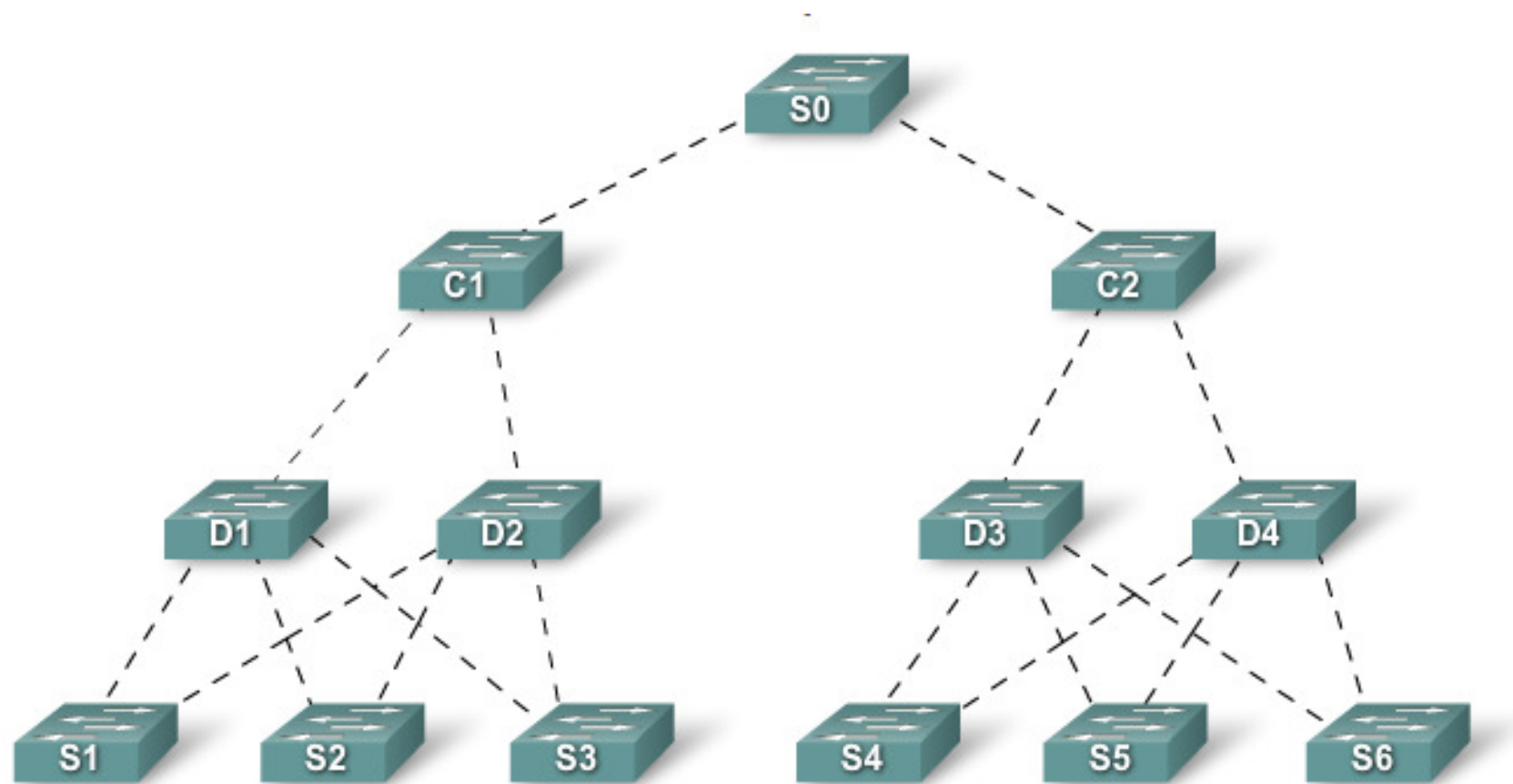


VTP

Chapter 4

- VLAN Trunking protocol
- Cisco proprietary
- Does not support extended vlans (1006 – 4094)

- Management of VLANs in large enterprises
 - Add vlans
 - Delete vlans
 - Rename vlans



VTP modes

- Server (default)
 - Creates, deletes and renames vlans in the domain
 - Vlans are stored in NVRAM
- Client
 - Cannot create, delete and rename vlans
- Transparent
 - Does not participate in VTP
 - Forwards VTP advertisements

S1#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 :
VTP Pruning Mode : Disabled
VTP V2 Mode : Disabled
VTP Traps Generation : Disabled
MD5 digest : 0x3F 0x37 0x45 0x9A 0x37 0x53 0xA6 0xDE
Configuration last modified by 0.0.0.0 at 3-1-93 00:14:07
S1#
```

Default configuration

- Version 1
- Domain name: null
- Mode: Server
- Config revision: 0

Advertisements

- Summary
- Subset
- Request

- Multicast on: 01-00-0C-CC-CC-CC

Summary

- 5 minute intervals
- Immediately after a configuration has been made
- Send by client and server

Summary Advertisement			
Version	Code	Followers	MgmtD Len
Management Domain Name (Zero-Padded to 32 Bytes)			
Configuration Revision Number			
Updater Identity			
Update Timestamp (12 Bytes)			
MD5 Digest (16 Bytes)			

Subset

- Triggered by:
- Creating a vlan
- Deleting a vlan
- Renaming a vlan

Subset Advertisements			
Version	Code	Seq-Number	MgmtD Len
Management Domain Name (zero-padded to 32 bytes)			
Configuration Revision Number			
VLAN-info Field 1			
:			
VLAN-info Field N			

Request

- Triggered by:
- Changing the domain name
- Switch reset
- Received a summary adv. with a higher rev. number

Advertisement Request			
Version	Code	Rsvd	MgmtD Len
Management Domain Name (zero-padded to 32 bytes)			
Start Value			

Configuration

```
Switch(config)# vtp mode server
```

```
Switch(config)# vtp domain <Domain_name>
```

```
Switch(config)# vtp mode client
```

```
Switch(config)# vtp domain <Domain_name>
```

```
Switch(config)# vtp mode transparent
```

```
Switch(config)# vtp password Hemmeligt_Password
```

VTP Pruning

- Limits unnecessary flooding
- Dynamically adds/removes vlans from trunks
- Disabled by default
- Configured only on VTP server

```
Switch(config)# vtp pruning
```