

配置思科統一通訊管理器(CUCM)備份並對其進行故障排除

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簡介

本檔案介紹將備份裝置新增至思科整合通訊管理員(CUCM)的程式。

必要條件

需求

思科建議您瞭解以下主題：

- 思科整合通訊管理員(CUCM)
- 安全檔案傳輸通訊協定(SFTP)伺服器管理

採用元件

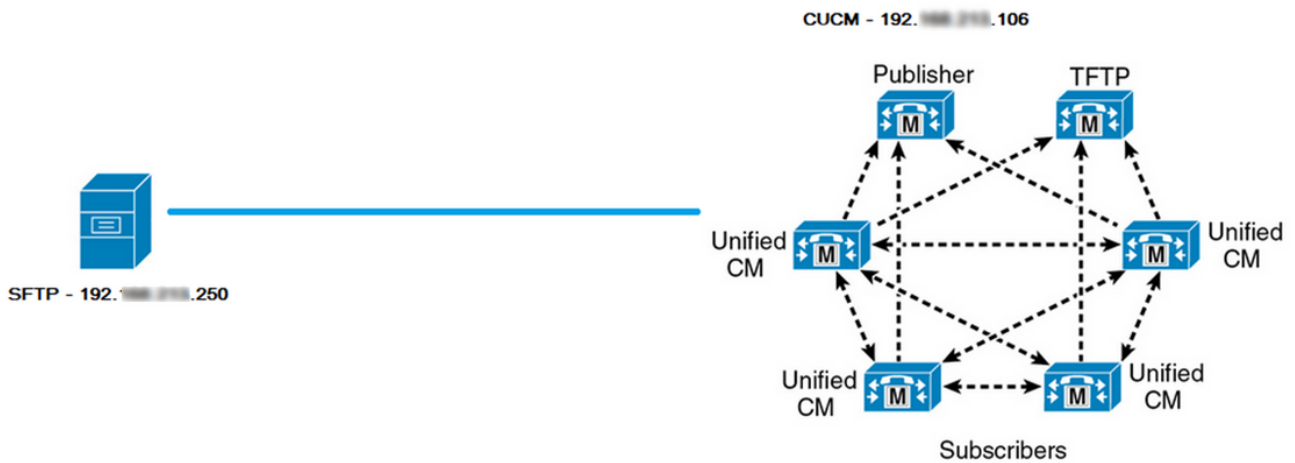
- 思科整合通訊管理員11.5
- Linux SFTP伺服器

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。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

背景資訊

在您的環境中使用任何軟體進行備份的目的是在發生災難時能夠恢復。在軟體損壞、硬體故障或發生自然災害時，備份對於防止資料丟失非常重要。

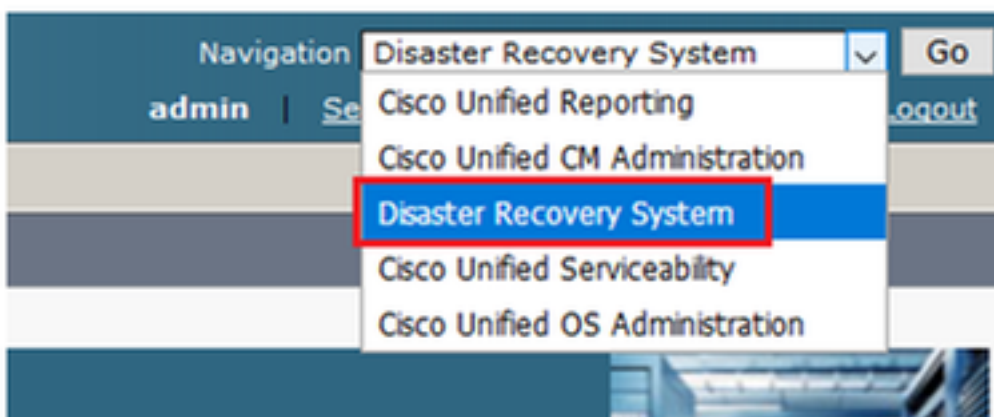
CUCM和SFTP拓撲，如下圖所示：

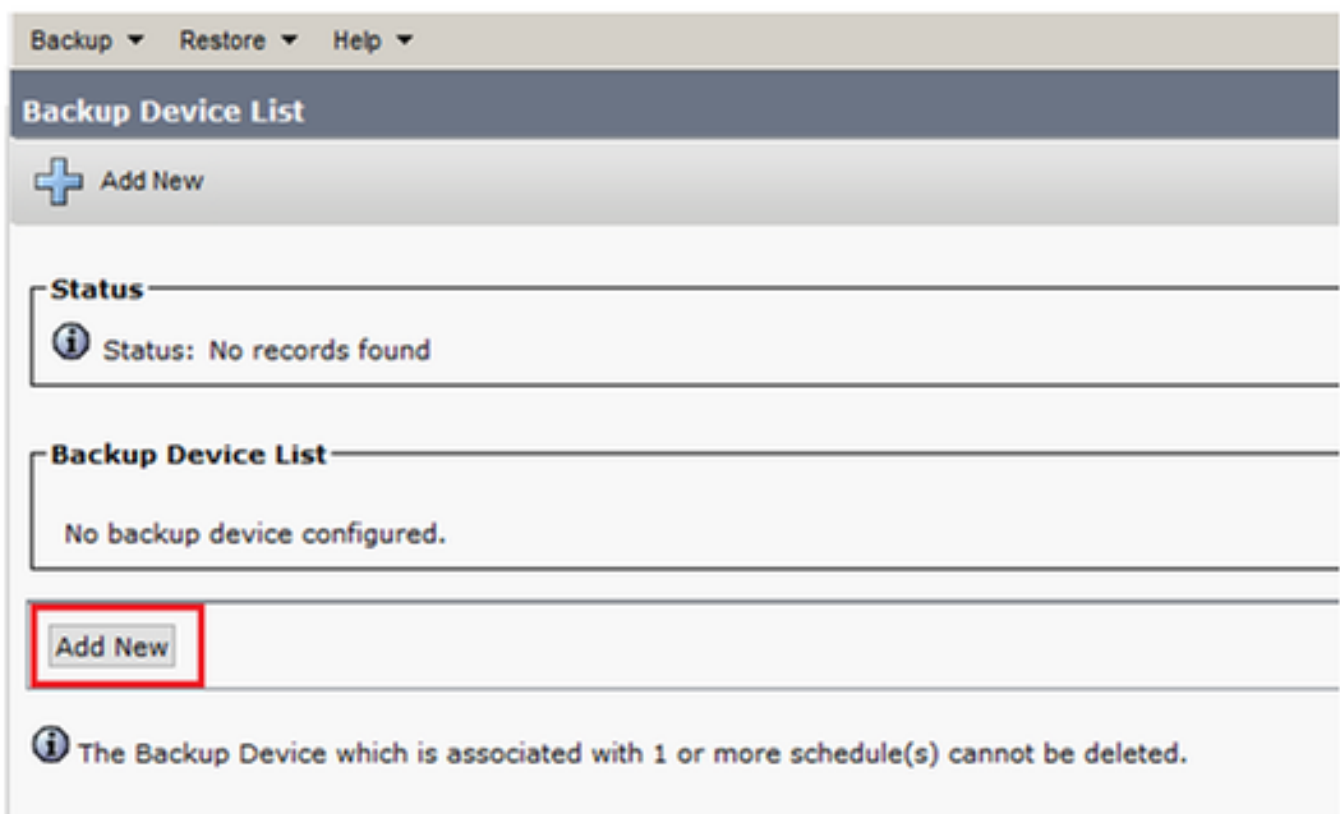
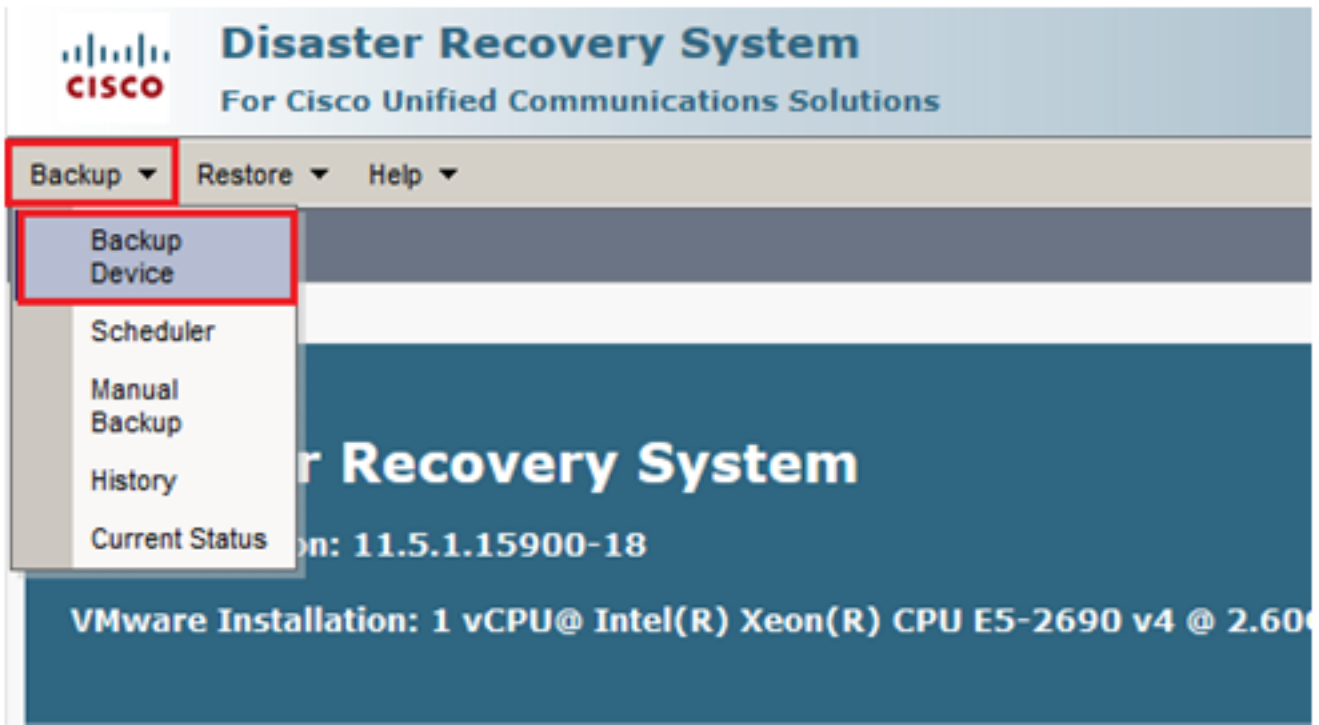


設定

通過GUI過程新增備份裝置

步驟1. 導覽至CUCM > Disaster Recovery System > Backup > Backup Device，然後按一下Add New，如下圖所示：





步驟2.新增備份裝置名稱、IP位址、路徑名稱、使用者名稱和密碼，如下圖所示：

- IP地址必須是儲存備份的目標SFTP伺服器。
- 路徑名是儲存備份的SFTP伺服器中的目錄。
- 出於身份驗證目的，SFTP伺服器中必須存在使用者名稱和密碼。
- 要儲存在網路目錄中的備份數量必須設定為需要儲存在SFTP目錄中的備份數量。

完成後，按一下**Save**。

Backup Device



Save



Back

Status



Status:Ready

Backup device name

Backup device name*

TAC-Backup

Select Destination*

Network Directory

Host name/IP address

192 . . . 250

Path name

/UCM/Backups/

User name

cisco

Password

Number of backups to store on Network Directory


1 ▾

Save


Back

確認更新成功，如下圖所示：

Backup Device

Save  Back

Status

 Update successful


Backup device name

Backup device name*

Select Destination*

Network Directory

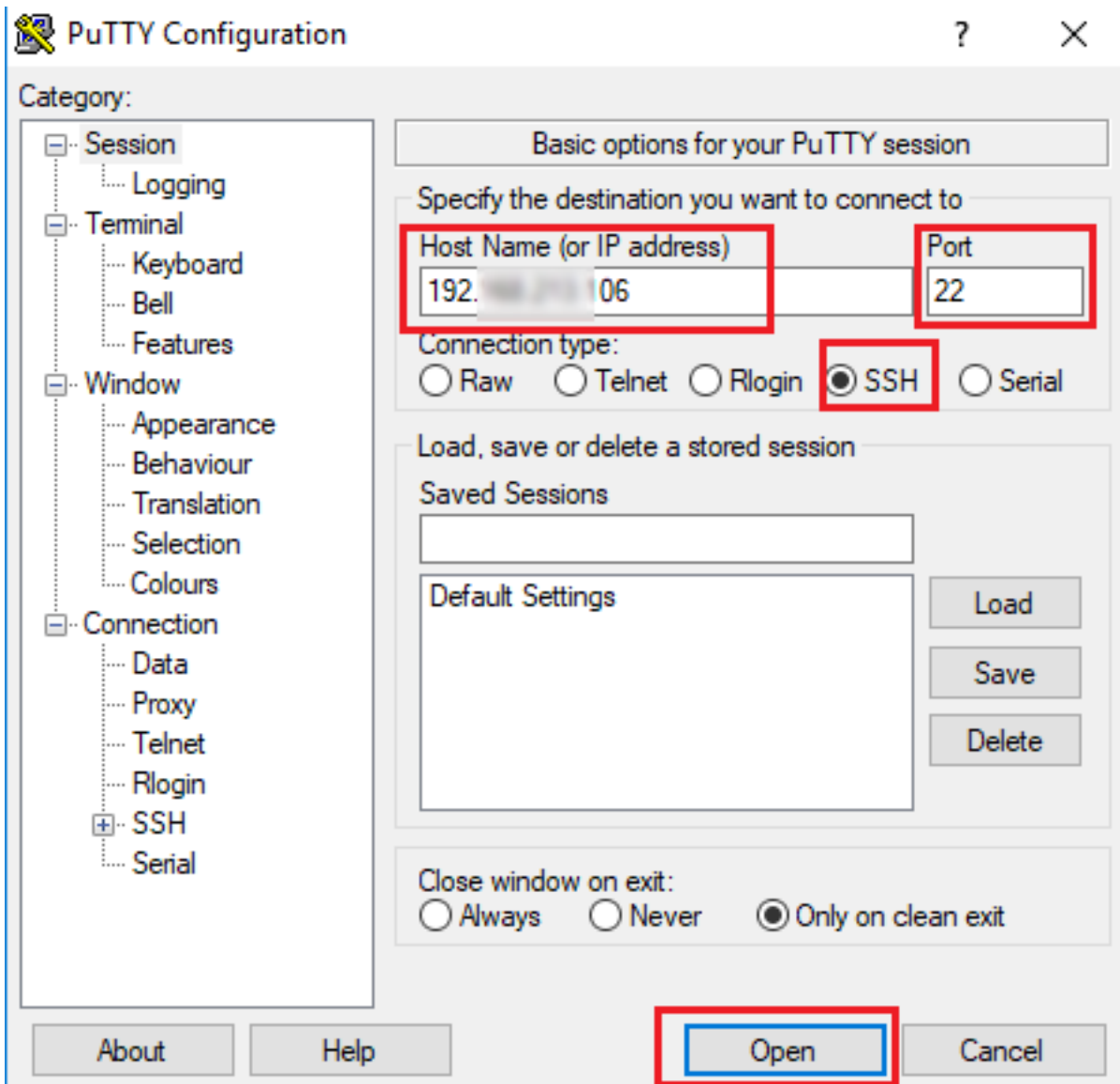
Host name/IP address	<input type="text" value="192.168.1.250"/>
Path name	<input type="text" value="/UCM/Backups/"/>
User name	<input type="text" value="cisco"/>
Password	<input type="password" value="*****"/>

Number of backups to store on Network Directory 

Save

通過CLI過程新增備份裝置

步驟1.將安全殼層(SSH)插入CUCM發佈伺服器的IP地址，並使用作業系統(OS)使用者名稱和密碼進行身份驗證，如下圖所示：



192.168.1.106 - PuTTY

```
login as: admin
admin@192.168.1.106's password:
Command Line Interface is starting up, please wait ...

Welcome to the Platform Command Line Interface

VMware Installation:
  1 vCPU: Intel(R) Xeon(R) CPU E5-2690 v4 @ 2.60GHz
  Disk 1: 80GB, Partitions aligned
  6144 Mbytes RAM
```

步驟2.使用語法新增備份裝置：`utils disaster_recovery device add network <backup device name> <path> <ip-address of remote server> <username> [備份數]`，如下圖所示：

192.168.1.106 - PuTTY

```
admin:utils disaster_recovery device add network TAC-Backup /UCM/Backups/ 192.168.1.250 cisco 1
Please enter password to connect to network server 192.168.1.250:*****
drfCliMsg: Backup Device has been saved successfully.
admin:
```

在此新增備份裝置過程時，以下步驟在CUCM中執行：

1. 聯絡SFTP伺服器並進行驗證
2. 將測試檔案傳輸到目錄
3. 從SFTP伺服器斷開連線
4. 聯絡SFTP伺服器並進行驗證
5. 刪除目錄中的測試檔案
6. 從SFTP伺服器斷開連線

附註：如果其中任何步驟失敗，CUCM無法新增備份裝置。

新增備份裝置的日誌分析

++++
傳送UpdateDestination請求以新增新備份目標
++++

```
2018-12-24 11:39:22,494 DEBUG [NetMessageDispatch] - drfMessageValidator.validateMessage():
Starting introspection for Message ID = 3200 Message Body =
===== BEGIN msgSubUpdateDestination_REQ =====
devicepath      : /UCM/Backups/
devicetype      : NETWORK
hostname        : 192.X.X.250
m_iBackupSetCount : 1
password        : 8f5fcb108a798014abff9ab4fc006f2a83027d6c858f0ac9b2720a32ba1b8d3c
storagelocationname : TAC-Backup
username        : cisco
version         : 1.0.0
schedules       : []
===== END msgSubUpdateDestination_REQ =====
```

++++
CUCM嘗試連線到SFTP伺服器
++++

```
2018-12-24 11:39:23,168 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection: Trying to
connect to the SFTP server.
```

```
2018-12-24 11:39:23,171 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection:
Connecting SFTP server...
```

++++
身份驗證成功完成
++++

```
2018-12-24 11:39:23,373 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection:
Authentication Completed Successfully, connected to remote server. Now opening a SFTP channel.
```

```
2018-12-24 11:39:23,580 DEBUG [NetMessageDispatch] - drfUtils:sftpPutFile: SSH Authentication
success for user cisco on 192.X.X.250
```

++++
CUCM傳輸檔案來自：/common/drf/d3-sb-11pub_dUmml_Drf到伺服器：192.X.X.250
/UCM/Backups/d3-sb-11pub_dUmml_Drf
此操作是為了確認CUCM是否具有讀/寫許可權。
++++

2018-12-24 11:39:23,581 DEBUG [NetMessageDispatch] - drfUtils:sftpPutFile: Transferring files from: /common/drf/d3-sb-11pub_dUmmI_Drf to the server: 192.X.X.250 /UCM/Backups/d3-sb-11pub_dUmmI_Drf

2018-12-24 11:39:23,581 DEBUG [NetMessageDispatch] - drfSftpProgressMonitor:: STARTING: 0 /common/drf/d3-sb-11pub_dUmmI_Drf -> /UCM/Backups/d3-sb-11pub_dUmmI_Drf total: 0

++++
檔案傳輸已完成
++++

2018-12-24 11:39:23,585 DEBUG [NetMessageDispatch] - drfSftpProgressMonitor:: ...File Transfer Completed

++++
CUCM關閉ChannelSftp...
++++

2018-12-24 11:39:23,586 DEBUG [NetMessageDispatch] - drfUtils:closeSFTPConnections: Closing ChannelSftp...
2018-12-24 11:39:23,586 DEBUG [NetMessageDispatch] - drfUtils:closeSFTPConnections: Disconnecting Channel...
2018-12-24 11:39:23,586 DEBUG [NetMessageDispatch] - drfUtils:closeSFTPConnections: Closing Session...

++++
CUCM嘗試連線到SFTP伺服器
++++

2018-12-24 11:39:23,586 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection: Trying to connect to the SFTP server.

2018-12-24 11:39:23,587 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection: Connecting SFTP server...

++++
身份驗證成功完成
++++

2018-12-24 11:39:23,733 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection: Authentication Completed Successfully, connected to remote server. Now opening a SFTP channel.

++++
CUCM從伺服器中刪除/UCM/Backups/d3-sb-11pub_dUmmI_Drf檔案 : 192.X.X.250
此操作是為了確認CUCM是否具有讀/寫許可權。
++++

2018-12-24 11:39:24,277 DEBUG [NetMessageDispatch] - drfUtils:sftpDeleteFile: Deleting files /UCM/Backups/d3-sb-11pub_dUmmI_Drf from the server: 192.X.X.250

++++
已成功刪除
++++

2018-12-24 11:39:24,277 INFO [NetMessageDispatch] - drfutils.sftpDeleteFiles: Successfully deleted /UCM/Backups/d3-sb-11pub_dUmmI_Drf on the Server 192.X.X.250

++++

CUCM關閉ChannelSftp...

+++++

```
2018-12-24 11:39:24,278 DEBUG [NetMessageDispatch] - drfUtils:closeSFTPConnections: Closing ChannelSftp...
2018-12-24 11:39:24,278 DEBUG [NetMessageDispatch] - drfUtils:closeSFTPConnections: Disconnecting Channel...
2018-12-24 11:39:24,278 DEBUG [NetMessageDispatch] - drfUtils:closeSFTPConnections: Closing Session...
2018-12-24 11:39:24,278 DEBUG [NetMessageDispatch] - drfUtils:isSftpLocationAccessible: Closing SFTP Client...
```

通過GUI過程啟動手動備份

步驟1. 導航至CUCM > Disaster Recovery System > Backup > Manual Backup，如下圖所示：



步驟2. 選擇備份裝置和要備份的功能，然後單擊「開始」。在本例中，僅備份UCM功能，如下圖所示：

Backup ▾ Restore ▾ Help ▾

Manual Backup

Start Backup
 Estimate Size
 Select All
 Clear All

Status
 Status: Ready

Select Backup Device
 Device Name*: TAC-Backup ▾

Select Features *

UCM
 CDR_CAR
 PLM

The following components are registered with Disaster Recovery System:

Feature	Server	Component
UCM	D3-SB-11PUB	CDPAGT
UCM	D3-SB-11PUB	SYSLOGAGT
UCM	D3-SB-11PUB	PLATFORM
UCM	D3-SB-11PUB	CLM
UCM	D3-SB-11PUB	CCMDB
UCM	D3-SB-11PUB	TCT
UCM	D3-SB-11PUB	CCMPREFS
UCM	D3-SB-11PUB	TFTP
UCM	D3-SB-11PUB	MOH
UCM	D3-SB-11PUB	ANN
UCM	D3-SB-11PUB	BAT
UCM	D3-SB-11PUB	CEF
UCM	D3-SB-11PUB	REPORTER
UCM	D3-SB-11PUB	DNALIASLOOKUP
UCM	D3-SB-11PUB	DNALIASSYNC
CDR_CAR	D3-SB-11PUB	CAR
PLM	D3-SB-11PUB	ELM-AGENT
PLM	D3-SB-11PUB	ELM-SERVER

- 進行備份時，您會看到一個狀態指示，如下圖所示：

Backup ▾ Restore ▾ Help ▾

Backup Status

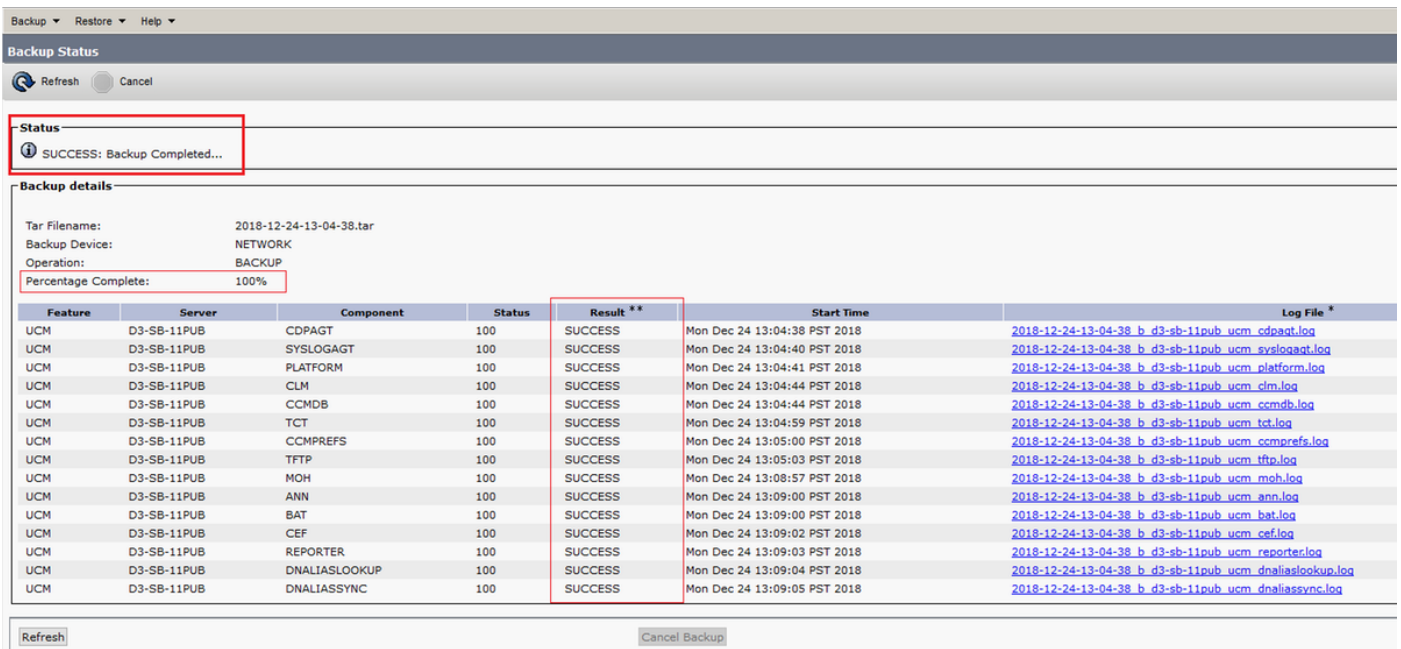
Status
 Backup operation in progress for server [D3-SB-11PUB], please wait...

Backup details

Tar Filename: 2018-12-24-13-04-38.tar
 Backup Device: NETWORK
 Operation: BACKUP
 Percentage Complete: 26%

Feature	Server	Component	Status	Result **	Start Time	Log File *
UCM	D3-SB-11PUB	CDPAGT	100	SUCCESS	Mon Dec 24 13:04:38 PST 2018	2018-12-24-13-04-38_b_d3-sb-11pub_ucm_cdpagt.log
UCM	D3-SB-11PUB	SYSLOGAGT	100	SUCCESS	Mon Dec 24 13:04:40 PST 2018	2018-12-24-13-04-38_b_d3-sb-11pub_ucm_syslogagt.log
UCM	D3-SB-11PUB	PLATFORM	100	SUCCESS	Mon Dec 24 13:04:41 PST 2018	2018-12-24-13-04-38_b_d3-sb-11pub_ucm_platform.log
UCM	D3-SB-11PUB	CLM	100	SUCCESS	Mon Dec 24 13:04:44 PST 2018	2018-12-24-13-04-38_b_d3-sb-11pub_ucm_clm.log
UCM	D3-SB-11PUB	CCMDB	0	Active	Mon Dec 24 13:04:44 PST 2018	
UCM	D3-SB-11PUB	TCT	0	---	---	
UCM	D3-SB-11PUB	CCMPREFS	0	---	---	
UCM	D3-SB-11PUB	TFTP	0	---	---	
UCM	D3-SB-11PUB	MOH	0	---	---	
UCM	D3-SB-11PUB	ANN	0	---	---	
UCM	D3-SB-11PUB	BAT	0	---	---	
UCM	D3-SB-11PUB	CEF	0	---	---	
UCM	D3-SB-11PUB	REPORTER	0	---	---	
UCM	D3-SB-11PUB	DNALIASLOOKUP	0	---	---	
UCM	D3-SB-11PUB	DNALIASSYNC	0	---	---	

- 備份完成後，您會看到SUCCESS消息，指示CUCM中的Backup Completed，如下圖所示：



- 備份完成後，您會看到SFTP目錄中的.TAR檔案，如下圖所示。如果需要還原，這些檔案將在以後使用：

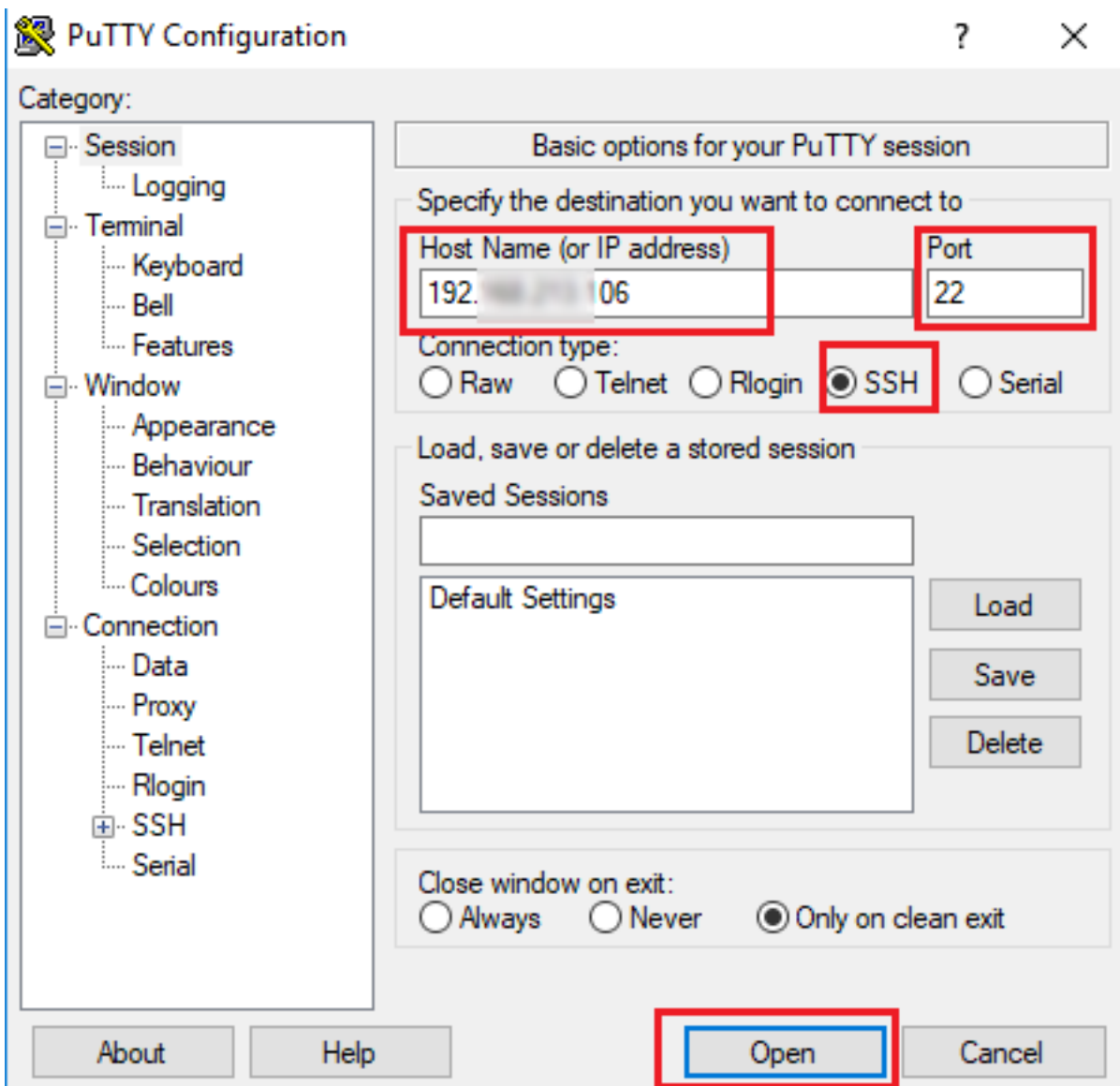
```

root@CM-SFTP:/home/cisco/UCM/Backups# ll
total 2232628
drwxr-xr-x  2 cisco cisco    20480 Dec 24 13:31 ./
drwxr-xr-x  71 cisco cisco   12288 Dec 21 13:33 ../
-rw-rw-r--  1 cisco cisco    23792 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_drfComponent.xml
-rw-rw-r--  1 cisco cisco   10272 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_ANN.tar
-rw-rw-r--  1 cisco cisco  3123405 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_BAT.tar
-rw-rw-r--  1 cisco cisco 37990432 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CCMDB.tar
-rw-rw-r--  1 cisco cisco 13015072 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CCMPPREFS.tar
-rw-rw-r--  1 cisco cisco   20538 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CDPAGT.tar
-rw-rw-r--  1 cisco cisco   10360 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CEF.tar
-rw-rw-r--  1 cisco cisco   10335 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CLM.tar
-rw-rw-r--  1 cisco cisco   20512 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_DNALIASLOOKUP.tar
-rw-rw-r--  1 cisco cisco   10272 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_DNALIASSYNC.tar
-rw-rw-r--  1 cisco cisco 27904032 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_MOH.tar
-rw-rw-r--  1 cisco cisco  1597472 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_PLATFORM.tar
-rw-rw-r--  1 cisco cisco   20577 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_REPORTER.tar
-rw-rw-r--  1 cisco cisco   10298 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_SYSLOGAGT.tar
-rw-rw-r--  1 cisco cisco   10360 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_TCT.tar
-rw-rw-r--  1 cisco cisco 2202353616 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_TFTP.tar
root@CM-SFTP:/home/cisco/UCM/Backups#

```

通過CLI過程啟動手動備份

步驟1.將安全殼層(SSH)插入CUCM發佈伺服器的IP地址，並使用作業系統使用者名稱和密碼進行身份驗證，如下圖所示：



步驟2.使用命令語法啟動手動備份：`utils disaster_recovery backup network <featurelist> <backup device name>`，如下圖所示：

```
192.168.1.106 - PuTTY
admin:utils disaster_recovery backup network UCM TAC-Backup
drfCliMsg: Backup initiated successfully. Please run 'utils disaster_recovery status backup' command to see the status
```

- 當備份正在進行時，您會看到使用命令語法的狀態指示：`utils disaster_recovery status backup`，如下圖所示：

```
192.168.1.106 - PuTTY
admin:utils disaster_recovery status backup
Status: Backup operation in progress for server [D3-SB-11PUB], please wait...
Tar Filename: 2018-12-24-13-21-17.tar
Storage Location: NETWORK
Operation: backup
Percentage Complete: 46
UCM D3-SB-11PUB CDPAGT SUCCESS Mon Dec 24 13:21:17 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_cdpagt.log
UCM D3-SB-11PUB SYSLOGAGT SUCCESS Mon Dec 24 13:21:18 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_syslogagt.log
UCM D3-SB-11PUB PLATFORM SUCCESS Mon Dec 24 13:21:19 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_platform.log
UCM D3-SB-11PUB CLM SUCCESS Mon Dec 24 13:21:22 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_clm.log
UCM D3-SB-11PUB CCMDB SUCCESS Mon Dec 24 13:21:23 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_ccmdb.log
UCM D3-SB-11PUB TCT SUCCESS Mon Dec 24 13:21:36 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_tct.log
UCM D3-SB-11PUB CCMPREFS SUCCESS Mon Dec 24 13:21:36 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_ccmprefs.log
UCM D3-SB-11PUB TFTP Active Mon Dec 24 13:21:39 PST 2018
UCM D3-SB-11PUB MOH --- ---
UCM D3-SB-11PUB ANN --- ---
UCM D3-SB-11PUB BAT --- ---
UCM D3-SB-11PUB CEF --- ---
UCM D3-SB-11PUB REPORTER --- ---
UCM D3-SB-11PUB DNALIASLOOKUP --- ---
UCM D3-SB-11PUB DNALIASYNC --- ---
```

- 備份完成後，您會看到一條命令語法的成功消息：`utils disaster_recovery status backup`，如下

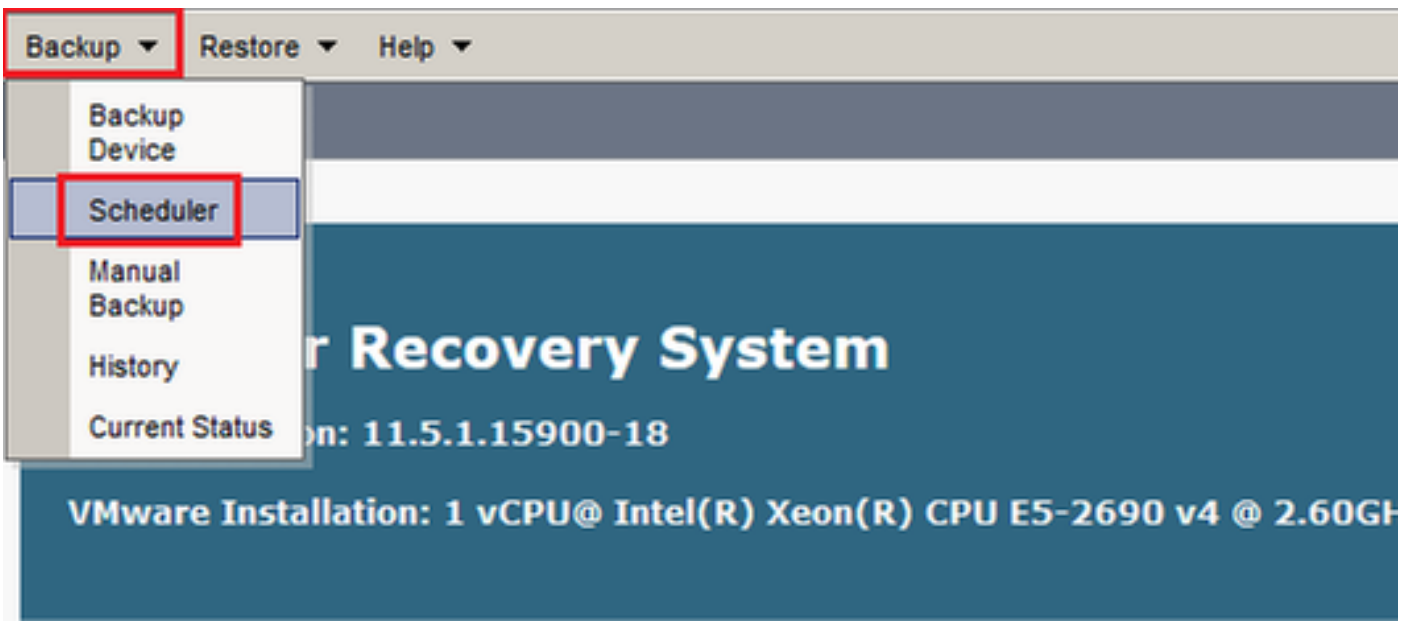
圖所示：

192.168.1.106 - PuTTY

```
admin:utils disaster_recovery status backup
Status: SUCCESS :Backup Completed...
Tar Filename: 2018-12-24-13-21-17.tar
Storage Location: NETWORK
Operation: backup
Percentage Complete: 100
UCM D3-SB-11PUB CDPAGT SUCCESS Mon Dec 24 13:21:17 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_cdpagt.log
UCM D3-SB-11PUB SYSLOGAGT SUCCESS Mon Dec 24 13:21:18 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_syslogagt.log
UCM D3-SB-11PUB PLATFORM SUCCESS Mon Dec 24 13:21:19 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_platform.log
UCM D3-SB-11PUB CLM SUCCESS Mon Dec 24 13:21:22 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_clm.log
UCM D3-SB-11PUB CCMDB SUCCESS Mon Dec 24 13:21:23 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_ccmdb.log
UCM D3-SB-11PUB TGT SUCCESS Mon Dec 24 13:21:36 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_tgt.log
UCM D3-SB-11PUB CCMPPREFS SUCCESS Mon Dec 24 13:21:36 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_ccmprefs.log
UCM D3-SB-11PUB TFTP SUCCESS Mon Dec 24 13:21:39 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_tftp.log
UCM D3-SB-11PUB MOH SUCCESS Mon Dec 24 13:25:25 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_moh.log
UCM D3-SB-11PUB ANN SUCCESS Mon Dec 24 13:25:27 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_ann.log
UCM D3-SB-11PUB BAT SUCCESS Mon Dec 24 13:25:28 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_bat.log
UCM D3-SB-11PUB CEF SUCCESS Mon Dec 24 13:25:29 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_cef.log
UCM D3-SB-11PUB REPORTER SUCCESS Mon Dec 24 13:25:30 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_reporter.log
UCM D3-SB-11PUB DNALIASLOOKUP SUCCESS Mon Dec 24 13:25:31 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_dnaliaslookup.log
UCM D3-SB-11PUB DNALIASSYNC SUCCESS Mon Dec 24 13:25:32 PST 2018 activelog/platform/drf/log/2018-12-24-13-21-17_b_d3-sb-11pub_ucm_dnaliassync.log
admin:
```

通過GUI過程啟用定時備份

步驟1.導覽至CUCM > Disaster Recovery System > Backup > Scheduler >> Add New，如下圖所示：





Disaster Recovery System


For Cisco Unified Communications Solutions

Backup ▾ Restore ▾ Help ▾

Schedule List

 Add New

Status

 Status: No records found




Schedule List

No Schedules configured.


Add New

步驟2. 為自動備份任務新增名稱，如下圖所示：

Scheduler

 Save  Set Default  Disable Schedule  Enable Schedule  Back

Status

 Status: Ready

Schedule Name

Schedule Name*

Select Backup Device

步驟3. 選擇備份裝置

Scheduler

Save Set Default Disable Schedule Enable Schedule Back

Status
 Status: Ready

Schedule Name
 Schedule Name* Weekly-Backup

Select Backup Device
 Device Name* TAC-Backup

步驟4.選擇要備份的功能

Select Backup Device
 Device Name* TAC-Backup

Select Features *

UCM CDR_CAR PLM

The following components are registered with Disaster Recovery System:

步驟5.選擇起始日期並選擇頻率:

Start Backup at *

Date 2018 Dec 30 Time 00 Hour 00 Minute

Frequency *

Once
 Daily
 Weekly

Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday

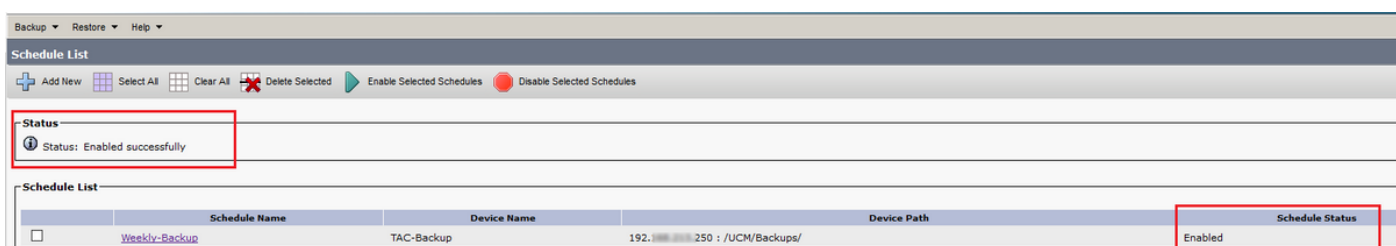
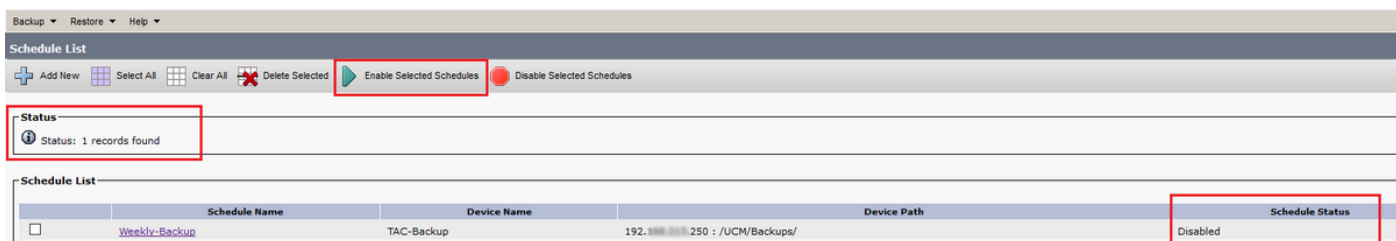
Monthly

步驟6.保存

Monthly

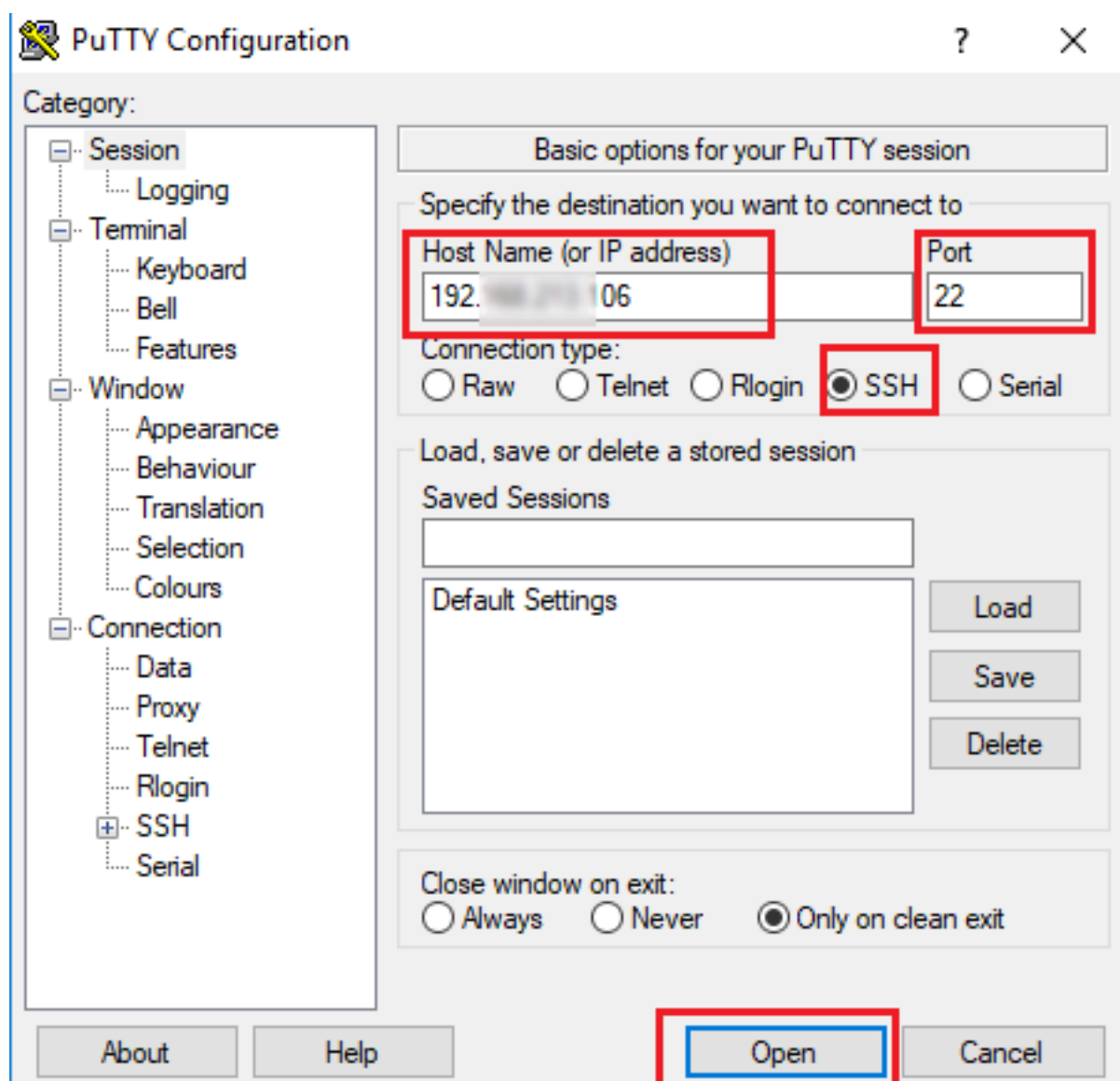
Save Set Defa

步驟7.啟用計畫備份:



通過CLI過程啟用定時備份

步驟1.將安全殼層(SSH)插入CUCM發佈伺服器的IP地址，並使用作業系統使用者名稱和密碼進行身份驗證，如下圖所示：



步驟2.使用命令語法新增定時備份：`utils disaster_recovery schedule add <schedulename> <devicename> <featurelist> <datetime><frequency>`，如下圖所示：


```
192. .106 - PuTTY
login as: admin
admin@192. .106's password:
Command Line Interface is starting up, please wait ...

Welcome to the Platform Command Line Interface

VMware Installation:
  1 vCPU: Intel(R) Xeon(R) CPU E5-2690 v4 @ 2.60GHz
  Disk 1: 80GB, Partitions aligned
  6144 Mbytes RAM

admin:utils disaster_recovery schedule add Weekly-Backup TAC-Backup UCM 2018/12/30-00:00 weekly
```

步驟3.使用命令語法啟用計畫備份：`utils disaster_recovery schedule enable <schedulename>`，如下圖所示：

```
192. .106 - PuTTY

admin:utils disaster_recovery schedule enable Weekly-Backup
Schedule Enabled Successfully
admin:
```

CUCM刪除舊備份示例

「Number of Backups」設定為1的備份裝置配置，如下圖所示：

Backup Device

Save Back

Status
i Status:Ready

Backup device name
 Backup device name* TAC-Backup

Select Destination*

Network Directory

Host name/IP address	192. .250
Path name	/UCM/Backups/
User name	cisco
Password

Number of backups to store on Network Directory 1 ▾

備份目錄，其中只有1個備份可用（16個檔案），如下圖所示：

```

root@CM-SFTP:/home/cisco/UCM/Backups# ll
total 2232628
drwxr-xr-x 2 cisco cisco 20480 Dec 24 13:31 ./
drwxr-xr-x 71 cisco cisco 12288 Dec 21 13:33 ../
-rw-rw-r-- 1 cisco cisco 23792 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_drfComponent.xml
-rw-rw-r-- 1 cisco cisco 10272 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_ANN.tar
-rw-rw-r-- 1 cisco cisco 3123405 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_BAT.tar
-rw-rw-r-- 1 cisco cisco 37990432 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CCMDB.tar
-rw-rw-r-- 1 cisco cisco 13015072 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CCMPREFS.tar
-rw-rw-r-- 1 cisco cisco 20538 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CDPAGT.tar
-rw-rw-r-- 1 cisco cisco 10360 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CEF.tar
-rw-rw-r-- 1 cisco cisco 10335 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_CLM.tar
-rw-rw-r-- 1 cisco cisco 20512 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_DNALIASSLOOKUP.tar
-rw-rw-r-- 1 cisco cisco 10272 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_DNALIASSYNC.tar
-rw-rw-r-- 1 cisco cisco 27904032 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_MOH.tar
-rw-rw-r-- 1 cisco cisco 1597472 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_PLATFORM.tar
-rw-rw-r-- 1 cisco cisco 20577 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_REPORTER.tar
-rw-rw-r-- 1 cisco cisco 10298 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_SYSLOGAGT.tar
-rw-rw-r-- 1 cisco cisco 10360 Dec 24 13:27 2018-12-24-13-04-38_D3-SB-11PUB_UCM_TCT.tar
-rw-rw-r-- 1 cisco cisco 2202353616 Dec 24 13:31 2018-12-24-13-04-38_D3-SB-11PUB_UCM_TFTP.tar
root@CM-SFTP:/home/cisco/UCM/Backups#

```

CUCM在刪除舊備份之前首先開始傳輸備份檔案 (達到32個檔案) :

Feature	Server	Component	Status	Result **
UCM	D3-SB-11PUB	CDPAGT	100	SUCCESS
UCM	D3-SB-11PUB	SYSLOGAGT	100	SUCCESS
UCM	D3-SB-11PUB	PLATFORM	100	SUCCESS
UCM	D3-SB-11PUB	CLM	100	SUCCESS
UCM	D3-SB-11PUB	CCMDB	100	SUCCESS
UCM	D3-SB-11PUB	TCT	100	SUCCESS
UCM	D3-SB-11PUB	CCMPREFS	100	SUCCESS
UCM	D3-SB-11PUB	TFTP	0	Active
UCM	D3-SB-11PUB	MOH	0	---
UCM	D3-SB-11PUB	ANN	0	---
UCM	D3-SB-11PUB	BAT	0	---
UCM	D3-SB-11PUB	CEF	0	---
UCM	D3-SB-11PUB	REPORTER	0	---
UCM	D3-SB-11PUB	DNALIASSLOOKUP	0	---
UCM	D3-SB-11PUB	DNALIASSYNC	0	---

備份完成後，DRS將刪除舊備份，以與要儲存在網路目錄 (16個檔案) 中的備份數量保持一致：

Feature	Server	Component	Status	Result **
UCM	D3-SB-11PUB	CDPAGT	100	SUCCESS
UCM	D3-SB-11PUB	SYSLOGAGT	100	SUCCESS
UCM	D3-SB-11PUB	PLATFORM	100	SUCCESS
UCM	D3-SB-11PUB	CLM	100	SUCCESS
UCM	D3-SB-11PUB	CCMDB	100	SUCCESS
UCM	D3-SB-11PUB	TCT	100	SUCCESS
UCM	D3-SB-11PUB	CCMPREFS	100	SUCCESS
UCM	D3-SB-11PUB	TFTP	100	SUCCESS
UCM	D3-SB-11PUB	MOH	100	SUCCESS
UCM	D3-SB-11PUB	ANN	100	SUCCESS
UCM	D3-SB-11PUB	BAT	100	SUCCESS
UCM	D3-SB-11PUB	CEF	100	SUCCESS
UCM	D3-SB-11PUB	REPORTER	100	SUCCESS
UCM	D3-SB-11PUB	DNALIASSLOOKUP	100	SUCCESS
UCM	D3-SB-11PUB	DNALIASSYNC	100	SUCCESS

成功建立的新備份和刪除舊備份的日誌分析

+++++

啟動手動備份時看到的消息：開始手動

+++++

```
2018-12-25 11:11:59,486 DEBUG [NetMessageDispatch] - drfMessageValidator.validateMessage():
Starting introspection for Message ID = 1700 Message Body =
===== BEGIN msgSubBackup_REQ =====
m_bLeaveTempBackupDirectoryInPlace      : false
destinationId      : TAC-Backup
backupType : MANUAL
featuresTobeBackedup : [UCM]
===== END msgSubBackup_REQ =====
```

+++++

這是已作為備份裝置新增的裝置：TAC備份

+++++

```
2018-12-25 11:11:59,486 DEBUG [NetMessageDispatch] - drfMessageHandler.HandleBackup: The backup
is being processed for the device: TAC-Backup
```

+++++

確保SFTP可訪問

+++++

```
2018-12-25 11:11:59,487 DEBUG [NetMessageDispatch] - drfMessageHandler.HandleBackup: Executing
sftpLsFiles to make sure SFTP is accessible.
2018-12-25 11:11:59,487 INFO [NetMessageDispatch] - drfUtils:sftpLsFiles-: Executing JSCH SFTP
ls command for: User: ciscoHostName: 192.X.X.250 from source :/UCM/Backups/ with pattern -l
2018-12-25 11:11:59,487 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection: Trying to
connect to the SFTP server.
```

+++++

CUCM連線到遠端SFTP伺服器

+++++

```
2018-12-25 11:11:59,617 DEBUG [NetMessageDispatch] - drfUtils:establishSftpConnection:
Authentication Completed Successfully, connected to remote server. Now opening a SFTP channel.
```

+++++

所選功能的數量：

找到1個選定功能

功能名稱：UCM

+++++

```
2018-12-25 11:11:59,834 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Found 1 features selected for Restore
2018-12-25 11:11:59,834 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: CDPAGTDirectBackup set to : yes
2018-12-25 11:11:59,834 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: SYSLOGAGTDirectBackup set to : yes
2018-12-25 11:11:59,834 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: PLATFORMDirectBackup set to : yes
2018-12-25 11:11:59,834 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: CLMDirectBackup set to : yes
2018-12-25 11:11:59,834 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: CCMDBDirectBackup set to : yes
```

2018-12-25 11:11:59,834 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: TCTDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: CCMPREFSDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: TFTPDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: MOHDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: ANNDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: BATDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: CEFDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: REPORTERDirectBackup set to : yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: DNALIASLOOKUPDirectBackup set to :
yes
2018-12-25 11:11:59,835 DEBUG [NetMessageDispatch] - drfMessageHandler:setComponentBackupType:
Feature Name: UCM. Server Name: D3-SB-11PUB. Component Name: DNALIASSYNCDirectBackup set to :
yes

++++
在給定路徑中找到33個檔案
++++

2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 33 files found at the
given path
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_UCM_PLATFORM.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_drfComponent.xml
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_REPORTER.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CLM.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_UCM_DNALIASSYNC.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_UCM_REPORTER.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_MOH.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_BAT.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_UCM_CCMDB.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_UCM_SYSLOGAGT.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CEF.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CCMPREFS.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_UCM_CCMPREFS.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_TCT.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-
SB-11PUB_UCM_CEF.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_PLATFORM.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-

SB-11PUB_UCM_CDPAGT.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-SB-11PUB_UCM_ANN.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-SB-11PUB_UCM_SYSLOGAGT.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_TFTP.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-SB-11PUB_UCM_TFTP.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-SB-11PUB_UCM_CCMDB.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_ANN.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-SB-11PUB_UCM_DNLIASSYNC.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-SB-11PUB_UCM_DNLIASLOOKUP.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_CDPAGT.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_MOH.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_CLM.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_DNLIASLOOKUP.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_BAT.tar
2018-12-25 11:16:23,886 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-24-13-21-17_D3-SB-11PUB_UCM_TCT.tar

+++++

用於跟蹤備份數：
DRS獲取其以前的備份ID的清單：
2018-12-24-13-21-17
2018-12-25-11-12-03

+++++

2018-12-25 11:16:23,887 INFO [TarWorkerThread] - drfSftpManager:drfGetListOfBackups: Adding the backup id after the _pubhostname filtering:2018-12-24-13-21-17
2018-12-25 11:16:23,887 INFO [TarWorkerThread] - drfSftpManager:drfGetListOfBackups: Adding the backup id after the _pubhostname filtering:2018-12-25-11-12-03

+++++

清單大小：1

+++++

2018-12-25 11:16:24,852 INFO [TarWorkerThread] - drfSftpManager.RemoveOldBackupSet: list size :
1

+++++

CUCM刪除：/UCM/Backups/2018-12-24-13-21-17_D3-SB-11PUB*

+++++

2018-12-25 11:16:24,852 INFO [TarWorkerThread] - drfSftpManager.RemoveOldBackupSet: Removing:
/UCM/Backups/2018-12-24-13-21-17_D3-SB-11PUB*

+++++

清單現在只有1個備份

+++++

```
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 18 files found at the
given path
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_REPORTER.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CLM.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_MOH.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_BAT.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CEF.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CCMPPREFS.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_TCT.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_PLATFORM.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CDPAGT.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_ANN.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_SYSLOGAGT.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_TFTP.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_CCMDB.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_DNALIASSYNC.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_UCM_DNALIASSLOOKUP.tar
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: 2018-12-25-11-12-03_D3-
SB-11PUB_drfComponent.xml
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfutils.sftpLsFiles-: Found 16 matching the
search criteria.
```

```
+++++
CUCM關閉ChannelSftp...
+++++
```

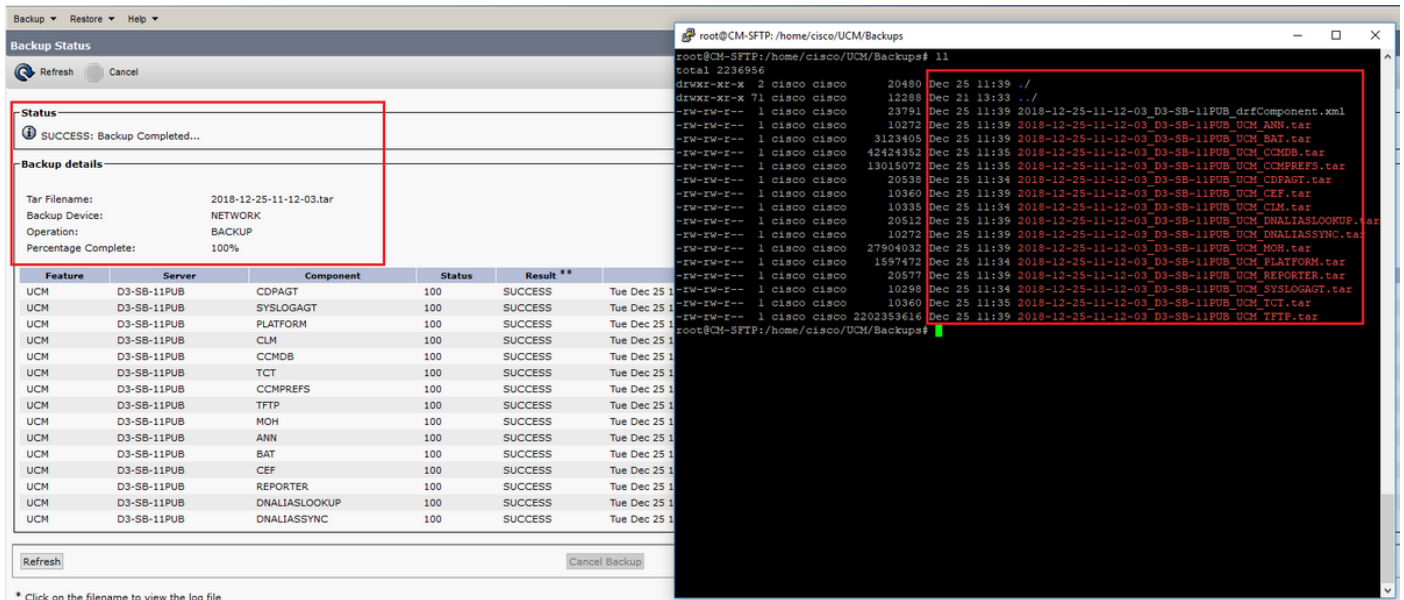
```
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfUtils:closeSFTPConnections: Closing
ChannelSftp...
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfUtils:closeSFTPConnections: Disconnecting
Channel...
2018-12-25 11:16:26,405 DEBUG [TarWorkerThread] - drfUtils:closeSFTPConnections: Closing
Session...
```

```
+++++
備份操作已完成
+++++
```

```
2018-12-25 11:16:26,572 INFO [TarWorkerThread] - {STATE_IDLE} drfBackup:CompleteBackup(Device=-
): === BACKUP operation COMPLETED ===
```

驗證

要驗證備份是否成功，您需要看到狀態消息**SUCCESS:備份已完成**，如下圖所示：

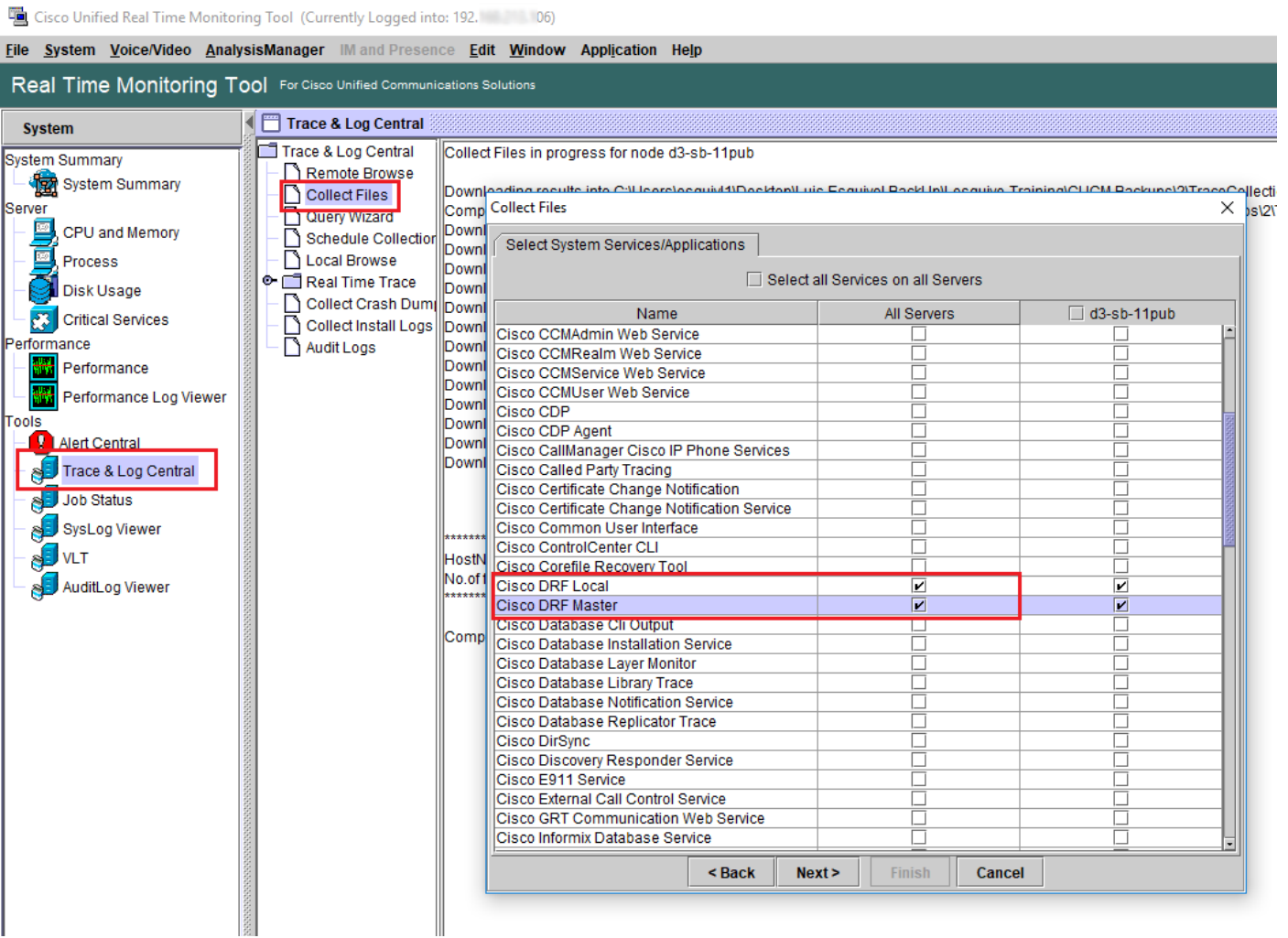


疑難排解

為了對CUCM中的備份進行故障排除，您需要：

- DRF本地日誌
- DRF主日誌

在RTMT中，導航到所有伺服器的跟蹤和日誌中心>收集檔案>Cisco DRF本地和Cisco DRF主，如下圖所示：



您可以在[如何收集CUCM 9.x或更高版本的跟蹤中查詢詳細資訊](#)

建議訪問遠端SFTP。