

# 通過災難恢復恢復獨立vManage

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## 簡介

本文檔介紹通過使用配置資料庫備份還原vManage所涉及的步驟。

## 背景資訊

本文檔假定已定期進行配置資料庫備份，由於某種原因，獨立vManage不可恢復，需要軟體重置或新安裝。

本文檔可幫助您恢復所有策略、模板、配置和邊緣裝置證書。

## Backup Configuration-db

```
vManage_rcdn01# request nms configuration-db backup path 05_08_20_configdb
Starting backup of configuration-db
config-db backup logs are available in /var/log/nm/neo4j-backup.log file
Successfully saved database to /opt/data/backup/05_08_20_configdb.tar.gz
```

scp到外部伺服器。

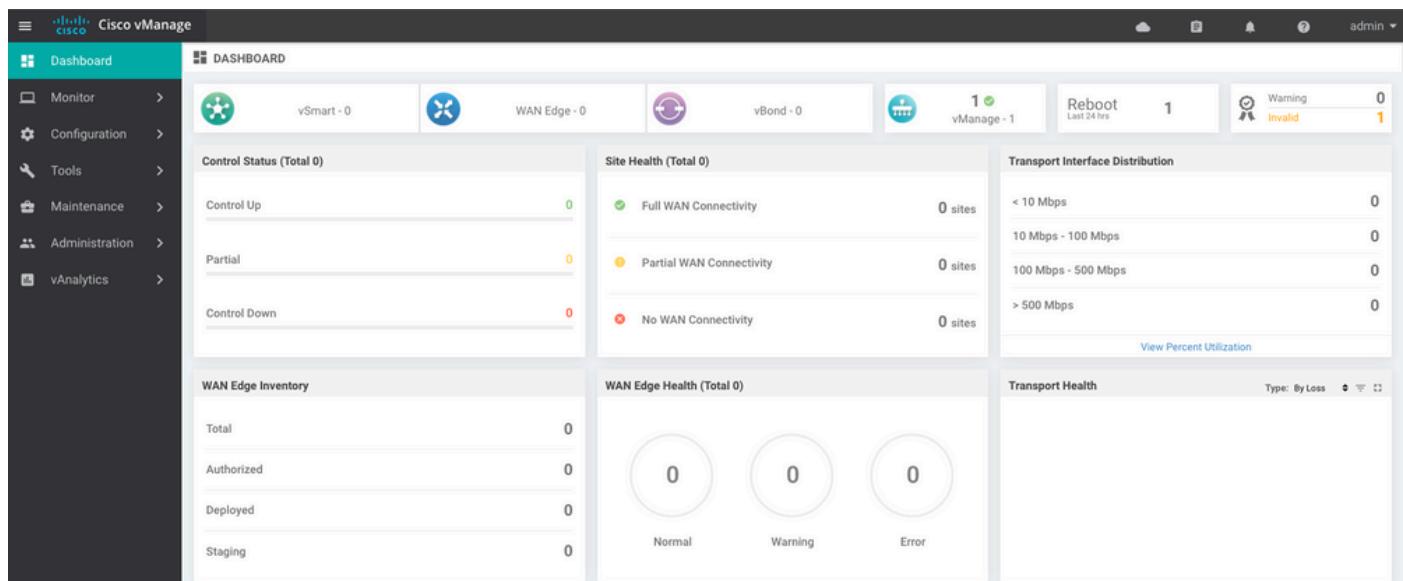
```
vManage_rcdn01# vshe11
vManage_rcdn01:~$ scp /opt/data/backup/05_08_20_configdb.tar.gz user@10.2.3.1://home/ftpuser/ftp/amaugust@10.2.3.1's password:
```

## 恢復vManage

通過命令重置vManage來模擬災難：

```
vManage_rcdn01# request software reset
```

現在，您已經有了新的vManage（類似於所示的vManage），建議在恢復備份之前按照正確的順序執行恢復過程。



## 步驟 1.vManage上的最低配置

```
system
host-name          vManage_rcdn01
system-ip          xx.xx.xx.xx
site-id            100
organization-name ****.cisco
vbond vbond.list
!
!
vpn 0
host vbond.list ip 10.2.3.4 10.2.3.5
interface eth0
  ip address 10.1.3.8/24
  tunnel-interface
  no shutdown
!
ip route 0.0.0.0/0 10.1.3.1
```

```
!
vpn 512
interface eth1
  ip address 10.11.3.8/24
  no shutdown
!
ip route 0.0.0.0/0 10.1.3.1
!
```

## 步驟 2.復製備份配置和根證書

<#root>

```
vManage_rcdn01:~$ scp am****@xx.xx.xx.xx://home/ftpuser/ftp/am****/05_08_20_configdb.tar.gz .
am****@xx.xx.xx.xx's password:
05_08_20_configdb.tar.gz                                         100%  484KB  76.6MB/s  00:
```

**verify**

```
vManage_rcdn01:~$ ls -lh
total 492K
-rw-r--r-- 1 admin admin  394 May  8 15:20 archive_id_rsa.pub
-rwxr-xr-x 1 admin admin 485K May  8 15:39 05_08_20_configdb.tar.gz
```

**Copy root certificate from other controller:**

```
vManage_rcdn01:~$ scp admin@vbond://home/admin/root.crt .
viptela 18.4.4
admin@vbond's password:
root.crt                                         100% 1380      2.8MB/s  00:
```

## 步驟 3.安裝根證書

```
vManage_rcdn01# request root-cert-chain install /home/admin/root.crt
Uploading root-ca-cert-chain via VPN 0
Copying ... /home/admin/root.crt via VPN 0
Updating the root certificate chain..
Successfully installed the root certificate chain
```

## 步驟 4.更新基本資訊

導航至 Administration > Settings 並配置vBond IP、組織名稱和證書的基本資訊。

Organization Name: **anycast.cisco**

vBond: **vbond [REDACTED]: 12346**

Email Notifications: **Disabled**

Controller Certificate Authorization: **Enterprise**

WAN Edge Cloud Certificate Authorization: **Automated**

Web Server Certificate: 12 Jul 2024 5:30:30 PM

Enforce Software Version (ZTP)

Banner: **Disabled**

Reverse Proxy: **Disabled**

Statistics Setting

## 步驟 5. 安裝vManage證書

使用 root.crt 安裝在Step 2。

CSR Generated	Controller Type	Hostname	System IP	Site ID	Certificate Serial	Expiration Date	uuid	vEdge List St...	Device IP
>	vManage	vManage_rcdn01	1.11.11.11	100	No certificate installed	-	92302e77-c05...	Sync	1.11.11.11

CSR

IP Address: 1.11.11.11

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```
--BEGIN CERTIFICATE REQUEST--
MIIDtjCCAjYCAQAwgcCx2AjbgnVIBAYTAINTMRMwE0YDVQQIExpDYWxpZm9ybmlh
MREwDwYDVQQIExnhTYW4gSm9z2TEXMBIGAUECzMOYWihW1c3QyY2izY28xFDAS
BgnVB AoTC3ZJUH8bGeSW5jMUNmQDVQDEzp2WfUvWlLTkyMzAyZTc3LWmw
NWMINDDY5Y1NzE3LTVmDeYmZx2DUyZl0wLnZpcfR8GEuy29MSwiAY,k6zI
hvchNAOkBFnNzXbw3J0QHPzPnREu729MmBjLANBgkqhki9wBAQEFAoC
AQAMIBIBpCAQEAp4czwUdwgqfGSGhmcu/w/lsANIMQKKGb6rfBskQe6m/8l
N1LgATHbygq3/53022218+CfmTwqTJSPVwZc4VjpwXKxLxpScImG2
JgoysSfqad3q4d3PM69HtgCeVFn7bgmMzuTkOXW2zhHW+Pcf5BKRA4e5x
Vng2Y+gAKVTPHykgEjgbzCY8skXyOmfxYFVGp/TM4DPclvbjg/931yy
FdwEqJ/nUJY6dd6k0GtDPddRxOiqb92m9b710Z0JApJvnQi+dJmd9tX2h0M29
HlwSsVWfUCh776dbDwmilM4k9kys5qshXXsJmQDQABo0swOQYJk0ZhvcNAOk0
MSiwwKAJBgNVHRMEAjAMBGAt1UdgQWBBQwKMQS4Q409c6o0vOvbaJOMSaJAN
```

[Close](#)

**Cisco vManage**

### CONFIGURATION | CERTIFICATES

WAN Edge List Controllers > Send to vBond

No file chosen

Search Options

Operation Status	Controller Type	Hostname	System IP	Site ID	Certificate Serial	Expiration Date	vId	vEdge List St...	Device IP	...
CSR Generated	vManage	vManage_rcdn01	1.11.11.11	100	No certificate installed	-	92302e77-c05...	Sync	1.11.11.11	...

Total Rows: 1

**Install Certificate**

Certificate Text

```
-----BEGIN CERTIFICATE-----
MIIEQjCCAppwAwIBAgTwpF8easywxDQYJKoZIhvNcNAQELBQAebdDELMakGA1UE
BhAKVhMdczA1BgNVBAgTM2hM2nCwDQYJkoZIhvNcNAQELBQAebdDELMakGA1UE
Z2Vzrc5cXNbzbzEXM8lUCA1UECwM0YHdhWz13Oz12zY2b0aNBgNvNMTBLBv
b3R0D2AfFwcyMDA1MDgxNzEMD0BaFwYwMz1MDgxNzEMD0BaHNMH0xvCOYDVOQG
EwVULzETMfEGAA1UECBMk027saV2zcm5pYTTRMA8G41UEB+MII2fuiEpxv2UfzAV
BghVBVAz1DmPfYYvnXNbzbzEXM8lUCA1UECwM0YHdhWz13Oz12zY2b0aNBgNvNMTBLBv
A1UEAAd5dm11bmFnZSD5M4MwKm13Mj1MDVLTQ2MmEtYTcxkj0T2AxMz2lMWjQ1
MmYtMC5zXBz0VvhLmNvTEMCAGCSqSib3DQcJAPYTCz3wc9yDEBz3XBz0Vvh
LmNbVtTCASh0DQYJkz2lwvNAQEBB0A0dgxEPADCCA0cGpeEBAKehHMFH4KmshqXOE
t2zLcPSgqZTBlhmuXbXwlypmprJ7GdyAEz2gpmX14d70gPRfa8c
5rVoP6kyeT2MGXOFdostMNvylasUnCjhRerEnfmnd5YOHShz6jg5/Wx2lAnZB
Z/W46TM7kyqD1ts4R1v3H7ASkAhuCvZ4NmPeAJsn1Ux8pIPB1oG2bwMrErJP
17zgnBWbVhQzT2r0zA3Jb246Pd7d8sm@XcBKf51Y+nXep0hrQz3XZUcToqnu/

```

Select a file

Install Cancel

**Cisco vManage**

### TASK VIEW

Install Certificate

Initiated By: admin From: 169.254.0.253

Total Task: 1 | Success: 1

Search Options

Status	Message	Device Type	Device IP	vManage IP
Success	Successfully synced vEdge list on vManage-9...	vManage	92302e77-c05c-462a-a717-5f013b31d52f	1.11.11.11

8-May-2020 16:15:06 UTC] Install Certificate, on device 92302e77-c05c-462a-a717-5f013b31d52f, started by user "admin" from IP address "169.254.0.253"
[8-May-2020 16:15:06 UTC] Pushing serial list to vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage\_rcdn01)
[8-May-2020 16:15:06 UTC] Started processing serial list file on vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage\_rcdn01)
[8-May-2020 16:15:07 UTC] Completed processing serial list file on vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage\_rcdn01)
[8-May-2020 16:15:07 UTC] Done - Push vSmart List for vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage\_rcdn01)
[8-May-2020 16:15:07 UTC] Pushed serial list to vManage-92302e77-c05c-462a-a717-5f013b31d52f (vManage\_rcdn01)
[8-May-2020 16:15:07 UTC] Updated controllers with new certificate serial number of vManage-92302e77-c05c-462a-a717-5f013b31d52f

**Cisco vManage**

### DASHBOARD

vSmart - 0 WAN Edge - 0 vBond - 0 vManage - 1 Reboot Last 24 hrs 1 Warning Invalid 0

Control Status (Total 0)

- Control Up 0
- Partial 0
- Control Down 0

Site Health (Total 0)

- Full WAN Connectivity 0 sites
- Partial WAN Connectivity 0 sites
- No WAN Connectivity 0 sites

Transport Interface Distribution

- < 10 Mbps 0
- 10 Mbps - 100 Mbps 0
- 100 Mbps - 500 Mbps 0
- > 500 Mbps 0

View Percent Utilization

WAN Edge Inventory

Total	0
Authorized	0
Deployed	0
Staging	0

WAN Edge Health (Total 0)

Normal	Warning	Error
0	0	0

Transport Health

Type: By Loss

## 步驟 6. 恢復資料庫

```
<#root>

vManage_rcdn01# request nms configuration-db restore path /home/admin/05_08_20_configdb.tar.gz

Configuration database is running in a standalone mode
0 [main] INFO com.viptela.vmanage.server.deployment.cluster.ClusterConfigurationFileHandler - Trying to
4 [main] INFO com.viptela.vmanage.server.deployment.cluster.ClusterConfigurationFileHandler - Working on
Successfully saved cluster configuration for localhost
Starting DB backup from: localhost
Creating directory: local
cmd to backup db: sh /usr/bin/vconfd_script_nms_neo4jwrapper.sh backup localhost /opt/data/backup/local
Finished DB backup from: localhost
Stopping NMS application server on localhost
Stopping NMS configuration database on localhost
Reseting NMS configuration database on localhost
Restoring from DB backup: /opt/data/backup/staging/graph.db-backup
cmd to restore db: sh /usr/bin/vconfd_script_nms_neo4jwrapper.sh restore /opt/data/backup/staging/graph.db-backup
Successfully restored DB backup: /opt/data/backup/staging/graph.db-backup
Starting NMS configuration database on localhost
Waiting for 10s before starting other instances...
Polling neo4j at: localhost
NMS configuration database on localhost has started.
Updating DB with the saved cluster configuration data
Successfully reinserted cluster meta information
Starting NMS application-server on localhost
Waiting for 120s for the instance to start...
Removed old database directory: /opt/data/backup/local/graph.db-backup
Successfully restored database
```

此步驟需要更多時間，具體取決於備份。

您可以通過以下方式驗證該流程： tailing vShell上的日誌。

```
<#root>
```

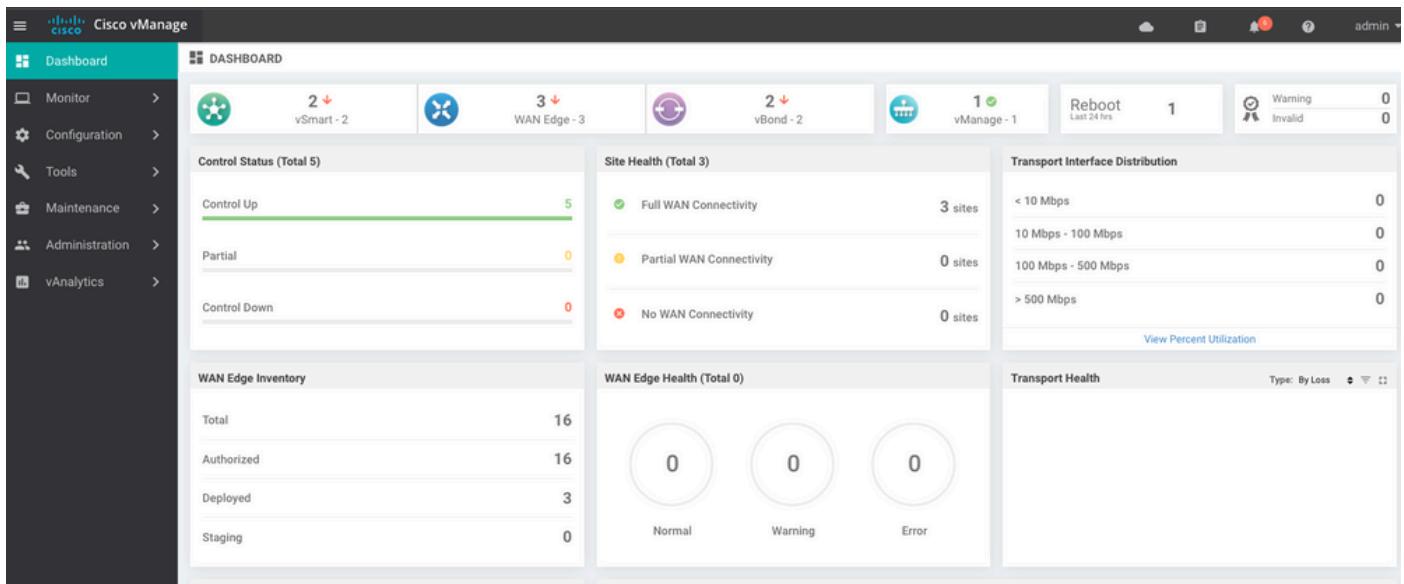
```
vManage_rcdn01:~$  
tail -fq /var/log/nms/vmanage-server.log /var/log/nms/neo4j-out.log
```

## 步驟 7. 檢查服務

```
vManage_rcdn01# request nms all status
```

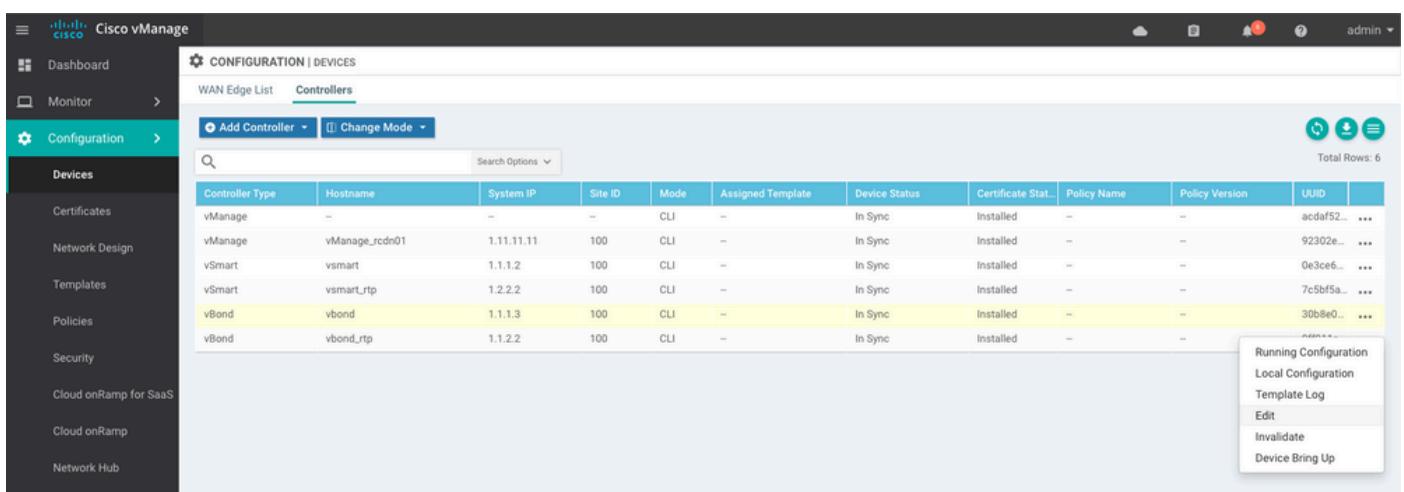
## 步驟 8. 重新驗證控制器

目前，您可以觀察到所有策略、模板和配置都已載入到vManage中，但所有控制器均已關閉。

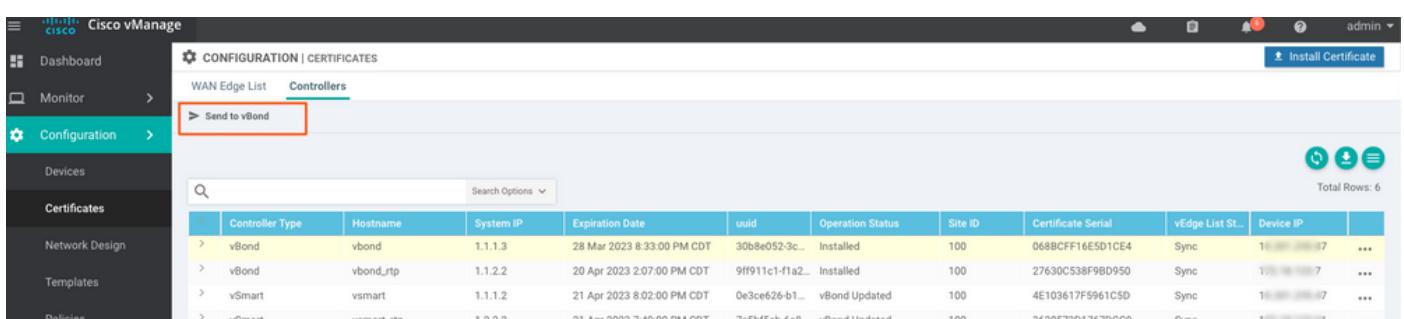


您需要重新驗證所有控制器。

導航至 Configuration > Devices. 編輯每個控制器並填寫管理IP地址（管理IP可以在本地配置中找到）使用者名稱和密碼。



## 步驟 9. 將更新傳送到控制器



Cisco vManage

**CONFIGURATION | CERTIFICATES**

WAN Edge List Controllers

> Send to Controllers

Total Rows: 15

State	Device Model	Chassis Number	Hostname	IP Address	Serial No./Token	Validate	...
Green	vEdge Cloud	ceaf1eb3-62cf-059d-634a-5649fca28125	Site03_vEdge...	1.1.1.6	EBOC7777	Invalid   Staging   Valid	...
Green	C1101-4P	C1101-4P-FGL221792P7	Site01_C1101	1.1.1.5	01633D8F	Invalid   Staging   Valid	...
Green	ISR4451-X	ISR4451-X/K9-FOC16491MWM	Site02_ISR44...	1.1.1.4	F42E	Invalid   Staging   Valid	...
Green	CSR1000v	CSR-953188CO-2D85-5D4B-A24A-2CEEE71...	-	-	Token - 40fcfc5d96bc40fc39a0d7bfbc7e354	Invalid   Staging   Valid	...
Green	CSR1000v	CSR-91AA7B9A-C7E7-88E9-F205-15B7322...	-	-	Token - 18bb348fdfc64ef3b5712046ccbd774	Invalid   Staging   Valid	...

現在，您會看到所有裝置都可以通過vManage進行管理。

Cisco vManage

**DASHBOARD**

vSmart - 2 WAN Edge - 3 vBond - 2 vManage - 1 Reboot Last 24 hrs 3 Warning Invalid 0

**Control Status (Total 4)**

- Control Up: 4
- Partial: 0
- Control Down: 0

**Site Health (Total 2)**

- Full WAN Connectivity: 2 sites
- Partial WAN Connectivity: 0 sites
- No WAN Connectivity: 0 sites

**Transport Interface Distribution**

- < 10 Mbps: 9
- 10 Mbps - 100 Mbps: 0
- 100 Mbps - 500 Mbps: 0
- > 500 Mbps: 0

**View Percent Utilization**

**WAN Edge Inventory**

Total	15
Authorized	15
Deployed	3
Staging	0

**WAN Edge Health (Total 2)**

Normal: 2 Warning: 0 Error: 0

**Transport Health**

Type: By Loss

**Top Applications**

No data to display

**Application-Aware Routing**

Tunnel Endpoints	Avg. Latency (ms)	Avg. Loss (%)	Avg. Jitter (ms)
Site02_ISR4451.default Site03_vEdge_Cloud...	50.5	0.013	37.333
Site01_C1101.default Site02_ISR4451.default	32.167	0.012	0
Site02_ISR4451.default Site01_C1101.default	32	0	0
Site01_C1101.default Site03_vEdge_Cloud...	25.917	0	41.083

Cisco vManage

**CONFIGURATION | TEMPLATES**

Device Feature

Add Template

Total Rows: 10

Name	Description	Type	Device Model	Device Templates	Devices Attached	Updated By	Last Updated	...
vEdge_VPN_0	Default Transport VPN tem...	WAN Edge VPN	C1111-4PLTEEA C1117-4P...	0	0	admin	23 Apr 2020 9:30:47 AM C...	...
Default_AAA	Default AAA template settin...	AAA	C1111-4PLTEEA C1117-4P...	1	1	admin	23 Apr 2020 9:42:40 AM C...	...
cEdge_VPN_0	Default Transport VPN tem...	WAN Edge VPN	C1111-4PLTEEA C1117-4P...	1	1	admin	23 Apr 2020 9:31:47 AM C...	...
vEdge_VPN_512_Interface	VPN 512 Interface config	WAN Edge Interface	C1111-4PLTEEA C1117-4P...	0	0	admin	23 Apr 2020 9:33:40 AM C...	...
vEdge_VPN_0_Interface	VPN 0 Interface config	WAN Edge Interface	C1111-4PLTEEA C1117-4P...	0	0	admin	23 Apr 2020 9:31:07 AM C...	...
Default_Banner	Banner for amaugust.cisco	Banner	ISR4451-X C1101-4P vEd...	1	1	admin	23 Apr 2020 8:17:38 AM C...	...
vEdge_VPN_512	VPN 512 add default route	WAN Edge VPN	C1111-4PLTEEA C1117-4P...	0	0	admin	23 Apr 2020 9:32:40 AM C...	...
cEdge_VPN_0_Interface	VPN 0 Interface config	WAN Edge Interface	C1111-4PLTEEA C1117-4P...	1	1	admin	23 Apr 2020 9:15:37 AM C...	...
cEdge_VPN_512	VPN 512 add default route	WAN Edge VPN	C1111-4PLTEEA C1117-4P...	1	1	admin	23 Apr 2020 9:33:16 AM C...	...
cEdge_VPN_512_Interface	VPN 512 Interface config	WAN Edge Interface	C1111-4PLTEEA C1117-4P...	1	1	admin	23 Apr 2020 9:34:20 AM C...	...

## 關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。