

# Cisco Prime Carrier Management

## Unified Management for Multidomain Carrier Networks

### Challenge

Today's carrier networks must be able to deliver a wide range of services to a very broad customer base, and service providers have evolved their network architectures and design to accommodate the changes in service requirements. Over the past decade, these networks have become increasingly complex due to the heterogeneity - consisting of multiple devices, technologies, and applications that serve multiple client access and service domains. Moving forward, the increasing demand for cloud-based applications and services that rely on a highly intelligent network for service assurance is expected to place more pressure on network operations.

The primary challenge in operating and managing such a complex network is the disparate tools and systems. These tools and systems can no longer meet the scale and efficiency required for service providers to remain competitive.

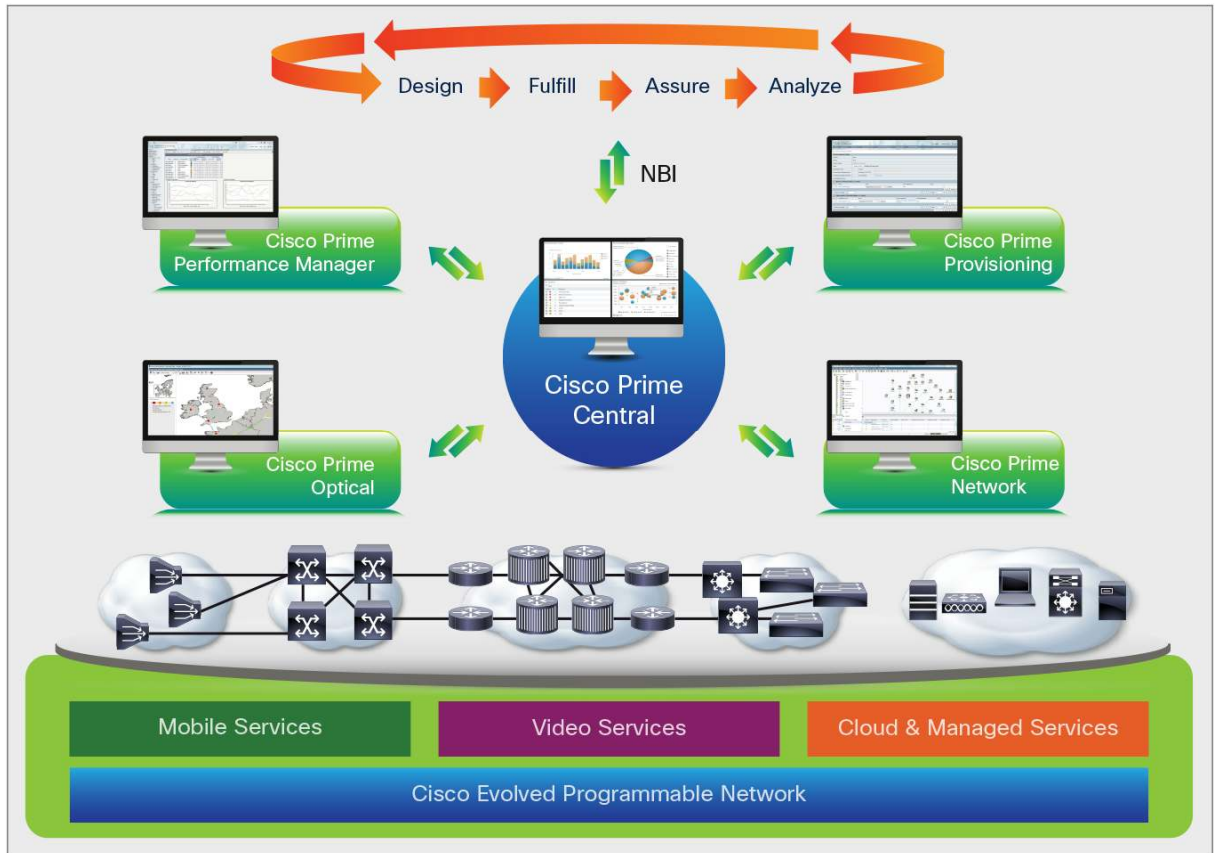
### Cisco Prime Carrier Management Business Benefits

Cisco Prime™ Carrier Management is an integrated suite of software applications that simplifies the lifecycle management of carrier-grade networks. It is a flexible, end-to-end solution for managing multiple service domains across the entire network - from subscriber access all the way to the data center - supporting voice, video, mobile, cloud, and managed services. See Figure 1.

Cisco Prime Carrier Management helps Service Providers to:

- Accelerate service deployments through a powerful and integrated approach to operations and by automating design, fulfillment, assurance and analysis tasks
- Reduce total cost of ownership through a unified management of the entire carrier network, supporting multiple service domains
- Achieve unparalleled time to value of Cisco® equipment and technologies - the Cisco Advantage - through day-one support
- Enhance customer experience by facilitating proactive service assurance
- Enjoy deployment flexibility by adopting the solution components as an integrated suite or incrementally as business needs evolve

**Figure 1.** Unified Management for Multidomain Carrier Networks



## Solution Components

The Cisco Prime Carrier Management suite consists of:

### [Cisco Prime Central](#)

Increases efficiencies in network and service lifecycle management tasks through centralized access to integrated operator workflows.

### [Cisco Prime Provisioning](#)

Accelerates service deployments and helps quickly resolve network issues through rapid, profile-based provisioning and powerful workflow-based diagnostic tools.

### [Cisco Prime Performance Manager](#)

Improves quality of service (QoS) by gathering actionable performance statistics across the entire network.

### [Cisco Prime Optical](#)

Helps manage the optical network with scalability through automated configuration, provisioning, and troubleshooting.

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### [Cisco Prime Network](#)

Provides comprehensive device operation, administration, and fault management for Cisco next-generation networks and services, supporting the multivendor environment.

### [Cisco Prime Carrier Management Architectural Use Cases](#)

#### [Evolved Programmable Networks](#)

Simplifies the lifecycle management of Carrier Ethernet, Unified MPLS, Packet Optical Transport and Cable Access networks through intelligent and automated management. Cisco Prime for EPN supports highly scalable core, aggregation and access equipment including the [Cisco ASR 9000](#) Series Routers, the [Cisco ONS 15454](#) Multiservice Transport Platform, and the [Cisco CRS](#) Series Routers.

#### [Mobility](#)

Helps provide outstanding mobile service assurance through integrated operator workflows across Unified RAN Backhaul and Evolved Packet Core. Cisco Prime for Mobility supports Cisco mobility networking solutions, including the [Cisco ASR 5000 Series](#) and [Cisco ASR 5500](#) core multimedia services platforms.

#### [Data Center Assurance](#)

Enhances cloud service assurance through simplified fault monitoring and performance management of data center resources. The solution is tightly aligned with the [Cisco Unified Data Center](#) architecture and supports a breadth of premier data center networking devices and platforms.

### [About Cisco Prime](#)

The Cisco Prime portfolio of IT and service provider management offerings empowers organizations to more effectively manage their networks and the services they deliver. Built on a service-centered foundation, Cisco Prime supports integrated lifecycle management through an intuitive workflow-oriented user experience - providing A-to-Z management for evolved programmable networks, mobility, video, and managed services.

### [For More Information](#)

For more information on Cisco Prime products for carrier-grade networks, please email [ask-prime-sp@cisco.com](mailto:ask-prime-sp@cisco.com).



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