

# 設定 VLAN 主幹通訊協定 (VTP)

## 目錄

---

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[慣例](#)

[背景資訊](#)

[設定](#)

[VTP配置指南](#)

[Catalyst交換機上的VTP配置](#)

[Catalyst 6500/6000系列/Catalyst 4500/4000 Cisco IOS®軟體\(Supervisor Engine III/Supervisor Engine IV\)、Catalyst 2950、3550和3750系列交換器](#)

[Catalyst 2900XL、3500XL、2950和3550](#)

[實用示例](#)

[VTP故障排除](#)

[相關資訊](#)

---

## 簡介

本文件說明如何設定 VLAN 主幹通訊協定 (VTP)。

## 必要條件

### 需求

本文件沒有特定需求。

### 採用元件

本文件所述內容不限於特定軟體和硬體版本。

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。

### 慣例

如需檔案慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

## 背景資訊

VTP減少了交換網路中的管理。若在一台 VTP 伺服器上設定新的 VLAN，會將 VLAN 分配至網域中的所有交換器。這可減少到處設定相同 VLAN 的必要。VTP 是思科專有的通訊協定，適用於大部分的 Cisco Catalyst 系列產品。

請參閱「瞭解 VLAN 主幹通訊協定 (VTP)」，以瞭解有關 VTP 的更多資訊。

 附註：只有註冊的思科使用者才能訪問內部站點、工具和文檔。

## 設定

### VTP配置指南

本節提供在網路中配置VTP的一些準則。

- 除非網路設計要求不同的VTP域，否則所有交換機都具有相同的VTP域名。

 附註：中繼交涉無法在VTP網域間使用。如需詳細資訊，請參閱[疑難排解VLAN中繼線通訊協定\(VTP\)的VTP網域之間封鎖的資料流量](#)一節。

- VTP域中的所有交換機都必須運行相同的VTP版本。
- VTP域中的所有交換機都具有相同的VTP口令（如果有）。
- 所有VTP伺服器交換機都必須具有相同的配置修訂版號，並且還必須是域中的最高配置修訂版。
- 將交換機的VTP模式從Transparent移到Server時，VTP Transparent交換機上配置的VLAN必須存在於Server交換機上。

### Catalyst交換機上的VTP配置

本節提供一些基本命令，用於在最常用的Catalyst交換器上設定VTP。

 註:Catalyst 2948G-L3和Catalyst 4908G-L3第3層(L3)交換器不支援在其他Catalyst交換器上找到的多個面向第2層(L2)的通訊協定。此類通訊協定包括VTP、DTP和連線埠彙總通訊協定(PAgP)。

### Catalyst 6500/6000系列/Catalyst 4500/4000 Cisco IOS®軟體(Supervisor Engine III/Supervisor Engine IV)、Catalyst 2950、3550和3750系列交換器

有兩種方法可用於配置VTP，如本節所示。這些方法的可用性可能與Cisco IOS®軟體的版本不同。例如，方法1在較新版本的Cisco IOS上不可用，另一方面，方法2（全域組態模式）在運行Cisco IOS軟體的Catalyst 6500系列交換器上的早期軟體中不可用。

- 方法1，在VLAN資料庫模式下：

在Cisco IOS軟體中，可以在VLAN配置模式下配置VTP域名、VTP模式和VLAN。

- a. 在EXEC模式下，發出以下命令以進入VLAN組態模式：

```
<#root>
Switch#
vlan database

!--- Issue this command in privileged EXEC mode,
!--- not in global configuration mode.

Switch(vlan)#
!--- This is VLAN configuration mode.
```

- b. 發出以下命令以設定VTP域名：

```
<#root>
Switch(vlan)#
vtp domain example
```

- c. 發出以下命令以設定VTP模式：

```
<#root>
Switch(vlan)#
vtp {client | server | transparent}
```

- d. 發出exit命令以退出VLAN配置模式。

---

 附註：end和Ctrl-Z命令在此模式下無法正常工作。

---

```
<#root>
Switch(vlan)#
end

Switch(vlan)#
```

```

^Z

% Invalid input detected at '^' marker.

Switch(vlan)#
Swtch(vlan)#
exit

APPLY completed.
Exiting.....
Switch#

```

## 2. 方法2，在全域性配置模式下：

在Cisco IOS軟體全域性配置模式下，可以使用Cisco IOS軟體命令配置所有VTP引數。命令格式如下：

```

<#root>

Switch(config)#
vtp ?

domain      Set the name of the VTP administrative domain.
file        Configure IFS filesystem file where VTP configuration is stored.
interface   Configure interface as the preferred source for the VTP IP updater
address.
mode        Configure VTP device mode
password    Set the password for the VTP administrative domain
pruning     Set the administrative domain to permit pruning
version     Set the administrative domain to VTP version

Switch#
configure terminal

Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#

vtp domain ?
WORD  The ascii name for the VTP administrative domain.

Switch(config)#
vtp domain example

Changing VTP domain name from example to example
Switch(config)#

vtp mode server

```

3. 發出以下命令以監控VTP操作和狀態：

```
<#root>
```

```
Switch#
```

```
show vtp status
```

```
VTP Version capable : 1 to 3
VTP version running : 2
VTP Domain Name : example
VTP Pruning Mode : Disabled
VTP Traps Generation : Disabled
Device ID : 6400.f13e.dc40
Configuration last modified by 10.122.190.226 at 0-0-00 00:00:00
Local updater ID is 10.122.190.226 on interface Fa1 (first layer3 interface found)
```

```
Feature VLAN:
```

```
-----
VTP Operating Mode : Server
Maximum VLANs supported locally : 1005
Number of existing VLANs : 16
Configuration Revision : 0
MD5 digest : 0x0A 0xF4 0xFD 0xE9 0x99 0xD7 0xAB 0x3F
               0x0A 0x64 0x04 0x7C 0x42 0x98 0xD8 0xE5
```

```
Switch#
```

```
Switch#
```

```
show vtp counters
```

```
VTP statistics:
```

```
Summary advertisements received : 0
Subset advertisements received : 0
Request advertisements received : 0
Summary advertisements transmitted : 0
Subset advertisements transmitted : 0
Request advertisements transmitted : 0
Number of config revision errors : 0
Number of config digest errors : 0
Number of V1 summary errors : 0
```

```
VTP pruning statistics:
```

Trunk	Join Transmitted	Join Received	Summary advts received from non-pruning-capable device
-------	------------------	---------------	---

```
-----
Switch#
```

Catalyst 2900XL、3500XL、2950和3550

請完成以下步驟：

## 1. 在VLAN資料庫模式下發出以下命令：

 附註：這與執行Cisco IOS軟體的Cisco 6500系列交換器的方法類似。

```
<#root>

vtp {client | server | transparent}

vtp domain name
```

## 2. 在啟用模式下，發出以下命令以監控VTP操作：

```
<#root>

show vtp counters

show vtp status
```

 附註：採用Cisco IOS軟體版本11.2(8)SA4和更新版本的Catalyst 2900XL系列交換器支援VTP通訊協定。Cisco IOS軟體版本11.2(8)SA3和早期的程式碼在Catalyst 2900XL系列交換器上不支援VTP通訊協定。

## 實用示例

### 範例 1：

此範例包括兩部透過TenGigabitEthernet連結連線的Catalyst 4500交換器：

1. 交換機A是沒有VTP域名且沒有VLAN的新交換機。交換機C是當前存在的交換機，在VTP域測試中運行時具有16個VLAN。
2. 在show vtp status命令的輸出示例中，可以看到VTP版本預設為1。交換機A支援VTP V2。但是，在這種情況下，交換機不運行VTP V2。如果使用vtp version 2命令配置了V2版本，則交換機只會運行VTP V2。在本例中，交換機A配置為VTP客戶端。此外，還必須確保所連線的交換機在連線到網路之前其配置修訂版為0，或低於當前VTP伺服器的值：

```
<#root>

Switch-A#
show vtp status

VTP Version capable          : 1 to 3
VTP version running          : 1
VTP Domain Name              :
```

```
VTP Pruning Mode : Disabled
VTP Traps Generation : Disabled
Device ID : 6400.f13e.dc40
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00
Local updater ID is 10.122.190.226 on interface Fa1 (first layer3 interface found)
```

Feature VLAN:

```
-----  
VTP Operating Mode : Server  
  
Maximum VLANs supported locally : 1005  
Number of existing VLANs : 5  
  
Configuration Revision : 0  
  
MD5 digest : 0x57 0xCD 0x40 0x65 0x63 0x59 0x47 0xBD  
               0x56 0x9D 0x4A 0x3E 0xA5 0x69 0x35 0xBC
```

Switch-A#  
Switch-A#  
Switch-A#  
Switch-A#

**show vlan brief**

VLAN Name	Status	Ports
1 default	active	Gi1/1, Gi1/2, Gi1/4, Gi1/5 Gi1/6, Gi1/7, Gi1/8, Gi1/9 Gi1/10, Gi1/11, Gi1/12, Gi1/13 Gi1/14, Gi1/15, Gi1/16, Gi1/17 Gi1/18, Gi1/19, Gi1/20, Gi1/21 Gi1/22, Gi1/23, Gi1/24, Gi1/25 Gi1/26, Gi1/27, Gi1/28, Gi1/29 Gi1/30, Gi1/31, Gi1/32, Gi1/33 Gi1/34, Gi1/35, Gi1/36, Gi1/37 Gi1/38, Gi1/39, Gi1/40, Gi1/41 Gi1/42, Gi1/43, Gi1/44, Gi1/45 Gi1/46, Gi1/47, Gi1/48, Te3/2 Te3/3, Te3/4, Te3/5, Te3/6 Te3/7, Te3/8
1002 fddi-default	act/unsup	
1003 token-ring-default	act/unsup	
1004 fddinet-default	act/unsup	
1005 trnet-default	act/unsup	

Switch-A#

Switch-C#

**show vtp status**

```
VTP Version capable : 1 to 3
VTP version running : 2
VTP Domain Name : test
VTP Pruning Mode : Disabled
VTP Traps Generation : Disabled
Device ID : 503d.e583.3b40
Configuration last modified by 10.122.190.227 at 11-24-22 13:44:22
Local updater ID is 10.122.190.227 on interface Fa1 (first layer3 interface found)
```

Feature VLAN:

-----

VTP Operating Mode	:	Server
Maximum VLANs supported locally	:	1005
Number of existing VLANs	:	16
Configuration Revision	:	4
MD5 digest	:	0xCB 0x67 0x2A 0xF1 0x9A 0x8D 0xD3 0x1B 0xA8 0xB3 0x89 0xB2 0x32 0x63 0xA6 0xD0

Switch-C#

Switch-C#

show vlan brief

VLAN	Name	Status	Ports
1	default	active	Gi1/1, Gi1/2, Gi1/3, Gi1/4 Gi1/5, Gi1/6, Gi1/7, Gi1/8 Gi1/9, Gi1/10, Gi1/11, Gi1/12 Gi1/13, Gi1/14, Gi1/15, Gi1/16 Gi1/17, Gi1/18, Gi1/19, Gi1/20 Gi1/21, Gi1/22, Gi1/23, Gi1/24 Gi1/25, Gi1/26, Gi1/27, Gi1/28 Gi1/29, Gi1/30, Gi1/31, Gi1/32 Gi1/33, Gi1/34, Gi1/35, Gi1/36 Gi1/37, Gi1/38, Gi1/39, Gi1/40 Gi1/41, Gi1/42, Gi1/43, Gi1/44 Gi1/45, Gi1/46, Gi1/47, Gi1/48 Te3/2, Te3/3, Te3/4, Te3/5 Te3/6, Te3/7, Te3/8
2	VLAN0002	active	
3	VLAN0003	active	
4	VLAN0004	active	
5	VLAN0005	active	
6	VLAN0006	active	
7	VLAN0007	active	

VLAN	Name	Status	Ports
8	VLAN0008	active	
9	VLAN0009	active	
10	VLAN0010	active	
11	VLAN0011	active	
12	VLAN0012	active	

1002 fddi-default	act/unsup
1003 trcrf-default	act/unsup
1004 fddinet-default	act/unsup
1005 trbrf-default	act/unsup

Switch-C#

```

Switch-A#
Switch-A#

configure terminal

Switch-A(config)#
vtp version 2

Switch-A(config)#
vtp mode client

Setting device to VTP Client mode for VLANS.
Switch-A(config)#

end

Switch-A#

Switch-A#

show vtp status

VTP Version capable : 1 to 3
VTP version running : 2
VTP Domain Name :
VTP Pruning Mode : Disabled
VTP Traps Generation : Disabled
Device ID : 6400.f13e.dc40
Configuration last modified by 10.122.190.226 at 11-25-22 02:34:10

Feature VLAN:
-----
VTP Operating Mode : Client
Maximum VLANs supported locally : 1005
Number of existing VLANs : 5
Configuration Revision : 1
MD5 digest : 0xD2 0x3F 0x31 0x25 0x6D 0xD1 0x3E 0x27
               0x62 0x77 0x7C 0xAF 0x0F 0xF6 0x72 0x02
Switch-A#

```

3. 在這個階段，兩台交換機之間手動建立了TRUNK。注意它們如何同步和觀察VTP資料包交換：

```

<#root>

Switch-A#
debug sw-vlan vtp events

vtp events debugging is on
Switch-A#

debug sw-vlan vtp packets

```

```

vtp packets debugging is on
Switch-A#
Switch-A#

configure terminal

Enter configuration commands, one per line. End with CNTL/Z.
Switch-A(config)#

interface tenGigabitEthernet3/2

Switch-A(config-if)#

no shut

Switch-A(config-if)#

end

Switch-A#

```

4. 交換機C向交換機A傳送總結通告。然後，交換機A從中獲取VTP域名，如以下輸出示例所示：

```

<#root>

!--- On Switch-A:

*Nov 25 02:45:46.580: VTP LOG RUNTIME: switchport trunk mode on Te3/2 has changed

*Nov 25 02:45:46.580: VTP LOG RUNTIME: delaying first flood on new trunk

*Nov 25 02:45:51.100: VTP LOG RUNTIME: Summary packet received in NULL domain state

*Nov 25 02:45:51.100: VTP LOG RUNTIME:
Summary packet received, domain = test, rev = 4, followers = 0, length 80, trunk Te3/2

!--- This indicates that Switch-A has received its first summary advertisement.

*Nov 25 02:45:51.100: VTP LOG RUNTIME: Validate TLVs : #tlvs 1, max blk size 4
*Nov 25 02:45:51.100: VTP LOG RUNTIME: Validate TLVs : #00, val 6, len 4
*Nov 25 02:45:51.100:
*Nov 25 02:45:51.100: summary: 02 01 00 04 74 65 73 74 00 00 00 00 00 00 00 00 ....test.....
*Nov 25 02:45:51.100: summary: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....z>c2211
*Nov 25 02:45:51.100: summary: 00 00 00 00 00 00 04 0A 7A BE E3 32 32 31 31 .....z>c2211
*Nov 25 02:45:51.100: summary: 32 34 31 34 30 31 31 35 8D 07 FE 82 E5 FE 49 AD 24140115..~.e~I-
*Nov 25 02:45:51.100: summary: 1A 6E A5 AB D0 35 C2 CA 00 00 00 01 06 01 00 02 .n%+P5BJ.....
*Nov 25 02:45:51.100:
*Nov 25 02:45:51.108: VTP LOG RUNTIME:
Transitioning from NULL to test domain

```

!--- This is where Switch-A gets the VTP domain name.

5. 啟用調試後，您可以看到交換器A收到沒有跟隨者的總結通告。因此，交換機A更新其域名並傳送通告請求以獲取VLAN資訊，如以下示例輸出所示：

```
<#root>
!--- On Switch-A

*Nov 25 02:45:51.108: VTP LOG RUNTIME: Summary packet rev 4 greater than domain test rev 0

*Nov 25 02:45:51.108: VTP LOG RUNTIME: Domain test currently not in updating state

*Nov 25 02:45:51.108: VTP LOG RUNTIME:
Summary packet with followers field zero

*Nov 25 02:45:51.108: VTP LOG RUNTIME:
Transmit vtp request, domain test, start value 0

!--- This is where the advertisement request is sent.
```

6. 交換機C向VLAN 1傳送另一個包含欄位跟隨者的彙總通告。包含所有VLAN的子集通告將顯示在此輸出中。然後，交換機A配置所有VLAN：

```
<#root>
!--- On Switch-A:

*Nov 25 02:45:51.595: VTP LOG RUNTIME:
Summary packet received, domain = test, rev = 4, followers = 1, length 80, trunk Te3/2

!--- Switch-A has received its second summary advertisement.

!--- This configuration revision is higher than that on Switch-A.

*Nov 25 02:45:51.595: VTP LOG RUNTIME: Validate TLVs : #tlvs 1, max blk size 4
*Nov 25 02:45:51.595: VTP LOG RUNTIME: Validate TLVs : #00, val 6, len 4
*Nov 25 02:45:51.595:
*Nov 25 02:45:51.596: summary: 02 01 01 04 74 65 73 74 00 00 00 00 00 00 00 00 ....test.....
*Nov 25 02:45:51.596: summary: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....z>c2211
*Nov 25 02:45:51.596: summary: 00 00 00 00 00 00 04 0A 7A BE E3 32 32 31 31 .....z>c2211
*Nov 25 02:45:51.596: summary: 32 34 31 34 30 31 31 35 8D 07 FE 82 E5 FE 49 AD 24140115..~.e~I-
*Nov 25 02:45:51.596: summary: 1A 6E A5 AB D0 35 C2 CA 00 00 00 01 06 01 00 02 .n%+P5BJ.....
*Nov 25 02:45:51.596:
*Nov 25 02:45:51.596: VTP LOG RUNTIME: Summary packet rev 4 greater than domain test rev 0

*Nov 25 02:45:51.596: VTP LOG RUNTIME: Domain test currently not in updating state
```

\*Nov 25 02:45:51.596: VTP LOG RUNTIME: pdu len 80, #tlvs 1

\*Nov 25 02:45:51.596: VTP LOG RUNTIME:

Subset packet received, domain = test, rev = 4, seq = 1, length = 420

!--- Switch-A has received its subset advertisement.

\*Nov 25 02:45:51.596: subset: 02 02 01 04 74 65 73 74 00 00 00 00 00 00 00 00 ....test.....

\*Nov 25 02:45:51.596: subset: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....

\*Nov 25 02:45:51.596: subset: 00 00 00 00 00 00 00 04 14 00 01 07 00 01 05 DC .....\\

\*Nov 25 02:45:51.596: subset: 00 01 86 A1 64 65 66 61 75 6C 74 00 14 00 01 08 ...!default....

\*Nov 25 02:45:51.596: subset: 00 02 05 DC 00 01 86 A2 56 4C 41 4E 30 30 32 ...\\."VLAN0002

\*Nov 25 02:45:51.596: subset: 14 00 01 08 00 03 05 DC 00 01 86 A3 56 4C 41 4E .....\\.#VLAN

\*Nov 25 02:45:51.596: subset: 30 30 30 33 14 00 01 08 00 04 05 DC 00 01 86 A4 0003.....\\.\$

\*Nov 25 02:45:51.596: subset: 56 4C 41 4E 30 30 30 34 14 00 01 08 00 05 05 DC VLAN0004.....\\

\*Nov 25 02:45:51.596: subset: 00 01 86 A5 56 4C 41 4E 30 30 30 35 14 00 01 08 ...%VLAN0005....

\*Nov 25 02:45:51.596: subset: 00 06 05 DC 00 01 86 A6 56 4C 41 4E 30 30 30 36 ...\\.&VLAN0006

\*Nov 25 02:45:51.596: subset: 14 00 01 08 00 07 05 DC 00 01 86 A7 56 4C 41 4E .....\\.'VLAN

\*Nov 25 02:45:51.596: subset: 30 30 30 37 14 00 01 08 00 08 05 DC 00 01 86 A8 0007.....\\.(

\*Nov 25 02:45:51.596: subset: 56 4C 41 4E 30 30 30 38 14 00 01 08 00 09 05 DC VLAN0008.....\\

\*Nov 25 02:45:51.596: subset: 00 01 86 A9 56 4C 41 4E 30 30 30 39 14 00 01 08 ...)VLAN0009....

\*Nov 25 02:45:51.596: subset: 00 0A 05 DC 00 01 86 AA 56 4C 41 4E 30 30 31 30 ...\\.\*VLAN0010

\*Nov 25 02:45:51.596: subset: 14 00 01 08 00 0B 05 DC 00 01 86 AB 56 4C 41 4E .....\\.+VLAN

\*Nov 25 02:45:51.596: subset: 30 30 31 31 14 00 01 08 00 0C 05 DC 00 01 86 AC 0011.....\\.,

\*Nov 25 02:45:51.596: subset: 56 4C 41 4E 30 30 31 32 18 00 02 0C 03 EA 05 DC VLAN0012....j.\\

\*Nov 25 02:45:51.596: subset: 00 01 8A 8A 66 64 64 69 2D 64 65 66 61 75 6C 74 ....fddi-default

\*Nov 25 02:45:51.596: subset: 30 00 03 0D 03 EB 11 78 00 01 8A 8B 74 72 63 72 0....k.x....trcr

\*Nov 25 02:45:51.596: subset: 66 2D 64 65 66 61 75 6C 74 00 00 00 01 01 0C CC f-default.....L

\*Nov 25 02:45:51.596: subset: 04 01 03 ED 07 01 00 02 08 01 00 07 09 01 00 07 ...m.....

\*Nov 25 02:45:51.596: subset: 20 00 04 0F 03 EC 05 DC 00 01 8A 8C 66 64 64 69 ....l\\....fddi

\*Nov 25 02:45:51.596: subset: 6E 65 74 2D 64 65 66 61 75 6C 74 00 03 01 00 01 net-default.....

\*Nov 25 02:45:51.596: subset: 24 00 05 0D 03 ED 11 78 00 01 8A 8D 74 72 62 72 \$....m.x....trbr

\*Nov 25 02:45:51.596: subset: 66 2D 64 65 66 61 75 6C 74 00 00 00 02 01 00 0F f-default.....

\*Nov 25 02:45:51.596: subset: 03 01 00 02 ....

\*Nov 25 02:45:51.596:

\*Nov 25 02:45:51.666: VTP LOG RUNTIME: Transmit vtp summary, domain test, rev 4, followers 1, tlv blk size 8 (inc #tlv field),  
MD5 digest calculated = 8D 07 FE 82 E5 FE 49 AD 1A 6E A5 AB D0 35 C2 CA

## 7. 此時，兩台交換器都已同步：

<#root>

Switch-A#

show vtp status

VTP Version capable : 1 to 3

VTP version running : 2

VTP Domain Name : test

VTP Pruning Mode : Disabled

VTP Traps Generation : Disabled

Device ID : 6400.f13e.dc40

Configuration last modified by 10.122.190.227 at 11-24-22 14:01:15

Feature VLAN:

-----  
VTP Operating Mode : Client  
Maximum VLANs supported locally : 1005  
Number of existing VLANs : 16  
Configuration Revision : 4  
MD5 digest : 0x8D 0x07 0xFE 0x82 0xE5 0xFE 0x49 0xAD  
0xA1 0x6E 0xA5 0xAB 0xD0 0x35 0xC2 0xCA

Switch-A#

show vlan brief

VLAN	Name	Status	Ports
1	default	active	Gi1/1, Gi1/2, Gi1/4, Gi1/5 Gi1/6, Gi1/7, Gi1/8, Gi1/9 Gi1/10, Gi1/11, Gi1/12, Gi1/13 Gi1/14, Gi1/15, Gi1/16, Gi1/17 Gi1/18, Gi1/19, Gi1/20, Gi1/21 Gi1/22, Gi1/23, Gi1/24, Gi1/25 Gi1/26, Gi1/27, Gi1/28, Gi1/29 Gi1/30, Gi1/31, Gi1/32, Gi1/33 Gi1/34, Gi1/35, Gi1/36, Gi1/37 Gi1/38, Gi1/39, Gi1/40, Gi1/41 Gi1/42, Gi1/43, Gi1/44, Gi1/45 Gi1/46, Gi1/47, Gi1/48, Te3/3 Te3/4, Te3/5, Te3/6, Te3/7 Te3/8
2	VLAN0002	active	
3	VLAN0003	active	
4	VLAN0004	active	
5	VLAN0005	active	
6	VLAN0006	active	
7	VLAN0007	active	

VLAN	Name	Status	Ports
8	VLAN0008	active	
9	VLAN0009	active	
10	VLAN0010	active	
11	VLAN0011	active	
12	VLAN0012	active	
1002	fdmi-default	act/unsup	
1003	trcrf-default	act/unsup	
1004	fddinet-default	act/unsup	
1005	trbrf-default	act/unsup	

## 範例 2：

此範例顯示如何在執行Cisco IOS軟體的Catalyst 6000上驗證VTP組態：

```
<#root>
Switch#
show vtp status

VTP Version: 2
Configuration Revision: 247
Maximum VLANs supported locally: 1005
Number of existing VLANs: 33
VTP Operating Mode: Client
VTP Domain Name: Lab_Network
VTP Pruning Mode: Enabled
VTP V2 Mode: Disabled
VTP Traps Generation: Disabled
MD5 digest: 0x45 0x52 0xB6 0xFD 0x63 0xC8 0x49 0x80
Configuration last modified by 0.0.0.0 at 8-12-99 15:04:49
Switch#
```

## 範例 3：

此範例顯示如何在執行Cisco IOS軟體的Catalyst 6000上顯示VTP統計資訊：

```
<#root>
Switch#
show vtp counters

VTP statistics:
Summary advertisements received: 7
Subset advertisements received: 5
Request advertisements received: 0
Summary advertisements transmitted: 997
Subset advertisements transmitted: 13
Request advertisements transmitted: 3
Number of config revision errors: 0
Number of config digest errors: 0
Number of V1 summary errors: 0
VTP pruning statistics:

Trunk          Join Transmitted Join Received      Summary advts received
                           from on-pruning-capable device
-----
Fa5/8          43071           42766            5
```

## VTP故障排除

請參閱[疑難排解VLAN中繼線通訊協定\(VTP\)](#)以了解疑難排解VTP的相關資訊。

---

 附註：只有註冊的思科使用者才能訪問內部站點、工具和文檔。

---

## 相關資訊

- [虛擬 LAN/VLAN 主幹協定 \(VLAN/VTP\)](#)
- [IP路由技術支援](#)
- [Show命令 — Cisco IOS配置基礎命令參考](#)
- [思科技術支援與下載](#)

## 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）。