

From the days of mainframes and terminals, through connected personal computers, local area networks (LANs), and wide area networks (WANs) to client-server, peer-to-peer, and the internet, the specifics of networking have changed time and again. Technical developments and new needs have pushed each other along.

Now it's time for another networking revolution: Secure Access Service Edge, or SASE (pronounced "sassy"). It's a transformative approach designed to support mobile, edge processing.

### The Old Way: The Data Center - at the Center

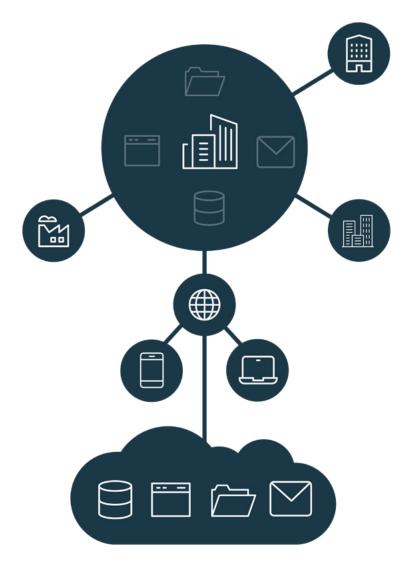
Despite the many changes in networking equipment and software over the years, the basic topology of a hub-and-spoke model hasn't really changed.





### But Now, the Data Center Is Just Part of the Equation

When the data center was the heart of computing, hub-and-spoke was fine. But consumerization, an explosion of mobile devices and activity, decentralized content, cloud computing, online video, web services with APIs, kiosks, and the Internet of Things and connected devices are driving a new use model. Traditional networks have been turned inside out; today, the data center is often just another waystation.





### **Traditional WAN Architecture Has Limits**

Trying to fit new technologies and requirements into traditional WAN architectures creates unnecessary complexity and rigidity, resource demand, and security weaknesses.

1,935

Number of cloud applications in use by the average enterprise<sup>1</sup>



Traffic at branch offices and remote sites that can be traced to cloud applications<sup>2</sup>



Workloads and compute instances processed by cloud data centers by 2021<sup>3</sup>

79.4ZB

Data generated by an estimated 41.6 billion IoT devices in 20254



### It's Time to Reimagine Networks and Network Security

To enable full business innovation, CIOs and IT departments must rethink the network with a more agile architecture that can use what a company already has and expand from there. At the same time, they must consider security an integral part of the network, moving beyond point solutions to ensure security is enforced and deployed centrally without affecting network performance.

### **Network goals**

- 1. Existing infrastructure remains supported
- 2. Flexibility for central and branch offices, as well as remote users
- 3. Robust bandwidth with quality of service (QoS) control to keep business-critical applications running at full capacity
- 4. Fully secure operations
- 5. Ability to evolve capabilities





### The SASE Advantage

Traditional hub-and-spoke networks can't address modern needs because control needs to happen everywhere, not a few central points that filter and control all traffic, which can hamper flexibility and performance.

# Top concerns about current WAN structures<sup>5</sup>

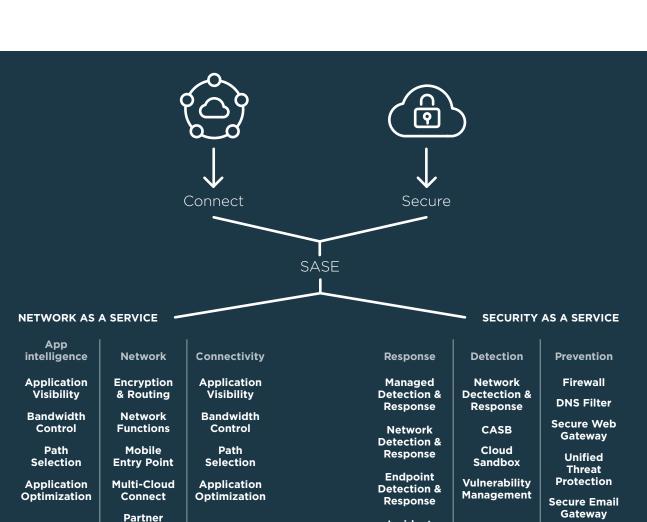




### **Simplified, Hardened Controls**

Connect

SASE turns the traditional model inside out. With a set of tightly integrated, cloud-managed security services that can be delivered on premises or in the cloud, security is enforced via identity- and context-aware, zero-trust policies, even on endpoints that may not be managed by IT. Instead of having equipment and IT personnel available at all the individual parts of the network, the exercise of control is centralized, simplified, and hardened.



Incident

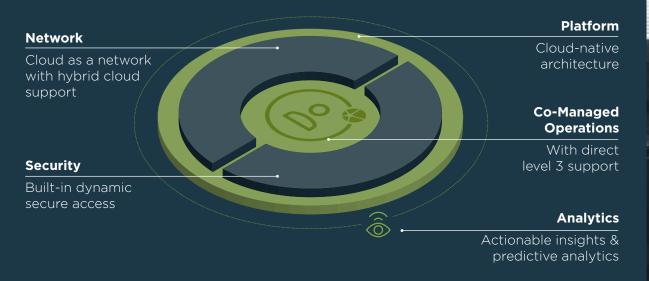
Response



### **Identity- and Context-Aware Architecture**

Essentially, the network and security operations centers converge into a single capability through a software-defined and policy-based network fabric. An IT department can virtually move through the network, combining network device management, traffic control (such as dynamic path selection, QoS, etc.), and security throughout all the layers of a network. The entire SASE service mesh becomes identity- and context-aware, wherein the context may be user identity, device identity, device state, time of day, geolocation, or other contexts.









### 7 Benefits of SASE

A move to SASE architecture brings many benefits:

- Reduction in complexity and costs
- Ability to enable new digital business scenarios
- Improvement in performance/latency with capacity efficiently allocated
- Ease of use/transparency for users
- Improved security with zero-trust network access
- Low operational overhead
- Increased effectiveness of network and network security staff

Companies that want to remain competitive in their industries will need to accommodate how business is done and consumers operate these days. That means moving to SASE.





### The Open Systems Edge

Finding the right partner already advanced in these technologies will make all the difference to success. That partner is Open Systems.

Open Systems has been delivering an intelligent edge and cloud access platform—the foundation of SASE—for over a decade with best-of-breed SD-WAN technology, embedded security at every layer, and 24x7 global operations support staffed by L3 network and security engineers.

With more than 7,200 deployments across more than 180 countries, Open Systems has a long-proven enterprise track record. Move into the future with a partner that's been doing this for a long time.

## For more information or a network assessment, **contact Open Systems today.**

- <sup>1</sup> McAfee, "5 Key Findings From 2019 Cloud Adoption and Risk Report"
- <sup>2</sup> EMA, Wide-Area Network Transformation: How Enterprises Succeed with Software-Defined WAN, December 2018
- <sup>3</sup> Tech Republic, "95% of global data center traffic will be from the cloud by 2021," February 5, 2018
- <sup>4</sup> IDC, "The Growth in Connected IoT Devices Is Expected to Generate 79.4ZB of Data in 2025, According to a New IDC Forecast." June 18, 2019
- <sup>5</sup> Gartner, Survey Analysis: Address Security and Digital Concerns to Maintain Rapid SD-WAN Growth, November 12, 2018
- <sup>6</sup> Gartner, The Future of Network Security Is in the Cloud, August 30, 2019





Open Systems is a leading global provider of a secure SD-WAN that enables enterprises to grow without compromise. With assured security, Al-assisted automation and expert management that free valuable IT resources, Open Systems delivers the visibility, flexibility and control you really want with the performance, simplicity and security you absolutely need in your network. Learn more at **open-systems.com**.