Cisco IWAN Application on APIC-EM Release Notes, Release 1.3.2

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Contents

These release notes provide a summary of the components in Cisco Intelligent Wide Area Network Application (Cisco IWAN App), Release 1.3.2.

This release notes contain the following sections:

Introduction

Cisco IWAN App (or the Cisco IWAN on APIC-EM) extends Software Defined Networking to the branch with an application-centric approach based on business policy and application rules. This provides IT centralized management with distributed enforcement across the network.

Cisco IWAN App automates and orchestrates Cisco IWAN deployments with an intuitive browser-based GUI. A new router can be provisioned in a matter of minutes without any knowledge of the Command Line Interface (CLI). Business priorities are translated into network policies based on Cisco best practices and validated designs. Cisco IWAN App dramatically reduces the time required for configuring advanced network services through the use of automation and simple, predefined workflows.

Cisco IWAN App offers a turnkey solution that allows IT to get out of the weeds of managing low-level semantics like VPN, QoS, optimization, ACL policies. Instead, IT can focus on the bigger picture, such as, aligning network resources with business priorities and delivering outstanding user experience that result in better business outcomes.

Cisco IWAN App includes the following features:

- Zero touch provisioning—Plug and play for remote devices without user intervention
- Simple workflows—Use case driven with step-by-step and site-to-site provisioning
- Business level policies—Rules drive network actions, abstraction of underlying policy configuration
- Network monitoring—Status, alerting of network issues

What's New in Cisco IWAN App Release 1.3.2

The following new features are available in Cisco IWAN App Release 1.3.2.

Feature Name	Description
IWAN App Separation	Decoupling the release schedule and release numbering of the IWAN application and Cisco APIC-EM. The IWAN App is now downloaded separately and installed into APIC-EM.
3-link single-branch support	Support for 3-link single-branch hub topologies when provisioning day 0 branch sites.
Selectable WAN link speeds	When configuring WAN settings for a branch site, can configure a specific download speed for Gigabit Ethernet and 10 Gigabit Ethernet interfaces.
Service Assurance on demand	Enables refreshing the "Service Assurance" network alarm status at any time, using a Refresh button. The IWAN app requests network connectivity status from the IWAN network and refreshes the status of any network alarms.
Support for ASR 1006-X as hub and master controller	Support for the Cisco ASR 1006-X router as a hub or dedicated master controller.
32 GB memory support	The minimum RAM requirement for running the IWAN app on APIC-EM in a virtual machine environment was reduced from 64 GB to 32 GB.

Separation of Cisco IWAN Application from APIC-EM Releases

Cisco IWAN app release 1.3.2 introduces a new approach to IWAN app releases. Beginning with this release:

- The IWAN app has been decoupled from the APIC-EM release schedule, and from the APIC-EM installation and upgrade processes.
- IWAN app release numbering is now independent of APIC-EM release numbering.
- Download the IWAN app separately from APIC-EM, then install or upgrade the app using the APIC-EM "App Management" page. See the user guide for details about deployment.

Integral Part of APIC-EM

While the release schedule and installation are now handled separately from APIC-EM, the IWAN app continues to be an integral part of APIC-EM and continues to appear in the APIC-EM GUI as before.

System requirements for the APIC-EM continue to apply to the IWAN app.

See Cisco IWAN Application Software Compatibility, page 6 for information about the software compatible with IWAN app releases, including APIC-EM and Cisco Prime Infrastructure versions.

Supported Cisco Platforms and Software Releases

Cisco IWAN supports the following Cisco router platforms and software releases.

Platform	Models	Software Release
Cisco 4000 Series Integrated Services Routers	4321 4331 4351 4431-X 4451-X	Cisco IOS XE 3.16.4bS
Cisco ASR 1000 Series Aggregation Services Routers	ASR1001 ASR1001-X ASR1002 ASR1002-X ASR1004 ASR1006 ASR 1006-X ASR1013	Cisco IOS XE 3.16.4bS
Cisco CSR 1000v Series Routers	Cloud Services Router 1000V	Cisco IOS XE 3.16.4bS
Cisco Integrated Services Routers Generation 2 (ISR-G2) Series Routers	ISR 3945 ISR 3945-ISM ISR 3945-E ISR 3945E-ISM ISR 3925 ISR 3925-ISM ISR 3925E ISR 3925E-ISM ISR 2951 ISR 2951-ISM ISR 2921 ISR 2921-ISM ISR 2911 ISR 2911-ISM ISR 2901 ISR 2901-ISM ISR 1941 ISR 1941-ISM ISR 1921 ISR 1921-ISM ISR 892FSP	Cisco IOS 15.5(3)M4a

Limitations and Restrictions

You must use NBAR2 Advanced Protocol Pack 14.0.0 if the software version on your devices is Cisco IOS XE Release 3.16.4bS.

When using EasyQoS and Cisco IWAN App on APIC-EM, you must adhere to the following:

- The network segments for each solution are disjoint. A device controlled by the IWAN solution cannot simultaneously be controlled by the EasyQoS solution. Application are of global scope across APIC-EM and as such, custom applications created in EasyQoS application may show up in the IWAN solution if applicable to the WAN solution.

- You must complete the following tasks on devices claimed by EasyQoS, to bring them in the IWAN workflow:
  - QoS policy tags should be removed prior to being claimed
  - The device must be cleaned of remaining EasyQoS policy or configuration and the device must brought to greenfield state.

Caveats

Open Caveats in Cisco IWAN App Release 1.3.2

Caveat ID Number	Headline
CSCvb95745	Unable to add a device that was deleted with the site that failed at business policy config phase
CSCvc11092	UI not able to populate the drop down menu for bandwidth, interfaces, etc with latest Chrome browser
CSCvc14842	QoS failure at \" platform qos port-channel-aggregate < port-channel # >\" config at port-channel int
CSCvc14850	VLAN type should not be required to be unique or mandatory
CSCvc46613	Spoke provision failure due to multiple users are defined and the not all of them are tried
CSCvc48625	IP Pool page throwing max VLAN number validation for BF SS Pool
CSCvc36435	SVI (VLAN) interface needs to be filtered out for WAN use

Resolved Caveats in Cisco IWAN App Release 1.3.2

Caveat ID Number	Headline
CSCvc60109	Need to re-enter SNMPv3 password if NWS update is required Cisco IWAN Release 1.3.1.1141 replaces Release 1.3.1.1134

Open Caveats, Service Assurance Feature, Beta Release

Caveat ID Number	Headline
CSCvc16668	Service Assurance: Alarm tab seen on the site with no alarms shown on UI
CSCvc32302	Service Assurance: Site doesn't have valid loopback configured in vrf 'default'
CSCvc46191	Service Assurance stuck at loading screen after enabling post upgrade
CSCvc01995	Incorrect Alarm field value on Site Details Page under Alarms Tab
CSCvc07291	Service Assurance: Uncontrolled TC alarm not shown for sites with no policy for backup link
CSCvc28965	Service Assurance: Monitoring Page Critical button dropdown shows Error: Unable to load data

Caveat ID Number	Headline
CSCvc36842	Service Assurance: No route is found at device is Misleading under child Alarm
CSCvc42733	Service Assurance flagging channel state check failed alarm for deleted sites
CSCvc55635	IWAN App Upgrade: reset_grapevine needed for Service Assurance in upgrade scenarios

System Requirements

The following sections describe the system requirements for Cisco IWAN App:

Hardware Requirements

Cisco IWAN App requires a server with the following capabilities/software:

- Server—64-bit x86
- CPU—6 (2.4GHz)
- RAM—32GB

  Note: For a multi-host hardware deployment (two or three hosts), 32GB RAM is sufficient for each host.
- Storage—500 Gigabytes or preferably 1 Terabyte HDD
- Network Adapter—1x
- 200 MBps Disk I/O speed

Software Requirements

For Cisco IWAN on APIC-EM, the following software is required on the server:

- Browser
  - Chrome (version 50.0 or higher)
  - Mozilla Firefox (version 46.0 or higher)

Cisco IWAN Application Software Compatibility

The following table describes compatible and recommended software versions for operation with the Cisco IWAN application, running on Cisco APIC-EM.

IWAN App	APIC-EM	Prime Infrastructure	OS on ASR1000 Series, ISR4000 Series, and CSR1000V Series Routers	OS on ISR-G2 Series Routers
1.3.2	1.3.2	3.1.4 Update 1	IOS XE 15.5(3)S4 (3.16.4bS)	IOS 15.5(3)M4a

Firewall Requirements

If there is a firewall between the branch and the APIC-EM controller, please ensure that the following ports are open:

- Branch to the APIC-EM controller:
  - PKI—TCP 80
  - PNP—TCP 80, 443
  - NTP—UDP 123
- APIC-EM controller to branch:
  - SNMP—TCP and UDP ports: 161, 162
  - SSH—TCP 22
- Internet branch to hub routers:
  - GRE and IPsec—UDP 500, 4500, IP—50

If there is a firewall between APIC-EM and Prime Infrastructure, ensure that port 443 is open for APIC-EM to access Prime Infrastructure API.

NetFlow Collectors

NetFlow collector provides Application Visibility. The two supported NetFlow collectors for Cisco IWAN App are: Cisco Prime and LiveAction.

- For information about compatible versions of Cisco Prime Infrastructure and other software, see Cisco IWAN Application Software Compatibility, page 6.
- LiveAction version 5.2.0 or higher is supported by Cisco IWAN App. See https://www.liveaction.com.

Supported Hub Devices — Required License

See Platforms and their Roles, page 7 for details per model.

- ASR 1000 Series
  - License—Image with licenses for Advanced IP Services or Advanced Enterprise Services
- ISR 4451 and 4431
  - License—Appx and Security

Supported Spoke Devices – Required License

See Platforms and their Roles, page 7 for details per model.

- ISR 4000 Series
  - License–Appx and Security
- ISR G2 Series
  - License–Data and Security
- CSR1000v Series
  - License–AX throughput

Platforms and their Roles

- ASR 1001–Hub or dedicated master controller
- ASR 1001x–Hub or dedicated master controller
- ASR 1002–Dedicated master controller
- ASR 1002x–Hub or dedicated master controller
- ASR 1013–Hub or dedicated master controller
- ASR1004–Hub or dedicated master controller
- ASR1006–Hub or dedicated master controller
- ASR1006-X–Hub or dedicated master controller
- CSR 1000v–Branch, or dedicated master controller
- ISR 4321–Branch
- ISR 4331–Branch
- ISR 4351–Branch
- ISR 4431–Hub, branch, or dedicated master controller
- ISR 4451–Hub, branch, or dedicated master controller
- ISR G2 1941–Branch
- ISR G2 2921–Branch
- ISR G2 2951–Branch
- ISR G2 2951-ISM–Branch
- ISR G2 3925–Branch
- ISR G2 3925-E–Branch
- ISR G2 3925-ISM–Branch
- ISR G2 3945–Branch

- ISR G2 3945-E—Branch
- ISR G2 3945-ISM—Branch
- ISR G2 892-FSP—Branch

Related Documentation

Documentation	Description
Cisco IWAN Application on Cisco APIC-EM User Guide, Release 1.3.2	Information about the installation, deployment, configuration of Cisco IWAN on APIC-EM. Explains the Cisco IWAN GUI and how to manage connected devices and hosts within your network.
Cisco Application Policy Infrastructure Controller Enterprise Module Deployment Guide	Information about the underlying Cisco APIC-EM product including deployment steps, verification, and troubleshooting.
Cisco IWAN Technology Design Guides	Cisco IWAN designs are explained in the Cisco IWAN technology design guides.
Configuration Guide for Cisco Network Plug and Play on Cisco APIC-EM	Information about Cisco Network Plug and Play solution.
Cisco Prime Infrastructure Release Notes	Provides a list of all release notes for the Cisco Prime Infrastructure product.
Cisco Prime Infrastructure 3.1 Documentation	Links to deployment guides and other Cisco Prime Infrastructure documentation.
Solution Guide for Cisco Network Plug and Play	Overview of the Plug and Play solution, component descriptions, summary of major use cases, and basic deployment requirements, guidelines, limitations, prerequisites, and troubleshooting tips.
Live Action	Documentation on LiveAction software.
Release Notes for Cisco Network Plug and Play, Release 1.3x	Description of the features and caveats for Cisco Network Plug and Play.
Release Notes for Cisco Application Policy Infrastructure Controller Enterprise Module, Release 1.3.0.x	Description of the features and caveats for the Cisco Application Policy Infrastructure Controller Enterprise Module (Cisco APIC-EM).

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*.

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the What's New in Cisco Product Documentation RSS feed. The RSS feeds are a free service.