CASE STUDY

Global MSP Optimizes SD-WAN Management for Major Service Provider Customers

ABOUT THE CLIENT

Industry: Technology Services

Product: VMware Telco Cloud Operations

Challenge: Network team struggling to manage SD-WAN services alongside legacy networks

RESULTS

Gained holistic visibility across all network domains

Automated network discovery across physical, virtual and SD-WAN networks

Unified management for multiple customers within the same UI

Improved network troubleshooting with automated root cause analysis

Increased and protected revenues by prioritizing network issues by customer, site and SLA

Accelerated problem remediation via full integration with ServiceNow ticketing systems

The Problem: Supporting modern hybrid networks with legacy tools

When one of the world's leading communications service providers (CSPs) needed help managing their enterprise customers' networks, they turned to a premier managed services provider (MSP) with a global presence. This MSP has handled IP/MPLS services for many years, providing day-to-day network monitoring and support for the CSP's largest enterprise customers. Recently, the MSP also took on the management of the software-defined wide-area networks (SD-WANs) for these same enterprises, which are based on VMware® SD-WAN by VeloCloud.

With tens of thousands of enterprise workers relying on VeloCloud connectivity, often under strict service-level agreements (SLAs), the MSP must be able to monitor the health of these networks and quickly diagnose any issues. However, while this MSP has mature service assurance tools for conventional IP/MPLS networks, they struggled to monitor newer SD-WAN services. The biggest issue: a basic disconnect between the IP/MPLS infrastructure and the virtual SD-WAN networks overlaid on top of it.

When issues arose with a customer's SD-WAN services, determining whether the problem was in the IP/MPLS network or the SD-WAN overlay was a complex, time-consuming process, requiring multiple disparate tools. Conversely, when alerted to problems with the underlying infrastructure, there was no easy way to determine which customers' SD-WAN services were impacted. The lack of visibility across physical and virtual networks also left significant gaps in the reporting the MSP could provide. To provide performance metrics about different customers' SD-WAN networks, or to show which customer sites had been down and why, they had to manually create spreadsheets. If they were going to deliver the quality that the Tier 1 CSP and its customers had grown to rely on, the MSP needed a better way to monitor and troubleshoot modern network services.

Integrated monitoring

of MPLS networks and 1000's of VMware SD-WAN edges

Saved countless hours

bouncing between network monitoring tools

Reduced time to remediate issues

by automatically identifying **95%** of problems

Increased customer satisfaction

by improving reliability and performance of SD-WAN services

LEARN MORE

For additional information about VMware Telco Cloud Operations:

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telco.vmware.com

The Solution: Unified management of SD-WAN and legacy networks

This MSP has long used VMware Telco Cloud Operations to manage the CSP's network services. Now, with VMware SD-WAN by VeloCloud integrated into Telco Cloud Operations, the company can monitor all customer network environments—IP, MPLS and SD-WAN—through a single pane of glass.

Telco Cloud Operations provides the operational intelligence the MSP needs to holistically manage virtual, physical and SD-WAN networks to rapidly resolve network performance issues and ensure consistent service delivery to enterprise customers. Today, they use Telco Cloud Operations for:

Dynamic discovery: Through API integration with the VMware SD-WAN Orchestrator, Telco Cloud Operations automatically discovers the SD-WAN physical and virtual edge devices, gateways, networks, tunnels, customers/tenants and services and their interactions. It creates a detailed representation of the SD-WAN network and relates it to the infrastructure of physical devices and networks underpinning it. Telco Cloud Operations automatically determines and maps the interrelation between devices and networks within and outside the SD-WAN service, and continuously updates that information as the network topology changes.

Automated root cause analysis: By understanding cross-domain relationships, Telco Cloud Operations monitors and manages the health and performance of the CSP's physical, virtual and SD-WAN networks as one entity. When problems arise, the self-adapting engine correlates events across all networks to quickly identify where the issue lies so MSP teams don't have to pinpoint the source of the problem. Telco Cloud Operations also correlates all alarms, alerting MSP engineers only to real issues that impact services. Telco Cloud Operations also integrates with the CSP's ServiceNow system to automatically generate tickets for identified issues, enabling true closed-loop actions.

Customer prioritization to optimize SLA management: Combining information from the SD-WAN Orchestrator and Telco Cloud Operations business impact manager tool, the MSP can assign each customer and service—and even different SD-WAN edge locations for the same customer—a unique business impact and cost score. When a network incident occurs that affects mission-critical services or sites that fall under higher-tier SLAs, the system automatically flags it as top priority for immediate resolution. In this way, the CSP can offer higher SLAs to its SD-WAN customers, which in turn drive higher revenues.