Release Notes for Cisco IR1101 Industrial Integrated Services Router, Cisco IOS XE Gibraltar 16.12.3

The following release notes support the Cisco IR1101 router. These release notes are updated to describe new features, limitations, troubleshooting, recommended configurations, caveats, and provide information on how to obtain support and documentation.

March 12, 2020

Contents

This publication consists of the following sections:

General Description

The Cisco IR1101 Industrial Integrated Services Router is a next generation modular industrial router which has a base module with additional Pluggable Modules that can be added. The Pluggable Module provides the flexibility of adding different interfaces to the IR1101 platform, for example, a cellular module.

The IR1101 ISR also has an Expansion Module that adds key capabilities such as dual LTE Pluggables, mSATA SSD FRU, SFP, and Digital GPIO connections.

Note: Complete details on the IR1101 and both Expansion Modules can be found in the IR1101 Industrial Integrated Services Router Hardware Installation Guide.

Image Information and Supported Platforms

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

Cisco IOS-XE Release 16.12.3 includes the following Cisco images:

- ir1101-universalk9.16.12.03.SPA.bin
- ir1101-universal9_npe.16.12.03.SPA.bin

- ir1101-ucmk9-*XX* for the SDWAN version of the OS.

The latest software downloads for the IR1101 can be found at:

https://software.cisco.com/download/home/286287045

Click on the IR1101 link to take you to the specific software you are looking for.

Interface Naming Conventions

The following is a description of the interface names.

Table 1 Hardware Interface Naming Convention

Port	Naming Convention
Gigabit Ethernet combo port	Gigabitethernet 0/0/0
Gigabit Ethernet SFP port on Expansion Module	Gigabitethernet 0/0/5
Fast Ethernet ports	Fastethernet0/0/1-0/0/4
Cellular Interface on IR1101 Base	Cellular 0/1/0 and cellular 0/1/1
Cellular Interface on Expansion Module	Cellular 0/3/0 and 0/3/1
Asynchronous Serial Interface	Async 0/2/0
USB	usbflash0:
mSATA	msata
IR1101 Base Unit Alarm input	alarm contact 0
GPIO on Expansion Module	alarm contact 1-4

Known Limitations

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

Downgrading from 16.12.x to 16.11.1

Symptoms: If an IR1101 with RJ45 Gig0/0/0 WAN is downgraded from 16.12.x to 16.11.1 or earlier, it will cause the Gig0/0/0 to fail to come up because its media-type is set to **media-type sfp**. The problem occurs because 16.12.x or later automatically selects the correct media-type of the Gig0/0/0 interface, while 16.11.1 and earlier does not have that capability.

Workaround: Specifically set the correct media-type for the Gig0/0/0 interface (e.g. media-type rj45) prior to any downgrade.

Related Documentation

The following documentation is available:

- All of the Cisco IR1101 Industrial Integrated Services Router documentation can be found here:

  https://www.cisco.com/c/en/us/support/routers/1100-series-industrial-integrated-services-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 resolved.

Note: You must have a Cisco.com account to log in and access the Cisco Bug Search Tool. If you do not have one, you can register for an account.

For more information about the Cisco Bug Search Tool, see the Bug Search Tool Help & FAQ.

Open Caveats

None for this release.

Resolved Caveats

- **CSCvq13666**

  IR1100 cEdge: Image upgrade fails due to insufficient disk space.

- **CSCvs37437**

  Changed the out of the box baud rate in rommon to be 9600 baud.

- **CSCvp31354**

  VPN LED always ON even when the tunnel is down.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Model Driven Telemetry - gRPC Dial-Out: Expands existing Model Driven Telemetry capabilities with the addition of gRPC protocol support and Dial-Out (configured) telemetry subscriptions.

YANG Data Models: For the list of Cisco IOS XE YANG models available with this release, navigate to:

https://github.com/YangModels/yang/tree/master/vendor/cisco/xe/16101

Revision statements embedded in the YANG files indicate if there has been a model revision. The README.md file in the same GitHub location highlights changes that have been made in the release.