CHAPTER 35

Configuring Service Parameters in Cisco Unity Connection 8.x

Caution Information in this chapter is applicable in a Cisco Unity Connection configuration only. If you have installed Cisco Unified Communications Manager Business Edition (CMBE), for information on configuring service parameters see the *Cisco Unified Communications Manager Administration Guide* at http://www.cisco.com/en/US/products/ps7273/prod_maintenance_guides_list.html.

Service parameters for Cisco Unity Connection allow you to configure different services in Cisco Unified Serviceability. You can view a list of parameters and their descriptions by selecting the question mark button in the Service Parameter Configuration window. You can view the list with a particular parameter at the top by selecting that parameter.

If you turn off a service in Cisco Unified Serviceability, Connection retains any updated service parameter values. If you start the service again, Connection sets the service parameters to the changed values.

For more information about Cisco Unified Serviceability services, see the *Cisco Unified Serviceability Administration Guide* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

Caution Some changes to service parameters can cause system failure. We recommend that you do not make any changes to service parameters unless you fully understand the feature that you are changing or unless the Cisco Technical Assistance Center (Cisco TAC) specifies the changes.

See the following sections:

- Configuring Service Parameters for a Cisco Unified Serviceability Service in Cisco Unity Connection 8.x, page 35-1
- Description of Service Parameters in Cisco Unity Connection 8.x, page 35-2

Configuring Service Parameters for a Cisco Unified Serviceability Service in Cisco Unity Connection 8.x

Use the following procedure to configure the service parameters for a particular Cisco Unified Serviceability service.

To Configure Service Parameters for a Cisco Unified Serviceability Service

Step 1 In Cisco Unity Connection Administration, expand **System Settings**, then select **Service Parameters**.

Step 2 On the Service Parameters page, in the Server list, select the name of the Cisco Unity Connection server.

Step 3 In the Service list, select the service that contains the parameter that you want to update.

Note The Service Parameters page displays all services (active and not active).

Step 4 Update the applicable parameter value. To set all service parameters for the service to the default values, select **Set to Default**.

To view a list of parameters and their descriptions, select the **?** button on the right side of the page.

Step 5 Select **Save**.

Description of Service Parameters in Cisco Unity Connection 8.x

Table 35-1 describes the service parameters for Cisco Unity Connection.

Table 35-1 Service Parameter Descriptions

Service Parameter	Description
Cisco AMC Service	
Primary Collector	Specifies the Primary AMC (AlertMgr and Collector) server that collects clusterwide real-time information. Value must match one of the configured servers and, preferably, a server with no or minimal call processing. This is a required field.
Failover Collector	Specifies the Failover AMC (AlertMgr and Collector) server. The server specified in this parameter is used to collect real-time data when the Primary AMC is down or unreachable. No data is collected if Failover Collector is not specified when Primary Collector is not active.
Data Collection Enabled	Determines whether collecting and alerting of real-time cluster information is enabled (True) or disabled (False). This is a required field. Default setting: True
Data Collection Polling Rate	Specifies the AMC collecting rate, in seconds. This is a required field. Default setting: 30 Minimum: 15 Maximum: 300 Unit: seconds

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
Server Synchronization Period	Specifies the amount of time, in seconds, that backup AMC (AlertMgr and Collector) waits at startup in order to determine if primary AMC is up and actively collecting. This parameter prevents backup AMC from assuming a collecting task prematurely. This is a required field. **Note** Restart the AMC service on the backup server for the parameter change to take effect. Default setting: 60 Minimum: 15 Maximum: 300 Unit: seconds
RMI Registry Port Number	Specifies the port number to turn on RMI registry. This port is used for primary or backup AMC to locate other AMC, and for the RTMT servlet to find primary/backup AMC. This is a required field. **Note** Restart the AMC service for the parameter change to take effect. Default setting: 1099 Minimum: 1024 Maximum: 65535
RMI Object Port Number	Specifies the port number used for RMI remote object. This port is used for AMC to exchange data with other AMC as well as with RTMT servlet. This is a required field. **Note** Restart the AMC service for the parameter change to take effect. Default setting: 1090 Minimum: 1024 Maximum: 65535
AlertMgr Enabled	*(For AMC troubleshooting purpose only.)* Enables and disables the alerting (email/epage) feature. This is a required field. **Note** Restart the AMC service for the parameter change to take effect. Default setting: True

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
Logger Enabled	*(For AMC troubleshooting purpose only.)* Enables and disables the logging feature (CSV files for generating reports). This is a required field. **Note** Restart the AMC service for the parameter change to take effect. Default setting: True
Cisco Database Layer Monitor Service	
Maintenance Time	Specifies the hour to begin CDR database maintenance. Use this parameter in combination with the Maintenance Window parameter. For example, specifying 22 in this parameter means that the CDR maintenance would begin at 10 p.m. If the Maintenance Window parameter is set to 2, it means that CDR maintenance will run every hour from 10 p.m. to midnight. If both parameters are set to 24, CDR maintenance will run every hour all day long. During CDR maintenance, the system deletes the oldest CDRs and associated CMRs, so the maximum number of records, as specified in the Max CDR Records parameter, is maintained. Also during maintenance, the system issues an alarm if the CDR file count exceeds 200, and checks for replication links between servers that have been broken and tries to reinitialize them. This is a required field. Default setting: 24 Minimum: 1 Maximum: 24 Unit: hours
Maintenance Window	Specifies the window of time during which CDR maintenance is performed on an hourly basis. For example, if this parameter is set to 12, CDR maintenance will run every hour for 12 hours, starting at the time that is specified in the Maintenance Time parameter. For example, if the Maintenance Time parameter is set to 7, and this parameter is set to 12, CDR maintenance will begin at 7 a.m. and run every hour until 7 p.m. If both parameters are set to 24, CDR maintenance will run every hour all day long. During CDR maintenance, the system deletes the oldest CDRs and associated CMRs, so the maximum number of records, as specified in the Max CDR Records parameter, is maintained. Also, during maintenance, the system issues an alarm if the CDR file count exceeds 200, and checks for replication links between servers that have been broken and tries to reinitialize them. This is a required field. Default setting: 2 Minimum: 1 Maximum: 24 Unit: hours

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
Table Out of Sync Detection	When set to On, collects Database Replication Status summary every day during the Maintenance window and compares the output of three consecutive days to determine if there are tables that have been out of sync for all three days. If that is the case, it will trigger an alert. This parameter, by default, is set to Off and is run at time specified in Maintenance Time parameter. This is a required field. Default: Off
MaintenanceTaskTrace	Sets the Maintenance Task trace. You must turn on this parameter to get a performance counter trace from the Maintenance Task. This is a required field. Default setting: Off
Cisco DirSync	
Maximum Number of Agreements	Specifies the maximum number of LDAP directories (also known as agreements) that can be configured in the LDAP Directory window in Cisco Unified CM Administration (System > LDAP > LDAP Directory). Creating more than one LDAP directory helps in synchronizing users from more than one search base. This is a required field. **Note** You must restart the Cisco DirSync service for changes to this parameter to take effect. Default setting: 5 Minimum: 1 Maximum: 5
Maximum Number of Hosts	Specifies the maximum number of LDAP host names that can be configured for failover purposes. This is a required field. **Note** You must restart the Cisco DirSync service for changes to this parameter to take effect. Default setting: 3 Minimum: 1 Maximum: 3
Retry Delay on Host Failure (secs)	Specifies the number of seconds to delay before retrying the connection to the first LDAP server (host name) that is configured in Cisco Unified CM Administration. After a connection failure, the system tries three times to reconnect to the same host. When the third attempt is also unsuccessful, the system attempts to connect to the next host name in the list in hierarchical order. This is a required field. Default setting: 5 Minimum: 5 Maximum: 60

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
Retry Delay on HostList Failure (mins)	Specifies the number of minutes to delay before retrying every LDAP server (host names) that is configured in Cisco Unified CM Administration. Connection to LDAP servers are retried in the order they appear in Unified CM Administration and three connection attempts are made based on the delay interval specified in the Retry Delay On Host Failure service parameter. When all three connection attempts fail to result in a connection to the LDAP server, the next LDAP server in the list is tried. If the system is unable to connect to any of the servers in the list, an error gets logged and the system waits until the next sync interval before retrying to connect starting with the first server in the list. This is a required field. Default setting: 10 Minimum: 10 Maximum: 120
LDAP Connection Timeout (secs)	Specifies the number of seconds allowed for establishing the LDAP connection. The LDAP service provider aborts the connection attempt if a connection cannot be established in the specified amount of time. This is a required field. Default setting: 5 Minimum: 1 Maximum: 60
Delayed Sync Start Time (mins)	Specifies the delay in starting the directory synchronization process after the Cisco DirSync service starts. Directory synchronization ensures that the users in the LDAP server are copied to the Cisco Unified Communications Manager database. This is a required field. **Note** You must restart the Cisco Tomcat service for changes to this parameter to take effect. Default setting: 5 Minimum: 5 Maximum: 60
Cisco RIS Data Collector Parameters	
RIS Cluster TCP Port	Specifies specifies the static TCP port that the Cisco RIS Data Collector services in the cluster use to communicate with each other. Note: You must restart the Cisco RIS Data Collector service on each node in the cluster for the parameter change to take effect. This is a required field. **Note** Restart the Cisco RIS Data Collector service on each node in the cluster for the parameter change to take effect. Default setting: 2555 Minimum: 1024 Maximum: 65535

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
RIS Client TCP Port	Specifies the static TCP port that the RIS clients use to communicate with the Cisco RIS Data Collector services in the cluster. Note: You must restart Cisco Database Layer Monitor service, and the Cisco the RIS Data Collector service on each node in the cluster for the parameter change to take effect. This is a required field. **Note** Restart Cisco Database Layer Monitor service, and the Cisco RIS Data Collector services on each node in the cluster for the parameter change to take effect. Default setting: 2556 Minimum: 1024 Maximum: 65535
RIS Client Timeout	the time, in seconds, that a RIS client will wait for a reply from the Cisco RIS Data Collector service. The RIS Data Collector service running on each node internally distributes 90 percent of the value specified in this parameter. To set this parameter correctly for a cluster with multiple nodes, specify a value that is 4 times (or more) the number of nodes that are running the RIS Data Collector service in your cluster. For example, if you have 7 nodes in the cluster that are running the RIS Data Collector service, set this value to 28 or higher. For a cluster with two nodes, set this parameter to 10, the minimum allowed value (or higher). Choosing a higher value helps ensure that the RIS Data Collector service on one node has enough time to receive a reply from the RIS Data Collector service on another node. The time needed for a reply can vary based on factors such as the node's processor speed, number of devices registered to the node, amount of server memory, the volume of calls, and other performance-affecting factors. NOTE: If the value in this parameter is set lower than the recommended 4x nodes value, Unified CM will internally increase the value to allow that needed minimum number of seconds per node. Actual response might be shorter; this value only indicates the maximum allowed time so choosing a higher value will not negatively affect performance. This is a required field. Default setting: 30 Minimum: 10 Maximum: 1000 Unit: seconds

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
RIS Cleanup Time of the Day	Specifies the time of the day that the RIS database will be cleaned up to remove any unused, old device information. During this time, the NumofRegistrationAttempts performance counters for all devices reset to 0. This is a required field. Default setting: 22:00 Maximum length: 5 Allowed values: Specify time in HH:mm format (for example 06:11). Unit: hours:minutes
RIS Unused Cisco CallManager Device Store Period	Specifies specifies the RIS database information storage period for any unregistered or rejected device information from the Cisco CallManager service. After the time specified in this parameter expires, Cisco CallManager removes the expired entries during the next RIS database cleanup time (specified in the RIS Cleanup Time of the Day parameter). This is a required field. Default setting: 3 Minimum: 1 Maximum: 30 Unit: days
RIS Unused CTI Records Storage Period	Specifies the RIS database information storage period for any closed provider, device, or line information from the CTI Manager. After the time specified in this parameter expires, Cisco CTI Manager removes the expired entries during the next RIS database cleanup time (specified in the RIS Cleanup Time of the Day parameter). This is a required field. Default setting: 1 Minimum: 0 Maximum: 5 Unit: days
RIS Maximum Number of Unused CTI Records	Specifies the maximum number of records for closed CTI providers, devices, and lines that will be kept in the RIS database. After the limit specified in this parameter is reached, Cisco CTI Manager does not save any new record for unused CTI providers, devices, or lines to the RIS database. This is a required field. Default setting: 3000 Minimum: 0 Maximum: 5000 Unit: records
TLC Throttling Enabled	Enables or disables Trace and Log Central throttling behavior. This is a required field. Default setting: True

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
TLC Throttling IOWait Goal	Specifies the system IOWait percentage that TLC throttles itself toward. This is a required field. Default setting: 10 Minimum: 10 Maximum: 40
TLC Throttling CPU Goal	Specifies the system CPU utilization percentage that TLC throttles itself toward. This is a required field. Default setting: 80 Minimum: 65 Maximum: 90
TLC Throttling Polling Delay	Specifies the minimum delay in milliseconds between IO wait and CPU usage polls for the purpose of trace collection throttling. This is a required field. Default setting: 250 Minimum: 200 Maximum: 2000
TLC Throttling SFTP Maximum Delay	Specifies the maximum time an SFTP transfer is paused in order to prevent timeouts. This is a required field. Default setting: 5000 Minimum: 1000 Maximum: 10000
Maximum Number of Processes and Threads	Specifies the maximum number of Processes and Threads running on the machine. If the total number of Processes and Threads on the machine has exceeded this maximum number, SystemAccess sends alarm TotalProcessesThreadsExceededThresholdStart and the corresponding alert is generated. This is a required field. Default setting: 2000 Minimum: 1000 Maximum: 3000
Enable Logging	Determines whether collecting and logging of troubleshooting perfmon data is enabled (True) or disabled (False). This is a required field. Default setting: True

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
Polling Rate	Specifies the troubleshooting perfmon data polling rate, in seconds. This is a required field. Default setting: 15 Minimum: 5 Maximum: 300 Unit: seconds
Maximum No. of Files	Specifies the maximum number of troubleshooting perfmon log files that are saved on disk. If the "Maximum No. of Files" is set to a large number, it is recommended that the "Maximum File Size" be reduced. This is a required field. **Note** If this value is reduced, excessive log files with the oldest time stamp will be deleted if Troubleshooting Perfmon Data Logging is enabled and RISDC is turned on. If desired, please save these files first before changing Maximum No. of Files. Default setting: 50 Minimum: 1 Maximum: 100
Maximum File Size (MB)	Specifies the maximum file size, in megabytes, in each troubleshooting perfmon log file before the next file is started. If the "Maximum File Size" is set to a large number, it is recommended that the "Maximum No. of Files" be reduced. This is a required field. Default setting: 5 Minimum: 1 Maximum: 500
Cisco Serviceability Reporter	
RTMT Reporter Designated Node	Specifies specifies the designated node on which RTMTReporter runs. It is desirable that this node is a non-callprocessing node since RTMTReporter service is CPU-intensive. This field will be automatically filled in with the local node IP at which Reporter is first turned on. This is a required field.
RTMT Report Generation Time	Specifies the number of minutes after midnight (00:00hrs) when the Real-Time Monitoring Tool, (RTMT) reports are generated. To reduce any impact to call processing, run non-real-time reports during non-production hours. This is a required field. Default setting: 30 Minimum: 0 Maximum: 1200

Table 35-1 Service Parameter Descriptions (continued)

Service Parameter	Description
RTMT Report Deletion Age	Specifies the number of days that must elapse before reports are deleted. For example, if this parameter is set to 7, reports that were generated seven days ago get deleted on the eighth day. A value of 0 disables report generation, and any existing reports get deleted. This is a required field. Default setting: 7 Minimum: 0 Maximum: 30