



Report Builder

Sample manual - first two chapters



Wise Owl
Training

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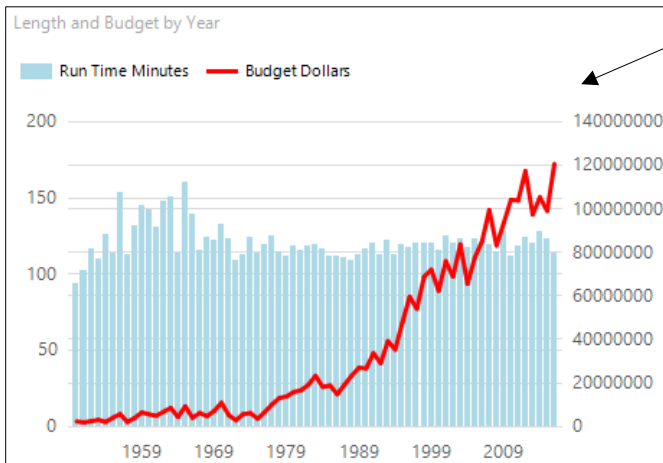
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CHAPTER 1 - GETTING STARTED

1.1 What is SQL Server Report Builder?

SQL Server Report Builder allows you to create, manage and share reports. You can see examples of the types of reports you can create in the diagram below:

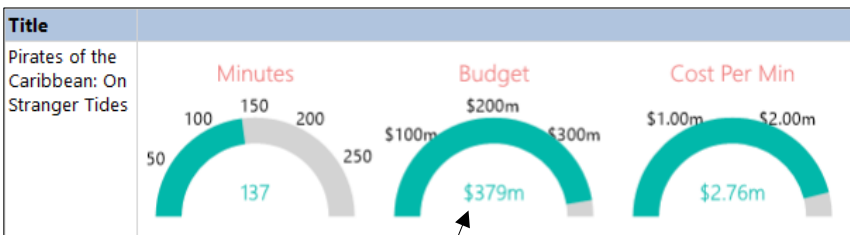


Charts allow you to display data graphically.

Year	Quarter	Month	Action	Adventure	Ani
2016	1	January			
		February	108		
		March	151		
	2	April			105
		May	291		

A matrix groups data into rows and columns.

Akira Kurosawa		
Title	Run Time	
Seven Samurai	207	↑
Kagemusha	180	↑
Ran	162	→
Ikiru	143	→
The Hidden Fortress	139	→
Throne of Blood	110	↓
Yojimbo	110	↓
Sanjuro	95	↓
Rashomon	88	↓



Indicators and gauges allow you to replace a boring list of numbers with a set of interesting icons and simple charts.

You can add *parameters* to a report to allow users to control what data they see.

Even a boring table can become exciting by adding interactive elements to it.

Australia		
Brazil		
Title	Release Date	Run Time
City of God	30/08/2002	130
Total		130

Choose director: Steven Spielberg

Choose film: Raiders of the Lost Ark

1 of 1

Cast list for Raiders of the Lost Ark	
Role	Actor
Indiana Jones	Harrison Ford
Sallah	John Rhys-Davies
Satipo	Alfred Molina
Marion Ravenwood	Karen Allen
Special vocal effects	Frank Welker
Dr. Marcus Brody	Denholm Elliott

Related Software

Report Builder is just one of many applications in the *Microsoft SQL Server* suite of software. You can see an overview of some of the software mentioned in this manual in the table below:

Name	Description
<i>SQL Server</i>	The core component of the SQL Server suite of software. This comprises the <i>database engine</i> which deals with storing and serving large volumes of data for applications designed by developers.
<i>SQL Server Management Studio</i>	An application for creating and managing SQL Server databases and various other associated objects.
<i>SQL Server Configuration Manager</i>	A tool for controlling which components of a SQL Server are running.
<i>SQL Server Reporting Services</i>	The <i>report server</i> component of SQL Server which deals with storing reports and serving them to applications or users who request them.
<i>Reporting Services Configuration Manager</i>	A tool for configuring the various aspects of a report server.
<i>Visual Studio</i>	Microsoft's flagship development tool which allows you to create many different types of applications and projects.
<i>SQL Server Data Tools</i>	A set of templates for Visual Studio which allows you to create and deploy SQL Server Reporting Services reports.
<i>SQL Server Report Builder</i>	A simple desktop application for creating SQL Server Reporting Services reports.
<i>Reporting Services Web Portal</i>	A web-based application for viewing and managing reports that have been deployed to a report server.



This manual assumes that you're a report author rather than a SQL Server developer and so you won't need to use many of the applications mentioned in the table above. It can be handy to understand how everything fits together however!

1.2 Installing Report Builder

You can install Report Builder from a couple of locations, as described in this section.

Installing from the Microsoft Website

You can use a search engine to find the Microsoft download page for Report Builder:

The screenshot shows the Microsoft download page for SQL Server 2016 Report Builder. The browser address bar shows the URL: <https://www.microsoft.com/en-us/download/details.aspx?id=53613>. The page title is "Microsoft® SQL Server® 2016 Report Builder". Below the title, there is a "Select Language:" dropdown menu set to "English" and a prominent red "Download" button. Below this, a paragraph states: "Report Builder provides a productive report-authoring environment for IT professionals and power users." A "Details" link is visible. At the bottom, a table-like structure shows the "Version:" as "14.0.1016.240" and the "Date Published:" as "1/8/2018".

Callouts from the image:

- Top right: "You could also just type this URL into your web browser." (points to the address bar)
- Middle right: "Click here to download the installer file and then run it to install Report Builder on your machine." (points to the Download button)
- Bottom right: "The examples shown in this manual use a version of Report Builder released on the 8th of January 2018." (points to the Date Published field)

Installing from the SSRS Web Portal

The *Reporting Services Web Portal* runs in a web browser and allows you to view reports that you've saved to a *Report Server*. You can also install Report Builder from the web portal:

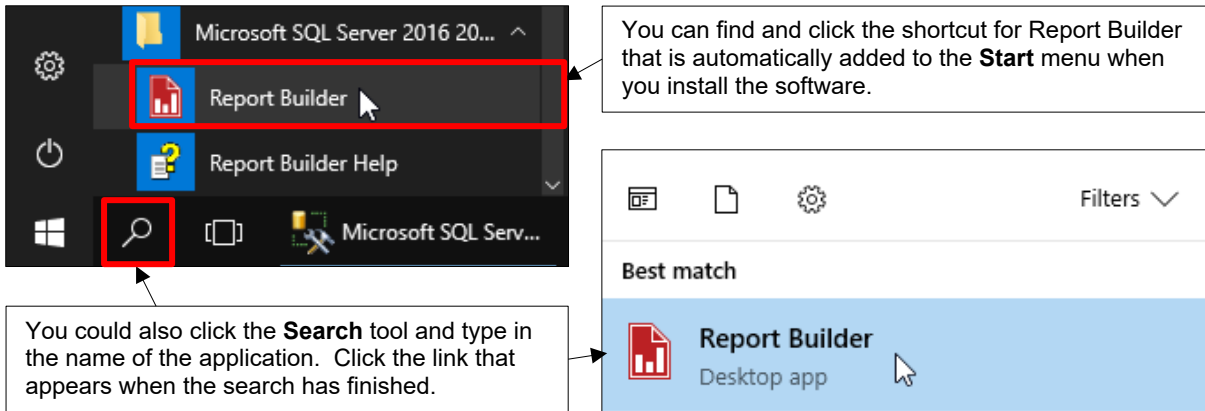
The screenshot shows the SQL Server Reporting Services web portal in a browser. The address bar shows the URL: http://desktop-uhnej1/Reports_SQL2016/browse/. The page header includes "SQL Server Reporting Services" and a "Browse" button. A "Download" menu is open, showing options for "Mobile Report Publisher" and "Report Builder". A mouse cursor is hovering over the "Report Builder" option.

Callouts from the image:

- Top right: "The URL of the web portal will depend on the configuration of your report server. How to find the web portal URL is covered later in this courseware." (points to the address bar)
- Middle right: "From the menu, choose **Report Builder** and then follow the instructions to install the software." (points to the Report Builder menu item)

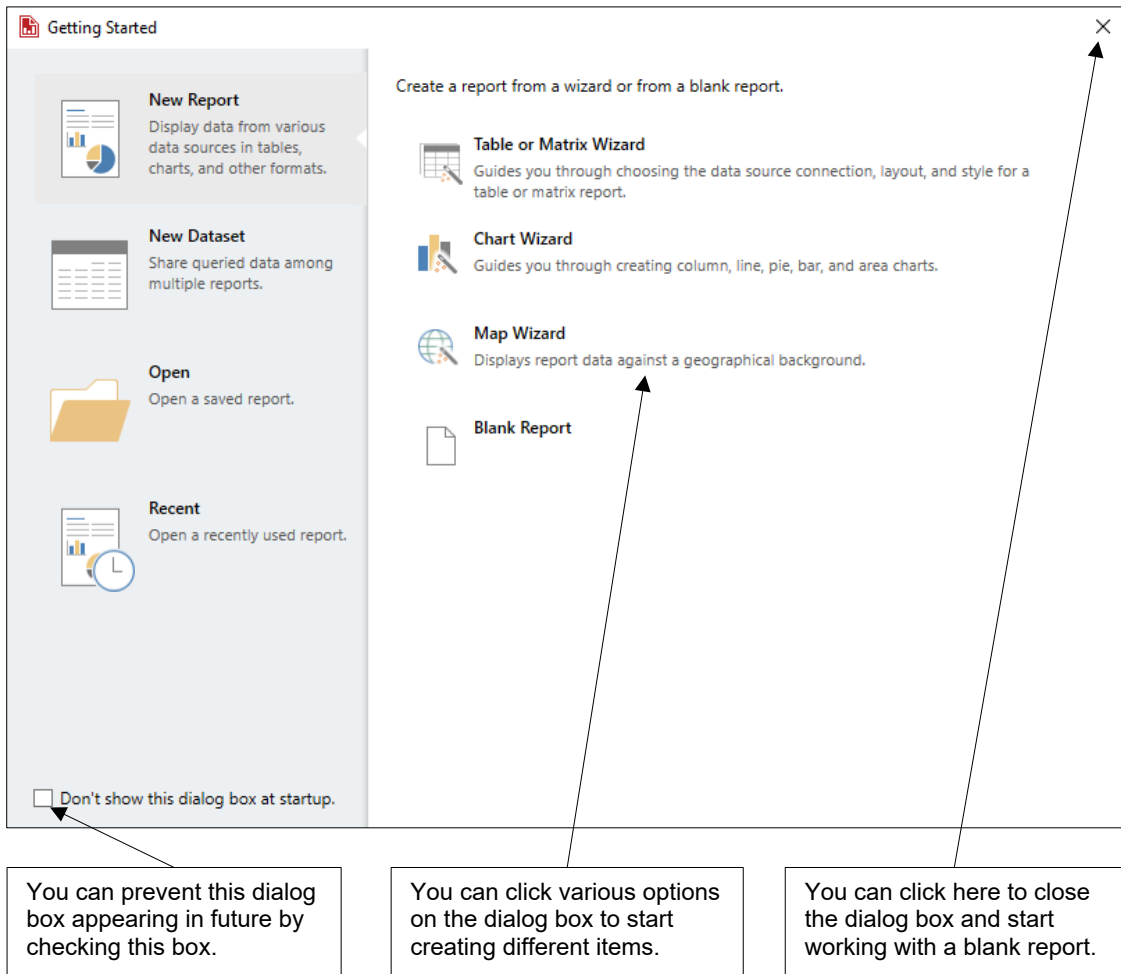
1.3 Running Report Builder

Once you've installed it, you can run Report Builder from the **Start** menu:



The Getting Started Dialog Box

By default, Report Builder displays the **Getting Started** dialog box when you open the application:



1.4 The Report Builder Screen

Report Builder has several views and windows that you'll use when creating reports. You can see an overview of the screen in which you'll spend most of your time in the diagram below:

The screenshot shows the Microsoft SQL Server Report Builder interface. At the top is a ribbon with tabs for File, Home, Insert, and View. The File tab is highlighted with a red box. The Home tab contains various formatting options like Bold, Italic, Underline, Font color, and Paragraph alignment. Below the ribbon is a 'Report Data' pane on the left with a tree view showing categories like Built-in Fields, Parameters, Images, Data Sources, and Datasets. The main workspace is a large white area with a dashed border, containing a placeholder text 'Click to add title' and a small box labeled '[&ExecutionTime]'. At the bottom, there are 'Row Groups' and 'Column Groups' sections. The status bar at the very bottom shows 'No current report server. Connect' and a zoom slider set to 100%.

The File menu contains options for opening, saving and creating new reports.

The Home tab of the ribbon has a variety of options for formatting and editing parts of your report.

You can close Report Builder by clicking the cross in the top-right corner of the window.

You may see a number of windows and panels around the border of the main Report Builder window. The next page describes these windows.

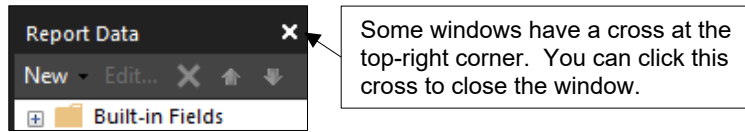
The main part of the screen is taken up by the report you're currently working on.

These buttons allow you to run the report and switch back to the design view.

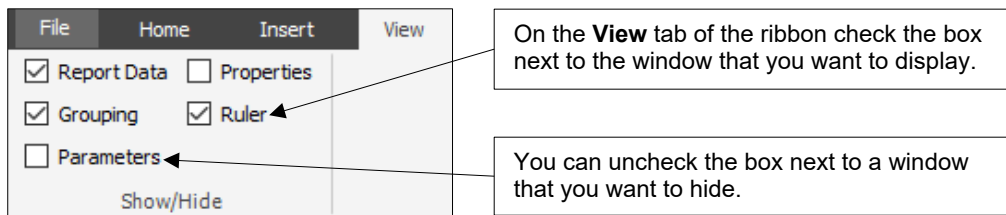
You can zoom in and out on the report using this slider.

Opening and Closing Windows

Report Builder has several windows and panels that you can open and close as and when you need them.


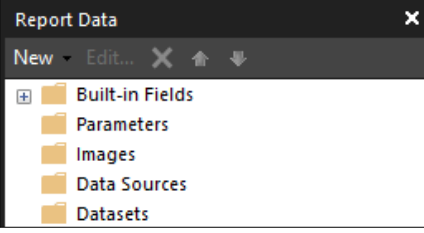
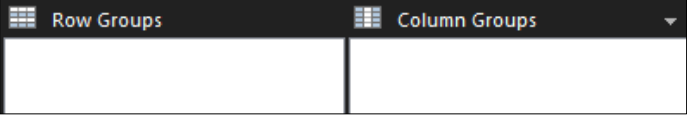
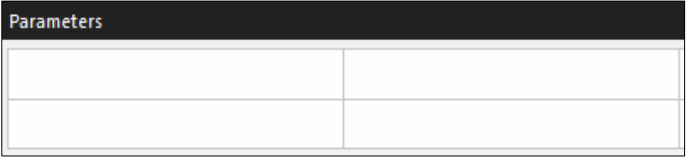


To reopen any windows that you've closed, choose **View** from the ribbon and select the window that you want to display.



The Main Windows

You can see a description of the main windows and panels in the table below:

Name	What it's for	What it looks like
<i>Properties</i>	Displays the attributes of any object that you have selected. You can change these properties to alter the object in various ways.	
<i>Report Data</i>	Allows you to create connections to data sources and queries to retrieve data that will be displayed in the report.	
<i>Grouping Pane</i>	Allows you to control how the selected report item is grouped.	
<i>Parameters Pane</i>	Allows you to create and edit report parameters.	

1.5 Using a Report Server

In Report Builder you can work with reports that are stored locally on your machine as well as files stored centrally on a report server.



Connecting to a report server means that you can save your reports in a location that other people can see. You can also access other shared resources such as data sources and datasets, which can make building reports much easier!

Connecting to a Report Server

To use files on a report server you first need to connect to it:

a) At the bottom of the Report Builder window, click **Connect**.

b) Ask your friendly SQL Server administrator for the URL of the report server and enter it here.

c) Click **Connect** to connect to the report server.

Setting a Default Report Server

You can set a default report server so that you don't have to manually choose to connect to one each time you open Report Builder. To do this, from the ribbon select **File | Options**

On the **Settings** page of the dialog box that appears, enter the report server URL into this box and then click **OK**

Finding the URL of the Report Server

If you don't have a SQL Server administrator to ask, and you have access to the report server, you can locate its URL in the **SQL Server Management Studio** application.

The image shows two parts of the process. On the left, a Windows search results window shows 'SQL Server Management Studio' as the best match. On the right, the 'Connect to Server' dialog box is open, showing 'Reporting Services' selected as the server type, '.SQL2016' as the server name, and 'Windows Authentication' as the authentication method. The user name is 'WISEOWL\Andrew.Gould'. The 'Connect' button is highlighted.

Best match

SQL Server Management Studio
Desktop app

a) If you have the application installed, in the **Start** menu right-click on it and choose **Run as Administrator**.

b) Choose a **Reporting Services** server and select or enter its name.

c) Click here to connect to the server.

The image shows the SQL Server Enterprise Edition interface. On the left, the Object Explorer shows a right-click context menu for the '.SQL2016 (Reporting Services)' server, with 'Properties' selected. On the right, the 'Select a page' dialog box is open, showing the 'General' page. The 'Name' field contains 'SQL Server Reporting Services', and the 'URL' field contains 'http://DESKTOP-UHNECJ1:80/ReportServer_SQL2016'. The 'Version' field shows 'Microsoft SQL Server Reporting Services Version 13.0.44'.

Object Explorer

Connect... Disconnect... Policies Facets Reports Refresh Properties

Select a page

General Execution History Logging Security Advanced

Name: SQL Server Reporting Services

Version: Microsoft SQL Server Reporting Services Version 13.0.44

Edition: Developer

Authentication Mode: Windows Authentication

URL: http://DESKTOP-UHNECJ1:80/ReportServer_SQL2016

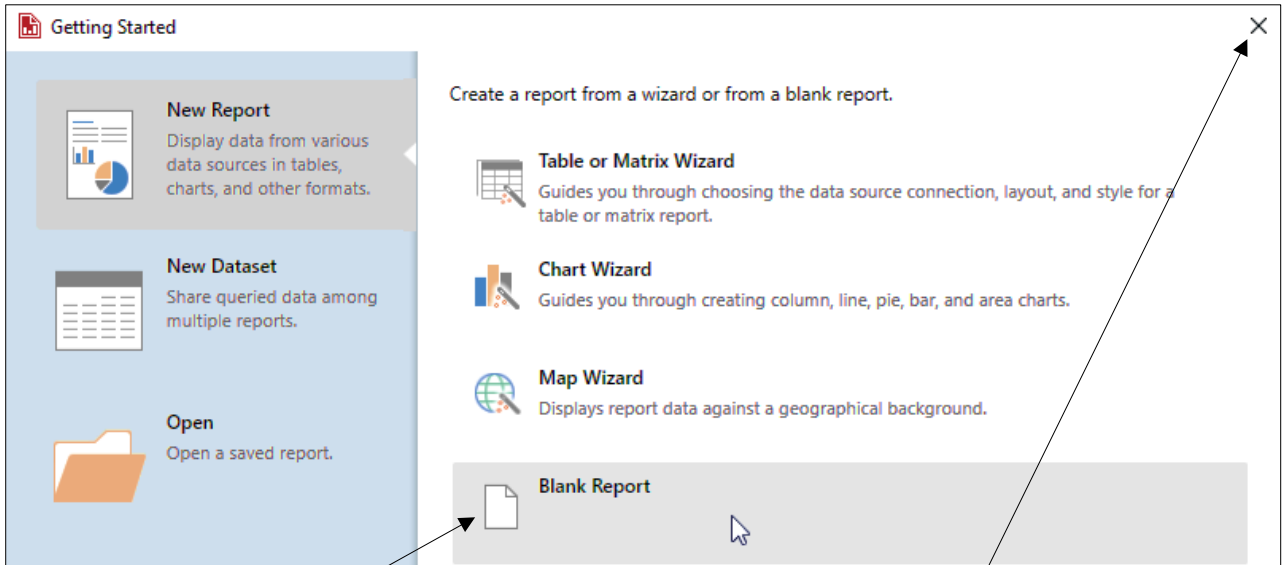
d) Right-click the server at the top of the **Object Explorer** window and choose **Properties**.

e) On the **General** page of the dialog box which appears you can copy the report server URL from this text box.

CHAPTER 2 - WORKING WITH REPORTS

2.1 Creating Reports

The easiest way to create a new report is simply to open Report Builder:




If the **Getting Started** dialog box appears when you open Report Builder, click **Blank Report** to create a new report.

You can also close the dialog box to see the blank report that is created automatically when you open Report Builder.

Choosing to Create a New Report

You can also create a new report when Report Builder is open:

<i>Ribbon</i>	<i>Keyboard</i>
File New	Ctrl + N



Wise Owl's Hint

You can only have one report open at a time in Report Builder. Creating a new report will automatically close the one you're working on (prompting you to save it if necessary).

2.2 Opening and Closing Reports

Opening Existing Reports

To open an existing report:

Ribbon	Keyboard
File Open	Ctrl + O

You can then browse for the report you want to open on the dialog box which appears:

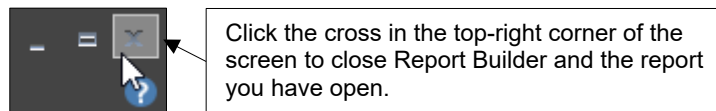
The screenshot shows the 'Open Report' dialog box with the following callouts:

- Click here to search for reports saved on a report server. (Points to the 'Recent Sites and Servers' folder)
- Choose one of these options to find reports saved on your local machine. (Points to the 'Desktop', 'My Documents', and 'My Computer' folders)
- You can double-click on a report to open it. (Points to the 'Charts Combination' report in the file list)
- You can also click on a report and then click **Open**. (Points to the 'Open' button)

The dialog box shows the 'Look in:' field set to 'http://desktop-uhnej1/ReportServer_SQL2016/Repo...'. The file list contains various reports, with 'Charts Combination' selected. The 'Name:' field is set to 'Charts Combination' and the 'Items of type:' dropdown is set to 'Reports (*.rdl)'. The 'Open' and 'Cancel' buttons are visible at the bottom right.

Closing a Report

You can close a report by closing Report Builder.




2.3 Saving Reports

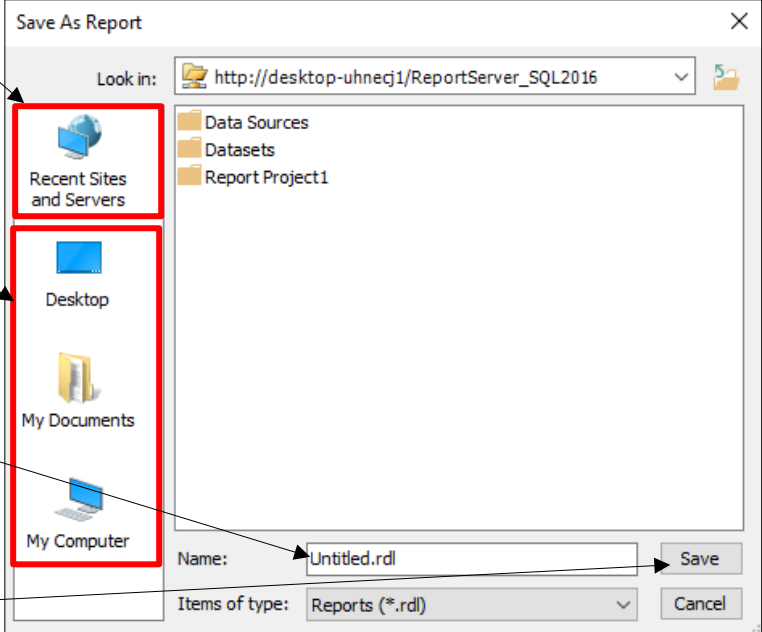
You can save a report to either your local machine or to a report server.

Saving a Report

To save a report that you're working on:

Ribbon	Keyboard	Toolbar
File Save	Ctrl + S	

If you've previously saved the report it will be saved with the same name in the same location. If this is the first time you've saved the report, you'll be asked where you'd like to save it:



Click here to choose to save a report on a report server. You'll then need to browse to the one you want to use.

Choose one of these options to select a location on your local machine. You can then browse to the exact place you want.

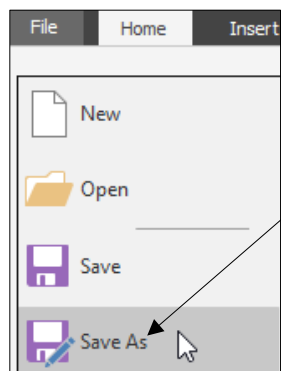
Type a name for the report in this text box.

Click **Save** to save the report in the place you've selected.

The screenshot shows the 'Save As Report' dialog box. The 'Look in:' field is set to 'http://desktop-uhnej1/ReportServer_SQL2016'. The left pane shows 'Recent Sites and Servers', 'Desktop', 'My Documents', and 'My Computer'. The right pane shows 'Data Sources', 'Datasets', and 'Report Project1'. The 'Name:' field contains 'Untitled.rdl'. The 'Items of type:' dropdown is set to 'Reports (*.rdl)'. The 'Save' and 'Cancel' buttons are visible at the bottom right.

Saving a Report with a New Name

If you'd like to save a report that you've previously saved with a new name or in a new location you can do so by choosing **File | Save As** from the ribbon:



From the **File** menu, choose this option to pick a new name and location for the report you're saving.

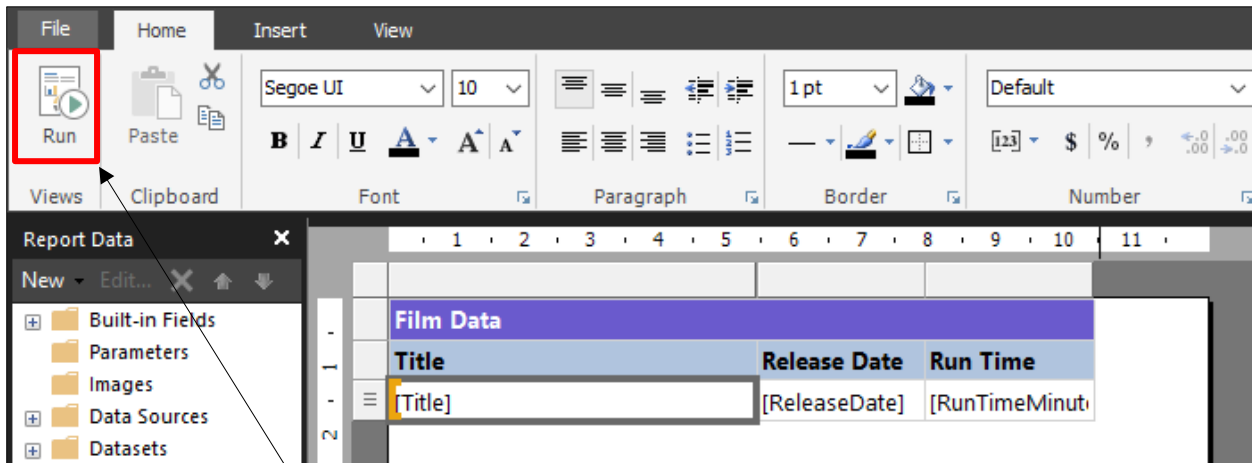
The screenshot shows the 'File' menu with options: 'New', 'Open', 'Save', and 'Save As'. The 'Save As' option is highlighted with a mouse cursor.

2.4 Running Reports

Your reports look different when you're creating them compared to when you run them. You'll need to switch between *design view* and *preview* to check that the report looks sensible.

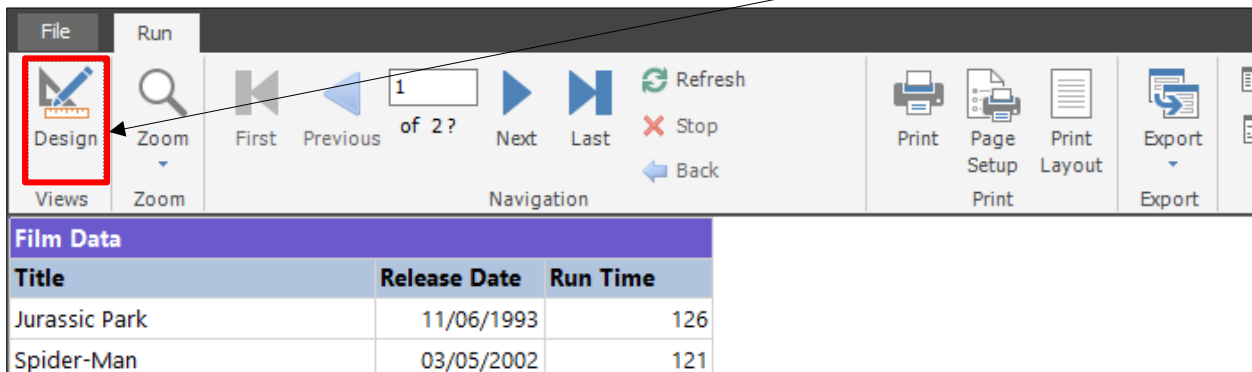
Design View and Report Preview

When you create a report it will automatically open in design view. This is where you'll spend most of your time as a report author. You can switch a report to a preview to running it.



In design view you can make changes to the report's appearance. To see what it looks like, click **Run** to switch to the report preview.

In preview you can see the report's data (and print or export it if you want to). You can click **Design** to return to design view and make further changes.



































You can switch between design view and preview using two buttons in the bottom-right of the Report Builder window.

Use these buttons to switch views.



What we do!

		Basic training	Advanced training	Systems / consultancy
Office	Microsoft Excel			
	VBA macros			
	Office Scripts			
	Microsoft Access			
Power BI, etc	Power BI and DAX			
	Power Apps			
	Power Automate (both)			
SQL Server	SQL			
	Reporting Services			
	Report Builder			
	Integration Services			
	Analysis Services			
Coding	Visual C#			
	VB programming			
	MySQL			
	Python	