



SQL Server 2014 BI

## ► Lab 05

# Working with Reporting Services Data Alerts in SQL Server 2014



[Jump to the Lab Overview](#)



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## About the Author

This lab was designed and written by [Peter Myers](#).



Peter Myers has worked with Microsoft database and development products since 1997. Today, he specializes in all Microsoft BI products and provides mentoring, technical training, and education content authoring for SQL Server, Office, and SharePoint. Peter has a broad business background supported by a bachelor's degree in applied economics and accounting, and he extends this with solid experience backed by current MCSE and MCT certifications. He has been a SQL Server MVP since 2007.

## Document Revisions

#	Date	Author	Comments
0	19-OCT-2014	Peter Myers	Initial release

# Lab Overview

## Introduction

In this lab, you will define a data alert to notify you when salespeople do not achieve at least the 1% profitability target.

## Objectives

The objectives of this exercise are to:

- Create a shared data source
- Upload a report and relate it to the shared data source
- Preview a report and create a data alert
- Run the data alert and review the email notification

## Exercises

This hands-on lab comprises the following exercise:

1. Working with Data Alerting

Estimated time to complete this lab: **15 minutes**

# Exercise 1: Working with Data Alerting

In this exercise, you commence by creating a data source. You will then upload a report definition and associate with the data source. You will then view the report and create a data alert. Finally, you will run the data alert and open the email notification.

## Task 1 – Creating the Report Data Source

In this task, you will create a data source to connect to the **AdventureWorksDW2014** database. The data source will be configured to use stored credentials which are requirement for the data alerts feature.

1. To open Internet Explorer, on the taskbar, click the Internet Explorer shortcut.



**Figure 1**

*Selecting the Internet Explorer Shortcut*

2. In the Internet Explorer favorites, select **AdventureWorks BI Site**.
3. In the **Quick Launch** (located at the left), select the **Data Connections** library.

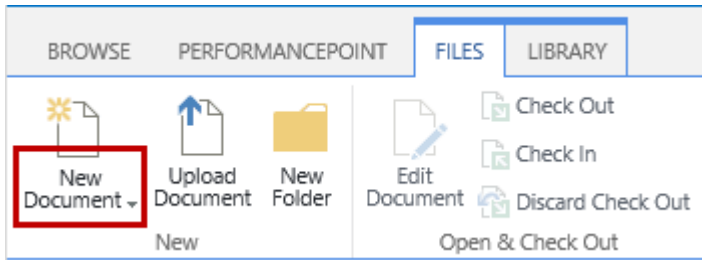


Dashboards  
**Data Connections**  
Data Feeds  
Libraries

**Figure 2**

*Selecting the Data Connections Library*

- On the **Files** ribbon tab, from inside the **New** group, click the down arrow for **New Document**, and then select **Report Data Source**.



**Figure 3**

*Clicking the Down Arrow Below For Document*

- In the **Name** box, enter **AdventureWorksDW2014**.
- In the **Connection String** box, enter the following connection string.

#### **Connection String**

```
Data Source=localhost;Initial Catalog=AdventureWorksDW2014;
```

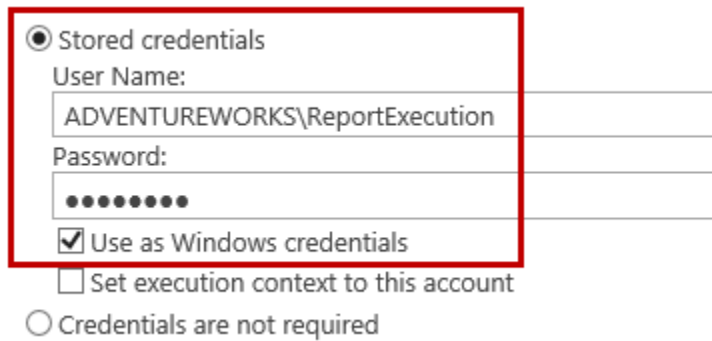
**Note:** For convenience, the connection string can be copied from the **D:\SQLServerBI\Lab05\Assets\Snippets.txt** file.

- To configure the credentials, select the **Stored Credentials** option.

**Note:** Data alerts can only be created on reports that have their data sources configured with stored credentials.

- In the **User Name** box, enter **ADVENTUREWORKS\ReportExecution**.
- In the **Password** box, enter **P@ssw0rd** (0 is a zero).
- Check the **Use As Windows Credentials** checkbox.

11. Verify that the credentials configuration looks like the following.



Stored credentials  
User Name:  
ADVENTUREWORKS\ReportExecution  
Password:  
●●●●●●●●  
 Use as Windows credentials  
 Set execution context to this account  
 Credentials are not required

**Figure 4**

*Verifying the Data Source Credentials*

12. Click **Test Connection**.

13. When the connection is created successfully, click **OK** (located at the bottom of the page).

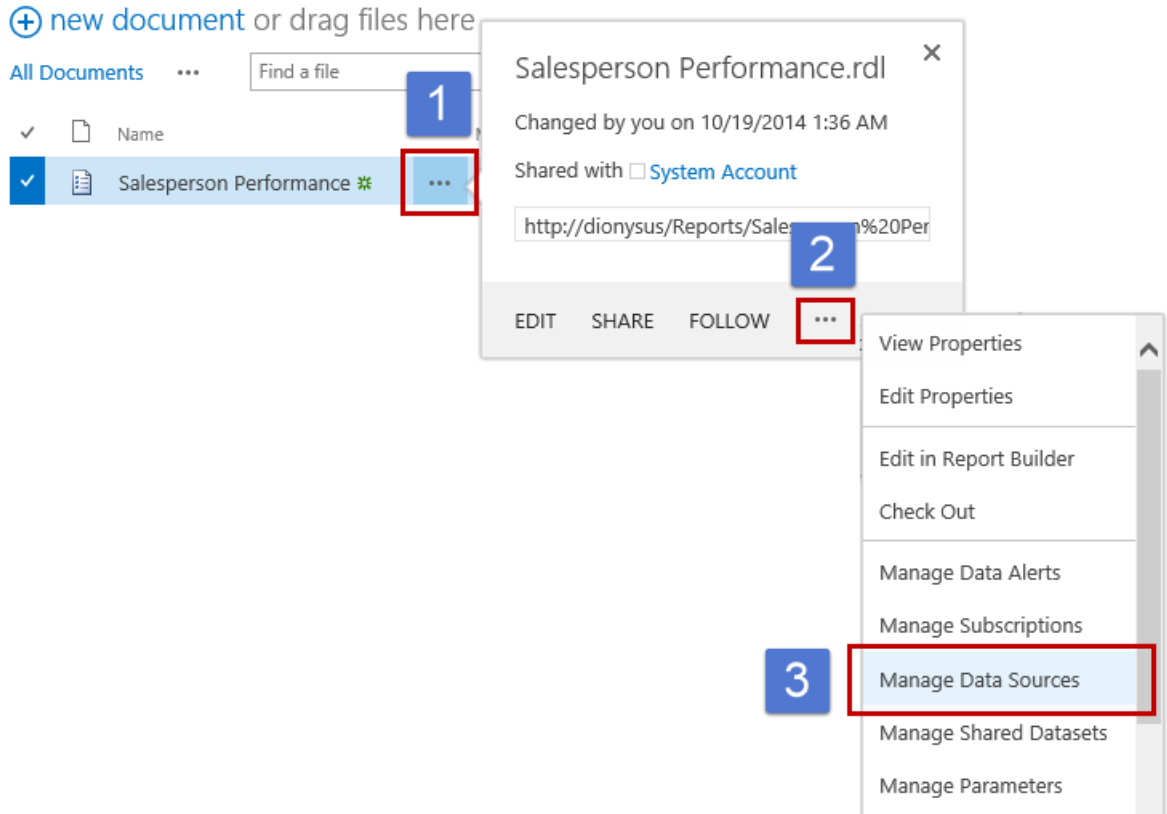
## **Task 2 – Uploading an Existing Report**

In this task, you will upload an existing report definition and associate it with the data source created in the previous task.

1. In the **Quick Launch**, select the **Reports** library.
2. To upload an existing report definition, on the **Files** ribbon tab, from inside the **New** group, click **Upload Document**.
3. In the **Add a Document** window, click **Browse**.
4. In the **Choose File to Upload** window, navigate to the **D:\SQLServerBI\Lab05\Assets** folder, select the **Salesperson Performance.rdl** file, and then click **Open**.
5. In the **Add a Document** window, click **OK**.
6. In the **Reports – Salesperson Performance.rdl** window, click **Save**.



- To associate the uploaded report with the data source created in the previous task, hover over the document, click the down arrow, and then select **Manage Data Sources**.

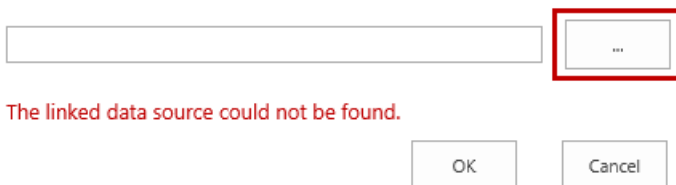


**Figure 5**  
*Managing the Report Data Sources*

- Click the **AdventureWorksDW2014** data source.

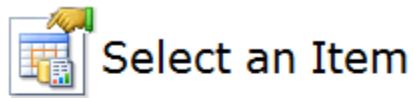
**Note:** This is a predefined data source in the uploaded report definition.

- To reference the data source created in the previous task, click the ellipsis.



**Figure 6**  
*Locating the Ellipsis*

10. In the **Select an Item** window, click the **Up** link.



**Figure 7**

*Navigating to the Site*

11. Click the **Data Connections** library link.
12. Select the **AdventureWorksDW2014** data source, and then click **OK**.
13. To update the report definition, click **OK**.
14. To return to the **Reports** library, click **Close**.

### Task 3 – Creating a Data Alert

In this task, you will create a data alert on the **Salesperson Performance** report to notify the administrator that one or more salespeople have not achieved at least 1% profitability.

1. To preview the report, in the **Reports** library, click the **Salesperson Performance** report.
2. When the report has rendered in the browser window, review the table of data. It represents each salesperson together with their respective sales, profit and profitability (the ratio of sales over profit).

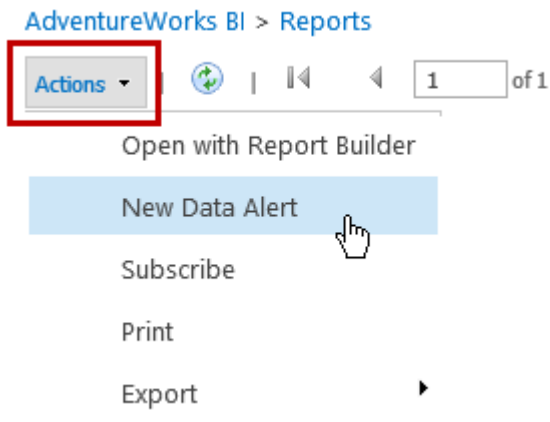
Notice that the last salesperson, **Tsvi Retier**, achieved a profitability of less than 1% and that the report author has used conditional formatting to highlight the value in red.

Salesperson	Sales	Profit	Profitability
Amy Alberts	732,078	8,215	1.12%
David Campbell	3,729,945	67,326	1.80%
Garrett Vargas	3,609,447	58,971	1.63%
Jae Pak	8,503,339	233,728	2.74%
Jillian Carson	10,065,804	164,536	1.63%
José Saraiva	5,926,418	62,708	1.05%
Linda Mitchell	10,367,007	172,016	1.65%
Lynn Tsoflias	1,421,811	87,954	6.18%
Michael Blythe	9,293,903	122,069	1.31%
Pamela AnsmanWolfe	3,325,103	125,116	3.76%
Rachel Valdez	1,790,640	95,871	5.35%
Ranjit Varkey Chudukatil	4,509,889	46,815	1.03%
Shu Ito	6,427,006	162,403	2.52%
Stephen Jiang	1,092,124	61,494	5.63%
Syed Abbas	172,524	20,766	12.03%
Tete MensaAnnan	2,312,546	60,482	2.61%
Tsvi Reiter	7,171,013	60,955	0.85%
<b>Total</b>	<b>80,450,597</b>	<b>1,611,426</b>	<b>2.00%</b>

**Figure 8**

*Reviewing the Report Data*

3. To create a report alert, on the report viewer toolbar, click **Actions**, and then select **New Data Alert**.



**Figure 9**  
*Creating a New Data Alert*

4. In the **New Data Alert** window, in the **Report Data Name** dropdown list, notice that **SalespersonPerformance** is selected. All output items in the report are available to use when defining an alert.

**Note:** The report author has set the **DataElementName** property for the item to **SalespersonPerformance**.

5. Once the data has been retrieved, review the report data, and scroll to the bottom of the list to see the last row for **Tsvi Reiter**.
6. In the right pane of the window, in the **Alert Name** box, notice that the alert name has defaulted to the name of the report.
7. Click the **(Add Rule...)** link, and then select the **ProfitPercent** field.
8. Click the **Is** link, and then select **Is Less Than**.
9. In the value box, enter **0.01** (representing 1%).

10. Verify that the rule looks like the following.



ProfitPercent is less than 0.01

**Figure 10**

*Reviewing the Rule*

11. In the **Schedule Settings** section, notice that the frequency can be set.
12. To expand the **Advanced** settings, click the arrow to the left of **Advanced**.
13. Review, but do not modify, the advanced properties.
14. Collapse the **Advanced** settings.
15. In the **Email Settings** section, in the **Recipients** box, enter **administrator@adventureworks.com**.
16. In the **Description** box, enter **One or more salespeople have not achieved at least 1% profitability**.

**Note:** For convenience, the description text can be copied from the **D:\SQLServerBI\Lab05\Assets\Snippets.txt** file.

17. Click **Save**.

## Task 4 – Running the Data Alert

In this task, you will navigate to the **Data Alert Manager** page, and then manually run the data alert.

1. To navigate to the **Reports** library, on the breadcrumb trail (located at the top of the browser window), click the **Reports** link.



**Figure 11**

*Navigating to the Reports Library*

2. To navigate to the **Data Alert Manager** page, hover over the **Salesperson Performance** report, click the ellipsis, click the second ellipsis, and then select **Manage Data Alerts** (the same process used to manage data sources in **Task 2**).
3. Notice that the **View Alerts for User** dropdown list is disabled, and is set to the currently logged in user account.

**Note:** Only administrators can select alerts defined by other users.

4. In the data alert table, right-click the data alert, and then select **Run**.

**Note:** This feature is a convenient way to test the alert without requiring you to wait for the next scheduled execution of the report.

5. Wait some seconds, and then press **F5** to refresh the web page.
6. In the **Status** column, notice that the alert ran successfully and that the alert was sent.

## Task 5 – Reviewing the Email Notification

In this task, you will open the email message.

1. To open Outlook, on the taskbar, click the Outlook shortcut.



**Figure 12**

*Selecting the Outlook Shortcut*

2. On the **Send/Receive** ribbon tab, click **Send/Receive All Folders**.

**Note:** The SMTP service could take up to two minutes to start and deliver the email message.

3. To open the email message, double-click the message.
4. Review the email message, and notice that the name of alert appears in the header of the message, and to the right includes the execution date and time. Following this header, is the description. The **Alert Results** grid lists all rows that matched the defined rule.

## Task 6 –Finishing Up

In this task, you will finish up by closing all windows opened in this lab.

1. In the Outlook message window, on the **File** ribbon tab, click **Close**.
2. To close Outlook, click the **X** button located at the top right corner.
3. Close the Internet Explorer window.

## Summary

In this lab, you created a data source and uploaded a report. You then created a data alert and ran the data alert. Finally, you opened and reviewed the email notification.