



# Release Notes for Cisco IOx Release 1.11.0 and 2.0

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These release notes provide information for Cisco IOx Releases 1.11.0.

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## Documentation Links

- [DevNet](#)  
<https://developer.cisco.com/docs/iox/>
- [Cisco IOx Data Sheet](#)  
<https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/iox/datasheet-c78-736767.html>
- [Cisco Fog Director](#)  
<https://www.cisco.com/c/en/us/support/cloud-systems-management/fog-director/tsd-products-support-series-home.html>
- [Cisco IOx Local Manager Reference Guide](#)  
<https://www.cisco.com/c/en/us/support/cloud-systems-management/iox/products-technical-reference-list.html>

# Edge Computing with Cisco IOx

Learn how to develop, deploy, and manage applications at the network edge with Cisco IOx:

<https://learninglabs.cisco.com/tracks/Cisco-IOx>

## Overview

Cisco IOx provides uniform and consistent hosting capabilities for various types of apps across 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.

## New Features in this Release

Starting with this release, the Cisco Fog Director VM runs in the Ubuntu 18.04 operating system.

## Supported Platforms

Cisco IOx Fog Director Release 1.11 is supported on the following platforms:

- IR809
- IR829
- IR1101
- ESR6300
- IE3400/IE3400H
- ESS3300
- CGR1000 Compute Module
- IC3000

## Image Information

The following image is available for Cisco IOx Fog Director:

`cisco_iox_fogdirector-1.11.0.ova`

Download Cisco IOx related software, such as IOS images, utilities and SDKs, from the following DevNet page:

<https://developer.cisco.com/docs/iox/#!iox-resource-downloads>

**Note:** IOx Fog Node images cannot be randomly loaded with any IOS images. Please do not make any changes without the guidance of a Cisco Technical Support representative.

[Table 1](#) provides support information for Cisco Fog Director and IOx releases.

**Table 1** Cisco Fog Director and CAF Support Matrix

	IOx 1.11	IOx 1.10	IOx 1.9	IOx 1.8	IOx 1.7	IOx 1.6
<b>Fog Director 1.11</b>	Yes	Yes	Yes	No	No	No
<b>Fog Director 1.10</b>	No	Yes	Yes	Yes	No	No
<b>Fog Director 1.9</b>	No	No	Yes	Yes	Yes	No
<b>Fog Director 1.8</b>	No	No	No	Yes	Yes	Yes

**Note:** App files that should persist when the app container reboots should be uploaded to the /data directory for that app. You can use Cisco Local Manager, Cisco Fog Director, or an SSH connection to upload the files.

## Limitations and Restrictions

- Upgrades of platform images must be performed from  $n-1$  to  $n$  release only ( $n$  = the latest release).
- If CAF crashes abruptly, CAF comes back up with limited functionality. If app management services are down you can download the tech support logs and verify the reason from the CAF logs or in syslog files. An example for app management going down is a CAF abrupt crash.  
The workaround is to reboot the device. If the app management services are down after the device reboots, collect the tech support logs from the device before contacting the support team.
- App asking for multiple USB ports and devices is not supported. This restriction applies only to FD.
- USB device hot swap-out and swap-in are not supported. You must plug in the USB device before activating the application on the IOx device.

## Caveats

You can use the Bug Search Tool to find information about caveats, including a description of the problems and available workarounds. The Bug Search Tool lists both open and resolved caveats.

To use the Bug Search Tool:

1. Go to <https://tools.cisco.com/bugsearch/>.
2. Log in with your Cisco.com user ID and password.
3. Enter information in the Search For, Product, and Releases field as needed, then press **Enter**.

For more information about the Bug Search Tool, click **Help** on the main Bug Search Tool page.

## Open Caveat

**Table 2** Open Caveat in IOx Release 1.11.0

ID	Description
CSCvr62782	Smart Licensing feature is disabled on the IR829 device.

## Resolved Caveats

This release does not include resolved caveats.

# Cisco Support

Use the following resources if you have any questions or require assistance with Cisco IOx:

- Go to DevNet Developer Support:  
<https://developer.cisco.com/site/devnet/support/>
- Go to Cisco Support:  
<https://www.cisco.com/c/en/us/support/index.html>
- Email Cisco Support at [tac@cisco.com](mailto:tac@cisco.com).
- Call Cisco Support at 1.408.526.7209 or 1.800.553.2447.

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