

## Solution Brief

# How to Assure Application Quality of Experience for SD-WAN

Go beyond quality of service visibility

### Why SD-WAN?

The value for software-defined WAN (SD-WAN) varies somewhat depending on whether the organization deploying it is a communications service provider (CSP), managed service provider (MSP), or an enterprise. Some of the main benefits are:

- Access independence
- More bandwidth for less cost
- Cloud migration ease (remote site direct internet connection to the cloud)
- Application performance visibility over the network
- Automated provisioning
- Centralized policy control and management

But, there's a very important item missing from this list: quality of experience (QoE) visibility at the true edge of application delivery—the end user. SD-WAN vendors offers some type of quality of service (QoS) visibility, but they do not extend this to true application QoE.

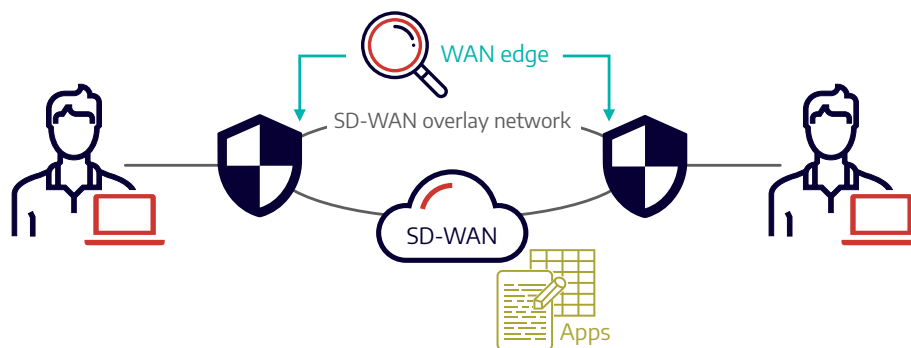


Figure 1: SD-WAN vendor solutions monitor quality of service but not user experience.

## From network QoS to application QoE at the real edge

Measuring the real user experience requires full visibility into:

- Network performance
- Application delivery (through the network and infrastructure)
- Application transaction delay

If any one of these is missing, it's not possible to have complete QoE visibility. SD-WAN vendor solutions fall short because they do not offer:

- Visibility into the underlay network
- Visibility into end user application QoE
- Visibility into the root cause of application performance degradation

## Limitations of SD-WAN performance monitoring

True, SD-WAN solutions provide visibility into such things as network performance between SD-WAN platforms or bandwidth or capacity usage for top protocols. But, because these metrics are provided within the walls of the network, they cover application performance from WAN edge to WAN edge only—not to the true edge which is the end user's experience.

These limitations create problematic QoE visibility gaps:

- No way to pinpoint location or cause of application performance degradations
- Insufficient granularity to perform troubleshooting or optimization across the entire application delivery chain



Figure 2: Accedian's Skylight solution extends performance visibility to the real edge, for true QoE assurance.

This is where Accedian's Skylight solution provides you with the insights and edge that you need. Skylight sensors fill in these gaps, extending performance visibility to the real edge and going beyond QoS to true QoE.

## Here's how that works for different types of organizations:

- CSPs: as the owners of access and delivery networks, communications service providers (CSPs) can achieve deeper QoS and full QoE visibility using Skylight sensor: control (active monitoring and service activation testing (SAT) for the underlay network) and Skylight sensors for application performance assurance
- MSPs: being purveyors of SD-WAN as a service, managed service providers (MSPs) can use Skylight sensors to add application assured QoE to differentiate their services and snap on new revenue streams
- Enterprises: to effectively deliver applications, enterprises must be able to see and analyze network, infrastructure, and application code performance. Unlike SD-WAN vendor tools that are limited to network monitoring, Skylight sensors cover all three.

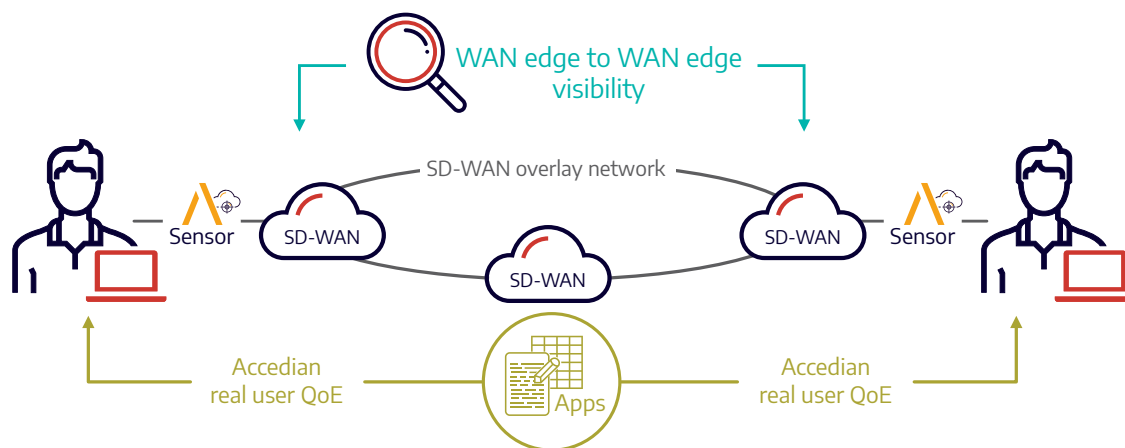


Figure 3: Going beyond QoS to true QoE with Accedian Skylight.

In short, Skylight serves as a complement to SD-WAN monitoring capabilities, adding depth (underlay network monitoring) and breadth (application QoE) of performance visibility and offering one single source of 'truth' about user experience.

## About Accedian

Accedian is the leader in performance analytics and end user experience solutions, dedicated to providing our customers with the ability to assure their digital infrastructure, while helping them to unlock the full productivity of their users.

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