

Intent-based software-defined WAN through DXC Technology and Aruba EdgeConnect



Overview

Enterprises rely on their wide area network (WAN) to connect customers, users and branches to on-premises or cloud data centers, SaaS applications and public cloud resources. The costs to operate and maintain the traditional WAN have increased significantly — along with the increased complexity of managing this critical service — due to explosive growth in cloud-based applications and internet-based traffic considerations.

DXC Technology and Aruba have collaboratively built a turnkey, next-generation managed software-defined WAN (SD-WAN) that provides enterprises with a secure, end-to-end, global, carrier-neutral SD-WAN service. This offering is backed by a globally leading IT company, with expertise in system integration, and by a global SD-WAN technology leader.

Business challenges

Today, enterprises face a number of key business challenges when it comes to network connectivity and digital transformation as they migrate from traditional MPLS-based WAN to an SD-WAN. These challenges include:

- Increasing cost of WAN connectivity
- Ensuring consistent high application performance
- Supporting scale for rapid growth of sites
- Optimization of WAN connectivity to public and SaaS cloud services
- Securing applications from anywhere, including from hybrid work locations
- Delivering a better end user experience

Selecting the right SD-WAN technology solution provider capable of addressing all of these business challenges is an important step in the transformation to a cloud-ready enterprise.

“In today’s digital environments, networks are critical to business performance and user experience. With DXC’s Cloud Right™ approach, we help our customers modernize their network infrastructure to improve performance, cost, and resilience through an intent-based SD-WAN solution. Together DXC and HPE Aruba deliver this solution with the right processes and automation to accelerate network modernization for our customers.”

Ayush Mittal

ITO Cloud Service Line Lead,
DXC Technology

Intent-based SD-WAN requirements

Adoption of SD-WAN continues to grow among enterprises. Industry analysts project the growth of the SD-WAN market at a CAGR rate of 20 – 30%, reaching \$8.4 billion by 2025¹. This continued growth will be spurred by demand for an intent-based, agile, high-performance and secure WAN.

Discussions with many DXC customers reflect enterprises’ changing business needs, with demand for a more agile network infrastructure that can support a cloud transformation strategy. DXC has defined the following features as being of great importance for solving enterprises’ business challenges and making SD-WAN intent-based.

- **Adaptive application and internet routing**
Deep packet inspection of traffic, identifying the application type and giving priority to business-critical applications — enhancing overall performance and user experience. Trusted traffic can be routed to cloud/internet and untrusted traffic sent to a security compartment for analysis and filtering.
- **Intent-based traffic management**
Business policy definitions for WAN enable traffic to be modeled in line with application needs. The policies are defined across different parameters, including latency, jitter, packet loss and underlay path selection. The business policies also control traffic transmission and decide actions if the preferred links go down or fail to meet specified performance thresholds.
- **Secure connect**
Internet breakout and stateful firewall capabilities, applying end-to-end microsegmentation that span the LAN-WAN-LAN and the LAN-WAN-data center. Service orchestration automation with secure service edge-(SSE-) based solution.
- **Zero touch/plug-and-play**
Zero-touch configuration capabilities for edge appliances with network policy settings configured on the Aruba SD-WAN Orchestrator, which propagates the appropriate configuration securely across the network. This enables plug-and-play deployment choices that scale to hundreds or thousands of sites.
- **Simplify management and operations**
Achieve simplicity through central, Orchestrator-based control and management, along with API-based integration for multiple external tools.

¹ Source: “Software-Defined Wide Area Network (SD-WAN) Market by Component (Solutions (Software and Appliances) and Services), Deployment Type (On-Premises and Cloud), End User).

“With the evolving scenario of the hybrid workplace, enterprises are looking to extend connectivity to branch locations and enable secure work-from home experiences. Flexible, reliable and secure network connectivity is extremely critical.

DXC’s intent-based SD-WAN solution, powered by Aruba EdgeConnect, enables organizations to reduce the footprint of their devices by unifying routing, firewall, WAN optimization and SD-WAN into a single platform, ensuring the highest quality of experience for both end users and IT teams.”

Mayur Bharath

Global Partner Ecosystem Lead,
Aruba, HPE Intelligent Edge BU

DXC and Aruba intent-based SD-WAN solution

The emergence of key technical requirements for intent-based SD-WAN resulted in DXC Technology and Aruba, an HPE company, collaborating to build a solution for overcoming the business challenges that enterprises faced in SD-WAN design, deployment and management. Through DXC’s Network Modernization and Network Reliability Operations offerings, customers can get the best capabilities from intent-based SD-WAN solutions.

Key tenets of the DXC and Aruba EdgeConnect solution are as follows:

1. Intent-based SD-WAN reference architecture and design

Multiple reference architectures available to jump-start design and implementation activities. Architectures available for data centers and large, medium and small sites. The reference architecture and design give a clear view of bill of materials (BOM), site resiliency requirements and technical feature requirements, along with integration needs.

2. Zero-touch deployment kit

Ready-to-use Orchestrator templates for different site types, enabling automated and faster edge provisioning. Template and policy-based provisioning ensures scalable architecture and standardization of network support activities.

3. SD-WAN management integrated with DXC Platform X™

API-based integration of DXC Platform X with Aruba SD-WAN Orchestrator for insights across entire the network and application performance with clear indications to troubleshoot, should there be an issue. DXC Platform X enables automation, analytics, AI/ML and ITSM integration. An intuitive dashboard offers application and network visibility.

4. Certified and experienced talent

Global, certified and experienced DXC talent works closely and collaboratively with Aruba experts to deliver the best service to our customers. Talent is certified across Aruba EdgeConnect Associate, Professional and Expert certifications.

5. Optimal economic model

DXC and Aruba have developed an optimal economic model for this offering. Customers can choose full subscription-based services or a hybrid model.

Contacts

Jayant Tulsiani

Global network services lead
jayant.tulsiani@dxc.com

Dimitri Dijkhuizen

Global network offering manager
dimitri.dijkhuizen@dxc.com

Phil Dreger

Global sales solutioning lead
pdreger@dxc.com

Gaurav Valecha

Global presales lead
gaurav.valecha@dxc.com

Conclusion

Integration of DXC expertise and tools and the Aruba EdgeConnect platform yields a powerful, highly flexible intent-based SD-WAN solution for enterprises to achieve multiple benefits and overcome the challenges typically seen in SD-WAN deployments. These benefits include:

- **Transformation at speed**

Leveraging the reference architectures, jump-start deployment kit and features like ZTD, DXC has built industrialized capabilities to roll out site transformation at a speed of 20 – 25 sites per week.

- **Application performance and user experience enhancement**

EdgeConnect SD-WAN platforms can increase application performance from 25 – 75%, depending on the underlay network.

- **Reliable and secure operations**

Using DXC Platform X and leveraging automation, analytics, and AI/ML capabilities, DXC is providing world-class network management and optimization services to hundreds of customers globally.

- **Cost optimization**

The DXC solution drives underlay optimization with enhanced user experience, which can lead to cost optimization of >30% over traditional WAN.

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dxc.com

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About DXC Technology

DXC Technology (NYSE: DXC) helps global companies run their mission critical systems and operations while modernizing IT, optimizing data architectures, and ensuring security and scalability across public, private and hybrid clouds. The world's largest companies and public sector organizations trust DXC to deploy services across the Enterprise Technology Stack to drive new levels of performance, competitiveness, and customer experience. Learn more about how we deliver excellence for our customers and colleagues at [DXC.com](https://dxc.com).