

IT Initiative—Cloud Adoption

Cloud infrastructure and applications enable elasticity and cost savings, all driven by easy management workflows. These benefits drive larger modernization imperatives such as transition to DevOps methodologies. With lines of business in enterprises recognizing the benefits from the cloud, IT has a choice to make—step up and lead the change or deal with shadow IT.

The Business Challenge

While cloud providers make it easy to leverage their services, on a technology level, adoption-related challenges usually arise from the network. The network connectivity between multiple cloud locations, either with the same or different cloud providers, and with enterprise branches/data

centers exhibit configuration and performance challenges. Unless this network has similar capacity, efficiency and management simplicity like the cloud itself, deriving OpEx and agility benefits from the overall cloud migration initiative is difficult.

Unfortunately, most current management approaches are based on legacy technology administered by Command Line Interface workflows that need to be implemented on individual appliances. This worsens IT turnaround time and hence IT agility.

Additionally, with latency and bandwidth constraints, network services such as WAN optimization and acceleration for business-critical applications are imperative. Since the cloud is an integral part of the enterprise network, performance needs to be assured end-to-end, from LAN to the cloud, without silos in management.

Given this new architecture, a rethink in networking is needed, one that aligns the WAN with the cloud era.

Technology-related requirements for adoption and performance can be broadly categorized as follows.

- Simple management and agility: Single-click orchestration of secure connectivity and performance to replicate cloud-like agility in the WAN.
- Capacity and scale: WAN architectures that allow transfer of large data sets with minimal latency.
- Visibility: End-to-end visibility that allows causal analysis for brownouts before significant business impact—is it the application or the network?

Why Riverbed?

- Unique SD-WAN solution that is a rethink of networking for the cloud era
- One-click deployment in AWS and Azure with automated IPSec VPN across all locations
- Integrated WAN optimization and visibility
- Unified and central management across LAN/WLAN, cloud and WAN

Solution

Riverbed® SteelConnect® uses software-defined WAN (SD-WAN) technology to deliver a unique solution built for cloud-centric networks. A centralized console is made available for management of the unified network—LAN, cloud and WAN. Secure IPsec connectivity to and between cloud instances can be established with a single-click, with an additional click to set up application acceleration and bandwidth reduction.

Management is intuitive and based on businessrelevant policy definition that extends control from end-user device to the on-premises or cloudbased resources. The policy revolves around five key parameters—applications, users, locations, performance and security. It ensures that application SLAs are met, agnostic of the network transport type, such as Internet, MPLS or LTE. As the network grows to new branch and cloud locations, those locations

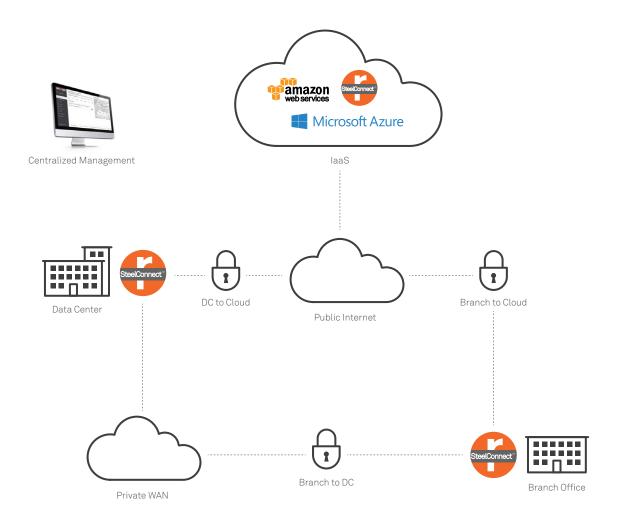
are added to existing policy. Hence, growth of the network does not result in a commensurate increase in management overhead.

"We've been able with AWS and Riverbed to not have any infrastructure that we own from an asset perspective. Other than all the financial benefits of now having an operational cost rather than capital that we need to depreciate and manage from the financial perspective, we've got an ability now to very quickly build and deploy a global network which would have taken months of planning and deployment before, now in hours."

Rob Gillan CTO SimplePay Functionality from Riverbed SteelConnect, specific to cloud-centric network management includes:

- Automates setup of cloud-based SD-WAN appliances based on a single-click workflow
- Automates secure IPsec connections to and between cloud instances—branches to clouds, between cloud regions and between cloud providers
- Enforces performance and security control based on policy defined in the central management console
- Delivers bandwidth reduction, application acceleration and visibility as needed

The centralized and automated control of network services across LAN, cloud and WAN helps overcome silos in management. This unlocks the cost savings and agility expected from cloud-centric networks.



Summary

Riverbed has delivered an SD-WAN solution built specifically for cloud-centric enterprise architectures. Unique partnerships with Amazon Web Services and Microsoft Azure allow Riverbed to leverage automation, application acceleration, bandwidth reduction and visibility to deliver a comprehensive solution for cloud adoption. The full system—across LAN/WLAN, cloud and WAN—is managed via simple workflows on a central console. Riverbed helps unlock the cost savings and agility expected from the cloud, with added performance benefits for greater ROI and accelerated adoption.

About Riverbed

Riverbed enables organizations to modernize their networks and applications with industry-leading SD-WAN, application acceleration, and visibility solutions. Riverbed's platform allows enterprises to transform application and cloud performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. At more than \$1 billion in annual revenue, Riverbed's 28,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at www.riverbed.com.

