

Release Notes for Cisco IOx Release 1.15.0

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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 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://developer.cisco.com/learning/tracks>

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

This release provides new features, including the following:

IOx Update to Support RS485 on IR510

Prior to IOx Release 1.15, the IR510 was unable to send and receive RS485 traffic over IOx applications. With IOx Release 1.15, the implementation allows the Tx/Rx of RS485 data.

If you are using python to deploy your application, use the following code to enable Tx/Rx on the RS485 interface for a python Tx/Rx application.

- In transmitter python application add:

```
import os
os.system("echo 1 > gpio46/value")
```

- In receive python application add:

```
import os
os.system("echo 0 > gpio46/value")
```

In `/home/root/iox/caf/config/device_config.yaml`, the following section was added to make `gpio46` available to the app:

```
gpio_mount:
-
src_path: /sys/class/gpio/gpio46
target_path: /gpio46
permission: rw
```

Image Information

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>

Limitations and Restrictions

- Check the platform documentation for the supported upgrade path. In some rare cases, the platform needs to be upgraded to a specific intermediate release.
- If CAF crashes abruptly, CAF comes back up with limited functionality. If app management services are reported as down, you can download the tech support logs and verify the reason from the CAF logs or in syslog files.
- 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 Caveats 1.15.0

This release does not include open caveats.

Resolved Caveats 1.15.0

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/support/>
- Go to Cisco Support:
 - <https://www.cisco.com/c/en/us/support/index.html>
- Email Cisco Support at tac@cisco.com.
- Call Cisco Support at 1.408.526.7209 or 1.800.553.2447.

