

### **Overview**

This chapter provides an introduction to Cisco IOx Local Manager and describes general operations that you perform with it.

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### **About Cisco IOx Local Manager**

Cisco IOx Local Manager is a platform-specific application that is installed on a host system as part of the installation of the Cisco IOx framework on that device. It provides a web-based user interface that you can use to manage, administer, monitor, and troubleshoot apps on the host system, and to perform a variety of related activities. (To manage apps across different devices, you can use Cisco Fog Director. See the Cisco Fog Director documentation for additional information.)

Cisco IOx is an application enablement platform that provides uniform and consistent hosting capabilities for various types of apps across various Cisco platforms. This platform brings together Cisco IOS, the industry-leading networking operating system, and Linux, the leading open source platform. Linux-based applications can run on Cisco devices in the Cisco IOx framework, so using this platform, you can bring custom applications and interfaces to the network.

With Cisco IOx, developers can create a wide variety of IoT apps, such as data aggregation system and control systems.

## **Browser Guidelines and Requirements**

Review the following guidelines and requirements before you access Cisco IOx Local Manager through a supported browser:

• Make sure that the IOx framework is installed on the Cisco host system that you are accessing through Cisco IOx Local Manager.

- Make sure that networking is configured for Cisco IOS and that you can connect to or ping Cisco IOS on the host system.
- Make sure that the following criteria are met on the host system:
  - The Cisco IOx network IP address and gateway are configured
  - The IOS PAT entry allows traffic on port 8443 to be forwarded to the IP address that is configure for configured Cisco IOx
  - VirtualPortGroup0 interface is configured and reachable
  - You are configured in Cisco IOS as a "user" with privilege 15 and you know the corresponding password
  - DHCP and DNS are configured in Cisco IOS
- For increased system security, Cisco IOx Local Manager times out after 30 minutes of no use. When a timeout occurs, you are logged out of Cisco IOx Local Manager. If you want to continue your session, click the **Continue** button. Otherwise, click the **Log out** button or allow the system to log you out automatically.
- Information that Cisco IOx Local Manager displays does not refresh automatically. To make sure that you are viewing current information on a Cisco IOx Local Manager page, click the **Refresh** button if the page provides this button, or click your browser **Refresh** button.
- When you execute a Cisco IOx Local Manager operation for an app, do not refresh your browser or
  perform another operation until the current operation completes. Otherwise, the current operation
  may not execute properly.
- Cisco IOx Local Manager supports access from one browser session at a time on the host on which
  it is running.

### **Hardware Platform Caveat**

Cisco C800 series devices do not provide dedicated storage for apps. These devices have a single, soldered-on flash storage that is shared between Cisco IOS and apps. The flash storage is not field replaceable.

Flash has a finite number of P/E cycles. It is expected to last for the duration of the device lifecycle if the flash is used only for Cisco IOS configuration. If apps write to the flash frequently, flash wear out becomes a serious concern.

We recommend that developers and users monitor and throttle the frequency of writes to flash. If an app demands frequent writes or a large amount of data storage, we recommend that data be exported for off-device storage.

# **Starting Cisco IOx Local Manager**

You can access Cisco IOx Local Manager from any supported computer that has IP connectivity to the host system on which it is installed. When you log in to Cisco IOx Local Manager, your user name and password are authenticated against your Cisco IOS username and password on the host system on which Cisco IOx Local Manager is installed.

To access Cisco IOx Local Manager, perform the following steps.

#### Before You Begin.

Review the information in the "Browser Guidelines and Requirements" section on page 1-1.

#### **Procedure**

**Step 1** Start a supported browser, and in the Address field, enter the following address:

https://ip\_address:port

#### where:

- ip\_address is the IP address of the host system on which Cisco IOx Local Manager is installed.
- port is the port number for access to Cisco IOx Local Manager. The default number is 8443.

The Log In page displays.

On some browsers, you can see information about supported browsers by hovering your mouse over the Down-arrow icon we next to "For best results use a supported browser" near the top of the Log In page.

Step 2 In the Username and PASSWORD fields, enter the user name and password that you use to log in to Cisco IOS on the host system that you identified in Step 1.

Your password is case-sensitive, so make sure to enter it exactly as it is configured.

Step 3 Click Login.

# **Exiting Cisco IOx Local Manager**

To exit Cisco IOx Local Manager, click Log Out from any Cisco IOx Local Manager page.

# **Viewing Information about Cisco IOx Local Manager**

To view information about Cisco IOx Local Manager, including its version number and the name of this host on which it is running, click **About** from any Cisco IOx Local Manager page.

Viewing Information about Cisco IOx Local Manager