service-module t1 linecode through show controllers satellite

show cable-diagnostics tdr

To display the test results for the Time Domain Reflectometry (TDR) cable diagnostics, use the **showcable-diagnosticstdr**command in privileged EXEC mode.

show cable-diagnostics tdr interface *interface interface-number*

Syntax Description

interface *interface*	Specifies the interface type; valid values are**fastethernet** and **gigabitethernet**.
interface-number	Module and port number.

Command Default

This command has no default settings.

Command Modes

Privileged EXEC

Command History

Release	Modification
12.2(17a)SX	Support for this command was introduced on the Supervisor Engine 720.
12.2(17d)SXB	Support for this command on the Supervisor Engine 2 was extended to Release 12.2(17d)SXB.

12.2(18)SXD	The output was changed as follows:
	
	• The Local Pair field was changed to the Pair field. The local pair designations were changed as follows:
	
	  • Pair A to Pair 1-2
	
	  • Pair B to Pair 3-4
	
	  • Pair C to Pair 5-6
	
	  • Pair D to Pair 7-8
	
	• The Remote Pair field was removed.
	
	• The Channel field was added to display the pair designation and are as follows:
	
	  • Pair A
	
	  • Pair B
	
	  • Pair C
	
	  • Pair D

Release	Modification
12.2(33)SRA	This command was integrated into Cisco IOS Release 12.2(33)SRA.

Usage Guidelines

The **showcable-diagnosticstdr** command is supported on specific modules. See the Release Notes for Cisco IOS Release 12.2 SX on the Catalyst 6500 and Cisco 7600 Supervisor Engine 720, Superivsor Engine 32, and Supervisor Engine 2 for the list of the modules that support TDR.

In the event of an open or shorted cable, the accuracy of length of where the cable is open or shorted is plus or minus 2 meters.

The pair length can be displayed in meters (m), centimeters (cm), or kilometers (km).

If the TDR test has not been run on the port, the following message is displayed:

```
TDR test was never run on Gi2/12
```

Examples

This example shows how to display the information about the TDR test:

```
Router# show cable-diagnostics tdr interface gigabitethernet 8/1
TDR test last run on: February 25 11:18:31
Interface Speed Pair Cable length      Distance to fault   Channel Pair status
--------- ----- ---- ------------------ ------------------- ------- -----------
Gi8/1     1000  1-2  1   +/- 6  m       N/A                 Pair B  Terminated
                3-4  1   +/- 6  m       N/A                 Pair A  Terminated
                5-6  1   +/- 6  m       N/A                 Pair C  Terminated
                7-8  1   +/- 6  m       N/A                 Pair D  Terminated
```

The table below describes the fields in the **showcable-diagnosticstdr**command output.

Table 1: show cable-diagnostics tdr Command Output Fields

Field	Description
Interface	Interface tested.
Speed	Current line speed.
Pair	Local pair name.
Cable Length	Cable length and accuracy. The accuracy unit is displayed in meters (m), centimeters (cm), or kilometers (km).
Channel	Pair designation.

Field	Description
Pair status	Pair status displayed is one of the following: • Terminated--The link is up. • Shorted--A short is detected on the cable. • Open--An opening is detected on the cable. • Not Completed--The test on the port failed. • Not Supported--The test on the port is not supported. • Broken--The pair is bad--either open or shorted. • ImpedanceMis--The impedance is mismatched. • InProgress--The diagnostic test is in progress.

Related Commands

Command	Description
clear cable-diagnostics tdr	Clears a specific interface or clear all interfaces that support TDR.
test cable-diagnostics	Tests the condition of 10-Gigabit Ethernet links or copper cables on 48-port 10/100/1000 BASE-T modules.