

# Services as Code

Available through Cisco Lifecycle Services

## Benefits

- **Automation:** Manage complex and dynamic environments easily by creating or modifying infrastructure programmatically using code-based configuration for automated provisioning, deployment, and scaling.
- **Testing and validation:** Improve change reliability and quality with configuration code that can be tested, validated, and integrated into continuous integration and continuous deployment (CI/CD) pipelines.
- **Version control:** Enable IT teams to track changes, collaborate, and roll back to previous versions if needed.

## Automation, DevOps consulting, and support

Traditionally, the configuration and provisioning of network services and infrastructure are executed manually and require a series of steps and interactions with various tools and platforms. But this approach can be error-prone, time-consuming, and difficult to reproduce consistently.

- Over 80% of network problems are due to improper configuration and issues with change management.<sup>1</sup>
- 64% of IT leaders expect to have unified, API-driven integrations for IT and business innovation within the next two years.<sup>2</sup>

- GitOps is dominate as a preferred management method for DevOps teams, with over 50% of organizations adopting GitOps for automated operations.<sup>3</sup>

Cisco® Services as Code allows your organization to define its network infrastructure state and treat all elements as software that can be versioned and managed at scale. Automation and DevSecOps methodologies expedite the provisioning, configuration, testing, and deployment processes to enable you to seamlessly operate and optimize your network, backed by 24x7 technical support.

<sup>1</sup> Gartner 2024 Hype Cycle Enterprise Networking

<sup>2</sup> Cisco, Global Networking Trends Report, 2024

<sup>3</sup> DevOps.com, Why GitOps Might Be the Future of DevOps, 2024

## Service overview

Services as Code includes the following:

- **Readiness assessment** to provide insight into functional specifications and help you get from the current state to desired state of CI/CD with seamless automation.
- **People, process, and solution enablement** that accelerates the adoption and operation of your networks for improved efficiency, accuracy, and scalability.
- **Solution setup and continuous integration** to allow your network teams to rapidly and reliably build, deploy, and manage network infrastructure as code.
- **Automated deployment** that delivers continuous deployment of changes.
- **Release management** for planning, coordinating, and deploying software releases to production environments.
- **24x7 support** throughout the lifecycle.

## Next steps

Cisco Services as Code is available through Cisco Lifecycle Services as an annual subscription service. By combining Cisco Customer Experience (CX) expertise with open-source communities, we can align Services as Code with your change management cycle to improve efficiency, accuracy, and scalability. To get started, contact your account representative or authorized Cisco partner today.

## Applicable technologies

Services as Code is currently available for the following technologies:

- **Cisco Application Centric Infrastructure (ACI®)** is a comprehensive solution for data centers, enabling businesses to innovate faster, minimize downtime, and secure network operations by simplifying, optimizing, and accelerating infrastructure deployment.
- **Cisco SD-WAN** connects any user to any application with integrated capabilities for multicloud, security, predictive automation, and enhanced network visibility – all on a Secure Access Service Edge (SASE)-enabled architecture.
- **Cisco Nexus® Dashboard Fabric Controller (NDFC)** is a key component of Cisco's data center solutions. It provides comprehensive automation and management capabilities for the deployment and operation of network fabrics, particularly in large-scale data centers.
- **Cisco Identity Services Engine (ISE)** is the policy decision point in zero-trust architecture. It gathers intel from the stack to authenticate users and endpoints, automatically containing threats.
- **Cisco Meraki™** is a cloud-managed IT solutions provider that offers a range of products, including wireless.
- **Cisco Catalyst® Center**, formerly known as Cisco DNA Center, is a centralized network management and control platform designed for Cisco Catalyst devices and networks.

## Why Cisco?

Leverage the unrivaled expertise and network optimization experience to drive your business forward.

- **Extensive expertise** with thousands of engineers and decades of experience in network transformations.
- **Proprietary IP** with intelligent and actionable insights amassed from millions of devices in production and Cisco AI and machine learning.
- **Knowledge transfer** to upskill your organization and help you maximize the customer experience with hands-on training.