Installing Multiple Instances of OpenManage Essentials Database on a Single SQL Server Enterprise Database Instance

This Dell technical white paper explains how a SQL Server Enterprise database instance carries database of multiple OpenManage Essentials instances across the network.

Dell Engineering
February 2017

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February 2017| Version 2.0

Executive summary

This white paper describes the process of installing multiple instances of OpenManage Essentials across the network and hosting all the databases on a single SQL Server Enterprise database.

Introduction

The goal of this white paper is to describe how an administrator can set up multiple OpenManage Essentials instances to run on the single SQL Server Enterprise database. When there are huge number of servers in the network, multiple instances of OpenManage Essentials database and a single SQL Enterprise Server are required to manage all of them. This feature is supported from OpenManage Essentials 2.2 version onwards.

Advantages of setting up multiple OpenManage Essentials instances to run on a single SQL Server Enterprise database

1. When there are multiple subnets, sites and geographies that need to be managed, multiple OpenManage Essentials servers managing different geographies can be run on the same database instead of different databases.

2. There is a limit to manage only 5500 devices using one OpenManage Essentials server. If there are more than 5500 devices that need to be managed in a data center, setting up multiple OpenManage Essentials instances on the same SQL Server instance, allows you to scale up the management of all the devices on the same SQL database.

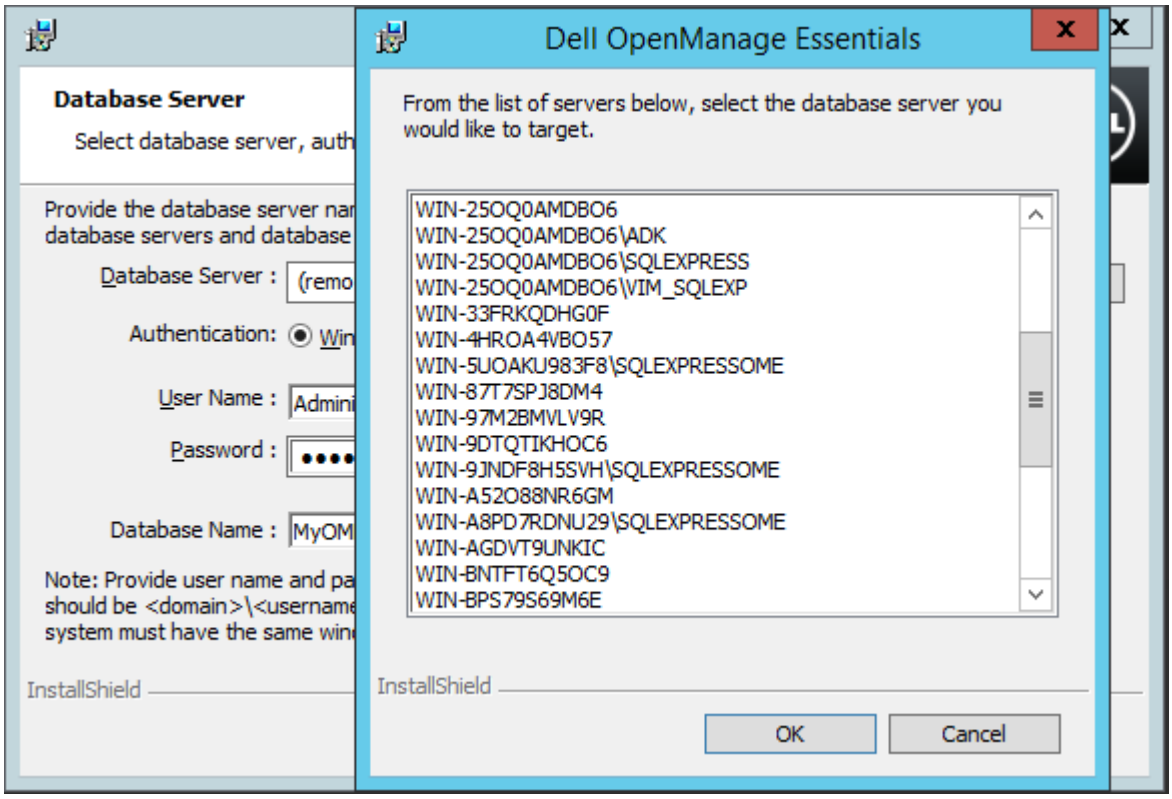
3. Multiple OpenManage Essentials servers can be installed with different databases and database names respectively, on the same SQL Server instance. Doing this helps in saving resources and time which would otherwise be consumed in the creation of individual SQL databases for the installation of each OpenManage Essentials instance.

Remote Database Installation using Custom Install option of OpenManage Essentials 2.2 Installer

Custom installation is recommended for remote database installation, or if you want to install OpenManage Essentials with Windows Authentication.

To set up the OpenManage Essentials database on the remote system, click **Browse** on the **Database Server** window and select the remote system, or enter the hostname and database instance in the **Database Server** field as shown in Figure 1.

Figure 1: Browsing a remote database



Perform the installation with one of the following authentication methods:

Windows Authentication

Windows login credentials are used to connect to the remote SQL Server. Use this authentication method if the Windows login credentials of the remote system and OpenManage Essentials installation system are identical.

SQL Server Authentication

Use this authentication method if the Windows login credentials of the remote database system and the OpenManage Essentials installation system are different.

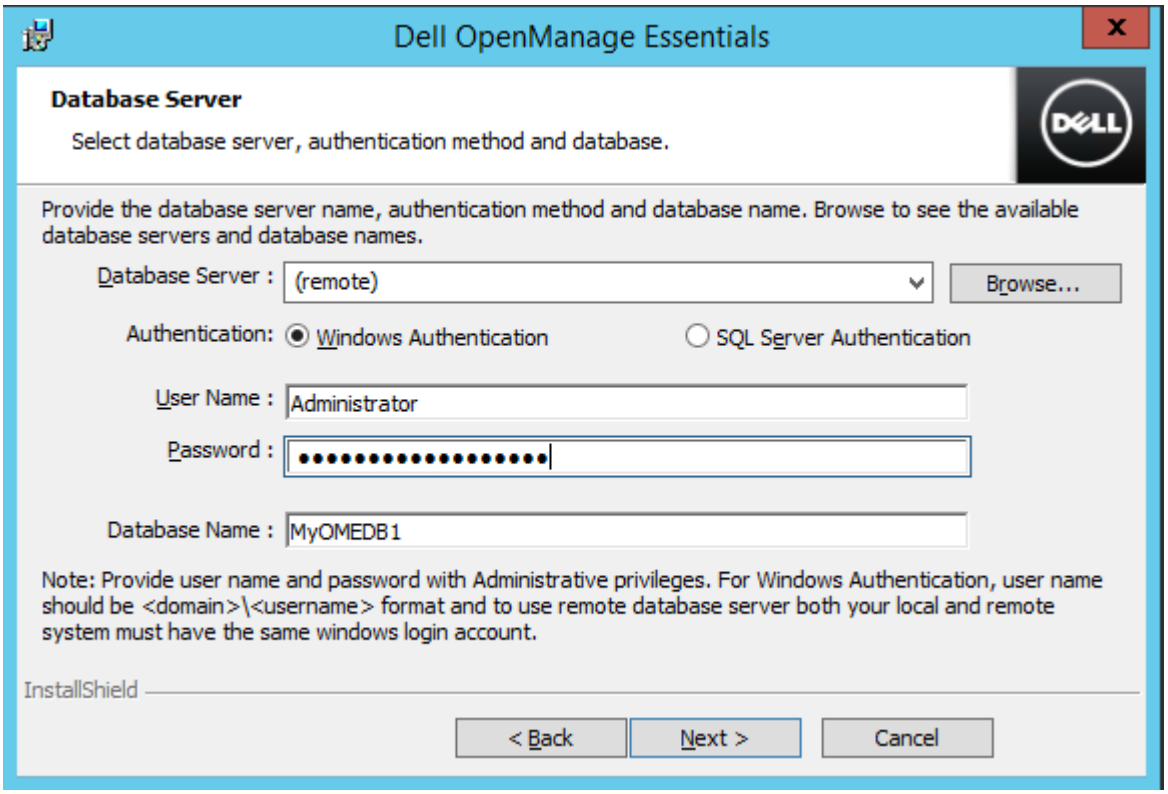
Note: After the OpenManage Essentials database is set up on the remote system, do not move the database. This will stop OpenManage Essentials from functioning properly.

In case of installing multiple OpenManage Essential databases on the same SQL server, you can either:

- Give a new name in the **Database name** field of the Database server window from the **InstallShield Wizard** as shown in Figure 2.
- Or create a Database in SQL server and provide that name in the **Database name** field.

Note: The **Database name** has to be unique for each of the OpenManage Essentials instance, if not the content might get overwritten during the Installation.

Figure 2 Database server window from the InstallShield Wizard



An Example: To setup OpenManage Essentials instances on multiple subnets of a datacenter with a centralized SQL Enterprise Server

Before setting up the OpenManage Essentials database on different subnets with the databases pointing to the centralized SQL server, ensure the following prerequisites are met:

• The network communication between the OpenManage Essentials system and the remote database system is functioning on all the subnets.

• The SQL Server user has permission to backup, create, and configure databases.

• If you want to use SQL Authentication mode for remote database installation, then ensure "SQL Server and Windows Authentication Mode" is enabled on the remote SQL Server.

• TCP/IP is enabled on the remote system to avoid database connection issues.

After ensuring all the above network prerequisites are met, follow the steps mentioned in the "Database Installation using Custom Install option of OpenManage Essentials 2.2 Installer" on each subnet to complete the setup.

See Figure .3 for a pictorial representation of this example.

Figure 3 Multiple OME instances with a single SQL Enterprise Server