## HP Operations Smart Plug-in for Microsoft Enterprise Servers

For the Windows ® operating system

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**Online Help** 



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# Chapter 1

# **Overview**

Smart Plug-in (SPI) is plug-in or add-on software for HP Operations Manager (HPOM). It functions as a modular component of HPOM and further improves its monitoring capabilities in managing your IT resources. SPIs help you to simplify the tasks of your environment by:

- Monitoring availability and health
- Detecting performance lapse
- Detecting, preventing, and solving problems
- Documenting problem solutions
- Generating reports

The Microsoft Enterprise Servers SPI helps you to manage the Microsoft Enterprise Servers in your environment. The Microsoft Enterprise Servers SPI keeps you informed about the conditions related to the following Microsoft Enterprise Servers:

- BizTalk Server 2006 and R2
- Internet Security and Acceleration Server 2006
- Microsoft Office SharePoint Server 2007
- Microsoft Office SharePoint Server 2010
- Microsoft Office Communications Server 2007 and R2
- Microsoft Lync Server 2010

**Note:** Microsoft Office Communications Server 2007 *supports* the following deployment configurations:

- Microsoft Office Communication Server Standard Edition
- Microsoft Office Communications Server Enterprise Edition Consolidated Configuration

• Microsoft Office Communications Server Enterprise Edition Expanded Configuration The Microsoft Office Communications Server *does not support* the following deployment configurations:

- Microsoft Office Communications Server 2007 configured with load balancing
- Microsoft Office Communications Server 2007 installed on clustered environment

The Microsoft Enterprise Servers SPI offers:

- **Topology/Service Mapping:** The Microsoft Enterprise Servers SPI discovers and maps Microsoft Enterprise Servers on your network. The servers are displayed in the service map, showing dependencies to other systems where appropriate.
- Availability Monitoring: The Microsoft Enterprise Servers SPI monitors the services that need to run to ensure complete availability of your Microsoft Enterprise Servers.

- **Performance Monitoring:** The Microsoft Enterprise Servers SPI monitors Windows performance counters, notifying you if thresholds are exceeded.
- Event Log Monitoring: The Microsoft Enterprise Servers SPI monitors the Windows Event Logs.
- **Reporting and Graphing:**The Microsoft Enterprise Servers SPI creates reports and graphs that show historical data and trend information based on the logged data. This can be used for capacity planning and SLA compliance.
- **Troubleshooting** Assistance with the Self Healing Info tool.

# **Getting Started**

The HP Operations Smart Plug-ins DVD contains the Smart Plug-in for Microsoft Enterprise Servers (Microsoft Enterprise Servers SPI). See the *HP Operations Smart Plug-in for Microsoft Enterprise Servers SPI Installation and Configuration Guide* for complete installation, upgrade, and configuration procedures.

To verify if the Microsoft Enterprise Servers SPI is installed or upgraded, check the SPI under policy group. Expand **Policy Group** under **Policy Management**. The **SPI for Microsoft Enterprise Servers** in the list verifies the installation or upgrade. You can further expand SPI for Microsoft Enterprise Servers and check for **BizTalk Server** 2006 under **BizTalk Server**, **Internet Security And Acceleration Server** 2006 under **Internet Security and Acceleration Server**, **Microsoft\_Office\_Communications\_Server\_2007** under **Microsoft\_Office\_ Communications\_Server**, and **Microsoft Office SharePoint Server** 2007 under **SharePoint Portal Server** depending on your environment setup.

After you configure the Microsoft Enterprise SPI, the HP Operations Management (HPOM) console shows updates in the following areas:

- Service Map: Service map shows the newly added and discovered Microsoft Enterprise Servers services displayed in both the console services tree (left) and the service map (right). Within the service map pane, the hierarchy expands to show the specific services present on each server. Further expansion of each server displays its components.
- Message Browser: Displays messages identified with the problem severity level.
- *Reports and Graphs:* Present the information that helps you see trends to manage the Microsoft Enterprise Servers in your environment by implementing policy scheduling and threshold adjustments.

*Prerequisite*: Installation of the HPOM console, management server, and agents is required for Microsoft Enterprise Servers SPI programs to work.

# **Components of Microsoft Enterprise Servers SPI**

The components of Microsoft Enterprise Server SPI are:

- *Policies:* Policies are pre-defined thresholds to keep a constant vigilance over the Microsoft Enterprise Server environment and improve monitoring schedules in the form of service map alerts and messages. Service map alerts are shown in service map while messages are available in message browser. The severity level of each message, whether it is a minor, major, or critical is shown by a color-code. The messages indicate the problem and help you take preventive action.
- Tools: Tools are the utilities to gather more Microsoft Enterprise Server related information. Self Healing tools are used for troubleshooting any of the Microsoft Enterprise Servers SPI. The MSES\_BTS\_DB\_Configuration tool is used to configure the BizTalk Server SPI of the Microsoft Enterprise Servers SPI and the Browse SharePoint Site tool runs the Internet Explorer to browse the web site defined by the service node.
- *Reports:* Reports represent various metrics of Microsoft Enterprise Servers. Data collected by policies are used to generate reports.

• *Graphs:* Graphs are pictorial representation of various metrics of the Microsoft Enterprise Servers. Graphs contain the data that are collected by policies.

Reports and graphs generated with the help of HP Reporter and HP Performance Manager provide you an overview to determine corrective actions to be taken in the long term. For more details on installation and configuration of HP Reporter and HP Performance Manager, see *HP Operations Smart Plug-in for Microsoft Enterprise Servers Installation and Configuration Guide*.

# Server and Service Discovery of Microsoft Enterprise Servers SPI

After configuring your nodes, deploy the discovery policies to discover (detect) the existing services and components of the Microsoft Enterprise Servers environment in the managed nodes. Deploying these policies launches an automated process that adds the discovered services to the HPOM service tree and service map.

Before deploying the discovery policy group, edit the discovery policy for the following Microsoft Enterprise Servers:

- BizTalk Server 2006
- Microsoft Office SharePoint Server 2007

• Microsoft Office Communications Server 2007 For more details, see Discovery Configuration Scenarios section of HP Operations Smart Plug-in for Microsoft Enterprise Servers Installation and Configuration Guide.

#### Note:

If the Microsoft Enterprise Servers SPI is installed **after** the nodes are configured, deploy the discovery policy groups manually for all Microsoft Enterprise Servers.

# Chapter 2

# Microsoft Enterprise Servers SPI - BizTalk Server 2006

# **Overview**

Microsoft BizTalk Server provides distributed application integration services using XML as its primary messaging format. External formats are converted to the Biztalk standards through parsers and Biztalk mapping services, which are components of Biztalk Messaging Services. The Biztalk Orchestration Designer defines the process that a document undergoes. In BizTalk messaging, channels handle the conversion of external formats, and ports are responsible for transmitting documents. The channels and ports in Biztalk Messaging can be configured to receive and transmit documents in a variety of formats and protocols, such as HTTP, HTTPS, SMTP, COM. In Orchestration services, the ports represent the input and output of a process. The action is defined in the XLANG schedule.

The Microsoft Enterprise Servers SPI monitors the performance of BizTalk Server 2006 with policies, tools, graphs, and reports.

The Microsoft Enterprise Servers BizTalk Server SPI requires additional configuration. Use the MSES\_BTS\_DB\_Configuration tool to configure the Microsoft Enterprise Servers SPI for BizTalk Server 2006. See Additional Configuration Procedure for Microsoft Enterprise Servers SPI for BizTalk Server 2006 section of HP Operations Smart Plug-in for Microsoft Enterprise Servers SPI Installation and Configuration Guide for more details on configuration.

# Microsoft Enterprise Servers SPI BizTalk Server Policies

The Microsoft Enterprise Servers SPI BizTalk Server policies monitor the Microsoft BizTalk Server. The policies offer the following monitoring processes:

- Availability Monitoring
- Performance Monitoring
- Windows Event Log Monitoring
- Database Connectivity
- Server Logging
- Discovery

#### **Availability Monitoring**

The Microsoft Enterprise Servers BizTalk Server SPI policies under availability monitoring monitor the services of the Microsoft BizTalk Server. If any of the services is not running and the service startup is set to *Auto Start*, an attempt is made to restart the service. A console error message is sent to indicate that service is not running.

Monitored services of BizTalk Server include:

- BizTalk Messaging Service (MSCIS)
- BizTalk Orchestration Service (WFSVCMGR)
- BizTalk Server Application Service
- BizTalk RuleEngineUpdate Service
- Enterprise Single Sign-On

#### **Event Log Monitoring**

The polices under event log monitoring send alert messages to the HPOM console as errors, warnings, and information entries.

Policies monitoring events are grouped as follows:

- BizTalk Server
- XLANG Scheduler

#### **Performance Monitoring**

Biztalk Server performance monitoring includes both specific BizTalk Server performance counters and CPU process-related counters. Each policy for performance monitoring has both error and warning thresholds.

Policies monitoring the following areas of performance are:

- CPU Usage
- Memory Usage

### **Server Logging**

The policies included are MSES\_BizTalkServer\_TDDS\_Logging, MSES\_BizTalk\_IntervalCount\_Logging, and MSES\_BizTalkServer\_SusDoc\_Logging policies.

These policies require the deployment of the MSES\_BizTalk\_CreateCodaDataSources policy to first create the CODA interval count datasource.

# **Availability Monitoring**

The availability monitoring group monitors the services of the Microsoft BizTalk Server. If any of the services is not running and the service startup is set to *Auto Start*, then an attempt is made to restart the service. A console error message is sent to indicate that service is not running.

Monitored services of BizTalk Server include:

- BizTalk Messaging Service (MSCIS)
- BizTalk Orchestration Service (WFSVCMGR)

- BizTalk Server Application Service
- BizTalk RuleEngineUpdate Service
- Enterprise Single Sign-On.

This monitoring group includes EBIZ\_BizTalkServerServices policy.

### EBIZ\_BizTalkServerServices

The EBIZ\_BizTalkServerServices policy monitors the following BizTalk Server 2006 services:

- BizTalk Server Application Service
- BizTalk RuleEngineUpdate Service
- Enterprise Single Sign-On

Schedule: This policy runs for every 5 minutes.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Biztalk Server – Biztalk Server 2006 – Manual-Deploy

# **Performance Monitoring**

Biztalk Server performance monitoring includes both specific BizTalk Server performance counters and CPU process-related counters. Each policy for performance monitoring has both error and warning thresholds.

Policies monitor the following areas of performance:

- CPU Usage
- Memory Usage

The policies under performance monitoring include:

- EBIZ\_BS-MEMUsage-BTSSvc
- EBIZ\_BS-CPUUsage-BTSSvc
- EBIZ\_BS-MEMUsage-ENTSSO
- EBIZ\_BS-CPUUsage-ENTSSO
- MSES\_SendPort\_Status\_Monitoring
- MSES\_ReceiveLocation\_Status\_Monitoring
- MSES\_BS\_ DocumentsReceived
- MSES\_BS\_DocumentsSuspended
- MSES\_BS\_DatabaseTransactions
- MSES\_BS\_ActiveApplicationDomains
- MSES\_BS\_DehydrationThreshold
- MSES\_BS\_IdleOrchestrations

- MSES\_BS\_MsgBox DBConnFailures
- MSES\_BS\_OrchestrationsCompleted
- MSES\_BS\_OrchestrationsCreated
- MSES\_BS\_OrchestrationsDehydrated
- MSES\_BS\_OrchestrationsDiscarded
- MSES\_BS\_OrchestrationsRehydrated
- MSES\_BS\_OrchestrationsResidentMemory
- MSES\_BS\_OrchestrationsScheduledForDehydration
- MSES\_BS\_OrchestrationsSuspended
- MSES\_BS\_RunningOrchestrations
- MSES\_Orchestration\_Status\_Monitoring
- MSES\_BS\_PendingMessages
- MSES\_BS\_PendingWorkItems
- MSES\_BS\_TransactionalScopes aborted

#### EBIZ\_BS-MEMUsage-BTSSvc

The EBIZ\_BS-MEMUsage-BTSSvc policy measures the memory usage of the Microsoft BizTalk Server Application services.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### EBIZ\_BS-CPUUsage-BTSSvc

The EBIZ\_BS-CPUUsage-BTSSvc policy measures the CPU usage of the Microsoft BizTalk Server Application services.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --> Biztalk Server -> Biztalk Server 2006 -> Manual-Deploy

#### EBIZ\_BS-MEMUsage-ENTSSO

The EBIZ\_BS-MEMUsage-ENTSSO policy measures the memory usage of Enterprise Single Sign-On service.

Policy Type: Measurement Threshold

Policy Group: SPI for Microsoft Enterprise Servers – en – Biztalk Server – Biztalk Server 2006 – Manual-Deploy

### EBIZ\_BS-CPUUsage-ENTSSO

The EBIZ\_BS-CPUUsage-ENTSSO policy measures the CPU usage of Enterprise Single Sign-On service.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_SendPort\_Status\_Monitoring

The MSES\_SendPort\_Status\_Monitoring policy monitors the status of the SendPorts in the Microsoft BizTalk Server.

Policy Type:Scheduled Task

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

### MSES\_ReceiveLocation\_Status\_Monitoring

The MSES\_ReceiveLocation\_Status\_Monitoring policy monitors the status of the ReceiveLocations of BizTalk Server.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

### MSES\_BS\_ DocsProcessed

The MSES\_BS\_ DocsProcessed policy monitors the average number of documents processed (pulled from the Work queue and sent to a port destination address) per second, since the last time the BizTalk Messaging Service was started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BS\_ DocReceived

The MSES\_BS\_ DocReceived policy monitors the average number of documents received per second by BizTalk Server. This includes all documents that make it into the Work queue, and any that have failed.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Biztalk Server – Biztalk Server 2006 – Manual-Deploy

#### MSES\_BS\_DocsSuspended

The MSES\_BS\_DocsSuspended policy monitors the average number of items suspended per second in the suspended queue.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### **MSES\_BS\_DBTransactions**

The MSES\_BS\_DBTransactions policy monitors the average number of database transactions performed since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

### MSES\_BS\_ActiveAppDomains

The MSES\_BS\_ActiveAppDomains policy monitors the number of application domains currently existing for hosting orchestrations.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BS\_DehydrationThreshold

The MSES\_BS\_DehydrationThreshold policy monitors the number in milliseconds that determines how aggressively orchestrations are being dehydrated. If the orchestration engine predicts that an instance is dehydratable (storing all the instance-specific data in the database and removing the instance from the memory), for an amount of time longer than the threshold value, it dehydrates the instance.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BS\_IdleOrchestrations

The MSES\_BS\_IdleOrchestrations policy monitors the number of idle orchestration instances currently hosted by the host instance. This refers to orchestrations that are not making progress but

are not also dehydratable, as when the orchestration is blocked waiting for a receive, listen, or delay in an atomic transaction.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --> Biztalk Server --> Biztalk Server 2006 --> Manual-Deploy

### MSES\_BS\_OrchestrationsCompleted

The MSES\_BS\_OrchestrationsCompleted policy monitors the average number of orchestration instances completed per second since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BS\_OrchestrationsCreated

The MSES\_BS\_OrchestrationsCreated policy monitors the average number of orchestration instances per second created since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BS\_OrchestrationsDehydrated

The MSES\_BS\_OrchestrationsDehydrated policy monitors the average number of orchestration instances dehydrated per second since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --> Biztalk Server -> Biztalk Server 2006 -> Manual-Deploy

### MSES\_BS\_OrchestrationsDiscarded

The MSES\_BS\_OrchestrationsDiscarded policy monitors the average number of orchestration instances discarded from memory since the host instance started. An orchestration can be discarded if the engine fails to persist its state.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --> Biztalk Server --> Biztalk Server 2006 --> Manual-Deploy

### MSES\_BS\_OrchestrationsRehydrated

The MSES\_BS\_OrchestrationsRehydrated policy monitors the average number of orchestration instances rehydrated per second (restoring the instance from the database to memory) since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BS\_OrchestrationsResidentinMemory

The MSES\_BS\_OrchestrationsResidentinMemory policy monitors the number of orchestration instances currently hosted by the host instance.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --> Biztalk Server --> Biztalk Server 2006 --> Manual-Deploy

#### MSES\_BS\_OrchestrationsScheduledForDehydration

The MSES\_BS\_OrchestrationsScheduledForDehydration policy monitors the number of dehydratable orchestrations for which there is a dehydration request pending.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

### MSES\_BS\_OrchestrationsSuspended

The MSES\_BS\_OrchestrationsSuspended policy monitors the average number of orchestration instances suspended per second since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --> Biztalk Server --> Biztalk Server 2006 --> Manual-Deploy

#### MSES\_BS\_RunningOrchestrations

The MSES\_BS\_RunningOrchestrations policy monitors the number of orchestration instances currently executing.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Biztalk Server – Biztalk Server 2006 – Manual-Deploy

#### MSES\_Orchestration\_Status\_Monitoring

The MSES\_Orchestration\_Status\_Monitoring policy monitors the status of the orchestrations.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BS\_PendingMessages

The MSES\_BS\_PendingMessages policy monitors the number of received messages for which receipt has not yet been acknowledged to the message box.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

### MSES\_BS\_PendingWorkItems

The MSES\_BS\_PendingWorkItems policy monitors the number of code execution blocks that are scheduled for execution.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Biztalk Server – Biztalk Server 2006 – Manual-Deploy

### MSES\_BS\_TransactionalScopesAborted

The MSES\_BS\_TransactionalScopesAborted policy monitors the number of long-running or atomic scopes that have been aborted since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BTS\_Logging\_RuleEngineUpdate

The MSES\_BTS\_Logging\_RuleEngineUpdate policy logs the performance data for BizTalk Server 2006 Rule Engine Update Service.

#### Note:

Ensure to deploy the MSES\_BizTalk\_CreateCodaSources policy before deploying this policy. *Policy Type*:Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – BizTalk Server Biztalk Server 2006 – Manual-Deploy

### MSES\_BTS\_Logging\_ENTSSO

The MSES\_BTS\_Logging\_ENTSSO policy logs the performance data for BizTalk Server 2006 ENTSSO.

#### Note:

Ensure to deploy the MSES\_BizTalk\_CreateCodaSources policy before deploying this policy. *Policy Type*: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – BizTalk Server Biztalk Server 2006 – Manual-Deploy

### MSES\_BTS\_Logging\_BaseEDI

The MSES\_BTS\_Logging\_BaseEDI policy logs the performance data for BizTalk Server 2006 Base EDI Service.

#### ♦Note:

Ensure to deploy the MSES\_BizTalk\_CreateCodaSources policy before deploying this policy. *Policy Type*:Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – BizTalk Server – Biztalk Server 2006 – Manual-Deploy

#### MSES\_BTS\_Logging\_ApplicationService

The MSES\_BTS\_Logging\_ApplicationService policy logs the performance data for BizTalk Server 2006 Application Service.

#### Note:

Ensure to deploy the MSES\_BizTalk\_CreateCodaSources policy before deploying this policy. *Policy Type*: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – BizTalk Server – Biztalk Server 2006 – Manual-Deploy

### Windows Event Log

The Windows Event Log policies sent alert messages to the HPOM console when errors, warnings, and information entries from BizTalk Server sources are logged.

Policies monitoring events are grouped in the following way:

- BizTalk Server
- XLANG Scheduler

The Windows Event Log group includes EBIZ\_BizTalkServerFwdApplicationLogEntries policy.

#### EBIZ\_BizTalkServerFwdApplicationLogEntries

The EBIZ\_BizTalkServerFwdApplicationLogEntries policy forwards all BizTalk Server 2006 application log entries with severity as:

- Critical
- Error
- Warning
- Information

*Policy Type:*Windows Event Log policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

## **Database Connectivity**

The Database Connectivity attempts to connect if the databases fails.

This monitoring group includes the following policies:

- MSES\_BS\_DBMonitor
- MSES\_BizTalk\_MessageBox\_DatabaseSize
- "MSES\_BizTalk\_DTA\_DatabaseSize"
- "MSES\_BS\_MsgBox DBConnectionFailures "

#### **MSES\_BS\_DBMonitor**

The MSES\_BS\_DBMonitor policy send a message to the HPOM message browser if any of the following databases fail to connect. An OPC message is sent to refresh the service map with this information. Connections to the following BizTalk 2006 databases are monitored:

- BAMPrimaryImport Business Activity Monitoring DB
- BAM Analysis Business Activity Monitoring OLAP Cubes DB
- BAMStarSchema Business Activity Monitoring DB
- BAMArchive Archives Business Activity Monitoring DB
- BizTalkHWSDb Human Workflow Services DB
- BizTalkDTADb Tracking DB
- BizTalkMgmtDB BTS Configuration Information DB
- BizTalkMsgBoxDb DB for storing Messages and subscriptions
- BizTalkRuleEngineDb DB for storing Policies and Vocabularies
- SSODB Single Sign-On DB

- TPM Trading Partner DB for Business Activity Services
- BizTalkAnalysisdb DB for storing business and health monitoring OLAP Cubes
- BizTalkEDIdb Electronic data interchange DB

Policy Type: Scheduled Task policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Auto-Deploy

#### MSES\_BS\_MsgBox DBConnectionFailures

The MSES\_BS\_MsgBox DBConnectionFailures policy monitors the number of attempted database connections that failed since the host instance started.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Biztalk Server – Biztalk Server 2006 – Manual-Deploy

#### MSES\_BizTalk\_MessageBox\_DatabaseSize

The MSES\_BizTalk\_MessageBox\_DatabaseSize policy monitors the percentage of the usage of the BizTalk MessageBox database.

Deploy this policy only on BizTalk MessageBox database nodes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Manual-Deploy

#### MSES\_BizTalk\_DTA\_DatabaseSize

The MSES\_BizTalk\_DTA\_DatabaseSize policy monitors the the percentage of the usage of the BizTalk DTA database.

Deploy this policy only on BizTalk database node.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- Biztalk Server --- Biztalk Server 2006 --- Manual-Deploy

# **Server Logging**

The Server Logging monitoring group collects selected performance and process-related data for CPU and memory counters.

This monitoring group includes the following policies:

- MSES\_BizTalkServer\_SusDoc\_Logging
- MSES\_BizTalk\_IntervalCount\_Logging
- MSES\_BizTalk\_TDDS\_Logging
- MSES\_BTS\_Logging\_ApplicationService
- MSES\_BTS\_Logging\_ENTSSO
- MSES\_BTS\_Logging\_BaseEDI
- MSES\_BTS\_Logging\_RuleEngineUpdate

#### Note:

You must run the Create Datasource for BizTalk Server tool before deploying the other policies to create the datasource.

#### MSES\_BizTalk\_Create\_Coda\_DataSources

The MSES\_BizTalk\_Create\_Coda\_DataSources policy creates the CODA interval count data source for BizTalk 2006 server.

#### Note:

Deploy the Microsoft Enterprise Servers SPI Data collector instrumentation for this policy to work. See Basic Configuration Procedure section of *HP Operations Smart Plug-in for Microsoft Enterprise Servers SPI Installation and Configuration Guide* for more details. *Policy Type*:Scheduled task policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Auto-Deploy

### MSES\_BizTalkServer\_SusDoc\_Logging

The MSES\_BizTalkServer\_SusDoc\_Logging policy collects suspended documents data from the BizTalk Server database and logs it into the data source.

#### Note:

Ensure to deploy the MSES\_BizTalk\_CreateCodaSources policy before deploying this policy. *Policy Type*:Scheduled Task policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Biztalk Server Biztalk Server 2006 Auto-Deploy

### MSES\_BizTalk\_IntervalCount\_Logging

The MSES\_BizTalk\_IntervalCount\_Logging policy collects the performance data for the following three BizTalk 2006 objects:

- BizTalk:Messaging
- Enterprise Single Sign On

#### • XLANG/s Orchestrations

#### Note:

Ensure to deploy the MSES\_BizTalk\_CreateCodaSources policy before deploying this policy. *Policy Type*:Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Auto-Deploy

### MSES\_BizTalk\_TDDS\_Logging

The MSES\_BizTalk\_TDDS\_Logging policy collects the performance data for BizTalk TDDS (Tracking Data Decode Service), and logs it into the data source.

#### Note:

Ensure to deploy the MSES\_BizTalk\_CreateCodaSources policy before deploying this policy. *Policy Type*:Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Auto-Deploy

### **Discovery**

The Discovery monitoring group discovers the services of the Microsoft BizTalk Server 2006.

This monitoring group includes the BizTalk\_Discovery policy.

### BizTalk\_Discovery

The BizTalk\_Discovery policy discovers the BizTalk infrastructure information and adds it to the service map.

Policy Type: Service Auto-Discovery policy

Policy Group: SPI for Microsoft Enterprise Servers en — Biztalk Server Biztalk Server 2006 Discovery

# **BizTalk Server 2006 Reports**

The Microsoft Enterprise Servers SPI offers the following reports for Microsoft Enterprise Servers (BizTalk Server 2006) SPI:

# BTS Document Process Rate Monthly/BTS Document Process Rate Weekly

These reports give the summarization of the following monthly/weekly statistics related to the BizTalk Documents:

- **Documents processed/sec**: Integer representing the average number of documents processed per second, that is, pulled from the Work queue and sent to a port destination address.
- **Documents received/sec**: Integer representing the average number of documents that have been received by BizTalk Server per second. This includes all documents that make it into the Work queue and any that have failed.
- **Documents suspended/sec**: Integer representing the average number of items suspended in the Suspended queue per second.

# **BTS Processes CPU Statistics**

The BTS Process CPU Statistics report shows a summary of CPU statistics of BizTalk Server processes, compared with overall CPU statistics of the system, in graphical and tabular formats. The summarized process statistics include the percentage of CPU time used by BizTalk Server Application Service, Enterprise SSO (Single Sign On) Service, Rule Engine Update Service, BizTalk Base EDI Service processes compared with the percentage of time the system CPU was busy. This report has the following counters:

- Process. % Processor Time (BTSNTSvc, ENTSSO, RuleEngineUpdateService, esp\_srv)
- Process.Thread Count (BTSNTSvc, ENTSSO, RuleEngineUpdateService, esp\_srv)

## **BTS Processes Memory Statistics**

The BTS Processes Memory Statistics report shows summary of memory statistics of BizTalk Server processes in graphical and tabular formats. The summarized process statistics include the page faults per second, private bytes, and working set used by BizTalk Server Application Service, Enterprise SSO (Single Sign On) Service, Rule Engine Update Service, BizTalk Base EDI Service processes. This report has the following counters:

- Process.Private Bytes (BTSNTSvc, ENTSSO, RuleEngineUpdateService, esp\_srv)
- Process.Working Set (BTSNTSvc, ENTSSO, RuleEngineUpdateService, esp\_srv)
- Process.Page Faults/sec (BTSNTSvc, ENTSSO, RuleEngineUpdateService, esp\_srv)

# BTS Orchestration Statistics Monthly/BizTalk Orchestration Statistics Weekly

These reports give the summarization of the following statistics related to orchestrations:

- Orchestrations completed/sec: Average number of orchestrations completed per second.
- Orchestrations created/sec: Average number of orchestrations created per second.
- Orchestrations dehydrated/sec: Average number of orchestrations dehydrated per second.
- Orchestrations discarded/sec: Average number of orchestrations discarded per second.
- Orchestrations rehydrated/sec: Average number of orchestrations rehydrated per second.
- Orchestrations suspended/sec: Average number of orchestrations suspended per second.
- Database transactions/sec: Average number of database transactions per second.

# BizTalk Transactional Rate Monthly/BizTalk Transactional Rate Weekly

A **scope** is a framework for grouping actions, primarily used for transactional execution and exception handling. **Compensation** is a process where a piece of code gets executed to undo or reverse the effects of a successfully committed transaction.

These reports give the monthly/weekly summarization of the following statistics related to transactions:

- **Transactional scopes aborted/sec**: Average number of long-running or atomic scopes that have been aborted.
- **Transactional scopes committed/sec**: Average number of long-running or atomic scopes that have successfully completed.
- **Transactional scopes compensated/sec**: Average number of long-running or atomic scopes that have successfully completed compensation scopes.

# BTS Suspended Documents Monthly/BizTalk Suspended Documents Weekly

These reports give the weekly suspended document statistics, segregated by the following attributes:

- State: Documents that are in resumable and non-resumable states.
- Server Name: Processing server name.
- **Priority**: Document Priority.

# **BTS TDDS (Tracking Data Decode Service) Statistics**

TDDS is also known as the BAM Event Bus Service. This report gives the monthly summarization of the following statistics related to TDDS:

- Events being processed: The number of events the BAM Event Bus Service is currently processing.
- **Batches being processed**: The number of batches the BAM Event Bus Service is currently processing.
- Events Committed: The number of events the BAM Event Bus Service has committed to SQL Server in the last second.
- **Records Committed**: The number of records the BAM Event Bus Service has committed to SQL Server in the last second.
- **Batches Committed**: The number of batches the BAM Event Bus Service has committed to SQL Server in the last second.

# **BTS Enterprise Single Sign-on - Monthly**

This report gives the monthly summarization of the following statistics related to enterprise SSO:

- GetConfigInfo/sec: Total number of config info accessed.
- IssueTicket/sec: Total number of tickets issued.
- GetCredentials/sec: Total number of credentials accessed.
- RedeemTicket/sec: Total number of tickets redeemed.
- ValidateandRedeemTicket/sec: Total number of tickets validated and redeemed.

# **BizTalk Server 2006 Graphs**

The following Microsoft Enterprise Servers SPI pre-defined graphs for BizTalk Server are offered:

- BizTalk Server Application Service CPU
- Enterprise Single Sign-On Service CPU
- Rule Engine Update Service CPU

These graphs represent the percentage of time spent by the processors executing threads for the BizTalk Server Application Service, Enterprise Single Sign-On Service and Rule Engine Update Service processes. This counter can be compared to System Processor Time to determine to what extent these processes are utilizing processor time.

- BizTalk Server Application Service Memory
- Enterprise Single Sign-On Service Memory
- Rule Engine Update Service Memory

#### Page Fault

Page Faults/sec represents the rate page faults occur in the threads executing in the BizTalk Server Application Service, Enterprise Single Sign-On Service and Rule Engine Update process. A page fault occurs when a thread refers to a virtual memory page that is not in its working set in main memory. The graph shows the average rate at which page faults occur, by the threads executing in these processes.

#### Working Set

Working Set represents the number of bytes in the working set of the BizTalk Server Application Service, Enterprise Single Sign-On Service and Rule Engine Update Service process. The Working Set is the set of memory pages touched recently by the threads in the process. If free memory in the computer is above a certain threshold, pages are left in the working set of a process even if they are not in use. When free memory falls below a certain threshold, pages are trimmed from working sets. If they are needed, they are then soft-faulted back into the working set before they leave main memory.

#### **Private Bytes**

Private Bytes is the current number of bytes the BizTalk Server Application Service, Enterprise Single Sign-On Service and Rule Engine Update process has allocated that cannot be shared with other processes.

# Chapter 3

# Microsoft Enterprise Servers SPI - BizTalk Server 2010

# **Overview**

Microsoft BizTalk Server 2010 provides distributed application integration services using XML as its primary messaging format. External formats are converted to the BizTalk standards through parsers and Biztalk mapping services, which are components of BizTalk Messaging Services. The Biztalk Orchestration Designer defines the process that a document undergoes. In BizTalk messaging, channels handle the conversion of external formats, and ports are responsible for transmitting documents. The channels and ports in Biztalk Messaging can be configured to receive and transmit documents in a variety of formats and protocols, such as HTTP, HTTPS, SMTP, COM. In Orchestration services, the ports represent the input and output of a process. The action is defined in the XLANG schedule.

The Microsoft Enterprise Servers SPI monitors the availability and performance of BizTalk Server 2010 using policies, tools, graphs, and reports.

The Microsoft Enterprise Servers BizTalk Server SPI requires additional configuration. You can use the MSES\_BTS\_DB\_Configuration tool to configure the Microsoft Enterprise Servers SPI for BizTalk Server 2010. For more information, see the *HP Operations Smart Plug-in for Microsoft Enterprise Servers SPI Installation and Configuration Guide.* 

# Microsoft Enterprise Servers SPI Biztalk 2010 Policies

The Microsoft Enterprise Servers SPI BizTalk 2010 policies monitor the services, availability, and performance of the BizTalk Server 2010 in the environment. The Microsoft Enterprises SPI comprises of the policy groups:

- Availability
- Discovery
- Document Processing
- File Receive Adapter
- Message Box
- Messaging
- Orchestration Engine
- Performance
- Sharepoint Adapter
- TDDS

# **SPI Policies - Metrics and Collection**

The metrics assess the availability and performance of BizTalk Server 2010. The main source of these metrics are performance counters. Each metric is assigned a unique Metric ID. The Microsoft Enterprise Servers SPI monitors these metrics and sends alerts if the metric value exceeds the specified threshold. For monitoring a particular Metric ID, a set of three policies are used:

- BTS\_<METRIC\_ID> This measurement threshold policy generates alerts when the collected value exceeds the threshold.
- BTS\_SCH\_<METRIC\_ID> This schedule task policy specifies the schedule for the BTS\_
   <METRIC\_ID> policy.
- BTS\_CFG\_<METRIC\_ID> This is a config file policy which contains the thresholds for the BTS\_<METRIC\_ID>.

A collection is group of metrics from the same source. These collections are logged into an approriate data store. Each Collection is associated with a collection ID. For collecting and logging a <COLLECTION\_ID>, a separate policy is used:

• BTS\_SCH\_<COLLECTION\_ID> - This is a schedule task policy which identifies the schedule when the <COLLECTION\_ID> is to be collected and logged to the data store.

Note: Metrics and Collections are defined in BTS\_MetricDef.xml.

# Availability

The Availability policy group contains policies that monitor the status of Biztalk Server 2010 services. The following sections describes the policies for this policy group.

#### **Metrics Monitored**

The Availability policy group contains policies for monitoring as described in the following sections.

-	
Metric Name	ESSO_STAT
Description	This policy monitors the Enterprise Single Sign On Service.
Metric Definition	ServiceName: ENTSSO
Measurement Threshold Policy	BTS_841402
ConfigFile Policy	BTS_CFG_841402
Scheduled Task Policy for Alerting	BTS_SCH_841402
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Availability

	1
Metric Name	BTSNT_STAT
Description	This policy monitors the status of all BizTalk Application Services.
Metric Definition	ServiceName:BTSSvc\$*
Measurement Threshold Policy	BTS_841403
ConfigFile Policy	BTS_CFG_841403
Scheduled Task Policy for Alerting	BTS_SCH_841403
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Availability

#### Metric ID: 841404

Metric Name	RULEENGINE_STAT
Description	This policy monitors the status of the Rule Engine Update Service.
Metric Definition	ServiceName: RuleEngineUpdateService
Measurement Threshold Policy	BTS_841404
ConfigFile Policy	BTS_CFG_841404
Scheduled Task Policy for Alerting	BTS_SCH_841404
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Availability

### **Metrics Logged**

The Availability policy group contains policies for logging as described in the following sections.

#### Collection ID: 840014

Collection Name	BTS_SERVSTAT
Description	This policy collects and logs the status of BizTalk services. The collected data is logged to class BTS_SERVSTAT.
Collection	Performance Object: Biztalk:TDDS
Definition	Service Name: ENTSSO
	Service Name: BTSSvc\$*
	Service Name: Rule Engine Update Service
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840014
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Availability

#### **Event Log Policies**

The availability policy group contains policies that monitor the BizTalk events. These policies can be accessed from the following location:

# Policy Group: SPI for Microsoft Enterprise Servers — en — Biztalk Server Biztalk Server 2010 — Availability

This policy group contains a set of event log policies.

#### BTS\_Fwd\_Application\_Errors

This policy forwards all the BizTalk errors reported in the Windows event log.

#### BTS\_Fwd\_Application\_Warning

This policy forwards all the BizTalk warnings reported in the Windows event log.

# Discovery

The Discovery policy group contains policies that discover BizTalk Server 2010 in the environment and updates the service map in the management console.

# **BTS\_Discovery**

The BTS\_Discovery policy discovers the BizTalk 2010 servers in the environment and displays it in the service map.

Policy Type	Service Auto-Discovery
Policy	SPI for Microsoft Enterprise Servers — en — Biztalk Server —
Group	Biztalk Server 2010 — Discovery

### BTS\_Cluster\_Re\_Discovery

The BTS\_Cluster\_Re\_Discovery policy updates the service map when a cluster failover occurs.

Policy Type	Windows Event Log
Policy	SPI for Microsoft Enterprise Servers — en — Biztalk Server —
Group	Biztalk Server 2010 — Discovery

# **Document Processing**

The Document Processing policy group contains policies that collects and logs performance data related to BizTalk Document Processing. The following sections describes the policies for this policy group.

#### **Metrics Logged**

The Document Processing policy group contains policies for logging as described in the following sections.

#### Collection ID: 840012

Collection Name	BTS_DOCPROCRATE
Description	This policy collects and logs performance metrics related to Document Processing.
Collection	Performance Object: Biztalk: Messaging
Definition	Performance Counter: Documents processed
	Performance Counter: Documents processed/Sec
	Performance Counter: Documents received
	Performance Counter: Documents resubmitted
	Performance Counter:Documents received/Sec
	Performance Counter:Documents suspended
	Performance Counter:Documents suspended/Sec
	Performance Counter:Documents transmitted/Batch
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840012
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Document Processing

# **File Receive Adapter**

The File Receive Adapter policy group contains policies that collect and monitor the performance metrics of the File Receive Adapter. The following sections describes the policies for this policy group.

### **Metrics Monitored**

The File Receive Adapter policy group contains policies for monitoring as described in the following sections.

#### Metric ID: 841502

Metric Name	BTS_RECDELRET
Description	Monitors the number of times the File Receive Adapter attempts to delete a file that is read.
Metric Definition	PerfObject:BizTalk: FILE Receive Adapter
	PerfCounter: Delete retries
	PerfInstance:*
Measurement Threshold Policy	BTS_841502
ConfigFile Policy	BTS_CFG_841502
Scheduled Task Policy for Alerting	BTS_SCH_841502
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers en Biztalk Server Biztalk Server 2010 File Receive Adapter

Metric Name	BTS_RECLCKFAIL
Description	Monitors the number of times the File Receive Adapter failed to lock the file per second.
Metric Definition	PerfObject:BizTalk:FILE Receive Adapter PerfCounter:Lock failures/sec PerfInstance:*
Measurement Threshold Policy	BTS_841503
ConfigFile Policy	BTS_CFG_841503
Scheduled Task Policy for Alerting	BTS_SCH_841503
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — File Receive Adapter

#### **Metrics Logged**

The File Receive Adapter policy group contains policies for logging as described in the following sections.

#### Collection ID: 840015

1	Î Î
Collection Name	BTS_FILERECPERF
Description	This policy collects and logs performance metrics related to file receive adapter.
Collection Definition	Performance Object:BizTalk: FILE Receive Adapter
	Performance Counter: Delete retries
	Performance Counter:Lock failures/sec
	Performance Counter:Bytes received/Sec
	Performance Counter:Messages received/Sec
	Performance Counter: Time to build batch
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840015
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — FileReceiveAdapter

### **Message Box**

The Message Box policy group conains policies that collect and monitor the performance metrics of BizTalk Message Box. The following sections describes the policies for this policy group.

#### **Metrics Monitored**

The Message Box policy group contains policies for monitoring as described in the following sections.

Metric Name	BTS_MSGSPOOLSIZE
Description	This policy monitors the Message Box Spool Size of a particular Message Box on the Biz Talk Server. An increasing spool size indicates that the messages are being picked up at a slower rate and throughput comes down.
Metric Definition	Performance Object: BizTalk: Message Box:General Counters
	Performance Counter:Spool Size
	Performance Instance:*
Measurement Threshold Policy	BTS_841002
ConfigFile Policy	BTS_CFG_841002
Scheduled Task Policy for Alerting	BTS_SCH_841002
Schedule	10 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Message Box

Metric Name	BTS_MSGSQUELEN
Description	Monitors the message box queue length and checks the number of messages in the particular host queue. A build up in host queue length indicates that the orchestrations are not completing faster.
Metric Definition	Performance Object: BizTalk: Message Box:Host Counters
	Performance Counter: Host Queue - Length
	Performance Instance:*
Measurement Threshold Policy	BTS_845002
ConfigFile Policy	BTS_CFG_845002
Scheduled Task Policy for Alerting	BTS_SCH_845002
Schedule	10 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Message Box

Metric Name	BTS_MSGSUSQLEN
Description	This policy monitors the total number of suspended message for a particular host.An increase in message suspension indicates that there are problems in message processing.
Metric Definition	Performance Object: BizTalk: Message Box:Host Counters
	Performance Counter:Host Queue - Suspended Msgs - Length
	Performance Instance:*
Measurement Threshold Policy	BTS_845005
ConfigFile Policy	BTS_CFG_845005
Scheduled Task Policy for Alerting	BTS_SCH_845005
Schedule	10 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Message Box

## **Metrics Logged**

The Message Boz policy group contains policies for logging as described in the following sections.

Metric Name	BTS_MBSTATGEN
Description	This policy collects and logs performance metrics related to Message Box.
Collection Definition	Performance Object:BizTalk: Message Box:General Counters
	Performance Counter:Spool Size
	Performance Counter: Tracking Data Size
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840001
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Message Box

Metric Name	BTS_MBSTATHOST
Description	This policy collects and logs Host Metrics related to Message Box.
Collection Definition	Performance Object:BizTalk: Message Box:Host Counters
	Performance Counter: Host Queue - Length
	Performance Counter:Host Queue - Number of Instances
	Performance Counter:Host Queue - Instance State Msg Refs - Length
	Performance Counter:Host Queue - Suspended Msgs - Length
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840005
Collection Interval	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Message Box

# Messaging

The Messaging policy group contains policies that collect and monitor the performance metrics of of the BizTalk Messaging Engine. The following sections describes the policies for this policy group.

## **Metrics Monitored**

The Messaging policy group contains policies for monitoring as described in the following sections.

Metric Name	BTS_DELIVTHROTST
Description	This policy monitors the throttling state of the message delivery and generates appropriate message for each state.
Metric Definition	Performance Object:BizTalk :Message Agent
	Performance Counter: Message delivery throttling state
	Performance Instance:*
Measurement Threshold Policy	BTS_843002
ConfigFile Policy	BTS_CFG_843002
Scheduled Task Policy for Alerting	BTS_SCH_843002
Schedule	10 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_DELIVDELAY
Description	This policy monitors the delay injected in each qualifying batch for throttling the delivery of messages.
Metric Definition	Performance Object: BizTalk: Message Agent
	Performance Counter: Message delivery delay (ms)
	Performance Instance:*
Measurement Threshold Policy	BTS_843003
ConfigFile Policy	BTS_CFG_843003
Scheduled Task Policy for Alerting	BTS_SCH_843003
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_DELIVTHRODUR
Description	This policy monitors the seconds spent in the current state of message delivery throttling.
Metric Definition	Performance Object: BizTalk: Message Agent
	Performance Counter: Message delivery throttling state duration
	Performance Instance:*
Measurement Threshold Policy	BTS_843004
ConfigFile Policy	BTS_CFG_843004
Scheduled Task Policy for Alerting	BTS_SCH_843004
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGPUBDEL
Description	This policy monitors the delay injected in each qualifying batch for throttling the publishing of messages.
Metric Definition	Performance Object: BizTalk:Message Agent
	Performance Counter: Message publishing delay (ms)
	Performance Instance:*
Measurement Threshold Policy	BTS_844002
ConfigFile Policy	BTS_CFG_844002
Scheduled Task Policy for Alerting	BTS_SCH_844002
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGPUBTHROT
Description	This policy monitors the message publishing throttling state.
Metric Definition	Performance Object: BizTalk:Message Agent
	Performance Counter: Message publishing throttling state
	Performance Instance:*
Measurement Threshold Policy	BTS_844003
ConfigFile Policy	BTS_CFG_844003
Scheduled Task Policy for Alerting	BTS_SCH_844003
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGPUBTHROTDUR
Description	This policy monitors the seconds spent in the current state of message publishing throttling.
Metric Definition	Performance Object: BizTalk:Message Agent
	Performance Counter: Message publishing throttling state duration
	Performance Instance:*
Measurement Threshold Policy	BTS_844004
ConfigFile Policy	BTS_CFG_844004
Scheduled Task Policy for Alerting	BTS_SCH_844004
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGOUTLAT
Description	This policy monitors the outbound latency of Biztalk Messaging Engine.
Metric Definition	Performance Object: BizTalk: Messaging Latency
	Performance Counter:Outbound Latency (sec)
	Performance Instance:*
Measurement Threshold Policy	BTS_846002
ConfigFile Policy	BTS_CFG_846002
Scheduled Task Policy for Alerting	BTS_SCH_846002
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGINLAT
Description	This policy monitors the Inbound Messaging Latency of the BizTalk Messaging Engine.
Metric Definition	Performance Object: BizTalk:Messaging Latency
	Performance Counter:Inbound Latency (sec)
	Performance Instance:*
Measurement Threshold Policy	BTS_846004
ConfigFile Policy	BTS_CFG_846004
Scheduled Task Policy for Alerting	BTS_SCH_846004
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGOUTAD
Description	This policy monitors the outbound adapter latency of the BizTalk Messaging Engine.
Metric Definition	Performance Object: BizTalk:Messaging Latency
	Performance Counter: Outbound Adapter Latency (sec)
	Performance Instance:*
Measurement Threshold Policy	BTS_846005
ConfigFile Policy	BTS_CFG_846005
Scheduled Task Policy for Alerting	BTS_SCH_846005
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_REQRESTO
Description	This policy monitors the request response timeout of the BizTalk Messaging Engine.
Metric Definition	Performance Object:BizTalk:Messaging
	Performance Counter:Request/Response timeouts
	Performance Instance:*
Measurement Threshold Policy	BTS_848002
ConfigFile Policy	BTS_CFG_848002
Scheduled Task Policy for Alerting	BTS_SCH_848002
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

## **Metrics Logged**

The Messaging policy group contains policies for logging as described in the following sections.

Metric Name	BTS_MSGDELIVERY
Collection Description	This policy collects and logs performance metrics related to Message Delivery.
Collection Definition	Performance Object: BizTalk: Message Agent
	Performance Counter:Message delivery throttling state
	Performance Counter:Message delivery delay (ms)
	Performance Counter:Message delivery throttling state duration
	Performance Counter:Message delivery incoming rate
	Performance Counter:Message delivery outgoing rate
	Performance Counter: Total messages delivered
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840003
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGPUBLISHING
Collecton Description	This policy collects and logs metrics related to Message Publishing.
Collection Definition	Performance Object: BizTalk: Message Agent
	Performance Counter: Message publishing delay (ms)
	Performance Counter: Message publishing throttling state
	Performance Counter: Message publishing throttling state duration
	Performance Counter: Message publishing incoming rate
	Performance Counter: Message publishing outgoing rate
	Performance Counter:Total messages published
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840004
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGLATENCY
Collection Description	This policy collects and logs metrics related to Message Latency.
Collection Definition	Performance Object: BizTalk: Messaging Latency
	Performance Counter:Outbound Latency (sec)
	Performance Counter:Request-Response Latency (sec)
	Performance Counter:Inbound Latency (sec)
	Performance Counter:Outbound Adapter Latency (sec)
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840006
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

Metric Name	BTS_MSGINGPERF
Collection Description	This policy collects and logs metrics related to Messaging Performance.
Collection Definition	Performance Object:BizTalk:Messaging
	Performance Counter:Request/Response timeouts
	Performance Counter: Active receive locations
	Performance Counter: Active receive threads
	Performance Counter: Active send messages
	Performance Counter: Active send threads
	Performance Counter: Pending receive batches
	Performance Counter:Pending transmitted messages
	PerformanceCounter:Throttled receive batches
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840008
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Messaging

# **Orchestration Engine**

The following section describes the policies for this policy group.

## **Metrics Monitored**

The Orchestration Engine policy group contains policies for logging as described in the following sections.

Metric Name	
wellic Name	BTS_BATCHFACT
Description	This metric monitors the average batch factor.
Metric Definition	Performance Counter: Average batch factor
	Performance Counter:Orchestrations discarded
	Performance Instance:*
Measurement Threshold Policy	BTS_842002
ConfigFile Policy	BTS_CFG_842002
Scheduled Task Policy for Alerting	BTS_SCH_842002
Schedule	10 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Orchestration Engine

Metric Name	BTS_ORCHIDLE
Description	This metric monitors the number of idle orchestrations.
Metric Definition	Performance Object:XLANG//s Orchestrations Performance Counter:Idle orchestrations Performance Instance:*
Measurement Threshold Policy	BTS_842005
ConfigFile Policy	BTS_CFG_842005
Scheduled Task Policy for Alerting	BTS_SCH_842005
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Orchestration Engine

Metric Name	BTS_ORCHDISC
Description	This metric monitors the rate of dehydration of orchestrations.
Metric Definition	Performance Object:XLANG//s Orchestrations Performance Counter:Orchestrations
	dehydrated/sec Performance Instance:*
Measurement Threshold Policy	BTS_842012
ConfigFile Policy	BTS_CFG_842012
Scheduled Task Policy for Alerting	BTS_SCH_842012
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Orchestration Engine

Metric Name	BTS_ORCHDEHYSEC
Description	This metric monitors the rate of orchestrations discarded.
Metric Definition	Performance Object:XLANG//s Orchestrations
	Performance Counter:Orchestrations discarded
	Performance Instance:*
Measurement Threshold Policy	BTS_842013
ConfigFile Policy	BTS_CFG_842013
Scheduled Task Policy for Alerting	BTS_SCH_842013
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Orchestration Engine

Metric Name	BTS_ORCHSUSPSEC
Description	This metric monitors the rate of orchestrations discarded.
Metric Definition	Performance Object:XLANG//s Orchestrations
	Performance Counter:Orchestrations suspended/sec
	Performance Instance:*
Measurement Threshold Policy	BTS_842018
ConfigFile Policy	BTS_CFG_842018
Scheduled Task Policy for Alerting	BTS_SCH_842018
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Orchestration Engine

Metric Name	BTS_TRANSABORT
Description	This metric monitors the average number of transactions aborted.
Metric Definition	Performance Object:XLANG//s Orchestrations
	Performance Counter: Transactional scopes aborted/sec
	Performance Instance:*
Measurement Threshold Policy	BTS_842021
ConfigFile Policy	BTS_CFG_842021
Scheduled Task Policy for Alerting	BTS_SCH_842021
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Orchestration Engine

Metric Name	BTS_MSGDBCONFAIL
Description	This metric monitors the MessageBoxDB Connection Failures and checks the number of attempted database connections that failed since the host instance started.
Metric	Performance Object:XLANG//s Orchestrations
Definition	Performance Counter:MessageBox databases connection failures
	Performance Instance:*
Measurement Threshold Policy	BTS_842023
ConfigFile Policy	BTS_CFG_842023
Scheduled Task Policy for Alerting	BTS_SCH_842023
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Orchestration Engine

## **Metrics Logged**

The Orchestration Engine policy group contains policies for logging as described in the following sections.

Metric Name	BTS_ORCHPERF
Description	This policy collects and logs performance metrics related to Orchestrations

Collection	Performance Object:XLANG/s Orchestrations
Definition	Performance Counter: Average batch factor
	Performance Counter: Database transactions
	Performance Counter:Database transactions/sec
	Performance Counter: Idle orchestrations
	Performance Counter:Online MessageBox databases
	Performance Counter:Orchestrations completed
	Performance Counter:Orchestrations completed/sec
	Performance Counter: Orchestrations created
	Performance Counter:Orchestrations created/sec
	Performance Counter:Orchestrations dehydrated
	Performance Counter:Orchestrations dehydrated/sec
	Performance Counter:Orchestrations discarded
	Performance Counter:Orchestrations discarded/sec
	Performance Counter:Orchestrations rehydrated
	Performance Counter:Orchestrations rehydrated/sec
	Performance Counter:Orchestrations suspended
	Performance Counter:Orchestrations suspended/sec
	Performance Counter:Orchestrations resident in-memory
	Performance Counter:Running orchestrations

	Performance Counter: Transactional scopes aborted/sec
	Performance Counter:Transactional scopes committed/sec
	Performance Counter:MessageBox databases connection failures
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840002
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers en Biztalk Server Biztalk Server 2010 Orchestration Engine

# Performance

The following sections describes the policies for this policy group.

## **Metrics Logged**

The Performance policy group contains policies for logging as described in the following sections.

	1
Collection Name	BTS_PROCESS
Collection Description	This metric collects and logs metrics related to BTSNTSVC Performance.
Collection Definition	Performance Object: Process
	Performance Counter:% Processor Time; Performance Instance: System
	Performance Counter: Thread Count; Performance Instance: BTSNTSVC
	Performance Counter:Page Faults/sec; Performance Instance: BTSNTSVC
	Performance Counter:Working Set; Performance Instance: BTSNTSVC
	PerfCounter:Private Bytes; PerfInstance: BTSNTSVC
Schedule Task Policy for Logging	BTS_SCH_840009
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server —

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Collection Name	BTS_PROCESS
Collection Description	This metric collects and logs metrics related to ENTSSO Performance
Collection Definition	Performance Object: Process
	Performance Counter: % Processor Time ; Performance Instance: ENTSSO
	Performance Counter: % Processor Time ; Performance Instance:System
	Performance Counter: Thread Count ; Performance Instance: ENTSSO
	Performance Counter:Page Faults/sec ; Performance Instance:ENTSSO
	Performance Counter:Working Set ; Performance Instance:ENTSSO
	Performance Counter: Private Bytes ; Performance Instance: ENTSSO
Schedule Task Policy for Logging	BTS_SCH_840010
Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Performance

Collection Name	BTS_PROCESS
Collection Description	This policy collects and logs metrics related to RuleEngineUpdateService Performance
Collection Definition	Performance Object:Process
	Performance Counter:% Processor Time ; Performance Instance:RuleEngineUpdateService
	Performance Counter:% Processor Time ; Performance Instance:System
	Performance Counter:Thread Count ;Performance Instance:RuleEngineUpdateService
	Performance Counter:Page Faults/sec Performance Instance:RuleEngineUpdateService
	Performance Counter:Working Set ; Performance Instance:RuleEngineUpdateService
	Performance Counter:Private Bytes ; Performance Instance:RuleEngineUpdateService
Schedule Task Policy for Logging	BTS_SCH_840011
Collection Schedule	15 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Performance

# **Sharepoint Adapter**

The Sharepoint Adapter policy group contains the following policies:

#### **Metrics Monitored**

The Sharepoint Adapter policy group contains polices for monitoring as described in the following sections.

Metric Name	BTS_RECMSGFAIL
Metric Description	Monitor SP Adapter Message Receive Failure and checks the percentage of Windows SharePoint Services files that are not processed by BizTalk Server due to receive errors
Metric Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Instance:*
	Performance Counter:% Receive Message Failures
Measurement Threshold Policy	BTS_847002
ConfigFile Policy	BTS_CFG_847002
Scheduled Task Policy for Alerting	BTS_SCH_847002
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Sharepoint Adapter

Metric Name	BTS_SENDMSGFAIL
Metric Description	Monitor SP Adapter Adapter Message Send Failure and checks the percentage of Windows SharePoint Services files that are not processed by BizTalk Server due to receive errors
Metric Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Instance:*
	Performance Counter:% Send Message Failures
Measurement Threshold Policy	BTS_847003
ConfigFile Policy	BTS_CFG_847003
Scheduled Task Policy for Alerting	BTS_SCH_847003
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Sharepoint Adapter

Metric Name	BTS_WEBSVCCALLFAIL
Metric Description	This policy monitors the SP Adapter WSVC Call Failure and checks the percentage of Windows SharePoint Services adapter Web service calls that have failed.
Metric Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Instance:*
	Performance Counter:% Web Service Call Failures
Measurement Threshold Policy	BTS_847004
ConfigFile Policy	BTS_CFG_847004
Scheduled Task Policy for Alerting	BTS_SCH_847004
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Sharepoint Adapter

Metric Name	BTS_RECCOMITFAIL
Metric Description	This policy monitors the SP Adapter Total Receive commit Failure and checks the total number of Windows SharePoint Services errors that were raised when updating the status of the SharePoint documents.
Metric Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Instance:*
	Performance Counter: Total Receive Commit Failures
Measurement Threshold Policy	BTS_847005
ConfigFile Policy	BTS_CFG_847005
Scheduled Task Policy for Alerting	BTS_SCH_847005
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Sharepoint Adapter

Metric Name	BTS_RECVMSGFAIL
Metric Description	This policy monitors the SP Adapter Total Receive Message Failure and checks the total number of Windows SharePoint Services files received that have not been processed by BizTalk Server due to errors.
Metric Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Instance:*
	Performance Counter:Total Receive Message Failures
Measurement Threshold Policy	BTS_847006
ConfigFile Policy	BTS_CFG_847006
Scheduled Task Policy for Alerting	BTS_SCH_847006
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Sharepoint Adapter

Metric Name	BTS_TTLSENDMSGFAIL
Metric Description	This policy monitors the SP Adapter Total Send Message Failure and checks the total number of failed messages BizTalk Server attempted to send to Windows SharePoint Services.
Metric Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Instance:*
	Performance Counter:Total Send Message Failures
Measurement Threshold Policy	BTS_847007
ConfigFile Policy	BTS_CFG_847007
Scheduled Task Policy for Alerting	BTS_SCH_847007
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Sharepoint Adapter

Metric Name	BTS_WEBSVCCALTOT
Metric Description	This policy monitors the SP Adapter Total WSVC Call Failure and checks the total number of Windows SharePoint Services adapter Web service calls that have failed.
Metric Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Instance:*
	Performance Counter:Total Web Service Call Failures
Measurement Threshold Policy	BTS_847008
ConfigFile Policy	BTS_CFG_847008
Scheduled Task Policy for Alerting	BTS_SCH_847008
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — Sharepoint Adapter

## **Metrics Logged**

The Sharepoint Adapter policy group contains polices for logging as described in the following sections.

Collection Name	BTS_SHRPERF
Collection Description	This policy collects and logs metrics related to Sharepoint Server
Collection Definition	Performance Object:BizTalk:Windows Sharepoint Services Adapter
	Performance Counter:% Receive Message Failures
	Performance Counter:% Send Message Failures
	Performance Counter:% Web Service Call Failures
	Performance Counter: Total Receive Commit Failures
	Performance Counter:Total Receive Message Failures
	Performance Counter: Total Send Message Failures
	Performance Counter: Total Web Service Call Failures
	Performance Counter: Total Sent Messages
	Performance Counter: Total Received Messages
	PerformanceCounter:Web Service Calls per Second
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840007
Collection Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — SharepointAdapter

# Tracking Data Decode Services (TDDS)

The following sections describes the policies for this policy group.

## **Metrics Logged**

The TDDS policy group contains polices for logging as described in the following sections.

Metric Name	BTS_TDDSSTAT
Description	This policy collects and logs performance metrics related to TDDS.
Collection	Performance Object:Biztalk:TDDS
Definition	Performance Counter: Total Batches
	Performance Counter: Total Events
	Performance Counter: Total Failed Batches
	Performance Counter: Total Failed Events
	Performance Counter: Total Records
	Performance Counter:Batches being processed
	Performance Counter: Events being processed
	Performance Counter:Records being processed
	Performance Counter:Batches Committed
	Performance Counter: Events Committed
	Performance Counter: Records Committed
	Performance Instance: *
Schedule Task Policy for Logging	BTS_SCH_840013
Schedule	5 min
Policy Group	SPI for Microsoft Enterprise Servers — en — Biztalk Server — Biztalk Server 2010 — TDDS

# **BizTalk Server 2010 Reports**

The Microsoft Enterprise Servers SPI provides the following reports for Microsoft Enterprise Servers (BizTalk Server 2010) SPI.

## **BizTalk Server Document Processing Statistics**

This is a weekly report which provides statistical summary of the documents processed by the BizTalk Server. The summarized document statistics include average number of Documents Processed, Received, Suspended, Re-Submitted and Transmitted for each day per BizTalk Server. These reports provide the summary of the following monthly and weekly statistics related to the BizTalk Documents. The following metric descriptions are displayed in this report:

- **Documents processed**: Represents the average number of documents processed, that is, pulled from the work queue and sent to a port destination address.
- **Documents received**: Represents the average number of documents that are received by the BizTalk Server. his includes all documents that are logged into the work queue and documents that have failed.
- Documents suspended: Represents the average number of documents that are suspended.
- **Documents Re-submitted:** Represents the average number of documents resubmitted y send adapters.
- **Documents Transmitted:** Represents the average number of documents transmitted per batch.

The schedule for this report is defined in the following policy :

Policy Name	BTS_SCH_840012
Class Name	BTS_DOCPROCRATE

## **Tracking Data Decode Statistics (TDDS) Statistics Report**

This weekly report shows TDDS statistics for a BizTalk Server in graphical and tabular format. The summarization comprises of average number of TDDS Batches, Events, Failed Batches and Failed Events per day per BizTalk Server. This report provides the summary of the statistics of TDDS.

The summary report provides the following details:

- Events processed
- Events failed
- Number of batches processed
- Number of batches failed

The schedule for this report is defined in the following policy:

Policy Name	BTS_SCH_840013
Class Name	BTS_TDDSSTAT

# **BizTalk Server Processes CPU Statistics - Application** Service

This report shows a summary of CPU statistics of BizTalk Server processes, compared with overall CPU statistics of the system, in graphical and tabular formats. The summarized process statistics include the percentage of CPU time used by BizTalk Server Application Service, compared with the percentage of time the system CPU was busy. This report has the following counters:

- Process. % Processor Time (BTSNTSvc) CPU time used by the BizTalk Service
- Process. Thread Count (BTSNTSvc) Thread count of the BizTalk service
- System % Processor Time Total time the system's CPU was busy

The schedule for this report is defined in the following policy:

Policy Name	BTS_SCH_840009
Class Name	BTS_PROCESS

# **BizTalk Server Processes CPU Statistics - Enterprise** Single Sign On (SSO) Service

This report shows a summary of CPU statistics of BizTalk Server processes, compared with overall CPU statistics of the system, in graphical and tabular formats. The summarized process statistics include the percentage of CPU time used by Enterprise SSO service compared with the percentage of time the system CPU was busy. This report has the following counters:

- Process. % Processor Time (ENTSSO) CPU time used by the BizTalk Service
- Process.Thread Count (ENTSSO) Thread count of the BizTalk service
- System % Processor Time Total time the system's CPU was busy

The schedule for this report is defined in the following policy:

Policy Name	BTS_SCH_840010
Class Name	BTS_PROCESS

# **BizTalk Server Processes CPU Statistics - Rule Engine** Update Service

This report shows a summary of CPU statistics of BizTalk Server processes, compared with overall CPU statistics of the system, in graphical and tabular formats. The summarized process statistics include the percentage of CPU time used by the RuleEngineUpdate Service, compared with the percentage of time the system CPU was busy. This report has the following counters:

- Process. % Processor Time (RuleEngineUpdateService) CPU time used by the BizTalk Service
- Process.Thread Count (RuleEngineUpdateService) Thread count of the BizTalk service
- System % Processor Time Total time the system's CPU was busy

The schedule for this report is defined in the following policy:

Policy Name	BTS_SCH_840011
Class Name	BTS_PROCESS

# **BizTalk Server Processes Memory Statistics - Application Service**

This report shows summary of memory statistics of BizTalk Server processes in graphical and tabular formats. The summarized process statistics include the page faults per second, private bytes, and working set used by BizTalk Server Application Service. This report has the following counters:

- **Process.Private Bytes** (BTSNTSvc)
- **Process.Working Set** (BTSNTSvc)
- Process.Page Faults/sec (BTSNTSvc)

The schedule for this report is defined in the following policy:

Policy Name	BTS_SCH_840009
Class Name	BTS_PROCESS

## **BTS Processes Memory Statistics - Enterprise Single** Sign On (SSO) Service

This report shows summary of memory statistics of BizTalk Server processes in graphical and tabular formats. The summarized process statistics include the page faults per second, private bytes, and working set used by Enterprise SSO (Single Sign On) Service. This report has the following counters:

- Process.Private Bytes (ENTSSO)
- Process.Working Set (ENTSSO)
- Process.Page Faults/sec (ENTSSO)

The schedule for this report is defined in the following policy:

Policy Name	BTS_SCH_840010
Class Name	BTS_PROCESS

# **BTS Processes Memory Statistics - Rule Engine Update Service**

This report shows summary of memory statistics of BizTalk Server processes in graphical and tabular formats. The summarized process statistics include the page faults per second, private bytes, and working set used by Rule Engine Update Service. This report has the following counters:

- Process.Private Bytes (RuleEngineUpdateService)
- Process.Working Set (RuleEngineUpdateService)
- Process.Page Faults/sec (RuleEngineUpdateService)

The schedule for this report is defined in the following policy:

Policy Name	BTS_SCH_840011
Class Name	BTS_PROCESS

# **BizTalk Server 2010 Graphs**

Microsoft Enterprise Servers SPI provides the following pre-defined graphs for BizTalk Server 2010.

# **BizTalk Service CPU Statistics**

This graph shows the CPU statistics of the Biztalk service compared with overall CPU statistics of the system.

# **Enterprise SSO Service CPU Statistics**

This graph shows the CPU statistics of Enterprise SSO service compared with overall CPU statistics of the system.

## **Rule Engine Update Service CPU Statistics**

This graph shows the CPU statistics of the IM conferencing service compared with overall CPU statistics of the system.

# **BizTalk Service Memory Statistics**

This graph shows the memory statistics of the Biztalk Service.

# **Enterprise SSO Memory Statistics**

This graph shows the memory statistics of the Enterprise SSO Service.

# **Rule Engine Update Service Memory Statistics**

This graph shows the memory statistics of the Rule Engine Update Service.

# **Document Processing Statistics by BizTalk Server**

This graph shows the documents processing statistics of BizTalk Server.

# **Orchestration Statistics by BizTalk Server**

This graph shows the issues encountered by BizTalk Orchestration.

# **Biztalk TDDS Statistics**

This graph shows the TDDS Statistics of BizTalk Server.

# Chapter 4

# **Microsoft Enterprise Servers SPI - Internet Security and Acceleration Server**

# **Overview**

Microsoft Internet Security and Acceleration (ISA) Server is a tool that integrates security (firewall) with acceleration (Web proxy cached pages.) This secures your site and speeds up the web access.

The ISA service map displays the nodes where ISA servers are installed. The service maps are available under both the Applications and the Systems Infrastructure areas.

# Microsoft Enterprise Servers SPI ISA Server Policies

The Microsoft Enterprise ServersSPI ISA policies monitor the Microsoft Internet Security and Acceleration (ISA) Server. The policies offer the following monitoring processes:

- Availability Monitoring
- Performance Monitoring
- Windows Event Log Monitoring
- Server Logging
- Discovery

# **Availability Monitoring**

The availability monitoring group monitor the services of the Microsoft ISA Server. Services are not automatically restarted, because they may have been shut down intentionally.

Monitored services of the ISA Server include:

- Microsoft Firewall (wspsrv)
- Microsoft ISA Server Control (mspadmin)
- Microsoft ISA Server Job Scheduler (w3prefch)
- Routing and Remote Access (svchost)
- Network Load Balancing
- Microsoft Data Engine (sqlservr)
- Microsoft ISA Server Storage (isastg)

• Firewall Engine

• ISA Storage Configuration (dsadmin) This monitoring group includes the following policies:

- ISA2006\_Availability\_Config-Storage-service
- ISA2006\_Availability\_DataEngine-Service
- ISA2006\_Availability\_Firewall-Engine-Service
- ISA2006\_Availability\_Firewall-Service
- ISA2006\_Availability\_JobScheduler-Service
- ISA2006\_Availability\_Network-Load-Balancing-Service
- ISA2006\_Availability\_RemoteAccess-Service
- ISA2006\_Availability\_ServerControl-Service
- ISA2006\_Availability\_Storage-Service

### ISA2006\_Availability\_Config-Storage-service

The ISA2006\_Availability\_Config-Storage-service policy checks if ISA Configuration Storage Server service is running. If not, it tries to restart the service.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server Internet Security And Acceleration Server 2007— Availability Monitoring

### ISA2006\_Availability\_DataEngine-Service

The ISA2006\_Availability\_DataEngine-Service policy checks if ISA Data Engine service is running. If not, it tries to restart the service.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Availability Monitoring

### ISA2006\_Availability\_Firewall-Engine-Service

The ISA2006\_Availability\_Firewall-Engine-Service policy checks if ISA Firewall Engine service is running. If not, it tries to restart the service.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers --- en --- Internet Security And Acceleration Server --- Internet Security And Acceleration Server 2007 --- Availability Monitoring

### ISA2006\_Availability\_Firewall-Service

The ISA2006\_Availability\_Firewall-Service policy checks if ISA Server Control service is running. If not, it tries to restart the service.

*Policy Type:* Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Availability Monitoring

### ISA2006\_Availability\_JobScheduler-Service

The ISA2006\_Availability\_JobScheduler-Service policy checks if ISA Job Scheduler service is running. If not, it tries to restart the service.

Policy Type: Windows Management Interface policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server — Internet Security And Acceleration Server 2007— Availability Monitoring

### ISA2006\_Availability\_Network-Load-Balancing-Service

The ISA2006\_Availability\_Network-Load-Balancing-Service policy checks if ISA Network Load Balancing service is running. If not, it tries to restart the service.

Policy Type: Windows Management Interface policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server — Internet Security And Acceleration Server 2007— Availability Monitoring

### ISA2006\_Availability\_RemoteAccess-Service

The ISA2006\_Availability\_RemoteAccess-Service policy checks if ISA Routing and Remote Access service is running. If not, it tries to restart the service.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Availability Monitoring

### ISA2006\_Availability\_ServerControl-Service

The ISA2006\_Availability\_ServerControl-Service policy checks if ISA Job Scheduler service is running. If not, it tries to restart the service.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Internet Security And Acceleration Server→ Internet Security And Acceleration Server 2007→ Availability Monitoring

### ISA2006\_Availability\_Storage-Service

The ISA2006\_Availability\_Storage-Service policy checks if ISA Server Storage service is running. If not, it tries to restart the service.

Schedule: This policy runs every

Policy Type: WIndows Management Interface policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server Internet Security And Acceleration Server 2007— Availability Monitoring

# Windows Event Log Monitoring

Event monitoring of the Windows 2000/2003 Event Log (application log) occurs for ISA Server events. Console messages are sent for all errors, warnings, and information events logged for the following sources:

- Microsoft Firewall
- Microsoft Web Proxy
- Microsoft ISA Server Control
- Microsoft Scheduled Cache Content Download This monitoring group includes the following policies:
- ISA2006\_FwdApplicationError
- ISA2006\_FwdApplicationInformation
- ISA2006\_FwdApplicationWarning

### ISA2006\_FwdApplicationError

The ISA2006\_FwdApplicationError policy forwards all ISA Server application log entries with severity as *Error*.

Policy Type: Windows Event Log policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Event Log Monitoring

### ISA2006\_FwdApplicationInformation

The ISA2006\_FwdApplicationInformation policy forwards all ISA Server application log entries with severity as *Information*.

Policy Type: Windows Event Log policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Event Log Monitoring

### ISA2006\_FwdApplicationWarning

The ISA2006\_FwdApplicationWarning policy forwards all ISA Server application log entries with severity as *Warning*.

Policy Type: Windows Event Log policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Event Log Monitoring

# **Performance Monitoring**

ISA performance monitoring includes both specific ISA Server performance counters and CPU process-related counters. Each policy for performance monitoring has both error and warning thresholds.

This policy group include the following policies:

- Firewall Service
  - ISA2006\_Firewall\_PageFaults
  - ISA2006\_Firewall\_PrivateBytes
  - ISA2006\_Firewall\_ProcessorTime
  - ISA2006\_Firewall\_ThreadCount
  - ISA2006\_Firewall\_WorkingSet
- Firewall Engine
  - ISA2006\_FirewallEngine\_PageFaults
  - ISA2006\_FirewallEngine\_PrivateBytes
  - ISA2006\_FirewallEngine\_ProcessorTime
  - ISA2006\_FirewallEngine\_ThreadCount
  - ISA2006\_FirewallEngine\_WorkingSet
- Job Scheduler
  - ISA2006\_JobScheduler\_PageFaults
  - ISA2006\_JobScheduler\_PrivateBytes
  - ISA2006\_JobScheduler\_ProcessorTime
  - ISA2006\_JobScheduler\_ThreadCount
  - ISA2006\_JobScheduler\_WorkingSet

- Network Load Balancing
  - ISA2006\_LoadBalancing\_PageFaults
  - ISA2006\_LoadBalancing\_PrivateBytes
  - ISA2006\_LoadBalancing\_ProcessorTime
  - ISA2006\_LoadBalancing\_ThreadCount
  - ISA2006\_LoadBalancing\_WorkingSet
- Microsoft Data Engine
  - ISA2006\_MSSQLMSFW\_PageFaults
  - ISA2006\_MSSQLMSFW\_PrivateBytes
  - ISA2006\_MSSQLMSFW\_ProcessorTime
  - ISA2006\_MSSQLMSFW\_ThreadCount
  - ISA2006\_MSSQLMSFW\_WorkingSet
- Remote Access
  - ISA2006\_RemoteAccess\_PageFaults
  - ISA2006\_RemoteAccess\_PrivateBytes
  - ISA2006\_RemoteAccess\_ProcessorTime
  - ISA2006\_RemoteAccess\_ThreadCount
  - ISA2006\_RemoteAccess\_WorkingSet
- Server Control
  - ISA2006\_ServerControl\_PageFaults
  - ISA2006\_ServerControl\_PrivateBytes
  - ISA2006\_ServerControl\_ProcessorTime
  - ISA2006\_ServerControl\_ThreadCount
  - ISA2006\_ServerControl\_WorkingSet
- Server Storage
  - ISA2006\_ServerStorage\_PageFaults
  - ISA2006\_ServerStorage\_PrivateBytes
  - ISA2006\_ServerStorage\_ProcessorTime
  - ISA2006\_ServerStorage\_ThreadCount
  - ISA2006\_ServerStorage\_WorkingSet
- Storage Configuration
  - ISA2006\_StorageConfig\_PageFaults
  - ISA2006\_StorageConfig\_PrivateBytes
  - ISA2006\_StorageConfig\_ProcessorTime

- ISA2006\_StorageConfig\_ThreadCount
- ISA2006\_StorageConfig\_WorkingSet

### ISA2006\_Firewall\_PageFaults

The ISA2006\_Firewall\_PageFaults policy monitors Page Faults of Firewall process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Firewall

### ISA2006\_Firewall\_PrivateBytes

The ISA2006\_Firewall\_PrivateBytes policy monitors private bytes of Firewall process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_\_\_ Internet Security And Acceleration Server \_\_\_\_ Internet Security And Acceleration Server 2007 \_\_\_\_ Log File Monitoring \_\_\_ Performance Monitoring \_\_\_ Service Based \_\_\_ Firewall

### ISA2006\_Firewall\_ProcessorTime

The ISA2006\_Firewall\_ProcessorTime policy monitors processor time of Firewall process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Firewall

### ISA2006\_Firewall\_ThreadCount

The ISA2006\_Firewall\_ThreadCount policy monitors Thread Count of Firewall process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Firewall

### ISA2006\_Firewall\_WorkingSet

The ISA2006\_Firewall\_WorkingSet policy monitors Working Set of Firewall process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Firewall

### ISA2006\_FirewallEngine\_PageFaults

The ISA2006\_FirewallEngine\_PageFaults policy monitors Page Faults of Firewall Engine.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Firewall Engine

## ISA2006\_FirewallEngine\_PrivateBytes

The ISA2006\_FirewallEngine\_PrivateBytes policy monitors Private Bytes of Firewall Engine.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Firewall Engine

### ISA2006\_FirewallEngine\_ProcessorTime

The ISA2006\_FirewallEngine\_ProcessorTime policy monitors Processor Time of Firewall Engine.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Firewall Engine

### ISA2006\_FirewallEngine\_ThreadCount

The ISA2006\_FirewallEngine\_ThreadCount policy monitors Thread Count of Firewall Engine.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server Internet Security And Acceleration Server 2007 Log File Monitoring — Performance Monitoring — Service Based — Firewall Engine

### ISA2006\_FirewallEngine\_WorkingSet

The ISA2006\_FirewallEngine\_WorkingSet policy monitors Working Set of Firewall Engine.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server Internet Security And Acceleration Server 2007 Log File Monitoring — Performance Monitoring — Service Based — Firewall Engine

### ISA2006\_JobScheduler\_PageFaults

The ISA2006\_JobScheduler\_PageFaults policy monitors Page Faults of Job Scheduler process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Job Scheduler

## ISA2006\_JobScheduler\_PrivateBytes

The ISA2006\_JobScheduler\_PrivateBytes policy monitors Private Bytes of Job Scheduler process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server Internet Security And Acceleration Server 2007 Log File Monitoring — Performance Monitoring — Service Based — Job Scheduler

### ISA2006\_JobScheduler\_ProcessorTime

The ISA2006\_JobScheduler\_ProcessorTime policy monitors Processor Time of Job Scheduler process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Job Scheduler

### ISA2006\_JobScheduler\_ThreadCount

The ISA2006\_JobScheduler\_ThreadCount policy monitors Thread Count of Job Scheduler process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers --- en --- Internet Security And Acceleration Server --- Internet Security And Acceleration Server 2007 --- Log File Monitoring --- Performance Monitoring --- Service Based --- Job Scheduler

### ISA2006\_JobScheduler\_WorkingSet

The ISA2006\_JobScheduler\_WorkingSet policy monitors Working Set of Job Scheduler process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server Internet Security And Acceleration Server 2007 Log File Monitoring — Performance Monitoring — Service Based — Job Scheduler

## ISA2006\_LoadBalancing\_PageFaults

The ISA2006\_LoadBalancing\_PageFaults policy monitors Page Faults of Load Balancing process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_ Internet Security And Acceleration Server \_\_ Internet Security And Acceleration Server 2007 \_\_ Log File Monitoring \_\_ Performance Monitoring \_\_ Service Based \_\_ Microsoft Data Engine

## ISA2006\_LoadBalancing\_PrivateBytes

The ISA2006\_LoadBalancing\_PrivateBytes policy monitors Private Bytes of Load Balancing process.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Microsoft Data Engine

### ISA2006\_LoadBalancing\_ProcessorTime

The ISA2006\_LoadBalancing\_ProcessorTime policy monitors Processor Time of Load Balancing process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Microsoft Data Engine

### ISA2006\_LoadBalancing\_ThreadCount

The ISA2006\_LoadBalancing\_ThreadCount policy monitors Thread Count of Load Balancing process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Microsoft Data Engine

### ISA2006\_LoadBalancing\_WorkingSet

The ISA2006\_LoadBalancing\_WorkingSet policy monitors Working Set of Load Balancing process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Microsoft Data Engine

## ISA2006\_MSSQLMSFW\_PageFaults

The ISA2006\_MSSQLMSFW\_PageFaults policy monitors Page Faults of ISA Data Engine process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_ Internet Security And Acceleration Server \_\_ Internet Security And Acceleration Server 2007 \_\_ Log File Monitoring \_\_ Performance Monitoring \_\_ Service Based \_\_ Microsoft Data Engine

## ISA2006\_MSSQLMSFW\_PrivateBytes

The ISA2006\_MSSQLMSFW\_PrivateBytes policy monitors Private Bytes of ISA Data Engine process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Microsoft Data Engine

### ISA2006\_MSSQLMSFW\_ProcessorTime

The ISA2006\_MSSQLMSFW\_ProcessorTime policy monitors Processor Time of ISA Data Engine process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Microsoft Data Engine

## ISA2006\_MSSQLMSFW\_ThreadCount

The ISA2006\_MSSQLMSFW\_ThreadCount policy monitors Thread Count of ISA Data Engine process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en Internet Security And Acceleration Server Internet Security And Acceleration Server 2007 Log File Monitoring Performance Monitoring Service Based Microsoft Data Engine

### ISA2006\_MSSQLMSFW\_WorkingSet

The ISA2006\_MSSQLMSFW\_WorkingSet policy monitors Working Set of ISA Data Engine process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Microsoft Data Engine

### ISA2006\_RemoteAccess\_PageFaults

The ISA2006\_RemoteAccess\_PageFaults policy monitors Page Faults of Remote Access process.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Remote Access

### ISA2006\_RemoteAccess\_PrivateBytes

The ISA2006\_RemoteAccess\_PrivateBytes policy monitors Private Bytes of Remote Access process.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Remote Access

### ISA2006\_RemoteAccess\_ProcessorTime

The ISA2006\_RemoteAccess\_ProcessorTime policy monitors Processor Time of Remote Access process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Remote Access

### ISA2006\_RemoteAccess\_ThreadCount

The ISA2006\_RemoteAccess\_ThreadCount policy monitors Thread Count of Remote Access process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Remote Access

### ISA2006\_RemoteAccess\_WorkingSet

The ISA2006\_RemoteAccess\_WorkingSet policy monitors Working Set of Remote Access process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Remote Access

### ISA2006\_ServerControl\_PageFaults

The ISA2006\_ServerControl\_PageFaults policy monitors Page Faults of Server Control process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – ISA Server Control

### ISA2006\_ServerControl\_PrivateBytes

The ISA2006\_ServerControl\_PrivateBytes policy monitors Private Bytes of Server Control process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server — Internet Security And Acceleration Server 2007 — Log File Monitoring — Performance Monitoring — Service Based — ISA Server Control

### ISA2006\_ServerControl\_ProcessorTime

The ISA2006\_ServerControl\_ProcessorTime policy monitors Processor Time of Server Control process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — ISA Server Control

### ISA2006\_ServerControl\_ThreadCount

The ISA2006\_ServerControl\_ThreadCount policy monitors Thread Count of Server Control process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — ISA Server Control

### ISA2006\_ServerControl\_WorkingSet

The ISA2006\_ServerControl\_WorkingSet policy monitors Working Set of Server Control process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — ISA Server Control

### ISA2006\_ServerStorage\_PageFaults

The ISA2006\_ServerStorage\_PageFaults policy monitors Page Faults of Server Storage process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – ISA Server Storage

### ISA2006\_ServerStorage\_PrivateBytes

The ISA2006\_ServerStorage\_PrivateBytes policy monitors Private Bytes of Server Storage process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – ISA Server Storage

### ISA2006\_ServerStorage\_ProcessorTime

The ISA2006\_ServerStorage\_ProcessorTime policy monitors Processor Time of Server Storage process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – ISA Server Storage

### ISA2006\_ServerStorage\_ThreadCount

The ISA2006\_ServerStorage\_ThreadCount policy monitors Thread Count of Server Storage process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Storage Configuration

## ISA2006\_ServerStorage\_WorkingSet

The ISA2006\_ServerStorage\_WorkingSet policy monitors Working Set of Server Storage process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – ISA Server Storage

### ISA2006\_StorageConfig\_PageFaults

The ISA2006\_StorageConfig\_PageFaults policy monitors Page Faults of Storage Configuration process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Storage Configuration

### ISA2006\_StorageConfig\_PrivateBytes

The ISA2006\_StorageConfig\_PrivateBytes policy monitors Private Bytes of Storage Configuration process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Storage Configuration

### ISA2006\_StorageConfig\_ProcessorTime

The ISA2006\_StorageConfig\_ProcessorTime policy monitors Processor Time of Storage Configuration process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_\_\_ Internet Security And Acceleration Server \_\_\_\_ Internet Security And Acceleration Server 2007 \_\_\_\_ Log File Monitoring \_\_\_ Performance Monitoring \_\_\_ Service Based \_\_\_ Storage Configuration

### ISA2006\_StorageConfig\_ThreadCount

The ISA2006\_StorageConfig\_ThreadCount policy monitors Thread Count of Storage Configuration process.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server— Internet Security And Acceleration Server 2007— Log File Monitoring — Performance Monitoring — Service Based — Storage Configuration

### ISA2006\_StorageConfig\_WorkingSet

The ISA2006\_StorageConfig\_WorkingSet policy monitors Working Set of Storage Configuration process.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Log File Monitoring – Performance Monitoring – Service Based – Storage Configuration

# **Server Logging**

In the server logging group, selected process-related data for CPU and memory counters is logged for the ISA Server.

This monitoring group includes the following policies:

- ISA2006\_Logging\_Firewall
- ISA2006\_Logging\_Jobscheduler
- ISA2006\_Logging\_Servercache
- ISA2006\_Logging\_Servercontrol
- ISA2006\_Logging\_WebProxy

### ISA2006\_Logging\_Firewall

The ISA2006\_Logging\_Firewall policy logs selected performance data for ISA Server 2006 Firewall service.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Internet Security And Acceleration Server — Internet Security And Acceleration Server 2007 — Log File Monitoring — Performance Data Logging

## ISA2006\_Logging\_Jobscheduler

The ISA2006\_Logging\_Jobscheduler policy logs selected performance data for ISA Server 2006 Job Scheduler.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Internet Security And Acceleration Server — Internet Security And Acceleration Server 2007 — Log File Monitoring — Performance Data Logging

## ISA2006\_Logging\_ServerCache

The ISA2006\_Logging\_ServerCache policy logs selected performance data for ISA Server 2006 Cache.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Internet Security And Acceleration Server — Internet Security And Acceleration Server 2007 — Log File Monitoring — Performance Data Logging

### ISA2006\_Logging\_ServerControl

The ISA2006\_Logging\_ServerControl policy logs selected performance data for ISA Server 2006 Server Control.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Internet Security And Acceleration Server Internet Security And Acceleration Server 2007 Log File Monitoring — Performance Data Logging

## ISA2006\_Logging\_WebProxy

The ISA2006\_Logging\_WebProxy policy logs selected performance data for ISA Server 2006 Web Proxy service.

Policy Type: Measurement Threshold policy

## Discovery

The Discovery monitoring group discovers the services of the ISA server.

This monitoring group includes the following policies:

- ISA2006\_Discovery\_System
- ISA2006\_Discovery\_Application
- ISA2006\_CheckDiscovery\_Error
- ISA2006\_AutoDiscover\_Delete

### ISA2006\_Discovery\_System

The ISA2006\_Discovery\_System policy discovers and adds infrastructure information to the service map.

*Policy Type:* Service Auto-Discovery policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Discovery

### ISA2006\_Discovery\_Application

The ISA2006\_Discovery\_Application policy discovers and adds application and dependency information to the service map.

Policy Type: Service Auto-Discovery policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Discovery

### ISA2006\_CheckDiscovery\_Error

The ISA2006\_CheckDiscovery\_Error policy forwards discovery script errors to the console map.

Policy Type: Logfile Entry policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Discovery

### ISA2006\_AutoDiscover\_Delete

The ISA2006\_AutoDiscover\_Delete policy acts as service deletion message.

Policy Type: Open Message Interface policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Internet Security And Acceleration Server – Internet Security And Acceleration Server 2007 – Discovery

# **Internet Security and Acceleration 2006 Reports**

Reports represent various metrics. They contain data that are collected by policies.

The Microsoft Enterprise Servers SPI offers a number of reports that help you monitor Internet Security and Acceleration Server activity. The following report descriptions include listings of performance counters used.

### Firewall, Scheduled Cache Content Download, and ISA Server Control Process CPU Statistics

The Firewall, Scheduled Cache Content Download, and ISA Server Control Process CPU Statistics report shows summary CPU statistics of ISA Server processes compared with overall CPU statistics of the system.

This report has the following counters:

- Process.% Processor Time (wspsrv, mspadmin, w3prefch, w3proxy)
- Process. Thread Count(wspsrv, mspadmin, w3prefch, w3proxy)
- Processor: % Processor Time

### **Dropped Packets Statistics**

The Dropped Packets Statistics report shows summary statistics of ISA Server total dropped packets resulting from packet filtering.

This report has ISA Server Firewall Packet Engine. Dropped Packets as its counter.

### **Firewall Statistics**

The Firewall Statistics report shows summary statistics of the ISA Server firewall, including the number of active sessions, the number of kernel mode data pumps, and the number of worker threads.

This report has the following counters:

- Active Sessions
- Active TCP Connections
- Active UDP Connections
- SecureNAT Mappings
- Available Worker Threads
- Worker Threads
- Kernel Mode Data Pumps

- Bytes Read/sec
- Bytes Written/sec

### Firewall, Scheduled Cache Content Download, and ISA Server Control Process Memory Statistics

The Firewall, Scheduled Cache Content Download, and ISA Server Control Process Memory Statistics report shows summary memory statistics of ISA Server processes.

This report has the following counters:

- Process.Private Bytes (wspsrv, mspadmin, w3prefch, w3proxy)
- Process.Working Set (wspsrv, mspadmin, w3prefch, w3proxy)
- Process.Page Faults/sec (wspsrv, mspadmin, w3prefch, w3proxy)

### **ISA Server Cache Statistics**

The ISA Server Cache Statistics report shows summary statistics of the ISA Server memory and disk cache, including the memory cache usage ratio percentage, and the disk cache failure rate.

This report has the following counters:

- Memory Usage Ratio Percent (%)
- Bytes Retrieved Rate from Memory Cache (KB/sec)
- Memory Cache Allocated Space (KB)
- Disk Failure Rate (Fail/sec)
- Total Disk Failures
- Bytes Retrieved Rate From Disk Cache (KB/sec)
- Disk Cache Allocated Space (KB)
- URL Commit Rate (URL/sec)
- URLs in Cache
- Max URLs Cached

### Web Proxy Statistics

The Web Proxy Statistics report shows summary statistics of the ISA Server Web Proxy, including the cache hit ratio percentage, the current number of Web proxy users, and the rate at which data bytes have been sent and received by the Web proxy service to and from Web Proxy clients.

This report has the following counters:

- Cache Hit Ratio (%)
- Cache Running Hit Ratio (%)

- Total Cache Fetches
- Client Bytes Received/sec
- Client Bytes Sent/sec
- Client Bytes Total/sec
- Current Users
- Maximum Users

### Web Proxy Request Statistics

The Web Proxy Request Statistics report shows summary statistics of the ISA Server Web Proxy including the number of failing client requests per second, and the total number of successful and failing client requests that have been made to the Web Proxy service.

This report has the following counters:

- Failing Requests/sec
- Requests/sec
- Current Average Milliseconds/request
- Total Failing Requests
- Total Requests
- Total Successful Requests
- Ftp Requests
- Http Requests

### Web Proxy Sites Allowed and Denied Statistics

The Web Proxy Sites Allowed and Denied Statistics report shows summary statistics of the ISA Server Web Proxy including the number of Web sites allowed access to client and the number of Web sites denied access to clients.

This report has the following counters:

- Sites Denied
- Sites Allowed

# Internet and Security Acceleration Server 2006 Graphs

The Microsoft Enterprise Servers SPI graphs are pictorial representation of the various metrics of Internet Security and Acceleration Server. Graphs contain data that are collected by policies.

The Microsoft Enterprise Servers SPI Internet and Security Acceleration Server 2006 graphs are as follows:

### **Cache URL Statistics**

The Cache URL Statistics graph shows summary statistics relating to URLs of the ISA Server cache.

### **Disk Cache Statistics**

The Disk Cache Statistics graph shows summary statistics of the ISA Server disk cache.

### **Disk Failure Statistics**

The Disk Failure Statistics graph shows summary statistics of the ISA Server disk cache failure rate.

### **Dropped Packets Statistics**

The Dropped Packets Statistics graph shows summary statistics of ISA Server total dropped packets resulting from packet filtering.

### **Firewall CPU**

The Firewall CPU graph shows summary CPU statistics of the ISA Server Firewall process.

### **Firewall Data Pump Statistics**

The Firewall Data Pump Statistics graph shows summary statistics of the ISA Server firewall, including the number of kernel mode data pumps.

### **Firewall Memory**

The Firewall Memory graph shows summary memory statistics of the ISA Server Firewall process.

### **Firewall Session / Connection Statistics**

The Firewall Session / Connection Statistics graph shows summary statistics of the ISA Server firewall, including the number of active sessions.

### **Firewall Worker Threads Statistics**

The Firewall Worker Threads Statistics graph shows summary statistics of the ISA Server firewall, including the number of worker threads.

### **ISA Server Control CPU**

The ISA Server Control CPU graph shows summary CPU statistics of the ISA Server Control process.

### **ISA Server Control Memory**

The ISA Server Control Memory graph shows summary memory statistics of the ISA Server Control process.

### Memory Cache Ratio Percent

The Memory Cache Ratio Percent graph shows summary statistics of the ISA Server memory cache, including the memory cache usage ratio percentage.

### **Memory Cache Statistics**

The Memory Cache Statistics graph shows summary statistics of the ISA Server memory cache, including the memory bytes retrieved rate.

### Scheduled Cache Content Download CPU

The Scheduled Cache Content Download CPU graph shows summary CPU statistics of the ISA Server Scheduled Cache Content Download process.

### Scheduled Cache Content Download Memory

The Scheduled Cache Content Download Memory graph shows summary memory statistics of the ISA Server Scheduled Cache Content Download process.

### **Sites Granted/Denied Statistics**

The Sites granted/Denied Statistics graph shows summary statistics of the ISA Server Web Proxy, including the number of Web sites allowed access to client and the number of Web sites denied access to clients.

### Web Proxy Average Milliseconds/request

The Web Proxy Average Milliseconds/request graph shows summary statistics of the ISA Server Web Proxy, including the average milliseconds per client request that has been made to the Web Proxy service.

### Web Proxy Cache Hit Ratio Statistics

The Web Proxy Cache Hit Ratio Statistics graph shows summary statistics of the ISA Server Web Proxy, including the cache hit ratio percentage.

### Web Proxy Client Bytes Statistics

The Web Proxy Client Bytes Statistics graph shows summary statistics of the ISA Server Web Proxy, including the rate at which data bytes have been sent and received by the Web proxy service to and from Web Proxy clients.

### Web Proxy CPU

The Web Proxy CPU graph shows summary CPU statistics of the ISA Server Web Proxy process.

### Web Proxy Memory

The Web Proxy Memory graph shows summary memory statistics of the ISA Server Web Proxy process.

### Web Proxy Requests Statistics

The Web Proxy Requests Statistics graph shows summary statistics of the ISA Server Web Proxy, including the number of failing client requests per second that have been made to the Web Proxy service.

### Web Proxy Users Statistics

The Web Proxy Users Statistics graph shows summary statistics of the ISA Server Web Proxy, including the current number of Web proxy users.

# Chapter 5

# Microsoft Enterprise Servers SPI - Microsoft Office SharePoint Server 2007

# **Overview**

Microsoft Office SharePoint Server 2007 is a document repository system accessed through both a web and native client. Microsoft Office SharePoint Server 2007 provides formal processes for authoring and approval, to allow simple but reliable document versioning.

# Microsoft Enterprise Servers Microsoft Office SharePoint Server 2007 SPI Policies

The Microsoft Enterprise Servers SPI policies monitor the Microsoft Office SharePoint Server 2007. The policies offer the following monitoring processes:

- Discovery
- Availability Monitoring
- Service Monitoring
- Application Monitoring
- Server Logging

# Discovery

The Discovery group discovers the services of the Microsoft Office SharePoint Server 2007.

This monitoring group includes the Microsoft Office SharePoint Server 2007 Discovery policy.

### Microsoft Office SharePoint Server 2007 Discovery

The Microsoft Office SharePoint Server 2007 Discovery policy discovers the services of the Microsoft Office SharePoint Server 2007.

Policy Type: Service Auto Discovery policy

# **Availability Monitoring**

The availability monitoring group monitor the services of the Microsoft Office SharePoint Server 2007. This monitoring group includes the following policies:

- MSES\_MOSS\_AdminService
- MSES\_MOSS\_Document Conversions Load Balancer Service
- MSES\_MOSS\_OfficeServerSearchService
- MSES\_MOSS\_TimerService
- MSES\_MOSS\_Document Conversions Launcher Service
- MSES\_MOSS\_SearchService
- MSES\_MOSS\_SingleSignOnService

### MSES\_MOSS\_AdminService

The MSES\_MOSS\_AdminService policy monitors the Microsoft Office SharePoint Server 2007 admin service. If the service is stopped it is restarted automatically.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

### MSES\_MOSS\_Document Conversions Load Balancer Service

The MSES\_MOSS\_Document Conversions Load Balancer Service policy monitors the Document Conversions Load Balancer Service process.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

#### **MSES\_MOSS\_Document Conversions Launcher Service**

The MSES\_MOSS\_Document Conversions Launcher Service policy monitors Document Conversions Launcher Service process.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_ SharePoint Portal Server \_\_ Microsoft Office SharePoint Server 2007 \_\_ Auto-Deploy / Manual-Deploy

### MSES\_MOSS\_OfficeServerSearchService

The MSES\_MOSS\_OfficeServerSearchService policy monitors the Office Sharepoint server search.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

### MSES\_MOSS\_SearchService

The MSES\_MOSS\_SearchService policy monitors the Microsoft SharePoint 2007 Server search service. If the service is stopped it is restarted automatically.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

### MSES\_MOSS\_ TimerService

The MSES\_MOSS\_ TimerService policy monitors the Microsoft SharePoint 2007 Server timer service. If the service is stopped it is restarted automatically.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

### MSES\_MOSS\_SingleSignOnService

The MSES\_MOSS\_SingleSignOnService policy monitors the Microsoft SharePoint 2007 Server single sign-on service. If the service is stopped it is restarted automatically.

Schedule: This policy runs every 5 minutes daily.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

# Server Logging

In server logging group the following metrics are collected for all the processes mentioned under logging.

Metric Name	Data Type
Instance Name	Text
Working Set	Real64
Page Faults per sec	Real64
Private Bytes	Real64
Thread Count	Real64
Processor Time (%)	Real64

This monitoring group includes the following policies:

- MSES\_MOSS-2k7\_Logging\_Process\_MOSS.Conversions.LoadBalancer
- MSES\_MOSS-2k7\_Logging\_Process\_WSSTRACING
- MSES\_MOSS-2k7\_Logging\_Process\_SPWRITER
- MSES\_MOSS-2k7\_Logging\_Process\_WSADMIN
- MSES\_MOSS-2k7\_Logging\_Process\_OWSTIMER
- MSES\_MOSS-2k7\_Logging\_Process\_MSSEARCH
- MSES\_MOSS-2k7\_Logging\_Process\_w3wp
- MSES\_MOSS-2k7\_Logging\_Process\_SSOSRV
- MSES\_MOSS-2k7\_Logging\_Process\_MOSS.Conversions.Launcher
- MSES\_MOSS-2k7\_CreateCodeDataSources

### MSES\_MOSS-2k7\_Logging\_Process\_ MOSS.Conversions.LoadBalancer

The MSES\_MOSS-2k7\_Logging\_Process\_MOSS.Conversions.LoadBalancer policy collects data for Microsoft Office Server Conversions LoadBalancer.

Service Name: Office Document Conversions Load Balancer Service

Monitored Process: Micorsoft.Office.Server.conversions.LoadBalancer.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server----Microsoft Office SharePoint Server 2007 --- Auto-Deploy

### MSES\_MOSS-2k7\_Logging\_Process\_ MOSS.Conversions.Launcher

The MSES\_MOSS-2k7\_Logging\_Process\_MOSS.Conversions.Launcher policy collects data for conversions.Launcher process.

Service Name: Office Document Conversions Launcher Service

Monitored Process: Microsoft.Office.Server.Conversions.Launcher.exe

Schedule: This policy runs every 5 minutes daily.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS-2k7\_Logging\_Process\_WSSTRACING

The MSES\_MOSS-2k7\_Logging\_Process\_WSSTRACING policy collects data for the WSSTRACING process.

Service Name: Windows SharePoint Services Tracing

Monitored Process: wsstracing.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### MSES\_MOSS-2k7\_Logging\_Process\_MSSEARCH

The MSES\_MOSS-2k7\_Logging\_Process\_MSSEARCH policy collects data for MSSEARCH process.

Service Name: Windows SharePoint Servicer Search

Monitored Process: mssearch.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### MSES\_MOSS-2k7\_Logging\_Process\_OWSTIMER

The MSES\_MOSS-2k7\_Logging\_Process\_OWSTIMER policy collects data for the OWSTIMER process.

Service Name: Windows SharePoint Services Timer

Monitored Process: owstimer.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### MSES\_MOSS-2k7\_Logging\_Process\_SPWRITER

The MSES\_MOSS-2k7\_Logging\_Process\_SPWRITER policy collects data for the SPWRITER process.

Service Name: Windows SharePoint Services VSS Writer

Monitored Process: spwriter.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS-2k7\_ Logging\_Process\_SSOSRV

The MSES\_MOSS-2k7\_Logging\_Process\_SSOSRV policy collects data for SSOSRV process.

Service Name: Microsoft Single Sign-on Service

Monitored Process: ssosrv.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS-2k7\_Logging\_Process\_w3wp

The MSES\_MOSS-2k7\_Logging\_Process\_w3wp policy collects data for w3wp process.

Service Name: Windows IIS worker process

Monitored Process: w3wp.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

## MSES\_MOSS-2k7\_ CreateCodaDataSources

The MSES\_MOSS-2k7\_ CreateCodaDataSources policy creates the data source for logging data.

Note: Deploy this policy before deploying any other logging policy.

Service Name: Office Document Conversions Launcher Service

Monitored Process: Microsoft.Office.Server.Conversions.Launcher.exe

Schedule: This policy runs every 30 minutes.

Policy Type: Scheduled Task policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS-2k7\_Logging\_Process\_WSSADMIN

The MSES\_MOSS-2k7\_Logging\_Process\_WSSADMIN policy collects data for WSADMIN process.

Service Name: Measurement Threshold policy

Monitored Process: wssadmin.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# **Service Monitoring**

The service monitoring group monitors the available services of the Microsoft Office SharePoint Server 2007. This monitoring group includes the following policies:

- MSES\_MOSS-2k7\_Database\_Monitoring
- MSES\_MOSS-2k7\_Logical\_Services\_Monitoring
- MSES\_MOSS\_Documents Delayed Retry
- MSES\_MOSS\_HeartBeats
- MSES\_MOSS\_Active Queue Length

- MSES\_MOSS\_ReasonToBackOff
- MSES\_MOSS\_IndexerCatalogsNumOfDocuments

### MSES\_MOSS-2k7\_Database\_Monitoring

The MSES\_MOSS-2k7\_Database\_Monitoring policy checks the status of the MOSS database instances.

Schedule: This policy runs every 30 minutes.

Policy Type: Scheduled Task policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS-2k7\_ Logical\_Services\_Monitoring

The MSES\_MOSS-2k7\_Logical\_Services\_Monitoring policy checks the status of the MOSS logical services.

Schedule: This policy runs every 30 minutes.

Policy Type: Scheduled Task policy

### MSES\_MOSS\_HeartBeats

The MSES\_MOSS\_HeartBeats policy monitors the Microsoft SharePoint Portal Server 2007 Gatherer/HearBeats counters.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS\_Documents Delayed Retry

The MSES\_MOSS\_Documents Delayed Retry policy monitors the Documents Delayed Retry counter.

Schedule: This policy runs every 20 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server----Microsoft Office SharePoint Portal Server 2007 --- Auto-Deploy / Manual-Deploy

### MSES\_MOSS\_Active Queue Length

The MSES\_MOSS\_Active Queue Length policy monitors the Active Queue Length.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — SharePoint Portal Server— Microsoft Office SharePoint Server 2007— Auto-Deploy / Manual-Deploy

### MSES\_MOSS\_ReasonToBackOff

The MSES\_MOSS\_ReasonTo BackOff policy monitors the ReasonToBackOff counters.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS\_IndexerCatalogsNumOfDocuments

The MSES\_MOSS\_IndexerCatalogsNumOfDocuments policy monitors the increase in the number of documents indexed.

Policy Type: Measurement Threshold policy

# **Application Monitoring**

The application monitoring group monitors the available applications of the Microsoft Office SharePoint Server 2007. This monitoring group includes the following policies:

- MSES\_MOSS\_FwdApplicationInformation
- MSES\_MOSS\_FwdApplicationWarning
- MSES\_MOSS\_FwdApplicationError

### MSES\_MOSS\_FwdApplicationError

The MSES\_MOSS\_FwdApplicationError policy handles all error messages from all Microsoft Office SharePoint services.

*Policy Type:* Windows Event Log policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

### MSES\_MOSS\_FwdApplicationInformation

The MSES\_MOSS\_FwdApplicationInformation policy handles information from all Microsoft Office SharePoint services .

Policy Type: Windows Event Log policy

### MSES\_MOSS\_FwdApplicationWarning

The MSES\_MOSS\_FwdApplicationWarning policy handles the warning messages from all Microsoft Office SharePoint services.

Policy Type: Windows Event Log policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – Microsoft Office SharePoint Server 2007 – Auto-Deploy / Manual-Deploy

# **Microsoft Office SharePoint Server 2007 Reports**

Microsoft Enterprise Servers SPI provides the following reports for Microsoft Office SharePoint Server 2007.

### Memory and CPU reports

These reports can be used to plan and predict capacity of Microsoft Office SharePoint Server 2007 deployment. They can assist determining whether an additional search server or Web front end server needs to be added to improve performance.

#### Note:

Deploy the WINOSSPI-WINOS\_Win2k\_Logging policy for these reports to function correctly.

**Daily/Weekly CPU Usage Summary**(g\_MOSS2k7CPUSummary.rpt/g\_ MOSS2k7CPUWeeklySummary.rpt)

This report shows summary CPU statistics of MOSS 2007 server's services installed nodes in an enterprise deployment. The displays for every six hours over the last 7 days, compared with overall CPU statistics of the system, in both graphical and tabular format. This report can help administrators see which server is heavily loaded and which process is causing so much load.

**Daily/Weekly Memory Usage Summary**(g\_MOSS2k7MemorySummary.rpt/ g\_ MOSS2k7MemoryWeeklySummary.rpt)

This report shows summary CPU statistics of MOSS 2007 server's services installed nodes in an enterprise deployment. The data displays for every six hours over the last 7 days, compared with overall CPU statistics of the system, in both graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the services.

# **IIS Worker Process reports**

#### Weekly Summary of IIS Worker Process CPU Usage(g\_MOSS2k7\_IIS\_

CPUWeeklySummary.rpt)

This report shows the size of each index, total free space, and total used space left on each of the SharePoint Portal Server 2003 Indexing servers. The report shows data points, and charts for every 12 hours in each day over the past seven days.

#### Note:

Deploy the WINOSSPI-IISCollector and NET\_SPS\_Logging policies for this report to function correctly.

# **Microsoft Office SharePoint Server 2007 Graphs**

The following predefined graphs for Microsoft Office SharePoint Server 2007 are available with the Microsoft Enterprise Servers SPI:

#### SharePoint Server Admin service CPU usage

This graph shows summary CPU statistics of the SharePoint admin service process (spsadmin.exe). This data can be compared with System Processor Time to determine to what extent the SharePoint admin service is utilizing processor time.

#### SharePoint Portal Server Admin service Memory usage

This graph shows summary memory statistics of the SharePoint admin service process (spsadmin.exe). The summarized process statistics show private bytes, and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set

#### SharePoint Portal Server Search Service CPU usage

This graph shows summary CPU statistics of the SharePoint search service process (mssearch.exe). This data can be compared with System Processor Time to determine to what extent the SharePoint admin service is utilizing processor time.

#### SharePoint Portal Server Search Service Memory usage

This graph shows summary memory statistics of the SharePoint search service process (mssearch.exe). The summarized process statistics include the private bytes, and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set

#### SharePoint Search Service Page Faults/sec

This graph shows summary memory statistics of the SharePoint Search service process (mssearch.exe). The summarized process statistics include the Page Faults\sec by the process.

Counters:

Process:Page Faults\sec

### SharePoint Portal Server SingleSignon Service CPU usage

This graph shows summary CPU statistics of the SharePoint Single sign on service process (SSOSRV.exe). This data can be compared with System Processor Time to determine to what extent the SharePoint Single sign on service is utilizing processor time.

### SharePoint Portal Server SingleSignon Service Memory usage

This graph shows summary memory statistics of the SharePoint single sign on service process (SSOSRV.exe). The summarized process statistics include the private bytes, and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set

### SharePoint Portal Server SPTimer Service CPU Usage

This graph shows summary CPU statistics of the SharePoint SPTimer service process (OWSTIMER.exe). This data can be compared with System Processor Time to determine to what extent the SharePoint SPTImer service is utilizing processor time.

### SharePoint Portal Server SPTimer Service Memory usage

This graph shows summary memory statistics of the SharePoint SPTimer service process (OWSTIMER.exe). The summarized process statistics include the private bytes and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set, Process

### IIS Worker process CPU usage

This graph shows summary CPU statistics of the IIS worker process service (w3wp.exe). This data can be compared with System Processor Time to determine to what extent the IIS worker process service is utilizing processor time, which can be used in making decisions about whether to add additional web front end servers.

### IIS Worker process Memory usage

This graph shows summary memory statistics of the IIS worker process service (w3wp.exe). The summarized process statistics include the private bytes and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set.

### **IIS Worker processes Page Faults**

This graph shows summary memory statistics of the IIS worker process service (w3wp.exe). The summarized process statistics include the Page Faults\sec by the process.

Counters:

• Process:Page Faults\sec

# Chapter 6

# Microsoft Enterprise Servers SPI - Microsoft SharePoint Server 2010

# **Overview**

Microsoft SharePoint 2010 is the latest version of the business collaboration software solutions developed by Microsoft. It comes with a host of new features compared to its predecessor, Microsoft Office SharePoint Server 2007 (MOSS).

Microsoft SharePoint 2010 is designed to replace and maintain the web requirements of your organization. It manages and provides improved functionalities such as intranet and extranet portals, document and file management, and tools for social networking and business intelligence.

# Microsoft Enterprise Servers Microsoft SharePoint Server 2010 SPI Policies

The Microsoft Enterprise Servers SPI policies monitor the Microsoft SharePoint Server 2010. The policies offer the following monitoring processes:

- Discovery
- Availability Monitoring
- Service Monitoring
- Application Monitoring
- Server Logging

## Discovery

The Discovery group discovers the services of the Microsoft SharePoint Server 2010.

This monitoring group includes the Microsoft SharePoint Server 2010 Discovery policy.

### Microsoft SharePoint Server 2010 Discovery

The Sharepoint\_Discovery policy discovers the services of the Microsoft SharePoint Server 2010.

Policy Type: Service Auto-Discovery policy

## **Availability Monitoring**

The Availability Monitoring group monitors the services of the Microsoft SharePoint Server 2010. This monitoring group includes the following policies:

- MSES\_SPS\_14\_AdminService
- MSES\_SPS\_14\_Document Conversions Load Balancer Service
- MSES\_SPS\_14\_OfficeServerSearchService
- MSES\_SPS\_14\_TimerService
- MSES\_SPS\_14\_Document Conversions Launcher Service
- MSES\_SPS\_14\_SearchService

### MSES\_SPS\_14\_Active Queue Length

The MSES\_SPS\_14\_Active Queue Length policy monitors the Sharepoint Foundation Search Gatherer/Active Queue Length counter.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – SharePoint Server 2010 – Manual-Deploy

### MSES\_SPS\_14\_AdminService

The MSES\_SPS\_14\_AdminService policy monitors the SharePoint 2010 Administration Service. If the service is stopped, it can be restarted using the operator-initiated action.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers en --> SharePoint Portal Server --> SharePoint Server 2010 --> Manual-Deploy

### MSES\_SPS\_14\_Document Conversions Load Balancer Service

The MSES\_SPS\_14\_Document Conversions Load Balancer Service policy monitors the Document Conversions Load Balancer for Microsoft SharePoint Server 2010 Service process. If the service is stopped, it can be restarted using the operator-initiated action.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – SharePoint Server 2010 – Manual-Deploy

### MSES\_SPS\_14\_Document Conversions Launcher Service

The MSES\_SPS\_14\_Document Conversions Launcher Service policy monitors Document Conversions Launcher Service process. If the service is stopped, it can be restarted using the operator-initiated action.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

### MSES\_SPS\_14\_OfficeServerSearchService

The MSES\_SPS\_14\_OfficeServerSearchService policy monitors the SharePoint Server Search 14 Service. If the service is stopped, it can be restarted using the operator-initiated action.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

### MSES\_SPS\_14\_SearchService

The MSES\_SPS\_14\_SearchService policy monitors the SharePoint Foundation Search V4 Service. If the service is stopped, it can be restarted using the operator-initiated action.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server ---- SharePoint Server 2010 --- Manual-Deploy

### MSES\_SPS\_14\_TimerService

The MSES\_SPS\_14\_TimerService policy monitors the SharePoint 2010 Timer Service. If the service is stopped, it can be restarted using the operator-initiated action.

Schedule: This policy runs every 5 minutes.

Policy Type: Windows Management Interface policy

# **Server Logging**

The Server Logging group collects the following metrics for all the logging processes applicable to the Microsoft SharePoint Server 2010.

Metric Name	Data Type
Instance Name	Text
Working Set	Real64
Page Faults per sec	Real64
Private Bytes	Real64
Thread Count	Real64
Processor Time (%)	Real64

This monitoring group includes the following policies:

- MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.LoadBalancer
- MSES\_SPS\_14\_Logging\_Process\_WSSTRACING
- MSES\_SPS\_14\_Logging\_Process\_SPWRITER
- MSES\_SPS\_14\_Logging\_Process\_WSADMIN
- MSES\_SPS\_14\_Logging\_Process\_OWSTIMER
- MSES\_SPS\_14\_Logging\_Process\_MSSEARCH
- MSES\_SPS\_14\_Logging\_Process\_w3wp
- MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.Launcher

### MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.LoadBalancer

The MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.LoadBalancer policy collects data for Microsoft Office Server Conversions LoadBalancer.

Service Name: Document Conversions Load Balancer for Microsoft SharePoint Server 2010

Monitored Process: Microsoft.Office.Server.Conversions.LoadBalancer.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server ---- SharePoint Portal Server 2010 --- Manual-Deploy

### MSES\_SPS\_14\_Logging\_Process\_ SPS.Conversions.Launcher

The MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.Launcher policy collects data for conversions.Launcher process.

Service Name: Document Conversions Launcher for Microsoft SharePoint Server 2010

Monitored Process: Microsoft.Office.Server.Conversions.Launcher.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers ---- en ---- SharePoint Portal Server ----- SharePoint Server 2010 ---- Manual-Deploy

### MSES\_SPS\_14\_Logging\_Process\_WSSTRACING

The MSES\_SPS\_14\_Logging\_Process\_WSSTRACING policy collects data for the WSSTRACING process.

Service Name: SharePoint 2010 Tracing

Monitored Process: wsstracing.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – SharePoint Server 2010 – Manual-Deploy

## MSES\_SPS\_14\_Logging\_Process\_MSSEARCH

The MSES\_SPS\_14\_Logging\_Process\_MSSEARCH policy collects data for the MSSEARCH process.

Service Name: Microsoft SharePoint Portal Server Search Service

Monitored Process: mssearch.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### MSES\_SPS\_14\_Logging\_Process\_OWSTIMER

The MSES\_SPS\_14\_Logging\_Process\_OWSTIMER policy collects data for the OWSTIMER process.

Service Name: SharePoint Foundation Timer

Monitored Process: owstimer.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers ---- en ---- SharePoint Portal Server ----- SharePoint Server 2010 ---- Manual-Deploy

### MSES\_SPS\_14\_Logging\_Process\_SPWRITER

The MSES\_SPS\_14\_Logging\_Process\_SPWRITER policy collects data for the SPWRITER process.

Service Name: SharePoint 2010 VSS Writer

Monitored Process: spwriter.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server----SharePoint Server 2010--- Manual-Deploy

### MSES\_SPS\_14\_Logging\_Process\_w3wp

The MSES\_SPS\_14\_Logging\_Process\_w3wp policy collects data for w3wp process.

Service Name: IIS worker process

Monitored Process: w3wp.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – SharePoint Server 2010 – Manual-Deploy

## MSES\_SPS\_14\_Logging\_Process\_WSSADMIN

The MSES\_SPS\_14\_Logging\_Process\_WSSADMIN policy collects data for WSSADMIN process.

Service Name: SharePoint Administration Service

Monitored Process: wssadmin.exe

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers—, en —, SharePoint Portal Server—, SharePoint Server 2010—, Manual-Deploy

## **Service Monitoring**

The Service Monitoring group monitors the available services of the Microsoft SharePoint Server 2010. This monitoring group includes the following policies:

- MSES\_SPS\_14\_Database\_Monitoring
- MSES\_SPS\_14\_Logical\_Services\_Monitoring
- MSES\_SPS\_14\_Documents Delayed Retry
- MSES\_SPS\_14\_HeartBeats
- MSES\_SPS\_14\_Active Queue Length
- MSES\_SPS\_14\_ReasonToBackOff
- MSES\_SPS\_14\_IndexerCatalogsNumOfDocuments

### MSES\_SPS\_14\_Database\_Monitoring

The MSES\_SPS\_14\_Database\_Monitoring policy checks the status of the database instances of the SharePoint 2010 server.

Schedule: This policy runs every 30 minutes.

Policy Type: Scheduled Task policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server ---- SharePoint Server 2010 --- Manual-Deploy

### MSES\_SPS\_14\_ Logical Services\_Monitoring

The MSES\_SPS\_14\_Logical Services\_Monitoring policy checks the status of the Sharepoint logical services.

Schedule: This policy runs every 30 minutes.

Policy Type: Scheduled Task policy

### MSES\_SPS\_14\_HeartBeats

The MSES\_SPS\_14\_HeartBeats policy monitors the Sharepoint Foundation Search Gatherer/HeartBeats counters of the SharePoint 2010 server.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server ---- SharePoint Server 2010 --- Manual-Deploy

### MSES\_SPS\_14\_Documents Delayed Retry

The MSES\_SPS\_14\_Documents Delayed Retry policy monitors the Sharepoint Foundation Search Gatherer/Documents Delayed Retry counter.

Schedule: This policy runs every 20 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server ---- SharePoint Server 2010 --- Manual-Deploy

## MSES\_SPS\_14\_ReasonToBackOff

The MSES\_SPS\_14\_ReasonToBackOff policy monitors the Sharepoint Foundation Search Gatherer/Reason To Back Off counter.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – SharePoint Portal Server – SharePoint Server 2010 – Manual-Deploy

### MSES\_SPS\_14\_IndexerCatalogsNumOfDocuments

The MSES\_SPS\_14\_IndexerCatalogsNumOfDocuments policy monitors the increase in the number of documents indexed.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en --- SharePoint Portal Server ---- SharePoint Server 2010 --- Manual-Deploy

## **Application Monitoring**

The Application Monitoring group monitors the available applications of the Microsoft SharePoint Server 2010. This monitoring group includes the following policies:

- MSES\_SPS\_14\_FwdApplicationWarning
- MSES\_SPS\_14\_FwdApplicationError

### MSES\_SPS\_14\_FwdApplicationError

The MSES\_SPS\_14\_FwdApplicationError policy manages all error messages from all Microsoft SharePoint 2010 server services.

Policy Type: Windows Event Log policy

## MSES\_SPS\_14\_FwdApplicationWarning

The MSES\_SPS\_14\_FwdApplicationWarning policy handles the warning messages from all the Microsoft SharePoint 2010 services.

Policy Type: Windows Event Log policy

Policy Group: SPI for Microsoft Enterprise Servers en --> SharePoint Portal Server --> SharePoint Server 2010 --> Manual-Deploy

# **Microsoft SharePoint 2010 Reports**

The Microsoft SharePoint 2010 reports can be used to plan and predict the deployment capacity of Microsoft SharePoint Server 2010.

### Note:

You must deploy the policy, MSES\_SPS\_14\_Logging\_Process\_MSSEARCH, for the following reports to function accurately.

### SP2k10CPUSummary

The SP2k10CPUSummary report shows the summary of the CPU statistics of SharePoint Server Search process compared with the overall CPU statistics of the system, in graphical and tabular format.

### SP2k10CPUWeeklySummary

The SP2k10CPUWeeklySummary report shows the weekly summary of the CPU statistics of SharePoint Server Search process compared with the overall CPU statistics of the system, in graphical and tabular format.

### SP2k10MemorySummary

The SP2k10MemorySummary report shows a summary of the memory statistics of the SharePoint Server Search process in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the mssearch process.

### SP2k10MemoryWeeklySummary

The SP2k10MemoryWeeklySummary report shows a weekly summary of the memory statistics of the SharePoint Portal Server processes in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the mssearch process.

### Note:

You have to deploy the policy, MSES\_SPS\_14\_Logging\_Process\_w3wp, for the following report to function accurately.

### SP2k10WeeklyIISCPUSummary

The SP2k10WeeklyIISCPUSummary report shows a summary of the CPU statistics of the IIS worker processes for Front End web servers of a SharePoint Portal Server deployment. The IIS

worker processes CPU utilization is compared with overall system CPU utilization.

# **Microsoft SharePoint Server 2010 Graphs**

The following predefined graphs for Microsoft SharePoint Server 2010 are available with the Microsoft Enterprise Servers SPI:

### SharePoint Server Admin Service CPU

The SharePoint Server Admin Service CPU graph shows the summary CPU statistics of the SharePoint admin service process (wssadmin.exe). This data can be compared with System Processor Time to determine the extent to which the SharePoint admin service is utilizing processor time.

### SharePoint Server Admin Service Memory Usage

The SharePoint Server Admin Service Memory Usage graph shows the summary of memory statistics of the SharePoint admin service process (wssadmin.exe). The summarized process statistics show private bytes, and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set

### SharePoint Server Search Service CPU

The SharePoint Server Search Service CPU graph shows a summary of the CPU statistics of the SharePoint search service process (mssearch.exe). This data can be compared with System Processor Time to determine the extent to which the SharePoint admin service is utilizing processor time.

### SharePoint Server Search Service Memory

The SharePoint Server Search Service Memory graph shows a summary of the memory statistics of the SharePoint search service process (mssearch.exe). The summarized process statistics include the private bytes, and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set

### SharePoint Search Service Page Faults/sec

The SharePoint Search Service Page Faults/sec graph shows a summary of the memory statistics of the SharePoint Search service process (mssearch.exe). The summarized process statistics include the Page Faults/sec by the process.

Counters:

Process.Page Faults/sec

### SharePoint Server SPTimer Service CPU

The SharePoint Server SPTimer Service CPU graph shows a summary of the CPU statistics of the SharePoint SPTimer service process (OWSTIMER.exe). This data can be compared with System Processor Time to determine the extent to which the SharePoint SPTImer service is utilizing processor time.

### SharePoint Server SPTimer Service Memory

The SharePoint Server SPTimer Service Memory graph shows a summary of the memory statistics of the SharePoint SPTimer service process (OWSTIMER.exe). The summarized process statistics include the private bytes and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set

### IIS Worker process CPU usage

The IIS Worker process CPU usage graph shows a summary of the CPU statistics of the IIS worker process service (w3wp.exe). This data can be compared with System Processor Time to determine the extent to which the IIS worker process service is utilizing processor time, which can be used in making decisions about whether to add additional web front end servers.

### IIS Worker process Memory usage

The IIS Worker process Memory usage graph shows a summary of the memory statistics of the IIS worker process service (w3wp.exe). The summarized process statistics include the private bytes and working set used by the process.

Counters:

- Process.Private Bytes
- Process.Working Set.

### **IIS Worker processes Page Faults**

This graph shows a summary of the memory statistics of the IIS worker process service (w3wp.exe). The summarized process statistics include the Page Faults/sec by the process.

Counters:

Process.Page Faults/sec

# Chapter 7

# **Microsoft Enterprise Servers SPI - Office Communications Server 2007**

# **Overview**

The Microsoft Enterprise Servers SPI monitors the Microsoft Office Communications Server 2007 and helps in unhindered flow of communications within the enterprises. The Microsoft Enterprise Servers SPI monitors the following OCS servers for process monitoring and service management, and for logging data used by Office Communications Server 2007 reports and graphs.

# Policy Groups of Office Communications Server 2007

The OCS has the following policy groups:

- Discovery
- AccessEdgeServer
- ArchivingCDRServer
- AVConfServer
- AVEdgeServer
- Configuration
- CWAServer
- FrontEndServer
- IMConfServer
- MediationServer
- TelConfServer
- WebCompServer
- WebConfServer
- WebEdgeServer
- Others

# Microsoft Enterprise Servers SPI Office Communications Server 2007 Policies

The Microsoft Enterprise Servers SPI monitors the Microsoft Office Communications Server 2007 and helps in unhindered flow of communications within the enterprises. The Microsoft Enterprise Servers SPI offers the following policies for process monitoring and service management, and for logging data used by Office Communications Server 2007 reports and graphs.

## **Policy Groups of Office Communications Server 2007**

The OCS has the following policy groups:

- Discovery
- AccessEdgeServer
- ArchivingCDRServer
- AVConfServer
- AVEdgeServer
- Configuration
- CWAServer
- FrontEndServer
- IMConfServer
- MediationServer
- TelConfServer
- WebCompServer
- WebConfServer
- WebEdgeServer
- Others

## Deployment of Microsoft Enterprise Servers SPI Office Communications Server 2007 Policies

The Microsoft Enterprise Servers SPI policies can be deployed on OCS 2007 and OCS 2007 R2. Ensure to deploy the relevant policies.

Assign only those policy groups on the managed nodes which host the roles that the policy group is related to. For example if the managed node hosts the AccessEdge Server, deploy only the AccessEdge Server policy group, and so on.

## Discovery

The Discovery policy group contains the OCS\_Discovery policy which discovers the OCS roles and services.

## OCS\_Discovery

Microsoft Office Communications Server 2007 Discovery policy discovers the following OCS roles and services:

- Roles
- A/V edge server
- Access edge server
- Web conferencing edge server
- Instant Messaging Conferencing Server
- Telephony Conferencing Server
- Web conferencing server
- A/V conferencing server
- Communicator Web Access
- Archiving and CDR Server
- Mediation server
- Web Components Server
- Services
- Front End Service
- Audio/Video Conferencing service
- IM Conferencing service
- Telephony Conferencing Service
- Web Conferencing Service
- Archiving and CDR service
- Audio/Video Authentication service
- Audio/Video Edge service
- Access Edge service
- Web Conferencing Edge service
- Mediation service

If the node to which the policy is deployed is a member of an OCS pool, then the policy discovers the following components - pool, the pool type (standard/enterprise), and the members of the pool. If

the agent is not running under the default account (Local System account) on the managed node, then create a user who is a member of the RTCUniversalGuestAccessGroup, if the node is a member of the OCS pool. For Edge Servers, provide the privileges of a Local Administator.

Edit the username and password in the policy and enter the credentials of this user. Save and close the policy and deploy the edited policy to the node.

The username format for the:

- DCE agent domain\user
- HTTPS domain\\user

*Policy type:* Service Auto-Discovery

*Policy group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server – Microsoft\_Office\_Communications\_Server\_2007 – Discovery

## AccessEdgeServer

Deploy this policy group on an Access Edge Server. The Access Edge Server is located in the perimeter network. It validates incoming SIP traffic, then forwards the IM traffic between internal and external users. In Live Communications Server 2005, it was called the Access Proxy.

The Access Edge Server and Web Conferencing Server can be configured on the same server. The A/V Edge Server can also be configured on the same server.

The following policies of this policy group can be deployed on OCS 2007 and OCS 2007 R2:

- OCS\_AccessEdgeServer\_ActiveTLSConnections
- OCS\_AccessEdgeServer\_AddressSpaceUsage
- OCS\_AccessEdgeServer\_AverageIncomingMessageProcessingTime
- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedDomain
- OCS\_AccessEdgeServer\_FlowControlledConnections
- OCS\_AccessEdgeServer\_IncomingRequestsDroppedPerSec
- OCS\_AccessEdgeServer\_MsgPerSecDroppedDueToUnknownDomain
- OCS\_AccessEdgeServer\_MsgsDroppedPerSecDueToCertMismatch
- OCS\_AccessEdgeServer\_RejectedExtEdgeClientConnectionsPerSec
- OCS\_AccessEdgeServer\_RejectedExtEdgeServerConnectionsPerSec
- OCS\_AccessEdgeServer\_SendsTimedOut
- OCS\_AccessEdgeServer\_AboveLimitConnectionsDropped
- OCS\_AccessEdgeServer\_FlowControlledConnectionsDropped
- OCS\_AccessEdgeServer\_MessagesInServer
- OCS\_Check\_AccessEdgeServiceStatus
- OCS\_AccessEdgeService\_Logging

- OCS\_AccessEdgeService\_PageFaultsPerSec
- OCS\_AccessEdgeService\_PrivateBytes
- OCS\_AccessEdgeService\_ProcessorTime
- OCS\_AccessEdgeService\_ThreadCount
- OCS\_AccessEdgeService\_WorkingSet
- OCS\_AccessEdgeServer\_IncomingResponsesDroppedPerSec
- OCS\_AccessEdgeServer\_IncomingMsgHeldAboveOverloadWatermark

Deploy the following policies only on OCS 2007:

- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedIMDomain
- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDomain
- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnresolvedDomain
- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToIncompMsgDomain

Deploy the following policies only on OCS 2007 R2:

- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedIMDomain\_R2
- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDomain\_R2
- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnresolvedDomain\_R2
- OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToIncompMsgDomain\_R2

### OCS\_AccessEdgeServer\_Logging

The OCS\_AccessEdgeServer\_Logging policy logs the following metrics as mentioned in the table into the data store (CODA / HP Performance Agent) for the instance \_Total. If a metric value is unavailable, this policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

### 🗘 Note:

Ensure that the OCS\_CreateDataSourcespolicy is running before you deploy the OCS\_ AccessEdgeService\_Logging policy.

Instance	Performance Object
_Total	LC:SIP - 02 – Protocol\SIP - 021 - Average Incoming Message Processing Time

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_ACCESS

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_FlowControlledConnectionsDropped

The OCS\_AccessEdgeServer\_FlowControlledConnectionsDropped policy monitors the total number of connections dropped because of excessive flow-control.

Performance Object: LC:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 024 - Flow-controlled Connections Dropped

*Threshold:* When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_AddressSpaceUsage

The OCS\_AccessEdgeServer\_AddressSpaceUsage policy monitors the percentage of available address space currently in use by the server process.

Performance Object: LC:SIP - 07 - Load Management

Counter: SIP - 009 - Address space usage

*Threshold:* This policy has the following threshold:

- Warning: 65
- Critical: 75

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeService\_PrivateBytes

The OCS\_AccessEdgeService\_PrivateBytes policy monitors the Private Bytes counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: Private Bytes

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### OCS\_Check\_AccessEdgeServiceStatus

The OCS\_Check\_AccessEdgeServiceStatus policy checks the status of the Access Edge Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCSrv

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_ActiveTLSConnections

The OCS\_AccessEdgeServer\_ActiveTLSConnections policy monitors the number of established TLS connections that are currently active. TLS Connection is considered established when peer certificate and, possibly, host name are verified for trust relationship.

Performance Object: LC:API - 00 - API Application Instance Counters

Instance: \_Total

Counter: API - 026 - Transactions Pending Dispatch Completion

Threshold: When the difference between two samples is greater than:

- Warning: 500
- Critical: 1000

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

### OCS\_AccessEdgeServer\_MsgsDroppedPerSecDueToCertMismatch

The OCS\_AccessEdgeServer\_MsgsDroppedPerSecDueToCertMismatch policy monitors the number of messages dropped per second because the remote peer's certificate did not contain a matching FQDN.

Performance Object: LC:SIP - 02 - Protocol

Counter: SIP - 011 - Messages/sec Dropped Due To Certificate Mismatch

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_ RejectedExtEdgeServerConnectionsPerSec

The OCS\_AccessEdgeServer\_RejectedExtEdgeServerConnectionsPerSec policy monitors the number of server connections rejected at the external edge per second because all federation is disabled.

Performance Object: LC:SIP - 08 - Access Edge Server Connections

Counter: SIP - 013 - Rejected External Edge Server Connections/sec

Threshold: This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 AccessEdgeServer

### OCS\_AccessEdgeServer\_SendsTimedOut

The OCS\_AccessEdgeServer\_SendsTimedOut policy monitors the total number of sends dropped because they stayed in the outgoing (send) queue for too long.

Performance Object: LC:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 018 - Sends Timed-Out

Threshold: When the difference between two samples is greater than:

- Warning: 500
- Critical: 1000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_IncomingResponsesDroppedPerSec

The OCS\_AccessEdgeServer\_IncomingResponsesDroppedPerSec policy monitors the number of incoming responses dropped per second because they could not be processed (due to bad headers, insufficient routing information, server resource allocation failure).

Performance Object: LC:SIP - 02 - Protocol

Counter: SIP - 005 - Incoming Responses Dropped/sec

Threshold: Configuration recommended

Schedule: This policy runs every 15 minutes.

Policy type: Measurement Threshold policy

### OCS\_AccessEdgeService\_WorkingSet

The OCS\_AccessEdgeService\_WorkingSet policy monitors the Working Set counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: Working Set

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AccessEdgeServer\_ MsgPerSecDroppedDueToUnknownDomain

The OCS\_AccessEdgeServer\_MsgPerSecDroppedDueToUnknownDomain policy monitors the number of messages that could not be routed per second because the message domain is not in the routing table.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter: SIP - 021 - Messages/sec Dropped Due To Unknown Domain

*Threshold:* This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

### OCS\_AccessEdgeServer\_FlowControlledConnections

The OCS\_AccessEdgeServer\_FlowControlledConnections policy monitors the number of connections that are currently being flow-controlled (no socket receives are posted).

Performance Object: LC:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 023 - Flow-controlled Connections

Threshold: When the difference between two samples is greater than :

- Warning: 50
- Critical: 100

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeService\_ThreadCount

The OCS\_AccessEdgeService\_ThreadCount policy monitors the Thread Count counter of theAccess Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: Thread Count

Threshold: This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_ RejectedExtEdgeClientConnectionsPerSec

The OCS\_AccessEdgeServer\_RejectedExtEdgeClientConnectionsPerSec policy monitors the number of client connections rejected at the external edge per second because remote user access is disabled.

Performance Object: LC:SIP - 08 - Access Edge Server Connections

Counter: SIP - 015 - Rejected External Edge Client Connections/sec

Threshold: This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AccessEdgeService\_Logging

The OCS\_AccessEdgeService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances RTCSrv or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ AccessEdgeService\_Logging policy.

Instance	Performance Object
RTCSrv	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeService\_PageFaultsPerSec

The OCS\_AccessEdgeService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToBlockedDomain

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedDomain policy monitors the number of messages dropped at the external edge per second because the domain is in the blocked list.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter: SIP - 027 - External Messages/sec Dropped Due To Blocked Domain

Threshold: This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_MessagesInServer

The OCS\_AccessEdgeServer\_MessagesInServer policy monitors the number of messages currently being processed by the server.

Performance Object: LC:SIP - 02 - Protocol

Counter: SIP - 012 - Messages In Server

Threshold: When the difference between two samples is greater than:

- Warning: 2500
- Critical: 5000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 AccessEdgeServer

## OCS\_AccessEdgeServer\_ AverageIncomingMessageProcessingTime

The OCS\_AccessEdgeServer\_AverageIncomingMessageProcessingTime policy monitors the average time (in seconds) it takes to process an incoming message.

Performance Object: LC:SIP - 02 - Protocol

Counter: SIP - 021 - Average Incoming Message Processing Time

Threshold: This policy has the following threshold:

- Warning: 3
- Critical: 5

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ AccessEdgeServer

### OCS\_AccessEdgeService\_ProcessorTime

The OCS\_AccessEdgeService\_ProcessorTime policy monitors the % Processor Time counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AccessEdgeServer\_IncomingRequestsDroppedPerSec

The OCS\_AccessEdgeServer\_IncomingRequestsDroppedPerSec policy monitors the number of incoming requests dropped per second because they could not be processed (due to bad headers, insufficient routing information, server resource allocation failure).

Performance Object: LC:SIP - 02 - Protocol

Counter: SIP - 005 - Incoming Requests Dropped/sec

Threshold: Configuration recommended

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_Check\_AVAuthServiceStatus

The OCS\_Check\_AVAuthServiceStatus policy checks the status of the Audio/Video Authentication Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCMRAUTH

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_Check\_AVEdgeServiceStatus

The OCS\_Check\_AVEdgeServiceStatus policy checks the status of the Audio/Video Conferencing Edge Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCMEDIARELAY

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AccessEdgeServer\_AboveLimitConnectionsDropped

The OCS\_AccessEdgeServer\_AboveLimitConnectionsDropped policy monitors the total number of connections that were dropped because the limit on number of incoming connections from a federated partner or clearinghouse was exceeded.

Performance Object: LC:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 004 - Above Limit Connections Dropped (Access Proxies only)

Threshold: When the difference between two samples is greater than:

- Warning: 1
- Critical: 2

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AccessEdgeServer\_ IncomingMsgHeldAboveOverloadWatermark

The OCS\_AccessEdgeServer\_IncomingMsgHeldAboveOverloadWatermark policy monitors the number of incoming messages currently being held by the server for processing for more than the overload watermark time threshold.

Performance Object: LC:SIP - 07 - Load Management

Counter: SIP - 004 - Incoming Messages Held Above Overload Watermark

Threshold: Configuration recommended

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ AccessEdgeServer

### OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToUnresolvedDomain

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnresolvedDomain policy monitors the number of messages dropped at the external edge per second because the domain failed to resolve by DNS SRV.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter: SIP - 053 - External Messages/sec Dropped Due To Unresolved Domain

*Threshold:* This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

## OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToUnresolvedDomain\_R2

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnresolvedDomain\_R2 policy monitors the number of messages dropped at the external edge per second because the domain failed to resolve by DNS SRV.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter:SIP - 057 - External Messages/sec Dropped Due To Unresolved Domain

*Threshold:* This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToIncompMsgDomain

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToIncompMsgDomain policy monitors the number of messages dropped at the external edge per second because the federation type of the domain is incompatible with previous messages.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter: SIP - 061 - External Messages/sec Dropped Due To Incompatible Message Domain

*Threshold:* This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Office\_Communications\_Server\_2007 AccessEdgeServer OCS2007

## OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToIncompMsgDomain\_R2

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToIncompMsgDomain policy monitors the number of messages dropped at the external edge per second because the federation type of the domain is incompatible with previous messages.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

*Counter:* Domain, SIP - 069 - External Messages/sec Dropped Due To Incompatible Message Domain

Threshold: This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToUnauthIMDomain

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDomain policy monitors the number of messages dropped at the external edge per second because the domain did not resolve by DNS SRV to the connection peer FQDN.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter: SIP - 057 - External Messages/sec Dropped Due To Unauthorized IM Service Provider Domain

*Threshold:* This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToUnauthIMDomain\_R2

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDomain\_R2 policy monitors the number of messages dropped at the external edge per second because the domain did not resolve by DNS SRV to the connection peer FQDN.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

*Counter:* SIP - 061 - External Messages/sec Dropped Due To Unauthorized IM Service Provider Domain

Threshold: This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToBlockedIMDomain

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedIMDomain policy monitors the number of messages dropped at the external edge per second because the domain resolved by DNS SRV to a server that is blocked in the IM Service Providers table.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter: SIP - 055 - External Messages/sec Dropped Due To Blocked IM Service Provider Domain

Threshold: This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Office\_Communications\_Server\_2007 AccessEdgeServer OCS2007

### OCS\_AccessEdgeServer\_ ExtMsgPerSecDroppedDueToBlockedIMDomain\_R2

The OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedIMDomain\_R2 policy monitors the number of messages dropped at the external edge per second because the domain resolved by DNS SRV to a server that is blocked in the IM Service Providers table.

Performance Object: LC:SIP - 09 - Access Edge Server Messages

Counter: SIP - 059 - External Messages/sec Dropped Due To Blocked IM Service Provider Domain

*Threshold:* This policy has the following threshold:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_CreateDataSources

The OCS\_CreateDataSources policy creates the OCS data source (CODA or HP Performance Agent) into which OCS SPI logging policies log data. Ensure to run this policy on the node before you deploy any logging policy.

Policy Type: Scheduled Task policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 — Configuration

## ArchivingCDRServer

Deploy this policy group on Archiving and CDR server. The Archiving and CDR Server is located in the internal network. It supports archiving instant messaging (IM) conversations and group conferences and for capturing usage information related to file transfers, audio/video (A/V) conversations, application sharing, remote assistance, meetings, and conferencing servers in call detail records (CDRs).

To implement archiving and CDR support, one or more Archiving and CDR servers must be deployed in the organization and the Enterprise pool or Standard Edition Server should point to the

Archiving and CDR Server. The database for the Archiving and CDR Server can be deployed on the same computer as the Archiving and CDR Server or on a separate computer.

This policy group has the following policies:

- OCS\_ArchivingCDRServer\_NumberOfDroppedMQMessages
- OCS\_ArchivingCDRServer\_NumberOfMessagesNotWrittenToDB
- OCS\_ArchivingCDRServer\_NumberOfValidationFailedMessages
- OCS\_Check\_ArchivingCDRServiceStatus
- OCS\_ArchivingCDRService\_Logging
- OCS\_ArchivingCDRService\_PageFaultsPerSec
- OCS\_ArchivingCDRService\_PrivateBytes
- OCS\_ArchivingCDRService\_ProcessorTime
- OCS\_ArchivingCDRService\_ThreadCount
- OCS\_ArchivingCDRService\_WorkingSet

## OCS\_ArchivingCDRService\_Logging

The OCS\_ArchivingCDRService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the counters RTCArch or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ ArchivingCDRService\_Logging policy.

Instance	Performance Object
RTCArch	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

Policy Type: Measurement Threshold policy

### OCS\_ArchivingCDRService\_ThreadCount

The OCS\_ArchivingCDRService\_ThreadCount policy monitors the Thread Count counter of the Archiving and CDR service.

Performance Object: Process

Counter: RTCArch

Instance: Thread Count

Threshold: This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### OCS\_Check\_ArchivingCDRServiceStatus

The OCS\_Check\_ArchivingCDRServiceStatus policy checks the status of the Archiving and CDR Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCLOG

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ ArchivingCDRServer

### OCS\_ArchivingCDRServer\_NumberOfMessagesNotWrittenToDB

The OCS\_ArchivingCDRServer\_NumberOfMessagesNotWrittenToDB policy monitors the number of messages that validation failed for.

Performance Object: LC: Arch Service - 01 - READ

Counter: Arch Service - 002 - Messages that failed validation

Threshold: When the difference between two samples is greater than then Critical: 1

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_ArchivingCDRService\_PageFaultsPerSec

The OCS\_ArchivingCDRService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Archiving and CDR service.

Performance object: Process

Instance: RTCArch

Counter: Page Faults/sec

Threshold: The policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### OCS\_ArchivingCDRService\_WorkingSet

The OCS\_ArchivingCDRService\_WorkingSet monitors the Working Set counter of the Archiving and CDR service.

Performance object: Process

Instance: RTCArch

Counter: Working Set

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Performance Monitoring policy

Policy Group: SPI for Microsoft Enterprise Servers—, en —, Microsoft\_Office\_ Communications\_Server\_, Microsoft\_Office\_Communications\_Server\_2007, ArchivingCDRServer

## OCS\_ArchivingCDRServer\_NumberOfDroppedMQMessages

The OCS\_ArchivingCDRServer\_NumberOfDroppedMQMessages policy monitors the number of messages dropped from MSMQ queue.

Performance object: LC:Arch Service - 01 – READ

Counter: Arch Service - 006 - Dropped messages from MQ

Threshold: When the difference between two samples is greater than then Critical: 1

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_ArchivingCDRService\_ProcessorTime

The OCS\_ArchivingCDRService\_ProcessorTime policy monitors the % Processor Time counter of the Archiving and CDR service.

Performance object: Process

Instance: RTCArch

Counter: % Processor Time

Threshold: This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_ArchivingCDRServer\_NumberOfValidationFailedMessages

The OCS\_ArchivingCDRServer\_NumberOfValidationFailedMessages policy monitors the number of messages failed to be written to SQL database.

Performance object: LC:Arch Service - 02 - WRITE

Counter: Arch Service - 002 - Messages failed to be written to DB

Threshold: When the difference between two samples is greater than then Critical: 1

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_ArchivingCDRService\_PrivateBytes

The OCS\_ArchivingCDRService\_PrivateBytes policy monitors the Private Bytes counter of the Archiving and CDR service.

Performance object: Process

Instance: RTCArch

*Counter:* Private Bytes

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Performance Monitoring policy

# **AVConfServer**

Deploy this policy group on AV Conferencing server. The AV Conferencing Server is located in the internal network. It enables audio and video peer-to-peer communications and audio and video conferencing. This server role is available on a Standard Edition Server.

In an Enterprise pool, it can be either joined with the Front End Server and Web Conferencing Server or can be deployed on a separate server.

This policy group has the following policies:

- OCS\_Check\_AVConfServiceStatus
- OCS\_AVConfServer\_MCUHealthState
- OCS\_AVConfServer\_NumberOfActiveConferences
- OCS\_AVConfService\_Logging
- OCS\_AVConfService\_PageFaultsPerSec
- OCS\_AVConfService\_PrivateBytes
- OCS\_AVConfService\_ProcessorTime

- OCS\_AVConfService\_ThreadCount
- OCS\_AVConfService\_WorkingSet

## OCS\_Check\_AVConfServiceStatus

The OCS\_Check\_AVConfServiceStatus policy checks the status of the Audio/Video Conferencing Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to retstart the service.

Monitored service: RTCAVMCU

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVConfServer\_MCUHealthState

The OCS\_AVConfServer\_MCUHealthState policy monitors the current health of the MCU. This is considered as:

- 0 = Normal
- 1 = Loaded
- 2 = Full
- 3 = Unavailable

Performance Object: AVMCU - 04 - MCU Health And Performance

Counter: AVMCU - 005 - MCU Health State

*Threshold:* This policy has the following threshold:

- Warning: 1
- Critical: 2

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

## OCS\_AVConfServer\_NumberOfActiveConferences

The OCS\_AVConfServer\_NumberOfActiveConferences policy monitors the number of active conferences on the A/V Conferencing Server.

Performance Object: AVMCU - 00 - Operations

Counter: AVMCU - 000 - Number of Conferences

Threshold: When the difference between two samples is greater than:

- Warning: 4000
- Critical: 5000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVConfService\_Logging

The OCS\_AVConfService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances AVMCUSvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ AVConfEdgeService\_Logging policy.

Instance	Performance Object
AVMCUSvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

Policy Type: Measurement Threshold policy

## OCS\_AVConfService\_PageFaultsPerSec

The OCS\_AVConfService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_AVConfService\_PrivateBytes

The OCS\_AVConfService\_PrivateBytes policy monitors the Private Bytes counter of the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 AVConfServer

### OCS\_AVConfService\_ProcessorTime

The OCS\_AVConfService\_ProcessorTime policy monitors the % Processor Time counter of the Front End service.

Performance Object: Process

Instance: AVMCUSvc

Counter: % Processor Time

Threshold: This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 – AVConfServer

### OCS\_AVConfService\_ThreadCount

The OCS\_AVConfService\_ThreadCount policy monitors the Thread Count counter of the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

*Counter:* Thread Count

Threshold: This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ AVConfServer

#### OCS\_AVConfService\_WorkingSet

The OCS\_AVConfService\_WorkingSet policy monitors the Working Set counter of the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

Counter: Working Set

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

```
Policy Type: Measurement Threshold policy
file:///C:/InformationEngineering/2012/MSES/Testing/OHFlare-vpw010/Content/vpw010/OCS_
CWAServer
Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft_Office_
Communications_Server_ Microsoft_Office_Communications_Server_2007
AVConfServer
```

# **AVEdgeServer**

Deploy this policy group on AV Edge server. The AV Edge Server is located in the perimeter network. It provides a single trusted point through which media traffic can traverse NATs and firewalls. It enables audio and video conferencing and A/V peer-to-peer communications with external users equipped with the Office Communicator 2007 client.

This server role can be either configured with the Access Edge Server and Web Conferencing Edge Server, or it can reside on a separate, dedicated server.

You can deploy the following policies on OCS 2007 and OCS 2007 R2:

- OCS\_AVAuthService\_PageFaultsPerSec
- OCS\_AVAuthService\_PrivateBytes
- OCS\_AVAuthService\_ProcessorTime
- OCS\_AVAuthService\_ThreadCount
- OCS\_AVAuthService\_WorkingSet
- OCS\_AVAuthService\_Logging
- OCS\_Check\_AVAuthServiceStatus
- OCS\_Check\_AVEdgeServiceStatus
- OCS\_AVEdgeService\_PageFaultsPerSec
- OCS\_AVEdgeService\_PrivateBytes
- OCS\_AVEdgeService\_ProcessorTime
- OCS\_AVEdgeService\_ThreadCount
- OCS\_AVEdgeService\_WorkingSet
- OCS\_AVEdgeServer\_BadRequestsReceivedPerSec
- OCS\_AVEdgeServer\_TCPAllocateRequestsExceedingPortLimitPerSec

- OCS\_AVEdgeServer\_TCPAuthenticationFailuresPerSec
- OCS\_AVEdgeServer\_UDPAllocateRequestsExceedingPortLimitPerSec
- OCS\_AVEdgeServer\_UDPAuthenticationFailuresPerSec

Deploy the following polices only on OCS 2007:

- OCS\_AVEdgeServer\_Logging
- OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec
- OCS\_AVEdgeServer\_UDPActiveSessionsExceedingBandwidthLimit
- OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec
- OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit Deploy the following policies on OCS 2007 R2:
- OCS\_AVEdgeServer\_Logging\_R2
- OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec\_R2
- OCS\_AVEdgeServer\_UDPActiveSessionsExceedingBandwidthLimit\_R2
- OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec\_R2
- OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit\_R2

#### OCS\_AVEdgeServer\_ UDPAllocateRequestsExceedingPortLimitPerSec

The OCS\_AVEdgeServer\_UDPAllocateRequestsExceedingPortLimitPerSec policy monitors the number of requests allocated over UDP that exceeded the port limit per second.

Performance Object: A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: - 006 - Allocate Requests Exceeding Port Limit/Sec

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AVEdgeServer\_ TCPAllocateRequestsExceedingPortLimitPerSec

The OCS\_AVEdgeServer\_TCPAllocateRequestsExceedingPortLimitPerSec policy monitors the number of allocated requests over TCP per second that exceeded the port limit.

Performance Object: A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: - 006 - Allocate Requests Exceeding Port Limit/Sec

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AVEdgeService\_PrivateBytes

The OCS\_AVEdgeService\_PrivateBytes policy monitors the Private Bytes counter of the Audio/Video Conferencing Edge Service.

Performance Object: Process

Instance: MediaRelaySvc

Counter: Private Bytes

Threshold: This policy has the following threshold:

• Warning: 1.5e+007

• Critical: 2e+007 Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

## OCS\_AVEdgeService\_WorkingSet

The OCS\_AVEdgeService\_WorkingSet policy monitors the Working Set counter of the Audio/Video Conferencing Edge Service.

Performance Object: Process

*Instance:* MediaRelaySvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_AVEdgeService\_Logging

The OCS\_AVEdgeService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances MediaRelaySvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ AVEdgeService\_Logging policy.

Instance	Performance Object
MediaRelaySvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

Policy Type: Measurement Threshold policy

# OCS\_AVEdgeService\_Logging\_R2

The OCS\_AVEdgeService\_Logging\_R2 policy logs the following metrics into the data store (CODA or HP Performance Agent) for the counters MediaRelaySvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ AVEdgeService\_Logging policy.

Counter	Performance Object
MediaRelaySvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

Policy Type:

Policy Group: Policy management — Policy groups — SPI for Microsoft Enterprise Servers — en \_ Microsoft\_Office\_Communications\_Server \_ AVEdge

## OCS\_AVEdgeService\_ThreadCount

The OCS\_AVEdgeService\_ThreadCount policy monitors the Thread Count counter of the Audio/Video Conferencing Edge Service.

Performance Object: Process

Instance: MediaRelaySvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVEdgeService\_ProcessorTime

The OCS\_AVEdgeService\_ProcessorTime monitors the % Processor Time counter of the Audio/Video Conferencing Edge Service.

Performance Object: Process

Instance: MediaRelaySvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_AVEdgeService\_PageFaultsPerSec

The OCS\_AVEdgeService\_PageFaultsPerSec monitors the Page Faults/sec counter of the Audio/Video Conferencing Edge Service.

Performance Object: Process

*Instance:* MediaRelaySvc

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVEdgeServer\_UDPAuthenticationFailuresPerSec

The OCS\_AVEdgeServer\_UDPAuthenticationFailuresPerSec policy monitors the number of failed attempts to authenticate with the relay over UDP per second.

Performance Object: A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: - 004 - Authentication Failures/sec

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AVEdgeServer\_TCPAuthenticationFailuresPerSec

The OCS\_AVEdgeServer\_TCPAuthenticationFailuresPerSec policy monitors the failed attempts to authenticate with the relay over TCP per second.

Performance Object: A/V Edge - 01 - TCP Counters

Instance: \_Total

*Counter:* - 004 - Authentication Failures/sec

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_AVEdgeServer\_BadRequestsReceivedPerSec

The OCS\_AVEdgeServer\_BadRequestsReceivedPerSec policy monitors the number of invalid requests received per second.

Performance Object: A/V Auth - 00 - Requests

Counter: - 003 - Bad Requests Received/sec

Threshold: This policy has the following threshold:

- Warning: 20
- Critical: 30

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec

The OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec policy monitors the number of packets over TCP dropped by the relay per second.

Performance Object: A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: - 023 - Packets Dropped/sec

*Threshold:* This policy has the following threshold:

- Warning: 200
- Critical: 300

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Office\_Communications\_Server\_2007 AVEdgeServer — OCS2007

## OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec\_R2

The OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec\_R2 policy monitors the number of packets over TCP dropped by the relay per second.

Performance Object: A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: - 022 - Packets Dropped/sec

Threshold: This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Office\_Communications\_Server\_2007\_ AVEdgeServer — OCS2007\_R2

# OCS\_AVEdgeServer\_Logging

The OCS\_AVEdgeServer\_Logging policy logs the data into the data store (CODA / HP Performance Agent) for the instance \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### 🗘 Note:

Ensure that the OCS\_CreateDataSources.html policy is running before you deploy the OCS\_ AVEdgeService\_Logging policy.

Instance	Performance Object
_Total	A/V Edge - 00 - UDP Counters\-004 - Authentication Failures/sec
	A/V Edge - 00 - UDP Counters\- 012 - Client Request Errors/sec (4xx Responses/sec)
	A/V Edge - 00 - UDP Counters\- 013 - Client Send Request Errors/sec
	A/V Edge - 00 - UDP Counters\- 017 - Session Idle Timeouts/sec
	A/V Edge - 01 - TCP Counters\-004 - Authentication Failures/sec
	A/V Edge - 01 - TCP Counters\- 012 - Client Request Errors/sec (4xx Responses/sec)
	A/V Edge - 01 - TCP Counters\- 014 - Client Send Request Errors/sec
	A/V Edge - 01 - TCP Counters\- 017 - Session Idle Timeouts

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

*Policy Type:* Measurement Threshold policy

## OCS\_AVEdgeServer\_Logging\_R2

The OCS\_AVEdgeServer\_Logging\_R2 policy logs the data into the data store (CODA / HP Performance Agent) for the instance \_Total. If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources.html policy is running before you deploy the OCS\_ AVEdgeService\_Logging policy.

Instance	Performance Object
_Total	A/V Edge - 00 - UDP Counters\-004 - Authentication Failures/sec
	A/V Edge - 00 - UDP Counters\- 010 - Client Request Errors/sec (4xx Responses/sec)
	A/V Edge - 00 - UDP Counters\- 012 - Client Send Request Errors/sec
	A/V Edge - 00 - UDP Counters\- 015 - Session Idle Timeouts/sec
	A/V Edge - 01 - TCP Counters\-004 - Authentication Failures/sec
	A/V Edge - 01 - TCP Counters\- 011 - Client Request Errors/sec (4xx Responses/sec)
	A/V Edge - 01 - TCP Counters\- 013 - Client Send Request Errors/sec
	A/V Edge - 01 - TCP Counters\- 016 - Session Idle Timeouts

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_AVEDGE

Policy Type: Measurement Threshold policy

# OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit

The OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit policy monitors the number of active relay sessions over TCP per second that are exceeding bandwidth limit.

Performance Object: A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: - 007 - Active Sessions Exceeding Bandwidth Limit

*Threshold:* This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVEdgeServer\_ TCPActiveSessionsExceedingBandwidthLimit\_R2

The OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit\_R2 policy monitors the number of active relay sessions over TCP per second that are exceeding bandwidth limit.

Performance Object: A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: - 025 - Active Sessions Exceeding Avg Bandwidth Limit

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec

The OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec policy monitors packets over UDP dropped by the relay per second rate.

*Performance Object:* A/V Edge – 00 - UDP Counters

Instance: \_Total

Counter: - 022 - Packets Dropped/sec

Threshold: This policy has the following threshold:

- Warning: 200
- Critical: 300

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec\_R2

The OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec\_R2 policy monitors packets over UDP dropped by the relay per second rate.

Performance Object: A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: - 021- Packets Dropped/sec

*Threshold:* This policy has the following threshold:

- Warning: 200
- Critical: 300

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Office\_Communications\_Server\_2007 — AVEdgeServer — OCS2007\_R2

#### OCS\_AVAuthService\_PageFaultsPerSec

The OCS\_AVAuthService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 AVEdgeServer

## OCS\_AVAuthService\_PrivateBytes

The OCS\_AVAuthService\_PrivateBytes policy monitors the Private Bytes counter of the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: Private Bytes

Threhold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVAuthService\_ProcessorTime

The OCS\_AVAuthService\_ProcessorTime policy monitors the % Processor Time counter of the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: % Processor Time

Threshold: This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVAuthService\_ThreadCount

The OCS\_AVAuthService\_ThreadCount policy monitors the monitors the Thread Count counter of the Audio/Video Authentication service.

Performance Object: Process

*Instance:* MediaRelaySvc

Counter: Thread

*Threshold:* This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_AVAuthService\_WorkingSet

The OCS\_AVAuthService\_WorkingSet policy monitors the Working Set counter of the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes

*Policy Type:* Measurement Threshold policy

#### OCS\_AVAuthService\_Logging

The OCS\_AVAuthService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances MRASSvc or \_Total.

If a metric value is unavailable, this policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### 🗘 Note:

Ensure that the OCS\_CreateDataSources.html policy is running before you deploy the OCS\_ AVAuthService\_Logging policy.

Instance	Performance Object
MRASSvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

Policy Type: Measurement Threshold policy

#### OCS\_AVEdgeServer\_UDPActiveSessionsExceedingBandwidthLimit

The OCS\_AVEdgeServer\_UDPActiveSessionsExceedingBandwidthLimit policy monitors the number of active relay sessions over UDP that are exceeding bandwidth limit.

Performance Object: A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: - 007 - Active Sessions Exceeding Bandwidth Limit

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

### OCS\_AVEdgeServer\_ UDPActiveSessionsExceedingBandwidthLimit\_R2

The OCS\_AVEdgeServer\_UDPActiveSessionsExceedingBandwidthLimit\_R2 policy monitors the number of active relay sessions over UDP that are exceeding bandwidth limit.

Performance Object: A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: - 026 Active Sessions Exceeding Avg Bandwidth Limit (R2)

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# Configuration

This policy group can be deployed on all Microsoft Office Communications Server 2007 server roles.

This policy group includes OCS\_CreateDataSources.

#### **OCS\_CreateDataSources**

The OCS\_CreateDataSources policy creates the OCS data source (CODA or HP Performance Agent) into which OCS SPI logging policies log data. Ensure to run this policy on the node before you deploy any logging policy.

Policy Type:Scheduled Task policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Office\_Communications\_Server\_2007 Configuration

# **CWAServer**

Deploy this policy group on Communicator Web Access server. The CWA server enables browserbased client access to Microsoft Office Communications Server 2007.

This group has the following policies:

- OCS\_CWAServer\_AuthFailuresDueToLDAPErrors
- OCS\_CWAServer\_FailedRequests
- OCS\_CWAServer\_LogonsDeniedDueToServerThrottling
- OCS\_CWAServer\_RequestsRejectedPerSecDueToInvalidTicket
- OCS\_CWAServer\_RequestsToNonExistentSessions
- OCS\_CWAServer\_SessionsFailedToSignIn
- OCS\_CWAServer\_SessionsTimedOut
- OCS\_CWAServer\_FormsLogonFailures
- OCS\_CWAServer\_IWALogonFailures
- OCS\_CWAServer\_LDAPErrors

## OCS\_CWAServer\_LDAPErrors

The OCS\_CWAServer\_LDAPErrors policy monitors total number of LDAP errors that have occurred during Communicator Web Access directory search operations.

Performance Object: CWA - 00 - Directory Search

Instance: \_Total

Counter: CWA - 003 - LDAP errors

*Threshold:* When the difference between two samples is greater than:

- Warning: 2
- Critical: 5

Schedule: This policy runs for 15 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_CWAServer\_SessionsFailedToSignIn

The OCS\_CWAServer\_SessionsFailedToSignIn policy monitors the total number of user sessions that failed to sign in to Office Communications Server since the Communicator Web Access virtual server was started.

Performance Object: CWA - 03 - User session Service

Instance: \_Total

Counter: CWA - 004 - Sessions failed to sign in

*Threshold:* When the difference between two samples is greater than:

- Warning: 50
- Critical: 75

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 CWAServer

## OCS\_CWAServer\_IWALogonFailures

The OCS\_CWAServer\_IWALogonFailures policy monitors the total number of failed logons that used IIS authentication since the Communicator Web Access virtual server was started. The IIS authentication types used are NTLM, Kerberos, or single sign on (SSO) authentication if the Communicator Web Access server is in SSO mode.

Performance Object: CWA - 01 - Authentication Module

Instance: \_Total

Counter: CWA - 007 - IWA auth logon failures

Threshold: When the difference between two samples is greater than:

- Warning: 300
- Critical: 500

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server – Microsoft\_Office\_Communications\_Server\_2007 – CWAServer

#### OCS\_CWAServer\_AuthFailuresDueToLDAPErrors

The OCS\_CWAServer\_AuthFailuresDueToLDAPErrors policy monitors the total number of authorizations that have failed due to LDAP errors during binds and searches since the Communicator Web Access virtual server was started.

Performance Object: CWA - 01 - Authentication Module

Instance: \_Total

Counter: CWA - 012 - LDAP error total

Threshold: When the difference between two samples is greater than:

- Warning: 300
- Critical: 500 Schedule: This policy runs every 15 minutes. Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ CWAServer

## OCS\_CWAServer\_LogonsDeniedDueToServerThrottling

The OCS\_CWAServer\_LogonsDeniedDueToServerThrottling policy monitors total number of logon attempts that were not allowed due to server throttling under heavy resource consumption.

Performance Object: CWA - 01 - Authentication Module

Instance: \_Total

Counter: CWA - 014 - Logons denied due to server throttling

*Threshold:* When the difference between two samples is greater than:

- Warning: 10
- Critical: 15

Schedule: This policy runs for every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server – Microsoft\_Office\_Communications\_Server\_2007 – CWAServer

### OCS\_CWAServer\_RequestsRejectedPerSecDueToInvalidTicket

The OCS\_CWAServer\_RequestsRejectedPerSecDueToInvalidTicket policy monitors the number of requests that were rejected per second due to an invalid ticket in the request. This problem occurs occasionally under normal circumstances, but spikes can be symptomatic of a denial of service attack or hacking attempt.

Performance Object: CWA - 02 – Security

Counter: CWA - 001 - Requests rejected due to invalid ticket / sec

Instance: \_Total

Threshold: When the average between two samples is greater than

- Warning:5
- Critical:10

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

## OCS\_CWAServer\_FormsLogonFailures

The OCS\_CWAServer\_FormsLogonFailures policy monitors total number of forms logon attempts that have failed since the Communicator Web Access virtual server was started.

Performance Object: CWA - 01 - Authentication Module

Instance: \_Total

Counter: CWA - 003 - Forms auth logon failures

*Threshold:* When the difference between two samples is greater than:

- Warning: 300
- Critical: 500

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server – Microsoft\_Office\_Communications\_Server\_2007 – CWAServer

# OCS\_CWAServer\_SessionsTimedOut

The OCS\_CWAServer\_SessionsTimedOut policy monitors the total number of Communicator Web Access user sessions that timed out due to communication failure with clients.

Performance Object: CWA - 03 - User session Service

Counter: CWA - 007 - Total sessions timed out

Instance: \_Total

Threshold: When the difference between two samples is greater than

- Warning: 250
- Critical: 500

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: Policy management Policy groups SPI for Microsoft Enterprise Servers en\_Microsoft\_Office\_Communications\_Server\_Microsoft\_Office\_Communications\_ Server\_2007

#### OCS\_CWAServer\_FailedRequests

The OCS\_CWAServer\_FailedRequests policy monitors the total number of requests that failed to process since the Communicator Web Access virtual server was started.

Performance Object: CWA - 03 - User session Service

Counter: CWA - 018 - Total requests failed

Instance: \_Total

Threshold: When the difference between two samples is greater than

- Warning: 250
- Critical: 500

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: Policy management—Policy groups—SPI for Microsoft Enterprise Servers en\_Microsoft\_Office\_Communications\_Server\_Microsoft\_Office\_Communications\_ Server\_2007

#### OCS\_CWAServer\_RequestsToNonExistentSessions

The OCS\_CWAServer\_RequestsToNonExistentSessions policy monitors the total number of requests targeting nonexistent sessions since the Communicator Web Access virtual server was started.

Performance Object: CWA - 03 - User session Service

Counter: CWA - 016 - Requests to nonexistent sessions

Instance: \_Total

Threshold: When the difference between two samples is greater than

- Warning: 250
- Critical: 500

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: Policy management Policy groups SPI for Microsoft Enterprise Servers en Microsoft\_Office\_Communications\_Server\_Microsoft\_Office\_Communications\_ Server\_2007Critical: 500

# **FrontEnd Server**

Deploy this policy group on a FrontEnd server. The FrontEnd Server is located in the internal network that hosts the IM Conferencing service, Address Book service, and Telephony Conferencing service to support registration, presence, IM, and conferencing.

This server role is available on a Standard Edition Server. In an Enterprise pool, it can either be configured with the Web Conferencing Server and A/V Conferencing Server, or can be deployed on a separate server.

The following policies can be deployed on OCS 2007 and OCS 2007 R2.

- OCS\_Check\_FrontEndServiceStatus
- OCS\_FrontEndService\_Logging
- OCS\_FrontEndService\_PageFaultsPerSec
- OCS\_FrontEndService\_PrivateBytes
- OCS\_FrontEndService\_ProcessorTime
- OCS\_FrontEndService\_ThreadCount
- OCS\_FrontEndService\_WorkingSet
- OCS\_FrontEndServer\_SendsOutstanding
- OCS\_FrontEndServer\_HoldingTimeForIncMsgs
- OCS\_FrontEndServer\_ProcessingLatency
- OCS\_FrontEndServer\_QueueLatency

Deploy the following policies on OCS 2007:

- OCS\_FrontEndServer\_Local503Responses
- OCS\_FrontEndServer\_Logging
- OCS\_FrontEndServer\_Local504Responses

Deploy the following policies on OCS 2007 R2:

- OCS\_FrontEndServer\_Local503Responses\_R2
- OCS\_FrontEndServer\_Logging\_R2
- OCS\_FrontEndServer\_Local504Responses\_R2

#### OCS\_FrontEndService\_PrivateBytes

The OCS\_FrontEndService\_PrivateBytes policy monitors the Private Bytes counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Private Bytes

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_FrontEndServer\_HoldingTimeForIncMsgs

The OCS\_FrontEndServer\_HoldingTimeForIncMsgs policy monitors the average amount of time taken by the server to process a request.

Performance Object: LC:SIP - 07 - Load Management

Counter: Usrv - SIP - 000 - Average Holding Time For Incoming Messages

Threshold: When a sample is greater than:

- Warning: 4
- Critical: 5

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ FrontEndServer

### OCS\_FrontEndServer\_QueueLatency

The OCS\_FrontEndServer\_QueueLatency policy monitors the amount of time( in milliseconds) that a request is spent in the back end queue

Performance Object: LC:USrv - 00 - DBStore

Counter: Usrv - 002 - Queue Latency (msec)

Threshold: When a sample is greater than:

- Warning: 4000
- Critical: 6000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_FrontEndService\_ProcessorTime

The OCS\_FrontEndService\_ProcessorTime policy monitors the the % Processor Time counter of the Front End service.

Performance Object: Process

Instance: AVMCUSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_Check\_FrontEndServiceStatus

The OCS\_Check\_FrontEndServiceStatus policy checks the status of the Front-End Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCSrv

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_FrontEndService\_Logging

The OCS\_FrontEndService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances RTCSrv or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ FrontEndService\_Logging policy.

This policy has the following metrics:

Instance	Performance Object
----------	--------------------

RTCSrv	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Data Class: OCS\_PROCESS

Schedule: This policy runs every 15 minutes.

*Policy Type:*Measurement Threshold policy

### OCS\_FrontEndService\_WorkingSet

The OCS\_FrontEndService\_WorkingSet policy monitors the Working Set counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Working Set

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_FrontEndService\_ThreadCount

The OCS\_FrontEndService\_ThreadCount policy monitors the Thread Count counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Thread Count

*Threshold:* This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

### OCS\_FrontEndService\_PageFaultsPerSec

The OCS\_FrontEndService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

#### OCS\_FrontEndServer\_ProcessingLatency

The OCS\_FrontEndServer\_ProcessingLatency policy monitors the amount of time (in milliseconds) that the back end spent in processing a request.

Performance Object: LC:USrv - 00 - DBStore

Counter: Usrv - 004- Sproc Latency (msec)

Threshold: When a sample is greater than:

- Warning: 4000
- Critical: 6000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

#### OCS\_FrontEndServer\_SendsOutstanding

The OCS\_FrontEndServer\_SendsOutstanding policy monitors the number of requests and responses that are queued outbound.

Performance Object: LC:SIP – 01 – Peers

Counter: SIP - 017 - Sends Outstanding

Threshold: When a sample is greater than:

- Warning: 100
- Critical: 200

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

#### OCS\_FrontEndServer\_Local503Responses

The OCS\_FrontEndServer\_Local503Responses policy monitors the number of 503 responses per second. The 503 code indicates that the server is unavailable.

Performance Object: LC:SIP - 04 - Responses

Counter: SIP - 051 - Local 503 Responses/sec

Threshold: When a sample is greater than :

- Warning: 2
- Critical: 5

Schedule: This policy runs every15 minutes.

Policy Type: Measurement Threshold policy

## OCS\_FrontEndServer\_Local503Responses\_R2

The OCS\_FrontEndServer\_Local503Responses\_R2 policy monitors the number of 503 responses per second. The 503 code indicates that the server is unavailable.

*Performance Object:* LC:SIP - 04 - Responses

Counter: SIP - 055 - Local 503 Responses/sec

Threshold: When a sample is greater than :

- Warning: 2
- Critical: 5

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Office\_Communications\_Server\_2007\_ FrontEndServer\_OCS2007\_R2

#### OCS\_FrontEndServer\_Local504Responses

The OCS\_FrontEndServer\_Local504Responses policy monitors the number of 504 responses per second. The 504 code indicates connectivity problems with other servers.

Performance Object: LC:SIP - 04 - Responses

Counter: SIP - 053 - Local 504 Responses/sec

Threshold: When a sample is greater than :

- Warning: 2
- Critical: 5

Schedule: This policy runs every15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ FrontEndServer→OCS2007

#### OCS\_FrontEndServer\_Local504Responses\_R2

The OCS\_FrontEndServer\_Local504Responses\_R2 policy monitors the number of 504 responses per second. The 504 code indicates connectivity problems with other servers.

Performance Object: LC:SIP - 04 - Responses

Counter: SIP - 057 - Local 504 Responses/sec

Threshold: When a sample is greater than :

- Warning: 2
- Critical: 5

Schedule: This policy runs every15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 FrontEndServer OCS2007\_R2

## OCS\_FrontEndServer\_Logging

The OCS\_FrontEndServer\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances msec or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### **Note:**

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ FrontEndService\_Logging policy.

This policy has the following metrics:

Instance	Performance Object
msec	LC:USrv - 00 – DBStore\Usrv - 002 - Queue Latency
	LC:USrv - 00 – DBStore\Usrv - 004- Sproc Latency
_Total	LC:SIP - 07 - Load Management\SIP - 000 - Average Holding Time For Incoming Messages
	LC:SIP - 04 – Responses\SIP - 051 - Local 503 Responses/sec
	LC:SIP - 04 – Responses\SIP - 053 - Local 504 Responses/sec
	LC:SIP - 01 – Peers\SIP - 017 - Sends Outstanding

Data Class: OCS\_FRONTEND

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_FrontEndServer\_Logging\_R2

The OCS\_FrontEndServer\_Logging\_R2 policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances msec or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ FrontEndService\_Logging policy. This policy has the following metrics:

Instance	Performance Object
msec	LC:USrv - 00 – DBStore\Usrv - 002 - Queue Latency
	LC:USrv - 00 – DBStore\Usrv - 004- Sproc Latency
_Total	LC:SIP - 07 - Load Management\SIP - 000 - Average Holding Time For Incoming Messages
	LC:SIP - 04 – Responses\SIP - 055 - Local 503 Responses/sec
	LC:SIP - 04 – Responses\SIP - 057 - Local 504 Responses/sec
	LC:SIP - 01 – Peers\SIP - 017 - Sends Outstanding

Data Class: OCS\_FRONTEND

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# **IMConfServer**

Deploy this policy group on IM Conferencing Server. The IM Conferencing Server is an instant messaging server. It is the conferencing server of OCS 2007.

It provides server-managed group IM. It runs as a separate process on the Standard Edition Server or Enterprise pool Front End Server.

This policy group includes the following policies:

- OCS\_Check\_IMConfServiceStatus
- OCS\_IMConfService\_PageFaultsPerSec

- OCS\_IMConfService\_PrivateBytes
- OCS\_IMConfService\_ProcessorTime
- OCS\_IMConfService\_ThreadCount
- OCS\_IMConfService\_WorkingSet
- OCS\_IMFConfService\_Logging

# OCS\_IMConfService\_ThreadCount

The OCS\_IMConfService\_ThreadCount policy monitors the Thread Count counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_IMConfService\_ProcessorTime

The OCS\_IMConfService\_ProcessorTime policy monitors the % Processor Time counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Performance Monitoring policy

# OCS\_IMConfService\_WorkingSet

The OCS\_IMConfService\_WorkingSet policy monitors the Working Set counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Working Set

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_Check\_IMConfServiceStatus

The OCS\_Check\_IMConfServiceStatus policy checks the status of the IM Conferencing Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCIMMCU

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_IMFConfService\_Logging

The OCS\_IMFConfService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances IMMCUSvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### ♦Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ IMFConfEdgeService\_Logging policy. This policy has the following metrics:

Instance	Performance Object	
IMMCUSvc	Process\Working Set	
	Process\Page Faults/sec	
	Process\Private Bytes	
	Process\Thread Count	
	Process\% Processor Time	
_Total	Processor\% Processor Time	

Data Class: OCS\_PROCESS

Schedule: This policy runs every 15 minutes.

*Policy Type*: Measurement Threshold policy

# OCS\_IMConfService\_PageFaultsPerSec

The OCS\_IMConfService\_PageFaultsPerSec policy the monitors the Page Faults/sec counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_IMConfService\_PrivateBytes

The OCS\_IMConfService\_PrivateBytes policy monitors the Private Bytes counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Private Bytes

Threshold: The policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# **MediationServer**

Deploy this policy group on the Mediation server. The Mediation Server is located in the internal network that mediates signaling and media between the Enterprise Voice infrastructure (such as a Director or home server) and another gateway (such as a Basic Media Gateway).

A Mediation Server is also used to link Office Communications Server and a PBX in both departmental deployment and PBX integration topologies. The Mediation Server is deployed on a separate, dedicated server.

This policy group includes the following policies:

- OCS\_MediationService\_PageFaultsPerSec
- OCS\_Check\_MediationServiceStatus
- OCS\_MediationService\_Logging
- OCS\_MediationService\_PrivateBytes
- OCS\_MediationService\_ProcessorTime
- OCS\_MediationService\_ThreadCount
- OCS\_MediationService\_WorkingSet
- OCS\_MediationServer\_LoadCallFailureIndex
- OCS\_MediationServer\_RejectedSIPInvitesFromGateway
- OCS\_MediationServer\_RejectedSIPInvitesFromProxy

# OCS\_MediationService\_Logging

The OCS\_MediationService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances MediationServerSvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ MediationService\_Logging policy. This policy has the following metrics:

Insatnce	Performance Object
MediationServerSvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Data Class: OCS\_PROCESS

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_MediationService \_PageFaultsPerSec

The OCS\_MediationService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_MediationServer\_LoadCallFailureIndex

The OCS\_MediationServer\_LoadCallFailureIndex policy monitors scaled index between zero and 100 that is related to all call failures due to heavy load.

Performance Object: MediationServer - 03 - Health Indices

Counter: 000 - Load Call Failure Index

Threshold: When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_MediationServer\_RejectedSIPInvitesFromGateway

The OCS\_MediationServer\_RejectedSIPInvitesFromGateway policy monitors the number of SIP INVITEs from gateway which were rejected immediately because of server load.

Performance Object: MediationServer - 01 - Inbound Calls

Counter: 003 - Total rejected

*Threshold:* When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_MediationService\_ThreadCount

The OCS\_MediationService\_ThreadCount policy monitors the Thread Count counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Thread Count

Threshold: This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_MediationService\_ProcessorTime

The OCS\_MediationService\_ProcessorTime policy monitors the % Processor Time counter of the Mediation service.

Performance Object: Process

Counter: % Processor Time

Instance: MediationServerSvc

Threshold: This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Performance Monitoring policy

Policy Group: Policy management Policy groups SPI for Microsoft Enterprise Servers en Microsoft\_Office\_Communications\_Server Microsoft\_Office\_Communications\_ Server\_2007

# OCS\_MediationService\_PrivateBytes

The OCS\_MediationService\_PrivateBytes policy monitors the Private Bytes counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_MediationService\_WorkingSet

The OCS\_MediationService\_WorkingSet policy monitors the Working Set counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

# OCS\_MediationServer\_RejectedSIPInvitesFromProxy

The OCS\_MediationServer\_RejectedSIPInvitesFromProxy policy monitors the number of SIP INVITEs from proxy which were rejected immediately because of server load.

Performance Object: MediationServer - 00 - Outbound Calls

Counter: 003 - Total rejected

*Threshold:* When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_Check\_MediationServiceStatus

The OCS\_Check\_MediationServiceStatus policy checks the status of the Mediation Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCMEDSRV

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# TelConfServer

Deploy this policy group on Telephony Conferencing server. The Telephony Conferencing Server is a conferencing server. It enables audio conference integration with audio conferencing providers (ACPs). This server runs as a separate process on the Standard Edition Server or Enterprise pool Front End Server.

This policy group includes the following policies:

- OCS\_Check\_TelConfServiceStatus
- OCS\_TelConfService\_Logging
- OCS\_TelConfService\_PageFaultsPerSec
- OCS\_TelConfService\_PrivateBytes
- OCS\_TelConfService\_ProcessorTime
- OCS\_TelConfService\_ThreadCount
- OCS\_TelConfService\_WorkingSet

# OCS\_TelConfService\_ThreadCount

The OCS\_TelConfService\_ThreadCount policy monitors the Thread Count counter of the Telephony Conferencing Service.

Performance Object: Process

Instance: AcpMcuSvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ TelConfServer

# OCS\_TelConfService\_Logging

The OCS\_TelConfService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances AcpMcuSvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ TelConfEdgeService\_Logging policy. This policy has the following metrics:

Instance	Performance Object	
AcpMcuSvc	Process\Working Set	
	Process\Page Faults/sec	
	Process\Private Bytes	
	Process\Thread Count	
	Process\% Processor Time	
_Total	Processor\% Processor Time	

Data Class: OCS\_PROCESS

Schedule: This policy runs every 15 minutes.

*Policy Type:*Measurement Threshold policy

# OCS\_TelConfService\_PrivateBytes

The OCS\_TelConfService\_PrivateBytes policy monitors the Private Bytes counter of the Telephony Conferencing Service.

Performance Object: Process

Instance: AcpMcuSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 – TelConfServer

# OCS\_Check\_TelConfServiceStatus

The OCS\_Check\_TelConfServiceStatus policy checks the status of the Telephony Conferencing Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCACPMCU

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_TelConfService\_PageFaultsPerSec

The OCS\_TelConfService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Telephony Conferencing Service.

Performance Object: Process

Instance: AcpMcuSvc

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_TelConfService\_WorkingSet

The OCS\_TelConfService\_WorkingSet monitors the Working Set counter of the Telephony Conferencing Service.

Performance Object: Process

Instance: AcpMcuSvc

Counter: Working Set

Threshold: This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_TelConfService\_ProcessorTime

The OCS\_TelConfService\_ProcessorTime policy monitors the Percentage Processor Time counter of the Telephony Conferencing Service.

Performance Object: Process

Instance: AcpMcuSvc

Counter: % Processor Time

Threshold: This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 -TelConfServer

# WebCompServer

Deploy this policy group on Web Components Server. The Web Components Server is located in the internal network. It provides IIS-based Web components that support Office Communications Server 2007.

These Web components include IIS Virtual Directory setup to support Address Book Server, the Web Conferencing Server (downloading of meeting content), and the IM Conferencing group expansion Web service. The Web Components Server runs on each Standard Edition Server and, for Enterprise pools, either on the Front End Server (in a consolidated configuration) or on a dedicated IIS server (in an expanded configuration).

The policies of this group must be deployed either on OCS 2007 or OCS 2007\_R2.

Deploy the following policies on OCS 2007:

- OCS\_WebCompServer\_InvalidInputRequestsPerSec
- OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec Deploy the following policies on OCS\_R2:
- OCS\_WebCompServer\_InvalidInputRequestsPerSec\_R2
- OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec\_R2

# OCS\_WebCompServer\_InvalidInputRequestsPerSec

The OCS\_WebCompServer\_InvalidInputRequestsPerSec policy monitors the number of invalid input requests per second.

Performance Object: LC:DLX - 00 - Distribution List Expansion

Counter: DLX - 016 - Invalid input requests/sec

*Threshold:* When a sample is greater than:

- Warning: 1
- Critical: 5

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers—, en —, Microsoft\_Office\_ Communications\_Server\_, Microsoft\_Office\_Communications\_Server\_2007, WebCompServer\_, OCS2007

# OCS\_WebCompServer\_InvalidInputRequestsPerSec\_R2

The OCS\_WebCompServer\_InvalidInputRequestsPerSec\_R2 policy monitors the number of invalid input requests per second.

Performance Object: LC: DLX - 00 - Address Book and Distribution List Expansion

Counter: DLX - 016 - Invalid input requests/sec

*Threshold:* This policy has the following threshold:

- Warning: 1
- Critical: 5

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec

The OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec policy monitors the number of timed out Security Descriptor fetch requests per second.

Performance Object: LC:DLX - 00 - Distribution List Expansion

Counter: DLX - 018 - Timed out Requests that fetch Security Descriptors/sec

Threshold: When the sample is greater than:

- Warning: 1
- Critical: 5

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec\_R2

The OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec\_R2 policy monitors the number of timed out Security Descriptor fetch requests per second.

Performance Object: LC: DLX - 00 - Address Book and Distribution List Expansion

Counter: DLX - 018 - Timed out Requests that fetch Security Descriptors/sec

Threshold: When the sample is greater than:

- Warning: 1
- Critical: 5

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# WebConfServer

Deploy this policy group on Web Conferencing server. The Web Conferencing Server is located in the internal network that enables multi-party data collaboration. This server role is available on a Standard Edition Server.

In an Enterprise pool, it can be either configured with the Front End Server and A/V Conferencing Server, or can be deployed on a separate server.

This policy group includes the following policies:

- OCS\_Check\_WebConfServiceStatus
- OCS\_WebConfServer\_ComplianceErrors
- OCS\_WebConfServer\_MCUHealthState
- OCS\_WebConfServer\_NumberOfUnhandledApplExceptions
- OCS\_WebConfServer\_ResourcesOverConfSpaceLimit
- OCS\_WebConfServer\_SessionQueuesState
- OCS\_WebConfService\_Logging
- OCS\_WebConfService\_PageFaultsPerSec
- OCS\_WebConfService\_PrivateBytes
- OCS\_WebConfService\_ProcessorTime
- OCS\_WebConfService\_ThreadCount
- OCS\_WebConfService\_WorkingSet

## OCS\_WebConfService\_ProcessorTime

The OCS\_WebConfService\_ProcessorTime policy monitors the % Processor Time counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

Counter: % Processor Time

Threshold: This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold

# OCS\_WebConfService\_ThreadCount

The OCS\_WebConfService\_ThreadCount policy monitors the Thread Count counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

Counter: Thread Count

Threshold: This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

## OCS\_WebConfServer\_ResourcesOverConfSpaceLimit

The OCS\_WebConfServer\_ResourcesOverConfSpaceLimit policy monitors the number of resource failed to be created because the Data MCU has reached the space limit for one or more conferences.

Performance Object: LC:DATAMCU - 00 - DataMCU Conferences

Counter: DATAMCU - 031 - Resources over conference space limit

*Threshold:* When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy type: Measurement Threshold policy

# OCS\_WebConfService\_WorkingSet

The OCS\_WebConfService\_WorkingSet policy monitors the Working Set counter of the Web Conferencing Service.

Performance Object: Process

*Instance:* DataMCUSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebConfService\_PageFaultsPerSec

The OCS\_WebConfService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Web Conferencing Service.

Performance Object: Process

*Instance:* DataMCUSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

# OCS\_Check\_WebConfServiceStatus

The OCS\_Check\_WebConfServiceStatus policy checks the status of the Web Conferencing Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCDATAMCU

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebConfServer\_MCUHealthState

The OCS\_WebConfServer\_MCUHealthState policy monitors the the current health of the MCU. It indicates 0 as Normal, 1 as Loaded, 2 as Full, and 3 as Unavailable.

*Performance Object:* LC:DATAMCU - 02 - MCU Health And Performance

Counter: DATAMCU - 005 - MCU Health State

Threshold: When the difference between two samples is greater than:

- Warning: 1
- Critical: 2

Schedule: This policy runs every 15 minutes.

Policy type: Measurement Threshold policy

# OCS\_WebConfService\_Logging

The OCS\_WebConfService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the counters DataMCUSvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

#### Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ WebConfEdgeService\_Logging policy.

Instance	Performance Object	
DataMCUSvc	Process\Working Set	
	Process\Page Faults/sec	
	Process\Private Bytes	
	Process\Thread Count	
	Process\% Processor Time	
_Total	Processor\% Processor Time	

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

Policy Type: Measurement Threshold policy

Policy Group: Policy management Policy groups SPI for Microsoft Enterprise Servers en\_Microsoft\_Office\_Communications\_Server WebConfServer

# OCS\_WebConfServer\_SessionQueuesState

Performance Object	LC:DATAMCU - 00 - DataMCU Conferences
Instance	N/A
Counter	DATAMCU - 041 - Session queues state
Interval	15 min
Threshold	When the difference between two samples is greater than Warning: 1 Critical: 2
Warning/Error Instruction Text	Probable Cause(s): When the Data MCU cannot handle the load capacity. Suggested Action(s): This should be a temporary condition. If this condition persists, increase the load capapcity of the Data MCU by provisioning more Data MCU machines.

The OCS\_WebConfServer\_SessionQueuesState policy monitors the state of the session queues.

# OCS\_WebConfServer\_ComplianceErrors

The OCS\_WebConfServer\_ComplianceErrors policy monitors the number of errors reported by the compliance module.

Performance Object: LC:DATAMCU - 00 - DataMCU Conferences

Counter: DATAMCU - 026 - Compliance errors

Threshold: When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every 15 minutes.

Policy type: Measurement Threshold policy

Policy group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Office\_Communications\_Server\_2007 — WebConfServer

# OCS\_WebConfServer\_NumberOfUnhandledApplExceptions

The OCS\_WebConfServer\_NumberOfUnhandledApplExceptions policy monitors the number of unhandled application exceptions.

Performance Object	LC:DATAMCU - 00 - DataMCU Conferences	
Instance	N/A	
Counter	DATAMCU - 038 - Number of Unhandled Application Exception	
Interval	15 min	
Threshold	When the difference between two samples is greater than Warning: 5 Critical: 10	

# OCS\_WebConfService\_PrivateBytes

The OCS\_WebConfService\_PrivateBytes policy monitors the Private Bytes counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# WebEdgeServer

Deploy this policy group on WebEdge server. The WebEdge Server is located in the perimeter network. It enables data collaboration with external users.

This server role is collocated with the Access Edge Server, except in remote offices, where the Web Conferencing Edge Server is deployed separately because no Access Edge Servers are deployed in the remote office.

This policy group has the following policies:

- OCS\_Check\_WebEdgeServiceStatus
- OCS\_WebEdgeService\_PageFaultsPerSec
- OCS\_WebEdgeService\_PrivateBytes
- OCS\_WebEdgeService\_ProcessorTime
- OCS\_WebEdgeService\_ThreadCount
- OCS\_WebEdgeService\_WorkingSet
- OCS\_WebEdgeService\_Logging
- OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieData
- OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieTimestamp
- OCS\_WebEdgeServer\_SystemThrottling
- OCS\_WebEdgeServer\_ThrottledServerConnections

## OCS\_WebEdgeService\_PageFaultsPerSec

The OCS\_WebEdgeService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Office\_Communications\_Server\_2007→ WebEdgeServer

# OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieData

The OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieData policy monitors the number of clients disconnected per second due to invalid cookie data.

Performance Object: LC:DATAPROXY - 01 - Client Connections

Counter: DATAPROXY - 012 - Clients disconnected per second due to invalid cookie data

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebEdgeServer\_ ClientsDisconPerSecInvalidCookieTimestamp

The OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieTimestamp policy monitors the number of clients rejected per second due to invalid timestamps.

Performance Object: LC:DATAPROXY - 01 - Client Connections

Counter: DATAPROXY - 008 - Clients disconnected per second due to invalid cookie timestamp

Threshold: This policy has the following threshold:

- Warning: 50
- Critical: 100
- Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server Microsoft\_Office\_Communications\_Server\_2007 WebEdgeServer

# OCS\_WebEdgeService\_WorkingSet

The OCS\_WebEdgeService\_WorkingSet policy monitors the Working Set counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: Working Set

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebEdgeService\_PrivateBytes

The OCS\_WebEdgeService\_PrivateBytes policy monitors the Private Bytes counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

*Counter:* Private Bytes

*Threshold:* This policy has the following threshold:

- Warning: 1.5e+007
- Critical: 2e+007

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

# OCS\_Check\_WebEdgeServiceStatus

The OCS\_Check\_WebEdgeServiceStatus policy checks the status of the Web Conferencing Edge Service and sends a critical message if the service is not running. When you receive the critical message, click the message, and then click the **Commands** tab in Message Properties box. Click **Start** in the Operator Initiated box to restart the service.

Monitored service: RTCDATAPROXY

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebEdgeService\_ProcessorTime

The OCS\_WebEdgeService\_ProcessorTime policy monitors the % Processor Time counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

- Warning: 80
- Critical: 90

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebEdgeServer\_SystemThrottling

The OCS\_WebEdgeServer\_SystemThrottling policy indicates that system wide throttling is on.

Performance Object: LC:DATAPROXY - 00 - Server Connections

Instance: \_Total

Counter: DATAPROXY - 041 - System is throttling

Threshold: When the difference between two samples is greater than:

- Warning: 1
- Critical: 2

Policy Type: Measurement Threshold policy

# OCS\_WebEdgeService\_Logging

The OCS\_WebEdgeService\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances DataProxy or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

<sup></sup> **€**Note:

Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_ WebEdgeService\_Logging policy.

Instance	Performance Object	
DataProxy	Process\Working Set	
	Process\Page Faults/sec	
	Process\Private Bytes	
	Process\Thread Count	
	Process\% Processor Time	
_Total	Processor\% Processor Time	

Schedule: This policy runs every 15 minutes.

Data Class: OCS\_PROCESS

*Policy Type:* Measurement Threshold policy

# OCS\_WebEdgeService\_ThreadCount

The OCS\_WebEdgeService\_ThreadCount policy monitors the Thread Count counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: Thread Count

*Threshold:* This policy has the following threshold:

- Warning: 100
- Critical: 150

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

# OCS\_WebEdgeServer\_ThrottledServerConnections

The OCS\_WebEdgeServer\_ThrottledServerConnections policy monitors the number of server connections currently that are throttled.

Performance Object: LC:DATAPROXY - 00 - Server Connections

Instance: \_Total

Counter: DATAPROXY - 034 - Current count of server connections that are throttled

Threshold: When the difference between two samples is greater than:

- Warning: 1
- Critical: 2

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

# Others

This policy group can be deployed on all Microsoft Office Communications Server 2007 server roles.

This policy group includes the following policies:

- OCS\_FwdApplicationError
- OCS\_FwdApplicationInformation
- OCS\_FwdApplicationWarning

# OCS\_FwdApplicationError

The OCS\_FwdApplicationError policy forwards all error messages logged in Windows Event Log by the following sources to the management console:

- OCS Server
- OCS Audio-Video Conferencing Server
- OCS Communicator Web Access Session Service
- OCS Data MCU
- OCS IM MCU
- OCS Intelligent IM Filter
- OCS MCU Infrastructure
- OCS Mediation Server
- OCS Protocol Stack
- OCS QoE Monitoring Server
- OCS User Replication
- OCS User Services
- OCS WMI Event Provider
- OCS ACP MCU
- OCS Address Book Server
- OCS Applications Module
- OCS AppDomain Host Process
- OCS Archiving Agent
- OCS Certificate Manager
- OCS Exchange Unified Message Routing<</li>
- OCS Inbound Routing
- OCS MCU Factory
- OCS MCU Infrastructure
- OCS Outbound Routing
- OCS Translation Service
- OCS User Replicator
- OCS User Services
- OCS WMI Consumer
- OCS WMI Provider

- OCS Mediation Server
- OCS Distribution List Expansion Web Service
- OCS Web Conferencing Edge Server
- OCS LDM

Policy Type: Windows Event Log policy

*Policy Group:* SPI for Microsoft Enterprise Servers—, en —, Microsoft\_Office\_ Communications\_Server\_, Microsoft\_Office\_Communications\_Server\_2007, Others

# OCS\_FwdApplicationInformation

The OCS\_FwdApplicationInformation policy forwards all informational messages logged in Windows Event Log by the following sources to the management console:

- OCS Server
- OCS Audio-Video Conferencing Server
- OCS Communicator Web Access Session Service
- OCS Data MCU
- OCS IM MCU
- OCS Intelligent IM Filter
- OCS MCU Infrastructure
- OCS Mediation Server
- OCS Protocol Stack
- OCS QoE Monitoring Server
- OCS User Replication
- OCS User Services
- OCS WMI Event Provider
- OCS ACP MCU
- OCS Address Book Server
- OCS Applications Module
- OCS AppDomain Host Process
- OCS Archiving Agent
- OCS Certificate Manager
- OCS Exchange Unified Message Routing<</li>
- OCS Inbound Routing
- OCS MCU Factory

- OCS MCU Infrastructure
- OCS Outbound Routing
- OCS Translation Service
- OCS User Replicator
- OCS User Services
- OCS WMI Consumer
- OCS WMI Provider
- OCS Mediation Server
- OCS Distribution List Expansion Web Service
- OCS Web Conferencing Edge Server
- OCS LDM

Policy Type: Windows Event Log policy

# OCS\_FwdApplicationWarning

The OCS\_FwdApplicationWarning policy forwards all warning messages logged in Windows Event Log by the following sources to the management console:

- OCS Server
- OCS Audio-Video Conferencing Server
- OCS Communicator Web Access Session Service
- OCS Data MCU
- OCS IM MCU
- OCS Intelligent IM Filter
- OCS MCU Infrastructure
- OCS Mediation Server
- OCS Protocol Stack
- OCS QoE Monitoring Server
- OCS User Replication
- OCS User Services
- OCS WMI Event Provider
- OCS ACP MCU
- OCS Address Book Server
- OCS Applications Module

- OCS AppDomain Host Process
- OCS Archiving Agent
- OCS Certificate Manager
- OCS Exchange Unified Message Routing<</li>
- OCS Inbound Routing
- OCS MCU Factory
- OCS MCU Infrastructure
- OCS Outbound Routing
- OCS Translation Service
- OCS User Replicator
- OCS User Services
- OCS WMI Consumer
- OCS WMI Provider
- OCS Mediation Server
- OCS Distribution List Expansion Web Service
- OCS Web Conferencing Edge Server
- OCS LDM

Policy Type: Windows Event Log policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server – Microsoft\_Office\_Communications\_Server\_2007 – Others

# Microsoft Office Communications Server 2007 Reports

The Microsoft Enterprise Servers SPI Microsoft Office Communications Server 2007 have the following reports:

# Front End Service CPU Statistics

The Front End Service CPU Statistics report shows CPU statistics of the front end service compared with overall CPU statistics of the system, in graphical and tabular format. The summarized process statistics include the percentage of CPU time used by the front end service compared with the percentage of time the system's CPU was busy.

# **IM Conferencing Service CPU Statistics**

The IM Conferencing Service CPU Statistics report shows CPU statistics of the IM conferencing service compared with overall CPU statistics of the system, in graphical and tabular format. The

summarized process statistics include the percentage of CPU time used by the IM conferencing compared with the percentage of time the system's CPU was busy.

# Access Edge Service CPU Statistics

The Access Edge Service CPU Statistics report shows CPU statistics of the access edge service compared with overall CPU statistics of the system, in graphical and tabular format. The summarized process statistics include the percentage of CPU time used by the access edge compared with the percentage of time the system's CPU was busy.

# **Front End Service Memory Statistics**

The Front End Service Memory Statistics report shows summary memory statistics of the front end service in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the front end service.

# **IM Conferencing Service Memory Statistics**

The IM Conferencing Service Memory Statistics report shows summary memory statistics of the IM conferencing service in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the IM conferencing service.

# **Access Edge Service Memory Statistics**

The Access Edge Service Memory Statistics report shows summary memory statistics of the access edge service in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the access edge service.

# SQL Back End Latency Experienced By Front End Server

The SQL Back End Latency Experienced By Front End Server report shows the amount of time that a request spent in the queue to the SQL back end and the amount of time taken by the back end to process in graphical (line graph) and tabular format. If either the queue latency or processing latency is high, the front end will start throttling requests to the back end.

# Average Holding Time for Incoming Messages on Front End Server

The Average Holding Time for Incoming Messages on Front End Server report shows the average holding time for incoming messages on the front end server in graphical (line graph) and tabular format. A high value indicates that the front end server is overloaded and unable to process the requests on time.

# Front End Server Availability and Connectivity

The Front End Server Availability and Connectivity report shows the Local 503 Responses/sec and the Local 504 Responses/sec on the front end server in graphical (line graph) and tabular format.

The 503 code indicates that the server is unavailable while the 504 code indicates that there are connectivity problems with other servers.

# Sends Outstanding on Front End Server

The Sends Outstanding on Front End Server report shows the Sends Outstanding on the front end server in graphical (line graph) and tabular format. A high value means that a large number of requests and responses are queued outbound and this could be due to network latency issues or a problem with a remote server.

# Average Incoming Message Processing Time on Access Edge Server

The Average Incoming Message Processing Time on Access Edge Server report needs to depict the average incoming message processing time on the access edge server in graphical (line graph) and tabular format. High values indicate that the access edge server is overloaded and unable to process the requests on time.

# Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server

The Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server report shows the client request errors/sec, client send request errors/sec and the idle sessions timedout/sec over UDP on the Audio/Video Edge Server in graphical and tabular format. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you may need to increase the session idle timeout parameter.

# Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server

The Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server report shows the client requests errors/sec, client send request errors/sec and the idle sessions timedout/sec over TCP on the Audio/Video Edge Server in graphical and tabular format. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you may need to increase the session idle timeout parameter.

# Data Store Table for Microsoft Enterprise Server

The Microsoft Enterprise SPI creates the following data tables for Microsoft Enterprise Server 2007 metrics in the data store on the node to facilitate the data-collection procedure.

#### **Data Store Details**

Report Name	Report Table, Data Store, and Data Class	Report Table Attributes
g_Front End Service CPU Statistics.rpt	OCS_	PCTPROCESSORTIME
	PROCESS	THREADCOUNT
Policy logging data: OCS_ FrontEndService_		SYSPCTPROCESSORTIME
g_IM Conferencing Service CPU	OCS_	PCTPROCESSORTIME
Statistics.rpt	PROCESS	THREADCOUNT
		SYSPCTPROCESSORTIME
Policy logging data: OCS_ IMConfService_Logging		
g_Access Edge Service CPU	OCS_	PCTPROCESSORTIME
Statistics.rpt	PROCESS	THREADCOUNT
		SYSPCTPROCESSORTIME
Policy logging data: OCS_ AccessEdgeService_Logging		
g_Front End Service Memory	OCS_	PAGEFAULTS
Statistics.rpt	PROCESS	<ul> <li>WORKINGSET</li> </ul>
		<ul> <li>PRIVATEBYTES</li> </ul>
Policy logging data: OCS_ FrontEndService_Logging		
g_IM Conferencing Service Memory	OCS_	PAGEFAULTS
Statistics.rpt	PROCESS	WORKINGSET
		PRIVATEBYTES
Policy logging data: OCS_ IMConfService_Logging		
g_Access Edge Service Memory	ocs_	PAGEFAULTS
Statistics.rpt	PROCESS	WORKINGSET
		PRIVATEBYTES
Policy logging data: OCS_		

Chapter 7:

Report Name	Report Table, Data Store, and Data Class	Report Table Attributes
AccessEdgeService_Logging		
g_SQL Back End Latency.rpt	OCS_	QUEUELATENCY
Policy logging data: OCS_ FrontEndServer_Logging	FRONTEND	SPROCLATENCY
g_Average Holding Time for Incoming Messages on Front End Server.rpt	OCS_ FRONTEND	HOLDINGTIMEFORINCM SG
Policy logging data: OCS_ FrontEndServer_Logging		
g_Front End Server Availability and	OCS_	LOCAL503RESPONSES
Connectivity.rpt	FRONTEND	LOCAL504RESPONSES
Policy logging data: OCS_FrontEnd		
g_Sends Outstanding on Front End Server.rpt	OCS_ FRONTEND	SENDSOUTSTANDING
Policy logging data: OCS_ FrontEndServer_Logging		
g_Average Incoming Message Processing Time on Access Edge Server.rpt	OCS_ ACCESSEDGE	AVINCMSGPROCTIME
Policy logging data: OCS_ AccessEdgeServer_Logging		
g_UDP Client Request Errors and	OCS_AVEDGE	UDPCLIENTREQERR
Timed Out Sessions on Audio/Video Edge Server.rpt		UDPCLIENTSENDERR
		UDPSESSIONTIMEOUTS
g_TCP Client Request Errors and	OCS_AVEDGE	TCPCLIENTREQERR
Timed Out Sessions on Audio/Video Edge Server.rpt		TCPCLIENTSENDERR
Policy logging data: OCS_ AVEdgeServer_Logging		TCPSESSIONTIMEOUTS

# Microsoft Office Communications Server 2007 Graphs

The graphs are pictorial representation of the various metrics. Graphs contain data that are collected by policies.

The Microsoft Office Communications Server 2007 SPI graphs are as follows:

# Front End Service CPU statistics

The Front End Service CPU statistics graph shows the CPU statistics of the Front End service compared with overall CPU statistics of the system. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the Front End service is utilizing the processor time.

This graph uses the data collected by the OCS\_FrontEndService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# Web Conferencing Service CPU statistics

The Web Conferencing Service CPU statistics graph shows the CPU statistics of the web conferencing service compared with overall CPU statistics of the system. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the web conferencing service is utilizing the processor time.

This graph uses the data collected by the OCS\_WebConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# **IM Conferencing Service CPU statistics**

The IM Conferencing Service CPU statistics graph shows the CPU statistics of the IM conferencing service compared with overall CPU statistics of the system. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the IM conferencing service is utilizing the processor time.

This graph uses the data collected by the OCS\_IMConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# **Telephony Conferencing Service CPU statistics**

The Telephony Conferencing Service CPU statistics graph shows the CPU statistics of the telephony conferencing service compared with overall CPU statistics of the system. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the telephony conferencing service is utilizing the processor time.

This graph uses the data collected by the OCS\_TelConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# Audio/Video Conferencing Service CPU statistics

The Audio/Video Conferencing Service CPU statistics graph shows the CPU statistics of the audio/video conferencing service compared with overall CPU statistics of the system, in graphical

format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the audio/video conferencing service is utilizing the processor time.

This graph uses the data collected by the OCS\_AVConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# Access Edge Service CPU statistics

The Access Edge Service CPU statistics graph shows the CPU statistics of the access edge service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the access edge service is utilizing the processor time.

This graph uses the data collected by the OCS\_AccessEdgeService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# Audio/Video Edge Service CPU statistics

The Audio/Video Edge Service CPU statistics graph shows the CPU statistics of the audio/video edge service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the audio/video edge service is utilizing the processor time.

This graph uses the data collected by the OCS\_AVEdgeService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# Audio/Video Authentication Service CPU statistics

The Audio/Video Authentication Service CPU statistics graph shows the CPU statistics of the audio/video authentication service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the audio/video authentication service is utilizing the processor time.

This graph uses the data collected by the OCS\_AVAuthService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

# Web Conferencing Edge Service CPU statistics

The Web Conferencing Edge Service CPU statistics graph shows the CPU statistics of the web conferencing edge service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the web conferencing edge service is utilizing the processor time.

This graph uses the data collected by the OCS\_WebEdgeService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

## Archiving and CDR Service CPU statistics

The Archiving and CDR Service CPU statistics graph shows the CPU statistics of the Archiving and CDR service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the Archiving and CDR service is utilizing the processor time.

This graph uses the data collected by the OCS\_ArchivingCDRService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### **Mediation Service CPU statistics**

The Mediation Service CPU statistics graph shows the CPU statistics of the mediation service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the mediation service is utilizing the processor time.

This graph uses the data collected by the OCS\_MediationService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### **Front End Service Memory Statistics**

The Front End Service Memory Statistics graph shows the memory statistics of the front end service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the front end service.

This graph uses the data collected by the OCS\_FrontEndService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### Web Conferencing Service Memory Statistics

The Web Conferencing Service Memory Statistics graph shows the memory statistics of the web conferencing service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the web conferencing service.

This graph uses the data collected by the OCS\_WebConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

#### **IM Conferencing Service Memory Statistics**

The IM Conferencing Service Memory Statistics graph shows the memory statistics of the IM conferencing service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the web conferencing service.

This graph uses the data collected by the OCS\_IMConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### **Telephony Conferencing Service Memory Statistics**

The Telephony Conferencing Service Memory Statistics graph shows the memory statistics of the telephony conferencing service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the telephony conferencing service.

This graph uses the data collected by the OCS\_TelConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### Audio/Video Conferencing Service Memory Statistics

The Audio/Video Conferencing Service Memory Statistics graph shows the memory statistics of the audio/video conferencing service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the audio/video conferencing service.

This graph uses the data collected by the OCS\_AVConfService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### **Access Edge Service Memory Statistics**

The Access Edge Service Memory Statistics graph shows the memory statistics of the access edge service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the access edge service.

This graph uses the data collected by the OCS\_AccessEdgeService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### Audio/Video Edge Service Memory Statistics

The Audio/Video Edge Service Memory Statistics graph shows the memory statistics of the audio/video edge service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the audio/video edge service.

This graph uses the data collected by the OCS\_AVEdgeService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### Audio/Video Authentication Service Memory Statistics

The Audio/Video Authentication Service Memory Statistics graph shows the memory statistics of the audio/video authentication service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the audio/video authentication service.

This graph uses the data collected by the OCS\_AVAuthService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### Web Conferencing Edge Service Memory Statistics

The Web Conferencing Edge Service Memory Statistics graph shows the memory statistics of the web conferencing edge service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the web conferencing edge service.

This graph uses the data collected by the OCS\_WebEdgeService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### **Archiving and CDR Service Memory Statistics**

The Archiving and CDR Service Memory Statistics graph shows the memory statistics of the Archiving and CDR service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the Archiving and CDR service.

This graph uses the data collected by the OCS\_ArchivingCDRService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### **Mediation Service Memory Statistics**

The Mediation Service Memory Statistics graph shows the memory statistics of the mediation service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the mediation service.

This graph uses the data collected by the OCS\_MediationService\_Logging policy. In the data store of the node, the OCS\_PROCESS table is used to construct this graph.

### Authentication failures/sec on Audio/Video Edge Server

The Authentication failures/sec on Audio/Video Edge Server graph shows the authentication failures per sec over UDP and TCP on the A/V Edge Server

This graph uses the data collected by the OCS\_AVEdgeServer\_Logging policy. In the data store of the node, the OCS\_AVEDGE table is used to construct this graph.

## SQL Back End Latency Experienced By Front End Server

The SQL Back End Latency Experienced By Front End Server graph shows the amount of time that a request spent in the queue to the SQL back end and the time taken by the SQL backend to process a request. If either the queue latency or processing latency is high, the front end will start throttling requests to the back end.

This graph uses the data collected by the OCS\_FrontEndServer\_Logging policy. In the data store of the node, the OCS\_FRONTEND table is used to construct this graph.

## Average Holding Time for Incoming Messages on Front End Server

The Average Holding Time for Incoming Messages on Front End Server graph shows the average holding time for incoming messages on the front end server. A high value indicates that the front end server is overloaded and unable to process the requests on time.

This graph uses the data collected by the OCS\_FrontEndServer\_Logging policy. In the data store of the node, the OCS\_FRONTEND table is used to construct this graph.

### Front End Server Availability and Connectivity

The Front End Server Availability and Connectivity graph shows the Local 503 Responses/sec on the front end server. The 503 code indicates that the server is unavailable while the 504 code indicates connectivity problems with other servers.

This graph uses the data collected by the OCS\_FrontEndServer\_Logging policy. In the data store of the node, the OCS\_FRONTEND table is used to construct this graph.

### Sends Outstanding on Front End Server

The Sends Outstanding on Front End Server graph shows the Sends Outstanding on the front end server. A high value means that a large number of requests and responses are queued outbound and could be due to network latency issues or a problem with a remote server.

This graph uses the data collected by the OCS\_FrontEndServer\_Logging policy. In the data store of the node, the OCS\_FRONTEND table is used to construct this graph.

# Average Incoming Message Processing Time on Access Edge Server

The Average Incoming Message Processing Time on Access Edge Server graph shows the Average Incoming Message Processing Time on the Access Edge Server . High values indicate that the Access Edge Server is overloaded and unable to process the requests on time.

This graph uses the data collected by the OCS\_AccessEdgeServer\_Logging policy. In the data store of the node, the OCS\_ACCESSEDGE table is used to construct this graph.

### Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server

The Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server graph shows the client requests errors/sec, client send request errors/sec and the idle sessions timed-out/sec over UDP on the Audio/Video Edge Server. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you can increase the session idle timeout parameter.

This graph uses the data collected by the OCS\_AVEdgeServer\_Logging policy. In the data store of the node, the OCS\_AVEDGE table is used to construct this graph.

### Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server

The Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server graph shows the client requests errors/sec, client send request errors/sec and the idle sessions timed-out/sec over TCP on the Audio/Video Edge Server. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you can increase the session idle timeout parameter.

This graph uses the data collected by the OCS\_AVEdgeServer\_Logging policy. In the data store of the node, the OCS\_AVEDGE table is used to construct this graph.

# Data Store Table for Microsoft Enterprise Server

The Microsoft Enterprise SPI creates the following data tables for Microsoft Enterprise Server 2007 metrics in the data store on the node to facilitate the data-collection procedure.

Graph Name	Policy Logging Data	Spec File	Data Store Data Class
Front End Service CPU Statistics	OCS_ FrontEndService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Web Conferencing Service CPU Statistics	OCS_ WebConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
IM Conferencing Service CPU Statistics	OCS_IMConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Telephony Conferencing Service CPU statistics	OCS_TelConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Audio/Video Conferencing Service CPU statistics	OCS_AVConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Access Edge Service CPU statistics	OCS_ AccessEdgeService_	OCS_ PROCESS.spec	OCS_ PROCESS

#### Data Store Details

	1	[	<del>ر</del>
	Logging		
Audio/Video Edge Service CPU statistics	OCS_AVEdgeService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Audio/Video Authentication Service CPU statistics	OCS_AVAuthService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Web Conferencing Edge Service CPU statistics	OCS_ WebEdgeService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Archiving and CDR Service CPU statistics	OCS_ ArchivingCDRService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Mediation Service CPU statistics	OCS_ MediationService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Front End Service Memory Statistics	OCS_ FrontEndService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Web Conferencing Service Memory Statistics	OCS_ WebConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
IM Conferencing Service Memory Statistics	OCS_IMConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Telephony Conferencing Service Memory Statistics	OCS_TelConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Audio/Video Conferencing Service Memory Statistics	OCS_AVConfService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Access Edge Service Memory Statistics	OCS_ AccessEdgeService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS

	[		
Audio/Video Edge Service Memory Statistics	OCS_AVEdgeService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Audio/Video Authentication Service Memory Statistics	OCS_AVAuthService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Web Conferencing Edge Service Memory Statistics	OCS_ WebEdgeService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Archiving and CDR Service Memory Statistics	OCS_ ArchivingCDRService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Mediation Service Memory Statistics	OCS_ MediationService_ Logging	OCS_ PROCESS.spec	OCS_ PROCESS
Authentication Failures/sec on Audio/Video Edge Server	OCS_AVEdgeServer_ Logging	OCS_AVEDGE.spec	OCS_AVEDGE
SQL Back End Latency Experienced By Front End Server	OCS_FrontEndServer_ Logging	OCS_ FRONTEND.spec	OCS_ FRONTEND
Average Holding Time for Incoming Messages on Front End Server	OCS_FrontEndServer_ Logging	OCS_ FRONTEND.spec	OCS_ FRONTEND
Front End Server Availability and Connectivity	OCS_FrontEndServer_ Logging	OCS_ FRONTEND.spec	OCS_ FRONTEND
Sends Outstanding on Front End Server	OCS_FrontEndServer_ Logging	OCS_ FRONTEND.spec	OCS_ FRONTEND
Average Incoming Message Processing Time on Access Edge	OCS_ AccessEdgeServer_ Logging	OCS_ ACCESSEDGE.spec	OCS_ ACCESSEDGE

Server			
Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server	OCS_AVEdgeServer_ Logging	OCS_AVEDGE.spec	OCS_AVEDGE
Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server	OCS_AVEdgeServer_ Logging	OCS_AVEDGE.spec	OCS_AVEDGE

# **General Policies**

The General policy group contains all the policies that monitor the processes and services of the ArchivingServer.

## LS\_Archiving\_AvgNoOfBlkedClientThreads

This policy monitors the average number of client threads that are blocked and waiting for the decrease in the queue depth.

Performance Object: LS:Arch Service - 00 - DBArch

Counter: Arch Service - 011 - Blocked Client Threads

Instance: All instances

Threshold: When the difference between the two samples is greater than:

- Critical: 100
- Warning: 0

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_AvgTimeRequestHeldInDB

This policy monitors the average time (in milliseconds) spent by a request in the database queue before it is processed.

Performance Object: LC:Arch Service - 00 - DBArch

Counter: Arch Service - 002 - Queue Latency (msec)

Instance: All instances

Threshold: When the difference between the two samples is greater than:

- Critical: 100
- Warning: 0

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_Logging

The LS\_Archiving\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the counters **RTCArch** or **\_Total**.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Instance	Performance Object
RTCArch	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: LS\_PROCESS

*Policy Type:*Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_NumOfDroppedMQMessages

The LS\_Archiving\_NumOfDroppedMQMessages policy monitors MSMQ for the number of messages getting dropped.

Performance object: LS:Arch Service - 01 - READ

Counter: Arch Service - 006 - Dropped messages from MQ

Instance: All instances

Threshold: When the difference between two samples is greater than:

- Critical: 1
- Warning: 0

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_NumberOfMessagesNotWrittenToDB

This policy monitors the rate of failure in numbers when the messages are written in to the SQL database.

Performance Object: LS:Arch Service - 02 - WRITE

Counter: Arch Service - 002 - Messages failed to be written to DB

Instance: All instances.

Threshold: When the difference between two samples is greater than:

- Critical: 1
- Warning: 0

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_NumberOfValidationFailedMessages

This policy monitors the number of messages for which the validation has failed.

Performance object: LS:Arch Service - 01 - READ

Counter: Arch Service - 002 - Messages that failed validation

Threshold: When the difference between two samples is greater than:

- Critical: 1
- Warning: 0

Schedule: This policy runs every one hour .

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter of the Archiving Service.

Performance Object: Process

Counter: Page Faults/sec

Instance: RTCArch

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_PrivateBytes

This policy monitors the Private Bytes counter available in the Archiving and CDR service.

Performance Object: Process

Counter: Private Bytes

Instance: RTCArch

Threshold: This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_ProcessorTime

This policy monitors the % Processor Time counter available in the Archiving and CDR service.

Performance Object: Process Counter: % Processor Time Instance: RTCArch Threshold: This policy has the following threshold: Critical: 90 Schedule: This policy runs every one hour. Policy Type: Measurement Threshold policy *Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_ThreadCount

This policy monitors the Thread Count counter available in the Archiving and CDR service.

Performance Object: Process

Counter: Thread Count

Instance: RTCArch

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Archiving\_WorkingSet

This policy monitors the Working Set counter available in the Archiving and CDR service.

Performance Object: Process

Counter: Working Set

Instance: RTCArch

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Check\_Arch\_ADStatus

The policy LS\_Check\_Arch\_ADStatus checks the connectivity status of the Active Directory with the Archiving Server and sends a critical alert message if the Active Directory is not accessible from the Archiving Server. After the connectivity is obtained, the policy sends a normal message and acknowledges the critical alert sent previously.

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Check\_Arch\_ReplicaStatus

The policy LS\_Check\_Arch\_ReplicaStatus checks the Central Management Store replication status at the Archiving Server. This policy sends out a critical alert message if the Central Management Store data is not updated. After the Central Management Store data is updated, the policy sends a normal message and acknowledges the critical error message sent previously.

Monitored Service: REPLICA

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Check\_ArchivingServiceStatus

The LS\_Check\_ArchivingServiceStatus checks the status of the Archiving Service and returns values that correspond to different states of the 'RTCLOG'. This policy sends a critical alert message if the Archiving Service is not running. After the service starts the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCLOG

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Check\_ReplicaServiceStatus\_Arch

The policy LS\_Check\_ReplicaServiceStatus\_Arch checks the status of the Replica Replicator Agent Service at the Archiving Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Replica\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Replica\_PrivateBytes

This policy monitors the Private Bytes counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process.

Instance: ReplicaReplicatorAgent

Counter: Private Bytes

Threshold: This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Replica\_ProcessorTime

This policy monitors the % Processor Time counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Counter: % Processor Time

Instance: ReplicaReplicatorAgent

Threshold: This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Replica\_ThreadCount

This policy monitors the Thread Count counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

*Counter:* Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# LS\_Replica\_WorkingSet

This policy monitors the Working Set Counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Counter: Working Set

Instance: ReplicaReplicatorAgent

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# Chapter 8

# Microsoft Enterprise Servers SPI - Microsoft Lync Server 2010

The Microsoft Enterprise Servers SPI monitors the Microsoft Lync Server 2010 and enables unhindered flow of communications within the enterprise. The Microsoft Enterprise Servers SPI offers the following policies for process monitoring, service management, and data logging. The logged data is used to generate the Lync Server 2010 reports and graphs.

# **Microsoft Lync Server 2010 Policy Groups**

Policies are grouped based on the server roles the Microsoft Enterprise Servers SPI monitors. The Lync Server 2010 has the following policy groups:

- ArchivingServer
- AVConfServer
- Common
- DirectorServer
- Discovery
- EdgeServer
- FrontEndServer
- MediationServer
- MonitoringServer
- Registrar

# ArchivingServer

The Archiving Server archives instant messages (IM) content received by the Lync Server 2010.

This server role includes the Archiving service and the Archiving database. All IM conversations and group conferences are stored in a SQL database, also called the Archiving database.

To implement archiving support, you must deploy more Archiving Servers in the organization such that the Enterprise pool or Standard Edition Server communicates with the Archiving Server. You can deploy the database for the Archiving Server on the same computer as the Archiving Server or on a separate computer.

## GoldenMetrics

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the Archiving Server.

#### LS\_Check\_ArchivingServiceStatus

The LS\_Check\_ArchivingServiceStatus checks the status of the Archiving Service and returns values that correspond to different states of the 'RTCLOG'. This policy sends a critical alert message if the Archiving Service is not running. After the service starts the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCLOG

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

#### LS\_Check\_ReplicaServiceStatus\_Arch

The policy LS\_Check\_ReplicaServiceStatus\_Arch checks the status of the Replica Replicator Agent Service at the Archiving Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — ArchivingServer

# **AVConfServer**

The A/V Conferencing Server is a server role that controls and integrates the audio/video inputs from various sources required during multiparty audio/video conferences.

The AV Conferencing Server is located in the internal network. It enables audio and video peer-topeer communications and audio and video conferencing. This server role is available on a Standard Edition Server.

In an Enterprise pool, you can either join it with the Front End Server and the Web Conferencing Server or can deploy it on a separate server.

## **General Policies**

The General policy group contains all policies that monitor the processes and services of the A/V Conferencing Server.

#### LS\_Replica\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Counter: Page Faults/sec

Instance: ReplicaReplicatorAgent

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_ETAToProcessItemsInHttpStack

This policy monitors the time taken in HTTP stack to process all pending transactions. It is measured in milliseconds.

Performance Object: LS:AVMCU - 04 - MCU Health And Performance

Counter: AVMCU - 000 - HTTP Stack load

Instance: All instances

*Threshold:* When the difference between two samples is greater than:

- Critical: 120000
- Warning: 30000

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_Logging

This policy collects data for the Audio/Video Conferencing Service and logs the following metrics into the data store (CODA or HP Performance Agent) for the instances AVMCUSvc or \_Total.

Instance	Performance Object
AVMCUSvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Schedule: This policy runs every 15 minutes.

Data Class: LS\_PROCESS

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_MCUHealthState

The LS\_AVConf\_MCUHealthState policy monitors the current health of the AVMCU. If the value is 0, it indicates that the MCU is normal, 1 indicates loaded, 2 indicates full and 3 indicates unavailable.

Performance Object: LS:AVMCU - 04 - MCU Health And Performance

Counter: AVMCU - 005 - MCU Health State

Instance: All instances.

Threshold: When the difference between the two samples is greater than:

- Critical: 2
- Warning: 1

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_NoOfAddConfFailed

This policy monitors the number of failed responses returned by add-conference.

Performance Object: LS:AVMCU - 03 - CCCP Processing

Counter: AVMCU - 029 - Number of add conference requests failed

Instance: All instances

Threshold: When the difference between the two samples is greater than:

- Critical: 100
- Warning: 50

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_NumberOfActiveConferences

This policy monitors the number of active conferences on the A/V Conferencing Server.

Performance Object: LS:AVMCU - 00 - Operations

Counter: AVMCU - 000 - Number of Conferences

*Threshold:* When the difference between two samples is greater than:

- Critical: 5000
- Warning: 4000

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter available in the Audio/Video Conferencing Service.

Performance Object: Process

Instance: AVMCUSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_PrivateBytes

This policy monitors the Private Bytes counter available in the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_ProcessorTime

This policy monitors the % Processor Time counter available in the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_ThreadCount

This policy monitors the Thread Count counter available in the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

Counter: Thread Count

Threshold: This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_AVConf\_WorkingSet

This policy monitors the Working Set counter available in the Audio/Video Conferencing service.

Performance Object: Process

Instance: AVMCUSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Check\_AVConfServiceStatus

The LS\_Check\_AVConfServiceStatus policy returns values that correspond to different states of the 'RTCAVMCU'. This policy checks the status of the Audio/Video Conferencing Service and sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCAVMCU

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Check\_AVConf\_ADStatus

The policy LS\_Check\_AVConf\_ADStatus checks the connectivity status of the Active Directory with the AV Conferencing Server and sends a critical alert message if the Active Directory is not accessible from the AV Conferencing Server. After the connectivity is obtained, the policy sends a normal message and acknowledges the critical alert sent previously.

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Check\_AVConf\_ReplicaStatus

The policy LS\_Check\_AVConf\_ReplicaStatus checks the Central Management Store replication status at the A/V Conferencing Server. This policy sends out a critical alert message if the Central Management Store data is not updated. After the Central Management Store data is updated, the policy sends a normal message and acknowledges the critical error message sent previously.

Monitored service: REPLICA

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Check\_ReplicaServiceStatus\_AVConf

The policy LS\_Check\_ReplicaServiceStatus\_AVConf checks the status of the Replica Replicator Agent Service at the A/V Conferencing Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Replica\_PrivateBytes

This policy monitors the Private Bytes counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Replica\_ProcessorTime

This policy monitors the % Processor Time counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Counter: % Processor Time

Instance: ReplicaReplicatorAgent

Threshold: This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Replica\_ThreadCount

This policy monitors the Thread Count counter available Lync Server Replica Replicator Agent service

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Replica\_WorkingSet

This policy monitors the Working Set Counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

### **GoldenMetrics**

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the AVConfServer.

#### LS\_Check\_AVConfServiceStatus

The LS\_Check\_AVConfServiceStatus policy returns values that correspond to different states of the 'RTCAVMCU'. This policy checks the status of the Audio/Video Conferencing Service and sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCAVMCU

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

#### LS\_Check\_ReplicaServiceStatus\_AVConf

The policy LS\_Check\_ReplicaServiceStatus\_AVConf checks the status of the Replica Replicator Agent Service at the A/V Conferencing Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — AVConfServer

# Common

The Common policy group contains a set of policies that can be deployed on all the Microsoft Lync Server 2010 server roles.

This policy group includes the following policies:

- LS\_FwdApplicationError
- LS\_FwdApplicationInformation
- LS\_FwdApplicationWarning

### LS\_FwdApplicationError

The LS\_FwdApplicationError policy forwards all error messages logged in Windows Event Log to the management console.

Policy Type: Windows Event Log policy

*Policy Group:* SPI for Microsoft Enterprise Servers—en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — Common

## LS\_FwdApplicationInformation

The LS\_FwdApplicationInformation policy forwards all informational messages logged in Windows Event Log to the management console.

*Policy Type:*Windows Event Log policy

*Policy Group:* SPI for Microsoft Enterprise Servers—en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — Common

## LS\_FwdApplicationWarning

The LS\_FwdApplicationWarning policy forwards all warning messages logged in Windows Event Log to the management console.

Policy Type: Windows Event Log policy

Policy Group: SPI for Microsoft Enterprise Servers—en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — Common

# **DirectorServer**

The Director is a server role that validates the internal and external users and directs traffic between the Edge Servers and the internal Office Communications Server deployment. The Director server role is supported only in an internal trusted network.

#### **General Policies**

The General policy group contains all the policies that monitor the processes and services of the Director Server.

#### LS\_Check\_FrontEndServiceStatus

The LS\_Check\_FrontEndServiceStatus policy returns the values that correspond to different states of the 'RTCSrv'. This policy sends a critical alert message if the FrontEnd Service is not running. After the service starts the policy acknowledges the alert sent previously.

Monitored service: RTCSRV

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Check\_Director\_ADStatus

The policy LS\_Check\_Director\_ADStatus checks the connectivity status of the Active Directory with the Director Server and sends a critical alert message if the Active Directory is not accessible from the Director Server. After the connectivity is obtained, the policy sends a normal message and acknowledges the critical alert sent previously.

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Check\_DirectorServiceStatus

The policy LS\_Check\_DirectorServiceStatus checks the status of the Replica Replicator Agent Service at the Director Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy.

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Check\_ReplicaServiceStatus\_Director

The policy LS\_Check\_ReplicaServiceStatus\_Director checks the status of the Replica Replicator Agent Service at the Director Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Check\_DirectorServiceStatus

The policy LS\_Check\_DirectorServiceStatus checks the status of the Replica Replicator Agent Service at the Director Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Director\_NoOfLDAPErrorsPerSec

This policy monitors the total number of outstanding searches on this LDAP session in the Directory Search component of the Communications Server User Servers Module associated with a GC.

*Performance Object:* LS:USrv - 19 - Directory Search

Instance: All instances

Counter: USrv - 000 - Number of outstanding searches

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Director\_NoOfOutStandingSearches

This policy monitors the number of outstanding searches on the LDAP session, per second, in the Directory Search component of Communications Server User Servers module associated with a GC.

Performance Object: LS:Usrv - 19 - Directory Search

Instance: All instances

Counter: USrv - 004 - Number of LDAP errors / sec

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Director\_SearchLatency

This policy monitors the average time (in seconds) it takes to perform the actual LDAP search.

Performance Object: LS:USrv - 19 - Directory Search

Instance: All instances

Counter: USrv - 005 - Search Latency (ms)

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Director\_SprocLatency

This policy monitors the average time taken in processing a RTCAuthorizeDelegate sproc call.

Performance Object: LS:USrv - 31 - Authorize delegate sproc

Instance: All instances

*Counter:* USrv - 001 - Sproc Latency (msec)

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_FrontEnd\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter available in the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 —DirectorServer

#### LS\_FrontEnd\_PrivateBytes

This policy monitors the Private Bytes counter available in the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_FrontEnd\_ProcessorTime

This policy monitors the % Processor Time counter available in the Front End service.

Performance Object: Process
Instance: RTCSrv
Counter: % Processor Time
Threshold: This policy has the following threshold:
Critical: 90
Schedule: This policy runs every one hour.
Policy Type: Measurement Threshold policy
Policy Group: SPI for Microsoft Enterprise Servers \_\_\_en \_\_\_ Microsoft\_Office\_
Communications\_Server\_\_Microsoft\_Lync\_Server\_2010 \_\_\_DirectorServer

#### LS\_FrontEnd\_ThreadCount

This policy monitors the Thread Count counter available in the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_FrontEnd\_WorkingSet

This policy monitors the Working Set counter available in the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Replica\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Replica\_PrivateBytes

This policy monitors the Private Bytes counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process.

Instance: ReplicaReplicatorAgent

*Counter:* Private Bytes

Threshold: This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Replica\_ProcessorTime

This policy monitors the % Processor Time counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: % Processor Time

Threshold: This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010 \_ DirectorServer

#### LS\_Replica\_ThreadCount

This policy monitors the Thread Count counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

*Instance:* ReplicaReplicatorAgent

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Replica\_WorkingSet

This policy monitors the Working Set Counter available in the Lync Server Replica Replicator Agent service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### **GoldenMetrics**

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the Director Server.

#### LS\_Check\_FrontEndServiceStatus

The LS\_Check\_FrontEndServiceStatus policy returns the values that correspond to different states of the 'RTCSrv'. This policy sends a critical alert message if the FrontEnd Service is not running. After the service starts the policy acknowledges the alert sent previously.

Monitored service: RTCSRV

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Check\_ReplicaServiceStatus\_Director

The policy LS\_Check\_ReplicaServiceStatus\_Director checks the status of the Replica Replicator Agent Service at the Director Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica

Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Director\_NoOfLDAPErrorsPerSec

This policy monitors the total number of outstanding searches on this LDAP session in the Directory Search component of the Communications Server User Servers Module associated with a GC.

Performance Object: LS:USrv - 19 - Directory Search

Instance: All instances

Counter: USrv - 000 - Number of outstanding searches

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Director\_SearchLatency

This policy monitors the average time (in seconds) it takes to perform the actual LDAP search.

Performance Object: LS:USrv - 19 - Directory Search

Instance: All instances

Counter: USrv - 005 - Search Latency (ms)

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

#### LS\_Director\_SprocLatency

This policy monitors the average time taken in processing a RTCAuthorizeDelegate sproc call.

Performance Object: LS:USrv - 31 - Authorize delegate sproc

Instance: All instances

Counter: USrv - 001 - Sproc Latency (msec)

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy.

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 — DirectorServer

# Discovery

The Discovery policy group contains the LS\_Discovery policy which discovers the LS roles and services.

Microsoft Lync Server 2010 Discovery policy discovers the following roles and services:

- Roles
- Archiving Server
- Audio/Video Conferencing server
- Director Server
- Edge Server
- Front End Server
- Mediation Server
- Monitoring Sever
- Registrar Server
- Services
- Lync Server Replica Replicator Agent
- Lync Server Front-End (Registrar and other)
- Lync Server IM Conferencing
- Lync Server Audio Test Service
- Lync Server Bandwidth Policy Service (Core)

- Lync Server Bandwidth Policy Service (Authentication)
- Lync Server Audio/Video Conferencing
- Lync Server Application Sharing
- Lync Server Web Conferencing
- Lync Server Web Conferencing Compatibility
- Lync Server Master Replicator Agent
- Lync Server File Transfer Agent
- Lync Server Conferencing Attendant
- Lync Server Conferencing Announcement
- Lync Server Response Group
- Lync Server Call Park
- Lync Server Mediation
- Lync Server Front-End
- Lync Server Registrar and other
- Lync Server Mediation
- Lync Server Access Edge
- Lync Server Audio/Video Edge
- Lync Server Audio/Video Authentication
- Lync Server Web Conferencing Edge
- Lync Server Audio/Video Conferencing
- Lync Server Mediation
- Lync Server Archiving
- Lync Server QoE Monitoring Service
- Lync Server Call Detail Recording

### LS\_Discovery

The LS\_Discovery policy discovers the roles and services of the Microsoft Lync Server 2010, along with sites, pools, and pool members, and displays them in the service tree on the management server console.

Policy Name: LS\_Discovery

*Policy Description:* Discovers the LS roles and services.

Policy type: Service Auto-Discovery

Policy group: SPI for Microsoft Enterprise Server→ en→ Microsoft\_Office\_ Communications\_Server→ Microsoft\_Lync\_Server\_2010→ Discovery

# Configuring LS\_Discovery Policy

The LS\_Discovery policy discovers the roles and services of the Microsoft Lync Server 2010, along with sites, pools, and pool members, and displays them on the service tree on the console of the management server.

To run the LS\_Discovery policy on all servers, except the Edge Server, follow these steps:

- Create a domain user to run the discovery policy with the following user privileges:
   CSViewOnlyAdministrator
  - RTCUniversalReadOnlyAdmins
  - "Execute" permission to the %OvAgentDir%\bin\instrumentation folder on the managed node.
- 2. Open the LS\_Discovery policy.
- 3. Edit the username and password in the policy and enter the user credentials CSViewOnlyAdministrator and RTCUniversalReadOnlyAdmins.
- 4. Deploy the policy on all Lync servers, except the Edge Server.

To run the LS\_Discovery policy on the Edge Server, follow these steps:

- 1. Create a user under the CSViewOnlyAdministrator account.
- Open the Edge Server configuration tool Configure Edge server Discovery for Lync Server 2010
- 3. In the console tree, expand Tools SPI for Microsoft Enterprise Servers Lync Server 2010.
- Double-click the Configure Edge server Discovery for Lync Server 2010 tool in the details pane.
- 6. Select Edge Sever.
- 7. Click Launch.
- 8. Fill in details Edge Server details, such as:
  - Domain: < Lync Server domain name>
  - User Name: <CSViewOnlyAdministrator>
  - Password: <Password>
- 9. Click **OK**.
- 10. Run the tool. Information related to the Lync Server is deployed on the Edge Server.
- 11. Create another user on the Edge Server with the user privilege 'Local Administrator' for the Edge Server .

- 12. Open the LS\_Discovery policy.
- 13. Edit the username and password in the policy and enter the user credentials of the 'Local Administrator' created on the Edge Server.
- 14. Deploy the LS\_Discovery Policy on the Edge Servers.

#### Note:

- 1. The Edge Server must be able to access all the Front End and Directors servers. Publish the SRV records or update the %SystemRoot%\System32\drivers\etc\hosts to resolve Front End and Director server FQDN to their IP.
- 2. Run this tool only once for every deployment on the Edge Server. If you change the CSViewOnlyAdministrator credential of the user, run the tool again with the latest user credentials.

# EdgeServer

The Edge Server is a server role in the network perimeter. It provides access to external users such as remote, federated and anonymous users. The Edge Server supports connectivity with public IM service providers.

The Edge Server runs the Access Edge Service, A/V Edge Service, and Web Conferencing Edge service. These three services are automatically installed with the Edge Server.

## **General Policies**

The General policy group contains all the policies that monitor the processes and services of the EdgeServer.

#### LS\_Replica\_PageFaultsPerSec

The LS\_Replica\_PageFaultsPerSec monitors the Page Faults/sec counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AccessEdge\_AboveLimitConnectionsDropped

The LS\_AccessEdge\_AboveLimitConnectionsDropped policy monitors total number of connections that were dropped because the limit on number of incoming connections from a federated partner or clearing house was exceeded.

Performance Object: LS:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 004 - Above Limit Connections Dropped (Access Proxies only)

Threshold: When the difference between the two samples is greater than:

- Warning: 1
- Critical: 2

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_AccessEdge\_ActiveTLSConnections

This policy monitors the number of established TLS connections currently active. TLS Connection is considered established when peer certificate and, possibly, host name are verified for trust relationship.

Performance Object: LS:API - 00 - API Application Instance Counters(\*)

Instance: \_Total

Counter: API - 026 - Transactions Pending Dispatch Completion

Threshold: When the difference between the two samples is greater than:

- Warning: 500
- Critical: 1000

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_AddressSpaceUsage

The LS\_AccessEdge\_AddressSpaceUsage policy monitors the percentage of available address space currently in use by the server process.

Performance Object: LS:SIP - 07 - Load Management

Counter: SIP - 009 - Address space usage

Instance: All instances

*Threshold:* When the difference between two samples is greater than:

- Warning: 65
- Critical: 75

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AccessEdge\_AvgIncomingMsgProccessingTime

This policy monitors the average processing time of an incoming message in seconds.

*Performance Object:* LC:SIP - 02 – Protocol

Counter: SIP - 021 - Average Incoming Message Processing Time

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 5

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AccessEdge\_DataLogging

The LS\_AccessEdge\_DNSResolutionFailures policy monitors the SIP - 017 - Sends Outstanding counter.

Performance Object: LS:SIP - 02 - Protocol

Counter: SIP - 021 - Average Incoming Message Processing Time

Instance: All instances.

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_DNSResolutionFailures

The LS\_AccessEdge\_DNSResolutionFailures policy monitors the total number of DNS resolution failures.

Performance Object: LS:SipEps - 02 - SipEps Connections

Counter: SipEps - 010 - NumberOfDNSResolutionFailures

Instance: \_Total

*Threshold:* When the difference between two samples is greater than:

- Warning: 50
- Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_EventsQueueLength

The LS\_AccessEdge\_EventsQueueLength policy monitors the current Queue Length of events indicated by the core manager thread.

*Performance Object:* LS:SipEps - 00 - Sip Dialogs

Counter: SipEps - 003 - CoreManagerQueueLength

Instance: \_Total

*Threshold:* When the difference between two samples is greater than:

- Warning: 50
- Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_ExtMsgDropDueToUnresolvedDomain

This policy monitors the rate at which the number of messages are dropped at the external edge, as DNS SRV failed to resolve the domain.

Performance Object: LS:SIP - 09 - Access Edge Server Messages

Counter: SIP - 063 - External Messages/sec Dropped Due To Unresolved Domain

Instance: All instances.

*Threshold:* This policy has the following threshold:

Critical: 40

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AccessEdge\_ExtMsgDroppedDueToBlkedIMDomain

This policy monitors the rate of messages dropped at the external edge, in a second, because of DNS SRV resolving the domain to a server blocked in the IM Service Providers table.

Performance Object: LS:SIP - 09 - Access Edge Server Messages

Counter: SIP - 065 - External Messages/sec Dropped Due To Blocked IM Service Provider Domain

Instance: All instances

Threshold: This policy has the following threshold:

Critical: 40

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AccessEdge\_ExtMsgDroppedDueToIncompMsgDomain

This policy monitors the rate at which the messages are dropped, per second, at the external edge, as the previous messages are not compatible with the federation type of domain.

Performance Object: LS:SIP - 09 - Access Edge Server Messages

Counter: SIP - 077 - External Messages/sec Dropped Due To Incompatible Message Domain

Instance: All instances.

*Threshold:* This policy has the following threshold:

Critical: 40

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_ExtMsgPerSecDropDueToBlckdDomain

This policy monitors the number of messages which are dropped at the external edge as their domain is in the blocked list, in one second.

*Performance Object:* LS:SIP - 09 - Access Edge Server Messages

Counter: SIP - 033 - External Messages/sec Dropped Due To Blocked Domain

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 40

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_FlowControlledConnections

The LS\_AccessEdge\_FlowControlledConnections policy monitors the number of connections that are currently being flow-controlled (no socket receives are posted).

Performance Object: LS:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 023 - Flow-controlled Connections

Threshold: When the difference between two samples is greater than :

- Warning: 50
- Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_FlowControlledConnectionsDropped

The LS\_AccessEdge\_FlowControlledConnectionsDropped policy monitors the total number of connections dropped because of excessive flow-control.

Performance Object: LS:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 024 - Flow-controlled Connections Dropped

*Threshold:* When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AccessEdge\_IncomingMsgHeldAboveOverloadWatermark

This policy monitors the number of incoming messages which are currently held by the server for processing more than the overload watermark time threshold.

Performance Object: LS:SIP - 07 - Load Management

Counter: SIP - 005 - Incoming Messages Held Above Overload Watermark

Instance: All instances

Threshold: This policy has the following threshold levels:

Critical: 40

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_IncomingRequestsDroppedPerSec

This policy monitors the rate at which the incoming requests are dropped, as they could not be processed due to bad headers, insufficient routing information, and severe resource allocation failure.

Performance Object: LS:SIP - 02 - Protocol

Counter: SIP - 005 - Incoming Requests Dropped/sec

Instance: All instances

Threshold: This policy has the following threshold:

Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdgeServer\_IncomingResponsesDroppedPerSec

This policy monitors the rate at which the incoming responses are dropped per second as they could not be processed.

Performance Object: LS:SIP - 02 - Protocol

Counter: SIP - 009 - Incoming Responses Dropped/sec

Instance: All instances.

Threshold: This policy has the following threshold levels:

Critical: 10

Schedule: This policy runs every one hour.

Policy type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AccessEdge\_Logging

This policy collects data for the Access Edge Service. The LS\_AccessEdge\_Logging policy logs the following metrics as mentioned in the table into the data store (CODA / HP Performance Agent) for the instance \_Total.

Instance	Performance Object
RTCSrv	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

If a metric value is unavailable, this policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Schedule: This policy runs every 15 minutes.

Data Class: LS\_ACCESS

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_MessagesInServer

The LS\_AccessEdge\_MessagesInServer policy monitors the number of messages currently being processed by the server.

Performance Object: LS:SIP - 02 - Protocol

Counter: SIP - 012 - Messages In Server

Instance: All instances

Threshold: When the difference between two samples is greater than:

- Warning: 2500
- Critical: 5000

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_MsgPerSecDroppedDueToUnknownDomain

This policy monitors the number of messages that are not routed in a second, as the message domain is not in the routing table.

Performance Object: LS: SIP - 09 - Access Edge Server Messages

Counter: SIP - 025 - Messages/sec Dropped Due To Unknown Domain

Instance: All instances.

*Threshold:* This policy has the following threshold:

Critical: 40

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_MsgsDroppedPerSecDueToCertMismatch

This policy monitors the rate at which the messages are dropped per second as they did not have an FQDN that matched the remote peer's certificate.

Performance Object: LS:SIP - 02 - Protocol

Counter: SIP - 011 - Messages/sec Dropped Due To Certificate Mismatch

Instance: All instances.

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AccessEdge\_NoOfMsgsDropDueToInternalSrvError

The LS\_AccessEdge\_NoOfMsgsDropDueToInternalSrvError policy monitors the number of messages dropped due to an internal server error.

Performance Object: LS: SIP - 05 - Routing

Counter: SIP - 022 - Messages Dropped Due To Internal Error

Instance: All instances

Threshold: When the difference between two samples is greater than:

- Warning: 10
- Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_NoOfMsgsDropDueToRoutingFailure

The LS\_AccessEdge\_NoOfMsgsDropDueToRoutineFailure policy monitors the total number of messages dropped due to a routing failure not covered by other counters.

Performance Object: LS:SIP - 05 - Routing

Counter: SIP - 021 - Messages Dropped Due To Other Routing Failure

Instance: All instances.

Threshold: When the difference between two samples is greater than:

- Critical: 20
- Warning: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_NoOfSrvCnxDisDueToThrottling

The LS\_AccessEdge\_NoOfSrvCnxDisDueToThrottling policy monitors the total number of server connections disconnected due to throttling.

*Performance Object:* LS:DATAPROXY - 00 - Server Connections

Counter: DATAPROXY - 035 - Server connections disconnected due to throttling

Instance: \_Total

*Threshold:* When the difference between two samples is greater than:

- Warning: 50
- Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_PageFaultsPerSec

The LS\_AccessEdge\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

## LS\_AccessEdge\_PrivateBytes

The LS\_AccessEdge\_PrivateBytes policy monitors the Private Bytes counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

*Counter:* Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AccessEdge\_ProcessorTime

The LS\_AccessEdge\_ProcessorTime policy monitors the % Processor Time counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AccessEdge\_RateOfCnxDropDueToPeer

This policy monitors the rate of the connections dropped, in a second, as the peer failed to exchange valid data with the server within establishing timeout.

*Performance Object:* LS: SIP – 00 – Networking

Counter: SIP - 005 - Connections Failed To Establish/Sec

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_RateOfCnxRefusedDueToSrvOverload

The LS\_AccessEdge\_RateOfCnxRefusedDueToSrvOverload policy monitors the rate of connections refused, in a second, with a Service Unavailable response because the server was overloaded.

Performance Object: LS: SIP – 00 – Networking

Counter: SIP - 007 - Connections Refused Due To Server Overload/Sec

Instance: All instances

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_RejExtEdgeClientConnectionsPerSec

This policy monitors the rate at which the number of client connections is rejected, in a second, at the external edge as the remote user access is disabled.

Performance Object: LS:SIP - 08 - Access Edge Server Connections

Counter: SIP - 015 - Rejected External Edge Client Connections/sec

Instance: All instances

Threshold: This policy has the following threshold :

Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_RejExtEdgeServerConnectionsPerSec

This policy monitors the rate of server connections rejected at the external edge in a second because all federation are disabled.

Performance Object: LS:SIP - 08 - Access Edge Server Connections

Counter: SIP - 013 - Rejected External Edge Server Connections/sec

Instance: All instances.

*Threshold:* This policy has the following threshold:

Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_AccessEdge\_SendsTimedOut

This policy monitors the number of sends that were dropped as they stayed in the outgoing (send) queue for a long time.

Performance Object: LS:SIP - 01 - Peers

Instance: \_Total

Counter: SIP - 018 - Sends Timed-Out

Threshold: When the difference between two samples is greater than:

- Critical: 1000
- Warning: 500

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_ThreadCount

The LS\_AccessEdge\_ThreadCount policy monitors the Thread Count counter of the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

## LS\_AccessEdge\_Throttling

This policy monitors the system wide throttling.

Performance Object: LS:DATAPROXY - 00 - Server Connections

Instance: \_Total

Counter: DATAPROXY - 041 - System is throttling

*Threshold:* When the difference between the two samples is greater than:

- Warning: 10
- Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AccessEdge\_TimedOutTransactions

This policy monitors the total number of transactions that have timed out.

Performance Object: LS:SipEps - 01 - SipEps Transactions

Instance: All instances

Counter: SipEps - 008 - Transactions Timed Out/sec

*Threshold:* This policy has the following threshold:

Critical - 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AccessEdge\_WorkingSet

This policy monitors the Working Set counter available in the Access Edge Service.

Performance Object: Process

Instance: RTCSrv

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_AVAuth\_Logging

The LS\_AVAuth\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances MRASSvc or \_Total.

If a metric value is unavailable, this policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Instance	Performance Object
MRASSvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: LS\_PROCESS

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_AVAuth\_PageFaultsPerSec

The LS\_AVAuth\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVAuth\_PrivateBytes

This policy monitors the Private Bytes counter available in the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

*Counter:* Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

### LS\_AVAuth\_ProcessorTime

This policy monitors the % Processor Time counter available in the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVAuth\_ThreadCount

This policy monitors the Thread Count counter available in the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVAuth\_WorkingSet

This policy monitors the Working Set counter available in the Audio/Video Authentication service.

Performance Object: Process

Instance: MRASSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AVEdge\_BadRequestsReceivedPerSec

This policy monitors the number of bad requests which are received in a second.

Performance Object: LS:A/V Auth - 00 - Requests

Counter: - 003 - Bad Requests Received/sec

Instance: All instances

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_DataLogging

This policy collects data for the LS A/V Edge Server. The LS\_AVEdge\_DataLogging policy logs the data into the data store (CODA / HP Performance Agent) for the instance \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Note:

Ensure that the LS\_CreateDataSources policy is running before you deploy the LS\_ AVEdgeService\_Logging policy.

Instance

Performance Object

_Total	LS:A/V Edge - 00 - UDP Counters\A/V Edge - 008 - Authentication Failures/sec
	LS:A/V Edge - 01 - TCP Counters\A/V Edge - 008 - Authentication Failures/sec
	LS:A/V Edge - 00 - UDP Counters\A/V Edge - 014 - Client Request Errors/sec (4xx Responses/sec)
	LS:A/V Edge - 00 - UDP Counters\A/V Edge - 016 - Client Send Request Errors/sec
	LS:A/V Edge - 00 - UDP Counters\A/V Edge - 019 - Session Idle Timeouts/sec
	LS:A/V Edge - 01 - TCP Counters\A/V Edge - 015 - Client Request Errors/sec (4xx Responses/sec)
	LS:A/V Edge - 01 - TCP Counters\A/V Edge - 017 - Client Send Request Errors/sec
	LS:A/V Edge - 01 - TCP Counters\A/V Edge - 020 - Session Idle Timeouts/sec

Schedule: This policy runs every 15 minutes.

Data Class: LS\_PROCESS

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AVEdge\_Logging

This policy collects data for the Audio/Video Conferencing Edge Service.

Instance	Performance Object
MediaRelaySvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: LS\_PROCESS

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AVEdge\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter available in the Audio/Video Edge service.

Performance Object: Process

Instance: MediaRelaySvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_PrivateBytes

This policy monitors the Private Bytes counter available in the Audio/Video Edge service.

Performance Object: Process

Instance: MediaRelaySvc

Counter: Private Bytes

Threshold: This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_ProcessorTime

This policy monitors the % Processor Time counter available in the Audio/Video Edge service.

Performance Object: Process

*Instance:* MediaRelaySvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_TCPActiveSessionsExceedingBWLmt

This policy monitors the number of active relay sessions over TCP, which are exceeding the bandwidth limit.

Performance Object: LS:A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: A/V Edge - 035 - Active Sessions Exceeding Avg Bandwidth Limit

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_TCPAuthenticationFailuresPerSec

This policy monitors the number of failed authentication attempts with the relay over TCP in one second.

Performance Object: LS:A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: A/V Edge - 008 - Authentication Failures/sec

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AVEdge\_TCPPacketsDroppedPerSec

This policy monitors the rate at which the packets over TCP are dropped by the relay, in a second.

Performance Object: LS:A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: A/V Edge - 030 - Packets Dropped/sec

*Threshold:* This policy has the following threshold:

Critical: 300

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

### LS\_AVEdge\_ThreadCount

This policy monitors the Thread Count counter available in the Audio/Video Edge service.

Performance Object: Process

*Instance:* MediaRelaySvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_UDPActiveSessionsExceedingBWLmt

This policy monitors the number of active relay sessions over UDP, which are exceeding the bandwidth limit.

Performance Object: LS:A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: A/V Edge - 034 - Active Sessions Exceeding Avg Bandwidth Limit

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_UDPAllocateRqstExeedingPortLimit

This policy monitors the number of allocated requests over UDP that exceed the port limit, in one second.

Performance Object: LS:A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: A/V Edge - 010 - Allocate Requests Exceeding Port Limit/sec

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_AVEdge\_UDPAuthenticationFailuresPerSec

This policy monitors the rate of failed authentication attempts with the relay over UDP in one second.

Performance Object: LS:A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: A/V Edge - 008 - Authentication Failures/sec

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_UDPPacketsDroppedPerSec

This policy monitors the rate of packets over UDP that are dropped by the relay in one second.

Performance Object: LS:A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: A/V Edge - 029 - Packets Dropped/sec

*Threshold:* This policy has the following threshold:

Critical: 300

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AVEdge\_WorkingSet

TThis policy monitors the Working Set counter available in the Audio/Video Edge service.

Performance Object: Process

*Instance:* MediaRelaySvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Check\_AccessEdgeServiceStatus

The LS\_Check\_AccessEdgeServiceStatus policy returns values that correspond to different states of the 'RTCSRV'. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: RTCSRV

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Check\_AVAuthServiceStatus

The LS\_Check\_AppSharingServiceStatus policy returns values that correspond to different states of the 'RTCMRAUTH' service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCMRAUTH

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_Check\_AVEdgeServiceStatus

The CS\_Check\_AVEdgeServiceStatus policy checks the status of the Audio/Video Conferencing Edge Service and returns values that correspond to different states of the 'RTCMEDIARELAY'. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCMEDIARELAY

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Check\_ReplicaServiceStatus\_Edge

The policy LS\_Check\_ReplicaServiceStatus\_Edge checks the status of the Replica Replicator Agent Service at the Edge Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Check\_WebEdgeServiceStatus

The LS\_Check\_WebEdgeServiceStatus policy returns values that correspond to different states of the 'RTCDATAPROXY'. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCDATAPROXY

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Replica\_PrivateBytes

The LS\_Replica\_PrivateBytes policy monitors the Private Bytes counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Replica\_ProcessorTime

The LS\_Replica\_ProcessorTime policy monitors the '% Processor Time' counter of the Replica Service.

Performance Object: Process

Counter: % Processor Time

Instance: ReplicaReplicatorAgent

Threshold: This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_Replica\_ThreadCount

The LS\_Replica\_ThreadCount policy monitors the Thread Count counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

### LS\_Replica\_WorkingSet

The LS\_Replica\_WorkingSet policy monitors the Working Set counter of the Replica Service.

Performance Object: Process Instance: ReplicaReplicatorAgent Counter: Working Set Threshold: This policy has the following threshold: Critical: 2e+007 Schedule: This policy runs every one hour. Policy Type: Measurement Threshold policy Policy Group: SPI for Microsoft Enterprise Servers \_\_en \_\_ Microsoft\_Office\_ Communications\_Server\_\_ Microsoft\_Lync\_Server\_2010 \_\_EdgeServer

### LS\_WebEdge\_ClientsDisconPerSecInvalidCookieData

This policy monitors the number of clients disconnected in a second because of invalid cookie data.

Performance Object: LS:DATAPROXY - 01 - Client Connections

Counter: DATAPROXY - 012 - Clients disconnected per second due to invalid cookie data
Instance: All instances

Threshold: This policy has the following threshold:
Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers ---- Microsoft\_Office\_
Communications\_Server --- Microsoft\_Lync\_Server\_2010 ---EdgeServer

#### LS\_WebEdge\_ClientsDisconPerSecInvalidCookieTm

This policy monitors the number of clients rejected in a second because of invalid timestamps.

Performance Object: LS:DATAPROXY - 01 - Client Connections

Counter: DATAPROXY - 008 - Clients disconnected per second due to invalid cookie timestamp

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_WebEdge\_Logging

This policy collects data for the LS Web Conferencing Edge Service.

Instance	Performance Object
DataProxy	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Schedule: This policy runs every 15 minutes.

Data Class: LS\_PROCESS

*Policy Type:*Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_WebEdge\_PageFaultsPerSec

The LS\_WebEdge\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

### LS\_WebEdge\_PrivateBytes

The LS\_WebEdge\_PrivateBytes policy monitors the Private Bytes counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_WebEdge\_ProcessorTime

The LS\_WebEdge\_ProcessorTime policy monitors the % Processor Time counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_WebEdge\_SystemThrottling

The policy monitors the system wide throttling.

Performance Object: LS:DATAPROXY - 00 - Server Connections

Instance: \_Total

Counter: DATAPROXY - 041 - System is throttling

Threshold: When the difference between two samples is greater than:

- Warning: 1
- Critical: 2

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_WebEdge\_ThreadCount

The LS\_WebEdge\_ThreadCount policy monitors the Thread Count counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_WebEdge\_ThrottedServerConnections

This policy monitors the total number of throttled server connections.

*Performance Object:* LS:DATAPROXY - 00 - Server Connections

Instance: \_Total

Counter: DATAPROXY - 034 - Current count of server connections that are throttled

Threshold: When the difference between two samples is greater than:

- Warning: 1
- Critical: 2

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_WebEdge\_WorkingSet

The LS\_WebEdge\_WorkingSet policy monitors the Working Set counter of the Web Conferencing Edge Service.

Performance Object: Process

Instance: DataProxy

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

## **GoldenMetrics**

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the Edge Server.

#### LS\_AccessEdge\_AvgIncomingMsgProccessingTime

This policy monitors the average processing time of an incoming message in seconds.

Performance Object: LC:SIP - 02 – Protocol

Counter: SIP - 021 - Average Incoming Message Processing Time

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 5

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_ExtMsgDroppedDueToBlkedIMDomain

This policy monitors the rate of messages dropped at the external edge, in a second, because of DNS SRV resolving the domain to a server blocked in the IM Service Providers table.

Performance Object: LS:SIP - 09 - Access Edge Server Messages

Counter: SIP - 065 - External Messages/sec Dropped Due To Blocked IM Service Provider Domain

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 40

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_AccessEdge\_RateOfCnxDropDueToPeer

This policy monitors the rate of the connections dropped, in a second, as the peer failed to exchange valid data with the server within establishing timeout.

Performance Object: LS: SIP – 00 – Networking

Counter: SIP - 005 - Connections Failed To Establish/Sec

Instance: All instances

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AccessEdge\_RateOfCnxRefusedDueToSrvOverload

The LS\_AccessEdge\_RateOfCnxRefusedDueToSrvOverload policy monitors the rate of connections refused, in a second, with a Service Unavailable response because the server was overloaded.

Performance Object: LS: SIP - 00 - Networking

Counter: SIP - 007 - Connections Refused Due To Server Overload/Sec

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_AVEdge\_BadRequestsReceivedPerSec

This policy monitors the number of bad requests which are received in a second.

Performance Object: LS:A/V Auth - 00 - Requests

Counter: - 003 - Bad Requests Received/sec

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

### LS\_AVEdge\_TCPActiveSessionsExceedingBWLmt

This policy monitors the number of active relay sessions over TCP, which are exceeding the bandwidth limit.

Performance Object: LS:A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: A/V Edge - 035 - Active Sessions Exceeding Avg Bandwidth Limit

Threshold: This policy has the following threshold:

- Warning: 10
- Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_TCPAuthenticationFailuresPerSec

This policy monitors the number of failed authentication attempts with the relay over TCP in one second.

*Performance Object:* LS:A/V Edge - 01 - TCP Counters

Instance: \_Total

Counter: A/V Edge - 008 - Authentication Failures/sec

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_UDPActiveSessionsExceedingBWLmt

This policy monitors the number of active relay sessions over UDP, which are exceeding the bandwidth limit.

Performance Object: LS:A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: A/V Edge - 034 - Active Sessions Exceeding Avg Bandwidth Limit

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_AVEdge\_UDPAuthenticationFailuresPerSec

This policy monitors the rate of failed authentication attempts with the relay over UDP in one second.

Performance Object: LS:A/V Edge - 00 - UDP Counters

Instance: \_Total

Counter: A/V Edge - 008 - Authentication Failures/sec

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers —en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 —EdgeServer

#### LS\_Check\_AccessEdgeServiceStatus

The LS\_Check\_AccessEdgeServiceStatus policy returns values that correspond to different states of the 'RTCSRV'. This policy sends a critical alert message if the service is not running. After the

service starts, the policy acknowledges the alert sent previously.

Monitored Service: RTCSRV

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Check\_AVAuthServiceStatus

The LS\_Check\_AppSharingServiceStatus policy returns values that correspond to different states of the 'RTCMRAUTH' service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCMRAUTH

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_Check\_AVEdgeServiceStatus

The CS\_Check\_AVEdgeServiceStatus policy checks the status of the Audio/Video Conferencing Edge Service and returns values that correspond to different states of the 'RTCMEDIARELAY'. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCMEDIARELAY

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers → en → Microsoft\_Office\_ Communications\_Server→ Microsoft\_Lync\_Server\_2010 → EdgeServer

#### LS\_Check\_ReplicaServiceStatus\_Edge

The policy LS\_Check\_ReplicaServiceStatus\_Edge checks the status of the Replica Replicator Agent Service at the Edge Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored Service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — EdgeServer

## LS\_Check\_WebEdgeServiceStatus

The LS\_Check\_WebEdgeServiceStatus policy returns values that correspond to different states of the 'RTCDATAPROXY'. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCDATAPROXY

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_WebEdge\_ClientsDisconPerSecInvalidCookieData

This policy monitors the number of clients disconnected in a second because of invalid cookie data.

Performance Object: LS:DATAPROXY - 01 - Client Connections

Counter: DATAPROXY - 012 - Clients disconnected per second due to invalid cookie data

Instance: All instances

Threshold: This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

#### LS\_WebEdge\_ClientsDisconPerSecInvalidCookieTm

This policy monitors the number of clients rejected in a second because of invalid timestamps.

Performance Object: LS:DATAPROXY - 01 - Client Connections

Counter: DATAPROXY - 008 - Clients disconnected per second due to invalid cookie timestamp

Instance: All instances

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server Microsoft\_Lync\_Server\_2010 — EdgeServer

# **FrontEnd Server**

The FrontEnd Server is located in the internal network that hosts the IM Conferencing service, Address Book service, and Telephony Conferencing service to support registration, presence, IM, and conferencing.

This server role is available on a Standard Edition Server. In an Enterprise pool, it can either be configured with the Web Conferencing Server and A/V Conferencing Server, or can be deployed on a separate server.

# **General Policies**

The General policy group contains all the policies that monitor the processes and services of the FrontEnd Server.

# LS\_AppSharing\_PageFaultsPerSec

This policy monitors the Page Faults/sec counter available in the Lync Server Application Sharing service.

Performance Object: Process

Instance: ASMCUSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

# LS\_FileTransferAgent\_PageFaultsPerSec

The LS\_FileTransferAgent\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the File Transfer Agent service.

Performance Object: Process

Instance: FileTransferAgent

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_ FrontEndServer

#### LS\_Replica\_PageFaultsPerSec

The LS\_Replica\_PageFaultsPerSec monitors the Page Faults/sec counter of the Replica Service.

Performance Object: Process Instance: ReplicaReplicatorAgent Counter: Page Faults/sec Threshold: This policy has the following threshold: Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_AppSharing\_ProcessorTime

The LS\_AppSharing\_ProcessorTime policy monitors the % Processor Time counter of the Application Sharing service.

Performance Object: Process

Counter: % Processor Time

Instance: ASMCUSvc

Threshold: This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_AppSharing\_ThreadCount

The LS\_AppSharing\_ThreadCount policy monitors the Thread Count counter of the Application Sharing service.

Performance Object: Process

Instance: ASMCUSvc

*Counter:* Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_AppSharing\_WorkingSet

The LS\_AppSharing\_WorkingSet policy monitors the Working Set counter of the Application Sharing service.

Performance Object: Process

Instance: ASMCUSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_Check\_AppSharingServiceStatus

The LS\_Check\_AppSharingServiceStatus policy checks the status of the Application Sharing Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes

Monitored service: RTCASMCU

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_Check\_AudioTestServiceStatus

The LS\_Check\_AudioTestServiceStatus policy checks the status of the Audio Test Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCATS

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

#### LS\_Check\_BandwidthAuthServiceStatus

The LS\_Check\_BandwidthAuthServiceStatus policy checks the status of the Bandwidth Policy (Authorization) Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCPDPAUTH

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_Check\_BandwidthCoreServiceStatus

The LS\_Check\_BandwidthCoreServiceStatus policy checks status of the Bandwidth Policy (Core) Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCPDPCORE

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_Check\_CallParkServiceStatus

The LS\_Check\_CallParkServiceStatus policy checks the status of the Call Park Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCCPS

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_Check\_ConfAnnouncementServiceStatus

The LS\_Check\_ConfAnnouncementServiceStatus policy checks the status of the Conferencing Announcement Service. This policy sends a critical alert message if the service is not running.

After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCCAS

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_ FrontEndServer

#### LS\_Check\_ConfAttendantServiceStatus

The LS\_Check\_ConfAttendantServiceStatus policy checks the status of the ConfAttendant Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCCAA

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_Check\_FileTransferAgentServiceStatus

The LS\_Check\_FileTransferAgentServiceStatus policy checks the status of the File Transfer Agent Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: FTA

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_Check\_FrontEnd\_ADStatus

The policy LS\_Check\_FrontEnd\_ADStatus checks the connectivity status of the Active Directory with the Front End Server. It sends a critical alert message if the Active Directory is not accessible from the Front End Server. After the connectivity is obtained, the policy sends a normal message and acknowledges the critical alert sent previously.

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_ FrontEndServer

# LS\_Check\_FrontEnd\_ReplicaStatus

The policy LS\_Check\_FrontEnd\_ReplicaStatus checks the Central Management Store replication status at the Front End Server. This policy sends out a critical alert message if the Central Management Store data is not updated. After the Central Management Store data is updated, the policy sends a normal message and acknowledges the critical error message sent previously.

Monitored service: REPLICA

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_Check\_FrontEndServiceStatus

The LS\_Check\_FrontEndServiceStatus policy checks the status of the Front-End Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCSRV

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_Check\_IMConfServiceStatus

The LS\_Check\_IMConfServiceStatus policy checks the status of the IM Conferencing Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCIMMCU

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers —en —Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010—FrontEndServer

## LS\_Check\_MasterReplicatorAgentServiceStatus

The LS\_Check\_MasterReplicatorAgentServiceStatus policy checks the status of the Master Replicator Agent Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: MASTER

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

# LS\_Check\_ReplicaServiceStatus\_FrontEnd

The policy LS\_Check\_ReplicaServiceStatus\_FrontEnd checks the status of the Replica Replicator Agent Service at the Front End Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_Check\_ResponseGroupServiceStatus

The LS\_Check\_ResponseGroupServiceStatus policy checks the status of the Response Group Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCRGS

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_Check\_WebConfCompatibilityServiceStatus

The LS\_Check\_WebConfCompatibilityServiceStatus policy checks the status of the Web Conferencing Compatibility Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCMEETINGMCU

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

# LS\_Check\_WebConfServiceStatus

The LS\_Check\_WebConfServiceStatus policy checks the status of the Web Conferencing Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCDATAMCU

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_FileTransferAgent\_PrivateBytes

The LS\_FileTransferAgent\_PrivateBytes policy monitors the Private Bytes counter of the File Transfer Agent service.

Performance Object: Process

Instance: FileTransferAgent

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_FileTransferAgent\_ProcessorTime

The LS\_FileTransferAgent\_ProcessorTime policy monitors the % Processor Time counter of the File Transfer Agent service.

Performance Object: Process

Counter: % Processor Time

*Instance:* FileTransferAgent

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Performance Monitoring policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010—FrontEndServer

## LS\_FileTransferAgent\_ThreadCount

The LS\_FileTransferAgent\_ThreadCount policy monitors the Thread Count counter of the File Transfer Agent service.

Performance Object: Process

Instance: FileTransferAgent

Counter: Thread Count

Threshold: This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_FileTransferAgent\_WorkingSet

The LS\_FileTransferAgent\_WorkingSet policy monitors the Working Set counter of the File Transfer Agent service.

Performance Object: Process

Instance: FileTransferAgent

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_FrontEnd\_AvgNoOfBlkedClientThreads

This policy monitors the average number of client threads that are blocked in the queue, waiting for the queue depth to decrease.

Performance Object: LS:USrv - 01 - DBStore

Instance: All instances

Counter: USrv - 011 - Blocked Client Threads

Threshold: When the difference between the samples is greater than:

- Critical: 6000
- Warning: 4000

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

#### LS\_FrontEnd\_AvgTimeRequestHeldInDB

This policy monitors the average time (in milliseconds) a request is held in the database queue.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances

Counter: Usrv - 002 - Queue Latency (msec)

*Threshold:* When the difference between two samples is greater than:

- Critical: 6000
- Warning: 4000

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_FrontEnd\_AvgTimeToFetchProperties

This policy monitors the average fetch time of member properties in milliseconds.

Performance Object: LS:WEB - 00 - Distribution List Expansion

Instance: All instances

Counter: WEB - 008 - Average member properties fetch time in milliseconds

Threshold: When the difference between two samples is greater than:

- Critical: 30000
- Warning: 10000

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

# LS\_FrontEnd\_DataLogging

This policy collects data for the LS Front End Server.

Instance	Performance Object
All instances	LS:USrv - 00 - REGDBStore\Usrv - 002 - Queue Latency (msec)
	LS:USrv - 00 - REGDBStore\Usrv - 004 - Sproc Latency (msec)
	LS:SIP - 07 - Load Management\SIP - 000 - Average Holding Time For Incoming Messages
	LS:SIP - 04 - Responses\SIP - 055 - Local 503 Responses/sec
	LS:SIP - 04 - Responses\SIP - 057 - Local 504 Responses/sec
	LS:SIP - 01 - Peers\SIP - 017 - Sends Outstanding

Data Class: LS\_PROCESS

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

# LS\_FrontEnd\_HoldingTimeForIncMsgs

This policy monitors the average processing time taken by the server for one request.

Performance Object: LS:SIP - 07 - Load Management

Counter: SIP - 000 - Average Holding Time For Incoming Messages

Instance: All instances

*Threshold:* This policy has the following threshold level:

Critical: 5

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

# LS\_FrontEnd\_Local503Responses

This policy monitors the number of 503 responses received in a second. Code 503 means that the server is unavailable.

*Performance Object:* LS:SIP - 04 - Responses

Counter: SIP - 055 - Local 503 Responses/sec

Instance: All instances

Threshold: This policy has the following threshold level:

Critical: 5

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_FrontEnd\_Local504Responses

This policy monitors the number of 504 responses received in a second. Code 504 implies that there are problems connecting to other servers.

*Performance Object:* LS:SIP - 04 - Responses

Counter: SIP - 057 - Local 504 Responses/sec

Instance: All instances

*Threshold:* This policy has the following threshold level:

Critical: 5

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_FrontEnd\_Logging

The LS\_FrontEnd\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances RTCSrv or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

This policy has the following metrics:

Instance	Performance Object
RTCSrv	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Data Class: LS\_PROCESS

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_FrontEnd\_NoOfRequestsWaitingOnAD

This policy monitors the number of request waiting currently for Active Directory responses.

Performance Object: LS:WEB - 00 - Distribution List Expansion

Instance: \_Total

Counter: WEB - 004 - Pending Active Directory Requests

Threshold: When the difference between the samples is greater than:

- Critical: 100
- Warning: 50

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_FrontEnd\_PageFaultsPerSec

The LS\_FrontEnd\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_FrontEnd\_PrivateBytes

The LS\_FrontEnd\_PrivateBytes policy monitors the Private Bytes counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers —en —Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010—FrontEndServer

## LS\_FrontEnd\_ProcessingLatency

This policy monitors the processing time taken by the back end for one request.

Performance Object: LS:USrv - 01 - DBStore

Counter: USrv - 004 - Sproc Latency (msec)

Instance: All instances

*Threshold:* This policy has the following threshold level:

Critical: 6000

Schedule: This policy runs every 15 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

# LS\_FrontEnd\_SearchLatency

The policy LS\_FrontEnd\_SearchLatency monitors the average time (in milliseconds) it takes to perform the LDAP search.

Performance Object: LS:USrv - 19 - Directory Search

Counter: USrv - 005 - Search Latency (ms)

Instance: All instances

Threshold: This policy has the following threshold levels:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_FrontEnd\_ProcessorTime

The LS\_FrontEnd\_ProcessorTime policy monitors the % Processor Time counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_FrontEnd\_QueueLatency

This policy monitors the time period that a request takes in the back end queue.

Performance Object: LS:USrv - 01 - DBStore

Counter: Usrv - 002 - Queue Latency (msec)

Instance: All instances

Threshold: This policy has the following threshold levels:

Critical: 6000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

# LS\_FrontEnd\_RateOfSoapExceptions

This policy monitors the SOAP exceptions generated per second.

*Performance Object:* LS:WEB - 00 - Distribution List Expansion

Instance: \_Total

Counter: WEB - 015 - Soap exceptions/sec

*Threshold:* When the difference between two samples is greater than:

- Warning: 50
- Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_FrontEnd\_SendsOutstanding

This policy monitors the number of outbound requests and responses that are queued.

Performance Object: LS:SIP – 01 – Peers

*Counter:* SIP – 017 – Sends Outstanding

Instance: All instances

Threshold: This policy has the following threshold level:

Critical: 200

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_FrontEnd\_ThreadCount

The LS\_FrontEnd\_ThreadCount policy monitors the Thread Count counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Thread Count Threshold: This policy has the following threshold: Critical: 150 Schedule: This policy runs every one hour. Policy Type: Measurement Threshold policy Policy Group: SPI for Microsoft Enterprise Servers —en

Policy Group: SPI for Microsoft Enterprise Servers —en —Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

# LS\_FrontEnd\_WorkingSet

The LS\_FrontEnd\_WorkingSet policy monitors the Working Set counter of the Front End service.

Performance Object: Process

Instance: RTCSrv

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

# LS\_IMConf\_Logging

This policy collects data for the LS IM Conferencing Service.

This policy has the following metrics:

Instance	Performance Object
IMMCUSvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Data Class: LS\_PROCESS

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_IMConf\_PageFaultsPerSec

The LS\_IMConf\_PageFaultsPerSec policy the monitors the Page Faults/sec counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_IMConf\_PrivateBytes

The LS\_IMConf\_PrivateBytes policy monitors the Private Bytes counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Private Bytes

*Threshold:* The policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_IMConf\_ProcessorTime

This policy monitors the % Processor Time counter available in the IM Conferencing service.

Performance Object: Process

Instance: IMMcuSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Performance Monitoring policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_IMConf\_ThreadCount

The LS\_IMConf\_ThreadCount policy monitors the Thread Count counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_IMConf\_WorkingSet

The LS\_IMConf\_WorkingSet policy monitors the Working Set counter of the IM Conferencing Service.

Performance Object: Process

Instance: IMMcuSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_MasterReplicatorAgent\_PageFaultsPerSec

The LS\_MasterReplicatorAgent\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the MasterReplicatorAgent Service.

Performance Object: Process

Instance: MasterReplicatorAgent

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_MasterReplicatorAgent\_PrivateBytes

The LS\_MasterReplicatorAgent\_PrivateBytes policy monitors the Private Bytes counter of the MasterReplicatorAgent Service.

Performance Object: Process

Instance: MasterReplicatorAgent

*Counter:* Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_MasterReplicatorAgent\_ProcessorTime

The LS\_MasterReplicatorAgent\_ProcessorTime policy monitors the '% Processor Time' counter of the MasterReplicatorAgent Service.

Performance Object: Process

Instance: MasterReplicatorAgent

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_MasterReplicatorAgent\_ThreadCount

The LS\_MasterReplicatorAgent\_ThreadCount policy monitors the Thread Count counter of the MasterReplicatorAgent Service.

Performance Object: Process

Instance: MasterReplicatorAgent

Counter: Thread Count

Threshold: This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

#### LS\_MasterReplicatorAgent\_WorkingSet

The LS\_MasterReplicatorAgent\_WorkingSet policy monitors the Working Set counter of the MasterReplicatorAgent Service.

Performance Object: Process

Instance: MasterReplicatorAgent

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010—FrontEndServer

## LS\_Replica\_PrivateBytes

The LS\_Replica\_PrivateBytes policy monitors the Private Bytes counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_Replica\_ProcessorTime

The LS\_Replica\_ProcessorTime policy monitors the '% Processor Time' counter of the Replica Service.

Performance Object: Process

Counter: % Processor Time

Instance: ReplicaReplicatorAgent

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_Replica\_ThreadCount

The LS\_Replica\_ThreadCount policy monitors the Thread Count counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_Replica\_WorkingSet

The LS\_Replica\_WorkingSet policy monitors the Working Set counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_WebConf\_Logging

This policy collects data for the Web Conferencing Service.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

This policy has the following metrics:

Instance	Performance Object
RTCSrv	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Data Class: LS\_PROCESS

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_WebConf\_MCUHealthState

This policy monitors the current health of DATAMCU. The value 0 signifies that the DATAMCU is normal, 1 signifies that it is loaded, 2 signifies that it is full, and 3 signifies that the MCU is unavailable.

*Performance Object:*LS:DATAMCU - 04 - MCU Health And Performance

Counter: DATAMCU - 005 - MCU Health State

Instance: All instances.

Threshold: When the difference between two samples is greater than:

- Warning: 1
- Critical: 2

Schedule: This policy runs every one hour.

Policy type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_WebConf\_NumberOfUnhandledApplExceptions

The number of unhandled exceptions in application is monitored by this policy.

Performance Object: LS: DATAMCU - 00 - DataMCU Conferences

Counter: DATAMCU - 005 - Number of Unhandled Application Exception

Instance: All instances.

Threshold: When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every one hour.

Policy type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_WebConf\_PageFaultsPerSec

The LS\_WebConf\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_WebConf\_PrivateBytes

The LS\_WebConf\_PrivateBytes policy monitors the Private Bytes counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

#### LS\_WebConf\_ProcessorTime

The LS\_WebConf\_ProcessorTime policy monitors the % Processor Time counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold

*Policy Group:* SPI for Microsoft Enterprise Servers —en —Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

# LS\_WebConf\_SessionQueuesState

This policy monitors the state of session queues.

Performance Object: LS:DATAMCU - 00 - DataMCU Conferences

Instance: All instances

Counter: DATAMCU - 008 - Session queues state

*Threshold:* When the difference between the two samples is greater than:

- Critical: 2
- Warning: 1

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_WebConf\_ThreadCount

The LS\_WebConf\_ThreadCount policy monitors the Thread Count counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

*Counter:* Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

#### LS\_WebConf\_WorkingSet

The LS\_WebConf\_WorkingSet policy monitors the Working Set counter of the Web Conferencing Service.

Performance Object: Process

Instance: DataMCUSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_WebConfCompatibility\_PageFaultsPerSec

The Page Faults / sec of Web Conference compatibility process is monitored by the LS\_ WebConfCompatibility\_PageFaultsPerSec policy

Performance Object: Process

Instance: MeetingMCUSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_WebConfCompatibility\_PrivateBytes

The private bytes of Web conference compatibility process is monitored by the LS\_ WebConfCompatibility\_PrivateBytes policy.

Performance Object: Process

Instance: MeetingMCUSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_WebConfCompatibility\_ProcessorTime

The % processor time of web conference compatibility process is monitored by the policy LS\_ WebConfCompatibility\_ProcessorTime policy. Performance Object: Process

Instance: MeetingMCUSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

## LS\_WebConfCompatibility\_ThreadCount

The thread count of web conference compatibility process is monitored by the LS\_ WebConfCompatibility\_ThreadCount policy.

Performance Object: Process

*Instance:* MeetingMCUSvc

Counter: Thread Count

Threshold: This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_WebConfCompatibility\_WorkingSet

The Working Set bytes of web conference compatibility process is monitored by the policy LS\_ WebConfCompatibility\_WorkingSet.

Performance Object: Process

Instance: MeetingMCUSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers \_\_\_en \_\_\_Microsoft\_Office\_ Communications\_Server\_\_\_Microsoft\_Lync\_Server\_2010\_\_\_FrontEndServer

# **GoldenMetrics**

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the FrontEnd Server.

## LS\_Check\_AppSharingServiceStatus

The LS\_Check\_AppSharingServiceStatus policy checks the status of the Application Sharing Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes

Monitored service: RTCASMCU

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_Check\_AudioTestServiceStatus

The LS\_Check\_AudioTestServiceStatus policy checks the status of the Audio Test Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCATS

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_Check\_BandwidthAuthServiceStatus

The LS\_Check\_BandwidthAuthServiceStatus policy checks the status of the Bandwidth Policy (Authorization) Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCPDPAUTH

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

# LS\_Check\_BandwidthCoreServiceStatus

The LS\_Check\_BandwidthCoreServiceStatus policy checks status of the Bandwidth Policy (Core) Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCPDPCORE

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_Check\_CallParkServiceStatus

The LS\_Check\_CallParkServiceStatus policy checks the status of the Call Park Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCCPS

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010—FrontEndServer

## LS\_Check\_ConfAnnouncementServiceStatus

The LS\_Check\_ConfAnnouncementServiceStatus policy checks the status of the Conferencing Announcement Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCCAS

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_Check\_ConfAttendantServiceStatus

The LS\_Check\_ConfAttendantServiceStatus policy checks the status of the ConfAttendant Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCCAA

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_Check\_FileTransferAgentServiceStatus

The LS\_Check\_FileTransferAgentServiceStatus policy checks the status of the File Transfer Agent Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: FTA

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_Check\_FrontEnd\_ReplicaStatus

The policy LS\_Check\_FrontEnd\_ReplicaStatus checks the Central Management Store replication status at the Front End Server. This policy sends out a critical alert message if the Central Management Store data is not updated. After the Central Management Store data is updated, the policy sends a normal message and acknowledges the critical error message sent previously.

Monitored service: REPLICA

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_Check\_FrontEnd\_ADStatus

The policy LS\_Check\_FrontEnd\_ADStatus checks the connectivity status of the Active Directory with the Front End Server. It sends a critical alert message if the Active Directory is not accessible from the Front End Server. After the connectivity is obtained, the policy sends a normal message and acknowledges the critical alert sent previously.

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

# LS\_Check\_FrontEndServiceStatus

The LS\_Check\_FrontEndServiceStatus policy checks the status of the Front-End Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: RTCSRV

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_Check\_IMConfServiceStatus

The LS\_Check\_IMConfServiceStatus policy checks the status of the IM Conferencing Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCIMMCU

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010—FrontEndServer

## LS\_Check\_MasterReplicatorAgentServiceStatus

The LS\_Check\_MasterReplicatorAgentServiceStatus policy checks the status of the Master Replicator Agent Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: MASTER

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_Check\_ReplicaServiceStatus\_FrontEnd

The policy LS\_Check\_ReplicaServiceStatus\_FrontEnd checks the status of the Replica Replicator Agent Service at the Front End Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Monitored service: Replica Replicator Agent

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_Check\_ResponseGroupServiceStatus

The LS\_Check\_ResponseGroupServiceStatus policy checks the status of the Response Group Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCRGS

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

#### LS\_Check\_WebConfCompatibilityServiceStatus

The LS\_Check\_WebConfCompatibilityServiceStatus policy checks the status of the Web Conferencing Compatibility Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCMEETINGMCU

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_Check\_WebConfServiceStatus

The LS\_Check\_WebConfServiceStatus policy checks the status of the Web Conferencing Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCDATAMCU

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_FrontEnd\_HoldingTimeForIncMsgs

This policy monitors the average processing time taken by the server for one request.

Performance Object: LS:SIP - 07 - Load Management

Counter: SIP - 000 - Average Holding Time For Incoming Messages

Instance: All instances

*Threshold:* This policy has the following threshold level:

Critical: 5

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — FrontEndServer

## LS\_FrontEnd\_Local503Responses

This policy monitors the number of 503 responses received in a second. Code 503 means that the server is unavailable.

Performance Object: LS:SIP - 04 - Responses

Counter: SIP - 055 - Local 503 Responses/sec

Instance: All instances

Threshold: This policy has the following threshold level:

Critical: 5

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_FrontEndServer

#### LS\_FrontEnd\_ProcessingLatency

This policy monitors the processing time taken by the back end for one request.

Performance Object: LS:USrv - 01 - DBStore

Counter: USrv - 004 - Sproc Latency (msec)

Instance: All instances

*Threshold:* This policy has the following threshold level:

Critical: 6000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers —en —Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010—FrontEndServer

# LS\_FrontEnd\_QueueLatency

This policy monitors the time period that a request takes in the back end queue.

Performance Object: LS:USrv - 01 - DBStore

Counter: Usrv - 002 - Queue Latency (msec)

Instance: All instances

Threshold: This policy has the following threshold levels:

Critical: 6000

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010\_ FrontEndServer

## LS\_FrontEnd\_SearchLatency

The policy LS\_FrontEnd\_SearchLatency monitors the average time (in milliseconds) it takes to perform the LDAP search.

Performance Object: LS:USrv - 19 - Directory Search

Counter: USrv - 005 - Search Latency (ms)

Instance: All instances

Threshold: This policy has the following threshold levels:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_FrontEndServer

## LS\_FrontEnd\_SendsOutstanding

This policy monitors the number of outbound requests and responses that are queued.

Performance Object: LS:SIP - 01 - Peers

Counter: SIP – 017 – Sends Outstanding

Instance: All instances

Threshold: This policy has the following threshold level:

Critical: 200

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010\_ FrontEndServer

# **MediationServer**

The Mediation Server is located in the internal network that mediates signaling and media between the Enterprise Voice infrastructure (such as a Director or home server) and another gateway (such as a Basic Media Gateway).

A Mediation Server is also used to link Office Communications Server and a PBX in both departmental deployment and PBX integration topologies. The Mediation Server is deployed on a separate and dedicated server.

# **General Policies**

The General policy group contains all the policies that monitor the processes and services of the Mediation Server.

#### LS\_ Mediation \_PageFaultsPerSec

The LS\_Mediation \_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 – MediationServer

#### LS\_Check\_MediationServiceStatus

The LS\_Check\_MediationServiceStatus policy checks the status of the Mediation Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCMEDSRV

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers — en — Microsoft\_Office\_ Communications\_Server — Microsoft\_Lync\_Server\_2010 — MediationServer

## LS\_Check\_Mediation\_ADStatus

The policy LS\_Check\_Mediation\_ADStatus checks the connectivity status of the Active Directory with the Mediation Server and sends a critical alert message if the Active Directory is not accessible from the Mediation Server. After the connectivity is obtained, the policy sends a normal message and acknowledges the critical alert sent previously.

Schedule: This policy runs every 5 minutes.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MediationServer

#### LS\_Check\_Mediation\_ReplicaStatus

The policy LS\_Check\_Mediation\_ReplicaStatus checks the Central Management Store replication status at the Mediation Server. This policy sends out a critical alert message if the Central Management Store data is not updated. After the Central Management Store data is updated, the policy sends a normal message and acknowledges the critical error message sent previously.

Monitored service: REPLICA

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MediationServer

#### LS\_Check\_ReplicaServiceStatus\_Mediation

The policy LS\_Check\_ReplicaServiceStatus\_Mediation checks the status of the Replica Replicator Agent Service at the Mediation Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: Replica Replicator Agent

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 MediationServer

#### LS\_Mediation\_LoadCallFailureIndex

This policy monitors the index of call failures due to heavy load. The index is scaled between 0 and 100.

Performance Object: LS: MediationServer - 03 - Health Indices

Counter: - 000 - Load Call Failure Index

Instance: All instances

*Threshold:* When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — MediationServer

#### LS\_Mediation\_Logging

This policy collects data for the Lync Server Mediation Service. The LS\_Mediation\_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances MediationServerSvc or \_Total.

If a metric value is unavailable, the policy logs zero (for real or integer metrics) or an empty string (for string-valued metrics).

Instance	Performance Object
MediationServerSvc	Process\Working Set
	Process\Page Faults/sec
	Process\Private Bytes
	Process\Thread Count
	Process\% Processor Time
_Total	Processor\% Processor Time

Data Class: LS\_PROCESS

Schedule: This policy runs every 15 minutes.

*Policy Type:*Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_\_Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_ MediationServer

#### LS\_Mediation\_NoOfCallsFailedFromProxy

This policy monitors the number of call failures due to unexpected interaction with the proxy.

Performance Object: LS: MediationServer - 05 - Global Per Gateway Counters

Instance: All instances

*Counter:* - 000 - Total failed calls caused by unexpected interaction from a gateway

Threshold: When the difference between the two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en \_\_\_\_Microsoft\_Office\_ Communications\_Server\_\_\_Microsoft\_Lync\_Server\_2010\_\_\_\_MediationServer

#### LS\_Mediation\_NoOfMediaCnxCheckFailures

This policy monitors the number of failures in the media connectivity check.

Performance Object: LS:MediationServer - 02 - Media Relay

Counter: - 001 - Media Connectivity Check Failure

Instance: All instances

*Threshold:* When the difference between the two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_\_Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_ MediationServer

#### LS\_Mediation\_PrivateBytes

The LS\_Mediation\_PrivateBytes policy monitors the Private Bytes counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_\_\_Microsoft\_Office\_ Communications\_Server\_\_\_Microsoft\_Lync\_Server\_2010\_\_\_\_MediationServer

#### LS\_Mediation\_ProcessorTime

The LS\_Mediation\_ProcessorTime policy monitors the % Processor Time counter of the Mediation service.

Performance Object: Process

Counter: % Processor Time

Instance: MediationServerSvc

Threshold: This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 – MediationServer

#### LS\_Mediation\_RejectedSIPInvitesFromProxy

The policy monitors the number of SIP INVITEs from proxy which were rejected immediately because of the server load.

Performance Object: LS:MediationServer - 00 - Outbound Calls

Counter: - 003 - Total rejected due to load

Instance: All instances

Threshold: When the difference between two samples is greater than:

- Warning: 5
- Critical: 10

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers – en – Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 – MediationServer

#### LS\_Mediation\_ThreadCount

The LS\_Mediation\_ThreadCount policy monitors the Thread Count counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — MediationServer

#### LS\_Mediation\_WorkingSet

The LS\_Mediation\_WorkingSet policy monitors the Working Set counter of the Mediation service.

Performance Object: Process

Instance: MediationServerSvc

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

#### LS\_Replica\_PageFaultsPerSec

The LS\_ReplicaService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Page Faults/sec

*Threshold:* This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_ Microsoft\_Lync\_Server\_2010 — MediationServer

#### LS\_Replica\_PrivateBytes

The LS\_Replica\_PrivateBytes policy the Private Bytes counter of the Replica Service.

Performance Object: Process.

Instance: ReplicaReplicatorAgent

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_\_Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_ MediationServer

#### LS\_Replica\_ProcessorTime

The LS\_Replica\_ProcessorTime policy monitors the '% Processor Time' counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en \_\_\_Microsoft\_Office\_ Communications\_Server\_\_Microsoft\_Lync\_Server\_2010\_\_ MediationServer

#### LS\_Replica\_ThreadCount

The LS\_ReplicaService\_ThreadCount policy monitors the Thread Count counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers ---- en ---- Microsoft\_Office\_ Communications\_Server\_-- Microsoft\_Lync\_Server\_2010--- MediationServer

## LS\_Replica\_WorkingSet

The LS\_Replica\_WorkingSet policy monitors the Working Set counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers ---- en ---- Microsoft\_Office\_ Communications\_Server\_-- Microsoft\_Lync\_Server\_2010--- MediationServer

# **GoldenMetrics**

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the Mediation Server.

#### LS\_Check\_MediationServiceStatus

The LS\_Check\_MediationServiceStatus policy checks the status of the Mediation Service. This policy sends a critical alert message if the service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: RTCMEDSRV

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers ---- Microsoft\_Office\_ Communications\_Server\_--Microsoft\_Lync\_Server\_2010--- MediationServer

#### LS\_Check\_ReplicaServiceStatus\_Mediation

The policy LS\_Check\_ReplicaServiceStatus\_Mediation checks the status of the Replica Replicator Agent Service at the Mediation Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: Replica Replicator Agent

Policy Type: Measurement Threshold policy.

Policy Group: SPI for Microsoft Enterprise Servers \_\_\_\_\_ Microsoft\_Office\_ Communications\_Server\_\_\_Microsoft\_Lync\_Server\_2010\_\_\_\_ MediationServer

# MonitoringServer

The Monitoring Server is a server role in the internal network that gathers all records information about the call details and quality of experience (QoE).

# **General Policies**

The General policy group contains all the policies that monitor the processes and services of the Monitoring Server.

#### LS\_CallDetailRecording\_DroppedMessagesFromMQ

This policy monitors the number of messages that are dropped from the MSMQ queue.

Performance Object: LS:CDR Service - 01 - READ

Instance: All instances

Counter: CDR Service - 006 - Dropped messages from MQ

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_MessagesFailedValidation

This policy monitors the number of messages that failed the validation process.

Performance Object: LS:CDR Service - 01 - READ

Instance: All instances

Counter: CDR Service - 002 - Messages that failed validation

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

## LS\_CallDetailRecording\_MessagesFailedWrittenDB

This policy monitors the number of messages that failed to get written to the SQL database.

Performance Object: LS:CDR Service - 02 - WRITE

Instance: All instances

Counter: CDR Service - 002 - Messages failed to be written to DB

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_NoOfFailuresDueToInternalLks

This policy monitors the number of error report failures that occurred because of internal locks.

Performance Object: LS:CDR Service - 03 - Report Error

Instance: All instances.

Counter: CDR Service - 001 - Number of failures due to internal locks

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_NumberOfThrottledErrorReports

This policy monitors the number of error reports throttled because of the limit on maximum reports in a minute.

Performance Object: LS:CDR Service - 03 - Report Error

Instance: All instances

Counter: CDR Service - 002 - Number of throttled error reports due to max report per minute limit

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_NumberOfUnknownFailures

This policy monitors the number of unknown error report failures.

Performance Object: LS:CDR Service - 03 - Report Error

Instance: All instances.

Counter: CDR Service - 000 - Number of unknown failures

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_PageFaultsPerSec

The LS\_CallDetailRecording\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the CallDetailRecording Service.

Performance Object: Process

Instance: RtcCdr

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_PrivateBytes

The LS\_CallDetailRecording\_PrivateBytes policy monitors the private bytes counter.

Performance Object: Process

Instance: RtcCdr

Counter: PrivateBytes

Threshold: This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

## LS\_CallDetailRecording\_ProcessorTime

The LS\_CallDetailRecording\_ProcessorTime policy monitors the '% Processor Time' counter of the CallDetailRecording Service.

Performance Object: Process

Instance: RtcCdr

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_QueueLatency

This policy monitors the average time (in milliseconds) the database holds a request in queue.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances.

Counter: CDR Service - 002 - Queue Latency (msec)

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_ThreadCount

The LS\_CallDetailRecording\_ThreadCount policy monitors the thread count counter of the CallDetailRecording Service.

Performance Object: Process

Instance: RtcCdr Counter: Thread Count Threshold: This policy has the following threshold: Critical: 150 Schedule: This policy runs every one hour. Policy Type: Measurement Threshold policy

# LS\_CallDetailRecording\_TotalDeadLks

This policy monitors the total number of deadlocks that have occurred since the start of the server.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances.

Counter: CDR Service - 013 - Total Deadlocks

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

#### LS\_CallDetailRecording\_TotalFatalSQLErrors

This policy monitors the number of fatal SQL errors that have taken place since the server started.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances.

Counter: CDR Service - 019 - Total fatal SQL errors

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

# LS\_CallDetailRecording\_TotalODBCFailures

This policy monitors the number of ODBC timeout failures that have taken place since the server started.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances

Counter: CDR Service - 017 - Total ODBC Timeout Failures

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_TotalSevereSQLErrors

This policy monitors the number of severe SQL errors that occurred since the server started.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances.

Counter: CDR Service - 018 - Total severe SQL errors

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_TotalThrottledRequests

This policy monitors the number of requests that were rejected with a retry-after due to high database queue latency.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances

Counter: CDR Service - 021 - Total throttled requests

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

## LS\_CallDetailRecording\_TransactionsAborted

This policy monitors the number of transactions that are aborted.

Performance Object: LS:CDR Service - 01 - READ

Instance: All instances

Counter: CDR Service - 010 - Transactions aborted

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

## LS\_CallDetailRecording\_WorkingSet

The LS\_CallDetailRecording\_WorkingSet policy monitors the Working Set counter of the CallDetailRecording Service.

Performance Object: Process

Instance: RtcCdr

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Check\_CallDetailRecordingServiceStatus

The LS\_Check\_CallDetailRecordingServiceStatus checks the status of the Call Detail Recording Service. This policy sends a critical alert message if the service is not running. After the service starts the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored Service: RTCCDR

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

## LS\_Check\_Monitor\_ADStatus

The policy LS\_Check\_Monitor\_ADStatus checks the connectivity status of the Active Directory with the Monitoring Server and sends a critical alert message if the Active Directory is not accessible from the Monitoring Server. After the connectivity is obtained, the policy sends a normal message and acknowledges the critical alert sent previously.

Schedule: This policy runs every 5 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

## LS\_Check\_Monitor\_ReplicaStatus

The policy LS\_Check\_Monitor\_ReplicaStatus checks the Central Management Store replication status at the Monitoring Server. This policy sends out a critical alert message if the Central Management Store data is not updated. After the Central Management Store data is updated, the policy sends a normal message and acknowledges the critical error message sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: REPLICA

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Check\_QualityMonitoringServiceStatus

The LS\_Check\_QualityMonitoringServiceStatus checks the status of the QoE Monitoring Service. This policy sends a critical alert message if the QualityMonitoringService is not running. After the service starts the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored Service: RTCQMS

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

# LS\_Check\_ReplicaServiceStatus\_Monitor

The policy LS\_Check\_ReplicaServiceStatus\_Monitor checks the status of the Replica Replicator Agent Service at the Monitoring Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: Replica Replicator Agent

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_QualityMonitoring\_NoIncorrectMSMQMsgsReceive

This policy monitors the number of discarded MSMQ messages that are not of the expected type or version.

*Performance Object:* LS:QMS - 00 - QoEMonitoringServer

Instance: All instances.

Counter: QMS - 004 - Number of MSMQ messages received with an incorrect type or version

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

#### LS\_QualityMonitoring\_PageFaultsPerSec

The LS\_QualityMonitoring\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the QualityMonitoring Service.

Performance Object: Process

Instance: QmsSvc

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_QualityMonitoring\_PrivateBytes

The LS\_QualityMonitoring\_PrivateBytes policy monitors the Private Bytes counter of the QualityMonitoring Service.

Performance Object: Process

Instance: QmsSvc

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_QualityMonitoring\_ProcessorTime

The LS\_QualityMonitoring\_ProcessorTimepolicy monitors the '% Processor Time' counter of the QualityMonitoring Service.

Performance Object: Process

Instance: QmsSvc

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_QualityMonitoring\_ThreadCount

The LS\_QualityMonitoring\_ThreadCount policy monitors the Thread Count counter of the QualityMonitoring Service.

Performance Object: Process

Instance: QmsSvc

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

## LS\_QualityMonitoring\_WorkingSet

The LS\_QualityMonitoring\_WorkingSet policy monitors the working set counter of the QualityMonitoring Service.

Performance Object: Process

Instance: QmsSvc

Counter: Working Set

Threshold: This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_QualityMonitoring\_NoRptssDropDueToDBFailure

This policy monitors the number of reports dropped because of database insertion failure. The transaction was committed prematurely because of an unrecoverable database error.

Performance Object: LS:QMS - 00 - QoEMonitoringServer

Instance: All instances.

Counter: QMS - 003 - Total number of reports that were dropped due to database insertion failure.

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Replica\_PageFaultsPerSec

The LS\_ReplicaService\_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Page Faults/sec

Threshold: This policy has the following threshold:

Critical: 100

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Replica\_PrivateBytes

The LS\_Replica\_PrivateBytes policy the Private Bytes counter of the Replica Service.

Performance Object: Process.

Instance: ReplicaReplicatorAgent

Counter: Private Bytes

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Replica\_ProcessorTime

The LS\_Replica\_ProcessorTime policy monitors the '% Processor Time' counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: % Processor Time

*Threshold:* This policy has the following threshold:

Critical: 90

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Replica\_ThreadCount

The LS\_ReplicaService\_ThreadCount policy monitors the Thread Count counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Thread Count

*Threshold:* This policy has the following threshold:

Critical: 150

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

#### LS\_Replica\_WorkingSet

The LS\_Replica\_WorkingSet policy monitors the Working Set counter of the Replica Service.

Performance Object: Process

Instance: ReplicaReplicatorAgent

Counter: Working Set

*Threshold:* This policy has the following threshold:

Critical: 2e+007

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

# **Golden Policies**

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the Monitoring Server.

#### LS\_CallDetailRecording\_MessagesFailedValidation

This policy monitors the number of messages that failed the validation process.

Performance Object: LS:CDR Service - 01 - READ

Instance: All instances

Counter: CDR Service - 002 - Messages that failed validation

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_MessagesFailedWrittenDB

This policy monitors the number of messages that failed to get written to the SQL database.

Performance Object: LS:CDR Service - 02 - WRITE

Instance: All instances

Counter: CDR Service - 002 - Messages failed to be written to DB

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

#### LS\_CallDetailRecording\_QueueLatency

This policy monitors the average time (in milliseconds) the database holds a request in queue.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances.

Counter: CDR Service - 002 - Queue Latency (msec)

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

#### LS\_CallDetailRecording\_TotalDeadLks

This policy monitors the total number of deadlocks that have occurred since the start of the server.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances.

Counter: CDR Service - 013 - Total Deadlocks

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

# LS\_CallDetailRecording\_TotalFatalSQLErrors

This policy monitors the number of fatal SQL errors that have taken place since the server started.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances.

Counter: CDR Service - 019 - Total fatal SQL errors

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

## LS\_CallDetailRecording\_TotalThrottledRequests

This policy monitors the number of requests that were rejected with a retry-after due to high database queue latency.

Performance Object: LS:CDR Service - 00 - DBCdr

Instance: All instances

Counter: CDR Service - 021 - Total throttled requests

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_CallDetailRecording\_TransactionsAborted

This policy monitors the number of transactions that are aborted.

Performance Object: LS:CDR Service - 01 - READ

Instance: All instances

Counter: CDR Service - 010 - Transactions aborted

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Check\_CallDetailRecordingServiceStatus

The LS\_Check\_CallDetailRecordingServiceStatus checks the status of the Call Detail Recording Service. This policy sends a critical alert message if the service is not running. After the service starts the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored Service: RTCCDR

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_Check\_QualityMonitoringServiceStatus

The LS\_Check\_QualityMonitoringServiceStatus checks the status of the QoE Monitoring Service. This policy sends a critical alert message if the QualityMonitoringService is not running. After the service starts the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored Service: RTCQMS

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 MonitoringServer

#### LS\_Check\_ReplicaServiceStatus\_Monitor

The policy LS\_Check\_ReplicaServiceStatus\_Monitor checks the status of the Replica Replicator Agent Service at the Monitoring Server and returns values that correspond to different states of the service. This policy sends a critical alert message if the Replica Replicator Agent Service is not running. After the service starts, the policy acknowledges the alert sent previously.

Schedule: This policy runs every 5 minutes.

Monitored service: Replica Replicator Agent

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

## LS\_QualityMonitoring\_NoIncorrectMSMQMsgsReceive

This policy monitors the number of discarded MSMQ messages that are not of the expected type or version.

Performance Object: LS:QMS - 00 - QoEMonitoringServer

Instance: All instances.

Counter: QMS - 004 - Number of MSMQ messages received with an incorrect type or version

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

#### LS\_QualityMonitoring\_NoRptssDropDueToDBFailure

This policy monitors the number of reports dropped because of database insertion failure. The transaction was committed prematurely because of an unrecoverable database error.

Performance Object: LS:QMS - 00 - QoEMonitoringServer

Instance: All instances.

Counter: QMS - 003 - Total number of reports that were dropped due to database insertion failure.

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— MonitoringServer

# Registrar

The registrar server is a component that accepts register requests from users and is located along with a Director or a Front End server.

# **General Policies**

The General policy group contains all the policies that monitor the processes and services of the Registrar Server.

## LS\_Registrar\_EndpointsDisconnected

This policy monitors the number of endpoints that are disconnected because of missed keep-alives.

Performance Object: LS:USrv - 12 - Register

Instance: All instances.

Counter: USrv - 011 - Endpoints Disconnected

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

## LS\_Registrar\_IndirectEndpointsDisconnected

This policy monitors the number of indirect endpoints that are disconnected because of error responses.

Performance Object: LS:USrv - 12 - Register

Instance: All instances.

Counter: USrv - 012 - Indirectly Connected Endpoints Disconnected

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 Registrar

#### LS\_Registrar\_LegacyRegistersRejected

This policy monitors the number of legacy registers that are rejected because the publisher is in rich mode.

Performance Object: LS:USrv - 12 - Register

Instance: All instances.

Counter: USrv - 005 - Legacy REGISTERs rejected (421 Response)

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_QueueDepth

This policy monitors the average number of database requests to execute.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 000 - Queue Depth

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_QueueLatency

This policy monitors the average time (in milliseconds) a request is held in database queue.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 002 - Queue Latency (msec)

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_RegistrationNotificationSent

This policy monitors the number of deregistered notifications that are sent to the contacts. These notifications are sent when the server decides that the contacts are invalid.

Performance Object: LS:USrv - 12 - Register

Instance: All instances.

Counter: USrv - 006 - Registration Notifications Sent

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 Registrar

#### LS\_Registrar\_ThrottledRequests

This policy monitors the number of requests rejected in a second with a message to retry later because of the high database latency.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 020 - Throttled requests/sec

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_TotalDeadlkFailures

This policy monitors the number of deadlock failures occurred since the server was started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 015 - Total Deadlock Failures

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers→ en → Microsoft\_Office\_ Communications\_Server→Microsoft\_Lync\_Server\_2010→ Registrar

#### LS\_Registrar\_TotalDeadLks

This policy monitors the number of deadlocks occurred since the server started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 013 - Total Deadlocks

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 Registrar

#### LS\_Registrar\_TotalDroppedRequests

This policy monitors the number of requests dropped by the database layer as they will time out.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 014 - Total Dropped Requests

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 Registrar

# LS\_Registrar\_TotalFatalSQLErrors

This policy monitors the number of fatal SQL errors occurred since the server started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 019 - Total fatal SQL errors

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

## LS\_Registrar\_TotalODBCTimeoutFailures

This policy monitors the number of ODBC timeout failures occurred since the server was started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 017 - Total ODBC Timeout Failures

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

# LS\_Registrar\_TotalSevereSQLErrors

This policy monitors the number of severe SQL errors occurred since the server started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 018 - Total severe SQL errors

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_TotalThrottledRequests

This policy monitors the number of requests rejected with a message to retry after some time because of high database queue latency.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 021 - Total throttled requests

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

# **GoldenMetrics**

The GoldenMetrics policy group is a sub set of the General policy group. This sub-group contains policies mandatory for monitoring the Microsoft Lync Server 2010. You must deploy these policies on the Registrar Server.

#### LS\_Registrar\_EndpointsDisconnected

This policy monitors the number of endpoints that are disconnected because of missed keep-alives.

Performance Object: LS:USrv - 12 - Register

Instance: All instances.

Counter: USrv - 011 - Endpoints Disconnected

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 Registrar

#### LS\_Registrar\_IndirectEndpointsDisconnected

This policy monitors the number of indirect endpoints that are disconnected because of error responses.

Performance Object: LS:USrv - 12 - Register

Instance: All instances.

Counter: USrv - 012 - Indirectly Connected Endpoints Disconnected

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_QueueDepth

This policy monitors the average number of database requests to execute.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 000 - Queue Depth

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 Registrar

#### LS\_Registrar\_QueueLatency

This policy monitors the average time (in milliseconds) a request is held in database queue.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 002 - Queue Latency (msec)

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_ThrottledRequests

This policy monitors the number of requests rejected in a second with a message to retry later because of the high database latency.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 020 - Throttled requests/sec

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every 15 minutes.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010 Registrar

## LS\_Registrar\_TotalDeadlkFailures

This policy monitors the number of deadlock failures occurred since the server was started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 015 - Total Deadlock Failures

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

# LS\_Registrar\_TotalDeadLks

This policy monitors the number of deadlocks occurred since the server started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 013 - Total Deadlocks

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

*Policy Type:* Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_TotalDroppedRequests

This policy monitors the number of requests dropped by the database layer as they will time out.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 014 - Total Dropped Requests

*Threshold:* This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

Policy Group: SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

## LS\_Registrar\_TotalFatalSQLErrors

This policy monitors the number of fatal SQL errors occurred since the server started.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 019 - Total fatal SQL errors

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

#### LS\_Registrar\_TotalThrottledRequests

This policy monitors the number of requests rejected with a message to retry after some time because of high database queue latency.

Performance Object: LS:USrv - 00 - REGDBStore

Instance: All instances.

Counter: USrv - 021 - Total throttled requests

Threshold: This policy has the following threshold:

Critical: 20

Schedule: This policy runs every one hour.

Policy Type: Measurement Threshold policy

*Policy Group:* SPI for Microsoft Enterprise Servers— en — Microsoft\_Office\_ Communications\_Server\_Microsoft\_Lync\_Server\_2010— Registrar

# Microsoft Enterprise Servers SPI Microsoft Lync Server 2010 Graphs

The graphs are pictorial representation of the various metrics. Graphs contain data that are collected by policies.

The Microsoft Lync Server 2010 SPI graphs are as follows:

# Front End Service CPU statistics

The Front End Service CPU statistics graph shows the CPU statistics of the Front End service compared with overall CPU statistics of the system. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the Front End service is utilizing the processor time.

This graph uses the data collected by the LS\_FrontEndService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# Web Conferencing Service CPU statistics

The Web Conferencing Service CPU statistics graph shows the CPU statistics of the web conferencing service compared with overall CPU statistics of the system. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the web conferencing service is utilizing the processor time.

This graph uses the data collected by the LS\_WebConfService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# **IM Conferencing Service CPU statistics**

The IM Conferencing Service CPU statistics graph shows the CPU statistics of the IM conferencing service compared with overall CPU statistics of the system. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the IM conferencing service is utilizing the processor time.

This graph uses the data collected by the LS\_IMConfService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# Audio/Video Conferencing Service CPU statistics

The Audio/Video Conferencing Service CPU statistics graph shows the CPU statistics of the audio/video conferencing service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the audio/video conferencing service is utilizing the processor time.

This graph uses the data collected by the LS\_AVConfService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# Access Edge Service CPU statistics

The Access Edge Service CPU statistics graph shows the CPU statistics of the access edge service compared with overall CPU statistics of the system, in graphical format. The summarized

process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the access edge service is utilizing the processor time.

This graph uses the data collected by the LS\_AccessEdgeService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# Audio/Video Edge Service CPU statistics

The Audio/Video Edge Service CPU statistics graph shows the CPU statistics of the audio/video edge service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the audio/video edge service is utilizing the processor time.

This graph uses the data collected by the LS\_AVEdgeService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# Audio/Video Authentication Service CPU statistics

The Audio/Video Authentication Service CPU statistics graph shows the CPU statistics of the audio/video authentication service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the audio/video authentication service is utilizing the processor time.

This graph uses the data collected by the LS\_AVAuthService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# Web Conferencing Edge Service CPU statistics

The Web Conferencing Edge Service CPU statistics graph shows the CPU statistics of the web conferencing edge service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the web conferencing edge service is utilizing the processor time.

This graph uses the data collected by the LS\_WebEdgeService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

# Archiving and CDR Service CPU statistics

The Archiving and CDR Service CPU statistics graph shows the CPU statistics of the Archiving and CDR service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the Archiving and CDR service is utilizing the processor time.

This graph uses the data collected by the LS\_ArchivingCDRService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Mediation Service CPU statistics

The Mediation Service CPU statistics graph shows the CPU statistics of the mediation service compared with overall CPU statistics of the system, in graphical format. The summarized process statistics include the percentage of CPU time used by the service compared with the percentage of time the system's CPU was busy. The graph helps you to determine to what extent the mediation service is utilizing the processor time.

This graph uses the data collected by the LS\_MediationService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### **Front End Service Memory Statistics**

The Front End Service Memory Statistics graph shows the memory statistics of the front end service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the front end service.

This graph uses the data collected by the LS\_FrontEndService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Web Conferencing Service Memory Statistics

The Web Conferencing Service Memory Statistics graph shows the memory statistics of the web conferencing service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the web conferencing service.

This graph uses the data collected by the LS\_WebConfService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### **IM Conferencing Service Memory Statistics**

The IM Conferencing Service Memory Statistics graph shows the memory statistics of the IM conferencing service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the web conferencing service.

This graph uses the data collected by the LS\_IMConfService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Audio/Video Conferencing Service Memory Statistics

The Audio/Video Conferencing Service Memory Statistics graph shows the memory statistics of the audio/video conferencing service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the audio/video conferencing service.

This graph uses the data collected by the LS\_AVConfService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Access Edge Service Memory Statistics

The Access Edge Service Memory Statistics graph shows the memory statistics of the access edge service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the access edge service.

This graph uses the data collected by the LS\_AccessEdgeService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Audio/Video Edge Service Memory Statistics

The Audio/Video Edge Service Memory Statistics graph shows the memory statistics of the audio/video edge service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the audio/video edge service.

This graph uses the data collected by the LS\_AVEdgeService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Audio/Video Authentication Service Memory Statistics

The Audio/Video Authentication Service Memory Statistics graph shows the memory statistics of the audio/video authentication service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the audio/video authentication service.

This graph uses the data collected by the LS\_AVAuthService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Web Conferencing Edge Service Memory Statistics

The Web Conferencing Edge Service Memory Statistics graph shows the memory statistics of the web conferencing edge service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the web conferencing edge service.

This graph uses the data collected by the LS\_WebEdgeService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Archiving and CDR Service Memory Statistics

The Archiving and CDR Service Memory Statistics graph shows the memory statistics of the Archiving and CDR service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the Archiving and CDR service.

This graph uses the data collected by the LS\_ArchivingCDRService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### **Mediation Service Memory Statistics**

The Mediation Service Memory Statistics graph shows the memory statistics of the mediation service in graphical format. The summarized process statistics include the page faults per second, private bytes, and working set used by the mediation service.

This graph uses the data collected by the LS\_MediationService\_Logging policy. In the data store of the node, the LS\_PROCESS table is used to construct this graph.

#### Authentication failures/sec on Audio/Video Edge Server

The Authentication failures/sec on Audio/Video Edge Server graph shows the authentication failures per sec over UDP and TCP on the A/V Edge Server

This graph uses the data collected by the LS\_AVEdgeServer\_Logging policy. In the data store of the node, the LS\_AVEDGE table is used to construct this graph.

#### SQL Back End Latency Experienced By Front End Server

The SQL Back End Latency Experienced By Front End Server graph shows the amount of time that a request spent in the queue to the SQL back end and the time taken by the SQL backend to process a request. If either the queue latency or processing latency is high, the front end will start throttling requests to the back end.

This graph uses the data collected by the LS\_FrontEndServer\_Logging policy. In the data store of the node, the LS\_FRONTEND table is used to construct this graph.

#### Average Holding Time for Incoming Messages on Front End Server

The Average Holding Time for Incoming Messages on Front End Server graph shows the average holding time for incoming messages on the front end server. A high value indicates that the front end server is overloaded and unable to process the requests on time.

This graph uses the data collected by the LS\_FrontEndServer\_Logging policy. In the data store of the node, the LS\_FRONTEND table is used to construct this graph.

#### Front End Server Availability and Connectivity

The Front End Server Availability and Connectivity graph shows the Local 503 Responses/sec on the front end server. The 503 code indicates that the server is unavailable while the 504 code indicates connectivity problems with other servers.

This graph uses the data collected by the LS\_FrontEndServer\_Logging policy. In the data store of the node, the LS\_FRONTEND table is used to construct this graph.

#### Sends Outstanding on Front End Server

The Sends Outstanding on Front End Server graph shows the Sends Outstanding on the front end server. A high value means that a large number of requests and responses are queued outbound and could be due to network latency issues or a problem with a remote server.

This graph uses the data collected by the LS\_FrontEndServer\_Logging policy. In the data store of the node, the LS\_FRONTEND table is used to construct this graph.

# Average Incoming Message Processing Time on Access Edge Server

The Average Incoming Message Processing Time on Access Edge Server graph shows the Average Incoming Message Processing Time on the Access Edge Server . High values indicate that the Access Edge Server is overloaded and unable to process the requests on time.

This graph uses the data collected by the LS\_AccessEdgeServer\_Logging policy. In the data store of the node, the LS\_ACCESSEDGE table is used to construct this graph.

#### Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server

The Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server graph shows the client requests errors/sec, client send request errors/sec and the idle sessions timed-out/sec over UDP on the Audio/Video Edge Server. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you can increase the session idle timeout parameter.

This graph uses the data collected by the LS\_AVEdgeServer\_Logging policy. In the data store of the node, the LS\_AVEDGE table is used to construct this graph.

#### Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server

The Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server graph shows the client requests errors/sec, client send request errors/sec and the idle sessions timed-out/sec over TCP on the Audio/Video Edge Server. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you can increase the session idle timeout parameter.

This graph uses the data collected by the LS\_AVEdgeServer\_Logging policy. In the data store of the node, the LS\_AVEDGE table is used to construct this graph.

### Microsoft Enterprise Servers SPI Microsoft Lync Server 2010 Tools

The Microsoft Enterprise SPI provides the following tools for Microsoft Lync Server 2010.

### **Create Datasource for Lync Server 2010**

The Create Datasource for Lync Server 2010 tool creates databases into the HP Operations agent's data store (embedded performance component-also known as CODA).

If you use Performance Agent as the data store, data source creation and data logging happens in Performance Agent, by default. There is no additional configuration required.

If you do not have the HP Performance Agent installed in your environment, the tool creates databases into CODA.

To launch the Create Datasource tool, follow these steps:

- In the console tree, expand Tools 
   — SPI for Microsoft Enterprise Servers
   — Lync Server
   2010.
- 2. Double-click the **Create Datasource for Lync Server 2010** tool in the details pane. The Create Datasource window opens.
- 3. Select the nodes on which you want to run the tool, and then click **Launch**. If the tool is successfully launched on the selected nodes, the Tool Status window opens and displays the status.

To create data sources and to log data into CODA, while the HP Performance Agent is installed, follow these steps:

- 1. Create a folder dsi2ddf in the path %OvAgentDir%\Conf, if it does not exist.
- 2. Create an empty file nocoda.opt
- 3. Enter the names of the data sources that are to be logged in the HP Performance agent in the nocoda.opt file. Do not enter the names of the data source in the nocoda.opt file that should be logged in CODA. The name of the Lync Server data source is 'CS'. If you want the Lync Server data source to be created in CODA, while the HP PA is also installed, then exclude "CS" from the nocoda.opt file.

### **Configure Edge server Discovery for Lync Server 2010**

The **Configure Edge server Discovery for Lync Server 2010** tool stores user information required to run the LS\_Discovery policy on the Edge Server in an encrypted format. The SPI Discovery instrumentation reads the user information that is stored on the Edge Server.

To know more about the User Information, see section on LS\_DiscoveryPolicy

### Microsoft Enterprise Servers SPI Microsoft Lync Server 2010 Reports

The Microsoft Enterprise Servers SPI for Microsoft Lync Server 2010 has the following reports:

#### LS2K10 Front End Service CPU Stat

The LS2K10 Front End Service CPU Stat report shows CPU statistics of the front end service compared with overall CPU statistics of the system, in graphical and tabular format. The summarized process statistics include the percentage of CPU time used by the front end service compared with the percentage of time the system's CPU was busy.

#### LS2K10 IM Conferencing Service CPU Stat

The LS2K10 IM Conferencing Service CPU Stat report shows CPU statistics of the IM conferencing service compared with overall CPU statistics of the system, in graphical and tabular format. The summarized process statistics include the percentage of CPU time used by the IM conferencing compared with the percentage of time the system's CPU was busy.

#### LS2K10 Access Edge Service CPU Stat

The LS2K10 Access Edge Service CPU Stat report shows CPU statistics of the access edge service compared with overall CPU statistics of the system, in graphical and tabular format. The summarized process statistics include the percentage of CPU time used by the access edge compared with the percentage of time the system's CPU was busy.

#### LS2K10 Front End Service Memory Stat

The LS2K10 Front End Service Memory Stat report shows summary memory statistics of the front end service in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the front end service.

#### LS2K10 IM Conferencing Service Memory Stat

The LS2K10 IM Conferencing Service Memory Stat report shows summary memory statistics of the IM conferencing service in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the IM conferencing service.

#### LS2K10 Access Edge Service Memory Stat

The LS2K10 Access Edge Service Memory Stat report shows summary memory statistics of the access edge service in graphical and tabular format. The summarized process statistics include the page faults per second, private bytes, and working set used by the access edge service.

#### LS2K10 SQL Back End Lat Exp by Front End Server

The LS2K10 SQL Back End Lat Exp by Front End Server report shows the amount of time that a request spent in the queue to the SQL back end and the amount of time taken by the back end to process in graphical (line graph) and tabular format. If either the queue latency or processing latency is high, the front end will start throttling requests to the back end.

#### LS2K10 Avg Hold Time for In Msg Front End Server

The LS2K10 Avg Hold Time for In Msg Front End Server report shows the average holding time for incoming messages on the front end server in graphical (line graph) and tabular format. A high value indicates that the front end server is overloaded and unable to process the requests on time.

#### LS2K10 Front End Server Avail and Conn

The LS2K10 Front End Server Avail and Conn report shows the Local 503 Responses/sec and the Local 504 Responses/sec on the front end server in graphical (line graph) and tabular format. The 503 code indicates that the server is unavailable while the 504 code indicates that there are connectivity problems with other servers.

#### LS2K10 Sends Outstanding on Front End Server

The LS2K10 Sends Outstanding on Front End Server report shows the Sends Outstanding on the front end server in graphical (line graph) and tabular format. A high value means that a large number of requests and responses are queued outbound and this could be due to network latency issues or a problem with a remote server.

### LS2K10 Avg Inc Msg Proc Time Access Edge Server

The LS2K10 Avg Inc Msg Proc Time Access Edge Server report needs to depict the average incoming message processing time on the access edge server in graphical (line graph) and tabular format. High values indicate that the access edge server is overloaded and unable to process the requests on time.

#### LS2K10 Client Request Err UDP AV Edge Server

The LS2K10 Client Request Err UDP AV Edge Server report shows the client request errors/sec, client send request errors/sec and the idle sessions timed-out/sec over UDP on the Audio/Video Edge Server in graphical and tabular format. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you may need to increase the session idle timeout parameter.

#### LS2K10 Client Request Err TCP AV Edge Server

The LS2K10 Client Request Err TCP AV Edge Server report shows the client requests errors/sec, client send request errors/sec and the idle sessions timed-out/sec over TCP on the Audio/Video Edge Server in graphical and tabular format. High values of client request errors/sec and client send request errors/sec can indicate network latency issues. If a large number of sessions time out per second, then you may need to increase the session idle timeout parameter.

### **CODA Table Details for Microsoft Lync Server 2010**

The Microsoft Enterprise SPI creates the following CODA tables for Microsoft Lync Server 2010 metrics in the data store on the node to facilitate the data-collection procedure.

Table and Policy	Metrics/Performance Counter	Data Store Column and Description	Metric Data Type CODA/PA
CS_ ACCESSEDGE LS_ AccessEdge_ DataLogging	SIP - 021 - Average Incoming Message Processing Time	AVINCMSGPROCTIME- Average processing time for incoming messages on a Lync Edge Server	REAL64 / PRECISION 2

#### CODA Details of Measurement Threshold Policies

		1	·
CS_AVEDGE LS_AVEdge_ DataLogging	A/V Edge - 008 - Authentication Failures/sec	UDPAUTHFAILURES - The per-second rate of failed attempts to authenticate with the relay over UDP	REAL64 / PRECISION 2
Clie Err Re: A/A Clie Err A/A See Tin A/A See Tin A/A Clie Err Re: A/A Clie Err Re: A/A Clie Err	A/V Edge - 014 - Client Request Errors/sec (4xx Responses/sec)	UDPCLIENTREQERR - The per-second rate of client request errors over UDP	REAL64 / PRECISION 2
	A/V Edge - 016 - Client Send Request Errors/sec	UDPCLIENTSENDERR-The per-second rate of client send request errors over UDP	REAL64 / PRECISION 2
	A/V Edge - 019 - Session Idle Timeouts/sec	UDPSESSIONTIMEOUTS- The per-second rate of idle sessions that have timed out over UDP.	REAL64 / PRECISION 2
	A/V Edge - 008 - Authentication Failures/sec	TCPAUTHFAILURES - The per-second rate of failed attempts to authenticate with the relay over TCP.	REAL64 / PRECISION 2
	A/V Edge - 015 - Client Request Errors/sec (4xx Responses/sec)	TCPCLIENTREQERR-The per-second rate of client request errors over TCP.	REAL64 / PRECISION 2
	A/V Edge - 017 - Client Send Request Errors/sec	TCPCLIENTSENDERR-The per-second rate of client send request errors over TCP	REAL64 / PRECISION 2

CS_ FRONTEND LS_FrontEnd_ DataLogging	Usrv - 002 - Queue Latency (msec)	QUEUELATENCY-The average time (in milliseconds) a request is held in the database queue.	REAL64 / PRECISION 2
	Usrv - 004 - Sproc Latency (msec)	SPROCLATENCY-The average time (in milliseconds) it takes to execute a sproc call.	REAL64 / PRECISION 2
	SIP - 000 - Average Holding Time For Incoming Messages	HOLDINGTIMEFORINCMSG- The average time that the server held the incoming messages currently being processed.	REAL64 / PRECISION 2
	SIP - 055 - Local 503 Responses/sec	LOCAL503RESPONSES-The per-second rate of 503 responses generated by the server.	REAL64 / PRECISION 2
	SIP - 057 - Local 504 Responses/sec	LOCAL504RESPONSES -The per-second rate of 504 responses generated by the server.	REAL64 / PRECISION 2
	SIP - 017 - Sends Outstanding	SENDSOUTSTANDING-The number of messages that are currently present in the outgoing (send) queues.	REAL64 / PRECISION 2

CS_PROCESS	Name of the Process - Working Set	Instance Name - WORKINGSET - Working Set is the current size, in bytes, of the Working Set of this process.	REAL64 / PRECISION 2
	Name of the Process - Page Faults/sec	Instance Name - PAGEFAULTS - The rate at which page faults by the threads executing in this process are occurring.	REAL64 / PRECISION 2
	Name of the Process - Private Bytes	Instance Name - PRIVATEBYTES - Private Bytes is the current size, in bytes, of memory that this process has allocated that cannot be shared with other processes.	REAL64 / PRECISION 2
	Name of the Process - Thread Count	Instance Name - THREADCOUNT - The number of threads currently active in this process.	REAL64 / PRECISION 2
	Name of the Process - % Processor Time	Instance Name - PCTPROCESSORTIME - % Processor Time is the percentage of elapsed time that all of process threads used the processor to execution instructions	REAL64 / PRECISION 2
	Name of the Process - % Processor Time (_ Total)	Instance Name - SYSPCTPROCESSORTIME - % Processor Time utilized by all processes in memory at the given time	REAL64 / PRECISION 2

### **Data Store Details for Graphs**

The Microsoft Enterprise SPI creates the following data store details for graphs for Microsoft Lync Server 2010.

#### **Data Store for Graphs**

Graph Name	Policy Logging Data	Spec File	Data Store/ Data Class
Front End Service CPU Statistics	LS_FrontEnd_ Logging	CS_PROCESS.spec	CS_PROCESS

Web Conferencing Service CPU Statistics	LS_WebConf_	CS_PROCESS.spec	CS_PROCESS
	Logging		
IM Conferencing Service CPU Statistics	LS_IMConf_ Logging	CS_PROCESS.spec	CS_PROCESS
Audio/Video Conferencing Service CPU Statistics	LS_AVConf_ Logging	CS_PROCESS.spec	CS_PROCESS
Access Edge Service CPU Statistics	LS_ AccessEdge_ Logging	CS_PROCESS.spec	CS_PROCESS
Audio/Video Edge Service CPU Statistics	LS_AVEdge_ Logging	CS_PROCESS.spec	CS_PROCESS
Audio/Video Authentication Service CPU Statistics	LS_AVAuth_ Logging	CS_PROCESS.spec	CS_PROCESS
Web Conferencing Edge Service CPU Statistics	LS_WebEdge_ Logging	CS_PROCESS.spec	CS_PROCESS
Archiving and CDR Service CPU Statistics	LS_Archiving_ Logging	CS_PROCESS.spec	CS_PROCESS
Mediation Service CPU Statistics	LS_Mediation_ Logging	CS_PROCESS.spec	CS_PROCESS
Front End Service Memory Statistics	LS_FrontEnd_ Logging	CS_PROCESS.spec	CS_PROCESS
Web Conferencing Service Memory Statistics	LS_WebConf_ Logging	CS_PROCESS.spec	CS_PROCESS
IM Conferencing Service Memory Statistics	LS_IMConf_ Logging	CS_PROCESS.spec	CS_PROCESS
Audio/Video Conferencing Service Memory Statistics	LS_AVConf_ Logging	CS_PROCESS.spec	CS_PROCESS
Access Edge Service Memory Statistics	LS_ AccessEdge_ Logging	CS_PROCESS.spec	CS_PROCESS
Audio/Video Edge Service Memory Statistics	LS_AVEdge_ Logging	CS_PROCESS.spec	CS_PROCESS
Audio/Video Authentication Service Memory Statistics	LS_AVAuth_ Logging	CS_PROCESS.spec	CS_PROCESS
Web Conferencing Edge Service Memory Statistics	LS_WebEdge_ Logging	CS_PROCESS.spec	CS_PROCESS

Archiving and CDR Service Memory Statistics	LS_Archiving_ Logging	CS_PROCESS.spec	CS_PROCESS
Mediation Service Memory Statistics	LS_Mediation_ Logging	CS_PROCESS.spec	CS_PROCESS
SQL Back End Latency Experienced by Front End Server	LS_FrontEnd_ DataLogging	CS_ FRONTEND.spec	CS_ FRONTEND
Average Holding Time for Incoming Messages on Front End Server	LS_FrontEnd_ DataLogging	CS_ FRONTEND.spec	CS_ FRONTEND
Front End Server Availability and Connectivity	LS_FrontEnd_ DataLogging	CS_ FRONTEND.spec	CS_ FRONTEND
Sends Outstanding on Front End Server	LS_FrontEnd_ DataLogging	CS_ FRONTEND.spec	CS_ FRONTEND
Average Incoming Message Processing Time on Access Edge Server	LS_ AccessEdge_ DataLogging	CS_ ACCESSEDGE.spec	CS_ ACCESSEDGE
Client Request Errors and Timed Out Sessions over UDP on Audio/Video Edge Server	LS_AVEdge_ DataLogging	CS_AVEDGE.spec	CS_AVEDGE
Client Request Errors and Timed Out Sessions over TCP on Audio/Video Edge Server	LS_AVEdge_ DataLogging	CS_AVEDGE.spec	CS_AVEDGE
Authentication failures/sec on Audio/Video Edge Server	LS_AVEdge_ DataLogging	CS_AVEDGE.spec	CS_AVEDGE

### Report, Report Table, Data Store, and Policy Mapping Details

The Microsoft Enterprise SPI creates the following data tables in the data store on the node to facilitate the data-collection procedure. The data store class creator can be created by using the tool Create Data Sources.

#### **Data Store**

Report Name	Report Table	Data Store Class Name	Policy Logging Data
LS2K10 Front End Service CPU Stat	CS_PROCESS	CS_PROCESS	LS_FrontEnd_ Logging
LS2K10 IM Conferencing Service CPU Stat	CS_PROCESS	CS_PROCESS	LS_IMConf_Logging

			,
LS2K10 Access Edge Service CPU Stat	CS_PROCESS	CS_PROCESS	LS_AccessEdge_ Logging
LS2K10 Front End Service Memory Stat	CS_PROCESS	CS_PROCESS	LS_FrontEnd_ Logging
LS2K10 IM Conferencing Service Memory Stat	CS_PROCESS	CS_PROCESS	LS_IMConf_Logging
LS2K10 Access Edge Service Memory Stat	CS_PROCESS	CS_PROCESS	LS_AccessEdge_ Logging
LS2K10 SQL Back End Lat Exp by Front End Server	CS_ FRONTEND	CS_ FRONTEND	LS_FrontEnd_ DataLogging
LS2K10 Avg Hold Time for In Msg Front End Server	CS_ FRONTEND	CS_ FRONTEND	LS_FrontEnd_ DataLogging
LS2K10 Front End Server Avail and Conn	CS_ FRONTEND	CS_ FRONTEND	LS_FrontEnd_ DataLogging
LS2K10 Sends Outstanding on Front End Server	CS_ FRONTEND	CS_ FRONTEND	LS_FrontEnd_ DataLogging
LS2K10 Avg Inc Msg Proc Time Access Edge Server	CS_ ACCESSEDGE	CS_ ACCESSEDGE	LS_AccessEdge_ DataLogging
LS2K10 Client Request Err UDP AV Edge Server	CS_AVEDGE	CS_AVEDGE	LS_AVEdge_ DataLogging
LS2K10 Client Request Err TCP AV Edge Server	CS_AVEDGE	CS_AVEDGE	LS_AVEdge_ DataLogging

# Chapter 9

## **Microsoft Enterprise Servers SPI Tools**

The Microsoft Enterprise Servers SPI has the following tools:

- MSES\_BTS\_DB\_Configuration
- Self-Healing Info
- Self-Healing Verification
- Create Datasource for SharePoint Server 2010
- Create Datasource for BizTalk Server 2010
- BTS 2010 Enable Trace
- BTS 2010 Cluster Config

## MSES\_BTS\_DB\_Configuration

The MSES\_BTS\_DB\_Configuration tool is used to configure the Microsoft BizTalk Server.

The BizTalk Server 2006 stores data in SQL server instead of the WMI CIMV2 database. The the Microsoft Enterprise Servers SPI must connect to the BizTalk Server's SQL database to collect the related data it needs.

Before running Discovery, the HPOM administrator must configure the SQL database for all nodes with BizTalk Server installed. Windows integrated security (SSPI mode) does not workif the SQL authentication mode is set for SQL server. If SQL authentication is "users /", the HPOM console needs to know the SQL user name and password. To connect to SQL server If you If you choose to customize one or more policies after deploying them, ensure to redeploy the policies after customizing them. even when it is in SQL authentication mode, the HPOM administrator can use the MSES\_BTS\_DB\_Configuration tool to store the corresponding SQL server name, and the SQL user name and password's value is considered.

For more details on the MSES\_BTS\_DB\_Configuration tool, see Additional Configuration Procedure section of HP Operations Smart Plug-in for Microsoft Enterprise Servers Installation and Configuration Guide.

### Self-Healing Info

The Self-Healing Info tool runs the Microsoft Enterprise Servers SPI data collector on the selected nodes.

### **Self-Healing Verification**

The Self-Healing Verification tool verifies the version of the Microsoft Enterprise Servers SPI components.

### **Create Datasource for SharePoint Server**

The Create Datasource for SharePoint Server tool is launched to configure data sources for data logging in the SharePoint Server 2010. The name of data source configured using this tool is SharePoint\_Server.

### **Create Datasource for BizTalk Server**

The Create Datasource for BizTalk Server tool is launched to configure data sources for data logging in the BizTalk Server. The name of the data source configured using this tool is MSES\_BIZTALKSERVER\_INTERVAL.

### **BTS 2010 Create Datasource**

This tool configures the datasource for BizTalk Server 2010. The name of the datasource is BTS\_Data. By default, the datasource is created by CODA.

### **Create Datasource for ISA Server**

The Create Datasource for ISA Server tool is launched to configure data sources for data logging in the ISA server. The name of the data source configured using this tool is ISAServer2006. It is mandatory to run the tools before assigning and deploying the policies on the specific Microsoft Enterprise Server nodes.

### **BTS 2010 Enable Trace**

This tool can be used to enable tracing for the BizTalk SPI data collector. By enabling tracing, you can collect the troubleshooting information. This tool can be run on all BizTalk Server 2010 nodes. This tool set the trace level on the managed node. You must pass the following parameters as the trace level:

\$Trace Level - An integer value between 0 to 4, with 0 being the minimum and 4 being the maximum

The possible trace levels are as follows:

- 0 No errors are logged. If no tracel levels are passes, this is the default value.
- 1 Warnings. All errors and warnings are logged.
- 3 Debug. Apart from all other information, all debug trace statements are also logged.
- 4 Verbose. All trace statements are logged

**Note:** The log files are created in the **%OvDataDir%\bin\BTS\log** folder . Separate log files are created for each collection. All trace files have the prefix **BTS**.

### **BTS 2010 Cluster Config**

This tool generates the **apminfo.xml** file. This file provides necessary information to enable the Microsoft Enterprise SPI to identify and monitor BizTalk Server 2010 cluster nodes in the environment.

To run this tool, follow these steps:

- In the HPOM console tree, click Tools --> SPI for Microsoft Enterprise Servers --> BizTalk Server.
- Select the BTS 2010 Cluster Config tool.
- In the details pane, double-click Exchange Cluster Configuration . The Select where to launch this tool dialog box opens.
- Click Launch. The Tool Status window opens and displays the output under the Tool Output section.
- Select and copy the text content under the Tool Output section to a text editor. Save the text as **apminfo.xml** in the following locations on cluster nodes of BizTalk Server 2010 cluster:
  - For DCE-managed nodes—%OvAgentDir%\conf\OpC\
  - For HTTPS-managed nodes—%OvAgentDir%conf\conf\

Note: If the folder does not exist, create the folder manually.

- You can use the following commands to stop and start the agents:
  - opcagt -kill
  - opcagt -start

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