



OMi Management Pack for Microsoft SharePoint Server

Software Version: 1.01

For the Operations Manager i for Windows® and Linux operating systems

User Guide

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Chapter 1: Introduction to OMi Management Pack for Microsoft SharePoint Server

The HPE OMi Management Pack for Microsoft SharePoint Server (OMi MP for Microsoft SharePoint Server) works with Operations Manager i (OMi) and enables you to monitor Microsoft SharePoint servers in your environments. It includes Event Type Indicators (ETIs), Health Indicators (HIs), and Key Performance Indicators (KPIs) that analyze the events that occur in the Microsoft SharePoint servers and report the health and performance status.

The Aspects can be deployed by administrators for monitoring the Microsoft SharePoint servers in an enterprise environment.

Chapter 2: Getting Started

The following section provides information about the tasks required to monitor SharePoint Servers using OMi MP for Microsoft SharePoint Server. You can also analyze the status and health of SharePoint Server Configuration Items (CIs) through event, health, and performance perspectives.


Task 1: Adding Nodes to BSM 9.2x or OMi 10.x

Console

Note: If the SharePoint Server that you want to monitor is already being monitored by Smart Plug-in (SPI) for Microsoft Enterprise Servers, then remove the SPI artifacts and data sources from the managed node hosting the Microsoft SharePoint Servers before proceeding.

Note: If the Node already exists in Run-time Service Model (RTSM), you can skip this step and proceed to Task 2.

Before you begin monitoring, you need to add the nodes by following these steps:

1. Open the Monitored Nodes pane:
On BSM 9.2x, click **Admin > Operations Management > Setup > Monitored Nodes**.
On OMi 10.x, click **Administration > Setup and Maintenance > Monitored Nodes**.
2. In the **Node Views** pane, click **Predefined Node Filters > Monitored Nodes**, and then click , and then click **Computer > Windows**. The Create New Monitored Nodes dialog box opens.
3. Specify the Primary DNS Name and verify the IP Address.
4. Specify the Operating System and Processor Architecture of the node from the drop-down list, and then click **OK**.

The newly created node is saved as a CI instance in RTSM.

Note: The node with HPE Operations Agent must be connected to the HPE OMi Server and certificate must be granted.

User Privileges

To monitor Microsoft SharePoint Servers, provide user credentials with the following privileges:

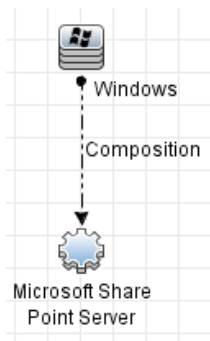
- SharePoint Administrator
- Local Administrator

Task 2: Deploying the SharePoint Discovery Aspects

The SharePoint CIs are discovered at two levels using two different Aspects. The SharePoint Discovery Aspects enable you to discover the Microsoft SharePoint Server instances in the environment. To discover all the Microsoft SharePoint Server CIs on the added managed nodes, you must deploy the SharePoint Discovery and SharePoint Extended Discovery Aspects to a Computer CI.

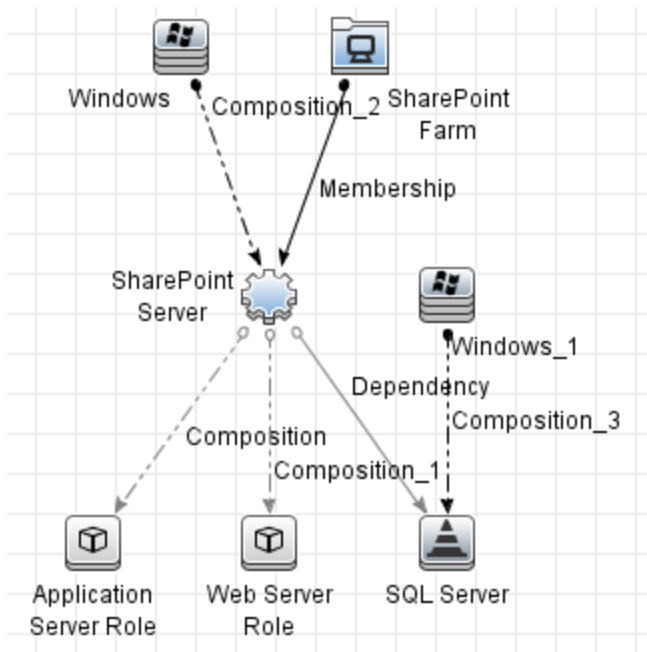
Following are the CIs that each Discovery Aspect discovers:

1. The SharePoint Discovery Aspect discovers the basic CIs of the following CI types (CITs):
 - Microsoft SharePoint Server
 - Computer



2. The SharePoint Extended Discovery Aspect discovers the advanced CIs of the following (CITs):
 - SharePoint Farm
 - Application Server Role
 - Web Server Role

- SQL Server



To deploy the SharePoint Discovery and SharePoint Extended Discovery Aspects, follow these steps:

1. Open the Management Templates & Aspects pane:


On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.

On OMi 10.x, click **Administration > Monitoring > Management Templates & Aspects**.

2. In the Configuration Folders pane:

Configuration Folders > Microsoft Application Management > Microsoft SharePoint Server > Aspects.

3. Follow one of the below methods to assign and deploy the Aspect. In the Management Templates & Aspects pane:

- Select the **SharePoint Discovery** or **SharePoint Extended Discovery** Aspect, and then click .
- Right-click the **SharePoint Discovery** or **SharePoint Extended Discovery** Aspect, and then click **Assign and Deploy Item**.


The Assign and Deploy Wizard appears.

4. In the **Configuration Item** tab, select the required managed node CI and then click **Next**.


5. In the **Required Parameters** tab, follow the step:

- If you are deploying the SharePoint Discovery Aspect, click **Next**.

Note: The SharePoint Discovery Aspect does not have mandatory parameters. You will get a notification stating the following message: There are no parameters that require editing for this Assignment.

- If you are deploying the SharePoint Extended Discovery Aspect, follow these steps:
 - i. Select the **USERNAME** parameter in the list, and then click . The USERNAME dialog box opens.
 - ii. Specify the value and then click **OK**.

For domain users, specify the username in the `<domain>\<username>` format.

For non-domain users, specify the username in the `<username>` format.
 - iii. Select the **PASSWORD** parameter in the list, and then click . The PASSWORD dialog box opens.
 - iv. Click **Value** and type a value in the **Password** field.
 - v. In the **Verify Password** field and type the same password and then click **OK**.
 - vi. Click **Next**.

6. (Optional). In the **All Parameters** tab on BSM 9.2x or **Parameter Summary** tab on OMi 10.x, click **Next**.

7. (Optional). If you do not want to enable the assignment immediately,

On BSM 9.2x clear the **Enable Assigned Objects** check box.

On OMi 10.x, clear the **Enable Assignment(s)** check box.

You can then enable the assignment later using the Assignments & Tuning pane.

8. Click **Finish**.

Note: After the SharePoint Aspect is deployed, the following message appears: Assignment and deployment jobs created. To check the status of the deployment job, go to the following location:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Deployment Jobs**.

On OMi 10.x, click **Administration > Monitoring > Deployment Jobs**.

Task 3: Verifying Discovery

After you deploy the SharePoint Discovery Aspects, you must verify if the CIs are populated in the View Explorer.

To view the CIs discovered, follow these steps:

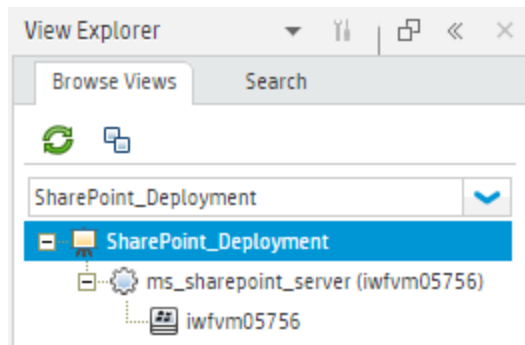
1. Open the Event Perspective pane:

On BSM 9.2x, click **Applications > Operations Management > Event Perspective**.

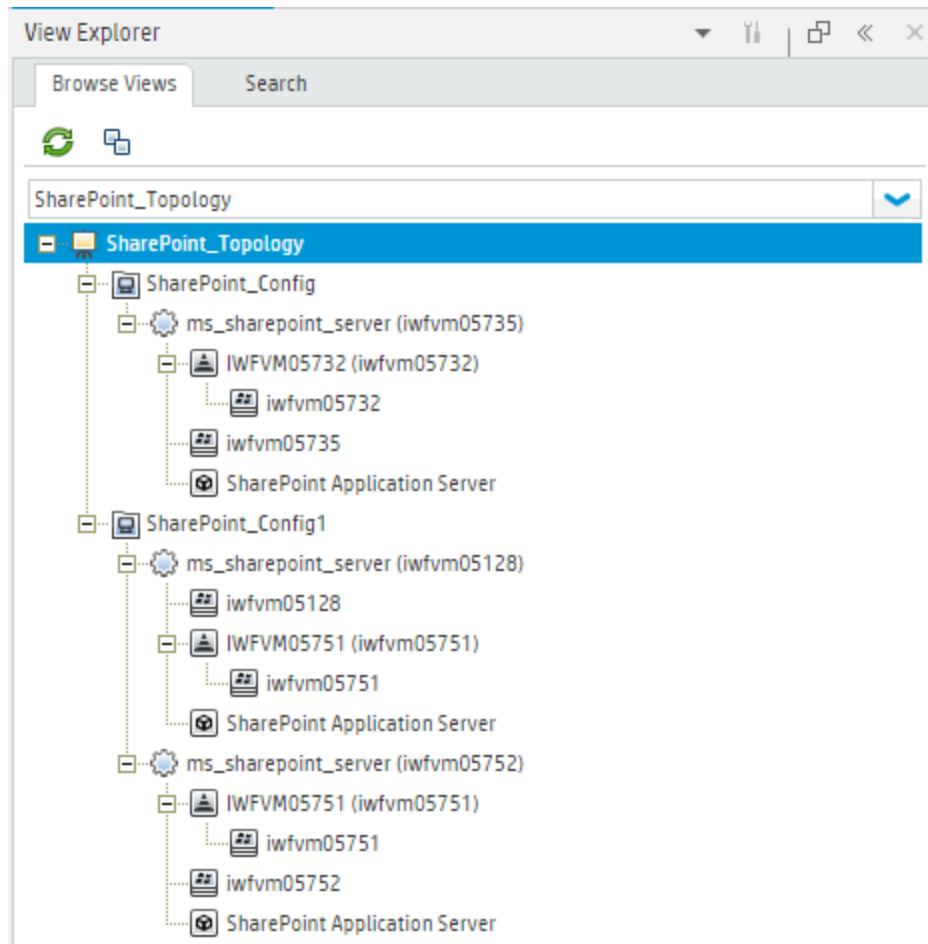
On OMi 10.x, click **Workspaces > Operations Console > Event Perspective**.

2. In the **Browse Views** tab:

For verifying SharePoint Discovery Aspect deployment, select the **SharePoint_Deployment** View.



For verifying SharePoint Extended Discovery Aspect deployment, select the **SharePoint_Topology** View.



Task 4: Deploying the Microsoft SharePoint Aspects

This section provides detailed procedure for deploying the Aspects.

If you have already deployed SharePoint 1.00 Aspects, see [Updating the Aspects to a Newer Version](#).

Data Collection

Frequency (polling interval) at which each Aspect must be monitored is predefined with a default value in a specific frequency parameter. Frequency parameter is an expert parameter that is defined for each

of the metrics regardless of whether they are for generating events or not.

Following are the four predefined frequency parameters:

Parameter	Frequency
Very High	5 mins
High	15 mins
Medium	1 hour
Low	24 hours

After Aspects are deployed, collector is triggered based on the predefined frequency parameter in a specific Aspect. You can modify the default value of the parameter at the following levels:

- During deployment of the Aspects using the Management Templates & Aspects pane.
- After deployment using the Assignments & Tuning pane.

For more information about how to modify the parameter values, see [Microsoft SharePoint Server Parameters](#).

Task 4a: Deploying the other SharePoint Aspects

The OMi MP for Microsoft SharePoint Server contains other Aspects apart from the SharePoint Discovery and SharePoint Extended Discovery Aspects.

To deploy the other SharePoint Aspects, follow these steps:

1. Open the Management Templates & Aspects pane:


On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.

On OMi 10.x, click **Administration > Monitoring > Management Templates & Aspects**.

2. In the Configuration Folders pane:

Click **Configuration Folders > Microsoft Application Management > Microsoft SharePoint Server > Aspects**.

3. Follow one of the below methods to assign and deploy the Aspect. In the Management Templates & Aspects pane:

- Select the required Aspect, and then click .
- Right-click the required Aspect, and then click **Assign and Deploy Item**.

The Assign and Deploy Wizard appears.

4. In the **Configuration Item** tab, select the required managed node CI and then click **Next**.
5. *(Optional)*. In the **Required Parameters** tab, click **Next**.

Note: SharePoint Aspects do not have mandatory parameters. You will get a notification stating the following message: There are no parameters that require editing for this Assignment.

6. *(Optional)*. In the **All Parameters** tab on BSM 9.2x or **Parameter Summary** tab on OMi 10.x, click **Next**.
7. *(Optional)*. If you do not want to enable the assignment immediately, follow the step:

On BSM 9.2x, clear the **Enable Assigned Objects** check box.

On OMi 10.x, clear the **Enable Assignment(s)** check box.

You can then enable the assignment later using the Assignments & Tuning pane.

8. Click **Finish**.

Note: After the Aspect is deployed, the following message appears: Assignment and deployment jobs created. To check the status of the deployment job, go to the following location:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Deployment Jobs**.

On OMi 10.x, click **Administration > Monitoring > Deployment Jobs**.

Task 5: Updating the Aspects to a Newer Version

You can update the existing deployed Aspects to the latest version.


If you have already deployed OMi MP for Microsoft SharePoint Server 1.00 Aspects to the managed nodes before installing OMi MP for Microsoft SharePoint Server 1.01, use the latest version of Aspects on those nodes.

To update to the latest version, select the Aspects on the managed nodes. Perform the following steps for each Aspect assignment on each of the managed nodes:


For BSM 9.2x:

1. Open the Management Templates & Aspects pane:
Click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.
2. Select the SharePoint Aspects 1.0 that have been deployed to the nodes.
3. Redeploy with parameterization to each of the SharePoint Server CIs.

For OMi 10.x:

1. To open the Assignments & Tuning pane, click **Administration > Monitoring > Assignments & Tuning**.
2. In the Browse Views pane, select the **SharePoint_Deployment** view and select each SharePoint Server CI where version update is required.
3. Click  **Show Assignments That Require an Update**.

All the Management Templates and Aspects that requires an update are listed.

4. Select each of the Management Templates and Aspects and click  **Update Assigned Item**.

The Update Assigned Item dialog box appears.

5. In the **Update Options** tab, follow these steps:
 - a. Select the latest version from the **Update to Version** drop down list.
 - b. Select the parameter value that you require for the assignment:
 - If you select **Use parameter values from existing assignments**, only the new mandatory parameters that do not have a default value are listed.
 - If you select **Use default parameter values from version selected above**, all mandatory parameters from the selected Aspect version that do not have a default value are displayed. These parameters must be edited before proceeding to the next step of the wizard.
 - c. Click **Next**.
6. In the **Required Parameters**, edit and provide values for each of the mandatory parameters. **SharePoint Username** and **SharePoint Password** are the mandatory parameters.
7. In the **Parameter Summary** tab, edit and provide the values for the remaining parameters.
8. Click **Finish** to save the changes and close the wizard. The assigned item is updated to the specified Management Template or Aspect version.

Monitoring SharePoint Server Environment

After you deploy Aspects, you can analyze the status and health of the SharePoint Server CIs from the following perspectives:

- [Event Perspective](#)
- [Health Perspective](#)
- [Performance Perspective](#)

Event Perspective

After you deploy the SharePoint Discovery and SharePoint Extended Discovery Aspects, you can view the events of the SharePoint Server CIs that are monitored by OMi MP for Microsoft SharePoint Server.

To view the Event Perspective of the SharePoint Server CIs, follow these steps:

1. Open the Event Perspective pane:
On BSM 9.2x, click **Applications > Operations Management** and then click the **Event Perspective** tab.

On OMi 10.x, click **Workspaces > Operations Console > Event Perspective**.

The View Explorer pane appears.
2. In the View Explorer, select the **Browse Views** tab.
3. From the drop-down menu, select the **SharePoint_Topology** View. Alternatively, you can use the **Search** tab to find a SharePoint Server CIs.

A list of SharePoint Server CIs monitored by OMi MP for Microsoft SharePoint Server appears.

4. Select the SharePoint Server CI for which you want to view the Event Perspective. A list of events for the selected SharePoint Server CI appears on the Event Browser pane.

When you select an event from the Event Browser, the Event Details pane opens where you can view following details:

- **General** - Displays the detailed information about the selected event such as Severity, Lifecycle State, Priority, Related CIs and so on.
- **Additional Info** - Displays more detailed information about the attributes of the selected event.

- **Source Info** - Displays an overview of the information available about the source of the selected event.
- **Actions** - Displays the list of actions available for a selected event. There are two types of possible actions: User Action and Automatic Action.
- **Annotations** - Displays a list of the annotations attached to the selected event.
- **Custom Attributes** - Displays a list of the attributes that either an administrator or a responsible user manually configured and added to the selected event.
- **Related Events** - Displays an overview of all the events that are related to the event selected in the Event Browser.
- **History** - Displays the history of the selected event.
- **Resolver Hints** - Displays the information used to identify the node and CI associated with an event.
- **Instructions** - Displays instruction information designed to help operators handle the associated event.
- **Forwarding** - Displays the transfer of ownership details if any, for the events.

For more information about the list of SharePoint ETIs, see the section [Event Types Indicator](#).

Health Perspective

After you deploy the SharePoint Discovery and SharePoint Extended Discovery Aspects, you can view the events related to the health of the SharePoint Server CIs that are monitored by OMi MP for Microsoft SharePoint Server.

To view the Health Perspective of the SharePoint Server CIs, follow these steps:

1. Open the Health Perspective pane:

On BSM 9.2x, click **Applications > Operations Management** and click **Health Perspective** tab.

On OMi 10.x, click **Workspaces > Operations Console > Health Perspective**.

The View Explorer pane appears.

2. In the View Explorer, select the **Browse Views** tab.
3. From the drop-down menu, select the **SharePoint_Topology** View. Alternatively, you can use the **Search** tab to find a SharePoint Server CIs.

A list of SharePoint Server CIs monitored by OMi MP for Microsoft SharePoint Server appears.

4. Select the SharePoint Server CI for which you want to view the Health Perspective. A list of health related events for the selected SharePoint Server CI appears on the Event Browser pane.

When you select an event from the Event Browser pane, the following panes appear:

- **Health Top View** - Displays the health top view of the selected event.
- **Health Indicators** - Displays the Key Performance Indicators (KPIs) and HIs related to the CI that you select from the Health Top View pane.
- **Actions** - Displays the list of actions available for a selected event.

For more information about the list of SharePoint HIs, see the section [Health Indicators](#).

Performance Perspective

Performance Perspective enables you to populate graphs from existing graph templates. You can also plot customized graphs by selecting the required metrics for a selected CI.


To view the Performance Perspective of SharePoint Server CIs using graphs, follow these steps:

1. Open the Performance Perspective pane:

On BSM 9.2x, click **Applications > Operations Management** and then click the **Performance Perspective** tab.

On OMi 10.x, click **Workspaces > Operations Console > Performance Perspective**.

The View Explorer pane appears.
2. In the **Browse Views** tab, select the **SharePoint_Topology** View. Alternatively, you can use the **Search** tab to find a SharePoint Server CIs.

The performance pane appears, which lists the default graphs available for the **SharePoint_Topology**.
3. Click the graph you want to plot from the **Graphs** tab, and then click  **Draw Graphs**. The selected graph is plotted on the right pane.


Note: For more information about managing events, health, and performance perspectives, see the *Operations Manager i Concepts Guide*.

Topology Synchronization Rules for Microsoft SharePoint Server

If you are using Smart Plug-in for Microsoft Enterprise Servers with HP Operations Manager, perform following steps to forward topology data from the HPOM Server to BSM or OMi Server.

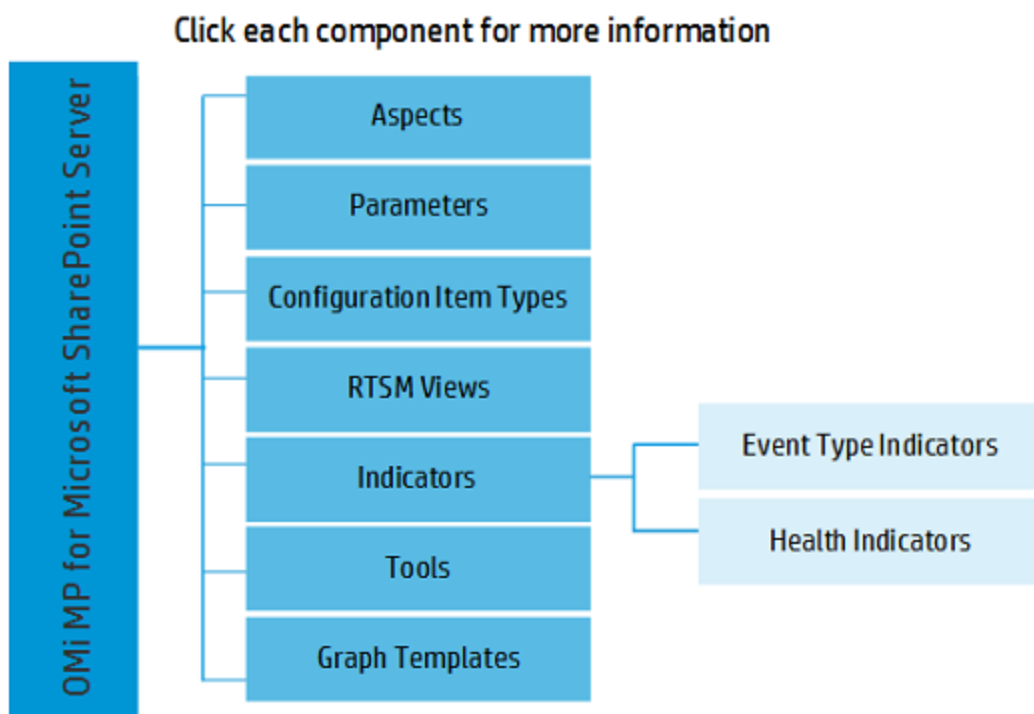
For more information about Topology Synchronization, see the latest version of the *HPE Operations Manager i Administration Guide*.

To check the Topology Synchronization settings, follow these steps:

1. Open the Infrastructure Settings:
 - On BSM 9.2x, click **Admin > Platform > Setup and Maintenance > Infrastructure Settings**.
 - On OMi 10.x, click **Administration > Setup and Maintenance > Infrastructure Settings**.
2. In the Infrastructure Settings pane, select **Applications > Operations Management**.
3. To verify the availability of the toposync package to be synced, go to **Operations Management – HPOM Topology Synchronization Settings**.
4. If the toposync package is not available, add the toposync package by following these steps:
 - a. In **Packages for Topology Sync**, click  .
 - b. In **Value**, add **HP OprSps** and click **Save**.

Chapter 3: Components

The OMi MP for Microsoft SharePoint Server includes the following components for monitoring Microsoft SharePoint Servers in your environment:



Microsoft SharePoint Aspects

The SharePoint Aspects can be used to monitor the building blocks or units of OMi MP for Microsoft SharePoint Server.

How to Access Microsoft SharePoint Aspects

1. Open the Management Templates & Aspects pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.

On OMi 10.x, click **Administration > Monitoring > Management Templates & Aspects**.

2. In the Configuration Folders pane, click **Configuration Folders > Microsoft Application Management > Microsoft SharePoint Server > Aspects**.

Tasks

How to Deploy Microsoft SharePoint Aspects

For more information about deploying Microsoft SharePoint Aspects, see [Task 2: Deploying the Microsoft SharePoint Aspects](#).

User Interface Reference

The following table lists the different tabs in the wizard:

General	Provides an overview of the general attributes of the SharePoint Aspects.
CI Type	The type of CIs that the Aspect can be assigned. The Microsoft SharePoint Server is the type of CI to which the Aspects can be assigned.
Instrumentation	Provides a single package which contains the binaries for discovery, collection, and data logging.
Aspects	Provides an overview of any Aspects that the SharePoint Aspect contains. You can expand each item in the list to see more details about the nested aspect.
Policy Templates	Provides an overview of the policy templates that the SharePoint Aspect contains. You can expand each item in the list to see more details about the policy template.

List of Microsoft SharePoint Aspects

A SharePoint Aspect comprises policy templates, instrumentation, and parameters for monitoring the health and performance of SharePoint.

The **SharePoint Collection Schedule** Aspect is part of SharePoint Performance, SharePoint Education Services, SharePoint Access Services, SharePoint Enterprise Content Management, SharePoint Profile Services, SharePoint Project Server, and SharePoint Services Aspects.

The OMi MP for Microsoft SharePoint Server comprises the following SharePoint Server Aspects:

SharePoint Discovery

This Aspect discovers the basic SharePoint CI (SharePoint Server CI and Node CI).

CI Type	Policy Template	Indicator	Description	Policy Type
Computer	MSPS_Discovery	NA	This policy discovers the SharePoint CIs.	Service Auto-Discovery

SharePoint Extended Discovery

This Aspect discovers Microsoft SharePoint Server CI and configures the node for monitoring.

CI Type	Policy Template	Indicator	Description	Policy Type
Windows	MSPS_CollectionDefinition_2010	NA	This policy maintains the metric definition for collecting SharePoint 2010 metrics	ConfigFile
Windows	MSPS_CollectionDefinition_2013	NA	This policy maintains the metric definition for collecting SharePoint 2013 metrics	ConfigFile
Windows	MSPS_ExtensiveDiscovery	NA	This policy discovers the topology of Microsoft SharePoint Server.	Service Auto-Discovery
Windows	MSPS_ExtensiveDiscovery_Conf	NA	Microsoft SharePoint Discovery Configuration File	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
Windows	MSPS_SCH_CreateDatasource	NA	Used to create datasource for monitoring SharePoint.	Scheduled Task

SharePoint Collection Schedule

This Aspect contains the collection schedules for collector.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_SCH_HIGH	NA	This policy schedules task of high frequency for collecting the data for SharePoint server.	Scheduled Task
Microsoft SharePoint Server	MSPS_SCH_VERY_HIGH	NA	This policy schedules task of very high frequency for collecting the data for SharePoint server.	Scheduled Task

SharePoint Databases

This Aspect monitors the SharePoint databases.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_Message_Policy	NA	This policy intercepts SharePoint messages.	Open Message Interface
Microsoft SharePoint Server	MSPS_SCH_SharePoint_DB_Mon	NA	This policy monitors the SharePoint Server databases.	Scheduled Task

SharePoint Event Logs

This Aspect monitors the Windows event logs in the SharePoint Server.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_FwdApplicationError	NA	This policy handles error messages from all the SharePoint services.	Windows Event Log
Microsoft SharePoint Server	MSPS_SharePointServerEvents	NA	This policy forwards all application errors from various event sources of SharePoint Servers.	Windows Event Log

SharePoint Performance

This Aspect collects and logs SharePoint performance related data

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoi	MSPS_Active_Queue_Length	SharePointActiveQueueLength	This policy monitors	Measurement

CI Type	Policy Template	Indicator	Description	Policy Type
nt Server			the active queue length.	Threshold
Microsoft SharePoint Server	MSPS_Documents_Delayed_Retry	NA	This policy monitors the Documents Delayed Retry counter.	Measurement Threshold
Microsoft SharePoint Server	MSPS_HeartBeats	NA	This policy monitors the SharePoint Portal Server Gather Heartbeats counter.	Measurement Threshold
Microsoft SharePoint Server	MSPS_IndexerCatalogsNumofDocuments	NA	This policy monitors the increase in the number of documents indexed.	Measurement Threshold
Microsoft SharePoint Server	MSPS_Perf_Conf	NA	This policy maintains the schedule of SharePoint performance counters.	ConfigFile
Microsoft SharePoint Server	MSPS_Perf_Conf_2010	NA	This policy maintains the schedule	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
			of SharePoint performance counters for 2010.	

SharePoint Services

This Aspect monitors the state of SharePoint services.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_Services_Conf	NA	This policy maintains the schedule of Sharepoint service collection.	ConfigFile
Microsoft SharePoint Server	MSPS_Services_Conf_2010	NA	This policy maintains the schedule of Sharepoint service collection 2010.	ConfigFile
Microsoft SharePoint Server	MSPS_SharePointAdminServState	SharePointAdminStatus	This policy checks the status of the SharePoint Administration V4 service.	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_SharePointSearchHostCtrlServState	SharePointSearchHostCtrlStatus	This policy checks the status of the SharePoint Search Host Controller Service.	Measurement Threshold
Microsoft SharePoint Server	MSPS_SharePointSearchServState	NA	This policy checks the status of the SharePoint Search service.	Measurement Threshold
Microsoft SharePoint Server	MSPS_SharePointServerSearchServState	SharePointServerSearchStatus	This policy checks the status of the SharePoint Server Search service.	Measurement Threshold
Microsoft SharePoint Server	MSPS_SharePointTimerServState	SharePointTimerStatus	This policy checks the status of the SharePoint Timer service.	Measurement Threshold
Microsoft SharePoint Server	MSPS_SharePointTracingServState	NA	This policy checks the status of the SharePoint Tracing service.	Measurement Threshold
Microsoft SharePoint	MSPS_SharePointUserCodeHostServState	NA	This policy checks the status of	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
oint Server			the SharePoint User Code Host service.	

SharePoint Access Services

This Aspect monitors to check if the SharePoint Access services collects and logs AccessDataServices server related data.

CI Type	Policy Template	Indicator	Description	Policy Type
Micro soft Share Point Serve r	MSPS_ADSSqlWriteFailure	ADSSqlWriteFailure:Warning, ADSSqlWriteFailure:Normal	The policy monitors if Access Data services triggered too many SQL write failures.	Measur ement Thresh old
	MSPS_ AccessDataServiceOutMemor y_2013	NA	This policy monitors if Access Services server compute r is low on memory or is out of memory.	Windo ws Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
	MSPS_ AccessServiceMachineNoLongerAvailable_2010	NA	This policy monitors the Access Data Services that has the status as Machine No Longer Available.	Windows Event Log
	MSPS_ AccessDataServicesWFEtoADSCommFailure_2013	NA	This policy monitors that if communication with Access Data Services has failed repeatedly over a period.	Windows Event Log
	MSPS_ AccessDataServicesPerformance_Conf	NA	This policy monitors the Schedule of SharePoint performance counters.	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
	MSPS_ADSSqlRetrsMonitor	ADSSqlRetriesMonitor:Warning, ADSSqlRetriesMonitor:Normal	This policy monitors the number of attempts made by Access Services to connect SQL Server database.	Measurement Threshold
	MSPS_ AccessServiceFailContactAccessAppServer_2010	NA	This policy monitors the connectivity of the Access Data services using Access Application Server.	Windows Event Log
	MSPS_ AccessDataServicesNoServersAvlForCreate_2013	NA	This policy monitors the availability of SQL servers for creating databases.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
	MSPS_ AccessDataServiceConfDBAccessFailed_2013	NA	This policy monitors connectivity between Access data services and SharePoint configuration database.	Windows Event Log
	MSPS_ADSSqlWriteMonitor	ADSSqlWriteMonitor:Warning, ADSSqlWriteMonitor:Normal	This policy monitors whether the average number of write failures compared to total write attempts is too high for Access Data Services.	Measurement Threshold
	MSPS_ AccessServiceMachineNotAvailable_2010	NA	This policy monitors the availability of server hosting	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Access Data services.	
	MSPS_ AccessDataServicesCannotCreateSessionCache_2013	NA	This policy monitors the Access Services back-end server computer which is failed to create a session for caching query results.	Windows Event Log
	MSPS_ AccessDataServicesTemplateFileError_2010	NA	This policy monitors if an Access template file is missing, the template file is not valid or there is an error reading it from the hard disk.	Windows Event Log
	MSPS_ AccessServiceMachineNotAvai	NA	This	Windows

CI Type	Policy Template	Indicator	Description	Policy Type
	lable_2013		policy monitors the availability of server hosting Access Data services.	Event Log
	MSPS_AccessDataServices_2013_Conf	NA	This policy monitors the information about the Access Data Service Performance Counter.	ConfigFile
	MSPS_ADSFailSqlConnReqst	ADSFailSqlConnectionRequest: Warning, ADSFailSqlConnectionRequest:Normal	The policy monitors if Access Data services exceeds the expected number of retries when trying to connect to the SQL Server	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			database.	
	MSPS_ AccessDataServiceConfDBAccessFailed_2010	NA	This policy monitors connectivity between Access data services and SharePoint configuration database.	Windows Event Log
	MSPS_ AccessDataServiceADSServers	AccessDataServicesNoAvailableADSServers:Major, AccessDataServicesNoAvailableADSServers:Normal, AccessDataServicesNoAvailableADSServers:Warning	This policy monitors the availability of Access Data Services (ADS) servers.	Measurement Threshold
	MSPS_ AccessServiceFailContactAccessAppServer_2013	NA	This policy monitors the connectivity of the Access Data services using Access Application	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Server.	
	MSPS_ AccessDataServiceOutMemory_2010	NA	This policy monitors if Access Services server is low on memory or is out of memory.	Windows Event Log
	MSPS_ AccessDataServicesFailedToRegisterDBServer_2013	NA	This policy monitors whether Access Data Services failed to register database server.	Windows Event Log
	MSPS_ AccessServiceMachineNoLongerAvailable_2013	NA	This policy monitors the Access Data Services that has the status as <i>Machine No Longer Available</i> .	Windows Event Log
	MSPS_ADSSqlConnRetries	ADSSqlConnectionRetries:Warning,	The	Measurement

CI Type	Policy Template	Indicator	Description	Policy Type
		ADSSqlConnectionRetries:Normal	policy monitors if Access Data services exceeds the expected number of retries when trying to connect application SQL database.	Threshold
	MSPS_AccessDataServicesCannotCreateSessionCache_2010	NA	This policy monitors the Access Services back-end server computer which failed to create a session for caching query results.	Windows Event Log

SharePoint Admin Search Services

This aspect monitors the SharePoint Admin Search services.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_RepositoryInstallationFailed_2013	NA	This policy monitors the repository installation failure for the file indicated. When dictionary installation fails for the primary, users should be aware that linguistic features such as query suggestions might get outdated.	Windows Event Log
Microsoft SharePoint Server	MSPS_RepositoryInitializationFailed_2013	NA	This policy monitors the Repository Initialization Failure when the repository was initializing on host controller startup.	Windows Event Log

SharePoint Content Processing

This Aspect monitors SharePoint Content Processing and Document Parsing Service.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_EntContentManagementDeploymentFailed_2010	NA	This policy monitors the failure of Enterprise Content Management deployment.	Windows Event Log
Microsoft SharePoint Server	MSPS_EntContentManagementDeploymentFailed_2013	NA	This policy monitors the failure of Enterprise Content Management deployment.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_DocParsingparserServerFailedToRestart_2013	NA	This policy monitors if the parser server worker inside parser server pool failed to restart.	Windows Event Log
Microsoft SharePoint Server	MSPS_EntContentManagementDiskBasedCacheIsMisconfigured_2013	NA	This policy monitors the failure of Disk-based cache configuration.	Windows Event Log
Microsoft SharePoint Server	MSPS_DocParsingNoMoreParserServerWorkers_2013	NA	This policy monitors if all parser workers cannot restart and parser server pool has no more workers available.	Windows Event Log
Microsoft SharePoint Server	MSPS_ContentProcSpellDictionarySizeLimitExceeded_2013	NA	This policy monitors the Content Processing which has exceeded its size limit for querying the spelling correction dictionary.	Windows Event Log
Microsoft	MSPS_	NA	This policy	Windows

CI Type	Policy Template	Indicator	Description	Policy Type
SharePoint Server	EntContentManagementDiskBasedCacheIsMisconfigured_2010		monitors the failure of Disk-based cache configuration.	Windows Event Log
Microsoft SharePoint Server	MSPS_QueueClassificationOrSpellDictCloseSizeLimit_2013	NA	This policy monitors size limit for query classification dictionary and query spelling correction dictionary.	Windows Event Log
Microsoft SharePoint Server	MSPS_ContentProcSizeLimit_2013	NA	This policy monitors size limit for querying the spelling correction dictionary.	Windows Event Log

SharePoint Crawl Component

This Aspect monitors Windows events raised by SharePoint Crawl components used in SharePoint search for Search gatherer host availability.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_CrawlerSearchGathererHostUnavailable_2013	NA	This policy monitors the availability of the search gatherer host service for 2013.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_CrawlerSearchGathererHostUnavailable_2010	NA	This policy monitors the availability of the search gatherer host service for 2010.	Windows Event Log

SharePoint Education Services

This Aspect monitors the SharePoint Education Services and collects and logs Education services related data.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_EducationServicesUnexpectedDataAccessLayerError_2013	NA	This policy monitors the unexpected data access layer error while trying to process a data access layer request.	Windows Event Log
Microsoft SharePoint Server	MSPS_EducationService_2013_Conf	NA	This policy monitors the information about the Education Service performance counter.	ConfigFile
Microsoft SharePoint Server	MSPS_EduServiceOutOfMemory_2013	NA	This policy monitors SharePoint	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Education services out of memory status while processing the request.	
Microsoft SharePoint Server	MSPS_EducationServicesErrorLoadingConfigSettings_2013	NA	This policy monitors the error while loading configuration settings from the SharePoint configuration database.	Windows Event Log

SharePoint Enterprise Content Management

This Aspect collects and logs the SharePoint disk-based cache related data.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_ECMDiskBasedCache_2013_Conf	NA	This policy monitors the information about the ECM disk based cache performance counter for	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
			SharePoint 2013.	
Microsoft SharePoint Server	MSPS_ECMDiskBasedCache_2010_Conf	NA	This policy monitors the information about the ECM disk based cache performance counter for SharePoint 2010.	ConfigFile
Microsoft SharePoint Server	MSPS_ECMDiskBaseCacheFlush	ECMDiskBaseCacheFlush:Warning, ECMDiskBaseCacheFlush:Normal	This policy monitors whether the Blob cache flushes or second performance counter threshold has been exceeded.	Measurement Threshold
Microsoft SharePoint Server	MSPS_ECMDiskBaseCacheComp	ECMDiskBaseCacheCompactions: Warning, ECMDiskBaseCacheCompactions: Normal	This policy monitors whether the total number of cache compacti ons performance counter threshold has been	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			exceeded.	
Microsoft SharePoint Server	MSPS_ECMDiskBaseCacheBlob	ECMDiskBaseCacheBlob:Warning, ECMDiskBaseCacheBlob:Normal, ECMDiskBaseCacheBlob:Critical	This policy monitors whether the Blob Cache fill ratio performance counter threshold has been exceeded.	Measurement Threshold

SharePoint Excel Calculation Services

This Aspect monitors Windows event raised by SharePoint Excel Calculation Services for service and components availability.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_ExcelCalcServiceNoLongerAvailable_2010	NA	This policy monitors the availability of the Excel Calculation Services server.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServiceNotRunLocally_2013	NA	This policy monitors if Excel services are running on the web front end.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesConfigDBAccessFailed_2010	NA	This policy monitors the Excel Calculation	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Services that failed to access Configuration Database.	
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesErrorCommunicatingMachine_2010	NA	This policy monitors the communication error while collecting data when the front-end Web server attempts to establish a connection to a specific Excel Calculation Services machine.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesMemoryAllocationFailed_2013	NA	This policy monitors the Excel Calculation Services that has the status as Memory Allocation Failed.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServiceTemplateFileMissing_2010	NA	This policy monitors the availability of the template file used to create new workbooks by Excel Calculation Service.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesConfigDBAccessFailed_2013	NA	This policy monitors the Excel Calculation Services that failed to access Configuration Database.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServiceTemplateFileMissing_2013	NA	This policy monitors the availability the template file used to create new workbook by Excel Calculation Service.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServMaxMemConfForExcCalcServExceeded_2013	NA	This policy monitors the maximum memory configured for Excel Calculation Services has been exceeded.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesInternalError_2010	NA	This policy monitors that internal error has occurred on the back end Excel Calculation Services application server.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesErrorCommunicatingMachine_2013	NA	This policy monitors the	Windows Event

CI Type	Policy Template	Indicator	Description	Policy Type
			communication error while collecting data when the front-end Web server attempts to establish a connection to a specific Excel Calculation Services machine.	Log
Microsoft SharePoint Server	MSPS_ExcelCalcServWorkbookDiskCacheCannotBeCreated_2013	NA	This policy monitors the Excel Calculation Services that has the status as <i>Workbook Disk Cache Cannot Be Created</i> .	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServWorkbookDiskCacheCannotBeCreated_2010	NA	This policy monitors the Excel Calculation Services that has the status as <i>Workbook Disk Cache Cannot Be Created</i> .	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServiceNoLongerAvailable_2013	NA	This policy monitors the availability of the Excel Calculation Services server.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_ExcelCalcServiceDiskCacheFull_2010	NA	This policy monitors if the workbook disk cache used by Excel Calculation Service to store workbooks is full.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesInternalError_2013	NA	This policy monitors that internal error has occurred on the back end Excel Calculation Services application server.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServMaxMemConfForExcCalcServExceeded_2010	NA	This policy monitors if the maximum memory configured for Excel Calculation Services has been exceeded.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalculationServicesMemoryAllocationFailed_2010	NA	This policy monitors if the Excel Calculation Services has the status <i>Memory Allocation Failed</i> .	Windows Event Log
Microsoft	MSPS_ExcelCalcServiceNotRunLocally_2010	NA	This policy	Windows

CI Type	Policy Template	Indicator	Description	Policy Type
SharePoint Server			monitors if Excel services are running on the web front end.	Windows Event Log
Microsoft SharePoint Server	MSPS_ExcelCalcServiceDiskCacheFull_2013	NA	This policy monitors if the workbook disk cache used by Excel Calculation Service to store workbooks is full.	Windows Event Log

SharePoint Index System

This Aspect monitors SharePoint Index system used in SharePoint Search.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_IndexJournalIOExceptionRead_2013	NA	This policy monitors the reading of Journal file. If the policy is not able to read the Journal file then this is a potential problem with recovery or replication and indexing is stopped.	Windows Event Log
Microsoft SharePoint Server	MSPS_IndexLostGenerations_2013	NA	This policy monitors whether the data acknowledged on an indexed system is permanently lost. The documents that are potentially lost on the index system are indicated with the given generations.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_IndexBlocked_2013	NA	This policy monitors the Index for blocked Information flow from content processor to index.	Windows Event Log
Microsoft SharePoint Server	MSPS_IndexLookupMissingPartition_2013	NA	This policy monitors the Index Lookup for missing partitions on the indicated index Lookup system.	Windows Event Log
Microsoft SharePoint Server	MSPS_IndexJournalIOExceptionWrite_2013	NA	This policy monitors the writing to the Journal file. If the policy is unable to write to the Journal file then this indicates a potential problem with recovery or replication and indexing is stopped.	Windows Event Log
Microsoft SharePoint Server	MSPS_IndexMissingPartition_2013	NA	This policy monitors the Index for missing partitions on the indicated index system.	Windows Event Log

SharePoint Infopath Forms Services

This Aspect monitors Windows events raised by SharePoint InfoPath Forms Service for templates and postback related actions.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_InfopathFrmSrvMaxAllowableNumPostbacksExceeded_2013	NA	This policy monitors whether the InfoPath Forms Services for user has exceeded the maximum number of postbacks allowed per session.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_InfopathFrmSrvMaxNumActionsPerPostbackExceeded_2013	NA	This policy monitors whether the InfoPath Forms Services for user has exceeded the threshold for the number of form actions allowed per postback.	Windows Event Log
Microsoft SharePoint Server	MSPS_InfopathFormsServicesCannotLoadifsFileName.xml_2013	NA	This policy monitors whether the InfoPath Forms Services can open the ifsFileNames.xml 2013 file.	Windows Event Log
Microsoft SharePoint Server	MSPS_InfopathFrmSrvMaxAllowableNumPostbacksExceeded_2010	NA	This policy monitors whether the InfoPath Forms Services for user has exceeded the maximum number of postbacks allowed per session for SharePoint 2010.	Windows Event Log
Microsoft SharePoint Server	MSPS_InfopathFrmSrvFormTemplnMemCacheReloadFreq_2010	NA	This policy monitors whether the InfoPath Forms Services in memory cache are reloaded frequently for SharePoint	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			2010. This indicates high pressure on memory and delayed performance.	
Microsoft SharePoint Server	MSPS_InfopathFrmSrvFormTemplnMemCacheReloadedFreq_2013	NA	This policy monitors whether the InfoPath Forms Services in memory cache are reloaded frequently for SharePoint 2013. This indicates high pressure on memory and delayed performance.	Windows Event Log
Microsoft SharePoint Server	MSPS_InfoPathFrmSrvMaxNumActionsPerPostBackExceeded_2010	NA	This policy monitors whether the InfoPath Forms Services for a user has exceeded the threshold for the number of form actions allowed per postback.	Windows Event Log
Microsoft SharePoint Server	MSPS_InfoPathFormsServicesCannotLoadifsFileName.xml_2010	NA	This policy monitors whether the InfoPath Forms Services can open the ifsFileNames.xml 2010 file.	Windows Event Log

SharePoint Logical Services

This Aspect monitors the logical services in SharePoint server.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_TranslationServiceState	TranslationServiceState:Major, TranslationServiceState:Normal	This policy monitors the availability of Machine Translation services.	Measurement Threshold
Microsoft SharePoint Server	MSPS_EnterManagedMetadataServiceState	EnterpriseManagedMetadataWebServiceAvailability:Major, EnterpriseManagedMetadataWebServiceAvailability:Normal	This policy monitors the availability of enterprise managed metadata service.	Measurement Threshold
Microsoft SharePoint Server	MSPS_PerformancePointServiceState	PerformancePointServiceState:Major, PerformancePointServiceState:Normal	This policy monitors the availability of PerformancePoint Service.	Measurement Threshold
Microsoft SharePoint Server	MSPS_SecureStoreServiceState	SecureStoreServiceState:Major, SecureStoreServiceState:Normal	This policy monitors the availability of Secure store services. Secure Store Service is a shared	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			service that provides storage and mapping of credentials such as account names and passwords.	
Microsoft Share Point Server	MSPS_DocConvLauncherState	DocumentConversionLauncherServiceAvailability:Major, DocumentConversionLauncherServiceAvailability:Normal	This policy monitors the availability of the document conversion launcher service.	Measurement Threshold
Microsoft Share Point Server	MSPS_ExcelCalculationServiceState	ExcelCalculationServiceState:Major, ExcelCalculationServiceState:Normal	This policy monitors the availability of Excel calculation services.	Measurement Threshold
Microsoft Share Point Server	MSPS_DocConvLoadBalancerState	DocumentConversionLoadBalancerAvailability:Major, DocumentConversionLoadBalancerAvailability:Normal	This policy monitors the availability of the document conversion load balancer service.	Measurement Threshold
Microsoft Share Point	MSPS_ProfSyncServiceState	ProfileSynchronizationServiceAvailability:Major, ProfileSynchronizationServiceAvailability:Normal	This policy monitors the availability	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
Server			of Profile Synchronization Service.	

SharePoint Performance Point Services

This Aspect monitors Windows event raised by SharePoint Performance Point Service for database availability.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_PerformancePointDBNotReachable_2010	NA	This policy monitors whether the PerformancePoint Services is running.	Windows Event Log
Microsoft SharePoint Server	MSPS_PerformancePointDBNotReachable_2013	NA	This policy monitors whether the PerformancePoint Services is running.	Windows Event Log

SharePoint Profile Service

This Aspect monitors the SharePoint Profile service.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_UserProfileServiceSynchSchedulerFailed_2010	NA	This policy monitors the failure of Sync Scheduler for sync between	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Microsoft SharePoint Foundation and Server User Profile service.	
Microsoft SharePoint Server	MSPS_UserProfileServiceSynchSchedulerFailed_2013	NA	This policy monitors the failure of Sync Scheduler for sync between Microsoft SharePoint Foundation and Server User Profile service.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProfileSynchronizationServiceUnexpectedFailures_2010	NA	This policy monitors the Profile Synchronization Service Unexpected failure.	Windows Event Log
Micro	MSPS_ProfileSyncConfigServices_	NA	This	Config File

CI Type	Policy Template	Indicator	Description	Policy Type
soft SharePoint Server	2010_Conf		policy monitors the Schedule of SharePoint Service Collection	
Micro soft SharePoint Server	MSPS_ ProfSyncConfServiceState	ProfileSynchronizationConfiguration ServiceAvailability:Major, ProfileSynchronizationConfiguration ServiceAvailability:Normal	This policy monitors the availability of Profile Synchronization Configuration Service.	Measurement Threshold
Micro soft SharePoint Server	MSPS_ ProfileSynchronizationService UnexpectedFailures_2013	NA	This policy monitors the Profile Synchronization Service Unexpected Failure.	Windows Event Log
Micro soft SharePoint Server	MSPS_ ProfileSynchronizationExecutionFailures_2010	NA	This policy monitors the failure of synchronizing data between	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			SharePoint Server and the directory.	
Microsoft SharePoint Server	MSPS_ProfileSynchronizationExecutionFailures_2013	NA	This policy monitors the failure of synchronizing data between SharePoint Server and the directory.	Windows Event Log
Microsoft SharePoint Server	MSPS_UserProfileServiceAudienceCompilationFailed_2010	NA	This policy monitors the User Profile Service Audience Compilation Failure.	Windows Event Log
Microsoft SharePoint Server	MSPS_UserProfileServiceAudienceCompilationFailed_2013	NA	This policy monitors the User Profile Service Audience Compilation Failure.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_ProfileSyncConfigServices_Conf	NA	This policy monitors the schedule of SharePoint Service Collection	Config File
Microsoft SharePoint Server	MSPS_UserProfileServiceTimerJobFailed_2010	NA	This policy monitors the User Profile Service Timer Job failure.	Windows Event Log
Microsoft SharePoint Server	MSPS_UserProfileServiceTimerJobFailed_2013	NA	This policy monitors the User Profile Service Timer Job failure.	Windows Event Log

SharePoint Project Server

This Aspect monitors SharePoint Project Server Services and collects and logs Project Server Queue related data.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_ProjCubeBuildServiceAnalysisServiceLockTimeOut_2010	NA	This policy monitors	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			whether the Project Cube Build Service Analysis Services Server Lock has timed out.	
Microsoft SharePoint Server	MSPS_ProjGeneralDataAccessLayerErrConnectingToDB_2013	NA	This policy monitors the Project General Data Access Layer error while connecting to one of the four Project Server databases.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectActiveDirectoryConnectionFailed_2010	NA	This policy monitors the Project Active Directory connection failures.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjCubeBuildServiceAnalysisServiceConnection failure_2010	NA	This policy monitors the connection failure on the server for the Project Cube Build Service Analysis Services.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectQueuePerformance_2010_Conf	NA	This policy monitors the information about the Project Queue performance	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
			counter.	
Microsoft SharePoint Server	MSPS_ProjectCubeBuildServiceAttemptToOverwriteFailed_2013	NA	This policy monitors whether the Cube Build Service failed to build an Analysis Services database because database with same name already exists.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectWorkspaceUserSynchFailed_2010	NA	This policy monitors the synchronization failure of users between the Project Server and the Project Workspace.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjCubeBuildServiceAnalysisServiceLockTimeout_2013	NA	This policy monitors whether the Project Cube Build Service Analysis Services Server Lock has timed out.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjGeneralDataAccessLayerErrConnectingToDB_2010	NA	This policy monitors the Project General Data Access Layer error while connecting to	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			one of the four Project Server databases.	
Microsoft SharePoint Server	MSPS_ProjCubeBuildServiceAnalysisServiceConnection_failure_2013	NA	This policy monitors Connection Failure on the server for the Project Cube Build Service Analysis Services.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectNotificationXSLTTransformationError_2010	NA	This policy monitors whether XSL used to transform XML data in the body of a notification e-mail has failed.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectQueuePerformance_2013_Conf	NA	This policy monitors the information about the Project Queue performance counter.	ConfigFile
Microsoft SharePoint Server	MSPS_ProjectActiveDirectoryConnectionFailed_2013	NA	This policy monitors the Project Active Directory connection failures.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectReportingServerSideEventHasFailed_2010	NA	This policy monitors the Project	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Reporting Server Side Event Failure.	
Microsoft SharePoint Server	MSPS_ProjectGeneralDALErrorWhileGettingConnections_2013	NA	This policy monitors the Project General Data Access Layer Error while getting information from the configuration database of the SharePoint Foundation farm.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectReportingServerSideEventHasFailed_2013	NA	This policy monitors the Project Reporting Server Side Event Failure.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectCubeBuildServiceOLAPProcessingFailure_2010	NA	This policy monitors the Analysis Services server that failed to process the cube after the cube structures are built.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectCubeBuildServiceAttemptToOverwriteFailed_2010	NA	This policy monitors whether Cube Build	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Service failed to build an Analysis Services database because database with same name already exist.	
Microsoft SharePoint Server	MSPS_ProjectNotificationXSLTTransformationError_2013	NA	This policy monitors whether XSL used to transform XML data in the body of a notification e-mail has failed.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectWorkspaceUserSynchFailed_2013	NA	This policy monitors the synchronization failure of users from Project Server to the Project Workspace.	Windows Event Log
Microsoft SharePoint Server	MSPS_ProjectCubeBuildServiceOLAPProcessingFailure_2013	NA	This policy monitors the Analysis Services server that failed to process the cube after the cube structures are built.	Windows Event Log
Microsoft SharePoint	MSPS_ProjectGeneralIDALErrorWhileGettingConnectionString	NA	This policy	Windows Event

CI Type	Policy Template	Indicator	Description	Policy Type
nt Server	s_2010		monitors the Project General Data Access Layer Error while getting information from the configuration database of the SharePoint Foundation farm.	Log

SharePoint Query Processing Component

This Aspect monitors SharePoint Query Processing Component which includes search query parsing, processing and index lookup.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_QueryProcQueryParsingSchemaServiceAvailable_2013	NA	This policy monitors the availability of the Query Parsing schema service.	Windows Event Log
Microsoft SharePoint Server	MSPS_QueryServiceAvailQueryProc_2013	NA	This policy monitors the availability of query processing component used by SharePoint	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			search.	
Microsoft SharePoint Server	MSPS_FallbackWordBreakerDidNotLoad_2013	NA	This policy monitors the word breaker service that could not load the fallback word breaker, for the indicated word breaker language.	Windows Event Log
Microsoft SharePoint Server	MSPS_IndexLookupSchemeServiceAvailQueryProc_2013	NA	This policy monitors the availability of Index Lookup schema service.	Windows Event Log
Microsoft SharePoint Server	MSPS_QueryProcQueryParsingScopeCacheAvailable_2013	NA	This policy monitors the availability of Query Processing: Search service application availability.	Windows Event Log
Microsoft SharePoint Server	MSPS_QueryProcessingCompoAvailQueryProc_2013	NA	This policy monitors the availability of query processing component.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_QueryServiceStartServiceAvailQueryProc_2013	NA	This policy monitors the availability of Query Processing Start Service.	Windows Event Log
Microsoft SharePoint Server	MSPS_SchemaReaderSchemaServiceAvailQueryProc_2013	NA	This policy monitors the availability of the schema service.	Windows Event Log
Microsoft SharePoint Server	MSPS_QueryProcQueryNormalizationSchemaServiceAvailable_2013	NA	This policy monitors the availability of query normalization schema service.	Windows Event Log
Microsoft SharePoint Server	MSPS_QueryOrContentProcessingFlowFailedToStart_2013	NA	This policy monitors if query or content processing flow failed to start due to unavailability of search components or index not available.	Windows Event Log

SharePoint Search Analytics Analysis

This Aspect monitors SharePoint Search usage analytics for connectivity with event store,

connectivity with search service application and connectivity with analysis engine. This also monitors status of usage analytics analysis, started or failed.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_SearchUsageAnalyticsAnalysisFailedToStart_2013	NA	This policy monitors if search usage analysis failed to start or failed during execution.	Windows Event Log
Microsoft SharePoint Server	MSPS_SearchUsageAnalyticsUsageAnalyticsAPENotAvailable_2013	NA	This policy monitors the availability of Search service application or Analysis engine service required for search usage analytics.	Windows Event Log
Microsoft SharePoint Server	MSPS_AnalyticsAnalysisFailToStartWarningSearchAnalytics_2013	NA	This policy monitors the search usage analytics which is unable to start.	Windows Event Log
Microsoft SharePoint Server	MSPS_SearchUsageAnalyticsStoreNotAvailable_2013	NA	This policy monitors the availability of Search Usage Analytics Store.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_AnalyticsAnalysisFailedToStartSearchAnalytics_2013	NA	This policy monitors the search analytics analysis service which failed to start.	Windows Event Log
Microsoft SharePoint Server	MSPS_SearchUsageAnalytics_2013	NA	This policy monitors the availability of Search service application or if search usage analysis failed to start or failed during execution.	Windows Event Log

SharePoint Secure Store Service

This aspect monitors the SharePoint Secure Store Service.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_SecureStoreServiceCredentialEncryptionFailed_2010	NA	This policy monitors the Secure Store Service credential encryption process failure.	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_SecureStoreServiceCredentialEncryptionFailed_2013	NA	This policy monitors the Secure Store Service credential encryption process failure.	Windows Event Log
Microsoft SharePoint Server	MSPS_SecureStoreServiceMasterKeyStatus_2013	NA	This policy monitors if Secure Store Service application master encryption key was not found.	Windows Event Log
Microsoft SharePoint Server	MSPS_SecureStoreServiceMasterKeyStatus_2010	NA	This policy monitors if Secure Store Service application master encryption key was not found.	Windows Event Log

SharePoint Translation Services

This Aspect monitors Windows events raised by SharePoint Translation Service for content and Queue database availability.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_TranslationServiceQueueDBNotAccessible_2013	NA	This policy monitors	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			accessibility of the Machine Translation service queue database.	
Microsoft SharePoint Server	MSPS_TranslationServiceContentNotAccessible_2013	NA	This policy monitors the accessibility of the Translation Service content.	Windows Event Log
Microsoft SharePoint Server	MSPS_TranslationServiceTimerJobFailure_2013	NA	This policy monitors the Translation Service Timer Job failure.	Windows Event Log
Microsoft SharePoint Server	MSPS_TranslationServiceWorkerFailure_2013	NA	This policy monitors the Machine Translation Service worker processes failure.	Windows Event Log

SharePoint Visio Graphics Services

This Aspect monitors Windows events raised by SharePoint Visio Graphics Service for connectivity with configuration manager and application server.

CI Type	Policy Template	Indicator	Description	Policy Type
Microsoft SharePoint Server	MSPS_VisioGraphicNotConnectToAppServerReturnByAppProxy_2013	NA	This policy monitors whether the Visio Graphic Service is able to	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			connect to the SharePoint application server event returned by the proxy application.	
Microsoft SharePoint Server	MSPS_VisioGraphicConnectConfManager_2013	NA	This policy monitors whether the Visio Graphic Service can connect to the SharePoint Configuration Manager 2013.	Windows Event Log
Microsoft SharePoint Server	MSPS_VisioGraphicNotConnectToAppServerReturnByAppProxy_2010	NA	This policy monitors whether the Visio Graphic Service is able to connect to the SharePoint application server event returned by the proxy application.	Windows Event Log
Microsoft SharePoint Server	MSPS_VisioGraphicConnectConfManager_2010	NA	This policy monitors if Visio Graphic	Windows Event Log

CI Type	Policy Template	Indicator	Description	Policy Type
			Service can connect to the SharePoint Configuration Manager 2010.	

Policy Template Groups

All the Microsoft SharePoint Server policy templates are available under the **MP for Microsoft SharePoint Server** template group.

How to View Policy Template Groups

1. Open the Policy Template Groups pane:
On BSM 9.2x, click **Admin > Operations Management > Monitoring > Policy Templates**.
On OMi 10.x, click **Administration > Monitoring > Policy Templates**.
2. In the Policy Template Groups pane, expand **Template Groups** and click the **MP for Microsoft SharePoint Server**.

Microsoft SharePoint Policy Templates

Following is the list of policy templates of OMi MP for Microsoft SharePoint Server.

Template Category	Policy Template
ConfigFile	MSPS_CollectionDefinition_2010
	MSPS_CollectionDefinition_2013
	MSPS_ExtensiveDiscovery_Conf
	MSPS_Perf_Conf
	MSPS_Perf_Conf_2010
	MSPS_Services_Conf
	MSPS_Services_Conf_2010
Measurement Threshold	MSPS_Documents_Delayed_Retry
	MSPS_IndexerCatalogsNumofDocuments
	MSPS_HeartBeats
	MSPS_Active_Queue_Length
	MSPS_SharePointAdminServState
	MSPS_SharePointSearchHostCntrlServState
	MSPS_SharePointSearchServState
	MSPS_SharePointServerEvents
Measurement Threshold	MSPS_SharePointServerSearchServState
	MSPS_SharePointTimerServState
	MSPS_SharePointTracingServState
	MSPS_SharePointUserCodeHostServState
Open Message Interface	MSPS_Message_Policy

Template Category	Policy Template
Scheduled Task	MSPS_SCH_CreateDatasource
	MSPS_SCH_HIGH
	MSPS_SCH_Logical_SVC_Mon
	MSPS_SCH_SharePoint_DB_Mon
	MSPS_SCH_VERY_HIGH
Service Auto-Discovery	MSPS_Discovery
	MSPS_ExtensiveDiscovery
Windows Event Log	MSPS_FwdApplicationWarning
	MSPS_FwdApplicationError

Parameters

Parameters are variables that are an integral component of Microsoft SharePoint Server Aspects, and Policy Templates. Each parameter corresponds to a variable. Parameters contain default values that are used for monitoring the different components of Microsoft SharePoint Servers. You can also modify the values of the variables to suit your monitoring requirements.

Types of Parameters

The parameters are grouped as follows:

- **Instance Parameters** - These parameters are essential for monitoring CIs.
For example, Server CI name is an Instance Parameter.
- **Mandatory Parameters** - These parameters contain the essential information required by policy templates.
For example, password is a mandatory parameter.
- **Dependent Parameters** - There are some parameters which are a subset of the mandatory parameters. Such parameters are referred to as dependent parameters.
For example, Frequency and Threshold are dependent parameters of Instance Name.
- **Expert Parameters** - These parameters can be used by SMEs and Administrators.

Microsoft SharePoint Server Parameters

OMi MP for Microsoft SharePoint Server contains the following parameters:

Parameter	Parameter Type	Description	Default Values
SharePoint Instance Name	Instance	SharePoint Instance Name that must be monitored.	CI Name
SharePoint Username	Dependent/Mandatory	SharePoint Server User Name with the required privileges to collect data.	NA
SharePoint Password	Dependent/Mandatory	Password for SharePoint Server User Name.	
Frequency of Very High Scheduler	Expert	Frequency for the scheduler which is expected to run for very high intervals (in minutes).	5
Frequency of High Scheduler	Expert	Frequency for the scheduler which is expected to run for high intervals (in minutes).	15
Frequency	Dependent	<p>Frequency of monitoring by a Policy Template. For example, the frequency of monitoring SharePoint Server availability.</p> <p>Note: When the value of the Frequency parameter is set to NORUN, that particular Policy Template, or Aspect will not be monitored until the frequency is changed to one of the scheduler value.</p>	

Parameter	Parameter Type	Description	Default Values
Threshold	Dependent	Threshold of a policy template. For example, the threshold of monitoring available database nodes.	
Severity	Dependent	Severity level of a policy template. For example, the severity of monitoring critical database nodes count.	



Tuning of Parameters

You can edit the parameters of the SharePoint Server Aspects that are already deployed to the CIs. To edit the parameters, follow these steps:

1. Open the Assignments & Tuning pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Assignments & Tuning**.

On OMi 10.x, click **Administration > Monitoring > Assignment & Tuning**.

2. In the **Browse Views** tab, select the **SharePoint_Topology** View that contains the CI for which you want to tune parameters. Alternatively, you can use the **Search** tab to find a CI.
3. In the list of SharePoint Server CIs, select a CI. The Assignments pane shows details of any existing Aspect's assignments for the SharePoint Server CI.
4. You can modify the default parameter values by following one of the methods:
 - In the Assignments pane:
 - i. Select the Aspect for which you want to tune the parameters and then click . The Tune Assignment pane shows the current parameter values.
 - ii. Select the parameter you want to tune and click . The Edit Parameters dialog box opens.
 - In the Assignment Details pane:
 - i. Double-click a parameter in the list. The Edit Parameter dialog box opens.
5. Change the value and then click **OK**. The new parameter values are deployed to the relevant CIs.

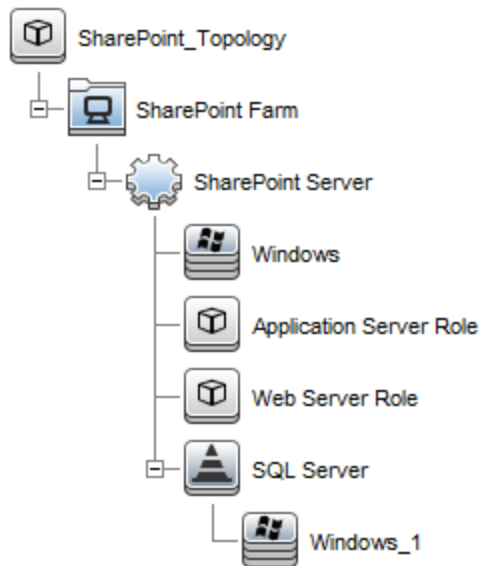
Configuration Item and Configuration Item Types

Configuration Item (CIs) are components that have to be managed to deliver an IT Service. CIs typically include IT Services, hardware, and software. Configuration Item Types (CITs) describes the type of a CI and its attributes. The SharePoint Server CIs that are discovered in an environment are grouped together under the CITs.

The OMi MP for Microsoft SharePoint Server consists the following CITs:

- SharePoint Farm
- Microsoft SharePoint Server
- Application Server Role
- Web Server Role
- SQL Server
- Computer

The following image shows the hierarchy of the CITs.



Health Indicators

Health Indicators (HIs) analyze the events that occur in Microsoft SharePoint Server CIs and report the health of the Microsoft SharePoint Server CIs. The OMi MP for Microsoft SharePoint Server includes the following HIs to monitor the Microsoft SharePoint Server-related events:

How to Access Health Indicators

1. Open the Indicators pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Indicators**.

On OMi 10.x, click **Administration > Service Health > CI Status Calculation > Health- and Event Type Indicators**.

2. In the CI Type pane, click **InfrastructureElement > RunningSoftware > Microsoft SharePoint Server**.

CI Type	HI	Description	Value/Severity
Microsoft SharePoint Server	SharePoint Active Queue Length	Indicates the number of items in SharePoint Active Queue	Normal/NORMAL, High/MAJOR
Microsoft SharePoint Server	SharePoint Admin Status	Indicates the status of SharePoint Admin Service	Up/NORMAL, Down/CRITICAL
Microsoft SharePoint Server	PerformancePoint Service	Indicates the status of PerformancePoint Service	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	Document Conversion Load Balancer Service	Indicates the status of Document Conversion Load Balancer Service	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	Excel Calculation Service	Indicates the status of Excel Calculation Service.	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	Enterprise Managed Metadata Web Service	Indicates the status of Enterprise Managed Metadata Web Service.	Up/NORMAL, Down/MAJOR

CI Type	HI	Description	Value/Severity
Microsoft SharePoint Server	Secure Store Service	Indicates the status of Secure Store Service.	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	Profile Synchronization Configuration Service	Indicates the status of Profile Synchronization Configuration Service.	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	Document Conversion Launcher Service	Indicates the status of Document Conversion Launcher Service.	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	Profile Synchronization Service	Indicates the status of Profile Synchronization Service.	Up/NORMAL, Critical/CRITICAL
Microsoft SharePoint Server	Translation Service	Indicates the status of Translation Service.	Up/NORMAL, Down/MAJOR

Event Type Indicators

Event Type Indicators (ETIs) are categorization of events based on the type of occurrence. The OMi MP for Microsoft SharePoint Server includes the following ETIs to monitor Microsoft SharePoint Server-related events:

How to Access Event Type Indicators

1. Open the Indicators pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Indicators**.

On OMi 10.x, click **Administration > Service Health > CI Status Calculation > Health- and Event Type Indicators**.

2. In the CI Type pane, click **InfrastructureElement > RunningSoftware > Microsoft SharePoint Server**.

CI Type	ETI	Description	Value/Severity
Microsoft	SharePoint Search	Indicates the status of SharePoint	Up/NORMAL,

CI Type	ETI	Description	Value/Severity
SharePoint Server	Host Control Status	search host control service	Down/MAJOR
Microsoft SharePoint Server	SharePoint Timer Status	Indicates the status of SharePoint timer service	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	SharePoint Server Search Status	Indicates the status of SharePoint server service	Up/NORMAL, Down/MAJOR
Microsoft SharePoint Server	ECM Disk Base Cache Flush	Indicates the performance of the ECM Disk Base Cache Flush.	Normal/NORMAL, Warning/WARNING
Microsoft SharePoint Server	Access Data Service SQL Write Monitor	Indicates the status of the Access Data Service SQL Write Monitor.	Normal/NORMAL, Warning/WARNING
Microsoft SharePoint Server	Access Data Service SQL Retries Monitor	Indicates the status of the Access Data Service SQL Retries Monitor.	Normal/NORMAL, Warning/WARNING
Microsoft SharePoint Server	ECM Disk Base Cache Blob	Indicates the performance of the ECM Disk Base Cache Blob.	Normal/NORMAL, Warning/WARNING, Critical/CRITICAL
Microsoft SharePoint Server	ECM Disk Base Cache Compactions	Indicates the performance of the ECM Disk Base Cache Compactions.	Normal/NORMAL, Warning/WARNING
Microsoft SharePoint Server	Access Data Service Fail SQL Connection Request	Indicates the performance of the Access Data Service Fail SQL Connection Request.	Normal/NORMAL, Warning/WARNING
Microsoft SharePoint Server	Access Data Service SQL Connection Retries	Indicates the status of the Access Data Service SQL Connection Retries.	Normal/NORMAL, Warning/WARNING
Microsoft SharePoint Server	Access Data Service SQL Write Failure	Indicates the status of the Access Data Service SQL Write Failure.	Normal/NORMAL, Warning/WARNING
Microsoft SharePoint Server	Access Services WFE Proxy	Indicates the performance of the WFE Proxy Access Service.	Normal/NORMAL, Warning/WARNING

Run-time Service Model Views

A Run-time Service Model (RTSM) View enables you to visualize the context of an event. A typical RTSM View shows a subset of Microsoft SharePoint Server CIs and their relationships with other neighboring CIs. Using the Views, you can visualize the topology of an Microsoft SharePoint Server environment. In addition, Views can be used to do the following:

- Manage the Event Perspective of SharePoint Server CIs
- Manage the Health Perspective of SharePoint Server CIs
- Assigning and tuning the Aspects and Policy Templates

How to Access RTSM Views

1. Open Modeling Studio pane:

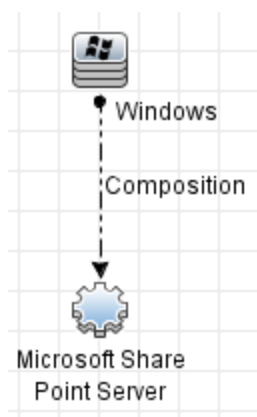
On BSM 9.2x, click **Admin > RTSM Administration > Administrator > Modeling > Modeling Studio > Resources**.

On OMi 10.x, click **Administration > RTSM Administration > Modeling > Modeling Studio > Resources**.

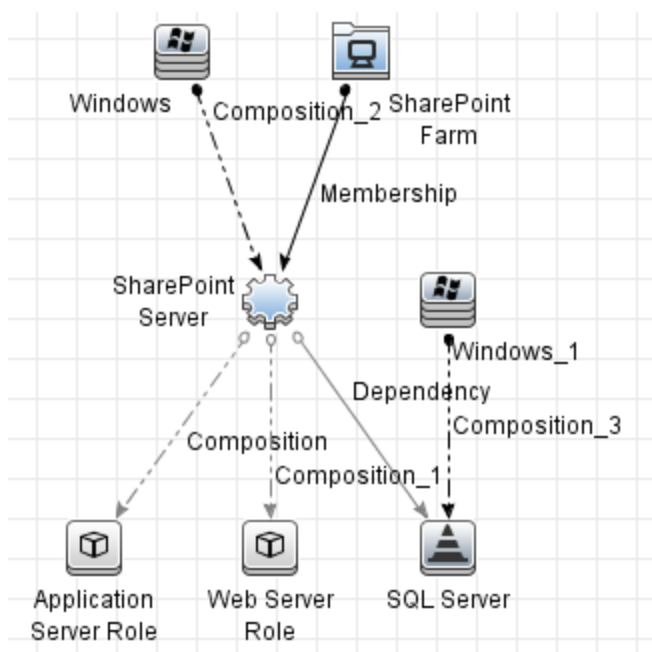
2. Click **Resource Type** as **Views**.
3. Click **Operations Management > SharePoint > <select the required view>** from the list.
4. Double-click or you can drag-and-drop the **<select the required view>** to the modeling canvas.

By default, the OMi MP for Microsoft SharePoint Server contains the following view named:

- **SharePoint_Deployment**: This view displays various components such as Microsoft SharePoint Server and Computer CI type. The following image shows the relationship among the CI types:



- **SharePoint_Topology:** This view displays various components such as SharePoint Farm, SharePoint Server, Application Server Role, SQL Server, and Computer CI type. The following image shows the relationship among the CI types:



Tools

The OMi MP for Microsoft SharePoint Server is packaged with tools which enable administering and monitoring the Microsoft SharePoint Server CIs. It comprises the following tools:

How to Access Tools

1. Open the Tools pane:

On BSM 9.2x, click **Admin > Operations Management > Operations Console > Tools**.

On OMi 10.x, click **Administration > Operations Console > Tools**.

2. In the CI Types pane, click **InfrastructureElement > RunningSoftware > Microsoft SharePoint Server**.

CI Type	Tool Name	Description
Microsoft SharePoint Server	MSPS Enable Collection Manager Trace	Enable tracing for collection manager components.
Microsoft SharePoint Server	MSPS Disable Collection Manager Trace	Disable tracing for collection manager components.
Microsoft SharePoint Server	MSPS Delete Data Source	Deletes the data source of the OMi MP for Microsoft SharePoint Server.

How to Launch a Tool

To launch a tool at the event level, follow the below steps:

1. Open the Browse Views pane:

On BSM 9.2x, click **Application > Operations Management > Event Perspective > View Explorer > Browse Views**.

On OMi 10.x, click **Workspaces > Operations Console > Event Perspective > View Explorer > Browse Views**.

2. To run a tool, follow one of the following methods:

- a. In the Browse View pane, select view and then in **Event Browser**, select an event.

All the related Tools appear in the Action pane.

- b. In the Action pane, click **CI** or **Node** radio button.
- c. Select the tool you want to launch.

Or

- a. In the Browse View pane, select the view and then select an event.
- b. Select an Event and then right-click, navigate to **Launch > Tools > select a tool**.

The Run Tool dialog box opens.

3. Click **Run Tool** to launch the selected tool.

To launch a tool at the CI or node level, follow the below steps:

1. Open the Browse Views pane:

On BSM 9.2x, click **Application > Operations Management > Event Perspective > View Explorer > Browse Views**.

On OMi 10.x, click **Workspaces > Operations Console > Event Perspective > View Explorer > Browse Views**.

2. In the Browse View pane, right-click a CI or node. The Select Tool pane opens.
3. Select the tool that you want to launch and click **Run Tool**.

Graphs

Graphs represent pictorial representation of metrics. The OMi MP for Microsoft SharePoint Server contains a set of graph templates mapped to the Computer CI type.

How to Access Graph Templates

1. Open the Performance Graph Mapping pane:

On BSM 9.2x, click **Admin > Operations Management > Operation Console**.

On OMi 10.x, click **Administration > Operations Console > Performance Graph Mappings**.

2. In the CI Types pane, select **InfrastructureElement > RunningSoftware > Microsoft SharePoint Server**.

Graph Template	Description	Metric Name	Table Name / Class Name
SharePoint Search Service CPU	This graph shows a summary of the CPU statistics of the SharePoint search service process.	PCTPROCESSORTIME	SHAREPOINT:SP_PROCESS
SharePoint Search Service Memory	This graph shows a summary of the memory statistics of the SharePoint search service process.	WORKINGSET PRIVATEBYTES	SHAREPOINT:SP_PROCESS
SharePoint Search Service Page Faults/sec	This graph shows a summary of the memory statistics of the SharePoint Search service process.	PAGEFAULTS	SHAREPOINT:SP_PROCESS
SharePoint Server Admin Service CPU	This graph shows the summary CPU statistics of the SharePoint admin service process.	PCTPROCESSORTIME	SHAREPOINT:SP_PROCESS
SharePoint Server Admin Service Memory	This graph shows the summary of memory statistics of the SharePoint Admin service process.	WORKINGSET PRIVATEBYTES	SHAREPOINT:SP_PROCESS
SharePoint Server SPTimer Service CPU	This graph a summary of the CPU statistics of the SharePoint SPTimer service process.	PCTPROCESSORTIME	SHAREPOINT:SP_PROCESS
SharePoint Server SPTimer Service Memory	This graph shows a summary of the memory statistics of the SharePoint SPTimer service process.	WORKINGSET PRIVATEBYTES	SHAREPOINT:SP_PROCESS
Web Server Worker process CPU usage	This graph shows a summary of the CPU statistics of the web server worker process service.	PCTPROCESSORTIME	SHAREPOINT:SP_PROCESS
Web Server Worker process Memory usage	This graph shows a summary of the memory statistics of the web server worker process usage.	WORKINGSET PRIVATEBYTES	SHAREPOINT:SP_PROCESS
Web Server Worker	This graph shows a summary of the page faults of the web server	PAGEFAULTS	SHAREPOINT:SP_PROCESS

Graph Template	Description	Metric Name	Table Name / Class Name
processes Page Faults	worker process service.		

How to View Graphs

Performance Perspective enables you to populate graphs from existing graph templates. You can also plot customized graphs by selecting the required metrics for a selected CI.


To view the Performance Perspective of SharePoint Server CIs using graphs, follow these steps:

1. Open the Performance Perspective pane:

On BSM 9.2x, click **Applications > Operations Management > Performance Perspective**.

On OMi 10.x, click **Workspaces > Operations Console > Performance Perspective**.

The View Explorer pane appears.

2. In the **Browse Views** tab, select the **SharePoint_Topology** View. The default graphs available for the **SharePoint_Topology** View appears in the Performance pane.
3. In the **Graphs** tab, select the graph you want to plot, and then click the  **Draw Graphs**. The selected graph is plotted on the right pane.

Chapter 4: Customizing OMi MP for Microsoft SharePoint Server

The OMi MP for Microsoft SharePoint Server can be customized to suit your monitoring requirements. You can edit the existing SharePoint Aspects or create new SharePoint Aspects to monitor any database environment.

Tuning Components of OMi MP for Microsoft SharePoint Server

Parameters are variables that are an integral component of the Microsoft SharePoint Server Aspects and Policy Templates. Parameters contain default values that are used for monitoring different components of SharePoint Servers.

Tuning Parameters

Parameters	Default Values
Frequency of High Scheduler	5
Frequency of Very High Scheduler	15
Frequency	NA Note: Frequency parameter is set to NORUN, that particular Policy Template, Management Template, or Aspect will not be monitored for the duration the Frequency value is modified.
Threshold	NA
Severity	NA

To modify the frequency of a collection, modify the corresponding Schedule Task policy. To modify the individual policy schedule, modify the corresponding frequency parameters:

After Deploying the SharePoint Server Aspects:

1. Open the Assignments & Tuning pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Assignments & Tuning**.

On OMi 10.x, click **Administration > Monitoring > Assignments & Tuning**.




2. In the **Browse Views** tab, select the **SharePoint_Deployment_View** that contains the CI for which you want to edit the value.
3. In the list of CIs, select the **SharePoint Collection Schedule** CI for which you want to change the threshold. The Assignment Details pane shows the current parameter values.
4. You can change the value of the default parameter values by following these steps:
 - a. Double-click the **Frequency of Very High Scheduler** parameter. The Edit Parameter dialog box opens.
 - b. Change the value and click **OK**. The updated parameter is assigned to the selected CIs.






Creating New SharePoint Aspects

1. Open the Management Templates & Aspects pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.

On OMi 10.x, click **Administration > Monitoring > Management Templates & Aspects**.


2. In the Configuration Folders pane, select the configuration folder in which you want to create the new aspect. If you need to create a new configuration folder, click .
3. In the Configuration Folders pane, click **Microsoft Application Management > Microsoft SharePoint Server > Aspects**.
4. In the Management Templates & Aspects pane, click , and then click  **Create Aspect**. The Create Aspect wizard opens.
5. In the **General** tab, type a unique **Name** for the new aspect and then click **Next**.
6. In the **CI type** tab on BSM 9.2x and **CI Type** tab on OMi 10.x, follow these steps:

- a. Each aspect enables you to manage one feature or characteristic of one or more types of configuration item. In the **CI Type** tab, select the Microsoft SharePoint Server CI to which this Aspect can be assigned, and then click ➔ to add them to the list of assigned CI types.
- b. Click **Next**.
7. (Optional). In the **Aspects** tab, click  **Add Existing Aspect**. The Add Existing Aspect dialog box opens, which enables you to select an existing aspect that you want to nest within this aspect. Select an aspect, and then click **OK**. Click **Next**.
8. In the **Instrumentation** tab, click  select the **MSPS-Core** instrumentation that you want to add. Click **Next**.
9. In the **Policy Templates** tab, click  and then select either **Add Policy Template** on BSM 9.2x and  **Add Policy Template From List** or  **Add Policy Template From Policy Template Groups** on OMi 10.x. If you select the **Add Policy Template From List**, select the policy templates that you want to add, and then click **OK**. (Press **CTRL** to select several policy templates.)

You can add policies from the MP for Microsoft SharePoint Server policy template group.

10. (Optional). In the **Parameters** tab, you see a list of all the parameters from the policy templates that you added to this aspect.

To combine parameters:


- a. Press **CTRL** and select parameters that you want to combine.
- b. Click . The Edit/Combine Parameters dialog box opens.
- c. Type a Name for the combined parameters.
- d. Specify a Description, Default Value, and whether the combined parameter is Read Only, an Expert Setting, or Hidden.

Note: Read Only prevents changes to the parameter value when the aspect is assigned to a configuration item. Hidden also prevents changes, but additionally makes the parameter invisible. Users can choose whether to show expert settings when they make an assignment.

- e. You can set either a specific default value, or you can click **From CI Attribute** and then browse for a CI attribute. When you specify a CI attribute, Operations Management sets the parameter value automatically during deployment of the policy templates, using the actual

value of this attribute from the CI. You can also set conditional parameter values here.

f. Click **OK**.

Note: You can also edit the parameters without combining them, to override the defaults in the policy template. Click one parameter, and then click . The Edit/Combine Parameters dialog box opens.

11. In the Create Aspect wizard, click **Finish** to save the aspect and close the wizard.

The new aspect appears in the Management Templates & Aspects pane.

Chapter 5: Troubleshooting

The following section provides information about troubleshooting scenarios:

SharePoint Discovery fails

Problem: Discovery fails with the following errors reported in the %ovdatadir%\log\system.txt file. agtrep (6344/912): (agtrep-149) Runtime exception occurred when executing command = C:\Windows\system32\cmd.exe /C ""C:/ProgramData/HP/HP BTO Software/bin/instrumentation/MPDiscoveryLauncher.exe"" : "(xpl-153) LogonUser (domain\exuser1) failed."

0: ERR: Wed Sep 10 14:51:58 2014: agtrep (6344/912): (agtrep-133) No output received from discovery policy action

Solution: Modify the incorrect user credentials specified for the SharePoint Extended Discovery Aspect by following these steps:

1. Open the Assignments & Tuning pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Assignments & Tuning**.

On OMi 10.x, click **Administration > Monitoring > Assignments & Tuning**.

2. In the **Browse Views** tab, select the **SharePoint_Topology**.
3. Expand the view, and select the node hosting the Microsoft SharePoint Server.
4. In the Assignments pane, select the SharePoint Extended Discovery Aspect. This shows the parameters and values in the Assignment Details pane.
5. Edit the user name and password to provide the user credentials.
6. Re-deploy the SharePoint Extended Discovery Aspect to the node.

For more information about how to deploy the SharePoint Extended Discovery Aspect, see the [Task 3: Deploying the SharePoint Discovery Aspects](#).

SharePoint Server CIs on a node do not appear on OMi console

Problem: SharePoint Server CIs are not appearing on the OMi console.

Solution: To verify the discovery, follow these steps:

1. Check if the following Aspects are deployed on the managed node:
 - SharePoint Discovery
 - SharePoint Extended Discovery
2. If the Microsoft SharePoint Aspects are not deployed, then deploy these Aspects one by one on the managed node.
3. If there are no errors, follow these steps:
 - a. Delete all the files under this folder `%ovdatadir%/tmp/agtrep` except `agtrep` folder.
 - b. On the command prompt, run `ovagtrep -clearall`.
 - c. Redeploy the following aspects on the managed node:
 - SharePoint Discovery
 - SharePoint Extended Discovery
4. If the problem persists, check the following log files to check for any reported errors:
 - `%ovdatadir%\bin\MSPS\log\MPDiscoveryLauncher.exe`
 - `%ovdatadir%\bin\MSPS\log\SharePoint_Basic_Discovery.log`
 - `%ovdatadir%\bin\MSPS\log\SharePoint_Discovery.log`
 - `%ovdatadir%\log\System.txt`

Multiple entries in the data sources

Problem: There are duplicate entries of SHAREPOINT datasource.

Solution: If the node was previously managed by Smart Plug-In for Microsoft Enterprise Servers and the older datasources are not deleted, then you see multiple entries.

To resolve this problem, follow these following steps:

1. You can backup the data to the HP Reporter or any other Reporting solution that you are using.

Example: Run the following command to backup on HP Reporter, `gathercoda -h <SharePoint_hostname>`.

2. On the managed node open the file `%ovdatadir%\conf\perf\datasources` using a text editor.
3. Check if the file contains the following entry:

```
DATASOURCE= SHAREPOINT LOGFILE="C:\ProgramData\HP\HP BTO  
Software\bin\MSPS\dsi\log\SHAREPOINT.log"
```

4. If the file contains the preceding entry then perform the following steps else perform step 5:
 - a. Open the `%ovdatadir%\conf\dsi2ddf\nocoda.opt` file. If the file does not exist then create the file. Ensure the file is not saved as text file.
 - b. Add the entry SHAREPOINT to this file and save.
 - c. From the command prompt, run the command:

```
ddfutil "C:\ProgramData\HP\HP BTO Software\bin\MSPS\dsi\log\SHAREPOINT.log"  
-rm all
```

- d. Remove the entry SHAREPOINT from the following file and save:

```
%ovdatadir%\conf\dsi2ddf\nocoda.opt
```

5. Check if the file `%ovdatadir%\conf\dsi2ddf\ddflbd.mwc` contains the following entry:

```
DATASOURCE=EXSPI_DATA LOGFILE="C:\ProgramData\HP\HP BTO  
Software\bin\MSPS\dsi\log\SHAREPOINT.log"
```

6. If the file contains the preceding entry, then from the command prompt run the command:

```
ddfutil "C:\ProgramData\HP\HP BTO Software\bin\MSPS\dsi\log\SHAREPOINT.log" -  
rm all
```

Data Logging Policies Not Logging Data

Problem: Data is not getting logged for Sharepoint classes.

Solution: To identify the root cause, perform the following steps:

1. Identify the Class or Table for which data is not getting logged. To identify the associated Aspect and Policy Template for the Class or Table, see the *Appendix: Metrics and Datasources* section.

As an example, let us consider that data is not getting logged for the class SERVSTAT. Based on the section *Appendix: Metrics and Datasources*, we can identify the corresponding Aspect and Policy Template Name as below:

Aspect: SharePoint Services

Policy Template Name: MSPS_PERF_Conf

2. Check if this Aspect is assigned to the node. If not, assign the Aspect to the managed node. This will schedule the data collection. If the Aspect was already assigned, then continue with the next steps.
3. On the managed node from the command prompt, run the command `ovpolicy -list -poltype configfile`. Check if the output has the policy template `MSPS_Service_Conf`. If not redeploy the SharePoint Services Aspect. If the policy template is already deployed then continue with the next steps.
4. Check if the SharePoint Extended Discovery Aspect is deployed to the node with the required credentials. If not, redeploy the Aspect with the correct credentials. If the Aspect was already deployed with the required credentials then continue with the below steps.
5. Run the collection manually by performing the following steps:
 - a. Enable the trace by running the tool **MSPS Enable Collection Manager Trace** on the Microsoft SharePoint Server.
 - b. Open the Management Template & Aspect pane:

On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Template & Aspects**.

On OMi 10.x, click **Administration > Monitoring > Management Template & Aspects**.
 - c. Select the **SharePoint Services** Aspect.

- d. Select the policy template **SharePoint_Services_Conf** from the list of policies grouped in the SharePoint Services Aspect. This is a ConfigFile policy template.
- e. Open the policy to identify the collections it will schedule. In this case there is one collection with the following details:

Collection name = MSPS_ChkSharePointAdminServStat

Collection ID = MSPS_C10001

Collection role = SharePoint
- f. Log on to the managed node.
- g. On the managed node, from the command prompt, run the following command:


```
%OvDataDir%\bin\instrumentation\MPMSCollectionManager.exe -s MSPS -c C10001 -o p
```
- h. Check the trace file MSPS_C10001_COLL_Trace.log in the directory
%ovdatadir%\bin\MSPS\log for further details.
- i. Disable tracing post analysis by running the tool **MSPS Disable Collection Manager Trace**.

Not Receiving Events

Problem: Events are not received for the Microsoft SharePoint Aspect.

Solution: Check the deployment of Aspects on all nodes. To check the deployment, follow these steps:

1. Identify the SharePoint Server Template for which alerts are not being generated.
2. Run the `ovpolicy -list -all` command at the command prompt. Check if the template is present in the output.
3. If the policy template is not deployed, re-deploy the Aspect.
4. Enable the trace by running the tool **MSPS Enable Collection Manager Trace** on the Microsoft SharePoint Server. Check the log files created in the folder %ovdatadir%\bin\MSPS\log for further details.
5. Disable tracing post analysis by running the tool **MSPS Disable Collection Manager Trace**.

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