Revised: December 24, 2024

Console Line Access on SD-Routing devices, Release 17.16.x

What's new and changed

Cisco IOS XE Release	Feature Name and Description	Supported Platforms
Cisco IOS XE 17.16.1a	**Console Line Access Management** From Cisco IOS XE 17.16.1a, Console Line Access feature allows centralized management of site outages through Cisco Catalyst SD-WAN Manager.	Cisco 1100 Terminal Services Gateway • C1100TGX-1N24P32A • C1100TG-1N24P32A

Overview of Console Line Access

Console Line Access enables network administrators to manage devices using Cisco Catalyst SD-WAN Manager. It uses out-of-band management to troubleshoot and maintain during primary network outages. This method uses asynchronous lines to create a separate path for management traffic, allowing device management during network disruptions. Unlike in-band management, which shares the data plane with regular traffic, out-of-band management separates management and data traffic. This separation improves security and stability.

From Cisco IOS XE 17.16.1a, Cisco SD-WAN Manager can be used to manage site outages. This eliminates the need to log into devices individually using IP addresses and SSH. Administrators can now resolve issues centrally from the management plane instead of accessing each device directly on the data plane.
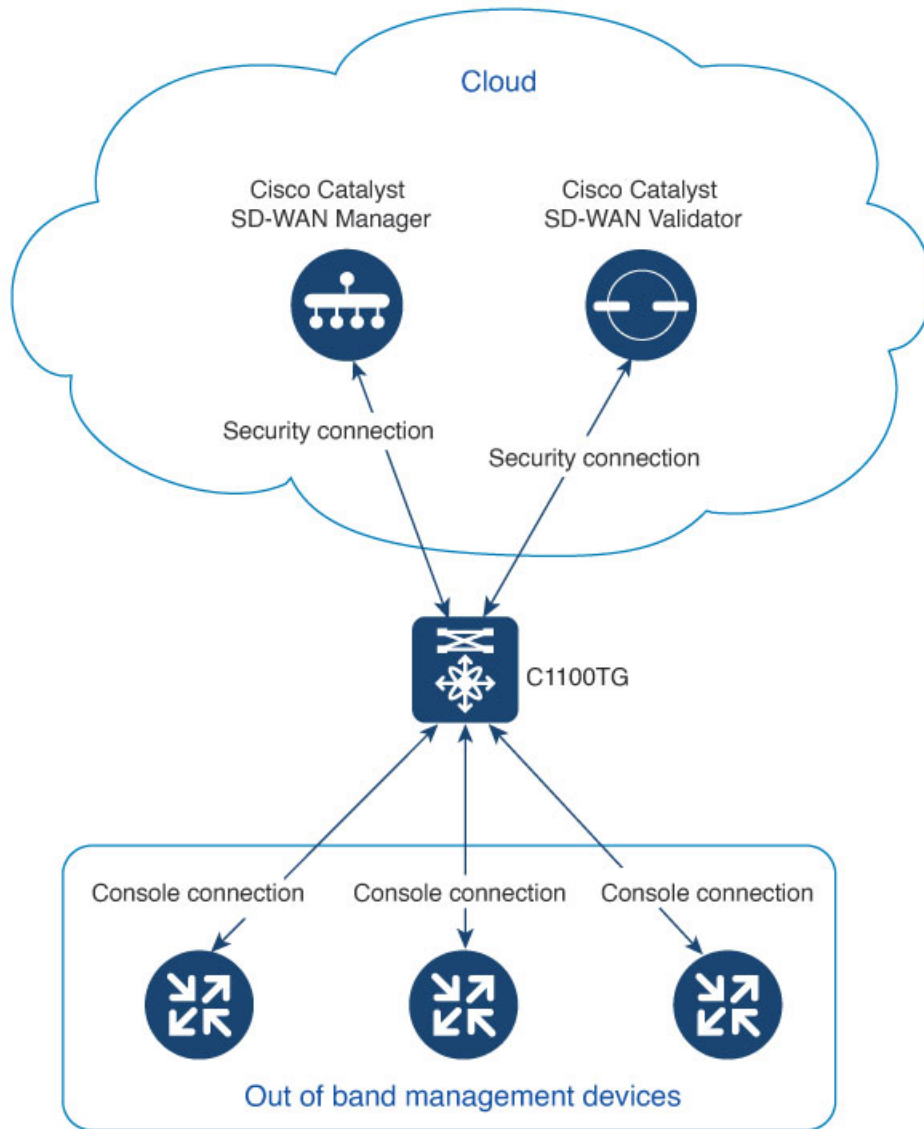
Prerequisites for Console Line Access

- Ensure you have onboarded the device to Cisco SD-WAN Manager using SD-Routing mode.

- The *tgadmin* user must be pre-configured on the device. If the *tgadmin* user is not configured, you will encounter an error.

- SSH must be configured under both VTY and asynchronous lines. For example,

```
username tgadmin password 7 131110130F010D24
line 0/1/0 0/1/31
    no exec
    transport input ssh
line vty 0 4
    transport input ssh
```

```
      netconf-yang
      netconf-yang feature candidate-datastore
  sd-routing
      organization-name "vIPtela Inc Regression"
      site-id 600
      system-ip 172.16.255.16
      vbond name vbond
      wan-interface GigabitEthernet0/0/0
```

View and Manage Console Line Access on Cisco SD-WAN Manager

Use the Console Line Access screen to view and manage disruptions or loss of connectivity at specific locations within a network. Navigate to **Tools** > **Console Line Access** to open the Console Line Access window, which displays a list of connected end devices. Each line represents a connected end device. A **green** icon indicates that the line is free, while a **grey** icon indicates that the line is occupied.

Establish Console Connection

Steps to establish a Console Connection:

Step 1   Open the console line terminal by selecting a line from the available line list.

Step 2   Enter the password for the **tgadmin** user twice.

Step 3   Once authenticated, the console connection will be established.

Basic Operations to Manage Console Line Access

Table 1: Basic Operations to Manage Console Line Access

Function	Description
Keyword Search	To find your preferred lines, use the **search tab**. You can search by various keywords like, line number, description, device name, or device system IP. Note, the line description must be added under the corresponding async interface.
Clear Line Operation	To clear a line, click on the **ellipsis** next to the specific line and select **Clear Line**. This action terminates the current SSH session, making the line available for other users.
Refresh the Line	To update the line status and view the latest connection details, click the **refresh** button.

Troubleshooting Console Line Access Issues

Table 2: Troubleshooting Console Line Access Issues

Error	Cause	Solution
Permission denied, please try again	User tgadmin is not pre-configured on the device.	Pre-configure the user tgadmin on the device.
Connection closed	SSH is not configured under Virtual Teletype (VTY) and asynchronous line.	Ensure SSH is configured under VTY and asynchronous lines.