



CHAPTER 3

Services on the Cisco HCM-F Platform

The Cisco HCM-F platform contains network services and servlets that the system requires to function. Since these services are required for basic functionality, they do not require activation. However, you may need to stop and start (or restart) these services for troubleshooting purposes.

Alarms provide information on runtime status and the state of the system, so you can troubleshoot problems that are associated with your system. After viewing the alarm information, you can run a trace on the service. The trace files can help you further troubleshoot issues with your system.

This section contains information on services and describes how to troubleshoot issues using alarms and traces:

- [Service Descriptions, page 3-1](#)
- [Working with Services, page 3-5](#)

Service Descriptions

After the installation of the Cisco HCM-F platform, most services start automatically. You can configure services by setting service parameters for each service. If necessary, for example, for troubleshooting purposes, you may need to stop and start (or restart) a service. You perform these task by using the command line interface (CLI) on the Cisco HCM-F platform.

This section describes the network services that exist of the Cisco HCM-F platform and are grouped by the following functional areas:

- [Cisco HCS Services, page 3-1](#)
- [Performance and Monitoring Services, page 3-3](#)
- [Backup and Restore Services, page 3-3](#)
- [System Services, page 3-4](#)
- [Platform Services, page 3-4](#)

Cisco HCS Services

This section describes the Cisco HCS services that are specific to Cisco HCS.

Cisco CDM Database Service

The Cisco CDM Database Service supports the Shared Data Repository.

Cisco JMS Broker Service

The Cisco JMS Broker Service provides a messaging infrastructure that other services use to communicate with each other. The broker is used by services such as CUCDMSync, VCenterSync, Fulfillment and DMA-CUOM.

Cisco HCS Admin UI Service

The Cisco HCS Admin UI service supports the administrative interface.

Cisco HCS CDM UI Service

The Cisco HCS CDM UI Service supports the Infrastructure Manager administrative interface.

Cisco HCS VCenterSync Service

The Cisco HCS VCenterSync Service monitors configuration data on one or more vCenter servers, copies data from the vCenter servers to the Cisco HCS Shared Data Repository, and maintains synchronization between the vCenter servers and the Cisco HCS Shared Data Repository. Cisco HCM-Service Assurance uses the vCenter configuration to perform fault correlation and event enrichment.

Cisco HCS CUCDMSync Service

The Cisco HCS CUCDMSync Service, which maintains synchronization of provisioned Cisco HCS data between Cisco Unified Communications Domain Manager and the Cisco HCS Shared Data Repository, copies data from the Cisco Unified Communications Domain Manager to the Cisco HCS Shared Data Repository. The CUCDMSync service supports automatic and manual synchronization.

Cisco HCS Fulfillment Service

The Cisco HCS Fulfillment Service triggers provisioning of the CUOM by automatically detecting data changes in the SDR related to devices. It triggers the DMA-CUOM to provision those devices on the CUOM. In addition, it automatically links a virtual machine to an application instance within the SDR.

Cisco HCS DMA-CUOM Service

The Cisco HCS DMA-CUOM Service is an interface between the SDR and the CUOM. The key function of the DMA is to automatically configure the CUOM to monitor Cisco HCS devices, such as gateway and DCNM, and application instances such as Cisco Unified Communication Manager, Cisco Unified Presence, and Cisco Unity Connection based on data from the SDR.

A second function of the DMA is to monitor CUOM limits and generate a trap when thresholds are reached.

Cisco HCS North Bound Interface Web Service

The Cisco HCS North Bound Interface Web Service is a set of SOAP APIs that expose Cisco HCM-F functionality to the service provider OSS/BSS. These APIs provide the ability to configure, service, and control a Cisco HCM-F deployment.

Cisco HCS Service Inventory

The Cisco HCS Service Inventory supports Service Inventory reporting features.

Cisco HCS SI UI

The Cisco HCS SI UI supports the Service Inventory administrative interface.

Cisco Platform Manager Service

The Cisco Platform Manager Service supports Platform Manager administrative interface.

Performance and Monitoring Services

This section describes the Performance and Monitoring Services.

Cisco Log Partition Monitoring Tool

The Cisco Log Partition Monitoring Tool service supports the Log Partition Monitoring feature, which monitors the disk usage of the log partition on the Cisco HCM-F platform by using configured thresholds and a polling interval.

Cisco RIS Data Collector

The Real-Time Information Server (RIS) maintains real-time information, such as critical alarms generated.

Cisco AMC Service

This service, Alert Manager and Collector service, allows you to retrieve real-time information that exists on the server.

Cisco Audit Event Service

The Cisco Audit Event Service monitors and logs any configuration change to the Cisco HCM-F platform by a user or as a result of the user action.

SOAP -Log Collection APIs Service

The Cisco SOAP-Log Collection APIs service allows you to collect log files and to schedule collection of log files on a remote SFTP server. Examples of log files that you can collect include syslog, core dump files, Cisco application trace files, and so on.

SOAP -Performance Monitoring APIs Service

The Cisco SOAP Performance Monitoring APIs service allows you to use performance monitoring counters for various applications through SOAP APIs; for example, you can monitor memory information per service, CPU usage, and so on.

Backup and Restore Services

This section describes the Backup and Restore Services.

Cisco DRF Master

The Cisco DRF Master Agent service supports the DRF Master Agent, which works with the CLI to schedule backups, perform restorations, view dependencies, check status of jobs, and cancel jobs, if necessary. The Cisco DRF Master Agent also provides the storage medium for the backup and restoration process.

Cisco DRF Local

The Cisco DRF Local service supports the Cisco DRF Local Agent, which acts as the workhorse for the DRF Master Agent. Components register with the Cisco DRF Local Agent to use the disaster recovery framework. The Cisco DRF Local Agent executes commands that it receives from the Cisco DRF Master Agent. Cisco DRF Local Agent sends the status, logs, and command results to the Cisco DRF Master Agent.

System Services

This section describes the System Services.

Cisco CDP

Cisco CDP advertises the voice application to other network management applications, so the network management application can perform network management tasks for the voice application.

Cisco Trace Collection Servlet

The Cisco Trace Collection Servlet, along with the Cisco Trace Collection Service, supports trace collection and allows users to view traces. If you stop this service, you cannot collect or view traces on the Cisco HCM-F platform.

For SysLog Viewer and trace and log collection, the Cisco Trace Collection Servlet and the Cisco Trace Collection Service must run on the server.

Cisco Trace Collection Service

The Cisco Trace Collection Service, along with the Cisco Trace Collection Servlet, supports trace collection and allows users to view traces. If you stop this service, you cannot collect or view traces on the Cisco HCM-F platform.

For SysLog Viewer and trace and log collection, the Cisco Trace Collection Servlet and the Cisco Trace Collection Service must run on the server.

**Tip**

If necessary, Cisco recommends that, to reduce the initialization time, you restart the Cisco Trace Collection Service before restarting Cisco Trace Collection Servlet.

Platform Services

This section describes the Platform Services.

Cisco Tomcat

The Cisco Tomcat service supports the web server.

Cisco Tomcat Stats Servlet

The Cisco Tomcat Stats servlet collects the Tomcat statistics.

Platform Administrative Web Service

The Platform Administrative Web service is a SOAP API that can be used to upgrade the system.

SNMP Master Agent

This service, which acts as the agent protocol engine, provides authentication, authorization, access control, and privacy functions that relate to SNMP requests.

**Tip**

After you complete SNMP configuration in the CLI, you must restart the SNMP Master Agent service.

MIB2 Agent

This service provides SNMP access to variables, which are defined in RFC 1213, that read and write variables; for example, system and interfaces.

Host Resources Agent

This service provides SNMP access to host information, such as storage resources, process tables, and installed software base. This service implements the HOST-RESOURCES-MIB.

System Application Agent

This service provides SNMP access to the applications that are installed and executing on the system. This implements the SYSAPPL-MIB.

Cisco CDP Agent

This service uses the Cisco Discovery Protocol to provide SNMP access to network connectivity information on the Cisco HCM-F platform. This service implements the CISCO-CDP-MIB.

Cisco Syslog Agent

This service supports gathering of syslog messages that various components generate. This service implements the CISCO-SYSLOG-MIB.

Cisco Certificate Expiry Monitor

This service periodically checks the expiration status of certificates that the system generates and sends notification when a certificate gets close to its expiration date.

Cisco Configuration Manager

This service manages administration and configuration settings used by the other services.

Working with Services

To start, stop, activate, or restart services or to configure service parameters for services on the Cisco HCM-F platform, you must use the command line interface (CLI). You can start, stop, activate, or refresh only one service at a time. Be aware that when a service is stopping, you cannot start it until after the service is stopped. Likewise, when a service is starting, you cannot stop it until after the service is started.

The following services are activated by default after you install the Cisco HCM-F platform.

- Cisco AMC Service
- Cisco Audit Event Service
- Cisco CDM Database
- Cisco CDP

- Cisco CDP Agent
- Cisco Certificate Expiry Monitor
- Cisco Configuration Manager
- Cisco DRF Local
- Cisco DRF Master
- Cisco HCS Admin UI
- Cisco HCS CDM UI
- Cisco JMS Broker
- Cisco Log Partition Monitoring Tool
- Cisco RIS Data Collector
- Cisco Syslog Agent
- Cisco Tomcat
- Cisco Tomcat Stats Servlet
- Cisco Trace Collection Servlet
- Host Resources Agent
- MIB2 Agent
- SNMP Master Agent
- SOAP-Log Collection APIs
- SOAP-Performance Monitoring APIs
- System Application Agent

The following services are stopped by default after you install the Cisco HCM-F platform.

- Cisco Trace Collection Service

The following services are deactivated by default after you install the Cisco HCM-F platform.

- Cisco HCS CUCDMSync Service
- Cisco HCS DMA-CUOM Service
- Cisco HCS Fulfillment Service
- Cisco HCS North Bound Interface Web Service
- Cisco HCS SI UI
- Cisco HCS Service Inventory
- Cisco HCS VCenterSync Service
- Cisco Platform Manager Service
- Platform Administrative Web Service



Caution

Some changes to service parameters may cause system failure. Cisco recommends 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 (TAC) specifies the changes.

Table 3-1 shows the commands that you need to work with services on the Cisco HCM-F platform:

Table 3-1 Service CLI Commands

Task	Command
Display a list of services and service status	<code>utils service list</code>
Activate a service	<code>utils service activate <i>servicename</i></code>
Stop a service	<code>utils service stop <i>servicename</i></code>
Start a service	<code>utils service start <i>servicename</i></code>
Restart a service	<code>utils service restart <i>servicename</i></code>
Show service parameters	<p><code>show <i>servicename</i> serviceparam <i>serviceparametername</i></code></p> <p>where,</p> <p><i>servicename</i> can be hcs, amc, risdc.</p> <p><i>serviceparametername</i> is one of the service parameters defined for that service.</p> <p>To see a list of service parameters that are defined for a service, use the following command:</p> <p><code>show <i>servicename</i> serviceparam?</code></p>
Set service parameters	<p><code>set <i>servicename</i> serviceparam <i>service parameter name</i></code></p> <p>where <i>servicename</i> equals <hcs amc risdc > and <i>service parameter name</i> is one of the service parameters defined for that service.</p>

**Note**

For information on troubleshooting with services, refer to [“Troubleshooting and Monitoring”](#) section on [page 12-1](#).

Related Topics

- [Service Descriptions, page 3-1](#)
- [Working with Services, page 3-5](#)
- [Troubleshooting and Monitoring, page 12-1](#)

