

裝置升級後，HCM-F服務處於停止狀態

目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[問題](#)

[已執行故障排除](#)

[解決方案](#)

[驗證](#)

簡介

本檔案介紹升級託管合作調解履行(HCM-F)後出現的問題以及疑難排解程式。

問題的根本原因與過期的Tomcat證書有關。許多計畫升級其HCM-F裝置 (以便從新引入的功能中受益) 的客戶在其現有的HCM-F Tomcat證書已過期且未重新生成時將面臨此問題。

必要條件

需求

思科建議您瞭解以下主題：

- 思科託管合作解決方案(HCS)
- 思科託管合作調解履行(HCM-F)

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- HCM-F 11.5.4

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除 (預設) 的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

問題

升級HCM-F (11.5.1到11.5.4) 和交換器版本後，Graphical User Interface(GUI)頁面無法再訪問，且服務處於停止狀態。

已執行故障排除

- 檢查服務狀態時發現Web使用者介面(UI)和Tomcat相關服務處於STOPPED狀態：

```
admin:utils service list
Requesting service status, please wait...
System SSH [STARTED]
Name Service Cache [STOPPED] Service Not Activated
Entropy Monitoring Daemon [STARTED]
Cisco SCSI Watchdog [STARTED]Service Manager [STARTED]
Service Manager is running
Getting list of all services
>>Return code = 0
Cisco AMC Service[STARTED]
Cisco Audit Event Service[STARTED]
Cisco CDM Database[STARTED]
Cisco CDP[STARTED]
Cisco CDP Agent[STARTED]
Cisco Certificate Expiry Monitor[STARTED]
Cisco Configuration Manager[STARTED]
Cisco DRF Local[STARTED]
Cisco DRF Master[STARTED]
Cisco HCS Admin UI[STOPPED] Component is not running
Cisco HCS CSF UI Service[STOPPED] Component is not running
Cisco HCS CUCDMSync Service[STARTED]
Cisco HCS ConfigMgr[STARTED]
Cisco HCS DMA-SA Service[STARTED]
Cisco HCS Data Access Manager Service[STARTED]
Cisco HCS Fulfillment Service[STARTED]
Cisco HCS IPA Service[STARTED]
Cisco HCS Intelligent Loader Service[STOPPED] Component is not running
Cisco HCS License Manager Service[STARTED]
Cisco HCS NBI REST FF Web Service[STOPPED] Component is not running
Cisco HCS NBI REST SDR Web Service[STOPPED] Component is not running
Cisco HCS NBI REST UCMon Web Service[STOPPED] Component is not running
Cisco HCS North Bound Interface Web Service[STOPPED] Component is not running
Cisco HCS Provisioning Adapter Service[STARTED]
Cisco HCS SDR Change Notification Service[STARTED]
Cisco HCS SDR UI[STOPPED] Component is not running
Cisco HCS SI UI[STOPPED] Component is not running
Cisco HCS SSO SP Service[STOPPED] Component is not running
Cisco HCS Service Inventory[STOPPED] Component is not running
Cisco HCS UCPA Service[STARTED]
Cisco HCS UCSMSync Service[STARTED]
Cisco HCS VCenterSync Service[STARTED]
Cisco JMS Broker[STARTED]
Cisco Log Partition Monitoring Tool[STARTED]
Cisco Platform Manager Service[STOPPED] Component is not running
Cisco RIS Data Collector[STARTED]
Cisco RTMT Web Service[STOPPED] Component is not running
Cisco Syslog Agent[STARTED]
Cisco Tomcat[STARTED]
Cisco Tomcat Stats Servlet[STOPPED] Component is not running
Cisco Trace Collection Service[STARTED]
Cisco Trace Collection Servlet[STOPPED] Component is not running
Host Resources Agent[STARTED]
MIB2 Agent[STARTED]
Platform Administrative Web Service[STOPPED] Component is not running
SNMP Master Agent[STARTED]System Application Agent[STARTED]
Cisco HCS UC Monitor Service[STOPPED] Service Not ActivatedPrimary Node =true
```

- 在CiscoSyslog中，我們看到不同Web相關服務的超文本傳輸協定(HTTP)404錯誤：

admin:file view activelog /syslog/CiscoSyslog

```
Jun 17 16:14:19 hcs862-hcm-f local7 2 : 6: hcs862-hcm-f.XXXXXXXXXX.net:
Jun 17 2019 14:14:19.781 UTC : %UC_SERVICEMANAGER-2-ServiceStartFailed: %[ServiceName=Cisco
RTMT Web Service][Reason=HTTP 404 Error][AppID=Cisco Service Manager][ClusterID=][NodeID=hcs862-
hcm-f]: Failed to start service.
Jun 17 16:14:19 hcs862-hcm-f local7 2 : 7: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 17 2019 14:14:19.781 UTC : %UC_SERVICEMANAGER-2-ServiceFailed: %[ServiceName=Cisco RTMT Web
Service][Reason=Service stopped abruptly][AppID=Cisco Service
Manager][ClusterID=][NodeID=hcs862-hcm-f]: Service terminated.
Jun 17 16:14:20 hcs862-hcm-f local7 2 : 8: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 17 2019 14:14:20.791 UTC : %UC_SERVICEMANAGER-2-ServiceStartFailed: %[ServiceName=Cisco
Trace Collection Servlet][Reason=HTTP 404 Error][AppID=Cisco Service
Manager][ClusterID=][NodeID=hcs862-hcm-f]: Failed to start service.
Jun 17 16:14:20 hcs862-hcm-f local7 2 : 9: hcs862-hcm-f.XXXXXXXXXXtest.net: Jun 17 2019
14:14:20.791 UTC : %UC_SERVICEMANAGER-2-ServiceFailed: %[ServiceName=Cisco Trace Collection
Servlet][Reason=Service stopped abruptly][AppID=Cisco Service
Manager][ClusterID=][NodeID=hcs862-hcm-f]: Service terminated.
Jun 17 16:14:21 hcs862-hcm-f local7 2 : 10: hcs862-hcm-f.XXXXXXXXXXtest.net: Jun 17 2019
14:14:21.796 UTC : %UC_SERVICEMANAGER-2-ServiceStartFailed: %[ServiceName=Cisco Tomcat Stats
Servlet][Reason=HTTP 404 Error][AppID=Cisco Service Manager][ClusterID=][NodeID=hcs862-hcm-f]:
Failed to start service.
Jun 17 16:14:21 hcs862-hcm-f local7 2 : 11: hcs862-hcm-f.XXXXXXXXXXtest.net: Jun 17 2019
14:14:21.796 UTC : %UC_SERVICEMANAGER-2-ServiceFailed: %[ServiceName=Cisco Tomcat Stats
Servlet][Reason=Service stopped abruptly][AppID=Cisco Service
Manager][ClusterID=][NodeID=hcs862-hcm-f]: Service terminated.
Jun 17 16:14:22 hcs862-hcm-f local7 6 : 12: hcs862-hcm-f.XXXXXXXXXXtest.net: Jun 17 2019
14:14:22.800 UTC : %UC_GENERIC-6-ServiceStarted: %[ServiceName=Cisco
CDP][ProcessID=8426][AppID=Cisco Service Manager][ClusterID=][NodeID=hcs862-hcm-f]: Service
started.
Jun 17 16:14:23 hcs862-hcm-f local7 2 : 13: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 17 2019 14:14:23.804 UTC : %UC_SERVICEMANAGER-2-ServiceStartFailed: %[ServiceName=Cisco HCS
Admin UI][Reason=HTTP 404 Error][AppID=Cisco Service Manager][ClusterID=][NodeID=hcs862-hcm-f]:
Failed to start service.
Jun 17 16:14:23 hcs862-hcm-f local7 2 : 14: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 17 2019 14:14:23.804 UTC : %UC_SERVICEMANAGER-2-ServiceFailed: %[ServiceName=Cisco HCS
Admin UI][Reason=Service stopped abruptly][AppID=Cisco Service
Manager][ClusterID=][NodeID=hcs862-hcm-f]: Service terminated.
Jun 17 16:14:24 hcs862-hcm-f local7 2 : 15: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 17 2019 14:14:24.808 UTC : %UC_SERVICEMANAGER-2-ServiceStartFailed: %[ServiceName=Cisco HCS
SDR UI][Reason=HTTP 404 Error][AppID=Cisco Service Manager][ClusterID=][NodeID=hcs862-hcm-f]:
Failed to start service.
Jun 17 16:14:24 hcs862-hcm-f local7 2 : 16: hcs862-hcm-f.XXXXXXXXXXtest.net: Jun 17 2019
14:14:24.808 UTC : %UC_SERVICEMANAGER-2-ServiceFailed: %[ServiceName=Cisco HCS SDR
UI][Reason=Service stopped abruptly][AppID=Cisco Service Manager][ClusterID=][NodeID=hcs862-hcm-
f]: Service terminated.
Jun 17 16:14:25 hcs862-hcm-f local7 6 : 17: hcs862-hcm-f.XXXXXXXXXXtest.net: Jun 17 2019
14:14:25.812 UTC : %UC_GENERIC-6-ServiceStarted: %[ServiceName=Cisco Certificate Expiry
Monitor][ProcessID=8774][AppID=Cisco Service Manager][ClusterID=][NodeID=hcs862-hcm-f]: Service
started.
Jun 17 16:14:25 hcs862-hcm-f local7 2 : 18: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 17 2019 14:14:25.813 UTC : %UC_SERVICEMANAGER-2-ServiceStartFailed: %[ServiceName=Cisco HCS
NBI REST SDR Web Service][Reason=HTTP 404 Error][AppID=Cisco Service
Manager][ClusterID=][NodeID=hcs862-hcm-f]: Failed to start service.
Jun 17 16:14:25 hcs862-hcm-f local7 2 : 19: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 17 2019 14:14:25.813 UTC : %UC_SERVICEMANAGER-2-ServiceFailed: %[ServiceName=Cisco HCS NBI
REST SDR Web Service][Reason=Service stopped abruptly][AppID=Cisco Service
Manager][ClusterID=][NodeID=hcs862-hcm-f]: Service terminated.
```

- Catalina中的Tomcat.out報告CCMTrustCerts上下文問題：

SEVERE: Context [/CCMTrustCerts] startup failed due to previous errors

Jun 18, 2019 2:59:49 PM org.apache.catalina.startup.HostConfig deployDirectoryINFO: Deployment

```
of web application directory /common/log/taos-log-a/tomcat/webapps/CCMTrustCerts has finished in
8,042 ms end of the file reachedoptions: q=quit, n=next, p=prev, b=begin, e=end (lines 1221 -
1223 of 1223) :INFO: Deploying web application directory /common/log/taos-log-
a/tomcat/webapps/manager
Jun 18, 2019 2:59:33 PM org.apache.catalina.startup.SetContextPropertiesRule beginWARNING:
[SetContextPropertiesRule]{Context} Setting property 'debug' to '0' did not find a matching
property.
Jun 18, 2019 2:59:33 PM org.apache.tomcat.util.digester.SetPropertiesRule beginWARNING:
[SetPropertiesRule]{Context/Realm} Setting property 'resourceName' to 'TomcatUsersDatabase' did
not find a matching property.
Jun 18, 2019 2:59:41 PM org.apache.catalina.startup.TldConfig executeINFO: At least one JAR was
scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete list
of JARs that were scanned but no TLDs were found in them. Skipping unneeded JARs during scanning
can improve startup time and JSP compilation time.
Jun 18, 2019 2:59:41 PM org.apache.catalina.core.StandardContext startInternalSEVERE: One or
more Filters failed to start. Full details will be found in the appropriate container log file
Jun 18, 2019 2:59:41 PM org.apache.catalina.core.StandardContext startInternalSEVERE: Context
[/manager] startup failed due to previous errors
Jun 18, 2019 2:59:41 PM org.apache.catalina.startup.HostConfig deployDirectoryINFO: Deployment
of web application directory /common/log/taos-log-a/tomcat/webapps/manager has finished in 7,483
ms
Jun 18, 2019 2:59:41 PM org.apache.catalina.startup.HostConfig deployDirectoryINFO: Deploying
web application directory /common/log/taos-log-a/tomcat/webapps/CCMTrustCerts
Jun 18, 2019 2:59:49 PM org.apache.catalina.startup.TldConfig executeINFO: At least one JAR was
scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete list
of JARs that were scanned but no TLDs were found in them. Skipping unneeded JARs during scanning
can improve startup time and JSP compilation time.
Jun 18, 2019 2:59:49 PM org.apache.catalina.core.StandardContext startInternalSEVERE: One or
more Filters failed to start. Full details will be found in the appropriate container log file
Jun 18, 2019 2:59:49 PM org.apache.catalina.core.StandardContext startInternal options: SEVERE:
Context [/CCMTrustCerts] startup failed due to previous errors
Jun 18, 2019 2:59:49 PM org.apache.catalina.startup.HostConfig deployDirectoryINFO: Deployment
of web application directory /common/log/taos-log-a/tomcat/webapps/CCMTrustCerts has finished in
8,042 ms
```

- 從命令列介面(CLI)運行「utils diagnose test」時，在tomcat_connectors模組中顯示一個錯誤，表明與Tomcat的內部連線未正常工作：

```
test - tomcat_connectors : Failed - The HTTP and HTTPS ports are not responding to local
requests.
```

Please collect all of the Tomcat logs for root cause analysis: file get activelog tomcat/logs/*

- Tomcat證書於3月26日到期。儘管如此，在HCM-F升級期間（或之前）未發現問題：

```
Jun 19 12:00:00 hcs862-hcm-f local199 0 : 42: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 19 2019 10:00:00.19 UTC : %UC_CERT-0-CertExpired: %[Message=Certificate expiration
Notification. Certificate name:tomcat.der Unit:tomcat Type:own-cert Expiration:Sun Mar 26
12:30:59:000 CES][AppID=Cisco Certificate Monitor][ClusterID=][NodeID=hcs862-hcm-f]: Certificate
has Expired and needs to be changed at the earliest
Jun 19 12:00:00 hcs862-hcm-f local199 0 : 43: hcs862-hcm-f.XXXXXXXXXXtest.net:
Jun 19 2019 10:00:00.21 UTC : %UC_CERT-0-CertExpired: %[Message=Certificate expiration
Notification. Certificate name:ipsec.der Unit:ipsec Type:own-cert Expiration:Sun Mar 26
12:30:57:000 CEST ][AppID=Cisco Certificate Monitor][ClusterID=][NodeID=hcs862-hcm-f]:
Certificate has Expired and needs to be changed at the earliest
```

解決方案

1.重新生成Tomcat證書:

admin:set cert regen tomcat

WARNING: This operation will overwrite any CA signed certificate previously imported for tomcat

Proceed with regeneration (yes|no)? **yes**

Successfully Regenerated Certificate for tomcat.

You must restart services related to tomcat for the regenerated certificates to become active.

2. 重新啟動HCM-F伺服器：

admin:utils system restart

Do you really want to restart ?Enter (yes/no)? **yes**

驗證

• 驗證服務狀態：

admin:utils service list

Requesting service status, please wait...

System SSH [STARTED]

Name Service Cache [STOPPED] Service Not Activated

Entropy Monitoring Daemon [STARTED]

Cisco SCSI Watchdog [STARTED]

Service Manager [STARTED]Service Manager is running

Getting list of all services

>>Return code = 0

Cisco AMC Service[STARTED]

Cisco Audit Event Service[STARTED]

Cisco CDM Database[STARTED]

Cisco CDP[STARTED]

Cisco CDP Agent[STARTED]

Cisco Certificate Expiry Monitor[STARTED]

Cisco Configuration Manager[STARTED]

Cisco DRF Local[STARTED]

Cisco DRF Master[STARTED]

Cisco HCS Admin UI[STARTED]

Cisco HCS CSF UI Service[STARTED]

Cisco HCS CUCDMSync Service[STARTED]

Cisco HCS ConfigMgr[STARTED]

Cisco HCS DMA-SA Service[STARTED]

Cisco HCS Data Access Manager Service[STARTED]

Cisco HCS Fulfillment Service[STARTED]

Cisco HCS IPA Service[STARTED]

Cisco HCS Intelligent Loader Service[STARTED]

Cisco HCS License Manager Service[STARTED]

Cisco HCS NBI REST FF Web Service[STARTED]

Cisco HCS NBI REST SDR Web Service[STARTED]

Cisco HCS NBI REST UCMon Web Service[STARTED]

Cisco HCS North Bound Interface Web Service[STARTED]

Cisco HCS Provisioning Adapter Service[STARTED]

Cisco HCS SDR Change Notification Service[STARTED]

Cisco HCS SDR UI[STARTED]

Cisco HCS SI UI[STARTED]

Cisco HCS SSO SP Service[STARTED]

Cisco HCS Service Inventory[STARTED]

Cisco HCS UCPA Service[STARTED]

Cisco HCS UCSMSync Service[STARTED]

Cisco HCS VCenterSync Service[STARTED]

Cisco JMS Broker[STARTED]

Cisco Log Partition Monitoring Tool[STARTED]

Cisco Platform Manager Service[STARTED]

Cisco RIS Data Collector[STARTED]

Cisco RTMT Web Service[STARTED]

Cisco Syslog Agent[STARTED]
Cisco Tomcat[STARTED]
Cisco Tomcat Stats Servlet[STARTED]
Cisco Trace Collection Service[STARTED]
Cisco Trace Collection Servlet[STARTED]
Host Resources Agent[STARTED]MIB2 Agent[STARTED]
Platform Administrative Web Service[STARTED]
SNMP Master Agent[STARTED]
System Application Agent[STARTED]
Cisco HCS UC Monitor Service[STOPPED]
Service Not ActivatedPrimary Node =true