

Cisco SD-WAN Support

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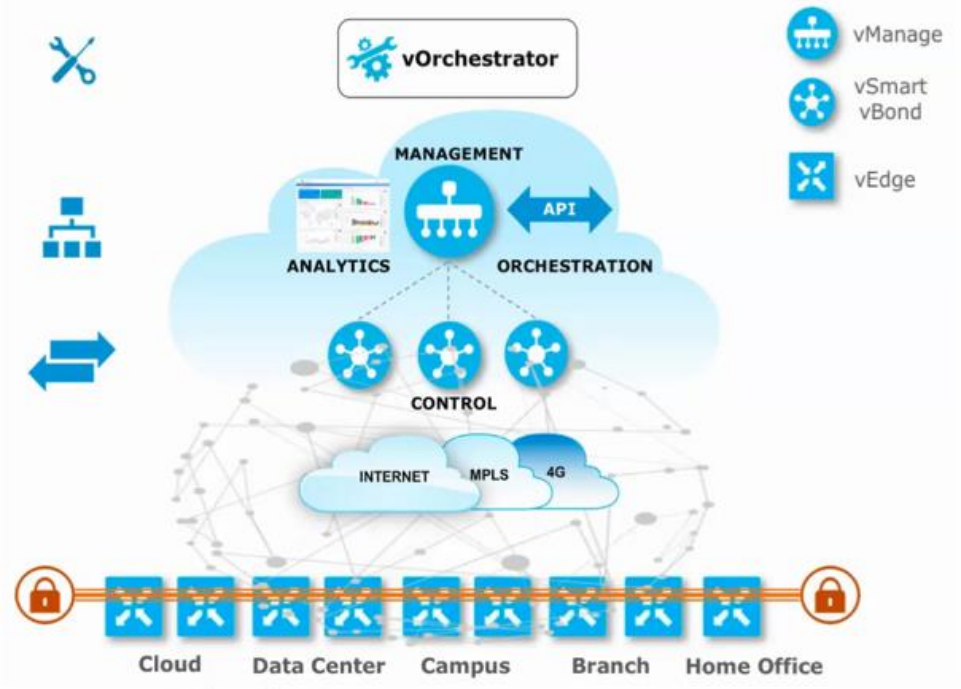
Cisco SD-WAN Overview

Cisco SD-WAN is a cloud-first architecture that separates data and control planes, managed through the Cisco vManage console. You can quickly establish an SD-WAN overlay fabric to connect data centers, branches, campuses, and co-location facilities to improve network speed, security, and efficiency.

Cisco SDWAN adopts a cloud based solution, it consists of vOrchestrator, vManage, vSmart and vEdge.

- vOrchestrator is responsible for launching all controllers VMs in the cloud.
- vManage is the management plane for the overall SDWAN solution. It uses netconf/YANG to talk to vEdge devices.
- vSmart is the control plane for the overall SDWAN solution. It talks to the vEdge device, acts as the route reflector, key reflector, and policy engine.
- vEdge is the data plane of the overall SDWAN solution. The IR1800 platform talks to vSmart, vManage, as part of the SDWAN network.

The follow diagram shows the high level architecture of SDWAN:



While Cisco SD-WAN is a cloud-first architecture, some of the components can be deployed on-premisis. Refer to the Cisco SD-WAN landing page for further information on the capabilities of SD-WAN.

Starting with IOS XE release 17.3.2, the IOS XE image can be configured as controller mode to run SD-WAN. A single universalk9 image is used to deploy Cisco IOS XE SD-WAN and Cisco IOS XE functionality. This universalk9 image supports two modes - Autonomous mode (for Cisco IOS XE features) and Controller mode (for Cisco SD-WAN features).

Access the Cisco IOS XE and Cisco IOS XE SD-WAN functionality through Autonomous and Controller execution modes, respectively. The Autonomous mode is the default mode for the router and includes the Cisco IOS XE functionality. To access Cisco IOS XE SD-WAN functionality, switch to the Controller mode. You can use the existing Plug and Play Workflow to determine the mode of the device. See the Cisco SD-WAN Getting Started Guide for further information.

Note PnP is not supported on LAN ports which are GigabitEthernet ports 0/1/0 – 0/1/3 on the IR1800. PnP is supported only on GigabitEthernet 0/0/0 port and Cellular PIMs.

vManage Support for the WP-WIFI6-x Module

This release will enable configuration and monitoring of the WP-WIFI6-x module through vManage from SDWAN. This applies only when the module is running in EWC mode.

Note

- vManage is now called Cisco Catalyst SD-WAN Manager.
- Cisco Catalyst SD-WAN Manager only supports SD-WAN UX 1.0, which is now replaced by SD-WAN UX 2.0.
- EWC mode is at End-of-Life and is not recommended for new deployments. For more information, see End-of-Sale and End-of-Life Announcement for the Cisco Wireless EWC on Access Point.

For further information about vManage, see the product landing page here: https://www.cisco.com/site/us/en/products/networking/wan/vmanage/index.html

SD-WAN

SD-WAN RA is a networking solution that

- combines IOS-XE SD-WAN and IOS-XE FlexVPN Remote Access Server features
- is supported on IoT routers with IOS XE 17.13.1, and
- provides remote access capabilities where all IoT devices only support the SD-WAN RA Client.

Additional documentation

Note All IoT devices only support the SD-WAN RA Client.

Information on SD-WAN Remote Access can be found in Cisco Catalyst SD-WAN Remote Access.

Additional documentation for SDWAN/vManage is available at these links:

- User Documentation for Cisco IOS XE Catalyst SD-WAN Release 17
- Cisco Catalyst SD-WAN
- Cisco SD-WAN Support Information
- Cisco vManage Monitor Overview
- Managing the SD-Routing Device Using Cisco SD-WAN Manager

Related Documentation

Cisco SDWAN documentation is available from the following sources:

https://www.cisco.com/c/en/us/support/routers/sd-wan/tsd-products-support-series-home.html

https://sdwan-docs.cisco.com/Product_Documentation/Software_Features

All of the technical documentation for Cisco SD-WAN can be found here:

https://www.cisco.com/c/en/us/support/routers/sd-wan/tsd-products-support-series-home.html

vManage Support for EWC Mode on the Cisco Wi-Fi Interface Module

The Cisco Wi-Fi Interface Module (WIM), is a pluggable interface available for all models of the IR1800 series. The PID is WP-WIFI6-x where x signifies the regulatory domain.

vManage support for EWC mode on the WIM module allows the user to configure the module in EWC mode with wlan profiles, radio profiles, and management details of the EWC from the router in SDWAN mode. The WIM is configured from vManage using feature template “ISR1K/IR18 Wireless” and verify the show wireless-lan commands in vManage.

With this release of IOS XE, vManage support has been added for the EWC Controller ONLY.

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