

The Future of the Edge

From widening the network to accessing optimized value from the edge, the way we think about optimizing network, application, and end-user performance has evolved.

Extending network reach with MPLS, fiber and assured performance



With MPLS, companies could extend their computer networks over large distances with fiber, connecting remote offices to data centers and each other privately using MPLS, delivering quality of service and private networking for applications and services across the network. This allowed for good performance and security but lacked flexibility to make changes quickly.

While this concept did extend network reach, it had issues with being flexible since most circuits were leased lines and bandwidth could not scale quickly and routing changes were time consuming. The driver behind the rapid shift towards flexible connectivity was the shift towards multi-cloud computing. In a matter of a few years customers were now looking for flexible, scalable and secure connectivity that can quickly route to multiple cloud targets.

Improving WANs with automation and a network overlay

SD-WAN improved on WANs by replacing traditional routers with virtualized appliances, controlled by software, bringing a level of automation that improves performance. Designed to connect to the cloud, SD-WAN takes commodity-based circuits and makes them feel like SLA-based services with a dedicated circuit, without the hardware dependencies and reliance on MPLS. The result: resilience, quality of service, security, and performance.



SASE: pushing the edge, integrating security



SASE shifts the focus away from connecting distributed sites to the data center (which is where SD-WAN shines), toward connecting endpoints and end-user devices.

SASE combines an organization's network and security functionalities into a single cloud service that operates closer to the edge and distributes traffic even more quickly than traditional network services. By uniting an organization's necessary network and security services — firewall as a service, secure web gateways, etc. — into one platform, SASE simplifies network and security management.

NEXT UP

Network management at the application level

Enter a new focus on application centric network model: focusing on application health and performance to provide a front-line for application observability.



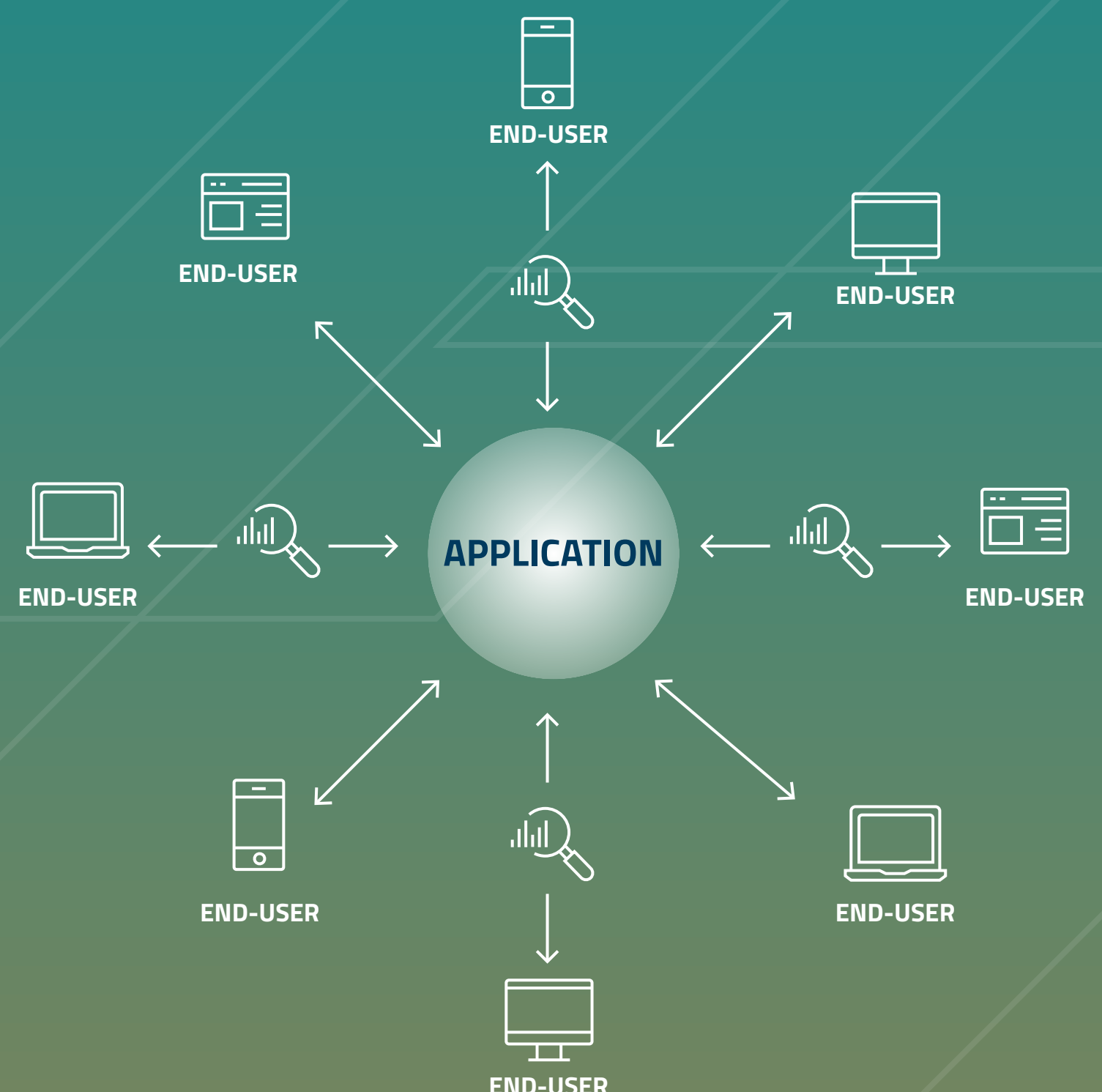
Applications are becoming the priority: End-user (and therefore IT) priorities have shifted from network, to infrastructure to application.



Increasing distance between end-users and applications: Cloud infrastructure and SaaS adoption is driving greater distance between users and apps - increasing the importance of network.



New data sources are available: Network configurations offer new insights on application performance across public and private networks.



THE FUTURE

Network intelligence — an AIOps approach

The next evolution of network management is adopting an AIOps approach — an operations pipeline built around data management, automation, and AI/ML-based processing of events, changes, and topology to drastically reduce operational workload and improve incident outcomes.



OUR PATH FORWARD

Zayo's portfolio of Edge Network Solutions provides one of the most robust and agile edge-to-core-to-cloud network connections on the market. Built on the backbone of Zayo's leading network, cloud connectivity solutions, and deep edge expertise, the new portfolio of Edge Network Solutions delivers one of the most robust and agile edge-to-core-to-cloud networking solutions and services in the market. True WAN transformation is now possible from the LAN to the Cloud.

[Learn more about Edge Solutions and Services on the World's Leading Network →](#)