Microsoft SQL Server

Last updated by | Mohamad Damati | Dec 23, 2020 at 3:16 PM GMT+3

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Introduction

This guide will take you through the steps of deploying and configuring Enterprise Dashboards for SQL Server. Dashboard will contain state and performance information about SQL AlwaysOn as well a SQL DB Engines monitored in System Center Operations Manager.

Getting Started

There are actions must be done before create and deploy System Center Enterprise Dashboard and steps you must take to properly deploy it.

Prerequisites

Before you start you must make sure you have the following prerequisites:

1. Power BI Reporting Service
2. Operations Manager 2012 R2, 2016 or 2019
3. Operations Manager Environment is healthy and does not suffer from performance issues.
4. Service Account to access databases
5. Download and import latest SQL Server for Windows Management Pack
6. Import Windows Servers Core OS Dashboard as some components depends on it.

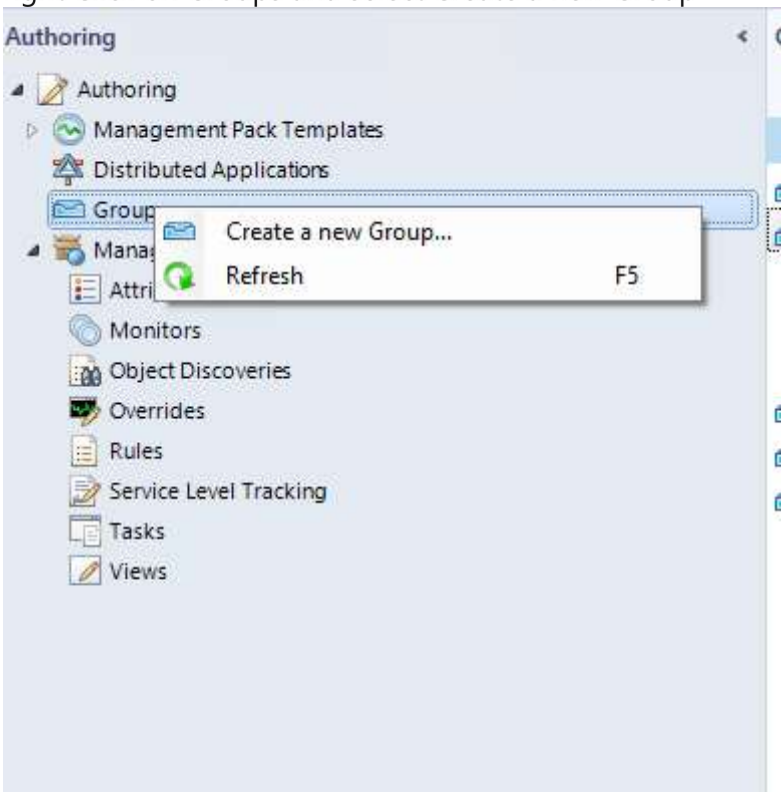
SQL Server Enterprise Dashboard Deployment

Use the following steps to deploy Dashboard.

Step 1: Create Dashboard Group

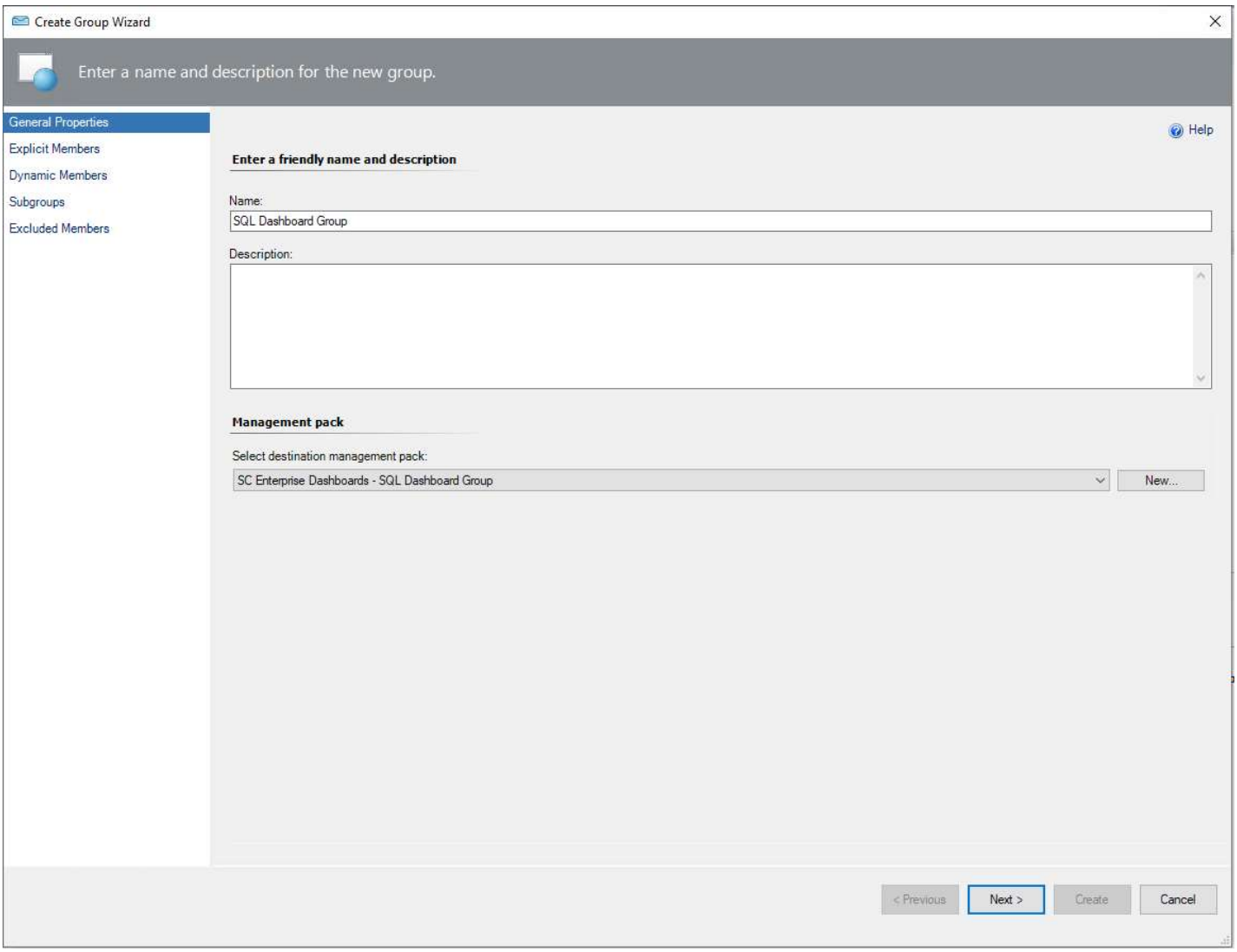
Enterprise Dashboards scope is defined based on Operations Manager Group for each workload, for SQL Server Dashboard the scope group name is **SQL Dashboard Group**.

1. Open SCOM Console, browse to Authoring --> Groups
2. right Click on Groups and select Create a new Group



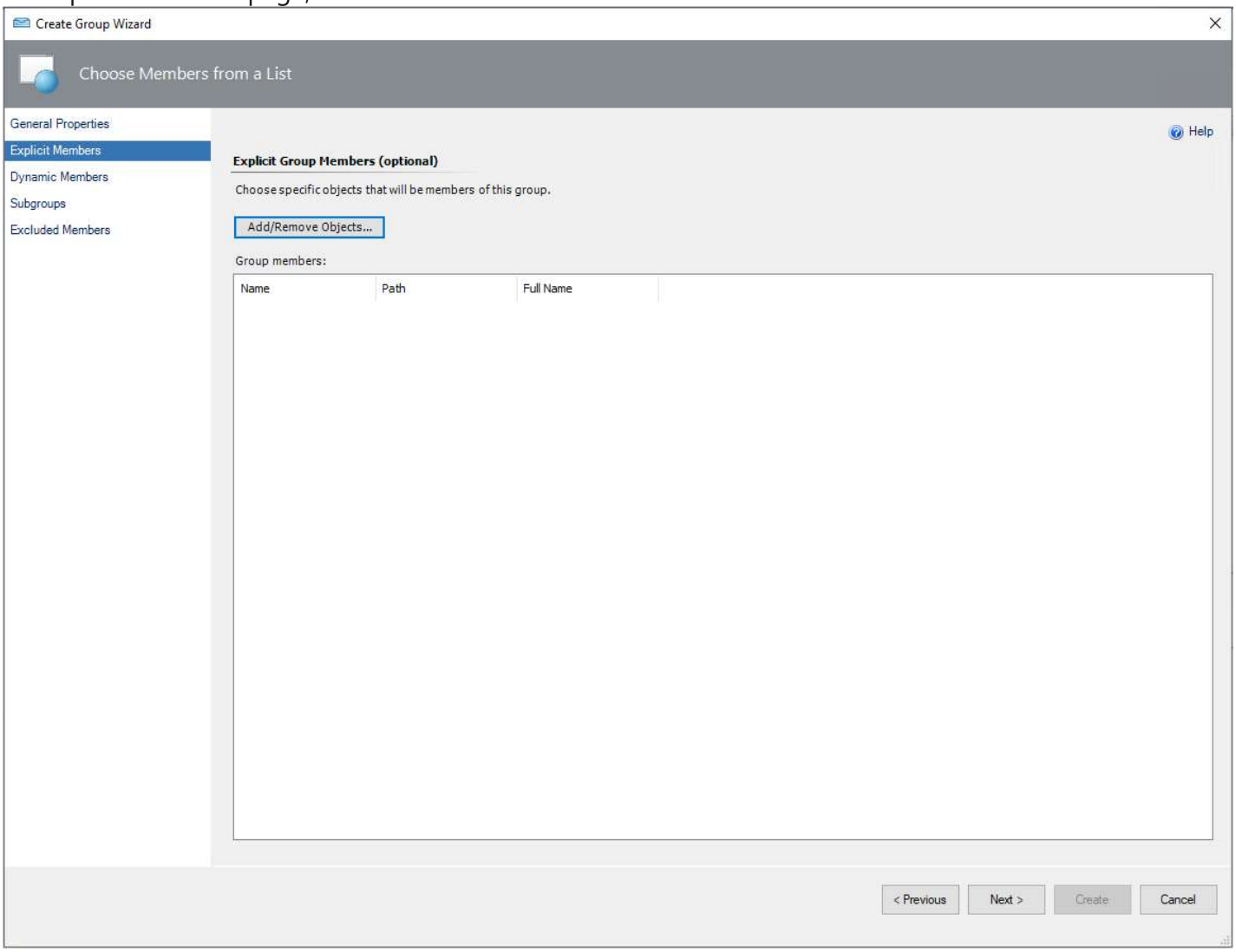
3. In Create Group Wizard, Type Group name "**SQL Dashboard Group**" and in Management Pack destination, click on **New**. Create New management pack to save this group. click **Next** and in Knowledge Page click

Create

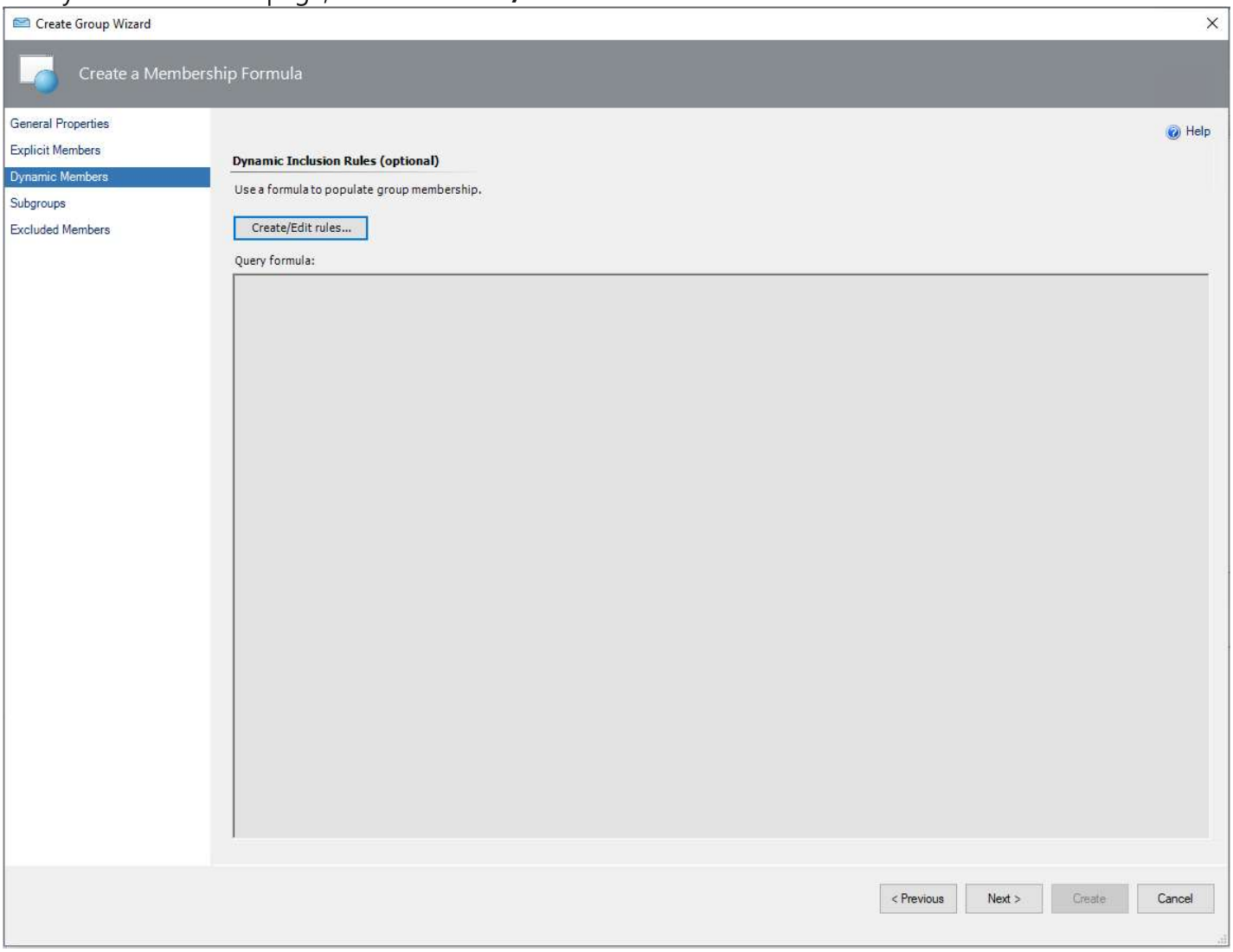


4. Verify Dashboard name and click **Next**

5. On Explicit Members page, Click **Next**

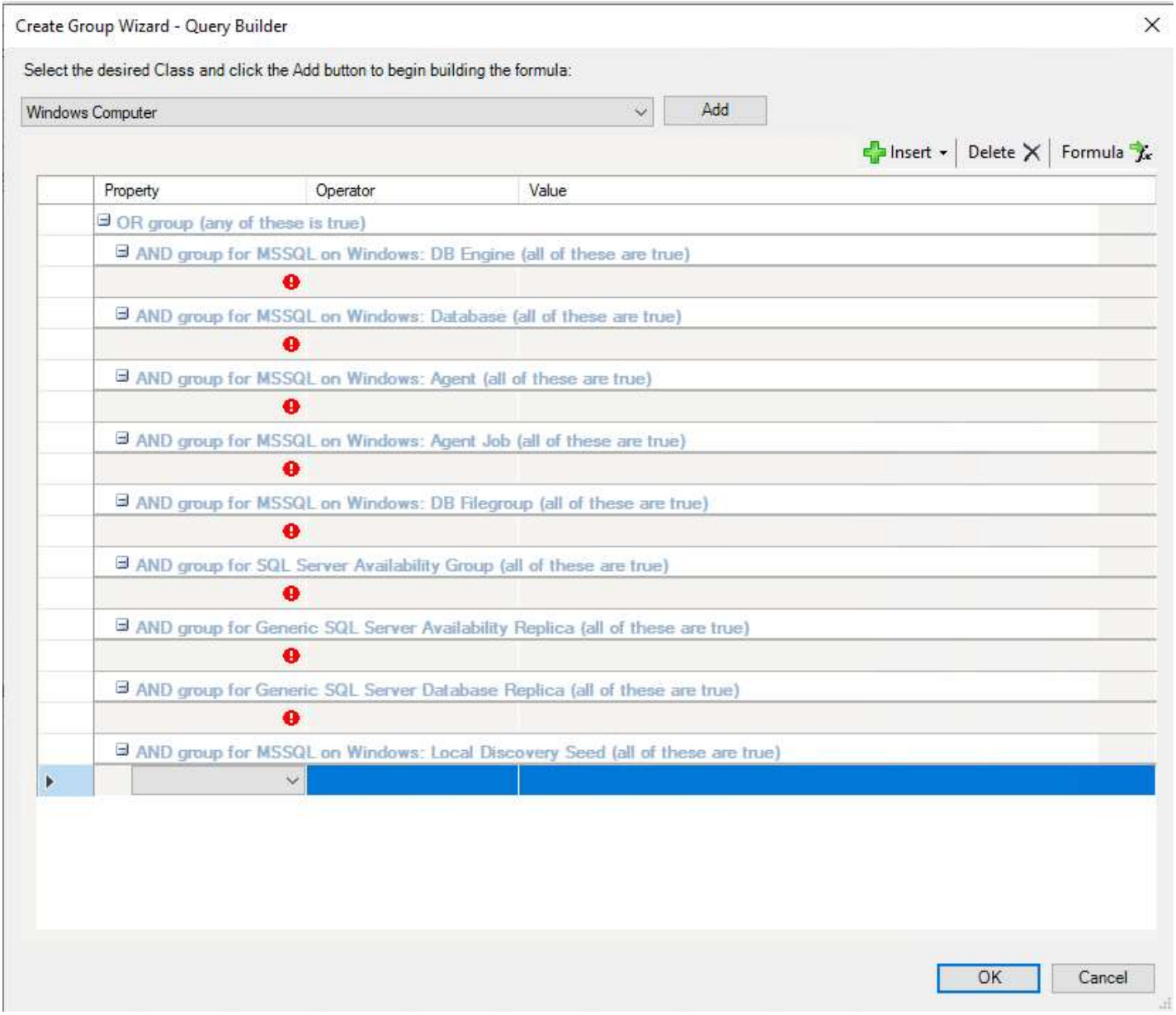


6. On Dynamic Members page, Click on **Create/Edit rules**

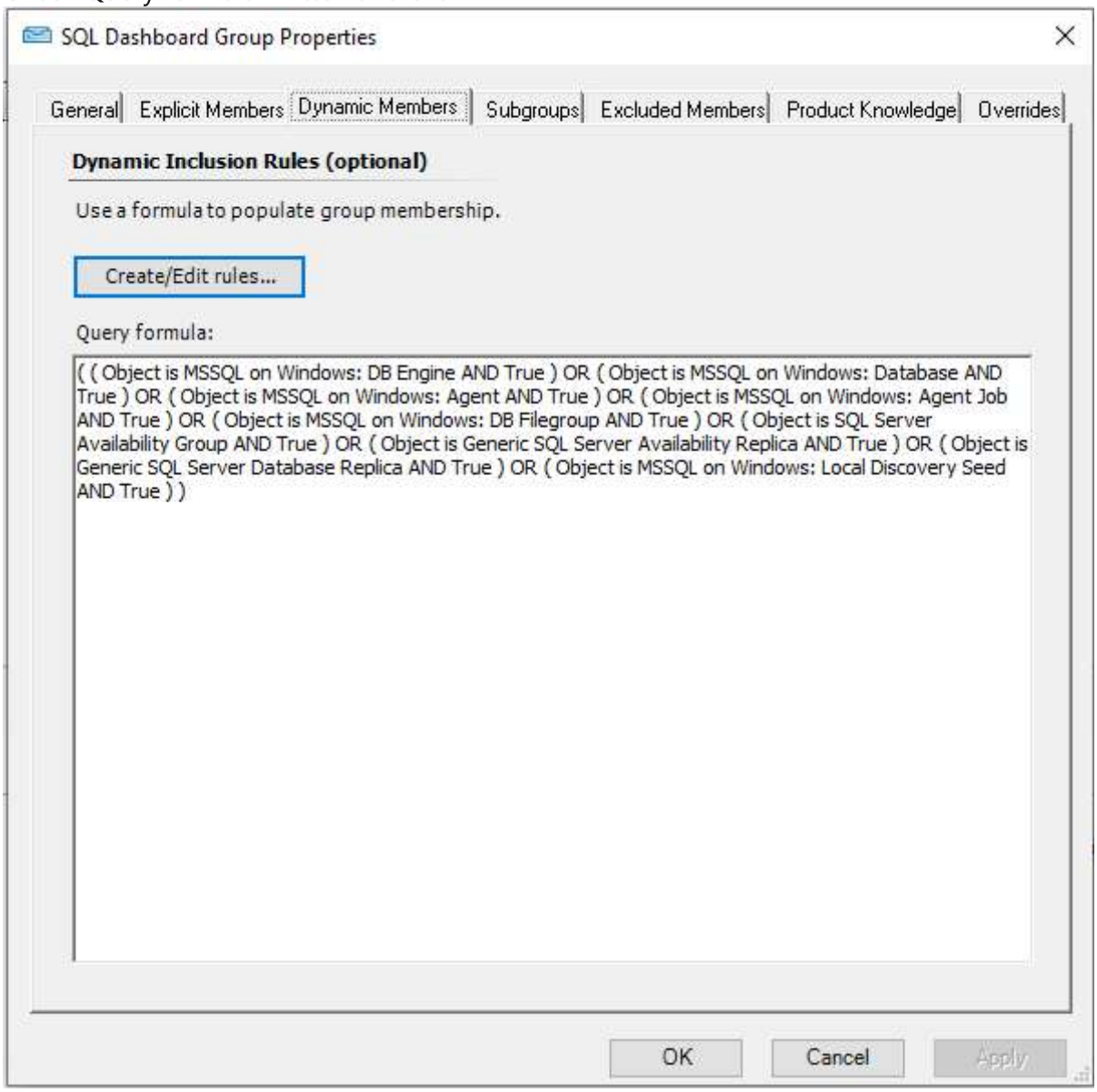


7. Add Following Classes by selecting **class name** and then **Insert**
   a. MSSQL on Windows: DB Engine
   b. MSSQL on Windows: Database
   c. MSSQL on Windows: Agent
   d. MSSQL on Windows: Agent Job
   e. MSSQL on Windows: Local Discovery Seed
   f. SQL Server Availability Group
   g. Generic SQL Server Availability Replica
   h. Generic SQL Server Database Replica

Then Click **Ok**

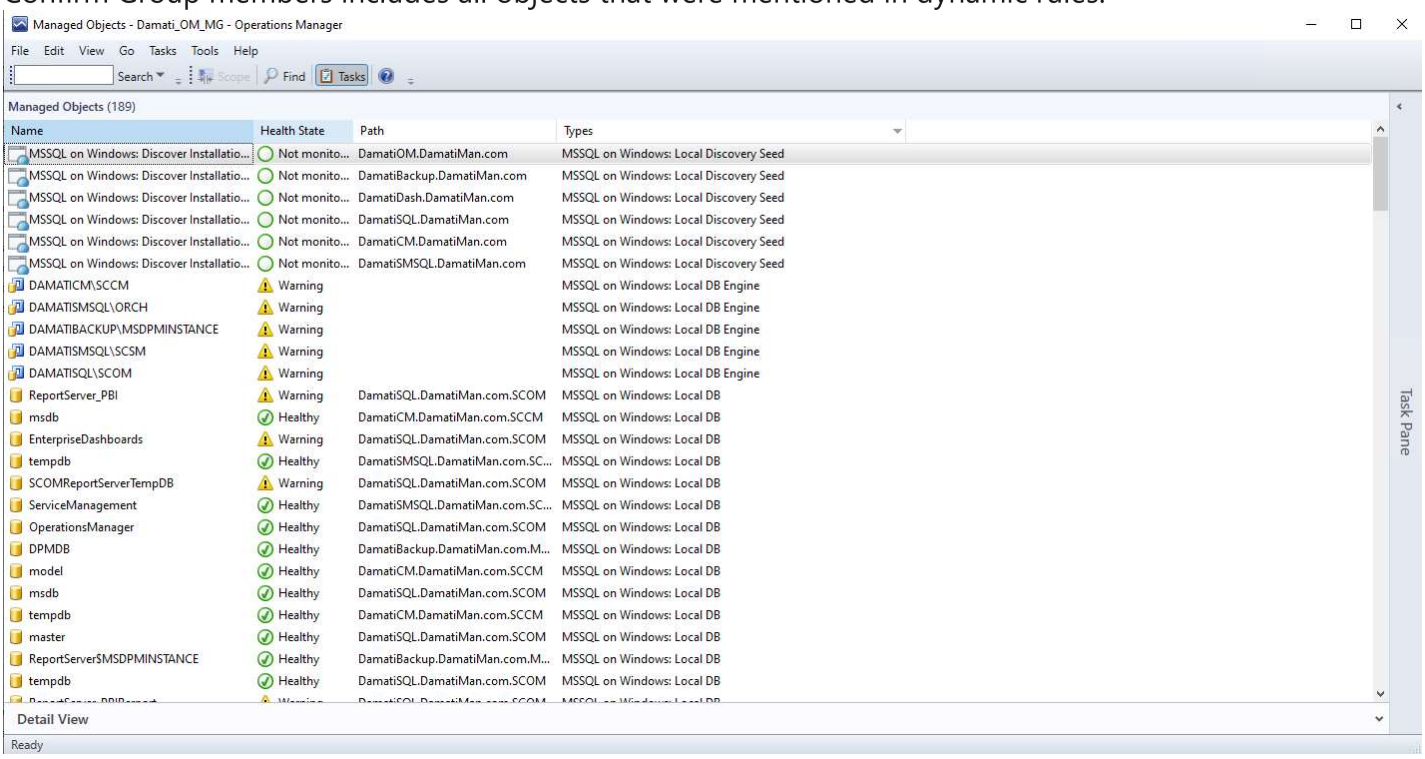


8. Check Query formula written and click **Ok**



9. Find the Group created, right click on it and select **View Group Members**

10. Confirm Group members includes all objects that were mentioned in dynamic rules.

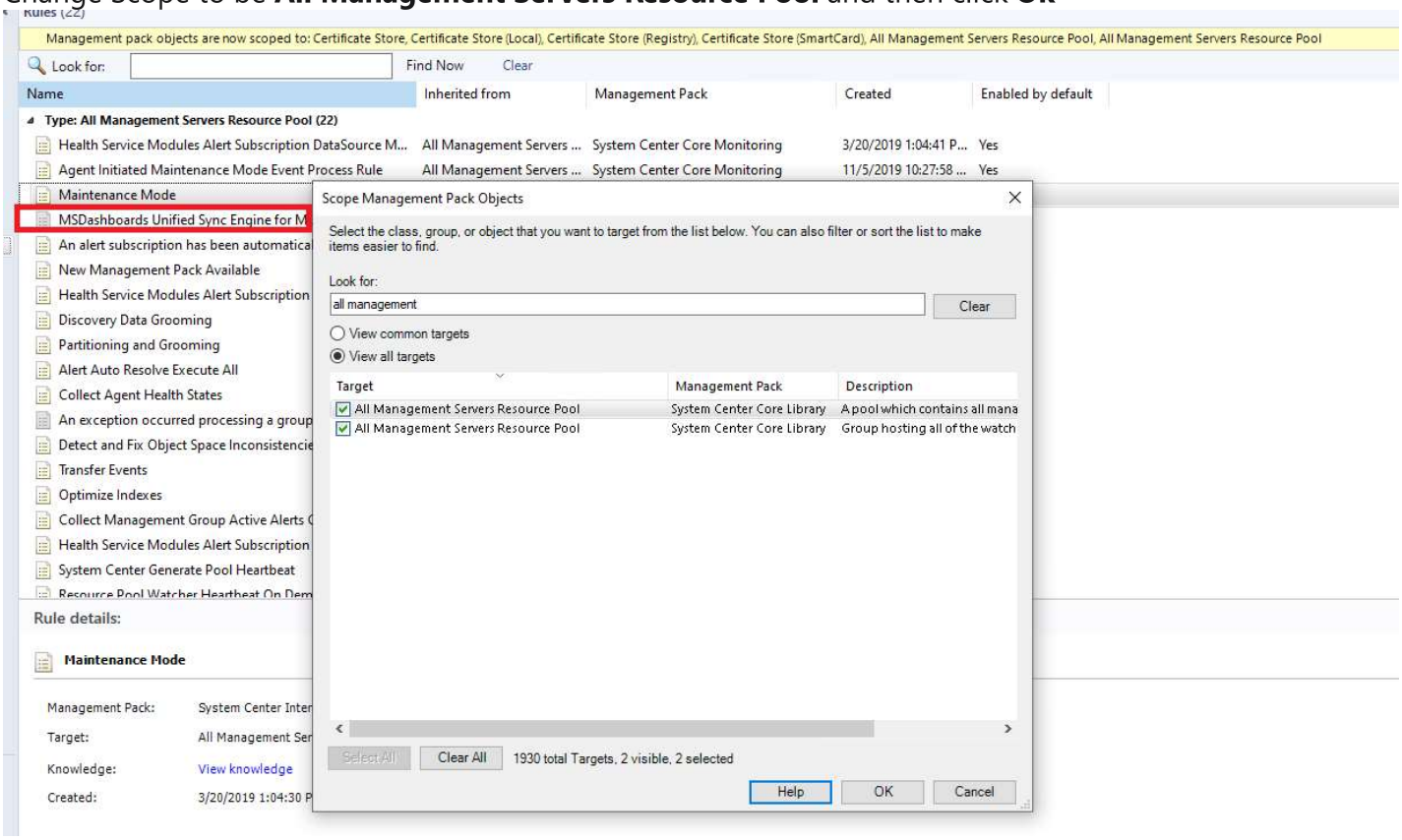


Step 2: Modify Sync Rule

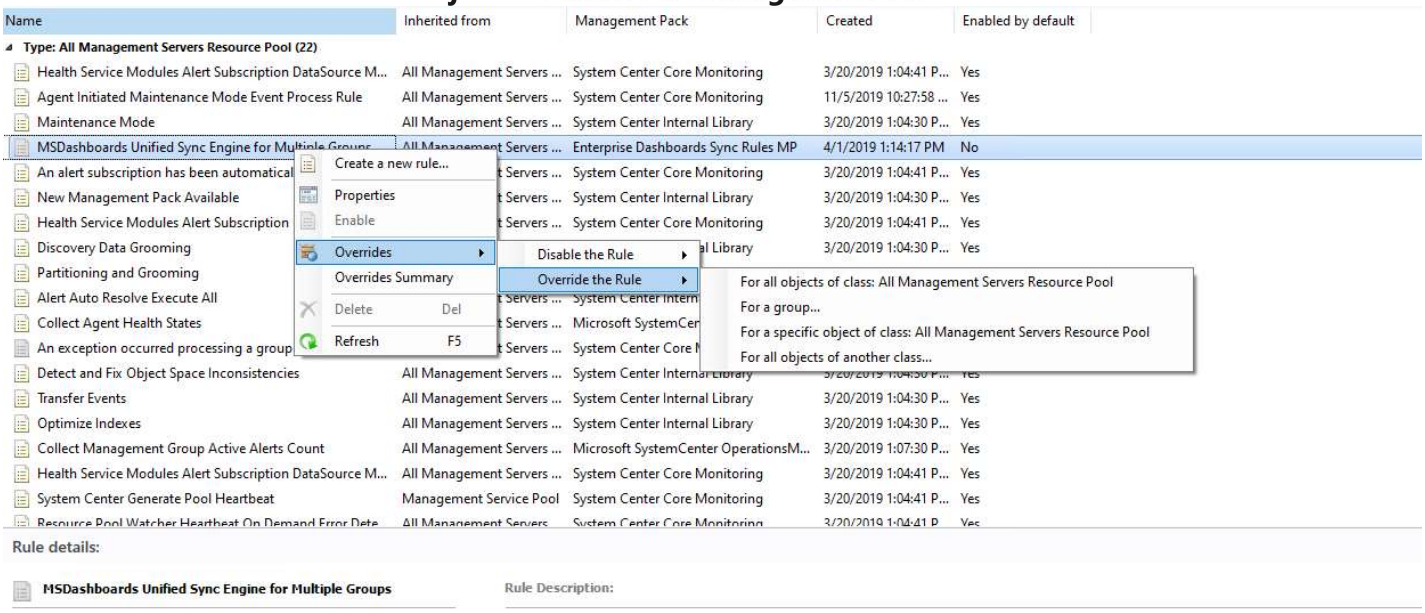
Enterprise Dashboards sync rule need to be modified to include new group created. the sync rule later, will start populating group members state information to EnterpriseDashbaord Database. follow below steps to add group to Sync Rule

1. Open SCOM Console, browse to **Authoring** Tab and **select Management Pack Objects** --> **Rules**

2. Change Scope to be **All Management Servers Resource Pool** and then click **Ok**

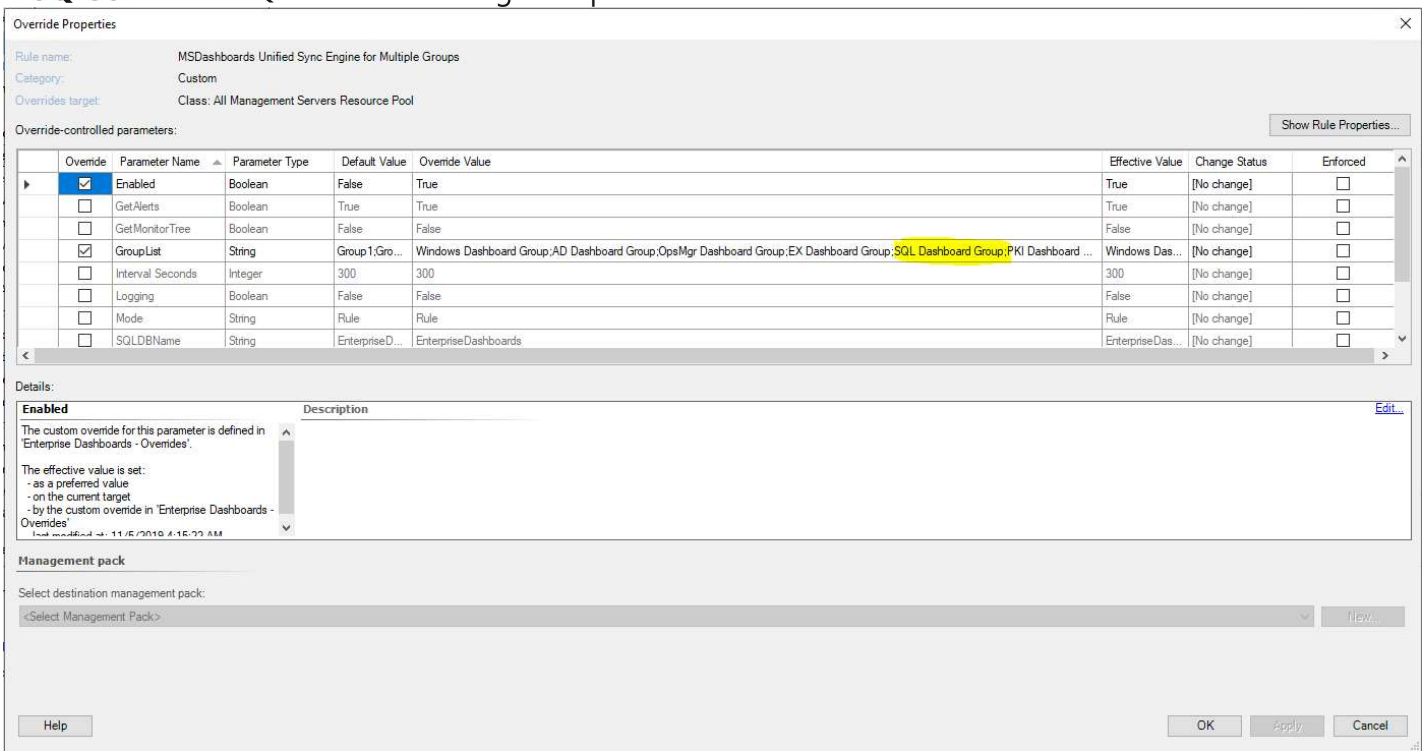


3. Right click on **MSDashboards Unified Sync Engine for Multiple Groups** and select **Overrides** --> **Override the Rule** --> **For All objects of class: All Management Servers Resource Pool**



4. In Override Rule properties, Ensure the following overrides enabled:
   a. **Enabled** = True
   b. **GroupList** includes "SQL Dashboard Group"

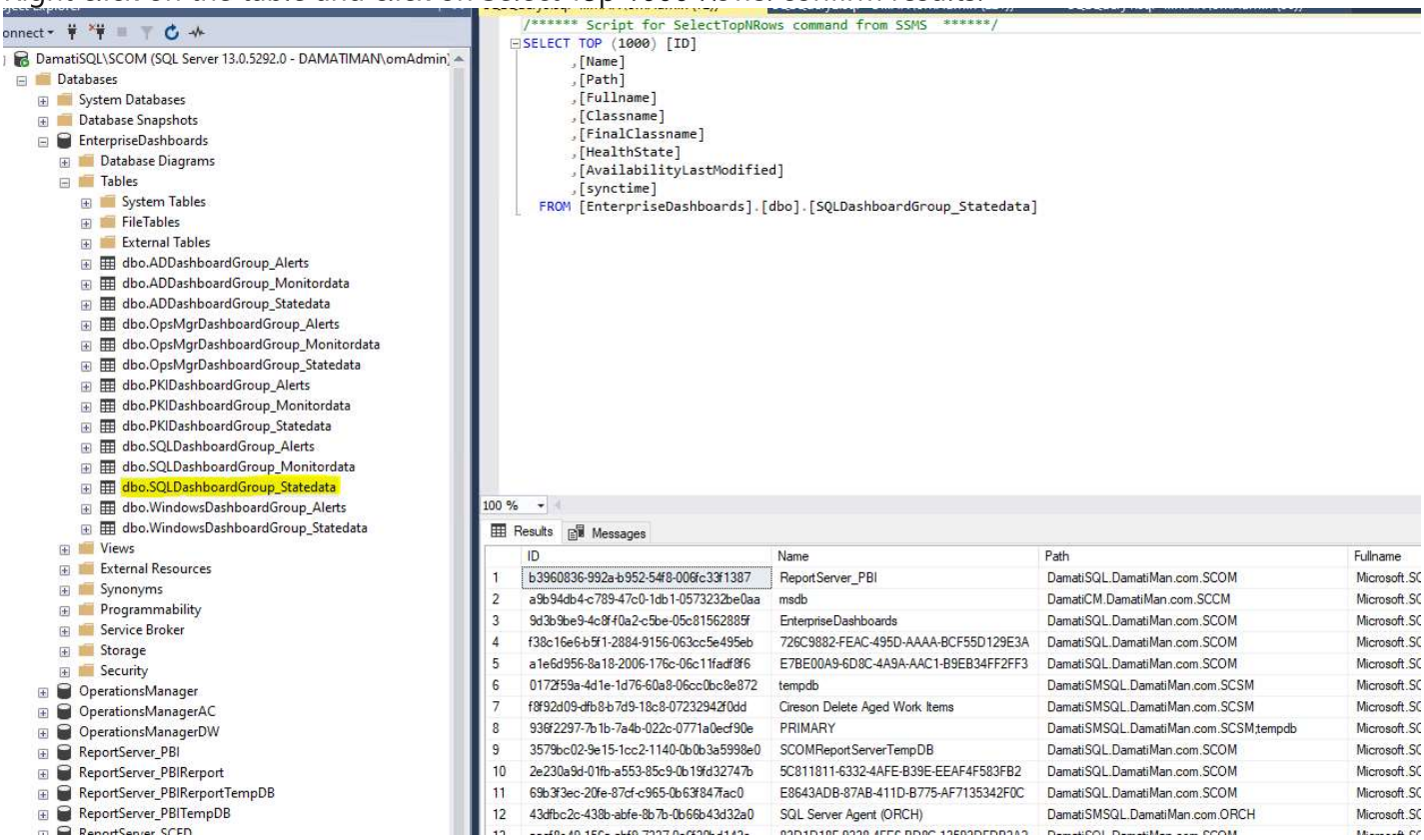
c. **SQLServer** = <SQL Instance hosting EnterpriseDashboards Database>



5. Click on **Ok**

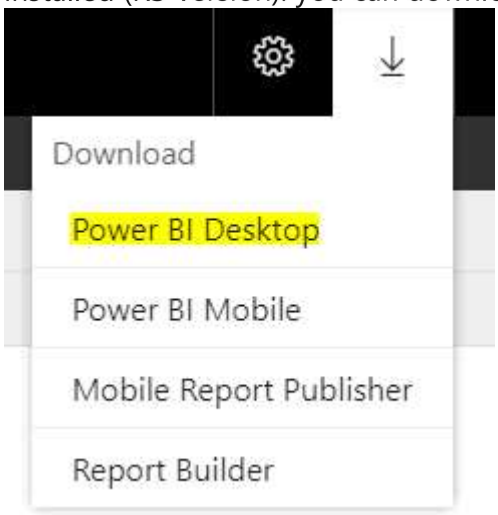
Step 3: Confirm Group populates information to EnterpriseDashboard Database

1. Using SQL Management Studio, Open EnterpriseDashboard Database and exand Tables.
2. Check if SQLDashboardGroup_Statedata table is created.
3. Right click on the table and click on Select Top 1000 Rows. confirm results.

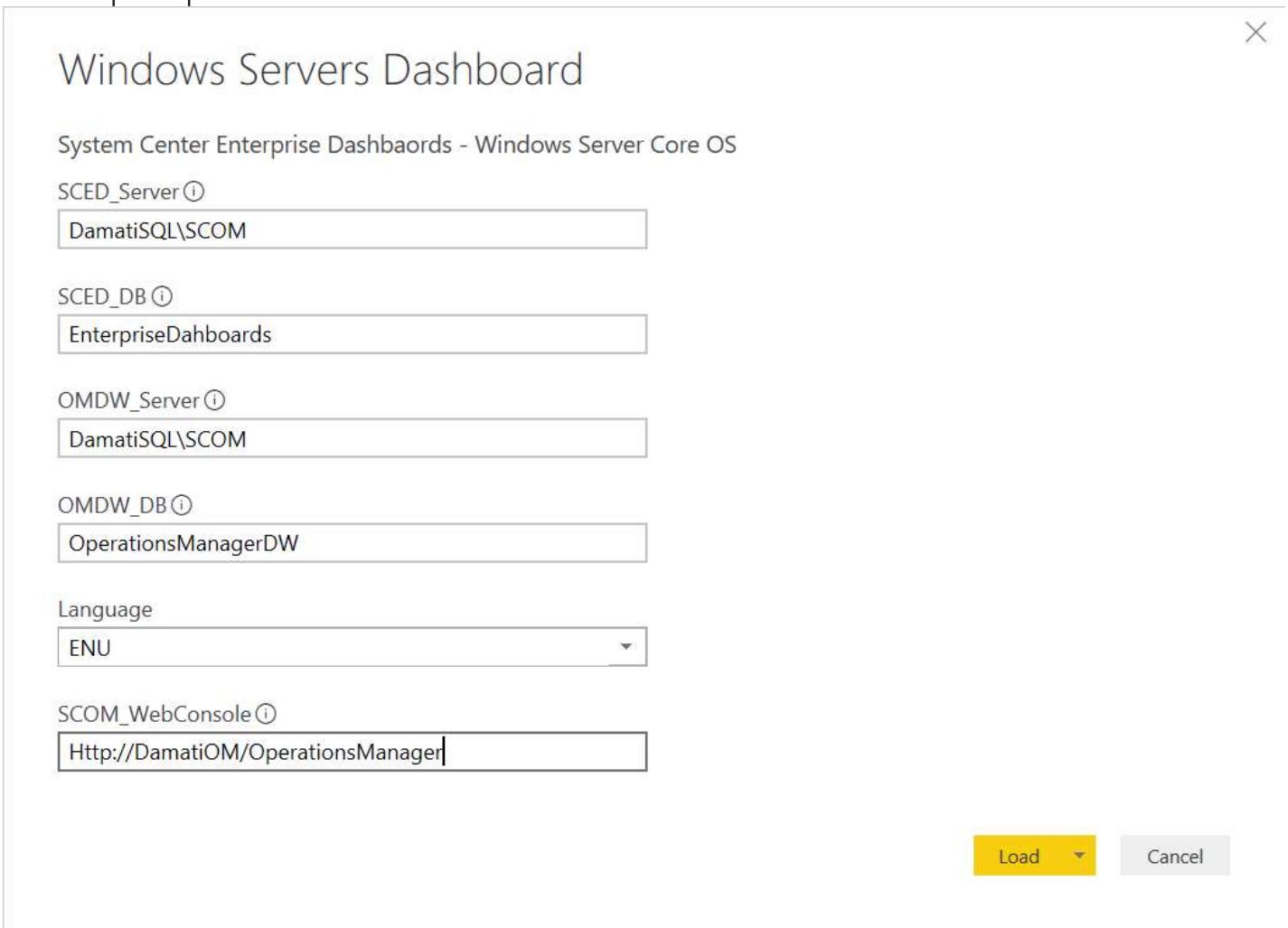


Step 4: Import Dashboard Template File

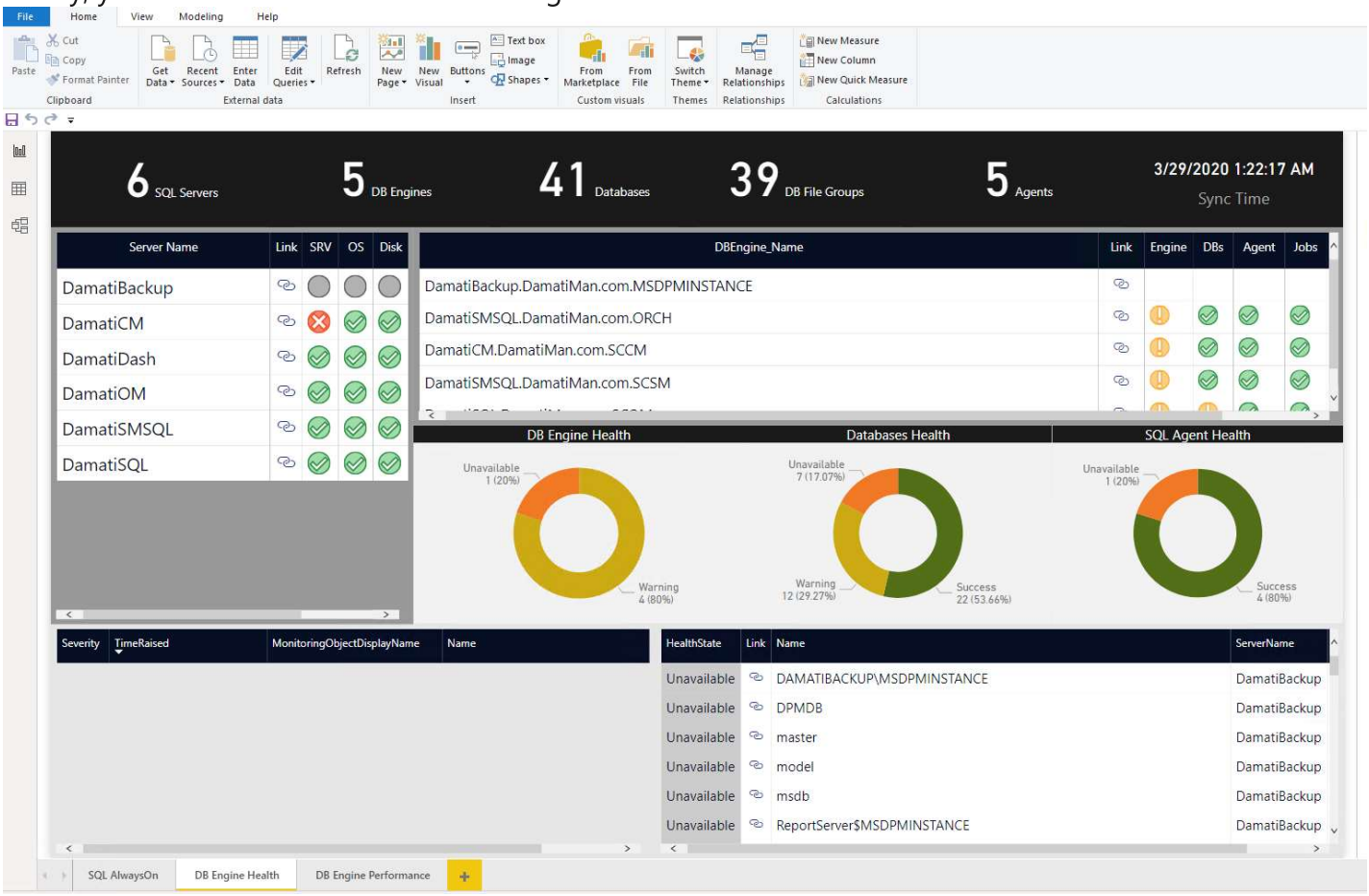
Following steps need to be applied on your desktop or Report server. make sure you have Power BI desktop installed (RS Version). you can download it from Power BI Report Server if you have required permisions.



1. Download SQL Server Dashboard Power BI Template
   SQL Server Dashboard.zip
2. Open Template file
3. Insert required parameters then click Loadnotes



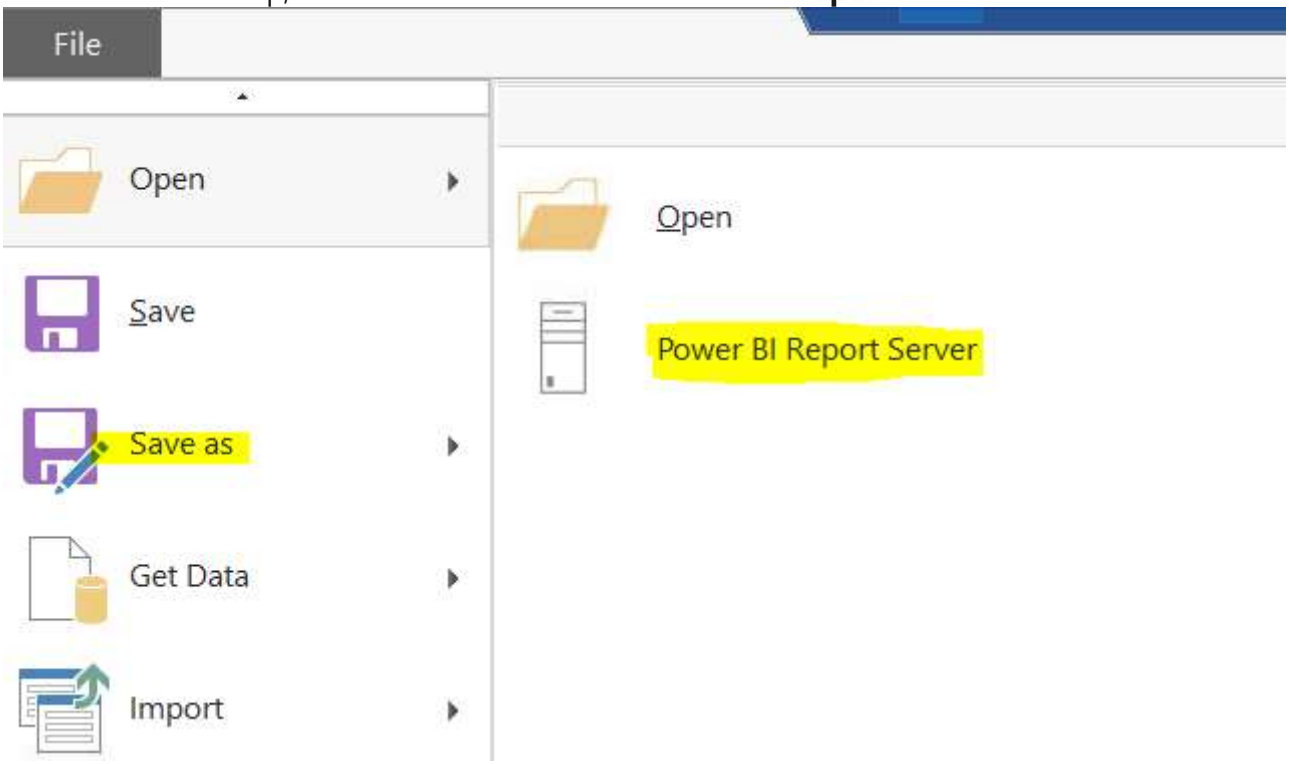
4. Dashboard will start connecting to Operations Manager Databases and load required information to build visulizations
5. Finally, you will have the dashboard running



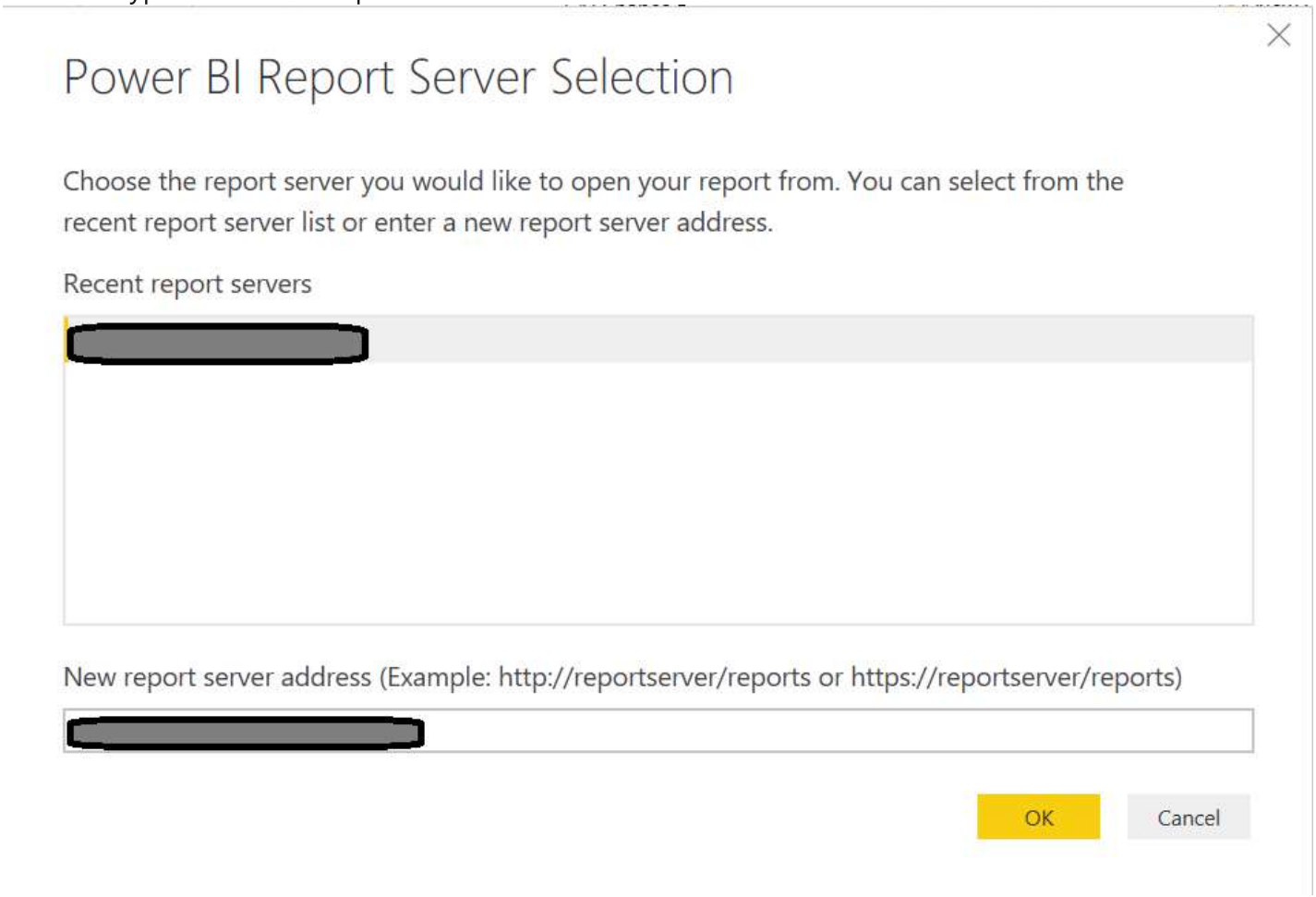
Step 5: Save Dashboard to Power BI Report Server

Once the dashboard is ready to be published, follow below steps.

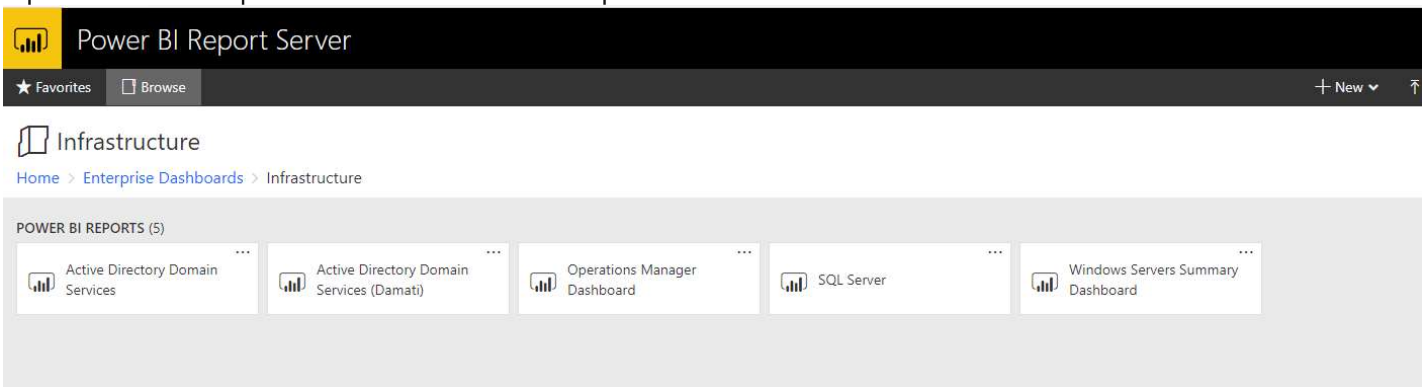
1. On Power BI Desktop, select **File** --> **Save As** --> **Power BI Report Server**



2. Select or Type in Power BI Report Server Name and click **Ok**



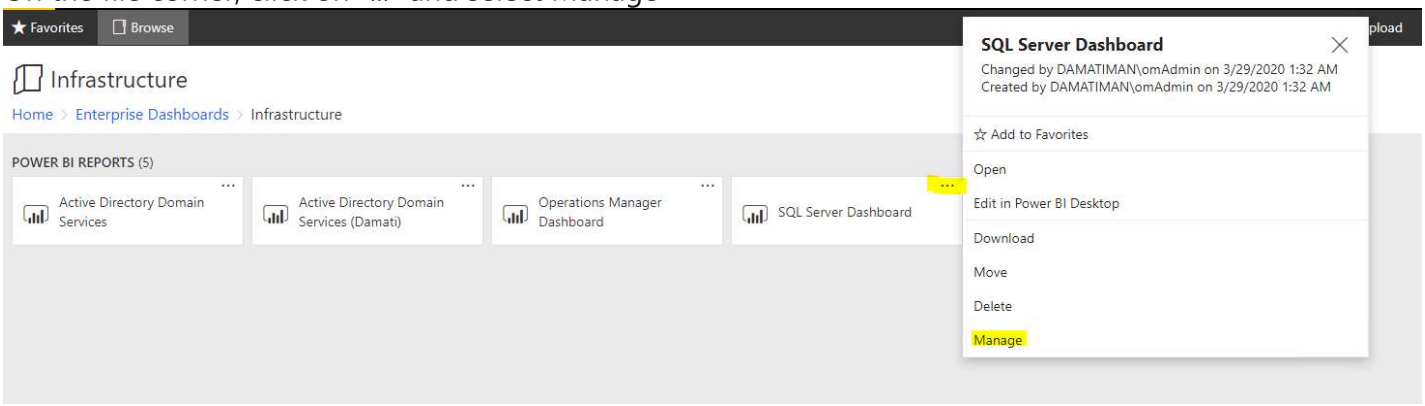
3. Open Power BI Report Server URL and Select published Dashboard



Step 6: Configure Data Source Settings

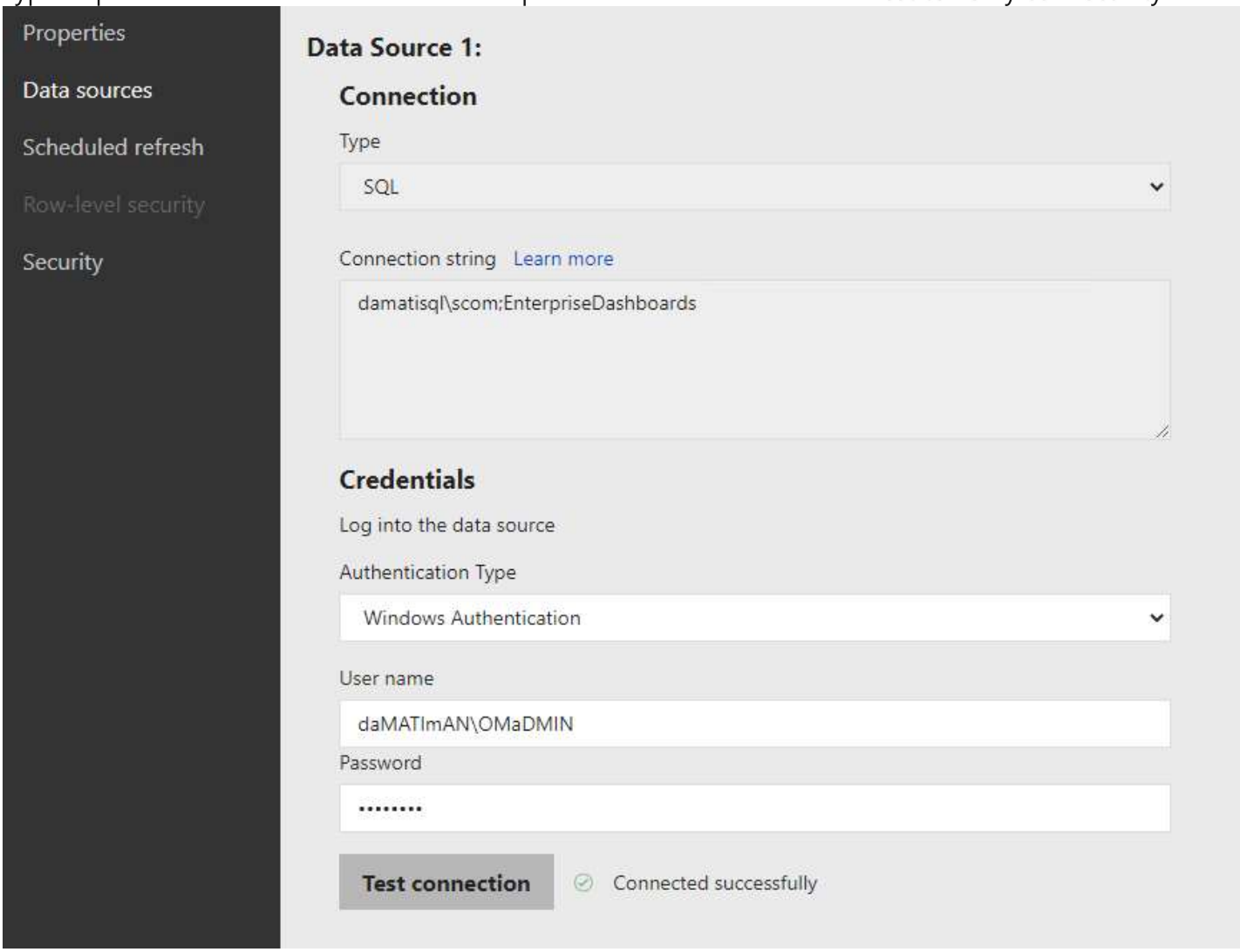
Data Sources does not have the real time information as it need to be configured after we published the dashboards. to do that, follow below steps:

1. On Power BI Report Server Web URL, Browse to Dashboard file location [DON'T OPEN IT].
2. On the file corner, click on "..." and select Manage

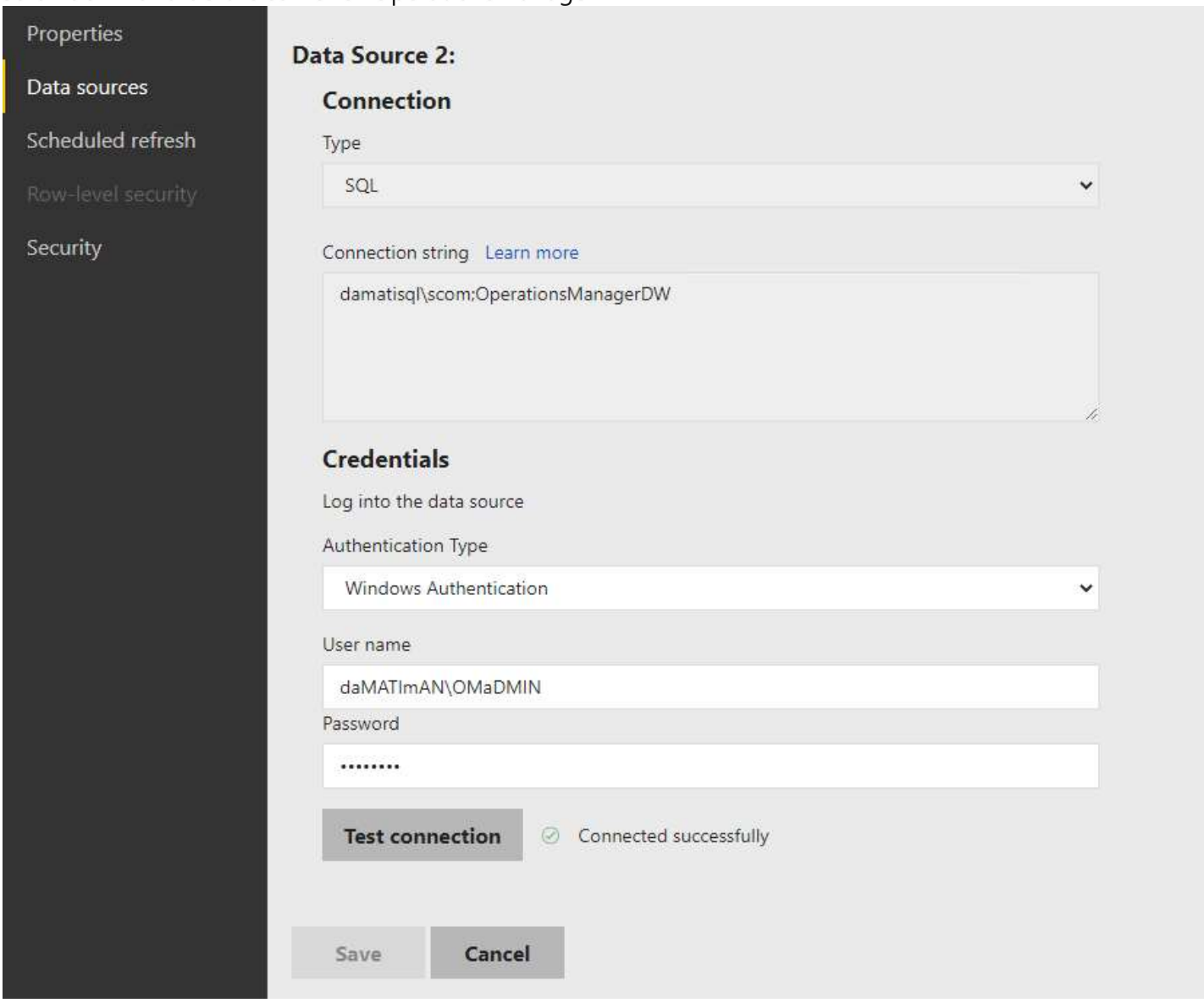


3. In Manage Tab, Select Data Sources

4. Type required credentials to connect to EnterpriseDashboards DB and click Test to verify connectivity



5. scroll down and do the same for OperationsManagerDW Database.



6. Confirm Test Connection is successful and click **Save**