

Cisco Intersight Infrastructure Service

IT Operations. Simplified

How valuable would it be if you could simplify IT operations to drive innovation and growth?



The need for IT operations as-a-Service

All day, every day, your organization must ensure it is delivering the digital experiences your customers expect. Providing positive digital experiences can instantly drive brand equity and growth, whereas failing to do so can negatively impact the bottom line.

Yet threats to digital infrastructure are increasing, IT departments are plagued by staffing shortages, and IT teams are struggling to find efficiencies to take on revenue-generating responsibilities outside the traditional scope of IT. Moreover, unprecedented demands for digital products and services drive demand for the computing resources that fuel them, which increases energy consumption. Regulations, mandates, and corporate Environment, Social, and Governance (ESG) programs are being established to put checks on data-center power and related IT operations.

As a result, the pace and expectations of IT operations teams charged with providing the compute, storage, and networking infrastructure to deliver digital experiences has been fundamentally transformed. Yesterday's

data-center-centric IT operations models and device-centric management tools cannot keep up with today's dispersed and rapidly changing, energy-hungry infrastructure requirements.

To overcome these challenges, IT departments are adopting IT operations solutions delivered as-a-service, such as Cisco Intersight® Infrastructure Service (IIS). Built on the [Cisco® Intersight IT operations platform](#), Cisco Intersight Infrastructure Service is an infrastructure lifecycle management solution that helps IT operations teams see, control, and automate their compute, storage, and networking infrastructure—wherever it is, from one place—to accelerate operations and drive growth.

Benefits of Cisco Intersight Infrastructure Service

- **Accelerate operations:** deploy, configure, and maintain infrastructure in minutes—at scale— anytime, anywhere, from one place.
- **Bolster security:** apply strict security standards across infrastructure operations, log all actions taken on your infrastructure, and continuously identify and mitigate potential security threats.

- **Strengthen compliance:**
 - Ensure consistent server configuration across your global infrastructure to identify and eliminate configuration drift.
 - Ensure consistent adherence to policies through automation, templates, and cross-domain management.
- **Increase uptime:** address potential hardware, OS, and software issues before they impact users, or minimize them when they occur.
- **Improve productivity:** reduce time spent on support, maintenance, and operation of multiple infrastructure domains, including networking, compute, storage, virtualization, and integrated systems.
 - Reduce troubleshooting by 45–60 minutes through automatic log collection and analysis.
 - Close RMA cases up to two days faster.
- **Monitor and control energy use:** monitor Cisco UCS® server power consumption and manage server energy use through policies at the server and chassis levels.

Keep pace with accelerated IT operations

Keeping up with the fast pace of IT demands cannot be done through traditional IT operations. Device-centric infrastructure operations create silos and complexity, preventing visibility into your overall infrastructure and compounding the number of tasks your staff must perform. Manually operating hundreds, or even thousands, of devices—along with ensuring their continuous security and compliance—complicates operations. It also increases security risk. As the number of devices and threats continue to grow, so do the number of attack surfaces.

But IT teams are stretched too thin to stay ahead of security threats and respond timely across their expanding infrastructure. Too often, you are saddled with repetition of low-value work: performing the same manual tasks on multiple devices. This is not only time consuming and error-prone, but it also results in inconsistent application of policies and configuration drift. In addition, traditional IT operations tools that do not have awareness of or control over energy consumed by the infrastructure they manage cannot meet today's requirements.

How Cisco Intersight Infrastructure Service works

Keep pace with accelerated IT operations by simplifying infrastructure lifecycle management with Cisco Intersight Infrastructure Service. IIS consolidates infrastructure operations into one solution, gives visibility and control across your entire infrastructure in one place, and enables automation so you can execute repeatable tasks and workflows fast and easily.

Cisco Intersight Infrastructure Service strengthens security through best practices in IT operations and ongoing monitoring and risk mitigation, lets you monitor and control server power, and speeds up support to resolve issues faster. IIS is designed with an open API and SDKs that plug into third-party infrastructure, giving you the freedom to create the toolchain that makes sense for your needs. It also eliminates the need to manage your IT operations toolset through continuous, automatic updates.

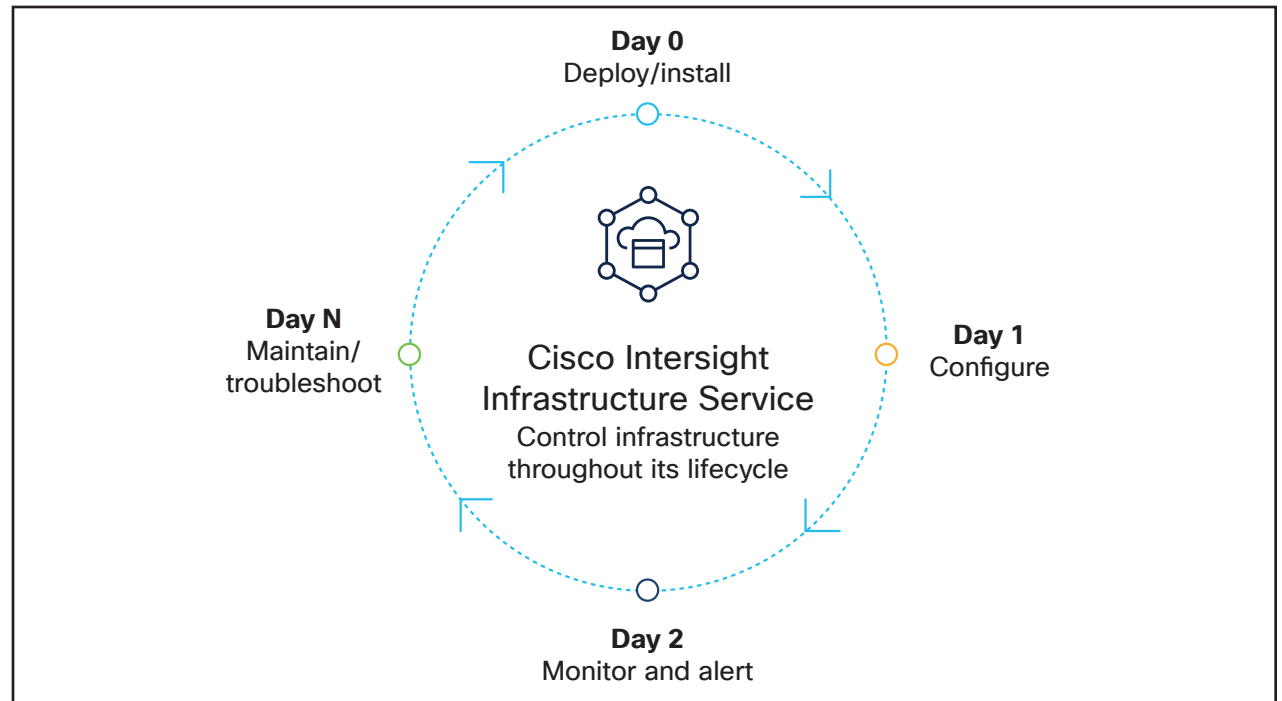


Figure 1. Simplify operations of your global infrastructure throughout its lifecycle with Cisco Intersight Infrastructure Service

Key capabilities:

- **Infrastructure lifecycle management:** manage Cisco UCS, converged, and hyperconverged infrastructure from initial provisioning through ongoing maintenance to the end of its lifecycle from one place.
- **Inventory:** see your global Cisco and third-party infrastructure, with HCL support for Cisco® compute and converged infrastructure solutions.
- **Health and performance:**
 - See real-time and selected historical data of Intersight-connected infrastructure to troubleshoot problems in depth, forecast, and budget resources, and find intrinsic correlations in dispersed data.
 - Identify UCS domain connectivity issues through a visual representation of components in an Intersight-managed UCS domain and the connections and relationships between them.
 - Detect potential hardware failures and compatibility issues, track support contract status, and identify and remediate configuration drift.
- **Personalization:** customize the dashboard, and create custom dashboards, using a widget library to display real-time and historical information in a way that supports how you work.
- **Global policies:** create and apply configuration rules to Cisco UCS templates; share and clone policy configurations to ensure consistent configurations across your global infrastructure.
- **Constant protection:** adhere to stringent security standards of Cisco InfoSec and enable encrypted communication between the Cisco Intersight SaaS platform and managed endpoints, allowing infrastructure to be deployed and operated securely.
- **Security advisories and field notices:** get immediate notification of potential security issues and infrastructure vulnerabilities specific to your Cisco systems along with guided remediation and automated bulk actions to resolve issues globally.
- **Compliance:** ensure compliance through alerts tailored to your environment to potential hardware, firmware, and software incompatibility.
- **Automation:**
 - Automate tasks and workflows using the drag-and-drop workflow designer or integrate existing automation from Red Hat Ansible, HashiCorp Terraform, or other tools.
 - Automate ESXi cluster deployment and customized ESXi installation for VMware Cloud Foundation.
- **Converged infrastructure support:**
 - See converged infrastructure inventory, including servers, SAN switching, storage, VMware virtualization, and Cisco fabric interconnects.
 - Incorporate into orchestrated workflows.
 - Use pre-integrated storage automation with Hitachi, NetApp, and Pure Storage.
- **Integration:**
 - Pre-integrated storage automation with Hitachi, NetApp, and Pure Storage.

- IT operations management: ingest data from Cisco Intersight-connected servers, storage, data-center networking, and virtual machines into ServiceNow to resolve issues faster using the Service Graph Connector for Cisco Intersight on the ServiceNow store.
- IT service management: import alarms and advisories from Cisco Intersight, raise incidents, and view incident analysis reports in ServiceNow using the Cisco Intersight- Incident Management Integration plug-in on the ServiceNow store.
- Third-party servers: integrate with Dell PowerEdge and HPE ProLiant servers or other third-party servers through the Redfish API.
- **SaaS updates:** automatic cloud-delivered updates to ensure the latest patches and features are available without downloading code or managing updates.



Figure 2. Accelerate delivery of applications and infrastructure using a drag-and-drop automation and workflow designer

Use cases

Table 1. Use cases

Cisco Intersight Infrastructure Service helps you	When you need to
Operate and monitor global infrastructure from one dashboard	<ul style="list-style-type: none"> • Deploy, configure, monitor, and maintain infrastructure –at scale–anytime, anywhere • Execute day-0 through day-N tasks quickly and consistently in a few clicks • Configure and update infrastructure with bulk automation through global templates and policies • Maintain consistent and compliant infrastructure through shared or cloned configuration resources • Monitor health and performance of Intersight-connected compute resources with out-of-the-box dashboards and customizable metrics widgets

Cisco Intersight Infrastructure Service helps you	When you need to
Increase uptime	<ul style="list-style-type: none"> Identify what needs immediate attention, including UCS domain connectivity issues, security advisories and field notices, along with supporting details and remediation Address potential hardware, OS, and software issues before they impact users, or minimize them if they occur
Deploy and manage Cisco converged infrastructure solutions	<ul style="list-style-type: none"> See, deploy, and manage converged infrastructure in one place (servers, SAN switching, storage, VMware virtualization, and Cisco fabric interconnects) Automate deployment of converged infrastructure and other operations tasks Get alerts, device health and inventory detail for servers, Cisco Nexus® switches, and storage
Manage infrastructure on-the-go with the Cisco Intersight Infrastructure Service mobile app	<ul style="list-style-type: none"> Monitor Cisco UCS systems, track inventory, and view alerts about security or impacted devices Check system status, get notifications, and take corrective actions on impacted devices View summary of system configurations of managed devices Track progress of running tasks Review and acknowledge alarms and faults
Simplify support	<ul style="list-style-type: none"> Get automatic notification of potential hardware incompatibility issues Automate log collection, issue routing, and initial diagnosis of support issues Receive proactive RMAs for certain component failures with automatic initiation of replacement part shipments (See full list.)

Cisco Intersight Infrastructure Service helps you	When you need to
Automate repetitive tasks and orchestrate workflows	<ul style="list-style-type: none">• Automate tasks and create sophisticated workflows across servers, VMs, networking devices, and other Cisco and third-party infrastructure components with a drag-and-drop designer• Use a library of pre-built tasks and common infrastructure management workflows• Integrate existing automated workflows from Ansible, Terraform, or other third-party tools using the Cisco Intersight API and SDKs• Automate ESXi cluster deployment and customized ESXi installation for VMware Cloud Foundation
Strengthen security	<ul style="list-style-type: none">• Get alerts to potential risks with threat summaries, identification of devices impacted in your environment, and recommended remediation• Facilitate SecOps investigations with audit logs that record all actions taken on your infrastructure• Integrate with Security Information and Event Management (SIEM) platforms such as Splunk• Use webhooks for automatic notifications when threats or vulnerabilities in your infrastructure are identified
Monitor, track, and control energy use	<ul style="list-style-type: none">• View real-time power consumption of UCS servers across your environment• Track UCS server energy consumption through metrics• Apply policy-based power management• Define and execute business objectives with power visibility and advanced management controls, including dynamic power rebalancing, power allocation (capping) policy, and BIOS and OS power policy



The bridge to possible

“Cisco Intersight is a game changer.... In the past, each server was its own island. Now we treat them as a pool of resources and administer them collectively.”

Scott Adamez,
Senior Manager of Infrastructure
Engineering, Riot Games

“Cisco Intersight saves us a ton of labor hours. We’re spending less time managing hardware and more time focusing on our customers.”

Paul Toomey,
President and Founder,
Geographic Solutions

Licensing and deployment

Cisco Intersight Infrastructure Service is available in two licensing tiers:

- **Essentials:** infrastructure lifecycle management and proactive support
- **Advantage:** includes everything in Essentials plus automation and ecosystem integration

Learn more about licensing tiers [here](#).

Cisco Intersight Infrastructure Service can be deployed either as Software-as-a-Service (SaaS) or as a virtual appliance. The SaaS version, hosted in the eastern United States or Germany, offers the most simplicity through automatic updates and no software management requirements.

The virtual appliance is available either as a connected virtual appliance or a private virtual appliance. The connected virtual appliance is connected to Intersight.com and includes automated Cisco TAC, proactive RMAs, and contract status along with forecasting of your current deployed infrastructure.

The Cisco Intersight Infrastructure Service virtual appliance provides the same operation experience to IT teams without a connection to the Intersight.com service. It gives you complete control over data isolation and can even instantiate Cisco Intersight in an air-gapped deployment while still taking advantage of features that simplify and modernize infrastructure management.



“With consistent and repeatable workflows offered by Cisco Intersight, IT teams can save time and decrease operational costs.”

ESG Validation,
Analyzing the Benefits of Cisco Intersight

The Cisco Advantage

Cisco Intersight Infrastructure Service is more than SaaS software for managing Cisco and third-party compute, storage, and networking infrastructure. IIS is part of the [Cisco Intersight IT operations platform](#). Unlike other platforms that require multiple logins and dashboards to operate and optimize on-premises and cloud infrastructure, Cisco Intersight is the only IT operations platform that lets you see, optimize, and automate on-premises and cloud infrastructure through a single login and user interface.

Cisco Intersight Infrastructure Service users can also subscribe to [Cisco Intersight Workload Optimizer](#) to optimize workloads on premises and in AWS, Microsoft Azure, and GCP.

Learn more

Getting started with Cisco Intersight Infrastructure Service is fast and easy, even if you currently use Cisco UCS Manager or Cisco UCS Director. Go to [Intersight.com](#), create an account, and start a free trial. You can also visit the [Intersight help center](#) to learn more about using IIS or [watch some of our videos](#).

Have questions? We invite you to [schedule a one-on-one demo](#) with a Cisco compute specialist.