The next gen of secured connectivity: Secure Access Service Edge (SASE)

June 2020

SASE: Connectivity for the ultra – connected global Enterprise

Connectivity for enterprise has rapidly evolved since the first introduction of MPLS.

The latest offering that seems to address the changing needs of enterprise is a highly secure, cloud-based private network, also known as a Secure Access Service Edge (SASE).

In this paper we will review the trends that led to the growing interest and demand for SASE, our view on the best WAN/Security partnerships, and a short review of the reasons Teridion's solution is at the forefront of this connectivity evolution.

The Secure Access Service Edge is an emerging offering combining comprehensive network security functions with comprehensive WAN capabilities to support the dynamic secure access needs of organizations.

SASE capabilities are delivered largely as cloud-based services driven by the identity of the entity, real-time context, organization security/compliance policies and continuous assessment of risk/trust throughout the sessions.

The connectivity market is abuzz with this new solution, as the prospect of having a highly secure network with all the advantages of the cloud is a highly attractive one.

SASE is shaping the way organizations secure their networks and data in the upcoming years, by preferring a unified, easy to manage solution that addresses enterprise security and networking requirements and challenges.

> **"Complexity, latency and the need to decrypt and inspect encrypted traffic once will increae demand for consolidation of networking and security-as-a-service capabilities into a cloud-delivered SASE."**
>
> Gartner

It's time for SASE

There are several trends that brought on the need for SASE at this point in time. The most impactful ones are the prevalence of SaaS, remote work and globalization of companies of all sizes increase the need for secure, flawless connectivity. As more business-critical systems are moving to the cloud, the need for converged security services is growing. A converged solution reduces complexity, improves speed and agility, and secures the new network architecture of tomorrow. With more users, devices applications, services and data located outside of the enterprise rather than inside, the existing security models are failing to meet today's business needs.

The enterprise data center is no longer the center of access requirements for users and devices. Digital business transformation efforts, the adoption of SaaS and other cloud-based services, and emerging edge computing platforms have turned the enterprise network "inside out," inverting historical patterns. According to Gartner, "Digital business and edge computing have inverted access requirements, with more users, devices, applications, services and data located outside of an enterprise than inside... Network security architectures that place the enterprise data center at the center of connectivity requirements are an inhibitor to the dynamic access requirements of digital business".

Network and network security architectures were designed for an era that is waning, and they are unable to effectively serve the dynamic secure access requirements of digital business. This is why enterprises can no longer rely on expensive, cumbersome MPLS deployments assuring connectivity for selected, high priority tasks only.

by:

- More user work is performed off the enterprise network
- More workloads run in IaaS than running in the enterprise data
- center
- More applications consumed via SaaS than consumed from
- enterprise infrastructure
- More sensitive data located outside of the enterprise data
- center in cloud services than inside
- More user traffic destined for public cloud services than to the
- enterprise data center
- More traffic from branch offices heading to public clouds than
- to the enterprise data center

In a modern cloud-centric digital business, users, devices and the networked capabilities they require secure access to, are everywhere. As a result, secure access services need to be everywhere as well.

An opportunity for growth for security vendors

Security vendors have already started branching out into this domain, as they understand that a joint SASE solution opens up a world of opportunities for them.

A sought-after enterprise solution will drive global expansion as well as strengthen the security vendors' ability to move their solutions to the cloud. However, this growing market will open doors into massive enterprise deployments only for security vendors who will come armed with a unified, fully orchestrated solution.

A complete SASE solution is comprised of a networking solution, a security solution, and an edge device. Enterprises should seek out an integrated solution. Such a solution is easy to manage, has one accountable entity to turn to for support. The integration between the parts should be seamless. When choosing a networking partner, these are the key factors to consider:

- A cloud native platform: A cloud native platform can automatically and dynamically scale up, down and horizontally as needed
- **Global presence:** Global presence provides the ability to serve all geographies in the best performing way
- **Cost efficiencies:** The Enterprise pays for what it uses, and not for overlapping, unused solutions, at a competitive cost
- **More than best effort performance:** The performance of the end to end solution should be backed by SLA
- **Network simplicity:** A solution that automates the deployment and maintenance of the network simplifies complex processes. It enables the Enterprise to add or remove sites, cloud workloads, and applications. Look for a solution that is as simple and automated as possible.

A solid security solution should include a next-generation firewall, a secure web gateway, advanced threat prevention, and cloud & mobile security cloud optimization capabilities.

Teridion as the ultimate SASE partner

Teridion is a public cloud based global connectivity platform that radically improves the internet performance through dynamic route optimization. Our network is based on various patented technologies. At the heart of our network are three main components:

- **Teridion Managed Agents –** thousands of sensors that globally collect real time internet performance and reachability data
- **Teridion Cloud Router (TCR) –** dynamically and automatically deployed for routing the traffic in the most optimal path
- **Teridion Management System (TMS) –** orchestrating the network, using machine learning and AI algorithms.

Our network is robust – fully redundant, no single point of failure and delivering unlimited bandwidth.

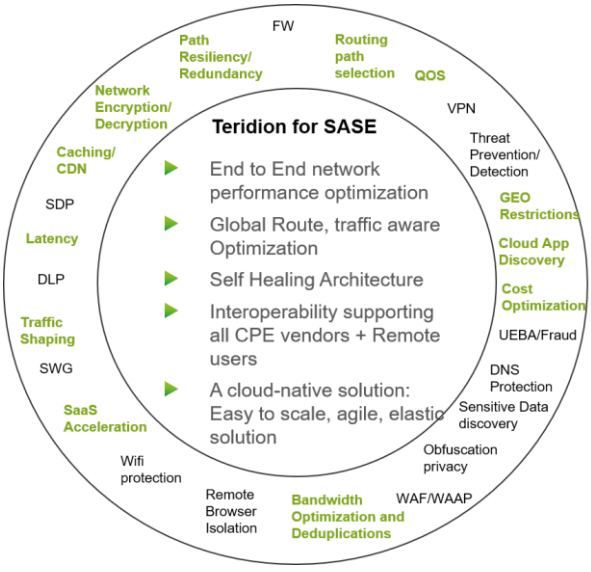
Leveraging our internal capabilities, we developed an orchestration service that provide the capability to orchestrate security image/gateways on our network's TCRs. This unique capability allows our partners to expand their global presence with an SLA- backed performance offer.

Teridion for SASE

For a unified SASE solution, we offer:

- End to End network performance optimization
- Global Route Optimization
- Self Healing Architecture
- Traffic aware optimization
- Interoperability supporting all CPE vendors + Remote users
- A cloud-native solution: Easy to scale, agile, elastic solution.

Key SASE success factors



These are the key success- enabling factors.

Teridion excels at all these parameters: Bringing inspection engines and algorithms closer to entities: Instead of forcing (via "tromboning") various entities' traffic to inspection engines entombed in boxes in the data center, solutions need to bring the inspection engines and algorithms closest to where the entities are located.

is being inspected. Only a networking solution that accelerates the traffic the way Teridion does, will solve for this challenge.

Teridion provides an orchestration capability that enables the security vendor to deploy your inspection engines anywhere in the world, closest to the user/branch, and route the traffic with MPLS-like SLAs to its destination.

How Teridion enables SASE

Centering secure access decisions on the identity of the entity at the source of the connection. Identities are the new center for access decisions, not the data center. The enterprise perimeter is no longer a location; it is a set of dynamic edge capabilities delivered when needed as a service from the cloud.

Teridion delivers all the required networking and management components. All the security vendor needs to do is deliver the security.

Together we deliver a dynamic, policy-based, secure access service edge, regardless of the location of the entities requesting the capabilities and regardless of the location of the networked capabilities they are requesting access to.

In the Diagram we see an illustration of an enterprise network topology that deployed a combined Security and Teridion's network as a unified solution.

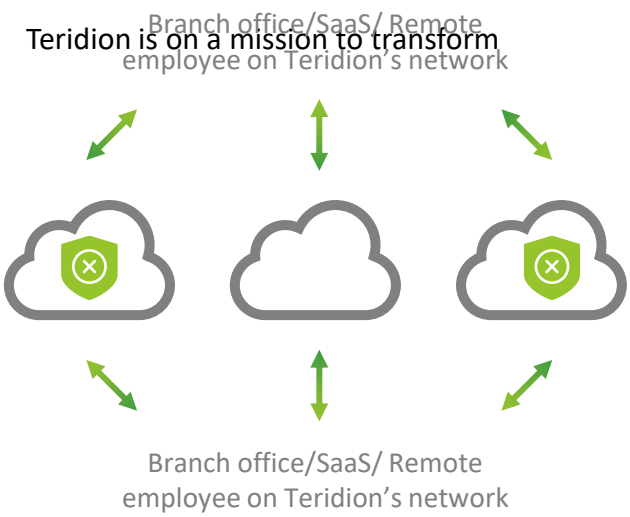
The multi cloud network allows for fast connectivity, and the security solution is assuring a secure connection. The security vendor's cloud-based solution, deployed dynamically on the Teridion's cloud routers, in the most optimized location based on performance, the traffic to and from the security solution is accelerated by Teridion's routing algorithm.

enterprise connectivity. Our patented technology guarantee superior connectivity to enterprises worldwide. Our multi-cloud network ensures not only MPLS-grade connections, but also significant cost savings and rapid scalability. Our network has been serving Tier 1 customers for over 5 years, with tens of PB traffic running through our network annually

Our ability to easily integrate with any edge device and security solution make us the ultimate partner for enterprises who are looking to take their networks to the next level.

About Teridion

Teridion is on a mission to transform



TERIDION

Resources

Teridion Whitepaper: The Internet Backbone Problem

Teridion Whitepaper: Teridion For SaaS Technical Overview

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Teridion Partner Program

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