

## What is DTP?

“DTP is a Cisco Proprietary Layer-2 Protocol for Trunk Negotiations”

DTP is enabled by default on Trunk Ports in Cisco equipment & both ends of a Trunk Links should support DTP for it to work.

## Key Attributes

**Protocol Type:** Layer2 Protocol  
**Standard:** Cisco Proprietary  
**Purpose:** Trunk Negotiation at two ends of a Layer2 link

DTP Port Modes	
<b>Access (DTP OFF)</b>	Permanent non-trunking mode
<b>Trunk (DTP ON)</b>	Permanent trunking mode
<b>Dynamic Auto</b>	Wait for the other end to ask to become Trunk
<b>Dynamic Desirable</b>	Force the other end to become Trunk
<b>Nonegotiate (Access)</b>	Disable DTP & become Access <a href="http://www.networkwalks.com">www.networkwalks.com</a>
<b>Nonegotiate (Trunk)</b>	Disable DTP & become Trunk

## DTP Admin Mode Combinations & resultant Operational Mode www.networkwalks.com

Admin Mode	Dynamic Auto	Dynamic Desirable	Trunk (ON)	Access (OFF)	Nonegotiate (Access)	Nonegotiate (Trunk)
<b>Dynamic Auto</b>	Static access	Trunk	Trunk	Static access	Static access	Unexpected Results
<b>Dynamic Desirable</b>	Trunk	Trunk	Trunk	Static access	Static access	Unexpected Results
<b>Trunk (ON)</b>	Trunk	Trunk	Trunk	Unexpected Results	Unexpected Results	Trunk
<b>Access (OFF)</b>	Static access	Static access	Unexpected Results	Static access	Static access	Unexpected Results
<b>Nonegotiate (Access)</b>	Static access	Static access	Unexpected Results	Static access	Static access	Unexpected Results
<b>Nonegotiate (Trunk)</b>	Unexpected Results	Unexpected Results	Trunk	Unexpected Results	Unexpected Results	Trunk

*\*Admin Mode = Input  
Operational Mode = Output*

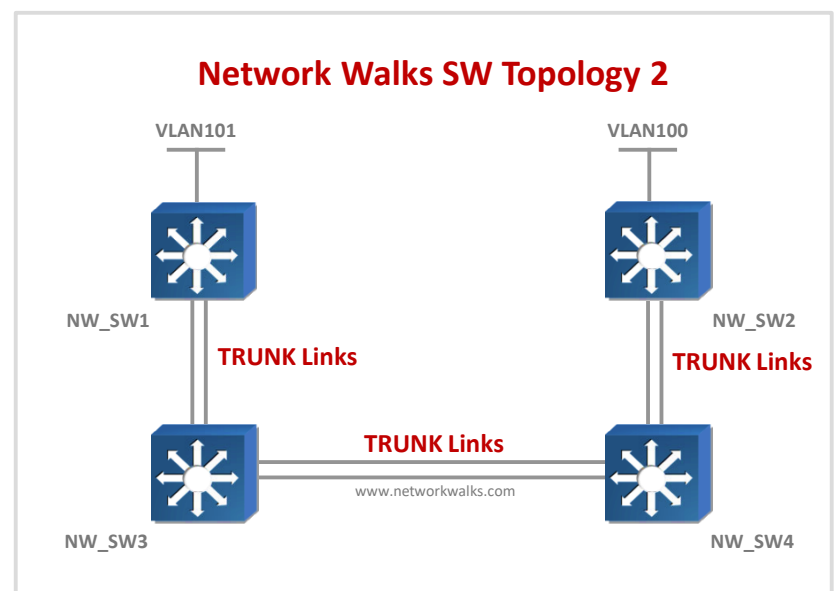
## DTP Configuration Commands (Cisco)

```
nw_SW(config-if) switchport mode access
nw_SW(config-if) switchport mode trunk
nw_SW(config-if) switchport mode dynamic desirable
nw_SW(config-if) switchport mode dynamic auto
nw_SW(config-if) switchport nonegotiate
```

## DTP show Commands (Cisco)

```
nw_SW# show interfaces f0/1 switchport
nw_SW# show interface trunk
#show interface status | i trunk
```

*\*By default, Ethernet interfaces on most Cisco switches are set to **desirable** mode*



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