Release Notes for Cisco Intelligent Wide Area Network Application (Cisco IWAN App) Release 1.3.0

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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 1.3.0.

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 1.3.0

The following new features are available in Cisco IWAN App Release 1.3.0:

Feature Name	Description
Harmonization of IWAN App and EasyQoS (UI)	Integrates IWAN and EasyQoS apps in Cisco APIC-EM infrastructure, thereby providing a unified user experience for managing applications lifecycle and application groups.
Day 0 Support Brownfield devices for branch devices	Migrates existing customer branch sites to IWAN deployment.
Brownfield - Branch Site Prefix Declaration Enablement	Enables a robust IWAN offering at the cost of user input, branch provisioning workflow has been modified to accept site prefix to accommodate subnets that are on a routed network behind the border router. The site prefixes are statically configured in PfR.
LAN pool support for brownfield	Allows allocating a LAN Brownfield IP address pool before provisioning a brownfield branch.
Day N Service Provider Count Update	Provides the ability to update Service Provider count and Remote Site count after initial provisioning.
Technology Troubleshooting (Service Assurance)—Beta	Provides a combined user experience for application, infrastructure and provisioning. Sites affected with alarms will be shown with an alarm badge. When an alarm is triggered the site turns to yellow. Service Assurance is not available by default and is available for beta testing only. To use the service, the service must be available manually. If the service stops, the service must be made available again." You can verify iwan-analytics-service v1.0 is present in at the following location: APIC-EM Settings > System Administration in the following scenarios: ■ When iwan-analytics-service is available, there is no toggle on or off in the Maps page. ■ When iwan-analytics-service is available, assurance is available when turned ON. Note that assurance is enabled only in lab environment. In production environment, assurance isdisabled. When service is available, there is a delay of few minutes before service assurance provides the correct status.

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 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 1.3.0

Caveat ID Number	Headline
CSCvb45788	After delete and readd Site Specific IP pools, LAN subinterfaces miss QoS or EzPM configurations
CSCvb66481	Incorrect configuration after deleting all vlans from SS IP pool on spoke device
CSCvb59004	Branch VLANs not removed from devices with LAN switchport after delete the site IP pool
CSCvb70165	Prime 3.1.4: Device sync is required for topology to show on PfR monitoring page of PI
CSCvb75909	Prime 3.1.4 UBF-26: Unknown error thrown while collecting CA
CSCvb24793	Spoke provision failed at device addition to inventory failure if WAN IP is changed during provision
CSCvb57808	Device license checking need to be more accurate for different platforms
CSCvb75245	“Device addition to inventory FAILURE” error message needs to be more accurate
CSCvb66590	PfR exports not sent to new collector IP, when collector is modified
CSCvb75927	Prime 3.1.4 UBF-26: QoS Class Map Statistics show only Net Mgmt Traffic for HUB INET BR
CSCvb81639	IWAN App displays exceedingly high jitter in milliseconds
CSCvb81327	Prime 3.1.4 UBF-29: IOS PfR event reports jitter in microseconds, Prime displays it as milliseconds
CSCvb59257	Device not properly deleted when site is deleted before device is fully added to inventory
CSCvb85069	Edit custom app from EzQOS UI; cli changes are not pushing to IWAN devices

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—64GB

  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)

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.

Supported Hub Devices

- 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

- 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
- 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

NetFlow Collectors

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

Cisco Prime Infrastructure Release 3.1.4 version is supported by Cisco IWAN App.

LiveAction version 5.2.0 or higher is supported by Cisco IWAN App. See http://www.liveaction.com.

Related Documentation

Documentation	Description
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	Refer to these documents for information about Cisco Prime Infrastructure, which can be used to configure Cisco IWAN.
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.
Cisco IWAN on Cisco APIC-EM Configuration Guide, Release 1.3.x	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.
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* at: http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html.

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