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# Managed Campus Network Services Solve Diverse Ramifications of Distributed Networks

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**Abstract:** This showcase by TechTarget's Enterprise Strategy Group explores the dynamic landscape of managed campus networks, focusing on their pivotal role in ensuring security, minimizing latency, and supporting distributed networks. By understanding the multifaceted impacts of these networks on various sectors, including financial, retail, and automotive industries, we address the influence of managed campus networks on improving operational efficiency, data security, and customer experiences, thereby reshaping the overall market dynamics across these sectors.

## Overview

Managed campus networks have evolved in response to emerging technologies and changing business outcomes. A managed campus network is a centralized and comprehensive approach to overseeing and maintaining the networking infrastructure within a specific geographical area, involving tasks such as configuration, monitoring, troubleshooting, and security enforcement to ensure optimal connectivity and performance. For organizations to leverage cost savings and solutions for increased productivity, they need technologies to provide a secure foundation to scale business needs. Managed campus networks play a pivotal role in enhancing security measures, mitigating latency, and supporting the deployment of efficient distributed networks within various sectors.

Managed campus networks, which are based on a cloud architecture, offer a powerful solution for simplifying network management, enhancing security, and optimizing performance. They are transforming operational approaches in financial, retail, and automotive industries while improving data security, reducing latency issues, and optimizing customer experiences, thereby driving significant shifts in market dynamics and competitiveness. As organizations across these sectors increasingly adopt managed campus networks, Enterprise Strategy Group research discussed in this paper serves as a valuable resource for understanding their far-reaching implications on industry evolution and technological advancements.

## Fortifying the Foundations of Managed Campus Networks With Security

Implementing robust security measures within managed campus networks to safeguard critical data and assets is key. As shown in Figure 1, 52% of respondents said one of their organization's greatest challenges with regard to public cloud infrastructure security is an increase in the threat landscape, while 39% said one of their greatest challenges is an increase in the amount of infrastructure-as-a-service usage at their organization.<sup>1</sup>

In addition, 82% of organizations use cloud service provider security groups or firewalls. In order to protect their public cloud infrastructure environment, 66% of organizations currently use network firewalls from cloud service providers, 62% use advanced threat prevention, and 56% use network intrusive prevention.<sup>2</sup> A significant majority of

<sup>1</sup> Source: Enterprise Strategy Group Research Report, [Network Security Trends in Hybrid Cloud Environments](#), July 2022.

<sup>2</sup> Ibid.

organizations prioritize the security of their public cloud infrastructure, as evidenced by the widespread use of cloud service provider security measures, network firewalls, advanced threat prevention, and network intrusive prevention.

Organizations are also lacking the right level of on-premises and private cloud staff and skills and have difficulty responding to security incidents and breaches. This is done by using a managed campus network to address skills gaps by leveraging dedicated IT teams or external service providers to handle configuration, monitoring, troubleshooting, and security tasks, ensuring optimal network performance without requiring extensive expertise from the campus users. The most important attributes for organizations regarding on-premises data center and private cloud network security tools are security functionality, security efficacy, and performance. With most organizations currently using or planning to adopt a hybrid cloud model in the next 12-24 months, the greatest concerns for supporting applications spanning public cloud infrastructure and on-premises data center infrastructure include ensuring and maintaining proper configuration of cloud services, meeting and maintaining compliance with industry regulations across disparate cloud environments, and a lack of consistent security policies across different application architectures.<sup>3</sup>

**Figure 1. Threats and Increased Usage Are Top Security Challenges**

**In your opinion, what are the greatest challenges your organization faces with regard to public cloud infrastructure security? (Percent of respondents, N=255, multiple responses accepted)**



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

## Navigating Managed Campus Networks Through Distributed Networking Strategies

Organizations are struggling to keep up with the constantly evolving network demands, causing delays and outages that impact the overall productivity. Software-defined (SD) technologies have changed the way networks today are designed, built, and operated. SD technologies have evolved by shifting from traditional, hardware-centric

<sup>3</sup> Ibid.

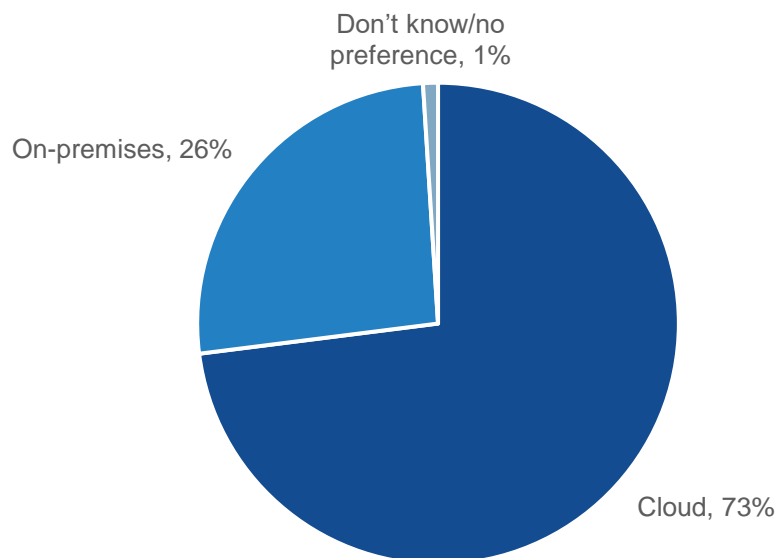
approaches to more flexible and programmable solutions, enabling dynamic and automated control over network, storage, and computing resources. Managed SD campus services are designed for organizations looking for advisory, transformation, and managed services as part of an end-to-end network service.

Organizations can leverage the synergy between distributed networking strategies and managed campus networks to enable dynamic scalability and seamless connectivity. Distributed networks help optimize resource allocation, enhance fault tolerance, and improve network performance within campus environments. Organizations can also leverage the foundations of managed campus networks to bridge the gap between centralized control and distributed flexibility, revolutionizing network management paradigms.

One of the big shifts in network management is the preference to have network management solutions be cloud-based. An Enterprise Strategy Group research survey shows that 73% of respondents stated their organization’s preference is cloud-based solutions (see Figure 2). When asked about the influences behind this preference, 44% cited lifecycle management and/or the ability to leverage AI/ML technology. Additionally, cloud-based solutions are easy to access when working remotely, and for those distributed environments, they provide centralized visibility and control.<sup>4</sup>

**Figure 2.** Cloud-based Network Management Is the Preferred Deployment Approach

**What is your organization’s preference for where unified end-to-end network visibility or management solutions are located? (Percent of respondents, N=339)**



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

The Cisco Managed Campus offers remarkable flexibility by supporting both on-premises and cloud-based configurations, highlighting the adaptability of cloud-based networks. Moreover, organizations increasingly seek the simplicity and efficiency of consuming on-premises infrastructure through a consumption-based model, a capability effectively facilitated by managed service providers. This underscores the broader trend toward optimizing resource utilization and operational convenience in network management. Traditional on-premises network management tends to create data “puddles,” and if everything is managed on premises, the cloud vendor has limited access,

<sup>4</sup> Source: Enterprise Strategy Group Research Report, [End-to-end Networking Visibility and Management](#), April 2023.

potentially lengthening the time it takes to create data models anonymously and leverage those models to create the algorithms to drive intelligence into their system.<sup>5</sup>

## Latency and the Evolving Landscape of Managed Campus Networks

Managing latency is important to unlocking the potential of managed campus networks, improving response times, and enhancing user experiences. Even processes that seem instantaneous have some measurable delay, and reducing such delays is an important business goal. Many applications require low latency to improve the user experience and customer satisfaction, as it helps the applications run faster. Such applications can include those hosted in the cloud, online meeting applications, or mission-critical applications.

One of the top challenges that organizations grapple with when employees experience latency in accessing corporate resources is a significant decrease in productivity.<sup>6</sup> Slow or unreliable network connections can lead to frustrating delays in accessing vital data and applications, hampering day-to-day tasks and decision-making processes.

This not only affects individual performance but also compromises the overall efficiency of the organization. Furthermore, latency issues can introduce security risks, as employees could resort to using alternative, potentially unsecured methods to circumvent the problem, thereby increasing vulnerability to data breaches and cyberthreats. To mitigate these challenges, organizations must invest in robust network infrastructure, adopt latency reduction strategies, and prioritize employee training on best practices for maintaining data security while dealing with latency issues and application performance.

Figure 3 shows the challenges organizations face specifically with connecting employees to corporate applications and resources. The top challenges include delivering a consistent experience or performance across corporate offices and home/remote locations, costs associated with maintaining a traditional VPN infrastructure, and network redundancy at home offices.<sup>7</sup>

Managed campus networks are becoming pivotal to delivering high-performance, low-latency solutions for various industries, such as automotive, retail, financial, education, and healthcare.

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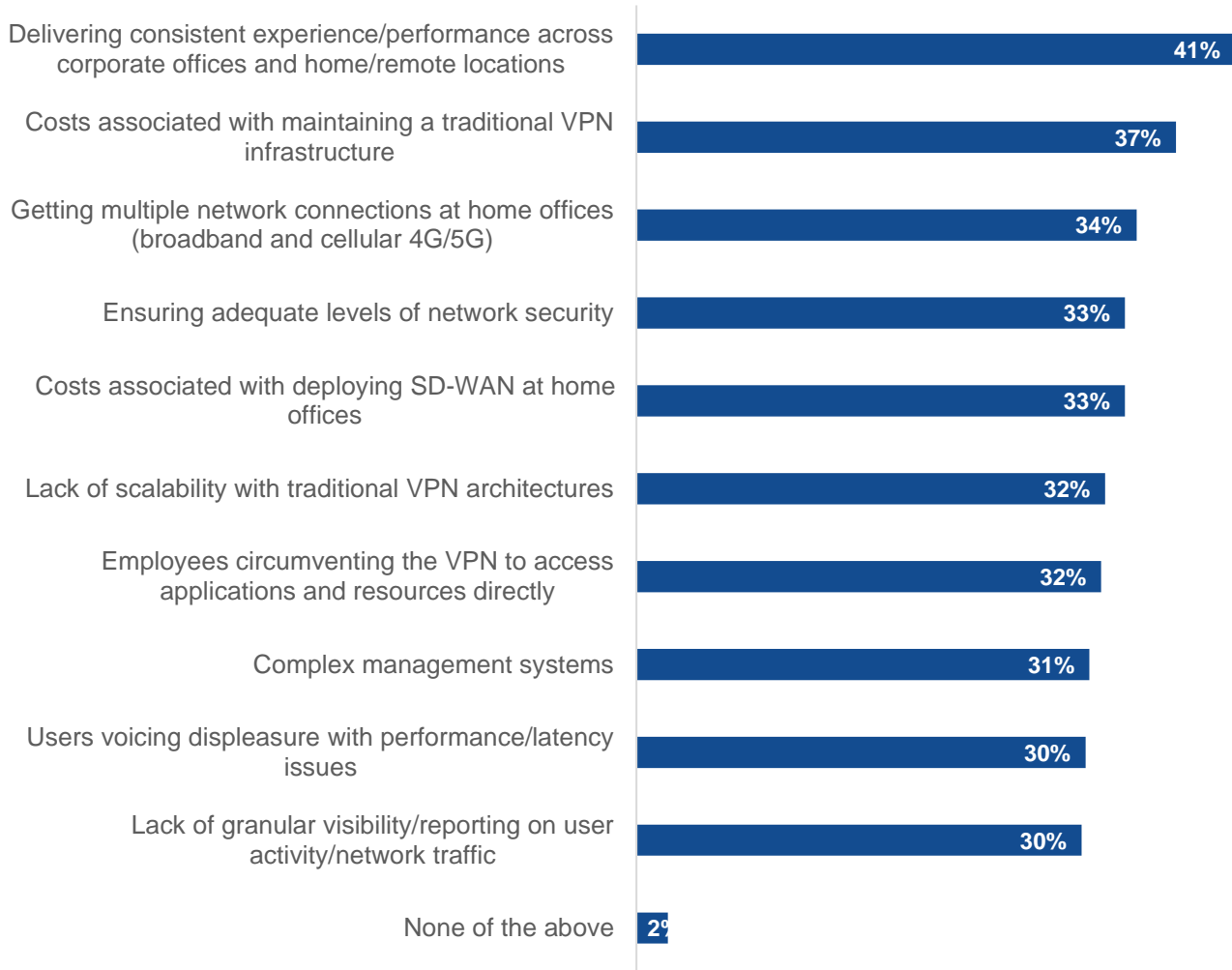
<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Source: Enterprise Strategy Group Complete Survey Results, [A Network Perspective on SASE and SD-WAN](#), September 2023.

**Figure 3.** Consistent Experiences and Network Redundancy

**What challenges does your organization face specifically with connecting employees to corporate applications and resources?  
(Percent of respondents, N=374, multiple responses accepted)**



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

### The Cisco and Computacenter Advantage

Computacenter's Managed SD-Campus Service sources, transforms, and manages campus networks, taking the complexity out of connectivity. Computacenter's end-to-end service ensures organizations can securely meet their networking goals with minimal exposure to unnecessary risk, and its experience and partnerships take organizations through the advisory, planning, design, build, and run phases to create a campus network that works for their business. Computacenter is a Cisco Gold Provider partner with specialization in Cisco Powered Campus Access. Organizations can use Computacenter's Managed SD-Campus Service so they can focus on their core business.

## Conclusion

With modern IT environments comprising distributed applications across private data centers, public clouds, and edge locations -- plus needing to support hybrid employees working outside of traditional office settings -- networking professionals have plenty of choices to make as they ensure critical connectivity for their organization. In addition, organizations are constantly facing challenges in equipping their increasingly complex campus networks, and they need a solution that simplifies network management, enhances security, and optimizes performance.

The Computacenter Managed SD-Campus Service supports organizations across the entire network. As the underlying technology, Cisco offers a comprehensive family of products managed through a centralized cloud management controller. Cisco and Computacenter's integrated Managed SD-Campus Service, which includes hardware, software, and support, enables organizations to focus their time on more strategic work, knowing their network is secure and performing well.

To learn more about how Cisco and Computacenter can help scale the network as your needs change, please see: <https://www.computacenter.com/en-us/what-we-do/networking/managed-sd-campus>.

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### About Enterprise Strategy Group

TechTarget's Enterprise Strategy Group provides focused and actionable market intelligence, demand-side research, analyst advisory services, GTM strategy guidance, solution validations, and custom content supporting enterprise technology buying and selling.

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