

Configure Link Layer Discovery Protocol Using CTC

Table 1: Feature History

Feature Name	Release Information	Description
Link Layer Discovery Protocol (LLDP) for NCS4K-4H-QDD-P Line Card	Cisco IOS XR Release 6.5.35	You can now configure LLDP on the packet interfaces of the NCS4K-4H-QDD-P Line Card.
Link Layer Discovery Protocol (LLDP) on NCS4K-4H-OPW-QC2 line card	Cisco IOS XR Release 6.5.33	In addition to the existing support on packet interfaces, Link Layer Discovery Protocol (LLDP) is now enabled on the client ports of the NCS4K-4H-OPW-QC2 card that carry Ethernet-over-OTN traffic. This feature allows NCS 4000 to discover peer devices connected either on the OTN ports or the packet interfaces. As a result, it reduces the need to use multiple protocols for network management, especially in a multi-vendor network.

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Link Layer Discovery Protocol for Ethernet-over-OTN

LLDP is a link layer protocol that allows NCS 4000 devices to transmit and receive device information from its neighbor devices connected through the client ports 0 to 9 that support Ethernet over OTN configuration and the package interfaces of the NCS4K-4H-OPW-QC2 line card. From R6.5.35, LLDP can also be configured on the client ports of the NCS4K-4H-QDD-P card that support packet interfaces.

Some of the details that can be sent and gathered by NCS 4000 if LLDP is enabled are:

- System name and description
- Port name and description
- MAC address and IP address
- Capabilities of the device

Enable LLDP on Line Card using CTC

Purpose	This procedure describes how to enable LLDP on NCS 4000 using CTC that allows to learn the information of its peer devices connected through the Ethernet over OTN port and the package interfaces.
Tools/Equipment	None
Prerequisite Procedures	"Login to CTC" in System Setup and Software Installation Guide for Cisco NCS 4000 Series
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Procedure

Step 1 In the node view, click **Provisioning**

Step 2 Click **Network** and then click **LLDP**.

Step 3 Select the **LLDP** check box to enable it.

Step 4 Click **Apply**.

View Neighbor Device Details Using CTC

Purpose	This procedure enables you to view the details of the neighbor devices connected to NCS 4000 through the Ethernet over the OTN port using CTC.
Tools/Equipment	None
Prerequisite Procedures	"Login to CTC" in System Setup and Software Installation Guide for Cisco NCS 4000 Series
Required/As Needed	As needed
Onsite/Remote	Onsite

Security Level	Provisioning or higher

Procedure

Step 1 In the node view, click **Maintenance** > **Network** > **LLDP**.

Step 2 Perform one of the following:

a) Click the **Neighbor** tab to view neighbor devices.

b) Click the **Neighbor Details** tab to view details of the neighbor devices.

Step 3 Click **Refresh** to refresh all the details in the tab.