

# Oracle Communications S&SM Overview

*Updated March 2007*



**Oracle Communications S&SM enables you to quickly and effectively tie together different environments and markets to provide a complete, unified view of the customer experience.**

## **ENABLING AN END-TO-END VIEW OF THE CUSTOMER EXPERIENCE**

The rapid pace of technological change, increased competition from new entrants, globalization, and the drive toward network convergence continue to shift market dynamics in the communications industry, creating new business opportunities and challenges. Service provider organizations are consolidating into larger, full-service operators that offer multiple bundles of services for voice, video, data, and more—in triple- and quad-play configurations. Nontraditional service providers are also entering these markets, offering their own unique service bundles to entice new customers.

This evolution highlights the critical importance of enabling an end-to-end view of the customer experience—a requirement that further complicates the ongoing issues of controlling costs, accelerating the time to market for new services, and streamlining complex business and operations support systems (BOSS). The ability to tie together diverse environments and markets through the effective management of service models, subscribers, and service instances is crucial to providing a complete, unified view of the customer experience.

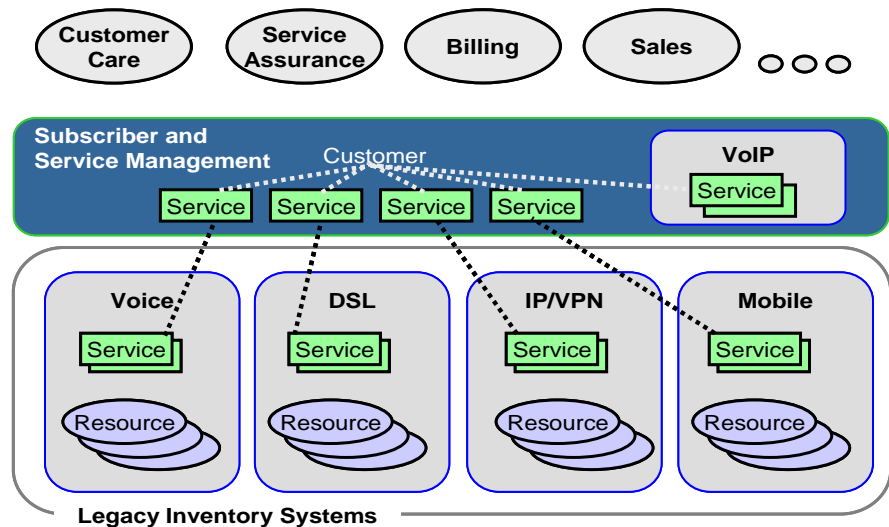
Recent inventory operations support systems (OSS) projects have focused on managing the physical resources used in the network. However, providers also need the agility to separate the management of subscribers, services, and resources. While existing inventory systems can sometimes provide a basic level of service inventory management, they are limited in their ability to address these new service-driven requirements. Upgrading an existing system or deploying a more-comprehensive system is costly and time-consuming, and hampers a provider's ability to effectively deliver the new services their customers demand.

## INTRODUCING ORACLE COMMUNICATIONS S&SM

Oracle Communications S&SM (Subscriber & Service Management) is an innovative solution that complements Oracle's existing inventory solutions and addresses the changing needs for subscriber and service management. Oracle Communications S&SM

- Provides a customer-centric view into products, subscribers, and services
- Complements your current BOSS investments through flexible modeling and modular deployment
- Allows for the rapid introduction of new services and the modification of business rules around current services

Oracle Communications S&SM tracks various services across disparate domains and technologies.



Oracle Communications S&SM tracks various services across disparate domains and technologies.

- Provides a multidimensional solution that grows with your needs, supporting one or many services and scaling from small, lightweight deployments to very large enterprisewide projects
- Is built on a standards-based architecture for rapid deployment and optimal investment value

### Meeting Subscribers' Changing Demands

The changing demands of your subscribers shape the services you offer and how they should be maintained. Customers demand network access anytime, anywhere, and through a variety of devices. Data, mobile, and video service have joined voice as being "always on" services. Increased customer expectations, coupled with the

demand for highly personalized content across a variety of services, continue to create new challenges for service providers.

With the ever-present threat of subscriber churn, enhancing customer service is critical for business success. Single bills, real-time self-service care, and instant responsiveness to requests are key to maintaining high levels of customer satisfaction. The proliferation of single-use and on-demand events such as location-based services, video-on-demand, and competitive entries mean that subscriber loads have never been higher. And an important part of the experience is how many mouse clicks or keystrokes the customer must make, or must wait for the customer service representative (CSR) to make, to enable a service request.

Oracle Communications S&SM addresses these challenges by providing a consolidated view of each subscriber and their services, no matter which technology or domain their services use, including remote and disparate systems. By relating services to instantiation rules, service providers can easily understand where new services can be added, and the extra value that each new service brings to the customer.

### **Controlling Costs to Meet Financial Goals**

A centralized view of services is critical to understanding and managing numerous complex, interdependent services. These services are frequently managed in “silo” systems and rely on multiple databases and network-facing systems to bring them together. Even with inventory consolidation projects, there is usually a gap between the network view and the total service view. Re-engineering inventory systems to create a single view requires significant cost and time, and since services change frequently, these costs can spiral out of control.

Oracle Communications S&SM includes robust data modeling and data storage functionality for managing services and subscribers, and can also present federated or replicated data from other systems. This allows other applications—which may have the design, assign, or usage logic incorporated—to be the master data store, either temporarily or permanently. Service providers can view that data via Oracle Communications S&SM’s graphical user interface (GUI) or API interface, greatly improving usability and reducing integration costs.

### **Enabling Rapid Revenue Through Faster Time to Market**

Getting new services to market faster increases your competitive advantage and shortens time to revenue and profit. If customized or technology-specific BOSS applications need to be purchased, built, deployed, or programmed, valuable time is wasted and service introduction may significantly lag behind your competitors. In addition to potential revenue loss, you may also lose subscribers who perceive your company as slow to adopt new technology. Likewise, the ability to turn off and decommission services quickly is key to focusing resources on the right areas of the business.

**Oracle Communications S&SM provides a consolidated view of each subscriber and their services, no matter which technology or domain their services use.**

**Oracle Communications S&SM is a true enterprisewide application that has been designed, architected, and developed to meet the changing needs of service providers around the world.**

Oracle Communications S&SM is built on a modular architecture and includes configuration tools that allow you to quickly introduce or change services via an administrative GUI, without disruption to the application. Because new functionality modules can be added at any time—independent of the core application—the deployment time is significantly reduced, enabling you to realize new service revenue.

## **PRODUCT FEATURES**

Oracle Communications S&SM is a true enterprise-wide application that has been designed, architected, and developed to meet the changing needs of service providers around the world. It delivers a powerful platform that leverages the latest industry standards to enable an accurate and consolidated view of subscribers and services, and provides the flexibility and agility needed to meet tomorrow's unknown demands.

### **Industry Standards**

Oracle Communications S&SM's architecture is based on the TeleManagement Forum's Shared Information/Data (SID) framework and on other key industry standards. These industry standards provide a powerful approach for modeling the business and delivering solutions in ways that are more powerful and flexible, and more interoperable than ever before. Oracle is actively involved in the ongoing development of these standards that enable rich out-of-the-box functionality, ensure interoperability between components sourced from different vendors, and facilitate a cost-effective evolution of the entire BOSS infrastructure.

### **Product, Service, and Subscriber Defined**

With Oracle Communications S&SM, you can easily define the service model, including product, service, and subscriber relationships, allowing you to bring your business together in new and traditional ways. You can define the specifications, characteristics, and business rules for each model and organize them hierarchically and relationally to one another. As a result, you can create a powerful catalog that actively drives the provisioning process or passively works to bring a consolidated view of the business together. For example, providing short message service (SMS) to a subscriber may require general packet radio service (GPRS) and a telephone number to be in place, while Web browsing may be a parallel service.

### **Federated and Shared Data**

Oracle Communications S&SM is designed specifically to work in collaboration with other components in the BOSS architecture, including other commercial or in-house inventory and resource management systems. Functions such as managing equipment assets, designing or configuring services, and assigning resources can be implemented in cooperation with various resource or domain management systems that exist in the architecture. This provides the flexibility to deliver on new requirements quickly while preserving embedded investments and reducing risk.

The solution's architecture flexibly supports string data sharing and synchronization, data federation, and transaction propagation so that a number of inventories can coexist harmoniously.

### **Next-Generation Architecture**

Oracle Communications S&SM is a true JEE-based application. Leveraging the latest proven technologies, this platform provides a highly flexible and extensible foundation of Web services and browser-based user interfaces that can

- Integrate seamlessly across application modules and disparate applications through hyperlinks and Web services
- Be accessed securely using a standard Web browser across a local area network (LAN), wide area networks (WANs), and the public internet
- Be accessed via SOAP/XML for enterprise application integration
- Take advantage of the Java programming language and scripting languages that make available all the features of the JSE and JEE platforms

With Oracle Communications S&SM, Web pages for inventory and management functions can be accessed from external systems via hyperlinks to perform manual execution tasks. The system also provides service-specific Web services, as well as APIs that integrate seamlessly with provisioning tasks to perform service provisioning, resource administration, and maintenance.

Finally, Oracle Communications S&SM's next-generation architecture enables system integrators to easily develop custom plug-ins for implementing service-specific and network-specific business policies.

### **Powerful Specifications**

Oracle Communications S&SM provides both static and dynamic ways to define and implement solutions quickly by leveraging the specification-instance pattern that is extensively defined in the TeleManagement Forum SID. Specifications provide the means to define subscribers, products, services, and business attributes, relationships, behaviors, patterns, and policies. These specifications enable the highest degree of automation, completeness, and integrity in the business process. Whether serving the business as a common, normalized repository of subscriber and service information, or driving the service provisioning process, specifications enable services to be defined and deployed faster than ever before.

### **Modular GUI**

No off-the-shelf solution meets 100 percent of a service provider's requirements. Adapting your business to fit an inflexible OSS product is not the right answer. Oracle Communications S&SM has a modular GUI and is built on an architecture designed with extensibility as a core value. It can effectively address your

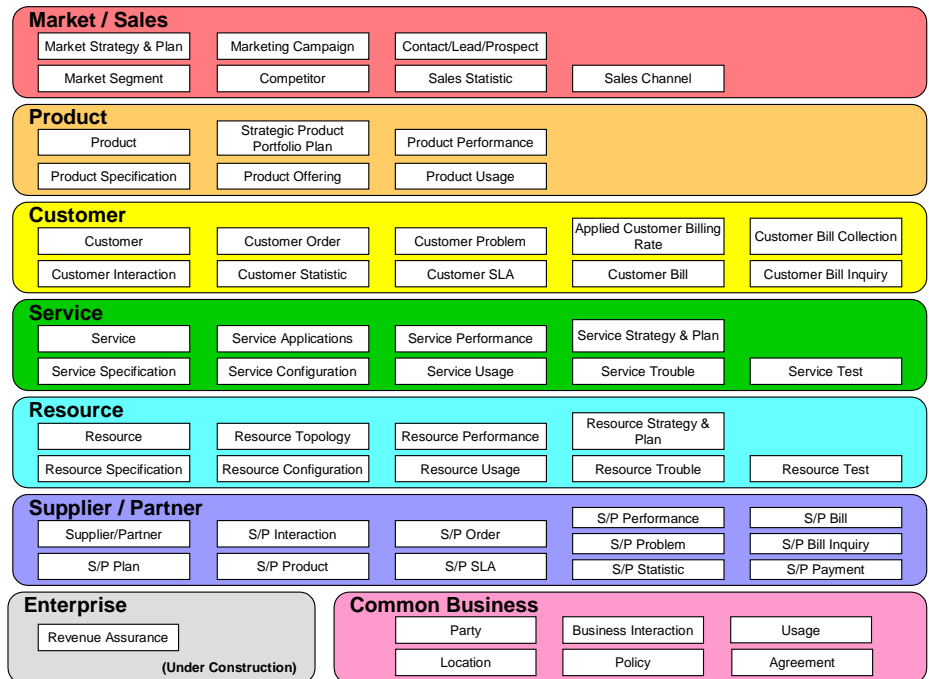
**Oracle Communications S&SM's next-generation architecture enables system integrators to easily develop custom plug-ins for implementing service-specific and network-specific business policies.**

requirements through a combination of out-of-the-box functionality, configurable extensions, and customization.

Each object model is composed of a number of browser-based screens that are configured based on the data model and business rules. Administrators can determine the layout, labels, and input methods for each screen. Because you can closely map screens to your processes, there is minimal impact to your staff, and efficiencies can be realized.

All of the functions presented are available as Java functions that can be used and arranged as necessary. To further streamline the user experience for your staff, links to commonly used functions can be stored on a per-user basis and recalled from a drop-down menu, reducing mouse usage and time. In addition, required links to external systems can be included, and custom functions can be incorporated.

# SID Framework



Oracle Communications S&SM's architecture leverages the TeleManagement Forum's SID specification-instance pattern.

## **CONCLUSION**

Oracle Communications S&SM provides the functionality, flexibility, and scalability to support new services for your customers. Its next-generation, open architecture enables you to quickly and effectively tie together different environments and markets to provide a complete, unified view of the customer experience.

## **CONTACT US**

For more information on Oracle Communications S&SM, call +1.800.ORACLE1 to speak to an Oracle representative or visit [oracle.com](http://oracle.com).



Oracle Communications S&SM Overview  
Updated March 2007

Oracle Corporation  
World Headquarters  
500 Oracle Parkway  
Redwood Shores, CA 94065  
U.S.A.

Worldwide Inquiries:  
Phone: +1.650.506.7000  
Fax: +1.650.506.7200  
[oracle.com](http://oracle.com)

Copyright © 2006, 2007, Oracle. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice.

This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.