SQL Enterprise Management Data Warehouse
eMDW

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Overview

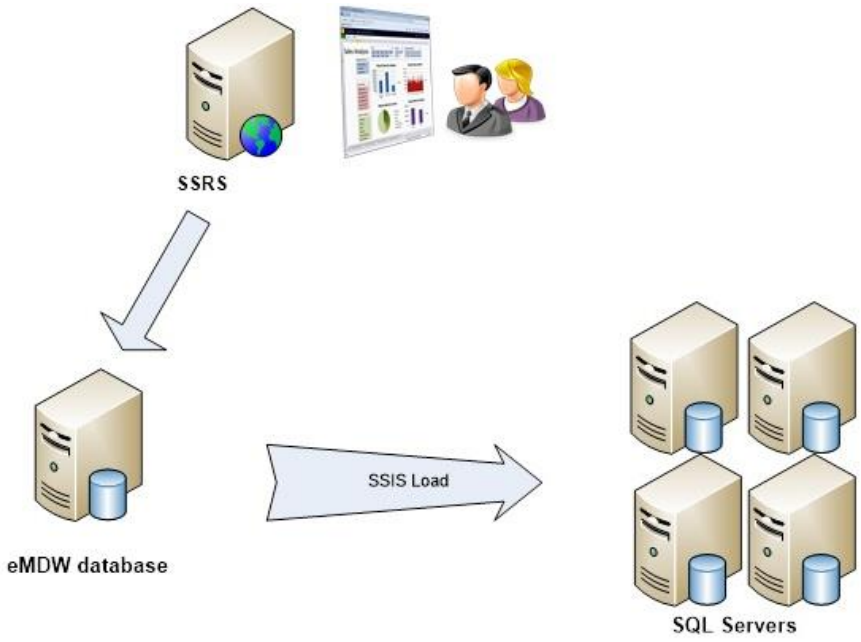
eMDW is a centralized SQL Server database repository, which stores various server/database/objects properties and performance related statistics. eMDW provides a unique visibility across entire SQL Server environment from one place and data analysis reports using SQL Reporting Service.

The Data Collection process uses SSIS and SQL Agent jobs to gather, schedule and purge information in the eMDW.

eMDW provides the following data collection sets on Server, database, objects and users :

1. SQL Server instance Properties
2. Database Properties
3. SQL Server logins
4. SQL Server Role Principals
5. Database Backup status and stats
6. Database Restore Log
7. Database File data
8. Database Objects
9. Database Objects Permission
10. Database Roles and members
11. Database data sizes

Diagram:



Installation:

eMDW solution includes the following:

1- SQL Script to create the database and all objects
2- SSIS Package “eMDW - Load Server DB data.dtsx”
3- SSRS Reports

Data Loading Process:

The Data Collection process uses SSIS. In the package, there are multiple connections:

1- CMS: a connection to SQL Central Management Server to collect all SQL Servers by environment by business unit.
2- eMDW: a connection to eMDW database for read/write during the package execution
3- ssislogging: a connection to eMDW to log package execution and error
4- master: a dynamic connection to loop through each SQL server
5- dbname: a dynamic connection to loop through each database on each server

SSIS package job schedule:

a. eMDW - Load Server DB data.dtsx = Daily

CMS Configuration:
The Central Management Server store a list of instances of SQL Server that is organized into one or more central management server groups. The eMDW expects two Groups only (Parent Group and Sub-Group). You can organize the group per your business need, for example you can have the top group is the environment and the subgroup is the tiers or business units (see figure 2). This is very helpful if you want to report by environment or business unit.

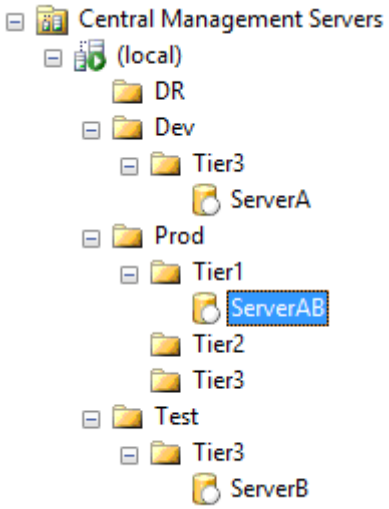


Figure 2

To create a central management server

1. In SQL Server Management Studio, on the **View** menu, click **Registered Servers**.
2. In Registered Servers, expand **Database Engine**, right-click **Central Management Servers**, point to **New**, and then click **Central Management Servers**.
3. In the **New Server Registration** dialog box, register the instance of SQL Server that you want to become the central management server.
4. In Registered Servers, right-click the central management server, point to **New**, and then click **New Server Group**. Type a group name and description, and then click **OK**.
5. In Registered Servers, right-click the central management server group, and then click **New Server Registration**.
6. In the **New Server Registration** dialog box, register one or more instances of SQL Server that you want to become members of the server group.