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Systematic Support for Next-Gen Networks

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SD-WAN is currently one of the most rapidly expanding areas of the network infrastructure market. What does this mean for network providers trying to stay ahead of the curve? There are several challenges bearing down on providers as they grow network footprints to support SD-WAN deployments for their clients. To rise above, they'll need to depend on the emergence of purpose-built software to create, assemble, and take action on all the intelligence necessary to support SD-WAN proposals for their customer base. What, exactly, are network providers concerned about? And how can support systems help them?



The WAN wave

Market trends like the rise of new security protocols and SaaS applications are creating a major strain on system administrators trying to handle the increasingly complicated needs of a contemporary enterprise business. Managing connections across a company's wide area network is becoming so thorny that many IT professionals now use software-defined networking technology to coat the complexity with a user-friendly interface: the birth of SD-WAN.

For companies with many different locations stuck on MPLS routing, the promise of SD-WAN is mammoth. These organizations can now take total control of their own network flow decisions at a central location and deploy them in a distributed manner. At a site level, broadband, LTE, and MPLS connections can all be combined for dynamic load sharing to maximize the user experience for all employees and customers. By configuring a network appropriately, a business can not only ensure connections are optimized for each application but also lower its costs as

well. SD-WAN, at its core, is about transitioning from expensive, legacy, carrier-oriented network processes to a world of greater choice, agility, control, and economic viability.

As companies across industries seek to streamline their infrastructure and move toward more cloud integration, the season of SD-WAN is on the cusp of full bloom. SD-WAN sales increased by 64 percent in 2019 and will only continue to grow. Already a billion-dollar market, one estimate expects SD-WAN adoption to increase [168 percent](#) by 2024. Other research expects [80 percent](#) of enterprise organizations to make a determination regarding SD-WAN by early 2022.

Starting off right

The table is set for network providers to serve a valuable new solution in a burgeoning market, but how can they guarantee they are creating an ideal SD-WAN offering for a client? How can they ensure they are positioned to continually grow their market share?

After all, the upfront planning process for even pitching an SD-WAN solution can be arduous. Before value is created, the technology is deployed, or an order is even placed, providers must be keenly aware of how their SD-WAN solution should be best architected to support the client.

To present a trusted and highly differentiated proposal, a provider needs to understand both the connections available at an enterprise location and the applications required to operate based on the organization's needs. It's essential to understand where the branch offices are located, and what the local policies are. A provider needs to understand what the last-mile access looks like, whether it is Ethernet or broadband. It's necessary to know what combination of cloud platforms are in use, whether the client is using AWS or Salesforce.

All this (and much more) is essential information for making the kind of network decisions that will land a deal. Preparing the best possible plan necessitates the most possible knowledge.

When attempting to capture the kind of data that can create a detailed proposal for a client, there are three key obstacles to overcome. The first challenge is a lack of easily accessible data. The kind of information providers need is typically far from their fingertips. Instead, fragmented and insular pieces of disparate data must be hunted down and gathered in an often-beleaguering process. Next, this data must be cobbled together somehow to create the kind of comprehensive view required to make smart recommendations.

On the whole, it's difficult to execute a reliable decision when insight is disjointed across 40 data silos. Providers need to establish a way to integrate data points into a central, actionable application workflow. Finally—and perhaps most critically—once different SD-WAN options can be detailed, the technical aspects of each must be associated with financial considerations. Comparing different network configurations virtually always involves different cost details. For instance, a system uptime of five nines could be achieved by leveraging a new fiber route or by employing two existing broadband connections. Both options achieve the goal but carry vastly

different costs. When accurately appraising trade-offs in a situation like this, costs must be part of the equation.

A systematic solution

If all of this sounds daunting, that's because it is. Fortunately for service providers, help overcoming the obstacles associated with architecting an ideal SD-WAN deployment exists. Purpose-built, API-enabled software can paint trusted context around which networks can serve which enterprise locations in one platform. These platforms can also interact with all the other applications involved in the process, from custom web applications to network engineering software, in order to centrally assemble all of the relevant and dependable intelligence needed to make the best decisions regarding SD-WAN architecture. With a location-based and data-driven support system painting a full picture of the market landscape and its relation to a client's enterprise from the start, a network provider's planning capability comes sharply into focus.

What's more, software platforms have the ability to go even further than gathering and presenting accessible data. First, platforms can automatically process network data to intersect with product pricing. The days of manually jumping between spreadsheets and portals in piecemeal fashion to compare broadband, DIA, and Ethernet rates can be relegated to the past. The economics of SD-WAN deployments can therefore be measured quickly and compared to alternative approaches by leveraging automation.

Secondly, software can detail the performance aspects of one network over another. From available networks, support systems can calculate latency and report diversity for any given route. With this detailed intelligence, support systems empower providers to make the right decisions so the right SD-WAN deployment can empower the client's business.

Service providers that aren't prepared to embrace data-driven decision-making and automation are leaving opportunities—and dollars—on the table. Simply put, providers can't maximize ROI for their clients and growth for themselves if they are using a swivel-chair approach to evaluating SD-WAN options. Rather, providers need support systems that surface critical, trusted insights in a unified interface with context around economics.

SD-WAN presents enterprises with the exceptional ability to lower costs while guaranteeing high standards of quality for each of their applications through the dynamic management of their own network. As a result, the rapid embrace of SD-WAN by the business world provides each service provider with an opportunity and a test rolled into one. To keep pace, these providers must rely on support systems that are purpose-built with the actionable intelligence and workflows needed to drive their go-to-market activity and set a course for significant growth as SD-WAN continues its widespread adoption.