## **Solution Brief**

# Automate Assurance with Service-centric Visibility

### Granular, end-to-end service health insights drive closed-loop automation and customer experience

Closed-loop operations, network automation, and automated assurance are gaining traction. Why?

The continued growth of the network measured by any metric, be that traffic, devices, or cell sites, has encouraged service providers to move away from their multi-monitor network displays and start to rely more on automation.

5G standalone networks make it more urgent to trust network systems to make the right decisions to avoid any impact on the quality of customer experience.

The challenge is delivering the expected service levels and managing SLAs for all services, end users, and devices.

### The opportunity?

Being able to get performance data at the right time, at the right level of precision, is critical to be able to to automate closed-loop actions to make the network more efficient.

Precise detection is needed to see the seemingly small but annoying issues that impact customers' quality of experience, for example, micro-bursts in latency.

It's beneficial to correlate multiple sources of data so you can look at what the network is doing over time, monitor service health and quality, and detect patterns and anomalies.

#### Automated assurance at a glance

- Monetize new 5G services faster with on-demand service activation testing and continuous service monitoring
- Reduce the risk of new services failure or negative brand impact: actively verify end-user Quality of Experience (QoE) through real-time performance KPIs
- Prevent user experience problems with early issue detection and insight to drive real-time actions: reroute paths or adjust bandwidth to maintain service quality
- Achieve faster MTTR resolution times: analyze where the bottlenecks are by correlating performance data in the access, backhaul, and transport networks
- Protect revenue by confidently meeting strict SLAs with business customers
- Differentiate your network services with customer self-service portals that offer real-time KPIs and SLA reporting

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Accedian Skylight for Cisco Crosswork™ Network Automation Automation is about enabling network teams to execute at machine speed with repeatable quality. In order to understand the changes you are making and why, you need better information from the network.\*

Kervin Pillay, CTO Automation BU, Cisco

#### Accedian Skylight and Cisco Crosswork™ Automation

Accedian Skylight and the Cisco Crosswork™ Automation platform show what's happening in the network every millisecond, enabling you to proactively detect anomalies, isolate faults, and automate intervention to assure customer experience in real time. These capabilities are highly relevant to 5G standalone operations and delivering new business-critical services.

The solution delivered by Accedian and Cisco provides complete visibility of the service quality, user experience, and the end-to-end transport network infrastructure. Virtual and physical sensors provide high-quality granular performance data and KPIs in real time, with per-second accuracy. This allows you to proactively detect anomalies, isolate faults, find the root causes and even automate remediation, before your customers are impacted.

**Key Solution Benefit for Network Operations:** Maximum network visibility and immediate insights on service quality to assure the user experience.

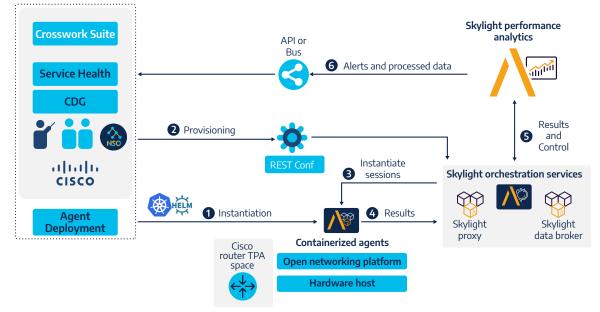
A single pane of glass approach saves time and enables teams to quickly pinpoint where problems are occurring to understand how to quickly fix and prevent issues from impacting user experience.

#### **Features**

- Fully cloud-native, software-based solution with open APIs
- Lightweight sensors for active-synthetic monitoring and testing and real end-user experience.
- Multi-vendor network and service performance visibility from core to edge, public to private cloud, physical to virtual, Layer 2 to Layer 7
- Microsecond latency measurements and sub-1% packet loss for critical 5G and premium business services
- Real-time performance data for closed-loop automated assurance and orchestration
- Analytics powered by machine learning to analyze and correlate performance data with metadata to automate detection and speed up troubleshooting
- Continuous and real-time service performance monitoring and real-time granular KPIs for end-customer reporting and SLA monitoring.

Click <u>here</u> for more information on Accedian Skylight for Cisco Crosswork™ Network Automation.

<sup>\*</sup>Heavy Reading White Paper: "Harnessing Edge Computing for 2022"



#### **Cisco Crosswork Automation with Accedian Skylight**

#### How it works

Accedian Skylight's test and monitoring capabilities can be orchestrated and fully automated through the Cisco Crosswork network automation platform.

- Skylight test agents can be deployed using Cisco® Network Service Orchestrator (NSO) and authenticated through Skylight
  Orchestrator, a centralized management and provisioning solution of testing and monitoring agents. Skylight Orchestrator
  supports real-time streaming of monitoring/test data and ensures that service performance is observed in real time, which allows
  proactive intervention before the end-customer Quality of Experience (QoE) is impacted.
- Skylight aids orchestrated assurance by provisioning tests, producing KPIs and reports, and streaming data as a part of the automated workflow defined in activation testing templates and other automated test sequences. NSO triggers these templates using the NETCONF and YANG API to achieve closed-loop automation. This actively verifies that services work after being provisioned by NSO and continue to perform over the service lifecycle.
- Performance data insight and events can be further analyzed in Skylight analytics or can be sent back to Cisco Crosswork Automation Platform to correlate performance KPIs with other events coming from the infrastructure to support SLA management, Al/analytics, databus, and self-service portals.

#### **About Accedian**

Accedian is a leader in performance analytics, cybersecurity threat detection, and end user experience solutions for service providers and mid-to-large size enterprises. The Accedian Skylight platform offers granular end-to-end visibility within "the massive multi" – multi-layer, multi-cloud, and multi-vendor networks. Accedian's open and scalable platform removes roadblocks to innovation, enabling cloud-native analytics and empowering customers to launch new assured services based on 5G, SD-WAN and edge technologies. Power your future with secure network performance.

#### To learn more, visit accedian.com.

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