

OMi Management Pack for Microsoft SharePoint Server

Software Version: 1.00 For Operations Manager i for Windows® and Linux operating systems

User Guide

Document Release Date: April 2017 Software Release Date: March 2015



Legal Notices

Warranty

The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from Hewlett Packard Enterprise required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notice

© 2015 - 2017 Hewlett Packard Enterprise Development LP

Trademark Notices

Adobe™ is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

UNIX® is a registered trademark of The Open Group.

This product includes an interface of the 'zlib' general purpose compression library, which is Copyright © 1995-2002 Jean-loup Gailly and Mark Adler.

Documentation Updates

To check for recent updates or to verify that you are using the most recent edition of a document, go to: https://softwaresupport.hpe.com/.

This site requires that you register for an HPE Passport and to sign in. To register for an HPE Passport ID, click **Register** on the HPE Software Support site or click **Create an Account** on the HPE Passport login page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HPE sales representative for details.

Support

Visit the HPE Software Support site at: https://softwaresupport.hpe.com/.

Most of the support areas require that you register as an HPE Passport user and to sign in. Many also require a support contract. To register for an HPE Passport ID, click Register on the HPE Support site or click Create an Account on the HPE Passport login page.

To find more information about access levels, go to: https://softwaresupport.hpe.com/web/softwaresupport/access-levels.

HPE Software Solutions Now accesses the Solution and Integration Portal website. This site enables you to explore HPE product solutions to meet your business needs, includes a full list of integrations between HPE products, as well as a listing of ITIL processes. The URL for this website is https://softwaresupport.hpe.com/km/KM01702731.

Contents

Chapter 1: OMi Management Pack for Microsoft SharePoint Server	5
Chapter 2: Getting Started	6
Task 1: Adding Nodes to BSM or OMi Console	6
Task 2: Enabling the Enrichment Rule	7
Task 3: Deploying the SharePoint Discovery Aspects	7
Task 4: Verifying Discovery	10
Task 5: Deploying the other SharePoint Aspects	12
Topology Synchronization Rules	13
Monitoring SharePoint Server Environment	14
Event Perspective	14
Health Perspective	15
Performance Perspective	16
Chapter 3: Components	18
Microsoft SharePoint Aspects	18
Tasks	19
How to Deploy Microsoft SharePoint Aspects	19
User Interface Reference	19
How to Create Microsoft SharePoint Aspects	19
List of Microsoft SharePoint Aspects	22
SharePoint Collection Schedule	22
SharePoint Databases	23
SharePoint Discovery	23
SharePoint Extended Discovery	23
SharePoint Event Logs	24
SharePoint Logical Services	25
SharePoint Performance	25
SharePoint Services	26
Policy Template Groups	28
How to View Policy Template Groups	28
Microsoft SharePoint Policy Templates	29
Parameters	30

Types of Parameters	30
Microsoft SharePoint Server Parameters	31
Tuning of Parameters	32
Configuration Item and Configuration Item Types	33
Health Indicators	34
How to Access Health Indicators	34
Event Type Indicators	35
How to Access Event Type Indicators	35
Run-time Service Model Views	36
How to Access RTSM Views	36
Tools	37
How to Access Tools	38
How to Launch a Tool	38
Graphs	39
How to Access Graph Templates	39
How to View Graphs	41
Chapter 4: Troubleshooting	42
SharePoint Discovery fails	42
SharePoint Server CIs on a node do not appear on OMi console	43
Multiple entries in the data sources	43
Data Logging Policies Not Logging Data	44
Not Receiving Events	46
Appendix A: Metric and Data sources	47
Generic Data Source	47
Send documentation feedback	50

Chapter 1: OMi Management Pack for Microsoft SharePoint Server

The 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 and its underlying infrastructure using the Business Service Management (BSM). 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 seamlessly 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 or OMi Console

Note: If the SharePoint Server that you want to monitor is already being monitored by Smart Plugin (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 from Administration:

On BSM 9.2x, click Admin > Operations Management > Setup > Monitored Nodes.

On OMi 10.x, click Administration > Setup and Maintenance > Monitored Nodes.

- In the Node Views pane, click Predefined Node Filters > Monitored Nodes, and then click , and then click Computer > <select the required OS type>. 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 needs to be activated on HPE OMi Server and certificate must be granted.

Task 2: Enabling the Enrichment Rule

To enable the Enrichment Rule, follow these steps:

1. Open the Enrichment Manager:

On BSM 9.2x, click Admin > RTSM Administration > Modeling > Enrichment manager.

On OMi 10.x, click Administration > RTSM Administration > Modeling > Enrichment manager.

- 2. In the Enrichment Rules pane, select SoftwareElementDisplayLabelForNewHost from the list.
- 3. Right-click and select **Properties**. The Enrichment Rule Properties window appears.
- 4. Click Next.
- 5. Select Rule is Active.
- 6. Click Finish.
- 7. In the Enrichment Rules pane, click 🛅 to save the changes.
- To enable the SoftwareElementDisplayLabelForExisitingHost and SoftwareElementDisplayLabelPopular rules, repeat the steps 3 to 7.

Task 3: Deploying the SharePoint Discovery Aspects

The SharePoint CIs are discovered at two levels using two different Aspects. The Sharepoint Discovery Aspects enables 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.

- 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
 4.
 - 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: SharePoint Discovery 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.

- If you are deploying the SharePoint Extended Discovery Aspect, follow these steps:
 - i. Select the **USERNAME** parameter in the list, and then click <a>. 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 usesrs, specify the username in the *<username*> format.

- iii. Select the **PASSWORD** parameter in the list, and then click <a>. 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 4: 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.

View Explorer	-	ĭi	6 «	\times
Browse Views	Search			
5 B				
SharePoint_Deplo	yment		•	~
😑 🛄 SharePoir	nt_Deploymer	it		
Ė…() ms_s	harepoint_se wfvm05756	rver (iwfv	(m05756))

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



Task 5: Deploying the other SharePoint Aspects

OMi MP for Microsoft SharePoint Server contains following Aspects apart from the SharePoint Discovery and SharePoint Extended Discovery Aspects:

- SharePoint Collection Schedule
- SharePoint Databases
- SharePoint Event Logs
- SharePoint Logical Services
- SharePoint Performance
- SharePoint Services

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.

- 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 ⁴/₄.
 - 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**.

Topology Synchronization Rules

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

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

To check the Topology Synchronization settings, follow these steps:

1. Open the Infrastructure Settings from the Operations Management Administration:

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 Manager, select **Applications > Operations Management**.
- 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 HPOprSps and click Save.

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:

 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.

 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 **I** the **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*.

Chapter 3: Components

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

- Microsoft SharePoint Aspects
- Policy Template Groups
- Parameters
- Configuration Items and Configuration Item Types
- Run-time Service Model Views
- Health Indicators
- Event Type Indicators
- Graph Templates
- Tools

Microsoft SharePoint Aspects

The SharePoint Aspects can be used to monitor the building blocks or units of OMi MP for Microsoft SharePoint Server. A SharePoint Aspect comprises policy templates, instrumentation, and parameters for monitoring the health and performance of SharePoint.

How to Access Microsoft SharePoint Aspects

1. Open the Management Templates & Aspects pane:

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

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

 In the Configuration Folder 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 5: 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.
СІ Туре	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. The SharePoint Collection Schedule Aspect is part of SharePoint Performance and SharePoint Services Aspects.
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.

How to Create 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, select the configuration folder in which you want to create the new aspect. If you need to create a new configuration folder, click ^{**}. The Create Configuration Folder dialog box appears.
- 3. Provide a name and appropriate description and click **OK**.
- 4. Select the new Configuration Folder and proceed with Step 6.
- In the Configuration Folders pane, click Microsoft Application Management > Microsoft SharePoint Server > Aspects.
- 6. In the Management Templates & Aspects pane, click ³, and then click ³ **Create Aspect**. The Create Aspect wizard opens.
- 7. In the General tab, type a unique Name for the new aspect and then click Next.
- 8. 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 one or more Available CI Types to which this Aspect can be assigned, and then click
 to add them to the list of assigned CI types. (Press CTRL to select several CI types.)
 - b. If you need the aspect to be assignable to a node independent of its CI type, select **Node Compatible** check box.
 - c. Click Next.
- In the Instrumentation tab, click to add instrumentation to the aspect. The Add Instrumentation dialog box opens, which enables you to select the instrumentation that you want to add. Select the instrumentation you want to add and then click OK. Click Next.
- 10. *(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**.
- 11. In the **Policy Templates** tab, click I and then select either **Add Policy Template** on BSM 9.2x and I Add Policy Template From List or Add Policy Template From Policy Template Groups on OMi 10.x.
 - a. 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.)
 - b. If suitable policy templates do not exist, click ³, and then click ³Add New Policy Template to create policy templates.

- c. If you select the Add Policy Template From Policy Template Groups, expand the MP for Microsoft SharePoint Server. Select the policy templates that you want to add, and then click OK. (Press CTRL to select several policy templates.)
- 12. In the **Policy Templates** tab, select the Version of the policy template(s) that you want to add. Enter all the required information.

Note: Each modification to a policy template is stored in the database as a separate version. Aspects contain specific versions of policy templates. If a new version of a policy template becomes available later, you must update the aspect to include the latest version.

- 13. (Optional). In the Policy Templates tab, select the Policy Template to which you want to add a deployment condition, and then click Edit Deployment Condition. The Edit Deployment Condition dialog box opens, that enables you to specify the deployment conditions for the selected policy template.
 - a. Set the condition and then click **OK**.
 - b. In the **Policy Templates** tab, click **Next**.
- 14. *(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.
- 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

15. 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.

List of Microsoft SharePoint Aspects

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

SharePoint Collection Schedule

This Aspect contains the collection schedules for collector.

•			

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

SharePoint Databases

This Aspect monitors the SharePoint databases.

СІ Туре	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 Discovery

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

СІ Туре	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.

СІ Туре	Policy Template	Indicator	Description	Policy Type
Computer	MSPS_CollectionDefinition_2010	NA	This policy maintains the metric definition for collecting SharePoint 2010 metrics	ConfigFile

СІ Туре	Policy Template	Indicator	Description	Policy Type
Computer	MSPS_CollectionDefinition_2013	NA	This policy maintains the metric definition for collecting SharePoint 2013 metrics	ConfigFile
Computer	MSPS_ExtensiveDiscovery	NA	This policy discovers the topology of Microsoft SharePoint Server.	Service Auto- Discovery
Computer	MSPS_ExtensiveDiscovery_Conf	NA	Microsoft SharePoint Discovery Configuration File	ConfigFile
Computer	MSPS_SCH_CreateDatasource	NA	Policy to create datasource for SharePoint monitoring	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 Logical Services

This Aspect monitors the logical services in SharePoint Server.

СІ Туре	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_ Logical_SVC_Mon	NA	This policy monitors logical services in SharePoint.	Scheduled Task

SharePoint Performance

This Aspect collects and logs SharePoint performance related data

СІ Туре	Policy Template	Indicator	Descripti on	Policy Type
Microsoft SharePoi nt Server	MSPS_Active_Queue_Length	SharePointActiveQueueLe ngth	This policy monitors the active queue length.	Measureme nt Threshold
Microsoft SharePoi nt Server	MSPS_Documents_Delayed_ Retry	NA	This policy monitors the Document s Delayed Retry counter.	Measureme nt Threshold
Microsoft SharePoi nt Server	MSPS_HeartBeats	NA	This policy monitors the SharePoin t Portal Server Gather Heartbeat s counter.	Measureme nt Threshold

СІ Туре	Policy Template	Indicator	Descripti on	Policy Type
Microsoft SharePoi nt Server	MSPS_ IndexerCatalogsNumofDocum ents	NA	This policy monitors the increase in the number of document s indexed.	Measureme nt Threshold
Microsoft SharePoi nt Server	MSPS_Perf_Conf	NA	This policy maintains the schedule of SharePoin t performan ce counters.	ConfigFile
Microsoft SharePoi nt Server	MSPS_Perf_Conf_2010	NA	This policy maintains the schedule of SharePoin t performan ce counters.	ConfigFile

SharePoint Services

This Aspect monitors the state of SharePoint services.

CI Type	Policy Template	Indicator	Descriptio n	Policy Type
Microso ft ShareP oint Server	MSPS_Services_Conf	NA	This policy maintains the schedule of	ConfigFile

CI Type	Policy Template	Indicator	Descriptio n	Policy Type
			Sharepoint service collection.	
Microso ft ShareP oint Server	MSPS_Services_Conf_2010	NA	This policy maintains the schedule of Sharepoint service collection.	ConfigFile
Microso ft ShareP oint Server	MSPS_ SharePointAdminServState	SharePointAdminStatus	This policy checks the status of the SharePoint Administra tion service V4 Service.	Measurem ent Threshold
Microso ft ShareP oint Server	MSPS_ SharePointSearchHostCntrlS ervState	SharePointSearchHostContr olStatus	This policy checks the status of the SharePoint Search Host Controller Service.	Measurem ent Threshold
Microso ft ShareP oint Server	MSPS_ SharePointSearchServState	NA	This policy checks the status of the SharePoint Search Service.	Measurem ent Threshold
Microso ft ShareP oint Server	MSPS_ SharePointServerSearchServ State	SharePointServerSearchStat us	This policy checks the status of the SharePoint	Measurem ent Threshold

СІ Туре	Policy Template	Indicator	Descriptio n	Policy Type
			Server Search 15 Service.	
Microso ft ShareP oint Server	MSPS_ SharePointTimerServState	SharePointTimerStatus	This policy checks the status of the SharePoint Timer Service.	Measurem ent Threshold
Microso ft ShareP oint Server	MSPS_ SharePointTracingServState	NA	This policy checks the status of the SharePoint Tracing Service.	Measurem ent Threshold
Microso ft ShareP oint Server	MSPS_ SharePointUserCodeHostSer vState	NA	This policy checks the status of the SharePoint User Code Host Service.	Measurem ent Threshold

Policy Template Groups

All the Microsoft SharePoint 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	

Template Category	Policy Template	
	MSPS_ SharePointUserCodeHostServState	
Open Message Interface	MSPS_Message_Policy	
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	Frequency of monitoring by a Policy Template. For example, the frequency of monitoring SharePoint Server availability. Note: When the value of the Frequency parameter is set to NORUN , that	

Parameter	Parameter Type	Description	Default Values
		particular Policy Template, or Aspect will not be monitored until the frequency is changed to one of the scheduler value.	
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 <a>. 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.

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

СІ Туре	н	Description	Value/Severity
Microsoft	SharePoint Active	Indicates the number of items in SharePoint Active Queue	Normal/NORMAL,
SharePoint	Queue Length		High/MAJOR

СІ Туре	н	Description	Value/Severity
Server			
Microsoft SharePoint Server	SharePoint Admin Status	Indicates the status of SharePoint Admin Service	Up/NORMAL, Down/CRITICAL

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.

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

СІ Туре	ETI	Description	Value/Severity
Microsoft SharePoint Server	SharePoint Search Host Control Status	Indicates the status of SharePoint search host control service	Down/NORMAL, Normal/MAJOR
Microsoft SharePoint Server	SharePoint Timer Status	Indicates the status of SharePoint Timer Service	Normal/NORMAL, Down/MAJOR
Microsoft SharePoint Server	SharePoint Server Search Status	Indicates the Status of SharePoint Server Sea Service	Normal/NORMAL, Down/MAJOR

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**.

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

СІ Туре	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 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 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.

 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 **I** Draw Graphs. The selected graph is plotted on the right pane.

Chapter 4: 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 occured 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 <code>%ovdatadir%\conf\perf\datasources</code> 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 Exchange 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

- 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 Exchange 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.
- 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.

Appendix A: Metric and Data sources

The metric data is logged into specific data sources for generating reports and graphs.

Generic Data Source

The generic data source reserves a column for the database instance name, labeled instance name. This column also contains the information that differentiates the data collected for each instance. Other column represents the graphing metrics. OMi MP for Microsoft SharePoint Server stores data in the **SHAREPOINT** datasource.

Table in Data Store	Aspect Names	Policy Template Name(s)	Metrics	Metrics Data Types	
SEARCHANALYSIS	SharePoint Performance	SharePoint MSPS_	MSPS_	SERANENGINSTANCE	Text
Note: This table contains data only for Microsoft SharePoint Server 2013.		PERF_ Conf; MSPS_ PERF_ CONF_ 2010	UPTIMEDAYS	UINT 32	
			FILEDELETES		
			SAFAILEDTASKS		
			UPTIMETSEC		
			ACTANPROCCOMP		
			RUNANALYSES		
			TASKFILLFACTOR		
			SARUNNINGTASKS		
			EVENTQUELEN		

Table in Data Store	Aspect Names	Policy Template Name(s)	Metrics	Metrics Data Types
SEARCHCONTPROC	SharePoint Performance	MSPS_ PERF_ Conf	SERCNTPROCINST	Text
Note: This table contains			FLWINSTWITHEMPTQ	UINT 32
data only for Microsoft SharePoint Server 2013.			OPRABORTDUETO	
1			FLWINSTABORTDUEFUQ	
			FLWINSTCANTSTOP	
			FLWINSTABORTED	
			FLWINSTFAILED	
			FLWINSTCOMPLETED	
			FLWINSTACTIVE	
			FAILEDCBPERSEC	
			FAILEDCBTOTAL	
			COMLPCALLBKPERSEC	
			COMPCALLBKBTOTAL	
			CALLBACKPERSEC	
			CALLBACKTOTAL	
			CALLBACKAVA	
SEARCHHOSTCTRL Note: This table contains data only for Microsoft SharePoint Server 2013.	SharePoint Performance	MSPS_ PERF_ Conf; MSPS_ PERF_ Conf_ 2010	SEARCHHOSTCTRLINST	Text
			COMPONENTUPTIME	UINT 32
			COMPRESTART	
SERVSTAT	SharePoint Services	MSPS_ Services_ Conf; MSPS_ Services_ Conf_ 2010	SERVNAME	Text
			SRVDISPNAME	
			SERVSTATUS	
			SERVSTATE	UINT 32

Table in Data Store	Aspect Names	Policy Template Name(s)	Metrics	Metrics Data Types
SP_PROCESS	SharePoint Performance	MSPS_ PERF_ Conf; MSPS_ PERF_ CONF_ 2010	INSTANCENAME	Text
			PCTPROCESSORTIME	UINT 32
			WORKINGSET	
			PAGEFAULTS	
			PRIVATEBYTES	
			THREADCOUNT	
SPFOUNDATIONSEARCH Shar Perfe	SharePoint Performance	SharePoint MSPS_ Performance PERF_ Conf; MSPS_ PERF_ CONF_ 2010	SPFINSTANCENAME	Text
			HEARTBEAT	UINT 32
			ACTQUEUELGTH	
SPSERVERSEARCH	SharePoint Performance	MSPS_ PERF_ Conf;	SPSINSTANCENAME	Text
		MSPS_ PERF_ CONF_ 2010	DOCDELAYED	UINT 32
SRCHANAPROCCOMP	SharePoint Performance	MSPS_ PERF_ Conf; MSPS_ PERF_ CONF_ 2010	SERANCOMPINSTANCE	Text
			SAEFAILEDTASKS	UINT 32
			LONGRUNNINGTSKS	
			SAERUNNINGTASKS	

Send documentation feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on User Guide (OMi Management Pack for Microsoft SharePoint Server 1.00)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to docfeedback@hpe.com.

We appreciate your feedback!