





Cisco SD-WAN Cloud Interconnect with Equinix







Adopting a hybrid-multicloud strategy

More and more enterprises are realizing the benefit of moving applications to the cloud. Most have already adopted a multicloud or hybrid cloud strategy. However, these enterprises face challenges when securely connecting to their cloud deployments. The internet offers only best-effort connectivity with inconsistent network quality, which can significantly impact application performance.

Another option, direct cloud interconnects, requires customers to plan for capacity and global reach upfront, which can lead to underutilization and increased cost. What if enterprises could have seamless, automated connectivity to multiple Infrastructure-as-a-Service (laaS) and Software-as-a-Service (SaaS) environments, without all the complexity?

Cisco SD-WAN Cloud OnRamp: Intent-based networking for multicloud

To keep up with the increased demands on the WAN, enterprises are learning to broker, connect, build, and govern their networks, not only for branch locations and data centers, but for a vast multicloud landscape. Cisco® SD-WAN delivers cloud networking as part of our intent-based networking framework to enable agility for enterprises' WAN connectivity. Cisco SD-WAN Cloud OnRamp optimizes and dynamically provisions network, security, and services.

Cisco SD-WAN Cloud Interconnect with Equinix: Automated hybrid-multicloud networking

Cisco Catalyst SD-WAN's integration with Equinix allows you to provision on-demand branch connectivity to multiple sites and to the world's leading cloud provider networks like Amazon Web Services (AWS), Google Cloud, and Microsoft Azure, directly from your SD-WAN controller. Part of Cisco SD-WAN

Cloud OnRamp, Cisco SD-WAN Cloud Interconnect is integrated with Equinix Network Edge, a network service that deploys the Cisco Catalyst 8000V Edge Software virtually at Equinix Data Centers and interconnects to the cloud in minutes using Equinix Fabric. The joint solution simplifies provisioning, delivers reliable network performance, and decreases the costs and complexity of operating your network connectivity to cloud service providers.

Through the automation capabilities of the Cisco Catalyst SD-WAN controller, Cisco Catalyst SD-WAN Manager, you can deploy your Cisco Catalyst SD-WAN overlay while integrating the dynamic and highly reliable underlay of the Equinix network, so that you can take advantage of the cloud consumption model for dynamic provisioning of your WAN connectivity. Catalyst SD-WAN Manager provides a single, easy-to-use console to automate deployment of connections between sites and from site to cloud, reducing provisioning from weeks to minutes. Equinix Network Edge provides secure, reliable connectivity to Equinix's global ecosystem via 260 colocation data centers in 71 markets across 33 countries and 6 continents.





Cisco also ensures that traffic traversing the private backbone of Equinix is encrypted end-to-end. Cisco extends the SD-WAN fabric over the private underlay all the way into the cloud service provider by hosting virtual SD-WAN routers (Cisco Catalyst 8000V Edge Software)

in transit VPCs/VNETs. This not only allows for end-to-end encryption for branch to cloud traffic, but also overcomes any failures of the underlay by automatically steering traffic from the branch to cloud over the internet.

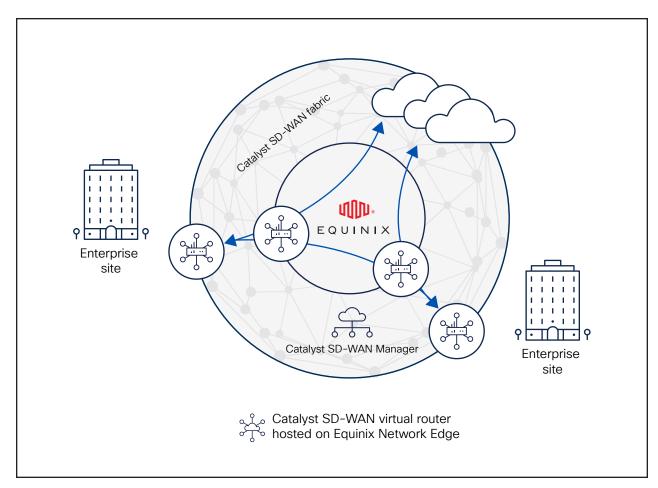


Figure 1. Cisco SD-WAN Cloud Interconnect with Equinix

Benefits of Cisco SD-WAN Cloud Interconnect with Equinix

 Full stack automation: Orchestrate both Cisco Catalyst SD-WAN overlay and Equinix underlay with Cisco SD-WAN Cloud Interconnect via Catalyst SD-WAN Manager.

Access the world's largest industry ecosystem, powered by 462,000+ interconnections.

- Multipath optimization: Implement policy to segment and select any path through any carrier.
- Centralized visibility: Enable Cisco Catalyst SD-WAN multicloud monitoring for end-to-end visibility.
- Single vendor experience: Receive onboarding, provisioning, and support from Cisco.
- Cloudlike consumption: Benefit from significant cost savings over traditional routes and pay only for what you need.
- Optimized performance: Minimize latency and network hops with secure, direct interconnections to leading cloud and SaaS providers.
- Encrypted Multicloud Interconnects:

 SD-WAN tunnels created between interconnect gateway (Equinix Network Edge) and the cloud service provider allow for branch to cloud traffic to be completely encrypted through the Equinix Fabric.





Additional resources

- Cisco SD-WAN Cloud Interconnect with Equinix FAQ.
- Cisco Catalyst SD-WAN and Equinix White Paper.
- Cisco SD-WAN Cloud OnRamp.
- Equinix Network Edge.
- · What is SDCI? webpage.
- · Cisco and Equinix partnership page.

How do you deploy Cisco SD-WAN Cloud Interconnect?

Users have the convenience of managing their SD-WAN fabric and connectivity to clouds and branches through Cisco Catalyst SD-WAN. All policy administration and deployment of virtual routers, like the Catalyst 8000V, is API driven and transparent to the user. Users' Equinix accounts are onboarded directly on Cisco Catalyst SD-WAN Manager allowing them to use the Catalyst SD-WAN Manager to provision all Equinix components on a single dashboard. Users select the connection bandwidth and locations where they want to deploy Equinix Network Edge and to establish connectivity to various cloud destinations.

How do you order Cisco SD-WAN Cloud Interconnect?

Users may order the solution via Cisco partners, who will have the capability to order all components of the solution through Cisco Commerce Workspace (CCW) on behalf of the user. Users will be able to purchase Cisco Catalyst 8000V Edge Software licenses along with the Cisco SD-WAN Cloud Interconnect gateway (Equinix Network Edge), Virtual

Connections (Equinix Fabric), and Device Link Group through CCW. Licensing is now available as a Pay-As-You-Go (PAYG) billing model. Please refer to the Equinix ordering guide for additional details on ordering various SKUs.

The PAYG licensing mechanism will require users to purchase PAYG (\$0 licenses) SKUs from CCW through their partners. These PAYG license SKUs entitle users to bring up any Equinix services without requiring any term commitments upfront. This also allows users to dynamically expand or contract their network based on their day-to-day bandwidth requirements and be billed at the end of the month. A true consumption-based billing model enables you to pay only if you use the Equinix services, so there is no wastage, no overages, and truly dynamic access to your network. With no upfront commitments, the guesswork is taken out of determining the amount of bandwidth you need for the next year. Users are billed based on publicly available rates, for compute and bandwidth reserved on a daily basis. Pricing varies based on the region where the services are located and the size of compute and bandwidth of the Equinix Network Edges and Virtual Connections, respectively. Users can also easily track their usage/consumption on their Subscription Billing Platform (SBP) portal.