

ORACLE COMMUNICATIONS SERVICES GATEKEEPER



FEATURES

- Converged Web-SOA-Telecom service exposure platform using multiple Service Facades supporting SOAP, REST, SOA and native interfaces
- Value-added Communication Services for messaging, call control, location, presence, payment, subscriber profile
- Comprehensive telecom-grade Container Services for Budget, Policy, Storage, Statistics, Alarms
- Centralized policy and SLA management using Service Interceptors
- Customization and extensibility using Platform Development Studio
- Productized integration with Oracle Communications Billing and Revenue Management
- Built upon industry's most powerful Java EE, SIP Servlet, and SOA platforms

BENEFITS

- Increase revenue by leveraging new applications through a standards-based service exposure platform that accommodates changing business models.
- Lower cost of development and maintenance using open, standards-based IT and Web standards.
- Enhance agility and competitiveness through extensible, customizable, SLA-based policy and partner management interfaces.

Oracle Communications Services Gatekeeper is an open, standards-based service exposure and policy enforcement platform, designed to enhance the network operator's Service Delivery Platforms (SDP) to better monetize unique network assets by leveraging third party developer and content partners. As the industry's leading open service exposure platform, Oracle Communications Services Gatekeeper has enabled operators globally to successfully implement a variety of different "upstream" business models with third party partners and developers, including service providers, enterprises, mobile virtual network operators (MVNO) and Web 2.0 developers.

Enhance Network Monetization Through Service Exposure

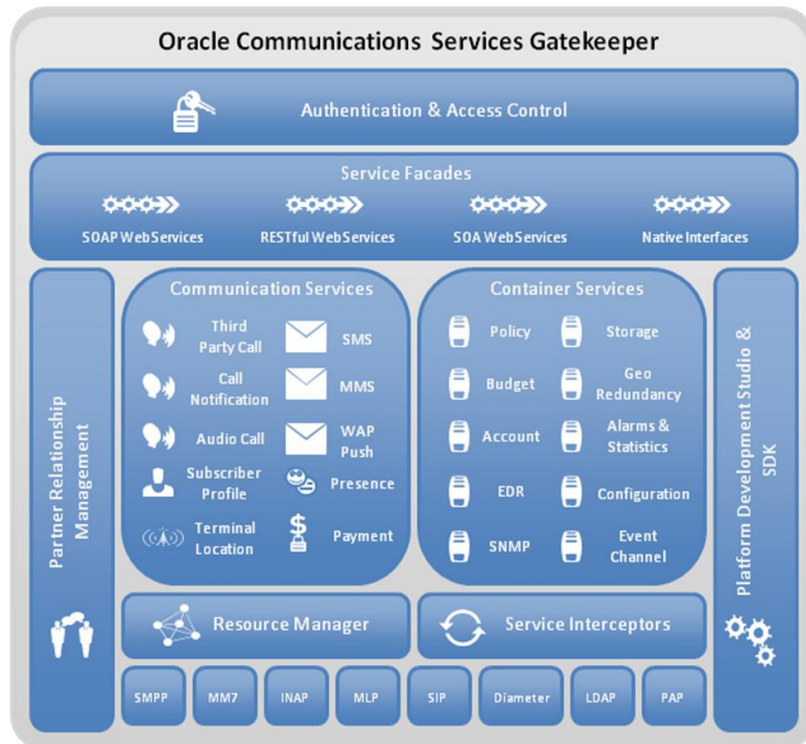
Network operators and service providers are under revenue and cost pressures. They must attract and retain new premium revenue customers, develop profitable new business models, improve returns on existing network investments, and launch new services as cheaply and quickly as possible. Faced with these challenges, most operators expect a drastic increase in their portfolio of content and application offerings—from a handful now, to thousands from partners, and eventually to millions from Web 2.0 clients. Although some of these new services will be developed in-house, the promise of applications developed and hosted externally is becoming a reality. The vast majority of these new applications will be Web applications, such as social networking sites, sourced from partners and third-party service providers and executed outside the carrier's network. This creates a very significant opportunity for network operators, yet presents a tremendous challenge around network integration, network security, shifting business models, and partner and application ecosystem management.

Many Tier 1 network operators worldwide have successfully deployed Oracle Communications Services Gatekeeper in their networks to enhance their service delivery platforms to create an open, standards-based service exposure layer. They leverage a centralized, service level agreement (SLA)-based policy enforcement framework for all internal and external third party applications. As operators gradually evolve and extend their SDPs to better leverage the IT and Web developer community, Oracle Communications Services Gatekeeper focuses on enabling operators to maximize revenue from legacy fixed and mobile network investments, such as location, payments and messaging, and future proofing its investment for service exposure through IP networks.

Open Third Party Service Exposure Platform

Oracle Communications Services Gatekeeper allows network operators to rise to the industry convergence challenge. It facilitates the operator's need to provide third party service provider access to its key value-added network capabilities in a

controlled, secure, optimized, and automated fashion, while providing robust customization and extensibility. Oracle Communications Services Gatekeeper delivers a converged service exposure layer, providing operators the choice and flexibility of using Web, Service Oriented Architecture (SOA) or telecom interfaces to expose their network capabilities to third party partners. This proven, carrier-grade service exposure platform is based on IT, Web and telecom industry standards such as Java Platform, Enterprise Edition (Java EE), SOA, Parlay X, Session Initiation Protocol (SIP), Diameter, Simple Object Access Protocol (SOAP), and Representational State Transfer (REST)-ful Web Services.



Functional Overview of Oracle Communications Services Gatekeeper

Communication Services With Multiple Service Facades

Oracle Communications Services Gatekeeper provides network operators with pre-built, specialized components called Communication Services to allow third party developers and application partners to easily access the operator's telecom network capabilities. The network capabilities supported by the Communication Services include messaging, call control, terminal location, payment, profile and presence. Oracle Communications Services Gatekeeper provides flexibility and choice in how third party developers and applications can access the operator's network through multiple types access interfaces called Service Facades.

The Service Facades supported are traditional SOAP Web Services, RESTful Web Services, SOA Web Services, and native telecom interfaces. The SOAP Service Façade supports application interfaces based on Parlay X 2.1/3.0, and Extended Web Services for those interfaces not supported in Parlay X. The SOA Service Façade is deployed in the Oracle Service Bus, and the application interfaces exposed are identical to the SOAP Service Façade. The RESTful Service Façade exposes HTTP-based interfaces with JSON-based data types, allowing Web 2.0 and rich

internet applications (RIA) to easily integrate communication capabilities. And the native telecom interfaces based on SMPP and MM7 enable support for legacy messaging applications. Oracle Communications Services Gatekeeper provides support for the following Communication Services:

- **SOAP & SOA Web Services:** Third Party Call (PX 2.1/3.0), Audio Call (PX 3.0), Call Notification (PX 2.1), SMS (PX 2.1), MMS (PX 2.1), Terminal Location (PX 2.1), Presence (PX 2.1), Payment (PX 3.0), Binary SMS (EWS), WAP Push (EWS), Subscriber Profile (EWS), Session Management (EWS)
- **RESTful Web Services:** Third Party Call, Call Notification, SMS, MMS, Location, Presence, Payment, WAP Push, Session Management
- **Native Telecom Interfaces:** SMS (SMPP), MMS (MM7)

Enhanced Control With Centralized Policy and SLA Enforcement

Oracle Communications Services Gatekeeper provides network operators with the powerful ability to control any third party partner's access and usage of its network capabilities using a centralized access control, policy and SLA enforcement mechanism. By providing a common authentication, authorization and access control mechanism across all internal and external applications, Oracle Communications Services Gatekeeper enables operators to implement a single point of access to the underlying telecom network capabilities for any type of Service Façade. Once authorized, all requests are processed by the Resource Manager and Service Interceptors, which provides the centralized policy and SLA enforcement, and traffic management mechanism. Operators can also control how subscribers customize and personalize their interactions with third party partners and developers using subscriber-centric policies.

Reduce Cost of Third Party Partner Relationship Management

Operators are rapidly expanding their third party partner ecosystems to include Web and IT developers, in addition to traditionally telecom and mobile content developers. Oracle Communications Services Gatekeeper provides a Web Services-based Partner Relationship Management interface to enable operators to automate a wide-range of partner on-boarding and management tasks, which are often performed in a non-scalable, manpower-intensive, and time-consuming fashion. It supports the handling of partner registration, service activation and provisioning, and easy access to partner account and SLA-specific information. This enables operators to reduce the operational costs of managing multiple ecosystems of third party developers and partners.

Flexibility and Agility Through Customizations and Extensions

Due to the unique and changing nature of telecom networks, and third party partner ecosystems, Oracle Communications Services Gatekeeper provides easy-to-use service creation and customization tools with the Platform Development Studio and SDK. The Platform Development Studio enables customizations, extensions and new communications services to be created. It includes an Eclipse-based Communication Service wizard, sample communication services, and a Platform Test Environment, which enable operators to rapidly create custom application interfaces, network resources, policies, service interceptors, and external network integrations. The SDK enables developers to use SOAP-based interfaces to easily create and test messaging and location-enabled services.

**ORACLE
COMMUNICATIONS
SERVICE DELIVERY
PRODUCT FAMILY**

Oracle Communications Service Delivery is a family of open, standards-based telecom service delivery platform (SDP) middleware and application products, designed to enable network operators, service providers, enterprises, and third party developers to harness and monetize the power of the Web, telecommunications, social networking, and IT assets.

**ORACLE
COMMUNICATIONS
SERVICE DELIVERY
PRODUCTS**

- Oracle Communications Converged Application Server
- Oracle Communications Services Gatekeeper
- Oracle Communications Marketing and Advertising

RELATED PRODUCTS

- Oracle Communications Billing and Revenue Management
- Oracle Service Bus
- Oracle SOA Suite
- Oracle BPM Suite
- Oracle WebCenter Suite
- Oracle WebLogic Suite
- Oracle Identity Management

Seamless Operation Support and Billing System Integration

Oracle Communications Services Gatekeeper can be seamlessly integrated with external operation support systems (OSS) and billing systems to provide operators with maximum operations, administration, maintenance, and billing flexibility. Using industry standards such as Diameter, it supports out-of-the-box integration for online and offline charging with the Oracle Communications Billing and Revenue Management, as well as with any other external billing system supporting Diameter. Oracle Communications Services Gatekeeper also gives operators the flexibility to implement tailored charging models for different application services by supporting both usage-based and content-based charging models.

Increase Quality of Service with High Availability and Reliability

Oracle Communications Services Gatekeeper has a tiered, clustered and geographically redundant deployment architecture, which eliminates a single point-of-failure, and results in extremely high service availability and reliability. This enables end-user customers, and external third party service provider partners to enjoy a very reliable service access experience, resulting in higher customer and partner satisfaction. Oracle Communications Services Gatekeeper also allows operators to monitor the availability of its network elements in real-time, and dynamically route requests away from overloaded systems. A highly available and reliable service exposure platform significantly increases the stability and QoS of an operator's SDP, thereby reducing operational TCO and increasing end-user service experiences.

Comprehensive Standards and Platform Support

Oracle Communications Services Gatekeeper supports a comprehensive set of Internet, Telecom, Java and SOA industry standards and platforms.

- Operating Systems: Solaris 9/10 (SPARC), HP-UX 11.23 (Itanium), Red Hat Linux AS4 (x86)
- Database: Oracle 10g, MySQL
- Application Server: Oracle WebLogic Server 10.3
- Java/Internet/Web Standards: Java EE 5, Java 6, SIP, Diameter, Web Services, LDAP, JMX, JMS, RMI, SNMP
- Telecom Standards: Parlay X 2.1/3.0 (ETSI OSA), SMPP, MM7 (3GPP), PAP (OMA), INAP (ETSI), MLP (LIF), IMS (3GPP)

Contact Us

For more information about Oracle Communications Services Gatekeeper, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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