

# The Future of Network Security Is in the Cloud: Introducing the Secure Access Service Edge

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**Your Users,  
Workloads,  
Applications  
and Data Are  
in the Cloud.  
Why Isn't Your  
Security?**

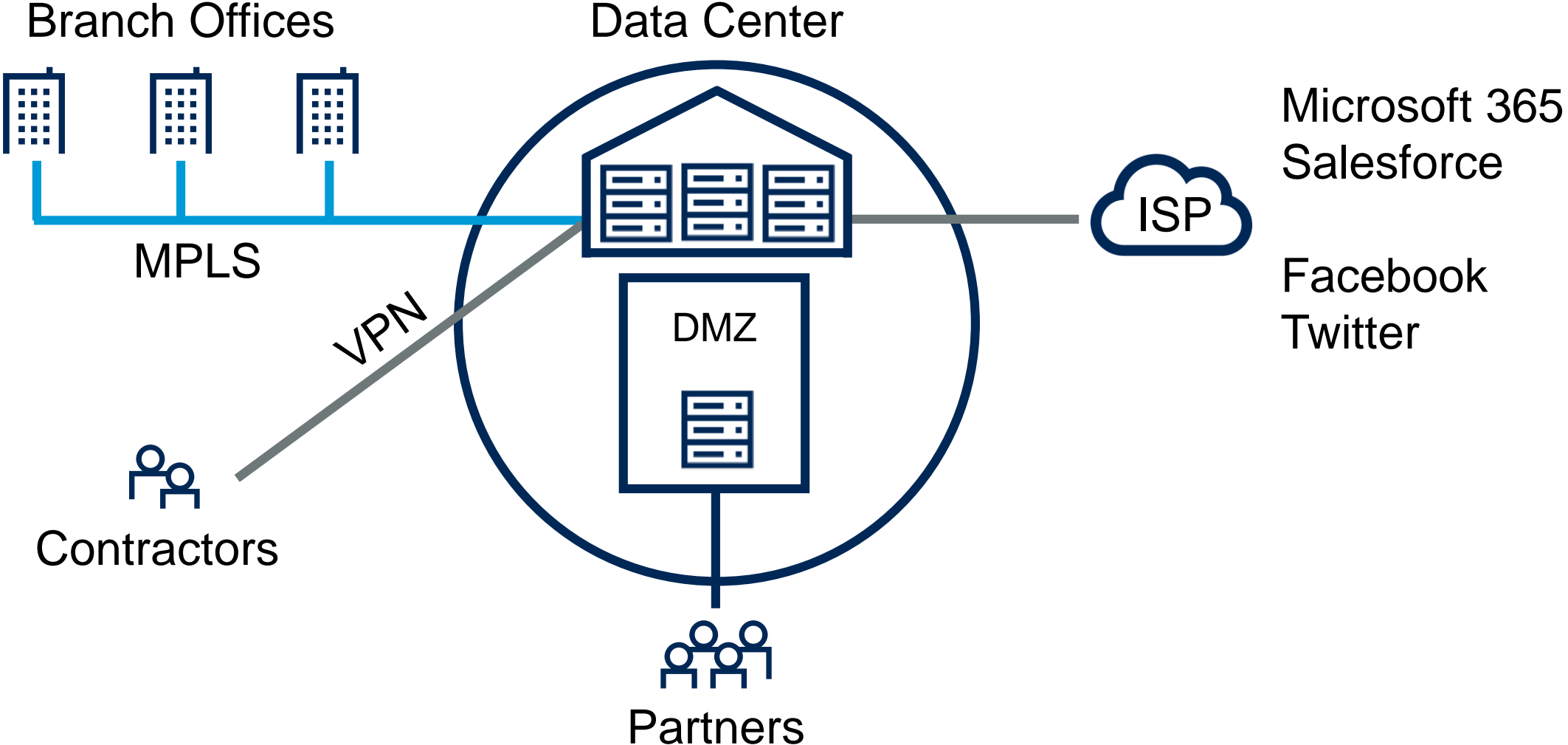


**A \_\_\_\_\_ Is a  
Capability, Not  
a Box.**

- **Firewall**
- **SWG**
- **CASB**
- **WAF**



# From Data Centers at the Center



# To People, Devices, Apps and IoT/OT Entities

Secure Access  
Service Edge



**Distributed  
Edge**



**Internet  
Edge**



**Internet  
Core  
Backbone**



**Instead of the security perimeter being entombed in a box at the data center edge, the perimeter is now everywhere an enterprise needs it to be —  
A dynamically created, policy-based secure access service edge.**

# Secure Access Service Edge Convergence

**Network as a Service**



**Connect it**



**Network Security as a Service**



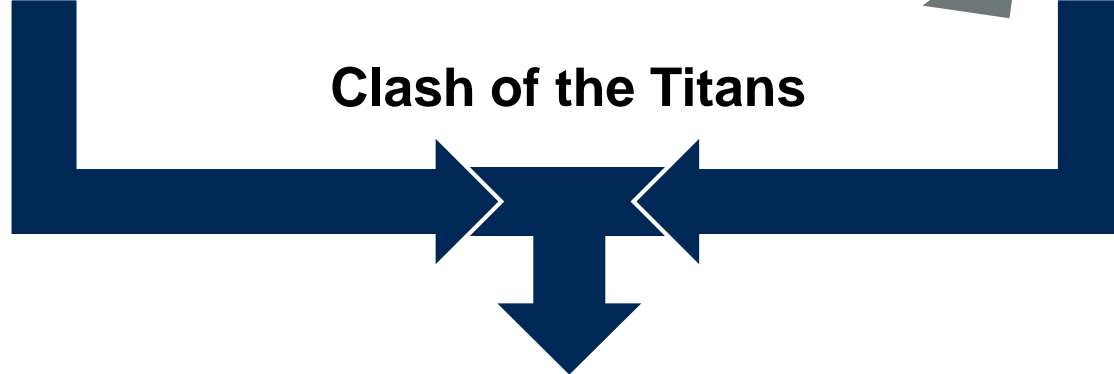
**Secure It**

Threat Detection

Sensitive Data Awareness



**Clash of the Titans**



**Secure Access Service Edge**

# Secure Access Service Edge Convergence



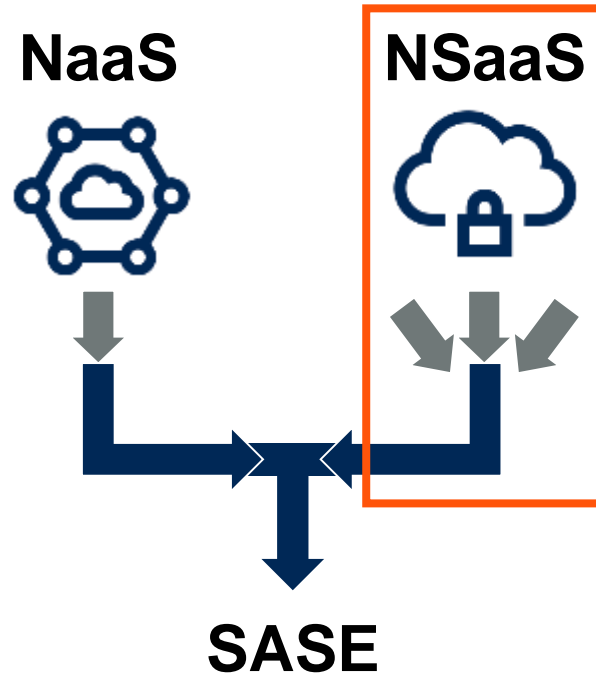


**You want to inspect a given piece of content for risk.**

**Does it make sense to scan for badness and then again for goodness?**

**Are these really different problems?**

# Secure Access Service Edge Convergence



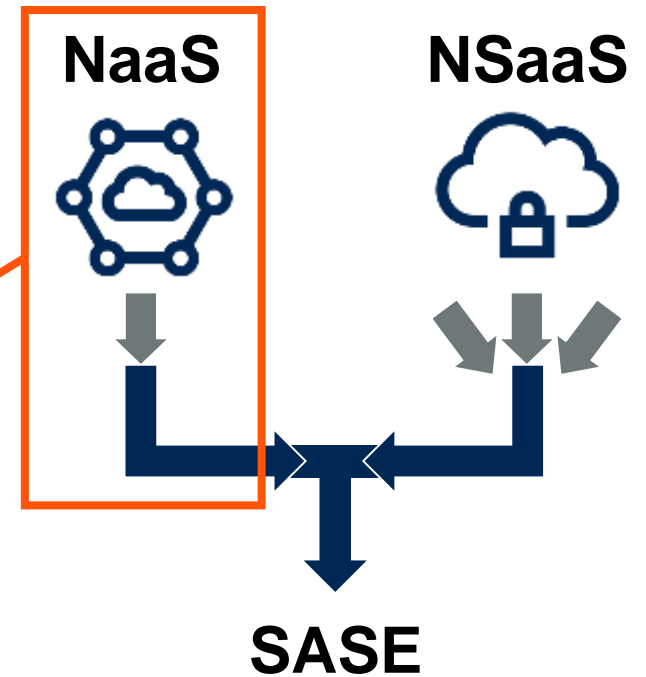
- CASB
- Cloud SWG
- ZTNA/VPN
- Remote Browser Isolation
- WAAPaaS
- FWaaS
- Sandboxing

**A remote/mobile user needs access to the internet, Microsoft 365, Salesforce, Box and enterprise private apps — All at the same time.**

**Are these really different problems?**

# Secure Access Service Edge Convergence

- SD-WAN
- CDN
- WAN optimization
- Bandwidth aggregators
- Network service providers



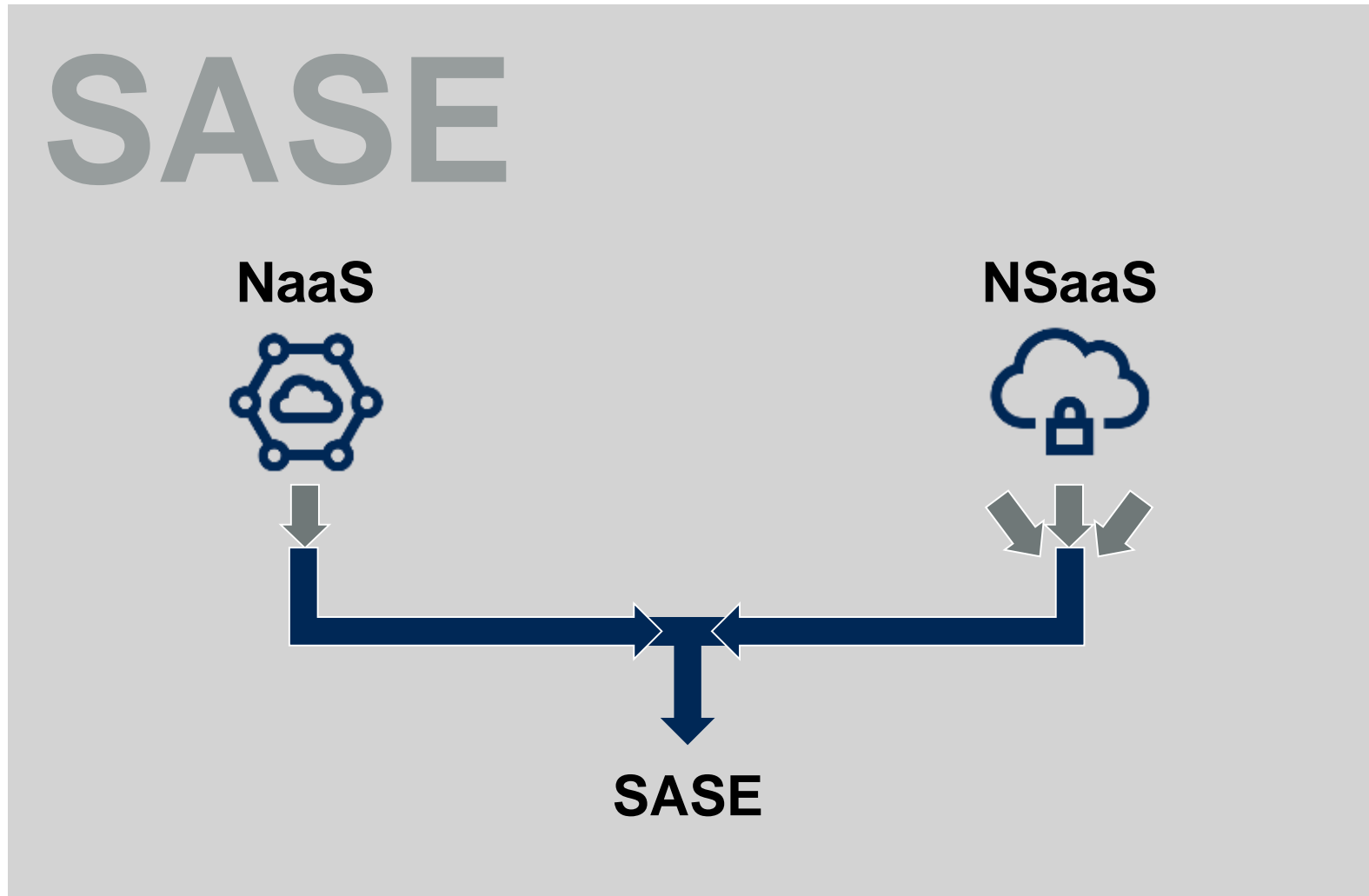
**An employee in their car, on their iPad, connected using 4G, is a branch office of one.**

**A branch office is just a concentration of users and devices.**

**A set of wind turbines with local processing of telemetry is a branch office of devices.**

**Are these really different problems?**

# Secure Access Service Edge Convergence



# Strategic Planning Assumption

By 2023, **20%** of enterprises will have adopted SWG, CASB, ZTNA and branch FWaaS capabilities from the same vendor up from less than 5% in 2019.



# How and Why Will Enterprises Adopt SASE?

# Why a Box-Based Model Is Destined to Fail

## Complexity of Consoles, Policy and Process



# What We Want Is a Seamless Experience — For the User and for the Security Policy Administrator



# Sue From Accounting, Managed Device



## Network

- Latency
- SaaS acceleration

## Security

- SWG
- Local Wi-Fi protection
- Malware protection
- Sensitive data monitoring



Microsoft 365



Salesforce



Twitter



Facebook

# Jorge, a Contractor, Unmanaged Device

## Network

- Cost optimization

## Security

- Remote browser isolation
- User behavior monitoring



Private App

# Wind Turbines at the Edge



## Network

- Cost optimization
- Deduplication



## Security

- ZTNA
- FWaaS
- Encryption



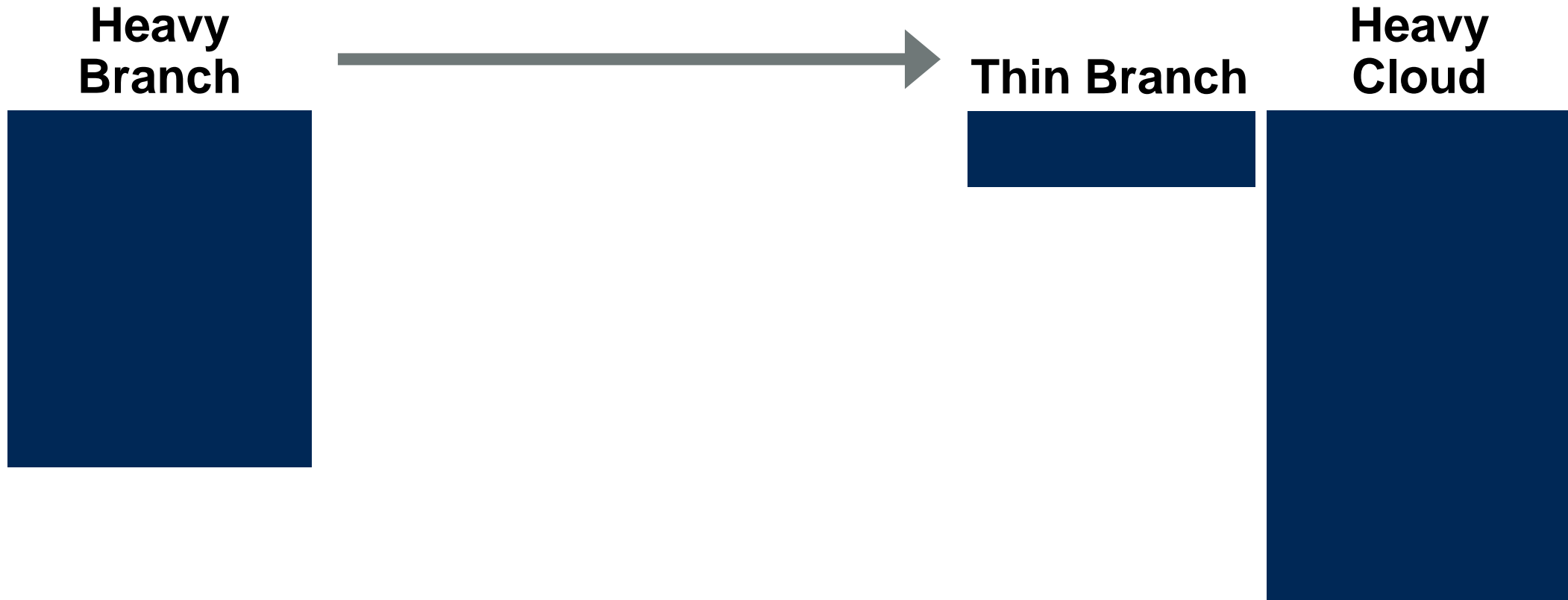
Edge



AWS\*

\*Amazon Web Services

# On-Premises Footprint Still Needed, but Smaller. Transition to a Thin Branch Model





# **What Vendors Are Delivering Against a SASE Vision?**

# SASE Services

## Core features:

- SD-WAN
- SWG
- CASB
- ZTNA
- FWaaS
- Sensitive data and malware
- Line rate operation

## Recommended:

- WAAP
- Remote browser isolation
- Network sandbox
- DNS protection
- API-based access to SaaS for data context
- Supports managed and unmanaged devices

## Optional:

- Wi-Fi hot spot protection
- Network obfuscation or dispersion
- Legacy VPN
- Edge compute protection

# What Does a Cloud Native SASE Mean?

- Software-based, hardware-neutral architecture
- Elastic
- Built using small units of loosely coupled code
- Globally distributed points of presence
- In-line encryption/decryption that scales
- Single pass scanning for malware/sensitive data
- Ideally, licensing per user/device as a subscription
- Ideally, multitenant by design
- Ideally, full integrated — Not cobbled from acquisitions

# Sample Vendor Landscape

- Akamai
- Barracuda
- Cato Networks
- Cisco
- Cloudflare
- Forcepoint
- Fortinet-OPAQ
- iboss
- McAfee
- Broadcom-Symantec
- Netskope
- Open Systems
- Palo Alto Networks
- Proofpoint
- Versa Networks
- VMware
- Zscaler

# Recommendations

- ④ Position SASE as digital business enabler.
- ④ Shift to identity and policy-based security services.
- ④ Evaluate immediate opportunities for ZTNA in 2020.
- ④ ZTNA, SWG, CASB and RBI:
  - Cut costs and reduce complexity as contracts renew.
  - Shift to cloud-native offerings.
- ④ Engage with network architects for office reopenings and branch office transformation projects.
- ④ Be open to switching vendors for comprehensive SASE.

# Recommended Gartner Research

- 🔍 [The Future of Network Security Is in the Cloud](#)  
Neil MacDonald, Lawrence Orans and Joe Skorupa (G00441737)
- 🔍 [Market Trends: How to Win as WAN Edge and Security Converge Into the Secure Access Service Edge](#)  
Joe Skorupa and Neil MacDonald (G00388951)
- 🔍 [Quick Answer: Cost Effectively Scaling Secure Access While Preparing for a Remote Workforce](#)  
Neil MacDonald and Steve Riley (G00725124)
- 🔍 [Hype Cycle for Enterprise Networking, 2020](#)  
Andrew Lerner and Danellie Young (G00441509)
- 🔍 [Hype Cycle for Cloud Security, 2020](#)  
Steve Riley, Jay Heiser and Tom Croll (G00448013)

For information, please contact your Gartner representative.