

# 如何在思科會議伺服器(CMS)中續訂過期的資料庫群集證書

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## 簡介

本文檔介紹如何在思科會議伺服器(CMS)上的資料庫群集上續訂過期（客戶端和伺服器）證書。

## 必要條件

### 採用元件

思科會議伺服器

## 背景資訊

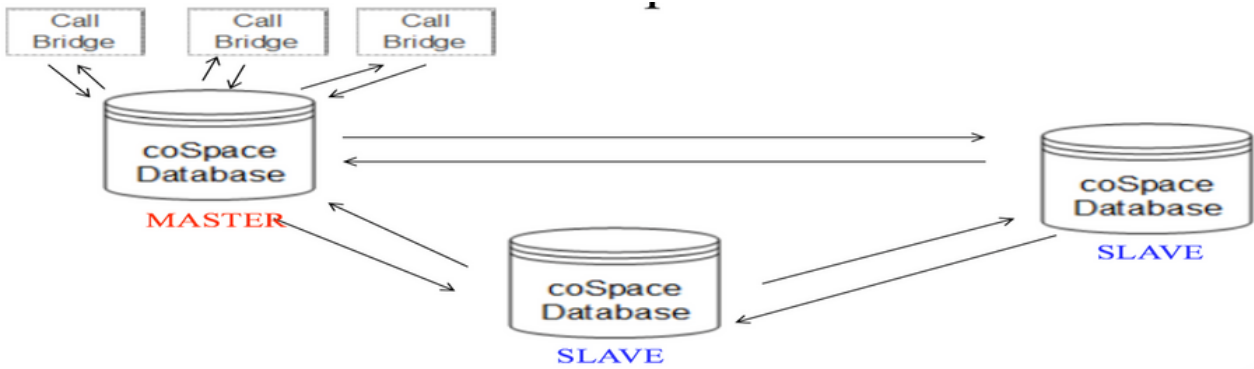
用於在Cisco Meeting Server上建立資料庫群集的證書（客戶端和伺服器）帶有到期日期。

證書過期後，群集中的資料庫節點將停止相互通訊。除非使用CLI命令「資料庫群集刪除」刪除群集，否則無法在CMS資料庫群集節點上更新證書。

證書繫結到不允許進行任何更改的資料庫服務，除非群集已關閉並且證書已斷開。

## 設定

### 網路圖表



## 程式概述

步驟1.備份群集中的CMS節點

步驟2.通過FTP從cms獲取備份檔案並儲存在本地pc上。

步驟3. 從群集中刪除資料庫群集節點。

步驟4.更新證書。

**注意：**請嘗試提供與之前使用的相同證書檔名（已過期）。您可能需要從思科會議伺服器中刪除舊的過期證書以使新證書生效。

步驟5.再次建立群集資料庫群集初始化。

步驟6.按照過程建立集群。

**注意：**上述步驟將針對所有從節點執行，然後在主節點上最後更新

## 設定程式

步驟1.在「資料庫群集狀態」的輸出中，CMS資料庫群集的證書顯示已過期。

```

cms2> database cluster status
Status                : Disabled
Node in use           : None

Interface              : a

Certificates
  Server Key           : dbclusterserver.key
  Server Certificate   : dbclusterserver.cer (expired)
  Client Key           : dbclusterclient.key
  Client Certificate   : EXPRSVR.cer (expired)
  CA Certificate       : CA.cer
  
```

步驟2.通過運行「pki inspect <cert name>」命令驗證證書到期

```
cms2>
cms2> pki inspect EXPRSVR.cer
Checking ssh public keys...not found
Checking user configured certificates and keys...found
File contains a PEM encoded certificate
Certificate:
  Data:
    Version: 3 (0x2)
    Serial Number:
      11:02:ce:3b:00:06:00:00:00:a7
    Signature Algorithm: sha1WithRSAEncryption
    Issuer: DC=com, DC=uctplab, CN=uctplab-TPWIN2008R2DC-CA
    Validity:
      Not Before: Mar  9 08:47:17 2015 GMT
      Not After : Mar  9 08:57:17 2017 GMT
    Subject: C=IN, ST=KA, L=BLR, O=Siigo, OU=AC, CN=VCSmRA.S.com
    Subject Public Key Info:
      Public Key Algorithm: rsaEncryption
      Public-Key: (4096 bit)
```

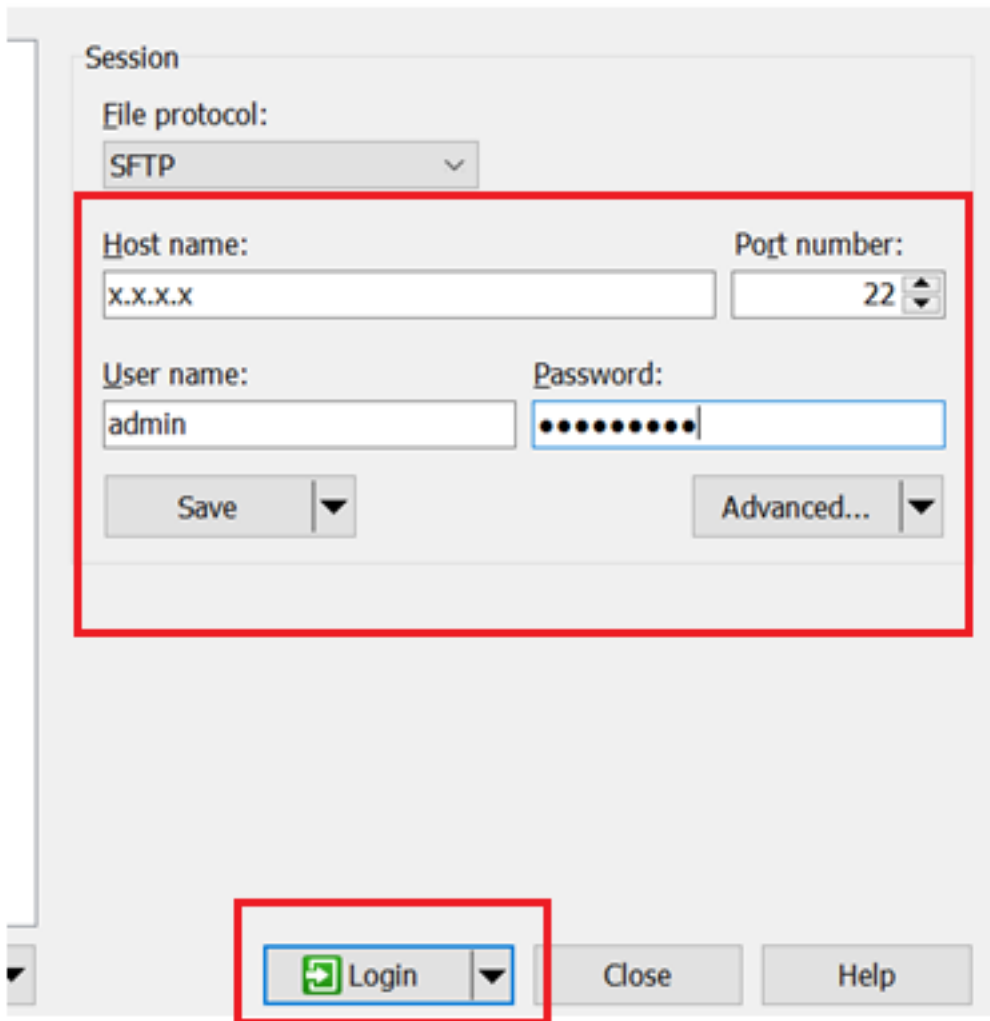
注意：資料庫群集處於活動狀態時，無法更新證書。我們需要從群集中刪除該節點。如果在群集處於活動狀態時嘗試更新證書。出現以下錯誤

```
ROOT@EXPRSVR>
cms2> database cluster certs dbclusterserver.key dbclusterserver.cer EXPRSVR.cer cmscore2.key CAVD.cer
ERROR: Cannot change certificates when clustering enabled.
  Disable clustering on this node first
cms2>
cms2>
cms2>
cms2>
cms2>
```

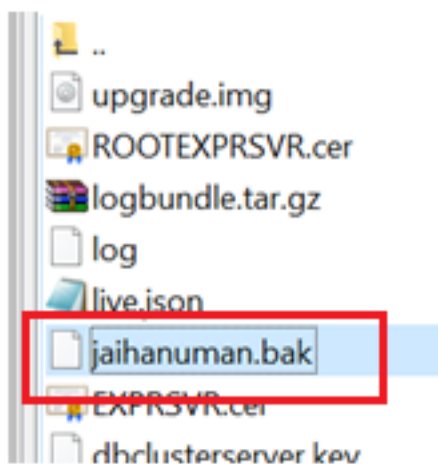
步驟3.通過運行備份快照<filename>在節點上建立備份檔案

```
Usage:
  backup snapshot <name>
  backup rollback <name>
  backup list
cms2> backup snapshot jaihanuman
jaihanuman.bak ready for download
cms2>
cms2>
cms2>
```

步驟4.登入到FTP客戶端並提取本地PC上的檔案。



步驟5.將.bak檔案從cms拖到本地PC



步驟6.運行命令從資料庫群集中刪除該節點。"database cluster remove"

```
cms2>
cms2>
cms2> database cluster remove
WARNING!!!
Are you sure you wish to remove this node from the current cluster? (Y/n)
The current contents of this node's database will become the running local database.
This node will lose all knowledge of the rest of the cluster.
The callbridge and web administration will restart at the end of this procedure.
```

注意：按大寫字母的「Y」。小寫「y」不繼續。

```
cms2>
cms2> database cluster remove
WARNING!!!
Are you sure you wish to remove this node from the current cluster? (Y/n)
The current contents of this node's database will become the running local database.
This node will lose all knowledge of the rest of the cluster.
The callbridge and web administration will restart at the end of this procedure.
Please wait...
Remove started...
cms2>
```

步驟7.節點正在從群集分離

```
cms2> database cluster status
Status : Disabling (Started 19 seconds ago)

Nodes:
Node in use : None

Interface : a

Certificates
Server Key : dbclusterserver.key
Server Certificate : dbclusterserver.cer (expired)
Client Key : dbclusterclient.key
Client Certificate : EXPRSVR.cer (expired)
CA Certificate : CA.cer

cms2>
```

步驟8.已從資料庫群集中刪除節點。

```
cms2> database cluster status
Status           : Disabled
Node in use      : None

Interface        : a

Certificates
Server Key       : dbclusterserver.key
Server Certificate : dbclusterserver.cer (expired)
Client Key       : dbclusterclient.key
Client Certificate : EXPRSVR.cer (expired)
CA Certificate    : CA.cer

Last command     : 'database cluster remove' (Success)
```

步驟9.更新資料庫群集的新證書檔案。資料庫群集將需要客戶端和伺服器證書。

database cluster certs

```
cms2> .key dbclusterserver.cer dbclusterclient.key dbclusterclient.cer CAVD.cer
Certificates updated
cms2>
cms2>
```

步驟10.再次向資料庫群集中新增節點。

```
cms2> database cluster initialize
WARNING!!!
Are you sure you wish to initialize this node as a new database cluster? (Y/n)
The contents of this node's database will become the master version of the data
base in the new cluster.
The callbridge and web administration will restart at the end of this procedure
.
```

步驟11.新證書檔案已更新。

```
cms2> database cluster status
Status                : Enabled

Nodes:
  10.106.85.75 (me)   : Connected Master
Node in use           : 10.106.85.75

Interface              : a

Certificates
  Server Key           : dbclusterserver.key
  Server Certificate   : dbclusterserver.cer
  Client Key           : dbclusterclient.key
  Client Certificate   : dbclusterclient.cer
  CA Certificate       : CAVD.cer

Last command           : 'database cluster initialize' (Success)
```

步驟12.將該節點新增到資料庫集群主節點。

```
cms2> database cluster join 10.106.85.73
WARNING!!!
Are you sure you wish to join this node to an existing database cluster? (Y/n)
The contents of this node's database will be destroyed!
The callbridge and web administration will restart at the end of this procedure.
NOTE: This node is already in a cluster.
Knowledge of all nodes in the old cluster will be removed
```

步驟13.使用更新的證書，資料庫群集再次正常

```
cms2> database cluster status
Status                : Enabled

Nodes:
  10.106.85.73       : Connected Master
  10.106.85.74       : Connected Slave ( In Sync )
  10.106.85.75 (me)  : Connected Slave ( In Sync )
Node in use           : 10.106.85.73

Interface              : a

Certificates
  Server Key           : dbclusterserver.key
  Server Certificate   : dbclusterserver.cer
  Client Key           : dbclusterclient.key
  Client Certificate   : dbclusterclient.cer
  CA Certificate       : CAVD.cer

Last command           : 'database cluster join 10.106.85.73' (Success)

cms2>
```