



Cisco SD-WAN Cloud OnRamp for SaaS

Overview

Q: What is Cisco SD-WAN Cloud OnRamp for SaaS?

A: Cisco SD-WAN Cloud OnRamp for SaaS is Cisco Catalyst SD-WAN's cloud networking solution for Software-as-a-Service (SaaS) applications. The solution continuously monitors all possible paths to the SaaS applications by sending continuous probes through all permissible paths to measure latency and loss on the path to calculate Application Quality of Experience (App QoE) metrics. Based on these metrics, the solution selects the best possible path for routing the application traffic, thereby helping ensure fast, efficient, and reliable connectivity. The App QoE metric also gives network administrators visibility into network path performance over a period of time for all the available network paths, which they can use for troubleshooting and improving the user experience.



Benefits

Q: What are the benefits of Cisco SD-WAN Cloud OnRamp for SaaS?

A: Key benefits of Cloud OnRamp for SaaS include:

- **Reliability:** Dynamically route SaaS traffic to the best path, providing a fast, secure, and reliable end-user experience.
- **Visibility:** Gain real-time and historical visibility into application performance through Quality-of-Experience (QoE) metrics.
- **Automation:** Automatically apply application-aware routing policies for direct branch connectivity to trusted applications. A new, user-friendly interface for Cisco SD-WAN Cloud OnRamp for SaaS helps simplify IT via streamlined step-by-step configuration and an intuitive workflow.

Applications supported

Q: What applications does Cisco SD-WAN Cloud OnRamp for SaaS currently support?

A: Currently, Cisco SD-WAN Cloud OnRamp for SaaS supports 1400+ business applications used by enterprises. These applications include Microsoft 365, Webex by Cisco, Amazon Web Services (AWS), Google apps, Salesforce,

Dropbox, SAP Concur, Intuit, Box, Oracle, Zendesk, Zoho, SugarCRM, and GoToMeeting. In addition, the solution automates best path selection for custom and standard NBAR (Network Based Application Recognition) applications, allowing enterprises to enable Cloud OnRamp for SaaS capabilities with the application of their choice.

Q: How does Cisco SD-WAN Cloud OnRamp for SaaS optimize connectivity to Webex?

A: With Cloud OnRamp for SaaS for Webex, Cisco Catalyst SD-WAN segregates Webex traffic from generic internet traffic and routes it via the best path from a branch router to deliver a seamless, consistent, and high-quality user experience. There are various Webex regions across the globe, which have responder endpoints that respond to probes from Cisco Catalyst SD-WAN routers.

Cisco Catalyst SD-WAN router sends continuous probes to these Webex responders and calculates the QoE score based on the loss and latency values returned by probe results, which is then used to determine the best performing path. For seamless automation of the above mechanism, Cisco Catalyst SD-WAN Manager integrates with Webex using APIs to periodically fetch Webex region prefixes, responders' details, and automatically update edge router configuration and policies appropriately.

With Webex app experience feedback via telemetry, customers can visualize the app performance metrics such as loss, latency, jitter, resolution height, media-bitrate, framerate, and much more via the Webex 360 dashboard in Cisco Catalyst SD-WAN Analytics. Webex telemetry also provides insights into application perspective via network KPIs such loss, latency, etc., offering a holistic view of network and application health. This feature also empowers IT teams and network admins of organizations to proactively identify and resolve network or application problems across their global offices, for an improved user experience.

Q: How does Cisco SD-WAN Cloud OnRamp for SaaS optimize connectivity to Microsoft 365?

A: Cloud OnRamp for SaaS segregates Microsoft 365 traffic from generic internet traffic and uses path probing mechanism to identify the best performing path to route user traffic for Microsoft 365 Apps over that path. Microsoft 365 IP and URL categories separate and group their Apps into 3 categories (Optimize, Allow and Default) based on Apps endpoint sensitivity and network requirements to deliver an effective user experience. Cloud OnRamp for SaaS uses these URL categories to apply a different policy to Microsoft 365 Apps that belong to a particular category. With Microsoft 365 IP and URL categorization, network administrators

have granularity and flexibility to define on what Microsoft 365 endpoints are accessed over Direct Internet Access circuits and what endpoints are accessed via data center back-haul with security inspection.

Cloud OnRamp for SaaS is tightly integrated with [Cisco Software-Defined Application Visibility and Control \(SD-AVC\)](#). Cisco SDAVC periodically fetches Microsoft 365 IP and URL categories (Optimize, Allow, and Default) using Microsoft 365 Web Service APIs. The application classification cache on Catalyst SD-WAN routers is updated continuously by Cisco SD-AVC based on the fetched data. This allows Network administrators to selectively enable Cloud OnRamp for SaaS optimization for specific Microsoft 365 IP and URL categories. For more details on IP and URL categorization, see details at aka.ms/IPURLBlog.

Cloud OnRamp for SaaS is additionally integrated with Microsoft Informed Networking Routing Telemetry for Microsoft Exchange, Teams and SharePoint which provides deeper visibility into network and application performance. With Microsoft Informed Network Routing, Cloud OnRamp for SaaS receives Microsoft's opinion score on network paths and uses this to improve its optimal

path selection algorithm for Microsoft 365 traffic. Cisco Catalyst SD-WAN Analytics delivers enhanced analytics with insights into application and network performance via Microsoft 365 telemetry. The end-result is a seamless Microsoft 365 user experience via path optimization, deeper analytics, and policy automation.

Deployment

Q: Who is the solution designed for?

A:

- Organizations aiming for higher workforce productivity and optimized connectivity to cloud and SaaS applications, and seeking to enable a fast, secure, and reliable application experience for their users.
- Organizations with remote sites and globally dispersed teams that access SaaS applications and other workloads in the cloud.
- Organizations considering or using Cisco Catalyst SD-WAN today.

Q: How do I enable Cisco SD-WAN Cloud OnRamp for SaaS?

A: The Cloud OnRamp for SaaS solution can be centrally managed, deployed, and operated using the Cloud OnRamp for SaaS workflow in [Cisco Catalyst SD-WAN Manager](#). Cloud OnRamp for SaaS now features a new, simplified user experience beginning with Cisco Catalyst SD-WAN release 20.15/17.15. The user-friendly interface and guided workflow enable best path selection, additional monitoring capabilities, such as a new SaaS site topology view for 1400+ business applications including Microsoft 365 and Cisco Webex.

Q: How can I make Cloud OnRamp for SaaS deployment even easier for Kubernetes applications?

A: The Cloud OnRamp for SaaS: Kubernetes integration reduces time to configure Cloud OnRamp for SaaS, enabling automation and optimization of traffic between Kubernetes applications and the SaaS they are consuming. The integration extracts pre-defined SaaS connectivity requirements from Kubernetes applications and automatically programs those into Cloud OnRamp for SaaS. Learn more about the integration with the Cloud OnRamp for SaaS: Kubernetes Integration [white paper](#).

Ordering and licensing

Q: How is Cisco SD-WAN Cloud OnRamp for SaaS ordered?

A: Cloud OnRamp for SaaS is part of the Cisco Catalyst SD-WAN software included with each router platform that can be procured through [Cisco Commerce \(CCW\)](#).

Each router needs to be ordered with an appropriate [Cisco DNA Software for SD-WAN and Routing subscription](#).

Q: What are the licensing options available?

A: Cloud OnRamp for SaaS is part of Cisco DNA Software for SD-WAN and Routing. View the feature support matrix [here](#).

Resources

Q: Where can I find more information about the Cisco SD-WAN Cloud OnRamp for SaaS solution?

A:

- [What Is Cloud OnRamp for SaaS? video](#).
- [Cloud OnRamp for SaaS white paper](#).
- [Cloud OnRamp with Microsoft 365 demo video](#).
- [Cloud OnRamp with Microsoft 365 white paper](#).
- [Cloud OnRamp with Webex demo video](#).
- Cisco SD-WAN Cloud OnRamp – cisco.com/go/onramp.