





## Icon and State Reference



- [Device Reachability and Admin States](#), on page 1
- [Port or Interface States](#), on page 3
- [Circuit or VC States](#), on page 4
- [Link Serviceability States](#), on page 9
- [Link Characteristics](#), on page 9
- [Equipment Operational States \(Chassis View\)](#), on page 10
- [Alarm Severity Icons](#), on page 10
- [Device Type Icons](#), on page 11
- [Circuit or VC Network Topology Overlay Icons](#), on page 13

## Device Reachability and Admin States

**Device Reachability State**—Indicates whether Cisco EPN Manager can communicate with the device using all configured protocols.





*Table 1: Device Reachability State*

Icon	Device Reachability State	Description	Troubleshooting
	Reachable	Cisco EPN Manager can reach the device using SNMP, or the NCS 2K device using ICMP.	—
	Ping reachable	Cisco EPN Manager can reach the 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 <a href="#">Change Basic Device Properties</a> .

	Unreachable	Cisco EPN Manager cannot reach the device using Ping.	Verify that the physical device is operational and connected to the network.
	Unknown	Cisco EPN Manager cannot connect to the device.	Check the device.







**Device Admin State**—Indicates 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
	Managed	Cisco EPN Manager is actively monitoring the device.	Not Applicable.
	Maintenance	Cisco EPN Manager is checking the device for reachability but is not processing traps, syslogs, or TL1 messages.	To move a device back to Managed state, see <a href="#">Move a Device To and From Maintenance State</a> .
	Unmanaged	Cisco EPN Manager is not monitoring the device.	<p>In the Network Devices table, locate the device and click the "i" icon next to the data in the <b>Last Inventory Collection Status</b> column. The popup window will provide details and troubleshooting tips. Typical reasons for collection problems are:</p> <ul style="list-style-type: none"> <li>• Device SNMP credentials are incorrect.</li> <li>• The Cisco EPN Manager deployment has exceeded the number of devices allowed by its license.</li> <li>• A device is enabled for switch path tracing only.</li> </ul> <p>If a device type is not supported, its Device Type will be <b>Unknown</b>. You can check if support for that device type is available from Cisco.com by choosing <b>Administration &gt; Licenses and Software Updates &gt; Software Update</b> and then clicking <b>Check for Updates</b>.</p>
	Unknown	Cisco EPN Manager cannot connect to the device.	Check the device.

## Port or Interface States



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



Port or Interface Primary State	Icon	Admin Status	Operational State
Unknown		Unknown	Unknown
Down		Up	Down
Test		Test	—
Admin Down		Admin Down	—
Up		Up	Up
Auto Up		Up	Auto Up

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

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

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

Port or Interface Operational State	Icon	Description
Unknown		Port or interface operational state is unknown. There is no response (or insufficient response) from the device.
Down		Port or interface is not working properly.

Up		Port or interface is receiving and transmitting data.
Auto Up		Port or interface is receiving and transmitting data (only certain devices support this state; other devices use "Up").







## Circuit or VC States

**Circuit or VC Primary States**— Conveys the most important state information for a circuit, in this order: Serviceability, Discovery, Alarm, Provisioning. It is normally shown in the first column of a circuit or VC table.

Circuit or VC Primary State	Icon	Serviceability	Discovery	Alarm	Provisioning
Missing		—	Missing	—	—
Down		Down	—	—	—
Critical		—	—	Critical	—
Major		—	—	Major	—
Minor		—	—	Minor	—
Partially Down		Partial	—	—	—
Admin Down		Admin Down	—	—	—
Partially Discovered		—	Partial	—	—
Failed		—	—	—	(Create, modify, or delete) failed
In progress		—	—	—	(Create, modify, or delete) in progress
Warning		—	—	Warning	—
Up		Up	—	—	—
Auto Up		Auto Up	—	—	—
Info		—	—	Info	—
Cleared		—	—	Cleared	—

**Circuit or VC Serviceability State**— This value is a combination of the circuit or VC's admin and operational states. The admin state is shown because it impacts service operability. For optical circuits, the admin state

also 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 or VC Serviceability State	Icon	Description
Admin Down		Circuit or VC manually shut down by the administrator.
Down		Circuit or VC is operationally down and administratively up.
Up		Circuit or VC is operationally and administratively up.
Auto Up		Circuit or VC is operationally auto up and administratively up. Only certain devices support the Auto Up operational state.
Unavailable		Circuit or VC has not been discovered yet, or its operational status is unavailable.
Partial		<p>Circuit/VC operational or administrative state is partial.</p> <ul style="list-style-type: none"> <li>• Partial admin state—The circuit or VC has a mixed administrative request (to activate some service resources and deactivate others), has a mix of resources that are administratively up and down, or has resources whose operational state is unavailable.</li> <li>• Partial operational state—The circuit or VC has a mix of some active and deactivated resources, or the operational state for some of its resources are unavailable.</li> </ul>

Following table provides details of the serviceability states of Circuits/VCs under various scenarios:

Technology	Service Type	Scenario	Serviceability State
------------	--------------	----------	----------------------

Carrier Ethernet	EPL, EVPL, Access EPL, and Access EVPL	If the operational state of the endpoints (service instance / sub-interface), cross connects, and pseudowire participating in the service is up	Up
		If the admin state of both, the source and destination endpoints (service instance / sub-interface) participating in the service is down	Admin Down
		In all the other scenarios, when at least one endpoint (service instance / sub-interface), cross connect, or the pseudowire participating in the service is down	Down
	EP-LAN, EVP-LAN, EP-Tree, and EVP-Tree	If all the endpoints (service instance / sub-interface), bridge domains, VFIs, and pseudowires participating in the service are up	Up
		If the operational state of at least two endpoints (service instance / sub-interface) participating in the service are up and the rest of the endpoints are down	Partial
		If the admin state of all the endpoints (service instance / sub-interface) participating in the service is down	Admin Down
		If the operational state of at least one endpoint (service instance / sub-interface) participating in the service is up and the rest of the endpoints are down	Down

Circuit Emulation	All service types	If the operational state of the endpoints (cemGroup), underlying TDM controller, cross connect, and pseudowire participating in the service are up	Up
		If the admin state of both, the source and destination endpoints (cemGroup) participating in the service is down	Admin Down
		In all the other scenarios, when the operational state of one of the endpoint (cemGroup), underlying TDM controller, cross connect, and pseudowire participating in the service is down	Down
MPLS	Unidirectional TE Tunnel	If the operational state of the tunnel interface is up	Up
		If the admin state of the tunnel interface is down	Admin Down
		In all the other scenarios, when the operational state of the tunnel is down	Down
	Bidirectional TE Tunnel	If the operational states of the interfaces on both ends of the tunnel is up	Up
		If the admin states of the interfaces on both ends of the tunnel is down	Admin Down
		In all the other cases, when the operational state of the tunnel interface is down	Down

Layer 3 VPN		If the operational state of all the endpoints (sub-interface, BDI, and BVI) participating in the service is up	Up
		If the operational state of at least two endpoints (sub-interface, BDI, and BVI) participating in the service are up and the rest of the endpoints are down	Partial
		If the admin state of all the endpoints (sub-interface, BDI, and BVI) participating in the service is down	Admin Down
		If the operational state of at least one endpoint (sub-interface, BDI, and BVI) participating in the service is up and the rest of the endpoints are down	Down





**Circuit or VC 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 or VC Discovery State	Icon	Description
Partial		Circuit or VC partially discovered by Cisco EPN Manager ; not all of its expected entities have been discovered.
Full		Circuit or VC fully discovered by Cisco EPN Manager , so Cisco EPN Manager can monitor the service and provide meaningful operational and performance data.
Missing		Circuit or VC not yet discovered by Cisco EPN Manager (though it may have been provisioned).







**Circuit or VC Provisioning State**—Represents whether there is a provisioning intent for a circuit or VC and, if so, its status. If a reconciliation report has been generated, the state of the reconcile action is reflected.

Circuit or VC Provisioning State	Icon	Description
None		Circuit or VC was discovered but has not yet been provisioned. The circuit/VC must be promoted in order to modify or delete it.



Failed		Action has failed.
In Progress		Action was initiated but not yet completed.
Planned		Action is planned but not yet initiated.
Succeeded		Action has completed successfully.

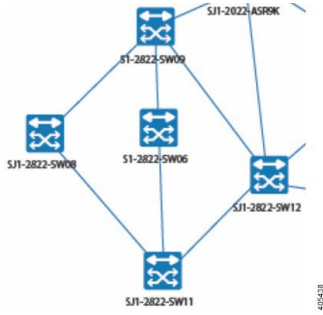
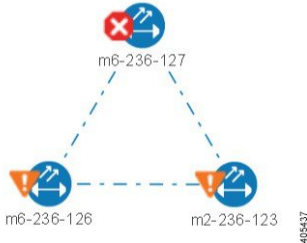
## Link Serviceability States

Serviceability State	Icon	Description
Admin Down		Link was purposefully shut down by the 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		Link is not discovered yet or its status is unavailable.
Partial		Link has a mismatch between requests, resources, or resource states. Examples: <ul style="list-style-type: none"> <li>• Link is processing a request to activate some service resources and deactivate others.</li> <li>• Link has some active and some deactivated resources.</li> <li>• Some link resources are up and others are down.</li> <li>• The state for one of the link's resources is not known.</li> </ul>

## Link Characteristics




The following table 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
-----------	-------------

	<p>Solid Line—Indicates a physical, topological, or service link, such as a link between two devices.</p>
	<p>Dashed Line—Indicates an association or business link between elements such as EVCs, VPLS service instances, or VPN components.</p>


## Equipment Operational States (Chassis View)







The equipment operational states represent the running state of the network element.

Equipment Operational State	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
	Critical alarm	Red



Severity Icon	Description	Color
	Major alarm	Orange
	Minor alarm	Yellow
	Warning alarm	Light Blue
	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
	Switch
	Router
	Router Aggregated
	<p>Cisco NCS 6000 device on which a Secure Domain Router (SDR) resides. The SDR's name is listed directly above the device's icon.</p> <p><b>Note</b> 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).</p>

Icon	Definition
	Router configured with an L3VPN service.
	Switch Aggregated
	Access Point
	Service Module
	UCS C-Series
	NAM Blade
	Group
	Generic Device
	Virtual Server
	Wireless LAN Controller

Icon	Definition
	Unknown
	DWDM ROADM Regeneration/NCS 2000

## Circuit or VC Network Topology Overlay Icons

Overlay Icon	Definition
	Source endpoint
	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.
	Endpoint with some ports that were either included or excluded during creation of the circuit. This endpoint contains multiple ports that are participating in various routes of the circuit.
	E-TREE EVC endpoint that has been designated as a root.
	Selected endpoint.

Overlay Icon	Definition
	<p>Hub; If the hub and root are on the same device (VPLS scenario), the brown circle is combined with the root icon.</p>
	<p>Link included during creation of the circuit.</p>
	<p>Link excluded during creation of the circuit.</p>
	<p>Endpoint with some ports that were either included or excluded during creation of the circuit. This represents the aggregated link that contains multiple ports participating in various routes of the same circuit.</p>