



Link Layer Discovery Protocol

This document describes how to display the RPD LLDP neighbors and counters information. It also describes how to use the **show lldp neighbors/statistics** command.

Your software release may not support all the features that are documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. The Feature Information Table at the end of this document provides information about the documented features and lists the releases in which each feature is supported.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <http://tools.cisco.com/ITDIT/CFN/>. An account on <http://www.cisco.com/> is not required.

- [Hardware Compatibility Matrix for Cisco Remote PHY Device, on page 1](#)
- [Link Layer Discovery Protocol, on page 2](#)
- [Displaying LLDP Status, on page 2](#)
- [Feature Information for LLDP, on page 3](#)

Hardware Compatibility Matrix for Cisco Remote PHY Device



Note Unless otherwise specified, the hardware components introduced in a given Cisco Remote PHY Device Software Release are supported in all subsequent releases.

Table 1: Hardware Compatibility Matrix for the Cisco Remote PHY Device

| Cisco HFC Platform | Remote PHY Device |
|-------------------------------------|---|
| Cisco GS7000 Super High Output Node | Cisco 1x2 / Compact Shelf RPD Software 2.1 and Later Releases |

| Cisco HFC Platform | Remote PHY Device |
|---|--|
| Cisco GS7000 Super High Output Intelligent Node (iNode) | Cisco 1x2 / Compact Shelf RPD Software 4.1 and Later Releases Cisco Intelligent Remote PHY Device 1x2 <ul style="list-style-type: none"> • PID—iRPD-1X2= • PID—iRPD-1X2-PKEY= |



Note The -PKEY suffix in the PID indicates units that enable the SCTE-55-2 Out-of-Band protocol support.

Link Layer Discovery Protocol

LLDP (Link Layer Discovery Protocol) is a vendor-neutral link layer protocol in the Internet Protocol Suite used by network devices for advertising their identities and capabilities on an IEEE 802 local area network, principally wired Ethernet.

In Cisco 1x2 / Compact Shelf RPD Software 6.1, LldpEnable TLV is introduced to enable or disable the LLDP protocol.

This TLV will be documented in a forthcoming revision of the Cablelabs Remote PHY Specification. The TLV Type is 15.6.1. A Boolean value is defined to enable/disable LLDP operation on the RPD. 0 means LLDP is disabled. 1 means LLDP is enabled. Default value is 1.

Displaying LLDP Status

To display RPD LLDP neighbors and counters information, use **show lldp neighbors/statistics** command as shown in the following example.

```
R-PHY#show lldp neighbors
-----
LLDP neighbors:
-----
Interface:   eth0, via: LLDP, RID: 1, Time: 0 day, 21:10:24
Chassis:
  ChassisID:  mac 00:1c:0e:82:c3:26
  SysName:    K02-NM-SW.cisco.com
  SysDescr:   Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M), Version 12.2(37)SE,
  RELEASE SOFTWARE (fc2)
              Copyright (c) 1986-2007 by Cisco Systems, Inc.
              Compiled Thu 10-May-07 16:43 by antonino
  MgmtIP:    10.74.54.231
  Capability: Bridge, off
  Capability: Router, off
Port:
  PortID:    local Fa0/38
  PortDescr: FastEthernet0/38
-----
Interface:   vbh0, via: LLDP, RID: 2, Time: 0 day, 04:12:02
```

```

Chassis:
  ChassisID:      mac 00:de:fb:95:17:01
  SysName:        Cloud-Leaf-C
  SysDescr:       Cisco NX-OS(tm) n6000, Software (n6000-uk9), Version 7.3(3)N1(1), Interim
                  version 7.3(3)N1(0.535), RELEASE SOFTWARE Copyright (c) 2002-2012, 2016-2017 by Cisco
                  Systems, Inc. Compiled 11/18/2017 2:00:00
  MgmtIP:         10.74.54.173
  Capability:     Bridge, on
Port:
  PortID:         local Eth1/26
  PortDescr:     Ethernet1/26
UnknownTLVs:
  TLV:            OUI: 00,01,42, SubType: 1, Len: 1 01
  TLV:            OUI: 00,01,42, SubType: 2, Len: 16
                  24,00,24,00,24,00,24,00,24,00,24,00,24,00,24,00
  TLV:            OUI: 00,01,42, SubType: 6, Len: 4 06,00,00,00
-----

```

```
R-PHY#show lldp statistics
```

```
-----
LLDP statistics:
-----
```

```
Interface:      eth0
  Transmitted:  5099
  Received:     3818
  Discarded:    0
  Unrecognized: 6
  Ageout:       0
  Inserted:     2
  Deleted:      0
-----
```

```
Interface:      vbh0
  Transmitted:  2548
  Received:     2554
  Discarded:    6
  Unrecognized: 8
  Ageout:       0
  Inserted:     1
  Deleted:      0
-----
```

If the LLDP is disabled, the output of the **show lldp statistics** command will be:

```
R-PHY#show lldp statistics
lldp disabled
```

Feature Information for LLDP

Use Cisco Feature Navigator to find information about the platform support and software image support. Cisco Feature Navigator enables you to determine which software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to the <https://cfng.cisco.com/> link. An account on the Cisco.com page is not required.



Note The following table lists the software release in which a given feature is introduced. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Table 2: Feature Information for LLDP

| Feature Name | Releases | Feature Information |
|---------------------|--|---|
| LLDP | Cisco 1x2 / Compact Shelf RPD Software 5.4 | This feature was integrated into the Cisco Remote PHY Device. |
| Disable LLDP by TLV | Cisco 1x2 / Compact Shelf RPD Software 6.1 | This feature was integrated into the Cisco Remote PHY Device. |