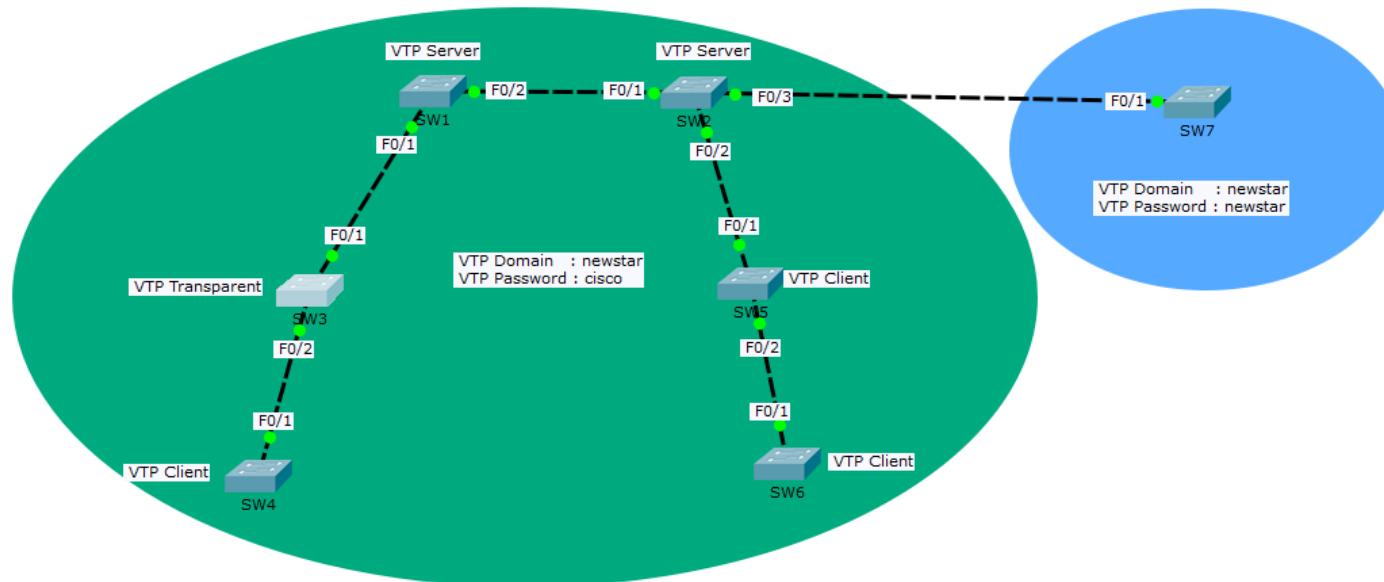# HƯỚNG DẪN LAB
LAB 11 – VTP

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Sơ đồ LAB :

Yêu cầu

- Đấu nối và đặt tên thiết bị như sơ đồ
- Cấu hình trunk cho các kết nối giữa các switch
- Cấu hình VTP như sơ đồ

Thiết bị	VTP Domain	VTP Password	Vai trò
SW1	newstar	cisco	VTP Server
SW2	newstar	cisco	VTP Server
SW3	newstar	cisco	VTP Transparent
SW4	newstar	cisco	VTP Client
SW5	newstar	cisco	VTP Client
SW6	newstar	cisco	VTP Client
SW7	newstar	newstar	VTP Client

- Thử tạo/sửa/xóa vlan trên các switch và quan sát ảnh hưởng của VTP

Các bước thực hiện

Bước 1: Đấu nối và đổi tên thiết bị như sơ đồ.

Bước 2: Cấu hình trunk trên các switch

SW1

```
SW1(config)#interface range F0/1-2
SW1(config-if-range)#switchport mode trunk

Kiểm tra :
SW1#show interfaces trunk
Port          Mode            Encapsulation   Status          Native vlan
Fa0/1         on              802.1q          trunking        1
Fa0/2         on              802.1q          trunking        1

Port          Vlans allowed on trunk
Fa0/1         1-1005
Fa0/2         1-1005

Port          Vlans allowed and active in management domain
Fa0/1         1
Fa0/2         1

Port          Vlans in spanning tree forwarding state and not pruned
Fa0/1         none
Fa0/2         none
```

SW2

```
SW2(config)#interface range F0/1-3
SW2(config-if-range)#switchport mode trunk

Kiểm tra:
SW2#show interfaces trunk
```

```
Port          Mode          Encapsulation  Status        Native vlan
Fa0/1         on            802.1q         trunking      1
Fa0/2         on            802.1q         trunking      1
Fa0/3         on            802.1q         trunking      1

Port          Vlans allowed on trunk
Fa0/1         1-1005
Fa0/2         1-1005
Fa0/3         1-1005

Port          Vlans allowed and active in management domain
Fa0/1         1
Fa0/2         1
Fa0/3         1

Port          Vlans in spanning tree forwarding state and not pruned
Fa0/1         1
Fa0/2         none
Fa0/3         none
```

SW3

```
SW3(config)#interface range F0/1-2
SW3(config-if-range)#switchport mode trunk
```

Kiểm tra:

```
SW3#show interfaces trunk
Port          Mode          Encapsulation  Status        Native vlan
Fa0/1         on            802.1q         trunking      1
Fa0/2         on            802.1q         trunking      1

Port          Vlans allowed on trunk
Fa0/1         1-1005
Fa0/2         1-1005

Port          Vlans allowed and active in management domain
Fa0/1         1
Fa0/2         1

Port          Vlans in spanning tree forwarding state and not pruned
Fa0/1         1
Fa0/2         none
```

SW4

```
SW4(config)#interface F0/1
SW4(config-if)#switchport mode trunk
```

Kiểm tra:

```
SW4#show interfaces trunk
Port          Mode          Encapsulation  Status        Native vlan
Fa0/1         on            802.1q         trunking      1

Port          Vlans allowed on trunk
Fa0/1         1-1005

Port          Vlans allowed and active in management domain
Fa0/1         1

Port          Vlans in spanning tree forwarding state and not pruned
Fa0/1         1
```

SW5

```
SW5(config)#interface range F0/1-2
SW5(config-if-range)#switchport mode trunk

Kiểm tra:
SW5#show interfaces trunk
Port        Mode           Encapsulation  Status       Native vlan
Fa0/1       on             802.1q         trunking     1
Fa0/2       on             802.1q         trunking     1

Port        Vlans allowed on trunk
Fa0/1       1-1005
Fa0/2       1-1005

Port        Vlans allowed and active in management domain
Fa0/1       1
Fa0/2       1

Port        Vlans in spanning tree forwarding state and not pruned
Fa0/1       1
Fa0/2       none
```

SW6

```
SW6(config)#interface F0/1
SW6(config-if)#switchport mode trunk

Kiểm tra:
SW6#show interfaces trunk
Port        Mode           Encapsulation  Status       Native vlan
Fa0/1       on             802.1q         trunking     1

Port        Vlans allowed on trunk
Fa0/1       1-1005

Port        Vlans allowed and active in management domain
Fa0/1       1

Port        Vlans in spanning tree forwarding state and not pruned
Fa0/1       1
```

SW7

```
SW7(config)#interface F0/1
SW7(config-if)#switchport mode trunk

Kiểm tra:
SW7#show interfaces trunk
Port        Mode           Encapsulation  Status       Native vlan
Fa0/1       on             802.1q         trunking     1

Port        Vlans allowed on trunk
Fa0/1       1-1005

Port        Vlans allowed and active in management domain
Fa0/1       1

Port        Vlans in spanning tree forwarding state and not pruned
Fa0/1       1
```

Bước 3 : Cấu hình VTP cho các switch

Cấu hình gồm 3 bước :

- Xác định VTP Domain
- Xác định VTP Password
- Xác định vai trò của Switch (là server, client hay transparent)

Có thể kiểm tra cấu hình bằng 2 lệnh :

- show vtp status
  - Configuration Revision : Revision number
  - VTP Operating Mode : vai trò của Switch
  - VTP Domain Name : VTP Domain
  - MD5 Digest : VTP password đã bị mã hóa
- show vtp password : xem VTP password không mã hóa

SW1
``` SW1(config)#vtp domain newstar SW1(config)#vtp password cisco SW1(config)#vtp mode server Kiểm tra: SW1#show vtp status VTP Version   : 2 Configuration Revision   : 0 Maximum VLANs supported locally : 255 Number of existing VLANs   : 5 VTP Operating Mode   : Server VTP Domain Name   : newstar VTP Pruning Mode   : Disabled VTP V2 Mode   : Disabled VTP Traps Generation   : Disabled MD5 digest   : 0x83 0xA8 0xC4 0x33 0x3C 0x94 0x28 0x0B Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00 Local updater ID is 0.0.0.0 (no valid interface found) SW1#show vtp password VTP Password: cisco ```

SW2
``` SW2(config)#vtp domain newstar SW2(config)#vtp password cisco SW2(config)#vtp mode server Kiểm tra: SW2#show vtp status VTP Version   : 2 Configuration Revision   : 0 Maximum VLANs supported locally : 255 Number of existing VLANs   : 5 VTP Operating Mode   : Server VTP Domain Name   : newstar VTP Pruning Mode   : Disabled VTP V2 Mode   : Disabled VTP Traps Generation   : Disabled ```

```
MD5 digest                        : 0x83 0xA8 0xC4 0x33 0x3C 0x94 0x28 0x0B
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00
Local updater ID is 0.0.0.0 (no valid interface found)

SW2#show vtp password
VTP Password: cisco
```

SW3

```
SW3(config)#vtp domain newstar
SW3(config)#vtp password cisco
SW3(config)#vtp mode transparent

Kiểm tra:
SW3#show vtp status
VTP Version                     : 2
Configuration Revision          : 0
Maximum VLANs supported locally : 255
Number of existing VLANs        : 5
VTP Operating Mode              : Transparent
VTP Domain Name                 : newstar
VTP Pruning Mode                : Disabled
VTP V2 Mode                     : Disabled
VTP Traps Generation            : Disabled
MD5 digest                      : 0x83 0xA8 0xC4 0x33 0x3C 0x94 0x28 0x0B
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00

SW3#show vtp password
VTP Password: cisco
```

SW4

```
SW4(config)#vtp domain newstar
SW4(config)#vtp password cisco
SW4(config)#vtp mode client

Kiểm tra:
SW4#show vtp status
VTP Version                     : 2
Configuration Revision          : 0
Maximum VLANs supported locally : 255
Number of existing VLANs        : 5
VTP Operating Mode              : Client
VTP Domain Name                 : newstar
VTP Pruning Mode                : Disabled
VTP V2 Mode                     : Disabled
VTP Traps Generation            : Disabled
MD5 digest                      : 0x83 0xA8 0xC4 0x33 0x3C 0x94 0x28 0x0B
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00

SW4#show vtp password
VTP Password: cisco
```

SW5

```
SW5(config)#vtp domain newstar
SW5(config)#vtp password cisco
SW5(config)#vtp mode client

Kiểm tra:
SW5#show vtp status
```

```
VTP Version                      : 2
Configuration Revision           : 0
Maximum VLANs supported locally : 255
Number of existing VLANs         : 5
VTP Operating Mode               : Client
VTP Domain Name                  : newstar
VTP Pruning Mode                 : Disabled
VTP V2 Mode                      : Disabled
VTP Traps Generation             : Disabled
MD5 digest                       : 0x83 0xA8 0xC4 0x33 0x3C 0x94 0x28 0x0B
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00

SW5#show vtp password
VTP Password: cisco
```

SW6

```
SW6(config)#vtp domain newstar
SW6(config)#vtp password cisco
SW6(config)#vtp mode client
```

Kiểm tra:
```
SW6#show vtp status
VTP Version                      : 2
Configuration Revision           : 0
Maximum VLANs supported locally : 255
Number of existing VLANs         : 5
VTP Operating Mode               : Client
VTP Domain Name                  : newstar
VTP Pruning Mode                 : Disabled
VTP V2 Mode                      : Disabled
VTP Traps Generation             : Disabled
MD5 digest                       : 0x83 0xA8 0xC4 0x33 0x3C 0x94 0x28 0x0B
Configuration last modified by 0.0.0.0 at 0-0-00 00:00:00

SW6#show vtp password
VTP Password: cisco
```

SW7

```
SW7(config)#vtp domain newstar
SW7(config)#vtp password newstar
SW7(config)#vtp mode client
```

Kiểm tra
```
SW7#show vtp status
VTP Version                      : 2
Configuration Revision           : 0
Maximum VLANs supported locally : 255
Number of existing VLANs         : 5
VTP Operating Mode               : Client
VTP Domain Name                  : newstar
VTP Pruning Mode                 : Disabled
VTP V2 Mode                      : Disabled
VTP Traps Generation             : Disabled
MD5 digest                       : 0xA4 0xC8 0x48 0x9F 0x87 0x33 0xE0 0x22

SW7#show vtp password
VTP Password: newstar
```

Bước 4 : Tạo VLAN trên SW1 (VTP Server) và quan sát sự thay đổi trên các switch còn lại

SW1

```
SW1(config)#vlan 10
SW1(config-vlan)#exit
SW1(config)#vlan 20
SW1(config-vlan)#exit

Kiểm tra:
SW1#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

SW2

```
SW2#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/4, Fa0/5, Fa0/6, Fa0/7
                                                Fa0/8, Fa0/9, Fa0/10, Fa0/11
                                                Fa0/12, Fa0/13, Fa0/14, Fa0/15
                                                Fa0/16, Fa0/17, Fa0/18, Fa0/19
                                                Fa0/20, Fa0/21, Fa0/22, Fa0/23
                                                Fa0/24, Gig0/1, Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

SW3

```
SW3#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
```

```
1005 trnet-default                    active
```

```
SW4#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

SW5

```
SW5#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

SW6

```
SW6#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

SW7

```
SW7#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                Gig0/2
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

Từ các output trên, có thể thấy :

- SW2 có VLAN 10 và VLAN 20, chứng tỏ VTP Server đồng bộ thông tin VLAN từ gói tin VTA.
- SW3 không có VLAN 10 và 20, chứng tỏ VTP Transparent không đồng bộ thông tin VLAN từ VTA.
- SW4 có VLAN 10 và 20, chứng tỏ
  - VTP Transparent (là SW3) trung chuyển VTA
  - VTP Client đồng bộ thông tin VLAN từ VTA
- SW5 có VLAN 10 và 20, chứng tỏ
  - VTP Server (là SW2) trung chuyển VTA
  - VTP Client đồng bộ thông tin VLAN từ VTA
- SW6 có VLAN 10 và 20, chứng tỏ
  - VTP Client (là SW5) trung chuyển VTA
  - VTP Client đồng bộ thông tin VLAN từ VTA
- SW7 không có VLAN 10 và 20, chứng tỏ
  - VTP password giữa SW2 và SW7 không khớp, nên SW2 không gửi VTA cho SW7

Bước 5: Tạo vlan trên SW3 (VTP Transparent) và quan sát sự thay đổi trên các switch còn lại

SW3

```
SW3(config)#vlan 30
SW3(config-vlan)#exit

Kiểm tra
SW3#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
30   VLAN0030                         active
1002 fddi-default                     active
1003 token-ring-default               active
```

```
1004 fddinet-default                  active
1005 trnet-default                    active
```

```
SW1#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

```
SW2#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/4, Fa0/5, Fa0/6, Fa0/7
                                                Fa0/8, Fa0/9, Fa0/10, Fa0/11
                                                Fa0/12, Fa0/13, Fa0/14, Fa0/15
                                                Fa0/16, Fa0/17, Fa0/18, Fa0/19
                                                Fa0/20, Fa0/21, Fa0/22, Fa0/23
                                                Fa0/24, Gig0/1, Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

```
SW4#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

SW5
| ```
SW5#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
``` |

SW6
| ```
SW6#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                Gig0/2
10   VLAN0010                         active
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
``` |

Từ các output, có thể thấy :

- Các switch còn lại không hề có VLAN 30, chứng tỏ VTP Transparent không đồng bộ thông tin VLAN cho các switch khác.

Bước 6 : Tạo vlan trên SW4 (VTP Client) và quan sát sự thay đổi

SW4
| ```
SW4(config)#vlan 40
VTP VLAN configuration not allowed when device is in CLIENT mode.
``` |

Log cho thấy SW4 không được phép tạo VLAN khi đang là VTP CLIENT.

Kiểm tra:

SW4
| ```
SW4#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
``` |

```
1     default                           active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                   Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                   Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                   Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                   Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                   Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                   Gig0/2
10    VLAN0010                          active
20    VLAN0020                          active
1002  fddi-default                      active
1003  token-ring-default                active
1004  fddinet-default                   active
1005  trnet-default                     active
```

Output không hề có VLAN 40.

Bước 7: xóa vlan 10 trên SW2 (VTP Server) và quan sát sự thay đổi trên các switch còn lại

SW2

```
SW2(config)#no vlan 10
```

Kiểm tra:
```
SW2#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/4, Fa0/5, Fa0/6, Fa0/7
                                                Fa0/8, Fa0/9, Fa0/10, Fa0/11
                                                Fa0/12, Fa0/13, Fa0/14, Fa0/15
                                                Fa0/16, Fa0/17, Fa0/18, Fa0/19
                                                Fa0/20, Fa0/21, Fa0/22, Fa0/23
                                                Fa0/24, Gig0/1, Gig0/2
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

SW1

```
SW1#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active

SW1#show vtp status
VTP Version                     : 2
Configuration Revision          : 5
```

```
Maximum VLANs supported locally : 255
Number of existing VLANs        : 6
VTP Operating Mode              : Server
VTP Domain Name                 : newstar
VTP Pruning Mode                : Disabled
VTP V2 Mode                     : Disabled
VTP Traps Generation            : Disabled
MD5 digest                      : 0x43 0xEC 0xAB 0xCA 0x2B 0x03 0x4A 0xDE
Configuration last modified by 0.0.0.0 at 3-1-93 01:03:49
Local updater ID is 0.0.0.0 (no valid interface found)
```

```
SW2#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/4, Fa0/5, Fa0/6, Fa0/7
                                                Fa0/8, Fa0/9, Fa0/10, Fa0/11
                                                Fa0/12, Fa0/13, Fa0/14, Fa0/15
                                                Fa0/16, Fa0/17, Fa0/18, Fa0/19
                                                Fa0/20, Fa0/21, Fa0/22, Fa0/23
                                                Fa0/24, Gig0/1, Gig0/2
40   VLAN0040                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active

SW3#show vtp status
VTP Version                     : 2
Configuration Revision          : 0
Maximum VLANs supported locally : 255
Number of existing VLANs        : 6
VTP Operating Mode              : Transparent
VTP Domain Name                 : newstar
VTP Pruning Mode                : Disabled
VTP V2 Mode                     : Disabled
VTP Traps Generation            : Disabled
MD5 digest                      : 0x83 0xA8 0xC4 0x33 0x3C 0x94 0x28 0x0B
Configuration last modified by 0.0.0.0 at 3-1-93 01:03:49
Local updater ID is 0.0.0.0 (no valid interface found)
```

```
SW4#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                Gig0/2
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

```
SW4#show vtp status
VTP Version                 : 2
Configuration Revision      : 5
Maximum VLANs supported locally : 255
Number of existing VLANs    : 6
VTP Operating Mode          : Client
VTP Domain Name             : newstar
VTP Pruning Mode            : Disabled
VTP V2 Mode                 : Disabled
VTP Traps Generation        : Disabled
MD5 digest                  : 0x43 0xEC 0xAB 0xCA 0x2B 0x03 0x4A 0xDE
Configuration last modified by 0.0.0.0 at 3-1-93 01:03:49
```

SW5

```
SW5#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                Fa0/23, Fa0/24, Gig0/1, Gig0/2
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active

SW5#show vtp status
VTP Version                 : 2
Configuration Revision      : 5
Maximum VLANs supported locally : 255
Number of existing VLANs    : 6
VTP Operating Mode          : Client
VTP Domain Name             : newstar
VTP Pruning Mode            : Disabled
VTP V2 Mode                 : Disabled
VTP Traps Generation        : Disabled
MD5 digest                  : 0x43 0xEC 0xAB 0xCA 0x2B 0x03 0x4A 0xDE
Configuration last modified by 0.0.0.0 at 3-1-93 01:03:49
```

SW6

```
SW6#show vlan brief

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                Fa0/6, Fa0/7, Fa0/8, Fa0/9
                                                Fa0/10, Fa0/11, Fa0/12, Fa0/13
                                                Fa0/14, Fa0/15, Fa0/16, Fa0/17
                                                Fa0/18, Fa0/19, Fa0/20, Fa0/21
                                                Fa0/22, Fa0/23, Fa0/24, Gig0/1
                                                Gig0/2
20   VLAN0020                         active
1002 fddi-default                     active
1003 token-ring-default               active
1004 fddinet-default                  active
1005 trnet-default                    active
```

```
SW6#show vtp status
VTP Version                 : 2
Configuration Revision      : 5
Maximum VLANs supported locally : 255
Number of existing VLANs    : 6
VTP Operating Mode          : Client
VTP Domain Name             : newstar
VTP Pruning Mode            : Disabled
VTP V2 Mode                 : Disabled
VTP Traps Generation        : Disabled
MD5 digest                  : 0x43 0xEC 0xAB 0xCA 0x2B 0x03 0x4A 0xDE
Configuration last modified by 0.0.0.0 at 3-1-93 01:03:49
```

Từ các output có thể thấy :

- Số revision tăng lên
- VLAN 20 đã được xóa khỏi tất cả các switch (trừ SW3 là VTP Transparent)

Kết luận

	VTP Server	VTP Client	VTP Transparent
Khả năng tạo/sửa/xóa VLAN	✓		✓ (chỉ local)
Đồng bộ thông tin VLAN	✓	✓	
Chuyển tiếp VTA	✓	✓	✓