Monitoring Cisco ACI

Advanced Visibility for the Multi-Cloud and Hybrid Data Center

The advent of Software-Defined Networking (SDN) and the Software Defined Data Center have completely changed the modern data center landscape. While the software defined data center adds great flexibility and agility, there is a trade-off in terms of operational visibility and supportability, due to the inherent complexity of this technology. Cisco's Application Centric Infrastructure (ACI) is instrumental in making the software defined data center a mainstream option for large enterprise organizations, driving greater simplicity in virtualized networks by focusing on the application and automating all of the underlying network connections.

Challenge

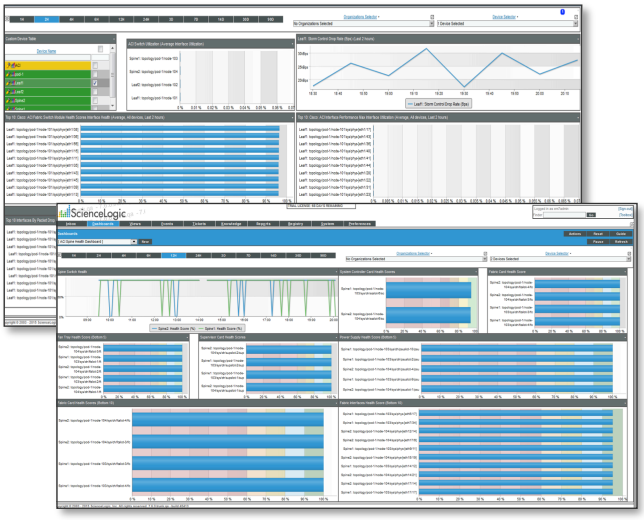
Cisco ACI reduces the heavy lifting network engineers must do to get a network up and running. Gone are the days of manually establishing Access Control Lists (ACLs) — all those activities are automatically handled by ACI behind the scenes. However, by extracting the network set-up from a network engineer's regular activities, troubleshooting and fault isolation become much more complex.

Solution

ScienceLogic's SL1 Automation Engine for AIOps combines a hybrid IT monitoring platform with extensive automation. SL1 automatically discovers all the elements of a Cisco ACI system – including Multi-Pod and Multi-Site implementations, including spines, leafs, APICs, tenants, applications, EPGs, bridge domains, contracts, etc. It maps ACI components onto visual topology views, applies best practice monitoring templates, and populates a set of out-of-the-box dashboards.

Operational Readiness and Proactive Support

By monitoring and providing alerts and specific views into such things as interface traffic and packet loss, ScienceLogic's SL1 platform ensures network performance issues are a thing of the past. Further, powerful customized dashboards delivered to both operations and business users ensure IT always knows the state of the ACI system while business users have a full grasp for the value IT is providing. This enables the operations team to provide exceptional support to the software defined data center as soon as ACI is operational.



Simplify IT Monitoring — One Screen and Solution to Monitor Your Entire Data Center — Including Legacy Infrastructure

Networks don't operate in a vacuum and IT departments can't monitor and manage infrastructure on a piecemeal basis. Jumping between different management platforms just to keep an IT infrastructure up and running creates an inefficient IT workforce. By monitoring all your IT infrastructure including power, network, servers, storage, applications, and public cloud services along with your ACI system, ScienceLogic SL1 gives organizations the ability to ensure service performance and fix IT infrastructure issues — before users are impacted.

Reduce Downtime

Automatic Dependency Mapping for Cisco ACI and the IT Elements that Use It

ScienceLogic automatically detects and dynamically maps which virtual machines are currently used for which applications in your ACI system. This allows organizations to focus first on the applications and their performance. If an application is performing poorly or has spotty availability, IT personnel can quickly diagnose whether the issue is with the application, virtual machine, hypervisor, or ACI network element — using intuitive, graphical maps. IT can now confidently ensure applications are always operating at peak performance with continuous availability.

Sample Coverage

Element	Sample Data Collected
APIC	APIC Status and Configuration Information, Fault Counts and Faults
ACI	Component Counts, Total Fault Counts, Authentication Counts, Faults
Leafs and Spines	Health Scores, Interface Performance Counts, Switch Module Fault Counts, Switch Module Health Scores, Switch Fault Counts, Faults and Configuration Information, Relationships to Hypervisor
Tenants	Health Scores and Fault Counts, Faults
Application Network Profiles	Health Scores and Fault Counts, Faults
Endpoint Group	Health Scores and Fault Counts, Client Endpoint Information, Faults
Bridge Domain	Health Scores and Fault Counts, Bridge Configuration Information, Bridge Subnet Information, Faults
Private Networks	Health Scores and Fault Counts, Configuration Information, Faults
Service Graphs	Health Scores and Fault Counts, Faults
Service Nodes	Health Scores and Fault Counts, Faults
Device Cluster	Health Scores and Fault Counts, Faults
Service Device	Health Scores and Fault Counts, Faults
Multi-Pod Support	
Multi-Site Support	

About ScienceLogic

The ScienceLogic SL1 platform enables companies to digitally transform themselves by removing the difficulty of managing complex, distributed IT services. We use patented discovery techniques to find everything in your network, so you get visibility across all technologies and vendors running anywhere in your data centers or clouds.

The power of our solution is that we collect and analyze millions of data points across your IT universe to help you make sense of it all. We automatically provide a complete inventory, track dynamic relationships between technologies, notify you about issues needing immediate attention, and enable you to initiate corrective actions – all in real-time. We also collaborate with you to integrate the platform with the rest of your IT management ecosystem so you can share data and automate your IT processes.