specify the delivery method by creating a column for each delivery type (FTP, SharePoint, Email, etc.). For each record specify their email, fax number, and so on.

Region	Area	Country	Section	FirstName	LastName	email	disk	printer	FTPServer	FTPFolder
Americas	North	United States	1	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>				
Americas	North	United States	2	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	United States	3	John	Doe	<a href="mailto:jdoe@mycompany.com">jdoe@mycompany.com</a>	<a href="#">\\myserver\myreports\jdoe</a>			
Americas	North	Canada	1	Peter	Crimble			<a href="#">HP2003sUpstairs</a>		
Americas	South	Brazil	34	Jorge	Minola		<a href="#">\\myserver\myreports\jdoe</a>		<a href="#">myftpserver.com</a>	<a href="#">jminola</a>
Asia	Asia	India	2	Anil	Maharaja	<a href="mailto:mmaharaja@mycompany.com">mmaharaja@mycompany.com</a>				
Asia	Pacific	Japan	3	John	Wu	<a href="mailto:jwu@mycompany.com">jwu@mycompany.com</a>			<a href="#">myotherftpserver.co.jp</a>	<a href="#">jwu</a>

*Tip: For email destinations, simply add a semicolon after an email address to send the same instance of the report to another email address.*

- Data driving the Report's Distribution
- As mentioned above, PBRs will pull delivery data from your database.
- In this example, we will be using email addresses found in the table.

- With Data-Driven inserts, simply drag and drop the field that indicates your desired destination (email in this case).



- Now PBRS will deliver a unique report based on a corresponding email address.

#### *Customize Recipient Messaging*

- You can also customize the messaging the recipient receives. Using Data-Driven Inserts, PBRS will automatically pull data from your table and use it to customize the subject, body or report format.

The screenshot shows an email configuration window titled "Destination". At the top, "Destination Name" is "Email" and "Type" is "Email". Below are tabs for "Email", "Format", "Naming", "Misc", and "PGP". The "Email" tab is active, showing fields for "To..." (containing "<[r]Email>"), "CC..." (highlighted with a yellow border), "BCC...", "Subject" (containing "<[r]CompanyName> Daily Reports"), and "Attach". The email body contains the text: "Dear <[r]CustomerID>," followed by "Here is your report of <[m]CurrentScheduleName>." and "Thank you." Below the body are checkboxes for "Embed report" and "Delivery Receipt", a "Format" dropdown set to "TEXT", and a "Mail Server" dropdown set to "Default". At the bottom are fields for "Name:" and "Address:". An "Insert" dialog box is open in the center-right, displaying a list of fields under "Data-Driven Data": Address, City, CompanyName, ContactName, ContactTitle, Country, CustomerID (highlighted), Email, Fax, Phone, PostalCode, and Region. The "Options (if any)" section is empty. "OK" and "Cancel" buttons are at the bottom right of the main window.

- Simply drag and drop fields from your table to the desired position.

*For example, to customize an email greeting, type the greeting, and add the recipient's name as shown above.*

Click **Next** to continue to the next wizard section.

## Report Wizard

Data-Driven Package Wizard

**General**  
Schedule  
Data-Driven  
Destinations  
**Reports**

Report Name	Format
1:Supplier Information	Acrobat Format (*.pdf)
2:Orders By Month	Acrobat Format (*.pdf)

Add  
Edit  
Remove  
↑  
↓

Merging

☒ Merge all Excel outputs into a single workbook  
☐ Merge all PDF outputs into a single PDF file

Monthly Reports | .xls  
| .pdf

Cancel Next Finish

A package may be created with no constituent reports and then the reports can be added later. However, you may also add reports at this stage in the wizard - and amend, delete or add some more later.

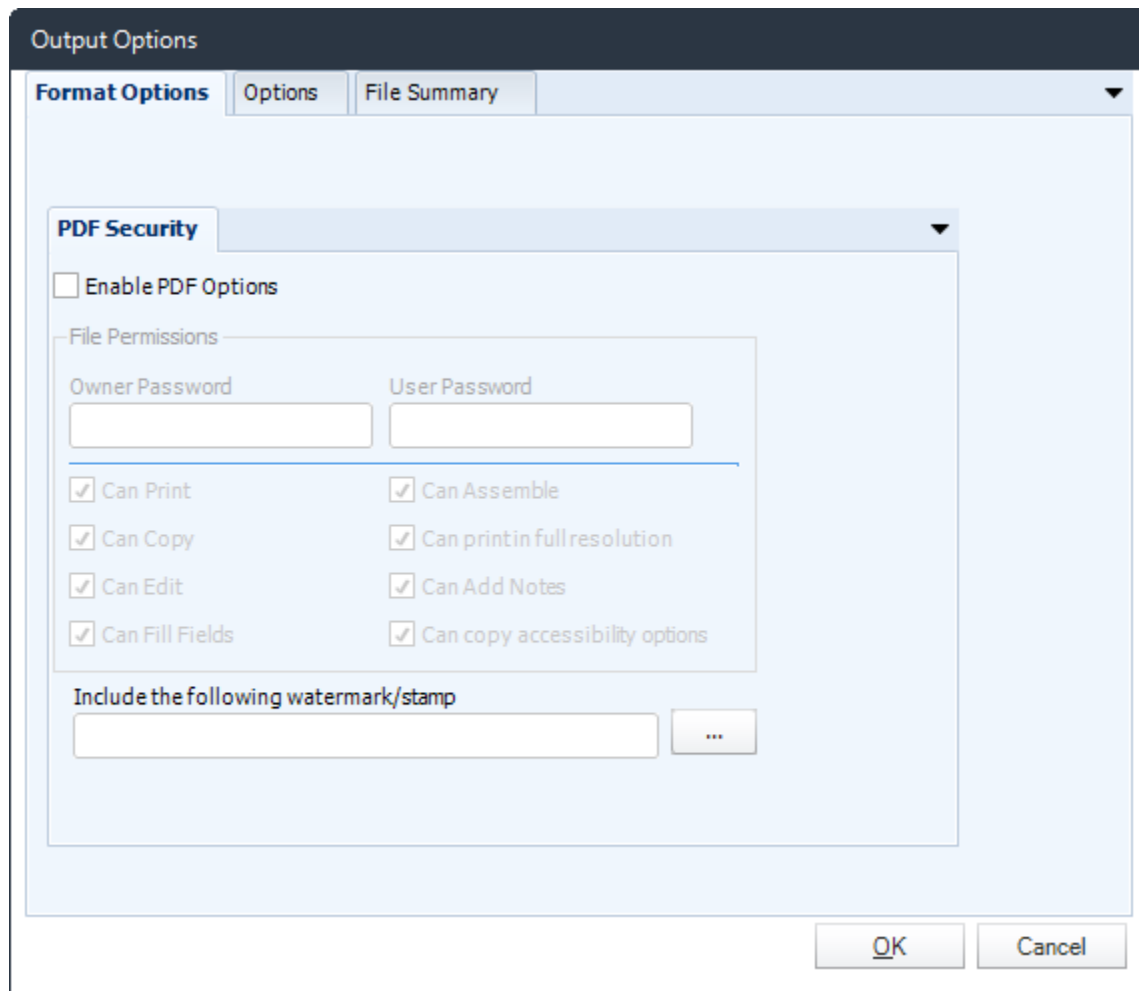
- **Merge all Excel Files:** PBRS will then merge all excel outputs in the package into a single excel file.

The screenshot shows a dialog box titled "Output Options" with three tabs: "Format Options", "Options", and "File Summary". The "Format Options" tab is active. Inside this tab, there is a section titled "General" with a dropdown arrow. Below "General", there is a text input field labeled "Worksheet Name (leave blank for default i.e. Sheet1)". Below that is a section titled "Workbook Password" which contains a checkbox labeled "Password protect the workbook" and an empty text input field below it. At the bottom right of the dialog box are "OK" and "Cancel" buttons.

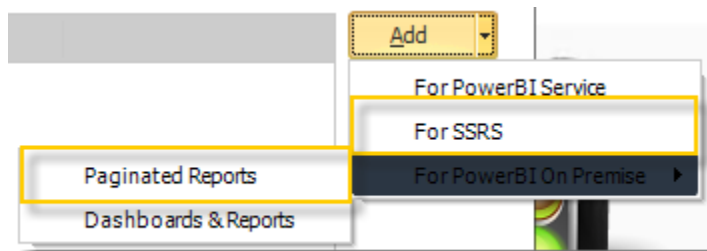
*HINT: Add Password Protection to this section in this option window rather than the individual report in the package. This will password protect the entire merged workbook.*

- **Merge all PDF Files:** Merge PDF outputs into a single PDF file. The reports will appear in the merged PDF in the order they are displayed in the package schedule. Checking this box will bring up additional PDF Options.





- Click **Add** and select **For SSRS** or **Paginated Reports**.



- Package Report Properties will appear on.

## Package Report Properties Report Wizard

Packaged Report Properties

**Report**

☒ Use SSRS Account Ananse

Service URL: http://ananse/reportserver/reportservice2010.asmx

Report Location: /Working Samples/Supplier Information ...

Report Name: Supplier Information

Format: **Format Option**

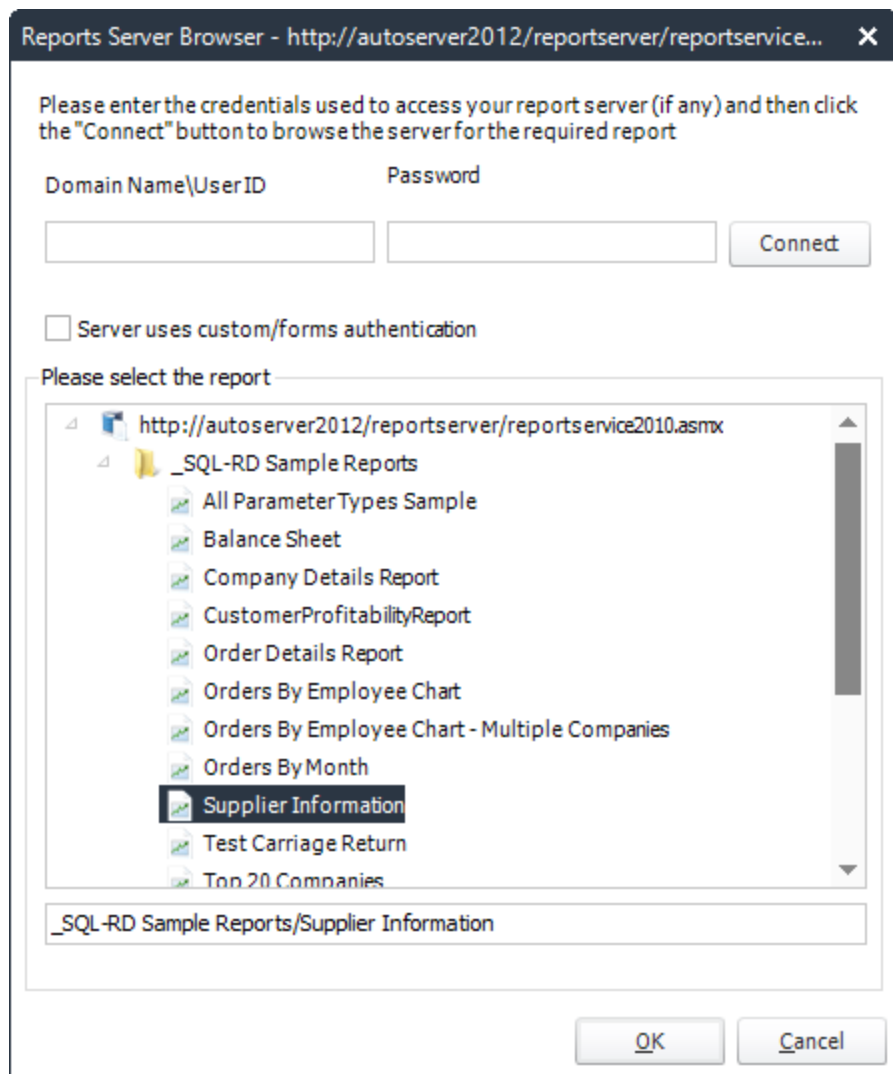
- Acrobat Format (\*.pdf)
- CSV (\*.csv)
- Data Interchange Format (\*.dif)
- dBase II (\*.dbf)
- dBase III (\*.dbf)
- dBase IV (\*.dbf)
- HTML (\*.htm)
- Lotus 1-2-3 (\*.wk1)
- Lotus 1-2-3 (\*.wk3)
- Lotus 1-2-3 (\*.wk4)
- Lotus 1-2-3 (\*.wks)
- MS Excel 97-2000 (\*.xls)
- MS Excel 2007 (\*.xlsx)
- Web Archive (\*.mhtml)
- TIFF (\*.tif)
- XML (\*.xml)
- MS Word (\*.doc)
- MS Word 2007 (\*.docx)
- Rich Text Format (\*.rtf)
- Text (\*.txt)
- Custom (\*.\*)
- MS Word - Text (\*.txt)

☒ Enabled

OK Cancel

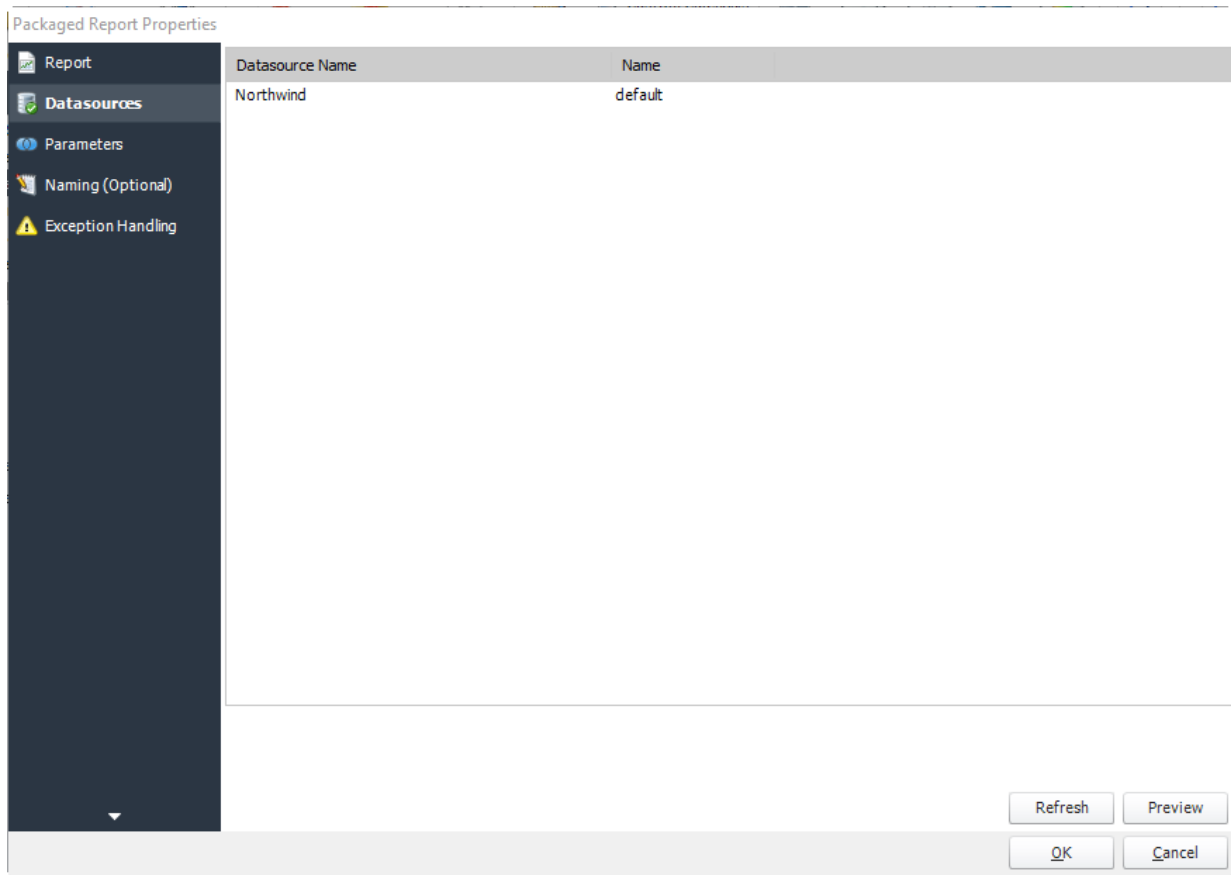
- **Use SSRS Account:** Select the SSRS Account where your report server is located, and then click on (...) button next in **Report Location**.
- **Service URL:** Uncheck 'Use SSRS Account' checkbox, to enter the address of your reporting services server.
- **Report Location:** Browse through the report server browser to select the desired report. Authenticate to the reports server if necessary.

*Hint: SQL Azure Reporting Services- when writing your report, make sure you have enabled Forms Authentication. You should use the 2010 .asmx address for your reporting service URL.*

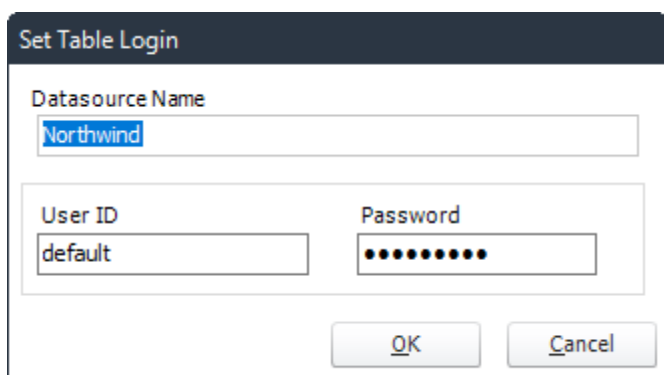


- **Report Name:** Write in the name of the package.
- **Format:** Select the output format for the report.

## Datasources Wizard

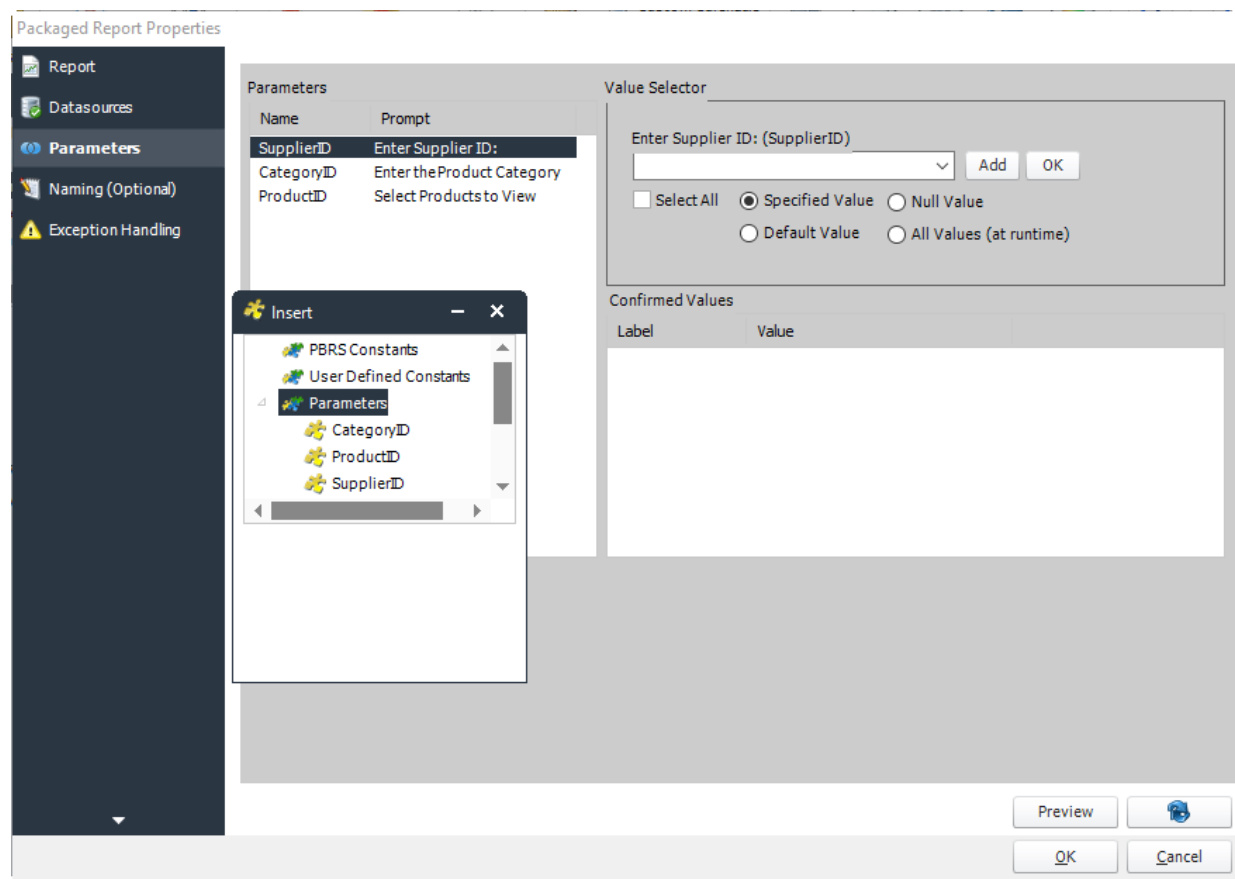


- In this section you will authenticate to the database the report runs against, set snapshots, and other options.
- **Login Required:** Set the authentication information for the report.



- **Preview:** View the report prior to execution.

## Parameters Wizard



- In this section, you will determine the parameters for your report (if any). If your report has no parameters, you may skip this section by clicking next.
- There are 3 requirements in order for PBRs to detect your SSRS Report parameters and their parameter values:
  - The parameter must be in use in the report.
  - The parameter must be visible.
  - The parameter must be set to be prompted at run time.
- If these three requirements are achieved, you should see the parameters in your report listed in this screen.
- For each parameter, select from the drop down list the value the report must use. You can type a value into the field as well.
- PBRs can handle SSRS Reports with Cascading parameters, or reports where you can select multiple parameter values.
- **Select All:** Selecting All Available Values will run the report given all the values.
- **Specified Value:** Select the value you want in your report.
- **Null Value:** Set no value for this parameter.
- **Default Value:** It will select the default value.
- **All Values (at run time):** Any new values will automatically will be included at run time.

## Naming (Optional) Wizard

Packaged Report Properties

Report  
Datasources  
Parameters  
**Naming (Optional)**  
Exception Handling

☒ Use the default naming convention

☐ Customize the output file name

☐ Customize output extension

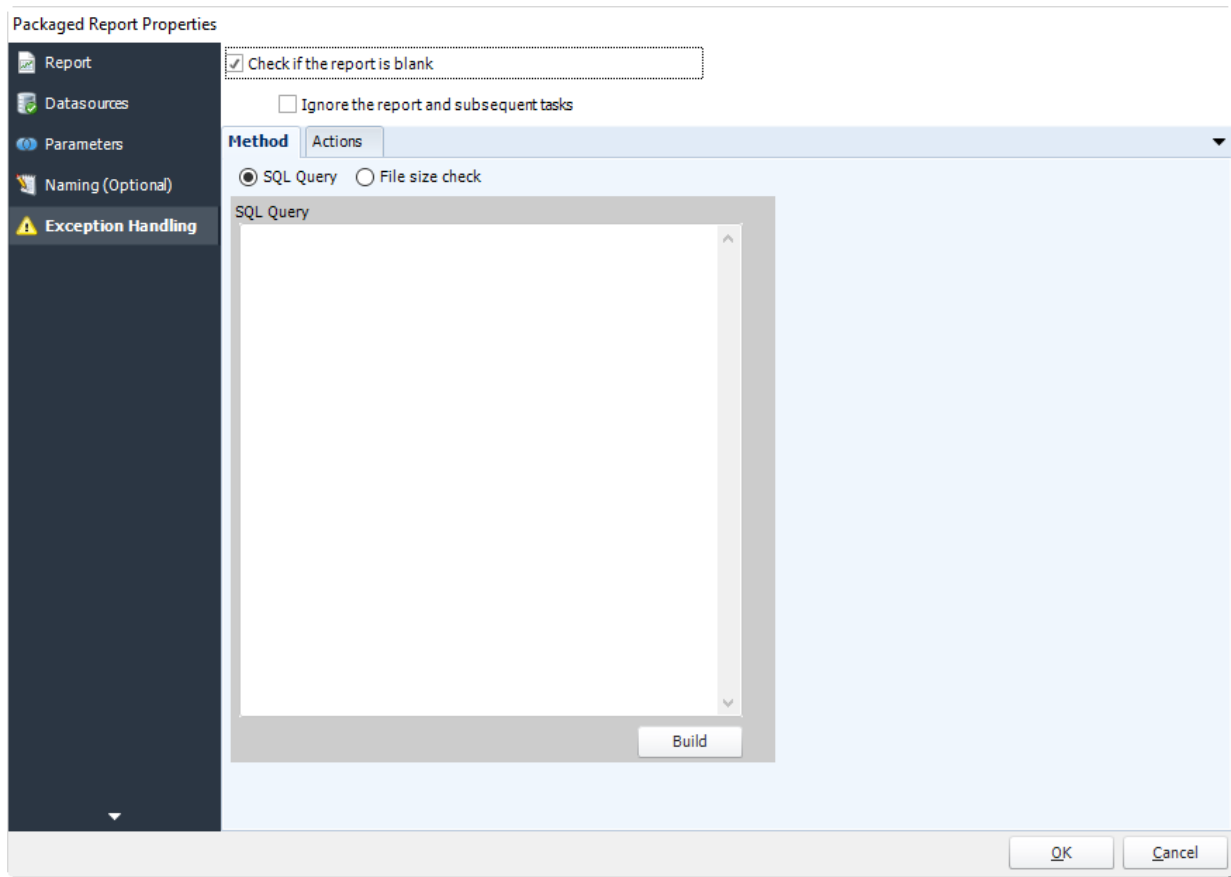
☐ Append date/time to report output

Adjust date/time stamp by (days)

OK Cancel

- **Default Naming Convention:** PBRS will name the output file in the following format: reportname.format extension, e.g. Catalog Report.pdf.
- **Customize the output file name:** Choose your own filename or right-click and use the Insert Function to insert a value.
- **Customize output extension:** Choose your own extension. This is useful for system integration. For example, the default extension for a character separated file is "CSV," but you can give your export an extension of "txt" so that the file can be read by another already existing system you may have. You may also right-click and use the Insert Function to insert a value.
- **Append date/time:** This is useful for the following reasons:
  - If the filename is the same each time, and it is being exported to the same folder each time, then it will be overwritten by the latest one each time. By appending date and time to the filename, each file remains unique, and no files are overwritten.
  - You can track which reports ran and when they ran by looking at what the report is named.

## Exception Handling Wizard



- **Check if the Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.
- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.

## Method

The screenshot shows a software window titled 'Method'. It has two tabs: 'Method' and 'Actions'. The 'Method' tab is active, showing two radio buttons: 'SQL Query' (selected) and 'File size check'. Below these is a large text area labeled 'SQL Query' with a vertical scrollbar. At the bottom right of the text area is a 'Build' button.

- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
- Click **Build**.
- Get values from a database window will appear. For more information about Get values from database, [click here](#).



Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple ☒ Advanced ☐

Only return records where

☒ And ☐ Or

Where

Parse

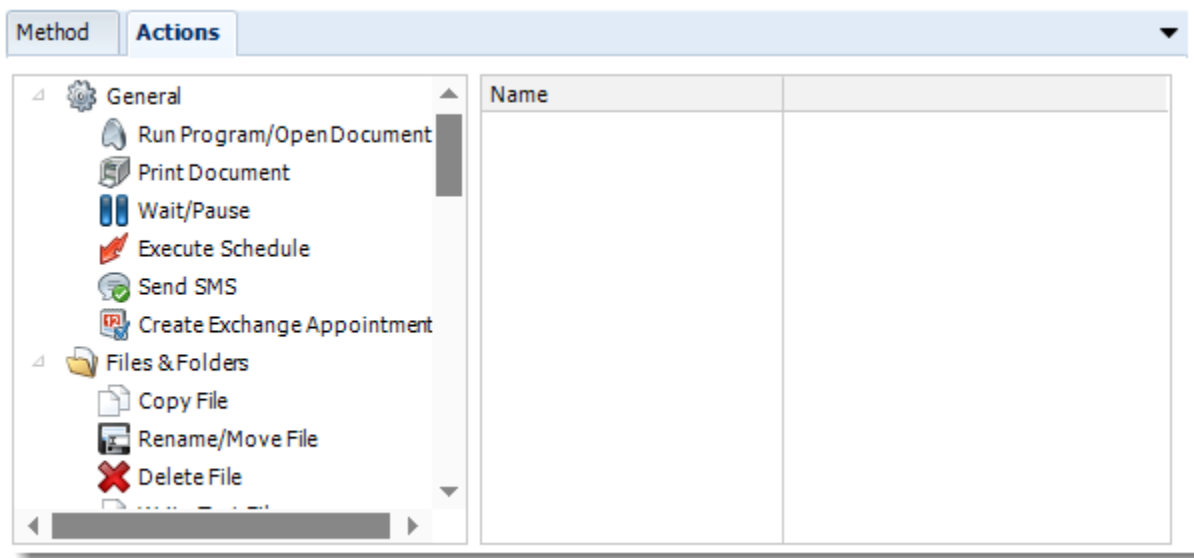
- **File size check:** Assume reports is blank if size is under "X" bytes.

Method ☒ Actions ☐

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

### *Actions*



- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*Tip: You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

- Click **OK**.

## Exception Handling Wizard

The screenshot shows the 'Data-Driven Package Wizard' window with the 'Exception Handling' tab selected in the left sidebar. The main area contains the following settings:

- Treat as "error" if not completed in:** 30.00 mins. ☒ Auto-calculate
- On error, retry executing schedule every:** 0 mins up to 3 times.
- ☒ Check if the report is blank
- ☐ Ignore the report and subsequent tasks

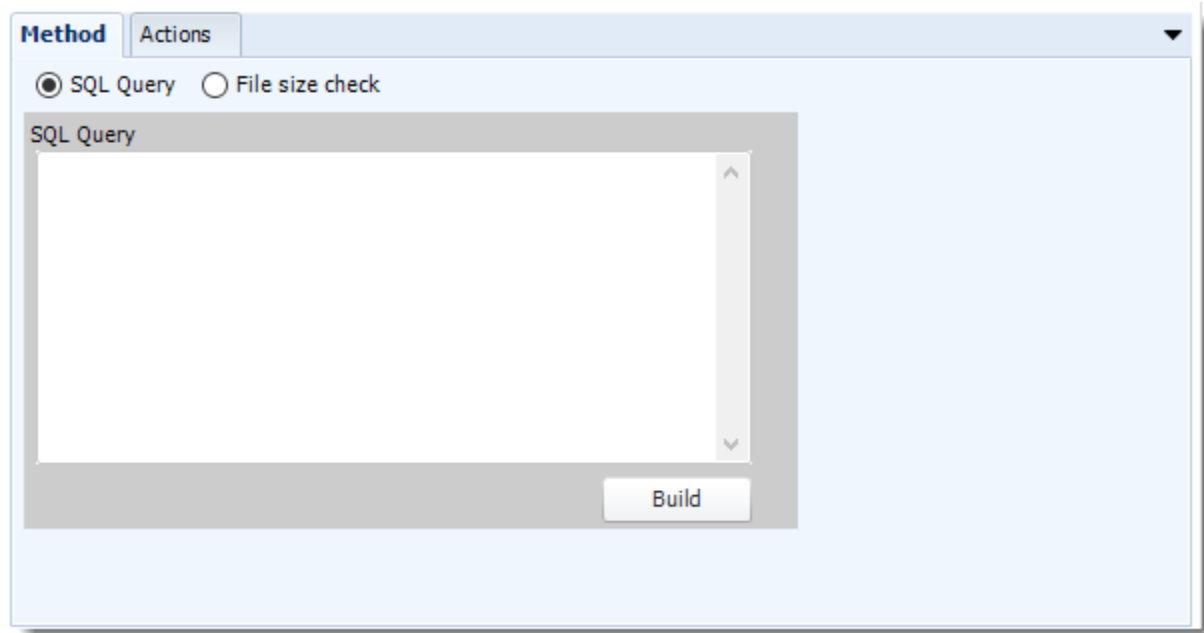
Below these settings are two tabs: 'Method' and 'Actions'. The 'Method' tab is active, showing two radio buttons: 'SQL Query' (selected) and 'File size check'. Below the radio buttons is a text area labeled 'SQL Query' with a 'Build' button at the bottom right. At the bottom of the wizard are 'Cancel', 'Next', and 'Finish' buttons.

- **Treat as “error” if not completed in X minutes:** If a report takes longer than the specified amount of time to run, this option will treat the schedule as an error and follow the appropriate action. The “Auto-calculate” option instructs PBRS automatically determine how long a schedule should take to run the report. If it takes longer than the calculated amount of time, then it is an error.

*If manually determining the error timing, please double check the run time of the report in order to get the correct time estimate.*

- **On error, retry executing schedule every:** If set to 0, PBRS will deem the schedule as "Failed" the first time it encounters an error. The schedule will not run again until its next scheduled time. Change the value to tell PBRS how many times you want it to retry running the report before declaring it as "Failed."
- **Check if the Report is Blank:** If a report is blank because it genuinely returned no data, recipients can misconstrue this as an error with the scheduler. This option allows you to identify genuine empty reports and instruct PBRS on what to do with them.
- **Ignore the report and subsequent tasks:** If the report is blank, do not send the report. The report will not be delivered to the destination. No custom tasks will be run.

## Method



The screenshot shows a software window titled 'Method'. It has two tabs: 'Method' and 'Actions'. The 'Method' tab is active, showing two radio buttons: 'SQL Query' (selected) and 'File size check'. Below these is a large text area labeled 'SQL Query' with a vertical scrollbar. At the bottom right of the text area is a 'Build' button.

- Select the Method that will determine whether a report is blank.
- **SQL Query:** Select this option to use a user made query that will determine if the report is blank. If the query returns no results, the report is blank.
- Click **Build**.
- Get values from a database window will appear. For more information about Get values from database, [click here](#).

Get values from database

DSN Name

UserID

Password

Connect

Select the table and the column that holds the required values

Simple Advanced

Only return records where

☒ And ☐ Or

Where

Parse

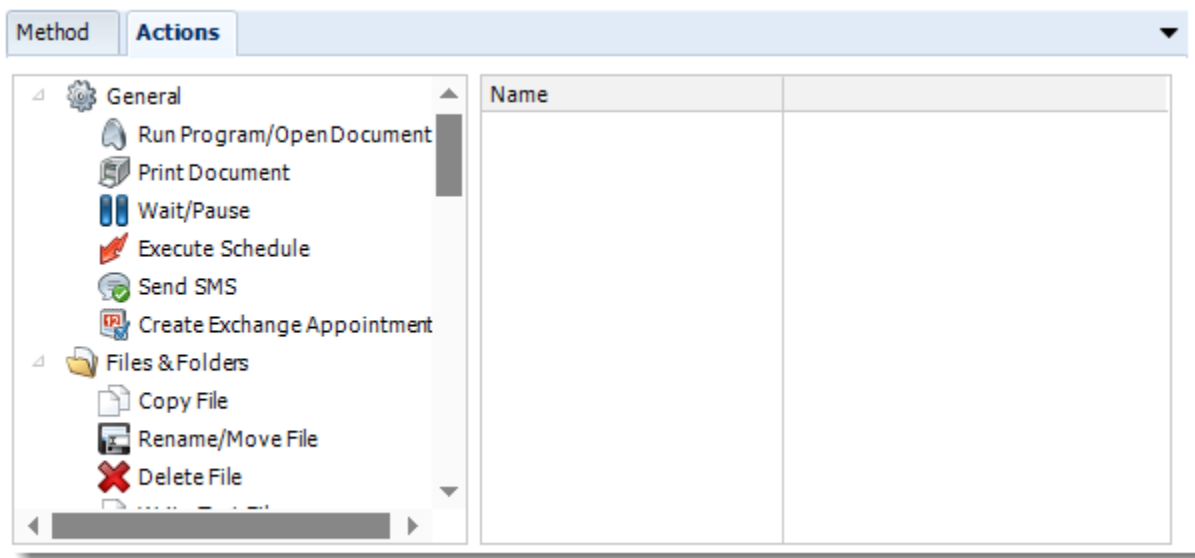
- **File size check:** Assume reports is blank if size is under "X" bytes.

Method Actions

☐ SQL Query ☒ File size check

Assume report is blank if size is under  bytes

### *Actions*

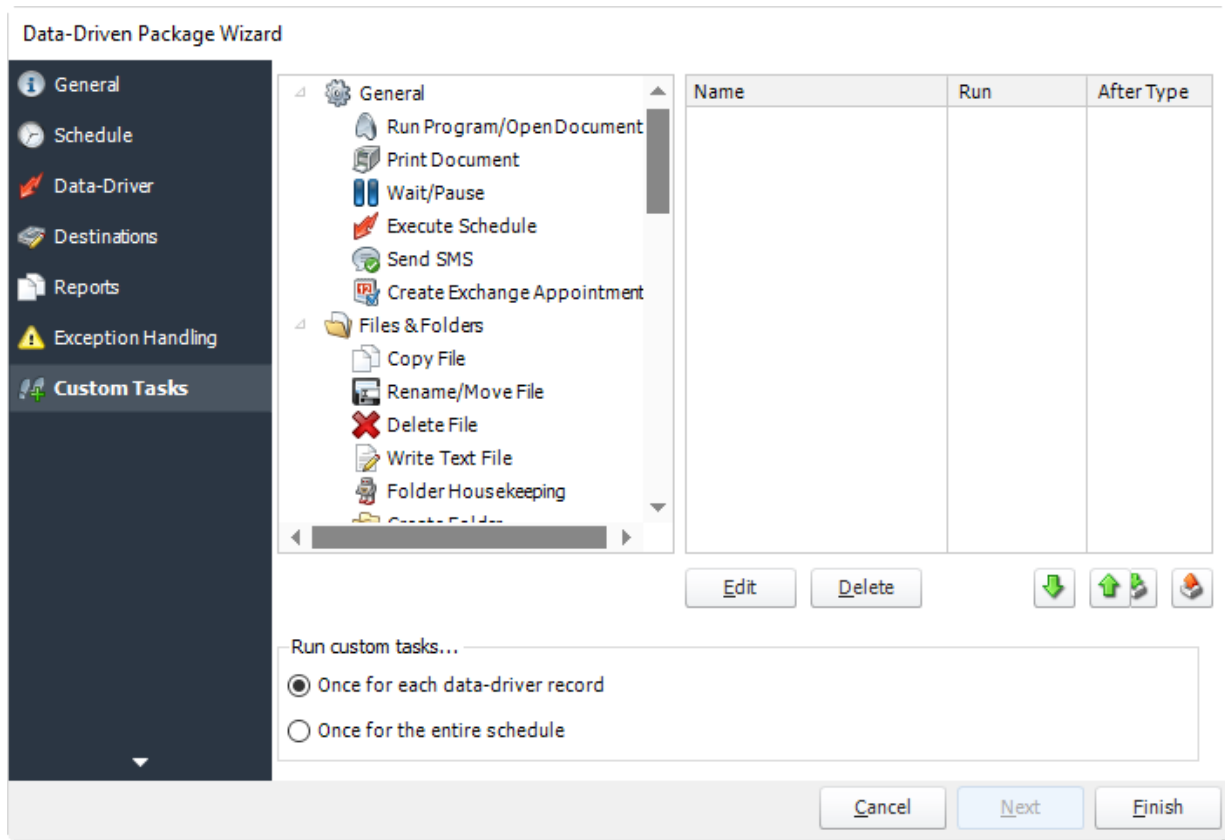


- Select an action from the task list. This task will be executed in the event that a schedule is blank.
- For more information about tasks, [click here](#).

*Tip: You can send a notification if a report is considered blank instead of sending the report. Simply select “check if a report is blank” then select “Ignore the report.” In the actions tab, select “Send Email” from the list. Compose your email and save.*

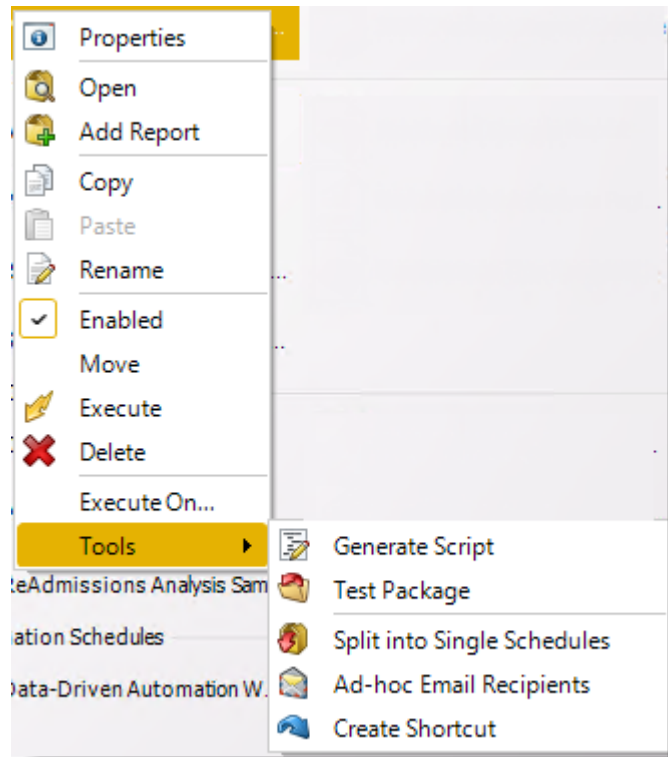
Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- If you have no desire to add a Custom Task, you can click **finish** to complete the schedule.

## Data-Driven Package Report Schedule Context Menu



Right-Click on a schedule to see the following actions:

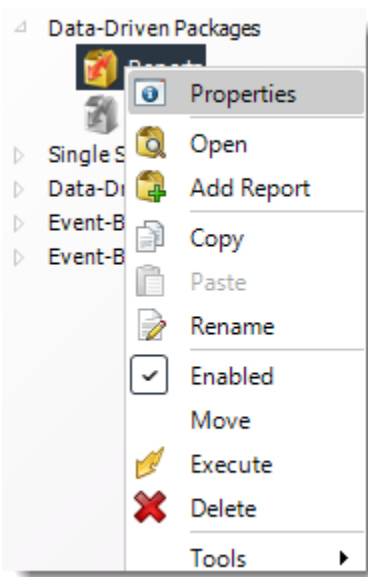
- **Properties:** Edit the schedule from here. Or you can just double click on the schedule.
- **Open:** This will open the package and show its constituent reports.
- **Add Report:** Use this to add one or more reports to an existing package.
- **Copy:** Use this to copy the schedule. Right-click in the "white space" of the folder you wish to copy it to and select the Paste button.
- **Rename:** Rename the package.
- **Enabled:** Schedules are enabled when there is a check icon beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check icon. Disabled schedules will not run until they are enabled again.
- **Move:** Use this option to move the report into an existing package.
- **Execute:** This button will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers .
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Test Package:** Use this option to test the schedule and export it to selected "test" destinations.
- **Split into Single Schedules:** This will split all the constituent reports in the package into Single Report Schedules.



*This process will automatically delete the package once the splitting process is completed.*

- **Ad-Hoc Email to Recipients:** Select this option to send an ad-hoc email to all recipients of this package. You can use this to alert recipients to a planned system outage, or any other useful information.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.

#### *Data-Driven Package Properties*



- To access your schedule properties, right-click on a schedule and select **properties**.
- Similar to the schedule wizard, you adjust settings to your schedules such as timing, error handling, or custom tasks.
- **General**

You can view the Schedule Unique ID in the General Wizard.

**Data-Driven Package Properties** ? X

**General**

**Package Name**  
Data-Driven SSRS Package Sample

**Create In**  
Sample Reports ...

**Description (optional)**

**Keyword (optional)**

**Unique ID**  
619285817

OK Cancel Apply

•Schedule

**Data-Driven Package Properties** ? X

**General** | **Schedule** | Reports | Destinations | Exception Handling | History | Tasks | Sharing | Data-Driver

Start Date: 8/ 6/2019 | End Date: 1/10/3004

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 11:47:04 AM | Exception calendar: ☐

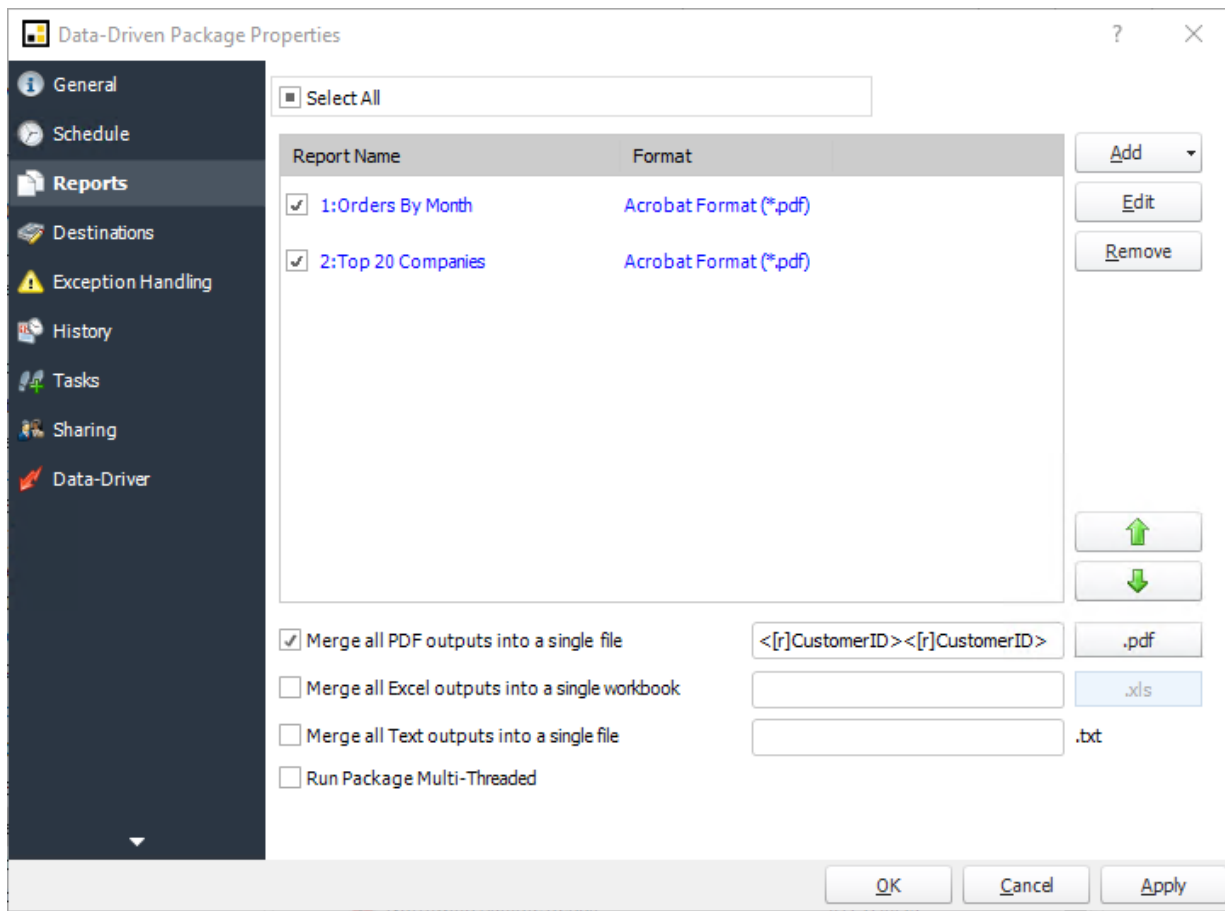
Next to run on: 1/23/2020 | 11:47:04 AM

☐ Repeat every: 0.25 hours until: 11:49:27 AM

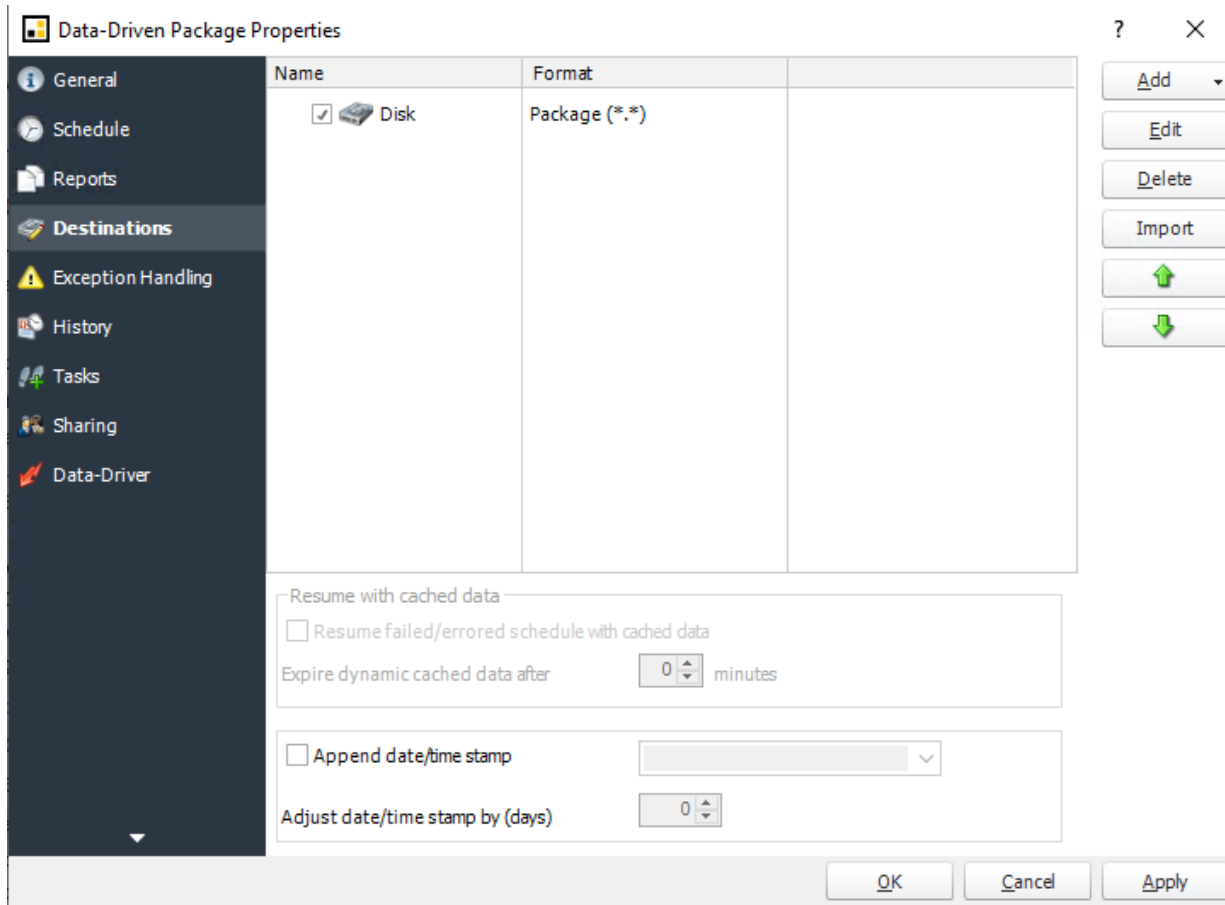
☒ Enable this schedule

OK Cancel Apply

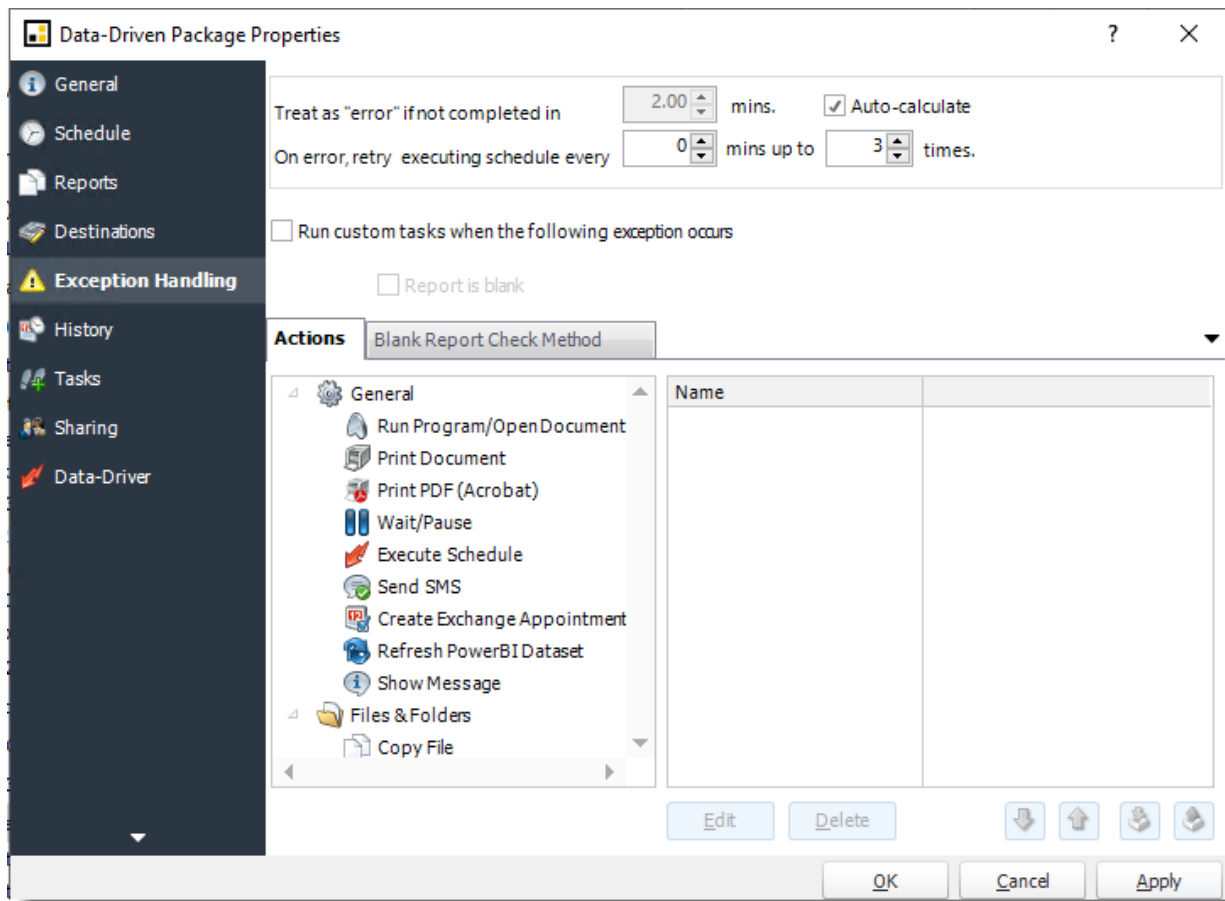
## •Reports



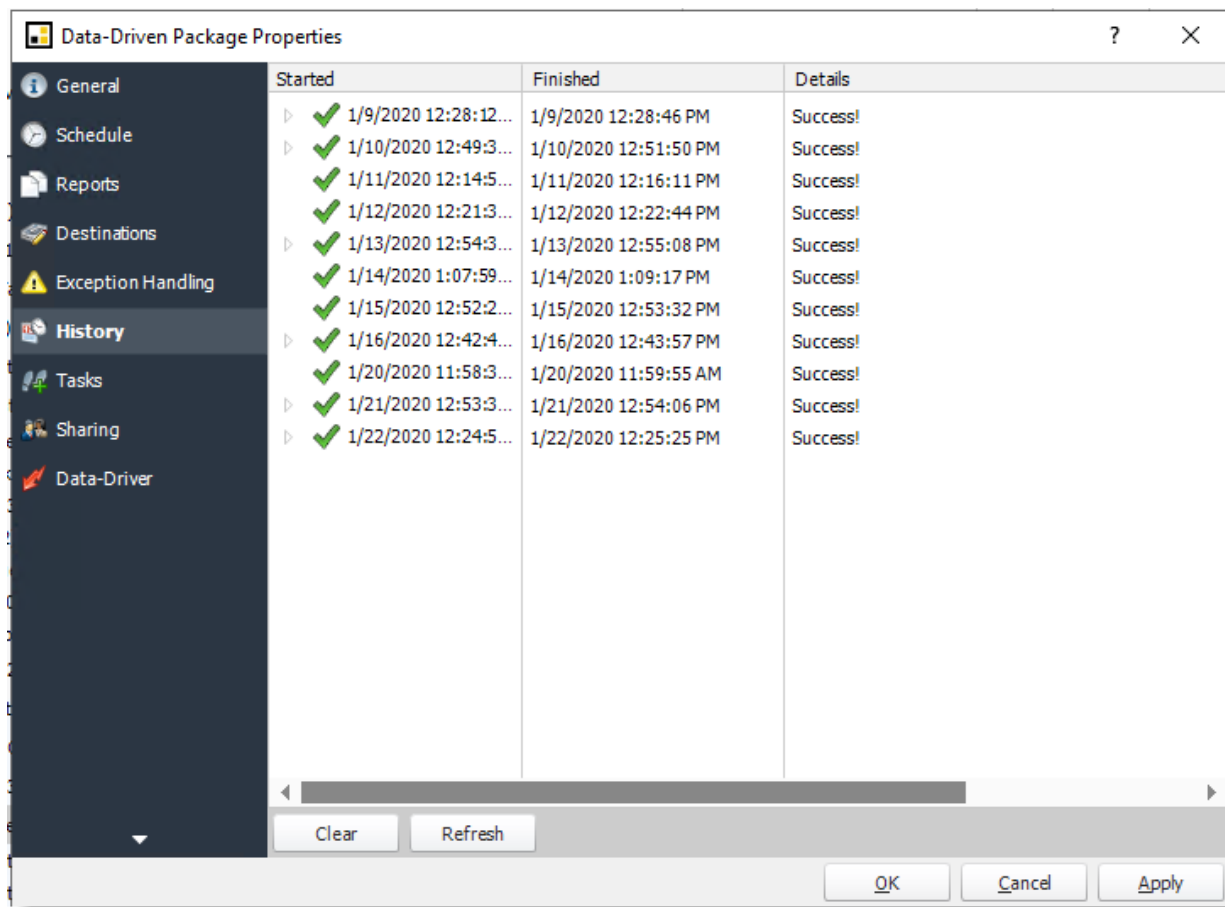
## •Destinations



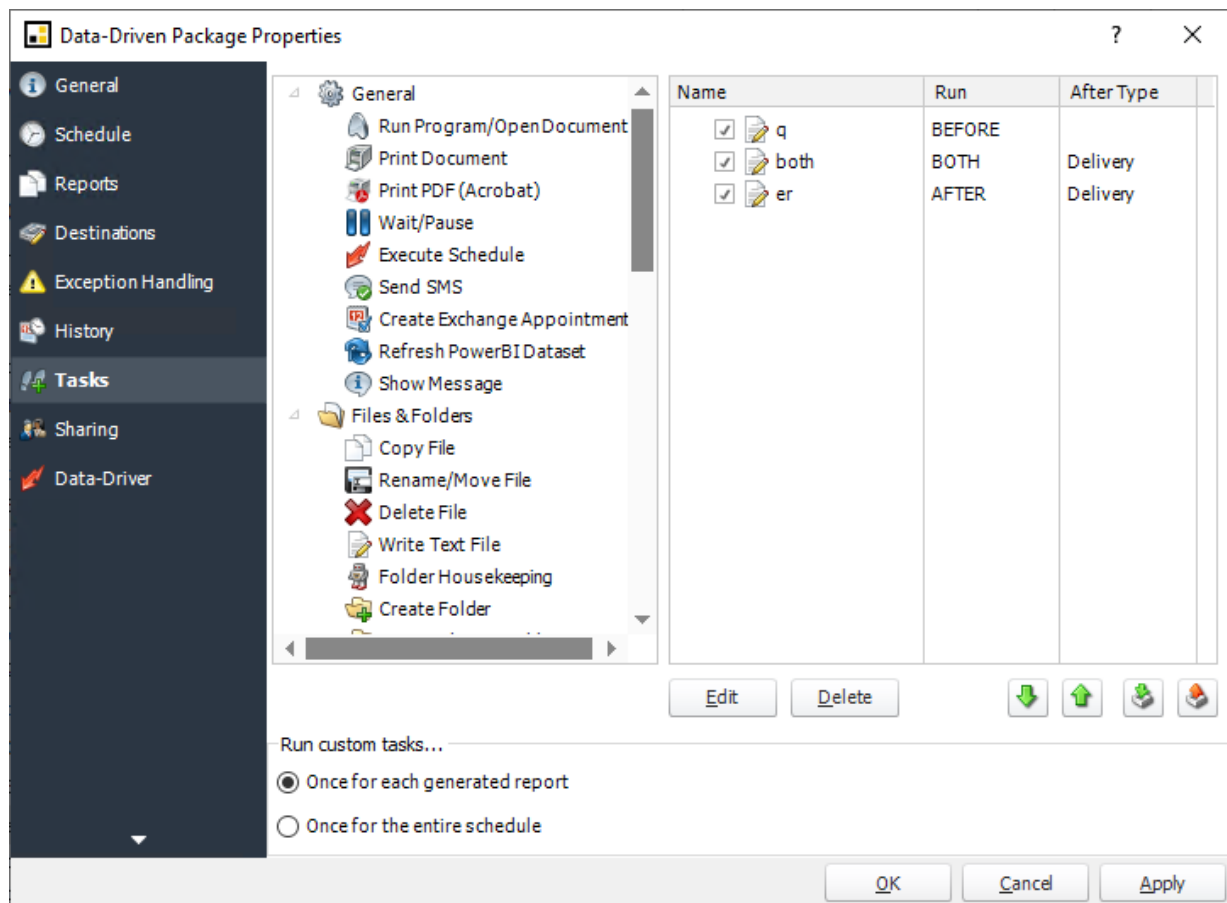
- Exception Handling



- **History**

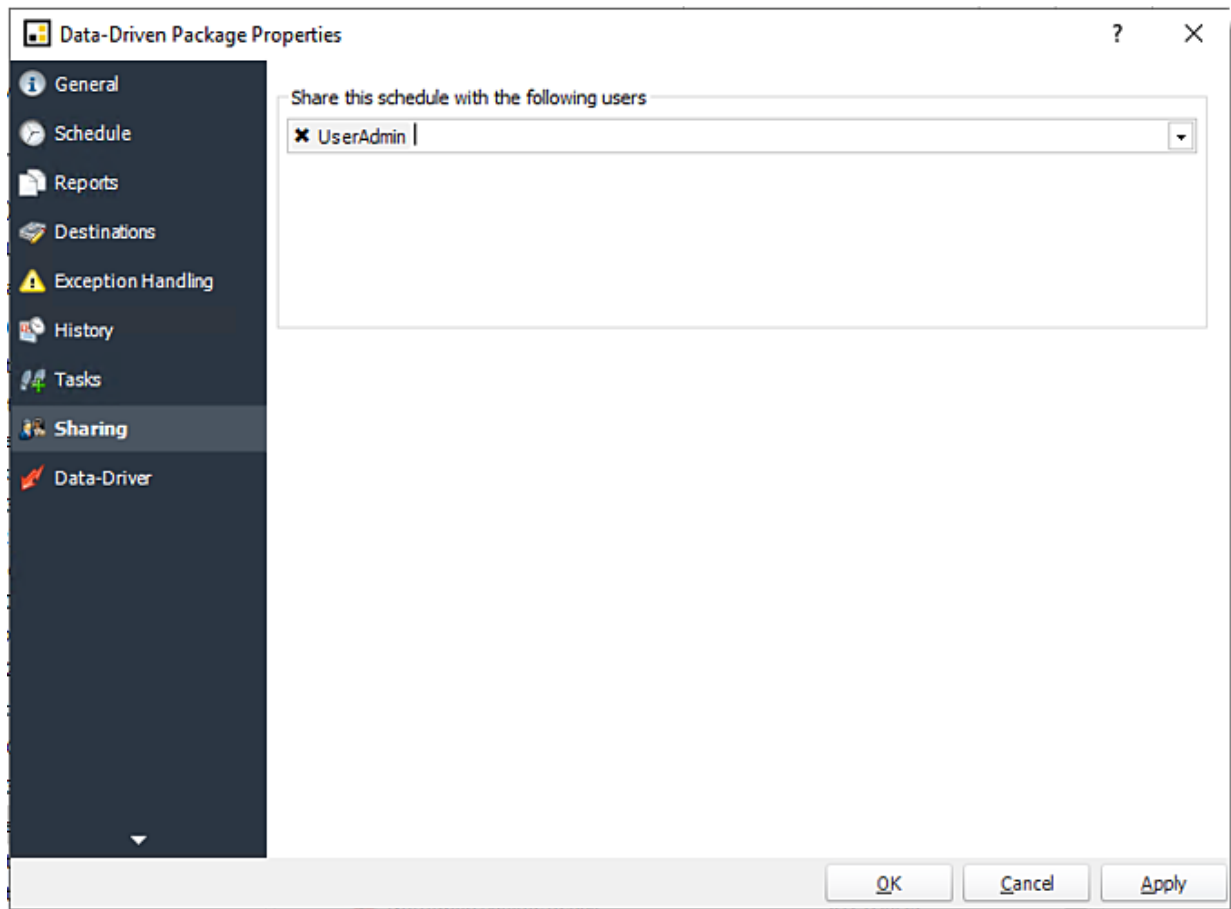


## •Tasks



- **Sharing:** Here you can share this schedule with multiple users.





- Data-Driver

**Data-Driven Package Properties** ? X

**General**  
Schedule  
Reports  
Destinations  
Exception Handling  
History  
Tasks  
Sharing  
**Data-Driver**

☒ SQL Data Driver ☐ JSON Data Driver

Database Connection Setup

☐ ODBC DSN ☒ SQL Server Account

SQL Server Account  
Northwind

Connect

Data selection criteria

```
SELECT Customers.* FROM Customers WHERE (CustomerID='AROUT' OR CustomerID='BOTTM' OR CustomerID='QUICK')
```

Build

Key Column CustomerID

☒ Group reports together by email address/directory (email/disk destination only)

☐ Merge the group into a single PDF file:

☐ Merge the group into a single Excel Workbook:

OK Cancel Apply

How do I use Data-Driven Automation Schedules to create workflows in PBRs?

**Data-Driven Automation Schedules** give you the ability to data-drive variables of your Custom Tasks without the need to schedule a report.

### Data-Driven Automation Schedules

A Data-Driven Automation Schedule gives you the ability to write automated processes using PBRs' standard Custom Actions from database tables and queries at run time. You can use Data-Driven Automation schedules for a number of scenarios.

Data-Driven Automation Schedules make up the Business automation arm of PBRs. Beyond reporting, you can automatically update databases, set registry keys, move files, and even create reports directly from database data.

How to Create a Data-Driven Automation Schedule

- Go to **Data-Driven Automation**.



Get values from database

☐ ODBC DSN    ☒ SQL Server Account

SQL Server Account

Connect

Please select the table that holds the required data

Simple    Advanced

Only return records where

   ☒ And    ☐ Or   

Where

Parse

OK

Cancel

## Building a Data Driver Wizard

- The Data Driver is where you set up the source for data for your data-driven reports. If your data source or data selection criteria changes this is where you will need to make any required changes.
- **ODBC Datasource Name:** Check this option to select ODBC DSN. Drop down and select a DSN.

*We strongly recommend System DSNs so that the DSN is visible to PBRs even when the user associated with the DSN is logged off.*

*All communication to databases (including Access databases) is done through ODBC, so you must setup a system DSN to the database before you can use this facility.*

When setting up DSNs we recommend (if possible) that you use Windows Authentication (Trusted Connection). This ensures that your username and password are not required to be stored in PBRs (more secure) and overcomes a large number of security restrictions which Windows places on DSNs. When using Windows Authentication, make sure that the PBRs NT service user (or background application service user) has full rights to the database otherwise, though you will connect when you are logged in, automated scheduling will fail if the Service user has not got rights to the database.

When setting up a DSN to a SQL server, you must ensure that the "Default Database" setting is set to the database you are connecting to (Windows defaults this to "Master").

- **UserID:** Enter the User ID PBRs should use to log on to the database.
- **Password:** Enter the password associated with the above user.
- **SQL Server Account:** Check this option to use your SQL Server Account.

You must add the SQL Server Account in Integrations.

- **Connect:** Click Connect to connect to the Database.
- Select the table from the database that holds the required data. You can refine your selection query by using the simple or advanced tabs.
- Click **Parse**.
- For more information of "Get Values From Database" interface, [click here](#).
- Click **OK**.

Data Driven Automation Schedule

**Data Driver**

Data selection criteria

```
SELECT Customers.* FROM Customers WHERE (Customers.CustomerID LIKE 'p%')
```

Build

Key Column: CustomerID

☒ Use up to 8 threads to run this schedule

Cancel Next Finish

- Click **Build** to specify the data selection criteria. This will return you to the Build Data Driver tool.
- **Key Column:** Select the key column for the data that is returned for the reports. The information that drives the schedule is required to have a key column so that each row in the table is uniquely identified by the value in this column. The key column is there as an identifier which is used to troubleshoot in cases where there is a problem with one of the records.
- **Use up to 'x' threads to run this schedule:** Check this option to allow x amount of threads to be exported simultaneously.

Click **Next** to continue to the next wizard section.

## General Wizard

Enter your schedule Details. This section determines the most basic properties of a schedule.

- **Parent Folder:** Select the PBRs folder where your schedule will be stored.
- **Schedule Name:** Name your automation schedule.
- **Description:** Add a description to your schedule
- **Keywords:** Add keywords to make the schedule searchable, they can also be used by Smart Folders.

Click **Next** to continue to the next wizard section.

## Schedule Wizard

Data Driven Automation Schedule

**Data Driver**  
**General**  
**Schedule**

Start Date   ☒ End Date

**Daily** Weekly Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  days

Schedule time  ☐ Exception calendar

Next to run on

☐ Repeat every   until

☒ Enable this schedule

In this section, you will decide when the report will execute. There are a variety of options:

- Daily:** Run a report every day or at a frequency of days.
- Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

**Daily** Weekly Week Days Working Day Monthly Annual Custom Calendar Other >>

Repeat every  days

- Weekly:** Run a report on a weekly time frame.
- Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

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Updated on 15 November 2021

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

Daily **Weekly** Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every  weeks

on

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday

☒ Saturday ☒ Sunday

- **Week Days:** Run the schedule Monday through Friday.

Daily Weekly **Week Days** Working Day Monthly Annual Custom Calendar Other

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

Daily Weekly Week Days **Working Day** Monthly Annual Custom Calendar Other

Specify the 'nth' or 'last' working day of the month

☒ nth  ☐ Last

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.



Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other >>

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other >>

- Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other >>

Calendar Name

- [New...]
- Business Days

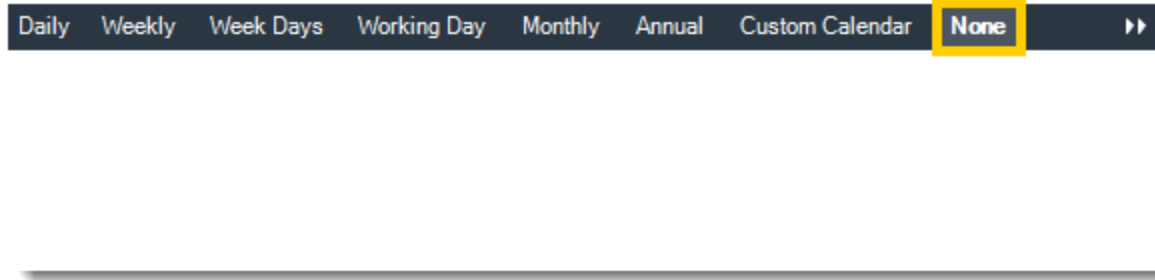
- Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other** >>

Run schedule every

- Minutes
- Hours
- Days
- Weeks
- Months
- Years

- **None:** No scheduling is required for this item.



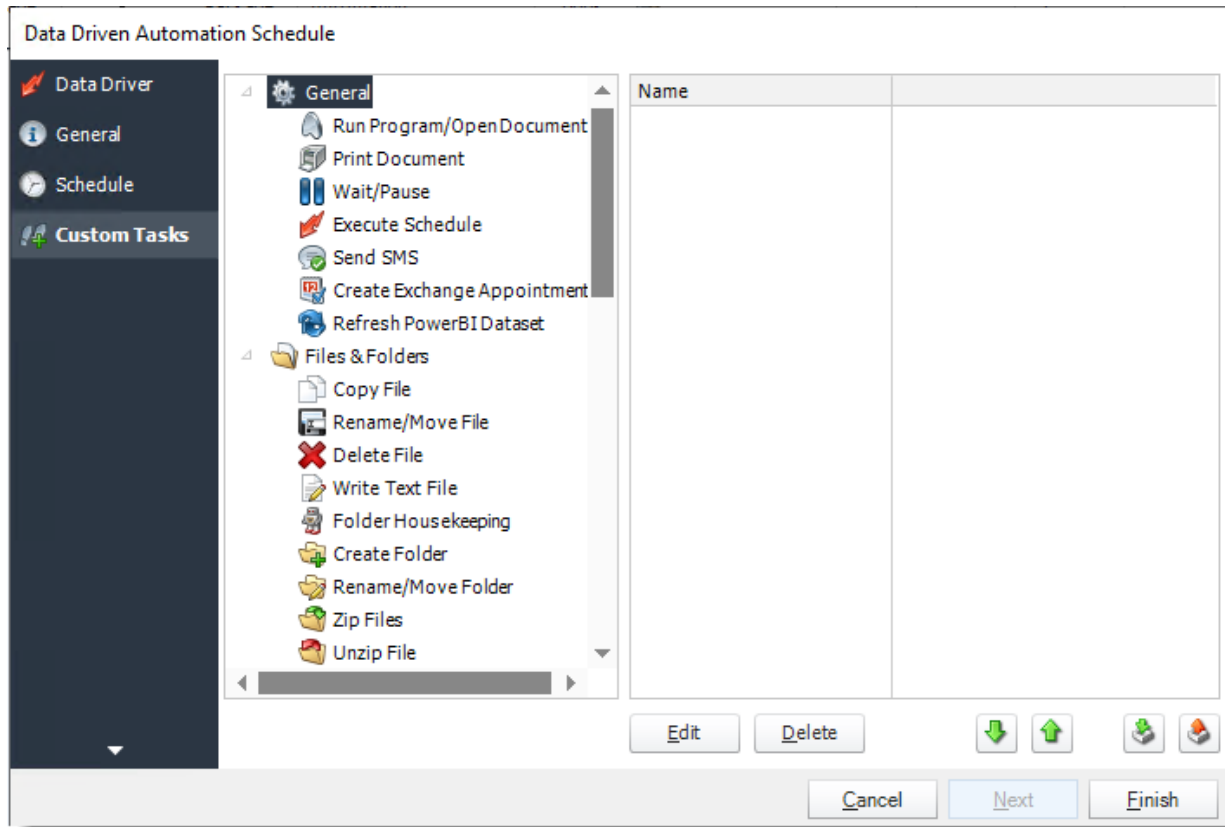
- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

*For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.*

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

Click **Next** to continue to the next wizard section.

## Custom Task Wizard



- In the section, you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- Click **Finish** to complete the schedule.

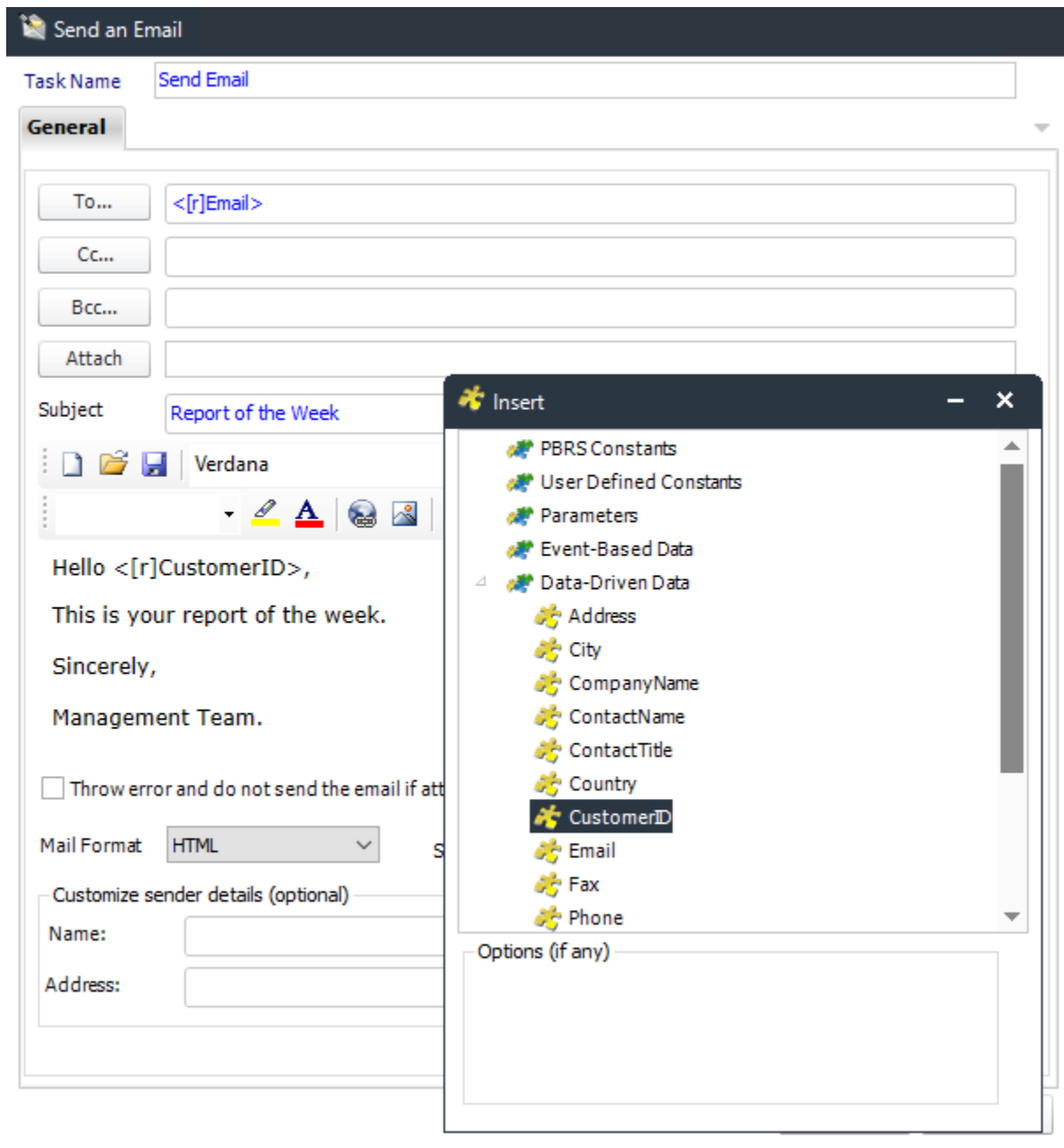
### *Data-Driven the tasks*

- Using Data Driven Inserts, PBRS will automatically pull data from your table and use it to customize the subject, body or report format.
- With the Data-Driven Automation Schedule, you can determine the delivery method of your report based on your data.
- Data driving the Report's Distribution.
- As mentioned above, PBRS will pull delivery data from your database.

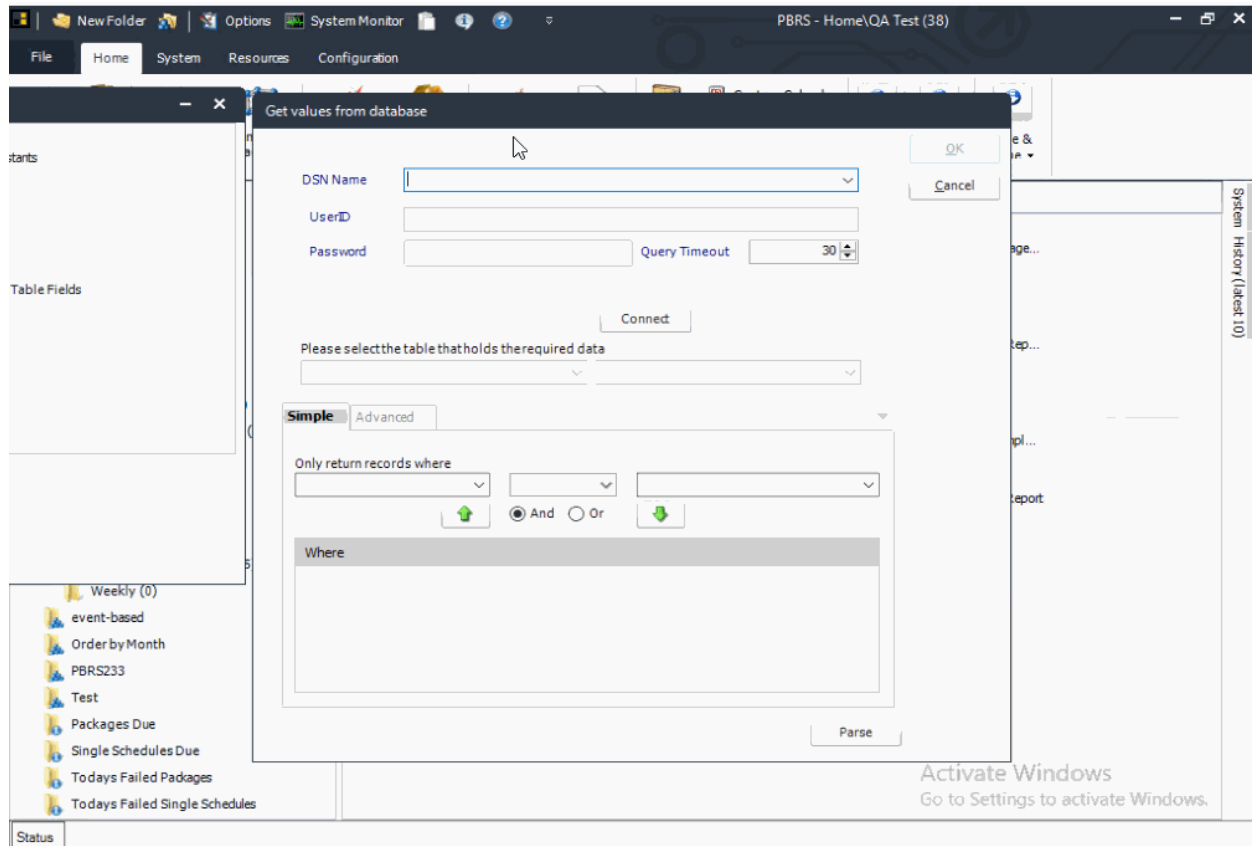
### *Using Send an Email Custom Tasks with Data-Driven Automation*

*For this example, this is just one of the tasks that can be done this way.*

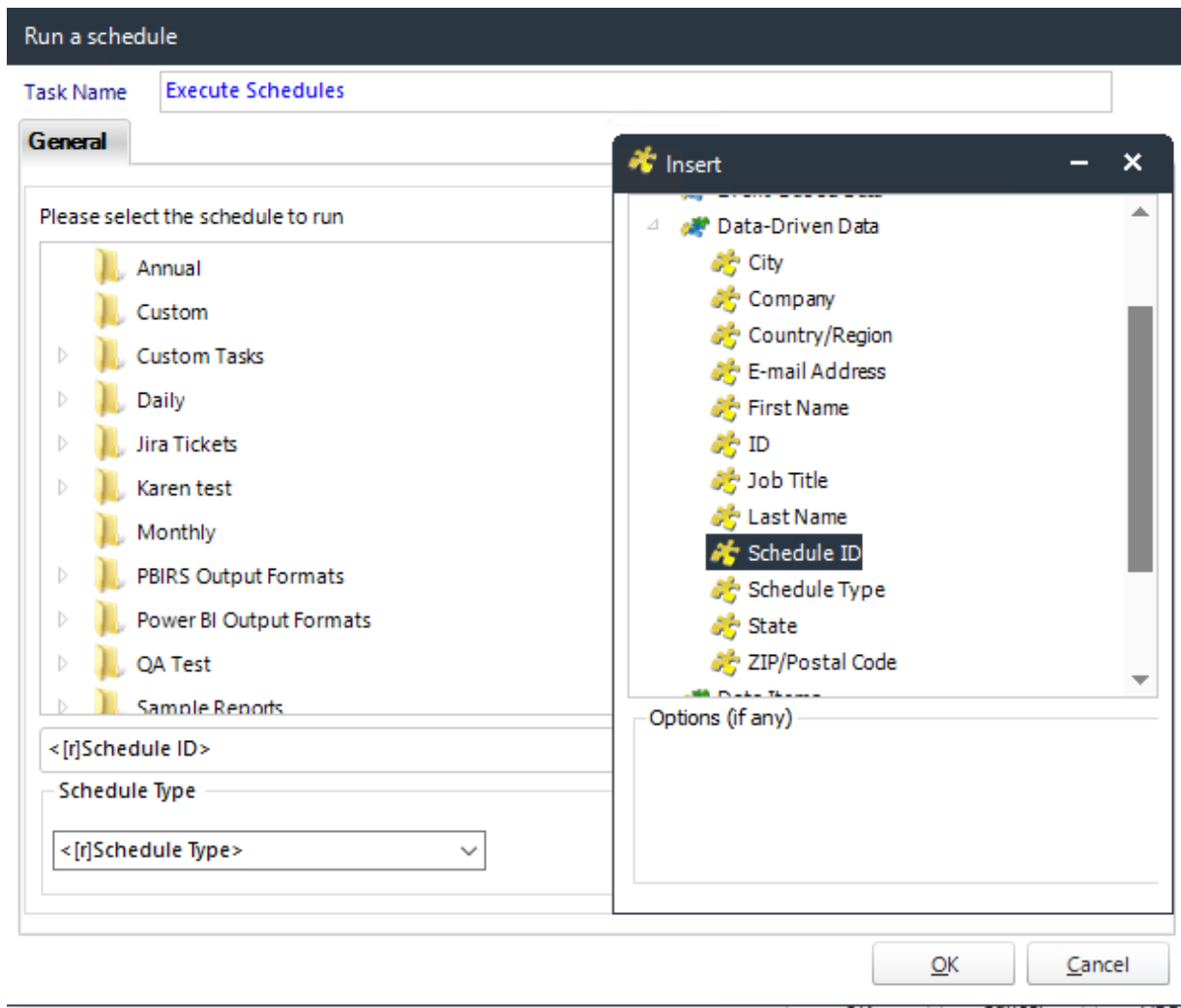
- With Data Driven inserts, simply drag and drop the field that indicates your desired destination (*email in this case*).



## Execute Schedules using Data-Driven Inserts

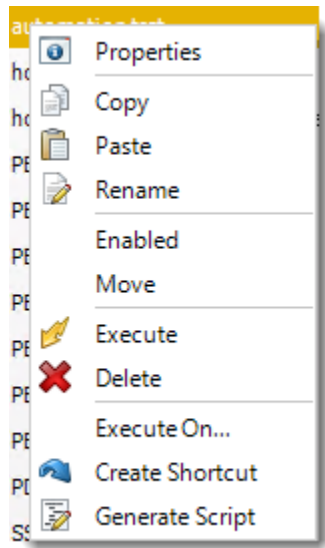


For this example, you can data-driver your Schedule reports using the **UniqueID** of the report.



- You may find the schedules report UniqueID in **Schedule Properties General Wizard**.

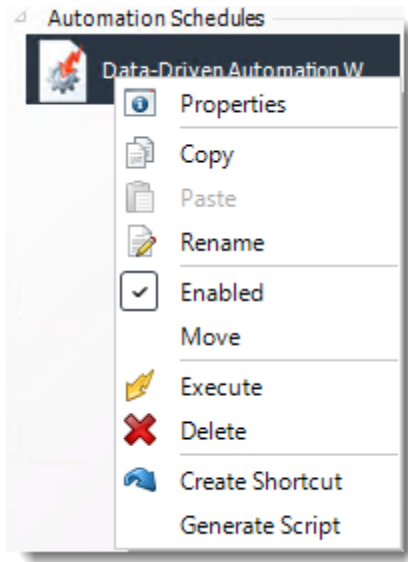
## Data-Driven Automation Schedule Context Menu



To access the schedule's context Menu right-click on the schedule

- **Properties:** Selecting this option will bring up the "Properties" module containing configuration information for that schedule.
- **Copy:** Use this to copy an existing schedule. You can then paste it into another folder or the same folder. Simply open the folder you wish to paste to, right-click in the "white" space and select "Paste". Follow the on-screen instructions to complete the process.
- **Paste:** Paste a previously copied schedule
- **Rename:** Rename a schedule
- **Enabled:** Schedules are enabled when there is a check beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check. Disabled schedules will not run till they are enabled again.
- **Execute:** This will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.

## Data-Driven Automation Schedule Properties



To access your schedule properties, right-click on a schedule and select **properties**.

Similar to the schedule wizard, you adjust settings to your schedules such as timing or custom tasks.

### •General

You can view the Schedule Unique ID in the General Wizard.



**Data-Driven Automation Schedule Properties**

**General**

Location  ...

Schedule Name

Description (optional)

Keywords (Optional)

Unique ID

OK Cancel Apply

•Schedule

**Data-Driven Automation Schedule Properties**

**General** | **Schedule** | History | Tasks | Sharing | Data Driver

Start Date: 10/ 8/2019 | End Date: 10/ 8/3018

**Daily** | Weekly | Week Days | Working Day | Monthly | Annual | Custom Calendar | Other

Repeat every: 1 days

Schedule time: 3:12:00 PM | Exception calendar: ☐

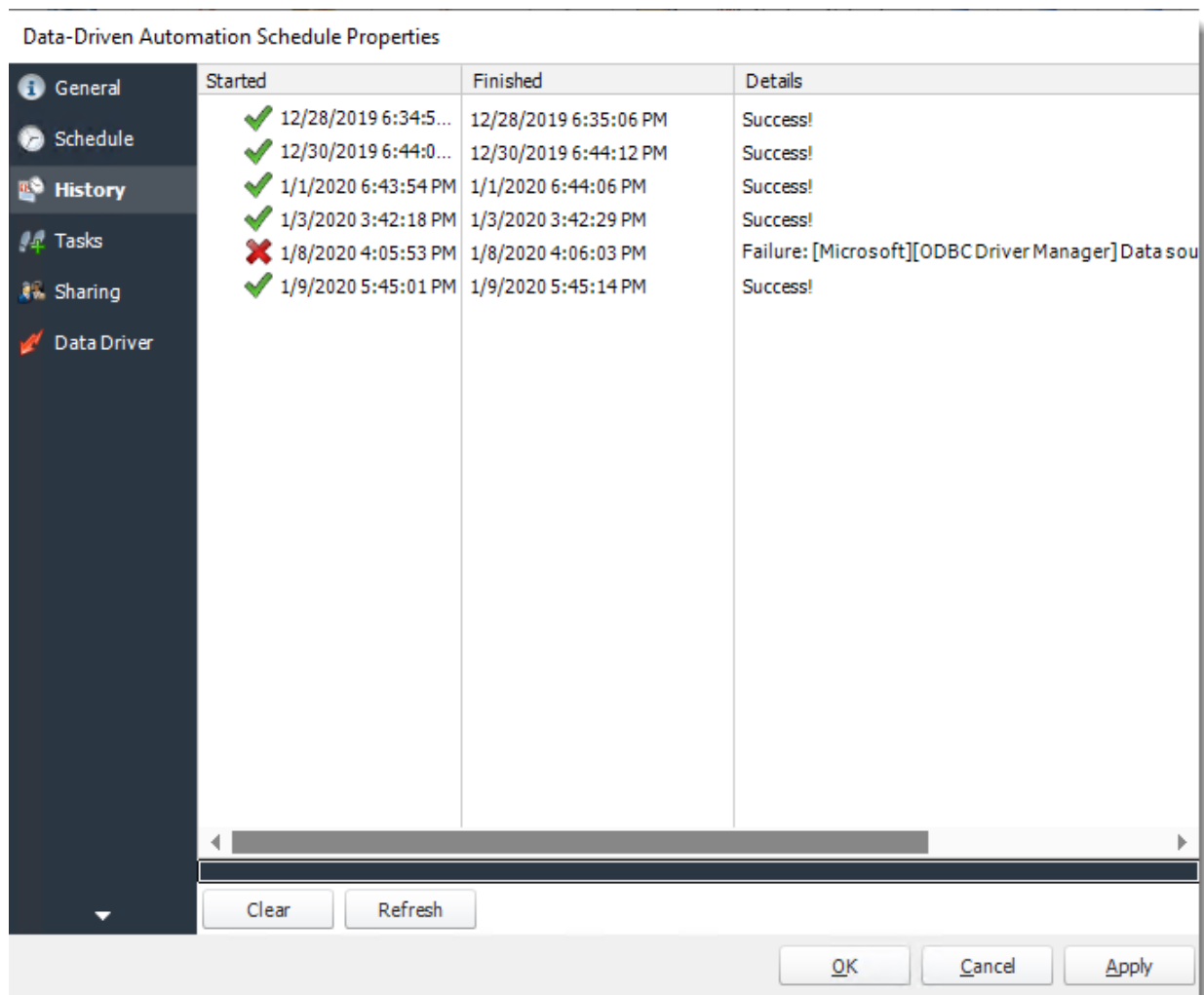
Next to run on: 1/10/2020 | 3:12:00 PM

☐ Repeat every: 0.25 hours until: 3:12:00 PM

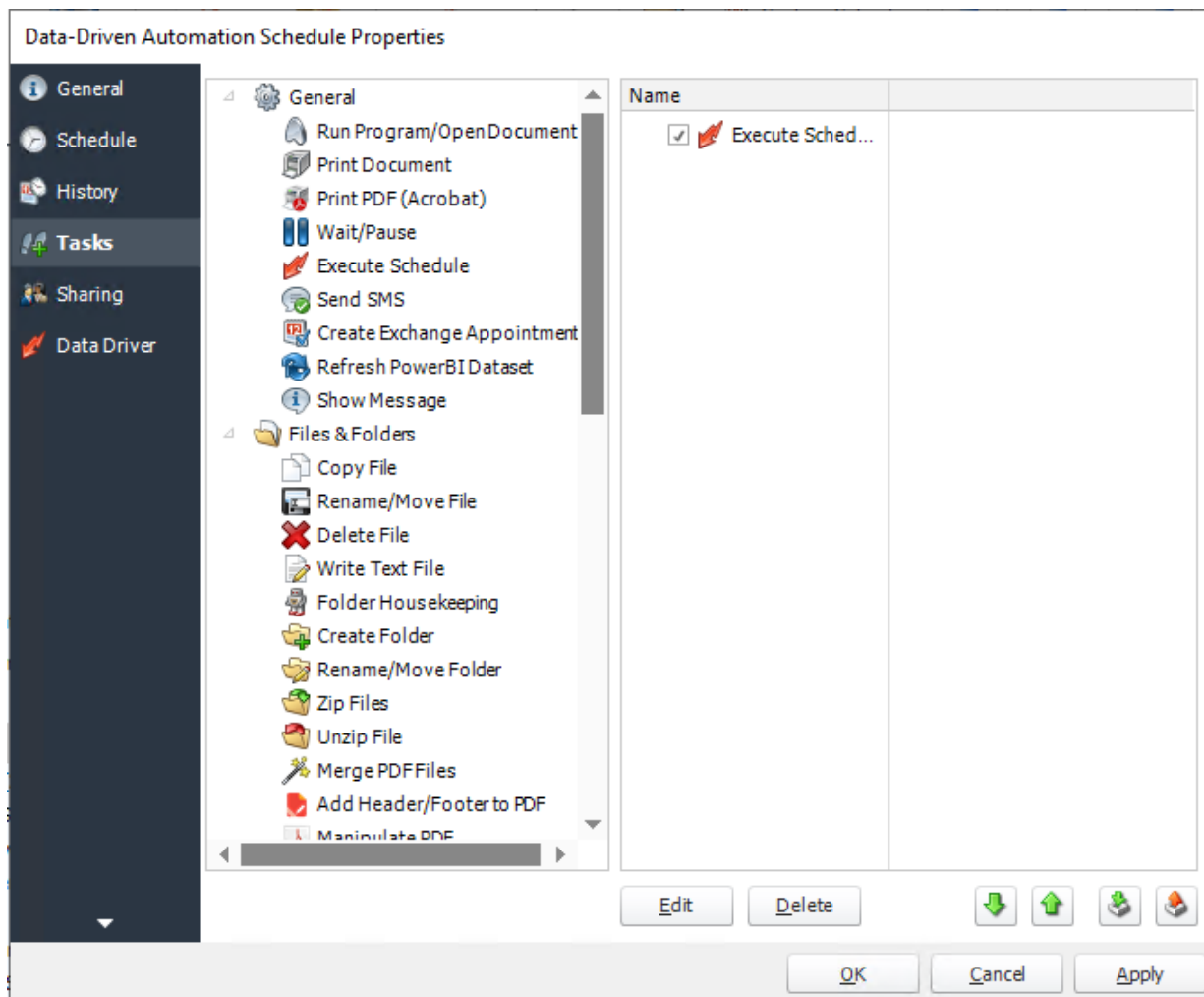
☒ Enable this schedule

OK Cancel Apply

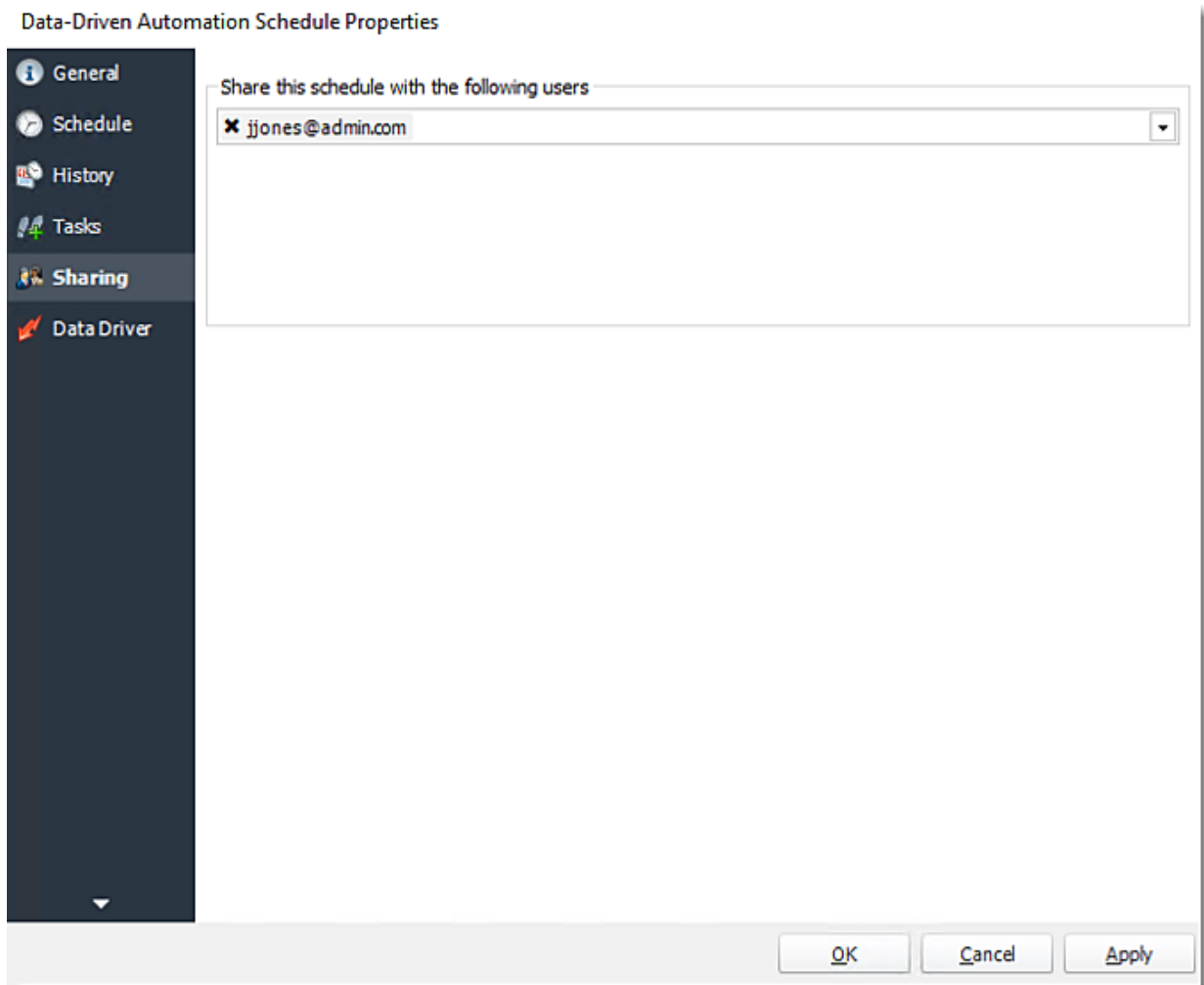
## •History



## •Tasks



- **Sharing:** Here you can share this schedule with multiples users.



- Data-Driver

**Data-Driven Automation Schedule Properties**

**General**  
Schedule  
History  
Tasks  
Sharing  
**Data Driver**

DSN Name:

UserID:

Password:  Query Timeout:

☐ Remember credentials

Data selection criteria

Key Column:

☒ Use up to  threads to run this schedule

## How do I use an Automation Schedule to create a workflow in PBRs?

**Automation Schedules give you the ability to write automated processes and workflows using PBRs' standard Custom Actions.**

### Automation Schedule

Automation Schedules give you the ability to write automated processes using PBRs' standard Custom Actions.

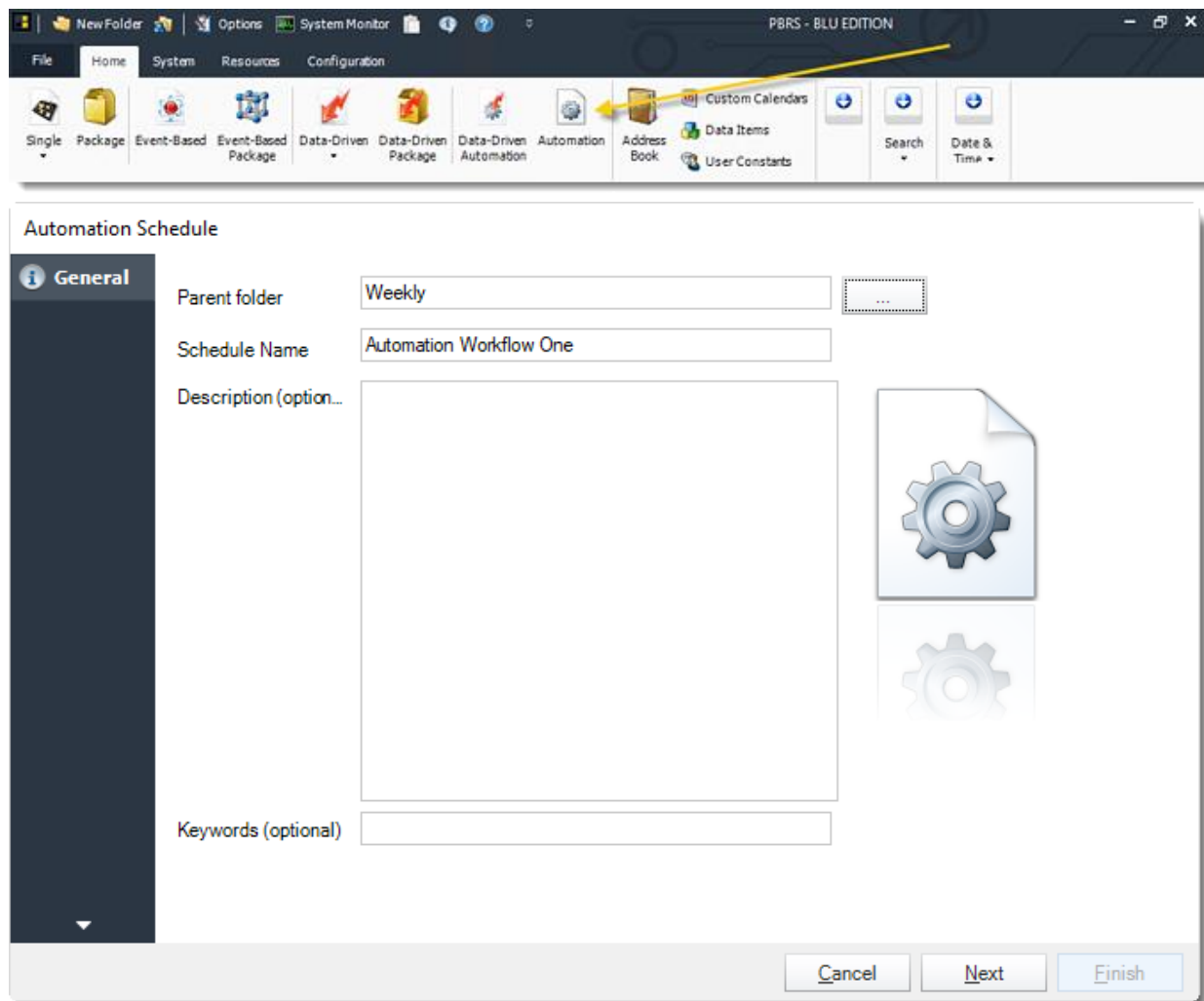
Automation Schedules make up the Business automation arm of PBRs. Beyond reporting, you can automatically update databases, set registry keys, move files, and even create reports directly from database data.

Combine multiple tasks to automate database maintenance, integration, or as an automated way to communicate. Combine these functions with other schedules such as the Event based Schedule to unlock even more powerful functionality.

To combine automation tasks with a schedule type, use a custom task. Custom tasks are usually created toward the end of a Report schedule Wizard.

### How to Create an Automation Schedule

- Go to **Automation**.



## General Wizard

Enter your schedule Details. This section determines the most basic properties of a schedule.

- **Parent Folder:** Select the PBRS folder where your schedule will be stored.
- **Schedule Name:** Name your automation schedule.
- **Description:** Add a description to your schedule.
- **Keywords:** Add keywords to make the schedule searchable, they can also be used by Smart Folders.



## Schedule Wizard

Automation Schedule

General

Schedule

Start Date 8/31/2018 End Date 8/31/3017

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 11:44:43 AM Exception calendar

Next to run on 8/31/2018 11:44:43 AM

Repeat every 0.25 until 11:44:43 AM

Enable this schedule and execute it on DEFAULT

Cancel Next Finish

In this section, you will decide when the report will execute. There are a variety of options:

- **Daily:** Run a report every day or at a frequency of days.
  - **Sub options:** Repeat every X Days.

*Example: Run the schedule every 3 days.*

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

- **Weekly:** Run a report on a weekly time frame.
  - **Sub options:** Repeat every X weeks.

*Example: Run the schedule every 2 Weeks.*

- **On:** Select the specific days of the week the schedule will run. If only once a week, select only the day of the week it will run.

*Example: Run every Monday, Wednesday, and Friday.*

The screenshot shows the 'Weekly' tab selected in a scheduling interface. The top navigation bar includes 'Daily', 'Weekly' (highlighted), 'Week Days', 'Working Day', 'Monthly', 'Annual', 'Custom Calendar', and 'Other'. Below the tabs, the 'Repeat every' field is set to '1' with a spinner, followed by 'weeks'. Under the 'on' section, there are checkboxes for each day of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. The checkboxes for Monday, Wednesday, and Friday are checked.

- **Week Days:** Run the schedule Monday through Friday.

The screenshot shows the 'Week Days' tab selected in the scheduling interface. The top navigation bar is the same as the previous screenshot, but the 'Weekly' tab is not highlighted. The main content area below the tabs is empty.

- **Working Day:** Run the schedule starting on a specific day of the month. Indicate which day of the month the schedule will run. E.G. run the schedule on the 4th working day of the month.

The screenshot shows the 'Working Day' tab selected in the scheduling interface. The top navigation bar is the same, but the 'Working Day' tab is highlighted. Below the tabs, the text 'Specify the 'nth' or 'last' working day of the month' is displayed. There are two radio buttons: 'nth' (which is selected) and 'Last'. Next to the 'nth' radio button is a spinner field set to '1'.

- **Monthly:** Run the schedule on a monthly time frame.
  - **Use the following options:** Checking this box will enable you to select frequency options such as the “last Thursday of the month.” Also you can include or exclude specific months from the schedule.

Daily Weekly Week Days Working Day **Monthly** Annual Custom Calendar Other >>

☒ Use the following options

The  of the month

<input checked="" type="checkbox"/> January	<input checked="" type="checkbox"/> April	<input checked="" type="checkbox"/> July	<input checked="" type="checkbox"/> October
<input checked="" type="checkbox"/> February	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> August	<input checked="" type="checkbox"/> November
<input checked="" type="checkbox"/> March	<input checked="" type="checkbox"/> June	<input checked="" type="checkbox"/> September	<input checked="" type="checkbox"/> December

- Annual:** Run the schedule every year at a specified time.

Daily Weekly Week Days Working Day Monthly **Annual** Custom Calendar Other >>

- Custom Calendar:** Select the custom Calendar you wish to use. You can create a new custom calendar from the menu as well. Please see [Custom Calendars](#) for more information.

Daily Weekly Week Days Working Day Monthly Annual **Custom Calendar** Other >>

Calendar Name

- [New...]
- Business Days

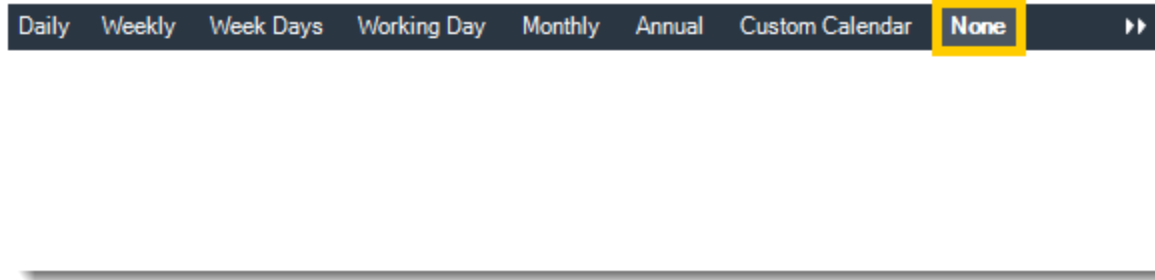
- Other:** Other scheduling options.
  - Run Schedule every X Minutes, hours, days, weeks, months, years.

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar **Other** >>

Run schedule every

- Minutes
- Hours
- Days
- Weeks
- Months
- Years

- **None:** No scheduling is required for this item.



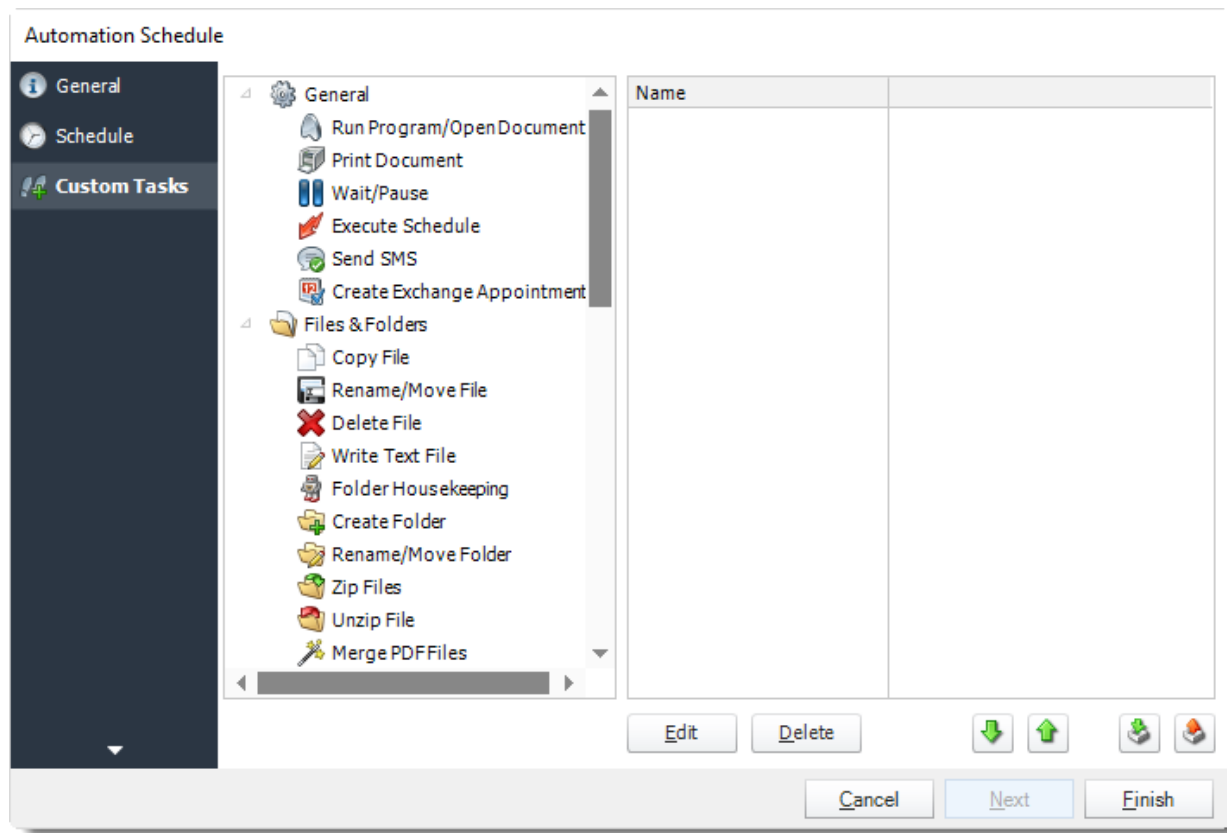
- **Start Date:** Enter the desired starting date for the schedule. This section can be the current date (providing schedule time has not already passed) or a date in the future.
- **End Date:** If the schedule is due to end after a certain date enter that here. If the schedule is to run indefinitely, then leave it blank.
- **Schedule time:** On the Next Run date, the package will run at this time.
- **Exception Calendar:** Choose a calendar that will instruct the schedule to NOT run on those specified days. Please see [Custom Calendars](#) for more information.
- **Next to run on:** The package will next run on this date.
- **Repeat Every:** Rerun the package every x minutes from the scheduled time until your specified time.

For example, you can set up a daily package to run every day at 8 am, and to run every hour until 5 pm.

- **Until:** After this date, there will be no automated scheduling of this package.
- **Enable this Schedule:** Uncheck this option to Disable the package. Disabled packages are not deleted, but they do not execute automatically. You can re-start the automatic scheduling at a later date by checking this option again. Or right-clicking this schedule from the main screen and selecting Enable.

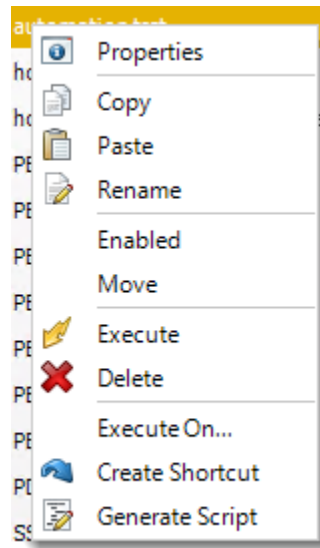
Click **Next** to continue to the next wizard section.

## Custom Tasks Wizard



- In the section you have the option of setting up custom tasks. Custom tasks are business process automation tools that can be auto triggered before or after a report runs.
- For more information on Custom Tasks, [click here](#).
- Click **finish** to complete the schedule.

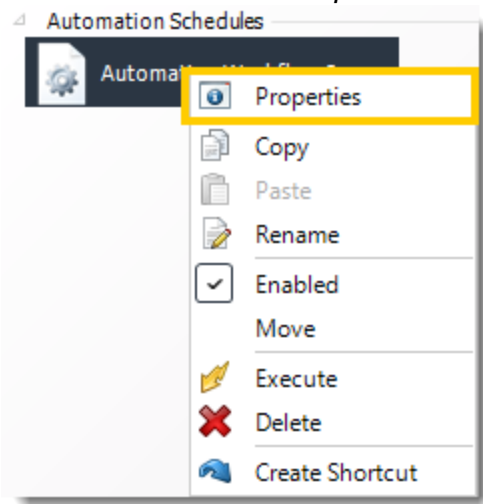
## Automation Schedule Context Menu



To access the schedule's context Menu right-click on the schedule

- **Properties:** Selecting this option will bring up the "Properties" module containing configuration information for that schedule.
- **Copy:** Use this to copy an existing schedule. You can then paste it into another folder or the same folder. Simply open the folder you wish to paste to, right-click in the "white" space and select "Paste". Follow the on-screen instructions to complete the process.
- **Paste:** Paste a previously copied schedule
- **Rename:** Rename a schedule
- **Enabled:** Schedules are enabled when there is a check beside this option. To stop a schedule from running, or to "pause" it for a while, select this option to remove the check. Disabled schedules will not run till they are enabled again.
- **Execute:** This will execute the schedule immediately. Note that the next run date and time is not moved on as a result of a manual execution. They only move on if the schedule is run automatically by one of the schedulers.
- **Delete:** Selecting this option will delete the schedule.
- **Execute On:** Use to option to execute the schedule to another collaboration server.
- **Create Shortcut:** Use this option to create a shortcut you can save in any location on your PC. Execute the shortcut to execute the schedule in PBRs.

### Automation Schedule Properties



To access your schedule properties, right-click on a schedule and select **properties**.

Similar to the schedule wizard, you adjust settings to your schedule such as timing or custom tasks.

#### •General

You can view the Schedule Unique ID in the General Wizard.

Automation Schedule Properties - Zip files

**General**

Location  ...

Schedule Name

Description (optional)

Keywords (Optional)

Unique ID

OK Cancel Apply

•Schedule



Automation Schedule Properties - Zip files

General Schedule History Tasks Sharing

Start Date 10/10/2019 End Date 10/24/3004

Daily Weekly Week Days Working Day Monthly Annual Custom Calendar Other

Repeat every 1 days

Schedule time 9:17:38 AM Exception calendar

Next to run on 1/11/2020 9:17:38 AM

Repeat every 0.25 hours until 9:17:00 AM

☒ Enable this schedule

OK Cancel Apply

## •History

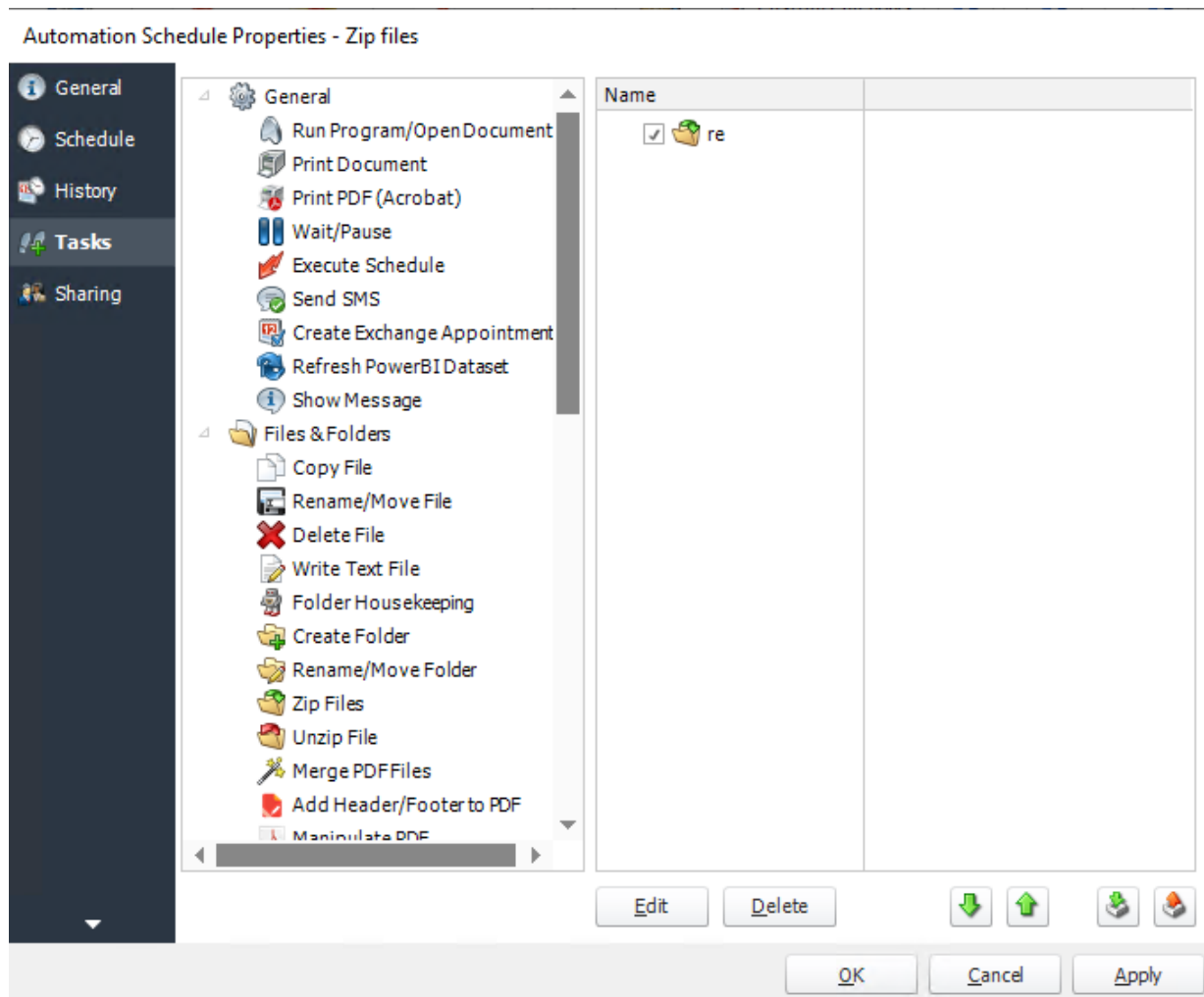
Automation Schedule Properties - Zip files

General	Started	Finished	Details
Schedule	✓ 12/27/2019 9:18:0...	12/27/2019 9:18:07 AM	Success!
History	✗ 12/27/2019 9:18:0...	12/27/2019 9:18:14 AM	Failure: [0]
Tasks	✓ 12/28/2019 9:17:4...	12/28/2019 9:17:49 AM	Success!
Sharing	✗ 12/28/2019 9:17:4...	12/28/2019 9:17:59 AM	Failure: [0]
	✓ 12/29/2019 9:17:3...	12/29/2019 9:17:40 AM	Success!
	✗ 12/29/2019 9:17:3...	12/29/2019 9:17:46 AM	Failure: [0]
	✓ 12/30/2019 9:17:4...	12/30/2019 9:17:47 AM	Success!
	✗ 12/30/2019 9:17:4...	12/30/2019 9:17:53 AM	Failure: [0]
	✓ 12/31/2019 9:17:5...	12/31/2019 9:17:51 AM	Success!
	✗ 12/31/2019 9:17:5...	12/31/2019 9:18:00 AM	Failure: [0]
	✓ 1/1/2020 9:18:09...	1/1/2020 9:18:10 AM	Success!
	✗ 1/1/2020 9:18:09...	1/1/2020 9:18:16 AM	Failure: [0]
	✓ 1/2/2020 9:18:09...	1/2/2020 9:18:10 AM	Success!
	✗ 1/2/2020 9:18:09...	1/2/2020 9:18:19 AM	Failure: [0]
	✓ 1/2/2020 4:52:36 PM	1/2/2020 4:52:40 PM	Success!
	✓ 1/3/2020 9:18:03...	1/3/2020 9:18:06 AM	Success!
	✗ 1/3/2020 9:18:03...	1/3/2020 9:18:12 AM	Failure: [0]
	✓ 1/4/2020 9:18:03...	1/4/2020 9:18:05 AM	Success!
	✗ 1/4/2020 9:18:03...	1/4/2020 9:18:12 AM	Failure: [0]
	✓ 1/5/2020 9:17:56...	1/5/2020 9:17:58 AM	Success!
	✗ 1/5/2020 9:17:56...	1/5/2020 9:18:07 AM	Failure: [0]
	✓ 1/6/2020 9:17:43...	1/6/2020 9:17:45 AM	Success!

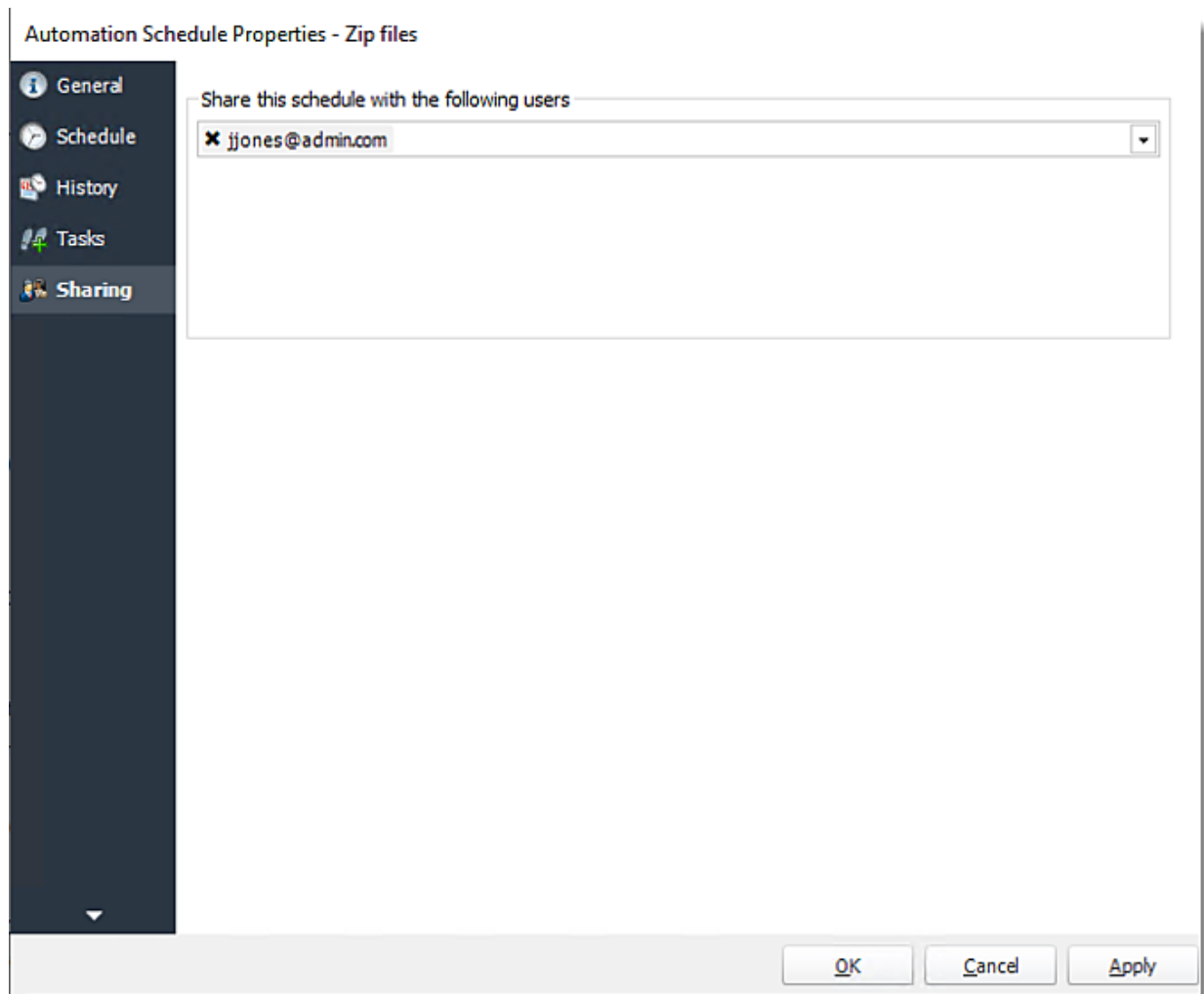
Clear Refresh

OK Cancel Apply

## •Tasks



- **Sharing:** Here you can share this schedule with multiple users.



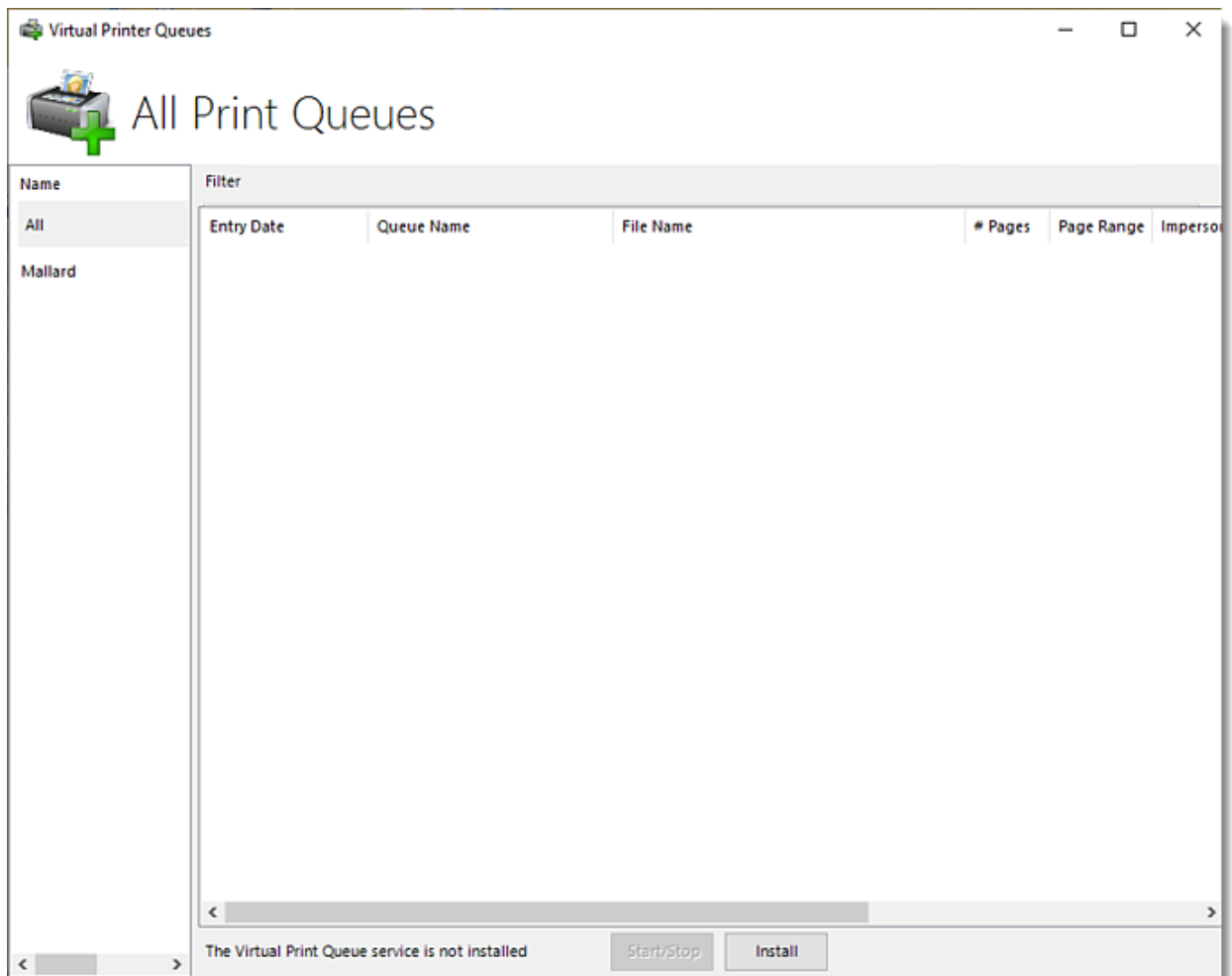
## How do I use Virtual Print Queue?

**Use Virtual Print Queue to log all your print jobs, re-print, and preview.**

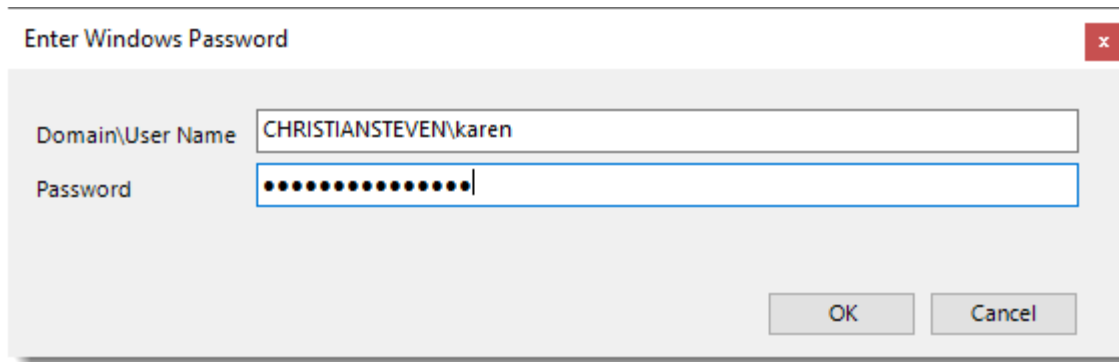
*You must add your printer in Integrations Library - Print Queue in order to use Virtual Print.*

### System Monitor - Virtual Print Queue

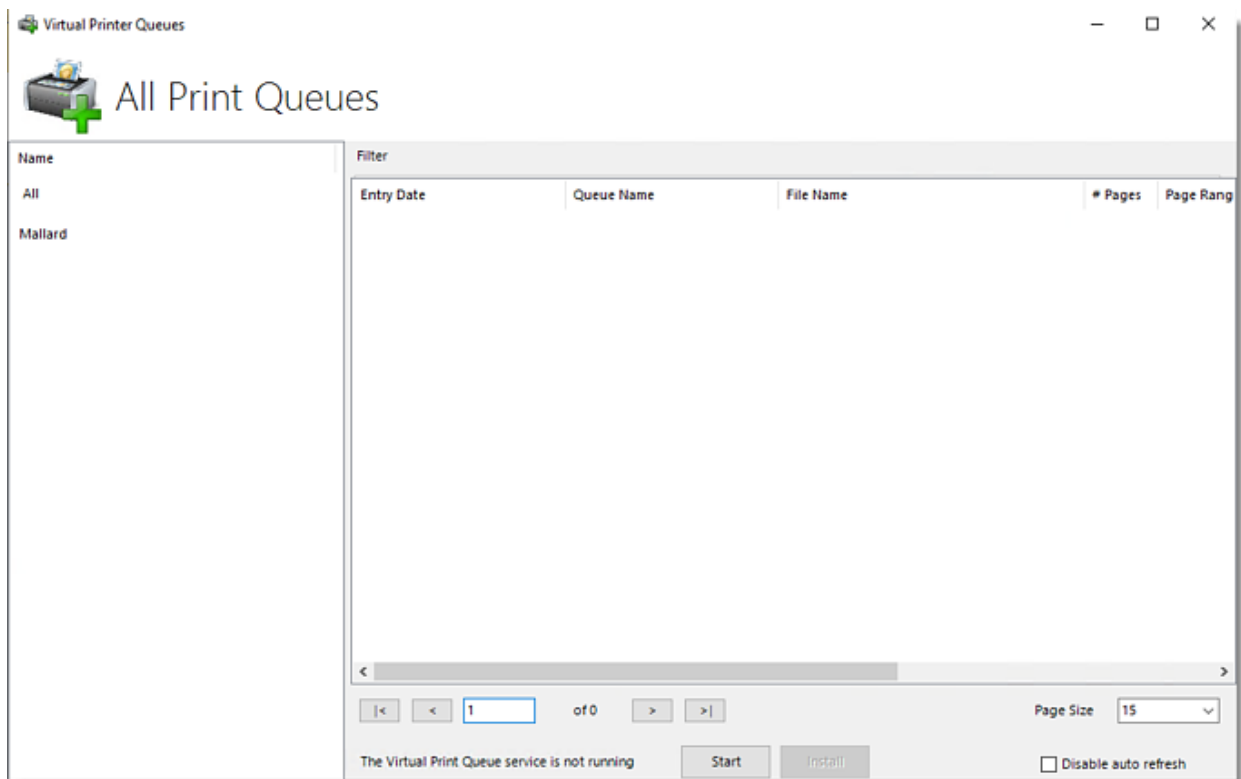
- Go to **System Monitor** and select **Virtual Print Queue**.



- To start using Virtual Print Queue, click **Install**.



- Enter your windows credentials and click **OK**.

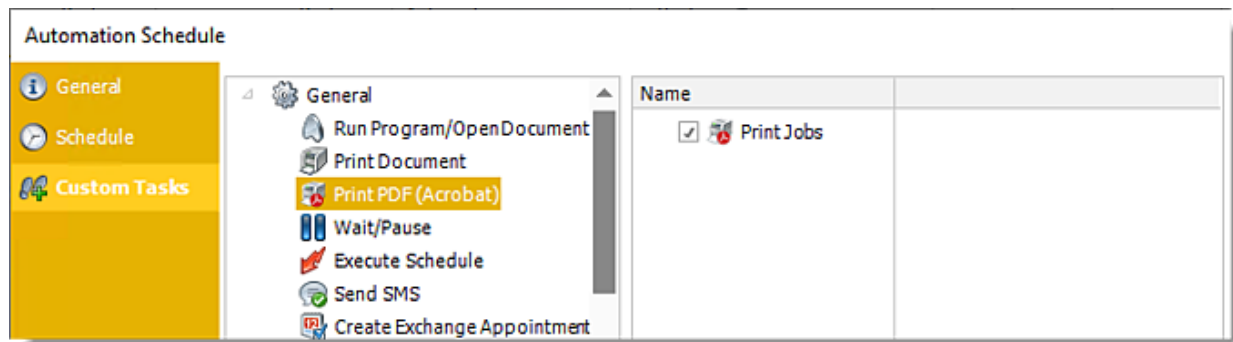


- Click **Start** to start the Virtual Print Queue service.

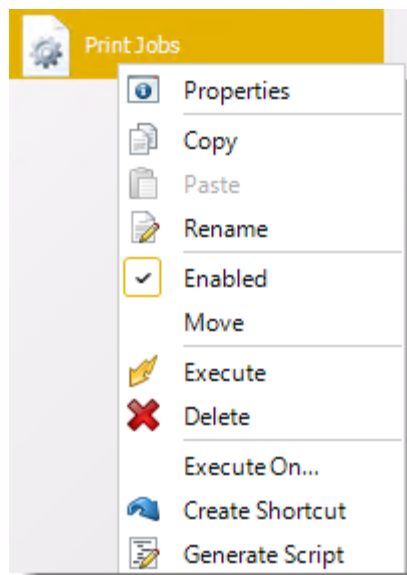
*You can stop the Virtual Print Queue service by clicking **Stop**.*

How to add print jobs in Virtual Print Queue?

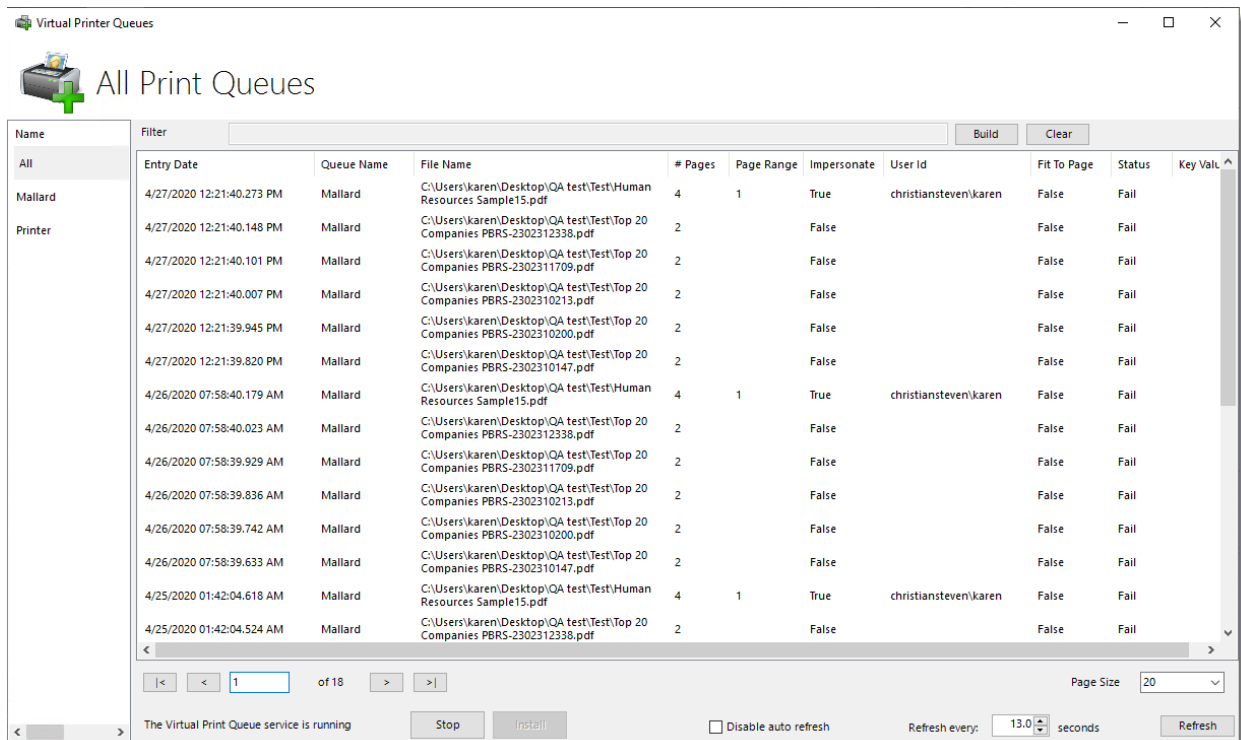
*In order to use the Virtual Print Queue, you must use Print Acrobat tasks.*



•Run the **schedule**.

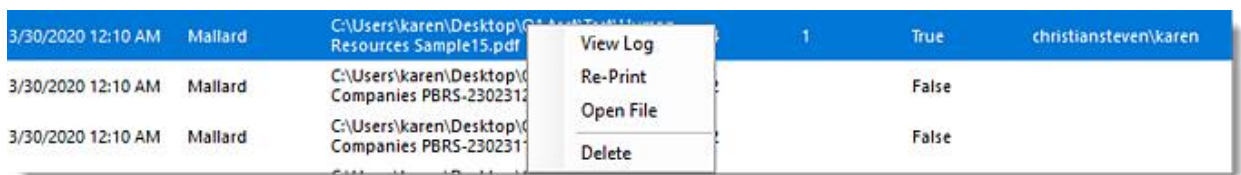


•The Print Job will appear in Virtual Print Queue.



### Print Jobs Context Menu

- **Right-click** the job to see its context menu.



- - **View Log:** You can view all the history logs of the print job.
  - **Re-print:** Re-print the job.
  - **Open File:** It will preview the report.
  - **Delete:** It will delete the job.



## How do I set up Collaboration in PBRs?

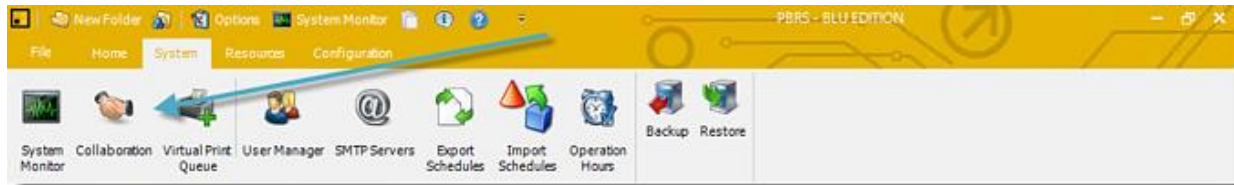
**Collaboration enables the ability to "assign" schedules to other PBRs servers.**

System - Collaboration

- Go to **System**.



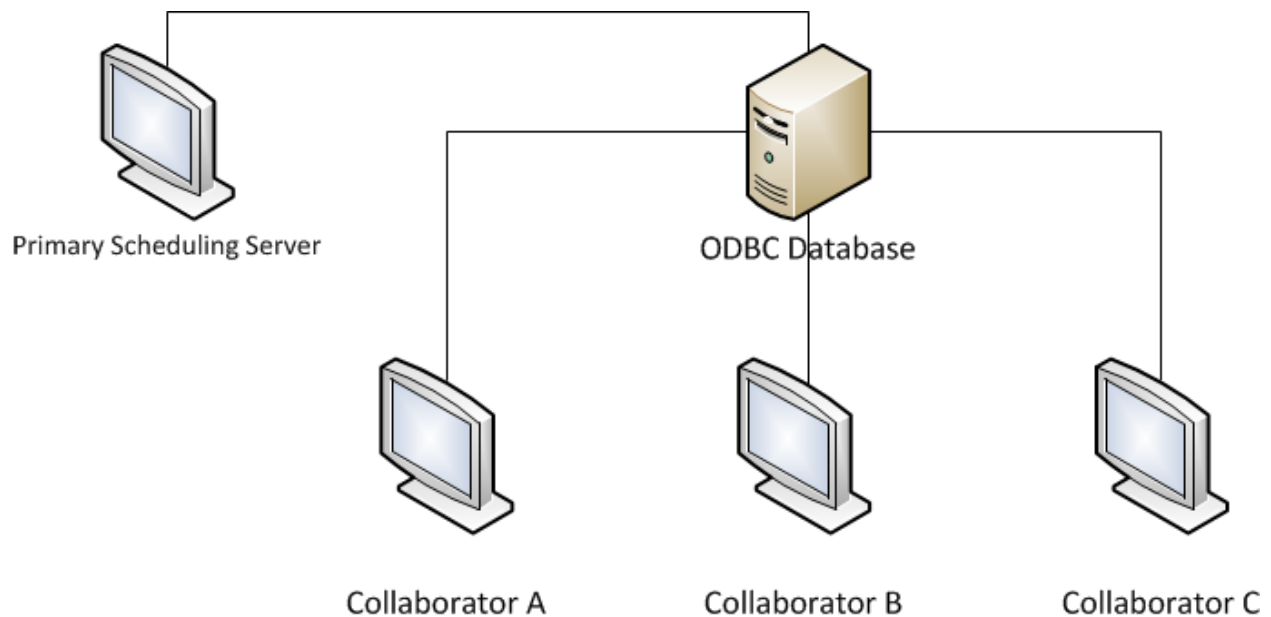
- Select **Collaboration**.



Collaboration enables the ability to "assign" schedules to other PBRs servers. Though the management and editing of the schedules will occur on the Primary PBRs server, processing and running of the schedule will occur on the collaborator (the other PBRs installation).

With Collaboration, resource-intensive schedules can be processed on more powerful servers. Also, numerous schedules can be spread out across an array of PBRs servers to reduce the overall load and run schedules more efficiently.

*PBRs servers/instances that are set up as collaborators only run schedules delegated to them by the Primary Server. Collaborators DO NOT process their own local schedules.*



Combined with Multi-threading, each PBRs Collaborator will have up to 4 threads. Therefore, quadrupling the number of concurrent schedules you can run simultaneously with every collaborator added.

*In the example picture shown above, there would be 16 available threads.*

## IMPORTANT

*The remainder of this guide will walk you through setting up collaboration with another PBRs server. It is imperative that you follow the steps below carefully. Failure to do so may result in an unsuccessful setup.*

## Requirements

- More than one PBRs Installation is required in order to properly set up collaboration. If you currently only have one installation of PBRs, please see the following links for more information regarding installing PBRs on another server:
  - [PBRs Pre-Requisites](#)
  - [Installing PBRs](#)
  - [Database Configuration](#)
  - [Activating PBRs](#)
- Each PBRs instance must be accessible through your internal network.
- Each remote server with PBRs installed must have the correct email, database, and system settings in order to ensure proper processing and delivery of the reports/schedules. **Each collaborator's settings should match the main scheduler.**
- The Primary Server's database must be migrated to your own SQL Server instance. Additionally, each collaborator must be connected to the primary scheduler's database.

## Setting up Collaboration

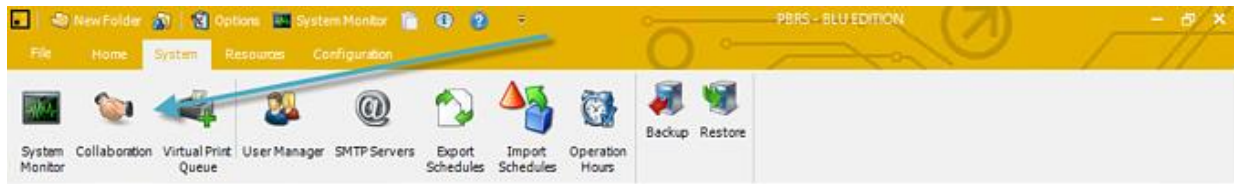
### Adding a Collaborator Server

To set up collaboration you must have the PBRS API - API Settings section configured in all servers.


- Open **PBRS** on the **Primary Scheduling Server**.
- Go to **System**.



- Select **Collaboration**.



- Click **Enable server Collaboration** and click **Add**.

 Collaborators


☐ Enable server Collaboration

Name	Path	API Endpoint	Leader

Scheduler Collaboration Method: ☒ Server Affinity ☐ Round-Robin (beta)

Add  
Delete

Collaboration Server

 Collaboration Server

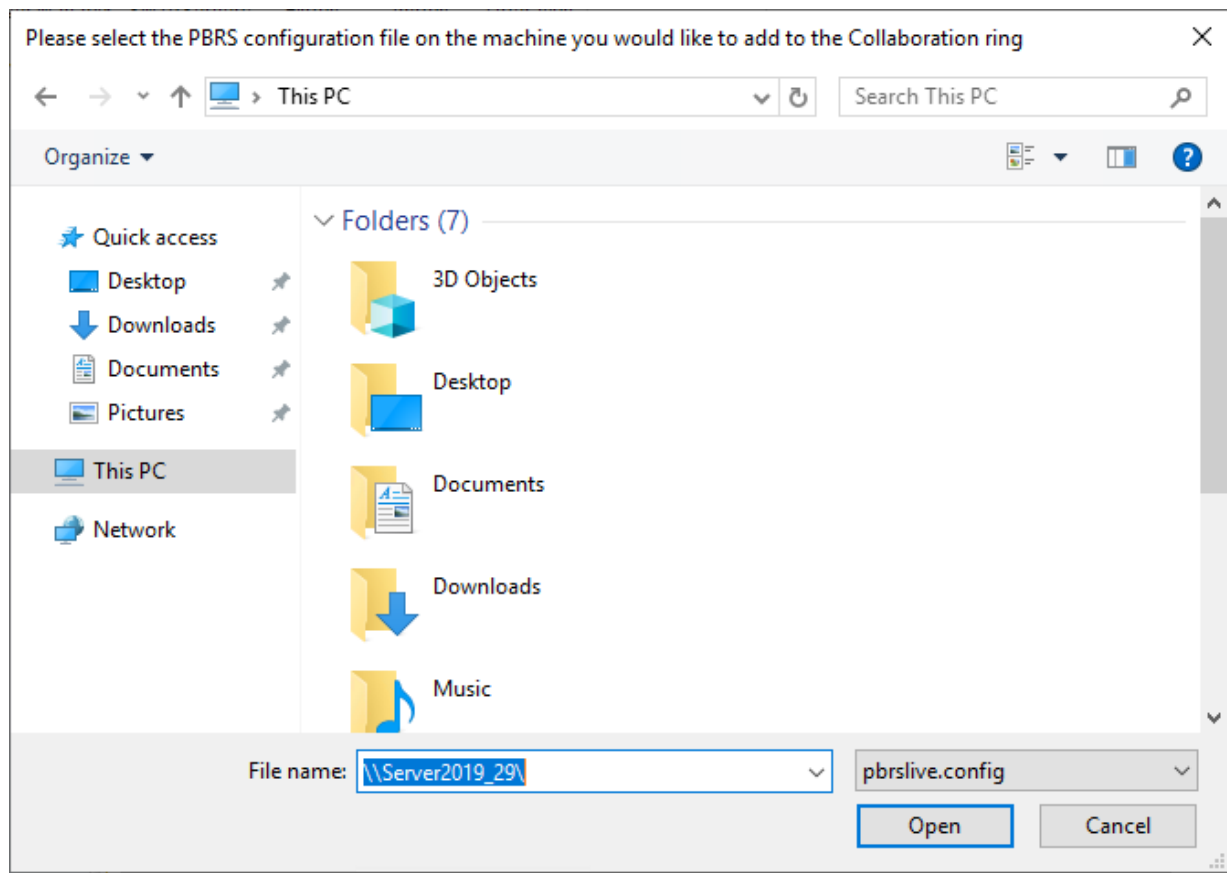
API Endpoint

Config file

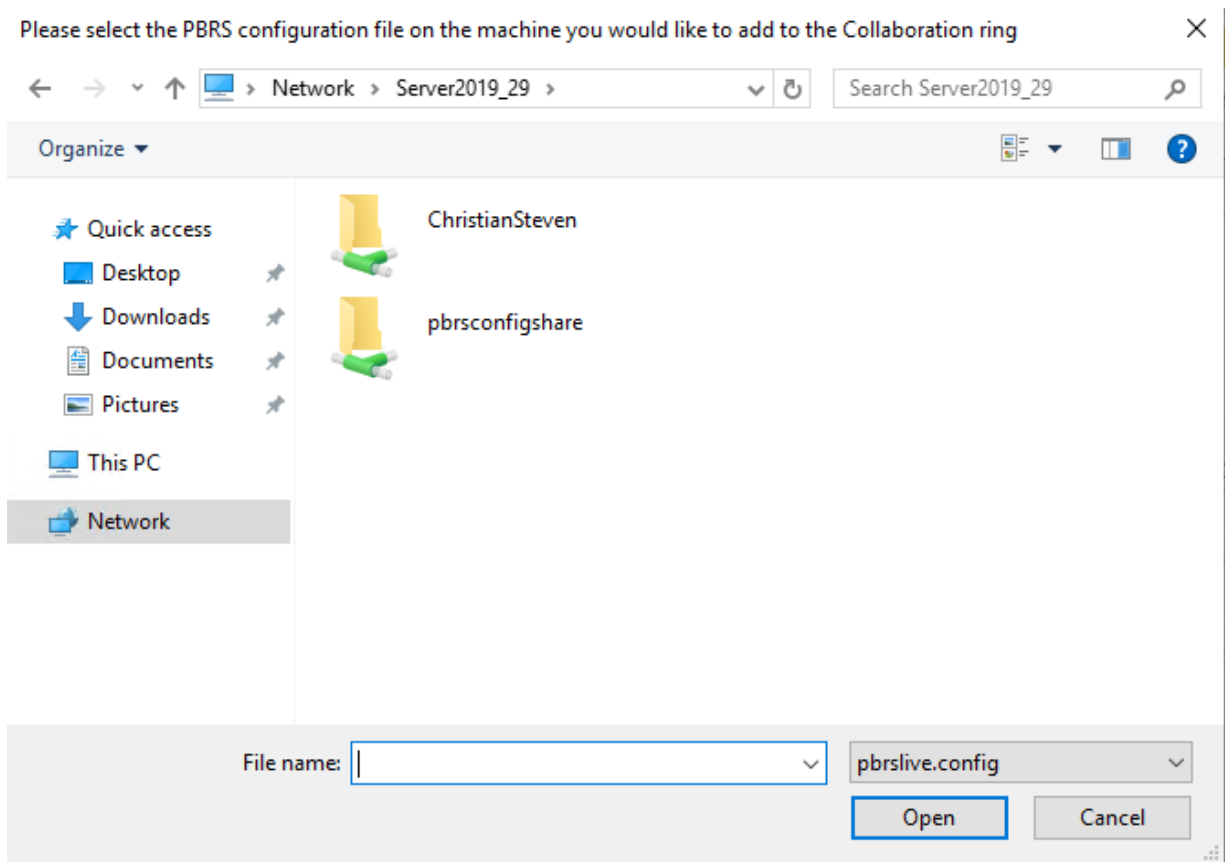
- Click the (...) button to browse through the network and select the **PBRS Collaboration Server config file** or enter the **Server API Endpoint** and click **Connect**.

*PBRS Collaborator server must have collaboration enabled.*

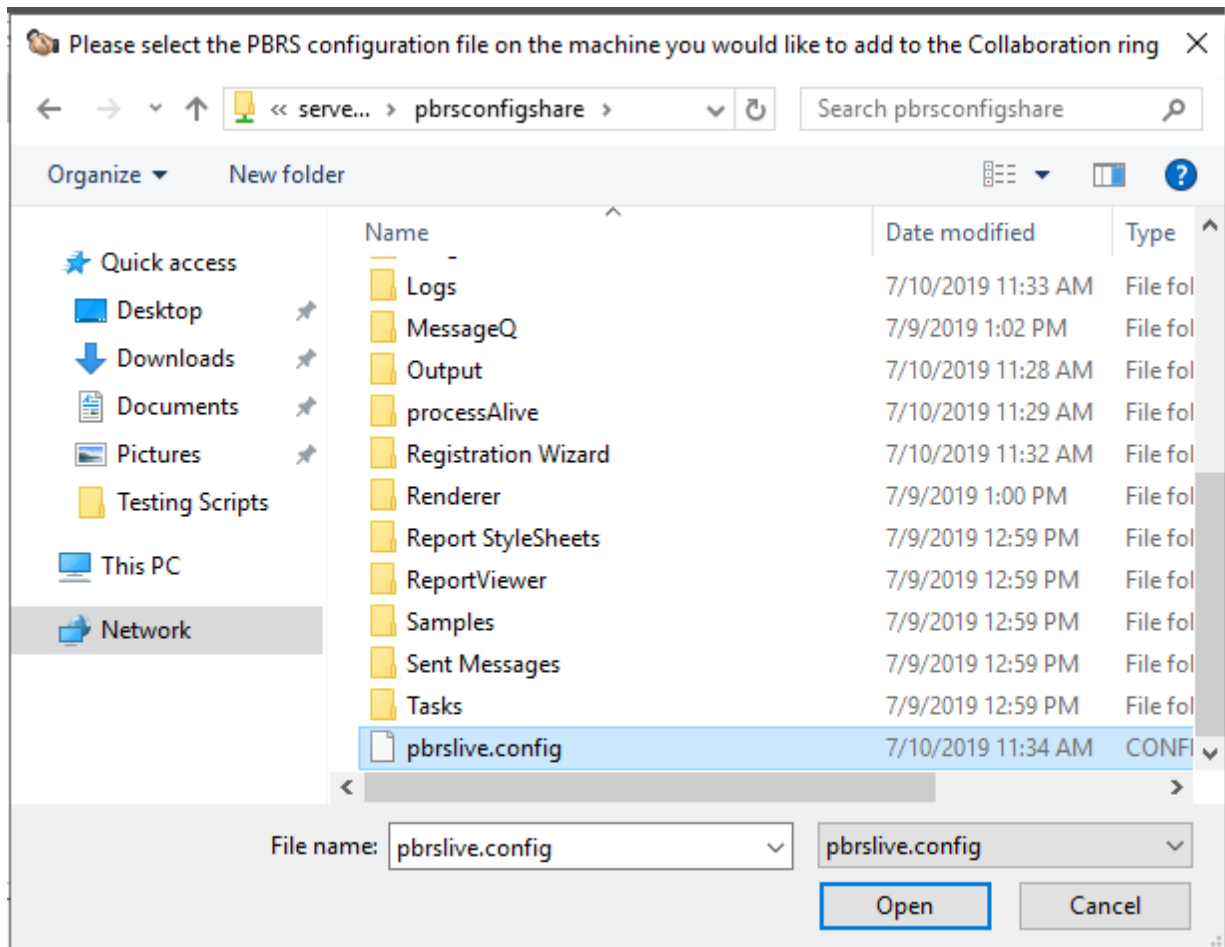
- Enter the Server Name in the File Name textbox.



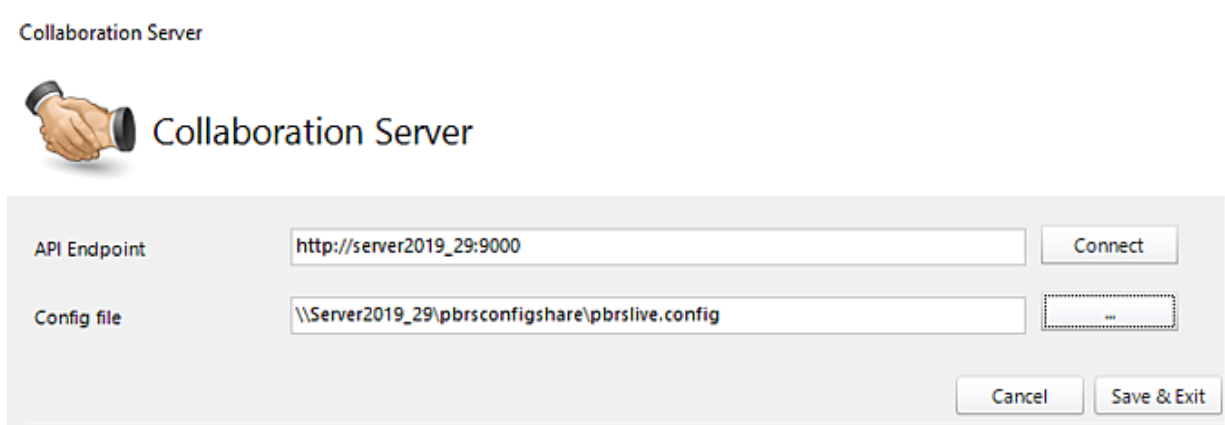
- Click **Open**.



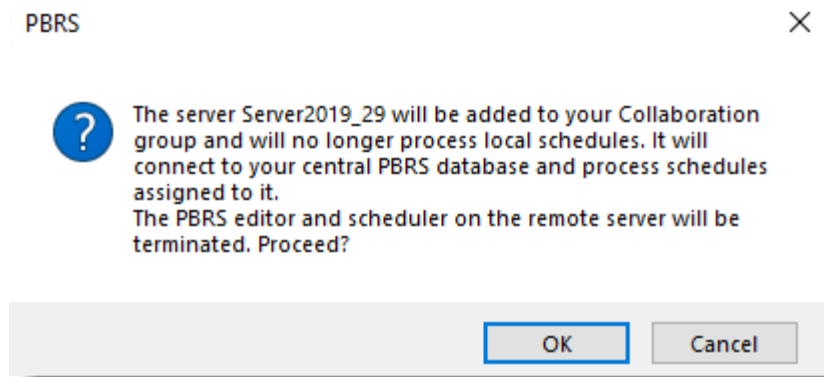
- Select **pbrsconfigshare**.



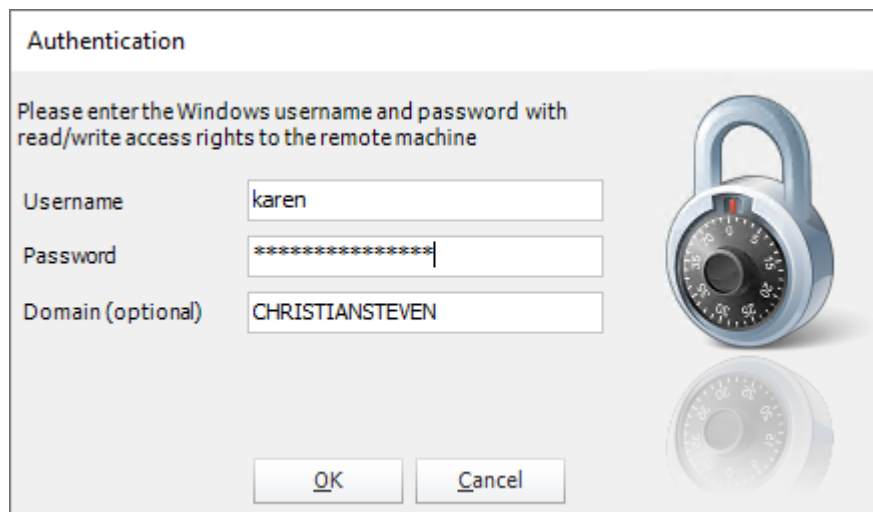
- Select **pbrslive.config** and click **Open**.



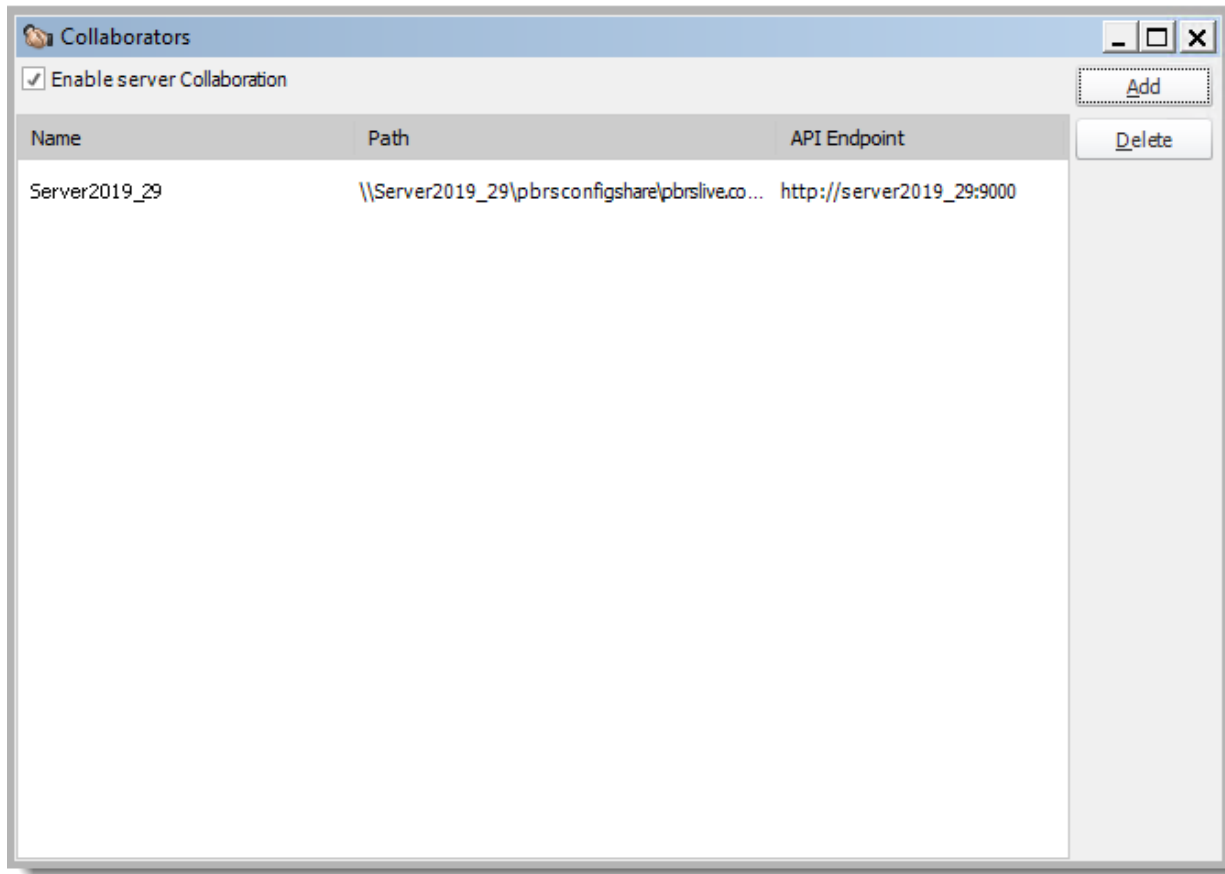
- Click **Connect** and **Save&Exit**.



- Click **OK**.
- Enter your windows credentials.
- Click **OK**.

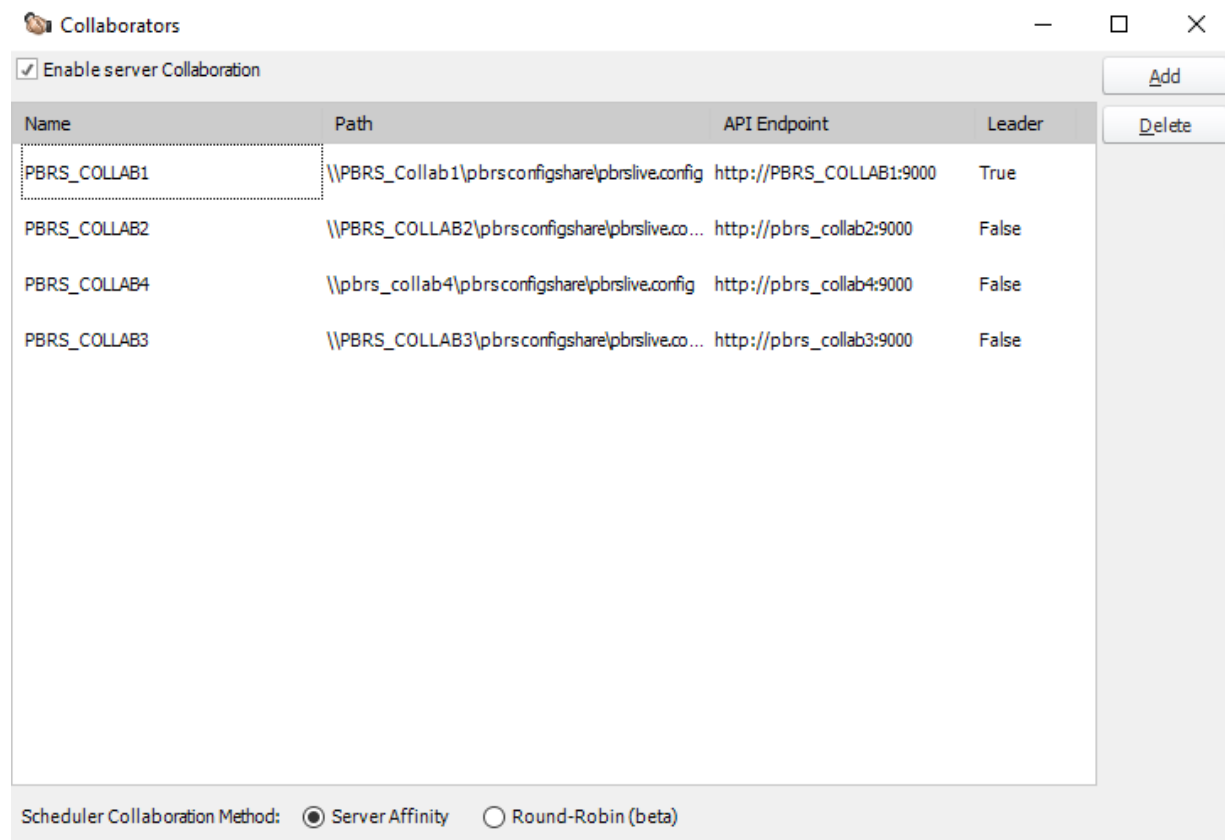






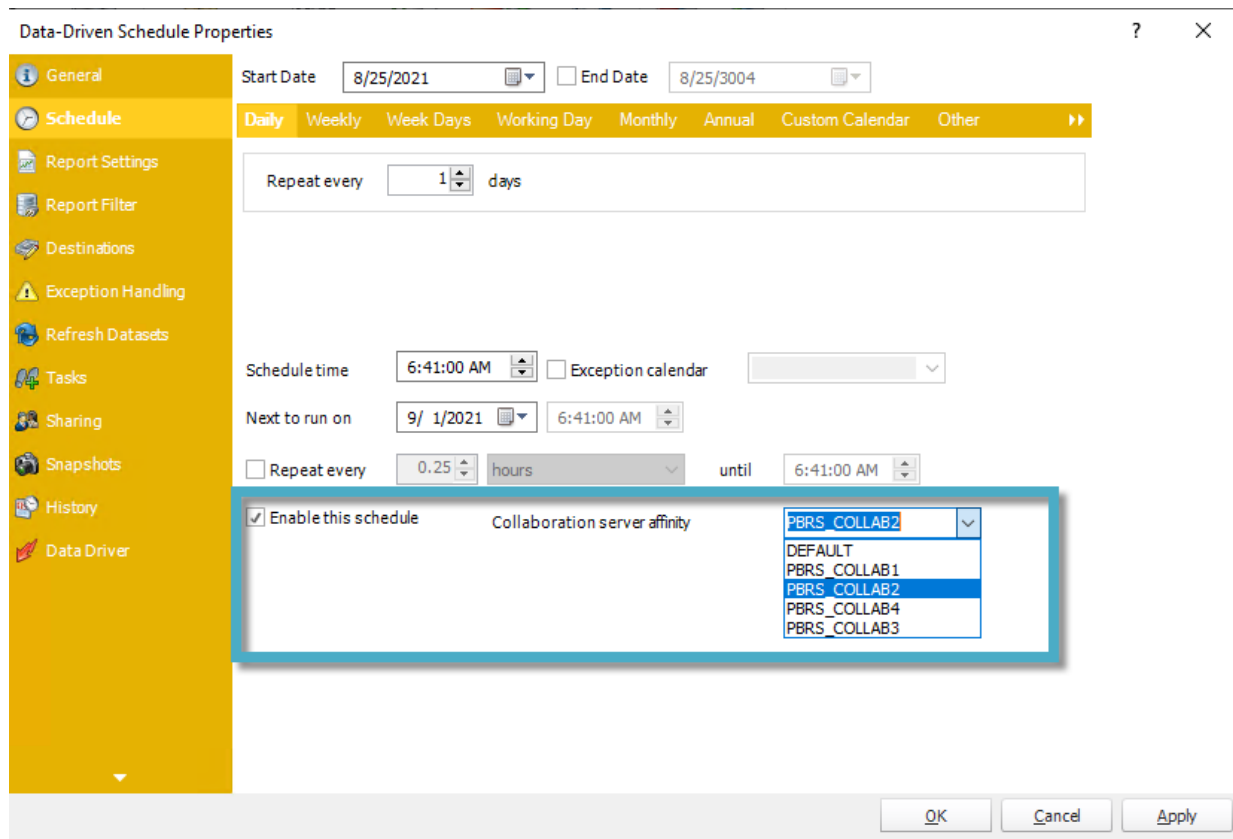
- PBRS Collaborator server is now added in the PBRS Primary Scheduling Server Collaboration system.

## Selecting the Scheduler Collaboration Method



They're two options for the Scheduler Collaboration type. It can be Server Affinity or Round-Robin.

- **Server Affinity:** Check this method if you want to select a specific server to run a schedule. This is known as the main method. In the Schedule Wizard, it will appear the option to select the server to run the schedule.

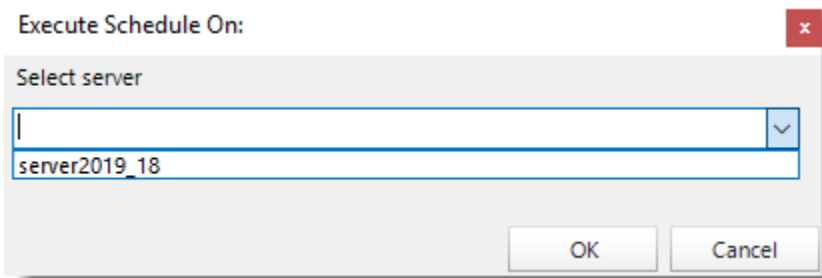
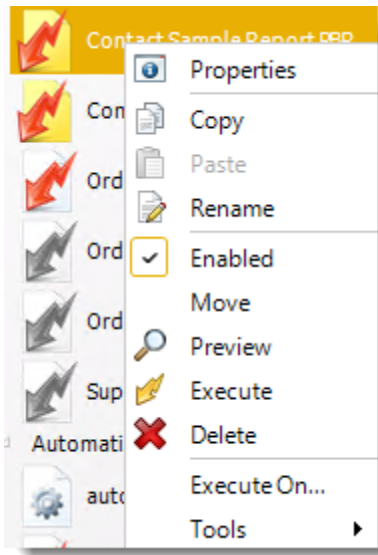


- **Round-Robin:** Check this method if you don't have any server preference to run a schedule. The schedules due to run will be spread among the servers. This will ignore the Collaboration server affinity selected on the Schedule Wizard and will select any server available to run the schedule.

#### *Manually Executing a Schedule in Collaboration Servers*

- If you have a schedule already created and you want to run the schedule on the Collaborator Servers, go to the **Schedule Context Menu** and click **Execute On...**

*You need to enable Process Watcher in Options - General.*



- Select the Server and click **OK**.
- The schedule will execute on Server2019\_18.

## How do I create a SQL Server Backup in PBRs?

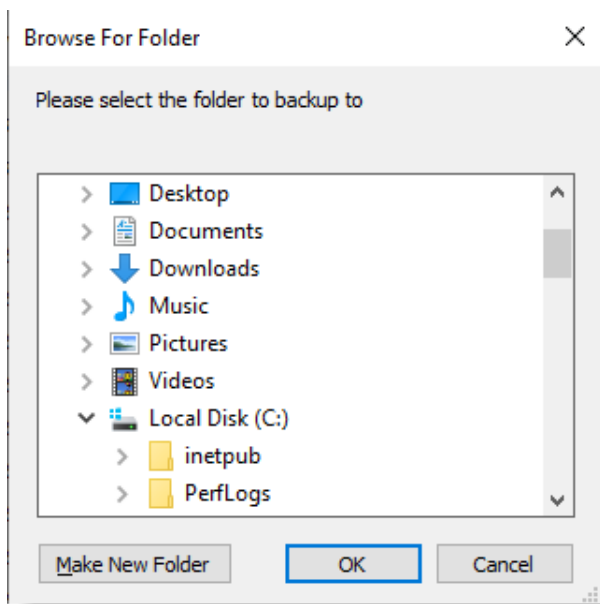
**PBRs has the ability to create a SQL Server backup. This is how to do it.**

System - SQL Server Backup

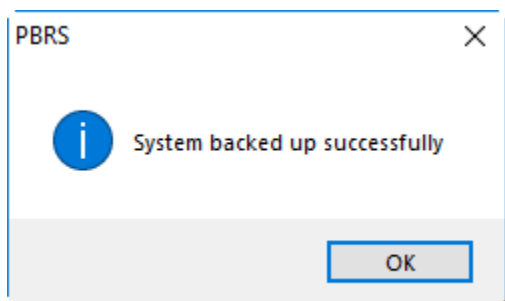
- Go to **System** and click the **Backup down arrow button**.



- Select **SQL Server Backup**.



- Select the folder where the backup will be stored and click **OK**.



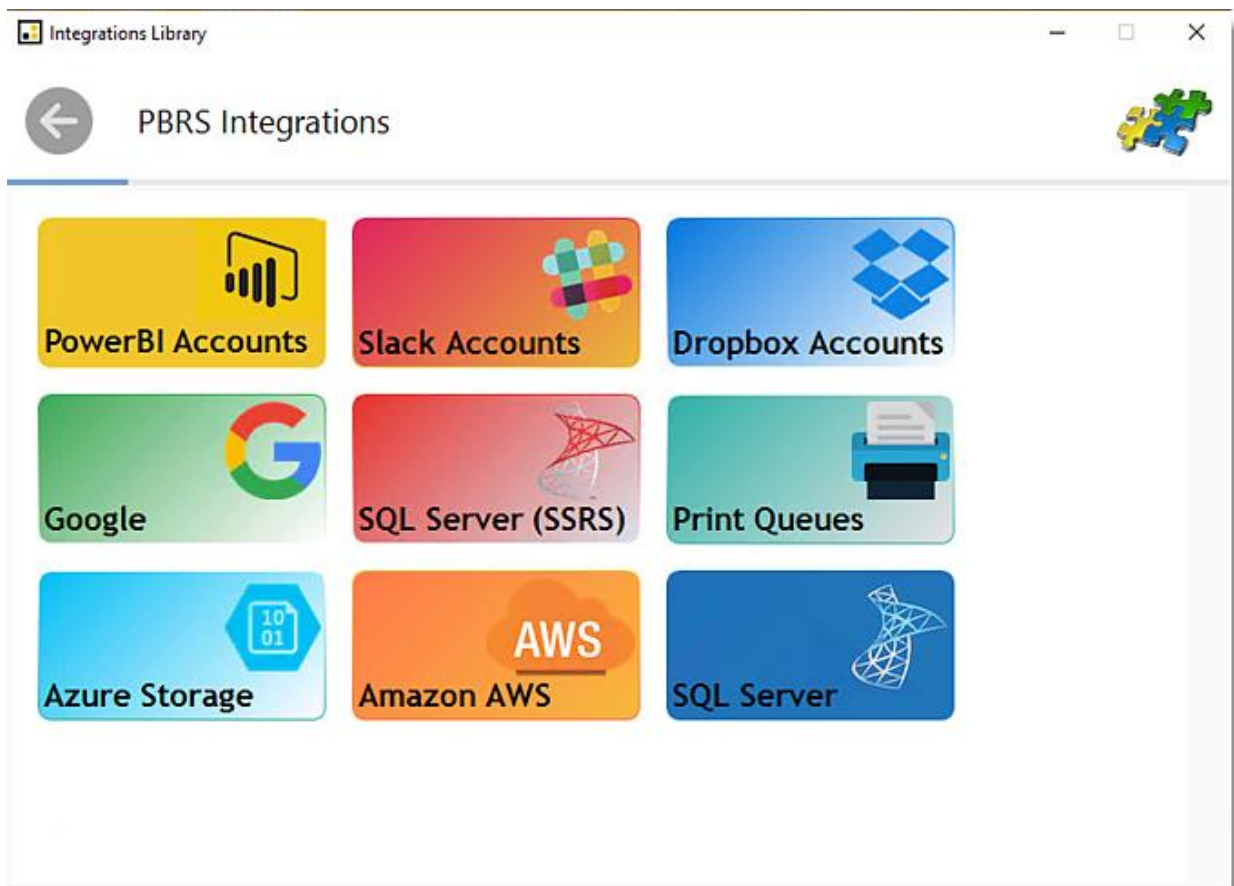
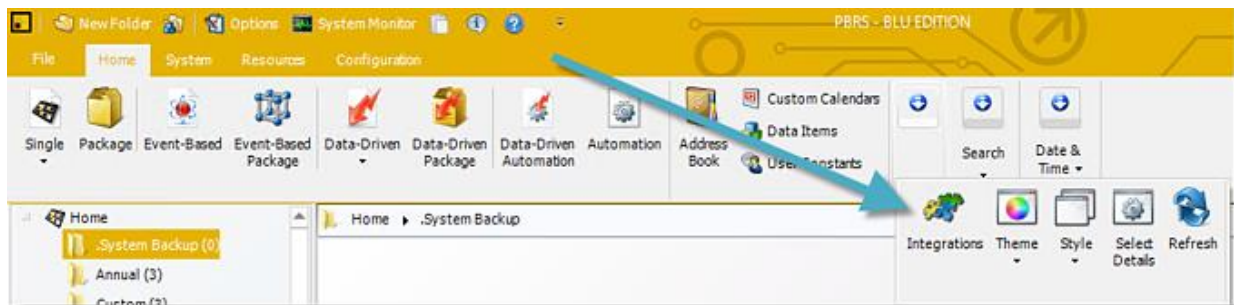
- SQL Server backed up successfully.

How do I add an SQL Server account in PBRs?

**This is how you would associate your SQL Server account(s) with PBRs. Associating your SQL Server gives PBRs access to the database you wish to use the schedule(s). PBRs will use stored credentials to access and export reports & dashboards.**

SQL Server Account

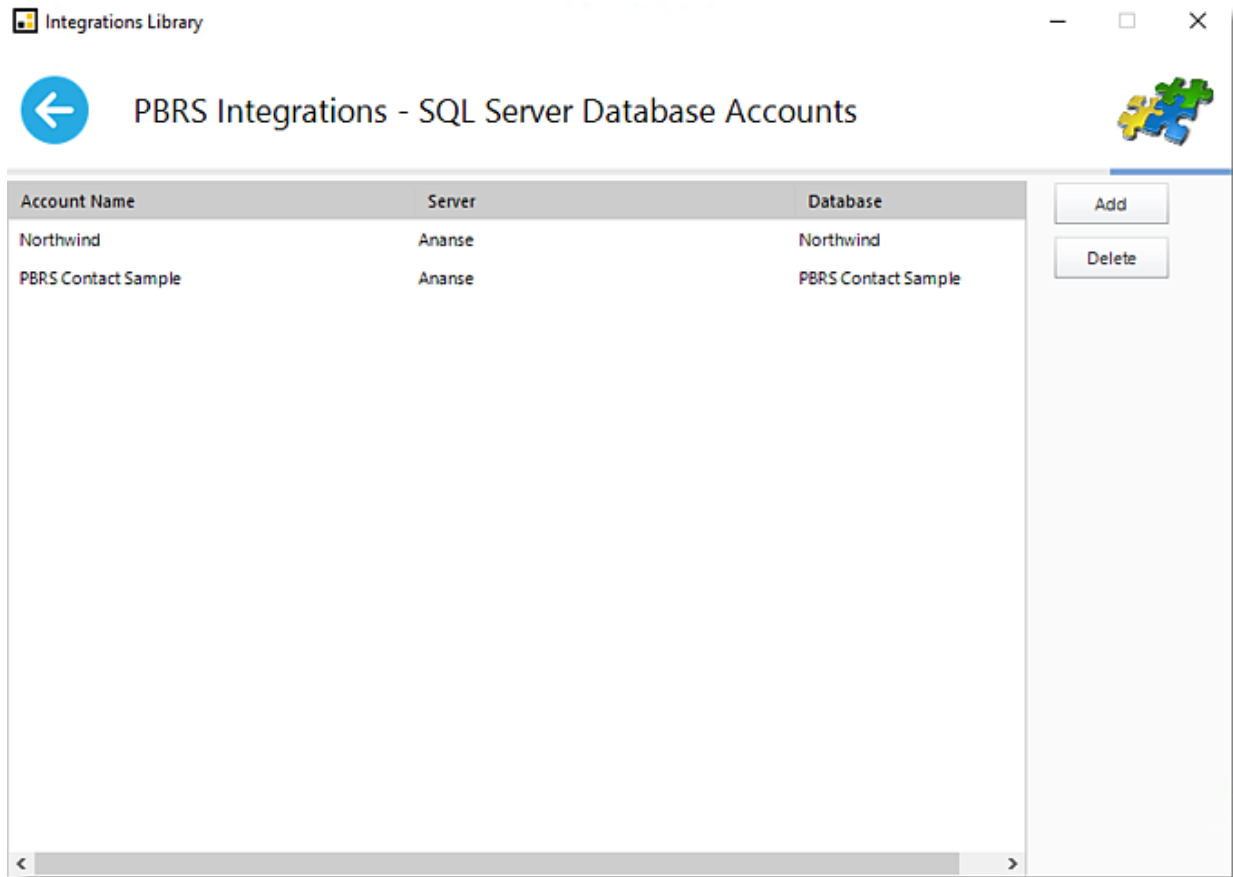
- Go to **Integrations**.



- Select **SQL Server**.

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- Click **Add**.



## Add a SQL Server Database Account

General | Sharing

Account Name

Server Name

Database Name

User Id

Password

Press 'Connect' to test access to the account>>

Connect

Cancel Save & Close

- **Account Name:** Enter the Account name.
- **Server Name:** Enter the server name.
- **Database Name:** Enter the database name.
- **User ID:** Enter the SQL Server User ID.
- **Password:** Enter the SQL Server password.
- Click **Connect**.





## Add a SQL Server Database Account

General | Sharing

Account Name: Northwind

Server Name: Ananse

Database Name: Northwind

User Id: sa

Password: .....

Press 'Connect' to test access to the account > >

Please wait...

Cancel Save & Close

PBRS

Connection test succeeded!

OK

- Click **OK**.
- Click **Save&Close**.
- The SQL Server Database Account is added in PBRS.

## How do I use the PBRs API?

The **PBRs API** is used for collaboration and other system functions. **PBRs API** allows you to run schedules as well as control the scheduling services. Here is how to install and configure it if needed.

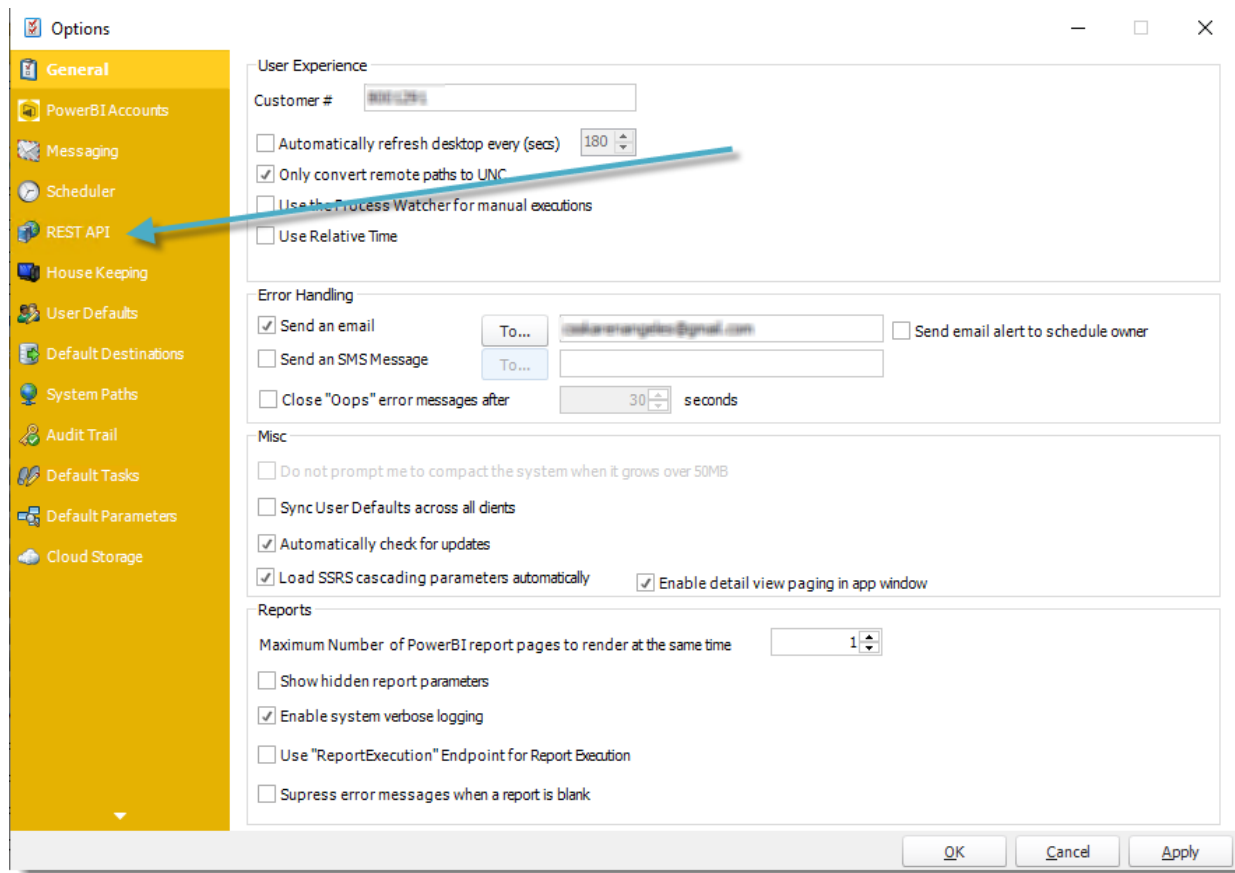
### Options - PBRs API

The PBRs API is used for collaboration and other system functions. PBRs API allows you to run schedules as well as control the scheduling services. You can use any programming language of your choice to query the API. Here is how to install and configure it if needed.

### How to Install the PBRs API?

- Go to **Options**.






•Go to **REST API**.

## API Settings

API Configuration



### PBRS API Configuration

API Settings | API Clients

Configuration Settings

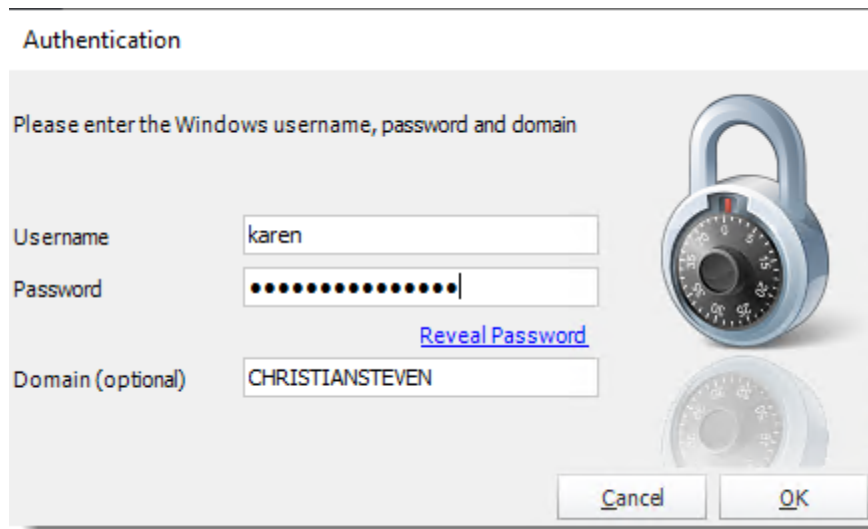
Protocol

Port

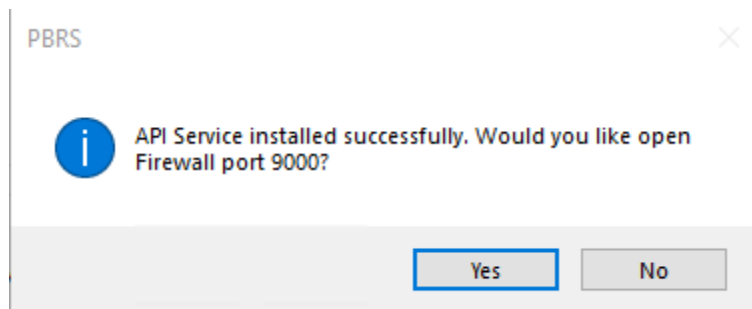
API Status

The PBRS API Service is not installed

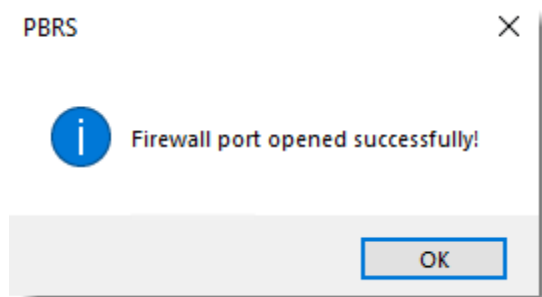
- The API Settings section is used for collaboration and other system functions.
- Click **Install API**.



- Enter your windows credentials to install API.
- Click **OK**.




- Click **Yes**.



- Click **OK**.

## API Configuration



### PBRS API Configuration

API Settings | API Clients

Configuration Settings

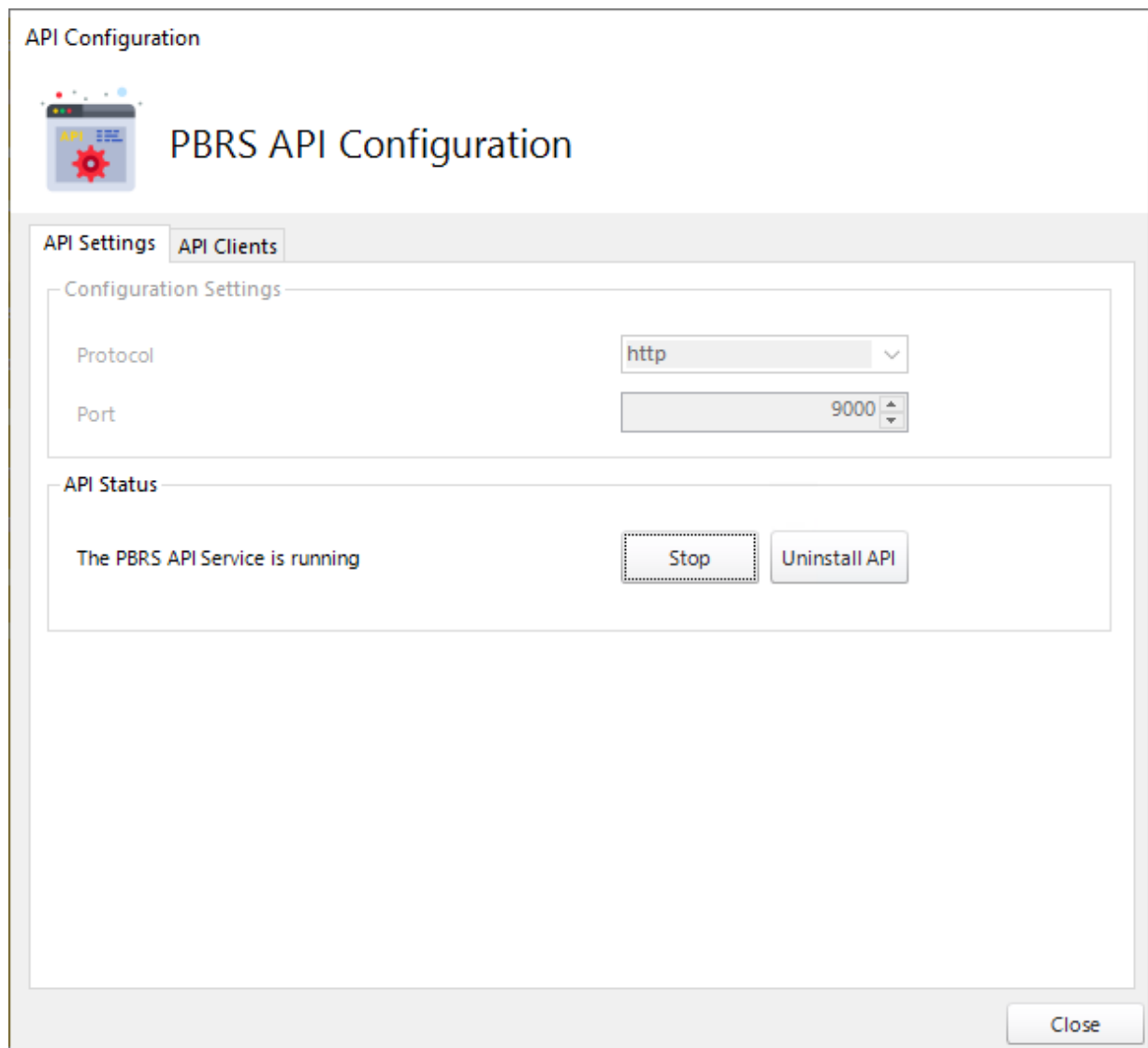
Protocol

Port

API Status

The PBRS API Service is not running

- PBRS API is installed.
- Click **Start** to start the PBRS API Service.



- The PBRS API is configured and PBRS API Service is running.

## API Clients

API Configuration



### PBRS API Configuration

API Settings API Clients

Name	Client ID
Karen	8c00d59d-8c47-41e5-8f85-b8e038c0f15b

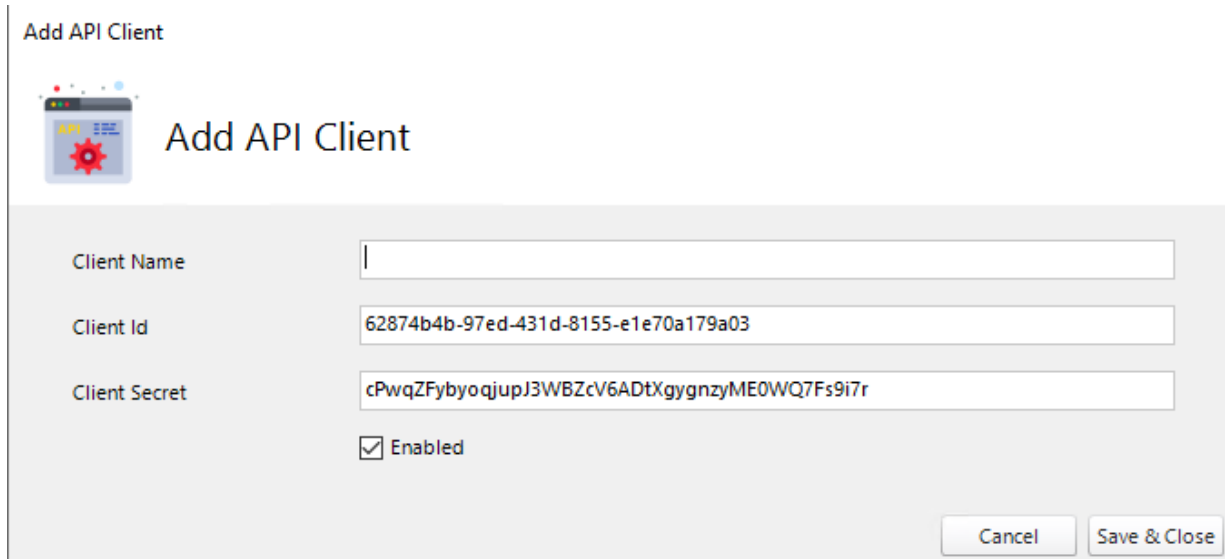
Add

Delete

Close

- API Clients section is used to give another application access to the PBRS API.
- Click **Add**.





Add API Client

Client Name

Client Id

Client Secret

☒ Enabled

Cancel Save & Close

- You only need to provide the Client name as the Client ID and Secret are automatically generated by PBRs.
- Once the Client name is added, click **Save & Close**.

How do I use the PBRs API?

#### *Getting Started*

PBRs's API allows you to run schedules as well as control the scheduling services. You can use any programming language of your choice to query the API.

The PBRs API is a RESTful API based on HTTP requests and JSON responses. The easiest way to start using the PBRs API is by using Postman, a free tool which helps developers run and debug API requests, and is the source of truth for this documentation.

*Unless otherwise specified, all requests must be made with the **Content-Type** set to **application/x-www-form-urlencoded** in the request header.*

#### Authentication and Authorization

The PBRs API can use OAuth2 Client Credentials or Username and Password authentication and authorization flow. All API endpoints except the `/api/service/ping` require a valid access token for authorization.

## Get Token

### Username and Password Flow

To request an access token using the credentials of a PBRs user, make a POST request as follows:

**http://[pbrsserver]:9000/api/login/token**

POST http://[pbrsserver]:9000/api/login/token

POST Body

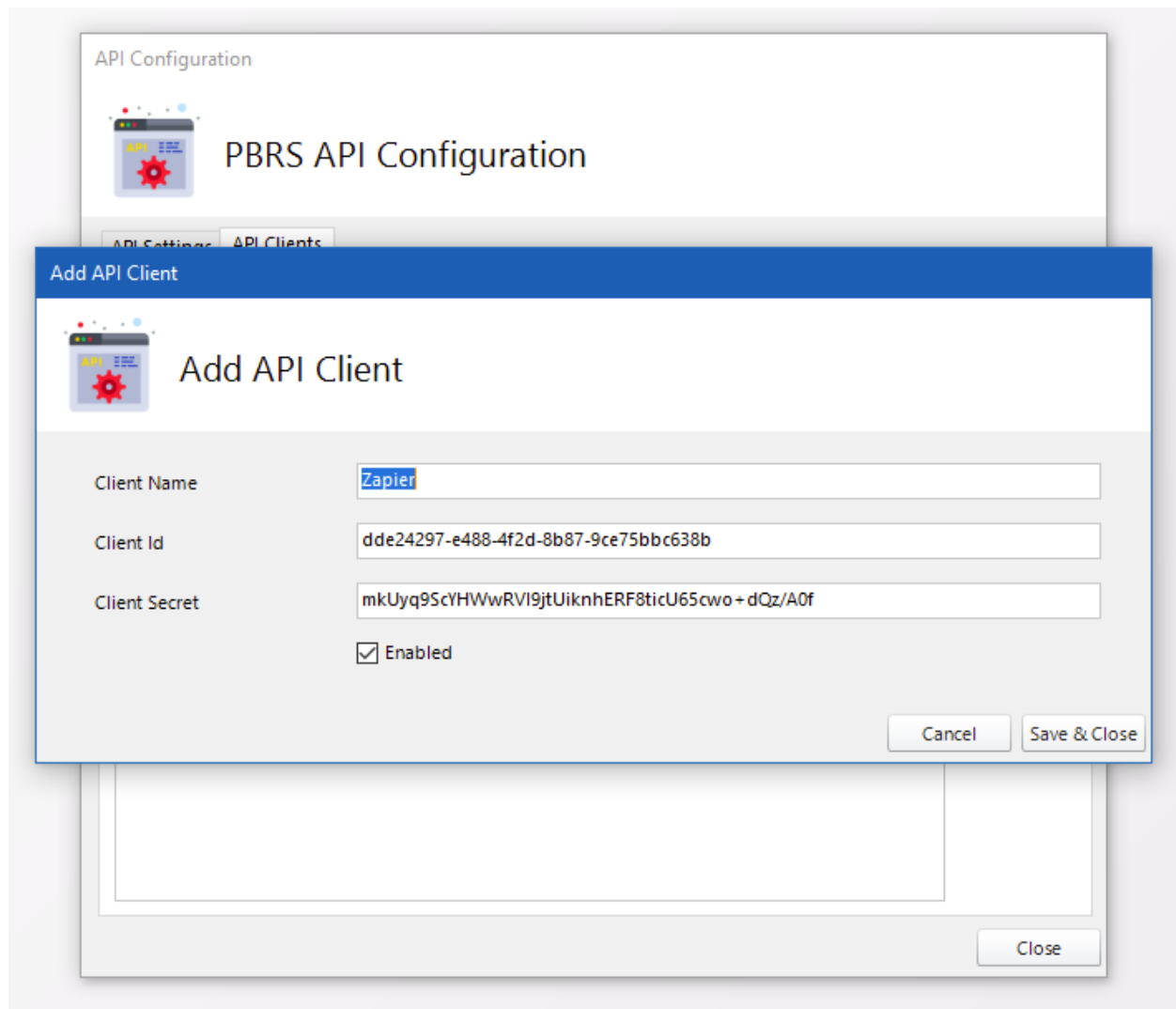
```
string username  
string password
```

Example Result

```
{  
  "UserId": "jd",  
  "FirstName": "John",  
  "LastName": "Doe",  
  "role": "Administrator",  
  "ExpiryDateEpoch": 1617803400,  
  "token":  
  "VEw+8f/9N1D8ZiJmOses38Wad0RD/NU9jUDIVVK8CeUcmIjErSZDn965NVmSIEZJd  
3gfRbkUajd5dCNm87c295S1TO4RKbeJUho6t6XEJUdiJSs1T4WY2xEaR75RqufM3Xi3  
u55Pp3AsQX0jmN0wcOe/26k1y3feM8hZmnjffbDYZT7azlpiebLBPaxhY6dAA==",  
  "token_type": "custom"  
}
```

### Client Credentials Flow

In order to use obtain an access token, you must first add the Client application to PBRs. This is done under the Configuration/PBRs API screen.



You only need to provide the Client name as the Client ID and Secret are automatically generated by PBRs.

To request an access token, make a POST request as follows:

**http://[pbrsserver]:9000/oauth2/token**

POST http://[pbrsserver]:9000/oauth2/token

POST Body

```
string grant_type: client_credentials
string client_id
string client_secret
```

Result

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```
{
string access_token
string token_type: bearer
int expires_in
}
```

Below is an example of what a successful authentication result looks like:

```
{
  "access_token": "AQAAANCMnd8BFdERjHoAwE_...",
  "token_type": "bearer",
  "expires_in": 86399
}
```

*PBRs API tokens expire in 24 hours.*

Once the access token has been obtained, it must be included as part of your **API request headers**.

For the username and password flow, the request header must include:

```
Authorization: token {access_token}
```

For client credentials flow include:

```
Authorization: bearer {access_token}
```

## EndPoints

The API is accessed by making HTTP requests to a specific URL endpoint, in which GET or POST variables contain information about what you wish to access. Every endpoint is accessed via the port and protocol configured in PBRs. The PBRs API Service must also be running on the PBRs server.

The default starting endpoint for the API is:

```
http://[pbrserver]:9000/api
```

## Service EndPoint

The Service Endpoint allows you to query and control the PBRs services.

### *Ping*

To check if the API is up and running, you can use Ping. The call will return 1 when the API is running.

```
GET /api/service/ping
```

Result:

```
int i
```

### *IsSchedulerRunning*

To check if the PBRs scheduler is running:

```
GET /api/service/isschedulerrunning
```

Result:

```
{  
  bool Result  
}
```

### *GetConfigPath*

To get the path to the PBRs config file:

```
GET /api/service/getconfigpath
```

Result:

```
{  
  string Result  
}
```

### *UpdateCollaborationSettings*

To update the collaboration settings for a server:

```
POST /api/service/updatecollaborationsettings
```

POST Body

```
bool IsCollaborationEnabled  
int CollaborationId  
string CollaborationLeader
```

```
string ConType
string ConString
string ConString2
```

## Schedule Endpoint

The Schedule endpoint allows you to control PBRs schedules. Where a schedule type must be specified, the following are valid:

- *"report"* or *"single"*: all Single and Data-Driven Schedules
- *"automation"*: all Automation schedules
- *"package"*: all Single and Data-Driven Package schedules
- *"event"*: all Event-Based schedules
- *"event-package"* or *"eventpackage"*: all Event-Based Package schedules

The schedule's unique Id can be obtained from the schedule's properties screen in the application GUI.

### *ExecuteSchedule*

Synchronously kicks off a schedule and waits for its completion.

```
POST api/schedule/executeschedule
```

### POST Body

```
string ScheduleType
int UniqueId
string RunBy
```

### Result

```
{
  bool Result
  string ErrorMessage
  int ErrorNumber
}
```

### *ExecuteScheduleOnTimeAsync*

Asynchronously kicks off the schedule as if it is being run by the scheduler. At completion, the schedule's *NextRun* date will be incremented.

```
POST api/schedule/executescheduleontimeasync
```

### POST Body

```
string ScheduleType
int Uniqueld
string RunBy
```

Result

```
{
  string ExecutionId
}
```

*ExecuteScheduleAsync*

Asynchronously kicks off a schedule and does not wait for its completion. The resulting *ExecutionId* can be used to query the execution status

POST api/schedule/executescheduleasync

POST Body

```
string ScheduleType
int Uniqueld
string RunBy
```

Result

```
{
  string ExecutionId
}
```

*GetNumberOfFreeThreads*

Gets the number of threads that are available for schedule execution based on the configured maximum thread count set in the application.

GET api/schedule/getnumberoffreethreads

Result

```
{
  int Result
}
```

*CancelExecution*

Attempts to cancel an existing async execution:

```
GET api/schedule/cancelexecution?ExecutionId={ExecutionId}
```

Result

```
{  
  string Result  
}
```

*GetExecutionStatus*

Retrieves the status of a schedule execution. The status can be one of:

- Waiting
- Executing
- Completed

```
GET api/schedule/GetExecutionStatus?ExecutionId={ExecutionId}
```

Result

```
{  
  string ExecutionId  
  int UniqueId  
  int ProcessId  
  string Status  
  long EntryDateEpoch  
  long CompletionDateEpoch  
  string RunBy  
  string ResultJson*  
  string ServerName  
}
```

\*ResultJson Format

```
{  
  bool success  
  string errormessage  
}
```

*GetExecutionQueue*

Returns an array of schedules that have been executed in the past 12 hours as well those waiting to be executed and currently executing.

```
GET api/schedule/GetExecutionQueue
```



## Result

```
[
{
  string ExecutionId
  int UniqueId
  int ProcessId
  string Status
  int EntryDateEpoch
  int CompletionDateEpoch
  string RunBy
  string ResultJson
  string ServerName
  string ScheduleType
  string ScheduleName
}
]
```

## Folder Endpoint

The Folder endpoint allows you to traverse the entire PBRS folder hierarchy including schedules.

### *Get Folder*

Retrieves the details about a Folder based on the provided ID. To get the topmost folder, provide folder ID.

```
GET api/folder/get/{id}
```

## Result

```
{
  int FolderId
  string folderName
  int FolderParent
}
```

### *GetSubFolders*

Retrieves an array of folders for the given folder ID.

```
GET api/folder/getsubfolders/{id}
```

## Result

```
[
{
  int FolderId
  string folderName
}
```

```
int FolderParent
}
]
```

### *GetSchedules*

Retrieves an array of schedules for the given folder ID.

```
GET api/folder/getschedules/{id}
```

### Result

```
[
{
  int UniqueId
  string Name
  string ScheduleType
  bool IsDataDriven
  bool IsEnabled
}
]
```

### *GetUniqueIdFromPath*

Returns the unique identifier of any schedule in a given folder path.

```
POST api/folder/getuniqueidfrompath
```

### POST Body

```
string Path
string ScheduleName
string ScheduleType
```

### Result

```
{
  int UniqueId
}
```

### *GetFolderFromPath*

Returns the folder object from the given path.

```
POST api/folder/getfolderfrompath
```

### POST Body

```
string Path
```

## Result

```
{
  int FolderId
  string folderName
  int FolderParent
}
```

## PowerBIAccount Endpoint

The PowerBIAccount endpoint allows you to interrogate the Power BI accounts in PBRs.

### *GetAll*

Returns a collection of all the Power BI accounts in PBRs.

```
GET api/powerbiaccount/getall
```

### Example Result

```
[
  {
    "AccountName": "Sales",
    "AccountId": "16f471xb-87fb-4f74-8fea-0a5df5a8156b"
  },
  {
    "AccountName": "Accounts",
    "AccountId": "0247ef0a-1a50-427b-ac06-cfd711c54d16"
  }
]
```

### *GetWorkspaces/{Id}*

Returns a collection of all the workspaces in the specified Power BI account.

```
GET api/powerbiaccount/getworkspaces/{id}
```

### Example Result

```
[
  {
    "Name": "My Workspace",
    "Id": ""
  },
  {

```

```
[
  {
    "Name": "Tests",
    "Id": "24a89913-81fe-4815-a822-8d49cxxxfec1"
  },
  {
    "Name": "Dev",
    "Id": "8b16abae-f65a-445d-b17d-2fbxxx4e59c7"
  },
  {
    "Name": "Prod",
    "Id": "23cb7428-af4d-4223-a445-7aa44cxxx45f"
  },
  {
    "Name": "Paginated Reports",
    "Id": "e4aa4920-d626-4ca3-9077-fb5250xxx36"
  },
  {
    "Name": "V2Workspace",
    "Id": "1e83d0c8-1c2b-4b59-8093-7911xxx6b7e8"
  }
]
```

### *GetReports*

Returns a collection of Power BI reports in a given workspace.

GET `api/powerbiaccount/getreports`

### GET Body

Field	Type	Desc
AccountID	string	The Power BI account ID
WorkspaceID	string	The Power BI Workspace ID

### Example Result

```
[
  {
    "Name": "Customer Profitability Sample",
```

```

    "Url": "https://app.powerbi.com/reportEmbed?reportId=....&config=..."
  },
  {
    "Name": "Queen City Dashboard",
    "Url": "https://app.powerbi.com/reportEmbed?reportId=...&config=..."
  }
]

```

### *GetDashboards*

Returns a collection of Power BI dashboards in a given workspace.

GET api/powerbiaccount/getdashboards

GET Body

Field	Type	Description
AccountID	string	The Power BI account ID
WorkspaceID	string	The Power BI Workspace ID

### Example Result

```

[
  {
    "Name": "Customer Map",
    "Url": "https://app.powerbi.com/dashboardEmbed?dashboardId=...&config=..."
  },
  {
    "Name": "Customer Profitability Sample",
    "Url": "https://app.powerbi.com/dashboardEmbed?dashboardId=...&config=..."
  }
]

```

### *GetVisualsForReport*

Returns a collection of all the visuals in a given report and their respective Power BI page index.

GET api/powerbiaccount/getvisualsforreport

POST Body

Field	Type	Description
AccountID	string	The Power BI Account ID where the report is located.
ReportUrl	string	The Embed URL of the Power BI report.

*GetPaginatedReports*

Returns a collection of Paginated Reports in a given workspace.

GET api/powerbiaccount/getpaginatedreports

GET Body

Field	Type	Desc
AccountID	string	The Power BI account ID
WorkspaceID	string	The Power BI Workspace ID

SingleSchedule Endpoint

The SingleSchedule endpoint allows you to carry out CRUD operations related to PBRs single schedules.

\* denotes a required field

### *GetAll*

Retrieves all Power BI Single Schedules in PBRs regardless of folder location based on the Schedules' Keywords. If the body is not provided, the request will return an empty array.

GET api/singleschedule/getall

GET Body

Field	Type	Description
FilterValues	[string]	A string array of zero or more values to filter only the schedules whose keywords match the provided values.
FilterOperator	string	The search operator for the filters. Valid values are: <ul style="list-style-type: none"><li>•LIKE</li><li>•NOT LIKE</li><li>•=</li><li>•&lt;&gt;</li></ul> Defaults to LIKE
MatchType	string	Specifies if the filter should match ALL the values or ANY one value. Valid values are: <ul style="list-style-type: none"><li>•ALL</li><li>•ANY</li></ul>

### *GetAllPaginated*

Retrieves all Power BI Paginated Report Single Schedules in PBRs regardless of folder location based on the Schedules' Keywords. If the body is not provided, the request will return an empty array.

GET api/singleschedule/getallpaginated

GET Body

Field	Type	Description
FilterValues	[string]	A string array of zero or more values to filter only the schedules whose keywords match the provided values.
FilterOperator	string	<p>The search operator for the filters. Valid values are:</p> <ul style="list-style-type: none"> <li>•LIKE</li> <li>•NOT LIKE</li> <li>•=</li> <li>•&lt;&gt;</li> </ul> <p>Defaults to LIKE</p>
MatchType	string	<p>Specifies of the filter should match ALL the values or ANY one value. Valid values are:</p> <ul style="list-style-type: none"> <li>•ALL</li> <li>•ANY</li> </ul>

#### *Get Single Schedule*

Returns the full Power BI single schedule model.

GET api/singleschedule/get/{id}

#### Result

```
{
  "PowerBiAccountId": "16f471eb-87fb-4f74-8fea-0a5df5a8156b",
```



"ObjectType": "REPORT",

"ReportUrl": "https://app.powerbi.com/reportEmbed?reportId=017b23aa-ed0e-4ba1-a4fb-38908b16914f&config=eyJjbHVzdGVyVXJsIjoiaHR0cHM6Ly9XQUJJLVVTLUVBU1QyLXJIZGlyZWNOlMfFuYWx5c2lzLndpbmRvd3MubmV0liwiZW1iZWRGZWV0dXJlcyI6eyJtb2Rlcm5FbWJIZCI6dHJ1ZX19",

"PowerBiReportName": "Customer Profitability Sample",

"WorkspaceName": "My Workspace",

"ApplyBookmark": false,

"BookmarkJson": "",

"RenderingSettings": {

  "OptionId": "5cb83ebd-a262-4732-a8b7-fad55526091f",

  "ReportId": 670421871,

  "MinLoadingTime": 10,

  "MaxLoadingTime": 60,

  "PageWidth": 1300,

  "PageHeight": 800,

  "PagesToRender": "1-3",

  "PageOrientation": 0,

  "MarginLeft": 0,

  "MarginRight": 0,

  "ViewStyle": 0,

  "RenderingMethod": 2,

  "TransparentBackground": true,

  "MinReportSize": -1,

```
"CropPdf": false,
"PDFCompression": 0,
"CropLeft": 0,
"CropRight": 0,
"CropTop": 0,
"CropBottom": 0
},
"BasicFilters": [
  {
    "BasicValues": [
      "Amezam",
      "Sonic",
      "QuestFP"
    ],
    "Operator": "In",
    "FilterId": "21d15577-17ab-4fec-bf9d-330bcae9cd55",
    "TargetField": "Supplier.Name",
    "FieldDataType": "String",
    "FilterLevel": 0,
    "SlicerSelectorType": 0,
    "SlicerSelectorValue": "",
    "SlicerSelectorRawValue": {
      "name": null,
```

```
        "title": null,
        "type": null
    },
    "IgnoreBlankDataDrivenInserts": true
}
],
"AdvancedFilters": null,
"ScheduleName": "API Created Schedule",
"FolderPath": "Annual",
"UniqueId": 670421871,
"Description": "This is a sample schedule created via the API",
"Keywords": "API, PBRs, Testing",
"Schedule": {
    "Frequency": "Daily",
    "StartDate": "2021-03-30",
    "HasEndDate": false,
    "EndDate": "2030-03-31",
    "ExecutionTime": "14:00:00",
    "Repeat": false,
    "RepeatInterval": 0.25,
    "RepeatUnit": null,
    "RepeatUntil": "00:00:00",
    "Enabled": true,
    "ScheduleId": 670421872,
```

```
"NextRunEpochUtc": 1617127200,

"ParentId": 670421871,

"Description": "This is a sample schedule created via the API",

"Keywords": "API, PBRS, Testing"

},
"EmailDestinations": [

    {
        "To": [

            "user@company.com"

        ],

        "Cc": [],

        "Bcc": [],

        "Subject": "API Created Schedule Email",

        "Body": "Hello this is a test message",

        "BodyFormat": "TEXT",

        "EmbedReport": false,

        "EmbedFormat": "IMAGE",

        "CustomSenderName": "",

        "CustomerSenderAddress": "",

        "DestinationName": "Email Destination via API",

        "DestinationId": 670421872,

        "DestinationType": "Email",

        "OutputFormat": "Acrobat Format (*.pdf)",

        "CustomOutputFileName": "",
```

```

    "CustomOutputExtension": "",
    "Enabled": true,
    "ParentId": 670421871
  },
  {
    "To": [
      "user@company.com",
      "user2@company.com"
    ],
    "Cc": [
      "user3@company.com"
    ],
    "Bcc": [],
    "Subject": "API Created Schedule Email",
    "Body": "<!DOCTYPE HTML PUBLIC \"/>
Transitional//EN">\r\n<HTML><HEAD>\r\n<META http-equiv=\"Content-Type\"
content=\"text/html; charset=unicode\">\r\n<META name=\"GENERATOR\"
content=\"MSHTML 11.00.10570.1001\"></HEAD>\r\n<BODY style=\"font-family:
Verdana; font-size: 12px;\">\r\n<P>Hello this is a test
message</P></BODY></HTML>\r\n",
    "BodyFormat": "HTML",
    "EmbedReport": false,
    "EmbedFormat": "IMAGE",
    "CustomSenderName": "",
    "CustomerSenderAddress": "",
    "DestinationName": "Email Destination via API",

```

```

        "DestinationId": 670425094,
        "DestinationType": "Email",
        "OutputFormat": "Acrobat Format (*.pdf)",
        "CustomOutputFileName": "",
        "CustomOutputExtension": "",
        "Enabled": true,
        "ParentId": 670421871
    },
    "PackId": 0,
    "Owner": "swa"
}

```

#### *GetPaginated*

Returns the object representing a Paginated Single schedule.

GET api/singleschedule/getpaginated/{id}

#### *CreateForPowerBI*

This is to create Power BI Single Schedules.

POST api/singleschedule/createforpowerbi

#### POST Body

Field	Type	Description
PowerBiAccountId	string	The Power BI account ID.
ReportUrl	string	The embed url of the report.

PowerBiReportName	string	The name of the Power BI report.
WorkspaceName	string	The name of the Power BI workspace.
ApplyBookmark	boolean	Flag indicating if a Bookmark JSON will be provided for the report.
BookmarkJson	string	The JSON string for the Bookmark.
RenderingSettings	renderingsettingsmodel	The report rendering settings. (see below for fields)
BasicFilters	[powerbibasicfiltermodel]	An array of zero or more basic filters.
AdvancedFilters	[powerbiadvancedfiltermodel]	An array of zero or more advanced filters.
ScheduleName	string	The name of the PBRs schedule.
FolderPath	string	The path in PBRs to create the schedule.
Description	string	The schedule description.
Keywords	string	The schedule keywords.
Schedule	timeschedulebasemodel	The definition for when the schedule will run.

EmailDestinations	[emaildestinationmodel]	An array of 1 or more email destinations.
-------------------	-------------------------	---

### *CreatePaginated*

This is to create Power BI Paginated Single Schedules.

POST api/singleschedule/createpaginated

POST Body

Field	Type	Description
PowerBiAccountId	string	The Power BI account Id.
ReportUrl	string	The paginated report URL.
PowerBiReportName	string	The name of the paginated report.
WorkspaceName	string	The Workspace where the paginated report is located.
UseNativeAPIForRendering	boolean	Specifies if PBRS should use Power BI to render the report. Default is false.
Parameters	[PaginatedParameterModel]	An array of parameters for the paginated report.

### *UpdateForPowerBI*

This method updates a Power BI Single schedule and uses the same POST body as the CreateForPowerBI method.

POST api/singleschedule/updateforpowerbi



### *AddEmailDestination (EmailDestinationModel)*

Adds an email destination to an existing Power BI single schedule.

POST api/singleschedule/addemaildestination

POST Body

Field	Type	Description
ParentId	integer	The unique ID of the parent schedule.
DestinationName	string	The name of the destination.
OutputFormat	string	<p>The output format for the destination. Valid values are:</p> <ul style="list-style-type: none"><li>• Acrobat Format (*.pdf)</li><li>• HTML (*.html)</li><li>• PNG (*.png)</li><li>• JPG (*.jpg)</li><li>• PowerPoint (*.pptx)</li><li>• MS Excel (*.xlsx)</li><li>• MS Word (*.docx)</li><li>• MS Word (*.doc)</li><li>• Epub (*.epub)</li></ul>
CustomOutputFileName	string	Optional custom output file name.

CustomOutputExtension	string	Optional custom output file extension.
Enabled	boolean	Specifies if the destination is enabled or not.
To	[string]	An array of one or more email addresses to send the report to.
Cc	[string]	An array or zero or more email addresses to send the report to.
Bcc	[string]	An array or zero or more email addresses to send the report to.
Subject	string	The email subject.
Body	string	The email body as plain text or escaped HTML.
BodyFormat	string	The format of the email body. Valid options are HTML or TEXT.
EmbedReport	boolean	Indicates if the report should be embedded in the body of the email.
EmbedFormat	string	The format that the embedded report will be. Valid options are IMAGE or HTML.
CustomSenderName	string	The sender name that will appear when the email is sent.

CustomerSenderAddress	string	The custom reply-to email address.
-----------------------	--------	------------------------------------

## PackageSchedule Endpoint

The PackageSchedule endpoint allows you to carry out CRUD operations related to PBRs Package schedules.

### *GetAll*

Retrieves all Power BI Packaged in PBRs regardless of folder location based on the Schedules' Keywords. If the body is not provided, the request will return an empty array.

GET api/packageschedule/getall

### GET Body

Field	Type	Description
FilterValues	[string]	A string array of zero or more values to filter only the schedules whose keywords match the provided values.
FilterOperator	string	<p>The search operator for the filters. Valid values are:</p> <ul style="list-style-type: none"> <li>•LIKE</li> <li>•NOT LIKE</li> <li>•=</li> <li>•&lt;&gt;</li> </ul> <p>Defaults to LIKE</p>

MatchType	string	<p>Specifies of the filter should match ALL the values or ANY one value. Valid values are:</p> <ul style="list-style-type: none"> <li>•ALL</li> <li>•ANY</li> </ul>
-----------	--------	---

#### *Get Package*

Returns the full Package Schedule model for a specific package.

GET api/packageschedule/get/{id}

#### *Create*

This is to create Power BI packages.

POST api/packageschedule/create

Field	Type	Description
PackageName*	string	A unique name for the package schedule.
FolderPath*	string	The path in PBRS to create the schedule.
DataDriven	boolean	Specified if the package is to be driven with a data-driver. If true, a data-driver must be provided. Defaults to False.
Schedule*	TimeScheduleBaseModel	The definition for when the schedule will run.

EmailDestinations*	[EmailDestinationModel]	An array of 1 or more email destinations.
PowerBIReports*	[PackagedPowerBIReportModel]	An array of 1 or more packaged Power BI report definitions.
DataDriver	DataDriverModel	The data-driver definition. Must be provided if DataDriven is True.
GroupByEmail	boolean	Specifies if files will from the data-driven package will be grouped by email address.
Description	string	The schedule description.
Keywords	string	The schedule keywords.

#### Dependent Models

##### *PowerBIDataOnlyExportModel*

Field	Type	Description
PageNumber*	int	The zero based page index on the Power BI report where visual is located.
VisualTitle*	string	The title of the Power BI visual.

ExportType*	int	Specified if the data export will retrieve summary underlying data.  SUMMARY = 0 (Default)  UNDERLYING = 1
ExcelStyle	string	A JSON string that can be used to format the Ex output
ColumnsToSummarize	[string]	An array of zero or more column indices that will be summarized in the output Worksheet e.g ["A", "B", "D"]
RowsToSummarize	[int]	An array of zero or more row indices that will be summarized in the output Worksheet e.g. [1,3]
WorksheetName	string	The name of the Worksheet. Defaults to the visu title.
OrderNumber	int	The order that the Worksheet will appear in the Workbook.

#### *RenderingSettingsModel*

Field	Type	Description
MinLoadingTime	int	The minimum amount of time that PBRS will wait before proceeding to render a Power BI report to file.
MaxLoadingTime	int	The maximum amount of time that PBRS will wait before proceeding to render a Power BI report to file.

PageWidth	int	The width of the Power BI report.
PageHeight	int	The height of the Power BI report.
PageOrientation	int	<p>The orientation of the Power BI report. Valid values are:</p> <ul style="list-style-type: none"> <li>•0 = Portrait</li> <li>•1 = Landscape</li> </ul>
PagesToRender	string	The range of pages to render e.g. 1,2,3,5-10. Leave blank for all pages.
MarginLeft	int	The page's left side margin.
MarginRight	int	The page's right side margin.
ViewStyle	int	<p>The Power BI report fit style. Valid values are:</p> <ul style="list-style-type: none"> <li>•0 = Actual Size</li> <li>•1 = Fit To Page</li> <li>•2 = Fit To Width</li> </ul>

RenderingMethod	int	<p>The method to use for rendering the Power BI report. Valid values are:</p> <ul style="list-style-type: none"> <li>•0 = Webkit</li> <li>•1 = Chromium (Default)</li> <li>•2 = Image</li> </ul>
TransparentBackground	boolean	Indicates whether the rendered report should include the background image.
MinReportSize	int	An optional size that PBRS will use to determine whether or not a report was rendered successfully. If the report output size is less than this value, then the report will be re-rendered.
CropPdf	boolean	Indicates if PBRS should crop the PDF output.
CropLeft	int	The mount of pixels to crop the PDF by from the left edge.
CropRight	int	The mount of pixels to crop the PDF by from the right edge.
CropTop	int	The mount of pixels to crop the PDF by from the top edge.
CropBottom	int	The mount of pixels to crop the PDF by from the bottom edge.



PDFCompression	int	<p>How much compression to apply to the rendered PDF. Valid values are:</p> <ul style="list-style-type: none"> <li>•0 = None</li> <li>•1 = Low</li> <li>•2 = Medium</li> <li>•3 = High</li> </ul>
----------------	-----	---

*PowerBiFilterBaseModel*

Field	Type	Description
TargetField	string	The field that the filter will be applied to e.g. Sales.OrderId.
FieldDataType	string	<p>The target field's data type. Valid values are:</p> <ul style="list-style-type: none"> <li>•string</li> <li>•date</li> <li>•numeric</li> </ul>
FilterLevel	int	<p>Indicates if the filter should be applied to a slicer or page. Valid values are:</p> <ul style="list-style-type: none"> <li>•0 = Report</li> <li>•1 = Slicer</li> </ul>

SlicerSelectorType	int	<p>For slicer filters, indicates if the selector is a Visual title or the field that your slicer is based on. Valid values are:</p> <ul style="list-style-type: none"> <li>•0 = Visual title</li> <li>•1 = Slicer field</li> </ul>
SlicerSelectorValue	string	Holds either the slicer's visual title or the slicer's target field depending on the SlicerSelectorType above.
IgnoreBlankDataDrivenInserts	boolean	indicates if the filter should be ignored if its data-driven value is empty.

#### *PowerBiBasicFilterModel*

This model inherits from the **PowerBiFilterBaseModel**.

Field	Type	Description
BasicValues	[string]	An array of one or more values for the filter.
Operator	string	<p>The basic filter operator. Value can be either "In" or "NotIn".</p> <p>Default value is "In".</p>

#### *PowerBiAdvancedFilterModel*

This model inherits from the **PowerBiFilterBaseModel**.

Field	Type	Description
-------	------	-------------

Operator	string	<p>The filter operator. Valid values are:</p> <ul style="list-style-type: none"> <li>•LessThan</li> <li>•LessThanOrEqual</li> <li>•GreaterThan</li> <li>•GreaterThanOrEqual</li> <li>•DoesNotContain</li> <li>•Contains</li> <li>•StartsWith</li> <li>•EndsWith</li> <li>•DoesNotStartWith</li> <li>•Is</li> <li>•IsNot</li> <li>•IsBlank</li> <li>•IsNotBlank</li> </ul>
FirstCondition	key-value pair of string and string	A key-value pair of the operator and the value for the advanced filter condition.
SecondCondition	key-value pair of string and string	A dictionary of the operator and the value for the advanced filter condition.

#### *TimeScheduleBaseModel*

Field	Type	Description
-------	------	-------------

Description	string	The schedule's description.
Enabled	boolean	Indicates if the schedule should be enabled.
EndDate	string	If applicable the schedule's end date in the format dd.
ExecutionTime	string	The schedule's execution time in the format HH:mm. 14:00 for 2PM.
Frequency	string	<p>The frequency of the schedule. Valid values are:</p> <ul style="list-style-type: none"> <li>•Daily</li> <li>•Weekly</li> <li>•Monthly</li> <li>•Annual</li> <li>•Weekdays</li> </ul>
HasEndDate	boolean	Indicates if the schedule has an end date.
Keywords	string	The schedule's keywords.
NextRunEpochUtc	readonly int	The schedule's next run date represented as Unix time.
Repeat	bool	Indicates if the schedule should repeat after the execution time.
RepeatInterval	double	The repetition interval.

RepeatUnit	string	<p>The repeat interval. Valid values are:</p> <ul style="list-style-type: none"> <li>•minute</li> <li>•hour</li> </ul>
RepeatUntil	string	When the schedule will repeat until in the format
StartDate	string	<p>The start date of the schedule in the format yyyy-MM-dd. 2021-04-07 for April 7th 2021.</p>

Field	Type	Description
PowerBiAccountId*	string	The Power BI account ID.
ReportUrl*	string	The embed URL of the report.
ObjectType	string	<p>The Power BI object type. Valid values are:</p> <p>REPORT</p> <p>DASHBOARD</p> <p>Default value is REPORT</p>
PowerBiReportName*	string	The name of the Power BI report.
WorkspaceName*	string	The name of the Power BI workspace.
ApplyBookmark	boolean	Flag indicating if a Bookmark JSON will be provided for the report. Default to false.
BookmarkJson	string	The JSON string for the Bookmark. Only required if ApplyBookmark is true.
RenderingSettings	renderingsettingsmodel	The report rendering settings. (see below for fields)
BasicFilters	[powerbibasicfiltermodel]	An array of zero or more basic filters.
AdvancedFilters	[powerbiadvancedfiltermodel]	An array of zero or more advanced filters.
PowerBIDataOnlyExportSettings	[powerbidataonlyexportmodel]	Required if the output is MS Excel - Data Only (*.xlsx) to specify which visuals to export.

### *PackagedPowerBIReportModel*

#### *DataDriverModel*

Field	Type	Description
KeyField*	string	The name of the field that uniquely identifies each record in the data-driver.
ValuesJson*	string	A valid JSON string representing the multiple objects to be used to data-drive the schedule.

#### *PaginatedParameterModel*

Field	Type	Description
ParameterName	string	The name of the parameter.
ParameterValue	string	The value for the parameter.
IsNull	boolean	Specifies if Null should be passed as the parameter value. Defaults to false.
ParameterType	int	The parameter type and values can be:  String = 0 (Default)  Numeric = 1,  Date = 2,  Boolean = 3,  Other = 4

## How do I use the PBRs API to execute Schedules?

**The PBRs API allows you to run schedules as well as control the scheduling services. You can use any programming language of your choice to query the API.**

*You must install PBRs API in order to execute Schedules using PBRs API - [Click here.](#)*

### Executing Schedule using PBRs API

The PBRs API allows you to run schedules as well as control the scheduling services. You can use any programming language of your choice to query the API.

The API is accessed by making HTTP requests to a specific URL endpoint, in which GET or POST variables contain information about what you wish to access. Every endpoint is accessed via the port and protocol configured in PBRs. The PBRs API Service must also be running on the PBRs server.

### The default starting endpoint for the API is:

```
http://[pbrserver]:9000/api
```

### Service Endpoint

The Service Endpoint allows you to query and control the PBRs services.

#### *Ping*

To check if the API is up and running, you can use Ping. The call will return 1 when the API is running

```
GET /api/service/ping
```

Result:

```
int i
```

#### *IsSchedulerRunning*

To check if the PBRs scheduler is running:

```
GET /api/service/isschedulerrunning
```



Result:

```
bool Result
```

*GetConfigPath*

To get the path to the PBRs config file:

```
GET /api/service/getconfigpath
```

Result:

```
string Result
```

*UpdateCollaborationSettings*

To update the collaboration settings for a server:

```
POST /api/service/updatecollaborationsettings
```

POST Body:

```
bool IsCollaborationEnabled
```

```
int CollaborationId
```

```
string CollaborationLeader
```

```
string ConType
```

```
string ConString
```

```
string ConString2
```

## Schedule Endpoint

The Schedule endpoint allows you to control PBRs schedules. Where a schedule type must be specified, the following are valid:

- *"report"* or *"single"*: all Single and Data-Driven Schedules
- *"automation"*: all Automation schedules
- *"package"*: all Single and Data-Driven Package schedules
- *"event"*: all Event-Based schedules
- *"event-package"* or *"eventpackage"*: all Event-Based Package schedules

The schedule's unique Id can be obtained from the schedule's properties screen in the application GUI.

#### *ExecuteSchedule*

Synchronously kicks off a schedule and waits for its completion.

POST api/schedule/executeschedule

POST Body:

string ScheduleType

int UniqueId

string RunBy

Result:

bool Result

string ErrorMessage

int ErrorNumber

#### *ExecuteScheduleOnTimeAsync*

Asynchronously kicks off the schedule as if it is being run by the scheduler. At completion, the schedule's *NextRun* date will be incremented.

POST api/schedule/executescheduleontimeasync

POST Body:

string ScheduleType

int UniqueId

string RunBy

Result:

string ExecutionId

### *ExecuteScheduleAsync*

Asynchronously kicks off a schedule and does not wait for its completion. The resulting *ExecutionId* can be used to query the execution status.

POST api/schedule/executescheduleasync

POST Body:

string ScheduleType

int UniqueId

string RunBy

Result:

string ExecutionId

### *GetNumberOfFreeThreads*

Gets the number of threads that are available for schedule execution based on the configured maximum thread count set in the application.

GET api/schedule/getnumberoffreethreads

Result:

int Result

### *CancelExecution*

Attempts to cancel an existing async execution.

GET api/schedule/cancelexecution?ExecutionId={ExecutionId}

Result:

string Result

### *GetExecutionStatus*

Retrieves the status of a schedule execution. The status can be one of:

- Waiting
- Executing

- Completed

```
GET api/schedule/GetExecutionStatus?ExecutionId={ExecutionId}
```

Result:

```
string ExecutionId
int UniqueId
int ProcessId
string Status
long EntryDateEpoch
long CompletionDateEpoch
string RunBy
string ResultJson*
string ServerName
```

\*ResultJson Format:

```
bool success
string errorMessage
```

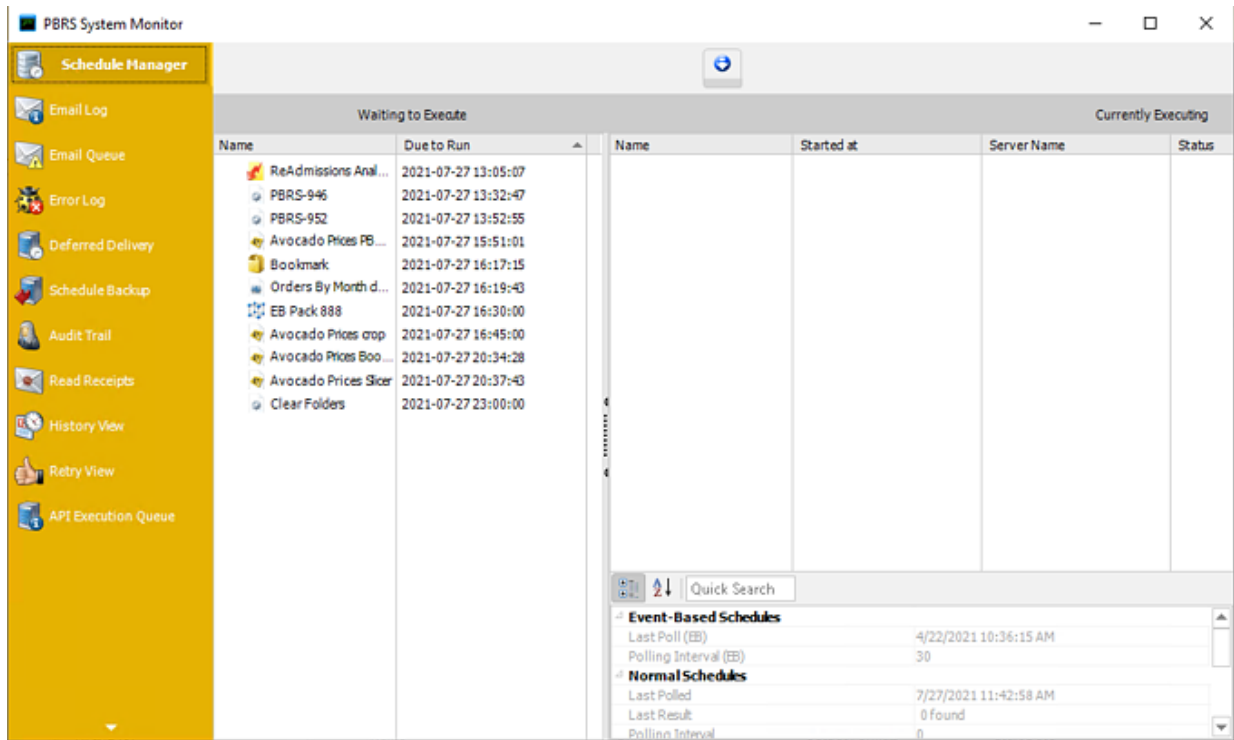
Where do I view the API Execution Queue?

Want to see the list of reports that have been executed using the API?

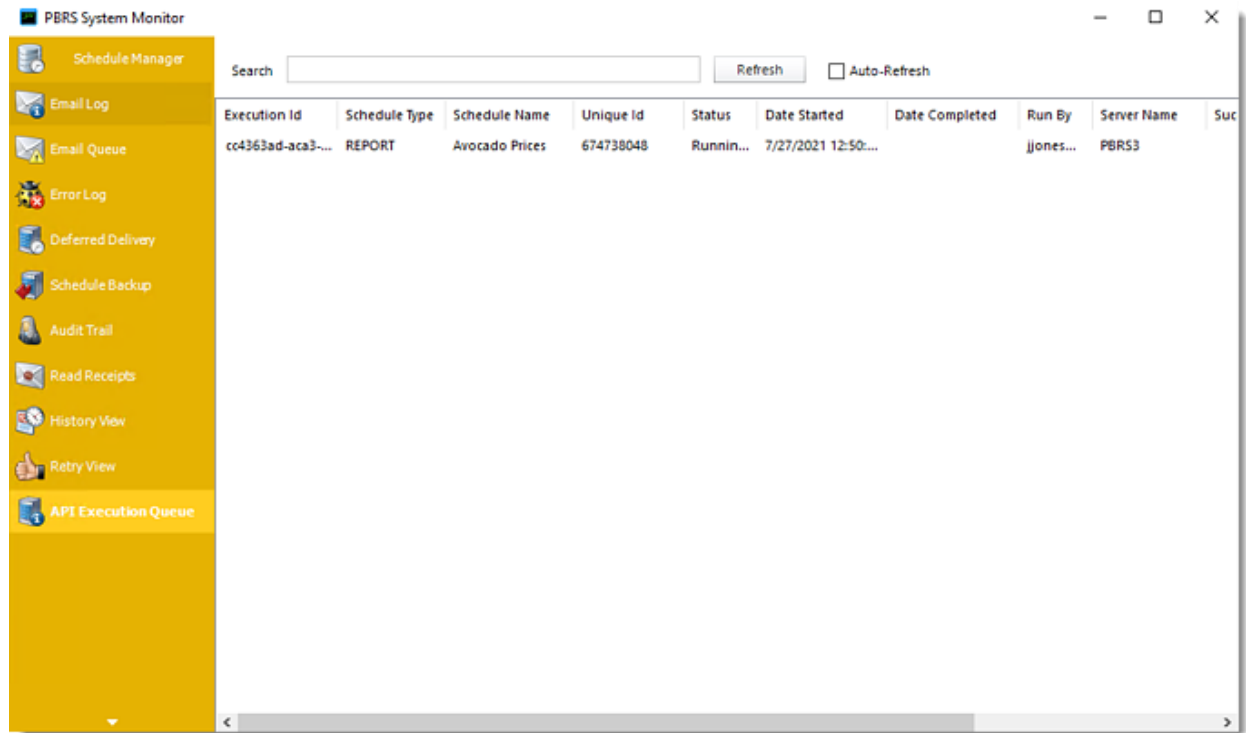
Here's where to find it.

System Monitor - API Execution Queue

- Go to **System Monitor**.



- Go to **API Execution Queue**.



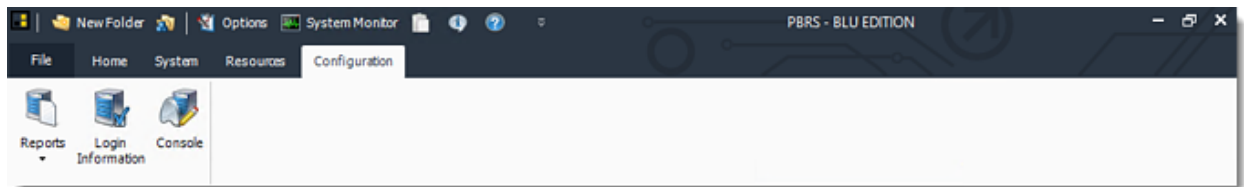
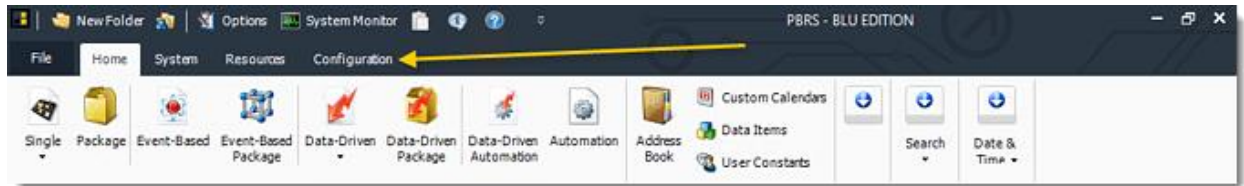
- Here you will view the API execution log.

What is the Configuration tab in PBRs?

**The configuration tab exposes a number of useful tools for you, and for ChristianSteven's technical support team.**

Configuration

Go to **Configuration**.



•To manage each section:

1. Reports
2. Login Information
3. Console (Used by ChristianSteven Technical Support)

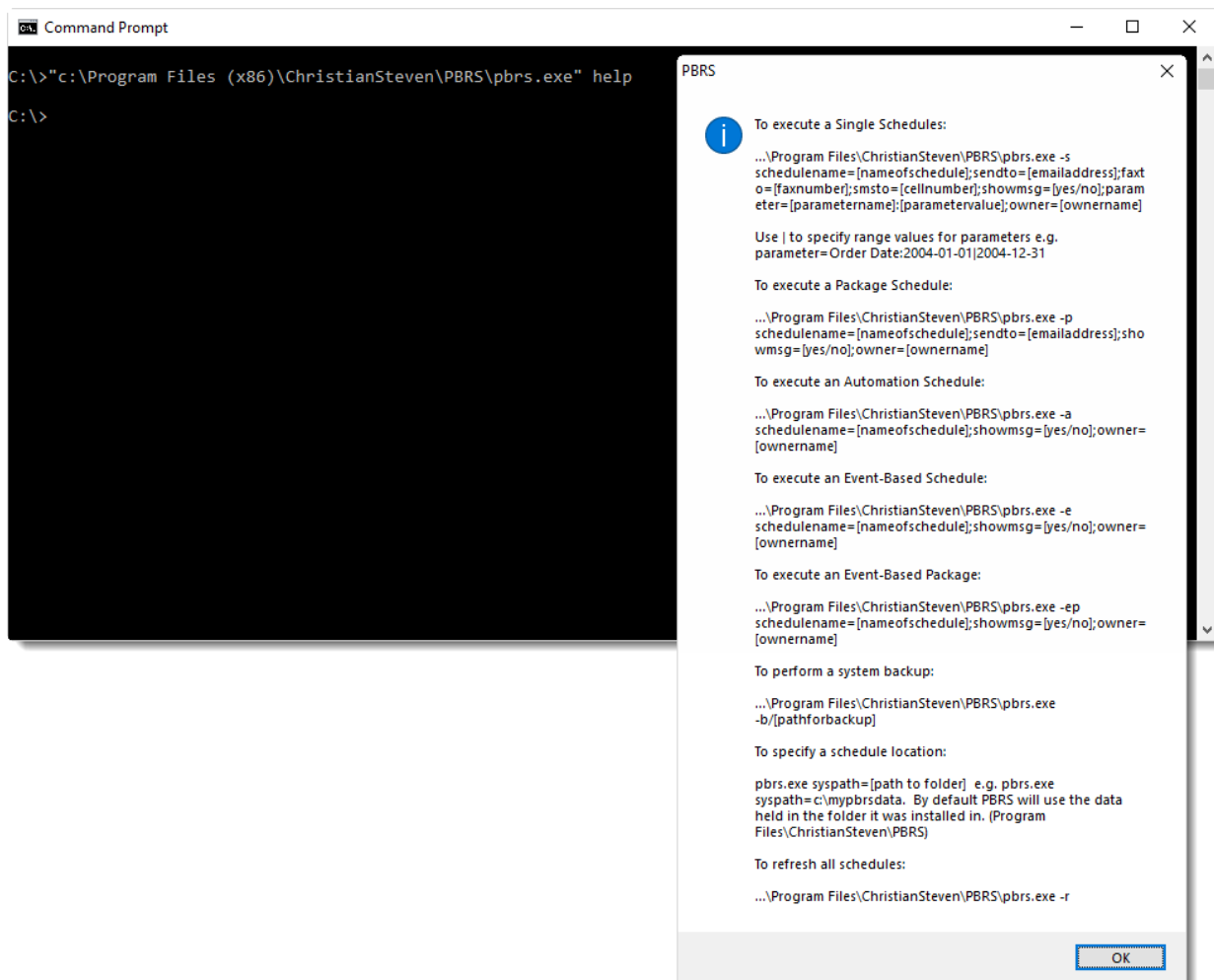
## How do I use Command Line Options in PBRs?

**Command line switches are all optional, and it doesn't matter the order you put them in. Switches are separated by a semi colon (;).**

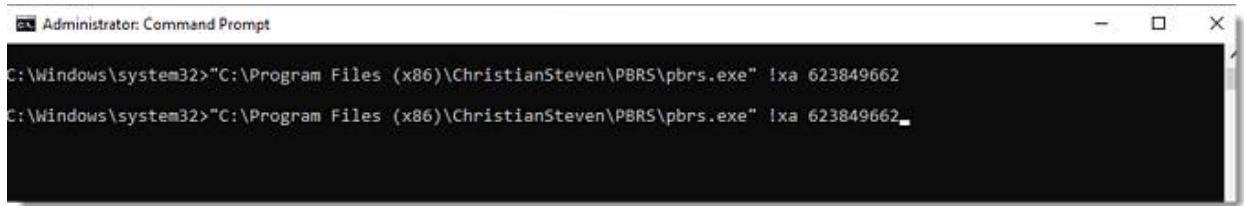
### Command Line Options

- Command line switches are all optional, and it doesn't matter the order you put them in. Switches are separated by a semi colon (;).

*When manually testing command-line options, you must use an **Elevated Command Prompt**.*







```
Administrator: Command Prompt
C:\Windows\system32>"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" !xa 623849662
C:\Windows\system32>"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" !xa 623849662_
```

## Examples:

### *Single Schedules and Data-Driven Schedules*

- To execute a Single Schedule and Data-Driven Schedules:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" -s  
schedulename=myschedulename
```

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" !xs scheduleid
```

- To do the above without any messages showing:

```
pbrs.exe -s schedulename:myschedule;showmsg=no
```

- To ignore the email address in the schedule and send to a specified email address:

```
pbrs.exe -s schedulename:myschedule;showmsg:no;sendto:billt@mycompany.com
```

### *Packages Schedules and Data-Driven Packages*

- To execute a Package:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" -p  
schedulename=myschedulename
```

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" !xp scheduleid
```

- To do the above without any messages showing:

```
pbrs.exe -p schedulename:myschedule;showmsg=no
```

- To ignore the email address in the schedule and send to a specified email address:

```
pbrs.exe -p schedulename:myschedule;showmsg:no;sendto:billt@mycompany.com
```

### *Event-Based Schedules*

- To execute an Event-Based Schedule:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" -e  
schedulename=myschedulename
```

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" !xe scheduleid
```

- To do the above without any messages showing:

```
pbrs.exe -e schedulename:myschedule;showmsg=no
```

- To ignore the email address in the schedule and send to a specified email address:

```
pbrs.exe -e schedulename:myschedule;showmsg:no;sendto:billt@mycompany.com
```

### *Event-Based Packages:*

- To execute an Event-Based Packages:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" -ep  
schedulename=myschedulename
```

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" !xz scheduleid
```

- To do the above without any messages showing:

```
pbrs.exe -ep schedulename:myschedule;showmsg=no
```

- To ignore the email address in the schedule and send to a specified email address:

```
pbrs.exe -ep schedulename:myschedule;showmsg:no;sendto:billt@mycompany.com
```

### *Automation Schedule and Data-Driven Automation:*

- To execute an Automation Schedule:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" -a  
schedulename=myschedulename
```

```
"C:\Program Files (x86)\ChristianSteven\PBRs\pbrs.exe" !xa scheduleid
```

- To do the above without any messages showing:

```
pbrs.exe -a schedulename:myschedule;showmsg=no
```

- To ignore the email address in the schedule and send to a specified email address:

```
pbrs.exe -a schedulename:myschedule;showmsg=no;sendto:billt@mycompany.com
```

Creating a Schedule by command line:

Run pbrs.exe with the switch of -x e.g. \PBRs\pbrs.exe -x

- And then the following parameters:

*ScheduleName: name of schedule*

*ReportPath: path of Power BI or SSRS Reports*

*FolderName: folder to store schedule*

*PBRsUser: pbrs login userid*

*PBRSPassword: pbrs login password*

*UserID: power bi report database userid*

*Password: power bi report database password*

*Frequency: schedule frequency*

*{Daily,Weekly,Monthly,Yearly,Weekdays,Custom:[calendarname]}*

*RunAt: time schedule executes*

*Description: schedule description*

*Keyword: schedule keywords*

*StartDate: start date for schedule*

*EndDate: end date for schedule*

*Repeat: 1 or 0 if schedule is to repeat*

*RepeatInterval: repeat interval*

*RepeatUntil: repeat until time*

*Status: 1 or 0*

*UseLogin: 1 or 0*

*UseSavedData: 1 or 0*

*Destination: schedule destination {Email,Disk,Fax,Printer,Ftp}*

*DestinationName: name of destination*

*SendTo: email send to or fax number*

*CC: email cc*

*Bcc: email bcc*

*Subject: email subject*

*Message: email message*

*Extras: extra attachments*

*MailFormat: text or html*

*SMTPServer: specify SMTP server*

*OutputPath: disk output path*

*FTPServer:FTPUserName*

*FTPPassword*

*FTPPathFormat: schedule output format*

*Zip: 1 or 0*

*Embed: 1 or 0*

Parameter: [parametername]:[parametervalue]

Separate out the switches using a semi-colon(;)

*e.g. pbrs.exe -x schedulename:myschedule;reportpath:c:\myreports;foldername:Bills Reports*

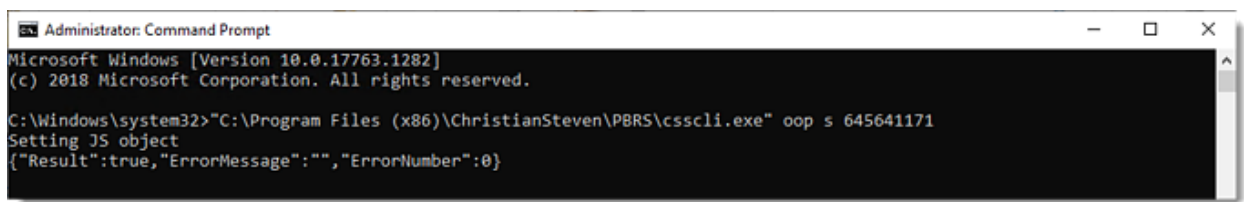
and so on.

## Csscli.exe Command-Lines

*When manually testing command-line options, you must use an **Elevated Command Prompt**.*

Csscli.exe is a command-line application to return results when running the schedules in Command Prompt.

If you want to run Command Lines to return PBRs results, use the csscli.exe command line. Using this command-line option you can view the results of the schedule right after you execute the schedule in Command Prompt. You can also view if there was an error message of the schedule if it fails.



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.17763.1282]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Windows\system32>"C:\Program Files (x86)\ChristianSteven\PBRs\csscli.exe" oop s 645641171
Setting JS object
{"Result":true,"ErrorMessage":"","ErrorNumber":0}
```

Example:

### *Single Schedules and Data-Driven Schedules*

- To run and view results Single Schedules and Data-Driven Schedules:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\csscli.exe" oop s [scheduleid]
```

### *Packages Schedules and Data-Driven Packages*

- To run and view results Single Packages and Data-Driven Packages:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\csscli.exe" oop p [scheduleid]
```

### *Event-Based Schedules*

- To run and view results Event-Based Schedules:

```
"C:\Program Files (x86)\ChristianSteven\PBRs\csscli.exe" oop e [scheduleid]
```

### *Automation Schedules and Data-Driven Automation*

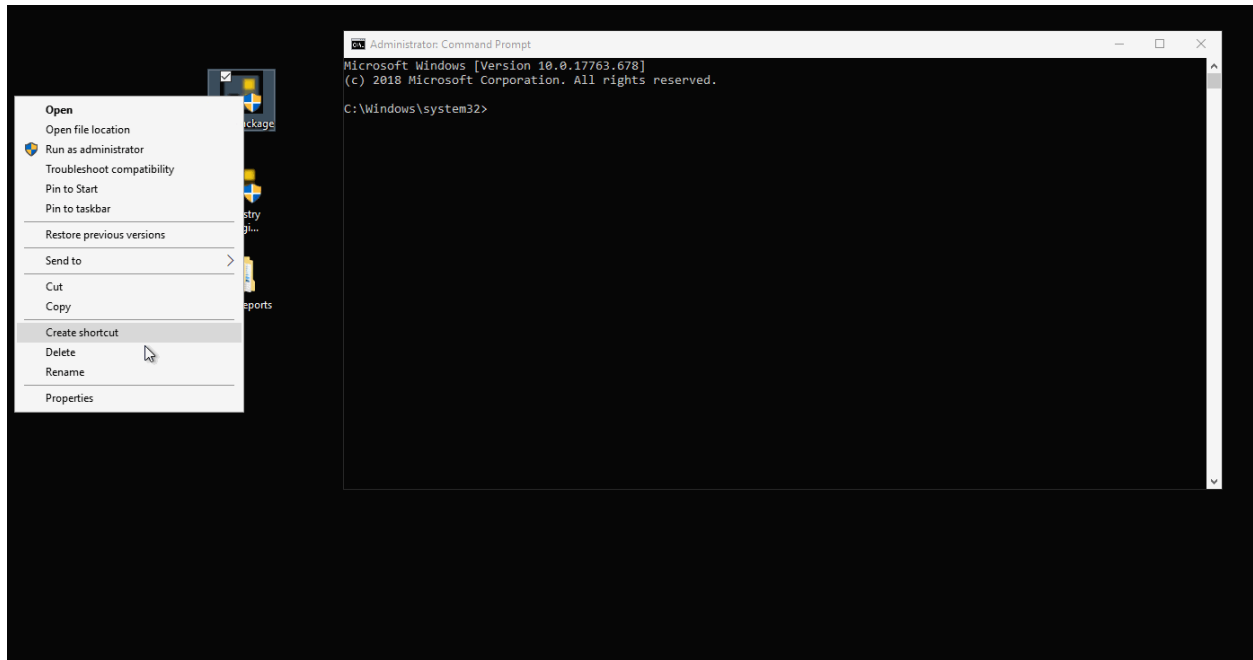
- To run and view results Automation Schedule and Data-Driven Automation:

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Updated on 15 November 2021

"C:\Program Files (x86)\ChristianSteven\PBRs\csscli.exe" oop a [scheduleid]

How do I run Command Lines with PBRs Shortcuts?



- Go to **Shortcut Properties**.
- Copy **Target**.
- Paste the **Target** in Command Prompt.

Invoking PBRs From Another Server

To invoke PBRs from another server and/or run schedules with your own enterprise management or scheduling system, use

*Windows:*

PsExec: <https://docs.microsoft.com/en-us/sysinternals/downloads/psexec>

*Linux:*

Winexe: <https://www.secpod.com/blog/winexe/>

PBRs API to Execute Schedules

- You can also use the PBRs API to execute schedules - [Click Here](#)

## How do I setup a Failover System in PBRs?

**Failover is the ability to seamlessly and automatically switch to a backup system when the primary PBRs Server fails. This will reduce or eliminate negative user impact. This is how to set up a Failover System in PBRs.**

### Prerequisite

*Collaboration must be enabled and configured before the Failover feature will work.*

*When updating the Failover Server you must update the Failover Server as the last server.*

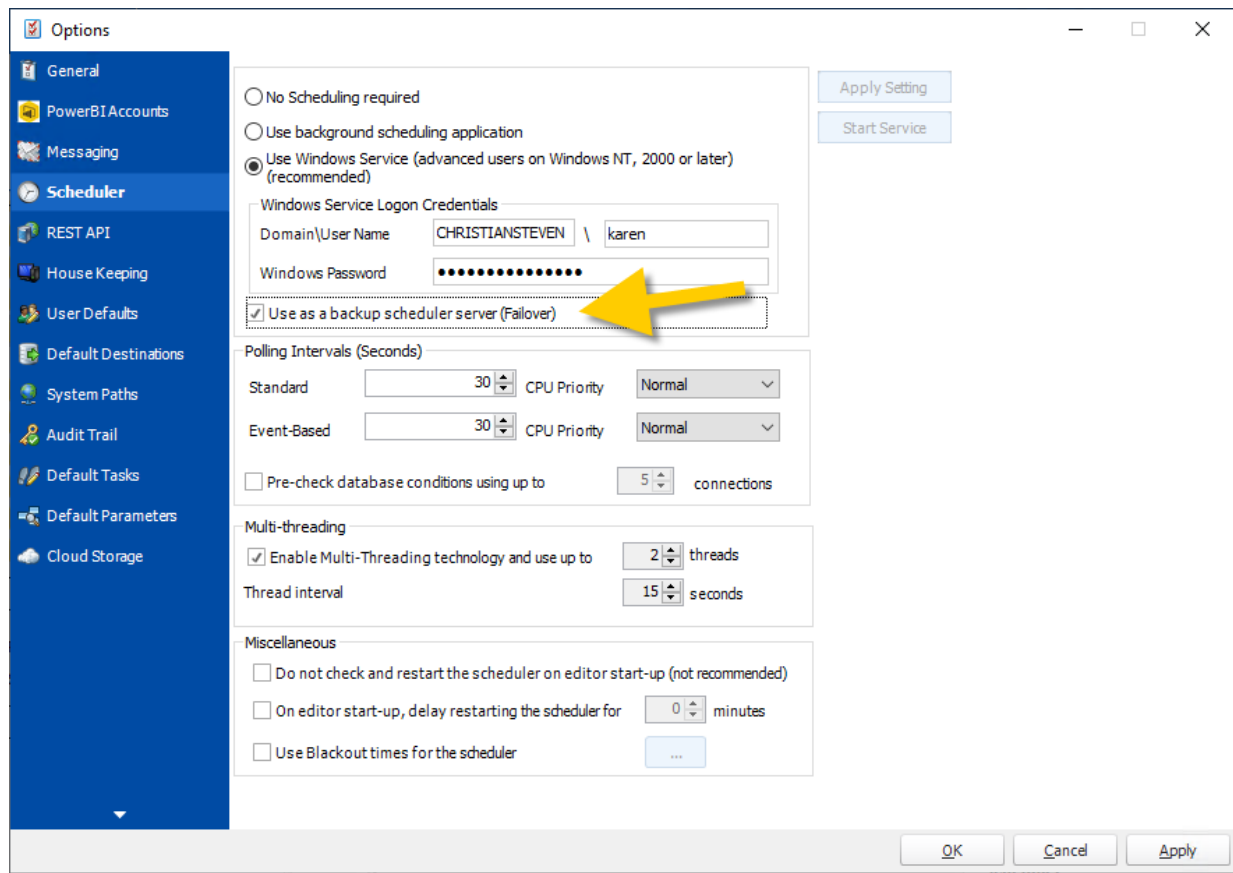
### Scheduler - Failover Server

You should select one of the collaboration servers to become the Failover Server for the Primary Server. The Failover Server will become the Main Scheduler in the event that the Primary Server fails.

- Once Collaboration has been enabled and configured you are ready to set up the Failover Server.

On the server that will become the Failover Server.

- Go to **Options** and select **Scheduler**.
- Check '**Use as a backup scheduler server (Failover)**', checkbox.



- Click **Apply** and **OK**.
- The Failover Server is set up.
- Restart the Failover Server.

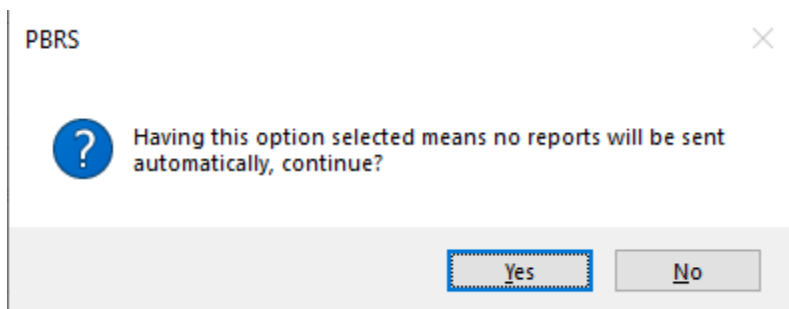
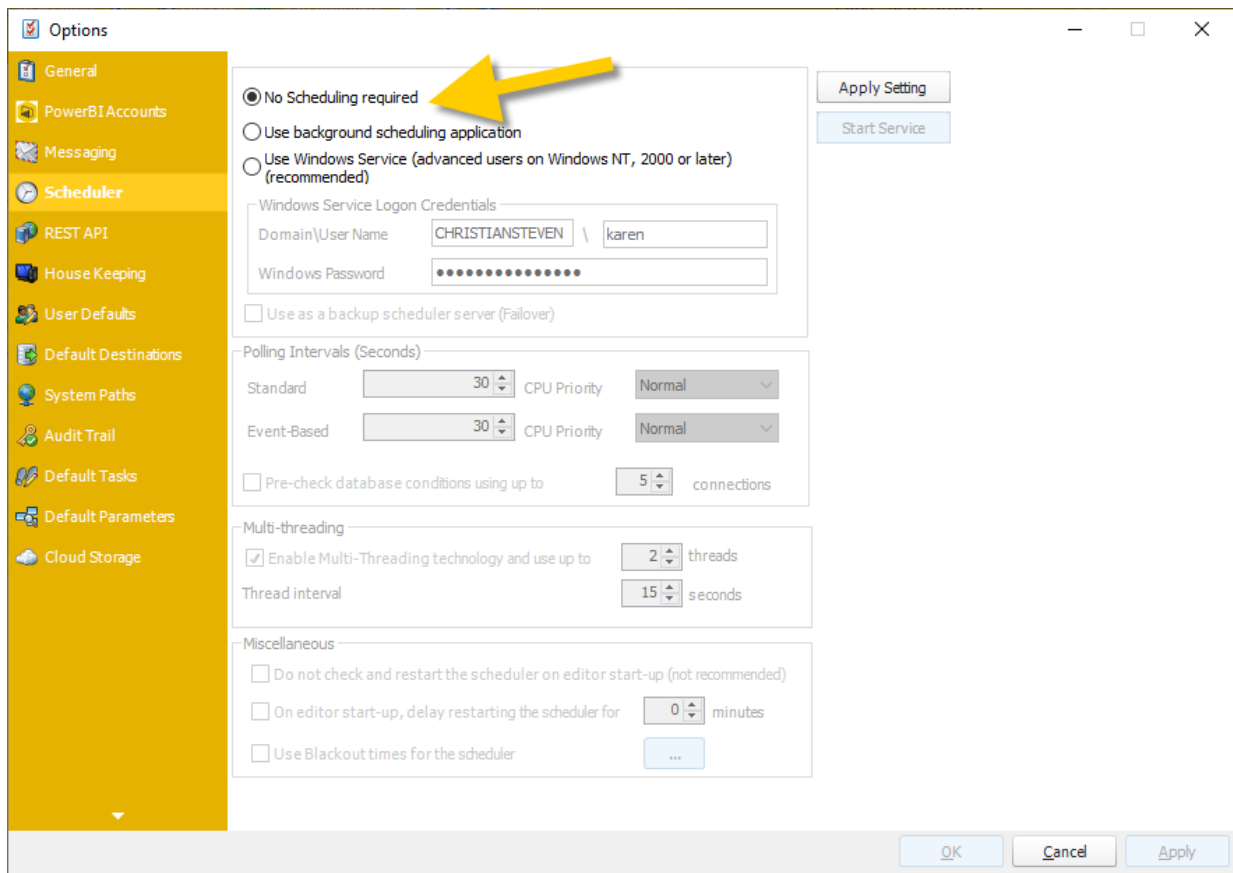
How do I revert the System once the Primary Server comes back online?

To reset the Failover settings, follow the steps below:

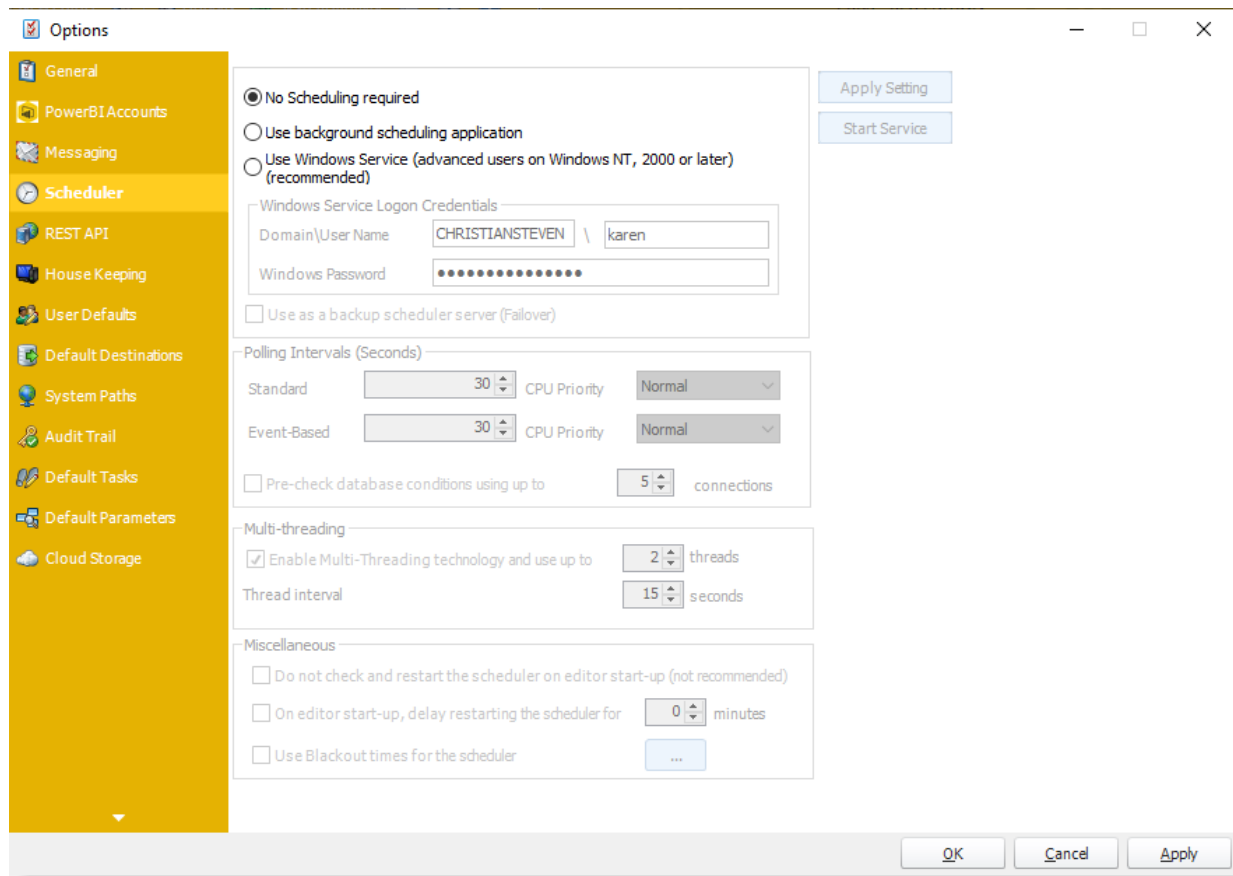
*Uninstall the scheduler on both the Primary and Failover server.*

- Go to **Options** and select **Scheduler**.
- Check **No Scheduling required** checkbox.
- Click **Apply Setting**.





•Click **Yes**.



- Click **Apply** and **OK**.

*On both the *Primary* and *Fallover* servers, you will need to reset "Collaboration Leader" to the *Primary* Server.*

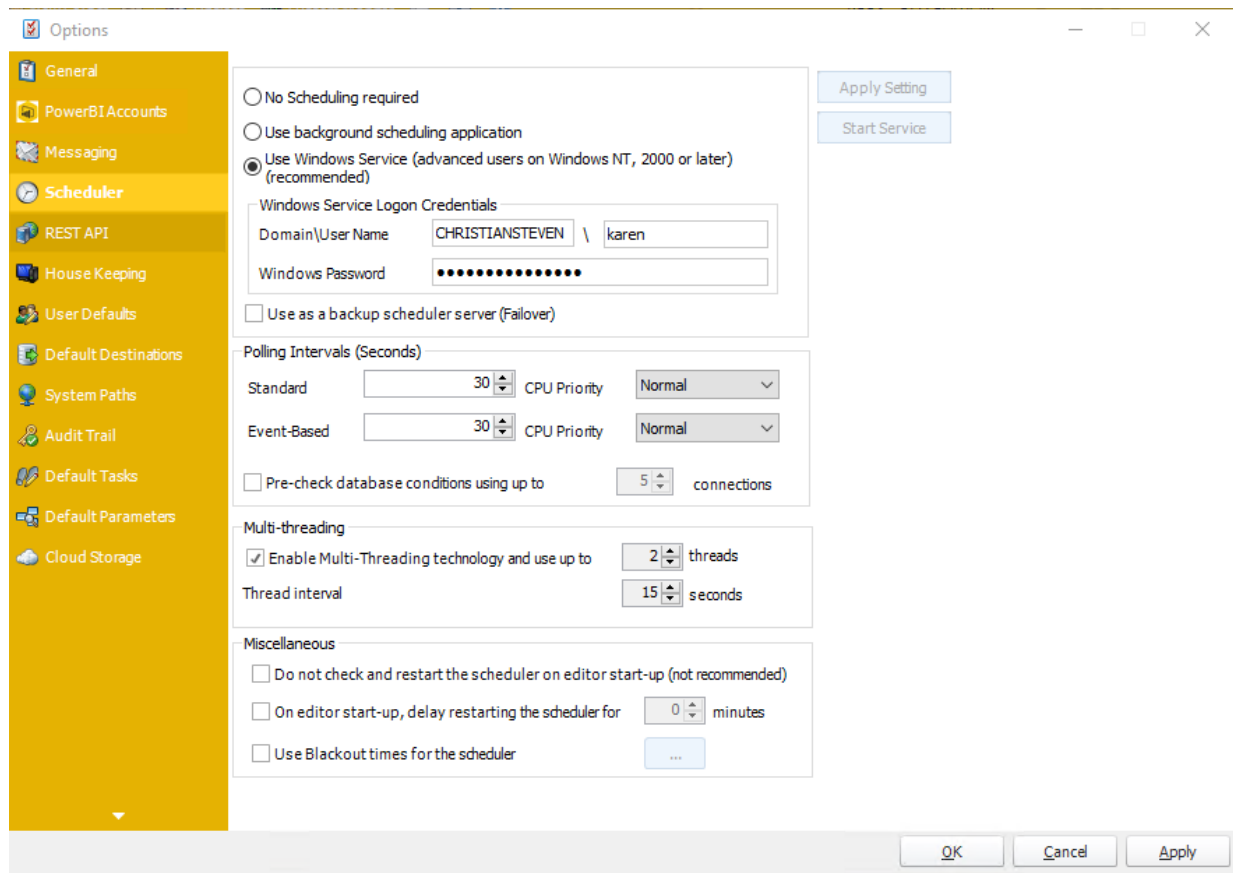
- Go to **pbrslive.config** in the PBRs Folder. (typically C:
- Open the file using notepad or a similar application.
- Search for '**collaborationleader**'.
- Change the value in the setting below it **from** the Fallover Server's name **to** the Primary Server's name
- Save** the file.



```
</setting>
<setting name="iconsize">
  <value>32</value>
</setting>
<setting name="windowviewstyle">
  <value>tree</value>
</setting>
<setting name="collaboration">
  <value>1</value>
</setting>
<setting name="selectedfolder"|
  <value>665663204</value>
</setting>
<setting name="collaborationleader">
  <value>PBRs_COLLAB1</value>
</setting>
<setting name="pbviewerwindowstate">
  <value>Normal</value>
</setting>
<setting name="advancedbackupschedule">
  <value>0</value>
</setting>
<setting name="lastinsertnode">
  <value>PBRs_Constants</value>
```

*Install the scheduler services on the Primary Server.*

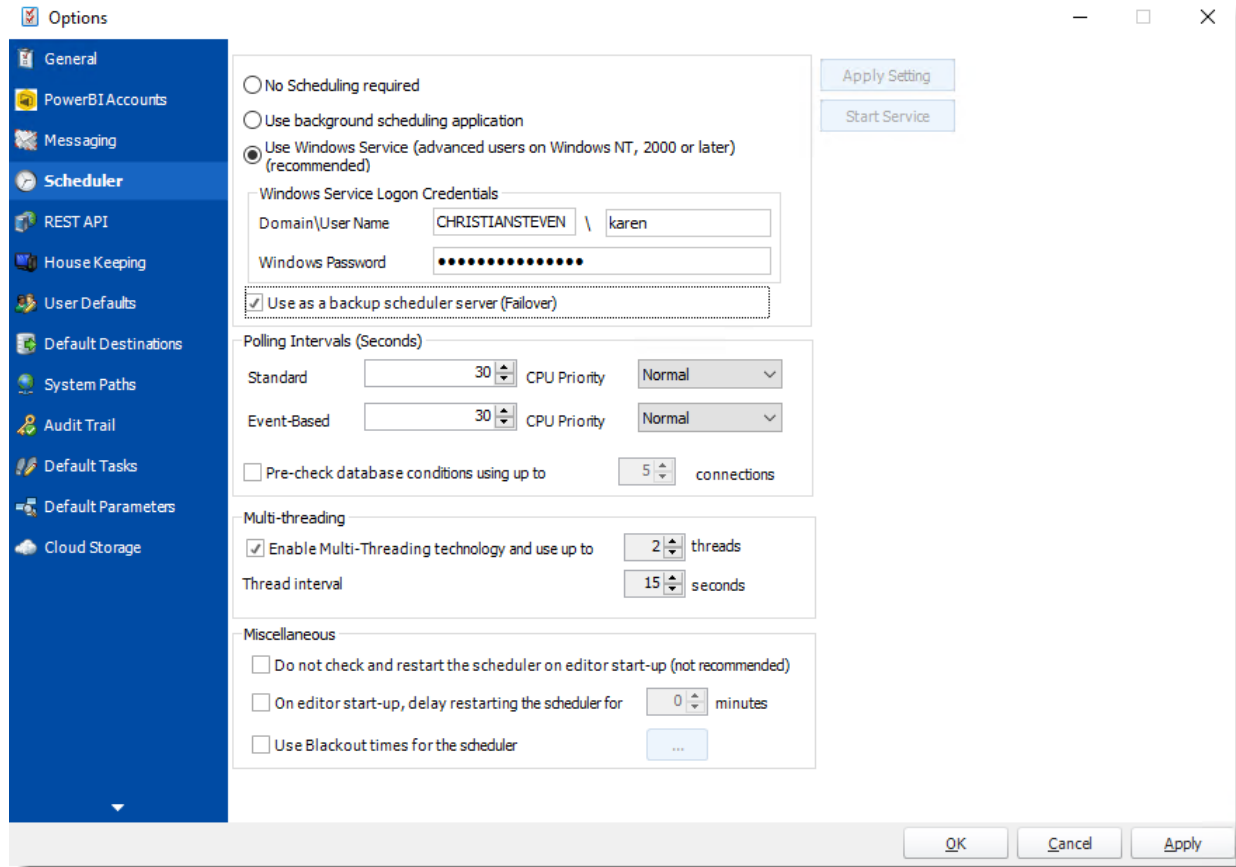
- Go to **Options** and select **Scheduler**.
- Configure the **Scheduler**.
- Do not** check the option to "Use as a backup scheduler server (Failover) as this is the primary server.



- Once configured, click **Apply** and **OK**.

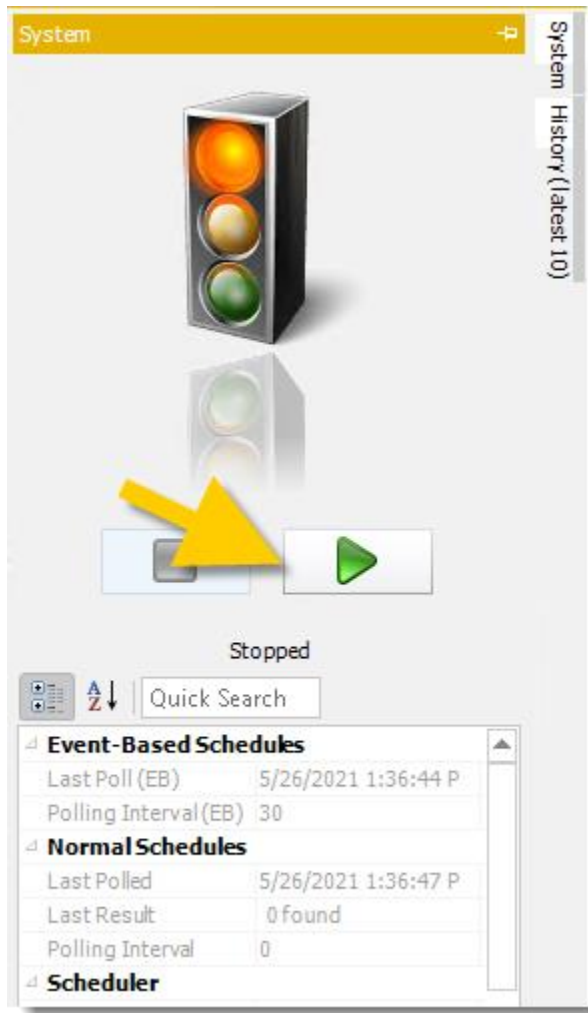
*Install the scheduler services on the Failover Server.*

- Go to **Options** and select **Scheduler**.
- Configure the **Scheduler**.
- Check '**Use as a backup scheduler server (Failover)**' option.



- Once configured, click **Apply** and **OK**.

*Start the scheduler services on both servers.*



The system has now been reverted to its original state.

How do I create contacts and contact groups for use by PBRs schedules?

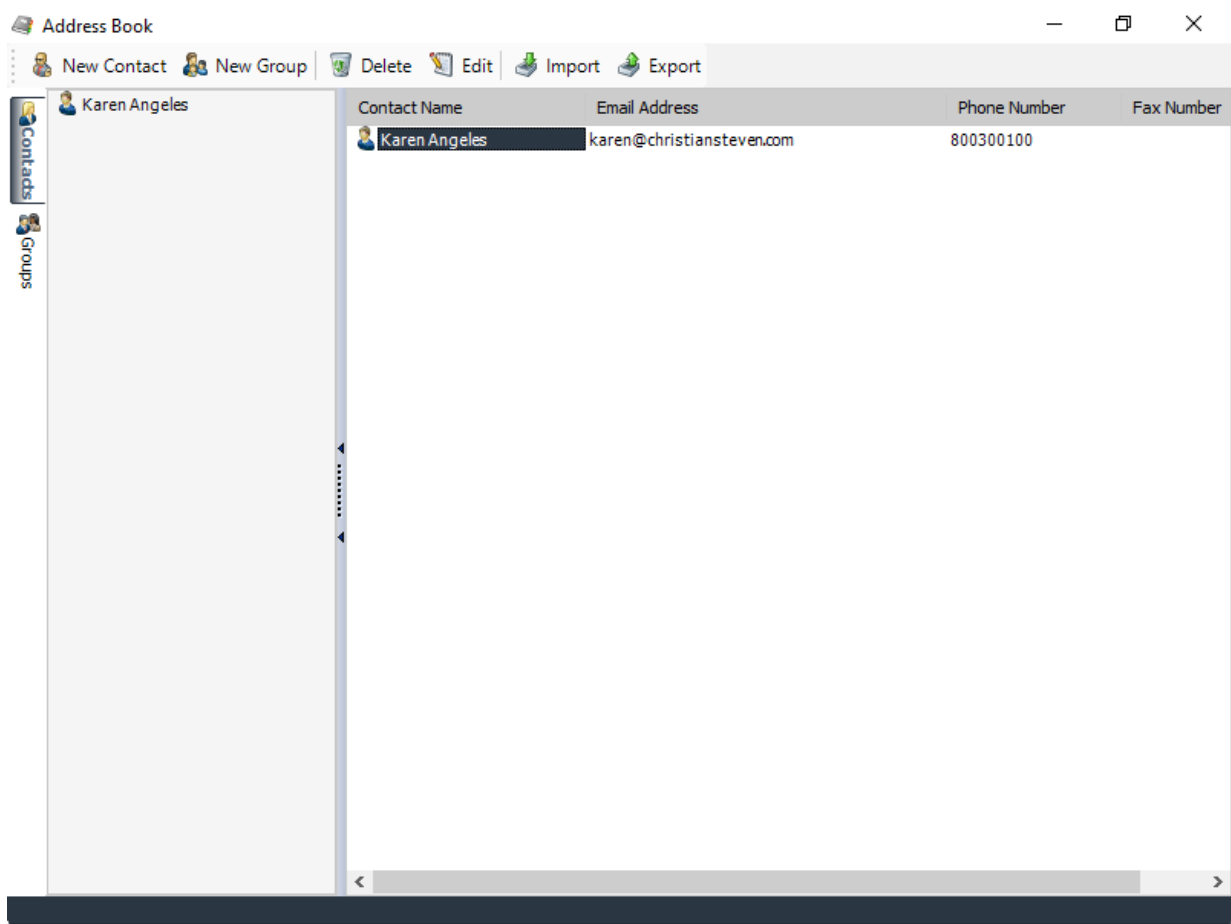
**The Address Book in PBRs allows you to create and store contacts for later use by PBRs schedules. You can also create contact groups and easily add or remove contacts as needed.**

Address Book

- Go to **Address Book**

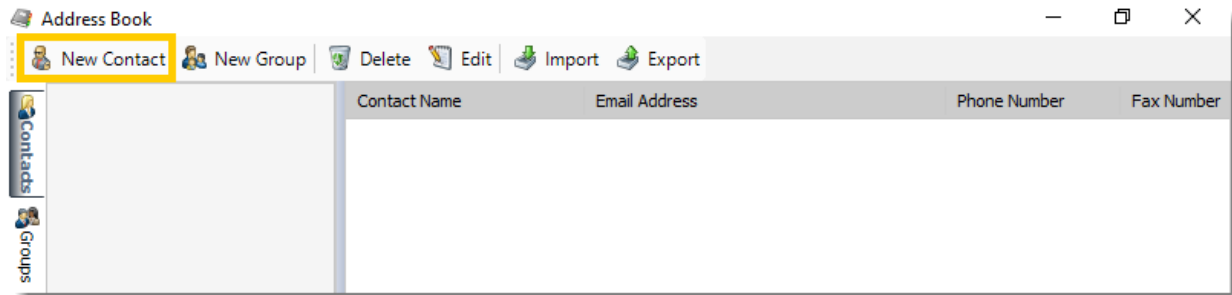


The PBRs Address book allows you to set up contacts and group contacts for use in schedules.



## New Contact

- Click **New Contact**



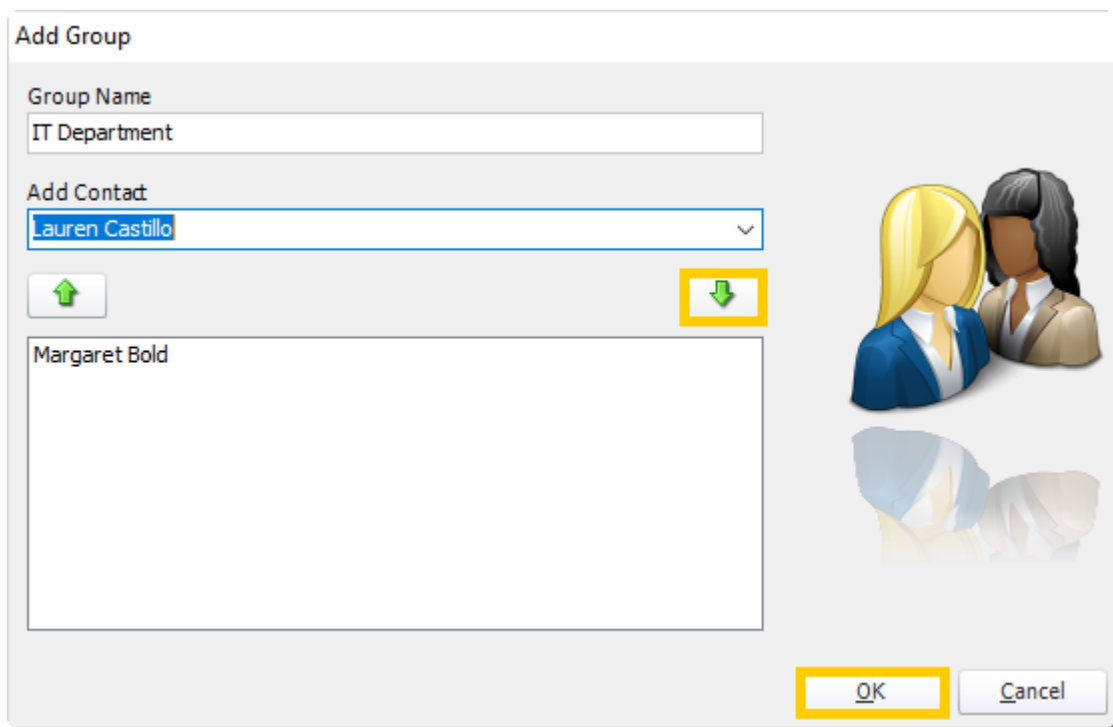
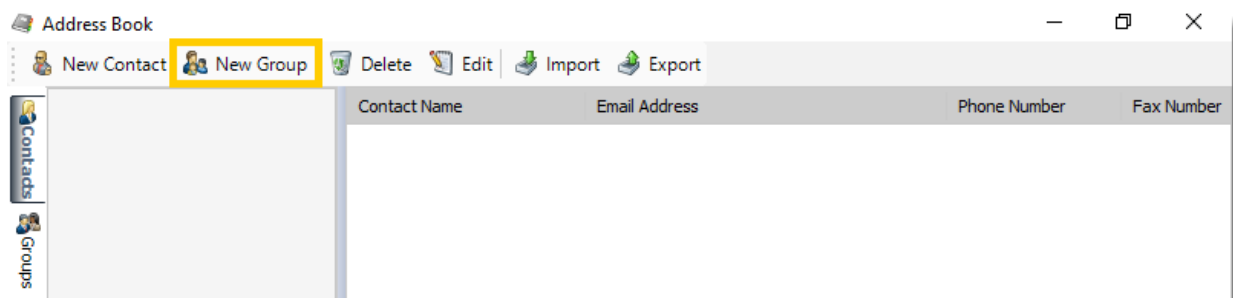
- Enter the contacts details and click **OK** to save.

A screenshot of the 'Add Contact' dialog box. It has a title bar 'Add Contact'. The form contains the following fields: 'Contact Name' with the value 'Lauren Castillo'; 'Email Address' with the value 'lcastillo@mycompany.com'; 'Phone Number' with the value '800-200-400'; and 'Fax Number' which is empty. To the right of the form is an icon of two people. At the bottom right, there are 'OK' and 'Cancel' buttons. The 'OK' button is highlighted with a yellow box.

## New Group

- Click **New Group**

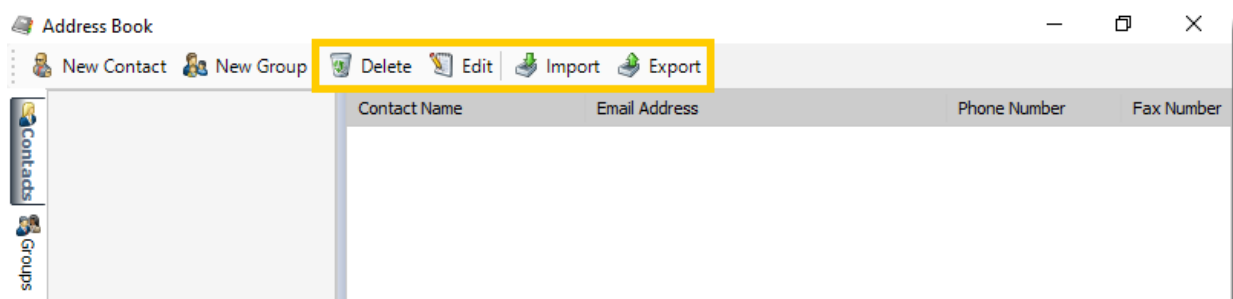
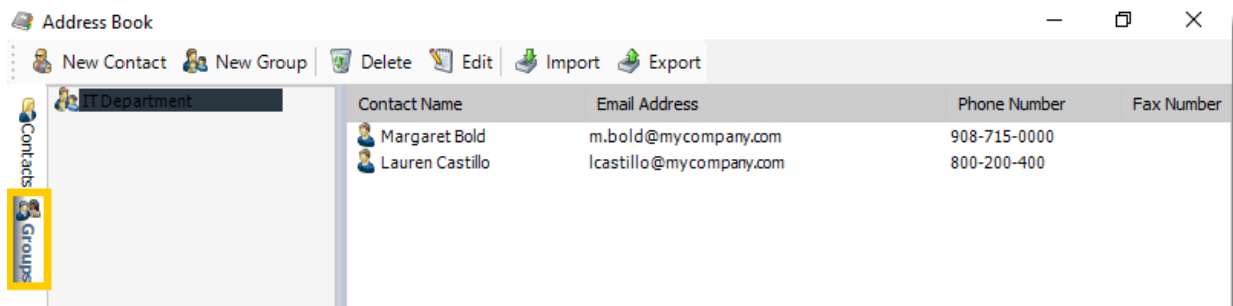
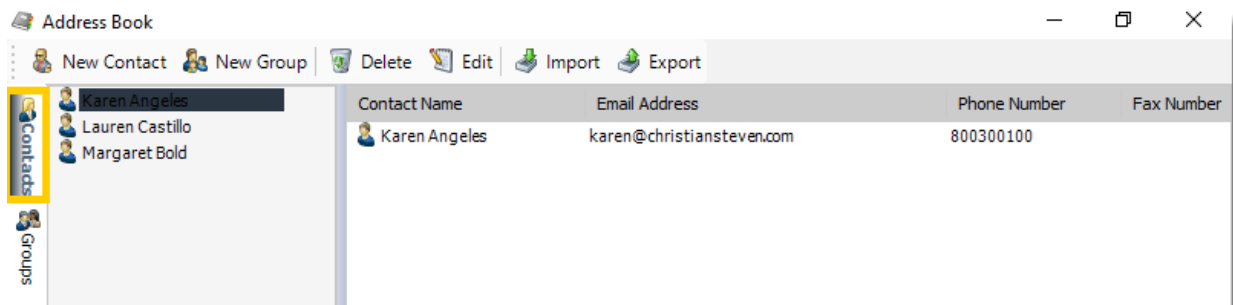
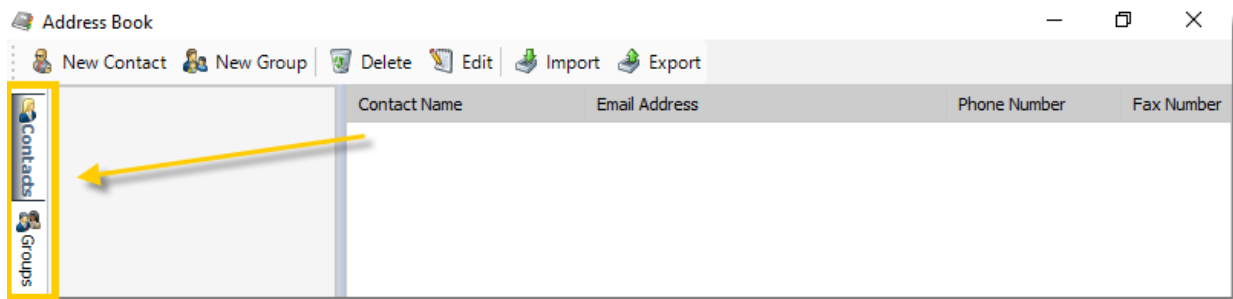




- **Group Name:** Enter a name for the Group
- **Add Contact:** Select the name from the drop down list and click the **down arrow** button to add to the group.
- Click **OK** to save.

## Menu tab

You can switch between your groups and contacts by using the tab on the left.



- **Delete:** Select a contact or group and click this button to delete.

- **Edit:** Select a contact or group and click this button to edit or simply double-click the contact or group.
- **Import:** Click this button to import a previously exported address book.
- **Export:** Click this button to export your address book.

How do I create and use custom frequencies & calendars in PBRS?

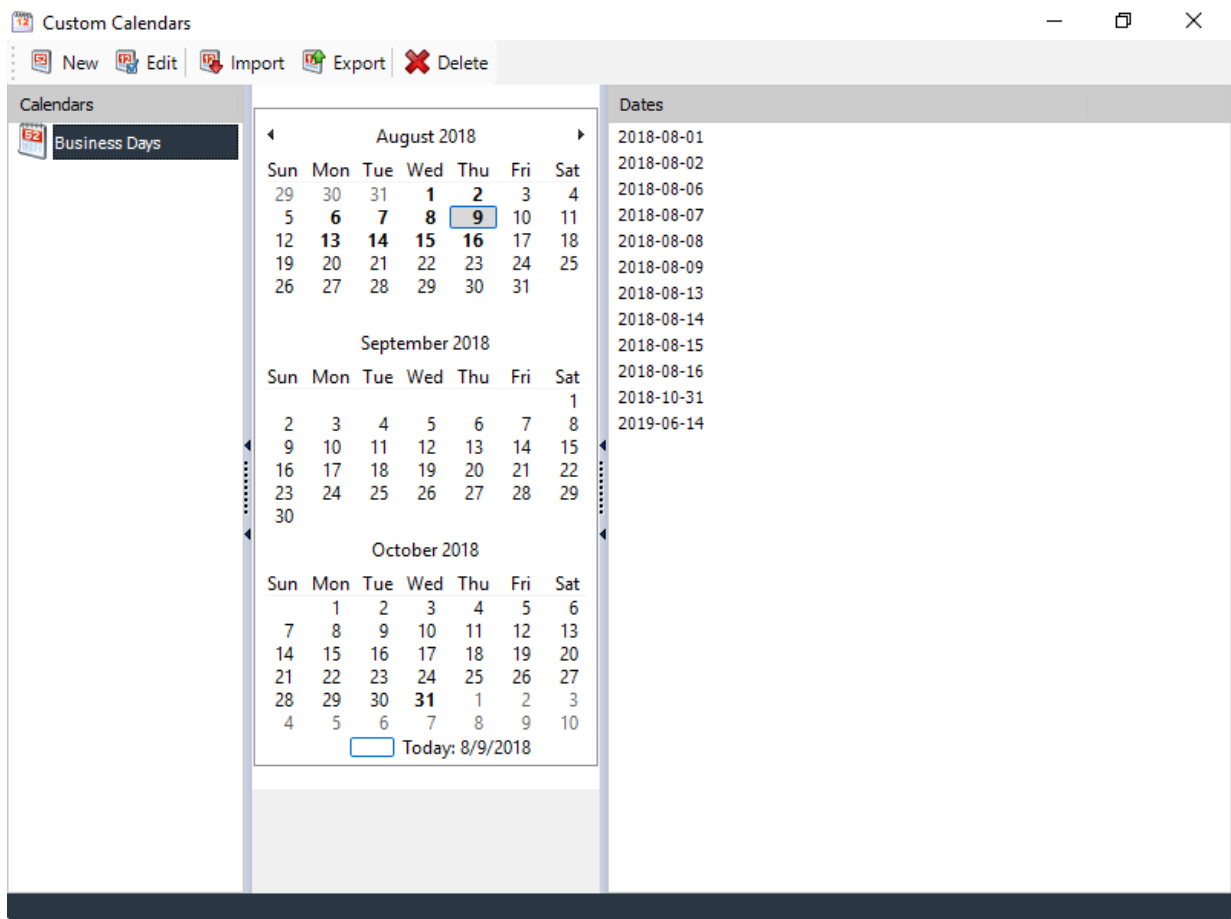
**You can create your own scheduling frequencies with "Custom Calendars". This is where the scheduling frequency required doesn't follow an existing standard pattern.**

Custom Calendars

- Go to **Custom Calendars**.

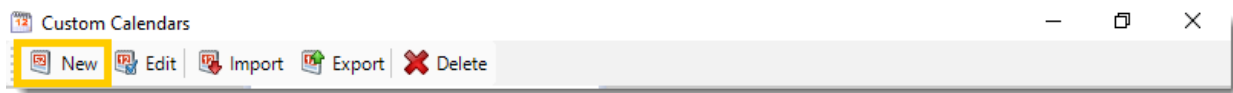


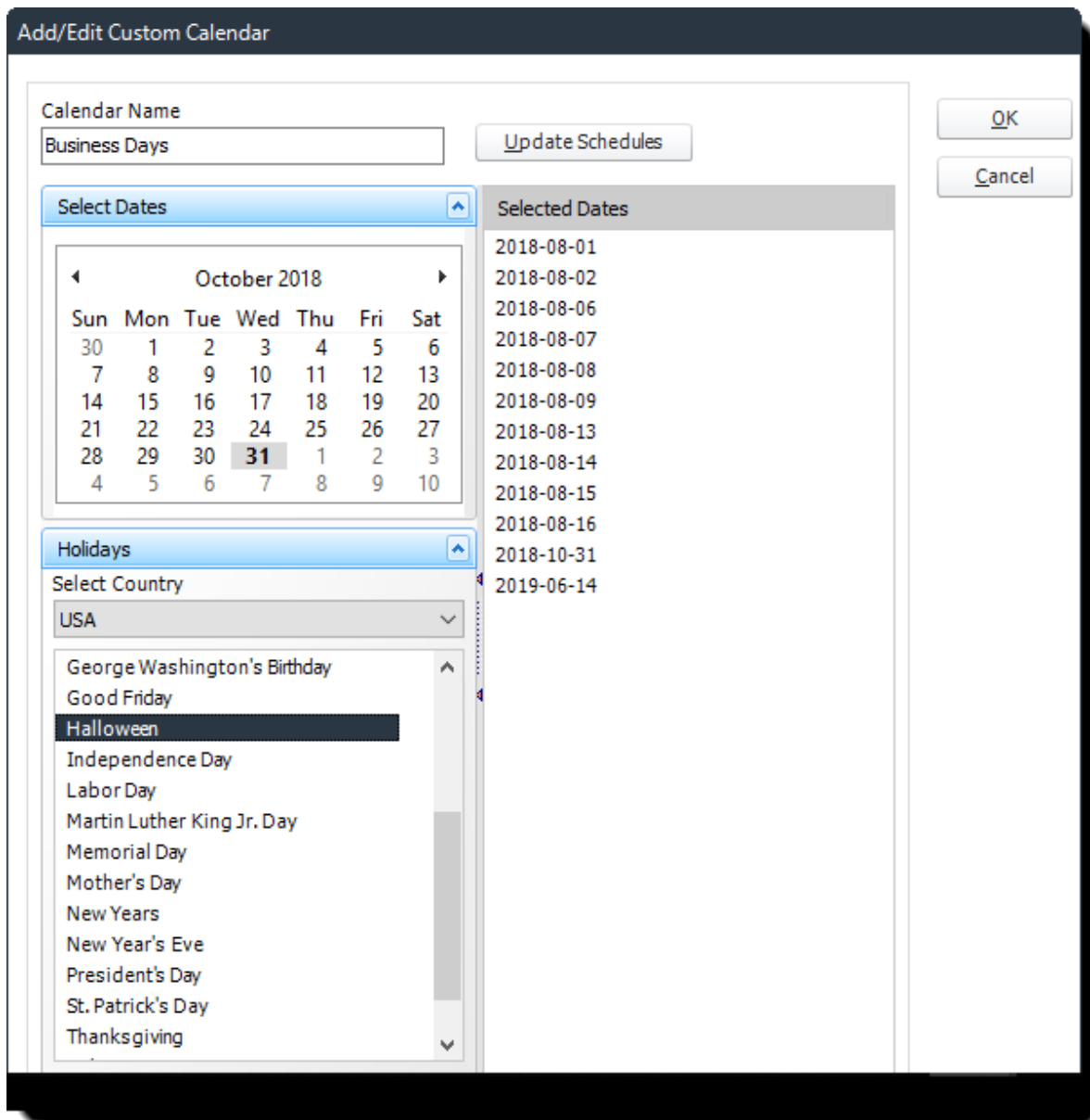
- Create your own scheduling frequencies with Custom Calendars.



## New Calendar

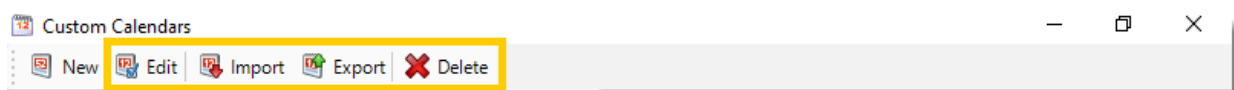
- To create a calendar:
  - Click **New**.
  - Type in a name for the new calendar.
  - Click the dates you wish scheduling to occur, click on a date again to remove it from the selection.
  - Click **OK** to save.





- **Update Schedules:** Use this button to update all schedules which use this calendar. The schedules will be updated with the new calendar information. If this function is not used, the schedules will retain the old calendar information.

## Menu tab



- **Edit:** Select the calendar you wish to edit and click this button.
- **Import:** Use this button to import a calendar.

- **Export:** Use this button to export a calendar.
- **Delete:** Select the calendar from the list and click this button.

## Applying a Calendar to a Schedule

- In your schedule go to **Schedule**.
- Click **Custom Calendar**
- Select a calendar from the drop down list.

Single Report Schedule Properties - WorldCup

**General** | **Schedule** | Report Settings | Report Filter | Destinations | Exception Handling | Tasks | Snapshots | History

Start Date: 7/31/2018 | End Date: 8/ 1/3004

Daily | Weekly | Week Days | Working Day | Monthly | Annual | **Custom Calendar** | Other

Calendar Name: [New...] | Business Days

Schedule time: 12:09:00 PM | Exception calendar: [ ]

Next to run on: 8/ 9/2018 | 12:09:00 PM

☐ Repeat every: 0.25 hours until: 12:16:35 PM

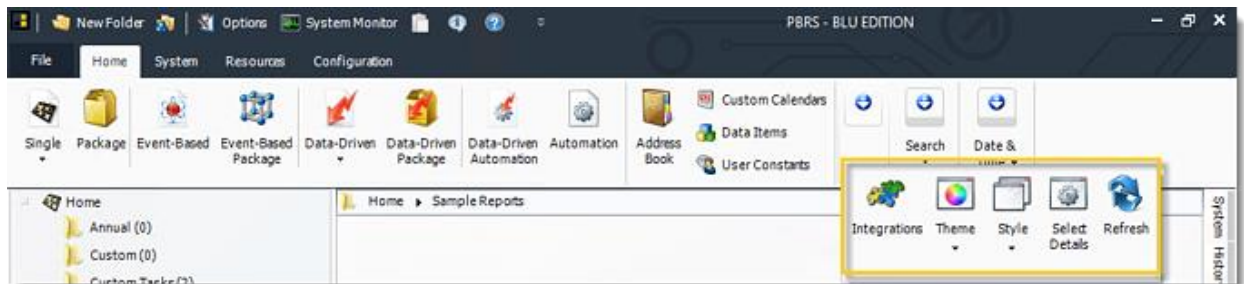
☒ Enable this schedule and execute it on: DEFAULT

- All schedules in use by a custom calendar are now disabled when the calendar ends. If a user adds more dates to the calendar the option is now available to re-enable all schedules that use the affected calendar.

How do I change the theme or view style of PBRs?

**You can select from a number of themes, colors & viewing styles from the Home menu of PBRs. You can also perform a system search and refresh the home screen from this ribbon section.**

View - Home

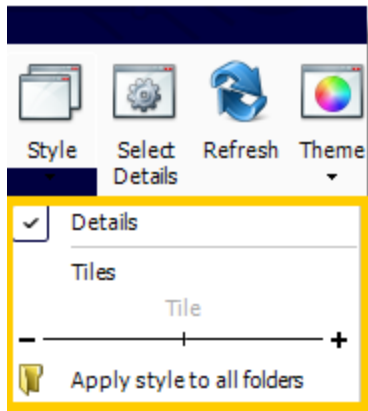


In the View section you can see the following options:

- Integrations Library
- Style
- Select Details
- Refresh
- Theme

Style

- Go to **Style**.

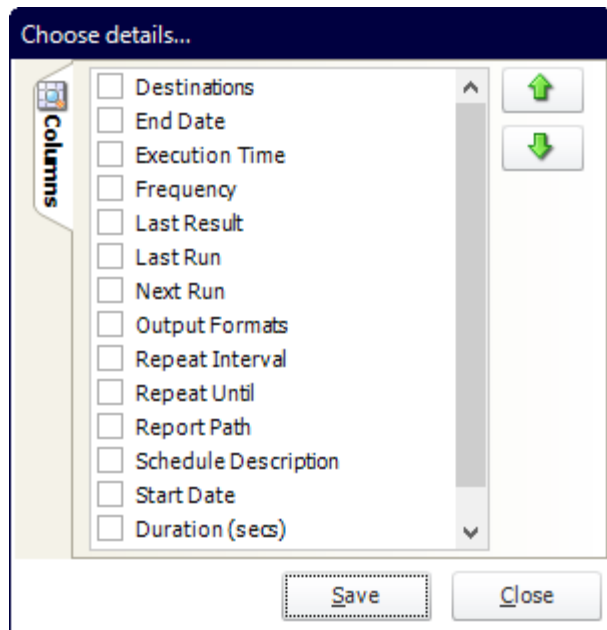


- Switch between list view and tile view for your schedules.
- Use the sliding bar to adjust the level of detail displayed for each schedule.

Select Details

- Go to **Select Details**.

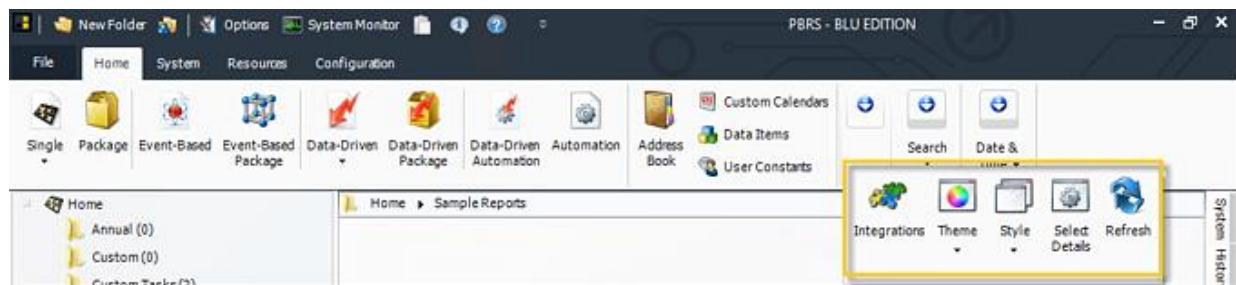




- Check the properties you would like to see when using Detail view.
- Use the arrows to determine the order the columns will be shown.

## Refresh

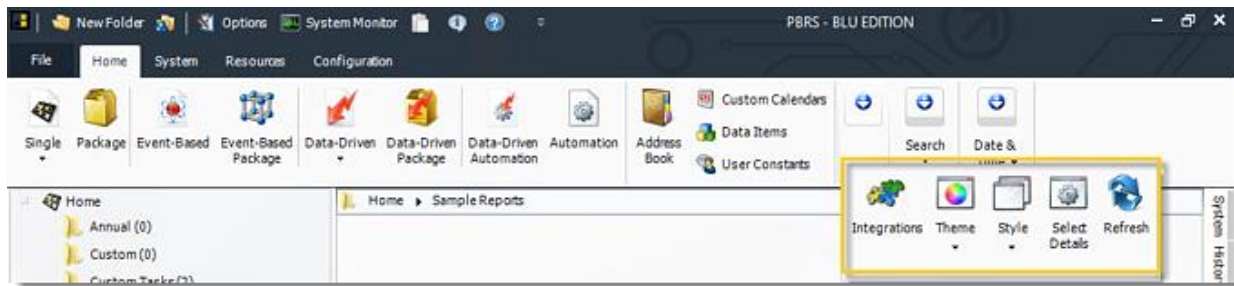
- Go to **Refresh**.



- Refresh the screen to show the latest schedule information.

## Theme

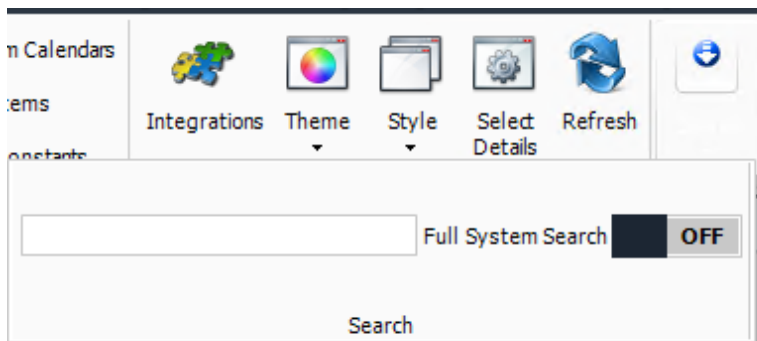
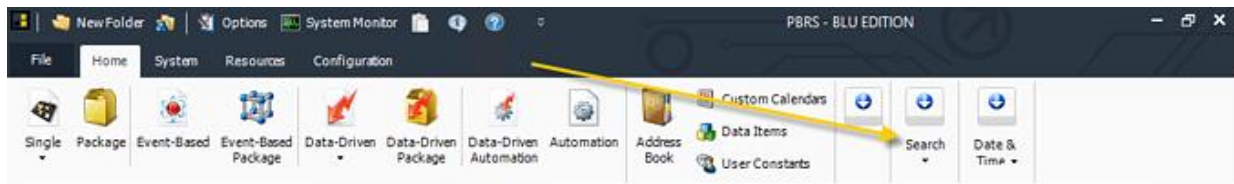
- Go to **Theme**.



- Select the color scheme for PBRs. Pick the one that best fits your tastes.

Search

Go to **Search**.



- Use search to find a specific schedule.

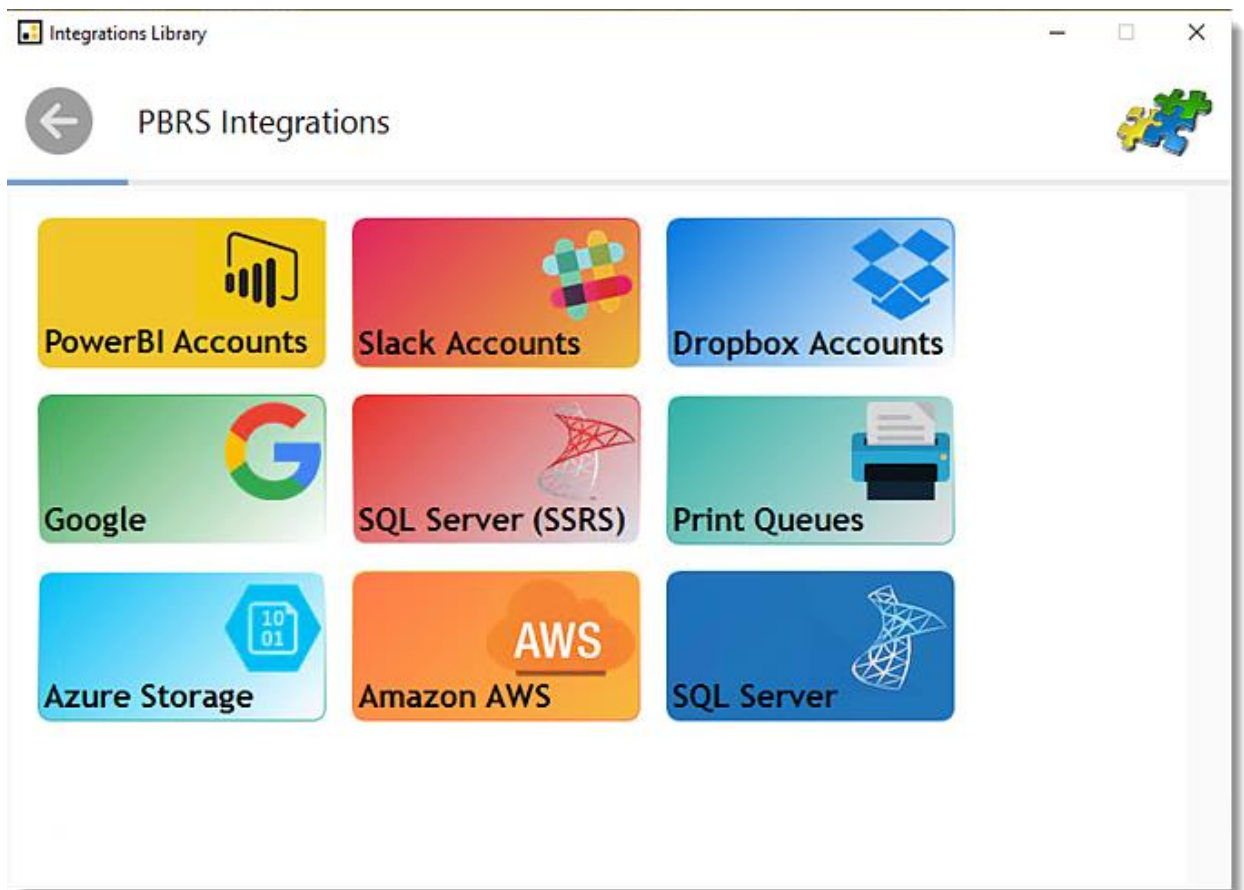
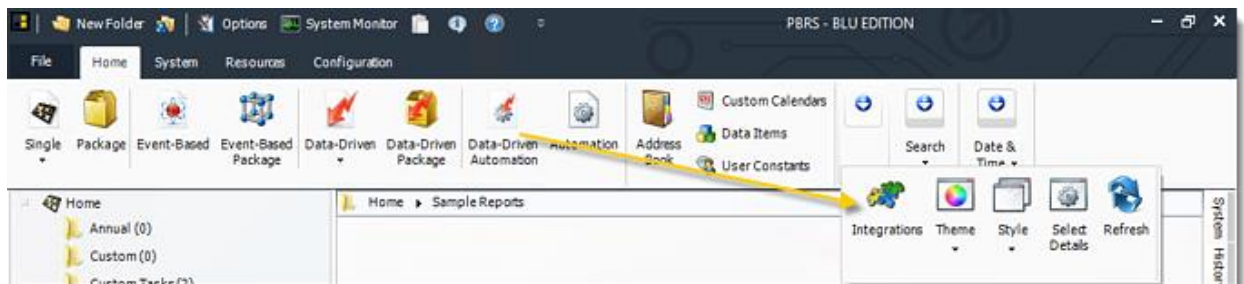
*Tip: Search looks for a schedule in the highlighted folder. To search all schedules, create a Smart Folder that encompasses every schedule, then use search to find the schedule.*

How do I create and manage integrations in PBRs?

**This is where you can add and manage your clouds accounts associated with PBRs. Associating your cloud accounts gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

Integrations

- Go to **Integrations**.



To manage each section:

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Updated on 15 November 2021

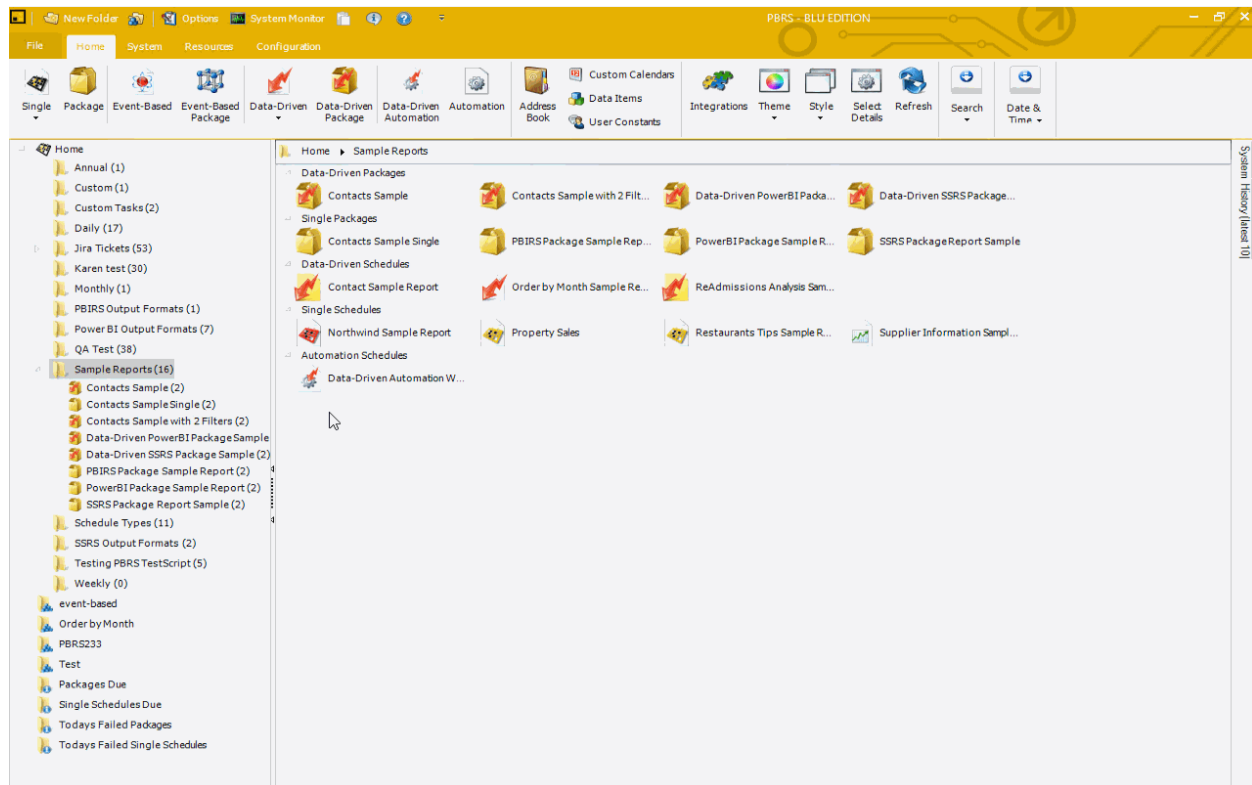
- [Power BI Accounts](#)
- [Slack Accounts](#)
- [Dropbox Accounts](#)
- [Google Accounts](#)
- [SSRS Accounts](#)
- [Print Queues](#)
- [Azure Storage](#)
- [Amazon AWS](#)
- [SQL Server](#)

# How do I share Accounts in Integrations Library?

**You have the ability to lock down Power BI and SSRS Accounts for Users and Groups in PBRs. Here's how.**

## Sharing Accounts - Integrations Library

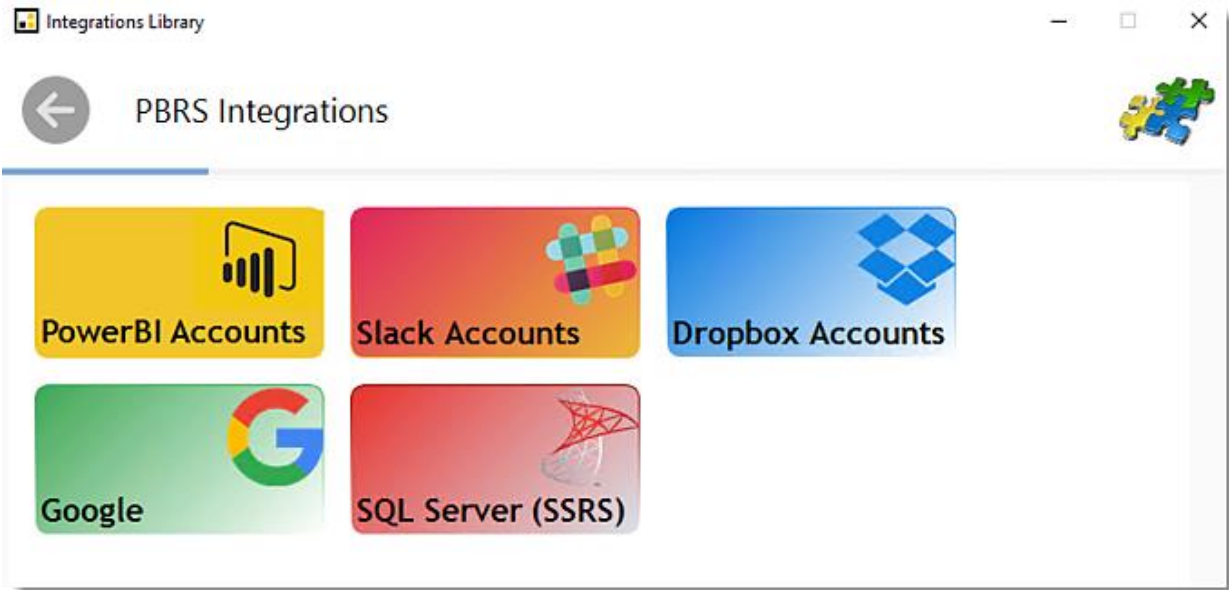
- You have the ability to lock down Power BI and SSRS Accounts for Users and Groups in PBRs.



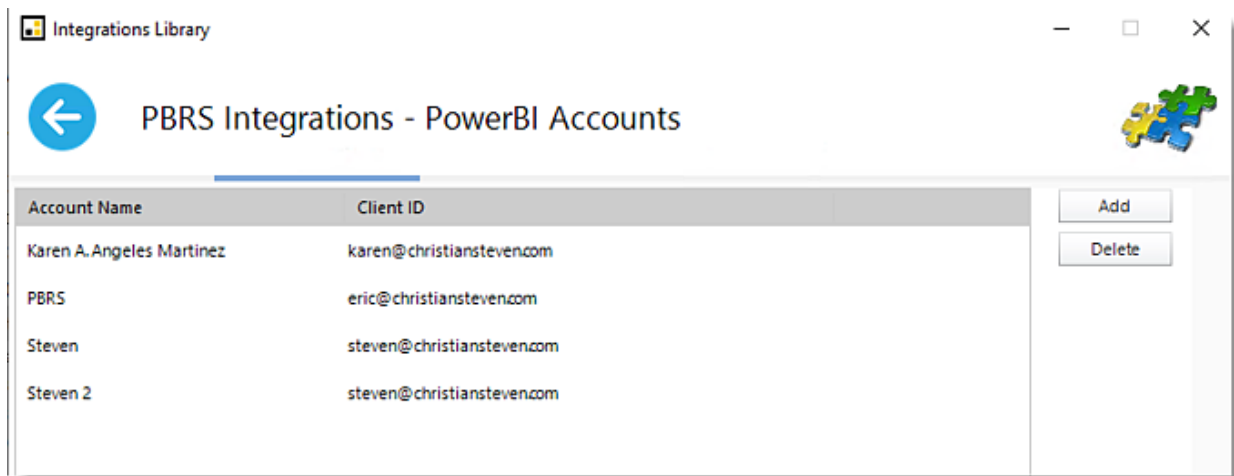
## Sharing Account for Power BI

- Go to **Integrations Library**.





- Select **PowerBI Accounts**.



- Double-click** the PowerBI Account.



## Add a PowerBI Account

General **Sharing**

Account Name

Authentication Type ☒ Office 365  
☐ Azure ActiveDirectory

**Please read the following before proceeding:**  
[1. How do I register an Azure AD app to embed Power BI content for use with PBRS?](#)  
[2. How do I add Power BI accounts to PBRS?](#)

Username  Password

Client ID  Client Secret

Refresh Token

Verify

**To register PBRS with Microsoft PowerBI, please follow the steps below:**  
[1. Click here to go to the PowerBI App Registration Portal and sign in with your account](#)  
2. Enter the name of the App as 'PBRS' and type as 'Server-Side Web App'  
3. For the Redirect URL, enter http://localhost  
4. For the Homepage URL, enter http://localhost  
5. Select all the APIs for access  
6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above  
7. Hit the verify button and follow the browser to authorize access to PBRS

Cancel Save & Close

•Click **Verify**.



## Add a PowerBI Account

General

Sharing

Account Name

Karen A. Angeles Martinez

Authentication Type

☒ Office 365  
☐ Azure ActiveDirectory

Please read the following before proceeding:

1. How do I register an Azure AD app to embed Power BI content for use with PBRs?

2. How do I add Power BI accounts to PBRs?

Username

karen@christiansteven.com

Client ID

8fb0d0c8-3395-4735-9888-3f9698759175

Refresh Token

PBRs

i

PowerBI account verified successfully

OK

Verify

To register PBRs with Microsoft PowerBI, please follow the steps below:

1. Click here to go to the PowerBI App Registration Portal and sign in with your account

2. Enter the name of the App as 'PBRs' and type as 'Server-Side Web App'

3. For the Redirect URL, enter http://localhost

4. For the Homepage URL, enter http://localhost

5. Select all the APIs for access

6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above

7. Hit the verify button and follow the browser to authorize access to PBRs

Cancel

Save & Close

- Go to the **Sharing** tab.





## Add a PowerBI Account

General Sharing

Share this account with the following groups

✕ Administrator ✕ QA Test |

- Select the group you would like to share the Power BI Account.



## Add a PowerBI Account

General Sharing

Share this account with the following groups

✕ Administrator ✕ QA Test |

QA Test  
User Admin  
Testing Sharing

- After selecting the Group, click **Save & Close**.



## Add a PowerBI Account

General Sharing

Share this account with the following groups

✕ Administrator ✕ QA Test ✕ Testing Sharing |

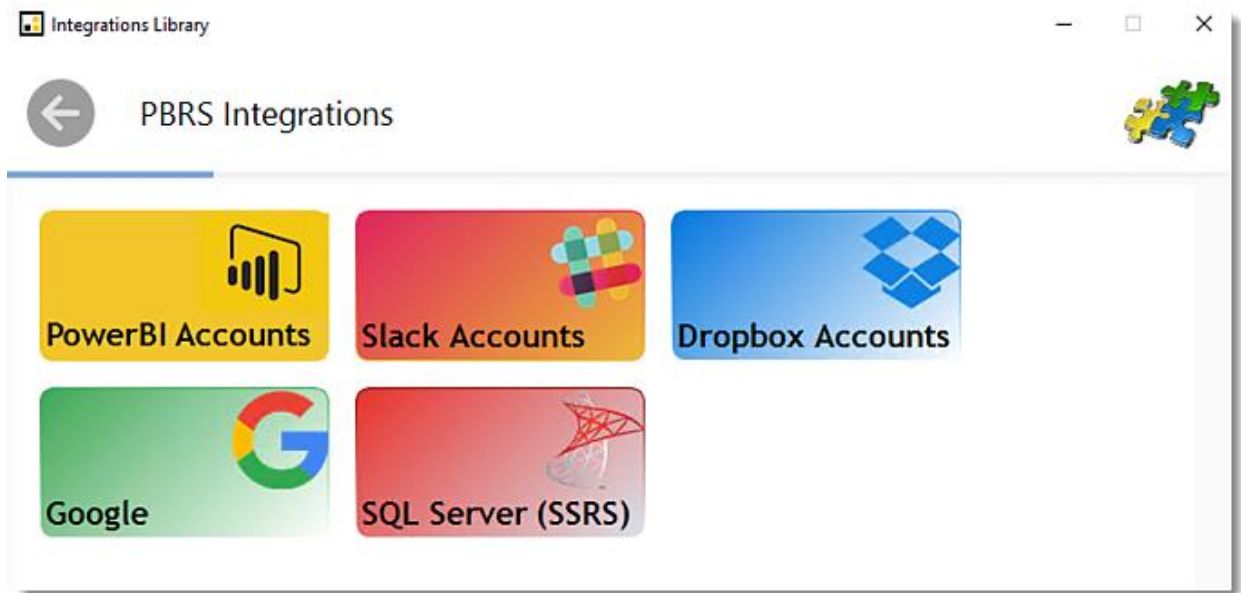
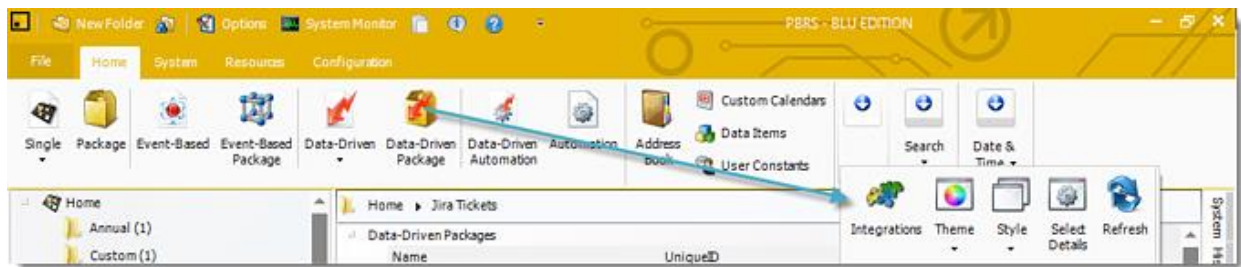
Cancel

Save & Close

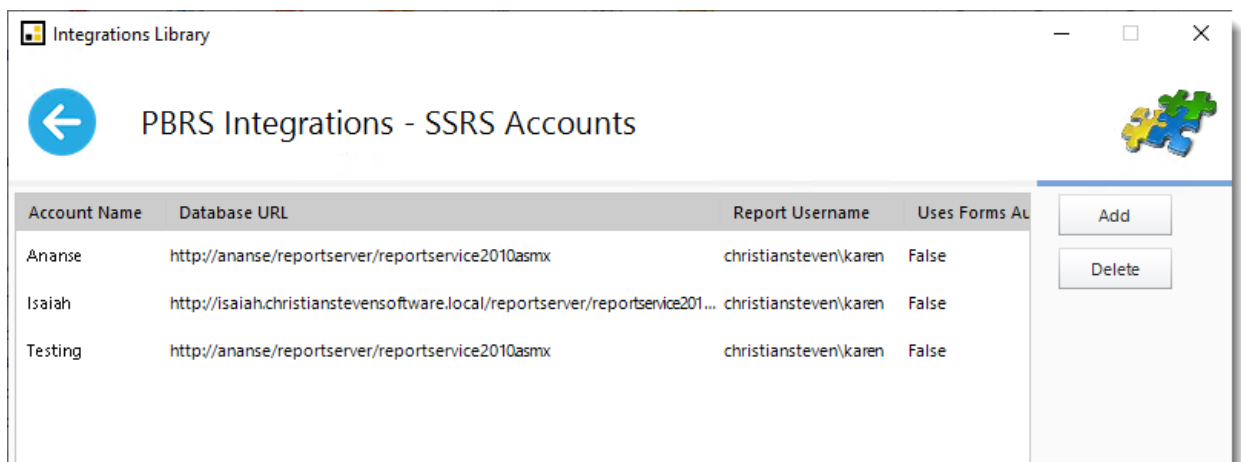
- The Power BI Account has been shared with the selected group.

### Sharing Account for SSRS Accounts

- Go to **Integrations Library**.




- Select **SQL Server (SSRS)**.



- Double-click** the SSRS Account.

SSRS Account



## Add an SSRS Account

General **Sharing**


SSRS Account Name

SSRS Server URL

Domain\Username

User's Password

☐ Server uses custom/forms authentication

 Press 'Connect' to test access to the SSRS Server>>

- Click **Connect**.

## SSRS Account



### Add an SSRS Account

General **Sharing**

SSRS Account Name

SSRS Server URL

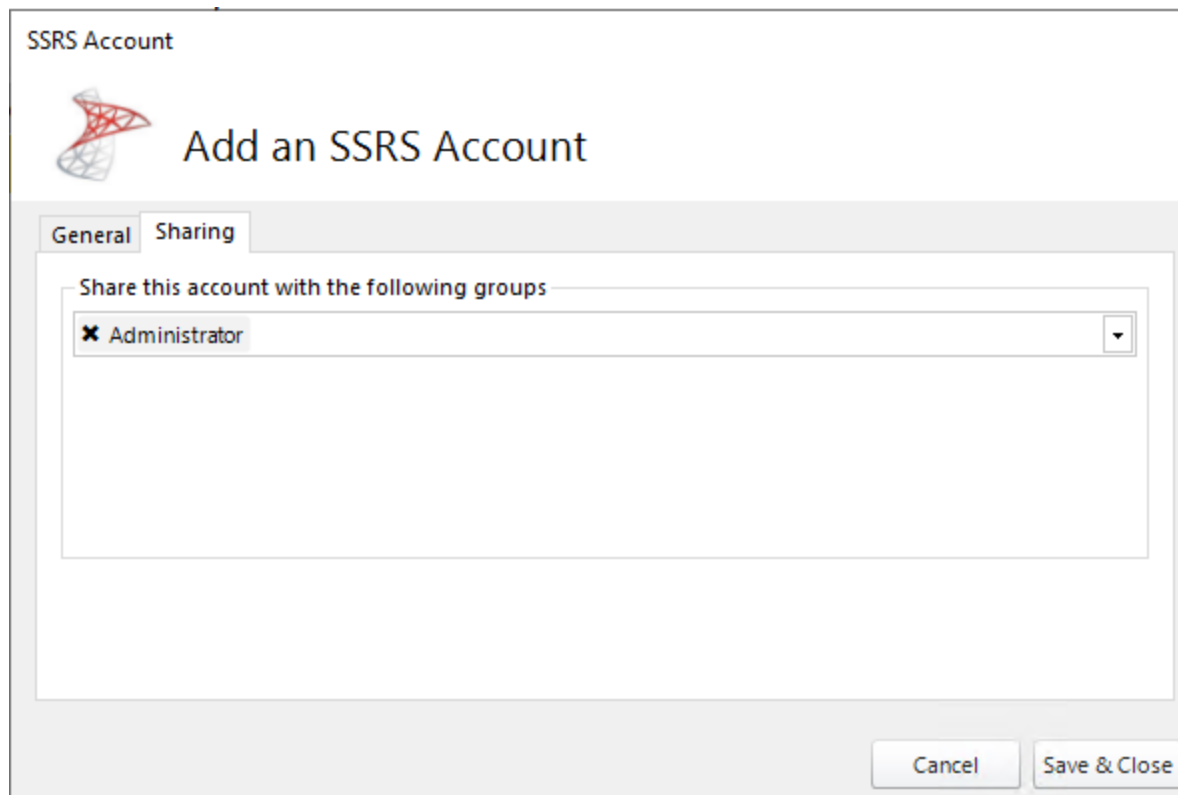
Domain\Username

User's Password

☐ Server uses custom/forms authentication

Press 'Connect' to test access to the SSRS Server>>

- Go to the **Sharing** tab.



- Select the group you would like to share this account.



## Add an SSRS Account

General Sharing

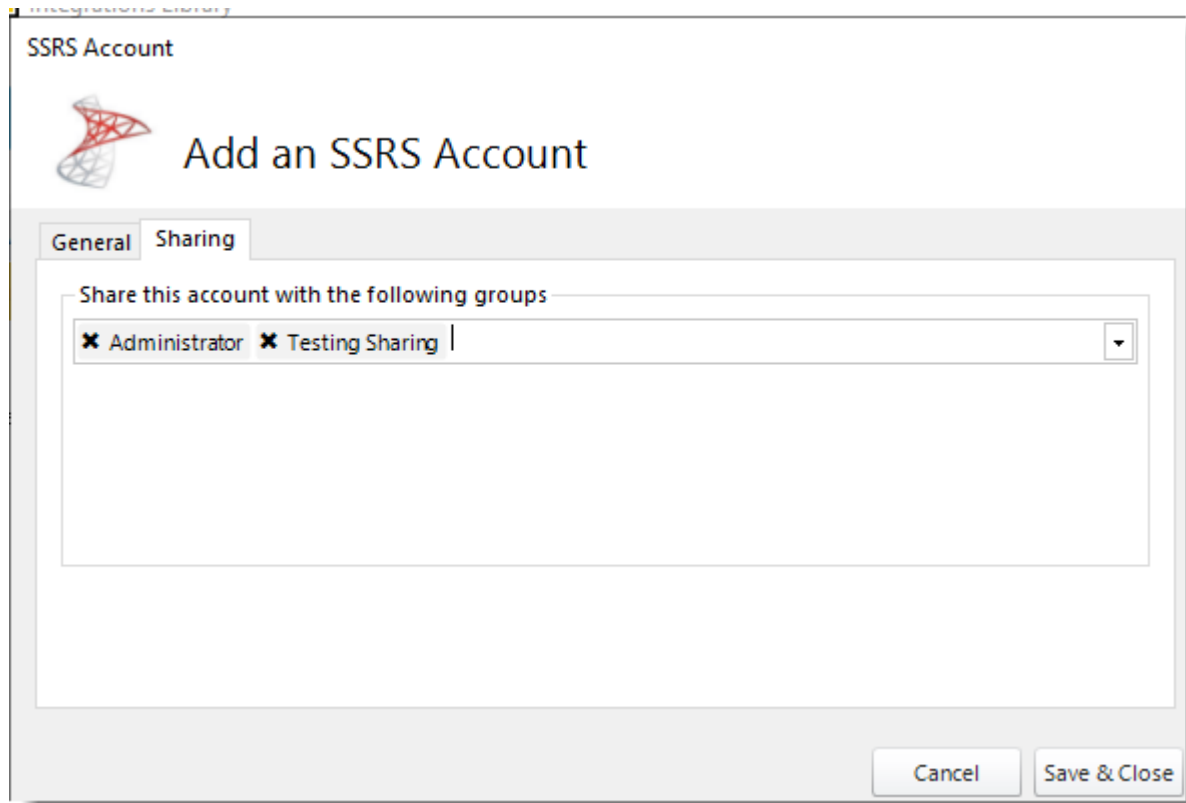
Share this account with the following groups

✕ Administrator |

QA Test  
User Admin  
Testing Sharing

Cancel Save & Close

- After selecting the Group, click **Save & Close**.



- The SSRS Account has been shared with the selecting group.

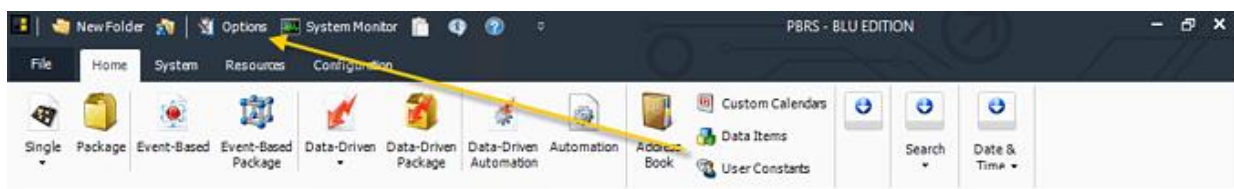


How do I add Power BI accounts to PBRs?

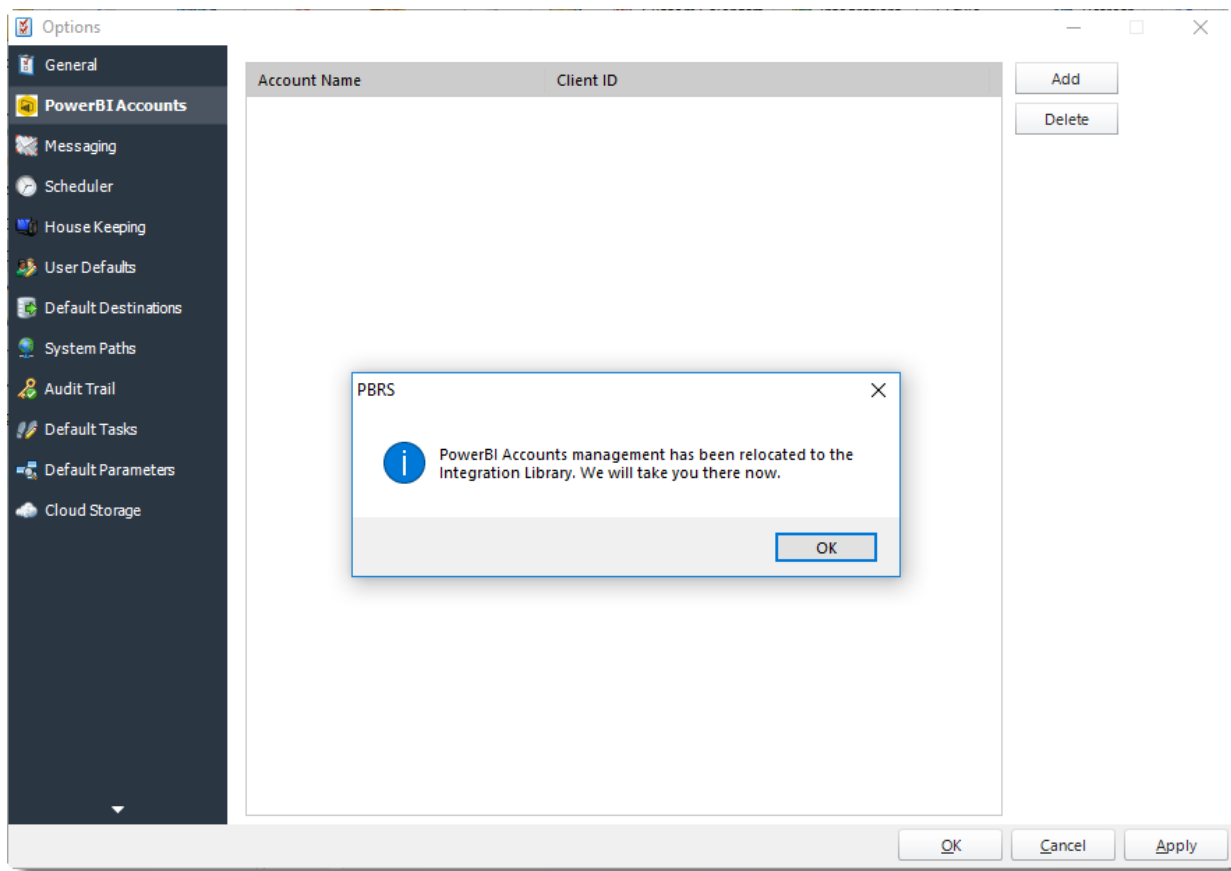
**This is how you would associate your Power BI account(s) with PBRs. Associating your Power BI account gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

## Power BI Accounts

- Go to **Options**.



- Select **Power BI Accounts**.



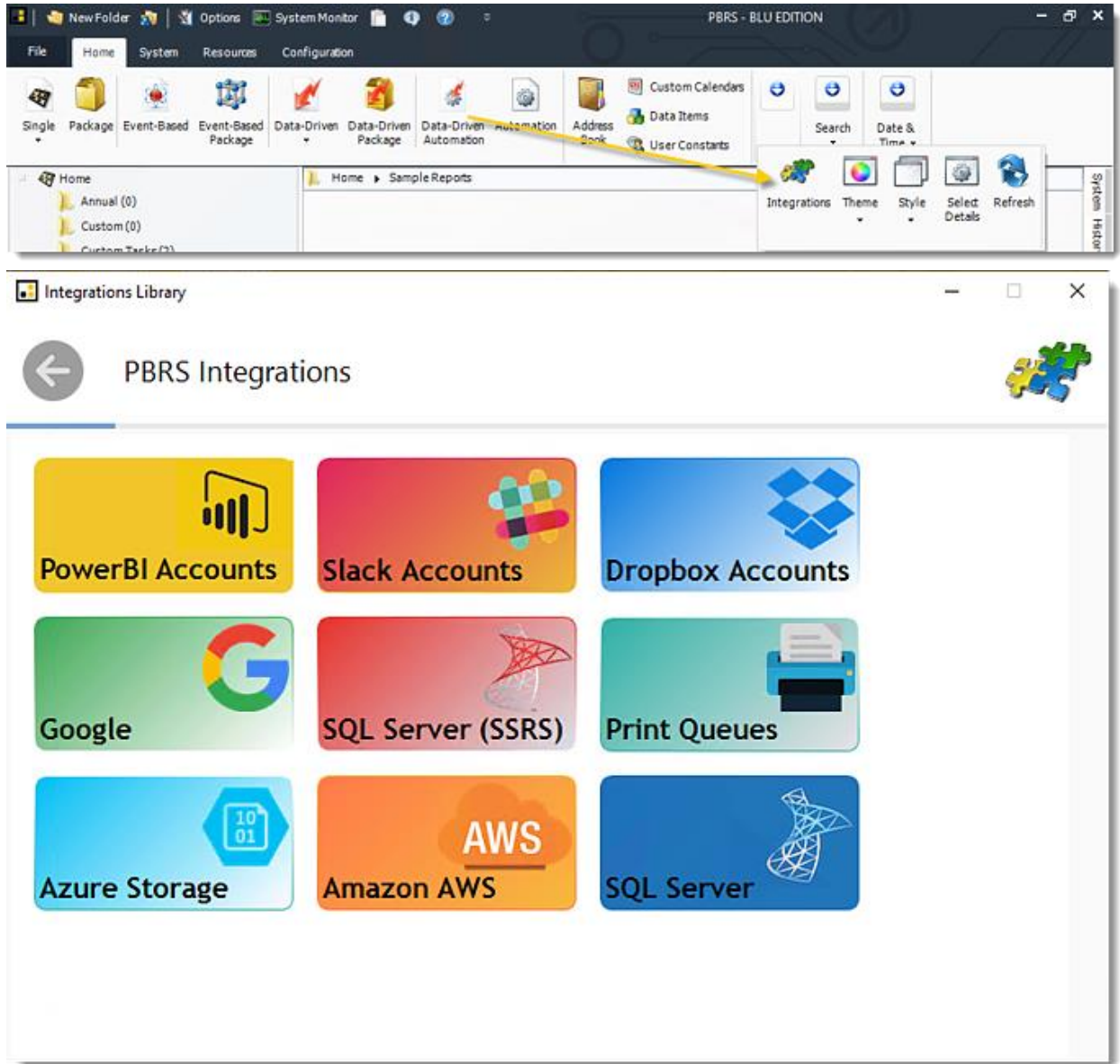
You can also manage Integrations Library here.

© ChristianSteven Software

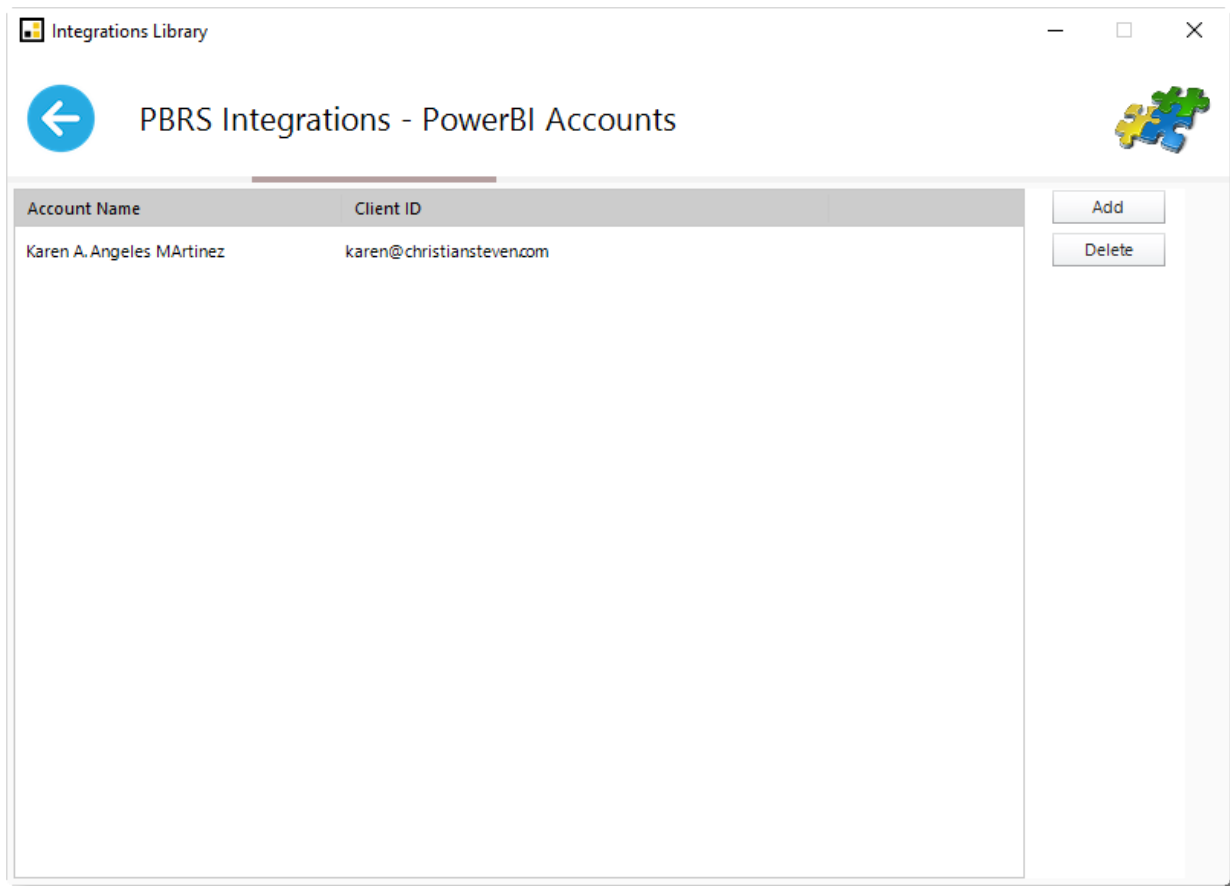
Updated on 15 November 2021

1156

- Or select **Integrations** on the home screen.



- Select **PowerBI Accounts**.



- Click **Add** to add an account.

#### *Adding Office 365 accounts*

- Select **Office 365** as the **Authentication Type**.
- Follow the instructions in the blue section of the *Add a Power BI Account* screen.



## Add a PowerBI Account

General | Sharing

Account Name

Authentication Type ☒ Office 365  
☐ Azure Active Directory

**Please read the following before proceeding:**

1. [How do I register an Azure AD app to embed Power BI content for use with PBRS?](#)
2. [How do I add Power BI accounts to PBRS?](#)

Username  Password

Client ID  Client Secret

Refresh Token

**To register PBRS with Microsoft PowerBI, please follow the steps below:**

1. [Click here to go to the PowerBI App Registration Portal](#) and sign in with your account
2. Enter the name of the App as 'PBRS' and type as 'Server-Side Web App'
3. For the Redirect URL, enter <http://localhost>
4. For the Homepage URL, enter <http://localhost>
5. Select all the APIs for access
6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above
7. Hit the verify button and follow the browser to authorize access to PBRS

- When you have completed the instructions, click **Verify**.



## Add a PowerBI Account

General

Sharing

Account Name

Karen A. Angeles Martinez

Authentication Type

☒ Office 365

☐ Azure ActiveDirectory

Please read the following before proceeding:

1. How do I register an Azure AD app to embed Power BI content for use with PBRs?

2. How do I add Power BI accounts to PBRs?

Username

karen@christiansteven.com

Password

.....

Client ID

8f8d8d8d-3285-4775-8888-3f8888788175

Client Secret

.....

Refresh Token

Verify

To register PBRs with Microsoft PowerBI, please follow the steps below:

1. Click here to go to the PowerBI App Registration Portal and sign in with your account

2. Enter the name of the App as 'PBRs' and type as 'Server-Side Web App'

3. For the Redirect URL, enter http://localhost

4. For the Homepage URL, enter http://localhost

5. Select all the APIs for access

6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above

7. Hit the verify button and follow the browser to authorize access to PBRs

Cancel

Save & Close

- If successful, a pop-up will appear: *Power BI account verified successfully*. Click **OK**.

PowerBI Account

## Add a PowerBI Account

Account Name: Karen A. Angeles MARTINEZ

Authentication Type: ☒ Office 365 ☐ Azure Active Directory

Username: karen@christiansteven.com

Password: .....

Client ID: 627188a6b-7516-468F-8260-2F6401C3814B

Client Secret: .....

Verify

**PBRS**

To register PBRS with Micro

1. Click here to go to the Power BI Developer Portal
2. Enter the name of the App and select the appropriate environment
3. For the Redirect URL, enter http://localhost:3000/
4. For the Homepage URL, enter http://localhost:3000/
5. Select all the APIs for access
6. Copy both the 'Client ID' and the 'Client Secret' codes and paste them above
7. Hit the verify button and follow the browser to authorize access to PBRS

PowerBI account verified successfully

OK

Cancel Save & Close

- The Power BI account is now added to PBRS.

### *Adding Azure Active Directory accounts*

- Select **Azure Active Directory** as the **Authentication Type**
- Follow the instructions in the blue section of the *Add a Power BI Account* screen.



## Add a PowerBI Account

General
Sharing

Account Name

Authentication Type
☐ Office 365
☒ Azure ActiveDirectory
☒ Use Code Authorization

**Please read the following before proceeding:**

1. [How do I register an Azure AD app to embed Power BI content for use with PBRs?](#)
2. [How do I add Power BI accounts to PBRs?](#)

Username
Password

Client ID
Azure Tenant ID

Refresh Token

[Whats my Azure Tenant ID?](#)

**To register PBRs with Microsoft PowerBI, please follow the steps below:**

1. [Click here to go to the PowerBI App Registration Portal and sign in with your account](#)
2. Enter the name of the App as 'PBRs' and type as 'Native App'
3. For the Redirect URL, enter http://localhost
4. For the Homepage URL, enter http://localhost
5. Select all the APIs for access
6. Copy the 'Client ID' code and paste it above
7. Hit the verify button and follow the browser to authorize access to PBRs

You will need to be an **Azure Global Administrator** to be able to successfully give PBRs the required permissions. If you are not an Azure Global Administrator, your Azure Global Administrator must first register an Azure AD app to embed Power BI content for use with PBRs, and then provide you with the **Client ID** and the **Azure Tenant ID**. Here's how.

- When you have completed the instructions, click **Verify**.



## Add a PowerBI Account

General
Sharing

Account Name
Karen A. Angeles Martinez

Authentication Type
☐ Office 365
☒ Azure Active Directory
☒ Use Code Authorization

**Please read the following before proceeding:**

- How do I register an Azure AD app to embed Power BI content for use with PBRS?
- How do I add Power BI accounts to PBRS?

Username
karen@christiansteven.com
Password
.....

Client ID
8f4a1a1b-3285-4725-a088-3f6a0e79a175
Azure Tenant ID
8C9d1a9d796\_72a04a318f3a7f5321402a138290000

Refresh Token

[Whats my Azure Tenant ID?](#)
Verify

**To register PBRS with Microsoft PowerBI, please follow the steps below:**

- Click here to go to the PowerBI App Registration Portal and sign in with your account
- Enter the name of the App as 'PBRS' and type as 'Native App'
- For the Redirect URL, enter http://localhost
- For the Homepage URL, enter http://localhost
- Select all the APIs for access
- Copy the 'Client ID' code and paste it above
- Hit the verify button and follow the browser to authorize access to PBRS

Cancel
Save & Close

- If successful, a pop-up will appear: Power BI account verified successfully. Click **OK**.





## Add a PowerBI Account

General | Sharing

Account Name

Authentication Type ☐ Office 365 ☒ Azure Active Directory ☒ Use Code Authorization

**Please read the following before proceeding:**

1. [How do I register an Azure AD app to embed Power BI content for use with PBRS?](#)
2. [How do I add Power BI accounts to PBRS?](#)

Username

Client ID

Refresh Token

[Whats my Azure Tenant ID?](#)

**PBRS**

PowerBI account verified successfully

OK

Verify

**To register PBRS with Microsoft PowerBI, please follow the steps below:**

1. [Click here to go to the PowerBI App Registration Portal](#) and sign in with your account
2. Enter the name of the App as 'PBRS' and type as 'Native App'
3. For the Redirect URL, enter <http://localhost>
4. For the Homepage URL, enter <http://localhost>
5. Select all the APIs for access
6. Copy the 'Client ID' code and paste it above
7. Hit the verify button and follow the browser to authorize access to PBRS

Cancel Save & Close

- The Power BI account is now added to PBRS

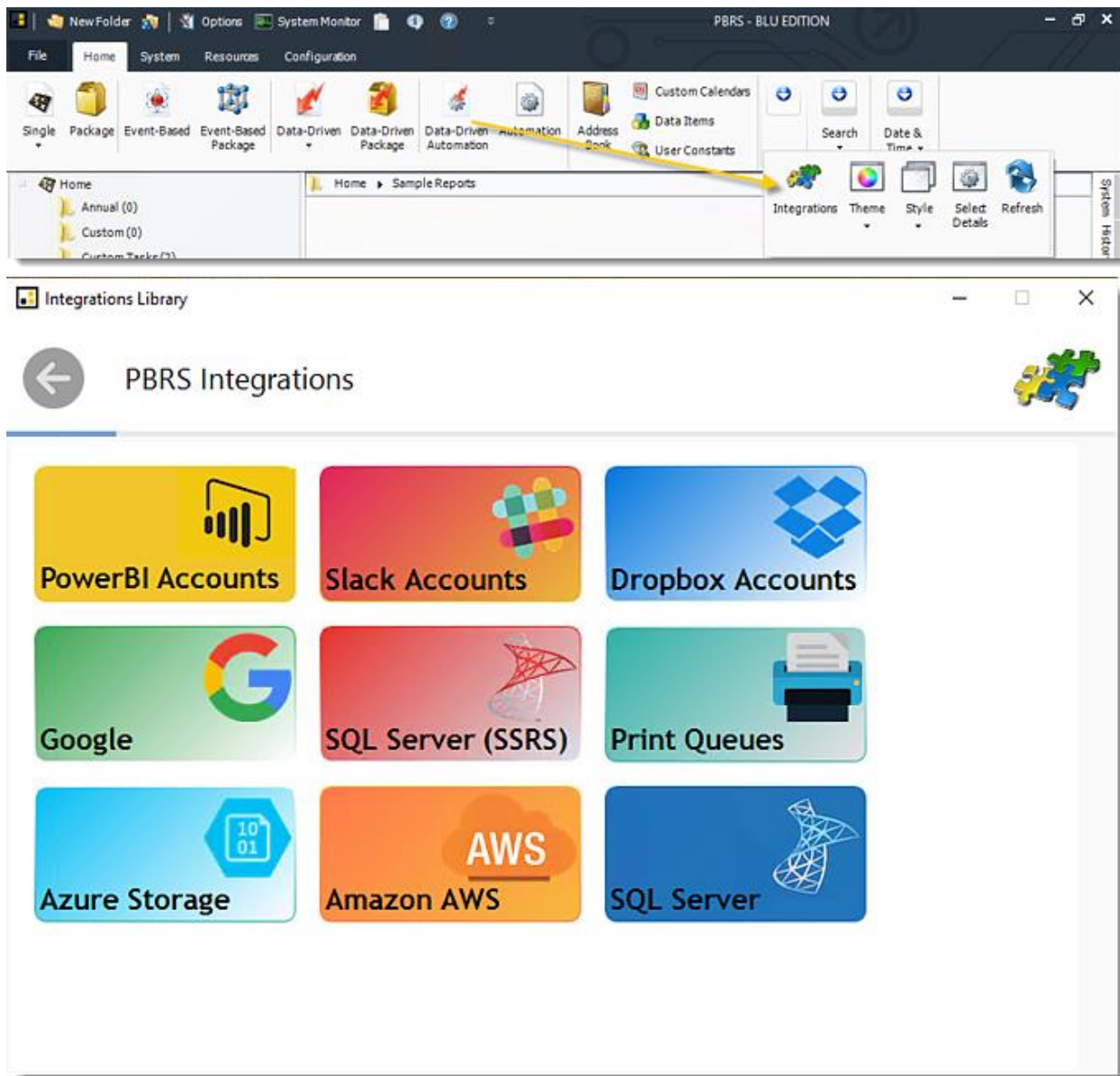
How do I add Slack accounts to PBRs?

**This is how you would associate your Slack account(s) with PBRs.**

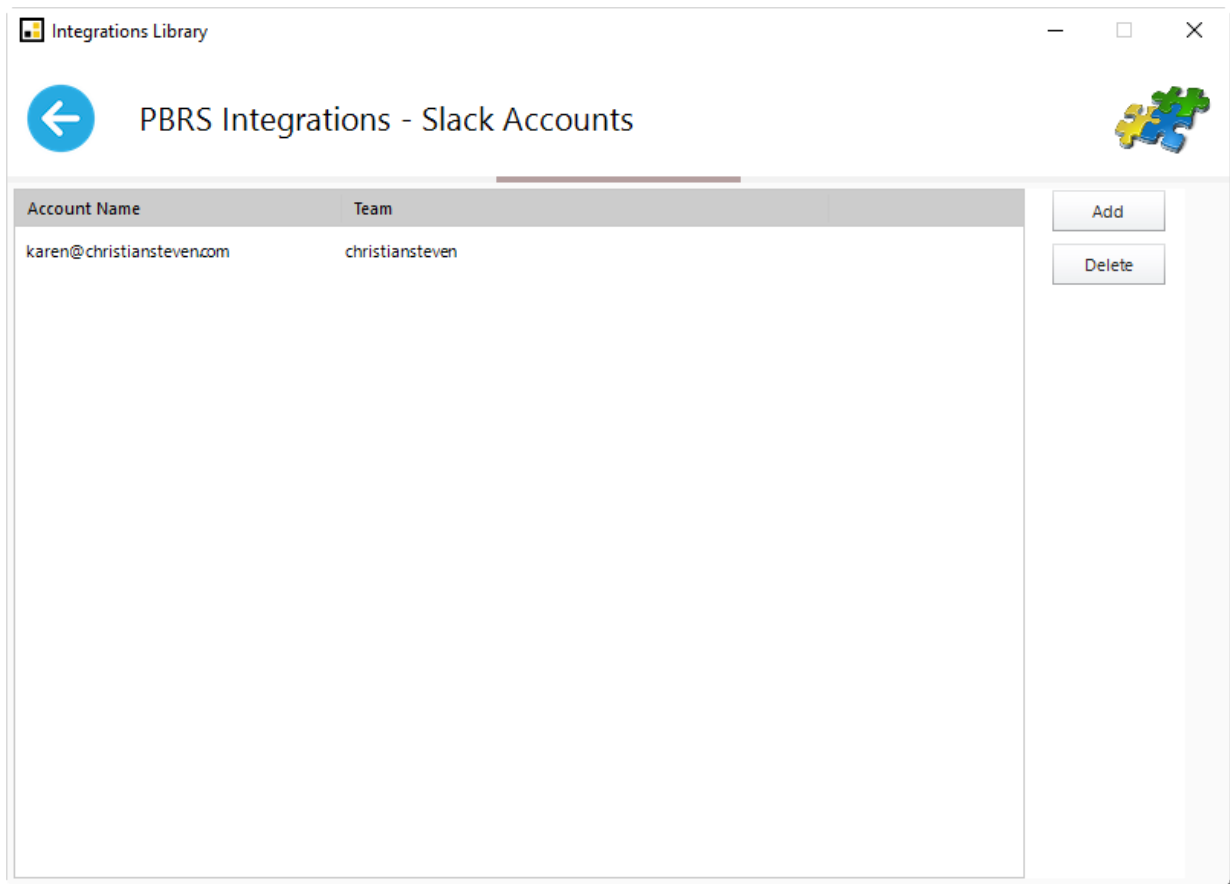
**Associating your Slack account gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

Integrations - Slack Accounts

- Go to **Integration**.




- Select **Slack Accounts**.



- Click **Add** to add an account.


Slack Account

 Add a Slack Account

Account Name

Team Name  slack.com

Access Token

 Press 'Connect' to acquire the Access Token from Slack >>

Connect

Cancel Save & Close


- Account Name:** Enter the account credentials.
- Team Name:** Enter the workspace's Slack URL


- **Access Token:** After adding slack account credentials, click **Connect** to acquire the Access Token from Slack.

The screenshot shows the Slack web interface for signing into a workspace. The header includes the Slack logo and navigation links: Product, Pricing, Support, Create a new workspace, Find your workspace, and a Sign in button. The main content area is titled 'Sign in to your workspace' and prompts the user to 'Enter your workspace's Slack URL.' Below this is a text input field containing 'christiansteven' and a dropdown menu showing '.slack.com'. A green 'Continue' button with a right arrow is positioned below the input field. At the bottom of the main content area, there is a link 'Find your workspace' for users who don't know their workspace URL. At the very bottom of the page, there is a link 'Create a new workspace' for users who need to get their group started on Slack.

- **Sign in to your workspace:** Enter your workspace's Slack URL.
- Click **Continue**.

Add PBRS to Slack

 Product Pricing Support Create a new workspace Find your workspace [Sign in](#)

 You need to sign in to see this page.

## Sign in to ChristianSteven

christiansteven.slack.com

Enter your **email address** and **password**.

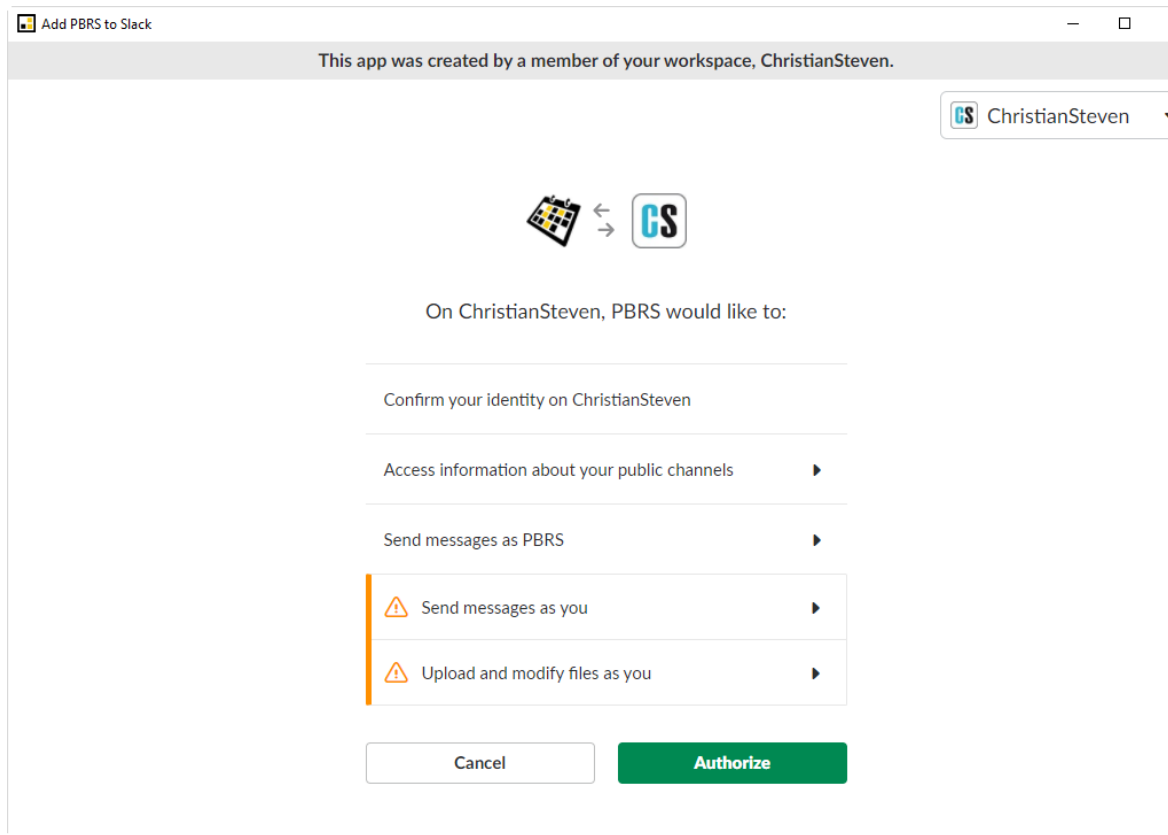
[Sign in](#)

☒ Remember me

[Forgot password?](#) · [Forgot which email you used?](#)

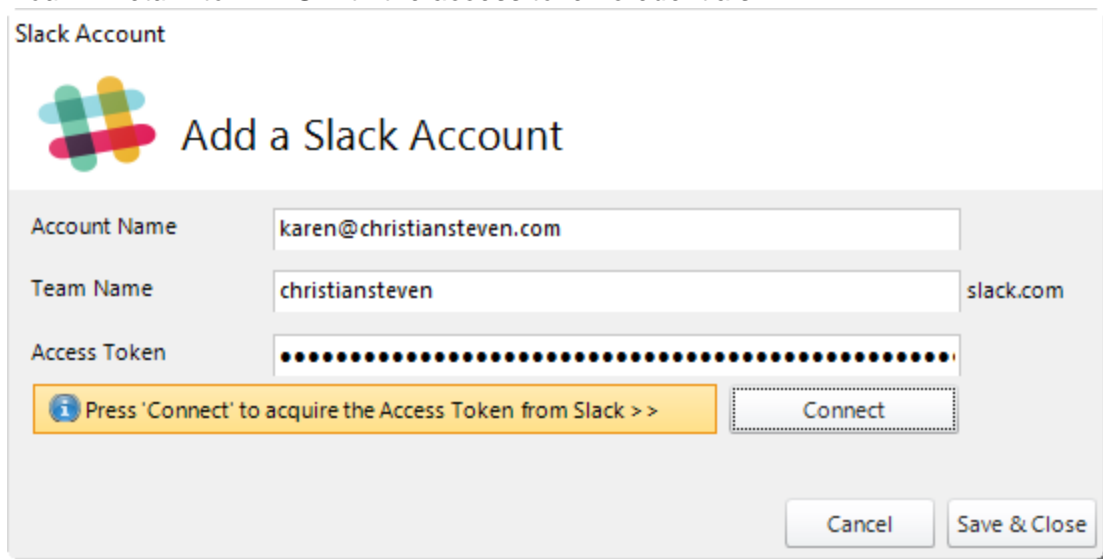
If you have an @christiansteven.com email address, you can [create an account](#).

- Enter your email address and password from Slack.
- Click **Sign In**.



- Click **Authorize**.

*You will return to PBRS with the access token credentials.*



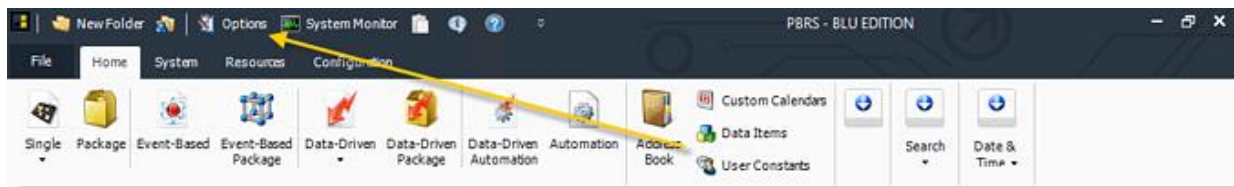
- Click **Save & Close**.
- The Slack account is now added to PBRS.

How do I add DropBox account in PBRs?

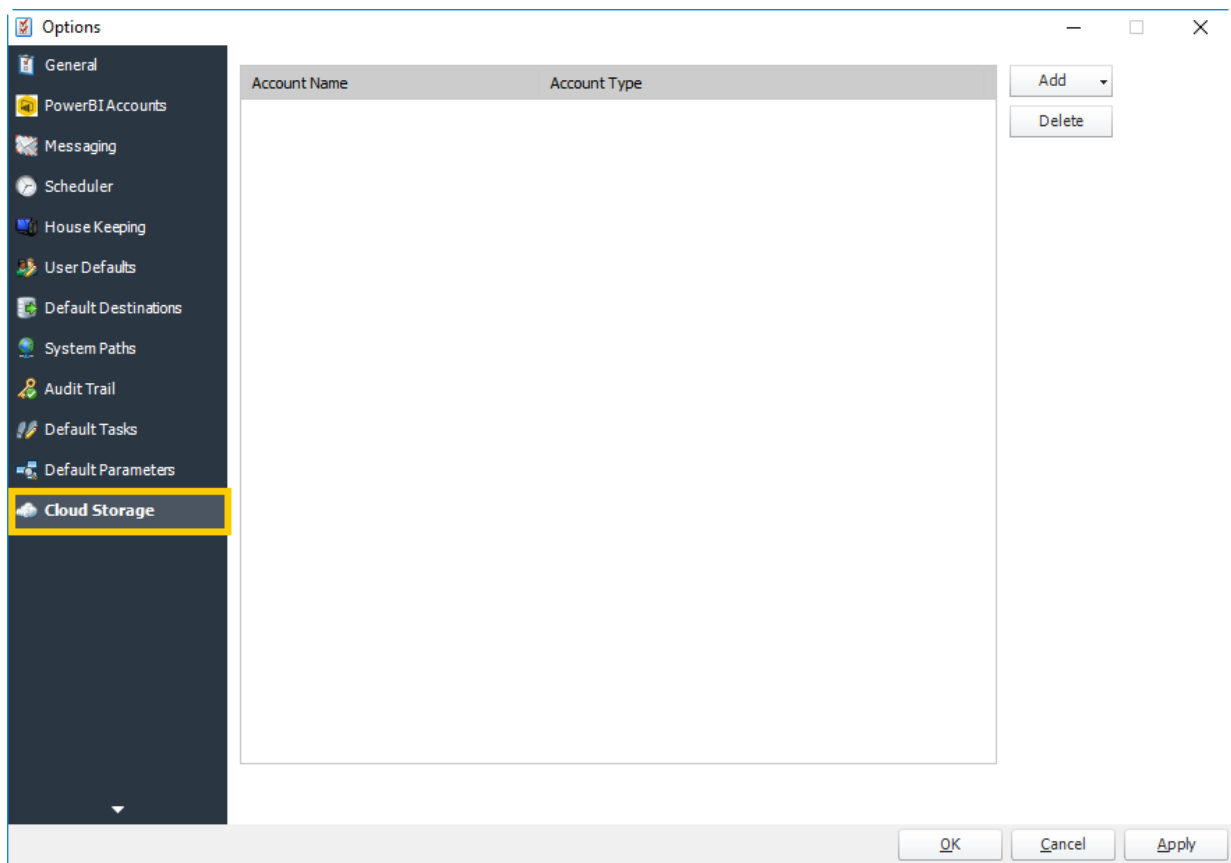
**This is how you would associate your DropBox account(s) with PBRs. Associating your DropBox account gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

DropBox Account

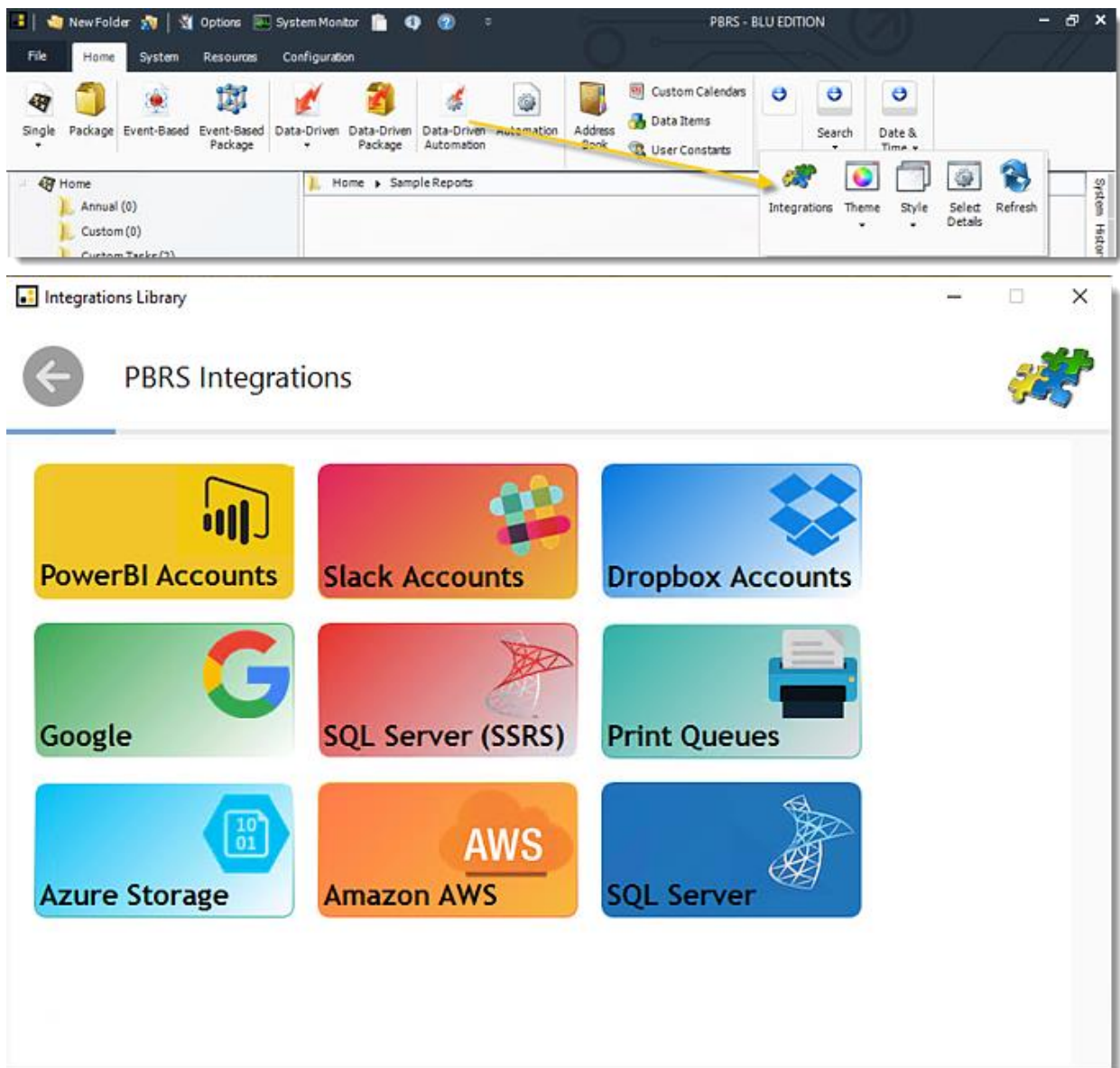
- Go to **Options**.



- Select **Cloud Storage**.

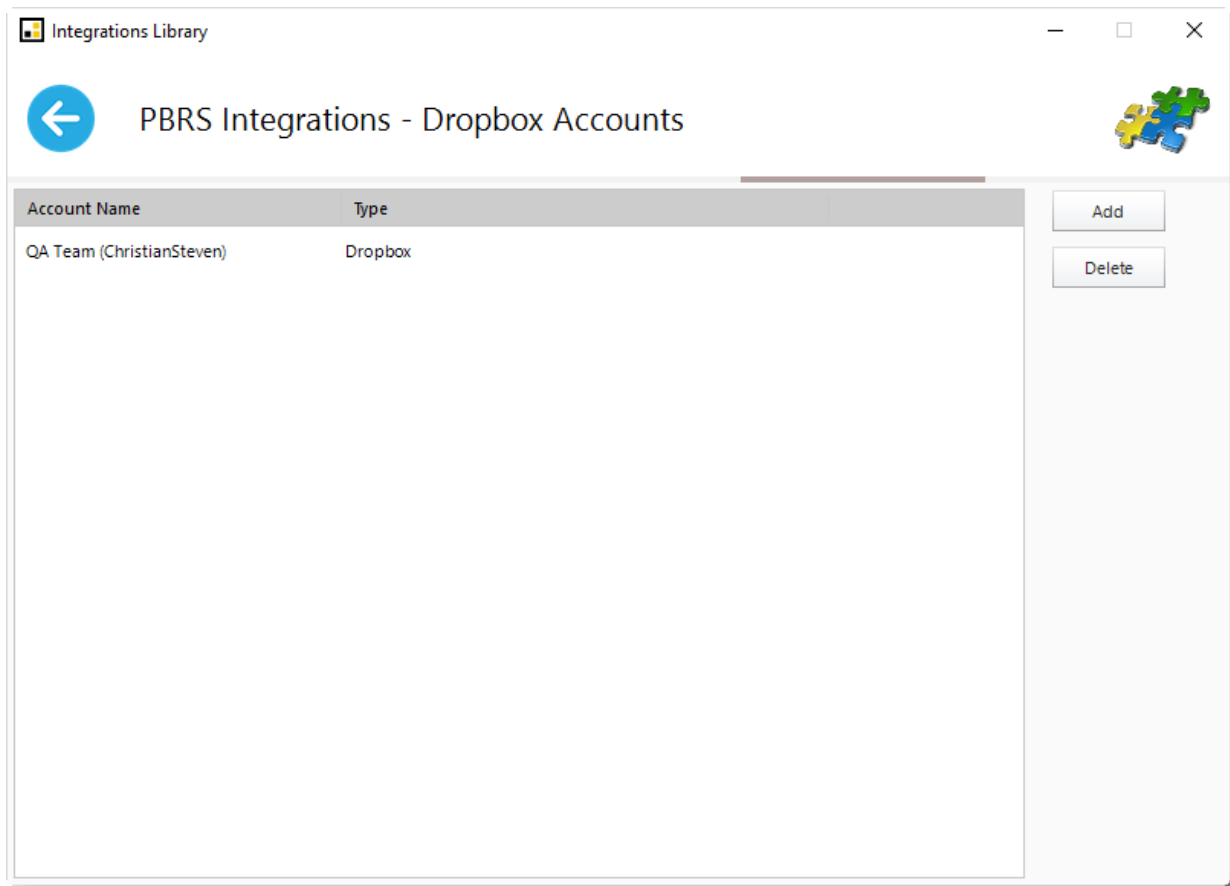


- Or select **Integrations** on the home screen.

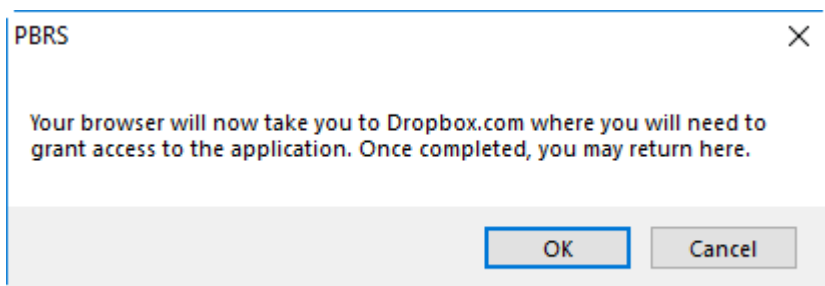


- Select **Dropbox Accounts**.

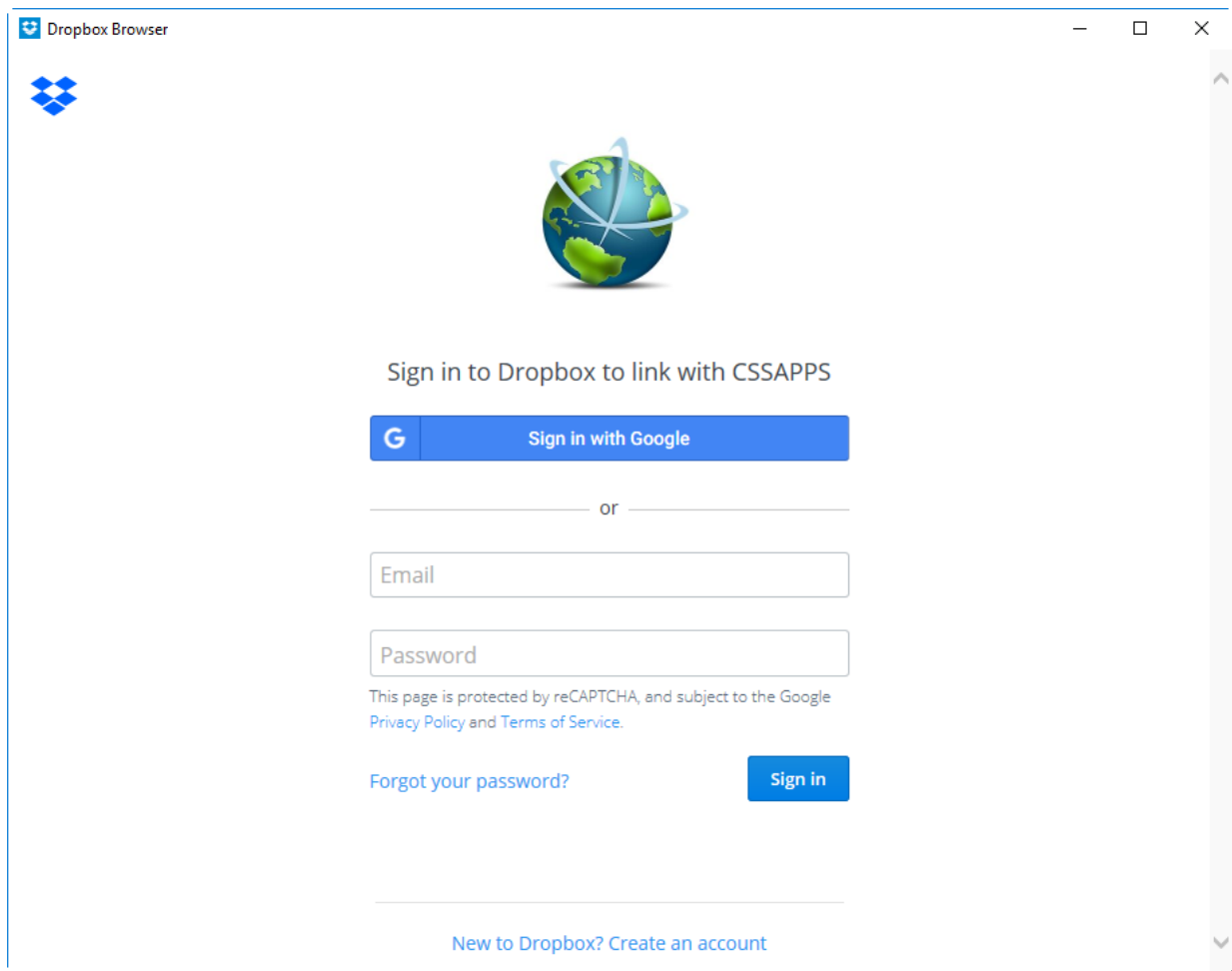




- Click **Add**.
- You will see a pop-up advising you that you will now be redirected to Dropbox.com to grant access to PBRS. Click **OK**.



- On the dropbox.com browser window that opens, **sign-in to your Dropbox account**.



- Navigate back to PBRS. You should now see your Dropbox account listed under the Account Name/Account Type section.
- The Dropbox account is now added to PBRS.

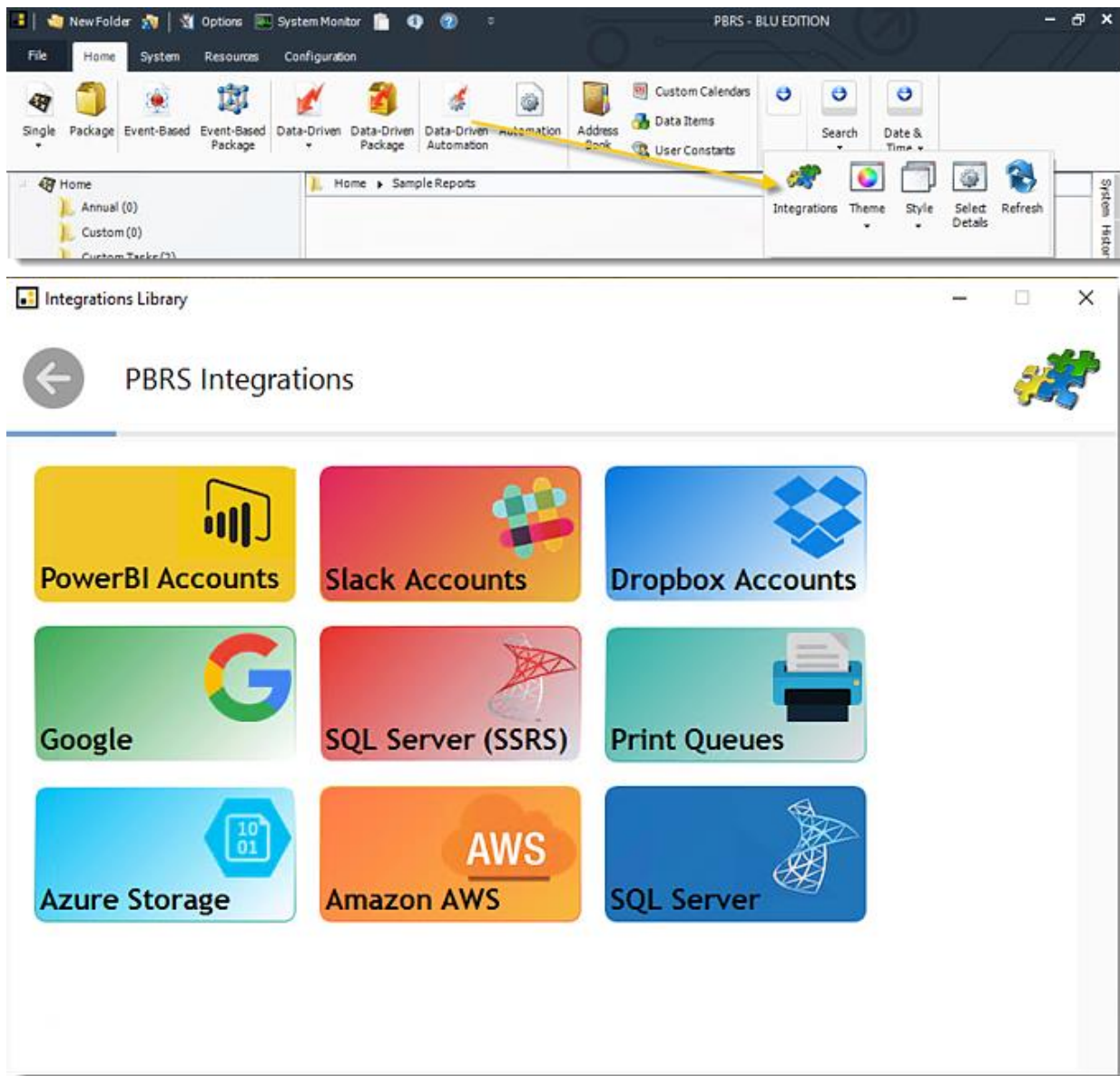
How do I add Google Accounts in PBRs?

**This is how you would associate your Google Accounts with PBRs.**

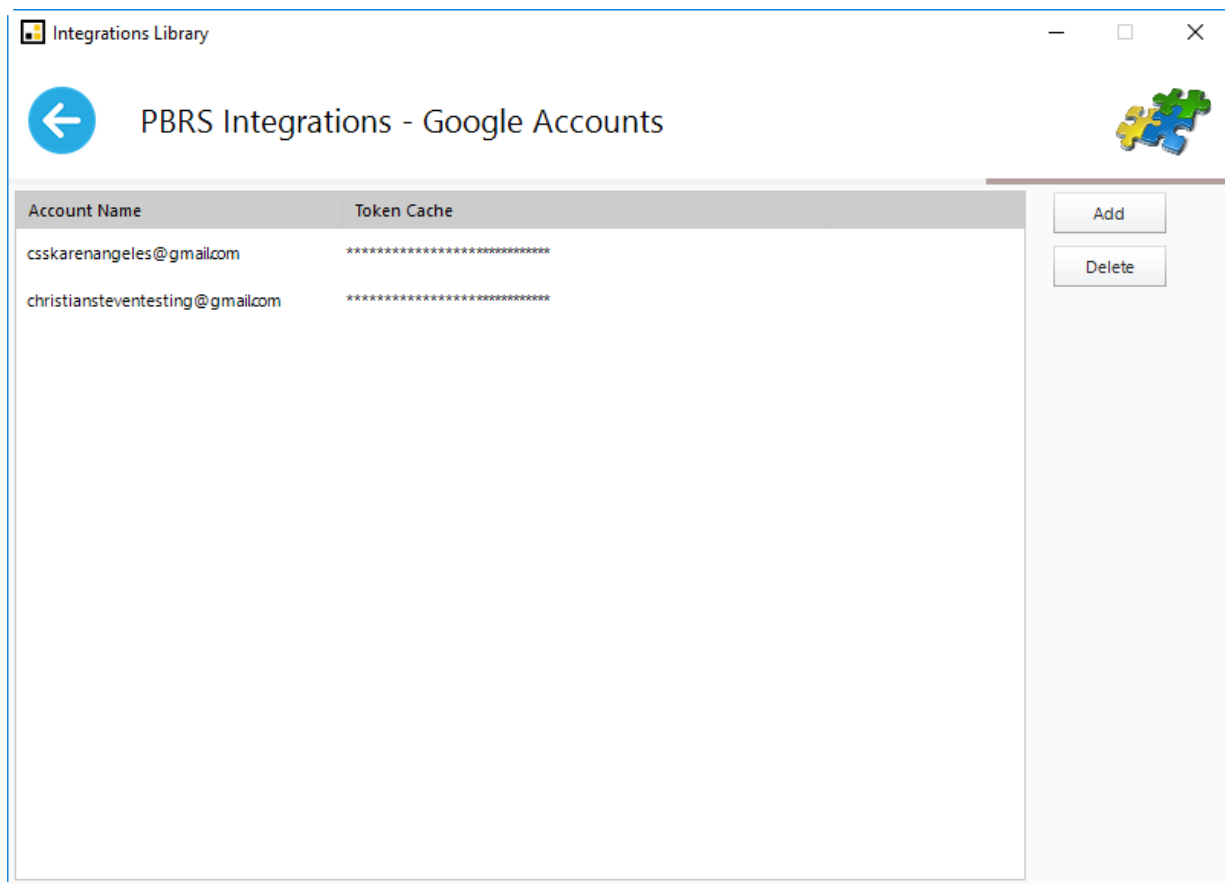
**Associating your Google Account gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

Integration - Google Accounts

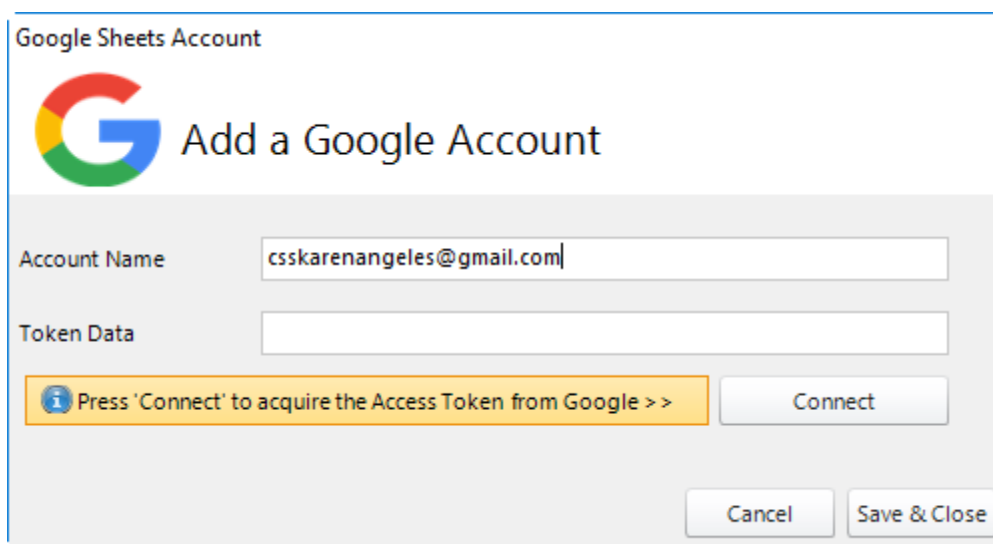
- Go to **Integration**.



- Select **Google**.



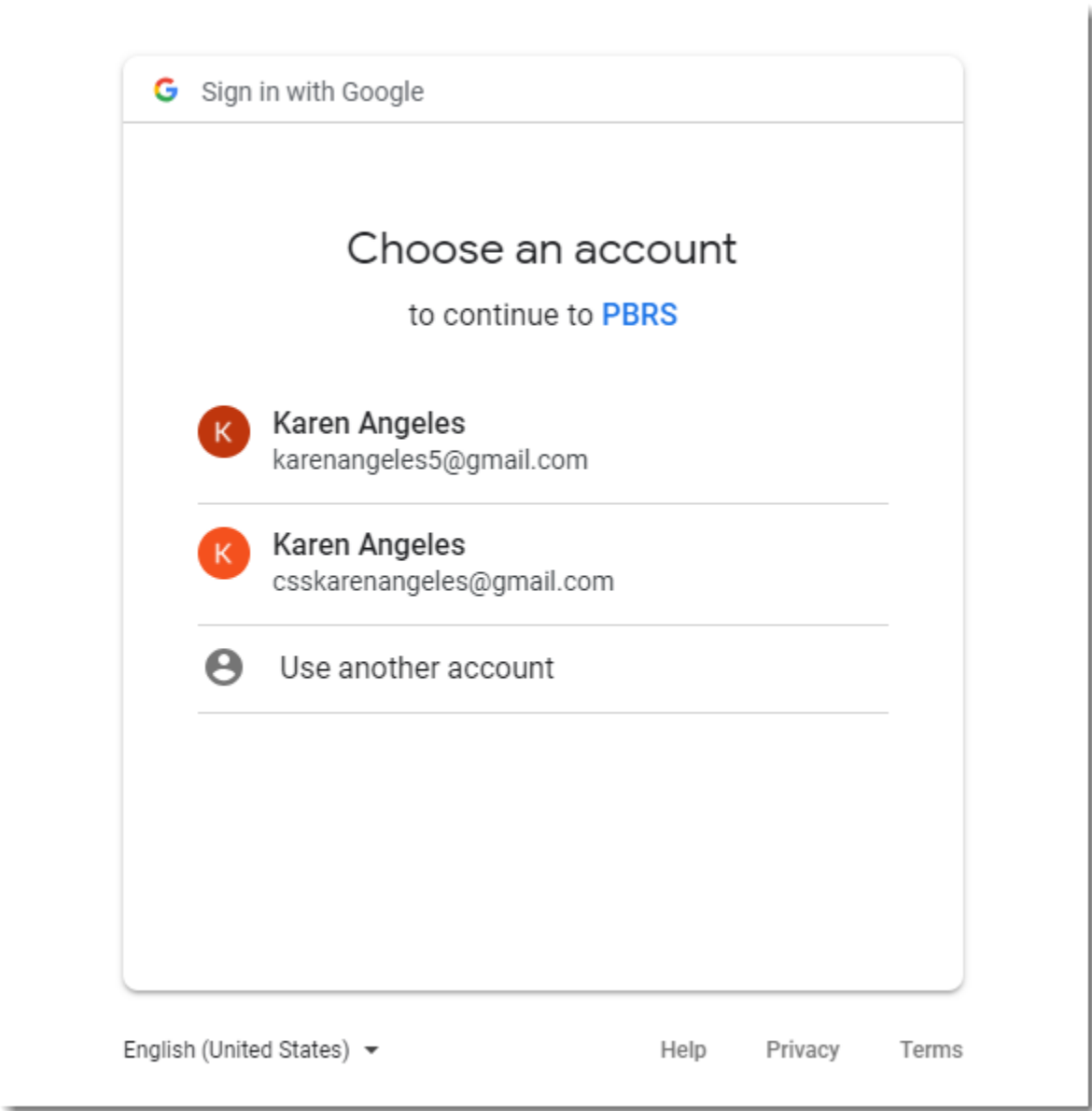
- Click **Add** to add an account.




- Account Name:** Enter the account credentials.

- **Token Data:** After adding account name, click **Connect** to acquire the Token Data from Google.


*This will open a web browser.*




- Select the account.

 Sign in with Google

## PBRS wants to access your Google Account

 csskarenangeles@gmail.com

This will allow **PBRS** to:

- See, edit, create, and delete your spreadsheets in Google Drive 

### Make sure you trust PBRS

You may be sharing sensitive info with this site or app.  
Learn about how PBRS will handle your data by reviewing  
its [terms of service](#) and [privacy policies](#). You can always  
see or remove access in your [Google Account](#).

[Learn about the risks](#)

Cancel

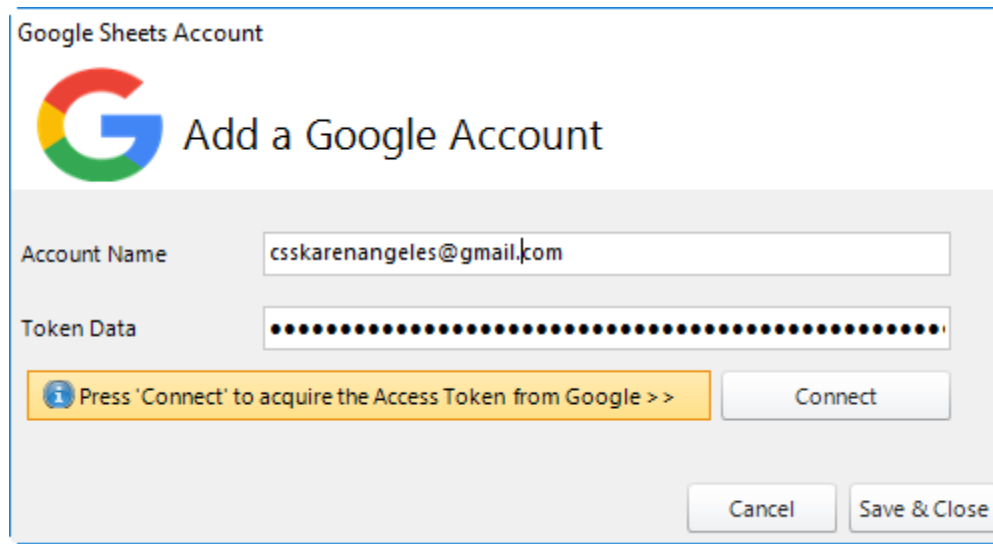
Allow

- Click **Allow** to continue in PBRS.

Received verification code. You may now close this window.

- Close this window.

*You will return to PBRS with the token data credentials.*



The screenshot shows a dialog box titled "Google Sheets Account" with the Google logo and the text "Add a Google Account". It contains two input fields: "Account Name" with the value "csskarenangeles@gmail.com" and "Token Data" filled with dots. Below these fields is a yellow information bar that says "Press 'Connect' to acquire the Access Token from Google > >". To the right of this bar is a "Connect" button. At the bottom right of the dialog are "Cancel" and "Save & Close" buttons.

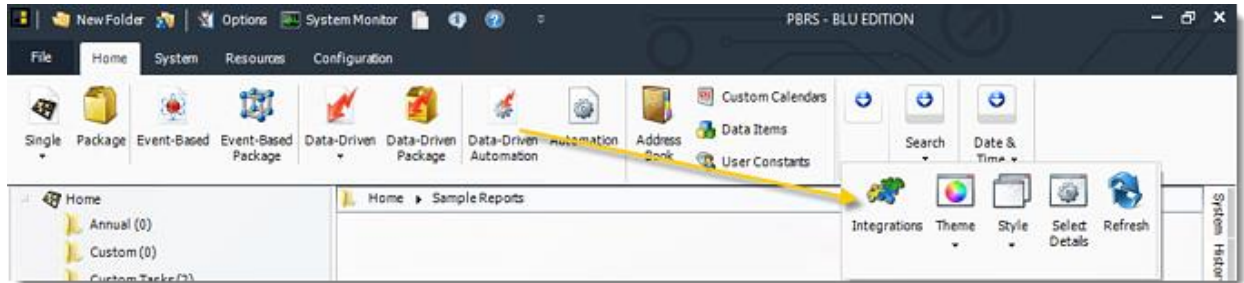
- Click **Save & Close**.
- The Google Accounts is now added to PBRS.

## How do I add SSRS Accounts in PBRs?

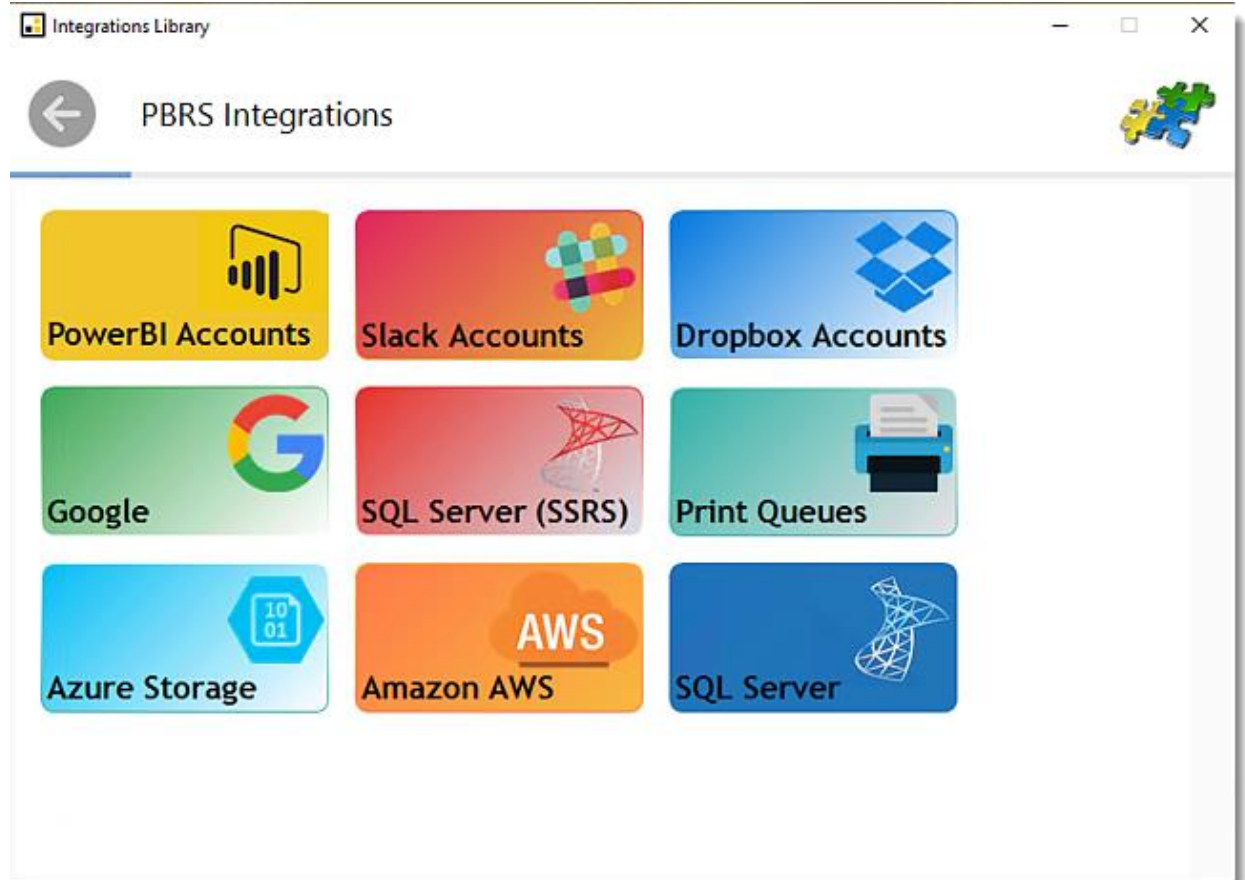
**This is how you would associate your SSRS account(s) with PBRs. Associating your SSRS account gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports.**

Integrations - SSRS Accounts

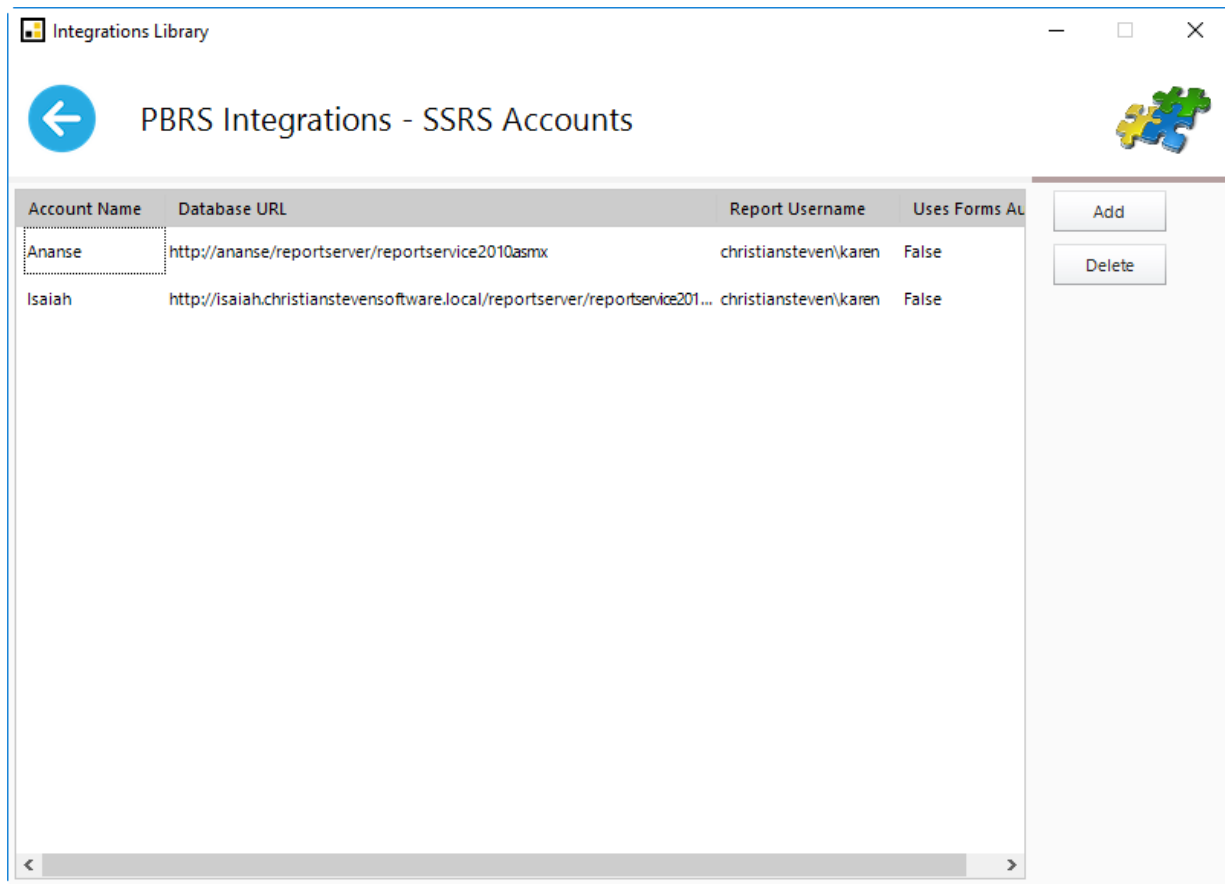
- Go to **Integration**.



- Select **SSRS Accounts**.








- Click **Add**.

SSRS Account



## Add an SSRS Account


SSRS Account Name

SSRS Server URL

Domain\Username

User's Password

☐ Server uses custom/forms authentication

 Press 'Connect' to test access to the SSRS Server > >

- **SSRS Account Name:** Enter the name for the account.
- **SSRS Server URL:** Enter the address of your reporting services server.
- **Domain\Username:** Enter the domain and user for the SSRS Server URL.
- **User's Password:** Enter password.
- Click **Connect**.

## SSRS Account



### Add an SSRS Account

SSRS Account Name:

SSRS Server URL:

Domain\Username:

User's Password:

☐ Server uses custom/forms authentication

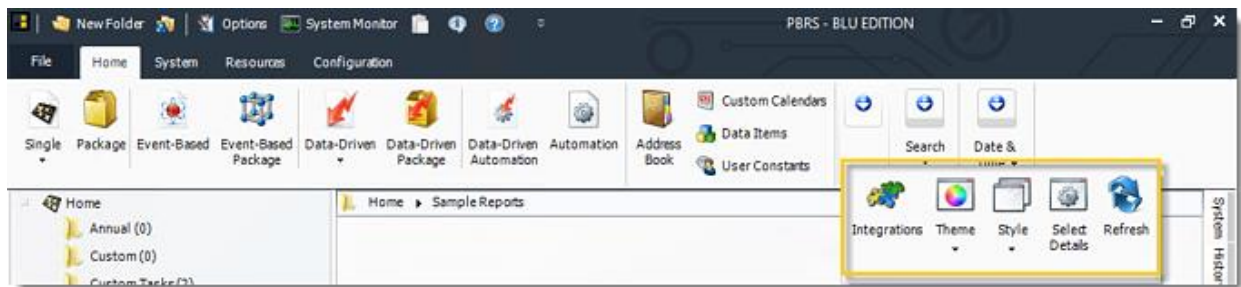
Press 'Connect' to test access to the SSRS Server > >

**Successfully connected!**

- Click **Save & Close**.
- The SSRS Account is now added to PBRs.

## Style

### View - Home

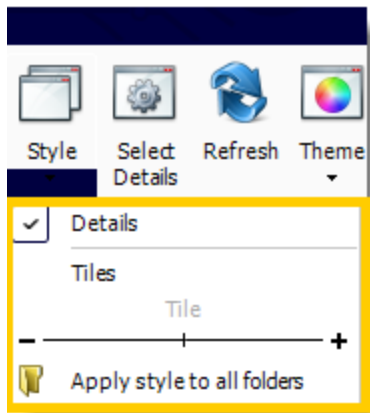


In the View section you can see the following options:

- Integrations Library
- Style
- Select Details
- Refresh
- Theme

## Style

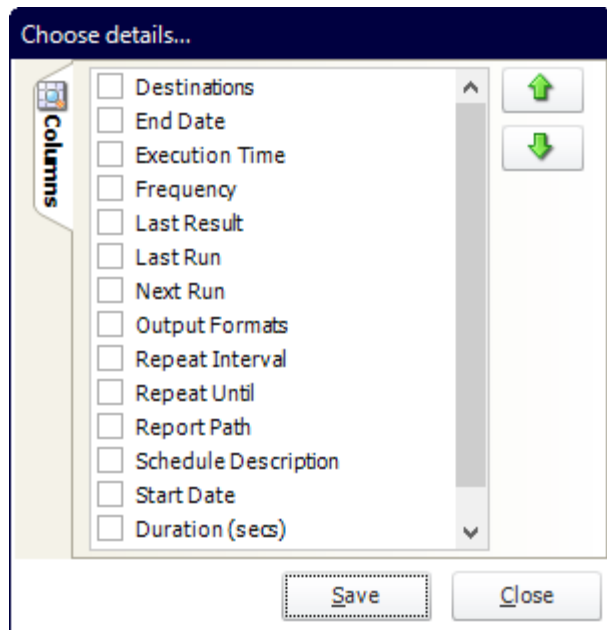
- Go to **Style**.



- Switch between list view and tile view for your schedules.
- Use the sliding bar to adjust the level of detail displayed for each schedule.

## Select Details

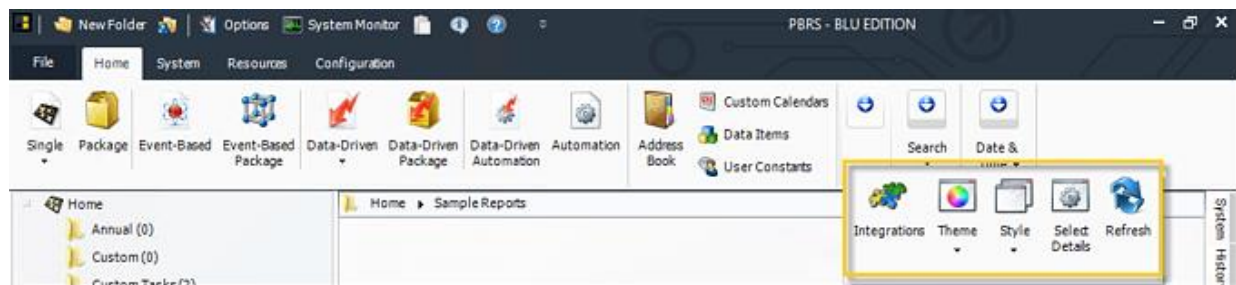
- Go to **Select Details**.



- Check the properties you would like to see when using Detail view.
- Use the arrows to determine the order the columns will be shown.

## Refresh

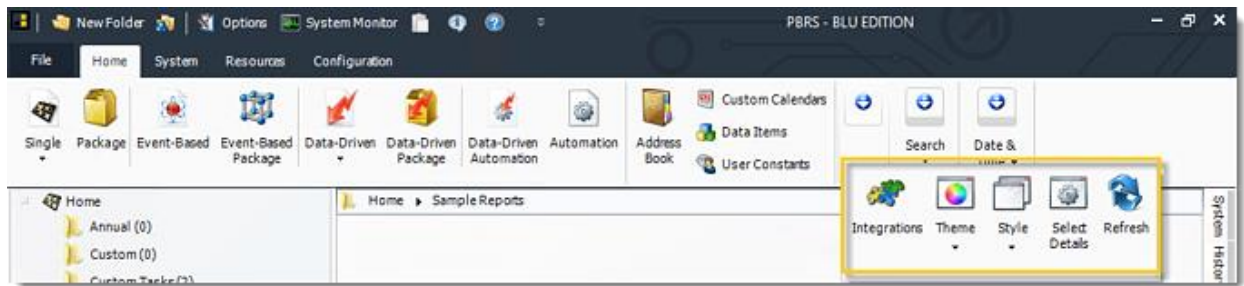
- Go to **Refresh**.



- Refresh the screen to show the latest schedule information.

## Theme

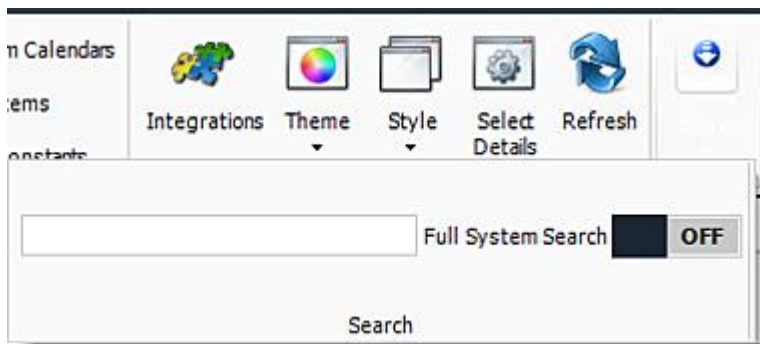
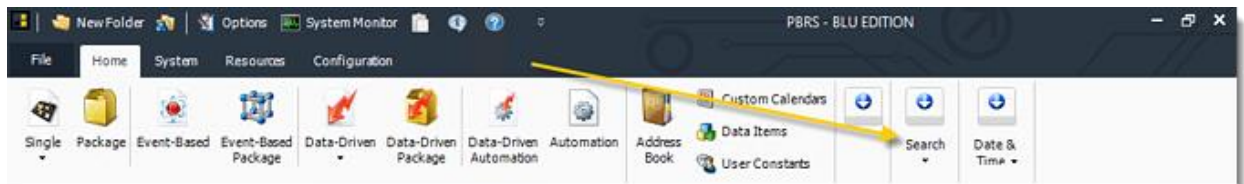
- Go to **Theme**.



- Select the color scheme for PBRs. Pick the one that best fits your tastes.

Search

Go to **Search**.



- Use search to find a specific schedule.

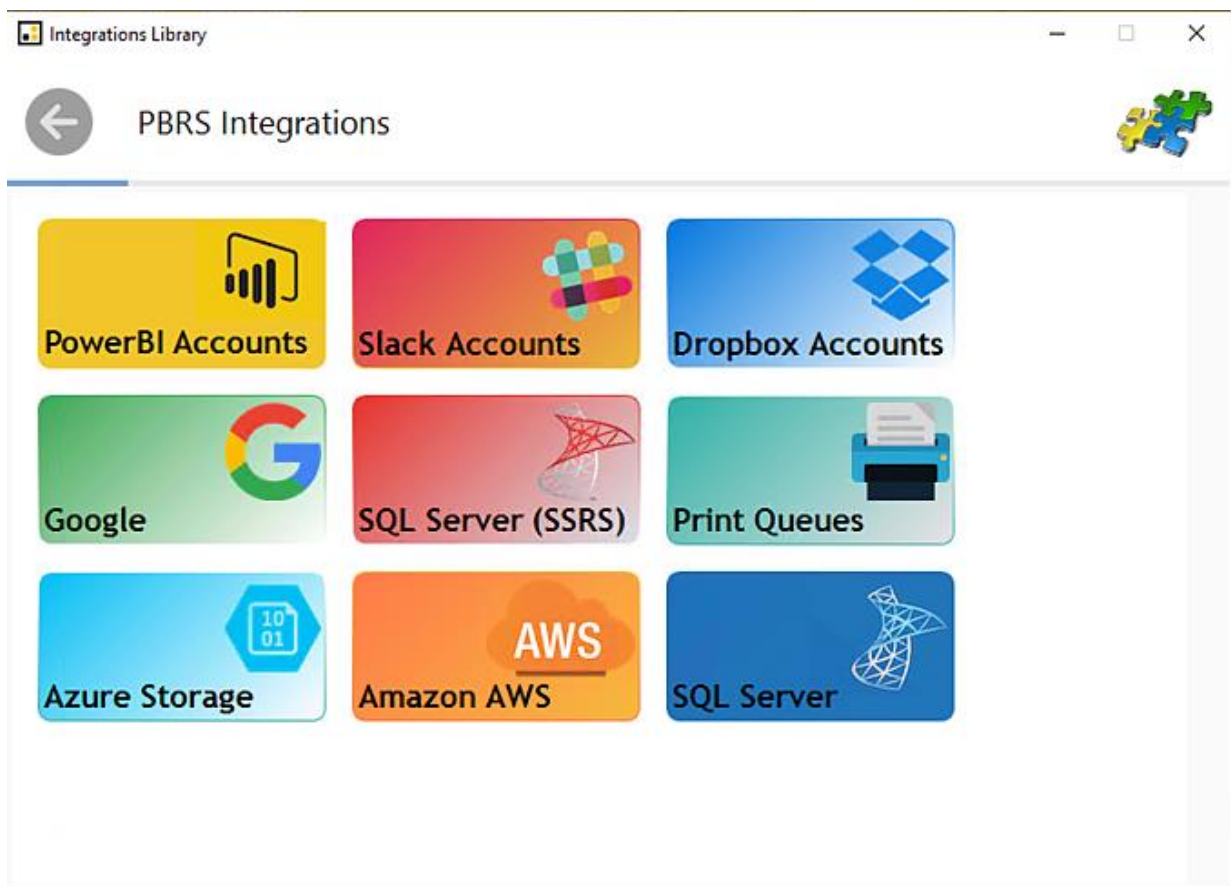
*Tip: Search looks for a schedule in the highlighted folder. To search all schedules, create a Smart Folder that encompasses every schedule, then use search to find the schedule.*

## How do I add Printers to PBRs?

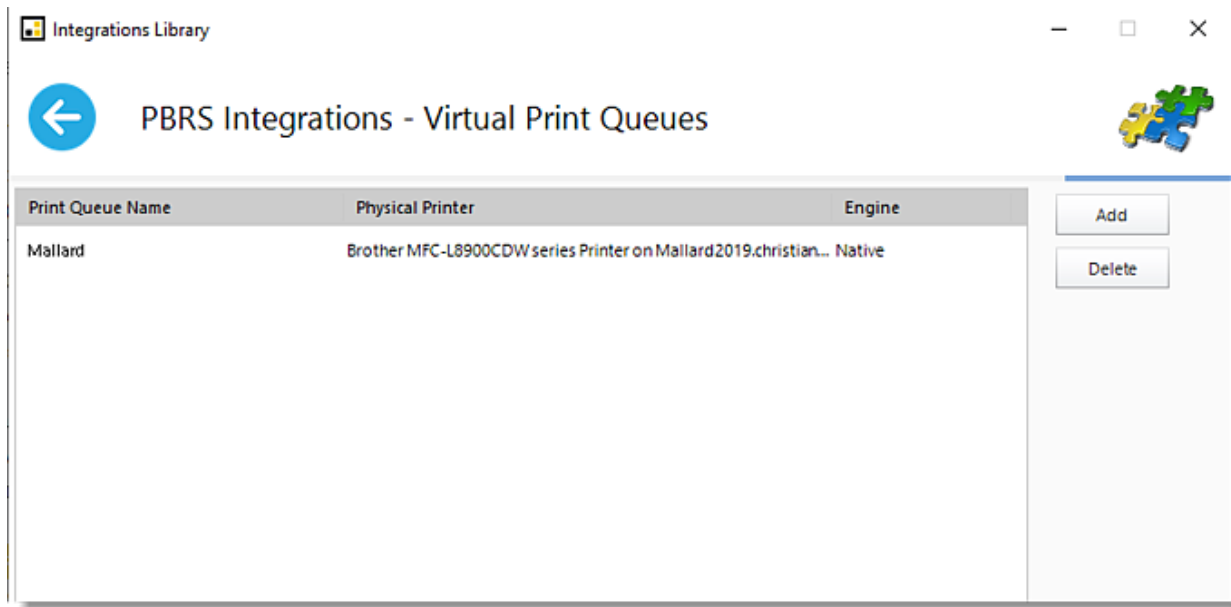
**This is how you would associate your Printer with PBRs. Associating your printer gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

Integrations - Print Queues

- Go to **Integrations**.



- Select **Print Queue**.



- Click Add.

**Virtual Print Queue**

Name:

Physical Printer:

☒ Acrobat Engine ☐ Native Engine

Server Name:

Print Driver (Optional):

Print Port (Optional):

☐ Auto-pause jobs with more than  pages

☐ Assume print failure if PBRS is unable to access the Windows print queue

Spooling buffer time (secs):

Cancel Save & Close

- Name:** Enter the virtual print name.



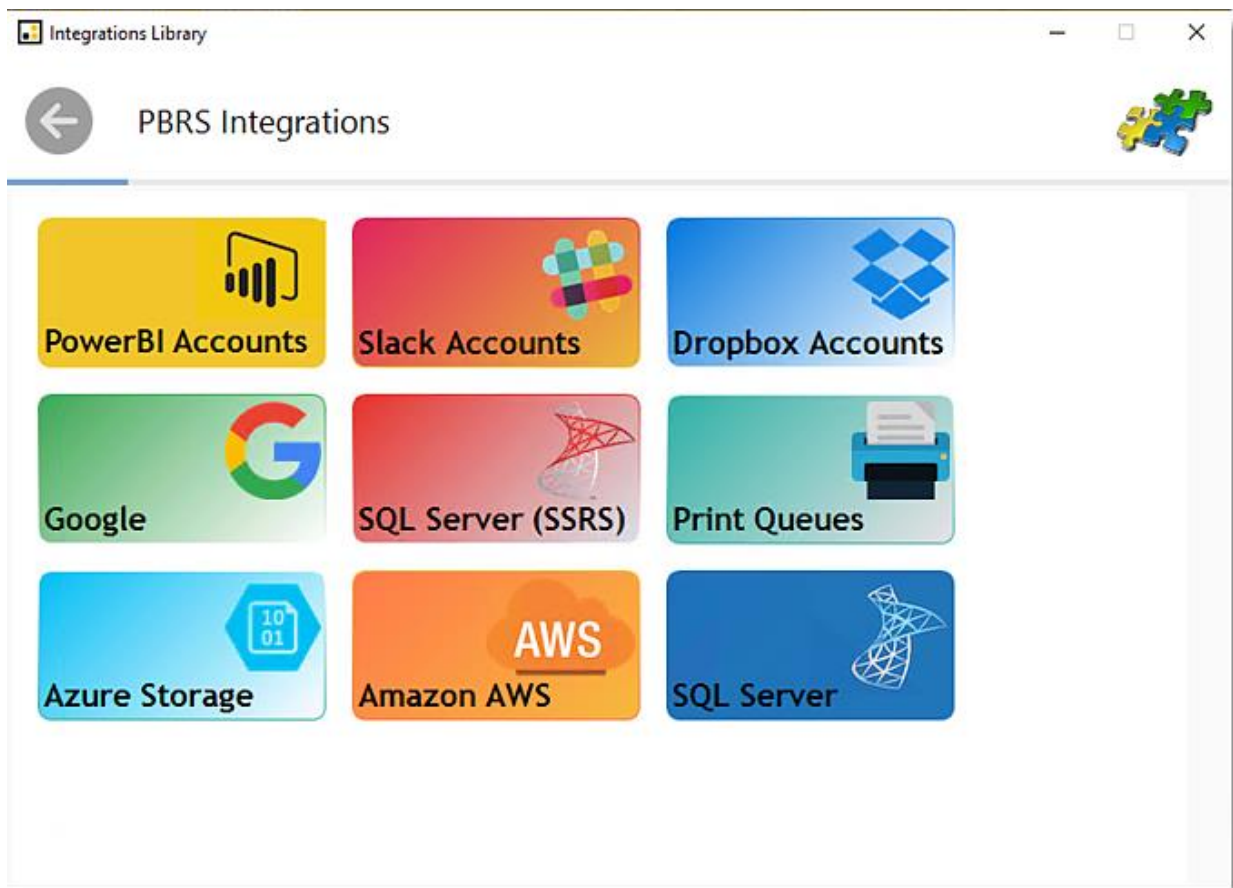
- **Physical Printer:** Select the type of printer engine. Use the drop-down menu to select the printer.
- **Server Name:** Enter the Server where the printer is going to run.
- **Printer Driver (Optional):** Enter the print driver.
- **Print Port (Optional):** Enter the print port.
- **Auto-pause jobs with more than X pages:** Check this option if you want to auto-pause reports more than x amount of pages.
- **Assume print failure if PBRS is unable to access the Windows print queue:** Check this option if you want to assume print failure if PBRS is unable to access the Windows print queue.
- **Spooling buffer time (secs):** Enter the number of seconds for the spooling time.
- Click **Save & Close**.
- The printer is added to PBRS.

How do I add Azure Blob Storage account in PBRs?

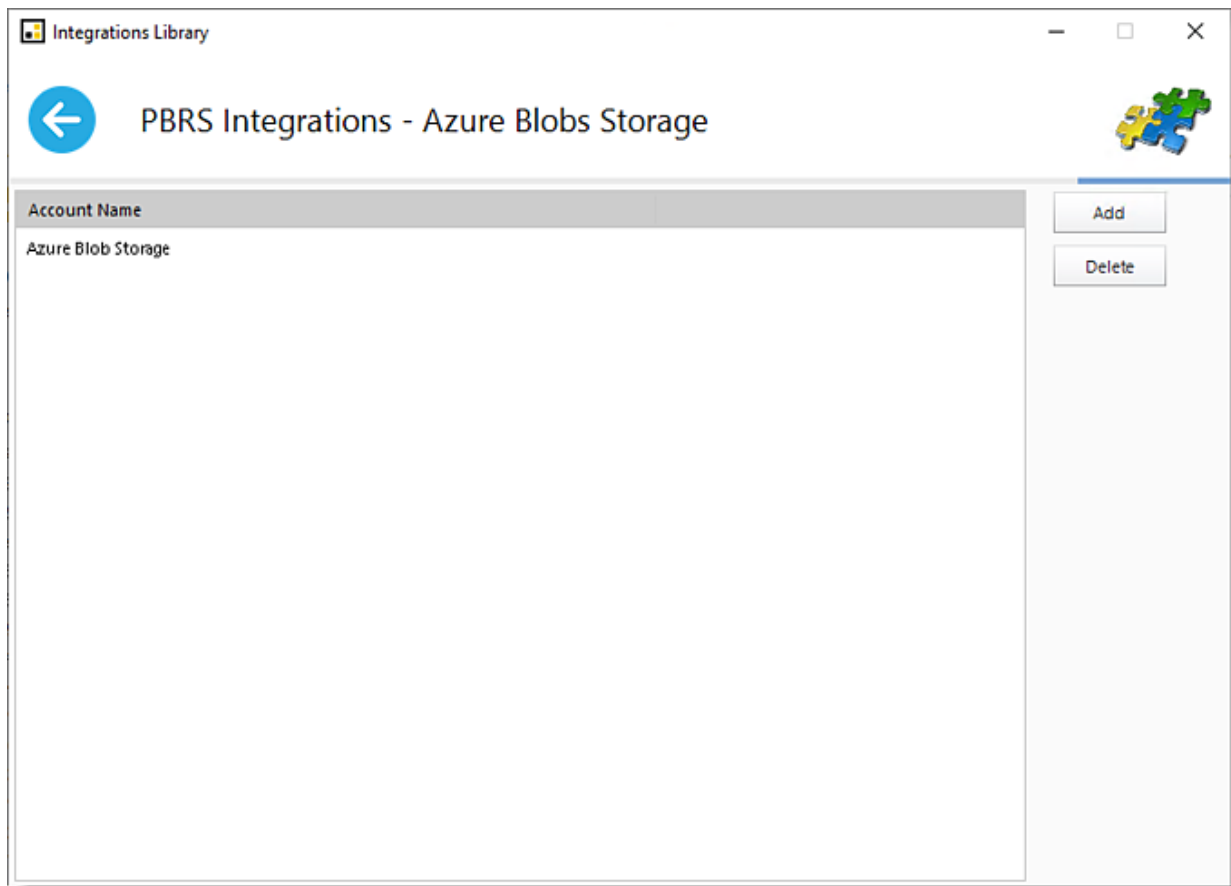
**This is how you would associate your Azure Blob Storage account(s) with PBRs. Associating your Azure Blob Storage gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

Azure Blob Storage Account

- Go to **Integrations**.




- Select **Azure Storage**.



•Click Add.

Azure Blob Storage Account




## Add an Azure Blob Storage Account

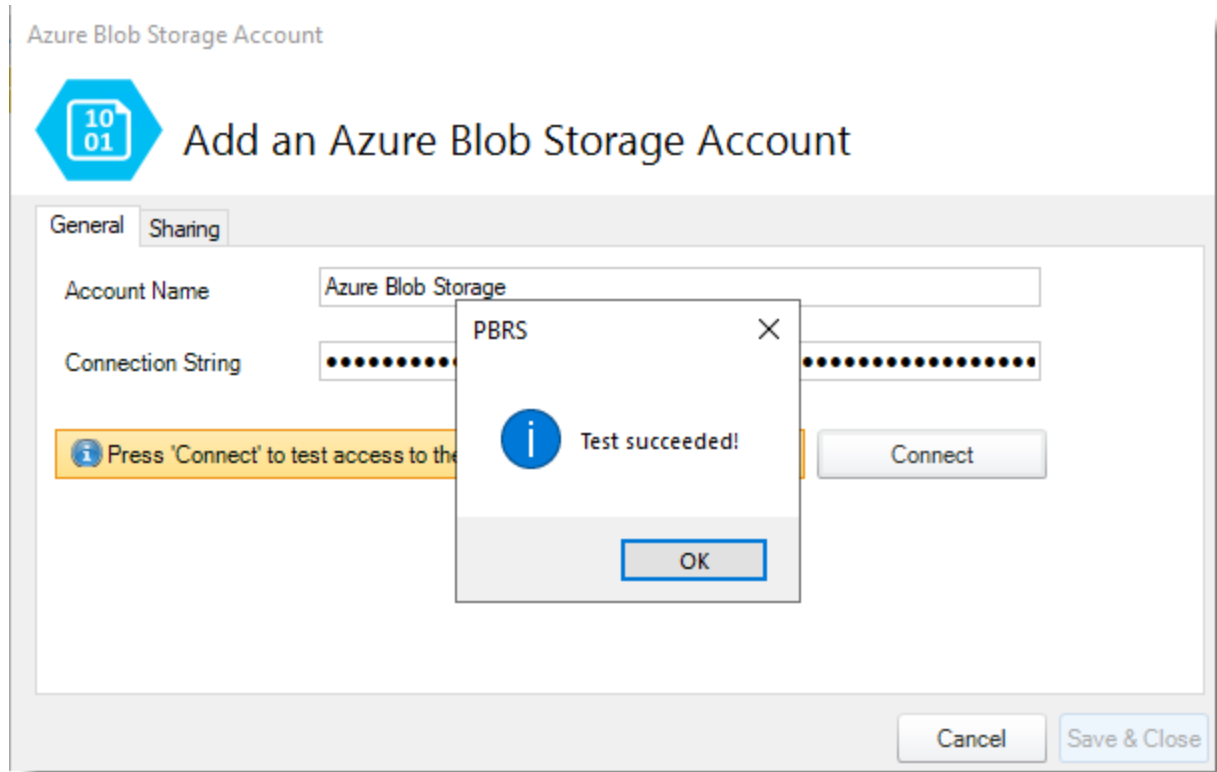
General **Sharing**

Account Name

Connection String

 Press 'Connect' to test access to the SSRS Server>>

- **Account Name:** Enter the account credentials.
- **Connection String:** Enter the connection string.
- Click **Connect**.



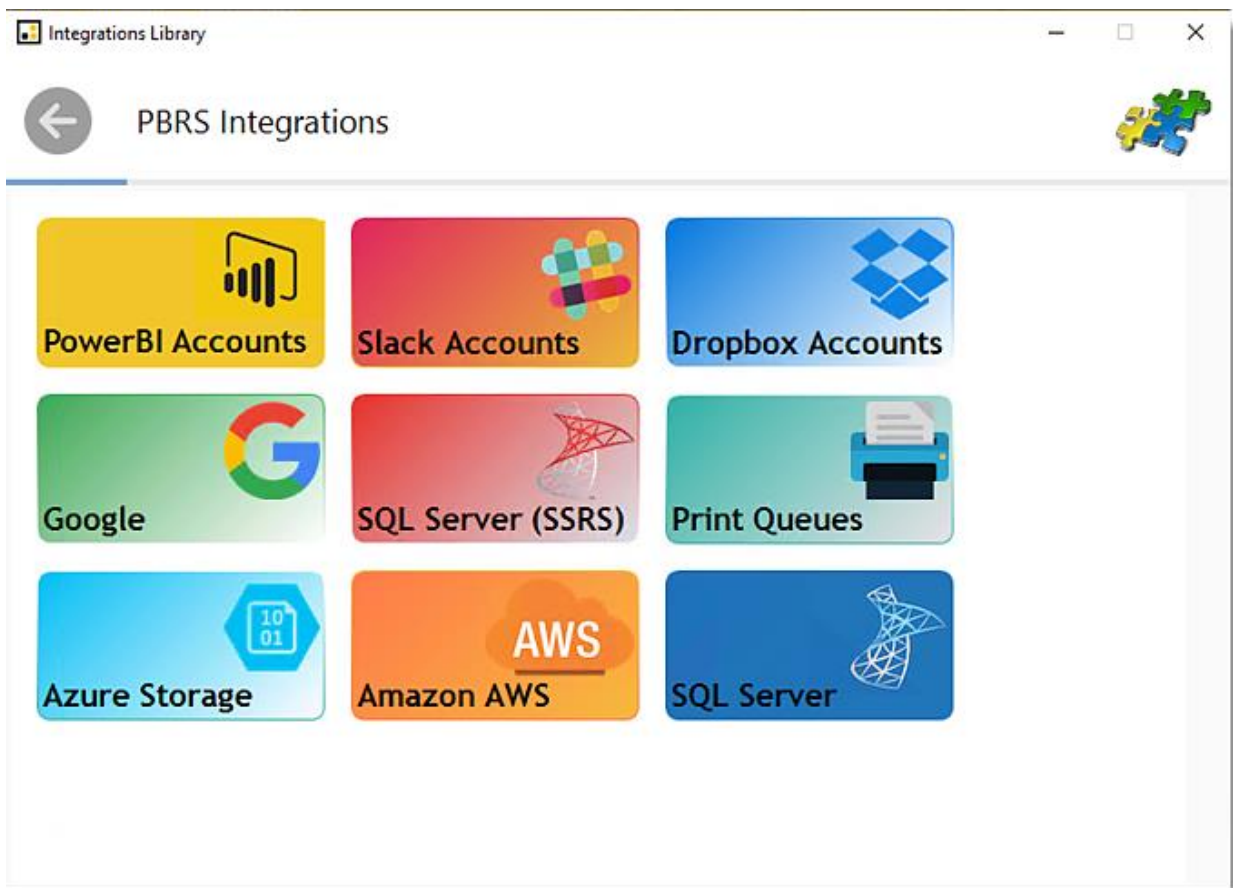
- Click **OK**.
- Click **Save&Close**.
- The Azure Blobs Storage Account is added in PBRS.

How do I add an Amazon AWS account in PBRs?

**This is how you would associate your Amazon AWS account(s) with PBRs. Associating your Amazon AWS account gives PBRs access to reports you wish to schedule. PBRs will use stored credentials to access and export reports & dashboards.**

Amazon AWS Account

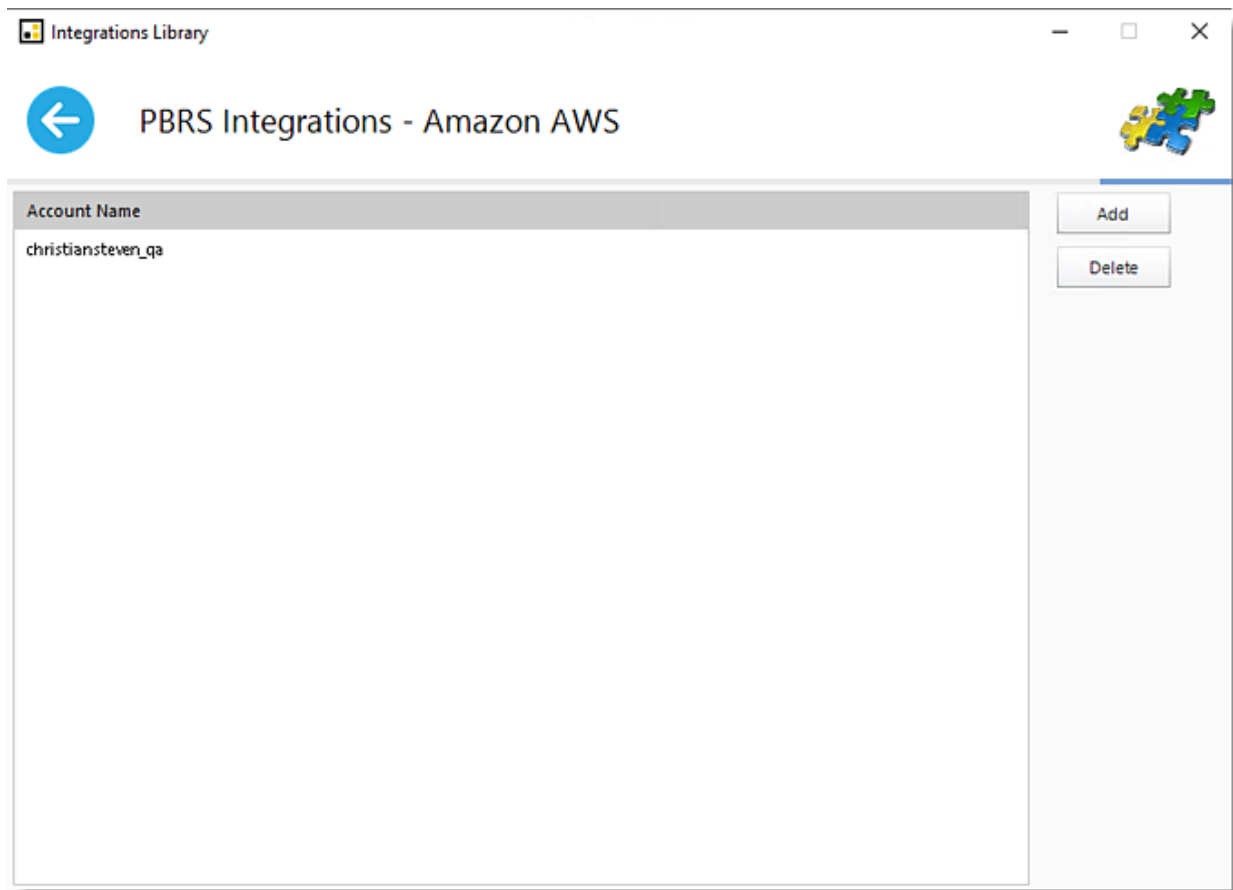
- Go to **Integrations**.



- Select **Amazon AWS**.

© ChristianSteven Software

Updated on 15 November 2021



- Click **Add**.



## Add an Amazon AWS Account

General

Sharing

Account Name

Access Key

Secret Key

Region

Press 'Connect' to test access to the account>>

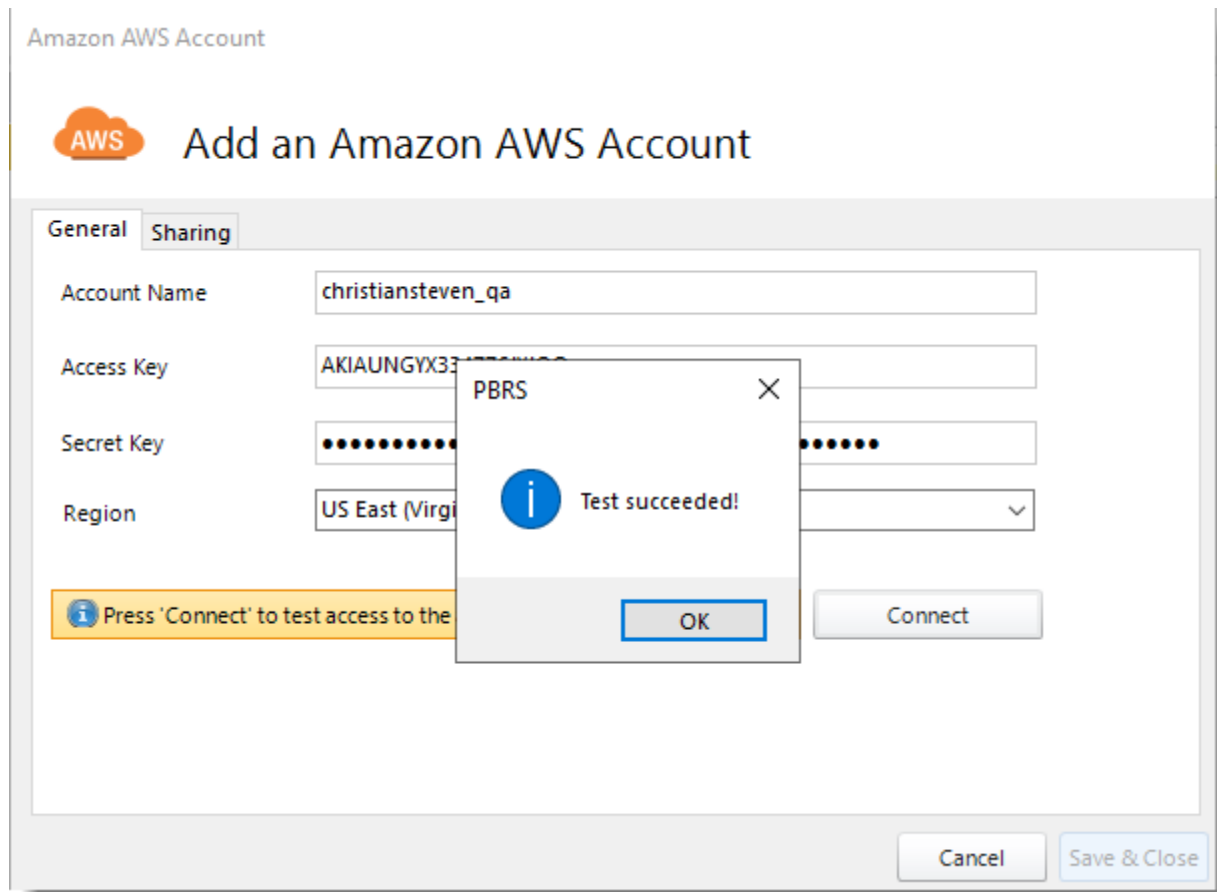
Connect

Cancel

Save & Close

- **Account Name:** Enter the account name.
- **Access Key:** Enter the access key of the account
- **Secret Key:** Enter the secret key.
- **Region:** Use the drop-down menu to select the region.
- Click **Connect**.





- Click **OK**.
- Click **Save & Close**.
- Amazon AWS Account is added in PBRs.

## How do I manage Users & Groups Permissions in PBRs?

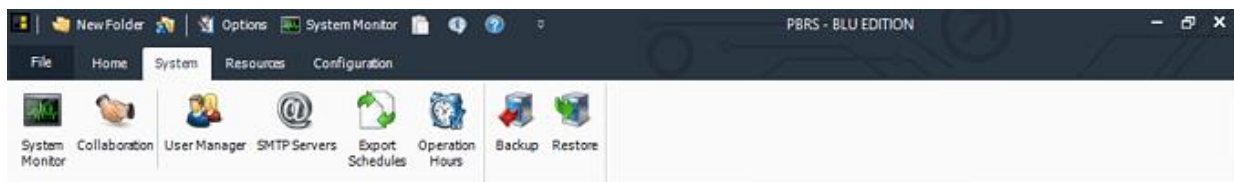
**You can set up new users and administrators, set up security groups and manage permissions using the User manager.**

System - User Manager

- Go to **System**.



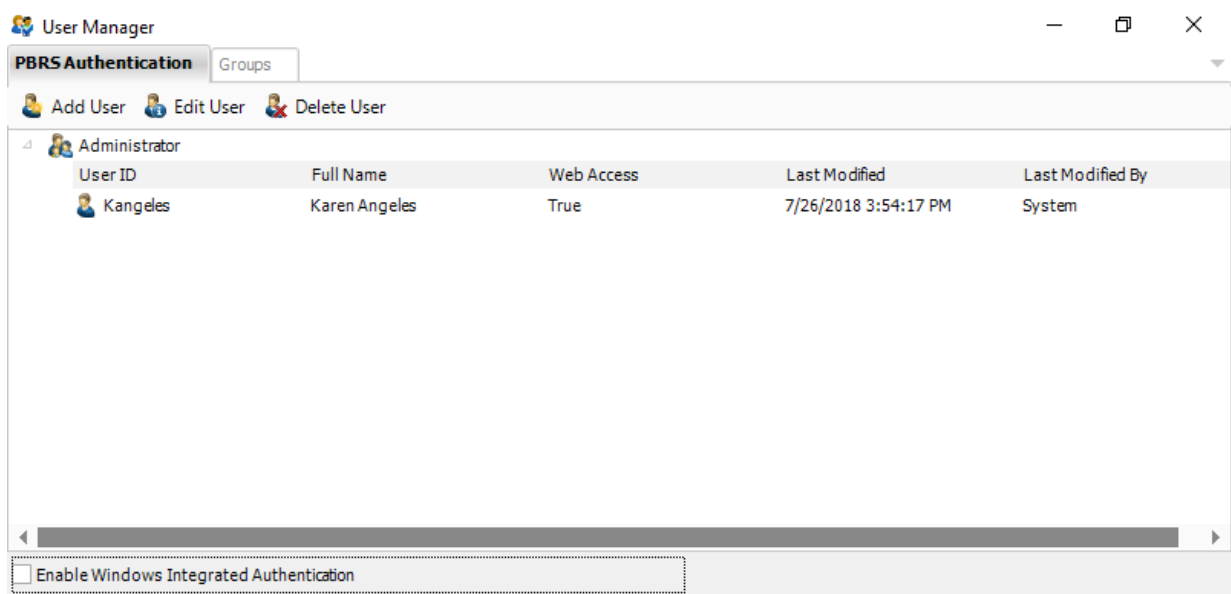
- Select **User Manager**.



What is user management?

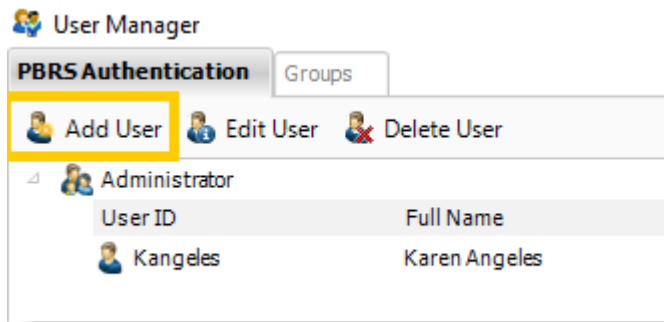
The principle behind the user management is simple:

- Administrators are able to view and manipulate all schedules
- Users can only see and manipulate schedules they have created.
- Create Group policies to determine what user can/cannot access in PBRs.



How to set up a user

- Click **Add User**.

The screenshot shows the 'User Information' dialog box. It has a tab labeled 'PBRS User'. The form contains the following fields and options:

- First Name: Margarita
- Last Name: Ramirez
- User ID: MRamirez
- Password: (masked with dots)
- Verify Password: (masked with dots)
- Security Role: User (dropdown menu)
- ☐ Automatically logon with this user
- ☐ RIA (Web) access enabled
- Assigned Schedules (button)

On the right side of the dialog, there is an illustration of a person holding a pencil. At the bottom right, there are 'OK' and 'Cancel' buttons.

- First Name:** Enter the user's first name.
- Last Name:** Enter the user's last name.
- User ID:** Enter a suitable username for the user.
- Password:** Create here the password for the user.
- Verify Password:** verify the user's password.
- Security Role:** Select a security role.

Security Role

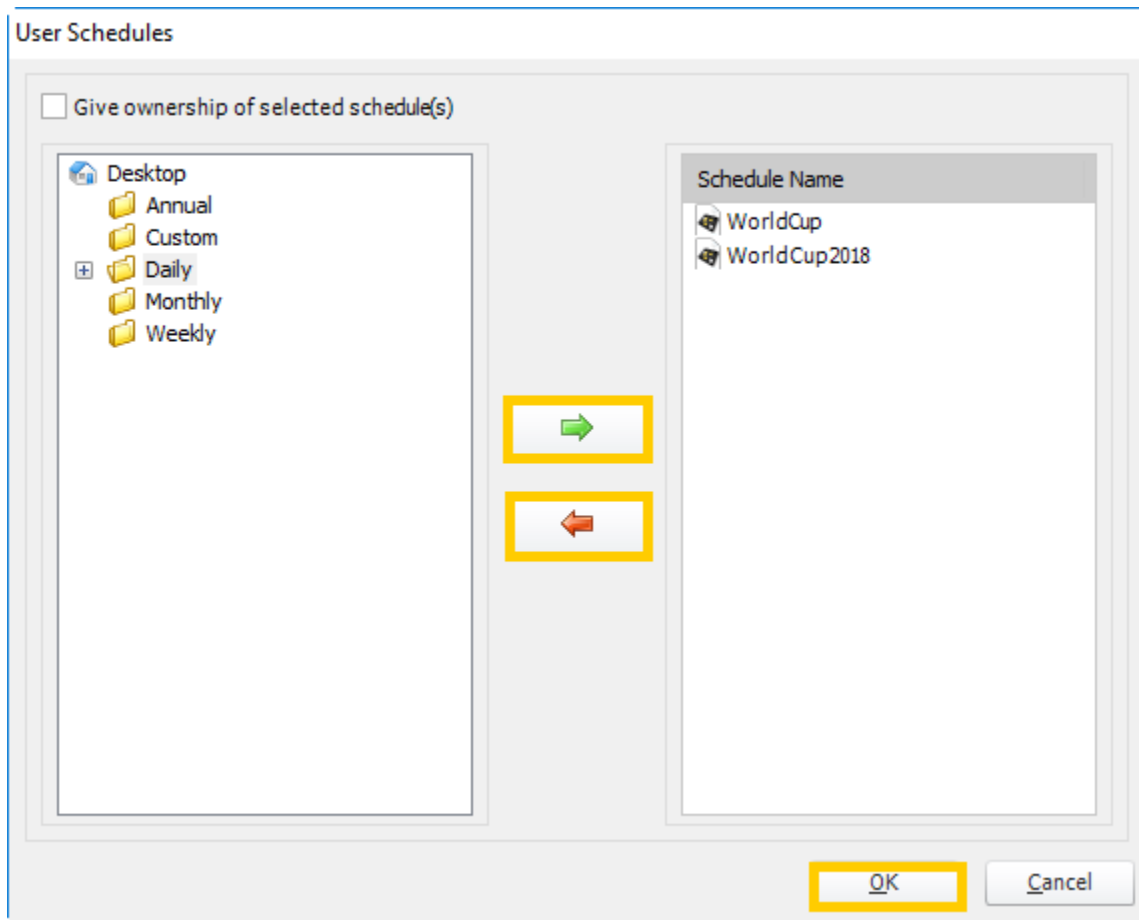
A dropdown menu with a blue border. The selected item is 'User', which is highlighted in blue. Below it, 'Administrator' and 'User' are listed in a standard font. A small downward arrow is visible on the right side of the dropdown box.

User  
Administrator  
User

- **Apply:** Click Apply to create the new user.
- **Automatically logon with this user:** When this option is checked, PBRs will always logon using this user's credentials. When PBRs starts, the splash screen will show this user and the system will automatically log in after 10 seconds. You can interrupt the automatic logon process by typing in a different username and password and manually log on as a different user.

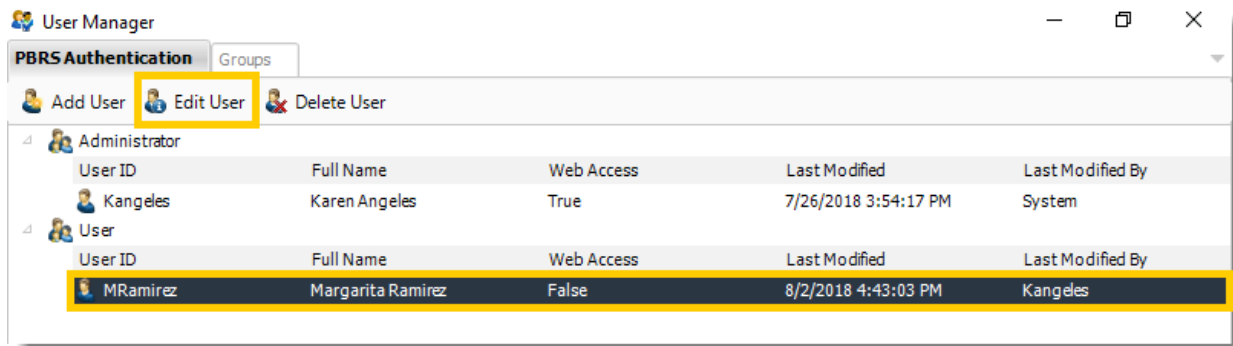
### *Assigned Schedules*

- Select the schedule or folder from the left hand pane and assign it to this user by clicking the **green button**.



### *Amending a user's details*

- Click on the user.
- Select **Edit User**.

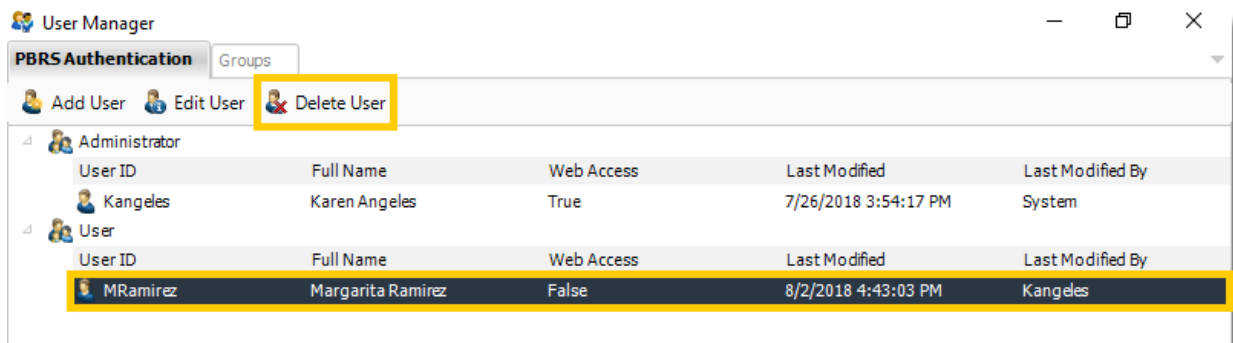


- Overwrite the existing details with the new details.
- Click **OK**.

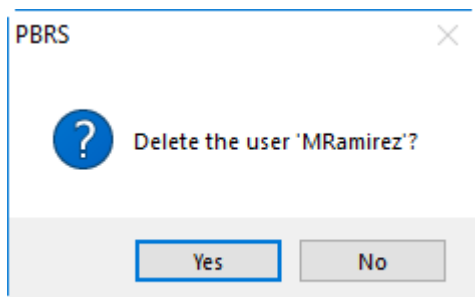
*You can also double-click on the user.*

Deleting a user

- Click on the user.
- Click **Delete User**



- Click **Yes**.

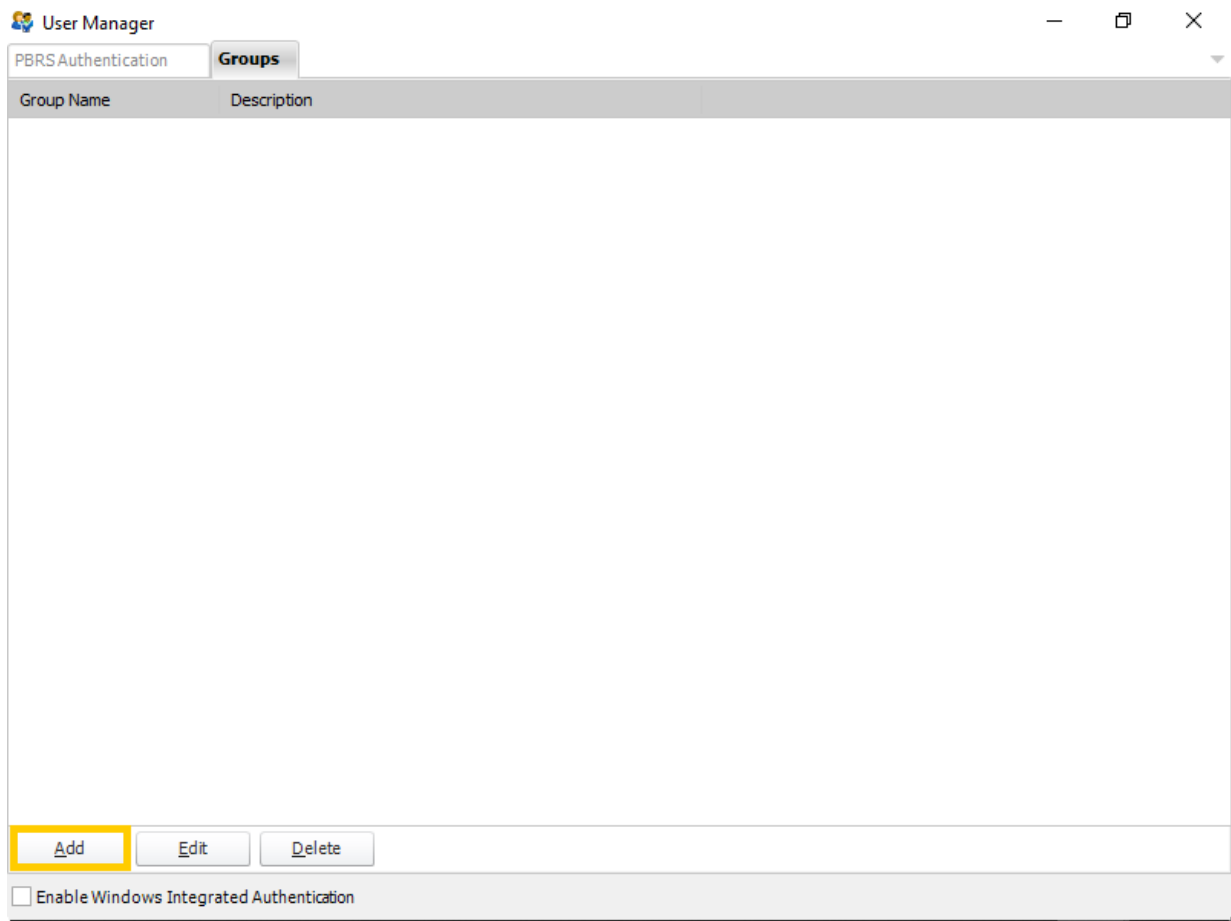


## Security Roles

PBRS comes with the Administrator and User security roles. Roles help you to easily manage which functionality is available to people who will be using PBRS.

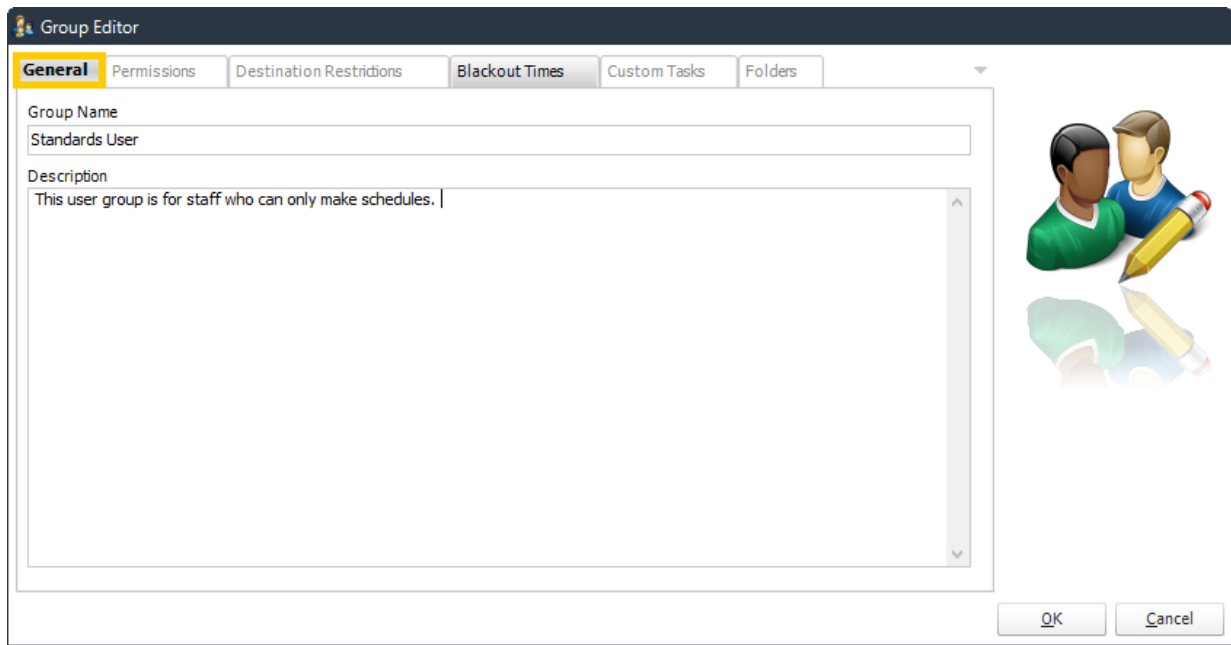
You can create new roles by creating groups.

- Click **Add** to create a new group.



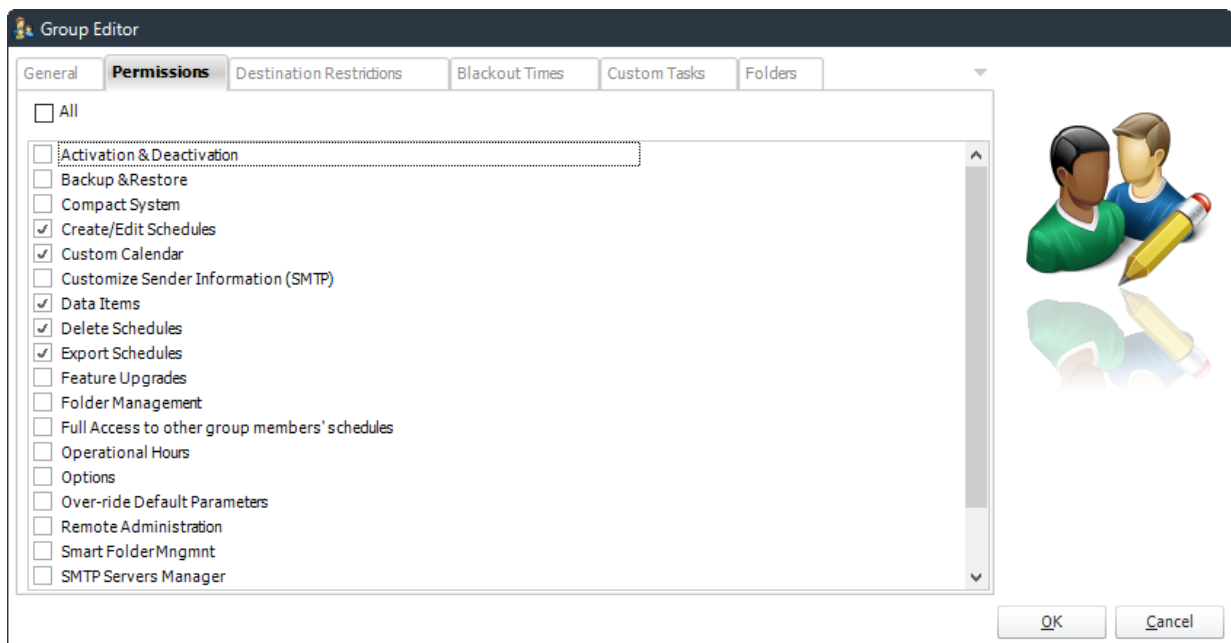
### Creating a New User Group

By placing users into different groups, you can determine what they can and cannot access in PBRS. Restrict access to certain functionality, activation/deactivation and even assign blackout times.

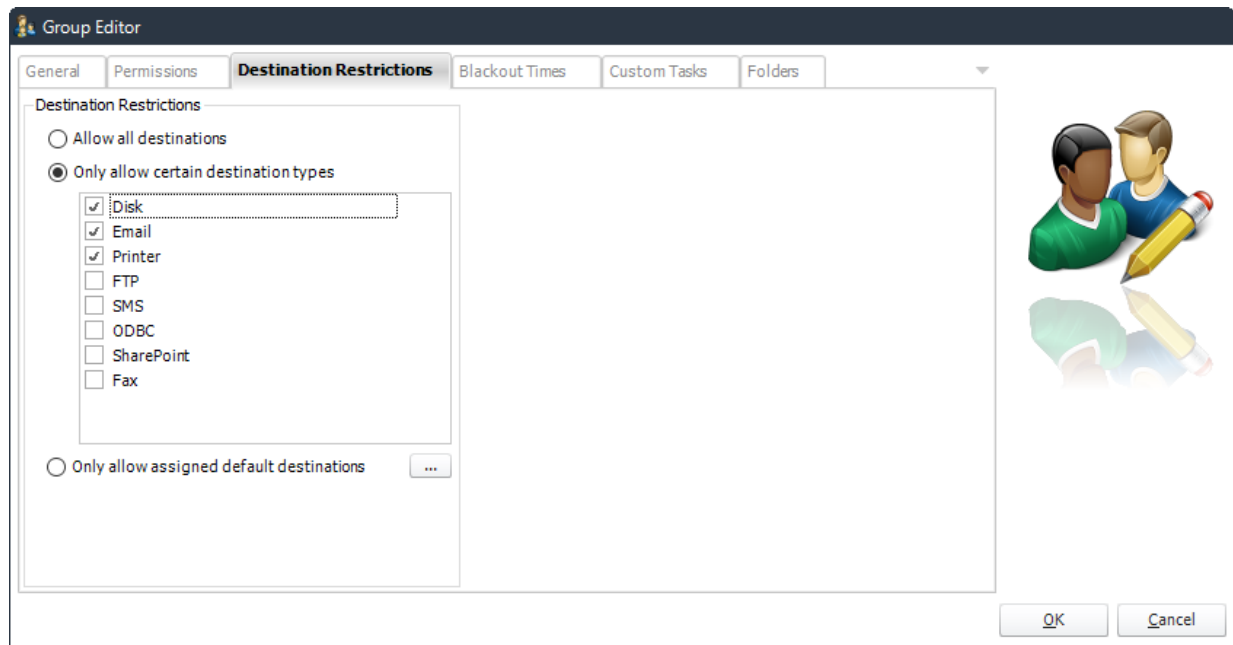


### *Permissions*

In the Permissions Tab, you can then specify access to system features such as operational hours, or the options menu. Check the boxes to indicate whether the group has access to these features.



## Destinations Restrictions

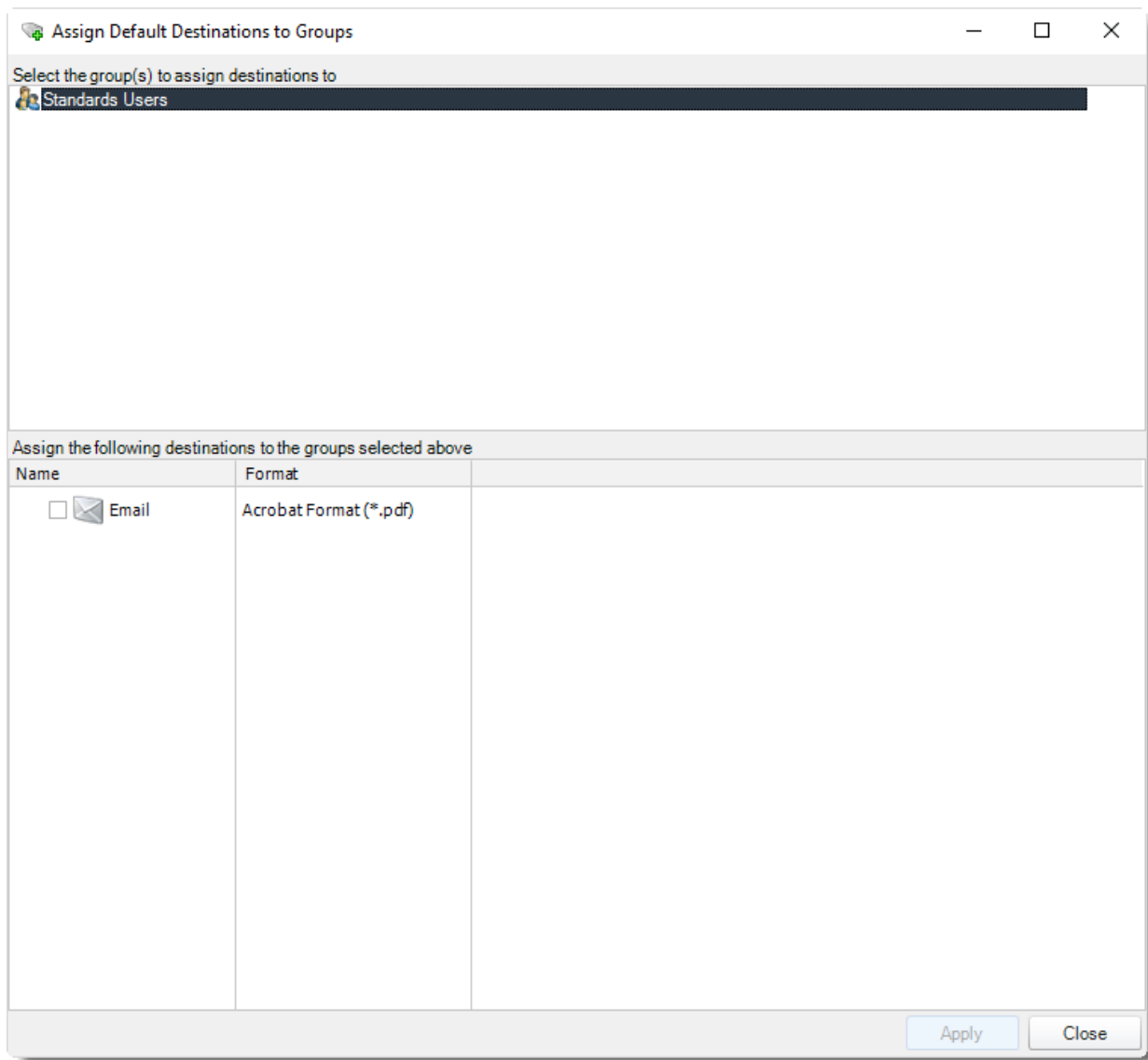


You can also restrict what destinations the group has access to.

- **Allow all destinations:** This group can access all destinations.
- **Only allow certain destination types:** Check the boxes to indicate which destinations the group has access to.
- **Only allow assigned default destinations:** Use only default destinations (created in the Options menu) and assign them to a specified group as shown below.  
See: [Default Destinations](#)

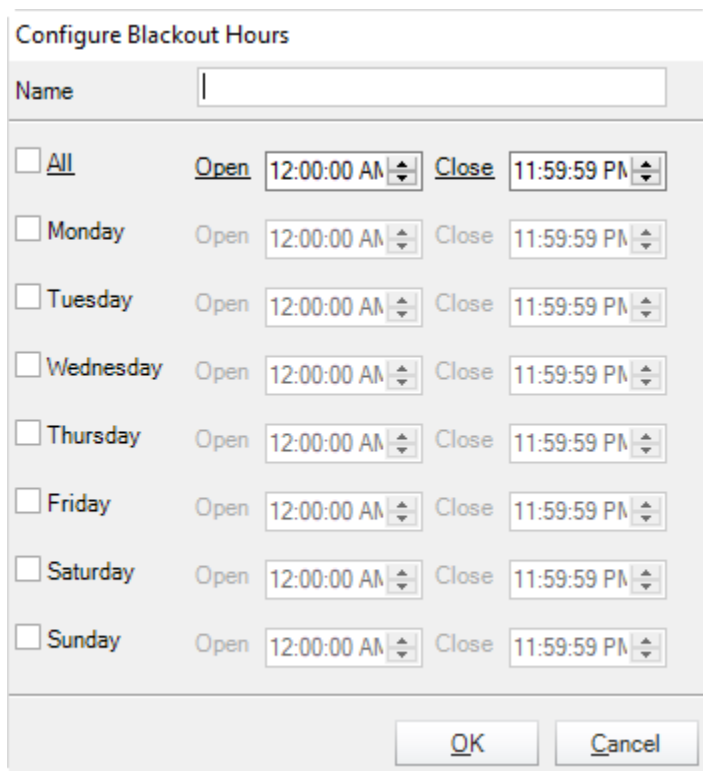
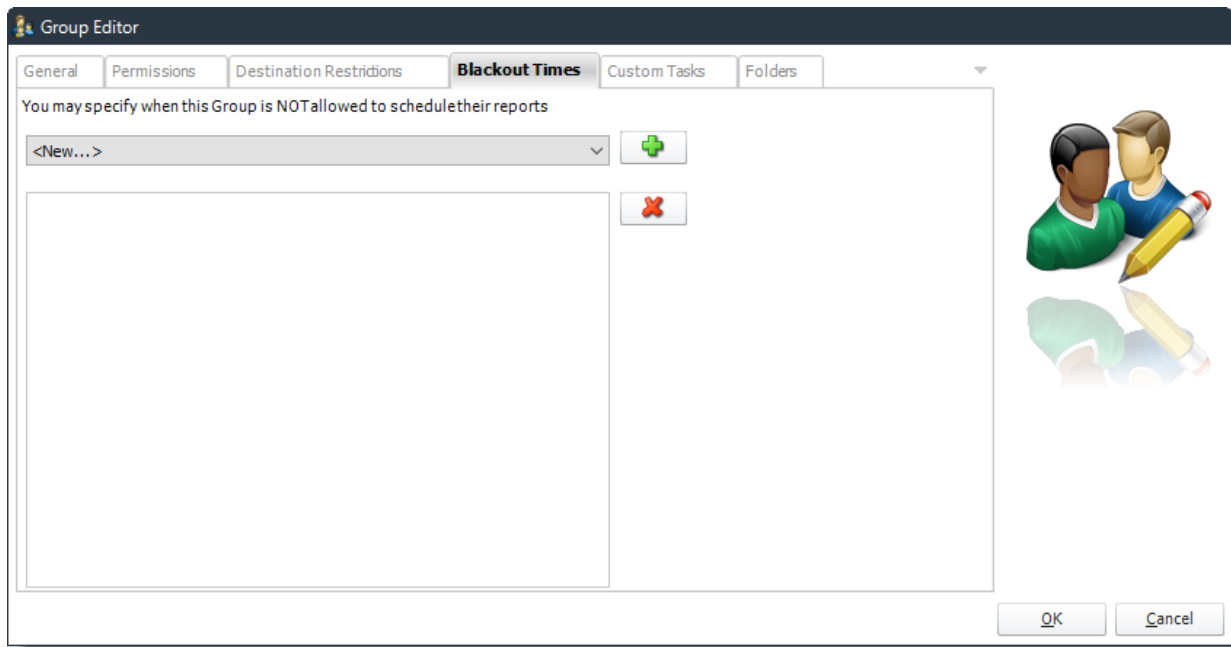
*Pre-create destinations in this manner and assign these destinations to the specific group. Perfect for avoiding giving out sensitive logon information such as FTP or SharePoint site info.*



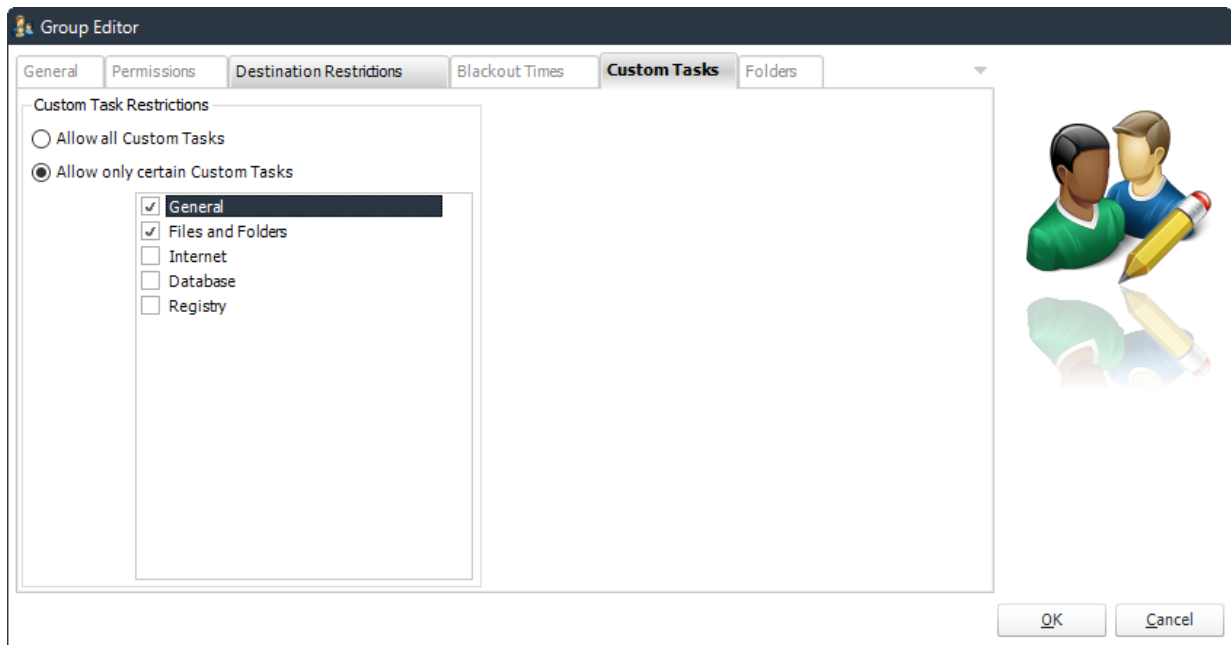


### *Blackout Times*

Set Blackout Times to prevent users from scheduling reports during a certain time frame. Use Operational Hours to build time frames.



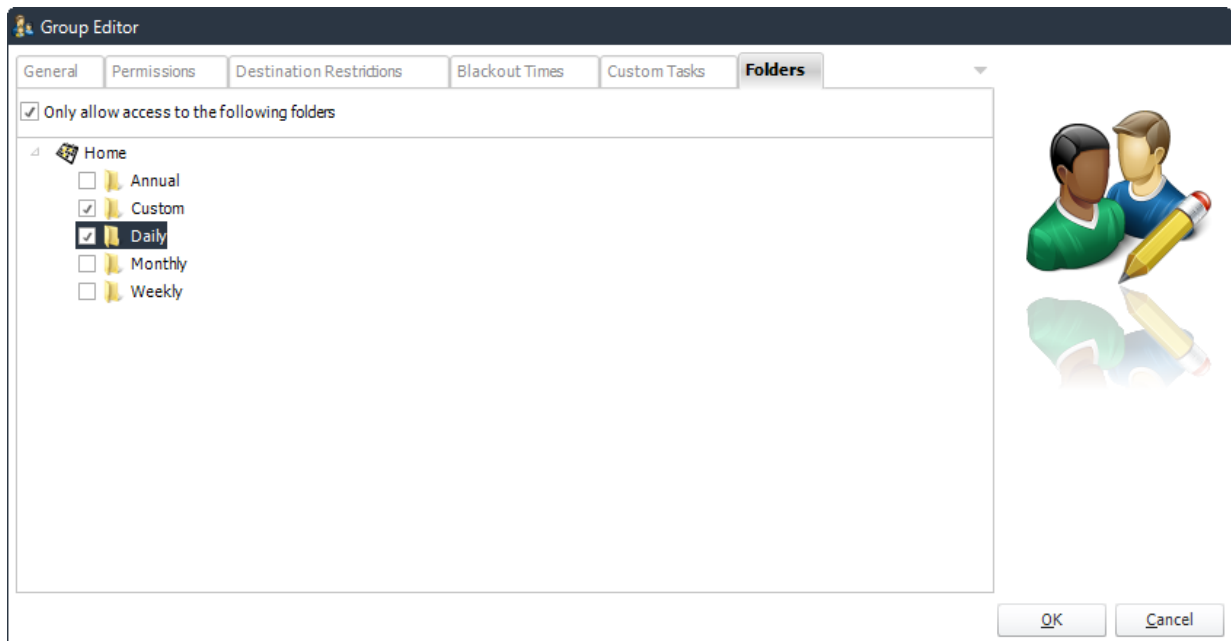
## Custom Tasks



- **Allow all Custom Tasks:** All users in this group can use custom tasks.
- **Allow Certain Custom Tasks:** Specify which task types this group has access to.

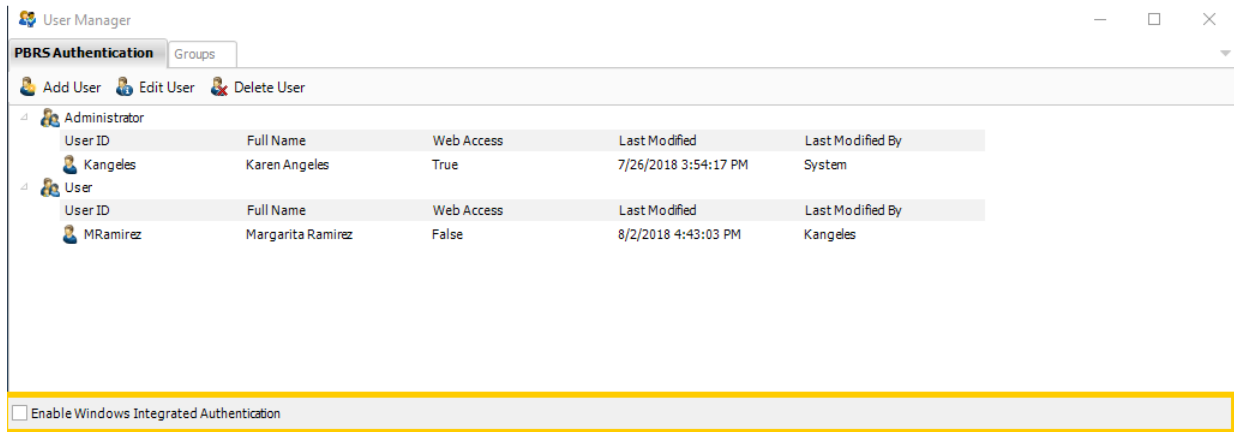
## Folders

- Allow the Group to have access to the folders.



- After you finish click **OK**.

## Enable Windows Integrated Authentication

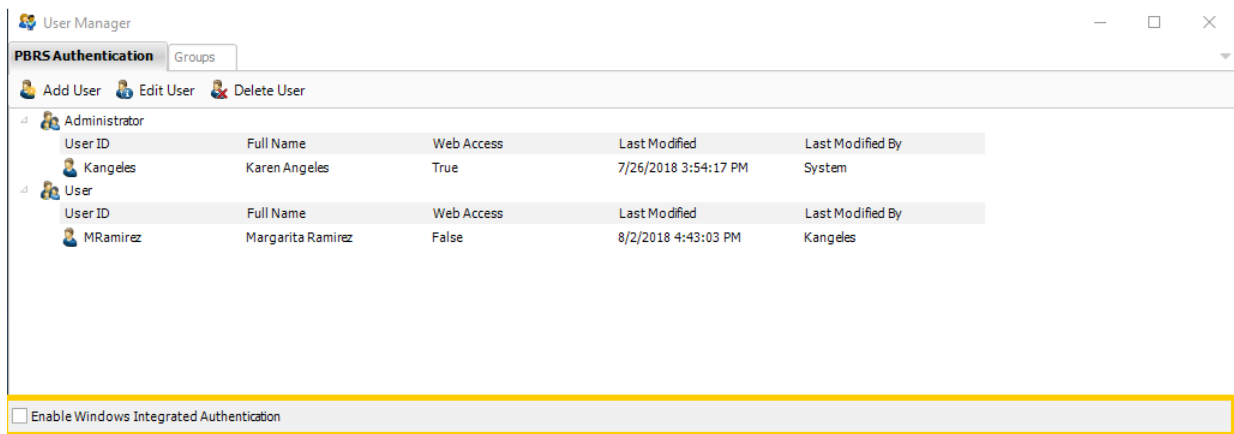


You will now be able to assign new and existing users to the newly defined security role as below.

## Windows Authentication

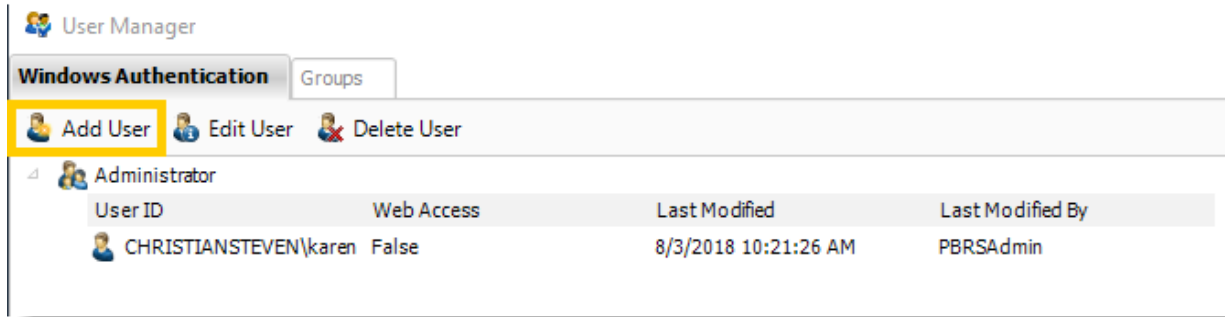
To enable Windows Authentication check the box in the lower left hand corner of the User Manager.

Windows Authentication allows you to use Windows Authentication to log in to PBRS. This can help save time in creating new users for PBRS. Security roles created in PBRS can also be applied to users under Windows authentication.



## Add User

- Add Active Directory users as PBRS users.



The 'User Information' dialog box is shown with the 'Windows User' tab selected. The fields are filled with the following values:

- Domain Name: CHRISTIANSTEVEN
- Group Name: CSS QA
- User Name: csstester
- Security Role: Standards Users

There are two checkboxes: 'Add the entire group' (unchecked) and 'RIA (Web) access enabled' (unchecked). An 'Assigned Schedules' button is located below the Security Role dropdown. The dialog has 'OK' and 'Cancel' buttons at the bottom right.

- **Domain Name:** Enter the domain name.
- **Group Name:** You can select from the drop down list the group where the user(s) are located.
- **Add the entire group:** All users in the user group will be added to PBRs.

*Users added in this manner WILL NOT be displayed as individual users in the Users list in the User Manager.*

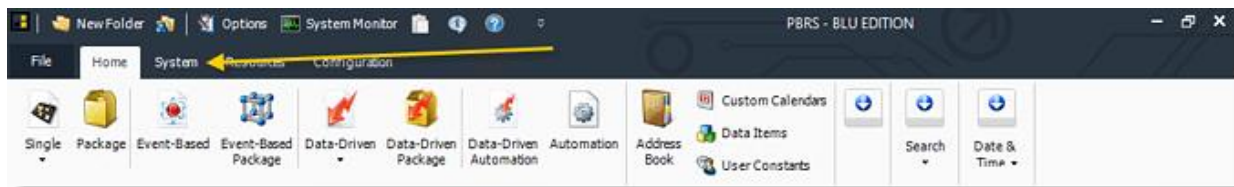
- **Security Role:** Assign a PBRs specific group to the user. The user will then take on the permissions allotted in the user group. User Groups can be created in the Groups Tab.
- **Assigned Schedules:** Assign schedules to the added user/group. Learn more about assigning schedules near the top of this topic.

How do I add multiple SMTP Servers for use by PBRS schedules?

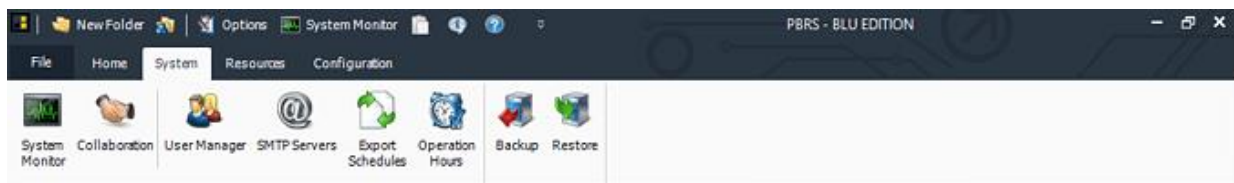
**You can set up a number of SMTP servers and select from the list of existing servers when creating schedules. You can also set some as "backup" servers to be used when your "primary" SMTP server is unavailable.**

System - SMTP Servers

- Go to **System**.

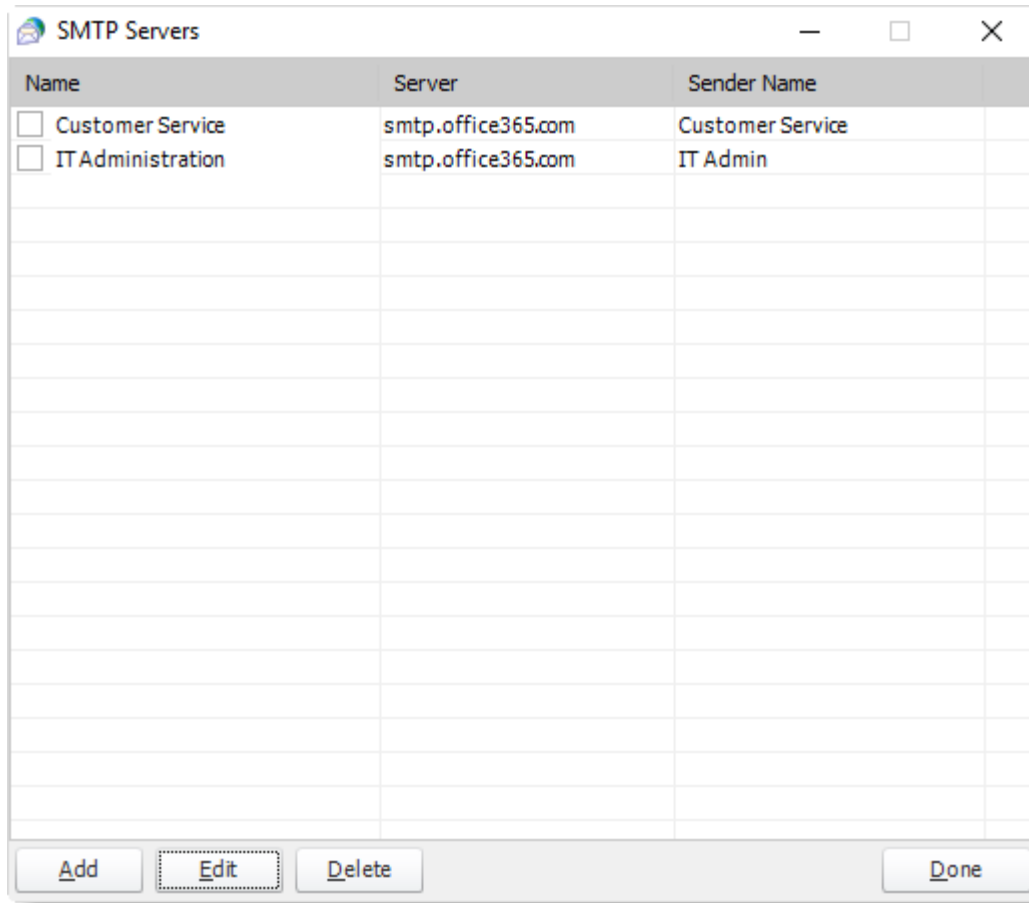


- Select **SMTP Servers**.



You can set up a number of SMTP servers and select from the list of existing servers when creating schedules. This allows you to use a different SMTP server for each schedule should you wish. This is useful if you want the "From" name and email address to be different for different recipients.

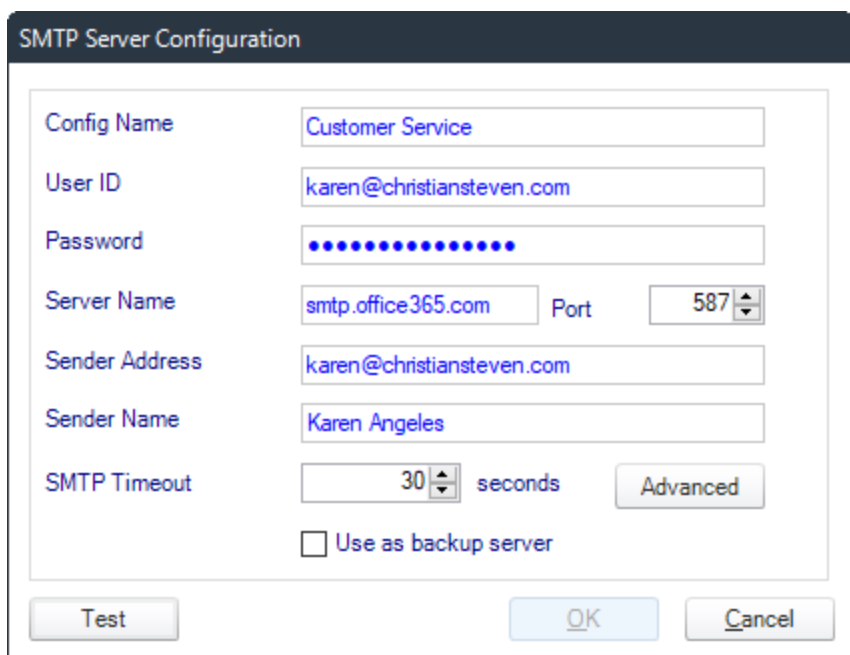
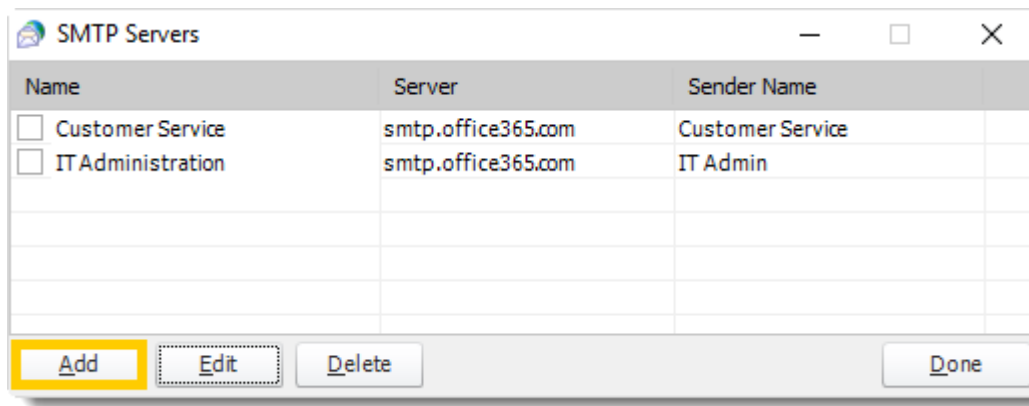
*Example: Reports and Alerts sent to customers come from the Customer Services Email Account; Alerts And Reports Relating to IT come from the IT Department's Account*



A "check" indicates that this server has been selected as a backup server. If the selected server fails, PBRs will attempt to send the email through the backup server instead. If there is no backup server selected, PBRs will continue to re-try the email (See "Retry Failed Mails") using just the server which has been selected for that schedule.

## Add Server

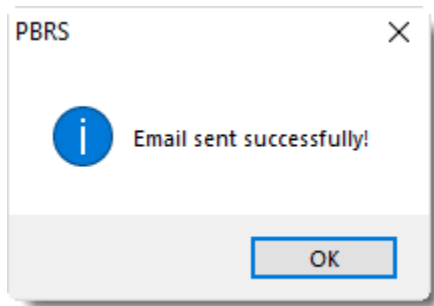
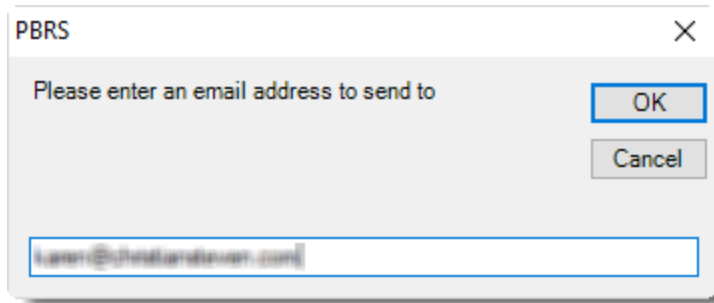
- Click **Add**.



As stated above, you can set this account to be a backup email server.

- Click **Test** to confirm that the settings are correct.





- Click **OK** to continue.

### Sending Through Another SMTP Account or Customize Sender Details

- In any schedule in **Email Destination**, you can customize the sender's details. Rather than the email appearing to come from a PBRS user, it can appear to come from any individual you desire.
- Mail Server** to use an added SMTP account simply select it from the drop down box.

Destination

Destination Name  Type

**Email** Format Naming Misc PGP

☐ Embed report

Format

Mail Server  ☐ Delivery Receipt

Customize sender details (optional)

Name:

Address:

## Customize Sender Details

Most mail servers today will no longer allow you to send an email if you attempt to use this function. This restriction is designed to stop spammers from hijacking or spoofing email accounts.

If you use the "Customize sender details" function and find that your emails are not being delivered, your mail server security settings are almost certainly the reason for the failure.

We recommend that, instead of using this function, you set up a number of email accounts. Then, select the mail server you want from the dropdown in the schedule.

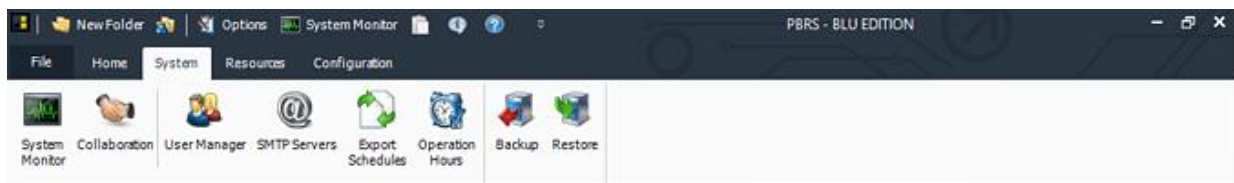
## Operation Hours

**Event-based schedules poll the event-source continuously. But you may want it to be "live" only at certain times. Operational Hours allow you to setup times during which an event is will trigger an Event-Based schedule.**  
System - Operation Hours

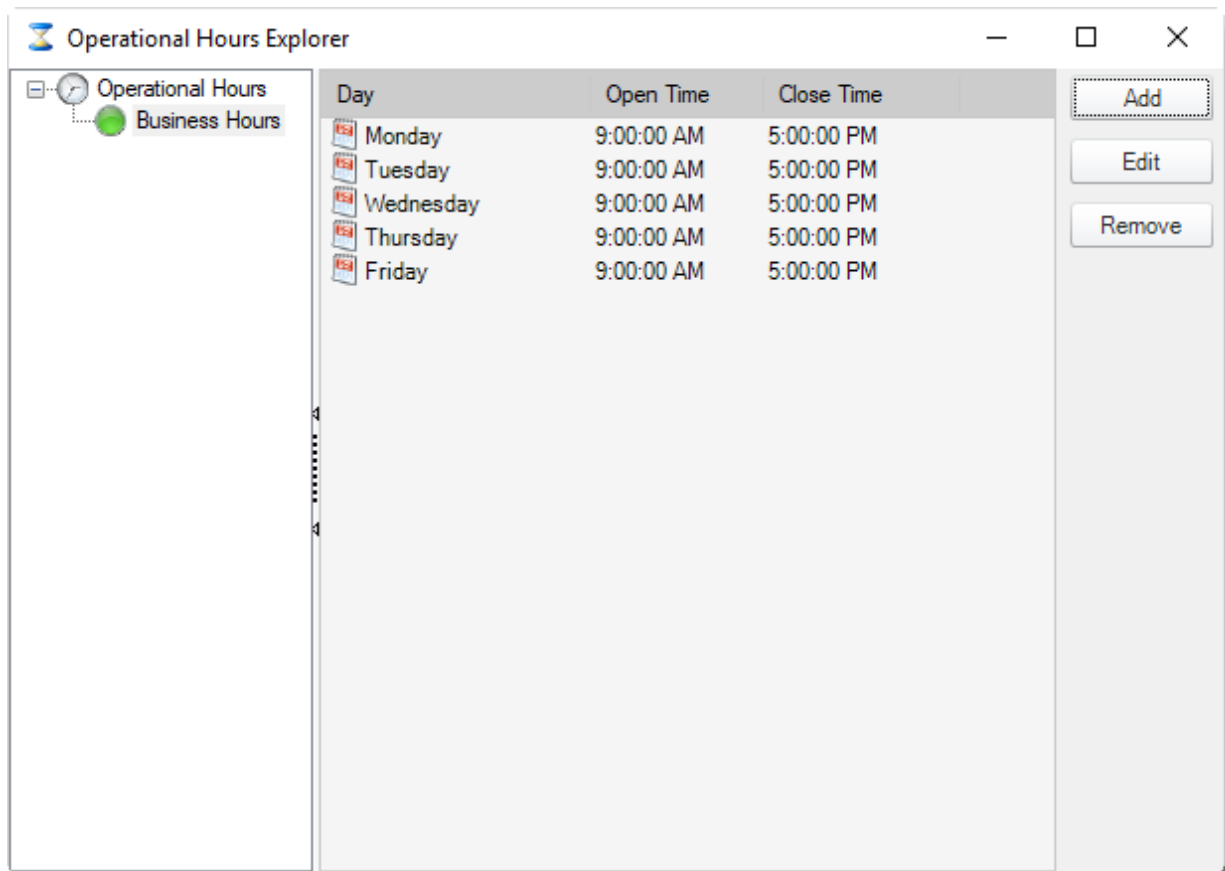
- Go to **System**.



- Select **Operation Hours**.

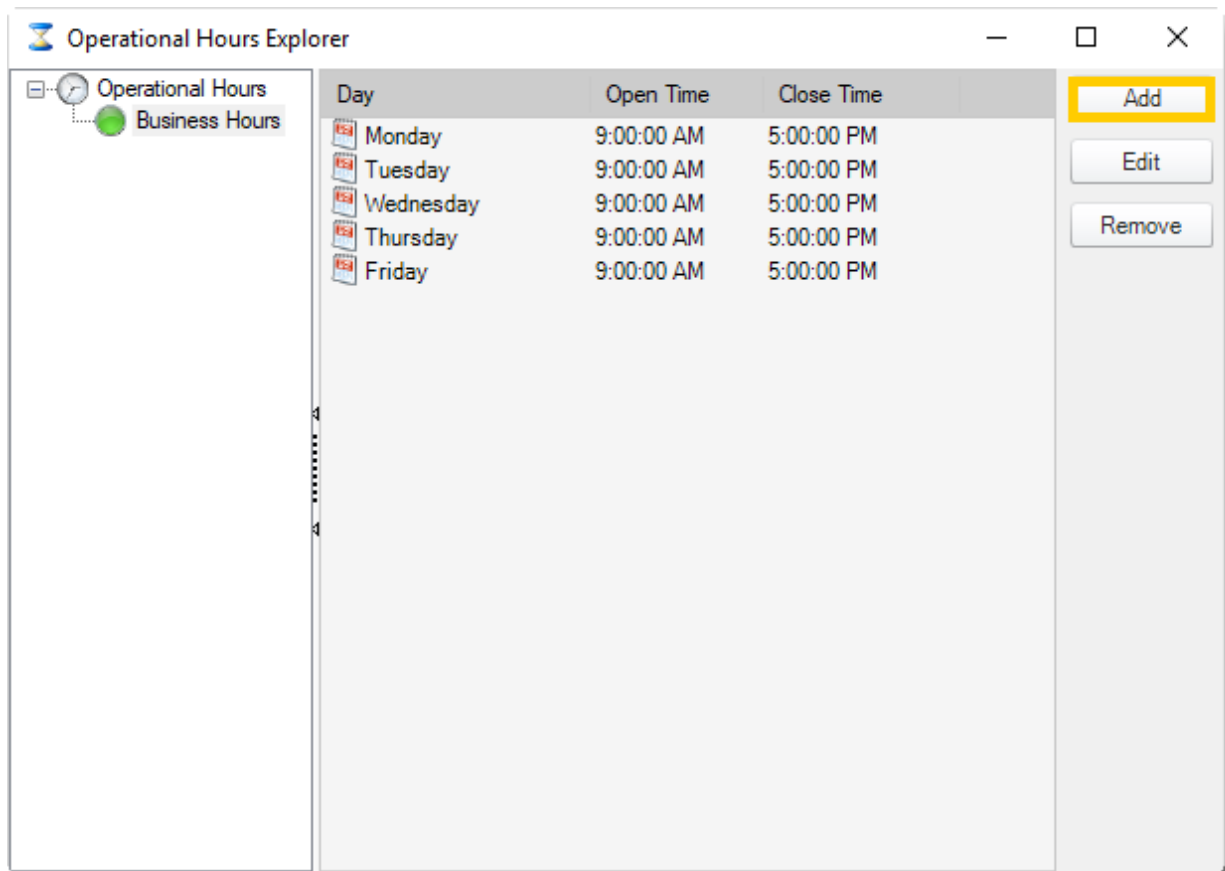


Operational Hours allow you to setup times during which an event is allowed to trigger an Event-Based schedule. If an event occurs during operational hours, the scheduled tasks will execute. For example, if you only wanted PBRS to monitor your database in the overnight hours, then this option would be quite useful.



### *Add Operational Hours*

- Click **Add**.



**Configure Operational Hours**

Name

<input type="checkbox"/> All	Open	<input type="text" value="12:00:00 AM"/>	Close	<input type="text" value="11:59:59 PM"/>
<input checked="" type="checkbox"/> Monday	Open	<input type="text" value="9:00:00 AM"/>	Close	<input type="text" value="5:00:00 PM"/>
<input checked="" type="checkbox"/> Tuesday	Open	<input type="text" value="9:00:00 AM"/>	Close	<input type="text" value="5:00:00 PM"/>
<input checked="" type="checkbox"/> Wednesday	Open	<input type="text" value="9:00:00 AM"/>	Close	<input type="text" value="5:00:00 PM"/>
<input checked="" type="checkbox"/> Thursday	Open	<input type="text" value="9:00:00 AM"/>	Close	<input type="text" value="5:00:00 PM"/>
<input checked="" type="checkbox"/> Friday	Open	<input type="text" value="9:00:00 AM"/>	Close	<input type="text" value="5:00:00 PM"/>
<input type="checkbox"/> Saturday	Open	<input type="text" value="12:00:00 AM"/>	Close	<input type="text" value="11:59:59 PM"/>
<input type="checkbox"/> Sunday	Open	<input type="text" value="12:00:00 AM"/>	Close	<input type="text" value="11:59:59 PM"/>

- Once you have specified the hours, click **OK** to save them.
- Select the operational hours and click **Edit** to edit existing operational hours.

### Applying Operational Hours

Any defined operational hours will now be available for use with Event-Based Schedules.

- Go to **Exception Handling** of your Event Based Schedule.
- Select your Hours of Operation.

Event-Based Schedule

General

Conditions

Report Type

**Exception Handling**

Custom Tasks

Exception Handling

Treat as "error" if not completed in 30.00 mins. ☒ Auto-calculate

On error, retry executing schedule every 0 mins up to 3 times.

Hours of Operation

☒ Use custom hours of operation

Schedule Priority

Set the priority of this schedule to 3 - Normal

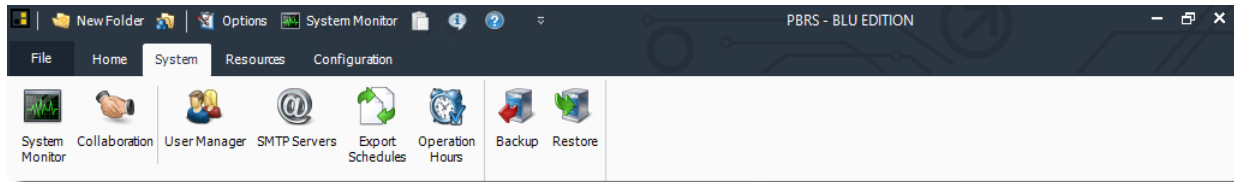
<New...>  
Business Hours

Cancel Next Finish

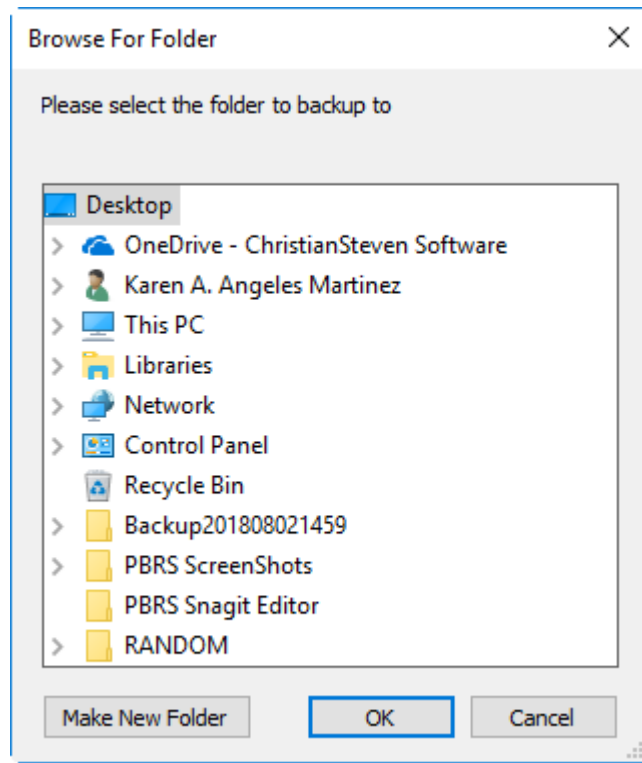
## System Backup

Need to create an ad-hoc backup of the PBRs system database and files? This is how to do it.

- Go to **System**.

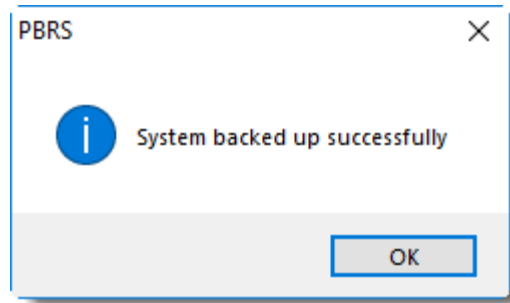


- Select **Backup**.
- Select the folder where the backup will be stored and click **OK**.



- PBRs will now backup the necessary data files.

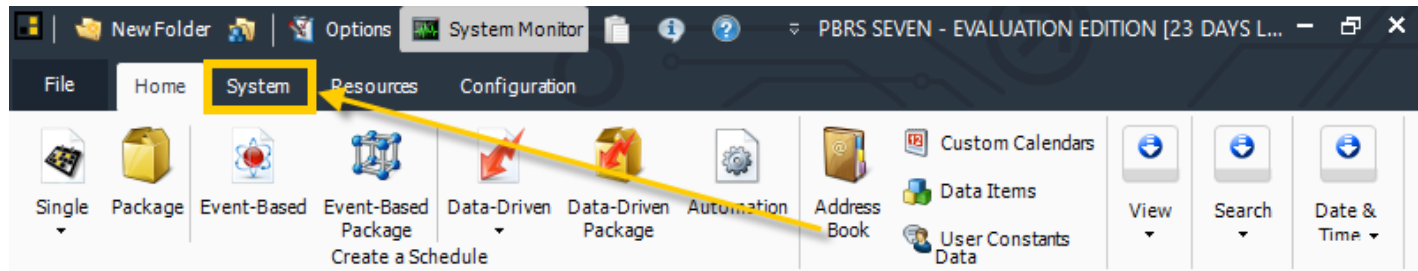




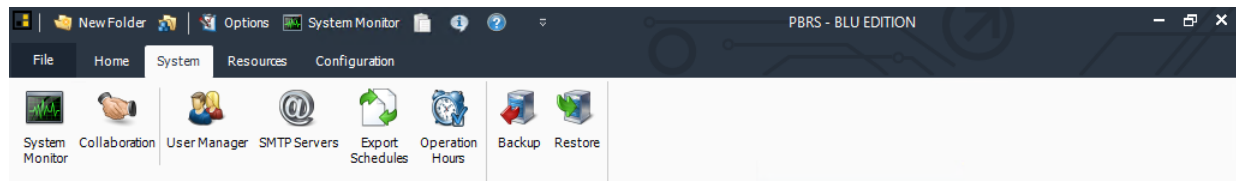
- You can schedule backups to happen at frequent intervals automatically. To do this, go to [Scheduled Backup](#).

## Restore Backup

- Go to **System**.



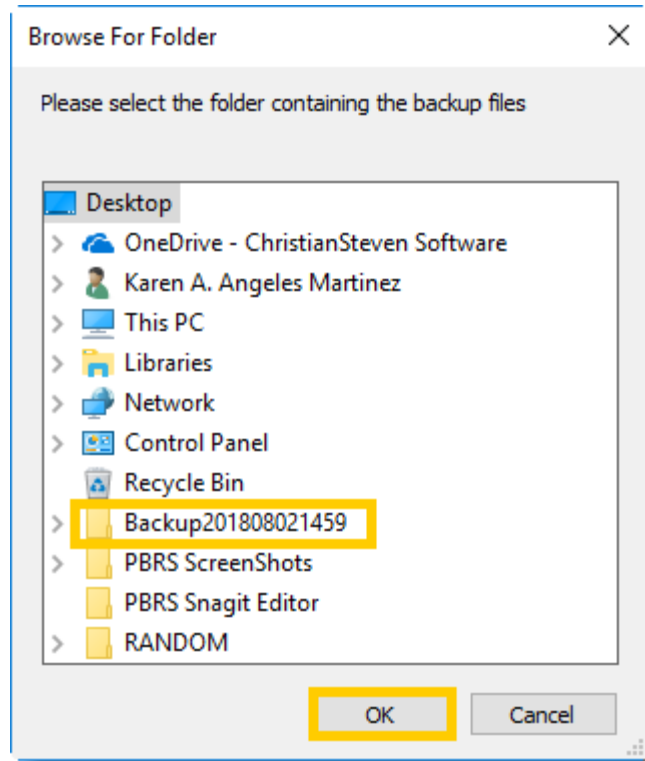
- Select **Restore**.



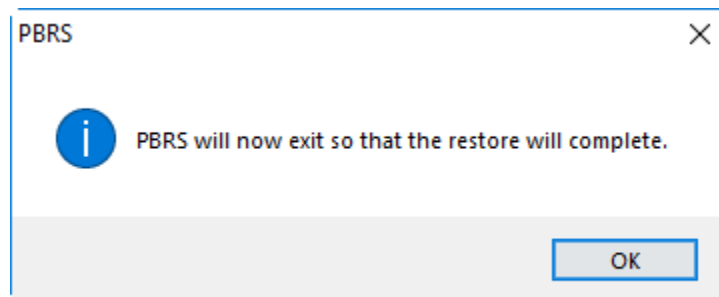
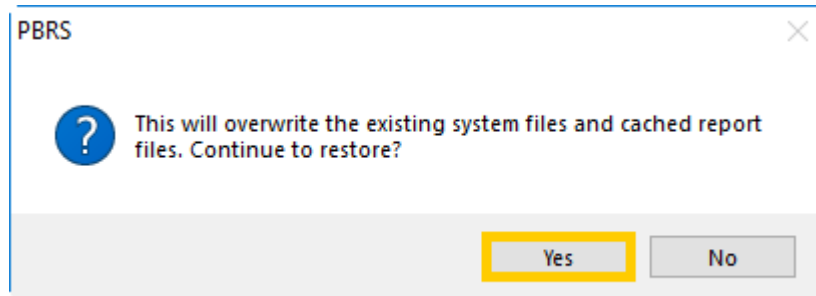
This option will restore your PBRS system and files to a previous backup. Simply select the folder where the previous backup is stored.

*When the system is restored, anything that happened after the backup was created will be wiped out.*

- Browse for the folder where the restore can be found.



- PBRs will load the Backup and restore the system settings.



- After the restore, all of your schedules and cached reports will appear.

*If you have changed certain defaults and system paths, please make sure you re point PBRs to these paths.*

## About PBRS

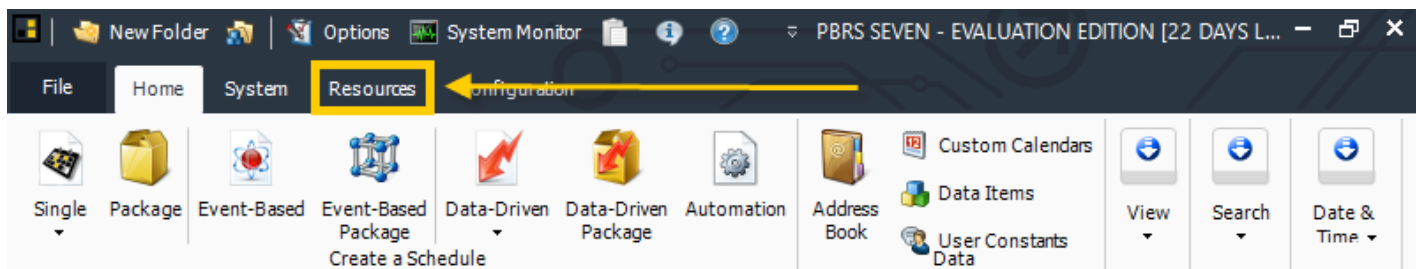
### Important

- Please ensure you activate your software with the most recent license key provided to you. Failure to do so may result in issues with the use or functionality and usability of PBRS
- You must have internet access in order to activate PBRS. If you do not have internet access, you will need to perform a manual deactivation/activation. Please open a support ticket and we will help you with this process

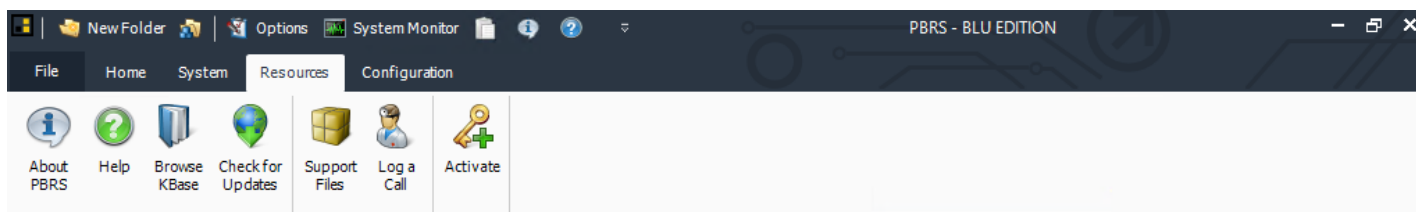
### Applying the New License Key

- Each year after renewing your Annual Maintenance, you will receive a new license key for your PBRS installation. This license key authenticates to our servers and gives your server "permission" to run PBRS for another year. Because our records update each time you receive a new license key, you must update the license key the software uses in order for the application to continue functioning as expected without any interruption to your service. To update the license key to the most recent version, perform the following steps.

- Go to **Resources**.



- Select **About PBRS**.



## The About Screen

About PBRS

Customer Number	<input type="text" value="99999999"/>
Company Name	<input type="text" value="christianstevensoftware"/>
Product	<input type="text" value="PBRS"/>
Edition	<input type="text" value="Blu"/>
Outputs	<input type="text" value="9999999"/>
License Number	<input type="text" value="99999999-99999999"/> <input type="button" value="Edit"/>

Version 3.0 20190904

Maximum daily outputs (peak usage): 1376

Blu Edition

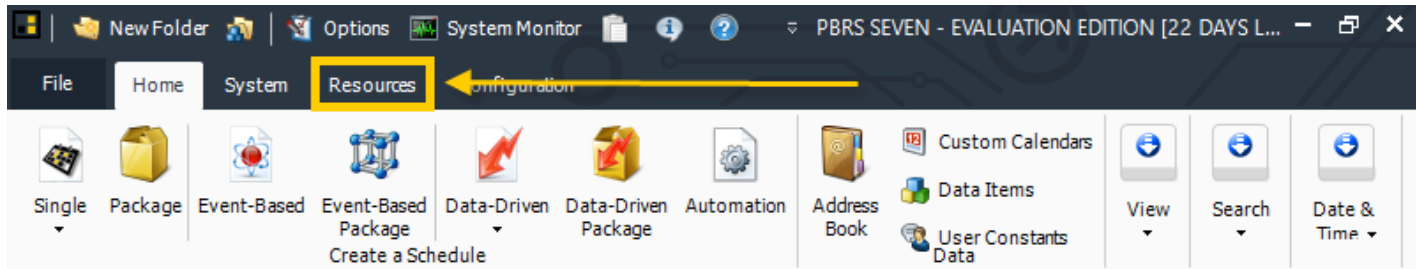
pbRS

- **Company Name:** Enter Your Company Name
- **Customer Number:** Enter your provided customer number here.
- **License key:** Enter your license key here. To enter your license key, click Enter License. The license key field will now be accessible; enter your license key EXACTLY as it appears in your documentation.

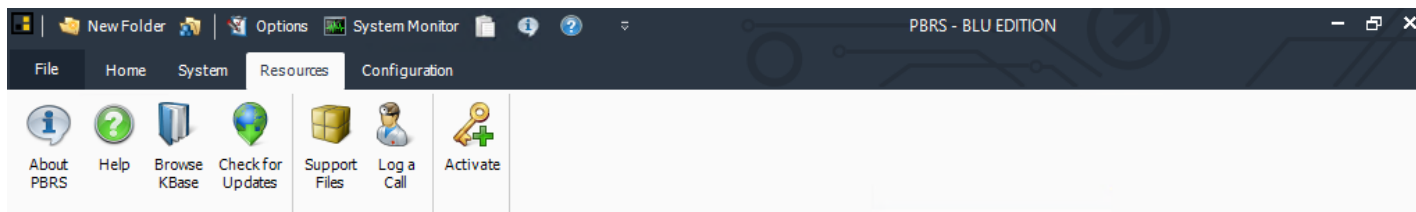
*If the incorrect license key is entered, PBRS will fail to update properly.*

## Demos

- Go to **Resources**.



- Select **Demos**.

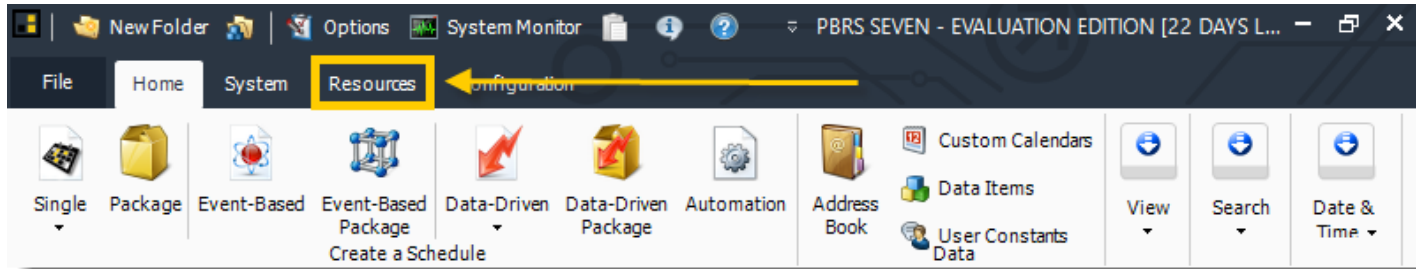


- Clicking the *Demos* button will open [ChristianSteven's YouTube Channel](#) in your web browser.
- You can also see our latest videos on the [latest videos](#) page on our website.

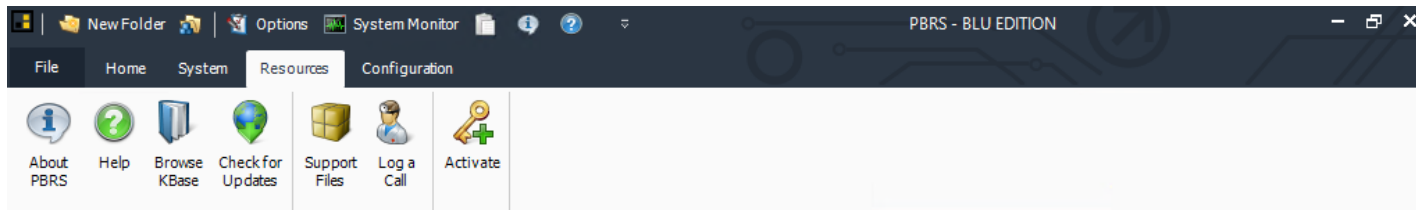
## Check for Updates

PBRS updates are released on a regular basis. The software will notify you when there is an update, but you can force the notification by clicking the button in the Resources tab.

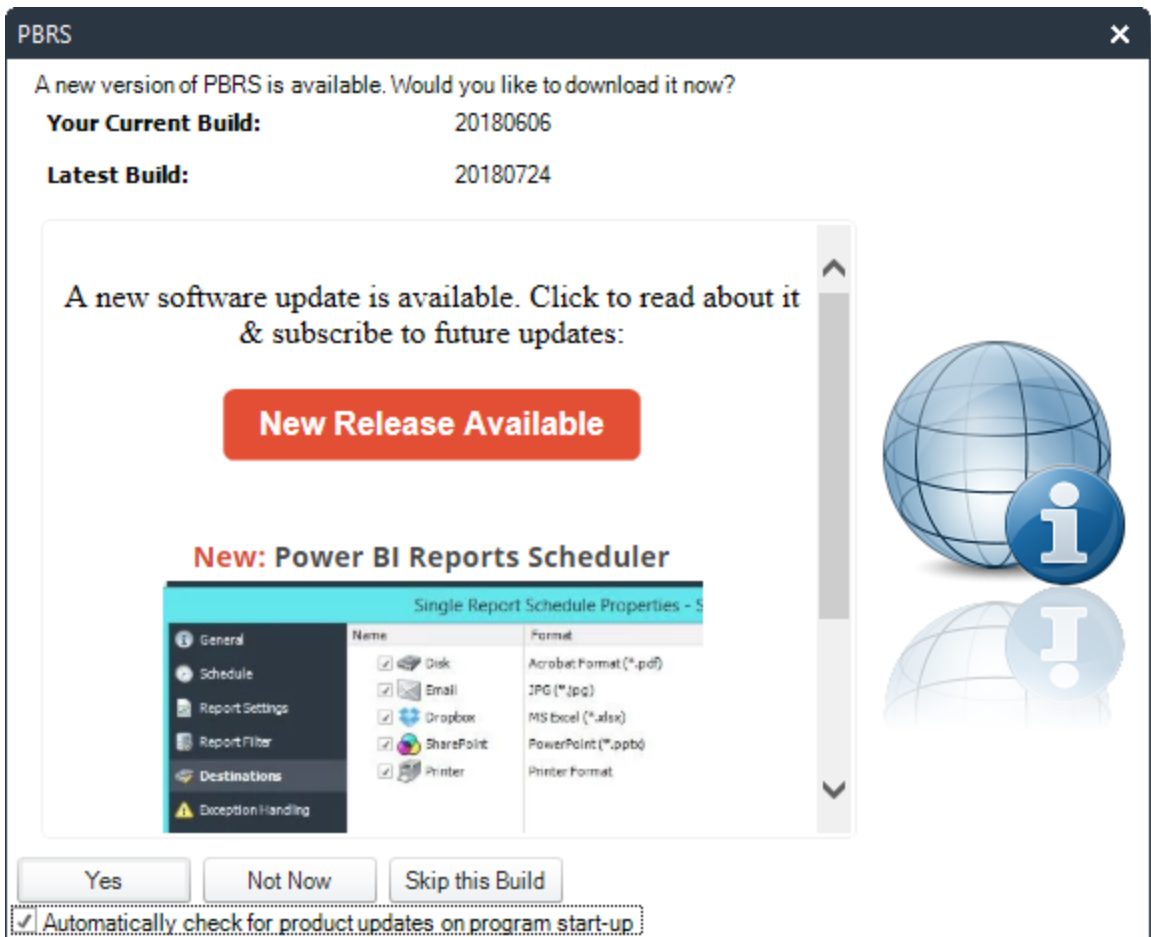
- Go to **Resources**.



- Select **Check for Updates**.



- Check ChristianSteven servers for the newest PBRS version.

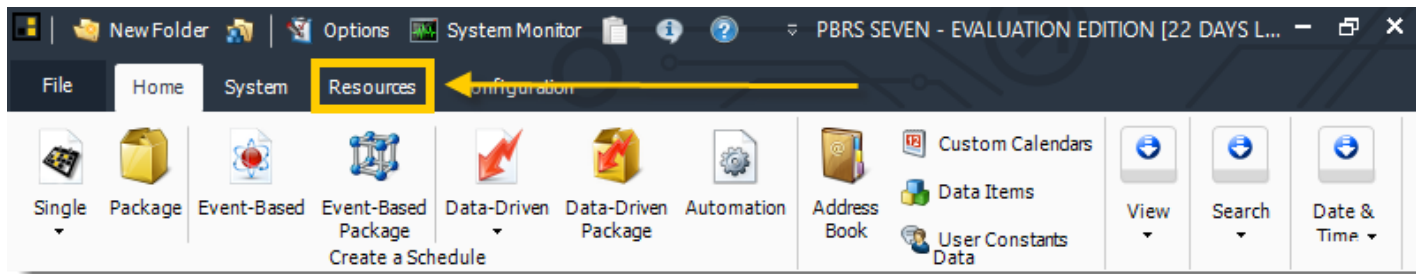




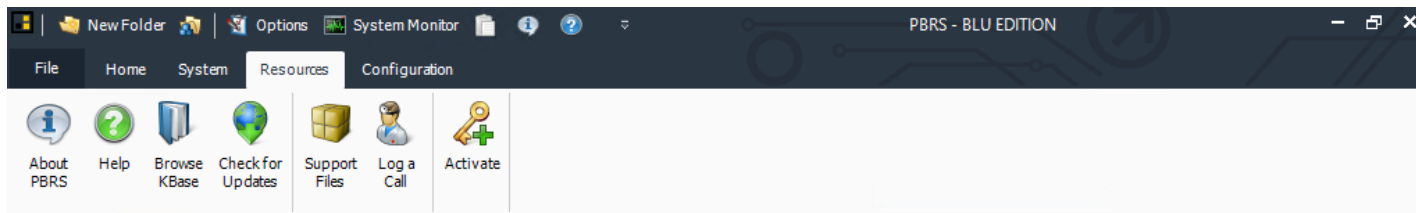
## Support Files

In order to replicate your system state and analyse technical issues, the help desk may ask you to produce and send Support Files.

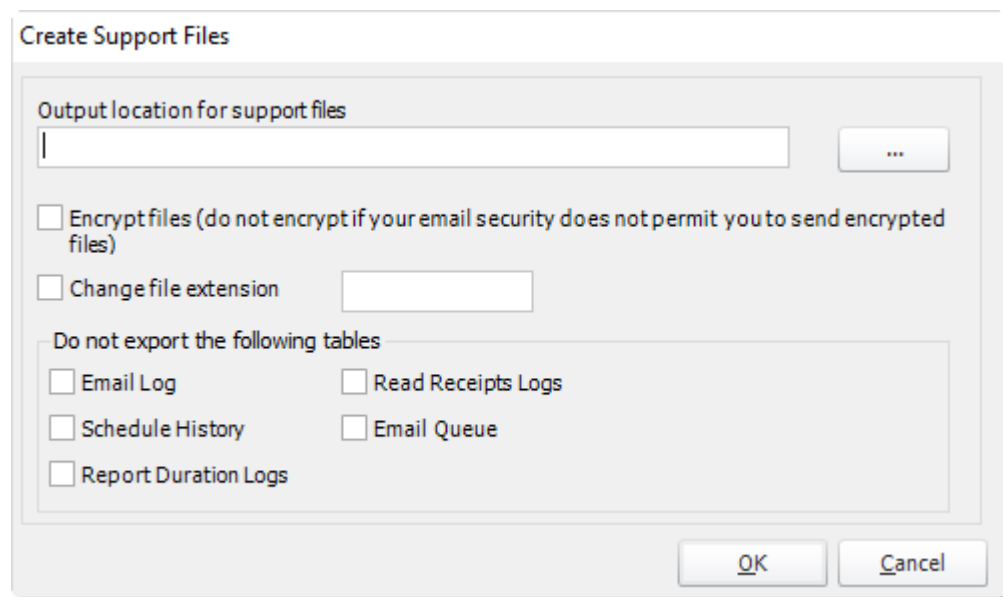
- Go to **Resources**.



- Select **Support Files**.



- Click **Support Files** to begin the process.



When this window appears, select the output location for your support files. By default, it will create a .zip file with the following filename: Product\_Customer# (i.e. PBRS\_12345678)

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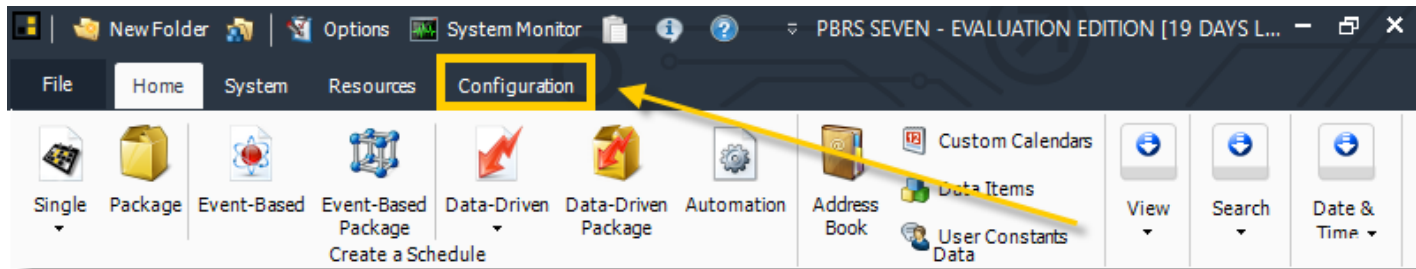
*You do not need select the other options listed. However, if there is information you do not wish to share, you want to keep the file size low, or you need to change the file extension for security reasons, you can do so.*

- Click **OK**
- Now you can
  - Send the support files zip via email.
  - Attach it to the support form.
  - Upload it [here](#) in response to a request from ChristianSteven.
  - Upload it to a file service e.g. [wetransfer.com](https://www.wetransfer.com), Google Drive, Dropbox etc., and send us the link.

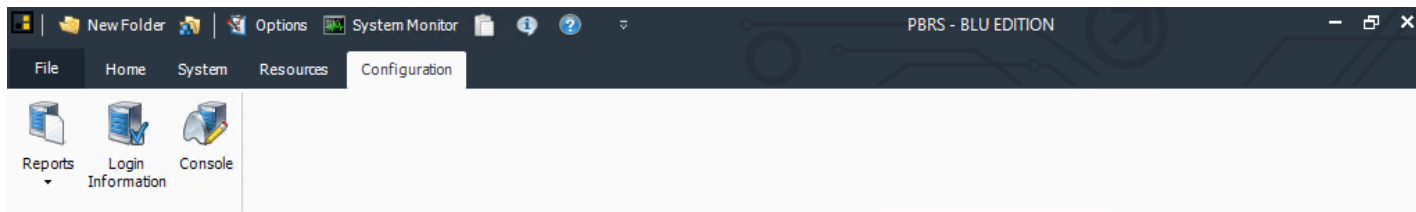
## Reports tool

The "Reports" tool exports system data for each type of schedule. You can preview the data, print or save it disk, choose fields to export and create custom reports.

- Go to **Configuration**



- Select **Reports**



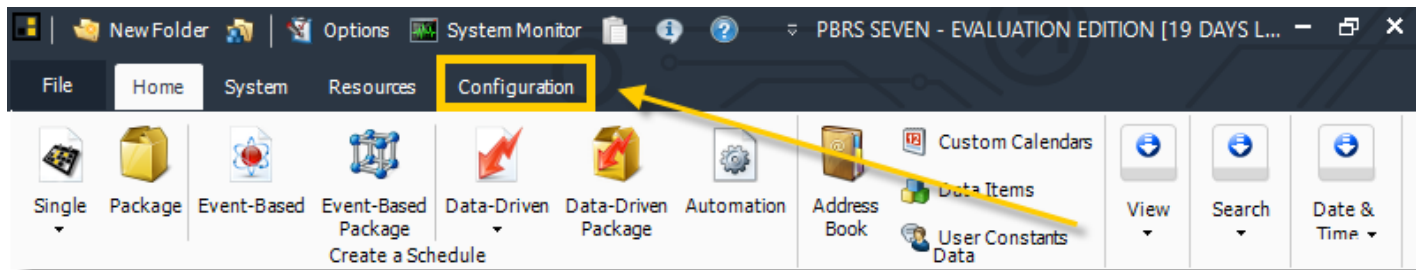
- This tool exports system data for each type of schedule. You can preview the data, print or save it disk, choose fields to export and create custom reports.

System Data: Single Schedules						
Print Preview            Print            Export to Excel            Save to Disk            Custom Report            Field Chooser						
Drag a column header here to group by that column.						
ReportID	DatabasePath	ReportName	PackID	Parent	DatabasePassword	ReportTitle
644404100	https://app.powe...	Avocado Prices...	0	1587631059		Avocado F
644406404	http://anase/re...	Supplier...	0	1587631059		Supplier...
644406855	http://isaiah.dri...	Northwind 0602	0	1587631059		Northwind
644407803	http://anase/re...	Orders By Month...	0	1587631059		Orders By
644408353	https://app.powe...	Contact Sample...	0	1587631059		Contact Sa
644416003	http://anase/re...	Copy of Orders...	0	1587631059		Copy of O
644421691	http://anase/re...	Copy of Orders...	0	1587631059		Copy of O
644479825	https://app.powe...	Soccer...	0	1587631059		Soccer...
644480380	https://app.powe...	Contact Sample...	0	1587631059		Contact Sa
644481842	https://app.powe...	Avocado Prices...	0	1587631059		Avocado F
644483695	https://app.powe...	ReAdmissions...	0	1587631059		ReAdmissi
644483815	https://app.powe...	ReAdmissions...	0	1587631059		ReAdmissi
644484493	http://anase/re...	Supplier...	0	1587631059		Supplier...
644484660	https://app.powe...	Avocado Prices...	0	1587631059		Avocado F
644485910	https://app.powe...	Avocado Prices...	0	1587631059		Avocado F
644486849	http://anase/re...	Supplier...	0	1587631059		Supplier...
644487231	http://isaiah.dri...	Northwind0603	0	1587631059		Northwind
644488376	http://anase/re...	Orders By Month...	0	1587631059		Orders By
644488975	https://app.powe...	Contact Sample...	0	1587631059		Contact Sa

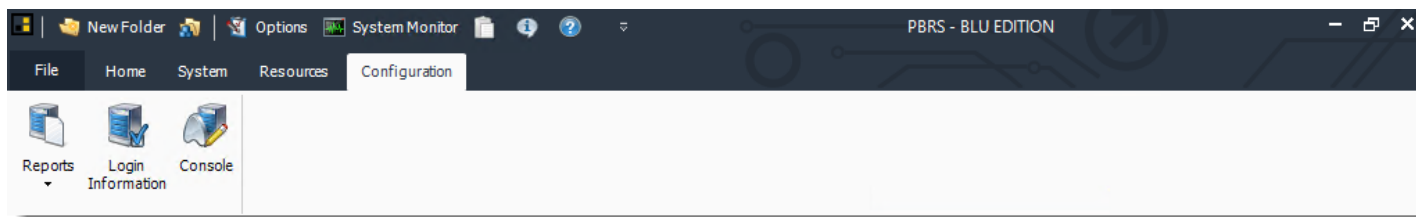
## Login Information

At some point, you might want to change the logon credentials of the PBRs database, or point your PBRs application to a different PBRs database.

- Go to **Configuration**.



- Select **Login Information**.



- Select this option to change or update the logon information required by your database.

SQL Server Configuration

Server Name  
TURNWALDWIN10

Database Name  
PBR5

Instance Name (Optional)  
PBR5


Database Username (Must be Admin)  
sa

Database Password  
●●●●●●●●●●

Database Connection Timeout  
90

☐ Use Windows Authentication    ☐ Show Connection String

Test  
OK Cancel



- Click **Test** to ensure that the information provided is correct.
- Click **OK** and your changes will be saved.