SevOne SDN Monitoring Solution 2.0: Automate the Operational Insight of Cisco ACI Based Infrastructure

What if you could automate the operational insight of your Cisco® Application Centric Infrastructure (Cisco ACI™) deployment as soon as new networks and services are deployed?

SevOne SDN Monitoring Solution 2.0 automates operational insight, helping unlock the value of application agility and data center automation that comes with the Cisco ACI solution.

Benefits

- **Ease the Transition to Cisco ACI** - Monitor your existing traditional network and new software-defined infrastructure from the same dashboard. Also, automatically monitor your new Cisco ACI infrastructure as soon as it is deployed.
- **Assess Business Impact:** Understand how infrastructure performance affects the applications and services available in your Cisco ACI deployment.
- **Extensibility** - Easily extend visibility to other critical data center assets such as firewalls and load balancers, or across the campus, wide area networks and branch offices.

Overview

The SevOne SDN Monitoring Solution 2.0 automatically detects physical and virtual endpoints as they come online and immediately monitors their performance in the context of how they were provisioned. Cisco ACI networks provide reliability, security, and optimal application performance using automation. When integrated with Cisco ACI, the SevOne SDN Monitoring Solution helps operators automatically understand both physical hardware and virtual network performance, providing a complete view of overall data center health.

Trends and challenges

Managing the performance of a large-scale network was challenging enough when the infrastructure was fairly static. Now, with Cisco ACI, customers can more easily scale out their networks by automating the provisioning of policies and paths through the network, the challenge of monitoring such a dynamic environment is even greater.

Transitioning from a legacy, static-based network to one that is policy-driven adds enhanced features and levels of security and availability. However, customers are often left with two networks—both of which need to be managed. SevOne SDN Monitoring Solution for Cisco ACI provides insights into both the legacy network and the new Cisco ACI fabric with performance metrics from each in a single dashboard. This interface helps our customers ensure fabric health and performance as the migration occurs.

How it works: Key features and components

Automated monitoring

This solution utilizes a new SevOne Data Collector that integrates directly with Cisco Application Policy Infrastructure Controller (APIC) for complete visibility into all the physical and logical entities in the Cisco ACI fabric. The integration enables operations and engineering teams to understand the health and performance of both the virtual and the physical components of a Cisco ACI deployment, along with the relationships between them, including ACI adjacency, APIC status, application profile, bridge domain, capacity, controller CPU, controller interface, controller memory, endpoint, endpoint group, virtual machine, fabric, fabric group reference, fan tray, hypervisor Network Interface Card (NIC), leaf/spine CPU, leaf/spine memory, loose link, loose node, management NIC, physical interface, power supply, private network, sensor storage, supervisor card, switch capacity, tenant, tunnel, and virtual machines.

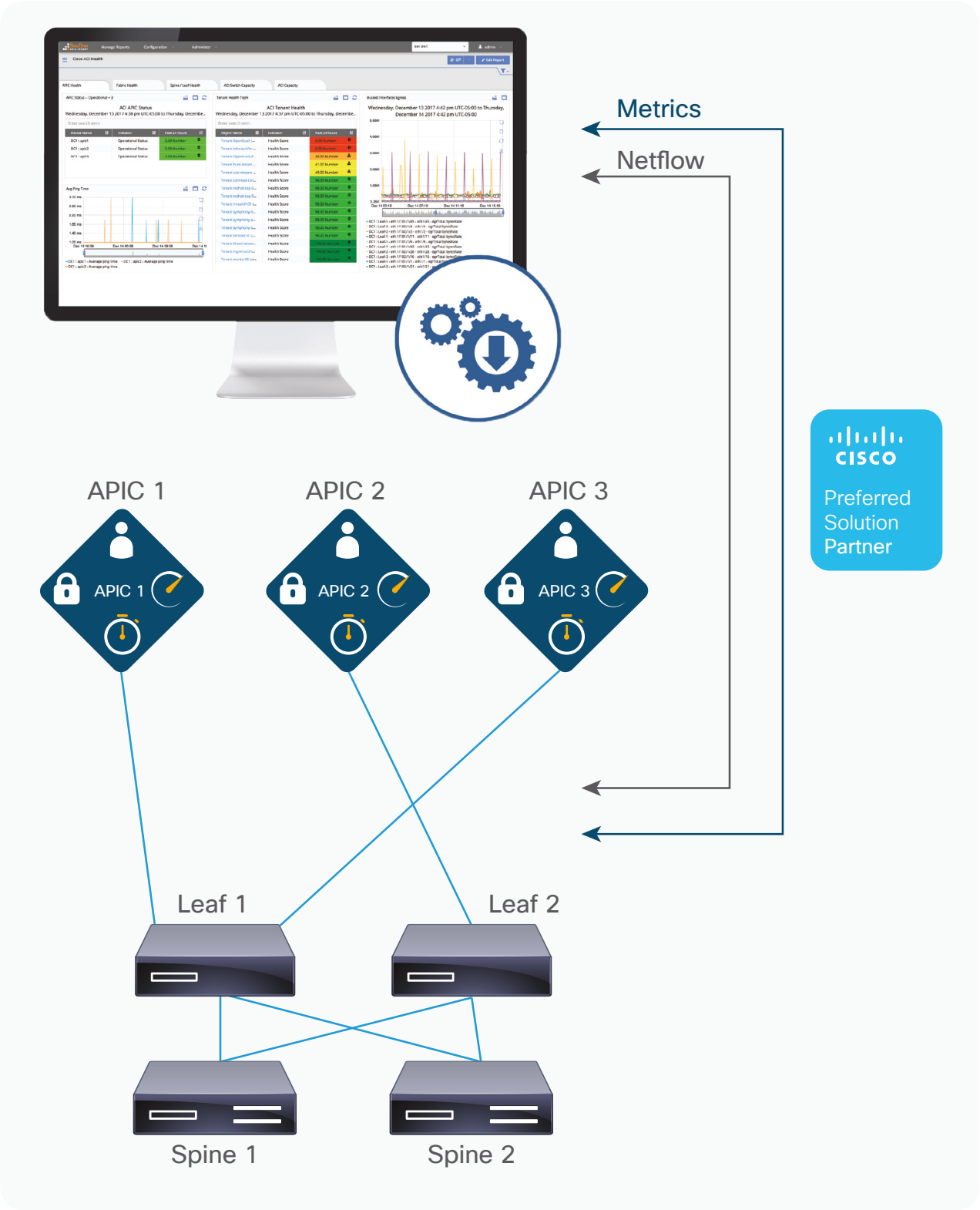
Standard dashboards

The solution comes with a series of standard dashboards for automated operational insight of your Cisco ACI infrastructure, including Automated Monitoring and Topology, Dynamic Tenant-Driven Visibility, Tenant Health Scores with Historical Data and Tenant Health Heatmap, Application Network Profile and Endpoint Group Faults, APIC Cluster Status, Automated Baselines, ACI Fabric and Capacity Analysis, and ACI Fabric and Metadata Enrichment.

Scale to meet business needs

Leveraging a SevOne Data Collector for each APIC cluster, the SevOne SDN Monitoring Solution for Cisco ACI can scale with Cisco ACI deployment, no matter how large the data center. All the data collected across multiple APIC clusters is then available in real time on a dashboard or in a performance alert. Performance alerts can be posted when a metric is above or below its normal value or outside a tolerance range configured manually.

Figure 1. Integrating SevOne SDN Monitoring Solution and Cisco ACI



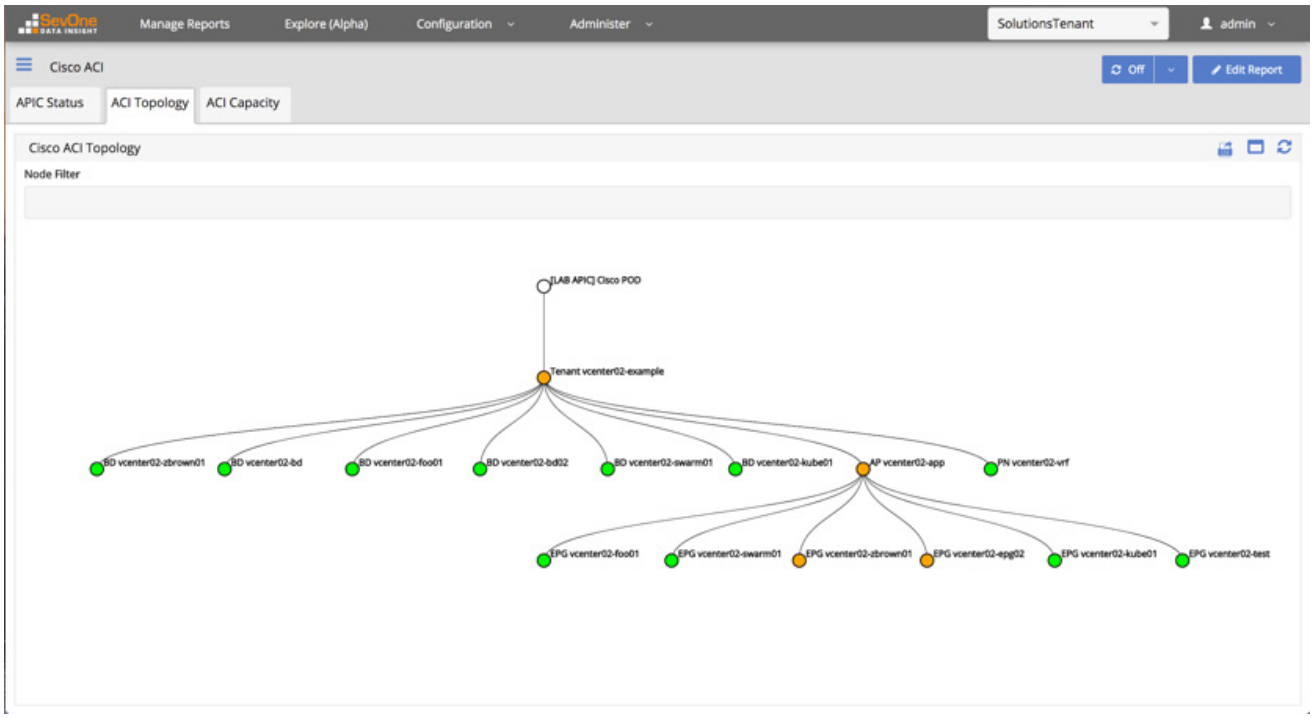
Use cases

Together, the Cisco ACI solution and SevOne SDN Monitoring Solution support a variety of use cases for enterprises, managed service providers, and communication services providers (Table 1).

Table 1. Use cases

Organization	Use case
Enterprises	• Reduce the time needed to build out the network • Understand the current environment: Single pane of glass to visualize both legacy network and Cisco ACI fabric • Continuously monitor the health and performance of Cisco ACI fabric
Managed service providers and communication services providers	• Monitor tens of thousands of physical ports with low-latency data transit among all of them • Allow multiple customers and many different applications to monitor the network with complete isolation • Collect all the health and performance data for the Cisco ACI fabric and present it per customer or per application • Allow a platform administrator to see all the required performance statistics on a single screen

Figure 2. Sample SevOne dashboard for Cisco ACI data centers



Why adopt the SevOne monitoring solution for Cisco ACI?

The integration of the SevOne SDN Monitoring Solution and Cisco ACI enables customers to confidently deploy Cisco ACI infrastructure with:

- Complete visibility and automated insights into the Cisco ACI infrastructure and existing data center network on one system
- Reduced need for troubleshooting from automated operational insights and continuous monitoring of the Cisco ACI fabric
- Actionable information to make decisions on upgrades or network capacity

Together, the SevOne SDN Monitoring Solution and Cisco ACI enable:

- Faster application deployment
- Improved Mean Time To Repair (MTTR)
- Improved Service-Level Agreement (SLA) compliance
- Increased business agility from confidence in deploying new applications and services
- Increased internal/external customer satisfaction with applications and services delivered by data center

For more information

To learn more about the SevOne SDN Monitoring Solution for Cisco ACI, please visit www.cisco.com/go/aci and SevOne.com.

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