



# Troubleshooting Overview

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The chapters in this guide describe common troubleshooting tips for specific Cisco APIC features and provide information about monitoring tools you can use for troubleshooting problems.

The features, issues, and tasks covered in this guide are listed below.

- **\_ui\_ Objects**—Explains how to remove unwanted \_ui\_ objects caused by making changes with the **Basic Mode** or the NX-OS CLI before using the **Advanced Mode**.
- **acidiag**—Explains how to use the acidiag command for troubleshooting operations on the Cisco APIC.
- **Cisco APIC Cluster**—Explains how to diagnose cluster faults and troubleshoot common cluster issues. For basic cluster management information, see the appendix of this guide.
- **Cisco APIC Password Recovery and Emergency/Hidden Login Access**—Explains how to recover a password, how to access the rescue-user login to run troubleshooting commands, including erasing the configuration, and how to access a hidden login domain in case of a lockout.
- **Cisco APIC Troubleshooting Operations**—Explains how to gather information about your switches and how perform troubleshooting operations such as shutting down the system, shutting down the Cisco APIC controller, reloading the APIC controller, and turning on the LED locator.
- **Cisco APIC Troubleshooting Tools**—Explains how to use the Cisco APIC troubleshooting tools for debugging, monitoring traffic, viewing user activity history, checking for delays in synchronizing the policy manager and the policy distributor, and detecting issues such as traffic drops, misrouting, blocked paths, and uplink failures.
- **Endpoint Connectivity**—Explains how to troubleshoot endpoint connectivity using the Cisco APIC troubleshooting tools, such as traceroute, atomic counters, and SPAN, and how to connect an SFP module to a new card.



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**Note** Information about the Cisco APIC troubleshooting tools is located in the [Using the Cisco APIC Troubleshooting Tools](#) chapter.

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- **EVPN Type-2 Host Routes**—Provides verification steps for this feature.
- **Export Policies**—Enables you to export statistics, tech support collections, faults and events, and to process core files and debug data from the fabric to any external hosts in a variety of formats.
- **Fabric Rebuild**—Explains how to rebuild your fabric.

- **Identifying a Failed Line Card**—Explains the procedure for identifying a line card that may have caused a loopback failure.
- **IP-Based EPG**—Explains how to verify that you have correctly configured an IP-based EPG using the Cisco APIC GUI and using switch commands.
- **Leaf Connectivity**—Explains how to recover a disconnected leaf using the REST API.
- **PIM Interfaces**—Explains what to check when a PIM interface is not created for an L3Out, a multicast tunnel interface, or for a multicast-enabled bridge domain.
- **Port Security**—Explains how to confirm your port security hardware and software installations.
- **Removing Disabled Interfaces and Decommissioned Switches**—Explains how remove a disabled port entry in the GUI.
- **Decommissioning and Recommissioning Switches**—Explains how to decommission and recommission nodes in a pod. A use case for this task would be to renumber the nodes in the pod in a more logical, scalable numbering convention.
- **Cisco APIC SSD Replacement**—Explains how remove an SSD in the GUI.
- **QoS**—Provides specific troubleshooting scenarios for this feature.
- **SSL Ciphers**—Explains how to determine if an SSL cipher is supported.
- **Switch Inventory**—Explains how to find the switch serial and model numbers. This helps TAC troubleshoot issues that you may experience.
- **Expected Output Errors**—Provides an example of expected output errors observed from the internal counter interface of uplinks of the Cisco Nexus 93180YC-EX and ACI 93180YC-FX leaf switches in ACI mode.
- [Troubleshooting Basics, on page 2](#)

## Troubleshooting Basics

The following are basic steps for troubleshooting:

### Before you begin

- Familiarize yourself with the tools listed in [Using the Cisco APIC Troubleshooting Tools](#).
- Familiarize yourself with the [Cisco APIC Troubleshooting Operations](#).
- For issues with a specific feature, check the main contents of this guide for your feature. Troubleshooting tips are listed per-feature.

### Step 1

Gather information that defines the specific symptoms.

#### Note

In many cases, you can use the tools listed and described in the [Using the Cisco APIC Troubleshooting Tools](#) chapter to gather useful troubleshooting information.

### Step 2

Identify all potential problems that could be causing the symptoms.

**Step 3** Systematically eliminate each potential problem (from most likely to least likely) until the symptoms disappear.

**Note** This guide provides step-by-step instructions for confirming the installation and configuration of specific features such as port security, endpoint connectivity, PIM, and IP-based EPGs. Following the instructions can help you to narrow down and resolve problems you are experiencing.

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