Oracle Communications Services Gatekeeper

Oracle Communications Services Gatekeeper is an open, standards-based API exposure platform with expansive API management capabilities to manage the entire API lifecycle enabling enterprises and CSPs to accelerate internal development, engage with partners and monetize assets. Combined with industry leading service level agreement management, analytics and an extensive array of built-in communications services, Oracle Communications Services Gatekeeper has enabled CSPs and enterprises globally to successfully implement a variety of different “upstream” business models with partners and developers, including service providers, enterprises, mobile virtual network operators (MVNO) and Web developers.

Enhance Network Monetization through API Exposure

CSPs 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 CSPs expect a drastic increase in their portfolio of content and application offerings—from a handful now, to thousands in the very near future. 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 developers and executed outside the CSP’s network. This creates a very significant opportunity, yet presents a tremendous challenge around network integration, network security, shifting business models, and partner and application ecosystem management.

Figure 1: API Exposure

CSPs of all sizes worldwide have successfully deployed Oracle Communications Services Gatekeeper in their networks to enhance their service delivery platforms by creating an open, standards-based API exposure layer. As CSPs gradually evolve and extend their SDPs to better leverage the IT and Web developer community, Oracle Communications Services Gatekeeper enables CSPs to maximize revenue from legacy...
**KEY BENEFITS**

- Fast time to market and increased revenue by leveraging a productized, telco-grade solution
- Attractive to partners and third-party developers due to multiple open and standardized API options
- Enhanced trust by ensuring privacy and security of subscribers’ resources
- Comprehensive control of third-party access and usage of network services
- Easily scalable to a large number of third-party developers and applications
- Rapidly extends to support exposure of new telco and third-party APIs

fixed and mobile network investments, such as location, payments, QoS control and messaging and future proofing its investment for API exposure through IP networks.

**Open API Exposure Platform**

Oracle Communications Services Gatekeeper allows CSPs to provide internal application developers, partners and third party developers’ access to its key value-added capabilities as well as third party APIs in a controlled, secure, optimized, and automated fashion, while providing robust customization and extensibility.

The Oracle Communications Services Gatekeeper is a comprehensive API exposure platform providing robust support for the three fundamental aspects of API exposure as shown in figure 1:

- Application Service Governance: a combination of API Management and SOA type governance
- Communications Service: enablers to facilitate the interconnection with network and IT resources
- Vertical Services: focused solutions to enable rapid time to market

**Applications Service Governance**

Application Service Governance is a term that has been introduced by Gartner to reflect the requirements for an API exposure platform to address SOA type governance in addition to traditional API management functionality. Combining the API Management and SOA type governance functions, the key functions of Application Service Governance is illustrated in the API lifecycle in Figure 2.

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Figure 2: API Lifecycle

Oracle Communications Services Gatekeeper’s Application Service Governance includes:

- Create & Publish: wizard based API creation of API’s in minutes
- Policy & SLA: extensive policy engine to ensure application QoS through limits, throttling, black lists, etc.
- Security: API firewall to prevent DDOS, JSON and brute forces attacks,
compliant with WS security standards and complete OAuth2 support

- Onboard & Manage Partners: Automate partner onboarding, manage API lifecycle, discovery and register APIs, and provide self care
- Monitoring & Analytics: understand API usage with 30+ out of the box reports
- Metering & Charging: charge for API usage based on volume or time through integration with online and offline charging
- Versioning & Retirement: publish, deprecate, suspend, retire APIs, enable multiple API versions to be in use

Communications Services

Oracle Communications Services Gatekeeper provides CSPs with pre-built, specialized components called Communication Services to allow third party developers and application partners to easily access the CSP’s telecom network and IT capabilities. The capabilities supported by the Communication Services include messaging, call control, terminal location, QoS control, payment, profile and presence. Oracle Communications Services Gatekeeper provides flexibility and choice in how third party developers and applications can access the CSP’s network through multiple types of 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 and SOA Service Façades support application interfaces based on Parlay X 2.1/3.0, and Extended Web Services for those interfaces not supported in Parlay X. The RESTful Service Façade exposes HTTP-based interfaces with JSON-based data types, allowing Web 2.0 and rich internet applications to easily integrate communication capabilities. 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), QoS Control (PX 4.0), Binary SMS (EWS), WAP Push (EWS), Subscriber Profile (EWS), Session Management (EWS), Device Capabilities (PX 3.0), Terminal Status (PX 2.1)
- RESTful Web Services: SMS (OneAPI 2.0), MMS (OneAPI 2.0), Location (OneAPI 2.0), Payment (OneAPI 2.0/2.1), Third Party Call, Call Notification, Presence, QoS Control, WAP Push, Session Management, Device Capabilities, Audio Call
- Native Telecom Interfaces: SMS (SMPP), MMS (MM7), UCP

A lightweight, brandable Software Developer Kit is provided with Oracle Communications Services Gatekeeper to enable CSPs to support developers as they test and build applications and services using SOAP and RESTful based interfaces.

Vertical Services

Oracle Communications Services Gatekeeper includes several vertical services that represent the integration of components to address a particular market requirement to provide rapid time to market with out-of-the box functionality as show in Figure 3. Some of the vertical services that are available include:

- IMS Access: provides integration with a number of IMS components, such as, the HSS, CSCF, MRF, Presence, and PCRF and the exposure of these
RELATED ORACLE PRODUCTS
- Oracle Communications Policy Management
- Oracle Communications Billing and Revenue Management
- Oracle Communications Data Model
- Siebel CRM

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 CSPs, service providers, enterprises, and third party developers to harness and cross-leverage the power of the Web, communications, social networking, and IT, to better monetize their unique network assets, and maximize profitability.

ORACLE COMMUNICATIONS SERVICE DELIVERY PRODUCTS
- Oracle Communications Services Gatekeeper
- Oracle Communications Converged Application Server
- OCCAS Service Controller
- Oracle Communications WebRTC Session Controller

Capabilities through a web services API
- QoS Control: integration with the Oracle or third party PCRF to provide session-based QoS and charging controls to applications through a REST or Parlay X API
- Messaging services: aggregation of SMS, MMS, and WAP push capabilities through simple APIs
- Trusted Identity Management: leveraging the CSP trust relation to act as a broker to provide trusted identity using CSP or third party assets

Figure 3: Vertical Services

Oracle Communications Services Gatekeeper

The Oracle Communications Services Gatekeeper is a comprehensive API Exposure platform with robust API management and an extensive array of telecom and enterprise communications services that easily aggregates and securely exposes assets while accelerating innovation and enabling the monetization of these assets.

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

Hardware and Software. Engineered to Work Together

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