

# SD-WAN

## Connecting Agencies to the Future

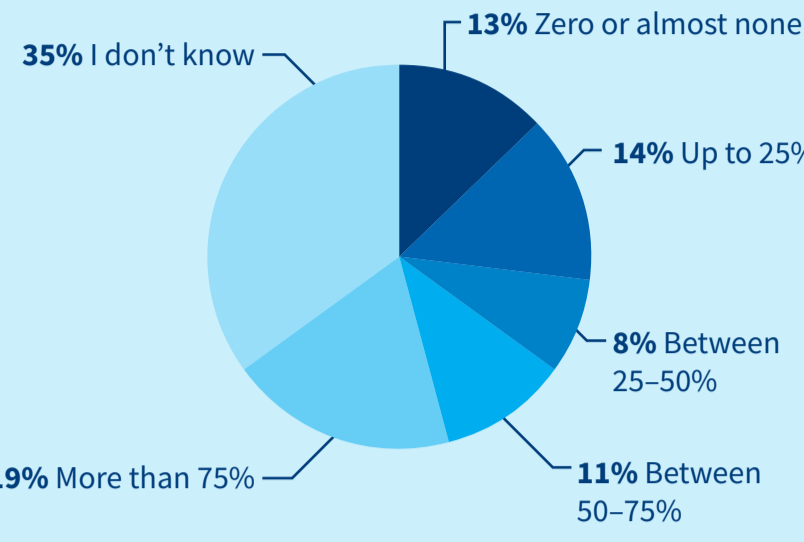
Traditionally, branch offices and individual users working outside the main office have taken poor network and application performance for granted. They recognized that the enterprise network was designed with the assumption that everyone would be working within the network perimeter. But that's no longer the case. Increasingly, agencies are turning to Software-Defined Wide Area Networks (SD-WANs) to provide better services to the extended enterprise – without compromising on either performance or security.

### The Future is Distributed

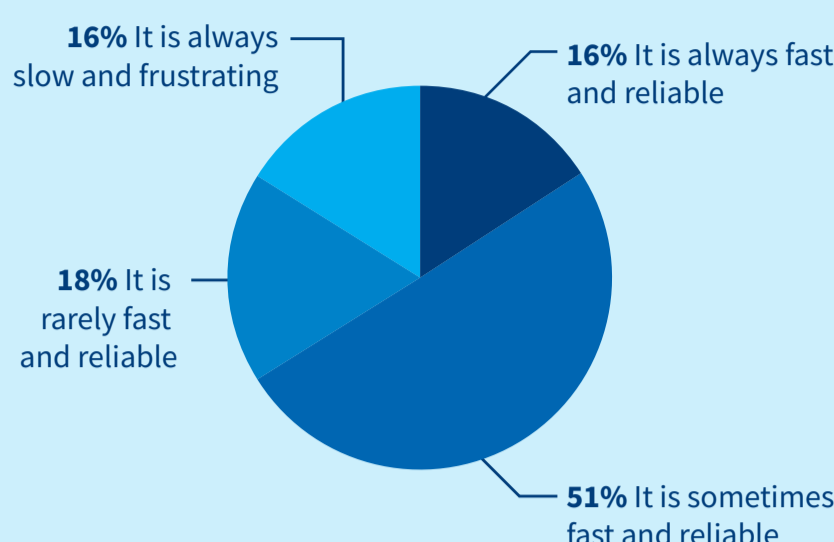
For many agencies, the extended enterprise is a given, as more and more of their end-users connect to the enterprise via the internet.

But for many people, the importance of reliable, secure remote access became most apparent during the COVID-19 crisis. Remote access capabilities across government received mixed reviews.

What percentage of people and offices at your organization under normal operations primarily connect to the Enterprise via the internet?



Which of these statements best describes your organization's experience with remote access to enterprise applications:



### The Drivers for SD-WAN Adoption

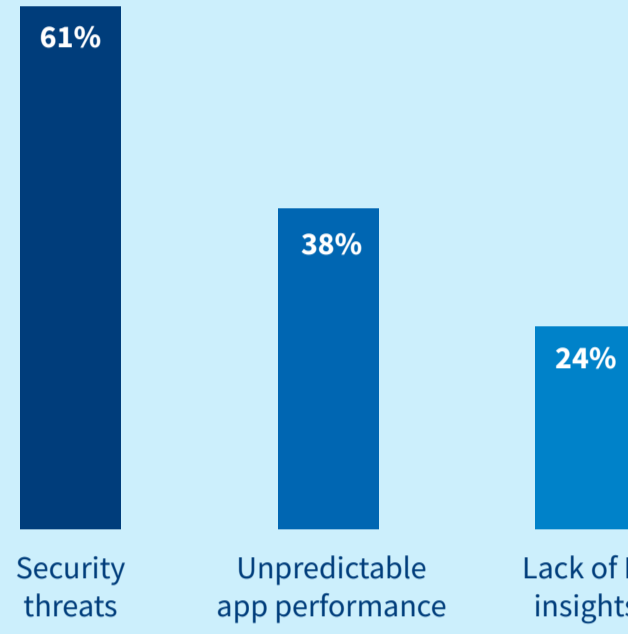
Agencies have run into many problems with traditional WAN solutions, but two stand out: Performance problems and users' complaints about performance problems.

But security concerns also are driving adoption, especially as agencies rely more on software-as-a-service solutions.

When connecting remote offices to a global WAN, what challenges are encountered most often?

- 1 Unpredictable performance of internet/SaaS applications
- 2 Users complain about poor or slow performance
- 3 Complexity of network management

What are your greatest concerns for the employee experience when adopting SaaS applications at remote sites?



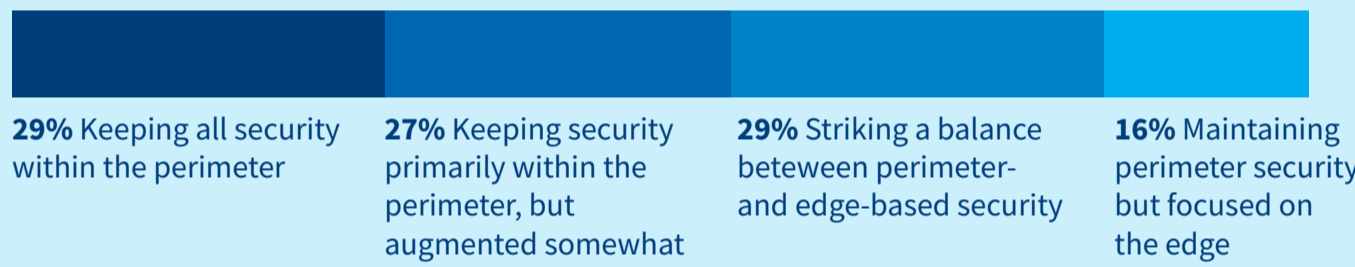
As agencies look for SD-WAN solutions, security tops the list of key capabilities – most notably the ability to enable remote offices and users to connect directly to cloud-based solutions, rather than routing all traffic through the agency's central security stack.

What advanced SD-WAN capabilities are most important for your enterprise remote sites?



Still, agencies are working out how to balance the need for distributed security capabilities with the on-going need for better perimeter-based security.

Which of these statements best describes your organization's current approach to security?



### SD-WAN Looms Large In Emerging Network Strategies

Market watchers see SD-WAN emerging as a prominent solution in the next several years.

**90%**

of WAN edge infrastructure refresh initiatives will be based on Virtual Customer Premises Equipment (vCPE) or SD-WAN appliances by 2023, up from less than 40% today

Source: SDX

**30.8%**

compound annual growth rate between 2018 and 2023 will drive the SD-WAN market to reach **\$5.25 billion**

Source: IDC

**70%**

of enterprise organizations will deploy intent-based networking by 2025, and SD-WAN and other software-defined technology will be the foundation

Source: Research and Markets

### The Future Is Now: The TIC 3.0 Era

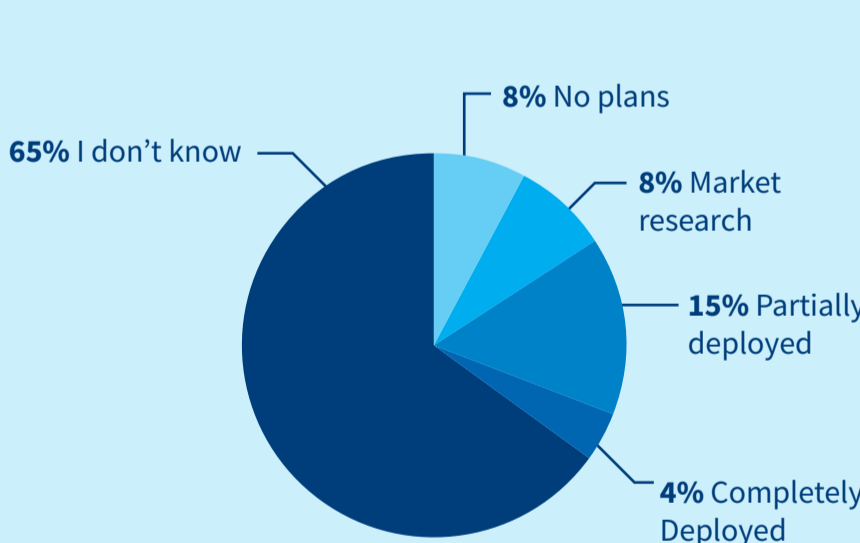
Going forward, many agencies are looking to SD-WAN to help them take advantage of the new flexibilities that come with the Trusted Internet Connections 3.0 guidelines.

On the whole, the federal government is still on the front end of the TIC 3.0 learning curve, with many respondents saying they were unaware of what was in the works at their agencies.

Rank the importance of the following WAN modernization use cases for your remote office connectivity (1=highest priority).

- 1 Secure cloud-direct networking with TIC 3.0 integration
- 2 Insightful performance and security analytics
- 3 Low cost, high throughput internet transport
- 4 Ease of central management and optimization
- 5 Advanced traffic engineering and optimization
- 6 LTE/5G wireless access

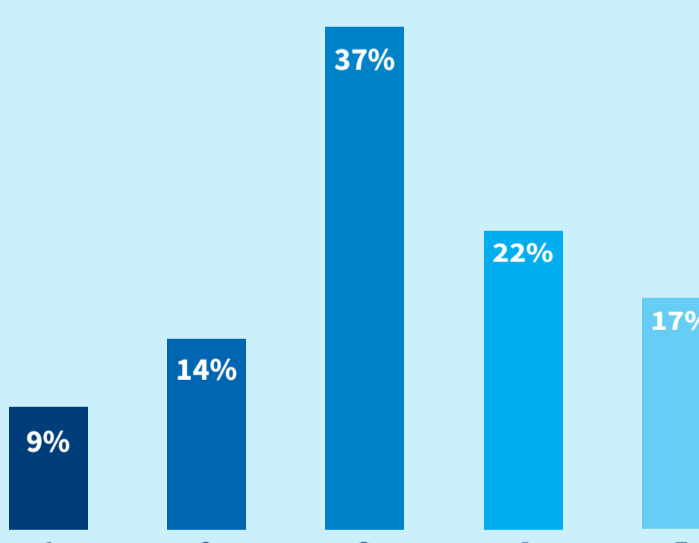
What are your plans for SD-WAN?



But interest in TIC 3.0 is on the upswing. Asked to rank the importance of integrating SD-WAN with new cloud-based TIC 3.0 guidelines, the scale clearly tips in favor of its importance.

Going forward, COVID-19 is likely to reshape the conversation about SD-WAN and TIC 3.0. Asked about TIC 3.0 use cases, the ability to support telework and remote work is paramount.

On a scale of 1 (not at all) to 5 (extremely important), to what extent is integration of SD-WAN with new cloud-based TIC 3.0 capabilities a priority for your organization?



What TIC 3.0 use cases are most important for your organization?

- 1 Elastic, secure access for teleworkers
- 2 Ease of security policy management across cloud, remote work, etc.
- 3 Data protection

### The Future Is Bright

On the whole, agencies are confident in their ability to adapt to this new environment. Asked about how challenging it will be to support the distributed enterprise, they essentially responded, "We got this."

In order to effectively execute their missions, most agencies will have to extend IT support to workers and offices operating beyond the perimeter of traditional enterprise. How challenging will this transition be at your agency?



**11%** This will be a smooth and effortless transition



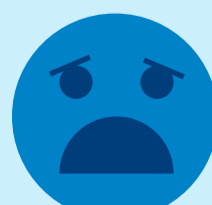
**62%** There will be bumps in the road, but we have a plan



**7%** We have a destination but are unsure how to get there



**9%** Uncertainty has kept us from making a start



**9%** We are overwhelmed and hopelessly lost

### How Swish and Riverbed Help

Riverbed is a strategic partner in Swish's Performance Engineering practice, which helps agencies gain critical insights and visibility in their IT operations and optimize their business impact on the enterprise. Riverbed SteelConnect EX is a highly agile SD-WAN integrated with SaaS and cloud acceleration, WAN optimization and advanced security. The solution meets the needs of both lean IT organizations looking for maximum simplicity and complex enterprise networks requiring maximum flexibility.

To learn more visit [swishdata.com](http://swishdata.com) and [riverbed.com](http://riverbed.com)