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

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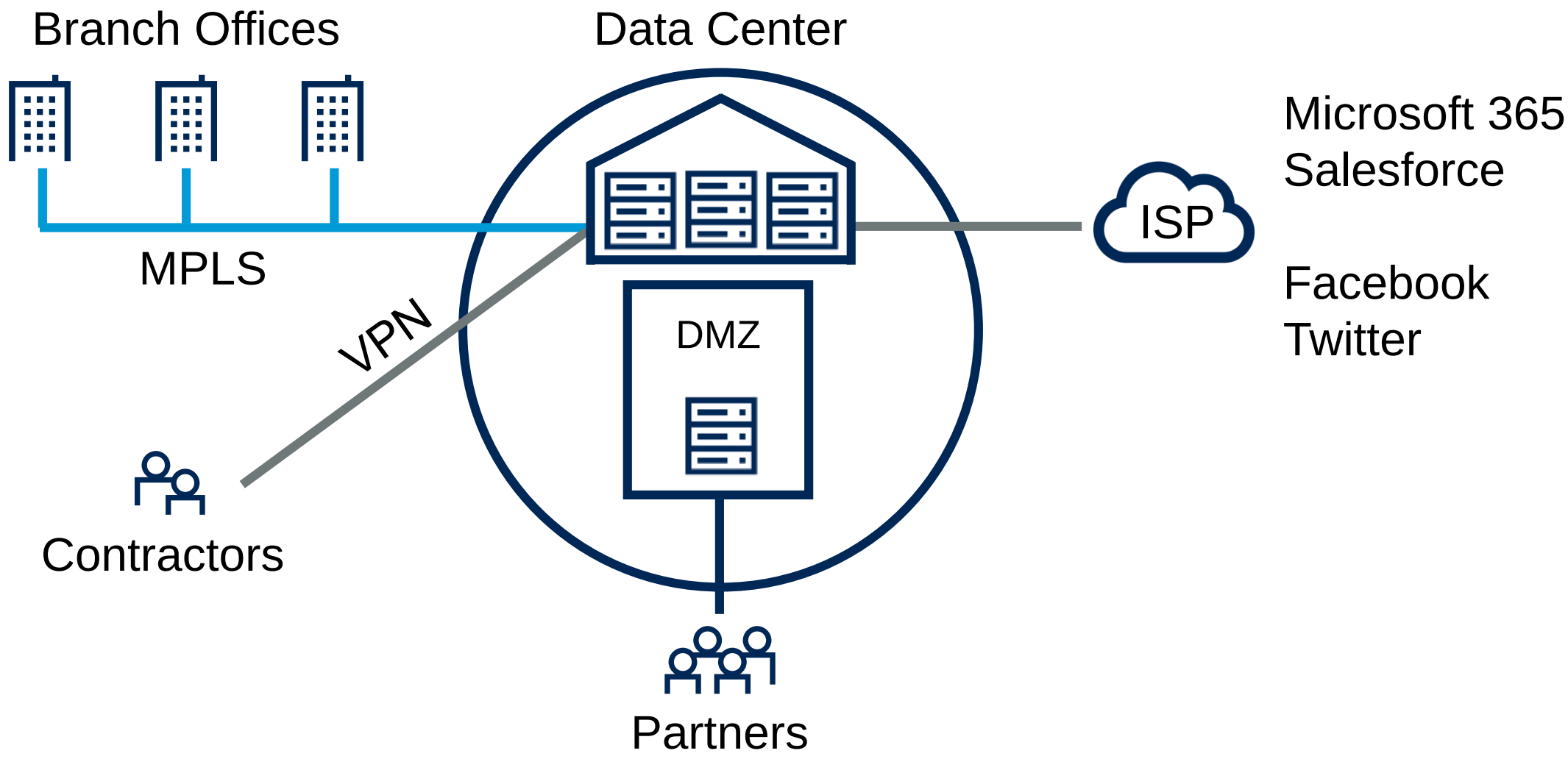
Your Users, Workloads, Applications and Data Are in the Cloud. Why Isn’t Your Security?

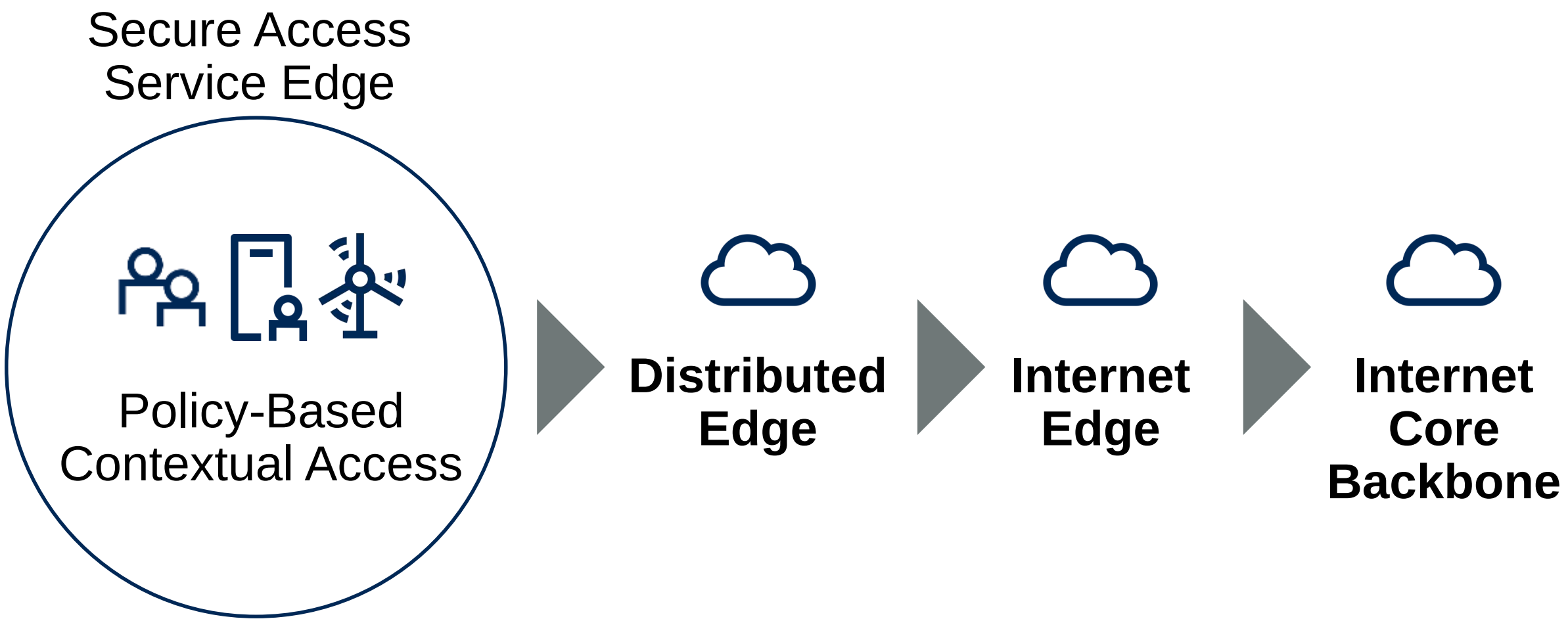
A _____ Is a Capability, Not a Box.

- Firewall
- SWG
- CASB
- WAF

From Data Centers at the Center



To People, Devices, Apps and IoT/OT Entities



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.

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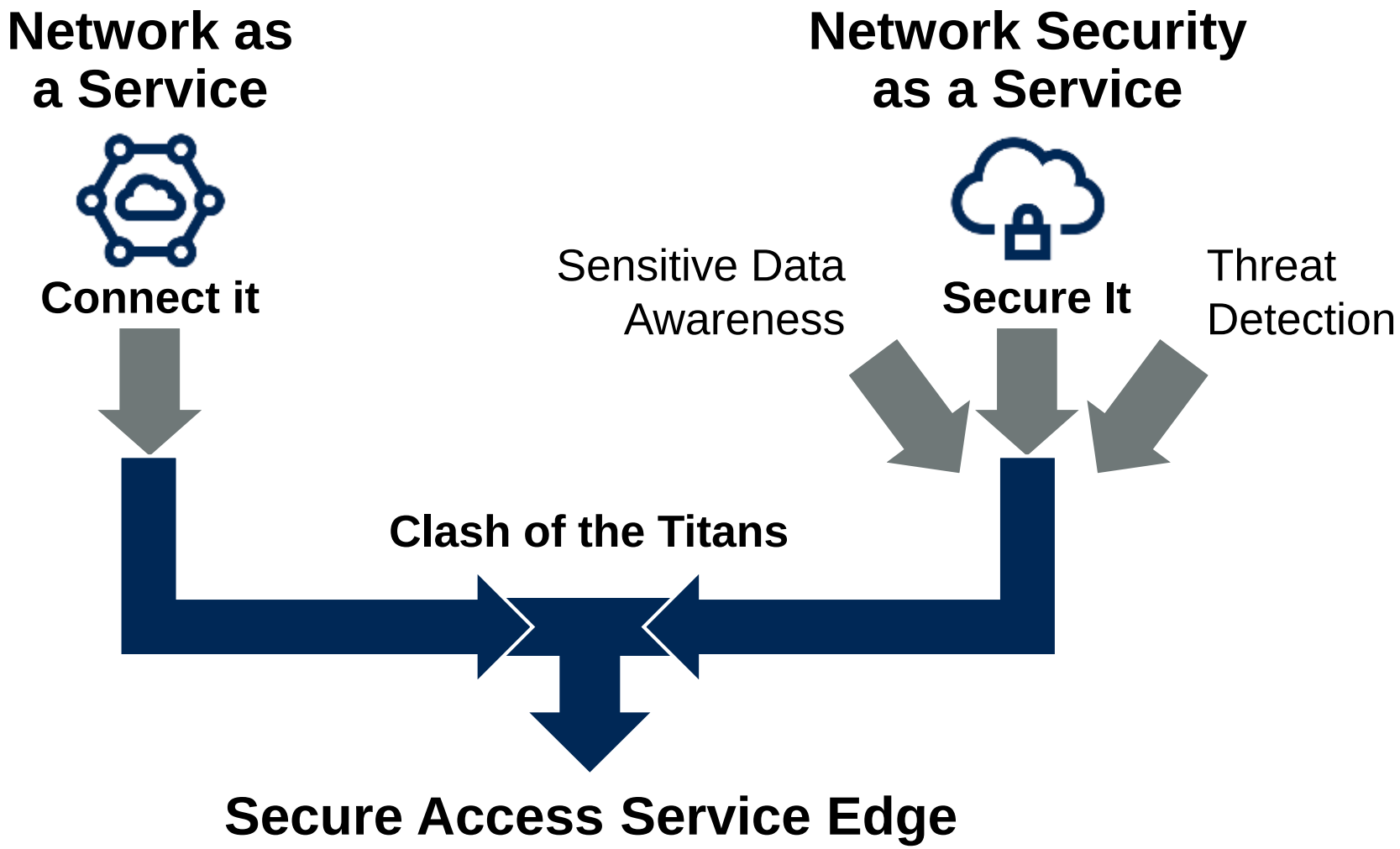
Secure Access Service Edge Convergence



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?

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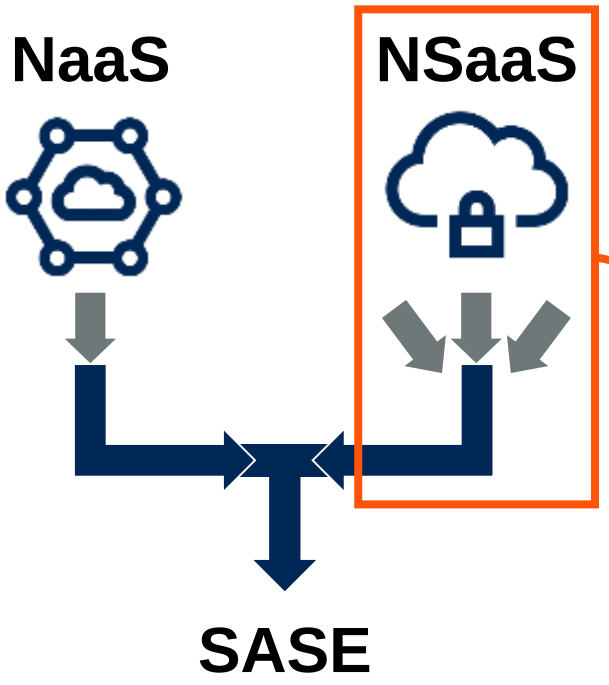
Secure Access Service Edge Convergence



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

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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?

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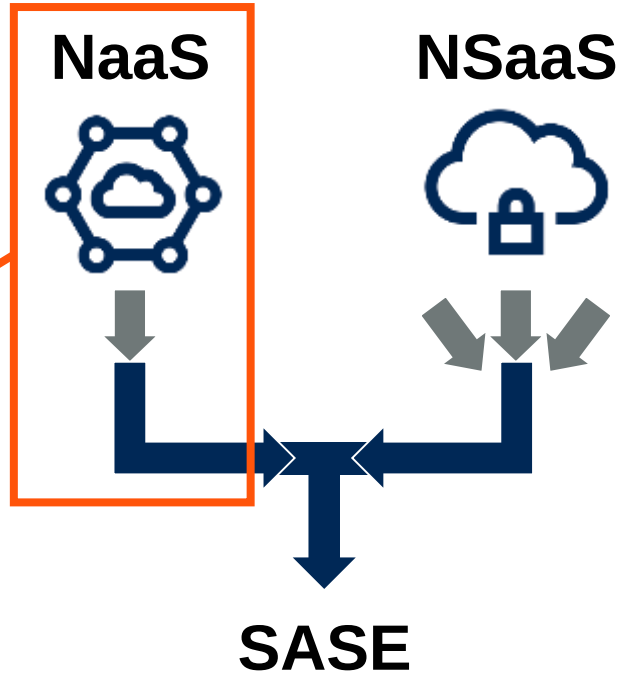
Secure Access Service Edge Convergence

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



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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?

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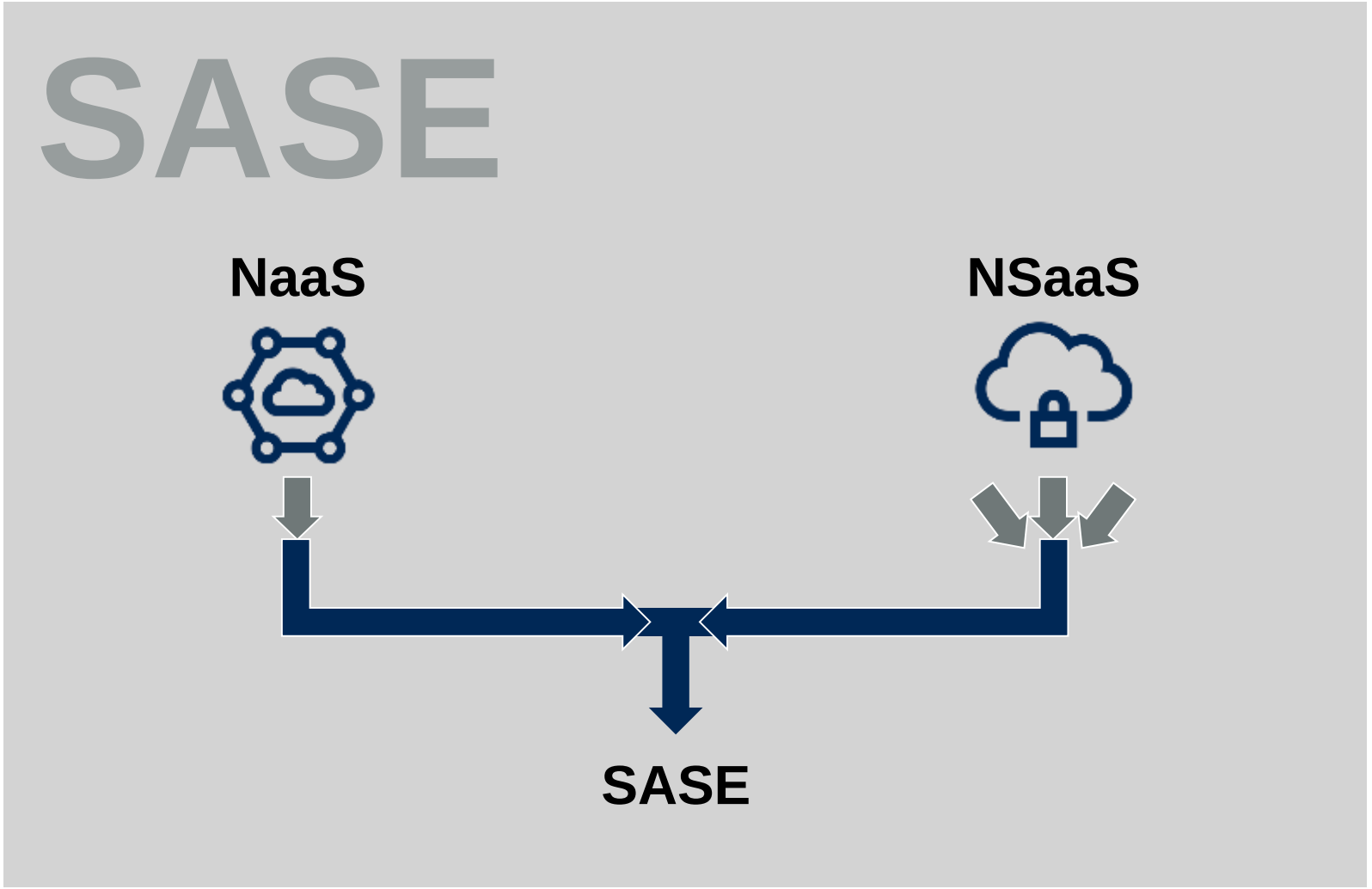
Secure Access Service Edge Convergence



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.

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How and Why Will Enterprises Adopt SASE?

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Why a Box-Based Model Is Destined to Fail
Complexity of Consoles, Policy and Process

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

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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

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Jorge, a Contractor, Unmanaged Device

Network

- Cost optimization

Security

- Remote browser isolation
- User behavior monitoring

Private App

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Wind Turbines at the Edge

Network

- Cost optimization
- Deduplication

Security

- ZTNA
- FWaaS
- Encryption

Edge

AWS*

*Amazon Web Services

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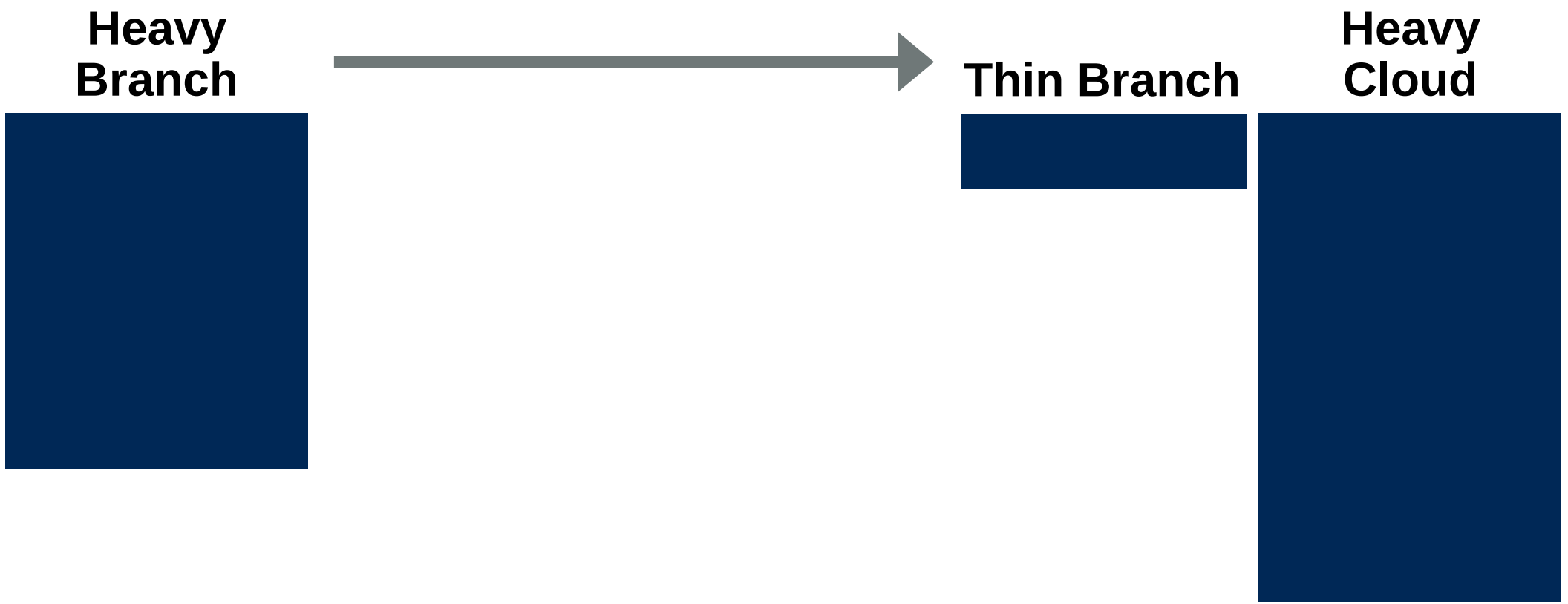
On-Premises Footprint Still Needed, but Smaller. Transition to a Thin Branch Model



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What Vendors Are Delivering Against a SASE Vision?

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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

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

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