

Monitoring the UCS Platform

How Do You Monitor Thousands of VMs in Cisco's UCS?

Cisco's Unified Computing System (UCS) is a next-generation data center platform that unites computing, networking, storage access, and virtualization into a cohesive system. Along with UCS's many benefits, however, its flexibility creates numerous management and monitoring challenges. For example, since UCS's scalable architecture can accommodate up to 320 blade servers in a single system with each blade running a hypervisor, UCS can scale to support thousands of virtual machines (VMs). The problem: how do you monitor and manage all those VMs?

Instant — View All Cisco UCS Infrastructure at Work in Real Time

ScienceLogic's monitoring solution offers Cisco UCS users a single, unified view into thousands of data center elements, including chassis, fans, blade servers, network components, physical and virtual machines, and elements in the cloud. ScienceLogic's dynamic mapping automatically displays all components of your UCS infrastructure on intuitive, real-time dashboards to let you examine everything in granular detail:

- Auto-discover, map, and monitor all system components and the relationships between them.
- Dynamically update relationships between UCS components as they change and adjust to your workload needs.
- Define and apply specific policies to each component (such as temperature monitoring within each UCS blade).
- Correlate events to the specific components to which they apply (such as mapping a fan failure to a specific UCS chassis).

KEY BENEFITS

- Manage your Cisco UCS architecture more efficiently, reducing costs and increasing customer satisfaction, no matter how large it grows.
- Automate the monitoring, configuration, and deployment for UCS chassis components reducing the chance of errors in configuration and deployment.
- Ensure SLA compliance with predictive monitoring and correlated alerts to prevent downtime and reduce outage duration.
- Embrace new technologies like Cisco UCS without fear of how they will be managed, driving competitive differentiators through technology.
- Report on performance and availability using iPad- and tablet-ready dashboards, giving your staff the ability to react to issues from anywhere.



Our simple and easy to create dashboards allow for high-level views of your Cisco UCS platform's performance from multiple angles along with a listing of events and tickets associated with the underlying components.



Integrated — Handle Any Environment, Right Out-of-the-Box

Instead of juggling multiple tools for different environments, you can use ScienceLogic's solution to monitor and manage Cisco's UCS platform instantaneously, right out-of-the-box, with a minimal learning curve, for any mix of physical, virtual, and cloud components.

Our intelligent, automated monitoring and management system is fully integrated end-to-end, giving you insightful, intuitive dashboards with accurate, actionable views. Our system builds on its powerful dynamic component mapping for Cisco UCS to help you improve your IT operations efficiency.

Intelligent — ScienceLogic's Feature-Rich Solution Monitors and Manages All Aspects of the Cisco UCS Platform

Every UCS Manager Is Intelligently Discovered and Monitored

ScienceLogic creates a device in its asset store for every Cisco UCS Manager based on its network signature, and creates and maintains hierarchical relationships between UCS components and associated sub-components, including:

- Chassis
- Blade servers
- Fabric switches and fabric extenders

Collection Uses Standard Interfaces for Benchmarking

To minimize load on a UCS Manager and to optimize performance, the ScienceLogic collector connects to the UCS Manager transactional XML interface.

Configuration Profiles Are Collected and Archived

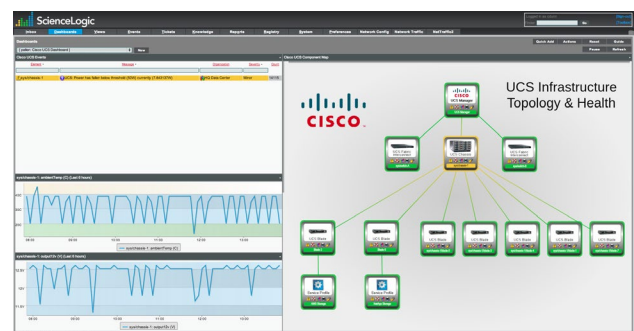
ScienceLogic collects and archives many configuration profiles in its asset store, such as:

- Chassis ID and Power Supply, blade slot occupied, power, and fan status
- Blade BIOS, firmware, CPU (cores), memory, disk, and interfaces
- Fabric Interconnect ID, firmware, power, fan status, and interfaces

Performance Metrics Are Constantly Monitored and Reported

Due to the converged nature of the Cisco UCS platform, ScienceLogic continuously monitors and reports on performance metrics in real time, such as:

- Chassis power consumption, fan RPM, temperature, and voltage
- Blade IO Temperature, and rear temperature
- Fabric Interconnect for each interface, including Tx bytes, Rx bytes, resets, excess collisions, discards, Switch CPU load, memory utilization, power, voltage and fans



You can view not just the topology of your Cisco UCS platform, but also drill into specific components to monitor and measure performance, all in the same view.



Events Are Predicated on Best Practices and Baselines You Define

ScienceLogic monitors your Cisco UCS environment 24/7, and triggers alerts based on industry best practices and automated baselines you define for various elements, such as:

- Chassis temperature, fan failure, voltage over/under, power redundancy, and power supply error
- Blade temperature, interface error state, and interface utilization
- Fabric Interconnect CPU utilization, memory utilization, fan RPM, temperature, fan failure, voltage, power redundancy, and power supply error

Multi-Tenancy Enables Individualized Monitoring and Accounting

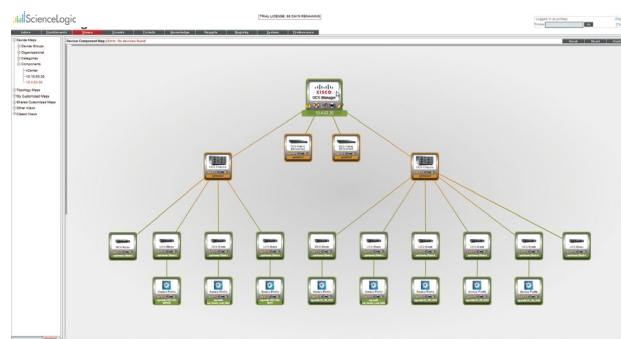
ScienceLogic's True™ Multi-Tenancy capability enables you, as a service provider or an enterprise, to use a single instance of our solution and a single console in your NOC to monitor and manage services for individual customers, departments, business units, or geographies, while keeping each entity's data secure and separate from others.

Dashboards and Reports Give You — and Others — Instant Insight

You can easily create iPad-ready, client- and/or departmental-branded HTML5 portals to offer secure views into the operation of the services being managed for your staff and customers alike. This level of transparency can foster unprecedented client confidence in your service delivery and SLAs.

ScienceLogic Enjoys Sponsored Validation for Cisco UCS

Cisco has conferred Sponsored Validation for the Cisco UCS platform on ScienceLogic because our monitoring of dynamic, heterogeneous compute environments — from the data center to the cloud — make our solution well-suited for the Cisco UCS environment which combines leading solutions, infrastructure, and tools from multiple vendors.



ScienceLogic's intuitive, real-time dashboards of the Cisco UCS topology will give you summary service or group views of availability and performance for all the underlying UCS components supporting your IT services.