



Connecting the hybrid world

With networking and hybrid cloud solutions from AWS and Cisco

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Introduction

Traditional business networks have changed. They used to connect corporate data centers through expensive networking. Now, however, data resides outside of corporate data centers in emails, cloud CRM systems, videos, productivity tools, and more. People are accessing corporate resources and enterprise applications remotely from a variety of end points, adding a layer of complexity to network security. So, how can you securely, rapidly, and consistently connect remote users, distributed teams, applications, workloads, and data across hybrid environments?

Amazon Web Services (AWS) and Cisco have created a robust, secure framework that makes it simple and fast to connect your hybrid world. This framework enables you to scale up and down as needed and pay as you go with a consistent global footprint and software-defined, repeatable blueprints. As a result, you can address modern challenges and opportunities by changing how networking is done. This eBook shows you how.



A seamless, secure approach to hybrid cloud networking

Businesses today need to operate across on-premises and public cloud environments to connect teams and remote workers who are part of complex, distributed networks with multiple users. AWS and Cisco offer technology and expertise that span from the user to the application, infrastructure, and security to application monitoring and multi-cloud management – and everywhere in between – by taking a robust approach to hybrid cloud.

By focusing on security, simplicity, and transformation, AWS and Cisco provide solutions you can depend on that are designed to make IT easier and empower innovation. You also get a solution framework that makes your unique environment better, without forcing you into a one-size-fits-all approach.

The result? You gain deep and wide visibility across your infrastructure and applications, so you can connect code to business outcomes. Your workloads have continuous access to the right resources, whenever and wherever needed. Connection and protection are at scale, backed by broad and seamless networking and security platforms.

By simplifying networking across on-premises and cloud, Cisco solutions on AWS help you address common use cases in a hybrid environment footprint, such as networking, cloud migration, and remote work.

Delivering a consistent experience on-premises and in the public cloud, this framework provides:



Buying options that meet your organization's size and requirements



Standards-based solutions that work with tools of your choice



A single point of contact across all solution components



A complete networking and security portfolio

How to build and support your hybrid cloud network of the future

Cisco solutions on AWS provide blueprints you can follow to build and support a secure, unified networking infrastructure. An array of products help you create a secure, clean, and fast hybrid cloud network that scales up and down as needed, connects with the public cloud, integrates with your existing investments, and is designed to last. Click each solution to learn more.



Networking solutions for the hybrid cloud

Cisco SD-WAN on AWS »

Securely manage and automate branch connectivity.

Cisco Meraki vMX100 and SD-WAN »

Use a virtual MX (vMX) to extend Cisco Meraki™ MX deployments to IT services on AWS.

Cisco Cloud ACI Anywhere »

Enable a consistent network and security policy for your hybrid cloud.

Cisco Cloud Services Router 1000V on AWS »

Securely, reliably, and cost-effectively extend your on-premises network to AWS. Securely manage and automate branch connectivity.

Cisco Catalyst 8000V Edge Software on AWS »

Deliver high-speed secure VPN services with high availability, firewall protection, app visibility and control, and more.

Cisco IOS XRv 9000 Router on AWS »

Extend your Cisco SD-WAN overlay to the AWS Cloud with a cost-effective virtual router trial.



Security solutions for the hybrid cloud

Cisco Adaptive Security Virtual Appliance (ASAv) »

Bring enterprise firewall power to AWS.

Cisco Firepower Next-Generation Firewall (NGFW) Virtual on AWS »

Deploy enterprise malware protection and other advanced threat defense options to AWS.

Cisco Secure Firewall Cloud Native »

Protect workloads, application stacks, and services with a solution purpose-built for Kubernetes environment on AWS.

Cisco Defense Orchestrator »

Manage security policy consistently across Cisco Adaptive Security Appliance (ASA), Cisco Firepower, Meraki MX, and AWS from a centralized console.

Cisco SecureX Threat Response »

Accelerate threat investigation and remediation.

Cisco Secure Endpoints »

Block threats before they target you with intergrated protection, detection, and response.

Networking case study



ENGIE is a French multinational electric utility company that operates in the fields of energy transition, electricity generation and distribution, natural gas, nuclear, renewable energy, and petroleum.

Challenge

ENGIE's networking team needed to provide connectivity for all its branch offices around the world, which adhered to different regulatory and compliance standards.

Solution

ENGIE extended its worldwide network with Cisco SD-WAN, enabling it to securely leverage a dedicated AWS Transit Connect and standardize network access across all AWS Regions.

Results

By deploying Cisco SD-WAN and AWS Transit Gateway, ENGIE reduced new site connectivity from 15 days to under a week.

“We have hundreds of branches and VPCs spread out around the globe. Using AWS Transit Gateway features and Cisco SD-WAN enables us to connect remote sites easily.”

- Adrien Geniller, Network Lead Architect, ENGIE

Optimize cloud migration with visibility and control

You need the right tools to get the most out of your cloud workloads. Cisco provides the toolsets to move faster and deliver optimal connections while AWS services accelerate migration and reduce risk. As a result, you get the observability needed to ensure complete visibility and control of your migration and modernization efforts. Click each solution to learn more.



Full-stack observability solutions

Cisco AppDynamics »

Understand application dependencies and workload demands with enterprise-class cloud and hybrid monitoring.

Cisco Intersight Workload Optimizer (IWO) »

Continuously optimize critical IT resources and simplify hybrid cloud operations with full-stack visibility, intelligent insight, and decision automation.

Cisco ThousandEyes »

Get actionable visibility of your AWS migration with a platform that monitors network infrastructure, troubleshoots application delivery, and maps internet performance.

Visibility case studies

Solar Turbines

A Caterpillar Company

Challenge

California-based, energy solutions company **Solar Turbines** needed to migrate more than 90 applications to AWS.

Solution

Solar Turbines turned to Cisco AppDynamics, available in AWS Marketplace, to gain end-to-end visibility and ensure optimal performance.

Result

Issue identification, which used to take hours, is down to just minutes.

“With AppDynamics, we see the entire flow and know about application or infrastructure issues within minutes. The efficiency is insane.”

- Tomas Huszagh, Software Engineering Manager and DevOps and Operations Lead, Solar Turbines

JOBVITE

Talent acquisition innovator **Jobvite** applies automation and intelligence to help its customers improve recruitment.

Challenge

After transitioning to a cloud-native microservices architecture, Jobvite needed to monitor its multiple AWS-based applications.

Solution

Jobvite used Cisco AppDynamics and AppDynamics Deep Code Insights (DCI) to gain an unprecedented level of visibility into production code to capture critical debug data entirely on-demand and without disrupting customers.

Result

Jobvite has shortened the investigation cycle for identifying root causes of issues, saving hours of work and research.

“We saw immediate results after implementing AppDynamics DCI.”

- Ron Teeter, Chief Architect, Jobvite

Connect and secure your hybrid cloud network for remote teams

Fewer workers are in the office; many employees work from home or remotely from somewhere else. To meet their needs, your hybrid cloud network must be scalable, visible, secure, and globally available with zero downtime. Cisco solutions on AWS offer cloud and networking products and services designed to optimize your infrastructure for remote work. Click each solution to learn more.



Connections and communication for remote work

[Cisco Webex »](#)

Webex is designed to enable great hybrid work experiences across your entire organization with one comprehensive feature set for users and IT.

[Cisco Adaptive Security Virtual Appliance \(ASAv\) Remote Access \(RA\) VPN on AWS »](#)

Ideal for remote work environments, Cisco ASAv RA VPN delivers a remote access VPN that scales up and down for dynamic environments.



Security for remote work

[Cisco Duo Security on AWS »](#)

Gain visibility and secure access for any user, device, or location with two-factor authentication and flexible security policies for AWS.

[Cisco Umbrella »](#)

Defend against cyber threats and protect users in minutes with simplified software-based cloud security delivered on AWS.

Remote work security case studies



Challenge

Ridesharing company **Lyft** wanted to establish strong access controls so only authorized individuals using company-issued devices could access sensitive data.

Solution

Lyft chose Cisco Duo Security on AWS to consolidate multi-factor authentication and mobile device management. Users now access internal applications securely without using a specific VPN client.

Result

Lyft has reduced its overall total cost of ownership by more than 50 percent.

“Duo Security has proven to be one of those rare solutions that both improves the security of our company while simultaneously being easier for our employees to use.”

- Mike Johnson, Former CISO, Lyft



Challenge

Canadian biotech company **STEMCELL** had been successfully supporting remote workers with Cisco ASA on AWS for several years and needed to expand its VPN capacity.

Solution

When global events caused organizations worldwide to unexpectedly close their local offices, some firms struggled to support employees who were suddenly working from home. The STEMCELL VPN capacity expansion took just a matter of minutes.

Result

Today, STEMCELL's remote workers securely access corporate applications via Cisco ASA firewalls and Cisco AnyConnect Secure Mobility clients, supporting approximately 600 concurrent users during peak times.

“Moving to Cisco ASA on AWS reduced our IT management activities by about 75%, freeing the team to work on other projects.”

- Adam Leggett, Manager of Global IT Infrastructure and Operations, STEMCELL

Summary

AWS and Cisco provide the robust framework, consistent global footprint, and software-defined repeatable blueprints needed to connect hybrid cloud environments, optimize cloud migration, and enable employees to work remotely and securely. With pay-as-you-go pricing, the ability to scale up and down based on demand, and solutions designed to connect the hybrid world, you can:

- Enable new site connectivity, cutting deployment timeframes from weeks to days.*
- Cut total cost of ownership in half.*
- Save approximately 50% in monitoring costs.*
- Reduce maintenance time by 50%.*
- Slash time to issue resolution from hours or days to minutes.*

By inspiring trust with secure and reliable solutions, simplifying IT across on-premises and cloud environments, and empowering hybrid work, Cisco solutions on AWS help you build a solid foundation for the network of the future.

*Accelerate Your Journey to Cloud with Cisco and AWS:
A seamless and secure approach to innovating with confidence, AWS eBook, 2020.



Looking for the next step in your hybrid world journey?

[I'm just researching »](#)

[I want to talk to someone to learn more »](#)

I'm ready to deploy

- [Cisco and AWS Quick Starts »](#)
- [Cisco Solutions and Free Trials in AWS Marketplace »](#)



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