

# The Challenges of Network and Cloud Security



In today's rapidly evolving digital landscape, business network IT managers face an ever-increasing challenge: ensuring the security of their networks.

One of the most prominent trends contributing to this challenge is the growing reliance on business cloud applications. Companies are increasingly adopting cloud services for their scalability, cost-effectiveness, and accessibility. However, this shift exposes businesses to new security risks. IT managers must grapple with the complexities of securing sensitive data and applications stored off-site, often in third-party data centers.

Critical aspects of this challenge stem from the inherent vulnerabilities of using broadband internet connections. While these connections offer high-speed access to the cloud, they also expose businesses to various security threats. Cybercriminals exploit these vulnerabilities through tactics like phishing attacks, DDoS (Distributed Denial of Service) attacks, and malware distribution. IT managers are expected to deploy, configure, and maintain advanced firewall security policies to safeguard their networks against such threats.

The proliferation of remote workers has further complicated the security landscape. With the advent of flexible work arrangements, employees access corporate networks from various locations and devices. This introduces the risk of unauthorized access, data leakage, and unsecured connections. IT managers must implement secure remote access solutions, enforce strong authentication protocols, and educate employees on cybersecurity best practices.

Moreover, the rise of "bring your own devices" (BYOD) has become a double-edged sword for businesses. While it enhances employee productivity and flexibility, it also increases the number of endpoints connecting to the corporate network, each potentially carrying its vulnerabilities. IT managers need comprehensive BYOD policies, mobile device management solutions, and regular patch management to mitigate these risks.

The challenges of network and cloud security for business network IT departments are continuously evolving. To navigate these challenges successfully, IT managers need a more cost-effective approach that optimizes network security and cloud application performance while reducing the cost and complexity.

## The Cybersecurity Challenge for Small & Medium Businesses





#### **5 Limitations of Corporate Firewalls**

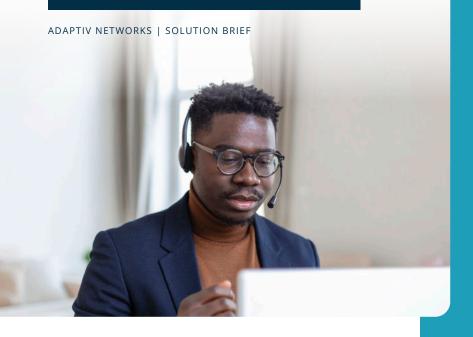
Corporate network firewalls have long been the frontline defense against cyber threats, but they come with their own set of limitations and frustrations, often testing the patience of business network IT leaders.

- COST Acquiring enterprise-grade firewalls can be a substantial investment, especially for small and medium-sized businesses. These expenses are not one-time; businesses must plan for the recurring cost of replacing hardware every few years to keep up with evolving security threats and technological advancements. This financial burden can strain budget allocations, diverting resources away from other critical IT projects.
- COMPLEXITY Configuring security policies on firewalls is an intricate and time-consuming task. Managing a firewall's rule set and ensuring that it aligns with the organization's security requirements can be complex. Mistakes or misconfigurations can inadvertently open security vulnerabilities or disrupt legitimate network traffic. This complexity demands skilled personnel and thorough testing, adding to the operational overhead.
- MAINTENANCE Firewall firmware updates are essential for ensuring ongoing protection against emerging threats. However, this process can be frustrating as it often requires scheduled downtime and may result in unexpected issues. IT managers must carefully plan for these updates, balancing security with minimal disruption to business operations.

- PERFORMANCE While advanced security features on firewalls are essential, they can impact network throughput. Intricate inspection processes, such as deep packet inspection, can slow down network performance, especially in high-traffic environments. IT departments must strike a delicate balance between security and performance, often requiring fine-tuning and optimization efforts.
- both the corporate network and cloud-based business applications is a critical need, especially in the era of remote work. However, routing all remote worker internet traffic through the company firewall can lead to poor user experiences and waste network bandwidth. This approach can result in latency issues and congestion, impacting productivity and frustrating remote employees.







## SASE: Network Security for the Cloud Generation

Adaptiv Networks has a history of cloud-managed SD-WAN innovation backed by our industry leading patent portfolio. For 20 years, we've been delivering cloud-connectivity for businesses who value simplicity, performance, and cost-effectiveness. By leveraging our unique capabilities as an SD-WAN overlay network provider, Adaptiv Networks has developed new cloud-based security solutions that allow businesses to enjoy a simple, secure, cloud-managed networking experience without the cost, complexity, and limitations of traditional corporate firewalls.

#### WHAT IS SASE?

SASE is a relatively new networking term that's generating plenty of buzz in the IT community. But, what is it and why is it important? The term SASE was coined in 2019 by Gartner to describe a new networking model that combines SD-WAN (software-defined wide area network) with cloud security. SASE (secure access service edge) is pronounced 'sassy,' and include several security features:

- Zero Trust Network Access (ZTNA)
- Web Filtering
- Secure Web Gateway (SWG)
- Firewall-as-a-service (FWaaS)

#### The Roadmap from SD-WAN to SASE

In the real world, we know IT leaders face budget challenges. Procuring an afforable firewall is one of them. Although many businesses have already invested in firewalls, they may be outdated... while other businesses have no firewalls in place at all. Regardless of what your current firewall situation is, Adaptiv Networks offers a flexible roadmap with three layers of protection designed to bring SASE within reach of small businesses and mid-sized enterprises.

#### Secure SD-WAN Network

Adaptiv SD-WAN provides a secure foundation with encrypted connectivity and a "zero-trust" network posture.



## Web Filtering Protection

Cloud Protect adds powerful URL filtering, making it easy to control which sites are allowed on your network.



#### SASE Cloud Security

Cloud Secure adds next-gen Firewall-as-a-Service with deep content inspection and Secure Web Gateway.

## **Step 1: A Secure SD-WAN**

#### **A Secure Network Foundation**

Adaptiv SD-WAN delivers a better network experience that boosts quality and reliability for business cloud applications. It also provides a base layer of security that includes a stateful firewall at each branch office. Our Adaptiv SD-WAN Edge device operates on a "zero-trust" philosophy blocking any unknown or unauthorized traffic from the outside. Branch network access is only allowed through the secure encrypted SD-WAN tunnel keeping your data private.



## Cloud Gateway Protection

Our secure SD-WAN cloud manages public IP addresses which creates a shield against DDOS attacks.



## Secure Access for ← Remote Workers ←

Simple encrypted access solution for employees to work from anywhere.





Our encrypted SD-WAN tunnel protects data over broadband for private site-to-site communications and cloud access.



### **Private Network Address**

Our SD-WAN Cloud assigns a private IP address to the edge device, making the branch network invisible to attackers.



## A Se

## A Secure Network Perimeter

Our SD-WAN edge device provides a stateful firewall that blocks all uninvited traffic from the branch network.

#### **Adaptiv SD-WAN vs. Firewalls**

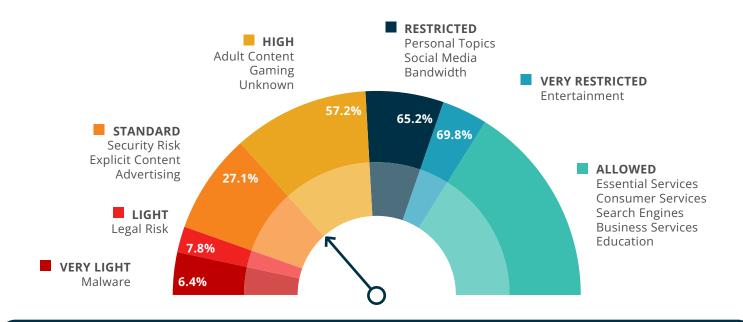
- Optimal Cloud Performance: Our cloud gateways provide inbound QoS and seamless multi-link failover with no dropped calls.
- Invisible to Attack: Our cloud gateways assign a private IP address to each business site, reducing exposure to DDoS attacks.
- Better Remote Access: Adaptiv My Connect provides simple, secure ZTNA access for hybrid workers without the wasted bandwidth of VPNs.

## **Step 2: Web Filtering Protection**

#### An added layer of cloud security

Adaptiv Cloud Protect builds on the foundation of Adaptiv SD-WAN, adding an extra layer of cloud-based web-filtering protection. Cloud Protect combines ease of use with cost-effectiveness, making it an ideal network security solution for small to mid-sized enterprises (SMEs). While Cloud Protect is not a full-featured SASE solution, it does provide an affordable cloud security option that fills the gap for businesses who have outdated firewalls or no firewalls whatsoever. As a cloud-managed service offering, Cloud Protect has zero complexity and no IT expertise is required, you simply choose the right layer of protection that best fits your business.

Cloud Protect is powered by our network of secure SD-WAN cloud gateways, using first-packet inspection to automatically recognize over 20 million websites that are categorized in our URL database. Based on the template setting you select, Cloud Protect will automatically block web-borne threats and prevent connection to unauthorized websites. This is a powerful cloud-based URL and DNS filtering solution that is constantly updated to ensure your web filtering protection is always up to date.



#### Cloud Protect: Who's it for?

Cloud Protect is an inexpensive, managed URL filtering solution deployed using pre-designed security templates, making it amazingly easy to install and manage.

Businesses who rely on cloud applications, but have no firewalls or cloud security in place

Cloud Protect significantly enhances their security posture for low cost.

Businesses with firewalls that were not configured and that aren't kept up to date

Cloud Protect is configured in just a few clicks and never goes out of date.

Businesses who do not have the skills nor the budget to manage next generation firewalls

Cloud Protect is a simple managed service with zero IT complexity.

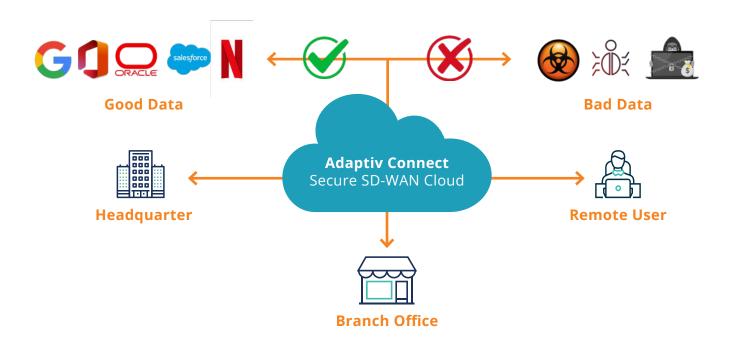
## Step 3: Cloud-managed SASE

#### **Advanced Network Security, Simplified.**

Building on the secure foundation of Adaptiv SD-WAN, plus the added layer of Cloud Protect web-filtering, Adaptiv Cloud Secure takes your network security to the next level. Adaptiv Cloud Secure is our full-featured SASE solution that combines the peace of mind of having advanced network protection with the simplicity of a cloud-managed service.

Cloud Secure is designed for enterprises who are ready to upgrade to a simple, cloud-based network security solution that delivers enhanced performance while eliminating the cost and complexity of corporate firewalls. Cloud Secure combines deep content inspection with AI that monitors over 100 million endpoints to provide advanced real-time threat protection against zero-day attacks.

- Cloud-based Firewall-as-a-Service
- Secure Web Gateway
- Advanced Anti-Malware
- Data Loss Prevention
- Threat Analysis



#### **Adaptiv Cloud Secure vs. Corporate Firewalls**

**Faster Performance:** By using our cloud gateways to perform application recognition we avoid any drop in bandwidth throughput.

**Zero Complexity:** Our cloud-managed security solutions eliminate the complexity of firewall configuration and firmware updates.

**Grows with Your Business:** Unlike firewalls, our SD-WAN and SASE services scale easily with no hardware capex required.

#### Cloud Secure: Who is it for?

Cloud Secure is a robust cloud-managed SASE solution that provides advanced threat prevention with next generation Firewall-as-a-Service and Secure Web Gateway.

#### **Businesses with aging firewalls**

A simple, cloud-managed SASE service replaces their firewalls with zero capex.

Businesses who need more bandwidth than existing firewalls can deliver Migrate to a scalable SASE service to avoid purchasing new larger firewalls.

## Businesses that are migrating out of MPLS

Migrate to a SASE now, with flexibility to keep MPLS until contracts expire.

## Conclusion

At Adaptiv Networks, we believe network security should be simple and affordable. We're committed to delivering on the promise of SASE as a cloud-managed service that's priced within reach of small and mid-sized enterprises.

Regardless of your current network security posture, our product lineup offers a clear roadmap to a more secure cloud networking experience. Whether or not you have existing firewalls, we can get you started with a secure SD-WAN solution that provides a base layer of network security. We can help you eliminate the cost and complexity of firewall management by simply adding our optional cloud security products when the time is right for you.

Cloud Protect offers amazingly simple and affordable webfiltering protection with zero IT complexity. Cloud Secure is our full-featured cloud-based SASE solution that offers advanced threat protection with Firewall-as-a-Service and Secure Web Gateway. Whichever level of protection is right for your business, Adaptiv Networks SD-WAN and SASE solutions are delivered as a cloud managed service, so you can focus on your business instead of your network.

#### **Why Adaptiv Networks**



Simple, Affordable SD-WAN and SASE Solutions



Zero IT Complexity, Delivered as a Managed Service



Optimal Cloud Performance with Robust Network Security



Flexible Options Designed to Grow with Your Business

## How to add Adaptiv SD-WAN to your business.

Adaptiv SD-WAN is sold as a simple subscription service that includes the SD-WAN edge device, access to the Adaptiv Connect network of intelligent cloud gateways and the cloud orchestrator. Our SD-WAN license pricing is based on your network throughput requirements, and we offer unique configuration options that optimize your cost without reducing your bandwidth.

Cloud Protect, Cloud Secure, and My Connect are sold as optional add-on subscriptions. All Adaptiv Networks solutions are sold exclusively through our global network of partners. Contact us today to discuss your business goals or to find an Adaptiv certified solution provider that's right for you.



#### **Adaptiv Networks Solutions**

Smart, secure business networks that deliver superior cloud performance with the simplicity of a managed service.

CONTACT US TODAY TO LEARN IF ADAPTIV NETWORKS IS RIGHT FOR YOUR BUSINESS

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