



Product Bulletin No. 3205

Cisco Service Control Application 3.0

Release Overview

INTRODUCTION

Cisco Systems® introduces Cisco® Service Control Application Release 3.0, the first major release of the product since Cisco acquired P-Cube in October 2004. The Cisco Service Control Application product line is a direct continuation of the P-Cube Engage product line and uses the same numbering scheme. Cisco Service Control Application 3.0 (SCA 3.0) is the Cisco Service Control solution for broadband and mobile service providers. It is used to gain visibility and control over the distribution of network resources and to optimize traffic according to the provider's business strategies. The solution helps service providers reduce network costs, improve network performance and customer experience, and create new revenue-generating service offerings and billing packages.

Cisco SCA 3.0 delivers the next maturity level of service control, supporting the rapidly growing installed base of the Cisco Service Control solution with a superior infrastructure that provides a robust foundation for upcoming releases.

The following are the main focus areas of infrastructure investment in Release 3.0 (delivery of some of the features mentioned herein will be completed with Release 3.0.3). These areas will also be the focus for all 3.x releases to follow:

- Triple-play delivery
- New business models
- Service creation
- Service security
- Scaling
- Usability
- Solutions and architectures

Customers deploying Cisco SCA 3.0 can now more than ever feel the power of service control for analyzing and controlling their networks. By using Cisco Service Control they become intimately familiar with their network traffic and can control their most important asset—their network—for increased revenue generation from their subscriber base.

TRIPLE-PLAY DELIVERY

Service providers delivering the triple-play solution of data, voice, and video realize significant savings in infrastructure expenses by running all three technologies simultaneously over the same inexpensive IP transport. Cost savings increase profits and enable service providers to become more competitive. However, these savings cannot come at the expense of the subscriber's quality of experience.

Cisco SCA 3.0 offers service providers the ability to monitor the quality of their data, voice, and video services, and allows them to deliver the required predictable behavior of these services through its new FastPath™ solution that provides bounds on jitter and delay for mission-critical applications.

NEW BUSINESS MODELS

Service control technology was first made available to broadband and mobile service providers. As the technology matured, the Cisco Service Control solution began to be deployed in the networks of other providers delivering services such as managed enterprises, data centers, and Metro Ethernet. At the same time, the Cisco Service Control solution also became popular among enterprise and higher-education customers.

As an integral component of the Cisco product offering, Cisco SCA 3.0 builds on Cisco experience, knowledge, and proven technology in each of these markets. Deployment in these new markets requires the Cisco Service Control solution to accommodate new business models.

One example is the management of services in MPLS-VPN environments. Cisco SCA 3.0 incorporates the solid, field-proven Cisco IOS® Software, which helps service providers fully analyze and control the VPN traffic in an MPLS-VPN environment.

SERVICE CREATION

Innovative developments and infrastructure investment in the classification model of Cisco SCA 3.0 enable prompt support for many new protocols, and strengthen the policy model. As with every Cisco Service Control release, Release 3.0 delivers support for new services offered over network traffic. One of the new services introduced with release 3.0 delivers content filtering to protect subscribers from content they wish to avoid.

Realizing that a service control solution cannot always address and support all new and existing services, Cisco SCA 3.0 introduces a new service control concept that helps enable the support of any value-added service (VAS). With this capability, Cisco SCA 3.0 can work in tandem with expert systems dedicated to addressing and controlling such services. Cisco Service Control Engines running Cisco SCA 3.0 identify traffic belonging to a VAS and redirect it to one or more expert systems, which handle the traffic and return it for further processing. This ability to deliver service control capabilities for services that are not part of a specific release makes the Cisco SCA 3.0 solution an integral part of any service delivery that must scale rapidly independent of product delivery schedules.

SERVICE SECURITY

Cisco SCA 3.0 places special emphasis on eliminating security threats from traffic. Based on Cisco security experience and expertise, Cisco SCA 3.0 is dedicated to securing valuable network resources against malicious attacks both by mitigating them as they occur and by taking preventive measures before they occur. These protective and preventive measures address known as well as new attacks.

SCALING

As service control becomes a mainstream network technology, major providers need to scale into any network size, capacity, and topology. The new Cisco SCA 3.0 infrastructure helps customers meet required scalability levels for current and future growth.

Subscriber integration has been enhanced to accommodate any RADIUS, Dynamic Host Configuration Protocol (DHCP), or other authentication, authorization, and accounting (AAA) environments. Direct and indirect integrations are enabled to fit any integration philosophy.

USABILITY

This release places special emphasis on improving the usability and serviceability of the solution across all its aspects.

One of the major usability enhancements implemented in Cisco SCA 3.0 is the consolidation of all graphical clients and tools under one unified framework. The new framework provides an ideal environment for interoperability, which integrates all tools used for managing and monitoring the product components. It automates the most common user activities, and it delivers an open and extensible platform for accommodating new tools in the future.

SOLUTIONS AND ARCHITECTURES

The ability to understand and control network content is critical to the evolution of network technology. As a strategic and innovative network technology leader, Cisco has realized the important evolutionary role of service control and constantly strives to transparently integrate service control technology into all its network architectures and solutions. Cisco SCA 3.0 is taking the first significant steps toward this goal by integrating with multiple new and existing Cisco architectures and solutions.

For example, Cisco SCA 3.0 is the intercept application manager (IAM) component in the CableLabs® PacketCable™ Multimedia (PCMM) architecture, it integrates into the Cisco Mobile Exchange framework, and it provides an application control point for IP Multimedia Subsystem (IMS) and non-IMS applications in Cisco IMS architectures. The service control solution also plays a central role in the Cisco Service Exchange Framework (SEF), and it supports the required interfaces for integration into the Cisco IP Next-Generation Network management framework.

Many more physical and logical integrations into Cisco solutions and architectures are planned for follow-up releases of Cisco Service Control.

SUMMARY

Cisco SCA 3.0 was designed and built to facilitate evolutionary progress toward making service control solutions a mainstream network technology. The abilities to support any service required by new and existing markets, accommodate any network scale and architecture, and integrate into the large variety of solutions offered by Cisco make Cisco SCA 3.0 the ideal deployment choice.



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