

Monitoring Cisco ACI

Advanced Visibility for Software-Defined Networks

Software-Defined Networking (SDN) changed the game for networking by separating the control plane from the data plane. However, in practice, SDN was difficult to implement. Cisco responded to that challenge by creating the Cisco Application Centric Infrastructure (ACI) and taking SDN mainstream. In effect, Cisco was able to elevate SDN and drive greater simplicity in virtual networks by focusing on the application and automating all of the underlying network connections.

Challenge

Cisco ACI is great for reducing the amount of heavy lifting network engineers have to do to get a network up and running. Gone are the days of manually establishing Access Control Lists (ACLs) — all of 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 finding the cause of network issues has become much more complex.

Solution

ScienceLogic's hybrid IT monitoring platform automatically discovers all of the elements making up your Cisco ACI system including spines, leafs, APICs, tenants, applications, EPGs, bridge domains, contracts, etc. It maps your ACI components onto visual topology views, applies best practice monitoring templates, and populates a number of out-of-the-box dashboards.

Ensure Network Performance – Spot Potential Bottlenecks and Network Issues Before End Users Notice Them

By monitoring and providing alerts and specific views into such things as interface traffic and packet

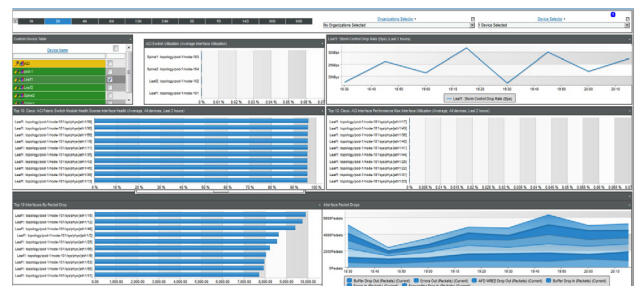
KEY FUNCTIONALITY

- Automatically discover, monitor, and map your ACI enabled network and the dependencies between your ACI elements and the rest of your infrastructure.
- Monitor your entire infrastructure, including your ACI system from one solution, using one codebase.
- Benefit from the most comprehensive monitoring coverage for Cisco ACI on the market today, spotting potential bottlenecks before they happen.

loss, ScienceLogic's 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.

Simplify IT Monitoring – One Screen and Solution to Monitor Your Entire IT Stack 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



Powerful dashboards showing key trending information such as where most packet drops are occurring and which interfaces are most heavily utilized.



keep an IT infrastructure up and running creates an inefficient IT workforce. By monitoring all of your IT infrastructure including power, network, servers, storage, applications, and public cloud services along with your ACI system, ScienceLogic gives organizations the ability to ensure service performance and fix IT infrastructure issues — before users are impacted.

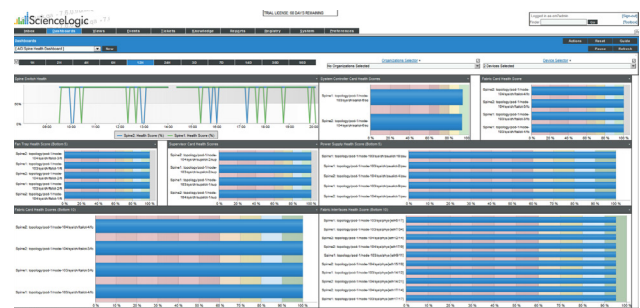
Reduce Downtime – Automatic Dependency Mapping of Cisco ACI and the IT Elements that Use It

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 (Please see PowerApps Page for Detailed Listing)

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 Module 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 Groups	Health Scores and Fault Counts, Client Endpoints 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



Key trending information for Spine health is available in out-of-the-box dashboards, giving your team the information they need to ensure Spine health in one glance.