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Release Notes for Cisco Catalyst IR1101, IR1800, IR8140, and IR8340 Routers, Release 17.18.1a

Cisco Catalyst Rugged Series Routers, IOS XE Release 17.18.1a

Cisco IOS XE Release 17.18.1a introduces new features and hardware for the Cisco Catalyst Rugged Series Routers. Key features include networking and interface capabilities using IRM-1100-4S8I Expansion Module for IR1101 routers, support for jumbo frames on the IRM-1100-4S8I Expansion Module, IP Device Tracking on routers, and VRF for the P-LTE-450 module.

New software features

This section provides a brief description of the new software features introduced in this release.

Table 1.   New software features for Cisco Catalyst Rugged Series Routers, Release 17.18.1a

Product Impact	Feature	Description
Ease of Use	IRM-1100-4S8I Expansion Module	You can now enhance your IR1101 router's networking capabilities by enabling additional connectivity and I/O options with the newly introduced the IRM-1100-4S8I Expansion Module. This module adds four SFP ports and eight Digital I/O connections, providing greater flexibility for your network deployments. Supported device: IR1101
Ease of Use	Support for jumbo frames	You can now improve your network efficiency and optimize bandwidth usage by enabling support for jumbo frames on the IRM-1100-4S8I Expansion Module. This feature allows MTU sizes of up to 9216 bytes, facilitating larger data transfers and reducing overhead. Supported device: IR1101
Software Reliability	IP Device Tracking on routers	You can now enhance your network security and monitoring capabilities by enabling IP Device Tracking with SISF support on LAN ports. This allows for comprehensive IPv4 device monitoring and improved security posture through integrated device tracking. Supported devices: IR1101 and IR1800
Ease of Use	VRF for the P-LTE-450 module	You can now enable VRF to provision LTE450 parameters through the LTE450 management interface. You can also enable VRF on 450 PIM management interface to enable HTTP request from router to the webserver of P-LTE-450 and get response from the webserver of P-LTE-450. Supported devices: IR1101 and IR1800 (For IR1800, P-LTE-450 is supported only on slot 0/4.)
Ease of Use	Product Analytics	Cisco IOS XE Product Analytics collects device Systems Information for the purposes of understanding product usage, enabling product improvements and product development, and assisting in product adoption and sales support. Only summarized data of feature usage and statistical counters of configuration are collected. No personal identifiable information, such as MAC/IP addresses, usernames, custom configuration names, or user provided strings, are collected as part of Cisco IOS XE Product Analytics. Cisco processes this data following the General Terms, the Cisco Privacy Statement, and any other applicable agreement with Cisco. See Cisco Enterprise Networking Product Analytics Frequently Asked Questions.

Product Impact	Feature	Description
Ease of Use	Inline Tagging on switch interfaces	You can now implement CTS Inline Tagging to enable end-to-end Cisco TrustSec architecture without the complexity and scalability challenges of SXP peering, ensuring that the CMD header in Ethernet frames is carried through to the network security enforcement point. Supported devices: IR1101 and IR1800

New hardware features

This section provides a brief description of the new hardware features introduced in this release.

Table 2.   New hardware features for Cisco Catalyst Rugged Series Routers, Release 17.18.1a

Product Impact	Feature	Description
Ease of Use	IRM-1100-4S8I Expansion Module	Cisco IOS XE Release 17.18.1a introduces the IRM-1100-4S8I Expansion Module for IR1101 routers, adding four SFP ports and eight Digital IO connections for enhanced networking capabilities. Supported device: IR1101

Resolved issues

You can also access the resolved caveats for this release through the Cisco Bug Search Tool.

This table lists the resolved issues in this specific software release.

Note:

- This software release may contain bug fixes first introduced in other releases. To see additional information, click the bug ID to access the Cisco Bug Search Tool.

- To search for a documented Cisco product issue, type in the browser: <bug number> in Cisco.com

Table 3.   Resolved issues for Cisco Catalyst Rugged Series Routers, Release 17.18.1a

Bug ID	Description
CSCwn60186	IR8340 / XE 17.9 / onboard G0/0/0 RJ45 WAN port flaps when removing "media-type rj45" config
CSCwn80507	Traceback followed by CPUHOG observed when IRM-GNSS-ADR VID: V20 is inserted into IR1833 router
CSCwn98622	Hardware removal & insertion SNMP traps received after soft reload-Misleading router actual activity
CSCwo91346	IR1101 WANMON failing to reach level 2 recovery
CSCwo31561	"Error in showing license Information" when "show license rum id all" is executed
CSCwm92704	8340 & 9320 redbox forwarding multiple primary announce messages to SAN

Bug ID	Description
CSCwp00808	IRM-NIM-RS232 module Serial interface stops transmitting TCP raw socket traffic
CSCwp13058	Unintended BBU fw upgrade when miscommunication occurs between IOS and BBU fw
CSCwo73978	Disappearance of band selection configuration from cellular controller after a router reload

Open issues

You can also access the open caveats for this release through the Cisco Bug Search Tool.

This table lists the open issues in this specific software release.

Note:

- This software release may contain bug fixes first introduced in other releases. To see additional information, click the bug ID to access the Cisco Bug Search Tool.

- To search for a documented Cisco product issue, type in the browser: <bug number> in Cisco.com

Table 4.   Open issues for Cisco Catalyst Rugged Series Routers, Release 17.18.1a

Product Impact	Description
CSCwp90680	IR1101 not completing ARP for Emerson FB-3000

Known issues

This table lists the limitations for this release. Click the bug ID to access the Cisco Bug Search Tool and see additional information

Table 5.   Known issues for Cisco Catalyst Rugged Series Routers, Release 17.18.1a

Product Impact	Feature	Description
Smart Licensing Using Policy	IRM-1100-4S8I Expansion Module	Starting with Cisco IOS XE 17.6.1, Smart Licensing Using Policy has changed how device information is displayed. When you configure a hostname for a product instance or device, only the Unique Device Identifier (UDI) is shown. The hostname is no longer displayed in licensing utilities and user interfaces as it was in previous releases. This change does not affect any licensing functionality, and there is no workaround for this limitation. The licensing utilities and user interfaces affected by this change are: • Cisco Smart Software Manager (CSSM) • Cisco Smart License Utility (CSLU) • Smart Software Manager On-Prem (SSM On-Prem)

Product Impact	Feature	Description
		Example of revised content:
		If you previously saw the device hostname in CSSM, you will now only see the UDI after upgrading to Cisco IOS XE 17.6.1 or later.
		Note: This is a display change only and does not impact license operations or activation.
VLAN-Aware Interoperability Limitations on IR1101	Support for jumbo frames	VLAN-aware interoperability with devices from other vendors is not supported on the Cisco IR1101 platform.
Standalone MAC Authentication Bypass Limitation	IP Device Tracking on routers	Standalone MAC Authentication Bypass (MAB) is an authentication method that grants network access to specific MAC addresses, regardless of 802.1X capability or credentials. On the IR1100 platform, the device may crash when both IPsec and MACsec traffic occur concurrently between the device and the client.

Table 6.   Additional details on MAB Catalyst

Details	Affected release	Resolved release
MAB/Dot1x may not work if the global type-6 encryption setting is enabled. If users still want to use MAB/Dot1x, they should disable the type-6 encryption and enable type-7 encryption.	17.4.x 17.5.x 17.6.1 17.6.2 17.7.1	17.3.5 Fixed in these future releases: 17.6.3 17.7.2 17.8.1 and later.
Due to a hardware limitation, the dACL and device-tracking features are not supported on Cisco Catalyst IR1101 Rugged Series Routers. However, dACL is supported on Cisco Catalyst IR1800 Rugged Series Routers. Therefore, features such as MAB and 802.1X should not be used with optional dACL or device-tracking enabled on the IR1101 platform.	Occurs in all releases	Hardware limitation, no software fix available.in these future releases:

Compatibility

This section lists compatibility information on Cellular Module Modem Firmware, OEM/PRI and it lists the latest modem firmware available for each of the modems used by the Cisco IoT routers. See the Cisco Firmware Upgrade Guide for 4G LTE and 5G Cellular Modems for upgrade instructions.

Cisco IOS XE updates do not automatically update modem firmware. You should manually check and update all modems to the latest firmware version, including any related PRI and/or OEMPRI components. Refer to the following table for the most up-to-date information.

Table 7.   Cellular Module Modem Firmware

Cellular Module	Modem and Firmware version	Software download link
P-5GS6-GL	FN980 38.03.0202	https://software.cisco.com/download/home/286329300/type/
P-LTEAP18-GL IRMH– LTEAP18-GL	LM960 32.00.1x9	Generic: https://software.cisco.com/download/home/286324996/type North America: https://software.cisco.com/download/home/286324947/type
P-LTEA-EA IRMH– LTEA-EA	EM7455 02.39.00.00	Generic: https://software.cisco.com/download/home/286308426/type Europe: https://software.cisco.com/download/home/286308426/type Canada: https://software.cisco.com/download/home/286319713/type North America ATT: https://software.cisco.com/download/home/286311442/type North American Sprint: https://software.cisco.com/download/home/286311455/type North America Verizon: https://software.cisco.com/download/home/286311429/type
P-LTEA-LA IRMH– LTEA-LA	EM7430 02.38.00.00	Generic: https://software.cisco.com/download/home/286308413/type Australia Telstra: https://software.cisco.com/download/home/286311403/type Japan: https://software.cisco.com/download/home/286311416/type
P-LTE-VZW	WP7601 02.37.0x.00	https://software.cisco.com/download/home/286322139/type
P-LTE-US	WP7603 02.37.0x.00	https://software.cisco.com/download/home/286322143/type
P-LTE-JN	WP7605 02.28.03	https://software.cisco.com/download/home/286322156/type
P-LTE-GB	WP7607 02.37.03.05	https://software.cisco.com/download/home/286322147/type

Cellular Module	Modem and Firmware version	Software download link
P-LTE-IN	WP7608 02.28.03	https://software.cisco.com/download/home/286322152/type
P-LTE-AU	WP7609 02.28.03	https://software.cisco.com/download/home/286323720/type
P-LTE-MNA	WP7610 02.37.0x.0x	https://software.cisco.com/download/home/286324942/type
P-LTEA7-NA	EM7411 01.14.22.00	https://software.cisco.com/download/home/286333933/type
P-LTEA7-EAL	EM7421 01.14.22.00	https://software.cisco.com/download/home/286333937/type
P-LTEA7-JP	EM7431 01.14.22.00	https://software.cisco.com/download/home/286333939/type
P-5GS6-R16SA-GL	EM9293 02.17.08.00	https://software.cisco.com/download/home/286334597/type
P-LTE-450	Not applicable v1.3.0	Contact Intelliport for the software download link (info@intelliport.hu)

Supported software packages

This section provides information about the release packages associated with Cisco Catalyst Rugged Series Routers.

For latest software downloads, see the Software Download page.

Table 8. Software packages for Cisco Catalyst Rugged Series Routers, Release 17.18.1a

Router	Image type	Filename
IR1101	Universal	ir1101-universalk9.17.18.01a.SPA.bin
	NPE	ir1101-universalk9_npe.17.18.01a.SPA.bin
IR1800	Universal	ir1800-universalk9.17.18.01a.SPA.bin
	NPE	ir1800-universalk9_npe.17.18.01a.SPA.bin

Router	Image type	Filename
IR8100	Universal	Ir8100-universalk9.17.18.01a.SPA.bin
	NPE	Ir8100-universalk9_npe.17.18.01a.SPA.bin
IR8340	Universal	Ir8340-universalk9.17.18.01a.SPA.bin
	NPE	Ir8340-universalk9_npe.17.18.01a.SPA.bin
	UTD Engine for Cisco IR8340	secapp-utd.17.18.01a.1.0.4_SV3.3.5.0_XE17.18.x86_64.tar

Related resources

Table 9.   Related resources

Document	Description
Cisco IOS XE	Provides products supported by Cisco IOS XE.
Cisco Catalyst IR1101 Rugged Series Router Cisco Catalyst IR1800 Rugged Series Router Cisco Catalyst IR8140 Heavy Duty Series Router Cisco Catalyst IR8340 Rugged Series Router Cisco Industrial Routers and Industrial Wireless Access Points Antenna Guide Cisco IOS XE 17.x Cisco SD-WAN Cisco IoT Field Network Director Cisco Industrial Network Director Cisco IoT Operations Dashboard	Provides data sheet for the specified routers.
Smart Licensing Using Policy on the Cisco Catalyst IR1101, IR1800, IR8140, and IR8340 Routers or the Cisco Industrial IoT Licensing page	Provides information about Smart Licensing Using Policy solutions and their deployment on IOS XE routers.
Cisco Support	You can submit a service request here.
Cisco TAC	Provides most up-to-date detailed troubleshooting information.

Document	Description
[Cisco Feature Navigator](#)	Use CFN to browse Cisco products and find relevant features and licenses. allows you to compare platforms, determine common features between products, and identify unique product features. The CFN also has a tab that provides a [MIB](#) Locator.

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