Release Notes for Cisco IOS Release 15.5(3)M0a FC1 for the Cisco IR800 Industrial Integrated Services Routers

The following release notes support Cisco IOS Releases 15.5(3)M0a FC1 and higher releases. These releases support the Cisco IR800 Industrial Integrated Services Routers. These release notes are updated to describe new features, limitations, troubleshooting, recommended configurations, caveats, and how to obtain support and documentation.

Contents

This publication consists of the following sections:

Image Information and Supported Platforms

Note You must have a Cisco.com account to download the software.

Cisco IOS Release 15.5(3)M0a FC1 includes the following Cisco IOS images:

- ir800-universalk9-bundle.SPA.155-3.M0a.bin

Cisco IOS Release 15.5(3)M0a FC1 includes support for the following IR800 series routers:

- IR829GW-LTE-GA-EK9
- IR829GW-LTE-GA-ZK9
- IR829GW-LTE-NA-AK9
- IR829GW-LTE-VZ-AK9
- IR809G-LTE-NA-K9
- IR809G-LTE-VZ-K9
- IR809G-LTE-GA-K9

The image file can be found at:

https://software.cisco.com/download/release.html?mdfid=286287074&flowid=75322&softwareid=280805680&release=15.5.3M0a&relind=AVAILABLE&rellifecycle=ED&reltype=latest

Note The ir800-universalk9-bundle.SPA.155-3.M0a.bin bundle must be copied via tftp to the IR800, and then installed using the `bundle install flash:<image name>` command. The ir800-universalk9-bundle.SPA.155-3.M0a.bin file can NOT be directly booted using the `boot system flash:/image_name`. Detailed instructions are found in the Cisco IR829 and IR809 Integrated Services Router Hardware Installation Guides.

Note Do not configure ip ssh version 1, otherwise the bundle installation will fail.

Caution A problem exists where the MCU upgrade fails to complete and the IR829 stays in bootloader mode. The router will get stuck in ROMMON and must be RMA to Cisco. The IR829 should only be upgraded to IOS version 15.6(3)M*x*. For example:
If the IR829 is running 15.5(3)M1, DO NOT upgrade to 15.5(3)M2. Go straight to 15.6(3)M*x*.

Related Documentation

The following documentation is available:

- *Cisco IOS Release Notes*

  All of the Cisco IR800 Industrial Integrated Services Router documentation can be found here:

  http://www.cisco.com/c/en/us/support/routers/800-series-industrial-routers/tsd-products-support-series-home.html

- Software manuals - all of the 800 series router documentation

  http://www.cisco.com/c/en/us/support/routers/800-series-routers/tsd-products-support-series-home.html

- Most of the Cisco IR800 configuration tasks are available in the Cisco 800 Series Integrated Services Routers Software Configuration Guide

  http://www.cisco.com/c/en/us/td/docs/routers/access/800/software/configuration/guide/SCG800Guide.html

- Configuring Wireless Devices - common tasks between C800 and IR800 series

  http://www.cisco.com/c/en/us/td/docs/routers/access/800/software/configuration/guide/SCG800Guide/SCG800_Guide_BookMap_chapter_01001

- Cisco 4G LTE Software Installation Guide - common tasks between C800 and IR800 series

  http://www.cisco.com/c/en/us/td/docs/routers/access/interfaces/software/feature/guide/EHWIC-4G-LTESW.html

Major Enhancements

This release adds Hardware Crypto support to the IR800 series.

Known Limitations

This release has the following limitations or deviations for expected behavior:

- The IR800 series is feature equivalent to the to C8xx series, however, support for this initial release has not implemented or validated for all features.

  For example:

  C8xx supports the following features under Ge0:

```
c819(config)#int gigabitEthernet 0
c819(config-if)#ethernet ?
  cfm       Ethernet CFM interface commands
  dot1ad    dot1ad port
  lmi       Ethernet LMI interface commands
  loopback  Ethernet Dataplane Loopback
  oam       Operations, Administration and Maintenance
  uni       Configure Ether UNI
  vlan      Configure Ethernet vlan
```

  IR8xx supports the following:

```
IR800_2(config)#int gigabitEthernet 0
IR800_2(config-if)#ethernet ?
  cfm  Ethernet CFM interface commands
  lmi  Ethernet LMI interface commands
```

- Show led command has a lag from the actual LEDs at first, then it stabilizes.

- Changing the default Guest OS CPU allocation may after the router performance. Detailed instructions are found in the Cisco IR829 Integrated Services Router Hardware Installation Guide and the Cisco IR809 Integrated Services Router Hardware Installation Guide.

  All of the Cisco IR800 Industrial Integrated Services Router documentation can be found here:

http://www.cisco.com/c/en/us/support/routers/800-series-industrial-routers/tsd-products-support-series-home.html

Caveats

Caveats describe unexpected behavior in Cisco IOS releases. Caveats listed as open in a prior release are carried forward to the next release as either open or closed (resolved).

Cisco IOS Release 15.5(3)M0a FC1

The following sections list caveats for Cisco IOS Release 15.5(3)M0a FC1:

Open Caveats

- **CSCuu86884**

  After the IR800 reloads, vlans are not added to vlan database.

  Workaround:

  Add vlans manually after reload

- **CSCuu49331**

  LED status report is inconsistent across different commands.

  Workaround:

  None

- **CSCut75469**

  IR829 is not getting GPS data after router bootup

  Conditions: After router bootup, sometimes the modem is up but does not get GPS data.

  Workaround: Power cycle the modem.

- **CSCuu45211**

  Conditions: Originally GobiSerial was connected to ttyUSB1, ttyUSB2, and ttyUSB3 in this scenario. After re-inserting the SIM, GobiSerial is now connected to ttyUSB0, ttyUSB1, and ttyUSB2 with USB interface is still connected.

  Workaround: Remove USB connection

- **CSCuu49331**

  LED status report is inconsistent across different commands

  Conditions: PoE LED will go back and forth between yellow and green when there is a PoE device in deny power state. Typing show platform led or show platform led summary will sometimes show yellow, sometimes shows green.

  Workaround: Remove the device that has been denied for power allocation

- **CSCuu60617**

  Media-type rs485 is configurable under IR800 serial port 0 interface (async1), however the serial port 1 (async1) interface does not support media-type rs485.

Conditions: When you configure 'media-type rs485" under the async1 interface, the configuration is acceptable.

Workaround: None

- **CSCuu42865**

  The `show environment temperature` command has high temperature threshold

  Example:

  ```
  IR800#show environment temperature
  Temperature:
  ------------------------------------------------------------
  Sensor        MajorThresh   MinorThres   CurTemp      Status
                (Celsius)     (Celsius)    (Celsius)
  ------------------------------------------------------------
  Sensor 1 75, -25 60, -15 43 OK
  ```

  The low and high values are on the higher side.

Closed Caveats

- **CSCuv48606**

  After a permanent license was installed, it was lost after a reload.

- **CSCuv53403**

  The IR829GW-LTE-GA-ZK9 router crashed when a major temperature threshold was reached (70C), run show env CLI.

- **CSCuv67596**

  The IR829 router would crash during a copy of a 0 byte file via http protocol.

- **CSCuu86919**

  Bundle image installation fails on unit with USB key is inserted

  Conditions:

  When IR829 unit is loaded with IOS image 15.5(2.25)M0.1, hypervisor 0.28, FPGA version 1.0.0 and BIOS version8 and boots up with USB inserted, bundle installation fails.

  Workaround:

  Remove USB key from an IR800 unit, reload unit and boot unit up. Unit is able to execute `bundle installation` to upgrade new image release.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation at: http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html.

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