Cisco Catalyst Center on AWS
Comprehensive network management for the public sector

Challenges

Public agencies wrestle with hard-to-manage distributed networks

As public sector agencies expand their network management, demand increases in time and complexity—often a result of duplicate and underperforming systems and services. Agency leaders want to unify their networks, but need to do so in a way that accommodates future scaling, improves operational efficiency, and supports intergovernmental collaboration. Throughout, they must prioritize security and compliance.

Externally, performant broadband and wireless connectivity are key to bridging the digital divide and making sure that citizen services are delivered equitably and inclusively. Faced with resource constraints, agencies need easy-to-manage solutions that simplify provisioning and provide detailed analytics so they can act quickly—without adding headcount.

The Solution

Cisco Catalyst Center on Amazon Web Services (AWS)

Cisco Catalyst Center on AWS enables institutions to consolidate and optimize network management and performance with a network controller that offers real-time location-based services. Through its comprehensive toolset, Cisco Catalyst Center simplifies network administration, reducing the overall maintenance of application portfolios so that agencies can maximize their existing teams.

As a centralized controller it delivers automation, assurance, and policy enforcement across networks. Cisco Catalyst Center leverages intent-based networking and contextual artificial intelligence (AI)- and machine learning (ML)-driven insights to ensure the network remains responsive to ever-changing IT requirements. And it provides extensive automation features for provisioning and change management.

Why Cisco Catalyst Center on AWS?

Cisco Catalyst Center and AWS together provide the full functionality that a Cisco Catalyst Center appliance deployment offers. It runs in an institution's own AWS cloud environment and manages the network from the cloud. This customizable solution allows agencies to manage their whole infrastructure safely and securely through AWS.

Public sector institutions can utilize Cisco Catalyst Center to utilize AWS native features along with the high availability that AWS provides. The Cisco Catalyst Center Virtual Appliance (VA) is optimized for AWS public cloud, providing the same controls and features as the on-premises version.

75% reduction in ticket resolution time for hardware failures

50% decrease in trouble tickets due to proactive hardware failure detection

30% reduction in costs resulting from a 20% decrease in operation support costs and 75% reduction in engineering time

Source: The Business Why's of Migration Cisco DNA Center

Benefits

Cisco Catalyst Center on AWS offers the flexibility, agility, and visibility that help public agencies thrive

Customers using Cisco Catalyst Center experienced a:

Cost optimization

Cisco Catalyst Center on AWS provides agencies with faster time-to-value by optimizing an institution's Cisco investment, securing a remote workforce, and lowering IT spending. Running Cisco Catalyst Center on AWS can reduce spending and yield cost-efficient scalability by simplifying infrastructure and operations, resulting in considerable cost savings compared to running hardware on premises.

Security and compliance

Cisco Catalyst Center breaks down siloes to increase visibility and secure information sharing. Complemented by the secure infrastructure of AWS, this solution provides automated security assessments that support the NIST Framework and improves compliance. Agencies can define user and device profiles that facilitate highly secure access and network segmentation based on needs.

Flexibility

Deploying the Cisco Catalyst Center Virtual Appliance on AWS offers agencies the flexibility to choose their preferred supported AWS region, granting them location independence. This allows IT team members to access network management capabilities from any location, at any time, ensuring seamless remote network management.

Operational efficiency

Multi-location agencies can manage router and switch deployments from a single point of view, automate tasks, compliance, and security updates and provision network devices in one click. AI and ML-supported troubleshooting with a guided workflow means even level 1 technicians can perform complex tasks, such as creating new sites and policies.

Features and capabilities

Cisco Catalyst Center on AWS comes with a rich set of features and capabilities that provide everything from easy deployment and scalability to cost reduction and location independence.

Monitor
and manage the flow of data within a network and ensure that only authorized resources and users enter and exit to protect data.

Automate
task adjustments and network optimization, reducing errors and saving time and effort.

Work
with other Cisco products and AWS services, such as AWS Identity Access Management (AWS IAM) and AWS Transit Gateway, to simplify and automate network management. APIs enable programmability and extensibility.

Identify
issues in real time to change network and wireless conditions using AI and ML enhanced analytics that collect streaming telemetry data from every corner of the network.

Optimize
the paths that data takes in a network, reducing bottlenecks and ensuring the fastest and most efficient delivery of information.

Secure
networks with fully featured Zero Trust capabilities that identify and classify endpoints and users and assign granular access policies.

Agencies have a choice with three different ways to deploy

1 **Automated deployment**

Configure Cisco Catalyst Center on AWS using the Cisco Catalyst Center VA Launchpad. The Cisco Catalyst Center Amazon Machine Image (AMI) deploys as an Amazon EC2 instance with the prescribed configuration in a new VPC along with subnets, transit gateways, and other essential resources.

2 **Manual deployment**

Manually deploy on your AWS account using AWS CloudFormation to configure Cisco Catalyst Center. Do this by creating the AWS infrastructure, establishing a VPN tunnel, and then deploying Cisco Catalyst Center.

3 **Deployment through AWS Marketplace**

Deploy through the AWS Marketplace to launch the software on the Amazon EC2 launch console. From there, agencies can create their AWS infrastructure, establishing a VPN tunnel, and configuring your Cisco Catalyst Center VA.

Get started with Cisco Catalyst Center on AWS by visiting the AWS Marketplace or speak with your Cisco representative about private offer through AWS Marketplace