Microsoft Azure - Starter Kits for Partners

Hands on Lab

Power BI Scenario

Power BI with On-Premises DW

Last Update: Aug 2016





**MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS DOCUMENT.**

The information contained in this document represents the current view of Microsoft Corporation on the issues discussed as of the date of publication. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information presented after the date of publication.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

The descriptions of other companies’ products in this document, if any, are provided only as a convenience to you. Any such references should not be considered an endorsement or support by Microsoft. Microsoft cannot guarantee their accuracy, and the products may change over time. Also, the descriptions are intended as brief highlights to aid understanding, rather than as thorough coverage. For authoritative descriptions of these products, please consult their respective manufacturers.

© 2016 Microsoft Corporation. All rights reserved. Any use or distribution of these materials without express authorization of Microsoft Corp. is strictly prohibited.

Microsoft and Windows are either registered trademarks of Microsoft Corporation in the United States and/or other countries.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

Contents

[Overview 4](#_Toc459976899)

[Objectives 4](#_Toc459976900)

[Prerequisites 4](#_Toc459976901)

[Exercises 4](#_Toc459976902)

[Infrastructure Provisioning 4](#_Toc459976903)

[Exercise 1: Walk through for accessing on-premises data with Power BI 4](#_Toc459976904)

[Exercise 2: Add On-premises data gateway 4](#_Toc459976905)

[Exercise 3: Manage your data source - Analysis Services in Power BI 5](#_Toc459976906)

[Exercise 4: Visualize SSAS live data in Power BI 5](#_Toc459976907)

## Overview

In this lab, you will implement Power BI connectivity to an on-premises SQL Server Analysis Services tabular database by installing the On-premises data gateway.

**Estimated time** to complete this lab: **90 minutes**.

**Audience**: IT Pro, Architect, Application Owners and Developers

### Objectives

In this hands-on lab, you will learn how to:

1. Connect to On Premise SSAS in Power BI
2. Visualize the data in Power BI

### Prerequisites

The following is required to complete this hands-on lab:

* Power BI subscription - [sign up for a free trial](http://aka.ms/WATK-FreeTrial)
* .NET framework 4.5
* Windows server 2008 R2 or above
* SQL Server 2016

## Exercises

## Infrastructure Provisioning

### Exercise 1: Walk through for accessing on-premises data with Power BI

In this exercise, the video shows the whole procedure of accessing on-premises data sources and visualizing the data in Power BI to build a hybrid BI architecture.

Instructions guide: <https://channel9.msdn.com/Events/DataDriven/SQLServer2016/Hybrid-BI-Accessing-on-premises-data-with-Power-BI>

### Exercise 2: Add On-premises data gateway

The on-premises data gateway acts as a bridge, providing quick and secure data transfer between on-premises data (data that is not in the cloud) and the Power BI, Microsoft Flow, Logic Apps, and PowerApps services.

You can use a single gateway with different services at the same time. If you are using Power BI, as well as PowerApps, a single gateway and be used for both. It is dependent on the account you sign in with. Follow this guide to add an on-premises data gateway:

**Instructions guide:** <https://powerbi.microsoft.com/en-us/documentation/powerbi-gateway-onprem/>

### Exercise 3: Manage your data source - Analysis Services in Power BI

1. Once you have installed the On-premises Data Gateway, you will need to add data sources that can be used with the gateway. This article will look at how to work with gateways and data sources. You can use the Analysis Services data source either for scheduled refresh or for live connections in Power BI. Follow this guide to manage the on-premises data source:

**Instructions guide:** <https://powerbi.microsoft.com/en-us/documentation/powerbi-gateway-enterprise-manage-ssas/>

### Exercise 4: Visualize SSAS live data in Power BI

* 1. In this exercise shows how to connect to a live Analysis Services data source and visualize the data in Power BI dashboard once the On-Premises data gateway has been setup. Follow this guide to connect and visualize SSAS live data:
  2. Instructions guide: <https://powerbi.microsoft.com/en-us/documentation/powerbi-sql-server-analysis-services-tabular-data/>