

## **Simplify your operations with SD-WAN**

*Allan Paton, Regional Vice President for UK, Ireland and Sub-Saharan Africa at Riverbed Technology*

For the past twenty years, the hardware-centric and Command Line Interface (CLI) driven approach to architecting and managing an enterprise network has remained unchanged. This wasn't a problem when the network was predictable, had one egress to the internet and was easier to secure, but this is no longer the case. The network has become faster and more secure, however this also means it has become increasingly unpredictable, insecure and complex. As a result, IT organisations are looking to software-defined WAN (SD-WAN) for cost efficiency and simplified operations.

It comes as no surprise then, that organisations are choosing to migrate their systems and applications to the cloud. One of the biggest reasons is the fact that the workplace is becoming more mobile and more users are now working in branch offices and other remote locations. Delivery of apps has had to become more flexible to keep up with demand.

The world of work and the IT systems which support it are changing. Despite this, the typical approach to managing the network has failed to follow this trend, resulting in hybrid networks becoming more difficult and complex to manage and scale. Remote and branch offices (ROBOs) are then impacted by poor performing apps and network outages, ultimately impacting user productivity and the bottom line.

### **The value of SD-WAN**

Just as the migration to the cloud is here to stay, so is the creation of hybrid networks. Enterprises need multiple network transport technologies to connect to mobile workers and cloud-based datacenters, so having a mix of on-premises systems and public-cloud applications and services is now the best way to meet the demands of today's users.

These hybrid topologies may allow support for a distributed workforce, however the unsuitability of traditional systems to manage such complex topologies has created a need for a rethink in IT management. As a result, network architects and operators are turning to software-defined WAN (SD-WAN) technologies to implement, as it offers four key benefits over the typical hardware-centric model – cost-savings, simplicity, agility and reliability.

Whilst network architecture may have evolved, enterprises still rely on NetOps to ensure that the network functions as expected with minimal (ie zero) interruptions. It's up to IT to balance that objective with the enterprise-wide goal of ensuring cost efficiency. This requires simplifying the operations and workflows to ensure performance, reliability and cost-effectiveness.

With SD-WAN, IT are able to reach these goals as well as position themselves as a strategic partner to the entire enterprise. By simplifying the management of the network and ensuring consistent performance levels, IT can spend less time managing and provisioning network resources and more time on helping users to perform better and become more agile.

As a result, SD-WAN is a transformational approach to network management workflows which is ideal for today's cloud-centric hybrid networks. IT can achieve a higher level of operational efficiency with features such as:

- **Zero-touch provisioning:** Automates provisioning and removes the need to provision resources at each branch. Thus, IT no longer need to try to place skilled IT personnel at branches and remote

offices.

- **Centralised management:** Making changes once and rolling them out globally at the same time to all locations and users enables you to make all new configurations and edits from a central location. IT can also manage and update policies. It is imperative that the SD-WAN solution enables business-aligned orchestration so that IT can achieve orchestration based on users, apps or security policies.
- **Cloud Connectivity:** Connect securely to the Cloud. As enterprises adopt more cloud services and applications, connecting securely to the cloud is critical. Complexity can lead to wasted time and lost productivity.
- **WAN optimisation:** Optimise the delivery of applications across hybrid networks for on-premise, cloud and SaaS application users anywhere. Managing the application performance is critical for the business.
- **Enhanced security:** A comprehensive SD-WAN solution will have a built-in firewall, automated virtual private network (VPN) capability and threat management technologies to improve the entire organisation's security position. This will simplify security systems management, eliminate the need to spend more money on an additional firewall and other threat management capabilities for remote and branch offices.

SD-WAN is an emerging technology with undeniable business benefits to the modern enterprise, such as improved agility, efficiency and performance. As SD-WAN proves that it can substantially increase network performance for today's mobile and remote users, reduce management costs, and free IT organisations to provide its services and support to all areas of the business, the demand for the technology will significantly grow.