

Link Layer Discovery Protocol (LLDP)

Lab Summary

Enable LLDP globally on all switches. Disable LLDP locally on SW-1 interface Fa0/1 and verify LLDP neighbor connectivity from SW-2.

Figure 1 Lab Topology



Lab Configuration

Start Packet Tracer File: **lldp.pkt**

Click on *SW-1* icon and select *CLI* folder.

Step 1: Enter global configuration mode.

```
SW-1> enable
SW-1# configure terminal
```

Step 2: Enable CDP globally on SW-1.

```
SW-1(config)# lldp run
```

Step 3: Disable LLDP locally on SW-1 interface Fa0/1.

```
SW-1(config)# interface fastethernet0/1
SW-1(config-if)# no lldp receive
SW-1(config-if)# no lldp transmit
SW-1(config-if)# end
SW-1# copy running-config startup-config
```

Click on *SW-2* icon and select *CLI* folder.

Step 4: Enter global configuration mode.

```
SW-2> enable  
SW-2# configure terminal
```

Step 5: Enable LLDP globally on SW-2.

```
SW-2(config)# lldp run  
SW-2(config)# end  
SW-2# copy running-config startup-config
```

Click on *SW-3* icon and select *CLI* folder.

Step 6: Enter global configuration mode.

```
SW-3> enable  
SW-3# configure terminal
```

Step 7: Enable LLDP globally on SW-3.

```
SW-3(config)# lldp run  
SW-3(config)# end  
SW-3# copy running-config startup-config
```

Click on *SW-4* icon and select *CLI* folder.

Step 8: Enter global configuration mode.

```
SW-4> enable  
SW-4# configure terminal
```

Step 9: Enable LLDP globally on SW-4.

```
SW-4(config)# lldp run  
SW-4(config)# end  
SW-4# copy running-config startup-config
```

Step 10: Verify Lab

Click on Fast Forward 2-3 times so that Packet Tracer is updated for network convergence.

The following command lists all neighbors of SW-2 and the local interface. Note that LLDP was disabled on SW-1 interface Fa0/1. The result is that SW-1 is not listed as a neighbor.

SW-2# **show lldp**

SW-2# **show lldp neighbors**

Capability codes:

(R) Router, (B) Bridge, (T) Telephone, (C) DOCSIS Cable Device
(W) WLAN Access Point, (P) Repeater, (S) Station, (O) Other

Device ID	Local Intf	Hold-time	Capability	Port ID
SW-4	Fa0/1	120	B	Fa0/1
SW-3	Fa0/2	120	B	Fa0/1

Lab Notes:

LLDP is disabled globally as a default setting on Cisco devices. All supported network interfaces are disabled as well. This lab shows you how to enable LLDP initially or if it has been previously disabled. As with CDP you can select to enable or disable LLDP globally or per interface. Cisco ASA firewalls do not support LLDP for security reasons.