



ngena connectivity platform

– your all-in-one platform for
the SASE Revolution

Networking needs a critical update



Enterprises today face a range of challenges as digitalization, remote working, globalization and new IT solutions call for flexible managed services and ready-to-use cloud network solutions. Legacy networks in particular are challenged to meet the increased demands of an access-from-and-to-everywhere Cloud world, where data has become the critical resource and ensuring secure access a complex and risky task for even the most seasoned organization.

Enter SASE

SASE (Secure Access Service Edge) is a new framework for the next generation of networking that combines aspects of software-defined networking innovations such as SD-WAN with modern security, intelligence, and automation functions.

SASE is the next evolution of networking and edge computing, utilizing virtualization and the Cloud to deliver a dynamic and responsive platform for managing global networks from the core to the edge.

ngena meets the modern challenges of providing business connectivity and delivers an all-in-one platform for the SASE era.

Key takeaways

Legacy network designs are facing unprecedented challenges as remote work and digital transformation rises worldwide.

SASE- Secure Access Service Edge- is a new framework combining software- defined networking (SD-WAN) with security, virtualization, and automation.

ngena provides a fully-managed one touch connectivity platform that enables organizations of any size to select, enhance, and deploy SASE as a Service, transforming networking and powering modernization across the entire business.

ngena delivers state-of-the-art multi-cloud and virtualization SD-WAN technologies that enable digital transformation with speed, agility and the latest innovative application services. Easily deploy pre-designed configurations in just a few clicks, with flexible customization options to fit any organization's unique connections to Cloud onramps, hosted applications, and other resources.

ngena is built on Cisco technology and includes security built-in, with a range of options from the essentials to advanced services and capabilities.

The ngena platform also provides pre-configured networking features and virtualized functions, that combined with centralized Cloud-based management makes deploying, configuring, and managing global networks fast, simple, and secure.

This global service catalogue for a broad range of SASE services including local access, portal-driven end-to-end automation and simplification and configuration flexibility, makes the ngena connectivity platform the only solution of its kind in the market today.



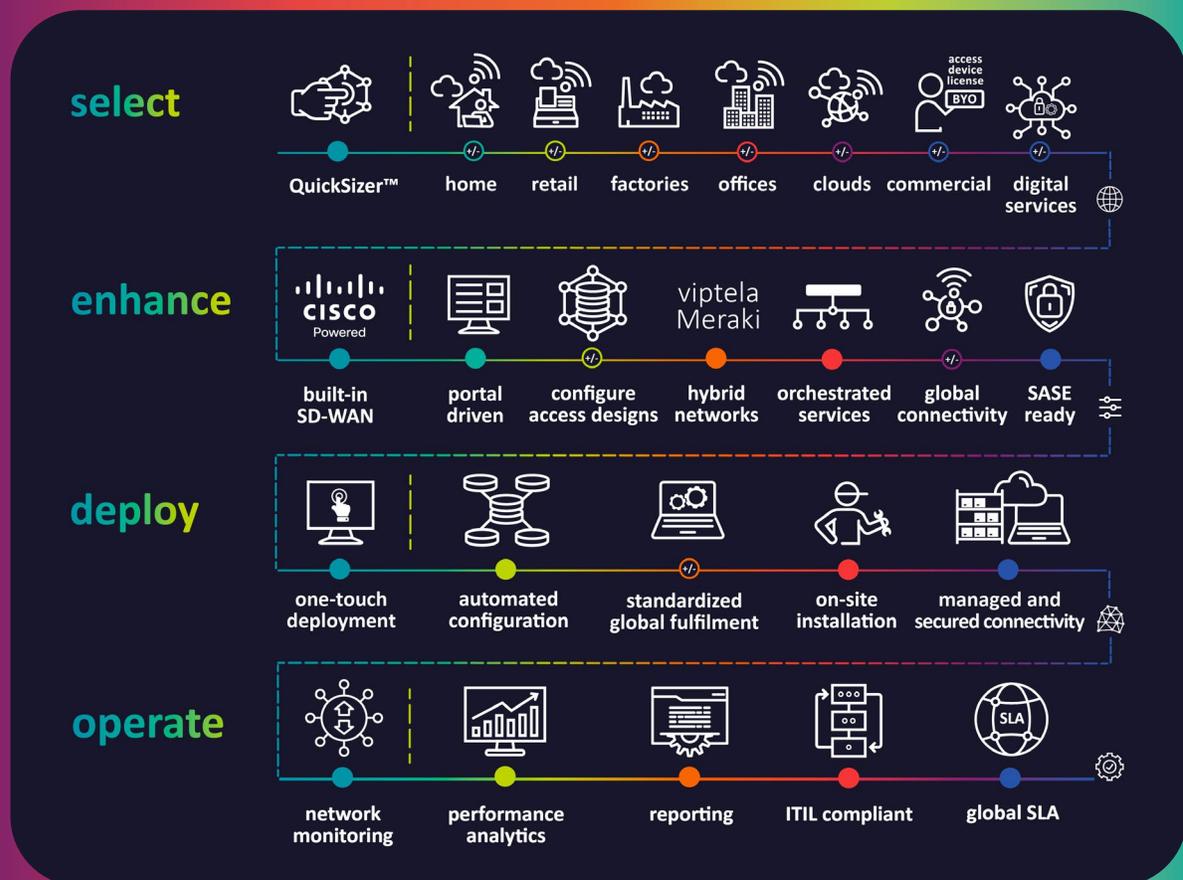
platform overview – 4 easy steps

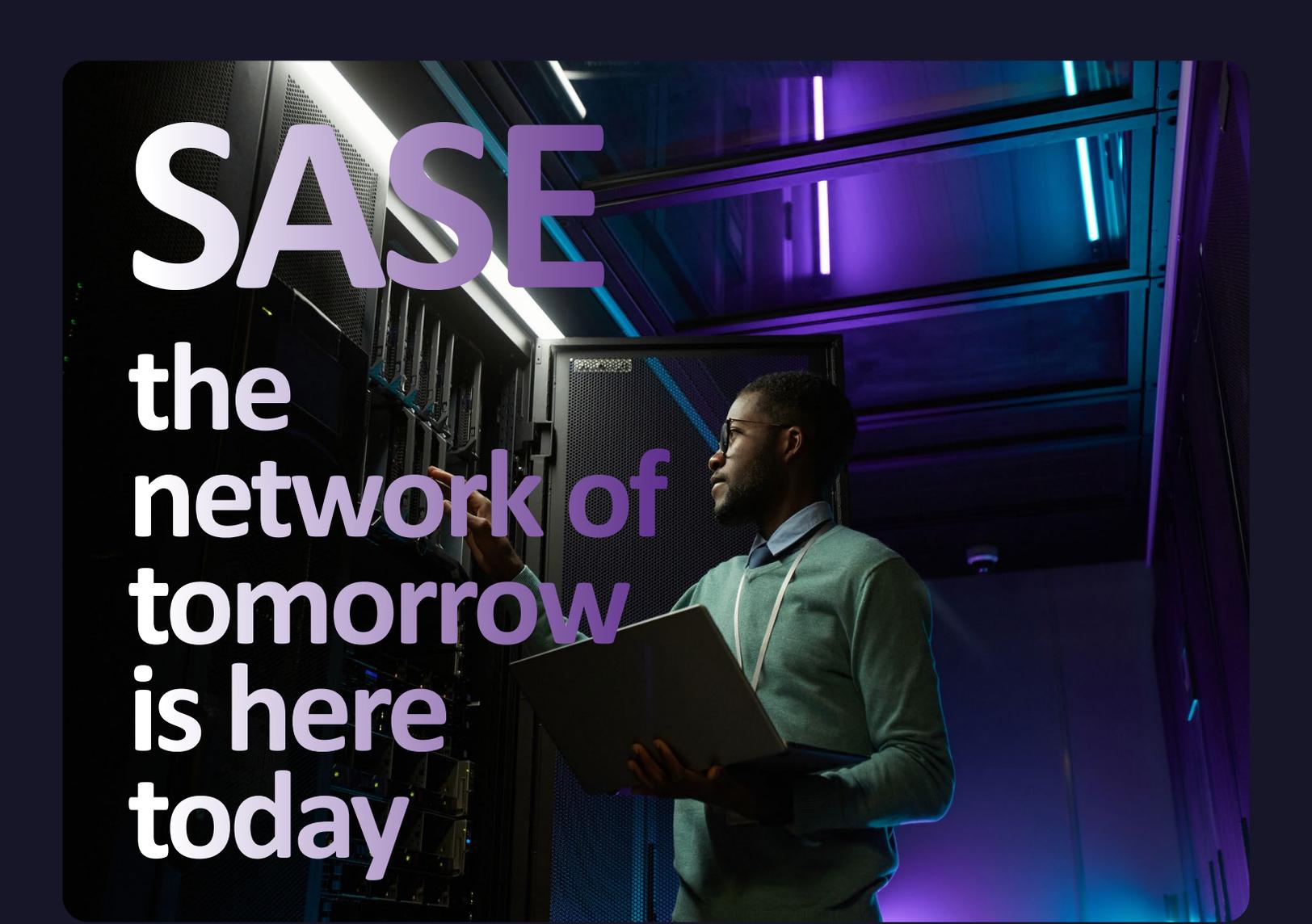
Our platform is designed to enable enterprise networks to support multi-cloud managed as-a-Service connectivity. We've built it for cloud economies. This means a flexible experience with no hardware investments, no extensive project management or any long design and configuration times.

The key elements of ngena's platform are a global cloud platform, a unique portfolio of SD-WAN services, a comprehensive set of integrated advanced security services, fully automated deployment and change processes, a hybrid network leveraging public Internet as well as private transport networks and an end-to-end management across the transport underlay as well as service overlay.

Our Cloud-based platform makes designing a modern network as easy as selecting, enhancing, deploying and operating.

select enhance deploy





SASE

the
network of
tomorrow
is here
today

SASE was defined by Gartner in 2019 and describes the convergence of two key services: Network as a Service (SD-WAN) and Network Security as a Service.

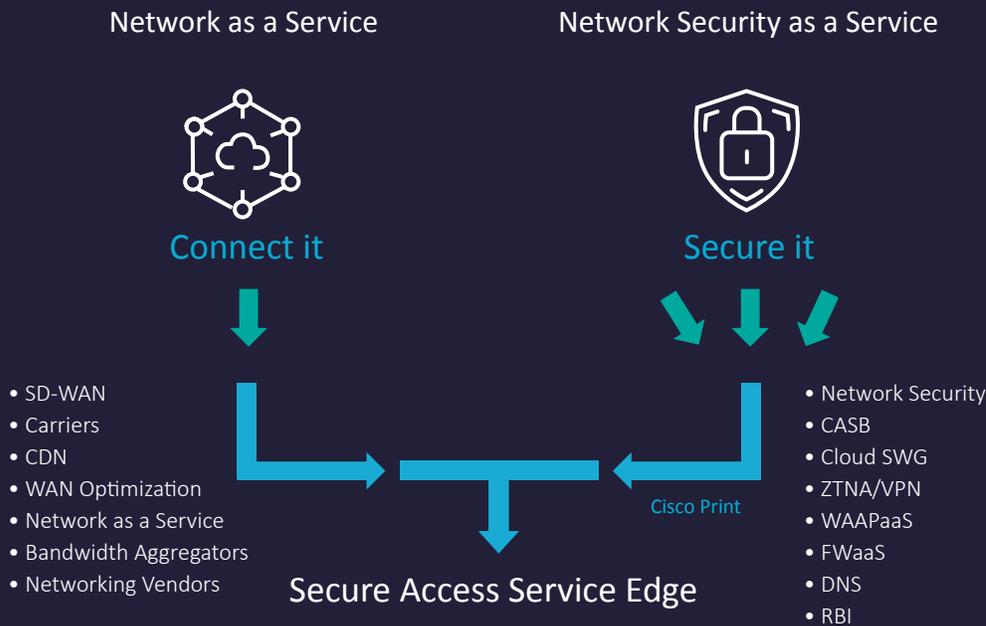
It combines elements of managed security, WAN, and edge compute into a single cloud-native offering. SASE was defined to especially support the growing enterprise need for edge computing capabilities that are distributed and push data and processing closer to the systems, applications and devices that often also require low latency access to local storage and compute.

Looking at the components of SASE, the basic idea is to bring together functionalities. The ngena platform is designed to implement the key characteristics of the SASE concept in an efficient architecture and to make services available already today.

ngena's cloud platform leverages the comprehensive Cisco product portfolio and is turning it into an end-to-end managed globally available service delivered by service edges, called ngena hubs.

ngena's platform provides a full SASE offering that ties together the best elements of Cisco's leading networking, security, and zero-trust product lines, delivering them as a singular service. This includes elements of Cisco's Viptela and Meraki SD-WAN platforms to address SASE's WAN and routing requirements.

SASE Convergence



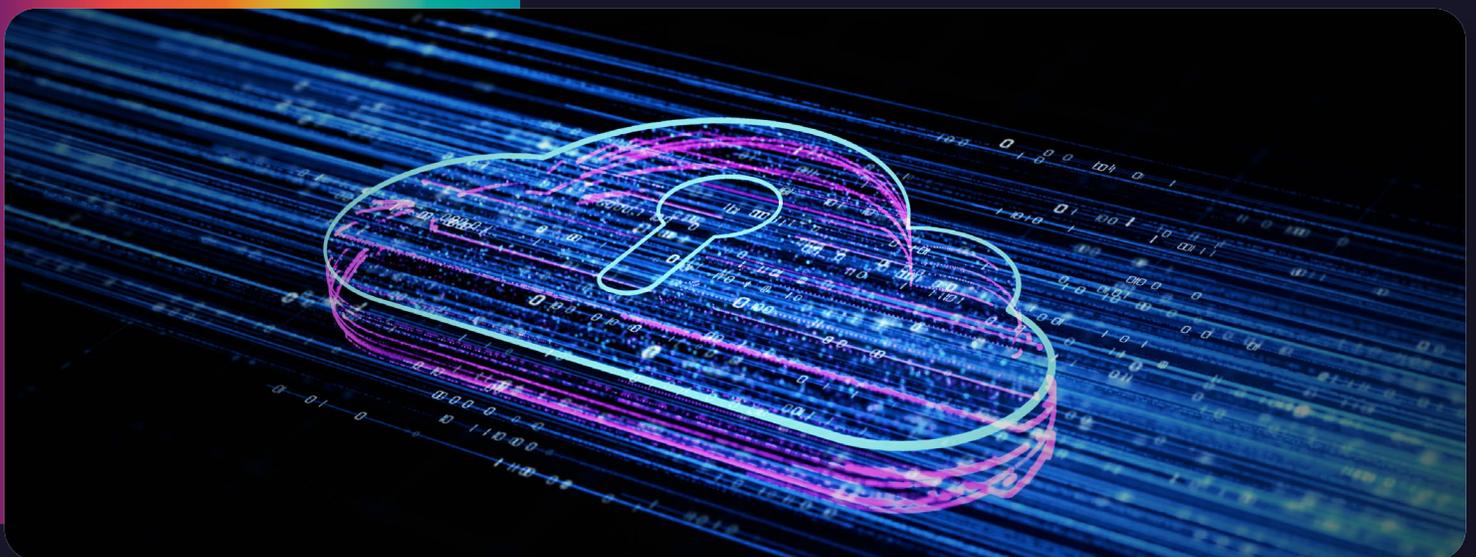
Capabilities Required

- Cloud Native Architecture (for speed/agility) includes MGMT/Control Plane
- Distributed POP and Peerings
- Single-Pass Scanning (open/inspected once)
- Granular Visibility & detailed logging options
- Role-Based MGMT
- Identify sensitive Data
- DNS Based Protections
- Support for IoT/Edge compute use cases
- Description Policies
- DLP use cases
- Licensing is based on entities protected

*CDN = Content Distribution Network; CASB = Cloud Access Security Broker; Cloud SWG = Cloud Secure Web Gateway; ZTNA/VPN = Zero Trust Access Solutions; WAAPaaS = Web App and API Protection; FWaaS = Firewall as a Service; DNS = Domain Name System; RBI = Remote Browser Isolation; DLP = Data Loss Prevention

Meanwhile, for security, the ngena platform leverages Cisco Umbrella for secure web gateway, domain name system (DNS), firewall, and cloud access security broker (CASB) functionality, and also integrates seamlessly the onsite advanced security capabilities of Viptela and Meraki as well as further security services provided on the ngena Hubs, like firewall and web security services.

Finally, ngena will integrate core elements of Cisco's zero-trust networking portfolio — especially Duo and AnyConnect — to verify identity and enhance the overall security of the offering. Alternatively, the ngena platform supports also the seamless integration of the cloud security offering from Zscaler.





- Service Router provides Advanced Security features consistently managed from central control system
- ngena hubs provide all VPN and traffic optimization services as well as additional security services
- Umbrella cloud provides broad set of advanced security services
- ngena’s portal provides access and consistent definition of policies across SD-WAN and security domain

* AppQoE: Application Quality of Experience; WOC: WAN Optimization Controller; NGFW: Next Generation Firewall, SWG: Secure Web Gateway, DNS: Domain Name System service; CSAB: Cloud Access Security Broker; ZTNA: Zero Trust Network Access; RBI: Remote Browser Isolation

Since the key characteristics of SASE have recently been presented by the CTO of MEF (Metro Ethernet Forum)*, it becomes quite obvious that ngena’s connectivity as a service offering is a true implementation of the SASE concept:

*Pascal Menezes, CTO, MEF; MEF 3.0 Workshop: SD-WAN Security & SASE on July 8, 2020

SASE characteristics as defined by MEF

SD-WAN

- Secure Access from Anywhere with any Device
- SD-WAN based
- WAN Application Optimization and prioritization
- Thin CPE model

Security

- Security in the cloud
- Zero Trust based
- Sites uses the secure cloud to get to the Internet & other clouds
- Scalable for multitenant
- Virtualized and cloud native

MEC Edge

- Designed for the MEC edge
- All MEC edges creates the service edge SASE cloud
- Connections to public and private clouds
- Connections to the Internet

ngena platform capabilities & architecture

- DC, HQ, branch/sales offices, @home, remote workers, ...
- Viptela / Meraki SD-WAN
- QoS, AppQoE, path selection/management, ...
- Thin & full capability CPE: Meraki (Z/Z3, MX), vEdge, ISR 1k / 4k, ASR, ENCS, ...
- ngena Hub-based security, Umbrella, Zscaler Umbrella/Duo, Zscaler, ...
- Multiple options for secure Internet breakout: local/regional, cloud
- Globally scalable, multi partner & multi business customer
- Security clouds and additional local security features (optional)
- ngena Hub as cloud edge
- ngena Hubs providing and orchestrating SASE capabilities
- Connections to public/private clouds locally and via ngena Hubs
- Connections to the Internet and to private networks

* Available in full scope in the future



SASE delivered by ngena

- gain new levels of access, control and security for your organization

Today, customers are at very different stages of their journey towards digital transformation.

A key strength of ngena's Connectivity Platform as a Service is that it will support customers whether they want to have a thick branch with onsite security or thin branch with edge-based security services or even a mixture of both for different geographies of their network.

ngena can support customers with a comprehensive set of integrated networking and security services as they rotate through that transformation.

As ngena provides cloud-based connectivity services across public and private networks, the convergence of security and network domains has always been the cornerstone of its platform. Therefore, ngena is already today a front runner in implementing the SASE concept and will further support its adoption as global standard..

SASE is not just a technology framework; it is a true pathway that brings digital modernization, the power of the Cloud together with modern networking and security services to business customers. The end result is the potential for a complete transformation in the way organization access, manage, and scale the network to meet increased demand for global connectivity.

From daily video conferencing to supporting online applications like Office 365 and protecting critical business data, ngena is here to help you take advantage of the capabilities of SASE all with an easy to use, unified platform approach and best-in-class technology from Cisco, the leader in networking. Reach out to us today to learn how SASE can help your organization.

enter the **one-touch** connectivity network!



about ngena

ngena is a global company that connects teams and unites the workforce worldwide through a centralized connectivity network experience. With one touch, ngena simplifies and strengthens global cloud computing, business networking, data analytics and data security at workplaces within the enterprise and at home.

Built on Cisco technology, ngena uses state-of-the-art cloud and virtualization SD-WAN technologies. ngena is the first company to offer pre-built configuration for fast and secure deployment using its Connectivity Platform as-a-Service.

We are here to answer your questions about our solutions and how to partner with ngena. connect@ngena.net | www.ngena.net

ngena is headquartered in Frankfurt, Germany with business operations in the United States, South America, Europe and Asia.

other locations

Miami and Tysons (USA), Mexico City (Mexico), Debrecen (Hungary), Košice (Slovakia), and Singapore (Singapore)

Employees:	260+
Partners:	50+
Data Center Hubs:	19
Backbone Miles:	100,000+