8 Ways SASE Answers Any IT & Security Challenges Now and in the Future
IT and security teams are scrambling.

They’re trying their best to address rapidly changing business needs and digital transformation requirements, but their toolbox is lacking. The currently large number of limiting and rigid point solutions can’t answer today’s needs, let alone tomorrow’s.

Just two years ago, the main IT challenge was to connect branches in a smarter and more affordable way. Suddenly, Covid-19 made that requirement almost redundant. Now, IT and security teams are forced to come up with access and security solutions for a workforce working almost 100% from home.

Covid-19 was an extreme, but not uncommon, type of development for IT teams, that need to be able to provide quick and holistic solutions that are sometimes difficult to foresee. What will the future bring? It doesn’t really matter if you’re ready.

Let’s find out more.
A Short History of Network Communication

Evolving business requirements have evolutionized and revolutionized network and security technology.

2000
MPLS
MPLS replaced point-to-point solutions in the 2000s. It was an answer to the need for a high-performing solution to connect global offices to headquarters.

SD-WAN
As business needs for ongoing communication and advanced applications grew (together with network bills), SD-WAN was introduced as a cost-effective replacement for regional access.

VPN
The emergence of the cloud and mobile workforce in the past few years has added cloud acceleration solutions and VPNs.

2020
ZTNA
And while the global backbone enables global connection, performance is questionable. Security-wise, VPNs and are now being challenged by new ZTNA and cloud security solutions.

The Result
Businesses ended up with a pile of point solutions that became too complex to manage and failed to answer their needs.
This multitude of networks and systems has created multiple challenges for IT managers, CISOs, CIOs, DevOps and security teams.
High Costs
Managing multiple systems, vendors and integrations is resource-intensive. It requires a lot of time and personnel that is costly, as well as capital, licensing and operational costs. Companies that choose MPLS are also paying a high price for bandwidth. While SD-WAN is more cost-effective than MPLS, integration and management costs of multiple solutions on top are still costly. In addition, using the Internet as the transport forces companies to deploy multiple last-mile solutions to ensure availability.

Keeping Up with Agile Business Needs
Successful businesses need to be able to move fast. Pop-up stores, remote manufacturing, M&As and immediate response to competitors are only a few of the daily use cases many enterprises encounter. Organizations need IT and security support for these situations in days and weeks, not months or years. But IT teams have become inhibitors instead of enablers. An SD-WAN setup, like most other networks, is time and resource consuming.

Friction Between Point Solutions
Lack of a single cohesive network and security solution has resulted in IT managers patching point solutions every time a new need arises. This happens even on top of the high-performing SD-WAN architecture. Multiple point solutions require integrations. Integrations create friction. Friction slows down business continuity.

Poor Global Network Performance
Global reach can be achieved via the global backbone (through an SD-WAN connection), but performance ebbs and flows. Global traffic is routed through multiple Internet circuits that prioritize cost-effectiveness over quality. As a result, IT managers cannot guarantee high-speed, efficient connection to enterprise data centers or external applications.

Cloud and Edge Support
The digital transition to the cloud, the growth of remote work prevalence even before Covid-19, and the emergence of new types of user devices - all require IT support. IT and security teams need to ensure and enable secure network access to any edge and the cloud.

IT Overhead
It’s complex and stressful to manage and orchestrate different MPLS, SD-WAN, cloud and security solutions all together. At the same time, IT teams are required to provide optimal and secure network services and resource access to everyone in the organization. Outsourcing to a telco still requires managing the telco and with little agility. This creates overhead that hampers IT’s ability to deliver.
Introducing SASE

SASE (Secure Access Service Edge) is the new end-to-end network and security architecture and solution

“SASE services will converge a number of disparate network security services including SD-WAN, secure web gateway, CABS, SDP, DNS protection and FWaaS.”

Gartner

In 2019, Gartner recognized SASE as a new technology category. Future network innovation will target operational simplicity, automation, reliability and flexible business models. In SASE, this is achieved through a simple, single converged solution that has global reach, is cloud-native and supports all edges. Given that SASE is designed to expand to any future needs without having to integrate with new solutions, SASE contains all existing and future network and security needs.

SASE is

- An optimal and secure network access solution for all edges: for any type of user and from anywhere.
- Convergence of the WAN Edge, network and security including SD-WAN, security web gateway, CASB, next gen firewalls & VPNs.
- A single, cohesive solution for all network and security needs.
- Cloud-native and globally distributed, designed with the ability to expand to any future needs without having to integrate with external solutions.

SASE is not a solution that chains other point solutions together, a group of on-premises boxes or a telco bundle.
8 Reasons Why SASE is Already Ready for Whatever’s Next in Network and Security

Convergence
SASE convergence is an advanced technology that is built from the ground up in a manner that can answer all network and security needs — today’s and the future’s. SASE converges all security and SD-WAN capabilities.

These include:

- Network Security
  - Cloud Optimization
  - Next Gen Firewall
  - WAN Optimization
  - Secure Web Gateway
  - Global Route Optimization
  - Advanced Threat Prevention
  - Self-healing Architecture
  - Cloud and Mobile Security

More importantly, SASE will continue to add new network technologies as part of the network, via convergence and not as integration projects or running virtual machines.

Converged vs. Integrated

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Seamless</th>
<th>Multiple breakpoints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deployment</td>
<td>Simple &amp; quick</td>
<td>Cumbersome &amp; complex</td>
</tr>
<tr>
<td>Performance</td>
<td>Optimal</td>
<td>High latency</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Single viewpoint</td>
<td>Fragmented</td>
</tr>
<tr>
<td>IT Management</td>
<td>Easy &amp; intuitive</td>
<td>Resource-intensive</td>
</tr>
</tbody>
</table>

Cloud-Native Scalability

As cloud-based businesses continue to grow, enabling them to consume and deliver via IaaS, PaaS and SaaS is crucial. Cloud computing enables businesses to scale so they can be quick, efficient and agile.

SASE is a cloud-native solution that replaces on-premises and cloud-based point solutions. It enables adding computer power and supporting more edges, cloud connection and data center connections.

Global Connection

Globalization and growth require the ability to connect to users and customers anywhere in the world, at any time.

SASE incorporates a private global backbone in the form of global PoPs that are physically close to all users and all edges. This is critical to the quality of service and security.

Multi-Edge Support

Evolving technologies also introduce new devices and the ability to connect from everywhere.

- Branches
- Head offices
- Data centers
- Cloud centers
- Remote workers
- Mobile users
- Traveling users
- End users (even spaceships)

High Performance

Products and businesses are experiencing a digital transformation. This transformation could range from providing a digital customer experience to IaaS to incorporating AI/ML. High-performing networks are essential to digital agility.

SASE enables MPLS-matched SLA through its private, high-speed global backbone. In addition, reducing the number of point solutions eliminates friction, which optimizes performance. Finally, SASE self-healing architecture enables seamless and transparent rerouting of network traffic in case of an outage.

Agility

Agility is a term that has become interchangeable with “modern, successful businesses.” Businesses that are not agile and go through time-consuming processes and red tape will stay behind.

SASE provides IT managers and security teams with all the tools they need to be able to respond quickly to changing business demands. SASE is also easy to use for IT managers, which reduces time-consuming overhead.

Simplified IT Management

Network and security technologies are becoming more prominent components in enterprise success. This requires a skilled IT and security team and easy-to-use solutions.

Some SASE solutions enable IT managers to easily manage their network and security with an intuitive and user-friendly UI. External management models ensure IT management still has control. Onboarding is also very easy.

Cost

Network and security technologies are becoming more prominent component in enterprise success. This requires a skilled IT and security team and easy-to-use solutions.
SASE

Higher performance, happier employees, better productivity

Looking Forward

SASE is a strategic decision for enterprises with a digital-first approach. Through convergence, speedy global access, a cloud-native solution, multi-edge support, high-end security, and more, SASE enables businesses to grow and evolve. From M&A and growing the workforce to moving everyone remotely and connecting globally, SASE answers all business use cases, now and in the future.
About Cato Networks

Cato is the world’s first SASE platform, converging SD-WAN and network security into a global, cloud-native service. Cato optimizes and secures application access for all users and locations, including branch offices, mobile users, and cloud datacenters, and allows enterprises to manage all of them with a single management console with comprehensive network visibility. Cato’s SASE platform has all the advantages of cloud-native architectures, including infinite scalability, elasticity, global reach and low total cost of ownership.

Connecting locations to the Cato cloud is as simple as plugging in a preconfigured Cato socket appliance, which connects to the nearest of Cato’s more than 60 globally dispersed points of presence (PoPs). Mobile users connect to the same PoPs from any mobile device via a simple piece of software that is easy to install and use. With Cato, new locations or users can be up and running in hours or even minutes, rather than days or weeks.

At the local PoP, Cato provides an onramp to its high-performance global private backbone and security services. Cato monitors traffic and selects the optimum path for each packet across the backbone for performance that is as good or better than legacy MPLS. Since mobile users run across the same backbone as all other resources, the remote access experience is no different from working at the office.

With Cato, customers can easily migrate from MPLS to SD-WAN, optimize global connectivity to on-premises and cloud applications, enable secure branch office Internet access everywhere, and seamlessly integrate cloud datacenters and mobile users into a high-speed network with a zero trust architecture.

Whether its mergers and acquisitions, global expansion, rapid deployments, or cloud migration, with Cato, the network and your business are ready for whatever is next in your digital transformation journey.

Cato Cloud
- Global Private Backbone
- Edge SD-WAN
- Security as a Service
- Cloud Datacenter Integration
- Cloud Application Acceleration
- Mobile Access Optimization
- Cato Management Application

Use Cases
- MPLS Migration to SD-WAN
- Optimized Global Connectivity
- Secure Branch Internet Access
- Cloud Acceleration and control
- Remote Access Security and Optimization
- Flexible Management