Cisco Intersight
Infrastructure Service: Automation
At-a-Glance
Today's digital economy has fundamentally transformed the pace and expectations of IT operations teams charged with delivering outstanding digital experiences using compute, storage, and networking infrastructure. Yet yesterday’s manual, device-centric management tools prevent IT teams from supporting today's rapidly changing infrastructure deployments that extend to the cloud and edge environments. IT staff must perform the same manual tasks on multiple devices, which is time-consuming and error-prone, results in inconsistent application of policies and configuration drift, and locks staff into low-value tasks.

Traditional infrastructure management cannot keep up.

Automating IT operations is one of the best ways to deliver applications and infrastructure faster and reduce operational risk with standardization. At the same time, automation empowers your team to eliminate manual, repetitive tasks so they can focus on strategic work.

Cisco® Intersight Infrastructure Service (IIS), a module of the Cisco Intersight IT operations platform, helps your team automate IT operations tasks and complex workflows, OS installation, replacement part orders and shipping, and personnel and infrastructure management procedures using the ServiceNow IT Operations Management (ITOM) platform.

Benefits

- Deliver apps and infrastructure faster—anytime and anywhere
- Reduce operational risk through standardization
- Simplify cross-domain orchestration
- Resolve issues faster
- Deliver OpEx savings

Automate deployments, configuration, workflows, and day-0 to day-N tasks

Using Intersight Infrastructure Service, you can orchestrate infrastructure across on-premises and public clouds. The workflow designer lets you create and execute complex workflows using a drag-and-drop tool. You can start from a library of curated tasks and workflows or design your own workflows. Not only does this help you work faster, but it also leverages domain knowledge through reusable tasks designed by experts. Workflow Designer is so flexible that it allows you to use your existing automation from third-party tools. If you already use Red Hat Ansible, HashiCorp Terraform, or other automation tools, you can incorporate your existing automation from them into IIS using generic executors. The Intersight API and Software Development Kits (SDKs) allow Intersight automation to be called from other management systems.
Automated OS installation

Operating System (OS) installation is a time-consuming and mundane task. When done manually, and depending on the OS, it can take 30 minutes to a couple of hours to perform on a single server. With IIS, automated OS installation is executed in a single click through certified response files that follow a standard OS installation path, which reduces operational risk. Automated OS installation lets you scale from a single server to hundreds of server instances.

Intersight classifies operating systems in two tiers. Tier 1 currently includes Microsoft Windows Server, Red Hat Enterprise Linux, and VMware ESXi, and Tier 2 includes CentOS, Citrix Hypervisor, Oracle Linux, SuSE Linux, and Ubuntu Linux operating systems. When revisions occur on a Tier-1 system, automated OS installation is available for it on day-0. When new versions of Tier-2 systems are available, automated OS installation is available with the next Cisco Unified Computing System (Cisco UCS) Platform software release. By automating OS installation on either Tier-1 or Tier-2 systems, you can reduce operational risk, accelerate time-to-service for your infrastructure, and free up your team to deliver OpEx savings.

Automate parts replacement with proactive RMA

A faulty or failed hardware component can bring workloads to a grinding halt. Rather than risk downtime from identifying a faulty component after it has failed, you can eliminate risk by detecting a faulty part proactively. IIS automatically detects faults on Cisco hardware under Intersight management*, generates service requests through the Cisco connected Technical Assistance Center (TAC), and collects related log files. If Return
Material Authorization (RMA) is determined to be the best solution, IIS sets up RMA in the ordering systems, and the automated assistant (Sherlock) sends the user an email with instructions to complete the replacement part shipment. The RMA action from the identification of the device fault to part replacement notification e-mail is completed in less than an hour. Analysis of our case-resolution time data shows that Proactive RMA resolves issues on average two days faster than when done manually.

Resolve issues faster using the Service Graph Connector for Cisco Intersight

Cisco Intersight integrates with your ServiceNow IT operations management ticketing systems through the Service Graph Connector for Cisco Intersight (available on the ServiceNow store). The connector automatically pulls information from Intersight-managed infrastructure into ServiceNow so you can predict, prevent, and resolve service outages faster.

The connector provides automatic data collection from all Cisco Intersight-connected UCS, network, storage, and virtualized infrastructure, including relationships across them in Service Graphs format. This gives you a complete view of your environment, including complex deployments that span multiple locations. By using Intersight as a discovery source, you can see all the relationships between virtual machines, servers, chassis, and the network fabric in ServiceNow. This helps you make decisions and take actions across IT stacks.

The integration also automatically creates ServiceNow tickets for any faults and alarms raised by assets under Intersight management. ServiceNow ticket routing policies can assign the right maintenance personnel to the respective issues, resulting in speedier resolutions.

You know you are being proactive when an engineer replaces a hard drive that was displaying anomalies before it fails and causes problems downstream.

- Distinguished engineer, global technology conglomerate

*See full list of hardware components supported by Proactive RMA.

Get started today

Learn more about automation and infrastructure lifecycle management with Cisco Intersight Infrastructure Service or view an on-demand demo.

Do you have automation ideas or questions you’d like to share with your peers? Or would you like sample tasks and workflows? Visit the Orchestration DevNet Community and join the conversation!