

## **DEPI Latency Measurement**

This document describes how to configure the DEPI latency measurement on the Cisco cBR Series Converged Broadband Router.

### **Finding Feature Information**

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 the platform support and Cisco software image support. To access Cisco Feature Navigator, go to the link <a href="http://tools.cisco.com/ITDIT/CFN/">http://tools.cisco.com/ITDIT/CFN/</a>. An account at the <a href="http://www.cisco.com/">http://www.cisco.com/</a> site is not required.

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# **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 2x2 Remote PHY Device

Cisco HFC Platform	Remote PHY Device
Cisco GS7000 BAU	Cisco 2x2 RPD Software 2.x and Later Releases
	Cisco Remote PHY Device 2x2
	PID—RPD-2X2=

## Information about DEPI Latency Measurement

The DEPI Latency Measurement (DLM) packet is a specific type of data packet used for measuring the network latency between the CCAP core and the RPD. There are two types of DLM packets, ingress DLM packet and egress DLM packet. The ingress DLM measures the latency between the CCAP core and the ingress point in the RPD, and the egress DLM measures the latency between the CCAP core and the egress point of the RPD. For now, only the ingress DLM is supported. Egress DLM will be supported in the future if required.

## **How to Configure DLM**

This section describes how to configure DLM on Cisco cBR-8.

### **Configuring DLM**

To configure DLM, complete the following procedure. DLM is disabled by default, only enabled when configured.

```
configure terminal
cable rpd name
core-interface interface_name
network-delay dlm interval in seconds
```

### **Verifying DLM Configuration**

To verify the DLM configuration, use the **show cable rpd dlm** command as shown in the example below:

```
Router# show cable rpd 0000.bbaa.0002 dlm
Load for five secs: 4%/1%; one minute: 4%; five minutes: 4%
Time source is NTP, 13:12:36.253 CST Sun Jan 1 2017
DEPI Latency Measurement (ticks) for 0000.bbaa.0002
Last Average DLM:
                              4993
Average DLM (last 10 samples): 4990
Max DLM since system on:
                              5199
Min DLM since system on:
                              4800
 Sample #
           Latency (usecs)
x-----x-----x
             491
1
             496
 2
             485
             492
             499
             505
             477
 7
             474
 8
             478
             471
```

The table below shows descriptions for the fields displayed by this command:

#### Table 2: show cable rpd dlm Field Descriptions

Field	Description
Last Average DLM	It means the last time average DLM (AD). At first, the Last Average DLM (LAD) is always 0, when the absolute value of (LAD - AD) exceeds or equal to 75us, LAD will be updated to be the value of AD, MAP advance triggered to update, AD will keep updating with the last (latest) 10 samples.

# **Example: DLM Configuration**

The following example shows how to configure DLM:

Router# configure terminal
Router(config) #cable rpd 1
Router(config-rpd) #core-interface tenGigabitEthernet 3/1/0
Router(config-rpd-core) #network-delay dlm 10

## **Feature Information for DLM**

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 www.cisco.com/go/cfn 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 3: Feature Information for DLM

Feature Name	Releases	Feature Information
DLM	Cisco 2x2 RPD Software 2.x	This feature was introduced in the Cisco 2x2 Remote PHY Device.

Feature Information for DLM