



Cisco Cloud Services Router 1000V and Amazon Web Services

SOLUTION OVERVIEW





Cisco brings the world's most popular networking platform to AWS

The Cisco CSR 1000V sets the standard for enterprise network services and security on Amazon Web Services. The Cisco CSR 1000V is a complete multiservice cloud networking platform offering scalable enterprise-class routing features, a VPN, stateful firewall, and application inspection. At the core of the Cisco CSR 1000V is a modular architecture with which you can add more services to meet changing business and user demand. The Cisco CSR 1000V is based on Cisco IOS® XE Software, which powers cutting-edge routers, including the Cisco ASR 1000 Series Aggregation Services Routers and Cisco 4400 Series Integrated Services Routers (ISRs), and represents decades of Cisco IOS Software development accelerated by innovation and customer demand.

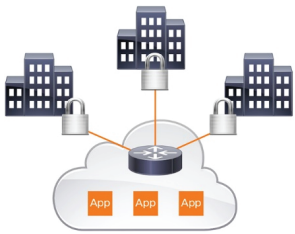
IT departments are seeking out options that provide a transparent expansion to AWS. The Cisco CSR 1000V provides this, as well as a familiar user interface of Cisco IOS XE Software and enables organizations to take advantage of their existing network management tools and processes. In addition to the Cisco IOS XE Software command line, the Cisco CSR 1000V includes a representational state transfer (REST) API, allowing orchestration tools to not only provision the Cisco CSR 1000V but also configure and monitor it.



Cisco CSR 1000V Use Cases in AWS

Branch-Office, Campus, and Data Center VPN Aggregation

A typical approach to AWS VPN access is to provision a single VPN backhaul between an existing data center and an Amazon Virtual Private Cloud (Amazon VPC). Deploying CSR 1000V enables every branch-office, campus, and data center location to directly access the Amazon VPC securely, without backhauling through an existing data center (see Figure 2). This process reduces latency, eliminates expensive private WAN links, and avoids per-VPN-tunnel costs. You can choose from a wide variety of VPN technologies supported on the CSR 1000V, including point-to-point IP Security (IPsec), FlexVPN, Dynamic Multipoint VPN (DMVPN), and EasyVPN. Familiar Cisco IOS XE VPN configuration allows IT staff to quickly integrate an Amazon VPC into existing enterprise VPN topologies.



Secure Inter-VPC Connectivity

Multiregion deployments become simpler with an inter-VPC VPN connectivity. By deploying a Cisco CSR 1000V instance on an Amazon VPC in each region and interconnecting through VPN, you can create and secure a global network topology.

Branch Office to AWS and Interapplication Security

The Cisco CSR 1000V includes advanced Cisco IOS XE Software security, including access control lists (ACLs) and a stateful zone-based firewall. It extends enterprise security policies to the AWS Cloud using a familiar platform and configuration syntax.

These features can be used to apply security between virtual networks in AWS or between AWS and on-premises locations.

Application Performance Monitoring and Control

Application visibility and control (AVC) is a Cisco IOS XE feature that allows the CSR 1000V to identify and classify thousands of different applications, reporting key performance metrics for each. When classified, quality-of-service (QoS) policies can be used to prioritize or block specific applications. AVC data collected can then be used to pinpoint application performance degradation.

The IP service-level agreement (SLA) feature enables the CSR 1000V to perform network performance measurements between Cisco devices to further enhance this capability. CSR 1000V on AWS can act as an IP SLA responder or source, implementing probes with time stamps to accurately measure delays, jitter, and other metrics that reflect network performance. IP SLA helps to proactively identify cloud performance problems, ensuring application availability, lower operational costs, and reducing downtime.



About AWS

For 10 years, Amazon Web Services has been the world's most comprehensive and broadly adopted cloud platform. AWS offers over 70 fully featured services for compute, storage, databases, analytics, mobile, Internet of Things (IoT) and enterprise applications from 35 Availability Zones (AZs) across 13 geographic regions in the U.S., Australia, Brazil, China, Germany, Ireland, Japan, Korea, Singapore, and India. AWS services are trusted by more than a million active customers around the world – including the fastest growing startups, largest enterprises, and leading government agencies – to power their infrastructure, make them more agile, and lower costs. To learn more about AWS, visit <http://aws.amazon.com>.



How to Deploy Cisco CSR 1000V in AWS

The Cisco CSR 1000V is available in AWS Marketplace by searching for CSR 1000V or Cisco. From AWS Marketplace, you can deploy the Cisco CSR 1000V in bring-your-own-license (BYOL) mode, or you can add its hourly usage to your monthly AWS statement.





More Information:

Cisco CSR 1000V on Amazon Marketplace, with 30-day Free Trial:

- Hourly AX Package: <https://aws.amazon.com/marketplace/pp/B000CG4OAA>
- Hourly SEC Package: <https://aws.amazon.com/marketplace/pp/B000CG4Q4E>
- Bring Your Own License: <https://aws.amazon.com/marketplace/pp/B00NF48FI2>

Cisco Transit VPC on Amazon MarketPlace

- <https://aws.amazon.com/marketplace/pp/B01IAFXXVO>

Cisco seller page on Amazon Marketplace:

- https://aws.amazon.com/marketplace/seller-profile/ref=dtl_pcp_sold_by?ie=UTF8&id=e201de70-32a9-47fe-8746-09fa08dd334f

Cisco CSR 1000V:

- <http://cisco.com/go/csr1000v>

Cisco CSR 1000V deployment video

- <https://www.youtube.com/watch?v=CkAeG0bBFcc>



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