# HP Operations Smart Plug-in for $\mathsf{Microsoft}^{\mathbb{R}}$ Enterprise Servers

for HP Operations Manager for HP-UX, Linux, and Solaris

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Reference Guide

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# 1 Introduction

The HP Operations Smart Plug-in for Microsoft Enterprise Servers (Microsoft Enterprise Servers SPI) helps you to manage the Microsoft Enterprise Servers in your environment. The Microsoft Enterprise Servers SPI provides information about the following Microsoft Enterprise Servers:

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

Microsoft Enterprise Servers SPI for 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 Enterprise Servers SPI for 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 the following services:

- **Topology/Service Mapping:** Discovers and maps Microsoft Enterprise Servers on your network. The service map displays the servers and shows the dependencies to other systems.
- **Availability Monitoring:** Monitors the services that need to run to ensure complete availability of your Microsoft Enterprise Servers.
- **Performance Monitoring:** Monitors Windows performance counters and notifies you if thresholds are exceeded.
- Event Log Monitoring: Monitors the Windows Event Logs.
- **Reporting and Graphing:** Creates reports and graphs that show historical data and trend information based on the data logged. This can be used for capacity planning and SLA compliance.
- Troubleshooting assistance with the Self Healing Info tool.

## Components of Microsoft Enterprise Server SPI

The components of Microsoft Enterprise Server SPI are as follows:

#### **Policies**

Policies are pre-defined thresholds to constantly monitor the Microsoft Enterprise Server environment and improve monitoring schedules in the form of service map alerts and messages. Service map alerts appear in the service map and messages are available in the message browser. A color code indicates the severity level of each message—minor, major, or critical. The messages indicate the problem and help you to take preventive action.

#### Tools

Tools are the utilities to configure and gather Microsoft Enterprise Server related information. Self Healing tools are used to troubleshoot any of the Microsoft Enterprise Servers. The *MSES\_BTS\_DB\_Configuration* and *Create Datasource for BizTalk Server* tools are used to configure the BizTalk Server. The *Create Datasource for ISA Server tool* is used to create data sources for the ISA Server of the Microsoft Enterprise Servers SPI.

#### Reports

Reports represent various metrics of Microsoft Enterprise Servers. Data collected by the Microsoft Enterprise Servers SPI are used to generate reports.

#### Graphs

Graphs are pictorial representations of various metrics of the Microsoft Enterprise Servers. Graphs contain the data collected by Microsoft Enterprise Servers SPI.

Reports and graphs are generated using HP Reporter and HP Performance Manager. The graphs and reports provide you an overview to determine corrective actions to be taken for problems.

# 2 Microsoft Enterprise Servers SPI for BizTalk Server 2006

Microsoft BizTalk Server provides distributed application integration services using XML as the primary messaging format. The external formats are converted to the BizTalk standards using parsers and BizTalk mapping services. Parsers and BizTalk mapping services are components of BizTalk Messaging Services.

The Biztalk Orchestration Designer defines the process that a document undergoes. In BizTalk messaging, channels convert the external formats and ports transmit the documents. The channels and ports can be configured to receive and transmit documents in a variety of formats and protocols, such as HTTP, HTTPS, SMTP, and COM. In Orchestration services, 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.

You can use the MSES\_BTS\_DB\_Configuration tool to configure the Microsoft Enterprise Servers SPI for BizTalk Server 2006. For more information, 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.* 

#### **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 Availability Monitoring group monitors services of the Microsoft BizTalk Server. If any of the services is not running and service startup is set to Operator initiated action, you can start the service from the operator interface. The policy also sends a console error message to indicate that service is not running.

Monitored services of BizTalk Server include:

- BizTalk Server Application Service
- BizTalk RuleEngineUpdate Service

• Enterprise Single Sign-On

The Availability Monitoring group includes the EBIZ\_BizTalkServerServices policy.

#### EBIZ\_BizTalkServerServices policy

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

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

The following table lists the details of the EBIZ\_BizTalkServerServices policy.

Schedule	Policy Type	Policy Group
Runs every 5 minutes	Windows Management Interface policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Manual-Deploy

#### Performance Monitoring

BizTalk Server Performance Monitoring includes specific BizTalk Server performance counters and CPU process-related counters. Each policy for performance monitoring has error and warning thresholds. The Performance Monitoring policies monitor the CPU and Memory usage.

The Performance Monitoring policies are available at the following location:

#### SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Manual-Deploy

The following table lists the policies in the Performance Monitoring group.

Policy	Description	Policy Type
EBIZ_BS-MEMUsage- BTSSvc	Measures memory usage of the Microsoft BizTalk Server Application services	Measurement Threshold policy
EBIZ_BS-CPUUsage- BTSSvc	Measures CPU usage of the Microsoft BizTalk Server Application services.	Measurement Threshold policy
EBIZ_BS-MEMUsage- ENTSSO	Measures memory usage of Enterprise Single Sign-On service.	Measurement Threshold policy
EBIZ_BS-CPUUsage- ENTSSO	Measures CPU usage of the Enterprise Single Sign-On service.	Measurement Threshold policy
MSES_SendPort_Stat us_Monitoring	Monitors status of the SendPorts in the Microsoft BizTalk Server.	Scheduled Task policy
MSES_ReceiveLocatio n_Status_Monitoring	Monitors status of the ReceiveLocations of BizTalk Server.	Windows Management Interface policy
MSES_BS_ DocsProcessed	Monitors the average number of documents pulled from the Work queue and sent to a port destination address per second, since the last time the BizTalk Messaging Service started.	Measurement Threshold policy

Policy	Description	Policy Type
MSES_BS_ DocReceived		
MSES_BS_DocsSuspe nded	Monitors the average number of documents suspended per second in the suspended queue.	Measurement Threshold policy
MSES_BS_DBTransac tions	Monitors the average number of database transactions performed per second since the host instance started.	Measurement Threshold policy
MSES_BS_ActiveApp Domains	Monitors the number of application domains currently existing for hosting orchestrations.	Measurement Threshold policy
MSES_BS_Dehydratio nThreshold		
MSES_BS_IdleOrches trations	Monitors the number of idle orchestration instances currently hosted by the host instance. This refers to orchestrations that are not making progress but are also not dehydratable, as when the orchestration is blocked waiting for a receive, listen, or delay in an atomic transaction.	Measurement Threshold policy
MSES_BS_Orchestrat ionsCompleted	Monitors the average number of orchestration instances completed per second since the host instance started.	Measurement Threshold policy
MSES_BS_Orchestrat ionsCreated	Monitors the average number of orchestration instances per second created since the host instance started.	Measurement Threshold policy
MSES_BS_Orchestrat ionsDehydrated	Monitors the average number of orchestration instances dehydrated per second since the host instance started.	Measurement Threshold policy
MSES_BS_Orchestrat ionsDiscarded	Monitors the average number of orchestration instances discarded per second from memory since the host instance started. An orchestration can be discarded if the engine fails to persist its state.	Measurement Threshold policy
MSES_BS_Orchestrat ionsRehydrated	Monitors the average number of orchestration instances rehydrated per second (restoring the instance from the database to memory) since the host instance started.	Measurement Threshold policy
MSES_BS_Orchestrat ionsResidentinMemor y	Monitors the number of orchestration instances currently hosted by the host instance.	Measurement Threshold policy
MSES_BS_Orchestrat ionsScheduledForDeh ydration	Monitors the number of dehydratable orchestrations having a dehydration request pending.	Measurement Threshold policy
MSES_BS_Orchestrat ionsSuspended	Monitors the average number of orchestration instances suspended per second since the host instance started.	Measurement Threshold policy
MSES_BS_RunningOr chestrations	Monitors the number of orchestration instances running currently.	Measurement Threshold policy

Policy	Description	Policy Type	
MSES_Orchestration_ Status_Monitoring	Monitors the status of the orchestrations.	Windows Management Interface policy	
MSES_BS_PendingMe ssages	Monitors the number of received messages for which receipt is not yet acknowledged to the message box.	Measurement Threshold policy	
MSES_BS_PendingWo rkItems	Monitors the number of code execution blocks that are scheduled for execution.	Measurement Threshold policy	
MSES_BS_Transactio nalScopesAborted	Monitors the number of long-running or atomic scopes that were aborted since the host instance started.	Measurement Threshold policy	

#### Windows Event Log Monitoring

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

Policies monitoring events are grouped as follows:

- BizTalk Server
- XLANG Scheduler

The Windows Event Log group includes EBIZ\_BizTalkServerFwdApplicationLogEntries policy. The EBIZ\_BizTalkServerFwdApplicationLogEntries policy forwards all BizTalk Server 2006 application log entries with severity levels as follows:

- Error
- Warning

Policy	Policy Type	Policy Group
EBIZ_BizTalkServerFwd ApplicationLogEntries	Windows Event Log policy	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\_BS\_MsgBox DBConnectionFailures
- MSES\_BizTalk\_MessageBox\_DatabaseSize
- MSES\_BizTalk\_DTA\_DatabaseSize

Before installing the MSES\_BizTalk\_DTA\_DatabaseSize and MSES\_BizTalk\_MessageBox\_DatabaseSize policies, ensure that the SQLDMO.dll is registered on the node. Otherwise the policy does not work properly.

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

The MSES\_BS\_DBMonitor policy sends 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. The policy monitors the connections to the following BizTalk 2006 databases:

- BAMPrimaryImport Business Activity Monitoring DB
- BAM Analysis Business Activity Monitoring OLAP Cubes DB
- BAMStarSchema Business Activity Monitoring DB
- BAMArchive Archives Business Activity Monitoring 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
- BizTalkAnalysisdb DB for storing business and health monitoring OLAP Cubes

The following table lists the details of the policies in the Database Connectivity monitoring group.

Policy	Description	Policy Type	Policy Group
MSES_BS_DBMon itor	Sends a message to the HPOM message browser if any of the following databases fail to connect.	Scheduled Task policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Auto-Deploy
MSES_BS_MsgBo x DBConnectionFail ures	Monitors the number of attempted database connections that failed since the host instance started.	Measurement Threshold policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Manual-Deploy
MSES_BizTalk_M essageBox_Databa seSize	Monitors the percentage usage of the BizTalk MessageBox database. Deploy this policy only on BizTalk MessageBox database nodes.	Measurement Threshold policy	SPI for Microsoft Enterprise Servers →en→ BizTalk Server→ Biztalk Server 2006→ Manual-Deploy
MSES_BizTalk_D TA_DatabaseSize	Monitors the the percentage usage of the BizTalk DTA database. Deploy this policy only on BizTalk DTA database nodes.	Measurement Threshold policy	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\_BizTalkServer\_TDDS\_Logging

- MSES\_BTS\_Logging\_ApplicationService
- MSES\_BTS\_Logging\_ENTSSO
- MSES\_BTS\_Logging\_BaseEDI
- MSES\_BTS\_Logging\_RuleUpdateEngine



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

Policy	Description	Policy Type	Policy Group
MSES_BizTalkS erver_SusDoc_Lo gging	Collects suspended document's data from the BizTalk Server database and logs it into the data source.	Scheduled Task policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Auto-Deploy
MSES_BizTalk_I ntervalCount_Lo gging	Collects performance data for the following three BizTalk 2006 objects: • BizTalk Messaging • Enterprise Single Sign On • XLANG/s Orchestrations	Measurement Threshold policy	SPI for Microsoft Enterprise Servers → en→ BizTalk Server→ Biztalk Server 2006→ Auto-Deploy
MSES_BizTalkS erver_TDDS_Log ging	Collects the performance data for BizTalk TDDS (Tracking Data Decode Service), and logs it into the data source.	Measurement Threshold policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Auto-Deploy
MSES_BTS_Log ging_Application Service	Logs the performance data for BizTalk Server 2006 Application Service.	Measurement Threshold policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Manual-Deploy
MSES_BTS_Log ging_ENTSSO	Logs the performance data for BizTalk Server 2006 ENTSSO.	Measurement Threshold policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Manual-Deploy
MSES_BTS_Log ging_BaseEDI	Logs the performance data for BizTalk Server 2006 Base EDI Service.	Measurement Threshold policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Manual-Deploy
MSES_BTS_Log ging_RuleUpdat eEngine	Logs the performance data for BizTalk Server 2006 Rule Engine Update Service.	Measurement Threshold policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ BizTalk Server $\rightarrow$ Biztalk Server 2006 $\rightarrow$ Manual-Deploy

#### Discovery

The Discovery monitoring group discovers the services of the Microsoft BizTalk Server 2006. This monitoring group includes the BizTalk\_Discovery policy.



Run the MSES\_BS\_DB\_Configuration tool before deploying the BizTalk Discovery policy.

Policy	Description	Policy Type	Policy Group
BizTalk_Discovery	Discovers the BizTalk	Service	SPI for Microsoft Enterprise
	infrastructure information and	Auto-Discovery	Servers→ en→ BizTalk Server→
	adds it to the service map.	policy	Biztalk Server 2006→ Discovery

### Reports

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

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

The BTS Document Process Rate Monthly and Weekly reports provide summary of the following monthly and weekly statistics related to the BizTalk Documents:

- **Documents processed/sec :** Integer representing the average number of documents processed per second. The processed documents are those documents pulled from the Work queue and sent to a port destination address.
- **Documents received/sec :** Integer representing the average number of documents that are received by BizTalk Server per second. This includes all documents that go into the Work queue and those that 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/Weekly)

The BTS Orchestration Statistics Monthly and Weekly reports provide the monthly and weekly summary of the following orchestrations statistics:

- **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.

#### BTS Transactional Rate (Monthly/Weekly)

The BTS Transactional Rate Monthly and Weekly reports provide the monthly and weekly summary of the statistics related to transactions.



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.

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

#### BTS Suspended Documents Report (Monthly/Weekly)

The BTS Suspended Documents Report Monthly and Weekly reports provide the monthly and 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 Statistics**

TDDS is also known as the BAM Event Bus Service. The BTS TDDS Statistics report provides the monthly summary of the following TDDS related statistics:

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

#### BTS Enterprise Single Sign-on(Monthly)

The BTS Enterprise Single Sign-on(Monthly) report provide the monthly summary of the following enterprise SSO related statistics:

- 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.

### Graphs

The Microsoft Enterprise Servers SPI offers the following pre-defined graphs for BizTalk Server:

- 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 the extent to which 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 of page faults occuring in the threads executing 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 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 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 have allocated that cannot be shared with other processes.

# 3 Microsoft Enterprise Servers SPI for Internet Security and Acceleration Server 2006

The 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 Internet Security and Acceleration Server service map displays the nodes where Internet Security and Acceleration Servers are installed. The service maps are available under both the Applications and the Systems Infrastructure areas.

### Policies

The Microsoft Enterprise Servers SPI ISA Server policies monitor the Microsoft ISA Server. The policies provide the following monitoring processes:

- Availability Monitoring
- Windows Event Log Monitoring
- Log File Monitoring
  - Performance Monitoring
  - Performance Data Logging
- Discovery

#### **Availability Monitoring**

The Availability Monitoring group monitors 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 the following:

- 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)
- ISA Storage Configuration (dsadmin)

The Availability Monitoring group policies are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Availability Monitoring

All the policies in the Availability Monitoring group of the Internet Security And Acceleration Server belong to the **Windows Management Interface** policy type.

Policy	Description
ISA2006_Availability_Co nfig-Storage-Service	Checks if ISA Configuration Storage Server service is running. If not, it tries to restart the service.
ISA2006_Availability_Dat aEngine-Service	Checks if ISA Data Engine service is running. If not, it tries to restart the service.
ISA2006_Availability_Fir ewall-Service	Checks if Microsoft Firewall service is running. If not, it tries to restart the service.
ISA2006_Availability_Job Scheduler-Service	Checks if ISA Job Scheduler service is running. If not, it tries to restart the service.
ISA2006_Availability_Net work-Load-Balancing-Ser vice	Checks if ISA Network Load Balancing service is running. If not, it tries to restart the service.
ISA2006_Availability_Re moteAccess-Service	Checks if ISA Routing and Remote Access service is running. If not, it tries to restart the service.
ISA2006_Availability_Ser verControl-Service	Checks if ISA Server Control service is running. If not, it tries to restart the service.
ISA2006_Availability_Sto rage-Service	Checks if ISA Server Storage service is running. If not, it tries to restart the service.

The following table lists the details of the policies in the group.

#### Performance Monitoring

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

The Performance Monitoring policy group includes the following groups:

- Firewall Service
- Firewall Engine
- Job Scheduler
- Network Load Balancing
- Microsoft Data Engine
- Remote Access
- ISA Server Control
- ISA Server Storage
- Storage Configuration

#### Firewall

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  Firewall

All the policies in the Firewall Service group have the policy type as **Measurement Threshold**.

The following table lists the policies in the Firewall Service group.

Policy	Description
ISA2006_Firewall_PageFaults	Monitors Page Faults of Firewall process.
ISA2006_Firewall_PrivateBytes	Monitors private bytes of Firewall process.
ISA2006_Firewall_ProcessorTime	Monitors processor time of Firewall process.
ISA2006_Firewall_ThreadCount	Monitors Thread Count of Firewall process.
ISA2006_Firewall_WorkingSet	Monitors Working Set of Firewall process.

#### **Firewall Engine**

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  Firewall Engine

All the policies in the Firewall Service group have the policy type as **Measurement Threshold**.

The following table lists the policies in the Firewall Engine group.

Policy	Description
ISA2006_FirewallEngine_PageFaults	Monitors Page Faults of Firewall Engine.
ISA2006_FirewallEngine_PrivateBytes	Monitors Private Bytes of Firewall Engine.
ISA2006_FirewallEngine_ProcessorTime	Monitors Processor Time of Firewall Engine.
ISA2006_FirewallEngine_ThreadCount	Monitors Thread Count of Firewall Engine.
ISA2006_FirewallEngine_WorkingSet	Monitors Working Set of Firewall Engine.

#### Job Scheduler

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  Job Scheduler

All the policies in the Job Scheduler group have the policy type as Measurement Threshold.

The following table lists the policies in the Job Scheduler group.

Policy	Description
ISA2006_JobScheduler_PageFaults	Monitors Page Faults of Job Scheduler process.
$ISA 2006\_JobScheduler\_PrivateBytes$	Monitors Private Bytes of Job Scheduler process.
ISA2006_JobScheduler_ProcessorTime	Monitors Processor Time of Job Scheduler process.
$ISA 2006\_JobScheduler\_ThreadCount$	Monitors Thread Count of Job Scheduler process.
ISA2006_JobScheduler_WorkingSet	Monitors Working Set of Job Scheduler process.

#### Network Load Balancing

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  Network Load Balancing

All the policies in the Network Load Balancing group have the policy type as **Measurement Threshold**.

The following table lists the policies in the Network Load Balancing group.

Policy	Description
$ISA 2006\_Load Balancing\_PageFaults$	Monitors Page Faults of Load Balancing process.
$ISA 2006\_Load Balancing\_Private Bytes$	Monitors Private Bytes of Load Balancing process.
ISA2006_LoadBalancing_ProcessorTime	Monitors Processor Time of Load Balancing process.
ISA2006_LoadBalancing_ThreadCount	Monitors Thread Count of Load Balancing process.
ISA2006_LoadBalancing_WorkingSet	Monitors Working Set of Load Balancing process.

#### Microsoft Data Engine

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  Microsoft Data Engine

All the policies in the Microsoft Data Engine group have the policy type as **Measurement Threshold**.

The following table lists the policies in the Microsoft Data Engine group.

Policy	Description
ISA2006_MSSQLMSFW_PageFaults	Monitors Page Faults of Microsoft Data Engine process.
ISA2006_MSSQLMSFW_PrivateBytes	Monitors Private Bytes of Microsoft Data Engine process.
ISA2006_MSSQLMSFW_ProcessorTime	Monitors Processor Time of Microsoft Data Engine process.
ISA2006_MSSQLMSFW_ThreadCount	Monitors Thread Count of Microsoft Data Engine process.
ISA2006_MSSQLMSFW_WorkingSet	Monitors Working Set of Micosoft Data Engine process.

#### Remote Access

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  Remote Access

All the policies in the Remote Access group have the policy type as **Measurement Threshold**.

The following table lists the policies in the Remote Access group.

Policy	Description
ISA2006_RemoteAccess_PageFaults	Monitors Page Faults of Remote Access process.
ISA2006_RemoteAccess_PrivateBytes	Monitors Private Bytes of Remote Access process.
ISA2006_RemoteAccess_ProcessorTime	Monitors Processor Time of Remote Access process.
ISA2006_RemoteAccess_ThreadCount	Monitors Thread Count of Remote Access process.
ISA2006_RemoteAccess_WorkingSet	Monitors Working Set of Remote Access process.

#### **ISA Server Control**

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  ISA Server Control

All the policies in the ISA Server Control group have the policy type as **Measurement Threshold**.

The following table lists the policies in the ISA Server Control group.

Policy	Description
ISA2006_ServerControl_ PageFaults	Monitors Page Faults of Server Control process.
ISA2006_ServerControl_ PrivateBytes	Monitors Private Bytes of Server Control process.
ISA2006_ServerControl_ProcessorTime	Monitors Processor Time of Server Control process.
$ISA 2006\_ServerControl\_ThreadCount$	Monitors thread count of Server Control process.
ISA2006_ServerControl_WorkingSet	Monitors Working Set of Server Control process.

#### **ISA Server Storage**

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  ISA Server Storage

All the policies in the ISA Server Storage group have the policy type as **Measurement Threshold**.

The following table lists the policies in the ISA Server Storage group.

Policy	Description
ISA2006_ServerStorage_PageFaults	Monitors Private Bytes of Server Storage process.
ISA2006_ServerStorage_PrivateBytes	Monitors Private Bytes of Server Storage process.
ISA2006_ServerStorage_ProcessorTime	Monitors Processor Time of Server Storage Process.
ISA2006_ServerStorage_ThreadCount	Monitors Thread Count of Server Storage Process.
ISA2006_ServerStorage_WorkingSet	Monitors Working Set of Server Storage Process.

#### **Storage Configuration**

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Log File Monitoring  $\rightarrow$  Performance Monitoring  $\rightarrow$  Service Based  $\rightarrow$  Storage Configuration

All the policies in the Storage Configuration group have the policy type as **Measurement Threshold**.

The following table lists the policies in the Storage Configuration group.

Policy	Description
ISA2006_StorageConfig_PageFaults	Monitors Page Faults of Storage Configuration process.
ISA2006_StorageConfig_PrivateBytes	Monitors Private Bytes of Storage Configuration process.
ISA2006_StorageConfig_ProcessorTime	Monitors Processor Time of Storage Configuration process.
ISA2006_StorageConfig_ThreadCount	Monitors Thread Count of Storage Configuration process.
ISA2006_StorageConfig_WorkingSet	Monitors Working Set of Storage Configuration process.

#### Windows Event Log Monitoring

Event monitoring of the Windows 2000 and 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

The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Event Log Monitoring

All the policies in the Event monitoring group belong to the **Windows Event Log** policy type.

The following table lists the policies in the Event monitoring group.

Policy	Description
ISA2006_FwdApplicationError	Forwards all ISA Server application log entries with severity as Error.
ISA2006_FwdApplicationInformation	Forwards all ISA Server application log entries with severity as Information.
ISA2006_FwdApplicationWarning	Forwards all ISA Server application log entries with severity as Warning.

#### Server Logging

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

The policies in this group are available at the following location:

# SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ Internet Security And Acceleration Server $\rightarrow$ Internet Security And Acceleration Server 2006 $\rightarrow$ Log File Monitoring $\rightarrow$ Performance Data Logging

All the policies in the Event monitoring group belong to the **Measurement Threshold** policy type.

Policy	Description
ISA2006_Logging_Firewall	Logs selected performance data for ISA Server 2006 Firewall service.
ISA2006_Logging_JobScheduler	Logs selected performance data for ISA Server 2006 Job Scheduler.
ISA2006_Logging_ServerCache	Logs selected performance data for ISA Server 2006 Cache.
ISA2006_Logging_ServerControl	Logs selected performance data for ISA Server 2006 Server Control.
ISA2006_Logging_WebProxy	Logs selected performance data for ISA Server 2006 Web Proxy service.

The following table lists the policies of the Server Logging group.

#### Discovery

The Discovery monitoring group discovers the services of the ISA server. The policies in this group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Internet Security And Acceleration Server  $\rightarrow$  Internet Security And Acceleration Server 2006  $\rightarrow$  Discovery

The following table lists the policies in the Discovery montioring group.

Policy	Description	Policy Type
ISA2006_Discovery_System	Discovers and adds infrastructure information to the service map.	Service Auto-Discovery policy
ISA2006_Discovery_Application	Discovers and adds application and dependency information to the service map.	

### **Reports**

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

The Microsoft Enterprise Servers SPI offers a number of reports that help you monitor ISA Server activity. The following sections detail the report descriptions including listings of the 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
- Worker Threads
- Available 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 of 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 are 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 are made to the Web Proxy service.

This report has the following counters:

- Failing Requests/sec
- Requests/sec
- Total Failing Requests
- Total Successful Requests
- Total Requests
- Ftp Requests
- Http Requests

#### Web Proxy Sites Granted 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

### Graphs

The Microsoft Enterprise Servers SPI graphs are pictorial representations of various metrics of ISA Server. Graphs contain data that are collected by the Microsoft Enterprise Servers SPI.

The following table lists the Microsoft Enterprise Servers SPI ISA Server 2006 graphs.

Graph	Description
Cache URL Statistics	Summary statistics relating to URLs of the ISA Server cache.
Disk Cache Statistics	Summary statistics of the ISA Server disk cache.
Disk Failure Statistics	Summary statistics of the ISA Server disk cache failure rate.
Dropped Packets Statistics	Summary statistics of ISA Server total dropped packets resulting from packet filtering.
Firewall CPU	Summary CPU statistics of the ISA Server Firewall process.
Firewall Data Pump Statistics	Summary statistics of the ISA Server firewall, including the number of kernel mode data pumps.
Firewall Memory	Summary memory statistics of the ISA Server Firewall process.
Firewall Session / Connection Statistics	Summary statistics of the ISA Server firewall, including the number of active sessions.
Firewall Worker Threads Statistics	Summary statistics of the ISA Server firewall, including the number of worker threads.
ISA Server Control CPU	Summary CPU statistics of the ISA Server Control process.
ISA Server Control Memory	Summary memory statistics of the ISA Server Control process.
Memory Cache Ratio Percent	Summary statistics of the ISA Server memory cache, including the memory cache usage ratio percentage.
Memory Cache Statistics	Summary statistics of the ISA Server memory cache, including the memory bytes retrieved rate.
Scheduled Cache Content Download CPU	Summary CPU statistics of the ISA Server Scheduled Cache Content Download process.
Scheduled Cache Content Download Memory	Summary memory statistics of the ISA Server Scheduled Cache Content Download process.

Graph	Description
Sites Granted/Denied Statistics	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	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	Summary statistics of the ISA Server Web Proxy, including the cache hit ratio percentage.
Web Proxy Client Bytes Statistics	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	Summary CPU statistics of the ISA Server Web Proxy process.
Web Proxy Memory	Summary memory statistics of the ISA Server Web Proxy process.
Web Proxy Requests Statistics	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	Summary statistics of the ISA Server Web Proxy, including the current number of Web proxy users.

# 4 Microsoft Enterprise Servers SPI for Microsoft Office SharePoint Server 2007

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

MOSS enables enterprises to develop an intelligent portal that seamlessly connects users, teams, and knowledge so that people can use information and work efficiently across business processes. This is possible by the integration of information from various systems into one solution, using single sign-on and enterprise application integration capabilities, and with flexible deployment options and management tools. The portal facilitates end-to-end collaboration by enabling aggregation, organization, and search capabilities for people, teams, and information. Users can find relevant information quickly through customization and personalization of portal content and layout, and by audience targeting. Organizations can target information, programs, and updates to audiences based on their organizational role, team membership, interest, security group, or any other membership criteria that can be defined.

MOSS has the following components:

- All the systems on which Microsoft Office SharePoint Server 2007 is installed.
- All components enabled on each system.
- Microsoft Office SharePoint Server 2007 Extended Virtual Servers and the systems which they are hosted on.
- Virtual server on which any site is hosted, (allows you to see the sites affected when a virtual server is unavailable).
- Content Databases, Configuration Databases, and SMTP servers and the dependency of these services on other components like IIS and Windows Operating System.
- All WSS sites and their content sources hosted by Microsoft Office SharePoint Server 2007, and their sub web (child) sites.
- Microsoft Office SharePoint Server 2007 Portal sites and the hierarchy of their member sites.

### **Policies**

The Microsoft Enterprise Servers SPI policies monitor the Microsoft Office Share Point Server 2007(MOSS). The policies offer the following monitoring processes:

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

#### **Availability Monitoring**

The availability monitoring group monitors the services of the Microsoft Office SharePoint Server 2007.

All the policies in the Availability Monitoring group belongs to the **Windows Management Interface** policy type and are available at the following location:

# SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ SharePoint Portal Server $\rightarrow$ Microsoft Office SharePoint Server 2007 $\rightarrow$ Auto-Deploy / Manual-Deploy

The following table lists the details of the policies in the Availability Monitoring group.

Policy	Description
MSES_MOSS_AdminService	Monitors the Microsoft Office SharePoint Server 2007 admin service. If the service is stopped it can be restarted using operator-initiated action. The policy runs every 5 minutes.
MSES_MOSS_Document Conversions Load Balancer Service	Monitors the Document Conversions Load Balancer Service process. If the service is stopped it can be restarted using operator-initiated action. The policy runs every 5 minutes.
MSES_MOSS_Document Conversions Launcher Service	Monitors Document Conversions Launcher Service process. If the service is stopped it can be restarted using operator-initiated action. The policy runs every 5 minutes.
MSES_MOSS_OfficeServerSe archService	Monitors the Office Sharepoint server search. The policy runs every 5 minutes.
MSES_MOSS_SearchService	Monitors the Microsoft SharePoint 2007 Server search service. If the service is stopped it can be restarted using operator-initiated action. The policy runs every 5 minutes.
MSES_MOSS_ TimerService	Monitors the Microsoft SharePoint 2007 Server timer service. If the service is stopped it can be restarted using operator-initiated action. The policy runs every 5 minutes.
MSES_MOSS_SingleSignOnS ervice	Monitors the Microsoft SharePoint 2007 Server single sign-on service. If the service is stopped it can be restarted using operator-initiated action. The policy runs every 5 minutes.

#### Service Monitoring

The service monitoring group monitors the available services of the Microsoft Office SharePoint Server 2007.

All the policies in the Service Monitoring group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  SharePoint Portal Server  $\rightarrow$  Microsoft Office SharePoint Server 2007  $\rightarrow$  Auto-Deploy / Manual-Deploy

Policy	Description	Policy Type
MSES_MOSS-2k7_Da tabase_Monitoring	Checks the status of the MOSS database instances. This policy runs every 30 minutes.	Scheduled Task policy
MSES_MOSS-2k7_ Logical_Services_Mon itoring	Checks the status of the MOSS logical services. This policy runs every 30 minutes.	Scheduled Task policy
MSES_MOSS_HeartB eats	Monitors the Microsoft SharePoint Portal Server 2007 Gatherer/Heartbeats counters. This policy runs every 5 minutes.	Measurement Threshold policy
MSES_MOSS_Docum ents Delayed Retry	Monitors the Documents Delayed Retry counter. This policy runs every 20 minutes.	Measurement Threshold policy
MSES_MOSS_Active Queue Length	Monitors the Active Queue Length. This policy runs every 10 minutes.	Measurement Threshold policy
MSES_MOSS_Reason To BackOff	Monitors the ReasonToBackOff counters. This policy runs every 20 minutes.	Measurement Threshold policy
MSES_MOSS_Indexe rCatalogsNumOfDocu ments	Monitors the increase in the number of documents indexed. This policy runs every 12 hours.	Measurement Threshold policy

The following table lists the details of the policies in the Service Monitoring group.

### **Application Monitoring**

The application monitoring group monitors the available applications of the Microsoft Office SharePoint Server 2007.

All the policies in the Application Monitoring group belong to the **Windows Event Log** policy type and are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  SharePoint Portal Server  $\rightarrow$  Microsoft Office SharePoint Server 2007  $\rightarrow$  Auto-Deploy / Manual-Deploy

The following table lists the policies in the Application Monitoring group.

Policy	Description
MSES_MOSS_FwdApplicationError	Handles all error messages from all Microsoft Office SharePoint services.
MSES_MOSS_FwdApplicationInformation	Handles information from all Microsoft Office SharePoint services.
MSES_MOSS_FwdApplicationWarning	Handles the warning messages from all Microsoft Office SharePoint services.

# 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

The monitoring group includes the following policies:

- MSES\_MOSS-2k7\_Logging\_Process\_MOSS.Conversions.LoadBalancer
- MSES\_MOSS-2k7\_Logging\_Process\_ MOSS.Conversions.Launcher
- MSES\_MOSS-2k7\_Logging\_Process\_WSSTRACING
- MSES\_MOSS-2k7\_Logging\_Process\_MSSEARCH
- MSES\_MOSS-2k7\_Logging\_Process\_OWSTIMER
- MSES\_MOSS-2k7\_Logging\_Process\_SPWRITER
- MSES\_MOSS-2k7\_ Logging\_Process\_SSOSRV
- MSES\_MOSS-2k7\_Logging\_Process\_W3WP
- MSES\_MOSS-2k7\_ CreateCodeDataSources
- MSES\_MOSS-2k7\_Logging\_Process\_WSSADMIN

The policies are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  SharePoint Portal Server  $\rightarrow$  Microsoft Office SharePoint Server 2007  $\rightarrow$  Auto-Deploy / Manual-Deploy

Metric	Descriptions
Policy	$MSES\_MOSS-2k7\_Logging\_Process\_MOSS.Conversions.LoadBalancer$
Description	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

Metric	Descriptions
Policy	MSES_MOSS-2k7_Logging_Process_ MOSS.Conversions.Launcher
Description	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

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

### Table 3 MSES\_MOSS-2k7\_Logging\_Process\_WSSTRACING

Metric	Descriptions
Policy	MSES_MOSS-2k7_Logging_Process_WSSTRACING
Description	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

### Table 4 MSES\_MOSS-2k7\_Logging\_Process\_MSSEARCH

Metric	Descriptions
Policy	MSES_MOSS-2k7_Logging_Process_MSSEARCH
Description	Collects data for the MSSEARCH process.
Service Name	Windows SharePoint Servicer Search
Monitored Process	mssearch.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

### Table 5 MSES\_MOSS-2k7\_Logging\_Process\_OWSTIMER

Metric	Descriptions
Policy	MSES_MOSS-2k7_Logging_Process_OWSTIMER
Description	Collects data for the OWSTIMER process.
Service Name	Windows SharePoint Services Timer

Metric	Descriptions
Monitored Process	owstimer.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

#### Table 6 MSES\_MOSS-2k7\_Logging\_Process\_SPWRITER

Metric	Descriptions
Policy	MSES_MOSS-2k7_Logging_Process_SPWRITER
Description	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

### Table 7 MSES\_MOSS-2k7\_Logging\_Process\_ SSOSRV

Metric	Descriptions
Policy	MSES_MOSS-2k7_ Logging_Process_SSOSRV
Description	Collects data for the 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

## Table 8 MSES\_MOSS-2k7\_Logging\_Process\_w3wp

Metric	Descriptions
Policy	MSES_MOSS-2k7_Logging_Process_w3wp
Description	Collects data for the w3wp process.
Service Name	Windows IIS worker process
Monitored Process	w3wp.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

Ensure that the MSES\_MOSS-2k7\_CreateCodaDataSources policy is deployed to create data sources before you deploy the Server Logging policies.

Metric	Descriptions
Policy	MSES_MOSS-2k7_CreateCodaDataSources
Description	Creates the data source for logging data.
Schedule	This policy runs every 30 minutes
Policy Type	Scheduled Task policy

Table 9 MSES\_MOSS-2k7\_CreateCodaDataSources

### Table 10 MSES\_MOSS-2k7\_Logging\_Process\_WSSADMIN

Metric	Descriptions
Policy	MSES_MOSS-2k7_Logging_Process_WSSADMIN
Description	Collects data for the WSSADMIN process.
Service Name	Microsoft SharePoint Administration Service
Monitored Process	wssadmin.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

### Discovery

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

Policy	Description	Policy Type	Policy Group
Microsoft Office SharePoint Server 2007 Discovery	Discovers the services of the Microsoft Office SharePoint Server 2007	Service Auto-Discovery policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ SharePoint Portal Server $\rightarrow$ Microsoft Office SharePoint Server 2007 $\rightarrow$ Discovery

# **Reports**

Following are the reports for the Microsoft Office SharePoint Server 2007.

## Memory and CPU reports

You can use the memory and CPU reports to plan and predict capacity of the Microsoft Office SharePoint Server 2007 deployment. The reports can assist in determining whether an additional search server or Web front end server needs to be added to improve the performance.



You must deploy the MSES\_MOSS-2K7\_Logging\_Process\_MSSEARCH policy for this report to function correctly.

Daily/Weekly CPU Usage Summary (g\_MOSS2k7CPUSummary.rpt/ g\_MOSS2k7CPUWeeklySummary.rpt) The 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 reports provide the administrators an overview of which server is heavily loaded and which process is causing much load.

#### Daily/Weekly Memory Usage Summary (g\_MOSS2k7MemorySummary.rpt/ g\_MOSS2k7MemoryWeeklySummary.rpt)

The 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)

The 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.

You must deploy the *MSES\_MOSS-2K7\_Logging\_Process\_MSSEARCH* policy for this report to function correctly.

# Graphs

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

Graph	Description
SharePoint Server Admin service CPU usage	Shows summary CPU statistics of the SharePoint admin service process (spsadmin.exe). The data can be compared with System Processor Time to determine the extent to which the SharePoint admin service is utilizing processor time.
SharePoint Portal Server Admin service Memory usage	<ul> <li>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.</li> <li>Counters: <ul> <li>Process.Private Bytes</li> <li>Process.Working Set</li> </ul> </li> </ul>
SharePoint Portal Server Search Service CPU usage	Shows summary CPU statistics of the SharePoint search service process (mssearch.exe). The data can be compared with System Processor Time to determine the extent to which the SharePoint admin service is utilizing processor time.

Graph	Description
SharePoint Portal Server Search Service Memory usages	<ul> <li>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.</li> <li>Counters: <ul> <li>Process.Private Bytes</li> <li>Process.Working Set</li> </ul> </li> </ul>
SharePoint Search Service Page Faults/ sec	Shows summary memory statistics of the SharePoint Search service process (mssearch.exe). The summarized process statistics include the Page Faults\sec by the process. <b>Counter:</b> Process:Page Faults\sec
SharePoint Portal Server SingleSignon Service CPU usage	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 the extent to which the SharePoint Single sign on service is utilizing processor time.
SharePoint Portal Server SingleSignon Service Memory	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.
usage	Counters:
	Process.Private Bytes     Develop Winking Set
	<ul><li>Process.Working Set</li><li>SharePoint Portal Server SPTimer Service CPU Usage</li></ul>
SharePoint Portal Server SPTimer Service CPU Usage	Shows summary 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 Portal Server SPTimer Service Memory usage	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:
	<ul><li> Process.Private Bytes</li><li> Process.Working Set, Process</li></ul>
	1 100055. WOLKING DUI, 1 100055

Graph	Description
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. <b>Counters:</b> 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. <b>Counters:</b> Process:Page Faults\sec .

# 5 Microsoft Enterprise Servers SPI for Microsoft SharePoint Server 2010

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

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

# **Policies**

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

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

### **Availability Monitoring**

The Availability Monitoring group monitors the services of the Microsoft SharePoint Server 2010.

All the policies in the Availability Monitoring group belongs to the **Windows Management Interface** policy type and are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  SharePoint Portal Server  $\rightarrow$  SharePoint Server 2010  $\rightarrow$  Manual-Deploy

Policy	Description
MSES_SPS_14_AdminService	Monitors the SharePoint 2010 Administration Service. If the service is stopped it can be restarted using the operator-initiated action. The policy runs every 5 minutes.
MSES_SPS_14_Document Conversions Load Balancer Service	Monitors the Document Conversions Load Balancer for Microsoft SharePoint Server 2010 service. If the service is stopped it can be restarted using the operator-initiated action. The policy runs every 5 minutes.
MSES_SPS_14_Document Conversions Launcher Service	Monitors Document Conversions Launcher Service process. If the service is stopped it can be restarted using the operator-initiated action. The policy runs every 5 minutes.
MSES_SPS_14_OfficeServerS earchService	Monitors the SharePoint Server Search 14 service. If the service is stopped it can be restarted using the operator-initiated action. The policy runs every 5 minutes.
MSES_SPS_14MOSS_Search Service	Monitors the SharePoint Foundation Search V4. If the service is stopped it can be restarted using the operator-initiated action. The policy runs every 5 minutes.
MSES_SPS_14_ TimerService	Monitors the SharePoint 2010 Timer Service. If the service is stopped it can be restarted using the operator-initiated action. The policy runs every 5 minutes.

The following table lists the details of the policies in the Availability Monitoring group.

### Service Monitoring

The Service Monitoring group monitors the available services of the Microsoft SharePoint Server 2010.

All the policies in the Service Monitoring group are available at the following location:

SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  SharePoint Portal Server  $\rightarrow$  SharePoint Server 2010  $\rightarrow$  Manual-Deploy

Policy	Description	Policy Type
MSES_SPS_14_Datab ase_Monitoring	This policy monitors the Sharepoint Server 2010 databases.This policy runs every 30 minutes.	Scheduled Task policy
MSES_SPS_14_Logic alServices_Monitorin g	This policy checks the status of the SharePoint 2010 Server logical services. This policy runs every 30 minutes.	Scheduled Task policy
MSES_SPS_14_Heart Beats	This policy monitors the Sharepoint Foundation Search Gatherer/Heartbeats counter. This policy runs every 5 minutes.	Measurement Threshold policy
MSES_SPS_14_Docu ments Delayed Retry	This policy monitors Sharepoint Foundation Search Gatherer/Documents Delayed Retry counter. This policy runs every 20 minutes.	Measurement Threshold policy
MSES_SPS_14_Activ e Queue Length	This policy monitors the Sharepoint Foundation Search Gatherer/Active Queue Length counter. This policy runs every 10 minutes.	Measurement Threshold policy
MSES_SPS_14_Reaso nToBackOff	This policy monitors the Sharepoint Foundation Search Gatherer/Reason To Back Off Counter counters. This policy runs every 20 minutes.	Measurement Threshold policy
MSES_SPS_14_Index erCatalogsNumofDoc uments	This policy monitors the increase in the number of documents indexed. This policy runs every 12 hours.	Measurement Threshold policy

The following table lists the details of the policies in the Service Monitoring group.

# **Application Monitoring**

The Application Monitoring group monitors the available applications of the Microsoft Office SharePoint Server 2010.

All the policies in the Application Monitoring group belong to the **Windows Event Log** policy type and are available at the following location:

# SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ SharePoint Portal Server $\rightarrow$ SharePoint Server 2010 $\rightarrow$ Manual-Deploy

The following table lists the policies in the Application Monitoring group.

Policy	Description
MSES_SPS_14_FwdApplicationError	This policy handles all error messages from all MicrosoftSharePoint 2010 services. This policy runs every 30 minutes.
MSES_SPS_14_FwdApplicationWarning	This policy handles the warning messages from all Microsoft SharePoint 2010 services. This policy runs every 30 minutes.

# 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

The monitoring group includes the following policies:

- MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.LoadBalancer
- MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.Launcher
- MSES\_SPS\_14\_Logging\_Process\_WSSTRACING
- MSES\_SPS\_14\_Logging\_Process\_MSSEARCH
- MSES\_SPS\_14\_Logging\_Process\_OWSTIMER
- MSES\_SPS\_14\_Logging\_Process\_SPWRITER
- MSES\_SPS\_14\_Logging\_Process\_W3WP
- MSES\_SPS\_14\_Logging\_Process\_WSSADMIN

The policies are available at the following location:

SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ SharePoint Portal Server $\rightarrow$ SharePoint Server 2010 $\rightarrow$
Manual-Deploy

Metric	Descriptions	
Policy	MSES_SPS_14_Logging_Process_SPS.Conversions.LoadBalancer	
Description	This policy collects data for the SPS 2010, Microsoft.Office.Server.Conversions.LoadBalancer process.	
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	

 Table 11
 MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.LoadBalancer

Metric	Descriptions	
Policy	MSES_SPS_14_Logging_Process_SPS.Conversions.Launcher	
Description	This policy collects data for the Microsoft SharePoint Server 2010 process, Microsoft.Office.Server.Conversions.Launcher.	
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 daily.	
Policy Type	Measurement Threshold policy	

 Table 12
 MSES\_SPS\_14\_Logging\_Process\_SPS.Conversions.Launcher

## Table 13 MSES\_SPS\_14\_Logging\_Process\_WSSTRACING

Metric	Descriptions
Policy	MSES_SPS_14_Logging_Process_WSSTRACING
Description	This policy collects data for the Microsoft SharePoint Server 2010 process, WSSTRACING.
Service Name	SharePoint 2010 Tracing
Monitored Process	wsstracing.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

#### Table 14 MSES\_SPS\_14\_Logging\_Process\_MSSEARCH

Metric	Descriptions
Policy	MSES_SPS_14_Logging_Process_MSSEARCH
Description	This policy collects data for the Microsoft SharePoint 2010 process, MSSEARCH.
Service Name	Microsoft SharePoint Portal Server Search Service
Monitored Process	MSSEARCH.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

Metric	Descriptions	
Policy	MSES_MOSS-2k7_Logging_Process_OWSTIMER	
Description	This policy collects data for the Microsoft SharePoint 2010 process, OWSTIMER.	
Service Name	SharePoint Foundation Timer	
Monitored Process	OWSTIMER.exe	
Schedule	This policy runs every 5 minutes.	
Policy Type	Measurement Threshold policy	

 Table 15
 MSES\_SPS\_14\_Logging\_Process\_OWSTIMER

### Table 16 MSES\_SPS\_14\_Logging\_Process\_SPWRITER

Metric	Descriptions
Policy	MSES_SPS_14_Logging_Process_SPWRITER
Description	This policy collects data for the Microsoft SharePoint Server 2010 process, SPWRITER.
Service Name	SharePoint 2010 VSS Writer
Monitored Process	SPWRITER.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

### Table 17 MSES\_SPS\_14\_Logging\_Process\_w3wp

Metric	Descriptions
Policy	MSES_SPS_14_Logging_Process_w3wp
Description	This policy collects data for the Microsoft SharePoint Server 2010 process, w3wp.
Service Name	IIS worker process
Monitored Process	w3wp.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

### Table 18 MSES\_SPS\_14\_Logging\_Process\_WSSADMIN

Metric	Descriptions
Policy	MSES_SPS_14_Logging_Process_WSSADMIN
Description	This policy collects data for the Microsoft SharePoint Server 2010 process, WSSADMIN.
Service Name	SharePoint Administration Service

Metric	Descriptions
Monitored Process	WSSADMIN.exe
Schedule	This policy runs every 5 minutes.
Policy Type	Measurement Threshold policy

# Discovery

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

Policy	Description	Policy Type	Policy Group
Sharepoint_Discov ery	Discovers the SharePoint environment.	Service Auto-Discovery policy	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ SharePoint Portal Server $\rightarrow$ SharePoint Server 2010 $\rightarrow$ Discovery

# Reports

The reports for the Microsoft SharePoint Server 2010 are as listed in the following section.

### Memory and CPU reports

You can use the memory and CPU reports to plan and predict capacity of the Microsoft Office SharePoint Server 2010 deployment. .



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

### 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.

# **IIS Worker Process reports**

You must deploy the MSES\_SPS\_14\_Logging\_Process\_w3wp policy for this report to function correctly.

#### 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.

# Graphs

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

Graph	Description	
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.	

Graph	Description	
SharePoint Server Search Service Memory	<ul> <li>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.</li> <li>Counters:</li> <li>Process.Private Bytes</li> </ul>	
	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.	
	Counter: 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:	
	<ul><li> Process.Private Bytes</li><li> Process.Working Set</li></ul>	
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. <b>Counters:</b>	
	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.	

# 6 Microsoft Enterprise Servers SPI for Office Communications Server 2007

The Microsoft Enterprise Servers SPI monitors the Microsoft Office Communications Server 2007 and 2007 R2 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.

# **Policies**

The OCS has the following policy groups:

- Discovery
- AccessEdgeServer
- Archiving CDR Server
- AVConfServer
- AVEdgeServer
- Configuration
- CWAServer
- FrontEnd Server
- IMConfServer
- MediationServer
- TelConfServer
- WebCompServer
- WebConfServer
- WebEdgeServer
- Others

# Discovery

The Discovery policy group contains the OCS\_Discovery policy which discovers the OCS roles and services. The 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 pool, pool type (standard/enterprise), and members of the pool are also discovered by the policy. If the agent is not running under the default account (Local System account) on the managed node, then you must 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.

Policy	Description	Policy Type	Policy Group
OCS_Discovery	Discovers the OCS roles and services.	Service Auto-Discovery	SPI for Microsoft Enterprise Servers $\rightarrow$ en Microsoft_Office_Communications_Server $\rightarrow$ Microsoft_Office_Communications_Server_2007 $\rightarrow$ Discovery

The username format for HTTPS is domain\\user

# AccessEdgeServer

The Access Edge Server is located in the perimeter network. It validates incoming SIP traffic and forwards the IM traffic between internal and external users. In Live Communications Server 2005, it is called the Access Proxy.

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

# Policies deployed on OCS 2007 and OCS 2007 R2

All the policies that can be deployed on both OCS 2007 and OCS 2007 R2 are available at SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server

The policies belong to the **Measurement Threshold** policy type.

The following policies can be deployed on OCS 2007 and OCS 2007 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).



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

Policy	OCS_AccessEdgeServer_Logging Policy
Name	OCS_AccessEdgeServer_Logging
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 02 – Protocol
Counter	SIP - 021 - Average Incoming Message Processing Time
Data Class	OCS_ACCESSEDGE
Instance	_Total

#### OCS\_AccessEdgeServer\_FlowControlledConnectionsDropped Policy

Policy	OCS_AccessEdgeServer_FlowControlledConnectionsDropped Policy
Name	$OCS\_AccessEdgeServer\_FlowControlledConnectionsDropped$
Description	Monitors the total number of connections dropped because of excessive flow-control.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 01 - Peers
Instance	_Total
Counter:	SIP - 024 - Flow-controlled Connections Dropped

Policy	OCS_AccessEdgeServer_FlowControlledConnectionsDropped Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	5
Critical	10

# OCS\_AccessEdgeServer\_AddressSpaceUsage Policy

Policy	OCS_AccessEdgeServer_AddressSpaceUsage Policy
Name	OCS_AccessEdgeServer_AddressSpaceUsage
Description	Monitors the percentage of available address space currently in use by the server process.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 07 - Load Management
Counter:	SIP - 009 - Address space usage
Warning	65
Critical	75

# OCS\_AccessEdgeService\_PrivateBytes Policy

Policy	OCS_AccessEdgeService_PrivateBytes Policy
Name	OCS_AccessEdgeService_PrivateBytes
Description	Monitors the Private Bytes counter of the Access Edge Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Private Bytes
Threshold	This policy has the following threshold Warning: 1.5e+007 Critical: 2e+007

## OCS\_Check\_AccessEdgeServiceStatus Policy

Policy	OCS_Check_AccessEdgeServiceStatus Policy
Name	OCS_Check_AccessEdgeServiceStatus
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCSrv

# OCS\_AccessEdgeServer\_ActiveTLSConnections Policy

Policy	OCS_AccessEdgeServer_ActiveTLSConnections Policy
Name	OCS_AccessEdgeServer_ActiveTLSConnections
Description	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.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:API - 00 - API Application Instance Counters
Instance	_TotalCounter
Counter	API - 026 - Transactions Pending Dispatch Completion
Threshold	When the difference between two samples is greater than:
	Warning: 500
	Critical: 1000

# OCS\_AccessEdgeServer\_MsgsDroppedPerSecDueToCertMismatch Policy

Policy	OCS_AccessEdgeServer_MsgsDroppedPerSecDueToCertMismatch Policy
Name	$OCS\_AccessEdgeServer\_MsgsDroppedPerSecDueToCertMismatch$
Description	Monitors the number of messages dropped per second because the remote peer's certificate did not contain a matching FQDN.
Schedule	This policy runs every 15 minutes.

Policy	OCS_AccessEdgeServer_MsgsDroppedPerSecDueToCertMismatch Policy
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

# OCS\_AccessEdgeServer\_RejectedExtEdgeServerConnectionsPerSec Policy

Policy	OCS_AccessEdgeServer_RejectedExtEdgeServerConnectionsPerSec Policy
Name	$OCS\_AccessEdgeServer\_RejectedExtEdgeServerConnectionsPerSec$
Description	Monitors the number of messages dropped per second because the remote peer's certificate did not contain a matching FQDN.
Schedule	This policy runs every 15 minutes.
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

# OCS\_AccessEdgeServer\_SendsTimedOut Policy

Policy	OCS_AccessEdgeServer_SendsTimedOut Policy
Name	OCS_AccessEdgeServer_SendsTimedOut
Description	Monitors the total number of sends dropped because they stayed in the outgoing (send) queue for too long.
Schedule	This policy runs every 15 minutes.
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

Policy	OCS_AccessEdgeServer_IncomingResponsesDroppedPerSec Policy
Name	$OCS\_AccessEdgeServer\_IncomingResponsesDroppedPerSec$
Description	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).
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 02 - Protocol
Counter	SIP - 005 - Incoming Responses Dropped/sec
Threshold	Configuration recommended

### OCS\_AccessEdgeServer\_IncomingResponsesDroppedPerSec Policy

# OCS\_AccessEdgeService\_WorkingSet Policy

Policy	OCS_AccessEdgeService_WorkingSet Policy
Name	OCS_AccessEdgeService_WorkingSet
Description	Monitors the Working Set counter of the Access Edge Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Working Set
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

# OCS\_AccessEdgeServer\_MsgPerSecDroppedDueToUnknownDomain Policy

Policy	$OCS\_AccessEdgeServer\_MsgPerSecDroppedDueToUnknownDomaint$
Name	$OCS\_AccessEdgeServer\_MsgPerSecDroppedDueToUnknownDomaint$
Description	Monitors the number of messages that could not be routed per second because the message domain is not in the routing table.
Schedule	This policy runs every 15 minutes.

Policy	$OCS\_AccessEdgeServer\_MsgPerSecDroppedDueToUnknownDomaint$
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

# OCS\_AccessEdgeServer\_FlowControlledConnections Policy

Policy	OCS_AccessEdgeServer_FlowControlledConnections Policy
Name	OCS_AccessEdgeServer_FlowControlledConnections
Description	Monitors the number of connections that are currently being flow-controlled (no socket receives are posted).
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 01 - Peers
Instance	_Total
Counter	SIP - 023 - Flow-controlled Connections
Threshold	This policy has the following threshold: Warning: 50 Critical: 100

# OCS\_AccessEdgeService\_ThreadCount Policy

Policy	OCS_AccessEdgeService_ThreadCount Policy
Name	OCS_AccessEdgeService_ThreadCount
Description	Monitors the number of connections that are currently being flow-controlled (no socket receives are posted).
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Thread Count
Threshold	This policy has the following threshold: Warning: 100 Critical: 150

### OCS\_AccessEdgeServer\_RejectedExtEdgeClientConnectionsPerSec Policy

Policy	OCS_AccessEdgeServer_RejectedExtEdgeClientConnectionsPerSec Policy
Name	$OCS\_AccessEdgeServer\_RejectedExtEdgeClientConnectionsPerSec$
Description	Monitors the number of client connections rejected at the external edge per second because remote user access is disabled.
Schedule	This policy runs every 15 minutes.
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

# OCS\_AccessEdgeService\_Logging Policy

Policy	OCS_AccessEdgeService_Logging Policy
Name	OCS_AccessEdgeService_Logging
Description	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).
Schedule	This policy runs every 15 minutes.
Schedule	This policy runs every 15 minutes.
Data Class	OCS_PROCESS

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\% Processor Time

## OCS\_AccessEdgeService\_PageFaultsPerSec Policy

Policy	OCS_AccessEdgeService_PageFaultsPerSec Policy
Name	OCS_AccessEdgeService_PageFaultsPerSec
Description	Monitors the Page Faults/sec counter of the Access Edge Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Page Faults/sec
Threshold	This policy has the following threshold:
	Warning: 50
	Critical: 100

# OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedDomain Policy

Policy	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToBlockedDomain Policy
Name	$OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedDomain$
Description	Monitors the number of messages dropped at the external edge per second because the domain is in the blocked list.
Schedule	This policy runs every 15 minutes.
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

# OCS\_AccessEdgeServer\_MessagesInServer Policy

Policy	OCS_AccessEdgeServer_MessagesInServer Policy
Name	OCS_AccessEdgeServer_MessagesInServer
Description	Monitors the number of messages currently being processed by the server.
Schedule	This policy runs every 15 minutes.

Policy	OCS_AccessEdgeServer_MessagesInServer Policy
Performance Object	LC:SIP - 02 – Protocol
Counter	SIP - 012 - Messages In Server
Threshold	This policy has the following threshold:
	<b>Warning:</b> 2500
	Critical: 5000

# OCS\_AccessEdgeServer\_AverageIncomingMessageProcessingTime Policy

Policy	OCS_AccessEdgeServer_AverageIncomingMessageProcessingTime Policy
Name	$OCS\_AccessEdgeServer\_AverageIncomingMessageProcessingTime$
Description	Monitors the average time (in seconds) it takes to process an incoming message.
Schedule	This policy runs every 15 minutes.
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

# OCS\_AccessEdgeService\_ProcessorTime Policy

Policy	OCS_AccessEdgeService_ProcessorTime Policy
Name	OCS_AccessEdgeService_ProcessorTime
Description	Monitors the % Processor Time counter of the Access Edge Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	% Processor Time
Threshold	This policy has the following threshold:
	Warning: 80
	Critical: 90

Policy	$OCS\_AccessEdgeServer\_IncomingRequestsDroppedPerSec\ Policy$
Name	$OCS\_AccessEdgeServer\_IncomingRequestsDroppedPerSec$
Description	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).
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 02 - Protocol
Counter	SIP - 005 - Incoming Requests Dropped/sec
Threshold	Configuration recommended

### OCS\_AccessEdgeServer\_IncomingRequestsDroppedPerSec Policy

# OCS\_AccessEdgeServer\_AboveLimitConnectionsDropped Policy

Policy	OCS_AccessEdgeServer_AboveLimitConnectionsDropped Policy
Name	OCS_AccessEdgeServer_AboveLimitConnectionsDropped
Description	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.
Schedule	This policy runs every 15 minutes.
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

# $OCS\_AccessEdgeServer\_IncomingMsgHeldAboveOverloadWatermark\ Policy$

Policy	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
Name	$OCS\_AccessEdgeServer\_IncomingMsgHeldAboveOverloadWatermark$
Description	Monitors the number of incoming messages currently being held by the server for processing for more than the overload watermark time threshold.
Schedule	This policy runs every 15 minutes.

Policy	OCS_AccessEdgeServer_IncomingMsgHeldAboveOverloadWatermark Policy
Performance Object	LC:SIP - 07 - Load Management
Counter	SIP - 004 - Incoming Messages Held Above Overload Watermark
Threshold	Configuration recommended

# Policies deployed only on OCS 2007

The policies that can be deployed only on the OCS 2007 server are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  AccessEdgeServer  $\rightarrow$  OCS2007

All the policies that can be deployed only on OCS 2007 belong to the **Measurement Threshold** policy type.

### OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnresolvedDomain Policy

Policy	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToUnresolvedDom ain Policy
Name	$OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnresolvedDomain$
Description	Monitors the number of messages dropped at the external edge per second because the domain failed to resolve by DNS SRV.
Schedule	This policy runs every 15 minutes.
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

OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToIncompMsgDomain Policy

Policy	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToIncompMsgDom ain Policy
Name	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
Description	Monitors the number of messages dropped at the external edge per second because the federation type of the domain is incompatible with previous messages.
Schedule	This policy runs every 15 minutes.

Policy	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToIncompMsgDom ain Policy
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

OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDomain Policy

Policy	$OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDoma in Policy$
Name	$OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDoma in$
Description	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.
Schedule	This policy runs every 15 minutes.
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

# CS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedIMDomain Policy

Policy	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
Name	$CS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedIMDomain$
Description	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.
Schedule	This policy runs every 15 minutes.

Policy	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
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

# Policies deployed only on OCS 2007 R2

The policies that can be deployed only on the OCS 2007 server are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  AccessEdgeServer  $\rightarrow$  OCS2007\_R2

All the policies that can be deployed only on OCS 2007 belong to the **Measurement Threshold** policy type.

Policy	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToUnresolvedDom ain_R2 Policy	
Name	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToUnresolvedDom ain_R2	
Description	Monitors the number of messages dropped at the external edge per second because the domain failed to resolve by DNS SRV.	
Schedule	This policy runs every 15 minutes.	
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	

#### OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnresolvedDomain\_R2 Policy

# $OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToIncompMsgDomain\_R2\ Policy$

Policy	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToIncompMsgDom ain_R2 Policy
Name	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToIncompMsgDom ain_R2
Description	Monitors the number of messages dropped at the external edge per second because the federation type of the domain is incompatible with previous messages.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 09 - Access Edge Server Messages
Counter	SIP - 069 - External Messages/sec Dropped Due To Incompatible Message Domain
Threshold	This policy has the following threshold: Warning: 5 Critical: 10

# OCS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToUnauthIMDomain\_R2 Policy

Policy	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToUnauthIMDoma in_R2 Policy
Name	OCS_AccessEdgeServer_ExtMsgPerSecDroppedDueToUnauthIMDoma in_R2
Description	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.
Schedule	This policy runs every 15 minutes.
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

Policy	CS_AccessEdgeServer_ExtMsgPerSecDroppedDueToBlockedIMDomain _R2 Policy	
Name	CS_AccessEdgeServer_ExtMsgPerSecDroppedDueToBlockedIMDomain _R2	
Description	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.	
Schedule	This policy runs every 15 minutes.	
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	

#### CS\_AccessEdgeServer\_ExtMsgPerSecDroppedDueToBlockedIMDomain\_R2 Policy

# Archiving CDR Server

Deploy the Archiving CDR Server policy group on the 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 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 must 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.

The policies in the Archiving CDR Server group are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  ArchivingCDRServer

All the Archiving CDR Server group policies belong to the **Measurement Threshold** policy type.

The policy group contains the following policies:

## OCS\_ArchivingCDRService\_Logging Policy

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

Policy	OCS_ArchivingCDRService_Logging Policy	
Name	OCS_ArchivingCDRService_Logging	
Description	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).	
Schedule	This policy runs every 15 minutes.	
Data Class	OCS_PROCESS	

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

### OCS\_ArchivingCDRService\_ThreadCount Policy

Policy	OCS_ArchivingCDRService_ThreadCount Policy
Name	OCS_ArchivingCDRService_ThreadCount
Description	Monitors the Thread Count counter of the Archiving and CDR service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Counter	RTCArch
Instance	Thread Count
Threshold	This policy has the following threshold: Warning: 100 Critical: 150

### OCS\_Check\_ArchivingCDRServiceStatus Policy

Policy	OCS_Check_ArchivingCDRServiceStatus Policy
Name	OCS_Check_ArchivingCDRServiceStatus
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored service	RTCLOG

### OCS\_ArchivingCDRServer\_NumberOfMessagesNotWrittenToDB Policy

Policy	OCS_ArchivingCDRServer_NumberOfMessagesNotWrittenToDB Policy
Name	$OCS\_ArchivingCDRServer\_NumberOfMessagesNotWrittenToDB$
Description	Monitors the number of messages that validation failed for.
Schedule	This policy runs every 15 minutes.
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 <b>Critical:</b> 1

# OCS\_ArchivingCDRService\_PageFaultsPerSec Policy

Policy	OCS_ArchivingCDRService_PageFaultsPerSec Policy
Name	OCS_ArchivingCDRService_PageFaultsPerSec
Description	Monitors the Page Faults/sec counter of the Archiving and CDR service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCArch
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Warning:</b> 50 <b>Critical:</b> 100

# OCS\_ArchivingCDRService\_WorkingSet Policy

Policy	OCS_ArchivingCDRService_WorkingSet Policy
Name	OCS_ArchivingCDRService_WorkingSet
Description	Monitors the Working Set counter of the Archiving and CDR service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCArch
Counter	Working Set
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

# OCS\_ArchivingCDRServer\_NumberOfDroppedMQMessages Policy

Policy	OCS_ArchivingCDRServer_NumberOfDroppedMQMessages Policy
Name	$OCS\_ArchivingCDRServer\_NumberOfDroppedMQMessages$
Description	Monitors the number of messages dropped from MSMQ queue.
Schedule	This policy runs every 15 minutes.
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 <b>Critical:</b> 1

# OCS\_ArchivingCDRService\_ProcessorTime Policy

Policy	OCS_ArchivingCDRService_ProcessorTime Policy
Name	OCS_ArchivingCDRService_ProcessorTime
Description	Monitors the % Processor Time counter of the Archiving and CDR service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process

Policy	OCS_ArchivingCDRService_ProcessorTime Policy
Instance	RTCArch
Counter	% Processor Time
Threshold	This policy has the following threshold: <b>Warning:</b> 80 <b>Critical:</b> 90

#### OCS\_ArchivingCDRServer\_NumberOfValidationFailedMessages Policy

Policy	$OCS\_ArchivingCDRS erver\_NumberOfValidationFailedMessages\ Policy$
Name	$OCS\_ArchivingCDRServer\_NumberOfValidationFailedMessages$
Description	Monitors the number of messages failed to be written to SQL database
Schedule	This policy runs every 15 minutes.
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 <b>Critical:</b> 1

#### OCS\_ArchivingCDRService\_PrivateBytes Policy

Policy	OCS_ArchivingCDRService_PrivateBytes Policy
Name	OCS_ArchivingCDRService_PrivateBytes
Description	Monitors the Private Bytes counter of the Archiving and CDR service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCArch
Counter	Private Bytes
Threshold	This policy has the following threshold: <b>Warning:</b> 1.5e+007 <b>Critical:</b> 2e+007

# **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 joined with the Front End Server and Web Conferencing Server or can be deployed on a separate server.

The policies in the AV Conferencing Server group are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  AVConfServer

All the Archiving CDR Server group policies belong to the **Measurement Threshold** policy type.

This policy group has the following policies:

#### OCS\_AVConfService\_PrivateBytes Policy

Policy	OCS_AVConfService_PrivateBytes Policy
Name	OCS_AVConfService_PrivateBytes
Description	Monitors the Private Bytes counter of the Audio/Video Conferencing service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AVMCUSvc
Counter	Private Bytes
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

#### OCS\_AVConfServer\_NumberOfActiveConferences Policy

Policy	OCS_AVConfServer_NumberOfActiveConferences Policy
Name	OCS_AVConfServer_NumberOfActiveConferences
Description	Monitors the number of active conferences on the A/V Conferencing Server.
Schedule	This policy runs every 5 minutes.
Performance Object	AVMCU - 00 - Operations
Counter	AVMCU - 000 - Number of Conferences
Threshold	This policy has the following threshold: Warning: 4000 Critical: 5000

### OCS\_AVConfService\_ProcessorTime Policy

Policy	OCS_AVConfService_ProcessorTime Policy
Name	OCS_AVConfService_ProcessorTime
Description	Monitors the % Processor Time counter of the Front End service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AVMCUSvc
Counter	% Processor Time
Threshold	This policy has the following threshold: Warning: 80 Critical: 90

# OCS\_AVConfService\_WorkingSet Policy

Policy	OCS_AVConfService_WorkingSet Policy
Name	OCS_AVConfService_WorkingSet
Description	Monitors the Working Set counter of the Audio/Video Conferencing service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AVMCUSvc
Counter	Working Set
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

# OCS\_Check\_AVConfServiceStatus Policy

Policy	OCS_Check_AVConfServiceStatus Policy
Name	OCS_Check_AVConfServiceStatus

Policy	OCS_Check_AVConfServiceStatus Policy	
Description	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 restart the service	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCAVMCU	

# OCS\_AVConfServer\_MCUHealthState Policy

Policy	OCS_AVConfServer_MCUHealthState Policy
Name	OCS_AVConfServer_MCUHealthState
Description	Monitors the current health of the MCU. This is considered as: 0 = Normal 1 = Loaded 2 = Full 3 = Unavailable
Schedule	This policy runs every 15 minutes.
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

# OCS\_AVConfService\_ThreadCount Policy

Policy	OCS_AVConfService_ThreadCount Policy
Name	OCS_AVConfService_ThreadCount
Description	Monitors the Thread Count counter of the Audio/Video Conferencing service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process

Policy	OCS_AVConfService_ThreadCount Policy
Instance	AVMCUSvc
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Warning:</b> 100 <b>Critical:</b> 150

#### OCS\_AVConfService\_PageFaultsPerSec Policy

Policy	OCS_AVConfService_PageFaultsPerSec Policy
Name	OCS_AVConfService_PageFaultsPerSec
Description	Monitors the Page Faults/sec counter of the Audio/Video Conferencing service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AVMCUSvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning: 50 Critical: 100

# OCS\_AVConfService\_Logging Policy

 $Ensure that the OCS\_CreateDataSources policy is running before you deploy the OCS\_AVConfService\_Logging policy.$ 

Policy	OCS_AVConfService_Logging Policy
Name	OCS_AVConfService_Logging
Description	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).
Schedule	This policy runs every 15 minutes.
Data Class	OCS_PROCESS

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

# **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 audio and video 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.

# Policies deployed on OCS 2007 and OCS 2007 R2

The policies that can be deployed on both OCS 2007 and OCS 2007 R2 servers are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  AVEdgeServer

All the policies belong to the **Measurement Threshold** policy type.

Policy	OCS_AVEdgeServer_UDPAllocateRqstExceedingPortLimit Policy
Name	OCS_AVEdgeServer_UDPAllocateRqstExceedingPortLimit
Description	Monitors the number of requests allocated over UDP that exceeded the port limit per second.
Schedule	This policy runs every 15 minutes.
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

#### OCS\_AVEdgeServer\_UDPAllocateRqstExceedingPortLimit Policy

# OCS\_AVAuthService\_PageFaultsPerSec Policy

Policy	OCS_AVAuthService_PageFaultsPerSec Policy
Name	OCS_AVAuthService_PageFaultsPerSec
Description	Monitors the Page Faults/sec counter of the Audio/Video Authentication service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MRASSvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold:
	Warning:50
	Critical: 100

# OCS\_AVAuthService\_PrivateBytes Policy

Policy	OCS_AVAuthService_PrivateBytes Policy
Name	OCS_AVAuthService_PrivateBytes
Description	Monitors the Private Bytes counter of the Audio/Video Authentication service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MRASSvc
Counter	Private Bytes
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

# OCS\_AVAuthService\_ProcessorTime Policy

Policy	OCS_AVAuthService_ProcessorTime Policy	
Name	OCS_AVAuthService_ProcessorTime	
Description	Monitors the % Processor Time counter of the Audio/Video Authentication service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	

Policy	OCS_AVAuthService_ProcessorTime Policy
Instance	MRASSvc
Counter	% Processor Time
Threshold	This policy has the following threshold:
	Warning: 80
	Critical: 90

# OCS\_AVAuthService\_ThreadCount Policy

Policy	OCS_AVAuthService_ThreadCount Policy
Name	OCS_AVAuthService_ThreadCount
Description	Monitors the monitors the Thread Count counter of the Audio/Video Authentication service
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MediaRelaySvc
Counter	Thread Count
Threshold	This policy has the following threshold: Warning: 100 Critical: 150

# OCS\_AVEdgeServer\_WorkingSet Policy

Policy	OCS_AVEdgeServer_WorkingSet Policy
Name	OCS_AVEdgeServer_WorkingSet
Description	Monitors the Working Set counter of the Audio/Video Authentication service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MRASSvc
Counter	Working Set
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

## OCS\_AVEdgeServer\_LoggingPolicy

Policy	OCS_AVEdgeServer_Logging Policy	
Name	OCS_AVEdgeServer_Logging	
Description	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, 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	OCS_PROCESS	

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

Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_AVEdgeServer\_Logging policy.

### OCS\_Check\_AVAuthServiceStatus Policy

Policy	OCS_Check_AVAuthServiceStatus Policy	
Name	OCS_Check_AVAuthServiceStatus	
Description	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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCMRAUTH	

# OCS\_Check\_AVEdgeServiceStatus Policy

Policy	OCS_Check_AVEdgeServiceStatus Policy	
Name	OCS_Check_AVEdgeServiceStatus	
Description	Monitors 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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCMEDIARELAY	

# OCS\_AVEdgeService\_PageFaultsPerSec Policy

Policy	OCS_AVEdgeService_PageFaultsPerSec Policy
Name	OCS_AVEdgeService_PageFaultsPerSec
Description	Monitors Page Faults/sec counter of the Audio/Video Conferencing Edge Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MediaRelaySvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning:50 Critical: 100

# OCS\_AVEdgeService\_PrivateBytes Policy

Policy	OCS_AVEdgeService_PrivateBytes Policy	
Name	OCS_AVEdgeService_PrivateBytes	
Description	Monitors the Private Bytes counter of the Audio/Video Authentication service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	

Policy	OCS_AVEdgeService_PrivateBytes Policy
Instance	MediaRelaySvc
Counter	Private Bytes
Threshold	This policy has the following threshold: <b>Warning:</b> 1.5e+007 <b>Critical:</b> 2e+007

# OCS\_AVEdgeService\_ProcessorTime Policy

Policy	OCS_AccessEdgeService_ProcessorTime Policy	
Name	OCS_AccessEdgeService_ProcessorTime	
Description	Monitors the % Processor Time counter of the Audio/Video Conferencing Edge Service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	
Instance	MediaRelaySvc	
Counter	% Processor Time	
Threshold	This policy has the following threshold: Warning: 80 Critical: 90	

# OCS\_AVEdgeService\_ThreadCount Policy

Policy	OCS_AVEdgeService_ThreadCount Policy	
Name	OCS_AVEdgeService_ThreadCount	
Description	Monitors the monitors the Thread Count counter of the Audio/Video Conferencing Edge Service	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	
Instance	MediaRelaySvc	
Counter	Thread Count	
Threshold	This policy has the following threshold: Warning: 100 Critical: 150	

# OCS\_AVEdgeService\_WorkingSet Policy

Policy	OCS_AVEdgeService_WorkingSet Policy	
Name	OCS_AVEdgeService_WorkingSet	
Description	Monitors the Working Set counter of the Audio/Video Conferencing Edge Service	
Schedule	This policy runs every 5 minutes	
Performance Object	Process	
Instance	MediaRelaySvc	
Counter	Working Set	
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007	

# OCS\_AVEdgeServer\_BadRequestsReceivedPerSec Policy

Policy	OCS_AVEdgeServer_BadRequestsReceivedPerSec Policy
Name	$OCS\_AVEdgeServer\_BadRequestsReceivedPerSec$
Description	Monitors the number of invalid requests received per second
Schedule	This policy runs every 15 minutes.
Performance Object	A/V Auth - 00 – Requests
Counter	- 003 - Bad Requests Received/sec
Threshold	This policy has the following threshold: Warning: 20 Critical: 30

# $OCS\_AVEdgeServer\_TCPAllocRqstExceedingPortLimit\ Policy$

Policy	OCS_AVEdgeServer_TCPAllocRqstExceedingPortLimit Policy
Name	$OCS\_AVEdgeServer\_TCPAllocRqstExceedingPortLimit$
Description	Monitors the number of allocated requests over TCP per second that exceeded the port limit.
Schedule	This policy runs every 15 minutes.
Performance Object	A/V Edge - 01 - TCP Counters

Policy	OCS_AVEdgeServer_TCPAllocRqstExceedingPortLimit Policy
Instance	_Total
Counter	- 006 - Allocate Requests Exceeding Port Limit/Sec
Threshold	This policy has the following threshold: <b>Warning:</b> 10 <b>Critical:</b> 20

# OCS\_AVEdgeServer\_TCPAuthenticationFailuresPerSec Policy

Policy	OCS_AVEdgeServer_TCPAuthenticationFailuresPerSec Policy	
Name	$OCS\_AVEdgeServer\_TCPA uthenticationFailuresPerSec$	
Description	Monitors the failed attempts to authenticate with the relay over TCP per second.	
Schedule	This policy runs every 15 minutes.	
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	

# OCS\_AVEdgeServer\_UDPAllocateRqstExceedingPortLimit Policy

Policy	OCS_AVEdgeServer_UDPAllocateRqstExceedingPortLimit Policy
Name	$OCS\_AVEdgeServer\_UDPAllocateRqstExceedingPortLimit$
Description	Monitors the number of requests allocated over UDP that exceeded the port limit per second.
Schedule	This policy runs every 15 minutes.
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: <b>Warning:</b> 10 <b>Critical:</b> 20

Policy	OCS_AVEdgeServer_UDPAuthenticationFailuresPerSec Policy
Name	OCS_AVEdgeServer_UDPAuthenticationFailuresPerSec
Description	Monitors the number of failed attempts to authenticate with the relay over UDP per second.
Schedule	This policy runs every 15 minutes.
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

#### OCS\_AVEdgeServer\_UDPAuthenticationFailuresPerSec Policy

# Policies deployed only on OCS 2007

The policies that can be deployed only on the OCS 2007 server are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  AVEdgeServer  $\rightarrow$  OCS2007

All the policies belong to the **Measurement Threshold** policy type.

#### OCS\_AVEdgeServer\_Logging Policy

Policy	OCS_AVEdgeServer_Logging Policy
Name	OCS_AVEdgeServer_Logging
Description	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).
Schedule	This policy runs every 15 minutes.
Data Class	OCS_PROCESS

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



Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_AVEdgeServer\_Logging policy.

Policy	OCS_AVEdgeServer_TCPPacketsDroppedPerSec Policy	
Name	OCS_AVEdgeServer_TCPPacketsDroppedPerSec	
Description	Monitors the number of packets over TCP dropped by the relay per second.	
Schedule	This policy runs every 15 minutes.	
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	

OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec Policy

#### OCS\_AVEdgeServer\_UDPActiveSessionsExceedingBandwidthLimit Policy

Policy	OCS_AVEdgeServer_UDPActiveSessionsExceedingBandwidthLimit Policy
Name	$OCS\_AVEdgeServer\_UDPActiveSessionsExceedingBandwidthLimit$
Description	Monitors the number of active relay sessions over UDP that are exceeding bandwidth limit.
Schedule	This policy runs every 15 minutes.
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

#### OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec Policy

Policy	OCS_AVEdgeServer_UDPPacketsDroppedPerSec Policy		
Name	OCS_AVEdgeServer_UDPPacketsDroppedPerSec		
Description	Monitors packets over UDP dropped by the relay per second rate		
Schedule	This policy runs every 15 minutes.		

Policy	OCS_AVEdgeServer_UDPPacketsDroppedPerSec Policy
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

#### OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit Policy

Policy	OCS_AVEdgeServer_TCPActiveSessionsExceedingBandwidthLimit Policy	
Name	$OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit$	
Description	Monitors monitors the number of active relay sessions over TCP per second that are exceeding bandwidth limit	
Schedule	This policy runs every 15 minutes.	
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	

# Policies deployed only on OCS 2007 R2

The policies that can be deployed only on the OCS 2007 R2 server are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  AVEdgeServer  $\rightarrow$  OCS2007\_R2

All the policies belong to the **Measurement Threshold** policy type.

### OCS\_AVEdgeServer\_Logging\_R2 Policy

Policy	OCS_AVEdgeServer_Logging_R2 Policy		
Name	OCS_AVEdgeServer_Logging_R2		
Description	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).		
Schedule	This policy runs every 15 minutes.		
Data Class	OCS_PROCESS		

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

Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_AVEdgeServer\_Logging\_R2 policy.

### OCS\_AVEdgeServer\_TCPPacketsDroppedPerSec\_R2 Policy

Policy	OCS_AVEdgeServer_TCPPacketsDroppedPerSec_R2 Policy
Name	OCS_AVEdgeServer_TCPPacketsDroppedPerSec_R2
Description	Monitors the number of packets over TCP dropped by the relay per second.
Schedule	This policy runs every 15 minutes.
Performance Object	A/V Edge - 01 - TCP Counters
Instance	_Total
Counter	- 022 - Packets Dropped/sec
Threshold	This policy has the following threshold: <b>Warning:</b> 100 <b>Critical:</b> 150

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Policy	OCS_AVEdgeServer_UDPActiveSessionsExceedingBandwidthLimit_R2 Policy
Name	OCS_AVEdgeServer_UDPActiveSessionsExceedingBandwidthLimit_R2
Description	Monitors the number of active relay sessions over UDP that are exceeding bandwidth limit.
Schedule	This policy runs every 15 minutes.
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

# OCS\_AVEdgeServer\_UDPPacketsDroppedPerSec\_R2 Policy

Policy	OCS_AVEdgeServer_UDPPacketsDroppedPerSec_R2 Policy		
Name	OCS_AVEdgeServer_UDPPacketsDroppedPerSec_R2		
Description	Monitors packets over UDP dropped by the relay per second rate.		
Schedule	This policy runs every 15 minutes.		
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		

# OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit\_R2 Policy

Policy	OCS_AVEdgeServer_TCPActiveSessionsExceedingBandwidthLimit_R2 Policy
Name	$OCS\_AVEdgeServer\_TCPActiveSessionsExceedingBandwidthLimit\_R2$
Description	Monitors the number of active relay sessions over TCP per second that are exceeding bandwidth limit.
Schedule	This policy runs every 15 minutes.
Performance Object	A/V Edge - 01 - TCP Counters

Policy	OCS_AVEdgeServer_TCPActiveSessionsExceedingBandwidthLimit_R2 Policy
Instance	_Total
Counter	- 025- Active Sessions Exceeding AvgBandwidth Limit
Threshold	This policy has the following threshold: Warning: 10 Critical: 20

# Configuration

This policy group can be deployed on all Microsoft Office Communications Server 2007 server roles. The policy group includes OCS\_CreateDataSources policy.

Policy	OCS_CreateDataSources Policy		
Name	OCS_CreateDataSources		
Description	Creates the OCS data source (CODA or HP Performance Agent) into which OCS SPI logging policies log data. Ensure to run this policy on he node before you deploy any logging policy.		
Policy Type	Scheduled Task policy		
Policy Group	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ Microsoft_Office_Communications_Server $\rightarrow$ Microsoft_Office_Communications_Server_2007 $\rightarrow$ Configuration		

# **CWAServer**

Deploy this policy group on Communicator Web Access (CWA) server. The CWA server enables browser-based client access to Microsoft Office Communications Server 2007.

The policies are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  CWAServer

All the policies belong to the **Measurement Threshold** policy type.

The policy group has the following policies:

#### OCS\_CWAServer\_AuthFailuresDueToLDAPErrors Policy

Policy	OCS_CWAServer_AuthFailuresDueToLDAPErrors Policy
Name	OCS_CWAServer_AuthFailuresDueToLDAPErrors
Description	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.
Schedule	This policy runs every 15 minutes.

Policy	OCS_CWAServer_AuthFailuresDueToLDAPErrors Policy
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

# OCS\_CWAServer\_FailedRequests Policy

Policy	OCS_CWAServer_FailedRequests Policy
Name	OCS_CWAServer_FailedRequests
Description	Monitors the total number of requests that failed to process since the Communicator Web Access virtual server was started.
Schedule	This policy runs every 15 minutes.
Performance Object	CWA - 03 - User session Service
Instance	_Total
Counter	CWA - 018 - Total requests failed
Threshold	When the difference between two samples is greater than: Warning: 250 Critical: 500

# OCS\_CWAServer\_LogonsDeniedDueToServerThrottling Policy

Policy	OCS_CWAServer_LogonsDeniedDueToServerThrottling Policy
Name	OCS_CWAServer_LogonsDeniedDueToServerThrottling
Description	Monitors total number of logon attempts that were not allowed due to server throttling under heavy resource consumption.
Schedule	This policy runs every 15 minutes.
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

Policy	OCS_CWAServer_RequestsRejectedPerSecDueToInvalidTicket Policy
Name	$OCS\_CWAS erver\_Requests Rejected PerSecDueToInvalidTicket$
Description	Monitors the number of requests 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.
Schedule	This policy runs every 15 minutes.
Performance Object	CWA - 02 – Security
Instance	_Total
Counter	CWA - 001 - Requests rejected due to invalid ticket / sec
Threshold	When the difference between two samples is greater than: Warning: 5 Critical: 10

#### OCS\_CWAServer\_RequestsRejectedPerSecDueToInvalidTicket Policy

#### OCS\_CWAServer\_RequestsToNonExistentSessions Policy

Policy	OCS_CWAServer_RequestsToNonExistentSessionss Policy
Name	OCS_CWAServer_RequestsToNonExistentSessionss
Description	Monitors the total number of requests targeting nonexistent sessions since the Communicator Web Access virtual server was started.
Schedule	This policy runs every 15 minutes.
Performance Object	CWA - 03 - User session Service
Instance	_Total
Counter	CWA - 016 - Requests to nonexistent sessions
Threshold	When the difference between two samples is greater than: Warning: 250 Critical: 500

# OCS\_CWAServer\_SessionsFailedToSignIn Policy

Policy	OCS_CWAServer_SessionsFailedToSignIn Policy
Name	OCS_CWAServer_SessionsFailedToSignIn
Description	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.
Schedule	This policy runs every 15 minutes.

Policy	OCS_CWAServer_SessionsFailedToSignIn Policy
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

# $OCS\_CWAS erver\_SessionsTimedOut\ Policy$

Policy	OCS_CWAServer_SessionsTimedOut Policy
Name	OCS_CWAServer_SessionsTimedOut
Description	Monitors the total number of Communicator Web Access user sessions that timed out due to communication failure with clients.
Schedule	This policy runs every 15 minutes.
Performance Object	CWA - 03 - User session Service
Instance	_Total
Counter	CWA - 007 - Total sessions timed out
Threshold	When the difference between two samples is greater than: Warning: 250 Critical: 500

# OCS\_CWAServer\_FormsLogonFailures Policy

Policy	OCS_CWAServer_FormsLogonFailures Policy
Name	OCS_CWAServer_FormsLogonFailures
Description	Monitors total number of forms logon attempts that have failed since the Communicator Web Access virtual server was started
Schedule	This policy runs every15 minutes.
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

#### OCS\_CWAServer\_IWALogonFailures Policy

Policy	OCS_CWAServer_IWALogonFailures Policy
Name	OCS_CWAServer_IWALogonFailures
Description	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.
Schedule	This policy runs every 15 minutes.
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

# OCS\_CWAServer\_LDAPErrors Policy

Policy	OCS_CWAServer_LDAPErrors Policy
Name	OCS_CWAServer_LDAPErrors
Description	Monitors total number of LDAP errors that have occurred during Communicator Web Access directory search operations.
Schedule	This policy runs every 15 minutes.
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

# 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.

# Policies deployed on OCS 2007 and OCS 2007 R2

The policies deployed on both OCS 2007 and OCS 2007 R2 servers are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  FrontEndServer

The policies belong to the **Measurement Threshold** policy type.

#### OCS\_Check\_FrontEndServiceStatus Policy

Policy	OCS_Check_FrontEndServiceStatus Policy
Name	OCS_Check_FrontEndServiceStatus
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCSrv

#### OCS\_FrontEndService\_Logging Policy

Policy	OCS_FrontEndService_Logging Policy
Name	OCS_FrontEndService_Logging
Description	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).
Schedule	This policy runs every 15 minutes.
Data Class	OCS_PROCESS

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



 $Ensure \ that \ the \ OCS\_CreateDataSources \ policy \ is \ running \ before \ you \ deploy \ the \ OCS\_FrontEndService\_Logging \ policy.$ 

Policy	OCS_FrontEndService_PageFaultsPerSecs Policy
Name	OCS_FrontEndService_PageFaultsPerSecs
Description	Monitors the Page Faults/sec counter of the Front End service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning: 50 Critical: 100

OCS\_FrontEndService\_PageFaultsPerSec Policy

#### OCS\_FrontEndService\_PrivateBytes Policy

Policy	OCS_FrontEndService_PrivateBytes Policy
Name	OCS_FrontEndService_PrivateBytes
Description	Monitors the Private Bytes counter of the Front End service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Private Bytes
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

# OCS\_FrontEndService\_ProcessorTime Policy

Policy	OCS_FrontEndService_ProcessorTime Policy
Name	OCS_FrontEndService_ProcessorTime
Description	Monitors thee the % Processor Time counter of the Front End service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process

Policy	OCS_FrontEndService_ProcessorTime Policy
Instance	AVMCUSvc
Counter	% Processor Time
Threshold	This policy has the following threshold: <b>Warning:</b> 80 <b>Critical:</b> 90

# OCS\_FrontEndService\_ThreadCount Policy

Policy	OCS_FrontEndService_ThreadCount Policy
Name	OCS_FrontEndService_ThreadCount
Description	Monitors the Thread Count counter of the Front End service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Thread Count
Threshold	This policy has the following threshold: Warning: 100 Critical: 150

# $OCS\_FrontEndService\_WorkingSet\ Policy$

Policy	OCS_FrontEndService_WorkingSet Policy
Name	OCS_FrontEndService_WorkingSet
Description	Monitors the Working Set counter of the Front End service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	RTCSrv
Counter	Working Set
Threshold	This policy has the following threshold: <b>Warning:</b> 1.5e+007 <b>Critical:</b> 2e+007

#### OCS\_FrontEndServer\_SendsOutstandingPolicy

Policy	OCS_FrontEndServer_SendsOutstanding Policy
Name	OCS_FrontEndServer_SendsOutstanding
Description	Monitors the number of requests and responses that are queued outbound.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP – 01 – Peers
Counter	SIP – 017 – Sends Outstanding
Threshold	This policy has the following threshold: Warning: 100 Critical: 200

# OCS\_FrontEndServer\_HoldingTimeForIncMsgs Policy

Policy	OCS_FrontEndServer_HoldingTimeForIncMsgs Policy
Name	OCS_FrontEndServer_HoldingTimeForIncMsgs
Description	Monitors the average amount of time taken by the server to process a request.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP – 07 - Load Management
Counter	SIP – 000 - Average Holding Time For Incoming Messages
Threshold	This policy has the following threshold: Warning: 4 Critical: 5

# OCS\_FrontEndServer\_ProcessingLatency Policy

Policy	OCS_FrontEndServer_ProcessingLatency Policy
Name	OCS_FrontEndServer_ProcessingLatency
Description	Monitors the amount of time (in milliseconds) that the back end spent in processing a request.
Schedule	This policy runs every 15 minutes.

Policy	OCS_FrontEndServer_ProcessingLatency Policy
Performance Object	LC:USrv - 00 - DBStore
Counter	Usrv - 004- Sproc Latency (msec)
Threshold	This policy has the following threshold: Warning: 4000 Critical: 6000

#### OCS\_FrontEndServer\_QueueLatency Policy

Policy	OCS_FrontEndServer_QueueLatency Policy
Name	OCS_FrontEndServer_QueueLatency
Description	Monitors the amount of time( in milliseconds) that a request is spent in the back end queue.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:USrv - 00 - DBStore
Counter	Usrv - 002 - Queue Latency (msec)
Threshold	This policy has the following threshold: Warning: 4000 Critical: 6000

# Policies deployed on OCS 2007

The policies to be deployed on OCS 2007 are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  FrontEndServer  $\rightarrow$  OCS2007

The policies belong to the **Measurement Threshold** Policy type.

OCS\_FrontEndServer\_Local503Responses Policy

Policy	OCS_FrontEndServer_Local503Responses Policy
Name	OCS_FrontEndServer_Local503Responses
Description	Monitors the number of 503 responses per second. The 503 code indicates that the server is unavailable.
Schedule	This policy runs every 15 minutes.

Policy	OCS_FrontEndServer_Local503Responses Policy
Performance Object	LC:SIP – 04 - Responses
Counter	SIP – 051 - Local 503 Responses/sec
Threshold	This policy has the following threshold: Warning: 2 Critical: 5

### OCS\_FrontEndServer\_Logging Policy

Policy	OCS_FrontEndServer_Logging Policy
Name	OCS_FrontEndServer_Logging
Description	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).
Schedule	This policy runs every 15 minutes.
Data Class	OCS_FRONTEND

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

Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_FrontEndServer\_Logging policy.

#### OCS\_FrontEndServer\_Local504Responses Policy

Policy	OCS_FrontEndServer_Local504Responses Policy
Name	OCS_FrontEndServer_Local504Responses
Description	Monitors the number of 504 responses per second. The 504 code indicates connectivity problems with other servers.
Schedule	This policy runs every 15 minutes.

Policy	OCS_FrontEndServer_Local504Responses Policy
Performance Object	LC:SIP – 04 - Responses
Counter	SIP – 053 - Local 504 Responses/sec
Threshold	This policy has the following threshold: Warning: 2 Critical: 5

# Policies deployed on OCS 2007 R2

The policies to be deployed on OCS 2007 R2 are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  FrontEndServer  $\rightarrow$  OCS2007\_R2

The policies belong to the **Measurement Threshold** Policy type.

#### OCS\_FrontEndServer\_Local503Responses\_R2 Policy

Policy	OCS_FrontEndServer_Local503Responses_R2 Policy
Name	OCS_FrontEndServer_Local503Responses_R2
Description	Monitors the number of 503 responses per second. The 503 code indicates that the server is unavailable.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP – 04 - Responses
Counter	SIP – 055 - Local 503 Responses/sec
Threshold	This policy has the following threshold: Warning: 2 Critical: 5

#### OCS\_FrontEndServer\_Logging\_R2 Policy

Policy	OCS_FrontEndServer_Logging_R2 Policy
Name	OCS_FrontEndServer_Logging_R2
Description	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).
Schedule	This policy runs every 15 minutes.
Data Class	OCS_FRONTEND

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

Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_FrontEndService\_Logging policy.

Policy	OCS_FrontEndServer_Local504Responses_R2 Policy
Name	OCS_FrontEndServer_Local504Responses_R2
Description	Monitors the number of 504 responses per second. The 504 code indicates connectivity problems with other servers.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP – 04 - Responses
Counter	SIP – 057 - Local 504 Responses/sec
Threshold	This policy has the following threshold: Warning: 2 Critical: 5

OCS\_FrontEndServer\_Local504Responses\_R2 Policy

# **IMConfServer**

Deploy this policy group on the IM Conferencing Server. The IM Conferencing Server is an instant messaging server and it is the conferencing server of OCS 2007.

It provides server-managed group IM and runs as a separate process on the Standard Edition Server or Enterprise pool Front End Server.

The policies in the IM Conferencing Server group are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  IMConfServer

The policies belong to the **Measurement Threshold** Policy type.

This policy group includes the following policies:

### OCS\_Check\_IMConfServiceStatus Policy

Policy	OCS_Check_IMConfServiceStatus Policy	
Name	OCS_Check_IMConfServiceStatus	
Description	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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	IMMCU	

# OCS\_IMConfService\_PageFaultsPerSec Policy

Policy	OCS_IMConfService_PageFaultsPerSec Policy	
Name	OCS_IMConfService_PageFaultsPerSec	
Description	Monitors the Page Faults/sec counter of the IM Conferencing Service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	
Instance	IMMcuSvc	
Counter	Page Faults/sec	
Threshold	This policy has the following threshold: Warning: 50 Critical: 100	

#### OCS\_IMConfService\_PrivateBytes Policy

Policy	OCS_IMConfService_PrivateBytes Policy	
Name	OCS_IMConfService_PrivateBytes	
Description	Ionitors the Private Bytes counter of the IM Conferencing Service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	

Policy	OCS_IMConfService_PrivateBytes Policy	
Instance	IMMcuSvc	
Counter	Private Bytes	
Threshold	This policy has the following threshold: <b>Warning:</b> 1.5e+007 <b>Critical:</b> 2e+007	

### OCS\_IMConfService\_ProcessorTime Policy

Policy	OCS_IMConfService_ProcessorTime Policy	
Name	OCS_IMConfService_ProcessorTime	
Description	Monitors the % Processor Time counter of the IM Conferencing Service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	
Instance	IMMcuSvc	
Counter	% Processor Time	
Threshold	This policy has the following threshold: <b>Warning:</b> 80 <b>Critical:</b> 90	

# OCS\_IMConfService\_ThreadCount Policy

Policy	OCS_IMConfService_ThreadCount Policy	
Name	OCS_IMConfService_ThreadCount	
Description	Monitors the Thread Count counter of the IM Conferencing Service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	
Instance	IMMcuSvc	
Counter	Thread Count	
Threshold	This policy has the following threshold: Warning: 100 Critical: 150	

### OCS\_IMConfService\_WorkingSet Policy

Policy	OCS_IMConfService_WorkingSet Policy	
Name	OCS_IMConfService_WorkingSet	
Description	Monitors the Working Set counter of the IM Conferencing Service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	
Instance	IMMcuSvc	
Counter	Working Set	
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007	

# OCS\_IMConfService\_Logging Policy

Policy	OCS_IMConfService_Logging Policy	
Name	OCS_IMConfService_Logging	
Description	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).	
Schedule	This policy runs every 15 minutes.	
Data Class	OCS_PROCESS	

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



 $Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_IMConfService\_Logging policy.$ 

# **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 server is deployed on a separate, dedicated server.

The policies in the Mediation Server group are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  MediationServer

The policies belong to the **Measurement Threshold** Policy type.

This policy group includes the following policies:

Policy	OCS_MediationService_PageFaultsPerSec Policy
Name	OCS_MediationService_PageFaultsPerSec
Description	Monitors the Page Faults/sec counter of the Mediation service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MediationServerSvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning: 50 Critical: 100

#### OCS\_MediationService\_PageFaultsPerSec Policy

#### OCS\_Check\_MediationServiceStatus Policy

Policy	OCS_Check_MediationServiceStatus Policy
Name	OCS_Check_MediationServiceStatus
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCMEDSRV

# OCS\_MediationService\_Logging Policy

Policy	OCS_MediationService_Logging Policy
Name	OCS_MediationService_Logging
Description	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).
Schedule	This policy runs every 15 minutes.
Data Class	OCS_PROCESS

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

Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_MediationService\_Logging policy.

# OCS\_MediationService\_PrivateBytes Policy

Policy	OCS_MediationService_PrivateBytes Policy
Name	OCS_MediationService_PrivateBytes
Description	Monitors the Private Bytes counter of the Mediation service
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MediationServerSvc
Counter	Private Bytes
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

## OCS\_MediationService\_ProcessorTime Policy

Policy	OCS_MediationService_ProcessorTime Policy
Name	OCS_MediationService_ProcessorTime
Description	Monitors the % Processor Time counter of the Mediation service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MediationServerSvc
Counter	% Processor Time
Threshold	This policy has the following threshold: Warning: 80 Critical: 90

# OCS\_MediationService\_ThreadCount Policy

Policy	OCS_MediationService_ThreadCount Policy
Name	OCS_MediationService_ThreadCount
Description	Monitors the Page Faults/sec counter of the Mediation service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	MediationServerSvc
Counter	Thread Count
Threshold	This policy has the following threshold: Warning: 100 Critical: 150

# OCS\_MediationService\_WorkingSet Policy

Policy	OCS_MediationService_WorkingSet Policy
Name	OCS_MediationService_WorkingSet
Description	Monitors the Working Set counter of the Mediation service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process

Policy	OCS_MediationService_WorkingSet Policy
Instance	MediationServerSvc
Counter	Working Set
Threshold	This policy has the following threshold: <b>Warning:</b> 1.5e+007 <b>Critical:</b> 2e+007

# OCS\_MediationServer\_LoadCallFailureIndex Policy

Policy	OCS_MediationServer_LoadCallFailureIndex Policy
Name	OCS_MediationServer_LoadCallFailureIndex
Description	Monitors scaled index between zero and 100 that is related to all call failures due to heavy load.
Schedule	This policy runs every 5 minutes.
Performance Object	MediationServer - 03 - Health Indices
Instance	000 - Load Call Failure Index
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning: 5 Critical: 10

# OCS\_MediationServer\_RejectedSIPInvitesFromGateway Policy

Policy	OCS_MediationServer_RejectedSIPInvitesFromGateway Policy
Name	$OCS\_MediationServer\_RejectedSIPInvitesFromGateway$
Description	Monitors the number of SIP INVITEs from gateway which were rejected immediately because of server load.
Schedule	This policy runs every 5 minutes.
Performance Object	MediationServer - 01 - Inbound Calls
Instance	003 - Total rejected
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning: 5 Critical: 10

Policy	OCS_MediationServer_RejectedSIPInvitesFromProxy Policy
Name	OCS_MediationServer_RejectedSIPInvitesFromProxy
Description	Monitors the number of SIP INVITEs from proxy which were rejected immediately because of server load.
Schedule	This policy runs every 5 minutes.
Performance Object	MediationServer - 00 - Outbound Calls
Instance	003 - Total rejected
Threshold	This policy has the following threshold: Warning: 50 Critical: 100

#### OCS\_MediationServer\_RejectedSIPInvitesFromProxy Policy

# TelConfServer

Deploy this policy group on the 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.

The policies in the Telephony Conferencing server group are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  TelConfServer

The policies belong to the **Measurement Threshold** Policy type.

This policy group includes the following policies:

#### OCS\_Check\_TelConfServiceStatus Policy

Policy	OCS_Check_TelConfServiceStatus Policy
Name	OCS_Check_TelConfServiceStatus
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCACPMCU

# OCS\_TelConfService\_Logging Policy

Policy	OCS_TelConfService_Logging policy Policy
Name	OCS_TelConfService_Logging policy
Description	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).
Schedule	This policy runs every 15 minutes.
Data Class	OCS_PROCESS

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

Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_TelConfService\_Logging policy.

# OCS\_TelConfService\_PageFaultsPerSec Policy

Policy	OCS_TelConfService_PageFaultsPerSec Policy
Name	OCS_TelConfService_PageFaultsPerSec
Description	Monitors the Page Faults/sec counter of the Telephony Conferencing Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AcpMcuSvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning: 50 Critical: 100

## OCS\_TelConfService\_PrivateBytes Policy

Policy	OCS_TelConfService_PrivateBytes Policy
Name	OCS_TelConfService_PrivateBytes
Description	Monitors the Private Bytes counter of the Telephony Conferencing Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AcpMcuSvc
Counter	Private Bytes
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

# OCS\_TelConfService\_ProcessorTime Policy

Policy	OCS_TelConfService_ProcessorTime Policy
Name	OCS_TelConfService_ProcessorTime
Description	Monitors the Percentage Processor Time counter of the Telephony Conferencing Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AcpMcuSvc
Counter	% Processor Time
Threshold	This policy has the following threshold: Warning: 80 Critical: 90

# OCS\_TelConfService\_ThreadCount Policy

Policy	OCS_TelConfService_ThreadCount Policy
Name	OCS_TelConfService_ThreadCount
Description	Monitors the Thread Count counter of the Telephony Conferencing Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process

Policy	OCS_TelConfService_ThreadCount Policy
Instance	AcpMcuSvc
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Warning:</b> 100 <b>Critical:</b> 150

#### OCS\_TelConfService\_WorkingSet Policy

Policy	OCS_TelConfService_WorkingSet Policy
Name	OCS_TelConfService_WorkingSet
Description	Monitors the Working Set counter of the Telephony Conferencing Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	AcpMcuSvc
Counter	Working Set
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

# 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 on OCS 2007 or OCS 2007\_R2.

## Deploy the following policies on OCS 2007

The policies to be deployed on the OCS 2007 server are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  OCS2007

The policies belong to the **Measurement Threshold** Policy type.

#### OCS\_WebCompServer\_InvalidInputRequestsPerSec Policy

Policy	OCS_WebCompServer_InvalidInputRequestsPerSec Policy
Name	$OCS\_WebCompServer\_InvalidInputRequestsPerSec$
Description	Monitors the number of invalid input requests per second.
Schedule	This policy runs every 15 minutes.
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

#### OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec Policy

Policy	OCS_WebCompServer_InvalidInputRequestsPerSec Policy
Name	OCS_WebCompServer_InvalidInputRequestsPerSec
Description	Monitors the number of invalid input requests per second.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:DLX - 00 - Distribution List Expansion
Counter	DLX - 018 - Timed out Requests that fetch Security Descriptors/sec
Threshold	When a sample is greater than: Warning: 1 Critical: 5

# Deploy the following policies on OCS\_R2

The policies to be deployed on the OCS 2007 R2 server are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$ Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  WebCompServer  $\rightarrow$  OCS2007\_R2

The policies belong to the Measurement Threshold Policy type.

#### OCS\_WebCompServer\_InvalidInputRequestsPerSec\_R2 Policy

Policy	OCS_WebCompServer_InvalidInputRequestsPerSec_R2 Policy
Name	$OCS\_WebCompServer\_InvalidInputRequestsPerSec\_R2$
Description	Monitors the number of invalid input requests per second.
Schedule	This policy runs every 15 minutes.

Policy	OCS_WebCompServer_InvalidInputRequestsPerSec_R2 Policy	
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	

#### OCS\_WebCompServer\_TimedOutSecurityDescRequestsPerSec\_R2 Policy

Policy	OCS_WebCompServer_InvalidInputRequestsPerSec_R2 Policy	
Name	OCS_WebCompServer_InvalidInputRequestsPerSec_R2	
Description	Monitors the number of invalid input requests per second.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LC:DLX - 00 - Address Book and Distribution List Expansion	
Counter	DLX - 018 - Timed out Requests that fetch Security Descriptors/sec	
Threshold	When a sample is greater than: Warning: 1 Critical: 5	

# 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.

The policies in the Web Conferencing server group are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  WebConfServer

The policies belong to the **Measurement Threshold** Policy type.

This policy group includes the following policies:

# OCS\_Check\_WebConfServiceStatus Policy

Policy	OCS_Check_WebConfServiceStatus Policy	
Name	OCS_Check_WebConfServiceStatus	
Description	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.	
Schedule	This policy runs every 15 minutes.	
Monitored Service	RTCDATAMCU	

# OCS\_WebConfServer\_ComplianceErrors Policy

Policy	OCS_WebConfServer_ComplianceErrors Policy	
Name	OCS_WebConfServer_ComplianceErrors	
Description	Monitors the number of errors reported by the compliance module.	
Schedule	This policy runs every 15 minutes.	
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	

# OCS\_WebConfServer\_MCUHealthState Policy

Policy	OCS_WebConfServer_MCUHealthState Policy	
Name	OCS_WebConfServer_MCUHealthState	
Description	Monitors the the current health of the MCU. It indicates 0 as Normal, 1 as Loaded, 2 as Full, and 3 as Unavailable.	
Schedule	This policy runs every 15 minutes.	
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	

Policy	OCS_WebConfServer_NumberOfUnhandledApplExceptions Policy	
Name	OCS_WebConfServer_NumberOfUnhandledApplExceptions	
Description	Monitors the number of unhandled application exceptions.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LC:DATAMCU - 00 - DataMCU Conferences	
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\_WebConfServer\_NumberOfUnhandledApplExceptions Policy

# OCS\_WebConfServer\_ResourcesOverConfSpaceLimit Policy

Policy	OCS_WebConfServer_ResourcesOverConfSpaceLimit Policy	
Name	OCS_WebConfServer_ResourcesOverConfSpaceLimit	
Description	Monitors the number of resource failed to be created because the Data MCU has reached the space limit for one or more conferences.	
Schedule	This policy runs every 15 minutes.	
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	

# OCS\_WebConfServer\_SessionQueuesState Policy

Policy	OCS_WebConfServer_SessionQueuesState Policy	
Name	OCS_WebConfServer_SessionQueuesState	
Description	Monitors the state of the session queues.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LC:DATAMCU - 00 - DataMCU Conferences	

Policy	OCS_WebConfServer_SessionQueuesState Policy	
Counter	DATAMCU - 041 - Session queues state	
Threshold	When the difference between two samples is greater than: Warning: 1 Critical: 2	
Warning/Error Instruction Text	<ul> <li>Probable Cause(s): When the Data MCU cannot handle the load capacity.</li> <li>Suggested Action(s): This should be a temporary condition. If this condition persists, increase the load capapeity of the Data MCU by provisioning more Data MCU machines.</li> </ul>	

# OCS\_WebConfService\_Logging Policy

Policy	OCS_WebConfService_Logging Policy	
Name	OCS_WebConfService_Logging	
Description	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).	
Schedule	This policy runs every 15 minutes.	
Data Class	OCS_PROCESS	

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

Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_WebConfService\_Logging policy.

OCS_WebConfService_	PrivateBytes Policy

Policy	OCS_WebConfService_PrivateBytes Policy
Name	OCS_WebConfService_PrivateBytes
Description	Monitors the Private Bytes counter of the Web Conferencing Service.
Schedule	This policy runs every 15 minutes.

Policy	OCS_WebConfService_PrivateBytes Policy
Performance Object	Process
Instance	DataMCUSvc
Counter	Private Bytes
Threshold	This policy has the following threshold:
	<b>Warning:</b> 1.5e+007
	Critical: 2e+007

# OCS\_WebConfService\_ProcessorTime Policy

Policy	OCS_WebConfService_ProcessorTime Policy
Name	OCS_WebConfService_ProcessorTime
Description	Monitors the % Processor Time counter of the Web Conferencing Service.
Schedule	This policy runs every 15 minutes.
Performance Object	Process
Instance	DataMCUSvc
Counter	% Processor Time
Threshold	When the difference between two samples is greater than: Warning: 80 Critical: 90

# OCS\_WebConfService\_ThreadCount Policy

Policy	OCS_WebConfService_ThreadCount Policy
Name	OCS_WebConfService_ThreadCount
Description	Monitors the Thread Count counter of the Web Conferencing Service.
Schedule	This policy runs every 15 minutes.
Performance Object	Process
Instance	DataMCUSvc
Counter	Thread Count
Threshold	This policy has the following threshold: Warning: 100 Critical: 150

#### OCS\_WebConfService\_WorkingSet Policy

Policy	OCS_WebConfService_WorkingSet Policy
Name	OCS_WebConfService_WorkingSet
Description	Monitors the Working Set counter of the Web Conferencing Service.
Schedule	This policy runs every 15 minutes.
Performance Object	Process
Instance	DataMCUSvc
Counter	Working Set
Threshold	This policy has the following threshold: Warning: 1.5e+007 Critical: 2e+007

#### OCS\_WebConfService\_PageFaultsPerSec Policy

Policy	OCS_WebConfServer_PageFaultsPerSec Policy
Name	OCS_WebConfServer_PageFaultsPerSec
Description	Monitors the Page Faults/sec counter of the Web Conferencing service.
Schedule	This policy runs every 15 minutes.
Performance Object	Process
Instance	DataMCUSvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Warning: 50 Critical: 100

# 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.

The policies in the WebEdge server group are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$  Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  WebEdgeServer

The policies belong to the Measurement Threshold Policy type.

This policy group has the following policies:

# OCS\_Check\_WebEdgeServiceStatus Policy

Policy	OCS_Check_WebEdgeServiceStatus Policy
Name	OCS_Check_WebEdgeServiceStatus
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCDATAPROXY

# OCS\_WebEdgeService\_PageFaultsPerSec Policy

Policy	OCS_WebEdgeService_PageFaultsPerSec Policy
Name	OCS_WebEdgeService_PageFaultsPerSec
Description	Monitors the Thread Count counter of the Web Conferencing Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	DataProxy
Counter	Page Faults/sec
Threshold	When the difference between two samples is greater than: Warning: 50 Critical: 100

# OCS\_WebEdgeService\_PrivateBytes Policy

Policy	OCS_WebEdgeService_PrivateBytes Policy
Name	OCS_WebEdgeService_PrivateBytes
Description	Monitors the Private Bytes counter of the Web Conferencing Edge Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process

Policy	OCS_WebEdgeService_PrivateBytes Policy
Instance	DataProxy
Counter	Private Bytesc
Threshold	When the difference between two samples is greater than: Warning: 1.5e+007 Critical: 2e+0070

# OCS\_WebEdgeService\_ProcessorTime Policy

Policy	OCS_WebEdgeService_ProcessorTime Policy
Name	OCS_WebEdgeService_ProcessorTime
Description	Monitors the % Processor Time counter of the Web Conferencing Edge Service.
Schedule	This policy runs every 5 minutes.
Performance Object	Process
Instance	DataProxy
Counter	% Processor Time
Threshold	When the difference between two samples is greater than: Warning: 80 Critical: 90

# OCS\_WebEdgeService\_ThreadCount Policy

Policy	OCS_WebEdgeService_ThreadCount Policy
Name	OCS_WebEdgeService_ThreadCount
Description	Monitors the Thread Count counter of the Web Conferencing Edge Service.
Schedule	This policy runs every 15 minutes.
Performance Object	Process
Instance	DataProxy
Counter	Thread Count
Threshold	When the difference between two samples is greater than: Warning: 100 Critical: 150

## OCS\_WebEdgeService\_WorkingSet Policy

Policy	OCS_WebEdgeService_WorkingSet Policy		
Name	OCS_WebEdgeService_WorkingSet		
Description	Monitors the Working Set counter of the Web Conferencing Edge Service.		
Schedule	This policy runs every 15 minutes.		
Performance Object	Process		
Instance	DataProxy		
Counter	Working Set		
Threshold	When the difference between two samples is greater than: Warning: 1.5e+007 Critical: 2e+0070		

# OCS\_WebEdgeService\_Logging Policy

Policy	OCS_WebEdgeService_Logging Policy		
Name	OCS_WebEdgeService_Logging		
Description	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).		
Schedule	This policy runs every 15 minutes.		
Data Class	OCS_PROCESS		

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



 $\label{eq:constraint} Ensure that the OCS\_CreateDataSources policy is running before deploying the OCS\_WebEdgeService\_Logging policy.$ 

Policy	OCS_WebEdgeServer_ClientsDisconPerSecInvalidCookieData Policy		
Name	OCS_WebEdgeServer_ClientsDisconPerSecInvalidCookieData		
Description	Monitors the number of clients disconnected per second due to invalid cookie data.		
Schedule	This policy runs every 15 minutes.		
Performance Object	LC:DATAPROXY - 01 - Client Connections		
Counter	DATAPROXY - 012 - Clients disconnected per second due to invalid cookie data		
Threshold	When the difference between two samples is greater than: Warning: 50 Critical: 100		

## OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieData Policy

OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieTimestamp Policy

Policy	OCS_WebEdgeServer_ClientsDisconPerSecInvalidCookieTimestamp Policy	
Name	$OCS\_WebEdgeServer\_ClientsDisconPerSecInvalidCookieTimestamp$	
Description	Monitors the number of clients rejected per second due to invalid timestamps.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LC:DATAPROXY - 01 - Client Connections	
Counter	DATAPROXY -008 - Clients disconnected per second due to invalid cookie timestamp	
Threshold	When the difference between two samples is greater than: Warning: 50 Critical: 100	

## OCS\_WebEdgeServer\_SystemThrottling Policy

Policy	OCS_WebEdgeServer_SystemThrottling Policy		
Name	DCS_WebEdgeServer_SystemThrottling		
Description	Indicates that system wide throttling is on.		
Schedule	This policy runs every 15 minutes.		
Performance Object	LC:DATAPROXY - 00 - Server Connections		

Policy	OCS_WebEdgeServer_SystemThrottling Policy	
Instance	_Total	
Counter	DATAPROXY - 041 - System is throttling	
Threshold	When the difference between two samples is greater than: Warning: 1 Critical: 2	

#### OCS\_WebEdgeServer\_ThrottledServerConnections Policy

Policy	OCS_WebEdgeServer_ThrottledServerConnections Policy		
Name	OCS_WebEdgeServer_ThrottledServerConnections		
Description	Monitors the number of server connections currently that are throttled.		
Schedule	This policy runs every 15 minutes.		
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		

# Others

The policies in the Others 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

All the three policies belong to the **Windows Event Log** policy type and are available at the following location: SPI for Microsoft Enterprise Servers  $\rightarrow$  en  $\rightarrow$ Microsoft\_Office\_Communications\_Server  $\rightarrow$  Microsoft\_Office\_Communications\_Server\_2007  $\rightarrow$  Others

#### OCS\_FwdApplicationError Policy

The OCS\_FwdApplicationError policy forwards all error messages logged in Windows Event Log using 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
- 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 Archiving Server
- OCS Distribution List Expansion Web Service
- OCS Web Conferencing Edge Server
- OCS LDM

#### OCS\_FwdApplicationInformation

The OCS\_FwdApplicationInformation policy forwards all informational messages logged in Windows Event Log using 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
- 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 Archiving Server
- OCS Distribution List Expansion Web Service
- OCS Web Conferencing Edge Server
- OCS LDM

## OCS\_FwdApplicationWarning

The OCS\_FwdApplicationWarning policy forwards all warning messages logged in Windows Event Log using 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
- 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 Archiving Server
- OCS Distribution List Expansion Web Service
- OCS Web Conferencing Edge Server
- OCS LDM

# Microsoft Enterprise Servers SPI Microsoft Office Communications Server 2007 Reports

The following sections describe the Microsoft Enterprise Servers SPI Microsoft Office Communications Server 2007 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 formats. The summarized process statistics includes 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 formats. The summarized process statistics includes 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 formats. The summarized process statistics includes 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 formats. The summarized process statistics includes 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 formats. The summarized process statistics includes 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 formats. The summarized process statistics includes 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 time that a request spent in the queue to the SQL back end and the time taken by the back end to process. The report is shown in graphical (line graph) and tabular formats. 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 formats. 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 formats. 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 formats. 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 formats. 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 timed-out/sec over UDP on the Audio/Video Edge Server, in graphical and tabular formats. 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 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.

# Data Store Table for Microsoft Enterprise Server

The Microsoft Enterprise SPI creates the following data tables for Microsoft Office Communication Server 2007 metrics in the data store on the node to facilitate the data-collection procedure.

Report Name	Report Table	Report Table Attributes	Data Store Data Class
g_Front End Service CPU Statistics.rpt Policy logging data: OCS_FrontEndService_Logging	OCS_PROCESS	<ul> <li>PCTPROCESSORTIME</li> <li>THREADCOUNT</li> <li>SYSPCTPROCESSORTI ME</li> </ul>	OCS_PROCESS
g_IM Conferencing Service CPU Statistics.rpt Policy logging data: OCS_IMConfService_Logging	OCS_PROCESS	<ul> <li>PCTPROCESSORTIME</li> <li>THREADCOUNT</li> <li>SYSPCTPROCESSORTI ME</li> </ul>	OCS_PROCESS
g_Access Edge Service CPU Statistics.rpt Policy logging data: OCS_AccessEdgeService_Logging	OCS_PROCESS	<ul> <li>PCTPROCESSORTIME</li> <li>THREADCOUNT</li> <li>SYSPCTPROCESSORTI ME</li> </ul>	OCS_PROCESS
g_Front End Service Memory Statistics.rpt Policy logging data: OCS_FrontEndService_Logging	OCS_PROCESS	<ul><li>PAGEFAULTS</li><li>WORKINGSET</li><li>PRIVATEBYTES</li></ul>	OCS_PROCESS
g_IM Conferencing Service Memory Statistics.rpt Policy logging data: OCS_IMConfService_Logging	OCS_PROCESS	<ul><li>PAGEFAULTS</li><li>WORKINGSET</li><li>PRIVATEBYTES</li></ul>	OCS_PROCESS
g_Access Edge Service Memory Statistics.rpt Policy logging data: OCS_AccessEdgeService_Logging	OCS_PROCESS	<ul><li>PAGEFAULTS</li><li>WORKINGSET</li><li>PRIVATEBYTES</li></ul>	OCS_PROCESS
g_SQL Back End Latency.rpt Policy logging data: OCS_FrontEndServer_Logging	OCS_FRONTEN D	<ul><li>QUEUELATENCY</li><li>SPROCLATENCY</li></ul>	OCS_FRONTEND

Report Name	Report Table	Report Table Attributes	Data Store Data Class
g_Average Holding Time for Incoming Messages on Front End Server.rpt	OCS_FRONTEN D	HOLDINGTIMEFORINC MSG	OCS_FRONTEND
Policy logging data: OCS_FrontEndServer_Logging			
g_Front End Server Availability and Connectivity.rpt	OCS_FRONTEN D	<ul><li>LOCAL503RESPONSES</li><li>LOCAL504RESPONSES</li></ul>	OCS_FRONTEND
Policy logging data: OCS_FrontEndServer_Logging			
g_Sends Outstanding on Front End Server.rpt	OCS_FRONTEN D	SENDSOUTSTANDING	OCS_FRONTEND
Policy logging data: OCS_FrontEndServer_Logging			
g_Average Incoming Message Processing Time on Access Edge Server.rpt	OCS_ACCESSE DGE	AVINCMSGPROCTIME	OCS_ACCESSEDGE
Policy logging data: OCS_AccessEdgeServer_Logging			
g_UDP Client Request Errors and Timed Out Sessions on Audio/Video Edge Server.rpt	OCS_AVEDGE	<ul> <li>UDPCLIENTREQERR</li> <li>UDPCLIENTSENDERR</li> <li>UDPSESSIONTIMEOU TS</li> </ul>	OCS_AVEDGE
g_TCP Client Request Errors and Timed Out Sessions on Audio/Video Edge Server.rpt	OCS_AVEDGE	<ul> <li>TCPCLIENTREQERR</li> <li>TCPCLIENTSENDERR</li> <li>TCPSESSIONTIMEOU TS</li> </ul>	OCS_AVEDGE
Policy logging data: OCS_AVEdgeServer_Logging		•~	

# Microsoft Enterprise Servers SPI Microsoft Office Communications Server 2007 Graphs

Graphs are pictorial representations of various metrics and contain data collected by policies. The following sections describe the Microsoft Office Communications Server 2007 SPI graphs.

#### 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 Office Communication 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_Loggin g	OCS_PROCESS.spec	OCS_PROCESS
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

Graph Name	Policy Logging Data	Spec File	Data Store Data Class
Web Conferencing Edge Service CPU statistics	OCS_WebEdgeService_Logging	OCS_PROCESS.spec	OCS_PROCESS
Archiving and CDR Service CPU statistics	OCS_ArchivingCDRService_Log ging	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_Loggin g	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_Log ging	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.sp ec	OCS_FRONTEND
Average Holding Time for Incoming Messages on Front End Server	OCS_FrontEndServer_Logging	OCS_FRONTEND.sp ec	OCS_FRONTEND

Graph Name	Policy Logging Data	Spec File	Data Store Data Class
Front End Server Availability and Connectivity	OCS_FrontEndServer_Logging	OCS_FRONTEND.sp ec	OCS_FRONTEND
Sends Outstanding on Front End Server	OCS_FrontEndServer_Logging	OCS_FRONTEND.sp ec	OCS_FRONTEND
Average Incoming Message Processing Time on Access Edge Server	OCS_AccessEdgeServer_Loggin g	OCS_ACCESSEDGE .spec	OCS_ACCESSEDGE
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

# 7 Microsoft Enterprise Servers SPI for Microsoft Lync Server 2010

The Microsoft Lync Server 2010 integrates various forms of communication tools and provides a single platform that enables users to connect and access these tools, irrespective of their physical location. Microsoft Lync Server 2010 uses a secure channel for user access that simplifies communication management and deployment. In addition, Lync 2010 supports data sharing, audio/video conferencing, instant messaging, telephony by integrating with Microsoft architecture such as Office, Exchange and SharePoint.

The Microsoft Enterprise Servers SPI monitors the Microsoft Lync Server 2010 and enables seamless 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.

# **Policies**

The Microsoft SharePoint 2010 server has the following policy groups:

- Archiving Server
- AVConfServer
- Director Server
- Discovery
- Edge Server
- Front End Server
- Mediation Server
- Monitoring Server
- Registrar

### **Archiving Server**

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.

### **General Policies**

The General policy group contains all the policies that monitor the processes and services of the ArchivingServer.

Policy Name	LS_Archiving_AvgNoOfBlkedClientThreads Policy
Description	This policy monitors the average number of client threads that are blocked and waiting for the decrease in the queue depth.
Schedule	This policy runs every one hour.
Performance Object	LS:Arch Service - 00 - DBArch
Instance	All instances
Counter	SIP - 024 - Flow-controlled Connections Dropped
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	0
Critical	100

### LS\_Archiving\_AvgNoOfBlkedClientThreads

#### LS\_Archiving\_AvgTimeRequestHeldInDB

Policy Name	LS_Archiving_AvgTimeRequestHeldInDB Policy
Description	This policy monitors the average time (in milliseconds) spent by a request in the database queue before it is processed.
Schedule	This policy runs every one hour.
Performance Object	LS:Arch Service - 00 - DBArch
Instance	All instances
Counter	Arch Service - 002 - Queue Latency (msec)
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	0
Critical	100

Lo_Atenting_Logging		
Policy Name	LS_Archiving_Logging Policy	
Description	This policy logs the following metrics into the data store (CODA or HP Performance Agent) for the counters RTCArch or _Total.	
Schedule	This policy runs every 15 minutes.	
Data Class	LS_PROCESS	

LS\_Archiving\_Logging

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

### LS\_Archiving\_NumOfDroppedMQMessages

Policy Name	LS_Archiving_NumOfDroppedMQMessages Policy
Description	This policy monitors MSMQ for the number of messages getting dropped.
Schedule	This policy runs every one hour.
Performance Object	LS:Arch Service - 01 - READ
Instance	All instances
Counter	Arch Service - 006 - Dropped messages from MQ
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	0
Critical	1

Policy Name	LS_Archiving_NumberOfMessagesNotWrittenToDB Policy
Description	This policy monitors the rate of failure in numbers when the messages are written in to the SQL database.
Schedule	This policy runs every one hour.
Performance Object	LS:Arch Service - 02 - WRITE
Instance	All instances
Counter	Arch Service - 002 - Messages failed to be written to DB
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	0
Critical	1

 $LS\_Archiving\_NumberOfMessagesNotWrittenToDB$ 

### LS\_Archiving\_NumberOfValidationFailedMessages

Policy Name	LS_Archiving_NumberOfValidationFailedMessages Policy
Description	This policy monitors the number of messages for which the validation has failed.
Schedule	This policy runs every one hour.
Performance Object	LS:Arch Service - 01 - READ
Instance	All instances
Counter	Arch Service - 002 - Messages that failed validation
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	0
Critical	1

### LS\_Archiving\_PageFaultsPerSec

Policy Name	LS_Archiving_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter of the Archiving Service.
Schedule	This policy runs every one hour.
Performance Object	Process

Policy Name	LS_Archiving_PageFaultsPerSec Policy
Instance	RTCArch
Counter	PageFaults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

### LS\_Archiving\_PrivateBytes

Policy Name	LS_Archiving_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter available in the Archiving and CDR service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCArch
Counter	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

### LS\_Archiving\_ProcessorTime

Policy Name	LS_Archiving_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter available in the Archiving and CDR service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCArch
Counter	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

### LS\_Archiving\_ThreadCount

Policy Name	LS_Archiving_ThreadCount Policy
Description	This policy monitors the Thread Count counter available in the Archiving and CDR service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCArch
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

### LS\_Archiving\_WorkingSet

Policy Name	LS_Archiving_WorkingSet Policy
Description	This policy monitors the Working Set counter available in the Archiving and CDR service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCArch
Counter	Working Set
Threshold	This policy has the following threshold: Critical: 2e+007

#### LS\_Check\_Arch\_ADStatus

Policy Name	LS_Check_Arch_ADStatus Policy
Description	This policy 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.

#### LS\_Check\_Arch\_ReplicaStatus

Policy Name	LS_Check_Arch_ReplicaStatus Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	REPLICA

#### LS\_Check\_ArchivingServiceStatus

Policy Name	LS_Check_ArchivingServiceStatus Policy
Description	This policy 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

#### LS\_Check\_ReplicaServiceStatus\_Arch

Policy Name	LS_Check_ReplicaServiceStatus_Arch Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	Replica Replicator Agent

#### LS\_Replica\_PageFaultsPerSec

Policy Name	LS_Replica_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process

Policy Name	LS_Replica_PageFaultsPerSec Policy
Instance	ReplicaReplicatorAgent
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

### LS\_Replica\_PrivateBytes

Policy Name	LS_Replica_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

### LS\_Replica\_ProcessorTime

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Policy Name	LS_Replica_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

#### LS\_Replica\_ThreadCount

Policy Name	LS_Replica_ThreadCount Policy
Description	This policy monitors the Thread Count counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

#### LS\_Replica\_WorkingSet

Policy Name	LS_Replica_WorkingSet Policy
Description	This policy monitors the Working Set Counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

### **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

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Policy	LS_Check_ArchivingServiceStatus Policy
Description	This policy 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	LS_Check_ReplicaServiceStatus_Arch Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	Replica Replicator Agent

 $LS\_Check\_ReplicaServiceStatus\_Arch$ 

### **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-to-peer 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.

Policy	LS_Replica_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

LS\_Replica\_PageFaultsPerSec

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Policy	LS_AVConf_ETAToProcessItemsInHttpStack Policy
Description	This policy monitors the time taken in HTTP stack to process all pending transactions. It is measured in milliseconds.
Schedule	This policy runs every one hour.
Performance Object	LS:AVMCU - 04 - MCU Health And Performance
Instance	All instances
Counter	AVMCU - 000 - HTTP Stack load
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	30000
Critical	120000

LS\_AVConf\_ETAToProcessItemsInHttpStack

### LS\_AVConf\_Logging

Policy	LS_AVConf_Logging Policy
Description	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.
Schedule	This policy runs every 15 minutes.
Data Class	LS_PROCESS

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

### LS\_AVConf\_MCUHealthState

Policy	LS_AVConf_MCUHealthState Policy
Description	This 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.
Schedule	This policy runs every one hour.
Performance Object	LS:AVMCU - 04 - MCU Health And Performance
Instance	All instances
Counter	AVMCU - 005 - MCU Health State
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	1
Critical	2

### LS\_AVConf\_NoOfAddConfFailed

Policy	LS_AVConf_NoOfAddConfFailed Policy
Description	This policy monitors number of failed responses returned by add-conference.
Schedule	This policy runs every one hour.
Performanc e Object	LS:AVMCU - 03 - CCCP Processing
Instance	All instances
Counter	AVMCU - 029 - Number of add conference requests failed
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	50
Critical	100

### LS\_AVConf\_NumberOfActiveConferences

Policy	LS_AVConf_NumberOfActiveConferences Policy
Description	This policy monitors the number of active conferences on the A/V Conferencing Server.
Schedule	This policy runs every one hour.
Performance Object	LS:AVMCU - 00 - Operations
Instance	All instances
Counter	AVMCU - 000 - Number of Conferences

Policy	LS_AVConf_NumberOfActiveConferences Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	4000
Critical	5000

### $LS\_AVConf\_PageFaultsPersec$

Policy	LS_AVConf_PageFaultsPersec Policy
Description	This policy monitors the Page Faults/sec counter available in the Audio/ Video Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	AVMCUSvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold: Critical: 100

### LS\_AVConf\_PrivateBytes

Policy	LS_AVConf_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter available in the Audio/ Video Conferencing service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	AVMCUSvc
Counter	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

### LS\_AVConf\_ProcessorTime

Policy	LS_AVConf_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter available in the Audio/Video Conferencing service.
Schedule	This policy runs every one hour.
Performance Object	Process

Policy	LS_AVConf_ProcessorTime Policy
Instance	AVMCUSvc
Counter	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

### LS\_AVConf\_ThreadCount

Policy	LS_AVConf_ThreadCount Policy
Description	This policy monitors the Thread Count counter available in the Audio/ Video Conferencing service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	AVMCUSvc
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

### LS\_AVConf\_WorkingSet

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Policy	LS_AVConf_WorkingSet Policy
Description	This policy monitors the Working Set counter available in the Audio/ Video Conferencing service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	AVMCUSvc
Counter	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

### LS\_Check\_AVConfServiceStatus

Policy	LS_Check_AVConfServiceStatus Policy
Description	This 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCAVMCU

### LS\_Check\_AVConf\_ADStatus

Policy	LS_Check_AVConf_ADStatus Policy
Description	This policy 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.

#### LS\_Check\_AVConf\_ReplicaStatus

Policy	LS_Check_AVConf_ReplicaStatus Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	REPLICA

#### LS\_Check\_ReplicaServiceStatus\_AVConf

Policy	LS_Check_ReplicaServiceStatus_AVConf Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	Replica Replicator Agent

### LS\_Replica\_PrivateBytes

Policy	LS_Replica_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

#### LS\_Replica\_ProcessorTime

Policy	LS_Replica_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

### LS\_Replica\_ThreadCount

Policy	LS_Replica_ThreadCount Policy
Description	This policy monitors the Thread Count counter available Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

#### $LS\_Replica\_WorkingSet$

Policy	LS_Replica_WorkingSet Policy
Description	This policy monitors the Working Set Counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Working Set
Threshold	This policy has the following threshold: Critical: 2e+007

#### **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.

Policy	LS_Check_AVConfServiceStatus Policy
Description	This 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCAVMCU

#### LS\_Check\_AVConfServiceStatus

#### LS\_Check\_ReplicaServiceStatus\_AVConf

Policy	LS_Check_ReplicaServiceStatus_AVConf Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	Replica Replicator Agent

### 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

All the three policies belong to the Windows Event Log policy type and are available at the

 $\label{eq:constraint} \begin{array}{l} \mbox{following location: SPI for Microsoft Enterprise Servers} \rightarrow \mbox{en} \rightarrow \\ \mbox{Microsoft_Office_Communications_Server} \rightarrow \mbox{Microsoft_Lync_Server_2010} \rightarrow \mbox{Common} \\ \end{array}$ 

### **Director Server**

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.

Policy Name	LS_Check_FrontEndServiceStatus Policy	
Description	This 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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCSRV	

LS\_Check\_FrontEndServiceStatus

#### LS\_Check\_Director\_ADStatus

Policy Name	LS_Check_Director_ADStatus Policy	
Description	This policy 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 Name	LS_Check_Director_ReplicaStatus Policy
Description	This policy checks the Central Management Store replication status at the Director 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

LS\_Check\_Director\_ReplicaStatus

#### LS\_Check\_ReplicaServiceStatus\_Director

Policy Name	LS_Check_ReplicaServiceStatus_Director Policy	
Description	This policy 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.	
Schedule	This policy runs every 5 minutes.	

#### LS\_Check\_DirectorServiceStatus

Policy Name	LS_Check_DirectorServiceStatus Policy	
Description	This policy 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.	
Schedule	This policy runs every 5 minutes.	

### LS\_Director\_NoOfLDAPErrorsPerSec

Policy Name	LS_Director_NoOfLDAPErrorsPerSec Policy
Description	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

$\mathbf{LS}$	_Director	<b>NoOfOutStandingSearches</b>
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Policy Name	LS_Director_NoOfOutStandingSearches Policy	
Description	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.	
Schedule	This policy runs every one hour.	
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: <b>Critical:</b> 20	

### LS\_Director\_SearchLatency

Policy Name	LS_Director_SearchLatency Policy
Description	This policy monitors the average time (in seconds) it takes to perform the actual LDAP search.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 19 - Directory Search
Instance	All instances
Counter	USrv - 005 - Search Latency (ms)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### LS\_Director\_SprocLatency

Policy Name	LS_Director_SprocLatency Policy
Description	This policy monitors the average time taken in processing a RTCAuthorizeDelegate sproc call.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 31 - Authorize delegate sproc
Instance	All instances
Counter	USrv - 001 - Sproc Latency (msec)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	LS_FrontEnd_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter available in the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

### LS\_FrontEnd\_PrivateBytes

Policy Name	LS_FrontEnd_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter available in the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

### LS\_FrontEnd\_ProcessorTime

Policy Name	LS_FrontEnd_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter available in the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	% Processor Time
Threshold	This policy has the following threshold: Critical: 90

Policy Name	LS_FrontEnd_ThreadCount Policy
Description	This policy monitors the Thread Count counter available in the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

### LS\_FrontEnd\_WorkingSet

Policy Name	LS_FrontEnd_WorkingSet Policy
Description	This policy monitors the Working Set counter available in the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	Working Set
Threshold	This policy has the following threshold: Critical: 2e+007

### LS\_Replica\_PageFaultsPerSec

Policy Name	LS_Replica_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

### LS\_Replica\_PrivateBytes

Policy Name	LS_Replica_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

#### LS\_Replica\_ProcessorTime

Policy Name	LS_Replica_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	% Processor Time
Threshold	This policy has the following threshold: Critical: 90

### LS\_Replica\_ThreadCount

Policy Name	LS_Replica_ThreadCount Policy
Description	This policy monitors the Thread Count counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

#### LS\_Replica\_WorkingSet

Policy Name	LS_Replica_WorkingSet Policy
Description	This policy monitors the Working Set counter available in the Lync Server Replica Replicator Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Working Set
Threshold	This policy has the following threshold: Critical: 2e+007

### **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.

Policy Name	LS_Check_FrontEndServiceStatus Policy
Description	This policy returns the values that correspond to different states of the 'RTCSrv'. It sends a critical alert message if the FrontEnd Service is not running. After the service starts the policy acknowledges the alert sent previously.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCSRV

#### LS\_Check\_ReplicaServiceStatus\_Director

Policy Name	LS_Check_ReplicaServiceStatus_Director Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.

LS_Director	_NoOfLDA	PErrorsPerSec
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Policy Name	LS_Director_NoOfLDAPErrorsPerSec Policy
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 19 - Directory Search
Instance	All instances
Counter	Counter USrv - 000 - Number of outstanding searches
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### LS\_Director\_SearchLatency

Policy Name	LS_Director_SearchLatency Policy
Description	This policy monitors the average time (in seconds) it takes to perform the actual LDAP search.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 19 - Directory Search
Instance	All instances
Counter	USrv - 005 - Search Latency (ms)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### LS\_Director\_SprocLatency

Policy Name	LS_Director_SprocLatency Policy
Description	This policy monitors the average time taken in processing a RTCAuthorizeDelegate sproc call.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 31 - Authorize delegate sproc
Instance	All instances
Counter	USrv - 001 - Sproc Latency (msec)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### Discovery

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

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

If the node, to which the policy is deployed, is a member of an LS pool, then the pool, pool type (standard/enterprise), and members of the pool are also discovered by the policy. If the agent is not running under the default account (Local System account) on the managed node, then you must create a user, who is a member of the RTCUniversalReadOnlyAdmins, if the node is a member of the LS pool. For Edge Servers, provide the privileges of a CSViewOnlyAdministrator.

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 **HTTPS** is domain\\user.

#### 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	This policy Discovers the LS roles and services.
Policy Type	Service Auto-Discovery
Policy Group	SPI for Microsoft Enterprise Servers $\rightarrow$ en $\rightarrow$ Microsoft_Office_Communications_Server $\rightarrow$ Microsoft_Lync_Server_2010 $\rightarrow$ Discovery

#### Configuring LS\_Discovery Policy

The LS\_Discovery policy discovers the Microsoft Lync Server 2010 roles and services 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.
- 2 Open the Edge Server configuration tool **Configure Edge server Discovery for Lync** Server 2010.
- 3 In the console tree, expand Tools  $\rightarrow$  SPI for Microsoft Enterprise Servers Lync Server 2010.
- 4 Double-click the **Configure Edge server Discovery for Lync Server 2010** tool in the details pane.
- 5 Right-click All Tasks  $\rightarrow$  Launch Tool.
- 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.
- 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.
- 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.

### Edge Server

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

Policy Name	LS_Replica_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

#### $LS\_AccessEdge\_AboveLimitConnectionsDropped$

Policy Name	LS_AccessEdge_AboveLimitConnectionsDropped Policy
Description	This 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.
Schedule	This policy runs every one hour.
Performance Object	LS: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 the Warning and Critical values.
Warning	1
Critical	2

#### LS\_AccessEdge\_ActiveTLSConnections

Policy Name	LS_AccessEdge_ActiveTLSConnections Policy
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:API - 00 - API Application Instance Counters(*)
Instance	_Total
Counter	API - 026 - Transactions Pending Dispatch Completion

Policy Name	LS_AccessEdge_ActiveTLSConnections Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	500
Critical	100

### LS\_AccessEdge\_AddressSpaceUsage

Policy Name	LS_AccessEdge_AddressSpaceUsage Policy
Description	This policy monitors the percentage of available address space currently in use by the server process.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 07 - Load Management
Instance	All instances
Counter	SIP - 009 - Address space usage
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	65
Critical	75

### $LS\_AccessEdge\_AvgIncomingMsgProccessingTime$

Policy Name	LS_AccessEdge_AvgIncomingMsgProccessingTime Policy
Description	This policy monitors the average processing time of an incoming message in seconds.
Schedule	This policy runs every one hour.
Performance Object	LC:SIP - 02 – Protocol
Instance	All instances
Counter	SIP - 021 - Average Incoming Message Processing Time
Threshold	This policy has the following threshold: <b>Critical:</b> 5

LS_AccessEdge	_DataLogging
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Policy Name	LS_AccessEdge_DataLogging Policy
Description	This policy monitors the SIP - 017 - Sends Outstanding counter.
Schedule	This policy runs every 15 minutes.
Performance Object	LC:SIP - 02 – Protocol
Instance	All instances
Counter	SIP - 021 - Average Incoming Message Processing Time

### LS\_AccessEdge\_DNSResolutionFailures

Policy Name	LS_AccessEdge_DNSResolutionFailures Policy
Description	This policy monitors the total number of DNS resolution failures.
Schedule	This policy runs every one hour.
Performance Object	LS:SipEps - 02 - SipEps Connections
Instance	_Total
Counter	SipEps - 010 - NumberOfDNSResolutionFailures
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	50
Critical	100

### LS\_AccessEdge\_EventsQueueLength

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Policy Name	LS_AccessEdge_EventsQueueLength Policy
Description	This policy monitors the current Queue Length of events indicated by the core manager thread.
Schedule	This policy runs every one hour.
Performance Object	LS:SipEps - 00 - Sip Dialogs
Instance	_Total
Counter	SipEps - 003 - CoreManagerQueueLength
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	50
Critical	100

Policy Name	LS_AccessEdge_ExtMsgDropDueToUnresolvedDomain Policy
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 09 - Access Edge Server Messages
Instance	All instances.
Counter	SIP - 063 - External Messages/sec Dropped Due To Unresolved Domain
Threshold	This policy has the following threshold: Critical: 40

 $LS\_AccessEdge\_ExtMsgDropDueToUnresolvedDomain$ 

#### $LS\_AccessEdge\_ExtMsgDroppedDueToBlkedIMDomain$

Policy Name	$LS\_AccessEdge\_ExtMsgDroppedDueToBlkedIMDomain\ Policy$
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 09 - Access Edge Server Messages
Instance	All instances.
Counter	SIP - 065 - External Messages/sec Dropped Due To Blocked IM Service Provider Domain
Threshold	This policy has the following threshold: <b>Critical:</b> 40

### $LS\_AccessEdge\_ExtMsgDroppedDueToIncompMsgDomain$

Policy Name	$LS\_AccessEdge\_ExtMsgDroppedDueToIncompMsgDomain\ Policy$
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 09 - Access Edge Server Messages
Instance	All instances.
Counter	SIP - 077 - External Messages/sec Dropped Due To Incompatible Message Domain
Threshold	This policy has the following threshold: <b>Critical:</b> 40

Policy Name	LS_AccessEdge_ExtMsgPerSecDropDueToBlckdDomain Policy
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 09 - Access Edge Server Messages
Instance	All instances.
Counter	SIP - 033 - External Messages/sec Dropped Due To Blocked Domain
Threshold	This policy has the following threshold: Critical: 40

 $LS\_AccessEdge\_ExtMsgPerSecDropDueToBlckdDomain$ 

Policy Name	LS_AccessEdge_FlowControlledConnections Policy
Description	This policy monitors the number of connections that are currently being flowcontrolled (no socket receives are posted).
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 01 - Peers
Instance	_Total
Counter	SIP - 023 - Flow-controlled Connections
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	50
Critical	100

### $LS\_AccessEdge\_FlowControlledConnectionsDropped$

Policy Name	LS_AccessEdge_FlowControlledConnectionsDropped Policy
Description	This policy monitors the total number of connections dropped because of excessive flow-control.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 01 - Peers
Instance	_Total
Counter	SIP - 024 - Flow-controlled Connections Dropped

Policy Name	LS_AccessEdge_FlowControlledConnectionsDropped Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	5
Critical	10

### $LS\_AccessEdge\_IncomingMsgHeldAboveOverloadWatermark$

Policy Name	$LS\_AccessEdge\_IncomingMsgHeldAboveOverloadWatermark\ Policy$
Description	This policy monitors the number of incoming messages which are currently held by the server for processing more than the overload watermark time threshold.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 07 - Load Management
Instance	All instances
Counter	SIP - 005 - Incoming Messages Held Above Overload Watermark
Threshold	This policy has the following threshold: <b>Critical:</b> 40

## $LS\_AccessEdge\_IncomingRequestsDroppedPerSec$

Policy Name	LS_AccessEdge_IncomingRequestsDroppedPerSec Policy
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 02 - Protocol
Instance	All instances
Counter	SIP - 005 - Incoming Requests Dropped/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 10

Policy Name	LS_AccessEdge_IncomingResponsesDroppedPerSec Policy
Description	This policy monitors the rate at which the incoming responses are dropped per second as they could not be processed.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 02 - Protocol
Instance	All instances
Counter	SIP - 009 - Incoming Responses Dropped/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 10

LS\_AccessEdge\_IncomingResponsesDroppedPerSec

#### LS\_AccessEdge\_Logging

Policy Name	LS_AccessEdge_Logging Policy
Description	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.
Schedule	This policy runs every 15 minutes.
Data Class	LS_ACCESS

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

### $LS\_AccessEdge\_MessagesInServer$

Policy Name	LS_AccessEdge_MessagesInServer Policy
Description	This policy monitors the number of messages currently being processed by the server.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 02 - Protocol
Instance	All instances

Policy Name	LS_AccessEdge_MessagesInServer Policy
Counter	SIP - 012 - Messages In Server
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	2500
Critical	5000

### $LS\_AccessEdge\_MsgPerSecDroppedDueToUnknownDomain$

Policy Name	LS_AccessEdgeMsgPerSecDroppedDueToUnknownDomain Policy
Description	This policy monitors the number of messages that are not routed in a second, as the message domain is not in the routing table.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 09 - Access Edge Server Messages
Instance	All instances
Counter	SIP - 025 - Messages/sec Dropped Due To Unknown Domain
Threshold	This policy has the following threshold: <b>Critical:</b> 40

### $LS\_AccessEdge\_MsgsDroppedPerSecDueToCertMismatch$

Policy Name	$LS\_AccessEdge\_MsgsDroppedPerSecDueToCertMismatch\ Policy$
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 02 - Protocol
Instance	All instances
Counter	SIP - 011 - Messages/sec Dropped Due To Certificate Mismatch
Threshold	This policy has the following threshold: Critical: 100

Policy Name	LS_AccessEdge_NoOfMsgsDropDueToInternalSrvError Policy
Description	This policy monitors the number of messages dropped due to an internal server error.
Schedule	This policy runs every one hour.
Performance Object	LS: SIP – 05 – Routing
Instance	All instances
Counter	SIP - 022 - Messages Dropped Due To Internal Error
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	10
Critical	20

 $LS\_AccessEdge\_NoOfMsgsDropDueToInternalSrvError$ 

	LS	AccessEdge	NoOfMsgsDro	pDueToRoutingFailure
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Policy Name	LS_AccessEdge_NoOfMsgsDropDueToRoutingFailure Policy
Description	This policy monitors the total number of messages dropped due to a routing failure not covered by other counters.
Schedule	This policy runs every one hour.
Performance Object	LS: SIP – 05 – Routing
Instance	All instances
Counter	SIP - 021 - Messages Dropped Due To Other Routing Failure
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	10
Critical	20

LS_AccessEdge	_NoOfSrvCnxDisDueToThrottling
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Policy Name	LS_AccessEdge_NoOfSrvCnxDisDueToThrottling Policy
Description	This policy monitors the total number of server connections disconnected due to throttling.
Schedule	This policy runs every one hour.
Performance Object	LS:DATAPROXY - 00 - Server Connections
Instance	_Total
Counter	DATAPROXY - 035 - Server connections disconnected due to throttling

Policy Name	LS_AccessEdge_NoOfSrvCnxDisDueToThrottling Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	50
Critical	100

# $LS\_AccessEdge\_PageFaultsPerSec$

Policy Name	LS_AccessEdge_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter of Access Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

# LS\_AccessEdge\_PrivateBytes

Policy Name	LS_AccessEdge_PrivateBytes Policy
Description	This policy monitors Private Bytes counter of the Access Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

# LS\_AccessEdge\_ProcessorTime

Policy Name	LS_AccessEdge_ProcessorTime Policy
Description	This policy monitors % Processor Time counter of the Access Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process

Policy Name	LS_AccessEdge_ProcessorTime Policy
Instance	RTCSrv
Counter	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

## LS\_AccessEdge\_RateOfCnxDropDueToPeer

Policy Name	LS_AccessEdge_RateOfCnxDropDueToPeer Policy
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS: SIP – 00 – Networking
Instance	All instances
Counter	SIP - 005 - Connections Failed To Establish/Sec
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# $LS\_AccessEdge\_RateOfCnxRefusedDueToSrvOverload$

Policy Name	LS_AccessEdge_RateOfCnxRefusedDueToSrvOverload Policy
Description	This policy monitors the rate of the connections refused, in a second, with a Service Unavailable response because the server was overloaded.
Schedule	This policy runs every 15 minutes.
Performance Object	LS: SIP – 00 – Networking
Instance	All instances
Counter	SIP - 007 - Connections Refused Due To Server Overload/Sec
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	$LS\_AccessEdge\_RejExtEdgeClientConnectionsPerSec\ Policy$
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 08 - Access Edge Server Connections
Instance	All instances
Counter	SIP - 015 - Rejected External Edge Client Connections/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 10

 $LS\_AccessEdge\_RejExtEdgeClientConnectionsPerSec$ 

## $LS\_AccessEdge\_RejExtEdgeServerConnectionsPerSec$

Policy Name	LS_AccessEdge_RejExtEdgeServerConnectionsPerSec Policy
Description	This policy monitors the rate of server connections rejected at the external edge in a second because all federation are disabled.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 08 - Access Edge Server Connections
Instance	All instances
Counter	SIP - 013 - Rejected External Edge Server Connections/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 10

## LS\_AccessEdge\_SendsTimedOut

Policy Name	LS_AccessEdge_SendsTimedOut Policy
Description	This policy monitors the number of sends that were dropped as they stayed in the outgoing (send) queue for a long time.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 01 - Peers
Instance	_Total
Counter	SIP - 018 - Sends Timed-Out
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	500
Critical	1000

$\mathbf{LS}_{-}$	AccessEdge	_ThreadCount
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Policy Name	LS_AccessEdge_ThreadCount Policy
Description	This policy monitors the Thread Count counter of the Access Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter	Thread Count
Threshold	This policy has the following threshold: Critical: 150

# LS\_AccessEdge\_Throttling

Policy Name	LS_AccessEdge_Throttling Policy
Description	This policy monitors the system wide throttling.
Schedule	This policy runs every one hour.
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 and Critical values.
Warning	10
Critical	20

# $LS\_AccessEdge\_TimedOutTransactions$

Policy Name	LS_AccessEdge_TimedOutTransactions Policy
Description	This policy monitors the total number of transactions that have timed out.
Schedule	This policy runs every one hour.
Performance Object	LS:SipEps - 01 - SipEps Transactions
Instance	All instances
Counter	SipEps - 008 - Transactions Timed Out/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 20

LS_AccessEdge	_WorkingSet
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Policy Name	LS_AccessEdge_WorkingSet Policy
Description	This policy monitors the Working Set counter available in the Access Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv'
Counter	Working Set
Threshold	This policy has the following threshold: Critical: 2e+007

# LS\_AVAuth\_Logging

Policy Name	LS_AVAuth_Logging Policy
Description	This policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances MRASSvc or _Total.
Schedule	This policy runs every 15 minutes.
Data Class	LS_Process

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

# LS\_AVAuth\_PageFaultsPerSec

Policy Name	LS_AVAuth_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter of the Audio/Video Authentication service.
Schedule	This policy runs every one hour.
Performance Object	Process

Policy Name	LS_AVAuth_PageFaultsPerSec Policy	
Instance	MRASSvc	
Counter	Page Faults/Sec	
Threshold	This policy has the following threshold: Critical: 100	

# LS\_AVAuth\_PrivateBytes

Policy Name	LS_AVAuth_PrivateBytes Policy	
Description	This policy monitors the Private Bytes counter of the Audio/Video Authentication service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	MRASSvc	
Counter	Private Bytes	
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007	

## LS\_AVAuth\_ProcessorTime

Policy Name	LS_AVAuth_ProcessorTime Policy	
Description	This policy monitors the % Processor Time counter of the Audio/Video Authentication service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	MRASSvc	
Counter	% Processor Time	
Threshold	This policy has the following threshold: <b>Critical:</b> 90	

# LS\_AVAuth\_ThreadCount

Policy Name	LS_AVAuth_ThreadCount Policy	
Description	This policy monitors the Thread Count counter of the Audio/Video Authentication service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	

Policy Name	LS_AVAuth_ThreadCount Policy	
Instance	MRASSvc	
Counter	ThreadCount	
Threshold	This policy has the following threshold: <b>Critical:</b> 150	

# LS\_AVAuth\_WorkingSet

Policy Name	LS_AVAuth_WorkingSet Policy	
Description	This policy monitors the Working Set counter of the Audio/Video Authentication service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	MRASSvc	
Counter	WorkingSet	
Threshold	This policy has the following threshold: Critical: 2e+007	

# $LS\_AVEdge\_BadRequestsReceivedPerSec$

Policy Name	LS_AVEdge_BadRequestsReceivedPerSec Policy	
Description	This policy monitors the number of bad requests received in a second.	
Schedule	This policy runs every one hour.	
Performance Object	LS:A/V Auth - 00 - Requests	
Instance	All instances	
Counter	- 003 - Bad Requests Received/sec	
Threshold	This policy has the following threshold: <b>Critical:</b> 20	

# LS\_AVEdge\_DataLogging

Policy Name	LS_AVEdge_DataLogging Policy	
Description	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.	
Schedule	This policy runs every 15 minutes.	
Data Class	LS_PROCESS	

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

# LS\_AVEdge\_Logging

Policy Name	LS_AVEdge_Logging Policy	
Description	This policy collects data for the Audio/Video Conferencing Edge Service.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LS_PROCESS	

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

# LS\_AVEdge\_PageFaultsPerSec

Policy Name	LS_AVEdge_PageFaultsPerSec Policy	
Description	This policy monitors the Page Faults/sec counter available in the Audio/ Video Edge service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	

Policy Name	LS_AVEdge_PageFaultsPerSec Policy
Instance	MediaRelaySvc
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

# LS\_AVEdge\_PrivateBytes

Policy Name	LS_AVEdge_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter available in the Audio/ Video Edge service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MediaRelaySvc
Counter	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

## LS\_AVEdge\_ProcessorTime

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Policy Name	LS_AVEdge_ProcessorTime Policy	
Description	This policy monitors the % Processor Time counter available in the Audio/Video Edge service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	MediaRelaySvc	
Counter	% Processor Time	
Threshold	This policy has the following threshold: <b>Critical:</b> 90	

## $LS\_AVEdge\_TCPActiveSessionsExceedingBWLmt$

Policy Name	LS_AVEdge_TCPActiveSessionsExceedingBWLmt Policy
Description	This policy monitors the number of active relay sessions over TCP, which are exceeding the bandwidth limit.
Schedule	This policy runs every one hour.
Performance Object	LS:A/V Edge - 01 - TCP Counters

Policy Name	LS_AVEdge_TCPActiveSessionsExceedingBWLmt Policy
Instance	_Total
Counter	A/V Edge - 035 - Active Sessions Exceeding Avg Bandwidth Limit
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	10
Critical	20

# $LS\_AVEdge\_TCPA uthenticationFailuresPerSec$

Policy Name	LS_AVEdge_TCPAuthenticationFailuresPerSec Policy
Description	This policy monitors the number of failed authentication attempts with the relay over TCP in one second.
Schedule	This policy runs every 15 minutes.
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: <b>Critical:</b> 20

# $LS\_AVEdge\_TCPPacketsDroppedPerSec$

Policy Name	LS_AVEdge_TCPPacketsDroppedPerSec Policy
Description	This policy monitors the rate at which the packets over TCP are dropped by the relay, in a second.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 300

# LS\_AVEdge\_ThreadCount

Policy Name	LS_AVEdge_ThreadCount Policy
Description	This policy monitors the Thread Count counter available in the Audio/ Video Edge service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MediaRelaySvc
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## $LS\_AVEdge\_UDPActiveSessionsExceedingBWLmt$

Policy Name	LS_AVEdge_UDPActiveSessionsExceedingBWLmt Policy
Description	This policy monitors the number of active relay sessions over UDP, which are exceeding the bandwidth limit.
Schedule	This policy runs every one hour.
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

# $LS\_AVEdge\_UDPAllocateRqstExeedingPortLimit$

Policy Name	LS_AVEdge_UDPAllocateRqstExeedingPortLimit Policy
Description	This policy monitors the number of allocated requests over UDP that exceed the port limit, in one second.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

Policy Name	LS_AVEdge_UDPAuthenticationFailuresPerSec Policy
Description	This policy monitors the rate of failed authentication attempts with the relay over UDP in one second.
Schedule	This policy runs every one hour.
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

 $LS\_AVEdge\_UDPAuthenticationFailuresPerSec$ 

## LS\_AVEdge\_UDPPacketsDroppedPerSec

Policy Name	LS_AVEdge_UDPPacketsDroppedPerSec Policy
Description	This policy monitors the rate of packets over UDP that are dropped by the relay in one second.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 300

# LS\_AVEdge\_WorkingSet

Policy Name	LS_AVEdge_WorkingSet Policy
Description	This policy monitors the Working Set counter available in the Audio/ Video Edge service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MediaRelaySvc
Counter	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

LS\_Check\_AccessEdgeServiceStatus

Policy Name	LS_Check_AccessEdgeServiceStatus Policy	
Description	This policy returns values that correspond to different states of '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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCSRV	

# LS\_Check\_AVAuthServiceStatus

Policy Name	LS_Check_AVAuthServiceStatus Policy	
Description	This 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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCMRAUTH	

## LS\_Check\_AVEdgeServiceStatus

Policy Name	LS_Check_AVEdgeServiceStatus Policy
Description	This 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCMEDIARELAY

## LS\_Check\_ReplicaServiceStatus\_Edge

Policy Name	LS_Check_ReplicaServiceStatus_Edge Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	Replica Replicator Agent

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Policy Name	LS_Check_WebEdgeServiceStatus Policy
Description	This 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCDATAPROXY

# LS\_Replica\_PrivateBytes

Policy Name	LS_Replica_PrivateBytes Policy	
Description	This policy monitors the Private Bytes counter of the Replica Service.	
Schedule	This policy runs every 5 minutes.	
Performance Object	Process	
Instance	ReplicaReplicatorAgent	
Counter	Private Bytes	
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007	

# LS\_Replica\_ProcessorTime

Policy Name	LS_Replica_ProcessorTime Policy	
Description	This policy monitors the % Processor Time counter of the Replica Service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ReplicaReplicatorAgent	
Counter	% Processor Time	
Threshold	This policy has the following threshold: <b>Critical:</b> 90	

# LS\_Replica\_ThreadCount

Policy Name	LS_Replica_ThreadCount Policy	
Description	This policy monitors the Thread Count counter of the Replica Service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	

Policy Name	LS_Replica_ThreadCount Policy
Instance	ReplicaReplicatorAgent
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

# LS\_Replica\_WorkingSet

Policy Name	LS_Replica_WorkingSet Policy	
Description	This policy monitors the Working Set counter of the Replica Service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ReplicaReplicatorAgent	
Counter	Working Set	
Threshold	This policy has the following threshold: Critical: 2e+007	

# $LS\_WebEdge\_ClientsDisconPerSecInvalidCookieData$

Policy Name	LS_WebEdge_ClientsDisconPerSecInvalidCookieData Policy
Description	This policy monitors the number of clients disconnected in a second because of invalid cookie data.
Schedule	This policy runs every one hour.
Performance Object	LS:DATAPROXY - 01 - Client Connections
Instance	All instances
Counter	DATAPROXY - 012 - Clients disconnected per second due to invalid cookie data
Threshold	This policy has the following threshold: <b>Critical:</b> 100

## $LS\_WebEdge\_ClientsDisconPerSecInvalidCookieTm$

Policy Name	LS_WebEdge_ClientsDisconPerSecInvalidCookieTm Policy
Description	This policy monitors the number of clients rejected in a second because of invalid timestamps.
Schedule	This policy runs every one hour.
Performance Object	LS:DATAPROXY - 01 - Client Connections

Policy Name	LS_WebEdge_ClientsDisconPerSecInvalidCookieTm Policy
Instance	All instances
Counter	DATAPROXY - 008 - Clients disconnected per second due to invalid cookie timestamp
Threshold	This policy has the following threshold: <b>Critical:</b> 100

# LS\_WebEdge\_Logging

Policy Name	LS_WebEdge_Logging Policy
Description	This policy collects data for the LS Web Conferencing Edge Service.
Schedule	This policy runs every15 minutes.
Monitored Service	LS_PROCESS

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

## LS\_WebEdge\_PageFaultsPerSec

Policy Name	LS_WebEdge_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter of the Web Conferencing Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataProxy
Counter	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

# LS\_WebEdge\_PrivateBytes

Policy Name	LS_WebEdge_PrivateBytes Policy
Description	This policy monitors the Private Bytes counter of the Web Conferencing Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataProxy
Counter	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_WebEdge\_ProcessorTime

Policy Name	LS_WebEdge_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter of the Web Conferencing Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataProxy
Counter	% Processor Time
Threshold	This policy has the following threshold: Critical: 90

# LS\_WebEdge\_SystemThrottling

Policy Name	LS_WebEdge_SystemThrottling Policy
Description	The policy monitors the system wide throttling.
Schedule	This policy runs every one hour.
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 the Warning and Critical values.
Warning	1
Critical	2

Policy Name	LS_WebEdge_ThreadCount Policy
Description	This policy monitors the Thread Count counter of the Web Conferencing Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataProxy
Counter	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## LS\_WebEdge\_ThrottedServerConnections

Policy Name	LS_WebEdge_ThrottedServerConnections Policy
Description	This policy monitors the total number of throttled server connections.
Schedule	This policy runs every one hour.
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 the Warning and Critical values.
Warning	1
Critical	2

# LS\_WebEdge\_WorkingSet

Policy Name	LS_WebEdge_WorkingSet Policy
Description	This policy monitors the Working Set counter of the Web Conferencing Edge Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataProxy
Counter	Working Set
Threshold	This policy has the following threshold: Critical: 2e+007

# **Golden**Metrics

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.

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Policy Name	LS_AccessEdge_AvgIncomingMsgProccessingTime Policy
Description	This policy monitors the average processing time of an incoming message in seconds.
Schedule	This policy runs every one hour.
Performance Object	LC:SIP - 02 – Protocol
Instance	All instances
Counter	SIP - 021 - Average Incoming Message Processing Time
Threshold	This policy has the following threshold: <b>Critical:</b> 5

 $LS\_AccessEdge\_AvgIncomingMsgProccessingTime$ 

#### $LS\_AccessEdge\_ExtMsgDroppedDueToBlkedIMDomain$

Policy Name	$LS\_AccessEdge\_ExtMsgDroppedDueToBlkedIMDomain\ Policy$
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 09 - Access Edge Server Messages
Instance	All instances.
Counter	SIP - 065 - External Messages/sec Dropped Due To Blocked IM Service Provider Domain
Threshold	This policy has the following threshold: <b>Critical:</b> 40

#### LS\_AccessEdge\_RateOfCnxDropDueToPeer

Policy Name	LS_AccessEdge_RateOfCnxDropDueToPeer Policy
Description	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.
Schedule	This policy runs every one hour.
Performance Object	LS: SIP – 00 – Networking

Policy Name	LS_AccessEdge_RateOfCnxDropDueToPeer Policy
Instance	All instances
Counter	SIP - 005 - Connections Failed To Establish/Sec
Threshold	This policy has the following threshold: <b>Critical:</b> 20

## $LS\_AccessEdge\_RateOfCnxRefusedDueToSrvOverload$

Policy Name	LS_AccessEdge_RateOfCnxRefusedDueToSrvOverload Policy
Description	This policy monitors the rate of the connections refused, in a second, with a Service Unavailable response because the server was overloaded.
Schedule	This policy runs every 15 minutes.
Performance Object	LS: SIP – 00 – Networking
Instance	All instances
Counter	SIP - 007 - Connections Refused Due To Server Overload/Sec
Threshold	This policy has the following threshold: Critical: 20

#### $LS\_AVEdge\_BadRequestsReceivedPerSec$

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Policy Name	LS_AVEdge_BadRequestsReceivedPerSec Policy
Description	This policy monitors the number of bad requests which are received in a second.
Schedule	This policy runs every one hour.
Performance Object	LS:A/V Auth - 00 - Requests
Instance	All instances
Counter	- 003 - Bad Requests Received/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 20

## $LS\_AVEdge\_TCPActiveSessionsExceedingBWLmt$

Policy Name	LS_AVEdge_TCPActiveSessionsExceedingBWLmt Policy
Description	This policy monitors the number of active relay sessions over TCP, which are exceeding the bandwidth limit.
Schedule	This policy runs every one hour.
Performance Object	LS:A/V Edge - 01 - TCP Counters

Policy Name	LS_AVEdge_TCPActiveSessionsExceedingBWLmt Policy
Instance	_Total
Counter	A/V Edge - 035 - Active Sessions Exceeding Avg Bandwidth Limit
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	10
Critical	20

# $LS\_AVEdge\_TCPA uthenticationFailuresPerSec$

Policy Name	LS_AVEdge_TCPAuthenticationFailuresPerSec Policy
Description	This policy monitors the number of failed authentication attempts with the relay over TCP in one second.
Schedule	This policy runs every 15 minutes.
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: <b>Critical:</b> 20

## $LS\_AVEdge\_UDPActiveSessionsExceedingBWLmt$

Policy Name	LS_AVEdge_UDPActiveSessionsExceedingBWLmt Policy
Description	This policy monitors the number of active relay sessions over UDP, which are exceeding the bandwidth limit.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

Policy Name	LS_AVEdge_UDPAllocateRqstExeedingPortLimit Policy
Description	This policy monitors the number of allocated requests over UDP that exceed the port limit, in one second.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

 $LS\_AVEdge\_UDPAllocateRqstExeedingPortLimit$ 

## $LS\_AVEdge\_UDPAuthenticationFailuresPerSec$

Policy Name	LS_AVEdge_UDPAuthenticationFailuresPerSec Policy
Description	This policy monitors the rate of failed authentication attempts with the relay over UDP in one second.
Schedule	This policy runs every one hour.
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

## LS\_Check\_AccessEdgeServiceStatus

Policy Name	LS_Check_AccessEdgeServiceStatus Policy	
Description	This policy returns values that correspond to different states of '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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCSRV	

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Policy Name	LS_Check_AVAuthServiceStatus Policy	
Description	This 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.	
Schedule	This policy runs every 5 minutes.	
Monitored Service	RTCMRAUTH	

# LS\_Check\_AVEdgeServiceStatus

Policy Name	LS_Check_AVEdgeServiceStatus Policy
Description	This 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCMEDIARELAY

# $LS\_Check\_ReplicaServiceStatus\_Edge$

Policy Name	LS_Check_ReplicaServiceStatus_Edge Policy
Description	This policy 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	Replica Replicator Agent

# LS\_Check\_WebEdgeServiceStatus

Policy Name	LS_Check_WebEdgeServiceStatus Policy
Description	This 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.
Schedule	This policy runs every 5 minutes.
Monitored Service	RTCDATAPROXY

Policy Name	LS_WebEdge_ClientsDisconPerSecInvalidCookieData Policy
Description	This policy monitors the number of clients disconnected in a second because of invalid cookie data.
Schedule	This policy runs every one hour.
Performance Object	LS:DATAPROXY - 01 - Client Connections
Instance	All instances
Counter	DATAPROXY - 012 - Clients disconnected per second due to invalid cookie data
Threshold	This policy has the following threshold: <b>Critical:</b> 100

 $LS\_WebEdge\_ClientsDisconPerSecInvalidCookieData$ 

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Policy Name	LS_WebEdge_ClientsDisconPerSecInvalidCookieTm Policy
Description	This policy monitors the number of clients rejected in a second because of invalid timestamps.
Schedule	This policy runs every one hour.
Performance Object	LS:DATAPROXY - 01 - Client Connections
Instance	All instances
Counter	DATAPROXY - 008 - Clients disconnected per second due to invalid cookie timestamp
Threshold	This policy has the following threshold: <b>Critical:</b> 100

# Front End 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.

Policy Name	LS_AppSharing_PageFaultsPerSec Policy
Description	This policy monitors the Page Faults/sec counter available in the Lync Server Application Sharing service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ASMCUSvc
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

LS\_AppSharing\_PageFaultsPerSec

# LS\_FileTransferAgent\_PageFaultsPerSec

Policy Name	LS_FileTransferAgent_PageFaultsPerSec Policy	
Description	The LS_ FileTransferAgent_PageFaultsPerSec policy monitors the Page Faults/sec counter of the File Transfer Agent service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	FileTransferAgent	
Counter:	Page Faults/sec	
Threshold	This policy has the following threshold: <b>Critical:</b> 100	

## LS\_Replica\_PageFaultsPerSec

Policy Name	LS_Replica_PageFaultsPerSec Policy	
Description	The LS_Replica_PageFaultsPerSec monitors the Page Faults/sec counter of the Replica Service	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ReplicaReplicatorAgent	
Counter:	Page Faults/sec	
Threshold	This policy has the following threshold: <b>Critical:</b> 100	

Policy Name	LS_AppSharing_ProcessorTime Policy	
Description	The LS_AppSharing_ProcessorTime policy monitors the % Processor Time counter of the Application Sharing service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ASMCUSvc	
Counter:	% Processor Time	
Threshold	This policy has the following threshold: <b>Critical:</b> 90	

# LS\_AppSharing\_ThreadCount

Policy Name	LS_AppSharing_ThreadCount Policy	
Description	The LS_AppSharing_ThreadCount policy monitors the Thread Count counter of the Application Sharing service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ASMCUSvc	
Counter:	Thread Count	
Threshold	This policy has the following threshold: <b>Critical:</b> 150	

## LS\_AppSharing\_WorkingSet

Policy Name	LS_AppSharing_WorkingSet Policy	
Description	The LS_AppSharing_WorkingSet policy monitors the Working Set counter of the Application Sharing service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ASMCUSvc	
Counter:	Working Set	
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007	

Policy Name	LS_Check_AppSharingServiceStatus Policy	
Description	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	

LS\_Check\_AppSharingServiceStatus

## LS\_Check\_AudioTestServiceStatus

Policy Name	LS_Check_AudioTestServiceStatus Policy	
Description	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	

## LS\_Check\_BandwidthAuthServiceStatus

Policy Name	LS_Check_BandwidthAuthServiceStatus Policy	
Description	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	

# $LS\_Check\_BandwidthCoreServiceStatus$

Policy Name	LS_Check_BandwidthCoreServiceStatus Policy	
Description	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	

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Policy Name	LS_Check_CallParkServiceStatus Policy	
Description	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	

# $LS\_Check\_ConfAnnouncementServiceStatus$

Policy Name	LS_Check_ConfAnnouncementServiceStatus Policy	
Description	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	

## $LS\_Check\_ConfAttendantServiceStatus$

Policy Name	LS_Check_ConfAttendantServiceStatus Policy
Description	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

# $LS\_Check\_FileTransferAgentServiceStatus$

Policy Name	LS_Check_FileTransferAgentServiceStatus Policy
Description	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 Name	LS_Check_FrontEnd_ADStatus Policy
Description	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.

LS\_Check\_FrontEnd\_ADStatus

# $LS\_Check\_FrontEnd\_ReplicaStatus$

Policy Name	LS_Check_FrontEnd_ReplicaStatus Policy
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored service	REPLICA

#### LS\_Check\_FrontEndServiceStatus

Policy Name	LS_Check_FrontEndServiceStatus Policy
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored service	RTCSRV

## LS\_Check\_IMConfServiceStatus

Policy Name	LS_Check_IMConfServiceStatus Policy
Description	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 Name	LS_Check_MasterReplicatorAgentServiceStatus Policy
Description	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

 $LS\_Check\_MasterReplicatorAgentServiceStatus$ 

#### $LS\_Check\_ReplicaServiceStatus\_FrontEnd$

Policy Name	LS_Check_ReplicaServiceStatus_FrontEnd Policy
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored service	Replica Replicator Agent

## LS\_Check\_ResponseGroupServiceStatus

Policy Name	LS_Check_ResponseGroupServiceStatus Policy
Description	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

## LS\_Check\_WebConfCompatibilityServiceStatus

Policy Name	LS_Check_WebConfCompatibilityServiceStatus Policy
Description	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

LS\_Check\_WebConfServiceStatus

Policy Name	LS_Check_WebConfServiceStatus Policy
Description	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

# LS\_FileTransferAgent\_PrivateBytes

Policy Name	LS_FileTransferAgent_PrivateBytes Policy
Description	The LS_FileTransferAgent_PrivateBytes policy monitors the Private Bytes counter of the File Transfer Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	FileTransferAgent
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_FileTransferAgent\_ProcessorTime

Policy Name	LS_FileTransferAgent_ProcessorTime Policy
Description	The LS_FileTransferAgent_ProcessorTime policy monitors the % Processor Time counter of the File Transfer Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	FileTransferAgent
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

Policy Name	LS_FileTransferAgent_ThreadCount Policy
Description	The LS_FileTransferAgent_ThreadCount policy monitors the Thread Count counter of the File Transfer Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	FileTransferAgent
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

# LS\_FileTransferAgent\_WorkingSet

Policy Name	LS_FileTransferAgent_WorkingSet Policy
Description	The LS_FileTransferAgent_WorkingSet policy monitors the Working Set counter of the File Transfer Agent service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	FileTransferAgent
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

# $LS\_FrontEnd\_AvgNoOfBlkedClientThreads$

Policy Name	LS_FrontEnd_AvgNoOfBlkedClientThreads Policy
Description	This policy monitors the average number of client threads that are blocked in the queue, waiting for the queue depth to decrease.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 01 - DBStore
Instance	All instances
Counter:	USrv - 011 - Blocked Client Threads

Policy Name	LS_FrontEnd_AvgNoOfBlkedClientThreads Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	4000
Critical	6000

# $LS\_FrontEnd\_AvgTimeRequestHeldInDB$

Policy Name	LS_FrontEnd_AvgTimeRequestHeldInDB Policy
Description	This policy monitors the average time (in milliseconds) a request is held in the database queue.
Schedule	This policy runs every one hour.
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 the Warning and Critical values.
Warning	4000
Critical	6000

# ${\bf LS\_FrontEnd\_AvgTimeToFetchProperties}$

Policy Name	LS_FrontEnd_AvgTimeToFetchProperties Policy
Description	This policy monitors the average fetch time of member properties in milliseconds.
Schedule	This policy runs every one hour.
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 the Warning and Critical values.
Warning	10000
Critical	30000

Policy Name	LS_FrontEnd_DataLogging Policy
Description	This policy collects data for the LS Front End Server.
Schedule	This policy runs every 15 minutes.
Data Class	LS_PROCESS

LS\_FrontEnd\_DataLogging

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

# LS\_FrontEnd\_HoldingTimeForIncMsgs

Policy Name	LS_FrontEnd_HoldingTimeForIncMsgs Policy
Description	This policy monitors the average processing time taken by the server for one request.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 07 - Load Management

Policy Name	LS_FrontEnd_HoldingTimeForIncMsgs Policy
Instance	All instances
Counter:	SIP - 000 - Average Holding Time For Incoming Messages
Threshold	This policy has the following threshold: <b>Critical:</b> 5

# LS\_FrontEnd\_Local503Responses

Policy Name	LS_FrontEnd_Local503Responses Policy
Description	This policy monitors the number of 503 responses received in a second. Code 503 means that the server is unavailable.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 04 - Responses
Instance	All instances
Counter:	SIP - 055 - Local 503 Responses/sec
Threshold	This policy has the following threshold: <b>Critical</b> : 5

# LS\_FrontEnd\_Local504Responses

Policy Name	LS_FrontEnd_Local504Responses Policy
Description	This policy monitors the number of 504 responses received in a second. Code 504 implies that there are problems connecting to other servers.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 04 - Responses
Instance	All instances
Counter:	SIP - 057 - Local 504 Responses/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 5

Policy Name	LS_FrontEnd_Logging Policy
Description	The LS_FrontEnd_Logging policy logs the following metrics into the data store (CODA or HP Performance Agent) for the instances RTCSrv or _Total.
Schedule	This policy runs every 15 minutes.
Data Class	LS_PROCESS

LS\_FrontEnd\_Logging

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

#### $LS\_FrontEnd\_NoOfRequestsWaitingOnAD$

Policy Name	LS_FrontEnd_NoOfRequestsWaitingOnAD Policy
	This policy monitors the number of request waiting currently for
Description	Active Directory responses.
Schedule	This policy runs every one hour.
Performance Object	LS:WEB - 00 - Distribution List Expansion
Instance	_Total
Counter:	WEB - 004 - Pending Active Directory Requests
	When the difference between two samples is greater than the
Threshold	Warning and Critical values.
Warning	50
Critical	100

$\mathbf{LS}_{-}$	FrontEnd	_PageFaultsPerSec
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Policy Name	LS_FrontEnd_PageFaultsPerSec Policy
Description	The LS_FrontEnd_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical</b> : 100

## LS\_FrontEnd\_PrivateBytes

Policy Name	LS_FrontEnd_PrivateBytes Policy
Description	The LS_FrontEnd_PrivateBytes policy monitors the Private Bytes counter of the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter:	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

## LS\_FrontEnd\_ProcessingLatency

Policy Name	LS_FrontEnd_ProcessingLatency Policy
Description	This policy monitors the processing time taken by the back end for one request.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 01 - DBStore
Instance	All instances
Counter:	USrv - 004 - Sproc Latency (msec)
Threshold	This policy has the following threshold: Critical: 6000

## LS\_FrontEnd\_SearchLatency

Policy Name	LS_FrontEnd_SearchLatency Policy
Description	The policy LS_FrontEnd_SearchLatency monitors the average time (in milliseconds) it takes to perform the LDAP search.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 19 - Directory Search
Instance	All instances
Counter:	USrv - 005 - Search Latency (ms)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

## LS\_FrontEnd\_ProcessorTime

Policy Name	LS_FrontEnd_ProcessorTime Policy
Description	The LS_FrontEnd_ProcessorTime policy monitors the % Processor Time counter of the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical</b> : 90

## LS\_FrontEnd\_QueueLatency

Policy Name	LS_FrontEnd_QueueLatency Policy
Description	This policy monitors the time period that a request takes in the back end queue.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 01 - DBStore
Instance	All instances
Counter:	Usrv - 002 - Queue Latency (msec)
Threshold	This policy has the following threshold: <b>Critical:</b> 6000

Policy Name	LS_FrontEnd_RateOfSoapExceptions Policy
Description	This policy monitors the SOAP exceptions generated per second.
Schedule	This policy runs every one hour.
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 the Warning and Critical values.
Warning	50
Critical	100

 $LS\_FrontEnd\_RateOfSoapExceptions$ 

## LS\_FrontEnd\_SendsOutstanding

Policy Name	LS_FrontEnd_SendsOutstanding Policy
Description	This policy monitors the number of outbound requests and responses that are queued.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP – 01 – Peers
Instance	All instances
Counter:	SIP – 017 – Sends Outstanding
Threshold	This policy has the following threshold: <b>Critical:</b> 200

## LS\_FrontEnd\_ThreadCount

Policy Name	LS_FrontEnd_ThreadCount Policy	
Description	The LS_FrontEnd_ThreadCount policy monitors the Thread Count counter of the Front End service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	

Policy Name	LS_FrontEnd_ThreadCount Policy
Instance	RTCSrv
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## LS\_FrontEnd\_WorkingSet

Policy Name	LS_FrontEnd_WorkingSet Policy
Description	The LS_FrontEnd_WorkingSet policy monitors the Working Set counter of the Front End service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RTCSrv
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_IMConf\_Logging

Policy Name	LS_IMConf_Logging Policy	
Description	This policy collects data for the LS IM Conferencing Service.	
Schedule	This policy runs every one hour.	
Performance Object	LS_PROCESS	

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

## LS\_IMConf\_PageFaultsPerSec

Policy Name	LS_IMConf_PageFaultsPerSec Policy
Description	The LS_IMConf_PageFaultsPerSec policy the monitors the Page Faults/sec counter of the IM Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	IMMcuSvc
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

## LS\_IMConf\_PrivateBytes

Policy Name	LS_IMConf_PrivateBytes Policy
Description	The LS_IMConf_PrivateBytes policy monitors the Private Bytes counter of the IM Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	IMMcuSvc
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_IMConf\_ProcessorTime

Policy Name	LS_IMConf_ProcessorTime Policy
Description	This policy monitors the % Processor Time counter available in the IM Conferencing service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	IMMcuSvc
Counter:	% Processor Time
Threshold	This policy has the following threshold: Critical: 90

## LS\_IMConf\_ThreadCount

Policy Name	LS_IMConf_ThreadCount Policy
Description	The LS_IMConf_ThreadCount policy monitors the Thread Count counter of the IM Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	IMMcuSvc
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## LS\_IMConf\_WorkingSet

Policy Name	LS_IMConf_WorkingSet Policy
Description	The LS_IMConf_WorkingSet policy monitors the Working Set counter of the IM Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	IMMcuSvc
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## $LS\_MasterReplicatorAgent\_PageFaultsPerSec$

Policy Name	LS_MasterReplicatorAgent_PageFaultsPerSec Policy
Description	The LS_MasterReplicatorAgent_PageFaultsPerSec policy monitors the Page Faults/sec counter of the MasterReplicatorAgent Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MasterReplicatorAgent
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

Policy Name	LS_MasterReplicatorAgent_PrivateBytes Policy
Description	The LS_MasterReplicatorAgent_PrivateBytes policy monitors the Private Bytes counter of the MasterReplicatorAgent Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MasterReplicatorAgent
Counter:	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

LS\_MasterReplicatorAgent\_PrivateBytes

### LS\_MasterReplicatorAgent\_ProcessorTime

Policy Name	LS_MasterReplicatorAgent_ProcessorTime Policy
Description	The LS_MasterReplicatorAgent_ProcessorTime policy monitors the % Processor Time counter of the MasterReplicatorAgentService.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MasterReplicatorAgent
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

## $LS\_MasterReplicatorAgent\_ThreadCount$

Policy Name	LS_MasterReplicatorAgent_ThreadCount Policy	
Description	The LS_MasterReplicatorAgent_ThreadCount policy monitors the Thread Count counter of the MasterReplicatorAgent Service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	MasterReplicatorAgent	
Counter:	Thread Count	
Threshold	This policy has the following threshold: <b>Critical:</b> 150	

LS_MasterReplicatorAgent_V	WorkingSet
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Policy Name	LS_MasterReplicatorAgent_WorkingSet Policy
Description	The LS_MasterReplicatorAgent_WorkingSet policy monitors the Working Set counter of the MasterReplicatorAgent Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MasterReplicatorAgent
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_Replica\_PrivateBytes

Policy Name	LS_Replica_PrivateBytes Policy
Description	The LS_Replica_PrivateBytes policy monitors the Private Bytes counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

### LS\_Replica\_ProcessorTime

Policy Name	LS_Replica_ProcessorTime Policy
Description	The LS_Replica_ProcessorTime policy monitors the '% Processor Time' counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

LS\_Replica\_ThreadCount

Policy Name	LS_Replica_ThreadCount Policy
Description	The LS_Replica_ThreadCount policy monitors the Thread Count counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## LS\_Replica\_WorkingSet

Policy Name	LS_Replica_WorkingSet Policy
Description	The LS_Replica_WorkingSet policy monitors the Working Set counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_WebConf\_Logging

Policy Name	LS_WebConf_Logging Policy	
Description	This policy collects data for the Web Conferencing Service.	
Schedule	This policy runs every 15 minutes.	
Data Class	LS_PROCESS	

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

## LS\_WebConf\_MCUHealthState

Policy Name	LS_WebConf_MCUHealthState Policy	
Description	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.	
Schedule	This policy runs every one hour.	
Performance Object	LS:DATAMCU - 04 - MCU Health And Performance	
Instance	All instances.	
Counter:	DATAMCU - 005 - MCU Health State	
Threshold	When the difference between two samples is greater than the Warning and Critical values.	
Warning	1	
Critical	2	

LS_WebConf_NumberO	fUnhandledApplExceptions

Policy Name	LS_WebConf_NumberOfUnhandledApplExceptions Policy
Description	The number of unhandled exceptions in application is monitored by this policy.
Schedule	This policy runs every one hour.
Performance Object	LS:DATAMCU - 00 - DataMCU Conferences
Instance	All instances.
Counter:	DATAMCU - 005 - Number of Unhandled Application Exception

Policy Name	LS_WebConf_NumberOfUnhandledApplExceptions Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	5
Critical	10

## LS\_WebConf\_PageFaultsPerSec

Policy Name	LS_WebConf_PageFaultsPerSec Policy
Description	The LS_WebConf_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Web Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataMCUSvc
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

## LS\_WebConf\_PrivateBytes

Policy Name	LS_WebConf_PrivateBytes Policy
Description	The LS_WebConf_PrivateBytes policy monitors the Private Bytes counter of the Web Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataMCUSvc
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

### LS\_WebConf\_ProcessorTime

Policy Name	LS_WebConf_ProcessorTime Policy
Description	The LS_WebConf_ProcessorTime policy monitors the % Processor Time counter of the Web Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataMCUSvc
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

#### LS\_WebConf\_SessionQueuesState

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Policy Name	LS_WebConf_SessionQueuesState Policy
Description	This policy monitors the state of session queues.
Schedule	This policy runs every one hour.
Performance Object	LS:DATAMCU - 00 - DataMCU Conferences
Instance	All instances
Counter:	DATAMCU - 008 - Session queues state
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	1
Critical	2

## LS\_WebConf\_ThreadCount

Policy Name	LS_WebConf_ThreadCount Policy
Description	The LS_WebConf_ThreadCount policy monitors the Thread Count counter of the Web Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process

Policy Name	LS_WebConf_ThreadCount Policy
Instance	DataMCUSvc
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## LS\_WebConf\_WorkingSet

Policy Name	LS_WebConf_WorkingSet Policy
Description	The LS_WebConf_WorkingSet policy monitors the Working Set counter of the Web Conferencing Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	DataMCUSvc
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## $LS\_WebConfCompatibility\_PageFaultsPerSec$

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Policy Name	LS_WebConfCompatibility_PageFaultsPerSec Policy
Description	The Page Faults / sec of Web Conference compatibility process is monitored by the LS_WebConfCompatibility_PageFaultsPerSec policy.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MeetingMCUSvc
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

Policy Name	LS_WebConfCompatibility_PrivateBytes Policy
Description	The private bytes of Web conference compatibility process is monitored by the LS_WebConfCompatibility_PrivateBytes policy.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MeetingMCUSvc
Counter:	Private Bytes
Threshold	This policy has the following threshold: Critical: 2e+007

LS\_WebConfCompatibility\_PrivateBytes

### LS\_WebConfCompatibility\_ProcessorTime

Policy Name	LS_WebConfCompatibility_ProcessorTime Policy
Description	The % processor time of web conference compatibility process is monitored by the policy LS_WebConfCompatibility_ProcessorTime policy.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MeetingMCUSvc
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

#### LS\_WebConfCompatibility\_ThreadCount

Policy Name	LS_WebConfCompatibility_ThreadCount Policy
Description	The thread count of web conference compatibility process is monitored by the LS_WebConfCompatibility_ThreadCount policy.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MeetingMCUSvc
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

Policy Name	LS_WebConfCompatibility_WorkingSet Policy
Description	The Working Set bytes of web conference compatibility process is monitored by the policy LS_WebConfCompatibility_WorkingSet.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MeetingMCUSvc
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

#### $LS\_WebConfCompatibility\_WorkingSet$

## **Golden**Metrics

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

Policy Name	LS_Check_AppSharingServiceStatus Policy
Description	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

#### $LS\_Check\_AudioTestServiceStatus$

Policy Name	LS_Check_AudioTestServiceStatus Policy
Description	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 Name	LS_Check_BandwidthAuthServiceStatus Policy
Description	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

 $LS\_Check\_BandwidthAuthServiceStatus$ 

#### $LS\_Check\_BandwidthCoreServiceStatus$

Policy Name	LS_Check_BandwidthCoreServiceStatus Policy
Description	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

#### LS\_Check\_CallParkServiceStatus

Policy Name	LS_Check_CallParkServiceStatus Policy
Description	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

#### $LS\_Check\_ConfAnnouncementServiceStatus$

Policy Name	LS_Check_ConfAnnouncementServiceStatus Policy
Description	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 Name	LS_Check_ConfAttendantServiceStatus Policy
Description	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

## $LS\_Check\_ConfAttendantServiceStatus$

### LS\_Check\_FileTransferAgentServiceStatus

Policy Name	LS_Check_FileTransferAgentServiceStatus Policy
Description	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

#### LS\_Check\_FrontEnd\_ADStatus

Policy Name	LS_Check_FrontEnd_ADStatus Policy
Description	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.

## $LS\_Check\_FrontEnd\_ReplicaStatus$

Policy Name	LS_Check_FrontEnd_ReplicaStatus Policy
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored service	REPLICA

$\mathbf{LS}_{-}$	Check	Fron	tEnd	lServ	ice	Status
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Policy Name	LS_Check_FrontEndServiceStatus Policy
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored service	RTCSRV

## LS\_Check\_IMConfServiceStatus

Policy Name	LS_Check_IMConfServiceStatus Policy
Description	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

## LS\_Check\_MasterReplicatorAgentServiceStatus

Policy Name	LS_Check_MasterReplicatorAgentServiceStatus Policy
Description	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

## $LS\_Check\_ReplicaServiceStatus\_FrontEnd$

Policy Name	LS_Check_ReplicaServiceStatus_FrontEnd Policy
Description	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.
Schedule	This policy runs every 5 minutes.
Monitored service	Replica Replicator Agent

Policy Name	LS_Check_ResponseGroupServiceStatus Policy
Description	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

LS\_Check\_ResponseGroupServiceStatus

## $LS\_Check\_WebConfCompatibilityServiceStatus$

Policy Name	LS_Check_WebConfCompatibilityServiceStatus Policy
Description	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

#### LS\_Check\_WebConfServiceStatus

Policy Name	LS_Check_WebConfServiceStatus Policy
Description	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

#### LS\_FrontEnd\_HoldingTimeForIncMsgs

Policy Name LS_FrontEnd_HoldingTimeForIncMsgs Policy	
Description	This policy monitors the average processing time taken by the server for one request.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 07 - Load Management

Policy Name	LS_FrontEnd_HoldingTimeForIncMsgs Policy
Instance	All instances
Counter: SIP - 000 - Average Holding Time For Incoming Messages	
Threshold	This policy has the following threshold: <b>Critical:</b> 5

# $LS\_FrontEnd\_Local 503 Responses$

Policy Name	LS_FrontEnd_Local503Responses Policy
Description	This policy monitors the number of 503 responses received in a second. Code 503 means that the server is unavailable.
Schedule	This policy runs every one hour.
Performance Object	LS:SIP - 04 - Responses
Instance	All instances
Counter:	SIP - 055 - Local 503 Responses/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 5

## LS\_FrontEnd\_ProcessingLatency

Policy Name	LS_FrontEnd_ProcessingLatency Policy
Description	This policy monitors the processing time taken by the back end for one request.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 01 - DBStore
Instance	All instances
Counter:	USrv - 004 - Sproc Latency (msec)
Threshold	This policy has the following threshold: <b>Critical:</b> 6000

## LS\_FrontEnd\_SearchLatency

Policy Name	LS_FrontEnd_SearchLatency Policy	
Description	The policy LS_FrontEnd_SearchLatency monitors the average time (in milliseconds) it takes to perform the LDAP search.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LS:USrv - 19 - Directory Search	
Instance	All instances	
Counter:	USrv - 005 - Search Latency (ms)	
Threshold	This policy has the following threshold: <b>Critical:</b> 20	

#### LS\_FrontEnd\_QueueLatency

Policy Name	LS_FrontEnd_QueueLatency Policy	
Description	This policy monitors the time period that a request takes in the back end queue.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LS:USrv - 01 - DBStore	
Instance	All instances	
Counter:	Usrv - 002 - Queue Latency (msec)	
Threshold	This policy has the following threshold: <b>Critical:</b> 6000	

# $LS\_FrontEnd\_SendsOutstanding$

Policy Name	LS_FrontEnd_SendsOutstanding Policy	
Description	This policy monitors the number of outbound requests and responses that are queued.	
Schedule	This policy runs every one hour.	
Performance Object	LS:SIP – 01 – Peers	
Instance	All instances	
Counter:	SIP – 017 – Sends Outstanding	
Threshold	This policy has the following threshold: <b>Critical:</b> 200	

# **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 and dedicated server.

### **General Policies**

The General policy group contains all the policies that monitor the processes and services of the Mediation Server.

Policy Name	LS_ Mediation _PageFaultsPerSec Policy	
Description	The LS_ Mediation _PageFaultsPerSec policy monitors the Page Faults/sec counter of the Mediation service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	MediationServerSvc	
Counter:	Page Faults/sec	
Threshold	This policy has the following threshold: <b>Critical:</b> 100	

#### LS\_ Mediation \_PageFaultsPerSec

#### LS\_Check\_MediationServiceStatus

Policy Name	LS_Check_MediationServiceStatus Policy	
Description	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 Name	LS_Check_Mediation_ADStatus Policy	
Description	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 five minutes.	

LS\_Check\_Mediation\_ADStatus

## LS\_Check\_Mediation\_ReplicaStatus

Policy Name	LS_Check_Mediation_ReplicaStatus Policy	
Description	The policy LS_Check_Arch_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.	
Schedule	This policy runs every five minutes.	
Monitored service	REPLICA	

## $LS\_Check\_ReplicaServiceStatus\_Mediation$

Policy Name	LS_Check_ReplicaServiceStatus_Mediation Policy	
Description	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 five minutes.	
Monitored service	Replica Replicator Agent	

Policy Name	LS_Mediation_LoadCallFailureIndex Policy	
Description	This policy monitors the index of call failures due to heavy load. The index is scaled between 0 and 100.	
Schedule	This policy runs every one hour.	
Performance Object	LS:MediationServer - 03 - Health Indices	
Instance	All instances	
Counter:	- 000 - Load Call Failure Index	
Threshold	When the difference between two samples is greater than the Warning and Critical values.	
Warning	5	
Critical	10	

LS\_Mediation\_LoadCallFailureIndex

#### LS\_Mediation\_Logging

Policy Name	LS_Mediation_Logging Policy	
Description	This policy collects data for the ls 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.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LS_PROCESS	

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

$\mathbf{LS}$	_Mediation	_NoOfCallsFailedFromProxy
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Policy Name	LS_Mediation_NoOfCallsFailedFromProxy Policy
Description	This policy monitors the number of call failures due to unexpected interaction with the proxy.
Schedule	This policy runs every one hour.
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 two samples is greater than the Warning and Critical values.
Warning	5
Critical	10

## $LS\_Mediation\_NoOfMediaCnxCheckFailures$

Policy Name	LS_Mediation_NoOfMediaCnxCheckFailures Policy
Description	This policy monitors the number of failures in the media connectivity check.
Schedule	This policy runs every one hour.
Performance Object	LS:MediationServer - 02 - Media Relay
Instance	All instances
Counter:	- 001 - Media Connectivity Check Failure
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	5
Critical	10

## LS\_Mediation\_PrivateBytes

Policy Name	LS_Mediation_PrivateBytes Policy
Description	The LS_Mediation_PrivateBytes policy monitors the Private Bytes counter of the Mediation service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MediationServerSvc
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_Mediation\_ProcessorTime

Policy Name	LS_Mediation_ProcessorTime Policy
Description	The LS_Mediation_ProcessorTime policy monitors the % Processor Time counter of the Mediation service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MediationServerSvc
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

## $LS\_Mediation\_RejectedSIPInvitesFromProxy$

Policy Name	LS_Mediation_RejectedSIPInvitesFromProxy Policy
Description	The policy monitors the number of SIP INVITEs from proxy which were rejected immediately because of the server load.
Schedule	This policy runs every one hour.
Performance Object	LS:MediationServer - 00 - Outbound Calls
Instance	All instances
Counter:	- 003 - Total rejected due to load

Policy Name	LS_Mediation_RejectedSIPInvitesFromProxy Policy
Threshold	When the difference between two samples is greater than the Warning and Critical values.
Warning	5
Critical	10

## LS\_Mediation\_ThreadCount

Policy Name	LS_Mediation_ThreadCount Policy
Description	The LS_Mediation_ThreadCount policy monitors the Thread Count counter of the Mediation service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MediationServerSvc
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## ${\bf LS}\_{\bf Mediation}\_{\bf WorkingSet}$

Policy Name	LS_Mediation_WorkingSet Policy
Description	The LS_Mediation_WorkingSet policy monitors the Working Set counter of the Mediation service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	MediationServerSvc
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_Replica\_PageFaultsPerSec

Policy Name	LS_Replica_PageFaultsPerSec Policy
Description	The LS_ReplicaService_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

## LS\_Replica\_PrivateBytes

Policy Name	LS_Replica_PrivateBytes Policy
Description	The LS_Replica_PrivateBytes policy the Private Bytes counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007.

## LS\_Replica\_ProcessorTime

Policy Name	LS_Replica_ProcessorTime Policy
Description	The LS_Replica_ProcessorTime policy monitors the '% Processor Time' counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

#### LS\_Replica\_ThreadCount

Policy Name	LS_Replica_ThreadCount Policy
Description	The LS_ReplicaService_ThreadCount policy monitors the Thread Count counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

## LS\_Replica\_WorkingSet

Policy Name	LS_Replica_WorkingSet Policy
Description	The LS_Replica_WorkingSet policy monitors the Working Set counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## **Golden**Metrics

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.

Policy Name	LS_Check_Mediation_ReplicaStatus Policy
Description	The policy LS_Check_Arch_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.
Schedule	This policy runs every five minutes.
Monitored service	REPLICA

 $LS\_Check\_Mediation\_ReplicaStatus$ 

#### $LS\_Check\_ReplicaServiceStatus\_Mediation$

Policy Name	LS_Check_ReplicaServiceStatus_Mediation Policy
Description	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 five minutes.
Monitored service	Replica Replicator Agent

# **Monitoring Server**

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.

Policy Name	$LS\_CallDetailRecording\_DroppedMessagesFromMQ\ Policy$
Description	This policy monitors the number of messages that are dropped from the MSMQ queue.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 01 - READ

$LS\_CallDetailRecording\_$	_DroppedMessagesFromMQ

Policy Name	LS_CallDetailRecording_DroppedMessagesFromMQ Policy
Instance	All instances
Counter:	CDR Service - 006 - Dropped messages from MQ
Threshold	This policy has the following threshold: <b>Critical:</b> 20

## $LS\_CallDetailRecording\_MessagesFailedValidation$

Policy Name	$LS\_CallDetailRecording\_MessagesFailedValidation\ Policy$
Description	This policy monitors the number of messages that failed the validation process.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

## $LS\_CallDetailRecording\_MessagesFailedWrittenDB$

Policy Name	LS_CallDetailRecording_MessagesFailedWrittenDB Policy
Description	This policy monitors the number of messages that failed to get written to the SQL database.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

Policy Name	LS_CallDetailRecording_NoOfFailuresDueToInternalLks Policy
Description	This policy monitors the number of error report failures that occurred because of internal locks.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

 $LS\_CallDetailRecording\_NoOfFailuresDueToInternalLks$ 

#### $LS\_CallDetailRecording\_NumberOfThrottledErrorReports$

Policy Name	LS_CallDetailRecording_NumberOfThrottledErrorReports Policy
Description	This policy monitors the number of error reports throttled because of the limit on maximum reports in a minute.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

#### LS\_CallDetailRecording\_NumberOfUnknownFailures

Policy Name	LS_CallDetailRecording_NumberOfUnknownFailures Policy
Description	This policy monitors the number of unknown error report failures.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

Policy Name	LS_CallDetailRecording_PageFaultsPerSec Policy
Description	The LS_CallDetailRecording_PageFaultsPerSec policy monitors the Page Faults/sec counter of the CallDetailRecording Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RtcCdr
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

 $LS\_CallDetailRecording\_PageFaultsPerSec$ 

## $LS\_CallDetailRecording\_PrivateBytes$

Policy Name	LS_CallDetailRecording_PrivateBytes Policy
Description	The LS_CallDetailRecording_PrivateBytes policy monitors the private bytes counter.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RtcCdr
Counter:	PrivateBytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

## LS\_CallDetailRecording\_ProcessorTime

Policy Name	LS_CallDetailRecording_ProcessorTime Policy.
Description	The LS_CallDetailRecording_ProcessorTime policy monitors the '% Processor Time' counter of the CallDetailRecording Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RtcCdr
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

Policy Name	LS_CallDetailRecording_QueueLatency Policy
Description	This policy monitors the average time (in milliseconds) the database holds a request in queue.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:CDR Service - 00 - DBCdr
Instance	All instances.
Counter:	CDR Service - 002 - Queue Latency (msec)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

LS\_CallDetailRecording\_QueueLatency

## LS\_CallDetailRecording\_ThreadCount

Policy Name	LS_CallDetailRecording_ThreadCount Policy
Description	The LS_CallDetailRecording_ThreadCount policy monitors the thread count counter of the CallDetailRecording Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RtcCdr
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

#### LS\_CallDetailRecording\_TotalDeadLks

Policy Name	LS_CallDetailRecording_TotalDeadLks Policy
Description	This policy monitors the total number of deadlocks that have occurred since the start of the server.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 00 - DBCdr
Instance	All instances.
Counter:	CDR Service - 013 - Total Deadlocks
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	LS_CallDetailRecording_TotalFatalSQLErrors Policy
Description	This policy monitors the number of fatal SQL errors that have taken place since the server started.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

LS\_CallDetailRecording\_TotalFatalSQLErrors

## LS\_CallDetailRecording\_TotalODBCFailures

Policy Name	LS_CallDetailRecording_TotalODBCFailures Policy
Description	This policy monitors the number of ODBC timeout failures that have taken place since the server started.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

# $LS\_CallDetailRecording\_TotalSevereSQLErrors$

Policy Name	LS_CallDetailRecording_TotalSevereSQLErrors Policy
Description	This policy monitors the number of severe SQL errors that occurred since the server started.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

Policy Name	LS_CallDetailRecording_TotalThrottledRequests Policy
Description	This policy monitors the number of requests that were rejected with a retry-after due to high database queue latency.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 00 - DBCdr
Instance	All instances
Counter:	CDR Service - 021 - Total throttled requests
Threshold	This policy has the following threshold: <b>Critical:</b> 20

 $LS\_CallDetailRecording\_TotalThrottledRequests$ 

# LS\_CallDetailRecording\_TransactionsAborted

Policy Name	LS_CallDetailRecording_TransactionsAborted Policy
Description	This policy monitors the number of transactions that are aborted.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 01 - READ
Instance	All instances
Counter:	CDR Service - 010 - Transactions aborted
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# $LS\_CallDetailRecording\_WorkingSet$

Policy Name	LS_CallDetailRecording_WorkingSet Policy
Description	The LS_CallDetailRecording_WorkingSet policy monitors the Working Set counter of the CallDetailRecording Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	RtcCdr
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

Policy Name	LS_Check_CallDetailRecordingServiceStatus Policy
Description	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

LS\_Check\_CallDetailRecordingServiceStatus\_

# LS\_Check\_Monitor\_ADStatus

Policy Name	LS_Check_Monitor_ADStatus Policy
Description	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.

# LS\_Check\_Monitor\_ReplicaStatus

Policy Name	LS_Check_Monitor_ReplicaStatus Policy
Description	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 Name	LS_Check_QualityMonitoringServiceStatus Policy
Description	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

LS\_Check\_QualityMonitoringServiceStatus

### LS\_Check\_ReplicaServiceStatus\_Monitor

Policy Name	LS_Check_ReplicaServiceStatus_Monitor Policy
Description	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

### $LS\_QualityMonitoring\_NoIncorrectMSMQMsgsReceive$

Policy Name	LS_QualityMonitoring_NoIncorrectMSMQMsgsReceive Policy
Description	This policy monitors the number of discarded MSMQ messages that are not of the expected type or version.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

Policy Name	LS_QualityMonitoring_PageFaultsPerSec Policy
Description	The LS_QualityMonitoring_PageFaultsPerSec policy monitors the Page Faults/sec counter of the QualityMonitoring Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	QmsSvc
Counter:	Page Faults/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 100

LS\_QualityMonitoring\_PageFaultsPerSec

# LS\_QualityMonitoring\_PrivateBytes

Policy Name	LS_QualityMonitoring_PrivateBytes Policy
Description	The LS_QualityMonitoring_PrivateBytes policy monitors the Private Bytes counter of the QualityMonitoring Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	QmsSvc
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

# ${\bf LS}\_{\bf Quality}{\bf Monitoring}\_{\bf ProcessorTime}$

Policy Name	LS_QualityMonitoring_ProcessorTime Policy
Description	The LS_QualityMonitoring_ProcessorTimepolicy monitors the '% Processor Time' counter of the QualityMonitoring Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	QmsSvc
Counter:	% Processor Time
Threshold	This policy has the following threshold: <b>Critical:</b> 90

Policy Name	LS_QualityMonitoring_ThreadCount Policy
Description	The LS_QualityMonitoring_ThreadCount policy monitors the Thread Count counter of the QualityMonitoring Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	QmsSvc
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

LS\_QualityMonitoring\_ThreadCount

# LS\_QualityMonitoring\_WorkingSet

Policy Name	LS_QualityMonitoring_WorkingSet Policy
Description	The LS_QualityMonitoring_WorkingSet policy monitors the working set counter of the QualityMonitoring Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	QmsSvc
Counter:	Working Set
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

### LS\_QualityMonitoring\_NoRptssDropDueToDBFailure

Policy Name	LS_QualityMonitoring_NoRptssDropDueToDBFailure Policy	
Description	This policy monitors the number of reports dropped because of database insertion failure. The transaction was committed prematurely because of an unrecoverable database error.	
Schedule	This policy runs every one hour.	
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: <b>Critical:</b> 20	

Policy Name	LS_QualityMonitoring_NoRptssDropDueToDBFailure Policy	
Description	This policy monitors the number of reports dropped because of database insertion failure. The transaction was committed prematurely because of an unrecoverable database error.	
Schedule	This policy runs every one hour.	
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: <b>Critical:</b> 20	

# LS\_QualityMonitoring\_NoRptssDropDueToDBFailure

### LS\_Replica\_PageFaultsPerSec

Policy Name	LS_Replica_PageFaultsPerSec Policy	
Description	The LS_ReplicaService_PageFaultsPerSec policy monitors the Page Faults/sec counter of the Replica Service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ReplicaReplicatorAgent	
Counter:	Page Faults/sec	
Threshold	This policy has the following threshold: <b>Critical:</b> 100	

#### LS\_Replica\_ProcessorTime

Policy Name	LS_Replica_ProcessorTime Policy	
Description	The LS_Replica_ProcessorTime policy monitors the % Processor Time counter of the Replica Service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ReplicaReplicatorAgent	
Counter:	% Processor Time	
Threshold	This policy has the following threshold: <b>Critical:</b> 90	

LS\_Replica\_PrivateBytes

Policy Name	LS_Replica_PrivateBytes Policy
Description	The LS_Replica_PrivateBytes policy the Private Bytes counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process.
Instance	ReplicaReplicatorAgent
Counter:	Private Bytes
Threshold	This policy has the following threshold: <b>Critical:</b> 2e+007

LS\_Replica\_ProcessorTime

Policy Name	LS_Replica_ProcessorTime Policy	
Description	The LS_Replica_ProcessorTime policy monitors the '% Processor Time' counter of the Replica Service.	
Schedule	This policy runs every one hour.	
Performance Object	Process	
Instance	ReplicaReplicatorAgent	
Counter:	% Processor Time	
Threshold	This policy has the following threshold: <b>Critical:</b> 90	

### LS\_Replica\_ThreadCount

Policy Name	LS_Replica_ThreadCount Policy
Description	The LS_ReplicaService_ThreadCount policy monitors the Thread Count counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Thread Count
Threshold	This policy has the following threshold: <b>Critical:</b> 150

$LS_{-}$	<u>Replica</u>	_WorkingS	et
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Policy Name	LS Replica WorkingSet Policy
Description	The LS_Replica_WorkingSet policy monitors the Working Set counter of the Replica Service.
Schedule	This policy runs every one hour.
Performance Object	Process
Instance	ReplicaReplicatorAgent
Counter:	Working Set
Threshold	This policy has the following threshold: Critical: 2e+007

# **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 Monitoring Server.

Policy Name	LS_CallDetailRecording_MessagesFailedValidation Policy	
Description	This policy monitors the number of messages that failed the validation process.	
Schedule	This policy runs every one hour.	
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: <b>Critical:</b> 20	

#### $LS\_CallDetailRecording\_MessagesFailedValidation$

#### $LS\_CallDetailRecording\_MessagesFailedWrittenDB$

Policy Name	LS_CallDetailRecording_MessagesFailedWrittenDB Policy
Description	This policy monitors the number of messages that failed to get written to the SQL database.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 02 - WRITE

Policy Name	LS_CallDetailRecording_MessagesFailedWrittenDB Policy
Instance	All instances
Counter:	CDR Service - 002 - Messages failed to be written to DB
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### LS\_CallDetailRecording\_QueueLatency

Policy Name	LS_CallDetailRecording_QueueLatency Policy
Description	This policy monitors the average time (in milliseconds) the database holds a request in queue.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:CDR Service - 00 - DBCdr
Instance	All instances.
Counter:	CDR Service - 002 - Queue Latency (msec)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# $LS\_CallDetailRecording\_TotalDeadLks$

Policy Name	LS_CallDetailRecording_TotalDeadLks Policy
Description	This policy monitors the total number of deadlocks that have occurred since the start of the server.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 00 - DBCdr
Instance	All instances.
Counter:	CDR Service - 013 - Total Deadlocks
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	LS_CallDetailRecording_TotalFatalSQLErrors Policy
Description	This policy monitors the number of fatal SQL errors that have taken place since the server started.
Schedule	This policy runs every one hour.
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: <b>Critical:</b> 20

LS\_CallDetailRecording\_TotalFatalSQLErrors

# LS\_CallDetailRecording\_TotalThrottledRequests

Policy Name	LS_CallDetailRecording_TotalThrottledRequests Policy
Description	This policy monitors the number of requests that were rejected with a retry-after due to high database queue latency.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 00 - DBCdr
Instance	All instances
Counter:	CDR Service - 021 - Total throttled requests
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### $LS\_CallDetailRecording\_TransactionsAborted$

Policy Name	LS_CallDetailRecording_TransactionsAborted Policy
Description	This policy monitors the number of transactions that are aborted.
Schedule	This policy runs every one hour.
Performance Object	LS:CDR Service - 01 - READ
Instance	All instances
Counter:	CDR Service - 010 - Transactions aborted
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	LS_Check_CallDetailRecordingServiceStatus Policy
Description	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

 $LS\_Check\_CallDetailRecordingServiceStatus$ 

### LS\_Check\_QualityMonitoringServiceStatus

Policy Name	LS_Check_QualityMonitoringServiceStatus Policy
Description	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

### LS\_Check\_ReplicaServiceStatus\_Monitor

Policy Name	LS_Check_ReplicaServiceStatus_Monitor Policy
Description	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

#### $LS\_QualityMonitoring\_NoIncorrectMSMQMsgsReceive$

Policy Name	LS_QualityMonitoring_NoIncorrectMSMQMsgsReceive Policy
Description	This policy monitors the number of discarded MSMQ messages that are not of the expected type or version.
Schedule	This policy runs every one hour.
Performance Object	LS:QMS - 00 - QoEMonitoringServer

Policy Name	LS_QualityMonitoring_NoIncorrectMSMQMsgsReceive Policy
Instance	All instances.
Counter:	QMS - 004 - Number of MSMQ messages received with an incorrect type or version
Threshold	This policy has the following threshold: <b>Critical:</b> 20

#### LS\_QualityMonitoring\_NoRptssDropDueToDBFailure

Policy Name	LS_QualityMonitoring_NoRptssDropDueToDBFailure Policy	
Description	This policy monitors the number of reports dropped because of database insertion failure. The transaction was committed prematurely because of an unrecoverable database error.	
Schedule	This policy runs every one hour.	
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: <b>Critical:</b> 20	

# 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_EndpointsDisconnect	ted
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Policy Name	LS_Registrar_EndpointsDisconnected Policy	
Description	This policy monitors the number of endpoints that are disconnected because of missed keep-alives.	
Schedule	This policy runs every one hour.	
Performance Object	LS:USrv - 12 - Register	

Policy Name	LS_Registrar_EndpointsDisconnected Policy	
Instance	All instances	
Counter:	USrv - 011 - Endpoints Disconnected	
ThresholdThis policy has the following threshold: Critical: 20		

### $LS\_Registrar\_IndirectEndpointsDisconnected$

Policy Name	LS_Registrar_IndirectEndpointsDisconnected Policy	
Description	This policy monitors the number of indirect endpoints that are disconnected because of error responses.	
Schedule	This policy runs every one hour.	
Performance Object	LS:USrv - 12 - Register	
Instance	All instances.	
Counter:	USrv - 012 - Indirectly Connected Endpoints Disconnected	
Threshold	This policy has the following threshold: <b>Critical:</b> 20	

# $LS\_Registrar\_LegacyRegistersRejected$

Policy Name	LS_Registrar_LegacyRegistersRejected Policy	
Description	This policy monitors the number of legacy registers that are rejected because the publisher is in rich mode.	
Schedule	This policy runs every one hour.	
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	

# LS\_Registrar\_QueueDepth

Policy Name	LS_Registrar_QueueDepth Policy	
Description	This policy monitors the average number of database requests to execute.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LS:USrv - 00 - REGDBStore	
Instance	All instances.	
Counter:	USrv - 000 - Queue Depth	
Threshold	This policy has the following threshold: <b>Critical:</b> 20	

# LS\_Registrar\_QueueLatency

Policy Name	LS_Registrar_QueueLatency Policy	
Description	This policy monitors the average time (in milliseconds) a request is held in database queue.	
Schedule	This policy runs every 15 minutes.	
Performance Object	LS:USrv - 00 - REGDBStore	
Instance	All instances.	
Counter:	USrv - 002 - Queue Latency (msec)	
Threshold	This policy has the following threshold: <b>Critical:</b> 20	

# $LS\_Registrar\_RegistrationNotificationSent$

Policy Name	LS_Registrar_RegistrationNotificationSent Policy	
Description	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.	
Schedule	This policy runs every one hour.	
Performance Object	LS:USrv - 12 - Register	
Instance	All instances.	
Counter:	USrv - 006 - Registration Notifications Sent	
Threshold	This policy has the following threshold: <b>Critical:</b> 20	

$\mathbf{LS}$	_Registrar_	<b>ThrottledRequests</b>
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Policy Name	LS_Registrar_ThrottledRequests Policy	
Description	ion This policy monitors the number of requests rejected in a second with a message to retry later because of the high database latency	
Schedule	This policy runs every 15 minutes.	
Performance Object	LS:USrv - 00 - REGDBStore	
Instance	All instances.	
Counter:	USrv - 020 - Throttled requests/sec	
Threshold	This policy has the following threshold: <b>Critical:</b> 20.	

# LS\_Registrar\_TotalDeadlkFailure

Policy Name	LS_Registrar_TotalDeadlkFailures Policy	
Description	This policy monitors the number of deadlock failures occurred since the server was started.	
Schedule	This policy runs every one hour.	
Performance Object	LS:USrv - 00 - REGDBStore	
Instance	All instances.	
Counter:	USrv - 015 - Total Deadlock Failures	
Threshold	This policy has the following threshold: <b>Critical:</b> 20	

### LS\_Registrar\_TotalDeadLks

Policy Name	LS_Registrar_TotalDeadLks Policy
Description	This policy monitors the number of deadlocks occurred since the server started.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 013 - Total Deadlocks
Threshold	This policy has the following threshold: <b>Critical:</b> 20

- 8 -	
Policy Name	LS_Registrar_TotalDroppedRequests Policy
Description	This policy monitors the number of requests dropped by the database layer as they will time out.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 014 - Total Dropped Requests
Threshold	This policy has the following threshold: <b>Critical:</b> 20

LS\_Registrar\_TotalDroppedRequests

LS\_Registrar\_TotalFatalSQLErrors

Policy Name	LS_Registrar_TotalFatalSQLErrors Policy
Description	This policy monitors the number of fatal SQL errors occurred since the server started.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 019 - Total fatal SQL errors
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### LS\_Registrar\_TotalODBCTimeoutFailures

Policy Name	LS_Registrar_TotalODBCTimeoutFailures Policy
Description	This policy monitors the number of ODBC timeout failures occurred since the server was started.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 017 - Total ODBC Timeout Failures
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	LS_Registrar_TotalSevereSQLErrors Policy
Description	This policy monitors the number of severe SQL errors occurred since the server started.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 018 - Total severe SQL errors
Threshold	This policy has the following threshold: <b>Critical:</b> 20

LS\_Registrar\_TotalSevereSQLErrors

### LS\_Registrar\_TotalThrottledRequests

Policy Name	LS_Registrar_TotalThrottledRequests Policy
Description	This policy monitors the number of requests rejected with a message to retry after some time because of high database queue latency.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 021 - Total throttled requests
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# **Golden**Metrics

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.

Policy Name	LS_Registrar_EndpointsDisconnected Policy
Description	This policy monitors the number of endpoints that are disconnected because of missed keep-alives.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 12 - Register

LS\_Registrar\_EndpointsDisconnected

Policy Name	LS_Registrar_EndpointsDisconnected Policy
Instance	All instances
Counter:	USrv - 011 - Endpoints Disconnected
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# LS\_Registrar\_IndirectEndpointsDisconnected

Policy Name	LS_Registrar_IndirectEndpointsDisconnected Policy
Description	This policy monitors the number of indirect endpoints that are disconnected because of error responses.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 12 - Register
Instance	All instances.
Counter:	USrv - 012 - Indirectly Connected Endpoints Disconnected
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# LS\_Registrar\_QueueDepth

Policy Name	LS_Registrar_QueueDepth Policy
Description	This policy monitors the average number of database requests to execute.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 000 - Queue Depth
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	LS_Registrar_QueueLatency Policy
Description	This policy monitors the average time (in milliseconds) a request is held in database queue.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 002 - Queue Latency (msec)
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# LS\_Registrar\_ThrottledRequests

Policy Name	LS_Registrar_ThrottledRequests Policy
Description	This policy monitors the number of requests rejected in a second with a message to retry later because of the high database latency.
Schedule	This policy runs every 15 minutes.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 020 - Throttled requests/sec
Threshold	This policy has the following threshold: <b>Critical:</b> 20.

# LS\_Registrar\_TotalDeadlkFailures

Policy Name	LS_Registrar_TotalDeadlkFailures Policy
Description	This policy monitors the number of deadlock failures occurred since the server was started.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 015 - Total Deadlock Failures
Threshold	This policy has the following threshold: <b>Critical:</b> 20

# LS\_Registrar\_TotalDeadLks

Policy Name	LS_Registrar_TotalDeadLks Policy
Description	This policy monitors the number of deadlocks occurred since the server started.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 013 - Total Deadlocks
Threshold	This policy has the following threshold: Critical: 20

# $LS\_Registrar\_TotalDroppedRequests$

Policy Name	LS_Registrar_TotalDroppedRequests Policy
Description	This policy monitors the number of requests dropped by the database layer as they will time out.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 014 - Total Dropped Requests
Threshold	This policy has the following threshold: <b>Critical:</b> 20

### LS\_Registrar\_TotalFatalSQLErrors

Policy Name	LS_Registrar_TotalFatalSQLErrors Policy
Description	This policy monitors the number of fatal SQL errors occurred since the server started.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 019 - Total fatal SQL errors
Threshold	This policy has the following threshold: <b>Critical:</b> 20

Policy Name	LS_Registrar_TotalThrottledRequests Policy
Description	This policy monitors the number of requests rejected with a message to retry after some time because of high database queue latency.
Schedule	This policy runs every one hour.
Performance Object	LS:USrv - 00 - REGDBStore
Instance	All instances.
Counter:	USrv - 021 - Total throttled requests
Threshold	This policy has the following threshold: <b>Critical:</b> 20

LS\_Registrar\_TotalThrottledRequests

# 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.

# 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.s 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.

#### 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 theArchiving 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.

# 8 Microsoft Enterprise Servers SPI Tools

The Microsoft Enterprise Servers SPI has the following tools:

- MSES\_BTS\_DB\_Configuration
- Create Datasource for ISA Server
- Create Datasource for BizTalk Server
- Self-Healing Info
- Self-Healing Verification
- Create Datasource for SharePoint Server
- Create Datasource for Lync Server 2010
- Configure Edge server Discovery for Lync Server 2010

# 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 Microsoft Enterprise Servers SPI connects to the BizTalk Server's SQL database to collect the data.

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 work if 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 choose to customize one or more policies after deploying them, ensure that you redeploy the policies after customizing them. Even when in SQL authentication mode, the HPOM administrator can use the MSES\_BTS\_DB\_Configuration tool to store the corresponding SQL server name, and SQL user name and password. If this configuration is not done for BizTalk Server 2006 nodes, the default SQL user name and password is considered.

To enable the X-Windows Server display, run the following command from the command line interface of the Management Server:export DISPLAY=<system IP>:0.0

Set the xterm path on the HPOM server before you run the MSES\_BTS\_DB\_Configuration tool.

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.

# Create Datasource for ISA Server

The Create Datasource for ISA Server tool is launched to configure datasources for data logging in the ISA server. The name of the datasource configured using this tool is *ISAServer2006*.

# 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.

# 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 versions 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 Lync Server 2010

The Create Datasource for Lync Server 2010 tool creates databases into the HP Operations agent's data store (embedded performance componentalso 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.

# 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.

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