EMA Quick Take:
Cisco Launches AI-Enabled
Cloud-Managed Infrastructure

An Enterprise Management Associates
Impact Brief

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Introducing a Consumption-Based IT Model for the Corporate Data Center

Cisco has launched Cisco Intersight (formerly known as Project Starship) to offer developers public cloud–like access to data center resources while lowering IT OPEX. Intersight aims to consolidate operations for on-premises infrastructure into a centralized SaaS-based management plane that ties together, and will eventually absorb, the capabilities from Cisco UCS Manager, HyperFlex, and Integrated Management Controller (IMC) Supervisor. Intersight will initially be hosted by Cisco, but will be available as an on-premises or partner-hosted appliance in the future.

Intersight offers detailed performance metrics, telemetry, and inventory data for corporate IT to optimally target proactive maintenance and root-cause analysis tasks. Combined with machine learning capabilities, Intersight will provide guidance and, if desired, automatic issue resolution. At launch, Intersight connects to UCS Manager, IMC, and HyperFlex. It is safe to assume that Cisco will soon offer UCS Director integration.

Should You Care about the Release of Cisco Intersight?

Enterprise Management Associates (EMA) believes that, yes, you should care, as Intersight aims to provide a smooth transition from Cisco's current set of management tools toward a single cloud-based management layer. In the future, Intersight will replace more and more of the capabilities of UCS Manager, UCS Director, and IMC Supervisor, as well as UCS Central, making the SaaS-control plane more comprehensive and its analytics more powerful. Ultimately, Cisco aims to enable any organization to create their own low-OPEX and developer friendly "megacloud" across their data centers.

CISCO INTERSIGHT

Primary Value Proposition

Simplified infrastructure management through centralized SaaS-based administration and machine learning–driven optimization and issue remediation

KEY FACTS

Simplified Management: Intersight abstracts all management point products into one centralized layer.

API Enabled: All Intersight capabilities are available to developers and partners via APIs.

Centralized Analytics: The Intersight vision of low-OPEX computing is enabled through advanced analytics and machine learning.

Unified Policy Management: Intersight provides admins with a central layer to ultimately manage all data center policies.

Proactive Guidance: Using analytics of telemetry and performance data, Intersight provides a list of optimization and maintenance tasks for the admin to execute.
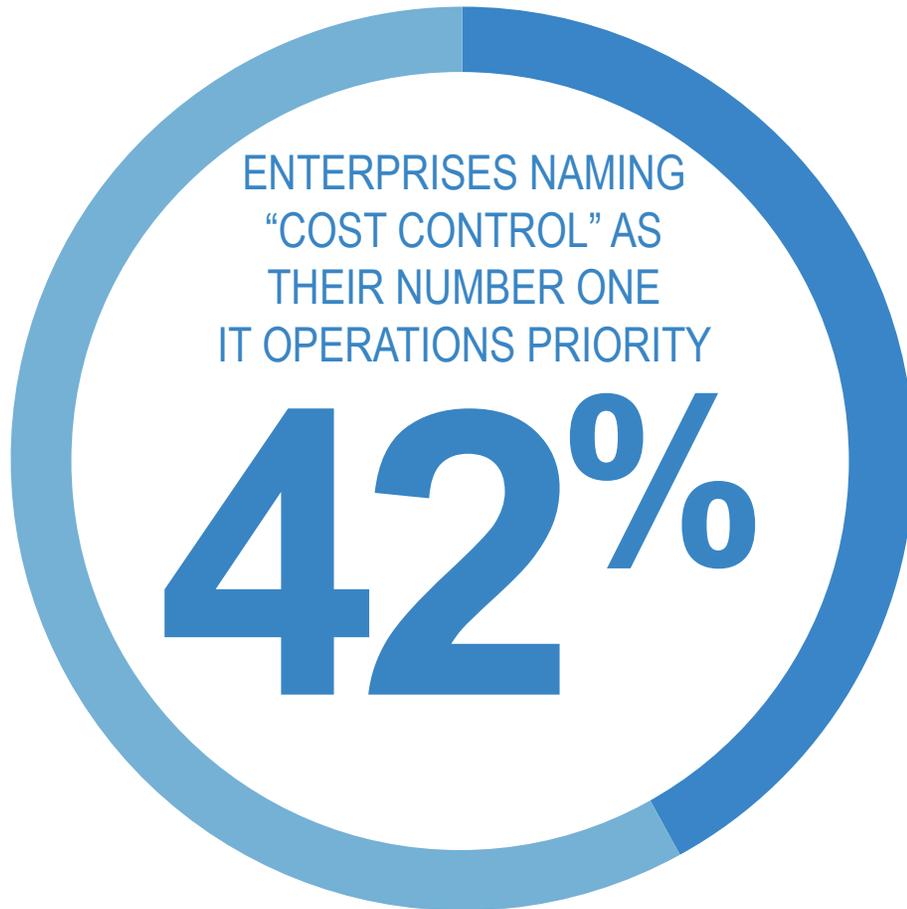
Enhanced Support: When Intersight detects an incident the platform automatically uploads the required log data for the Cisco Technical Assist Center to analyze.

Configuration: Option to deploy a preconfigured and use case–specific environment that follows best practices

Dependency Checks: Checking of database connections, Active Directory configuration, and connection to external solutions

Compatibility: Matrix showing which VMware products the new versions will work with

Resume: Ability to resume failed installation with one click once the issue is fixed

## Operational Complexity Prevents Success With DevOps and Containers

ENTERPRISES NAMING "COST CONTROL" AS THEIR NUMBER ONE IT OPERATIONS PRIORITY

42%

ADOPTION BOTTLENECKS

37% Operational Complexity

37% Lack of Management and Monitoring Systems

30% Skill Gap

#2 Integration of Management and Monitoring Tools Is the Second-Highest Priority In Hybrid Cloud

31% Management and Monitoring are a Key Hybrid Cloud Pain Point

37% Do Not Have a Single Pane of Glass to Monitor Their Devops Pipeline

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The Intersight architecture is based on Cisco's Open Connector Framework, which provides unified access to all Intersight components through an OData RESTful API. The Intersight Portal and external SDKs and automation tools—Ansible, Chef, Puppet, or Python—will soon be able to leverage this API to provision, manage, and optimize the underlying data center infrastructure. Today, this works mainly for Cisco infrastructure, but Cisco encourages its partner networks, such as Pure, NetApp, and IBM, to provide connectors for their own hyperconverged systems. On the software side, EMA expects plugins for popular server automation, cloud and container management frameworks, and service management solutions to become available shortly.

This extensible architecture is critical to establish Intersight as the central operations hub. This optimizes the impact of machine learning–driven analytics for proactive maintenance and automated issue resolution.

In short, Intersight is designed to be a conduit that accelerates application-centric infrastructure management and lowers OPEX through increasingly automated issue resolution.
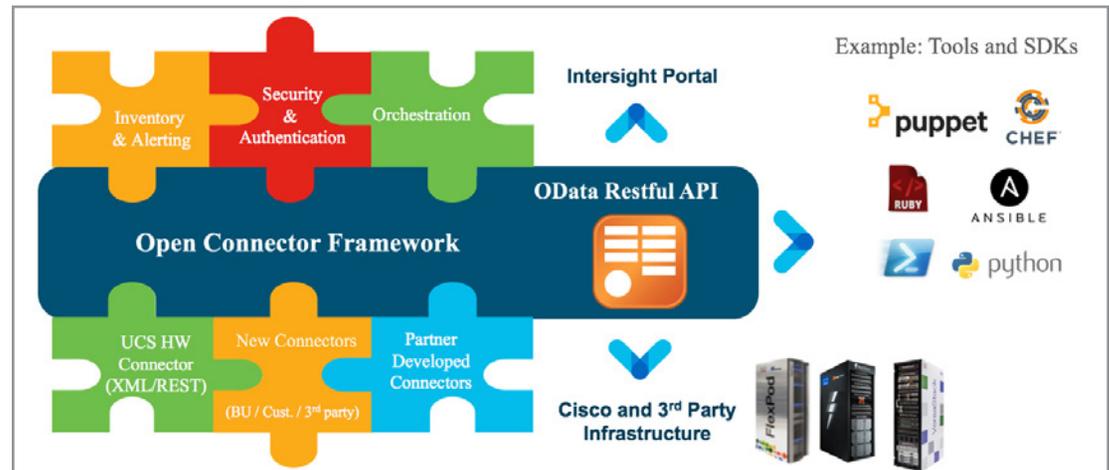
Intersight Represents The Central Conduit Between Data Center And Application.
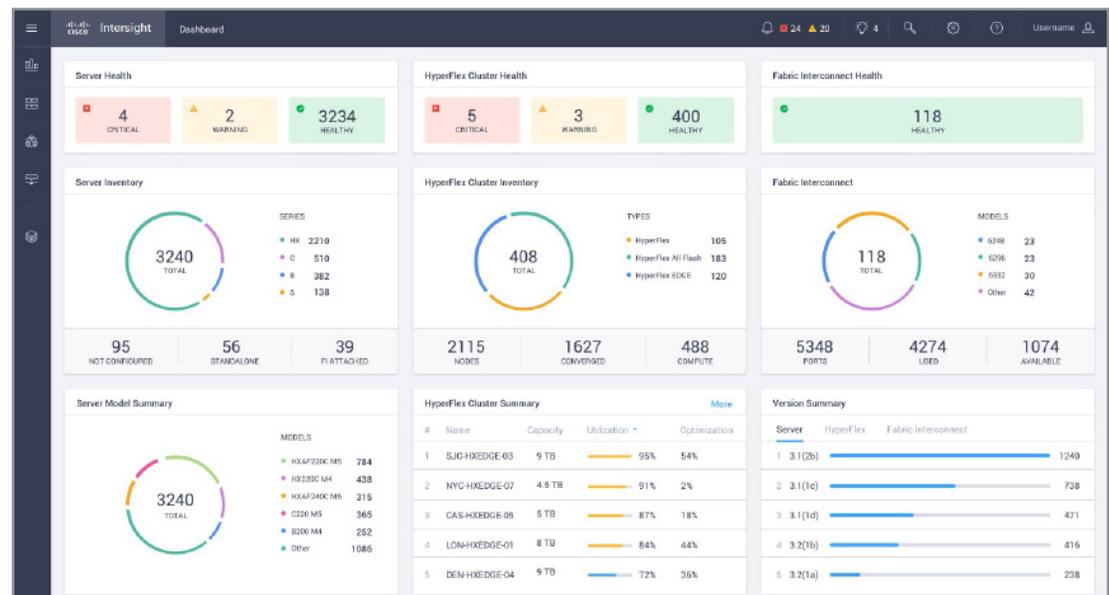
Intersight Shows The Health Of Clusters, Servers, And Fabric Interconnects Across One Or More Data Centers.

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First Look: Unified Operations Management

Today, Intersight works with UCS Manager, Hyperflex, and IMC. Admins can drill down from the cluster level to a view showing inventory, health, and service profiles of each individual server.

## Activities Supported in Intersight

Viewing issues, warnings, and health metrics: Admins can view alerts and warnings across data centers. Filtering and searching capabilities are included to help identify all affected resources.

Conducting maintenance tasks: Tasks such as firmware and driver updates and policy assignments can now be completed through Intersight. And the platform will eventually become a one-stop shop to manage data center infrastructure.

Launching UCS Manager: Intersight provides access to UCS Manager from anywhere, with no need for local network access. This means that admins can jump straight from Intersight to the UCS Manager screen if they require more detailed information or need to perform maintenance tasks that are not yet available in Intersight.

Managing servers and service profiles: In addition to viewing server details and inventory, admins can search for individual service profiles, firmware versions, health problems, and any other kind of metadata.

Auditing logs: Centralized data center management is every auditor's dream as this enables the management platform to provide fully comprehensive audit reports.
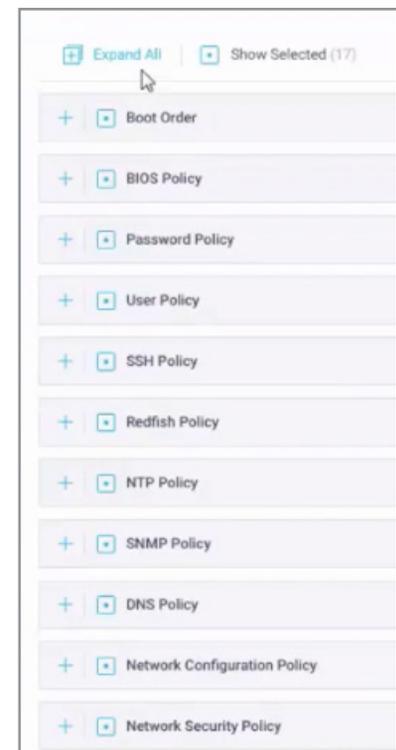
Intersight offers centralized policy management.
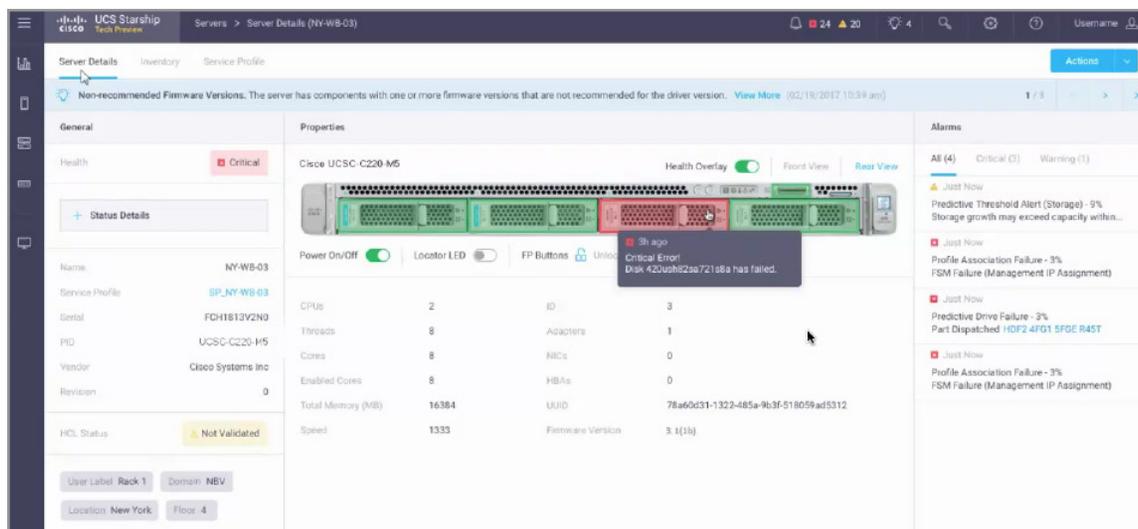
Administrators can drill down to the server level.

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Strategy

Cisco's strategy of collapsing its portfolio of infrastructure management tools into one central SaaS platform results in the following key advantages:

Decrease in operational complexity that comes with a higher degree of compliance and security

Optimal efficiency of machine learning–driven monitoring, root-cause analysis, and proactive maintenance

Rapid deployment of hyperconverged clusters with the HX Installer

Continuous rollout of new capabilities without the need for customers to upgrade any software

Future: **OEM integration of Turbonomic** to further increase resource efficiency

Future: **Integration with Cisco CloudCenter** for unified hybrid cloud management

Final Words

Cisco Intersight shows the company's determination to provide a simplified and consumption-based cloud experience that will appeal to developers and DevOps groups. Traditional IT operators receive a unified management platform to cost-efficiently manage and optimize their infrastructure.

KEY PAIN POINTS IN 2017

42% COST

36% SPEED

32% ISSUE PRIORITIZATION

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