Delivering highly available networks for the distributed enterprise

Citrix SD-WAN on AWS
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Introduction

Cloud technology has revolutionized the way global businesses operate. The ability to provision and de-provision IT resources on-demand and at a global scale gives them the agility to better support distributed workforces. Cloud providers also provide native access to innovative and emerging technologies, giving businesses of all sizes a path to retire inefficient processes and systems and drive new value from their critical applications.

These benefits combined with the cost-efficiency and flexibility of cloud technology are driving many to migrate critical applications to the cloud. However, those operating at a global scale need to reconsider how they deliver applications and data to their end-users to get the most out of the cloud.
Challenges created by legacy WAN architectures

Today’s distributed enterprise needs a method of reliably delivering cloud and Software-as-a-Service (SaaS) applications to branch offices. However, there are numerous challenges created by legacy WAN architectures that can negate the benefits of the cloud or worse, push some away from cloud adoption altogether. Three key challenges are:

1. **Inconsistent application experiences**
   Legacy WAN architectures are unable to handle increased application traffic which limit performance and in turn, create inconsistent experiences for end users.

2. **Latency created by backhauling**
   To deliver applications and traffic to branch offices, many organizations backhaul their network traffic for inspection. However, given their bandwidth-intensive nature, backhauling cloud and SaaS applications leads to latency, poor performance, and a negative end user experience.

3. **Complex and costly operations**
   Legacy WAN solutions often present complex operations, leading to inefficient network management, excessive costs, and personnel being diverted away from their core competencies.

Fortunately, there is a way to overcome these challenges: 
**Software-defined WAN (SD-WAN) solutions.**
SD-WAN benefits

SD-WANs help to simplify the management and operations of your network by treating it as code, separating control mechanisms from the hardware itself, ultimately delivering a better user-experience.

**Accelerated application delivery**
Automate manual tasks and intelligently steer SaaS application traffic to more effectively manage network throughput. This simplifies the connectivity between branch offices and Amazon Web Services (AWS) while centralizing the management of connectivity between branch offices and the cloud.

**Reliable, high performance WAN**
Continuous monitoring of network connectivity and granular quality of service (QoS) controls enable systems to detect path outages after just two or three missing packets, allowing seamless sub-second failover of traffic to the next-best WAN path.

**Simplified branch operations**
SD-WANs can be configured into edge mode, allowing all devices within a Local Area Network (LAN) to share the same WAN address. This enables organizations to eliminate dedicated legacy edge routers in branches.
Citrix SD-WAN on AWS

Citrix SD-WAN combines real-time path selection, edge routing, stateful firewall, end-to-end QoS, and WAN optimization, so you can accelerate application delivery, improve the user experience, and lower operating costs.

Primary use cases

**WAN virtualization**
Citrix SD-WAN connects branch offices to AWS through virtual paths. Users can continue using any existing links and add low-cost broadband to achieve an active-active state, allowing Citrix to map connectivity, monitor all conditions (e.g. latency, congestion, etc.), and innately determine which apps go over which link – in real time.

**WAN optimization**
Citrix SD-WAN optimizes bandwidth utilization between branch offices, enterprise data centers, and public clouds with Transmission Control Protocol (TCP) flow control, data compression, de-duplication, and protocol optimization to improve the user experience and reduce bandwidth costs.
Citrix SD-WAN on AWS (cont.)

**Application security**
Citrix SD-WAN provides strong encryption and an integrated stateful firewall to centrally define security policies for application traffic across on-premises, branch, and AWS environments.

**Monitoring and failover**
If traffic is slowed or in case of an outage, the Citrix SD-WAN dynamically reroutes it within milliseconds to the best link available, helping to establish high availability and performance.

**Zero touch deployment (ZTD)**
Fully managed cloud-based service, which allows discovery of new appliances in the SD-WAN network, streamlining the deployment process for Citrix SD-WANs at the branch office or on AWS.
Why Citrix?

**Trustworthy**
Citrix solutions are being used by more than 400,000 organizations and 100+ million users globally.

**Leader in virtual apps and desktops**
Citrix has a comprehensive suite of digital workspace solutions that provide secure remote access to applications and desktops. When combined with Citrix SD-WAN, business can deliver digital workspaces more reliably to distributed users.

**Built to last**
Citrix solutions are designed to provide platform stability, network and data security, and compliance with regulatory requirements.
Why AWS?

AWS provides a massive global footprint, helping organizations better support distributed workforces through improved network connectivity, performance, flexibility, scalability, and availability. AWS tools and resources can be integrated with third-party networking solutions to enhance and simplify connectivity between your remote and branch offices. By provisioning on-demand IT resources, you can scale out your network quickly, securely, and cost-efficiently.

Scalability

Security

Global footprint

Cost-effectiveness
Getting started with Citrix SD-WAN

Pilot Citrix SD-WAN on AWS: Free 90-day trial on AWS Marketplace
We recommend running Citrix SD-WAN in your own environment before making any commitments. When you are ready to discuss purchasing options, pricing, implementation, or any questions you have, contact us to talk to a Citrix Networking expert.

Trial options
SD-WAN Standard Edition
Try Citrix SD-WAN standard edition to scale WAN bandwidth, while enhancing application availability.

100 Mbps
Free trial >

200 Mbps
Free trial >

500 Mbps
Free trial >
Additional solutions from Citrix

To augment the benefits you receive from Citrix SD-WAN, explore our other solutions:

**Citrix Application Delivery Controller (ADC)**
Designed for use in hybrid-cloud networks, Citrix ADC is the optimal complement to the Citrix SD-WAN, with L4-7 application delivery intelligence that helps to transform traditional networks into application-driven enterprises.

Learn more >

**Citrix Workspace**
Citrix Workspace provides a unified way for employees to get all the apps and data they need —delivered on-premises or in the cloud—for a great, secure experience for every app, everywhere. Citrix SD-WAN eliminates network challenges to deliver an excellent Workspace experience for virtual apps and desktops running on AWS to users in branch locations.

Learn more >
Additional solutions from Citrix (cont.)

Remote access, SSO, and VDI monitoring
Citrix Gateway >

Protecting web apps and services
Citrix Web App Firewall >

Protect your users from web threats
Citrix Secure Web Gateway >

Visibility and management
Citrix Application Delivery Management >
About Citrix

Citrix is powering a better way to work with unified workspace, networking, and analytics solutions that help organizations unlock innovation, engage customers, and boost productivity, without sacrificing security. With Citrix, users get a seamless work experience and IT has a unified platform to secure, manage, and monitor diverse technologies in complex cloud environments. Citrix solutions are in use by more than 400,000 organizations including 99 percent of the Fortune 100 and 98 percent of the Fortune 500.

Learn more >