

# Services to Enhance Automation and Orchestration Value Propositions

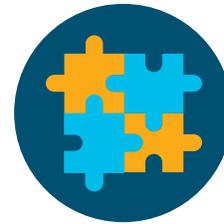
## Automate and Orchestrate Your Service Provider Business



**Your Needs**



**Benefits Overview**



**Solution Overview**



**Summary**

## Your Needs

### Can you outpace a fast-paced market?

In today's world of dynamic business models and disruptive technologies, from cloud computing and 5G to the Internet of Things and bring-your-own-device, it is becoming increasingly complex to manage and maintain the fundamental backbone of service delivery and technology: the network.

To outpace the competition and stay profitable in this complex setup, you are constantly tasked with rolling out new services at higher frequencies and at nominal prices, while extending improved service guarantees to your end customers.

At the same time, it is also imperative you modernize network and cloud infrastructure and embrace latest technologies for efficient service delivery. Hence, it's more important to increase operational agility and cut costs by simplifying the day-to-day management of your network.

One way to do this is by adopting programmatic modes of accessing networks, using software-defined networking (SDN) and Network Functions Virtualization (NFV), and automating end-to-end service interactions.

To achieve this, it is also necessary to address a multi-vendor physical and virtual infrastructure combination while incorporating new service platforms such as NFV/SDN, even in a DevOps-driven environment.

With all moving parts adding to the complexity, automation and orchestration is a primary need at the network, virtualization, and compute/data center layers. Through automated orchestration, you can ensure your infrastructure is self-monitoring, self-correcting, and self-acting, with optimal cost and efficiency.

Ignore the potential of automation and you could lose out on cost reductions and agility gains that your competitors are already taking advantage of. There's no need to delay, though: with Cisco Services, you can begin your automation and orchestration journey today.



# Benefits Overview

## How Automation and Orchestration Speeds Your Business

As a service provider, you will be acutely aware of the need to deliver new services **faster to differentiate** your company from the competition and succeed in this complex and **rapidly evolving** market. Historically, this required a large amount of effort, complex coordination, and costly integration activities.

Now, Cisco Services for Automation and Orchestration can help your business **automate complex tasks** so they can be carried out in minutes, with **minimal or zero** manual effort. Orchestration software controls the automation tasks that make up your company's service delivery workflows.

The Cisco Network Service Orchestration (NSO) Service can help you automate the network and set up service orchestration. These services help you address the following challenges:

- Deliver services across multi-location, multi-vendor, and mixed physical/virtual infrastructures
- Provide cross-domain services across WAN, metro, NFV, and cloud domains
- Accelerate the success of your new virtualized network initiatives using NFV
- Use models to drive service orchestration, increasing your responsiveness to customer requirements
- Place workloads intelligently

We can help make your network more agile, save time in networking tasks, and reduce operational costs over time. Cisco Services is already helping business use automation to:

### Increase operational efficiency, thanks to:

- Higher network utilization
- Reduced vendor lock-in

### Boost revenue, through:

- Reduced service activation time
- Enhanced customer experience

### Reduce time to revenue, by:

- Process automation
- Faster launch of new services

### Cut incidents, due to:

- Process automation
- Reduction in human errors

### Decrease backlogs, via:

- Reduced churn
- Improved compliance

### Cut operational costs, with:

- Fewer instances of provisioning fallout to troubleshoot
- Drastic reduction in manual tasks required to make a service go live



# Automation and Orchestration Services Overview

## Cisco Services for Automation and Orchestration

Industry experts agree that automation can help transform service provider delivery to meet the dynamic demands of your business and its customers. Below are some examples of how Cisco can help make that a reality for your organization, so you can do more with less.

### NSO Strategy and Assessment Service

The Cisco consultancy team works to ensure there is a joint understanding of the outcomes required from the solution, and provides detailed descriptions of the changes needed to ensure successful alignment of the automation strategy to your business initiatives.

### NSO Validation Service

Helps to understand the production requirements and any implications for orchestration, enabling you to test a solution in a pre-production environment without the risks and complexities of production.

### NSO Design and Implementation Service

Cisco consultants work with your team on end-to-end solution design development to meet your technical and business requirements. Part of the service is to perform implementation and testing of the solution and provide accurate documentation.

## Business Critical Services for NSO

Optimization helps you identify and deal with any necessary changes that your business needs post-deployment. Our Business Critical Services help you define a strategy for managing software releases, provide health checks to ensure availability and performance of your solution, and include continuous learning activities for your staff.

Cisco Services engineers help reduce your deployment risk with a plan built on industry-leading practices, protocols, and methodologies. The Cisco Services orchestration experts offer extensive experience in delivering software integration.

### Technical Services

Technical services can provide your business with support for automation and orchestration layers via:

- End-to-end coverage and support, including
  - Third-party vendors
  - Open-source software
- 24x7 support for software defined networks and software solutions, along with traditional hardware and software products
- Access to the latest Cisco software updates
- Configuration guidance and technical adoption
- Full network coverage option with problem resolution and proactive recommendations

## Cisco Automation and Orchestration Services in Action

AT&T's Commercial Connected Service (CCS) enables enterprise customers and resellers to securely and reliably extend their corporate data networks to mobile devices and workers by providing a portfolio of service offering and connectivity options between enterprise and cellular networks.

With AT&T's original packet core infrastructure, one of the critical challenges for CCS was customer on-boarding and provisioning. Each CCS implementation could differ from customer to customer, using a wide range of network features and services, such as IPSec Tunnels, public Internet, Layer 3 and Layer 2 VPN via Multiprotocol Label Switching, and Proxy Mobile IPv6.

Without automation, it would have taken up to six years to complete onboarding and migration for CCS's 3,000 customers. With the onboarding automation building tool provided by Cisco, AT&T experienced:

- Reduction in CCS migration time from more than 20 days to less than five days
- Cut in onboarding lead times from 60 days to less than 10 days
- Fewer human errors thanks to automated service configuration
- Ability to up-sell new services to existing customers

# Call to Action

## What's stopping you from automating today?

If you could, wouldn't you want to use best-in-class service provider automation tools to drive out complexity and accelerate your new service delivery and cost reduction initiatives? Or discover ways to cut system management time by hours, so you can focus on innovation? Are you worried that you don't have sufficient skills in your team to ensure successful delivery of automation projects?

If so, visit us <http://www.cisco.com/go/services>

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# Summary

## The Service Provider Journey

### What you need to do:

- Mitigate risk when migrating to new technologies and responding to the increase in security threats
- Improve efficiencies by decreasing operational costs
- Accelerate growth by identifying new revenue streams
- Increase speed to market with new services

### How you're going to do it:

- Transform the customer experience
- Transform the architecture
- Transform the business

### What needs to happen to your network:

- Simplification
- Automation
- Virtualization

### Why Cisco?

Cisco has a unique approach to service provider automation, which encompasses and leverages mass-scale networking. Cisco consultants use a combination of networking, virtualization and software expertise, uniquely leveraging the power of the networking devices, to deliver automation solutions which drive down your OpEx costs. This methodology is complemented by a full range of Professional, Advisory, Implementation, Training, Optimization, Managed, and Technical Services.

We know the network and our products better than anyone. And we have the experience and track record it takes to deploy products and solutions effectively and to integrate them into your network.

Cisco can call on the expertise of more than 12,000 engineers and technicians, including more than 2,500 CCIEs. Our intellectual capital goes deep: our team has been granted more than 1,100 patents since 1998. In addition, we manage more than 100,000 devices for customers in 75 countries.

We use proven methodologies and best practices derived from our experience with service providers all over the world supporting complex networks for over 30 years. That depth and breadth of experience with other service providers is unique, and we can put it to work for you. You'll be in safe hands.