

#### **Icon and State Reference**

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## **Device Reachability and Admin States**

**Device Reachability State**—A device's reachability status represents whether Cisco EPN Manager can communicate with the device using all configured protocols.

Table 1: Device Reachability State

Icon	Device Reachability State	Description	Troubleshooting
<b>✓</b>	Reachable	Cisco EPN Manager can reach device using SNMP.	

A	Ping reachable	Cisco EPN Manager can reach device using Ping, but not via SNMP.	Although ICMP ping is successful, check for all possible reasons why SNMP communication is failing. Check that device SNMP credentials are the same in both the device and in Cisco EPN Manager, whether SNMP is enabled on the device, or whether the transport network is dropping SNMP packets due to reasons such as mis-configuration, etc. See Change Basic Device Properties.
8	Unreachable	Cisco EPN Manager cannot reach device using Ping.	Verify that physical device is operational and connected to network.
?	Unknown	Cisco EPN Manager cannot connect to the device.	Check the device.

**Device Admin State**—A device's admin state (or status) represents the configured state of the device (for example, if an administrator has manually shut down a device, as opposed to a device being down because it is not reachable by Ping).

Table 2: Device Admin State

Icon	Device Admin State	Description	Troubleshooting
<b>3</b>	Managed	Cisco EPN Manager is actively monitoring the device.	Not Applicable.
<b>*</b>	Maintenance		To move a device back to managed state, see Move a Device To and From Maintenance State.

	Unmanaged	Cisco EPN Manager is not monitoring the device.	In the Network Devices table, locate the device and click the "i" icon next to the data in the Last Inventory Collection Status column. The popup window will provide details and troubleshooting tips. Typical reasons for collection problems are:  • Device SNMP credentials are incorrect.  • The Cisco EPN Manager deployment has exceeded the number of devices allowed by its license.  • A device is enabled for switch path tracing only.  If a device type is not supported, its Device Type will be Unknown. You can check if support for that device type is available from Cisco.com by choosing Administration > Licenses and Software Updates > Software Update, then click Check for Updates.
?	Unknown	Cisco EPN Manager cannot connect to the device.	Check the device.

### **Port and Interface States**

**Port/Interface Primary States**—A port/interface's primary state conveys the most important state information for a port/interface by combining the admin and operational states. The Multilayer Trace displays either a port primary state or alarm status. For the Chassis View, if an element in the Chassis View does not support changing color to indicate a state change, you can still get the state change information from the alarm that is generated for the state change.

Port/Interface Primary State	Icon	Admin Status	Operational State
Unknown	?	Unknown	Unknown
Down	•	Up	Down
Test	<b>?</b>	Test	_
Admin Down	*	Admin Down	_
Up	•	Up	Up
Auto Up	•	Up	Auto Up

**Port/Interface Admin Status**—The port/interface admin status represents the configured state of the port or interface (for example, if an administrator has manually shut down a port).

Port/Interface Admin Status	Icon	Description
Unknown	?	Port/interface admin status is unknown. There is no response (or insufficient response) from the device.
Admin Down	×	Port/interface was manually shut down by the administrator.
Up	•	Port/interface is enabled by administrator.
Test	<b>2</b>	Port/interface is being tested by the administrator.

**Port/Interface Operational State**—A port/interface's operational state conveys the port or interface's running state and whether it is working properly.

Port/Interface Operational State	Icon	Description
Unknown	?	Port/interface operational state is unknown. There is no response (or insufficient response) from the device.
Down	•	Port/interface is not working properly.
Up	•	Port/interface is receiving and transmitting data.
Auto Up	•	Port/interface is receiving and transmitting data (only certain devices support this state; other devices use "Up").

### **Circuit/VC States**

Circuit/VC Primary States— A circuit/VC's primary state conveys the most important state information for a circuit, in this order: Serviceability, Discovery, Alarm, Provisioning. It is normally shown in the first column in a table of circuits.

Circuit/VC Primary State	Icon	Serviceability	Discovery	Alarm	Provisioning
Missing	0	_	Missing	_	_
Down	•	Down	_	_	_

Critical	8	_	-	Critical	_
Major	<b>V</b>	_	_	Major	_
Minor	A	_	_	Minor	_
Partially Down	•	Partial	_	_	_
Admin Down	×	Admin Down	_	_	_
Partially Discovered	•	_	Partial	_	_
Failed	0	_	_	_	(Create, modify, delete) failed
In progress	•••	_	_	_	(Create, modify, delete) in progress
Warning	•		_	Warning	_
Up	•	Up	_	_	_
Auto Up	•	Auto Up	-	_	_
Info	•	_	-	Info	_
Cleared	<b>✓</b>	_	-	Cleared	_

**Circuit/VC Serviceability States**— A circuit/VC's serviceability state is a combination of the circuit/VC's admin and operational states. The admin state is shown because it impacts service operability and (for optical circuits) determines whether the Activate and Deactivate actions are available. The operational state is shown to quickly identify whether a service is working or not.

Circuit/VC Serviceability State	Icon	Description
Admin Down	<b>\$</b>	Circuit/VC manually shut down by administrator.
Down	×	Circuit/VC is down (and administratively up ).
Up	•	Circuit/VC is operationally up (and administratively up ).
Auto Up	•	Circuit/VC is operationally auto up (and administratively up). (Only certain devices support the Auto Up operational state.)

Unavailable	0	Circuit/VC is not discovered by yet, or the operational status is unavailable.
Partial		<ul> <li>Circuit/VC operational or administrative state is partial.</li> <li>Partial admin state = Circuit/VC has a mixed administrative request (to activate some service resources and deactivate the other); or the circuit/VC has some resources that are administratively up and some that are administratively down; or the operational state for some of a circuit/VC's resources is unavailable.</li> <li>Partial operational state = Circuit/VC has a some active resources and some deactivated resources; or the operational state for some of a circuit/VC's resources is unavailable.</li> </ul>

**Circuit/VC Discovery States**—A circuit/VC's discovery state represents the latest state and structure of a service and its components, as discovered from the network. Having a Discovered version means that the application is actually monitoring the service itself, e.g. it can define meaningful operational and performance data.

Circuit/VC Discovery State	Icon	Description
Partial	0	Circuit/VC partially discovered by CEPNM; not all of its expected entities have been discovered.
Full	<u> </u>	Circuit/VC fully discovered by CEPNM, so CEPNM can monitor the service and provide meaningful operational and performance data.
Missing	0	Circuit/VC not yet discovered by CEPNM (though it may have been provisioned).

Circuit/VC Provisioning States—A circuit/VC's provisioning state represents whether there is a provisioning intent for a circuit/VC and, if so, its status. If a reconciliation report has been generated, the state of the reconcile action is reflected.

Circuit/VC Provisioning State	Icon	Description
None	0	Circuit/VC was discovered but not yet been provisioned. The circuit/VC must be promoted in order to modify or delete it.
Failed	0	Action has failed.
In Progress	•••	Action was initiated but not yet completed.
Planned		Action is planned but not yet initiated.

Succeeded	<u> </u>	Action has completed successfully.

### **Link Serviceability States**

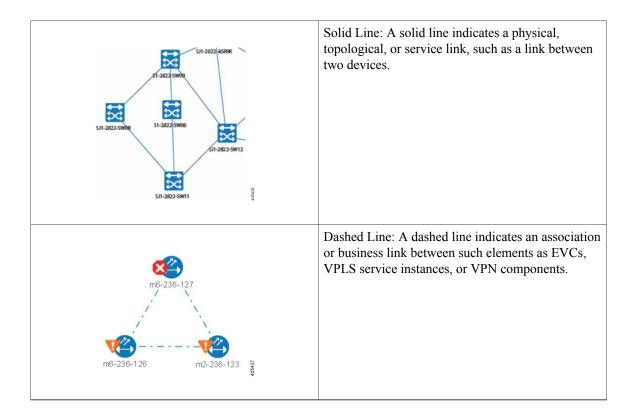
#### **Link Serviceability States**

Serviceability State	Icon	Description
Admin Down	×	Link was purposefully shut down by administrator.
Down	•	Link is down (but it should not be).
Up	•	Link is up and traffic is passing through the link.
Auto Up	•	Link is up because it detected a signal (this state is only supported by optical devices)
Unavailable	0	Link is not discovered by yet or the status is unavailable.
Partial	•	Link has a mismatch between requests, resources, or resource states.  Examples:  • Link is processing a request to activate some service resources and
		deactivate others.
		• Link has some active and some deactivated resources.
		• Some link resources that are up and others that are down.
		• The state for one of the link's resources is not known.

#### **Link Characteristics**

Table below describes the different types of links used to represent the connection between devices in the Topology Map view of Cisco EPN Manager .

Link Type	Description



### **Equipment Operational States (Chassis View)**

**Equipment Operational State**—The equipment operational state represents the running state of the network element.

<b>Equipment Operational State</b>	Icon	Description
In Service	(none)	Equipment is operating properly.
Pre-provisioned	********	(Cisco NCS 2000 and Cisco ONS devices only) Equipment has been configured but is not physical present in the chassis.
Failed/Disabled/Down/Out of Service/Out of Service Maintenance		Equipment is not operating properly.
Unknown		Equipment operational state is unknown. No response (or insufficient response) from the device.

### **Alarm Severity Icons**

The table below lists the alarm colors and their respective severity levels for the icons displayed in various parts of the web GUI.

Severity Icon	Description	Color
8	Critical alarm	Red
Ā	Major alarm	Orange
A	Minor alarm	Yellow
•	Warning alarm	Light Blue
<b>V</b>	Alarm cleared; normal, OK	Green
•	Informational alarm	Medium Blue
?	Indeterminate alarm	Dark Blue

### **Device Type Icons**

Table below defines the icons used to represent different device types in the Topology and the Multi-layer Trace views in Cisco EPN Manager .

Icon	Definition
<b>₹</b>	Switch
YA YK	Router
	Router Aggregated
mySDR	Cisco NCS 6000 device on which a Secure Domain Router (SDR) resides. The SDR's name is listed directly above the device's icon.  Note There may be cases where the SDR label for a device that belongs to a cluster or user-defined group is not displayed (since auto-clustering is applied to devices based on their proximity).
	Router configured with an L3VPN service.
	Switch Aggregated

Icon	Definition
0000	Access Point
<b>₩</b>	Service Module
	UCS C-Series
Þ.	NAM Blade
	Group
	Generic Device
	Virtual Server

Icon	Definition
↑ 21mm	Wireless LAN Controller
?	Unknown
	DWDM ROADM Regeneration/NCS 2000

# **Circuit/VC Network Topology Overlay Icons**

Overlay Icon	Definition
	Source endpoint
2	Destination endpoint
	EVC or CEM service with local switching
	Endpoint included by the user during creation of the circuit.
•	Endpoint excluded by the user during the creation of the circuit

Overlay Icon	Definition
<u>•</u>	Endpoint with some ports that were included during creation of the circuit and some that were excluded. This endpoint contains multiple ports that are participating in various routes of the circuit.
R	E-TREE EVC endpoint that has been designated as a root.
0	Selected endpoint.
0	Hub. If the hub and root are on the same device (VPLS scenario), the brown circle is combined with the root icon.
	Link included during creation of the circuit.
•	Link excluded during creation of the circuit.
	Link with some ports that were included during creation of the circuit and some that were excluded. This represents the aggregated link that contains multiple ports participating in various routes of the same circuit.

Circuit/VC Network Topology Overlay Icons