



6 SD-WAN Add-Ons That Can Boost Profits

By Jeffrey Burt

Channel Partners™

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About the Author



JEFFREY BURT has been a journalist for three decades, with more than half that time spent covering enterprise technology for eWeek. During his years as a senior editor, Burt wrote about all things data center, including processors, GPUs, servers and networking gear, as well as PCs, collaboration tools, virtualization, the cloud, SDN and, more recently, emerging technologies such as artificial intelligence, deep learning and autonomous vehicles. He continues to write about technology for a variety of publications.

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6 SD-WAN Add-Ons That Can Boost Profits

FOR MOST CUSTOMERS LOOKING TO USE MORE CLOUD SERVICES AND LAUNCH MOBILITY INITIATIVES, THE

WAN is a bottleneck. SaaS offerings such as Office 365 and Salesforce are especially susceptible to latency. What's the answer? The same network virtualization technologies, such as software-defined networking (SDN) and network-functions virtualization (NFV), that are making the rest of the infrastructure more agile, flexible, programmable and cost-efficient.

SD-WAN technologies bring broadband and LTE into the mix at a lower cost than more expensive MPLS and other traditional connections while automating the process of

choosing the right path for various workloads. Given that promise of greater flexibility and performance for less cost, businesses are intrigued: IDC analysts predict SD-WAN will be a \$6 billion market by 2020, and Gartner says that by 2019, 30 percent of enterprises will be using the technology.

In a report, Ovum analyst David Molony estimated that the percentage of large enterprises using SD-WAN or other hybrid WANs for their primary global network services will grow from 2 percent last year to 8 percent by the end of 2017.

Make the Case: SD-WAN

THE PROBLEM

The carrier network services traditionally used to provide WAN connectivity haven't kept up with the exploding need for capacity and flexibility — certainly not at a price that most organizations can afford.

WHO'S BUYING?

Geographically distributed organizations with limited networking expertise and complicated requirements, like lots of retail sites, are fully on board. But enterprises are very interested, too, and this tech is a natural for SMBs looking to grow.

SELLING POINTS

It's hard to justify a five-figure monthly bill for a modest-capacity MPLS circuit when home office workers pay the equivalent of a dollar per Mbps per month.

However the complexity inherent in designing and operating dependable, secure WANs using a mix of public internet and private circuits calls for channel partners' expertise.

“Enterprises are testing the waters with SD-WAN in pilot or in some part of their networks, just as they did with unified communications and optimization technology,” said Molony. But there’s also confusion: “Many have heard of SD-WAN by now or think they are using SD-WAN because they are using some form of unmanaged VPN,” he said.

That leaves a tremendous amount of opportunity as we head toward 2018. Channel partners with deep expertise in provisioning connectivity are well-positioned to capture that business, but you need a clear offering and a plan to educate and upsell customers.

Picking suppliers wisely is value-add No. 1.

The SD-WAN market is a crowded field. Established networking vendors such as Cisco Systems and Riverbed Technology are broadening their portfolios to include SD-WAN, while smaller and pure-play vendors including Talari Networks, CloudGenix, Silver Peak and VeloCloud are looking to gain traction. Aryaka has a unique offering. At the same time, major carriers such as AT&T, Verizon, Sprint and CenturyLink are partnering with many of those vendors to create their own SD-WAN services.

There are indications that market consolidation is on the way, with Cisco’s recent acquisition of Viptela an example. That adds an element of risk when choosing a smaller provider. And, especially for enterprises, one product may not fit all use cases, requiring integration.

The rapid change and broad range of players makes predeployment consulting a huge SD-WAN opportunity. Partners that can help customers evaluate as well as deploy and manage the technology will win, said Don Douglas, president and CEO of solutions provider Liquid Network.

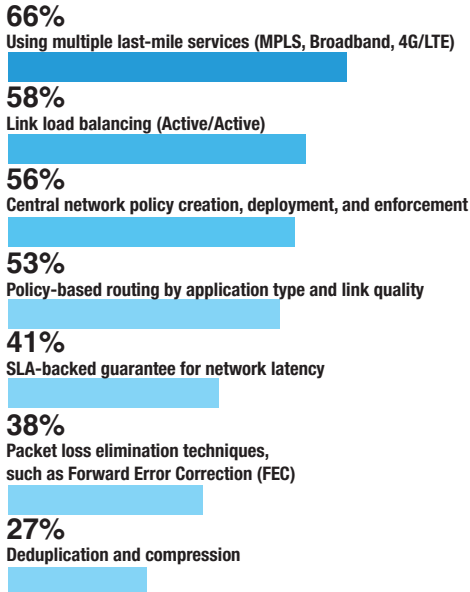
“Depending on the goals of the SD-WAN implementation, there may be a variety of outcomes that are desired,” said Douglas. “Are they trying to enhance the user experience? Better control IoT devices? Reduce the number of hardware products in the network? Provision more quickly?”

Telcos moving to offer SD-WAN services opens the market even more.

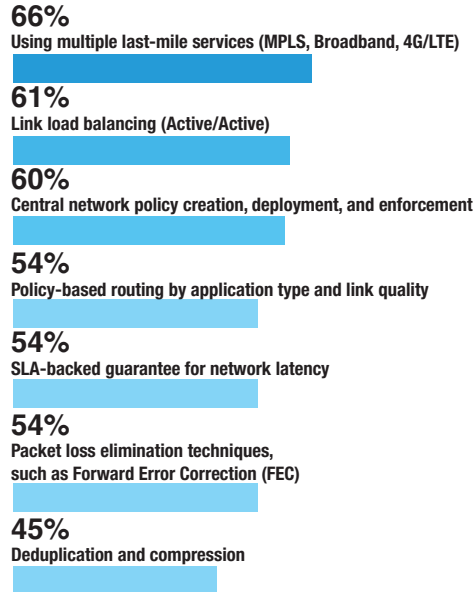
Hope vs. Reality

The features included in SD-WANs don't always align with customer expectations.

Which of the following networking features **are standard elements** of an SD-WAN solution?



Which of the following networking features **should be standard elements** of an SD-WAN solution, in your opinion?



Source: Cato Networks, "The Future of SD-WAN: Peril or Promise?"

"This does create further opportunity for the channel as carriers have often partnered with a single provider," Douglas said. "Really digging in and understanding the differences of each carrier offering as well as carrier-neutral solutions can be extremely valuable."

Partners also need lighter-weight consulting for organizations that understand what SD-WAN can do for them in terms of performance and cost, said Scott Gibson, senior vice president of Americas sales at systems integrator Teneo.

"A lot of customers have done a lot of research," Gibson said. "They understand the market a lot more than they did before. There's a lot of momentum behind it. The channel's role in SD-WAN is to be a guide."

For these customers, there are still add-ons that can boost profits.

As noted, there are a lot of players in the SD-WAN space. Despite — or perhaps because of — this congestion, channel partners from SIs to VARs to MSPs have a broad range of opportunities in delivering services that vendors and carriers can't or won't.

"Depending on the customer and industry, there will be a huge opportunity to bundle services," said Douglas. "Partners should be looking at their customer base and their expertise to determine which service they can bundle to create more value."

Let's take a look at six add-on options.

1. WAN Aggregation

Businesses with broad global reaches are going to have more than one service provider, said GlobalData technology analyst Mike Fratto. Even in a cloud-computing environment, managing disparate broadband and services providers — on everything from billing to provisioning — can be a headache.

Teneo's Gibson said the supplier ranks for some companies can reach the hundreds or thousands, and one of the attractions of SD-WAN for these firms is the relative simplicity of the technology.

“Customers cannot be exposed to the complexities of managing hundreds of service providers around the world,” he said. “The complexity needs to be taken out.”

Get Edgy

Gartner recently issued guidance on what to look for in a customer edge device. Currently, the consultancy sees a wide variety of models, including off-the-shelf x86 platforms, fully integrated appliances, integrated appliances with virtualization capabilities and wide-area-located gateway services.

Some expectations:

- Very small, thin devices with only basic functionality will be suitable for smaller branch offices, while larger branch offices and data centers demand devices supporting a wide range of functionality.
- Devices will embed virtualization (for flexible functional deployment scenarios) within the edge device. This needs to be tied to the carriers' network function virtualization (NFV) plans.
- Devices will support WAN service termination so that carriers can deploy these edge devices as part of their managed WAN services.
- Devices must support external cloud connectivity functionality and mobile device connectivity.
- Devices must seamlessly support connectivity between SD-WAN and non-SD-WAN sites.

Channel partners are experts at aggregating and managing vast numbers of providers, often in tandem with a cost-cutting consultation. MPLS, SONET and leased lines were not made for an online environment that relies on software-as-a-service (SaaS) applications, cloud connectivity and the ability of employees to collaborate regardless of the miles between them. There has been a push within the industry for many years to find a way to remake the WAN to address demands of an internet-driven world. Agents in particular have plenty of experience working with customers to reduce telco and unified communications costs.

2. Security

In the world of software-defined-everything, cloud, IoT and BYOD, security is “table stakes,” said Mike Wood, vice president of marketing for cloud SD-WAN provider VeloCloud. Cloud providers, ISPs and vendors bake some security into their products and services, but there is always a need for more, especially when an SD-WAN includes public internet connections.

Along with SD-WAN and other network virtualization technologies comes what some are calling “SD-security.” We discuss the implications of software-defined tech on security in depth [in this report](#). In essence, it involves moving many of the security functions traditionally delivered on proprietary hardware appliances into software. Channel partners can bring that virtualized security through local and third-party security services or by helping to integrate [NFV-based best-of-breed security software](#) — from such vendors as Check Point Software, IBM and Palo Alto — with what’s already on a customer’s network.

That becomes even more important as customers look to expose their WAN environments to the cloud.

“They need to be able to run any cloud service without problems,” Wood said.

Security provider Cato Networks [recently surveyed more than 350 IT professionals](#) about their WAN and SD-WAN plans. While the survey showed strong positive momentum for SD-WAN as a category, it also uncovered major shortcomings in traditional SD-WAN solutions, wrote Shlomo Kramer, Cato’s founder and CEO.

“When organizations invest in solutions that lack an SLA-backed transport layer and built-in security, they still rely on expensive MPLS services as well as physical security appliances, both of which severely limit savings potential,” added Kramer. Fortunately, 53 percent of those surveyed who had deployed SD-WANs also invested in more in network security.

Mark Sondergaard, director of channel sales for BullsEye Telecom, recently [shared insights on SD-WAN security](#), listing three main items to look for:

- Centralized connectivity control that gives IT or an MSP the power to enforce security policies from a single location. That means users can log in to a secure dashboard to monitor and administer the network remotely. And policies across the entire business can be harmonized, ensuring there are no “weak links” offering an easy route to company data.
- Zero touch provisioning (ZTP) that lets users add and configure new devices automatically. Security protocols are automatically applied to new equipment, ensuring the network stays secure as it grows.
- Encryption tunnels provide virtual private network (VPN) security for all network communications. Every IP packet that leaves the network is encrypted and encapsulated into a new IP packet with a new IP header, making it virtually impossible to intercept data.

3. A Variety of Management Models

Some customers want a complete managed service for their SD-WAN deployments, while others are looking more for a co-managed service, where a customer might want a service provider or channel partner to deploy the SD-WAN technology before internal IT will take over some of the management — such as making moves, adds and changes — themselves, Fratto said. Channel partners will want to make sure they can offer customers whatever management model they need.

Where's the Spending?

In a global survey and industry report by Cato Networks, respondents expected to increase investments in three areas: network security appliances, routers and MPLS services. One head-scratcher is that, overall, 62 percent of those implementing SD-WANs say their MPLS budgets will stay the same or increase. Fifty-six percent of those planning to use SD-WAN have similar expectations for their MPLS spend.



63% of respondents are concerned with the **cost of new equipment/services** needed to deploy SD-WAN



54% report increased investment in **network security appliances**



34% report increased investment in **routers and MPLS services**

Source: Cato Networks, "The Future of SD-WAN: Peril or Promise?"

4. Integration

Few businesses are going to go with an SD-WAN-only environment. Most will integrate SD-WAN technologies into their existing infrastructures, creating hybrid WANs. This is an opportunity for channel partners that can do the integration work customers want to avoid.

"The reality is that optimizing the network is as much about extending and securing connectivity as it is about new tech," said Ovum's Molony. He recommends that service providers have a range of hybrid WAN options in their portfolios to cater to varying and fast-changing customer requirements.

That integration extends to applications, Gibson said. There is a strong shift toward SaaS, and customers will turn to their channel partners for help in delivering these new applications as well as legacy software.

BullsEye's Sondergaard listed some features that will ease integration and management:

- **Multiplexing** to combine multiple physical circuits into a logical network. This way, multiple devices can use the same connection without impeding access for other devices. This also provides a fail-safe in case one physical circuit fails. In that case, the devices on the failed circuit simply transfer to another within the same network.
- **Path conditioning** provides the performance of a private connection over the public internet. It also protects networks from the negative effects of dropped packets that are common with broadband connections. It does this using a forward error correction (FEC) algorithm to reconstruct lost packets and avoid delays in connectivity.
- The ability to **intelligently direct network resources** based on the applications used the most. For example, critical and noncritical applications can be routed separately so that an increase in noncritical application use never impacts the performance of critical applications.

5. Technical Services

In fast-moving software-defined- and cloud-based environments, companies need to be able to quickly address market changes. Partners can help by delivering such capabilities as [open API access](#) and [service chaining](#).

Network services including firewalls, application delivery controllers and load balancers can be part of a larger set of network services connected through the network, and network virtualization can make provisioning these services faster. Channel partners can offer services to create such environments.

6. UCaaS and VoIP

Unified communication-as-a-service and voice-over-IP have been around for years, but there have always been problems with them, Wood said. The voice quality of many of these services has been poor, with issues around packet loss and codecs. SD-WAN technologies can improve the voice quality of such services and make them not only more reliable, but also less expensive.

"Now anyone can go out and, through their own VoIP service or a white label by someone else, offer exceptional quality," he said.

Still Lots of Runway

Don't worry if you're still working on a strategy. Despite lots of hype and big expectations of rapid growth and adoption, SD-WAN is still in its infancy.

In fact, Ovum classifies it as an "evolutionary step in the development of hybrid WAN services into virtual managed services." The consultancy expects an even wider range of service provider types to enter the competition for enterprise network services in 2017.

“We are still in the early stages of people trying to figure out when and how best to use SD-WANs,” Liquid Network’s Douglas said. “Not every solution is the best fit for every application, and every vendor implements things a little differently. This means there is tremendous value a partner can add when helping customers evaluate where to utilize SD-WANs and which vendors’ products will best suit their needs.”

Related Reports



[SD-WAN: Channel Seller's Guide](#)

The SD-WAN trend is on fire, especially in lucrative verticals like retail. The trend is sparked by inexpensive yet blazingly fast broadband, more use of the cloud and a new “mobile-first” mentality. For partners, value-added services, bundling and upsell opportunities can increase already rich monthly recurring revenues.



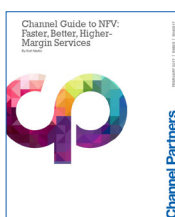
[SDN & Security: The Future Is Now](#)

The move to SDN/NFV will not be limited to a few functions or services — it is a ground-up shift from on-premises legacy systems and operations to more cloud, agile/microservices development and delivery approaches, and DevOps organizational structures. Helping customers successfully navigate this transformation will require the right skills and partnerships — but growth is off the charts.



[5 Must-Have Skills for Selling SDN and NFV](#)

Carriers, open-source consortiums and big IT vendors have laid the groundwork for SDN and NFV. Demand is there, so what’s stopping widespread use? Complexity, a skills shortage and confusion. Channel partners who can clear all that up can write their own tickets.



[Channel Guide to NFV: Faster, Better, Higher-Margin Services](#)

Services delivered in a software-defined model — from firewalls to UC to SD-WAN — represent significant opportunity for channel partners. In this Report, we provide a primer on network functions virtualization (NFV) and related technologies, tips on how to sell customers on the concept and recommendations for moving your business into the virtual era.



[Build a Go-Fast WAN to Optimize Cloud Connections](#)

Using IaaS for critical applications can turn any WAN into a performance bottleneck. This Report analyzes the problem and explains how to build a lightning-fast cloud connection that will thrill end users — and that may just save customers money to boot. It also covers options for maximizing performance between end users, legacy internal infrastructure and the cloud.