Solutions Brief: Unified Management of SD-WAN and Legacy Networks

Deliver a top-notch customer experience with VMware SD-WAN by VeloCloud and VMware Smart Assurance

New insights are revealed and automated actions made possible through the integration of VMware Smart Assurance with VMware SD-WAN by VeloCloud, providing communications service providers (CSPs) with unprecedented cross-domain visibility and holistic management.

At-a-Glance

- **Single Pane of Glass visibility** for holistic view of SD-WAN and traditional network
- **Automated discovery** of SD-WAN elements edges, hubs, gateways, tenants & tunnels
- **Manage multiple tenants** within same UI
- **Rapid identification** of issues through Automated Root Cause Analysis of faults in network
- **Impact analysis** by mapping edges to authorized applications & services
- **Quick remediation** of issues through integration with 3rd party service tools
VMware SD-WAN by VeloCloud

SD-WAN enables communications service providers (CSPs) to rapidly evolve their networks, increase flexibility, deliver advanced services and drive revenue. With VMware SD-WAN, CSPs can deliver elastic transport, high performance for cloud applications, and integrate advanced services all via a zero-touch deployment model.

VMware SD-WAN seamlessly integrates with existing service provider networks and is a transformational approach for Wide Area Network (WAN) architectures. It enables bandwidth on-demand, provides direct and optimal access to cloud-based applications, simplifies deployment of services and improves operational automation.

Benefits:

- Increase agility
- Lower costs
- Gain 360° visibility
- Improve customer experience
- Meet SLAs

VMware Smart Assurance

VMware Smart Assurance is an automated service assurance solution designed to bridge the gap between the virtual and physical worlds. It provides integrated monitoring and network management across all layers for rapid insights, lower costs and improved customer experience.

VMware Smart Assurance gives Communications Service Providers (CSPs) the operational intelligence they need to holistically manage their virtual, physical and SD-WAN networks as one to rapidly resolve any network performance issues and ensure consistent delivery of services to subscribers. Automated root cause analysis, rapid topology discovery and impact analysis maximize Quality of Service (QoS) and uptime while giving CSPs better control of the network.
Unified Management: VMware SD-WAN by VeloCloud and VMware Smart Assurance

By using VMware SD-WAN by VeloCloud and VMware Smart Assurance together, operators have a single pane of glass visibility for the whole network. This is especially valuable for Managed Service Providers (MSPs) as they can offer an end-to-end outsourced management of their customer’s networks. Operators can monitor and manage not only the SD-WAN network, but also the physical and virtual devices, protocols and services in their customer’s data centers, remote offices, and customer premise edge devices. If the MSP has access to the IP or MPLS backbone network, they can also manage that with VMware Smart Assurance. This gives MSPs unprecedented visibility into what is happening in both their customers’ and the carrier network.

Dynamic Discovery

Through an API integration with the VMware SD-WAN Orchestrator, VMware Smart Assurance automatically discovers the SD-WAN physical and virtual edge devices, gateways, networks, tunnels, customers/tenants and services and their interactions. In this way, it creates a representation of the SD-WAN network and relates it to the underlay infrastructure of physical devices and networks on which the SD-WAN service is riding. Infrastructure outside of the SD-WAN network is also discovered and the interrelation between the devices and networks is automatically determined and mapped. This relationship mapping is continuously updated as the network topology changes. Services are discovered on the LAN side and Cloud SaaS services are profiled at the customer/branch SD-WAN edges. The VMware SD-WAN Orchestrator provides information on which applications/services are authorized at each edge site and VMware Smart Assurance cross-correlates this information with the devices and services supported. This mapping allows VMware Smart Assurance to perform impact analysis for services.

Unprecedented Visibility

See exactly what is happening in both the SD-WAN and traditional network.
Automated Root Cause Analysis

By understanding the cross-domain relationships, VMware Smart Assurance is able to monitor and manage the SD-WAN network, traditional physical and virtual networks as one entity. When problems arise, the self-adapting engine correlates events across all the networks to rapidly identify where the problem lies. Network operations center (NOC) teams do not need to spend valuable time trying to triage whether the problem is with a network infrastructure device, a service or within the SD-WAN network. VMware Smart Assurance figures out what the true cause of the problem is by correlating all alarms. Operators are presented with a simple view of the root cause that allows them to drill down and see the extraneous alarms as infrastructure and service impacts. Once the cause is identified, NOC and Service Desk teams are alerted and through API integration with 3rd party service tools such as Remedy or ServiceNow, tickets can be automatically generated for rapid resolution.

Tenant Prioritization for SLA Management

By combining information pulled from the VMware SD-WAN Orchestrator and the business impact manager tool within VMware Smart Assurance, operators can use VMware Smart Assurance to assign each tenant and application/service a business impact and cost score. Higher weight typically would be placed on mission-critical applications/services and tenants that have contracted higher SLAs. If a high impact score is assigned, incidents that occur for these tenants or services will be flagged as a top priority for immediate resolution. In this way, MSP can confidently offer higher SLAs to their customers, driving higher revenues, knowing they are able to proactively manage their networks.

Learn More

For additional information about VMware Smart Assurance:

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