

# Network – Software Defined Solutions and Services

A research report comparing provider strengths, challenges and competitive differentiators

QUADRANT REPORT | JUNE 2023 | U.S.

Customized report courtesy of: COMCAST BUSINESS

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#### Report Author: Dr. Kenn D Walters

#### Acceleration toward ubiquitous secure end-to-end SD networks across all business segments

Networks and software-defined solutions and services encompass many technological topics, business coverage areas, organizational functions, and business processes and methods. These solutions are closely related to the digitalization, enhanced security and cloudification trends of enterprises globally. This ISG Provider Lens<sup>™</sup> study examines multiple network service and solution offerings related to software-defined networking (SD-networks) in the U.S. These include managed SD-WAN and associated core and mobility technologies and service offerings related to these segments, transformation services, edge technologies and secure access service edge (SASE). Regional analysis of the global SD-WAN market shows the U.S. as the largest shareholder, with revenue reaching

approximately \$2.6 billion in 2022. The U.S. alone consumes more than 30 percent of the global SDN solutions and services market as of 2023. Therefore, service providers in the U.S. play a vital role in defining the global SD-WAN market. Key factors driving the U.S. market growth include system integrators' (SI) offerings and the increasing SD-WAN adoption by traditional service providers and SMEs in line with the digitalization and multicloud implementation of large enterprises across industry verticals. As a technologically advanced country and the biggest shareholder in the global SD-WAN market, the dominance of the U.S. providers is becoming stronger due to the increasing adoption of technologies across corporate networks such as big data, edge computing, enhanced security, SASE, mobility (including private 5G networks), IoT, hybrid cloud and platforms, ML and Al.

Enterprises are evaluating and implementing various means to decrease costs while increasing their agility, flexibility, competitiveness, security, delivery structures, remote working and continuity practices leading to improved CX/UX. Running SD-WAN

# SD-networks – a foundational solution for current needs and an enabler for future needs



#### **Executive Summary**

implementations as an overlay allows the utilization of existing routers and switches or universal/virtualized customer premises equipment (u/vCPE). SD-WAN can also handle various connection types and divide and protect the traffic moving via the WAN. Many enterprises are increasingly opting to procure SD-WAN as part of a complete SASE solution, often consumed as a fully-managed SASE service from a managed service provider. SASE is the inflection point where enterprise networking and security fully converge.

Some of the primary factors driving rapid changes in the U.S. enterprise networks are summarized below.

## Increasing flexibility and functionality while simplifying management:

Enterprises increasingly focus on improving network resource and process integration, automation, orchestration and management. By moving its control layer to the cloud, SD-WAN can operate and be managed in real-time via one-touch or single-pane-of-glass through policy and automation. This enables seamless application and network resource additions without hardware implementation to meet business and user goals efficiently and securely.

Reducing risk in the cloud and multicloud migrations: Enterprises are increasingly migrating their IT and network operations onto the cloud. SD networks assist with this by reducing complexity and enabling a reduced-risk migration to single or multicloud environments for enterprises.

Increasing security across networks, including cloud-based networks: Network

security has become a major concern across business verticals as enterprises seek security from core to edge in an enterprise network. This need for security is met by enabling SD-networks which become vital in the riskfree provisioning of cloud-based and hybrid networks. It is foundational to simplified full SASE deployments.

**SME SD-WAN market growth:** Primary research shows an accelerating volume of SMEs entering markets across the U.S., with this segment expected to grow rapidly over the next few years. SMEs have a higher probability of having

distributed workforces and will often rely on cloud-based solutions for communication and collaboration. By utilizing low-cost SD-WAN solutions as overlays and access points into cloud and security, providers can reduce their monthly costs while leveraging multiple links to low-cost local Internet lines under an SD-WAN single-pane-of-glass control.

Consuming managed or co-managed service while improving CX: Allowing clients to consume network services via modern payment terms and conditions can significantly enhance the client experience. SD-networkingenabled solutions can be delivered as a fully managed or co-managed service, thus reducing overall cost and implementation risk. SDnetworking-enabled services assist in retaining or enhancing enterprises' ability to respond quickly to customer inquiries and rapidly provide (often automatically) required new services. Improving CX has become crucial for many enterprises.

A foundational solution to enable innovative technologies and solutions: Digitalization and other innovations, such as intent-based networks, AI- and ML-driven solutions, services and systems, rapid hotspot provisioning and data flow allowance, self-healing networks, intelligent edge, edge computing, SD-LAN connectivity and management and SASE require the flexibility and abilities of SD networks to be utilized fully and drive solutions to their full potential while de-risking their implementations.

The study's primary findings demonstrate that most telecommunication service and network service providers, as well as SIs, together with their significant partner ecosystems, have an impressive portfolio of SD-WAN and other SD network solutions. These are partial or function-specific solutions to complete end-to-end SD-WAN or SD network solutions, with many of them based on industry type or business vertical. Many enterprises have introduced advanced SD-network-based technological innovations, such as intent-based networks, that use ML and Al interactions and control or edge intelligence and computing solutions. Most enterprises require mobility and remote location solutions such as SD-LAN or SD-wireless or wireless and mobile LAN (SD-WLAN or SD-WMLAN), sometimes

coupled with enterprise LTE/5G private/public solutions. Movement and change in enterprise networking are further driven by the transition many enterprises are making to the cloud and multicloud environments. Cloud environments are well supported by SD networks from enterprise core to edge and integration of SASE solutions across all enterprise touchpoints.

This study considers the changing market requirements and provides a consistent overview of its segments. It also gives concrete decision-making support to help evaluate and assess the offerings and performance of providers.

SD-networking forms the basis for enabling, simplifying and de-risking the implementation of next-generation networks, including multicloud and SASE migrations.

## Provider Positioning Page 1 of 5

	Managed SD-WAN	SDN Transformation Services (Consulting and Implementation)	Enterprise Networks Technology and Service Suppliers	Edge Technologies and Services	SASE Solutions and Service
Accenture	Leader	Leader	Not In	Product Challenger	Leader
Apcela	Product Challenger	Leader	Leader	Leader	Not In
Arista	Not In	Not In	Contender	Not In	Not In
Aruba	Not In	Not In	Product Challenger	Leader	Not In
Aryaka	Product Challenger	Not In	Not In	Not In	Product Challenger
AT&T	Leader	Leader	Leader	Leader	Leader
ВТ	Market Challenger	Not In	Not In	Not In	Not In
CANCOM	Not In	Not In	Not In	Product Challenger	Not In
Cato Networks	Not In	Product Challenger	Leader	Product Challenger	Leader
Centrify	Not In	Not In	Contender	Not In	Not In

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## Provider Positioning Page 2 of 5

	Managed SD-WAN	SDN Transformation Services (Consulting and Implementation)	Enterprise Networks Technology and Service Suppliers	Edge Technologies and Services	SASE Solutions and Service
Citrix	Not In	Not In	Not In	Not In	Product Challenger
Colt	Product Challenger	Product Challenger	Not In	Not In	Product Challenger
Comcast Business	Leader	Leader	Market Challenger	Market Challenger	Product Challenger
Computacenter	Product Challenger	Contender	Product Challenger	Not In	Not In
Crown Castle	Not In	Market Challenger	Not In	Not In	Not In
DXC Technology	Product Challenger	Product Challenger	Product Challenger	Product Challenger	Not In
Extreme Networks	Not In	Product Challenger	Product Challenger	Leader	Not In
Fatpipe	Not In	Not In	Not In	Contender	Not In
Flexiwan	Not In	Not In	Not In	Contender	Not In
Fortinet	Not In	Not In	Not In	Not In	Market Challenger

## Provider Positioning Page 3 of 5

	Managed SD-WAN	SDN Transformation Services (Consulting and Implementation)	Enterprise Networks Technology and Service Suppliers	Edge Technologies and Services	SASE Solutions and Service
Globalgig	Contender	Not In	Not In	Not In	Not In
GTT	Leader	Product Challenger	Not In	Not In	Product Challenger
HCLTech	Product Challenger	Product Challenger	Product Challenger	Product Challenger	Product Challenger
Infosys	Product Challenger	Product Challenger	Product Challenger	Product Challenger	Contender
Kyndryl	Leader	Leader	Not In	Product Challenger	Not In
Logicalis	Product Challenger	Product Challenger	Not In	Not In	Not In
Lumen	Leader	Product Challenger	Product Challenger	Leader	Leader
MetTel	Not In	Not In	Product Challenger	Not In	Not In
Microland	Rising Star ★	Product Challenger	Leader	Product Challenger	Rising Star ★
Mphasis	Product Challenger	Product Challenger	Product Challenger	Product Challenger	Not In

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## Provider Positioning

	Managed SD-WAN	SDN Transformation Services (Consulting and Implementation)	Enterprise Networks Technology and Service Suppliers	Edge Technologies and Services	SASE Solutions and Service
Netskope	Not In	Not In	Not In	Not In	Product Challenger
NTT	Product Challenger	Not In	Not In	Not In	Product Challenger
Open Systems	Product Challenger	Not In	Not In	Not In	Contender
Orange Business	Leader	Leader	Leader	Leader	Leader
Pica8	Not In	Not In	Not In	Contender	Not In
Talari Networks	Not In	Not In	Product Challenger	Not In	Not In
Tata Communications	Product Challenger	Not In	Not In	Not In	Product Challenger
TCS	Not In	Rising Star ★	Product Challenger	Product Challenger	Not In
Tech Mahindra	Product Challenger	Leader	Leader	Product Challenger	Product Challenger
T-Mobile	Leader	Product Challenger	Product Challenger	Leader	Leader

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## Provider Positioning Page 5 of 5

	Managed SD-WAN	SDN Transformation Services (Consulting and Implementation)	Enterprise Networks Technology and Service Suppliers	Edge Technologies and Services	SASE Solutions and Service
Verizon	Leader	Leader	Leader	Leader	Leader
VMware	Not In	Not In	Market Challenger	Not In	Leader
Wipro	Leader	Leader	Leader	Leader	Leader
Zensar	Contender	Contender	Not In	Not In	Not In
Zscaler	Not In	Not In	Not In	Not In	Market Challenger

Simplified Illustration Source: ISG 2023

Managed SD-WAN

SDN Transformation Services (Consulting and Implementation)

Enterprise Networks Technology and Service Suppliers

**Edge Technologies and Services** 

#### **SASE Solutions and Service**

#### Definition

This ISG Provider Lens<sup>™</sup> study, Network – Software-Defined Solutions and Services 2023, examines various global network offerings related to enterprise networks and software-defined networking. These include software-defined wide area networks (SD-WAN), comprising managed SD-WAN services, consulting and advisory, and implementation support. Enterprise networks technology and services supply - concentrating on providers of all technology and services related to networks that enterprises implement and operate themselves (including full and partial SD-WAN solutions) – covers all areas from the network core to edge-branch technology and services. The study also looks at edge technologies and services, such as IoT, universal/virtual customer premises equipment (u/vCPE) and software-defined local area network (SD-LAN), including those delivered through mobile and 4G/5G technologies and the service offerings related to these segments. In addition, the study examines secure access service edge (SASE), which is an overarching, secure and fully integrated network environment for businesses.

ISG sets out to deliver a comprehensive research program with a clear and definitive evaluation criterion, covering the developments and deliverables of service providers and equipment suppliers in this dynamic marketplace. This study accounts for changing market requirements and provides a complete market overview of the segments, along with concrete decision-making support to help user organizations evaluate and assess the offerings and performance of providers.

#### Introduction

#### **Scope of the Report**

In this ISG Provider Lens™ quadrant report, ISG covers the following five quadrants for services/solutions: Managed SD-WAN, SDN Transformation Services (Consulting & Implementation), Enterprise Networks Technology and Service Suppliers, Edge Technologies and Services, SASE Solutions and Services.

This ISG Provider Lens<sup>™</sup> study offers ICT decision makers with the following:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments (quadrants)
- Focus on regional market

Our study serves as the basis for important decision-making in terms of positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

#### **Provider Classifications**

The provider position reflects the suitability of providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the service requirements from enterprise customers differ and the spectrum of providers operating in the local market is sufficiently wide, a further differentiation of the providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

• **Midmarket:** Companies with 100 to 4,999 employees or revenues between\$20 million and \$999 million with central headquarters in the respective country, usually privately owned. • Large Accounts: Multinational companies with more than 5,000 employees or revenue above \$1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens<sup>™</sup> quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens<sup>™</sup> quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

• Number of providers in each quadrant:

ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptionsare possible).

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#### Provider Classifications: Quadrant Key

**Product Challengers** offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths. Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

**Contenders** offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/ services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months. Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study. **★ Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader guadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.



#### Who Should Read This Section

This report is relevant to enterprises across all industries in the U.S. for evaluating providers that offer managed network services, primarily enterprise SD-WAN or hybrid multiprotocol label switching (MPLS)/IP WAN.

The quadrant report aims to highlight the network services and solution proficiency of selected providers, enabling enterprises to select the right partner for network transformation.

U.S.-based enterprises are increasingly prioritizing the adoption of a multicloud approach for easier deployment of SD-WAN services. Multicloud is becoming a de facto reality for businesses. However, the strategic planning and determination of a long-term multicloud approach are often lacking, as the current requirement is just for service availability over different cloud platforms such as AWS, Google Cloud and Microsoft Azure. This is mainly because of the various implementations enterprises have completed for different applications and geographies. Vendors help organizations to adopt multicloud infrastructure and enhance networking and security technologies for their business. Enterprises demand the same level of security and connectivity across all cloud platforms. With the same policies normalized across the clouds, it interoperates all the way back to branches, individual users, cloud environments and data centers globally. When different services are running in parallel on the cloud and on-premises in branch offices, policies are implemented to avoid traffic flow gaps and overlap. Thus, if traffic is blocked in the branch office, the UX remains unaffected.



#### IT and network management leaders

should read this report to understand the provider landscape, with a deep dive into the providers' technical and integration capabilities.



#### **Digital transformation professionals**

can understand how managed SD-WAN services providers fit their enterprise's digital transformation initiatives and how the providers compare to one another.

## $\mathbb{D}$

**Cybersecurity leaders** should read this report to understand the current state of security capabilities associated with consulting and other SD-WAN service providers' delivery.



**Procurement professionals** can acclimatize with the managed SD-WAN service suppliers' terms, around SLAs and KPIs, including service and quality levels. as well as pay-as-you-consume options.







This quadrant assesses the providers of **enterprise SD-WAN** and modern or nextgeneration networks **that deliver managed solutions** and associated services to enterprise clients **to enable innovative and nextgeneration networking**.

Dr. Kenn D Walters

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#### Definition

This quadrant examines the providers of enterprise WAN (primarily enterprise SD-WAN or hybrid MPLS/IP WAN) that deliver managed solutions and services. These include additional associated services, such as identity and access management (IAM), provided as wraparound services directed toward streamlining enterprises' network operations. These may include new installations, replacement or upgrade installations, or hybrid cloud pathway installations accounted as networks.

SD-WAN offers the benefits of software-defined technology over traditional hardware-based networking. It is an overlay architecture with a networking foundation that is easily manageable compared to legacy WANs, essentially moving the control layer to the cloud and centralizing and simplifying network management. This overlay design abstracts software from hardware, enabling network virtualization and making the network more flexible. An SD-WAN architecture reduces recurring network costs, offers networkwide control and visibility, and simplifies the technology with zero-touch deployment and centralized management. The key aspect of an SD-WAN architecture is that it can communicate with all network endpoints without the need for external mechanisms or additional protocols. Suppliers have been increasingly active as managed service providers, offering complete managed SD-WAN solutions to enterprises (including hybrid MPLS/IP or MPLS/SDN solutions) as well as white-label products to telco providers or integrators as part of their broader strategic implementations.

#### **Eligibility** Criteria

- 1. Scope of product/service managed WAN portfolio
- 2. Ability to deliver and manage all hardware and software aspects
- 3. Ability to rearchitect (as required) the existing MPLSbased WANs into hybrid-WAN systems
- 4. Management capability for the needed orchestration and control of the overall architecture

- Flexibility and ease in introducing new services and deployments
- 6. Stability and roadmap planning
- 7. Reference customer/site volume in deployment
- 8. Competitiveness of offerings and types of commercial terms

#### Observations

Managed SD-WAN remains a high-growth area of enterprise networking in the U.S., closely followed by co-managed SD-WAN in line with many companies' cloud migration and security strategies. The adoption of SD-WAN, which was originally delivered as a DIY solution, is gradually declining in the U.S., excluding a few specific industry verticals. This is potentially due to the overall complexity of modern enterprise networks and the issues enterprises face in maintaining and adding to internal resources with the correct skill sets for effective DIY operations.

The U.S. market has undergone significant growth in the last two years in integrating ever-more complex security solutions with enterprise networks. These solutions have typically involved SD-WAN and several advanced security functions and are often marketed as "SD-WAN +" or similar. In many ways, they are similar to a SASE solution but do not cover all the advanced security features which SASE offers. It should be noted that complete SASE refreshes or implementations include and/or require SD-WAN to be a crucial foundational component.

From the 90 companies assessed for this study, 25 have qualified for this quadrant with 10 being Leaders and one Rising Star

#### accenture

Accenture with its Cloud First Networks +5G practice and deep industry expertise offers Networks and Security Managed Services with a complete advanced managed SD-WAN solution set, which is vendor agnostic.

#### AT&T

**AT&T** offers modular enterprise tools and integration architecture and solutions, such as AT&T FlexWare<sup>SM</sup>, AT&T Network on Demand and AT&T managed network services, covering the entire range of managed SD-WAN.

#### **Comcast Business**

**Comcast Business** offers a managed network services platform that allows management and co-management with correlated incidents and automation and provides actionable business insights. Comcast Business offers multiple options, including Cisco, Aruba and Fortinet SD-WAN.

#### GTT

**GTT** leverages its global, Tier-1 IP backbone to transport client traffic between locations. The company enables customers to choose the technology, including from Aruba, Fortinet and VMware, that addresses their business needs.

#### kyndryl

**Kyndryl** provides advanced consulting, implementation and managed network services as a key enabler of core-to-edge operations, including hybrid cloud connectivity. Headquartered in New York, U.S., the company offers a strong portfolio of provider-agnostic SD-WAN.

#### LUMEN

**Lumen** offers advanced managed SD-WAN solutions targeted at business needs, combining multiple providers, services and features into a single, unified management experience. It has a vast partner ecosystem and delivers customized and industry-specific solutions extensively.



**Orange Business** is investing in secure virtualized networks (SD-WAN, SASE and 5G) and developing a modular service platform with the Orange Group and Orange Cyberdefense to implement a program of secure digitalization and automation.

#### T-Mobile

T-Mobile works closely with Deutsche Telekom Business Solutions (DTGB), which serves business customers and multinational corporate customers in 28 countries. T-Mobile's managed SD-WAN solution, MNS Complete, is delivered either as a fully managed or a co-managed model.

## verizon

**Verizon** delivers an advanced SD networking portfolio using a combination of technology collaborations with vendors, including investment in leaders in emerging SDN technologies and in-house development of integration tools and automation.



**Wipro** delivers an innovative and expansive solution set for managed SD-WAN with client-centric deliveries in the U.S. The company has a comprehensive portfolio of advanced solutions and service sets, tools and processes for its clients.



**Microland's** (Rising Star) SD services are at the core of its network offerings, including SD-WAN, SD-LAN/Wi-Fi, SDN for data centers and private 5G. The company offers end-to-end network services from consulting and design to deploy and run services.

Leader

"Comcast Business provides advanced and secure managed SD-WAN, with co-management options specifically customized to meet the client's needs." Dr. Kenn D Walters

## **Comcast Business**

#### Overview

Comcast Business (CB) is a strategic technology partner to Fortune 1,000 organizations, serving customers globally as a vendor-agnostic, trusted advisor to deliver large-scale transformation through tailored solutions. CB's managed SD-WAN solutions are offered either as a fully managed option or co-managed by the customer. CB is a technologyneutral, highly experienced and scalable managed services provider. It works with all best-in-breed vendors to design, test and deploy solutions that fully fit customer requirements. CB has strong relationships with hardware and software vendors in networking, next-generation wireless, cybersecurity, cloud and other domains.

#### Strengths

Multiple SD-WAN options: Comcast Business offers multiple SD-WAN vendor options, including Cisco, Cisco Meraki, Cisco Viptela, Versa, Aruba and Fortinet SD-WAN. These options can be tailored to customer requirements and delivered in flexible managed and co-managed models.

#### Support to meet individual customer

**requirements:** Comcast Business can offer full lifecycle support from design and implementation to support and refresh. It provides managed and network services in a carrier-agnostic fashion. It offers aggregation over 120 global and 300 North American connectivity providers to source and manage the most effective access technologies for customers on a site-by-site basis.

#### Intelligent networking supports tailored

**solutions:** The company's innovative next-generation point-of-presence (PoP) architecture provides integrated, scalable capabilities, delivers benefits of automation and cloud and offers hypervisor and network function virtualization (NFV) in the compute space. Its secure edge networking delivers application visibility and controls, dynamic bandwidth utilization and routing, and on-premises and cloud-based security. Managed network services platform allows management and co-management with correlated incidents and automation, providing actionable business insights.

#### Caution

Comcast Business is actively looking to increase its market share within the smaller end of the large enterprise segment and in midsized companies. This indicates a major shift from its traditional market to an advanced space, which is likely to put competitive pressure in terms of the offering size and the number of competitors.



SDN Transformation Services (Consulting and Implementation)

#### Who Should Read This Section

This report is relevant to enterprises across all industries in the U.S. for evaluating providers of SDN transformation services that involve consulting and implementation.

The quadrant report highlights providers' network services and solution proficiency to handle network transformation from consulting to implementation.

The scope of services offered in the U.S. ranges from basic monitoring to complete management (involving end-to-end network function management), excluding physical boxes. While the "monitor only" option caters to enterprises with specific preferences for SD-WAN or security solution providers, there has been growing demand for network consulting services to meet custom requirements. Since networking needs vary by application, service providers are addressing them by offering industry-specific service bundles. Network transformation and virtual network technologies adoption are considered disruptive formulas to achieve agility, flexibility and programmability to align with the needs of critical applications. Enterprises are seeking effective solutions to address challenges associated with architectural complexity, vendor restrictions, migration difficulties, application mobility and portability constraints, multitenant requirements and the lack of actionable insights based on analytics.



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#### **Digital transformation professionals**

can understand how managed SD-WAN services providers fit their enterprise's digital transformation initiatives and how the providers compare to one another.

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**Cybersecurity leaders** should read this report to understand the current state of security capabilities associated with consulting and other SD-WAN service providers' delivery.



**Procurement professionals** can acclimatize with the managed SD-WAN service suppliers' terms, around SLAs and KPIs, including service and quality levels. as well as pay-as-you-consume options.



### **İSG** Provider Lens<sup>®</sup> Network - Software Defined Solutions and Services SDN Transformation Services (Consulting and Implementation)



## This quadrant analyzes **providers of advisory, consulting and implementation services, delivering functional solutions** in the SD networking and SD-WAN space and encompasses **initial advisor consulting to service rollout**.

Dr. Kenn D Walters

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Source: ISG RESEARCH

U.S. 2023



#### Definition

This quadrant analyzes providers of advisory or consulting and services associated with delivering software-defined networking and SD-WAN to enterprises, from initial advisor consulting to services delivery and rollout.

Modern businesses require more agility, flexibility, automation and security across delivery areas and business domains including private, public, hybrid and multicloud networking; mobile application usage in the workplace; IoT; Industry 4.0; infrastructure as a service (XaaS); and intent-based AI and ML networking solutions requiring a flexible network environment that can accommodate changes quickly with minimum human intervention. SD networking provides many of these benefits compared with traditional hardware-based networking and is closely related to network function virtualization (NFV), cloudification strategies and digital transformation undertakings. However, it brings challenges in managing legacy and transformed environments and highlights the lack of skilled programmers or NetOps in some enterprises.

Suppliers in this area are increasingly active as advisors or consultants for implementation, offering complete or partial solutions or programming support to enterprises. They may also act as brokers and project managers to ensure combined coalition deliveries as planned. Consulting companies, prominent vendors and managed network services providers are also actively involved in offering SD-WAN packages in this area, independently or as a part of partnerships or consortium deals.

#### Eligibility Criteria

- 1. Scope of product/service portfolio
- 2. Ability to provide consultation for strategizing right through to deploying technology, including support in integration and implementation
- 3. Understanding of the overall market and contributions to the same

- 4. Scope of partnerships and offerings and management capability for the needed orchestration within a customer project
- 5. Stability and roadmap planning capabilities
- 6. Reference customer or solutions post-pilot or commercial deployment
- 7. Competitiveness of offering and types of commercial terms

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#### Observations

Advisory-led engagements in pre-sales settings are expected and are the normal practice in the U.S. due to the highly complex enterpriseand industry-specific areas of SD networking, coupled with transformation and future-state technology planning to meet enterprises' business needs. These pre-sales advisory teams are often highly skilled practitioners with deep industry vertical experience. However, in many cases, their proposed solutions are vendor-specific if being supplied by the vendors themselves.

In many cases, this has led to the engagement of both traditional consulting company advisors to assist enterprises at the strategic and tactical planning (roadmap) layer or traditional system integrators. Both deploy advisory staff in a vendor-agnostic manner and compete to establish the best-fitting plan for an enterprise's needs while utilizing their own intellectual property and partner ecosystems to deliver an implementation satisfying the end client. In the U.S. and many other regions globally, this led to major network service providers adding consulting and advisory teams to their business units. They are emulating the vendor-agnostic nature of the consulting and SI companies by also offering partner ecosystem solutions and their exclusive wrapper of services.

Many of the providers assessed within this quadrant employ advanced methods and processes to enable smooth planning of low-risk transitions from business roadmap to roll-out and efficient operation.

From the 90 companies assessed for this study, 25 have qualified for this quadrant with nine being Leaders and one Rising Star

### accenture

**Accenture's** Cloud First Networks + 5G practice unites more than 12,000 staff globally. The company works with clients through the network lifecycle of strategy, plan, design, build, test and run.



**Apcela** assists enterprises in transitioning from legacy, on premises-based data center networks to dynamic, multicloud SD-WANs with advanced security via automation to the network edge.

AT&T

**AT&T's** Network Transformation Services by its AT&T Business practice accounts for the entire infrastructure, including hardware, applications, policies, security, governance and compliance.

#### **Comcast Business**

**Comcast Business** provides customers with customization and consulting service options to develop roadmaps and implement transitions. Its advisory teams are led by highly experienced industry experts and supported by advanced tools and processes.

## kyndryl

**Kyndryl's** Network & Edge practice encompasses consulting, design, implementation and managed services. The practice is implementing a multipronged strategy to provide a complete core-to-edge story.



**Orange Business** is transforming its core activities. The company is increasing investments in secure virtualized networks (SD-WAN, SASE and 5G) and developing a modular service platform with the Orange Group and Orange Cyberdefense.

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#### Tech Mahindra

**Tech Mahindra** offers industry-experienced advisory services directed toward a NaaS model. Its advisory practice is ably supported with advanced managed services, engineering services and support, and utilizes cutting-edge automation.

### verizon<sup>/</sup>

**Verizon** applies a business model of packaging integrated vendor and in-house built applications as a portfolio of managed services. It continues to invest in integration tools, platforms, orchestration and automation with strong advisory expertise.

wipro

Wipro's Digital Network practice offers SD network consulting and transformation services utilizing its Insightix<sup>™</sup> assessment framework for SDN data center networks, multicloud connect, SD-LAN and SD-WAN with advanced SD-WAN and SASE transformations.

#### CONSULTANCY SERVICES

Rising Star **TCS** aims to be the preferred partner of choice for enterprises in network transformation by providing best-in-class business-focused solutions, leading to improved quality of experience, increased business agility and reduced TCO.

**P** Leader "Comcast Business delivers strong advisory-led engagements supported by modern and powerful tools and processes, and offers client-centric solutions in the U.S."

Dr. Kenn D Walters

## **Comcast Business**

#### Overview

Comcast Business provides customers with options around overall customization, SLA levels and consulting services to develop roadmaps and implement the transition. It has strong advisory teams of highly experienced industry experts supported by advanced tools and processes. The company's managed SD-WAN secure solutions, which are all fully SASE-compliant, are offered either as fully-managed (from its own network operations centers) options or co-managed by the customer with in-built secure routing and next-gen firewalls. It has an extensive world-class partner ecosystem.

#### Strengths

#### Leveraging advisors for client satisfaction:

Comcast Business uses the advisory expertise of its highly experienced customer engagement teams to ensure that client requirements are fully addressed, and all expectations are met by the planned implementation. Its advisors stay involved in all aspects of client projects through to delivery and ensure complete compliance with their original expectations.

#### Wide range of solution and delivery

**options:** The options Comcast Business offers include managed SD-WAN, comanaged SD-WAN, managed SD-WAN OTT, SASE, multicloud connectivity and security options (covering both cloud and endpoint), proactive threat intelligence and hunting, 24x7 managed detection and response, security analytics and security incident resolution and reporting.

**SDN platform to ease delivery:** Comcast Business offers a patented SDN platform based on Versa technology, which orchestrates the delivery and support of Comcast-provided applications, including SD-WAN (also underpinned by Versa). The company provides two management/comanagement options with full visibility and control via its digital experience portal.

#### Caution

Comcast Business is not as well known for its service portfolio and advisory services in the U.S. as many other leaders. The company should focus on highlighting its skills and capabilities and promote itself through media and marketing campaigns to attract client attention.



Enterprise Networks Technology and Service Suppliers

#### Enterprise Networks Technology and Service Suppliers

#### Who Should Read This Section

This report is relevant to enterprises across all industries in the U.S. for evaluating suppliers of SD-WAN equipment and services.

In this quadrant report, ISG lays out the current market positioning of enterprise network technology and service suppliers in the U.S. and how they address enterprises' key challenges.

Enterprises in the U.S. require the ability to control network configuration and change network service level policies via self-service portals and APIs. These abilities are sometimes configured into a SD WAN managed service portfolio, complementing existing fully managed and monitored service levels. Co-management enables enterprises to manage policies through portals and APIs. The portal enables clients to download the API and provides step-by-step user instructions. These APIs can be incorporated into the clients' own portals, such as ServiceNow, for seamless policy setup and management. Enterprises also seek intelligent networking options for application enablement, network capacity planning and defining network performance business rules.



#### IT and network management leaders

should read this report to understand the provider landscape, with a deep dive into the providers' technical and integration capabilities.



#### Digital transformation professionals

can understand how managed SD-WAN services providers fit their enterprise's digital transformation initiatives and how the providers compare to one another.

## $\mathbf{U}$

**Cybersecurity leaders** should read this report to understand the current state of security capabilities associated with consulting and other SD-WAN service providers' delivery.



**Procurement professionals** can acclimatize with the managed SD-WAN service suppliers' terms, around SLAs and KPIs, including service and quality levels. as well as pay-as-you-consume options.



## **ISG** Provider Lens" Network - Software Defined Solutions and Services Enterprise Networks Technology and Service Suppliers



This quadrant analyzes SD networking coreto-edge technology and services providers for enterprises' own operations, (DIY), including management systems and end-device control, from the central core to distributed edge.

Dr. Kenn D Walters

Source: ISG RESEARCH

U.S. 2023



#### Definition

This quadrant analyzes providers of software-defined networking from core to edge technology and services purchased by either service providers for specific projects or enterprises for their operations or equipment delivery. This includes SD-WAN implementations or partial implementations, which do not include managed services. It also includes specific operations support system/ business support system (OSS/BSS) solutions, SD-LAN, 4G/5G mobility-targeted services or solutions, applications, management systems and methods, including software-defined networks' end-device control and management that can be integrated into an enterprise's SD-WAN strategy from the primary enterprise location to branches or remote office locations.

SD-WAN is virtual and allows enterprises to bundle multiple WAN technologies and equip themselves with the required bandwidth. It determines the transmission path for data packets and the medium to be used; if a connection has excess load, an alternate path is automatically taken. The virtual connections consist of multiple paths that are used simultaneously, along with core network functionality. One of the key aspects of the architecture is that it can communicate with all network endpoints, allowing ease in branch and remote setup and management.

Suppliers have been increasingly active in selling SD-WAN solutions to enterprises for their DIY (non-managed) implementations and are partnering with licensed telcos or service providers in this space. In addition, many suppliers focus on specific discrete parts of the overall network (for example, OSS/BSS) and supply just these components or similar discrete, partial solutions.

#### Eligibility Criteria

- 1. Product **portfolio coverage**, focus areas, completeness of modular delivery and integration with broader solutions
- 2. Ability to deliver equipment and service to customers, including requisite training
- 3. Ability to deliver **value-added services** within a modern enterprise environment, using software-defined methods
- 4. Understanding of the **overall market**, technology environment and evolutions and **contributions** to the same

- 5. Scope of partnerships and offerings and management capability of a customer project
- 6. Openness of offerings to avoid vendor lock-in
- Reference customers or solutions post POC or pilot in commercial deployment
- 8. Competitiveness of offerings and types of **commercial terms**, such as shared risk models



#### Observations

The supply of network solutions or partial network solutions directly to enterprises for their own management and operation is still a high-growth segment in the market but varies in terms of market penetration and popularity by region. In the U.S., the trend to supply fully managed, or increasingly, co-managed solutions continues, with some previous DIY operators moving back toward suppliers via the co-managed route. This increase in managed or co-managed solutions is often due to the increasing overall network complexity, coupled with staff training and skill set issues in a difficult recruiting market, which faces enterprises that previously managed networks internally.

This quadrant extensively covers all supplier types, from licensed telco service providers (carriers) and other service providers to systems integrators (SIs) and vendors, relying on extensive partner ecosystems, wherever required, to enable full coverage of client requirements. From the 90 companies assessed for this study, 25 have qualified for this quadrant with eight being Leaders.



**Apcela** combines SD network capabilities with a global backbone and an analytics engine delivered through the Apcela Arcus Portal. The company has strong industry vertical expertise for complete cloud-focused network transformation programs.

#### AT&T

**AT&T** enjoys an exceptional delivery experience reputation among its clients for implementing the latest technologies and solutions in the SD-WAN space. The company draws from both its internal capabilities and its vast partner ecosystem.

#### Cato Networks

**Cato Networks** offers a cloud platform and an advanced SASE-based approach to integrated SD networks and security, delivering a global, cloud-based SD network with in-built network security.



**Microland** offers end-to-end network services from consulting and design to deploy and run services. In the U.S., Microland is involved in many state and local government-managed SD-WAN deployments. Microland focuses on enabling next-generation technologies.



In February 2023, **Orange Business** announced to expand its investments in secure virtualized networks (SD-WAN, SASE and 5G) and develop a modular service platform with the Orange Group and Orange Cyberdefense.

#### Tech Mahindra

**Tech Mahindra** delivers advanced technology and services across the SD networking and enterprise 5G space, supported by experienced advisors, with transition to managed or NaaS available.

### verizon<sup>/</sup>

**Verizon** delivers a comprehensive portfolio for all enterprise sizes. It deploys solutions that are scalable for small, midsize, large and multinational enterprises. The company has a vast range of products addressing current enterprise needs in this segment.



**Wipro** offers transformation services for SDN data center networks, multicloud connection, SD-LAN (wired plus wireless) and SD-WAN. It has a strong portfolio of in-house products and services and partner solutions.



# Edge Technologies and Services

#### Edge Technologies and Services

#### Who Should Read This Section

This report is relevant to enterprises across all industries in the U.S. that are evaluating providers offering technologies and services for the critical network edge space. These include hardware, software, management and reporting tools, applications and other services associated with the network edge.

In this quadrant report, ISG lays out the current market positioning of edge technology and service providers in the U.S.

Because most businesses do not have a model or a profile that is only cloud-based or only on-premises and instead, they have a blended model, which necessitates a blended solution. For example, on-premises implementation is preferred for highly secured enterprise business units. They may still rely on cloud for some of their security and networking, but most of their operation happens on the premises to ensure data protection. Businesses that rely more on cloud services than on-premises services may need an anchor point on their premises even though they deliver most services through cloud. When an employee or other leaves the branch office, it becomes a branch office of one that is highly mobile. The person's entire office is on their (phone, tablet, or a laptop). In this case, users rely heavily on cloud-based networking and security services and much less on the on-premises anchor point. Considering all these factors, enterprises in the U.S. prefer a blended deployment model. Accordingly, service providers recommend multitenant solutions that deliver services on cloud and on-premises. This robust model caters to the needs of new-age distributed businesses.



#### IT and network management leaders

involved in strategy, architecture, operations and procurement can understand providers' relative positioning and capabilities, driving effective consumption of services.



#### Digital transformation leaders can

understand how mobile network service providers fit their digital transformation strategy, and how they can effectually leverage their partnership ecosystem.

## D

**Cybersecurity leaders** can understand providers' security capabilities in mobile network service delivery, that provides a better visibility into the service providers' security approach.



#### Source: ISG RESEARCH **ISG** Provider Lens Network - Software Defined Solutions and Services **Edge Technologies and Services**



This quadrant analyzes providers delivering hardware and software solutions, including management and monitoring tools, applications and full services specifically for **network edge** in the enterprise network, across multiple verticals.

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#### Edge Technologies and Services

#### Definition

This quadrant analyzes vendors that deliver technologies across hardware and software, management or reporting tools, and applications and services associated with edge network technology to enterprises.

Edge technologies, services and computing are current trends in IoT and IioT. With the localized processing of data, security and privacy have improved as any breach can be managed locally and not passed on to the WAN or cloud and thus back to the central enterprise to defend. In IoT edge computing and networking, data from various connected devices in the IoT ecosystem is typically collected in a local device, analyzed on the network, and then transferred to the central data center or cloud. As the number of connected devices has increased exponentially, the volume of data generated is multifold. Thus, interim processing is required to ensure cost reduction and increased efficiency. This, in turn, places high importance on efficient and software-driven edge capability networks and connectivity capabilities.

Edge components can be managed in the same manner as core and SD-WAN components. Software-defined capabilities include branch and edge functionalities, along with all customer premises equipment (uCPE or vCPE) and associated software-defined mobile networks (SDMNs) and SD-LANs that include both wireless (SD-WLAN) and mobile (SD-WMLAN), as well as IoT or IioT sensors and devices or control/security devices.

#### Eligibility Criteria

- I. Product portfolio coverage, focus areas, and completeness of modular or area solutions, together with integration into broader solutions
- 2. Ability to **deliver requisite** training and education to clients with PoC or studio
- 3. Understanding of the overall market, technology environment and evolutions and contributions to the same, together with industry-specific knowledge and experience

- Scope of partnerships and offerings and management capability of disparate providers and solutions within a customer project
- 5. **Reference customers** or solutions in PoC or pilot deployments or commercial deployments
- 6. Competitiveness of offerings and **types of commercial terms**

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#### Edge Technologies and Services

#### Observations

Edge technology (edge compute, network edge, branch edge and remote edge) has seen a continuous rapid expansion over the last few years, accelerating exponentially during the global pandemic. The popularity of the hybrid working model has increased as much of the workforce situated in remote locations is working from home for at least some days of the working week. In addition, new technology and process models, such as IoT (which also covers IoT and lioT sensors and devices, including control/security devices), SD-LAN, SD-WLAN or SD-MWLAN, make this quadrant a continuing fast-growing business area and one of the focus areas for enterprise executives. In the industry vertical space, which intersects with many other global trends such as advances in Industry 4.0, robotic devices, telematics and telemetry, this area is still growing in terms of both overall YoY growth and enterprise adoption.

From the 90 companies assessed for this study, 23 have qualified for this quadrant with nine being Leaders.



**Apcela** assists enterprises in the transition from legacy, premise-based data center networks to dynamic, multicloud SD-WANs, with advanced security pushed via automation to the network edge.

#### Aruba

**Aruba** is a leading WAN edge company focused on developing unique WAN edge products and solutions for the enterprise SD-WAN market, primarily via channel partners. Aruba has partnerships with global telecom companies and managed service providers that offer SD-WAN services.

#### AT&T

**AT&T's** Network Edge brings high-performance cloud computing to the edge of the client network. It integrates and scales seamlessly with its optimized 5G and fiber network services and extending client applications to the edge.

#### Extreme Networks

**Extreme Networks** develops highly innovative Al-based solutions for edge and wireless network infrastructure equipment. This solution set includes cloud-to-edge principles. The company has an extensive range of edge products and solution sets.

### LUMEN

Lumen offers a complete edge computing solution, which can be built by combining Edge Bare Metal and Lumen® Edge VM with Lumen® Edge Private Cloud and Lumen® Dynamic Connections to create an edge ecosystem that is designed to cover the needs of all next-gen apps and services.

orange	Business Services

**Orange Business** views edge technologies as an integrated solution. It uses industryleading partners combined with deep technical knowledge to create value-added edge solutions for customers.

#### T-Mobile

**T-Mobile** has high-visibility offerings within the enterprise SD, mobile and edge networks spaces. The company has major edge capabilities, particularly in the private 5G space with different options available, including private 5G, edge security and IoT solutions.

## verizon

**Verizon** has a comprehensive portfolio of core and edge technologies and services, including virtualized network services (VNS) Intelligence Edge. For the application edge, it has added new Kubernetes-based container applications, together with orchestration.



**Wipro** has an extensive portfolio of its own products and services. Wipro's Boundaryless Universal Edge (BLUE) is a comprehensive offering containing an end-to-end solution set of platforms and services from cloud to edge.





# SASE Solutions and Service

#### Who Should Read This Section

This report is relevant to enterprises across all industries in the U.S. for evaluating enterprise SASE service providers of.

In this quadrant report, ISG lays out the current market positioning of SASE services providers in the U.S. and how they address the enterprises' key challenges.

The growing adoption of edge computing and cloud infrastructure in the U.S., combined with the rise of remote work due to the COVID-19 pandemic, has posed challenges to traditional enterprise network architectures and security models. In response, security and networking solution vendors are launching new softwaredefined and cloud-delivered solutions that combine network-as-a-service with networksecurity-as-a-service functionality. This new concept aims to enable enterprises to easily provide secure access to their applications from any device and location, whether hosted in the cloud or locally, without relying on locally deployed security appliances. Enterprises seek partners that can help in changing their network infrastructure to streamline the transition toward multicloud, SaaS and digital transformation. The network transformation aims to improve application experience, security and business resiliency.



#### IT and network management leaders

should read this report to understand providers' capabilities around SASE services, across flavours of technical and integration capabilities and partnerships.



#### **Digital transformation professionals**

should read this report to understand how providers of SASE services fit their digital transformation initiatives and how they compare to one another.

# $\mathbf{U}$

**Cybersecurity leaders** should read this report to understand the current state of security capabilities associated with providers of consulting and other SASE services delivery.



#### Procurement professionals should

read this report to acclimatize with SASE service suppliers, especially around new pay-as-you-consumption options instead of traditional models.



#### Source: ISG RESEARCH **ISG** Provider Lens<sup>••</sup> U.S. 2023 Network - Software Defined Solutions and Services **SASE Solutions and Services** Н Cato Networks Aryaka Accenture o NTT AT&T GTT Colt Verizon **ATTRACTIVENESS** Tata Communications 0 Orange Business Wipro Citrix Tech Mahindra T-Mobile HCLTech Lumen **Product Challenger** Leader Comcast Business Microland L VMware Netskope Open Systems Zscaler PORTFOLIO **Market Challenger** Contender L Fortinet 🛧 Rising Star COMPETITIVE STRENGTH н

This quadrant analyzes SASE solutions and services as packaged integrated networks and security solutions, delivering the network from core to edge. This SASE solution should fully integrate with existing enterprise business systems as required.

Dr. Kenn D Walters

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#### SASE Solutions and Service

#### Definition

This quadrant analyzes SASE solutions, which are offered to enterprises as overarching integrated networks and security solutions from the enterprise core to the edge. These include solutions moving into pilots and solutions currently commercially deployed into production.

Enterprises are increasingly focused on migrating their ICT and network operations to the cloud while enhancing security in all touchpoint areas. Software-defined networks have proven to be efficient in assisting with this by reducing complexity and facilitating risk-reduced migration to single or multicloud environments for enterprises. Networkintegrated security has been evolving continuously, with the inclusion of components such as proactive detection and response solutions, zero-trust networking, and identitybased security and authentication. Many providers supply a combination of identitybased authentication, SASE and network security to create a holistic, secure-by-design approach for the network of the future.

The major components of SASE include SD-WAN, cloud access security broker (CASB), next-generation firewall (NGFW) and firewallas-a-service (FwaaS), zero-trust network access (ZTNA) and secure web gateways (SWG). These encompass secure and integrated access from the data center (which may include network function virtualization [NFV]) to branch or edge, including SD-LAN or its wireless or mobile variant.

Suppliers in this area have been increasingly active as advisors or consultants for implementation, supplying complete POC, pilots and solutions to enterprises. Prominent vendors and managed network service providers are also actively involved in offering SASE.

#### **Eligibility** Criteria

- 1. Product portfolio coverage, focus areas, completeness of solutions, fully integrated broader solutions linking to data centers or other enterprise IT applications and systems
- Membership or affiliation (including inputs) with global
  SASE technical and trade groups
- Ability to enable clients to reuse the existing network and ICT solutions instead of just rip and replace
- Ability to deliver training and provide both POC or studio simulations and testing for clients

- 5. Industry-specific knowledge and experience mapped to the client type
- 6. Scope of partnerships and offerings plus management capability for the needed orchestration within a customer project
- 7. Reference customers or solutions in pilot moving into commercial deployment
- 8. Competitiveness of offerings and types of commercial terms

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#### SASE Solutions and Service

#### Observations

The definition of integrated secure enterprise networks (ISEN) has been around for years but has been made popular more recently by the term SASE. There is now an agreement on the detailed constituent components of SASE, as contained within the definition section of this quadrant, thus bringing it from the pilot domain into many actual commercial rollouts with integrated SD-WAN, backed by strong solution offerings from highly reputable providers.

In the U.S., it is one of the high-growth areas of the overall enterprise transformation and networks business currently, and growth is expected to accelerate further in the coming years. This growth is driven by the more traditional network provider ecosystem being supplemented by new disruptive SASE-specific entrants to the market, as well as major system integrators partnering with leading SASE solution providers to deliver fully integrated end-to-end secure network transformation to their enterprise clients. The newer market term SSE (for security service edge) can be confusing to many. SSE is a term to describe an evolving stack of different cloud-based security tools, including CASB, SWG, FwaaS and ZTNA. These form approximately half to two-thirds of a full SASE architecture, which, as described in our quadrant definition, is the convergence and integration of networking and security tools within a cloud infrastructure. This SSE stack may be of significant interest to the early adopters of SD networking in the US, as it can be used to supplement and integrate with existing SD-WAN to form a SASE solution within the enterprise.

From the 90 companies assessed for this study, 24 have qualified for this quadrant with nine being Leaders and one Rising Star.

## accenture

Accenture provides a range of SASE functions, including design strategy and roadmap development, building, migrating and managing the roadmap, implementing SASE and performing network segmentation from within its Cloud First Networks + 5G unit.

AT&T

**AT&T** combines leading partner ecosystemmanaged SD-WAN services, cybersecurity capabilities and the power of 5G with its own products and capabilities to deliver advanced SASE solutions.

#### Cato Networks

**Cato Networks** delivers a next-generation secure networking SASE architecture with SASE Cloud, which converges SD-WAN and network security capabilities into a single-pass architecture. It is cloud-native and is an elastic, resilient and scalable cloud service.



Lumen Technologies offers SD-WAN solutions, combining components from multiple leading SD-WAN providers (VMware, Fortinet, Versa Networks, Cisco and Palo Alto) into a single SASE solution with global availability that can be accessed through its comprehensive online purchase system.



**Orange Business's** flexible SD-WAN, managed secure access and full or partial SASE and security upgrade solutions are reinforced by its Orange Cyberdefense team and global security operations centers, which enable its SASE offering.

#### T-Mobile

**T-Mobile**, in the SASE space, adds its dedicated cybersecurity offering to its SD-WAN to create a SASE architecture-compliant solution set for enterprises.

## verizon

**Verizon's** advanced SASE provides a universally distributed, identity-centric networking and security platform that ensures end users and devices across all locations are securely connected.

#### **vm**ware<sup>®</sup>

**VMware** has an end-to-end secure solution that solves many enterprises' central, branch networking and security challenges. The solution is backed by Al analytics in a SASE platform package that is consumed as a service.



**Wipro** provides seamless transformation using standard methodologies, leveraging accelerators and automation tools. The company uses its own visualization and automation platforms for managed security services.

MICROLAND Making digital happen

**Microland's (Rising Star)** managed SASE services provide 24x7 monitoring of a customer's cloud estate against malicious events, enterprise-wide user traffic analysis, proactive management and response to alerts, including initial containment and incident response.

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NETWORK — SOFTWARE DEFINED SOLUTIONS AND SERVICES QUADRANT REPORT JUNE 2023



#### Methodology & Team

The ISG Provider Lens<sup>™</sup> 2023 – Network – Software Defined Solutions and Services research study analyzes the relevant software vendors/service providers in the U.S. market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of March 2023, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars (\$US) unless noted.

# The study was divided into the following steps:

- Definition of Network Software Defined Solutions and Services market
- Use of questionnaire-based surveys of service providers/ vendor across all trend topics
- 3. Interactive discussions with service providers/vendors on capabilities & use cases
- Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
- 5. Use of Star of Excellence CX-Data

- Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
- 7. Use of the following key evaluation criteria:
  - \* Strategy & vision
  - \* Tech Innovation
  - \* Brand awareness and presence in the market
  - \* Sales and partner landscape
  - \* Breadth and depth of portfolio of services offered
  - \* CX and Recommendation

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Dr. Kenn Walters is a highly skilled senior executive with over 40 years of experience in directing and managing major transformational technology projects, research and development programs, as well as extensive experience within providers and in global industry research and management consultancy. For ISG, Kenn has written over 100 articles as a distinguished lead analyst for ISG Insights in areas such as digital transformation, cloud managed networks, SD networking, SDN and digital disruptors. He and is a Distinguished lead analyst and author for multiple regions in the Provider Lens™ reports, (<u>https://isg-one.com/</u> <u>research/isg-provider-lens</u>) in such areas as Networks – Software Defined Networking, Digital Business Software and Services, Contact Center as a service, and CC CX. He holds a BSc, MSc, and Ph.D. in computer science and communications systems.



IPL Product Owner

#### Jan Erik Aase Partner and Global Head – ISG Provider Lens™

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor. Now as a partner and global head of ISG Provider Lens<sup>™</sup>, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

# **İSG** Provider Lens

The ISG Provider Lens<sup>™</sup> Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens™ research, please visit this <u>webpage</u>.

## **İSG** Research

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research™ delivers guidance that helps businesses accelerate growth and create more value.

ISG offers research specifically about providers to state and local governments (including counties, cities) as well as higher education institutions. Visit: <u>Public Sector</u>.

For more information about ISG Research<sup>™</sup> subscriptions, please email <u>contact@isg-one.com</u>, call +1.203.454.3900, or visit research.isg-one.com.

## **İ**SG

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 900 clients. including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services: network carrier services: strategy and operations design; change management; market intelligence and technology research and analysis.

Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,600 digitalready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data.

For more information, visit isg-one.com.



**JUNE, 2023** 

**REPORT: NETWORK — SOFTWARE DEFINED SOLUTIONS AND SERVICES** 

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