

# RFP Checklist:

## 10 Things Organizations Need to Move Forward with Long-Term Planning

As organizations move forward, deploying long-term solutions to ensure application-focused, secure connectivity for a highly distributed cloud environment and remote workforce, operations teams should add the following items to their RFP checklist.

Next-generation SD-WAN solutions should:

### 1. FOCUS ON APPLICATIONS:



Digital transformation initiatives and modern application environments result in a highly distributed application environment, and, as such, require solutions that enable users to have a positive experience regardless of application location. Therefore, next-gen SD-WAN solutions need to include Layer 7 application visibility and control. Armed with this higher-level information, organizations can accelerate the migration of applications to the public cloud or multiple public clouds (this should include both IaaS and SaaS) with the assurance that any policy and path decisions are predicated on ensuring application SLAs and not just the network.

### 2. BE EASY TO USE:



Given the already complex environments, organizations need solutions that don't require a PhD to deploy and operate. This includes the ability to rapidly deploy and provision a solution in remote locations without requiring technicians to visit each remote site. Essentially, next-generation SD-WAN solutions need to be plug and play, allowing users to simply connect the power and network to make them operational. Also, given the convergence of networking and security, any solution should include role-based access to ensure both network and security teams can access and create policies.

### 3. PROVIDE HIGHER LEVELS OF AUTOMATION:



The highly distributed environments are becoming so complex that they are exceeding the ability for operations teams to effectively manage them using time-consuming manual tasks. As a result, organizations need to leverage solutions that leverage intelligent automation for tasks that not only include day one provisioning (zero-touch provisioning) but also the ability to automate day two tasks like the ability to self-optimize and self-heal the SD-WAN environment. This includes the ability to rapidly identify the correct domain level at which the issue is located, either the network or application, which in turn can drive faster problem resolution. Technologies such as artificial intelligence and machine learning will be key to underpinning intelligent automation.

### 4. LEVERAGE CLOUD MANAGEMENT/DELIVERY:



Given that most organizations have a distributed workforce due to the pandemic and need to ensure that in the future workers can be productive from any location, it will be imperative that next-generation solutions leverage cloud management. Operations teams need to easily access the management console to create application, security, and compliance policies. The cloud-based management will ensure centralized policies with distributed enforcement at all locations. This is key for day two lifecycle management, as it will ensure that any security patches are automatically delivered, ensuring a consistent security posture. Furthermore, if these cloud-based management solutions leverage modern application architectures, it ensures that new product functionality or security upgrades can be added to the environment seamlessly and in a timely fashion, as opposed to as biannual or annual releases.

**5. FACILITATE THE CONVERGENCE OF NETWORK AND SECURITY:**

The emergence of the secure access service edge (SASE) framework emphasizes the need for tight integration between network and security functions (and teams). Next-generation SD-WAN with secure access is a great way to get started. However, organizations looking to follow the entire framework need to ensure that additional security capabilities are or will be fully integrated into the solution. This includes the ability to provision next-generation firewalls (NGFW), zero-trust network access (ZTNA), secure web gateways (SWG), cloud access security brokers (CASB), and remote browser isolation (RBI) services, etc., from the centrally managed cloud console. As previously mentioned, role-based access is important to help with this convergence. Organizations need to decide if they are going to leverage a single vendor for convergence or pursue a best-of-breed approach and understand the pros and cons of each.

**6. ENSURE HIGH LEVELS OF PERFORMANCE:**

Regardless of the network being used, next-generation SD-WAN solutions need to be able to utilize and optimize traffic over virtually any one or multiple network connections, including MPLS links, internet broadband connections, and cellular networks (including 4G and soon 5G), as well as to use cellular connectivity for a tertiary failover connection. The ability to leverage multiple network links is key to ensuring high availability, including the ability to use fixed lines for primary and failover noted. However, with the rollout of 5G, organizations should also consider this a viable primary link in the near future. Any SD-WAN solution should be able to take full advantage of all available bandwidth to optimize traffic and automatically select the optimal path based on the priority of the application. To do that effectively, solutions should have both Layer 3 (network) and Layer 7 (application) level visibility.

**7. DELIVER END-TO-END VISIBILITY:**

To better understand and optimize the experience, solutions need to have complete end-to-end visibility, from an endpoint device to the application, regardless of where either is located. This could include IoT sensors at edge locations and employees' homes to applications housed in corporate data centers, edge locations, or public clouds. The ability to deliver granular Layer 3 and 7 visibility will accelerate troubleshooting by rapidly isolating network and application issues. Plus, insights gleaned from both environments will also enable organizations to develop policies that are optimized for their specific environments.

**8. REDUCE COSTS:**

Despite growing complexity, IT budgets are still constrained. However, next-generation SD-WAN solutions can dramatically reduce network costs by replacing expensive MPLS links with cost-effective broadband connections. These cost reductions can really add up if an organization was previously using multiple MPLS links for high availability. This is especially true in legacy network architectures (hub and spoke) since the second link is only used for failover. SD-WAN solutions can leverage both in an active-active mode. In addition to the network costs, next-generation solutions that integrate security can reduce the amount of on-premises hardware and software needed at each location, along with any associated maintenance costs.

**9. ENABLE HIGHER LEVELS OF AGILITY:**

The ability to rapidly connect to new locations has proven to be a very important capability during a global pandemic. Next-generation SD-WAN solutions must be able to support employees at both work and home locations. The ability to leverage both fixed line broadband or MPLS and cellular connectivity will provide greater levels of flexibility and agility related to where the technology can be deployed. Another key attribute for next-generation SD-WAN will be the ability to leverage asymmetrical deployments—that is, the ability to connect to the cloud and optimize traffic with just one appliance at the corporate location (as opposed to symmetrical deployments that require an appliance at each end of the connection or very close to the end for SaaS environments).

**10. ACCELERATE INNOVATION:**

This is a very important criterion. The fact that next-generation SD-WAN solutions can help to save on network costs and deliver additional bandwidth is good, but the real value attained from what organizations can do with the additional bandwidth is even more important. Organizations should be thinking about how they can deliver better experiences and innovative new services (such as bandwidth-intensive video or voice apps) to their customers. Next-gen SD-WAN solutions can also be the foundation to consolidate additional services at the edge. Organizations should think beyond SASE and contemplate what other services could be integrated into this solution to extend its value.