Release Notes for Cisco Catalyst IR8140 Heavy Duty Series Router – Release 17.6.1a

Updated: February 11, 2022

The following release notes support the Cisco Catalyst IR8140 Heavy Duty Series Router (IR8140H), the next generation modular IP 66/67 Industrial Router for outdoor use. There are two IR8140H models:

- IR8140H-P-K9 (With PoE PSE)
- IR8140H-K9 (Without PoE PSE)

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

Note: The documentation set for this product strives to use bias-free language. For purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

Contents

This publication consists of the following sections:

General Description

The IR8140H Series features 4 external module slots plus two onboard WAN ports and supports the following:

- 60W PSU
- 900MHz WPAN - OFDM/FSK IRMH module
- 4G/LTE IRMH modules

- SSD module
- 1x 1Gbe SFP WAN
- 1x 1Gbe Cu WAN
- PoE (15W) – Supported only on the IR8140H-P-K9 PID
- 12VDC_OUT port (Only available when PoE is not in use)
- Battery Backup Units (BBUs) – Up to 3
- 2x Alarm ports (Digital IO)

Image Information and Supported Platforms

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

Cisco IOS-XE Release 17.6.1a includes the following Cisco images:

- IR8100-universalk9.17.06.01a.SPA.bin
- IR8100-universal9_npe.17.06.01a.SPA.bin

The latest software downloads for the IR8100 can be found at:

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

Click on the IR8100 link to take you to the specific software you are looking for.

Interface Naming Conventions

The following table shows the names of the interfaces.

Table 1 Hardware Interface Naming Convention

Port	Naming Convention
Gigabit Ethernet ports	GigabitEthernet0/0/0 GigabitEthernet0/0/1
Cellular Interface on IR1101 Base	Cellular 0/2/0 Cellular 0/2/1 Cellular 0/3/0 Cellular 0/3/1
SSD	msata
WPAN	Wpan0/1/0
Digital IO	alarm contact 1-2

Additional configuration steps are found in the Cisco Catalyst IR8140 Heavy Duty Series Router Software Configuration Guide.

Smart Licensing Using Policy

An enhanced version of Smart Licensing is available, with the overarching objective of providing a licensing solution that does not interrupt the operations of your network, rather, one that enables a compliance relationship to account for the hardware and software licenses you purchase and use.

With this licensing model, you do not have to complete any licensing-specific operations, such as registering or generating keys before you start using the software and the licenses that are tied to it. Only export-controlled and enforced licenses require Cisco authorization before use. License usage is recorded on your device with timestamps, and the required workflows can be completed later.

Multiple options are available for license usage reporting – this depends on the topology you implement. You can use the Cisco Smart Licensing Utility (CSLU) Windows application or report usage information directly to Cisco Smart Software Manager (CSSM), or deploy Smart Software Manager On-Prem (SSM On-Prem) Version 8, Release 202102 or later. A provision for offline reporting for air-gapped networks, where you download usage information and upload to CSSM, is also available.

Starting with this release, Smart Licensing Using Policy is automatically enabled on the device. This is also the case when you upgrade to this release.

By default, your Smart Account and Virtual Account in CSSM is enabled for Smart Licensing Using Policy.

Note: Starting with Cisco IOS XE 17.6.1, with the introduction of Smart Licensing Using Policy, even if you configure a hostname for a product instance or device, only the Unique Device Identifier (UDI) is displayed. This change in the display can be observed in all licensing utilities and user interfaces where the hostname was displayed in earlier releases. It does not affect any licensing functionality. There is no workaround for this limitation.

The licensing utilities and user interfaces that are affected by this limitation include only the following: Cisco Smart Software Manager (CSSM), Cisco Smart License Utility (CSLU), and Smart Software Manager On-Prem (SSM On-Prem).

Related Documentation

The following documentation is available:

- All of the Cisco IR8100 Industrial Integrated Services Router documentation can be found here:

  https://www.cisco.com/c/en/us/support/routers/catalyst-ir8100-heavy-duty-series-routers/series.html

- Cisco IOS XE Bengaluru 17.5.1

  https://www.cisco.com/c/en/us/support/ios-nx-os-software/ios-xe-bengaluru-17-5-1/model.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 at this time.

Resolved Caveats

- **CSCvz00883**

  Summary: Modem-power-cycle intermittently brings down the LTE module with the message “HC Died”.

  Example:

```
*Jul 14 14:37:26.570: %IOSXE-3-PLATFORM: R0/0: kernel: xhci-hcd f2510000.usb3: xHCI host controller
not responding, assume dead
*Jul 14 14:37:26.571: %IOSXE-3-PLATFORM: R0/0: kernel: xhci-hcd f2510000.usb3: HC died; cleaning up
```

Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at Cisco Profile Manager.
- To get the business impact you’re looking for with the technologies that matter, visit Cisco Services.
- To submit a service request, visit Cisco Support.
- To discover and browse secure, validated enterprise-class apps, products, solutions and services, visit Cisco Marketplace.
- To obtain general networking, training, and certification titles, visit Cisco Press.
- To find warranty information for a specific product or product family, access Cisco Warranty Finder.

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Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at www.cisco.com/go/offices.

YANG Data Models: For the list of Cisco IOS XE YANG models available navigate to:

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

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.