Release Notes for Cisco IOx Release 1.12.0 and 2.3

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These release notes provide information for Cisco IOx Releases 1.12.0 and 2.3.

Contents

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://learninglabs.cisco.com/tracks/Cisco-IOx

Cisco Systems, Inc.   www.cisco.com

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

- Disk Space Optimization for IR1101—With this feature, IOx conserves disk space on the IR1101 platform by disabling the local docker layer registry.

- Persistent Auto-installed Cybervision Sensor App Across Factory Reset in IC3000—If you order an IC3000 with the auto-installed Cybervision sensor IOx app, the original version of the app persists across the device factory reset operation.

- Notify Config Reset Operation to App in IC3000—IOx infra notifies apps about platform config reset operations, so the appropriate action can be taken inside the container/VM.

- Upload/Download Activation Payload in Local Manager (LM)—You can download the activation payload (in .json format) that was used for activating apps via LM. The same downloaded activation payload can then be imported for reactivating the app in LM without having to select options in the UI again.

- IOx App Resource Profile Enhancement—With this feature, the app resource profile attribute is made optional in package descriptor (package.yaml) under schema version 2.13. You can specify the CPU value in the "cpu-percent" attribute under custom app resource profile for ease of CPU units usage. This CPU value is a percent of the total CPU percentage restricted for App hosting on the device.

- IOx Service Redesign—IOx Service is redesigned adapting modern service architecture nats.io + resgate. The redesign provides consistent and simple REST API and WebSocket interface independent of sensors or sensor protocols.

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 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 Caveats

This release does not include open caveats.

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.

- Call Cisco Support at 1.408.526.7209 or 1.800.553.2447.