



## System Center Operations Manager Assessment: Prerequisites and Configuration



This document explains the required steps to configure the System Center Operations Manager (SCOM) Assessment included with your Azure Log Analytics Workspace and Microsoft Unified Support Solution Pack.

There are configuration and setup tasks to be completed prior to executing the assessment setup tasks in this document. For all pre-work, follow the [Getting Started with On-Demand Assessments](#) in the Services Hub Resource Center.

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# System Requirements and Configuration at Glance

According to the scenario you want to use, review the following details to ensure that you meet the necessary requirements.

## Supported Versions

- Your System Center Operations Manager environment must run on Microsoft System Operations Manager 2012 SP1 or Microsoft System Operations Manager 2012 R2, Microsoft System Operations Manager 2016, Microsoft System Operations Manager 1801, Microsoft System Operations Manager 1807, Microsoft System Operations Manager 2019

## Environment Permissions

- **Assessment account rights:**
  - A domain account with the following rights:
    - Member of the local Administrators group on all servers in the environment (All Operations Manager Roles - Management Server, OpsMgr Database, Data Warehouse, Reporting, Web Console, and Gateway).
    - Operation Manager Administrator Role for the management group being assessed.
    - SysAdmin role on all Microsoft SQL servers or instances used by Operations Manager.

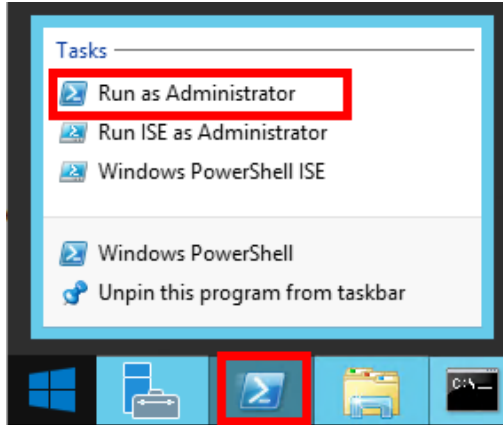
## Data Collection Machine

- The **data collection machine** must be a member server of the Active Directory domain in which the SCOM management group that you wish to evaluate, resides.
- **Data collection machine hardware:** Minimum 8 gigabytes (GB) of RAM, 2 gigahertz (GHz) dual-core processor, and minimum 10 GB of free disk space.
- The **data collection machine** is used to connect to one of the management servers in your management group and retrieve information from it. The machine is communicating over Remote Procedure Call (RPC), Server Message Block (SMB), WMI, remote registry, SQL Database, Lightweight Directory Access Protocol (LDAP) and Distributed Component Object Model (DCOM). Microsoft .NET Framework 4.8 or newer installed and running Windows Server 2012 R2 or newer.
- The data collection machine must have the Microsoft Monitoring Agent installed and configured for one of the deployment scenarios at the beginning of this document.

# Setting up the SCOM Assessment

When you have finished the installation of the Microsoft Monitoring Agent/OMS Gateway, you are ready to setup the SCOM Assessment.

1. Open the Windows PowerShell command prompt as an Administrator.



2. Run the command **Add-SCOMAssessmentTask – ServerName <YourServerName> -WorkingDirectory <Directory>** where <YourServerName> is the fully qualified domain name (FQDN) or the NetBIOS name of one of the management servers and <Directory> is the path to an existing directory used to store the files created while collecting and analyzing the data from the environment

**NOTE:** If the directory does not exist, it must be created before you continue with the execution.

```
Administrator: Windows PowerShell
PS C:\Users\romin> Add-SCOMAssessmentTask -ServerName "asttest.redmond.corp.microsoft.com" -WorkingDirectory "C:\OMS\SCOM"
```

3. Provide the necessary user account credentials.

```
Administrator: Windows PowerShell
PS C:\Users\romin> Add-SCOMAssessmentTask -ServerName "asttest.redmond.corp.microsoft.com" -WorkingDirectory "C:\OMS\SCOM"
[SCOMAssessment]Detected agent configuration for Management Group AOI-49900795-7a88-4eee-a2de-ca8a46fc0c9e
[SCOMAssessment]Enter the credential to be used to run this assessment. Credentials will be used to connect to remote server(s) for assessment.
[SCOMAssessment]User(DomainName\UserName):
redmond\romin
[SCOMAssessment]Enter the password for redmond\romin:
*****
```

**NOTE:** This domain account must have all the following rights:

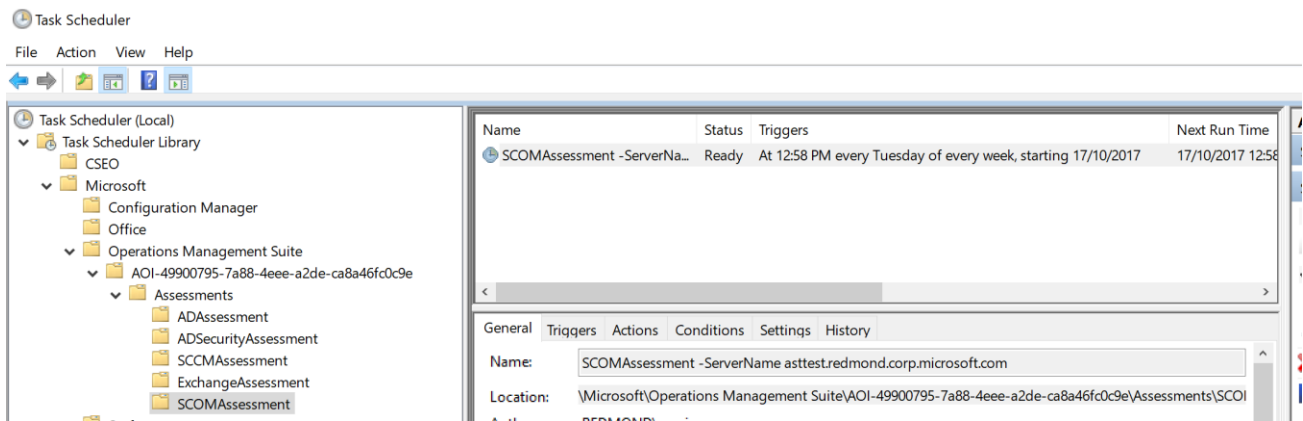
- Member of the local Administrators group on all servers in the environment (All Operations Manager Roles - Management Server, OpsMgr Database, Data Warehouse, Reporting, and Web Console).
  - The Operation Manager Administrator Role for the management group being assessed.
  - The SysAdmin role on all SQL Server instances or instances used by Operations Manager.
4. The script will continue with the necessary configuration. It will create a Scheduled Task that will trigger the data collection.

```

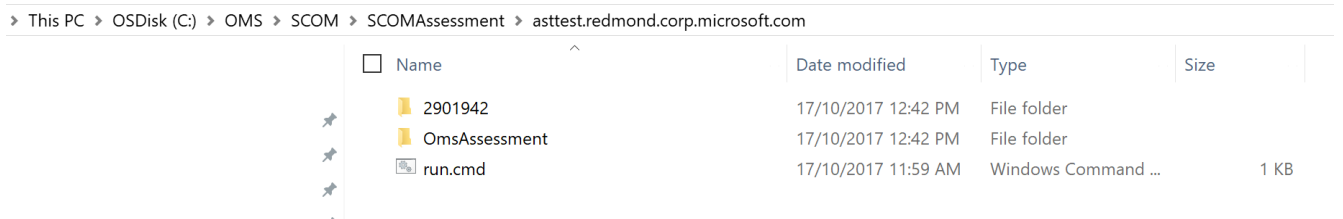
Administrator: Windows PowerShell
PS C:\Users\romin> Add-SCOMAssessmentTask -ServerName "asttest.redmond.corp.microsoft.com" -WorkingDirectory "C:\OMS\SCOM"
[SCOMAssessment]Detected agent configuration for Management Group AOI-49900795-7a88-4eee-a2de-ca8a46fc0c9e
[SCOMAssessment]Enter the credential to be used to run this assessment. Credentials will be used to connect to remote server(s) for assessment.
[SCOMAssessment]User(DomainName\UserName):
redmond\romin
[SCOMAssessment]Enter the password for redmond\romin:
*****
[SCOMAssessment]Creating Windows Schedule task to run assessment...
[SCOMAssessment]SCOMAssessment setup successful.
[SCOMAssessment]Detailed log is at: C:\Users\romin\AppData\Local\Temp\Assessments_Configuration_20171017_065858.log
PS C:\Users\romin>

```

Data collection is triggered by the **scheduled task** named "**SCOMAssessment -ServerName <YourServerName>**" within an hour of running the previous script and then every 7 days. The task can be modified to run on a different date/time or even forced to run immediately.



5. While the task is running, the collection data is temporarily stored under the folder you have specified during the installation using the following structure:



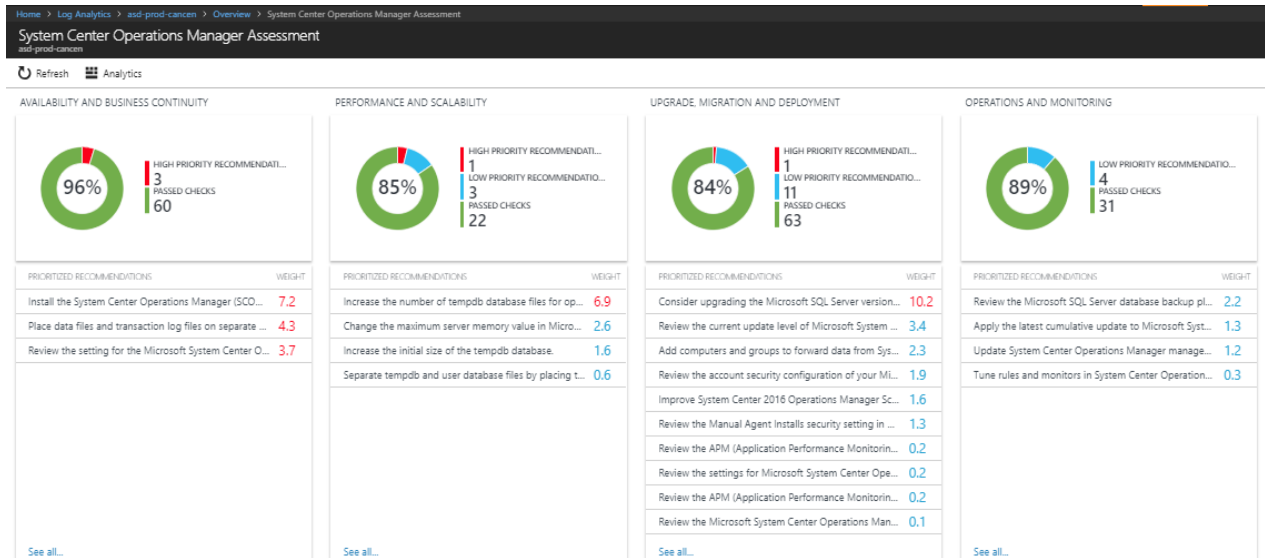
6. After data collection and analysis is completed on the tools machine, it will be submitted to your log analytics workspace in one of the following ways:

- o **Directly** if the Data Collection Machine is connected to the Internet.
- o **Through the OMS Gateway**, which will then submit the data to your log analytics workspace.

7. After a few hours, your assessment results will be available on your log analytics dashboard. Click the **SCOM Assessment** tile to review:



8. You will be presented the results.



# Appendix

## Data Collection Methods

The **SCOM Assessment in the log analytics workspace and Microsoft Unified Support Solution Pack** uses multiple data collection methods to collect information from your environment. This section describes the methods used to collect data from your environment. No Microsoft Visual Basic (VB) scripts are used to collect data.

1. Registry Collectors
2. Event Log Collectors
3. Windows PowerShell Collectors
4. File Data Collectors
5. SQL Data Collectors
6. Windows Management Instrumentation (WMI) Collectors

### 1. Registry Collectors

Registry keys and values are read from the data collection machine and all servers. They include items such as:

- Service information from HKLM\SYSTEM\CurrentControlSet\Services.
- This allows you to analyze the status of Operations Manager services.

### 2. Event Log Collectors

Collects the event logs from the servers. Microsoft collects the last 3 days of Information, Warnings and Errors from the Operations Manager, Application and System event logs.

### 3. Windows PowerShell Collectors

Collects various information such as:

- Management Packs information
- Number of Management Servers

### 4. File Data Collectors

Enumerates files in a folder on a remote machine, and optionally retrieves those files.

### 5. SQL Data Collectors

T-SQL queries are used to collect information regarding Operations Manager

### 6. Windows Management Instrumentation (WMI) Collectors

[WMI](#) is used to collect various information such as:

- WIN32\_Volume  
Collects information on Volume Settings for each server in the environment. For example, the information is used to determine the system volume and drive letter, which allows a client to collect information on the files located on the system drive.
- Win32\_Process  
Collect information on the processes running on each server in the environment. The information provides insight in processes that consume a large amount of threads, memory, or have a large page file usage.
- Win32\_LogicalDisk  
Used to collect information on the logical disks. Microsoft use the information to determine the amount of free space on the disk where the database or log files are located.