Oracle® Communications Services Gatekeeper

Release Notes

Release 6.0

E50775-03

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ORACLE®

Oracle Communications Services Gatekeeper Release Notes, Release 6.0

E50775-03

Contents

2   Database Schema Changes

Preface

This book includes information about this release of Oracle Communications Services Gatekeeper.

Audience

This book is intended for all Services Gatekeeper users.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

For related information, see the following Services Gatekeeper documents:

- *Oracle Communications Services Gatekeeper Concepts*

- *Oracle Communications Services Gatekeeper Getting Started Guide*

- *Oracle Communications Services Gatekeeper Multi-tier Installation Guide*

1

Release Notes

This document lists the new, enhanced, and removed features, resolved and known issues, documentation notes, and documentation updates in this release of Oracle Communications Services Gatekeeper.

This document contains the following sections:

- November 2015 Documentation Reposting Updates
- New and Changed Features
- Removed/Deprecated Features
- Resolved Issues
- Known Issues
- Documentation Notes
- Post-Release Documentation Updates

November 2015 Documentation Reposting Updates

These features have been added in the November 2015 documentation release.

New Deploying Services Gatekeeper in a Demilitarized Zone Chapter

A new "Deploying Services Gatekeeper in a Demilitarized" chapter has been added to the *Services Gatekeeper Security Guide* to explain a DMZ deployment.

New Actions Management API Documentation

A new reference document has been added to this release that explains how to manage actions in the Partner and API Management Portal GUI. See "API Actions Management REST-based API" in *Services Gatekeeper Portal Developer's Guide* for details.

Removed Duplicate API Reference Documentation

Most of the MBean attributes and operations have been removed from this documentation set. That information was a duplication of the OAM, Java API, and Actions API reference documents, which sometimes caused confusion when the two documentation sources conflicted. The reference documents are now the correct source for that information, and links to those doc sets are provided where appropriate. See Table 1–6 for a list of the documents affected.

New Parlay X 2.1 Short Messaging/SMPP Parameters

The **submit_date** and **done_date** tunneled parameters have been added to the Parlay X 2.1 Short Messaging/SMPP communication service. See "Parlay X 2.1 Short Messaging/SMPP" for details.

New Application Subscription Management Attributes

The **SubscriptionPluginMBean.TrustedApplicationInstances** and **expiry_period** attributes have been added to the Application Subscription Management communication service to manage subscriptions. For details, see "Application Subscription Management" in *Services Gatekeeper Communication Service Reference Guide*.

Miscellaneous Documentation Improvements

See Table 1–6, " Documentation Changes After Initial Release" for a list of the general documentation changes for this reposting.

New and Changed Features

This section describes new features and feature enhancements in this release of Services Gatekeeper.

New API Management Features

The Services Gatekeeper API management features include the new Partner and API Management Portal GUI, Network Service Supplier Portal GUI, and Partner Portal GUI.

Services Gatekeeper uses the API management platform to intercept and process the requests and responses in real time. You first develop applications using the partner relationship management (PRM) portals and put them in an active state. Then when the API management platform receives HTTP requests for those applications, it proxies each request based on predefined rules set in the PRM portals.

For information on the API management platform, see *Services Gatekeeper API Management Guide*.

Network Service Supplier Portal

Network Service Supplier Portal is new in Services Gatekeeper 6.0 release.

This graphical user interface provisions network resources as network service interfaces. Service suppliers working in your group, or from other groups or companies can use the Network Service Supplier Portal to provide service interfaces.

For information on Network Service Supplier Portal, see Network Service Supplier Portal Online Help.

Partner and API Management Portal

Partner and API Management Portal replaces the Partner Manager Portal application supported in Services Gatekeeper releases earlier than 6.0.

Your network operators and enterprise customers access Partner and API Management Portal to create and manage your APIs. These APIs could be created in Network Service Supplier Portal, communication service APIs, and Web service APIs

provided by Service Gatekeeper. They also manage the accounts of your partners and network service suppliers.

For information on Partner and API Management Portal, see Partner and API Management Portal Online Help.

Action Chains

You can set up action chains in Partner and API Management Portal GUI to filter and act on incoming and outgoing messages. These messages contain calls to the APIs subscribed to by your partner applications.

The action chains can have a wide range of real-time effects on the traffic flow such as identity management, mapping to support data formats and protocol changes, authorization, and monitoring.

When the API proxy receives a request, the proxy checks the incoming request and performs preconfigured tasks related to maintaining security. These tasks include, for example, verifying the service level agreement, or transforming the API as necessary (such as from JSON to XML format).

For information on action chains, see *Services Gatekeeper API Management Guide*.

Partner Portal

Partner Portal provided in this release replaces the Partner Portal application supported in the previous release of Services Gatekeeper.

Your application developers use Partner Portal to subscribe to the APIs provided by Partner and API Management Portal when configuring applications that use the services provided by these APIs.

For information on Partner Portal, see Partner Portal Online Help.

Extending the Portal User Interfaces

You can extend and customize these portals by adding new pages to the portals, creating a new navigation entry point on the left of the main dashboard page, or from the top menu bar to enter these new pages.

For information on extending the portals, see *Services Gatekeeper Portal Developer's Guide*.

New API Firewall Features

This release includes new configurable protections against denial of service (DOS) attacks by applications on your network. These settings protect against REST and SOAP messages designed to exhaust your server resources and prevent legitimate traffic messages from using your services. See "Securing Applications Against Malicious Traffic" in the *Services Gatekeeper Security Guide* for details.

New SAML Integration for OAuth 2.0

Services Gatekeeper now acts as a Security Assertion Markup Language (SAML) authorization server. You can use SAML credentials to gain access to resources protected by OAuth 2.0. See *Services Gatekeeper OAuth Guide* for details.

PCRF Connection Example

The documentation in this release includes an example procedure for connecting Services Gatekeeper to a Policy and Charging Rules Function (PCRF). A Tekelec PCRF is used in the example but the procedure for connecting other PCRFs is similar.

EDR Processing Changes and Enhancements

The way Services Gatekeeper processes EDRs has been improved and streamlined for better performance. The changes include modifications to the EDRs themselves, back-end changes, and improved EDR statistics information to help you diagnose problems, including:

- EDRs no longer contain the interceptor chain or request context fields. These fields contributed significant overhead to the EDR message object, and were of little value.

- The **displayStatistics** operation to the **EdrService** MBean has been changed to include the number of EDR messages published to the Java Messaging Service (JMS) by this MBean.

- A new **EDRtoAnalytics** MBean has been added to Services Gatekeeper to provide you with a statistical picture of the number of EDRs between the EDR processor and the data store writer.

New Default Single-system Installation Option

The default Services Gatekeeper installation option now installs everything you need to run a standalone implementation on a single hardware system. It includes an administration server, managed server, and a required database. This default installation option is faster, easier, and appropriate for test and evaluation implementations, or any production implementations that do not require multi-tier support. See *Services Gatekeeper Getting Started Guide* for details on the default installation.

As in releases earlier than 6.0, a multi-tier installation is also available that enables you to install the administration server, network tier, application tier, and database on separate systems. See the section on the installation options in *Services Gatekeeper Getting Started Guide* for information about making this choice, and *Services Gatekeeper Multi-tier Installation Guide* for details on the installation.

Upgraded Databases

Services Gatekeeper is now certified to be deployed with the following databases:

- Java DB (single-tier only)
- Oracle 12*c*
- Oracle RAC 12*c*
- Oracle 11*g* R2
- Oracle RAC 11*g* R2
- MySQL Cluster 7.2
- MySQL 5.6

Support for Enterprise Manager Cloud Control

You can now run the multi-tier version of Services Gatekeeper as an application that Oracle Enterprise Manager (which you purchase and install separately) monitors. See *Services Gatekeeper System Administrator's Guide* for details.

Full IPv6 and Dual-Stack Communication Support

Services Gatekeeper is now fully IPv6 compliant, and also supports communication using a combination of the IPv4 and IPv6 protocols.

SLA Support for Adding Proxy Servers for Callbacks/Notifications

You can now specify proxy servers to receive notifications or callback messages for your web services by adding them to the service provider or application SLA. You use the new `<proxyhost>` and `<proxyport>` SLA elements to specify the servers. See *Services Gatekeeper Accounts and SLAs Guide* for details.

New Communication Services

These communication services have been added to this release of Services Gatekeeper:

Parlay X 2.1 Terminal Status/SIP

You use the new Parlay X 2.1 Terminal Status/SIP communication service to obtain the status of terminals in your IMS core. This communication service replaces the Terminal Status/MAP communication service, which is deprecated.

Parlay X 4.0 Application-driven Quality of Service (QoS)/Diameter

You use the Parlay X 4.0 Application-driven Quality of Service (QoS)/Diameter to request QoS changes to subscriber connections to SOAP-based applications. Using predefined feature profiles, you can apply, modify, retrieve, delete, and query for the history of QoS settings.

See the appropriate chapters in the following guides for details about these services:

- *Services Gatekeeper System Administrator's Guide*
- *Services Gatekeeper Communication Service Reference Guide*
- *Services Gatekeeper Application Developer's Guide*

Enhancements to Communication Services

These communication services have been enhanced in this release of Services Gatekeeper:

- Native SMPP - Enhanced and clarified the "Connection Handling and Provisioning" documentation.
- OneAPI Short Messaging/SMPP - Enhanced and clarified documentation for the **senderName** parameter.
- Parlay X 2.1 Short Messaging/SMPP - General documentation clarifications.
- Parlay X 2.1 Terminal Location/MLP - Clarified the documentation on terminal location precision and MLP data types.

See the appropriate chapters in the following guides for details about these services:

- *Services Gatekeeper System Administrator's Guide*

- *Services Gatekeeper Communication Service Reference Guide*

- *Services Gatekeeper Application Developer's Guide*

Removed and Deprecated Communication Services

Support for these communication services has been removed or will be removed in a later release:

- The Parlay X 3.0 Audio Call/Parlay 3.3 UI-MPCC communication service is no longer supported.

- The Parlay X 3.0 Call Notification/Parlay 3.3 MPCC communication service is no longer supported.

- The Parlay X 3.0 Third Party Call/Parlay 3.3 MPCC communication service is no longer supported.

- The Parlay X 2.1 Terminal Status/MAP communication service is deprecated.

- Communication services that relied on the INAP/SS7 protocols as the network interface are no longer supported.

Enhancement for System High Availability

Services Gatekeeper now offers more precise control over how often the application tier (AT) and network tier (NT) servers confirm that their peer servers are available to process traffic. A new heartbeat mechanism enables you to set the time between heartbeat requests/responses in milliseconds or by the number of missing heartbeat responses. The heartbeat mechanism is disabled by default. See "Configuring Network Node Heartbeats" in *Services Gatekeeper System Administrator's Guide* for details and instructions on how to enable this feature.

New Capability for Using Geographic Redundancy Without Registering Applications

You no longer need to register each application at every geographically-redundant site. You can now register each application at a single site and the system replicates the registration at the other geographically-redundant sites. See "Setting Up Geographic Redundancy" in *Services Gatekeeper System Administrator's Guide* for information.

Documentation Improvements

The Services Gatekeeper documentation set has been edited, updated, and reorganized. These books and documents have been added for the new features in this release:

- Network Services Supplier Portal Online Help

- *Services Gatekeeper Getting Started Guide*

- *Services Gatekeeper Integration Guide*

These books have been combined:

- These books have been combined with the *Services Gatekeeper Application Developer's Guide*:

  - *Services Gatekeeper OneAPI Application Developer's Guide*

  - *Services Gatekeeper RESTful Application Developer's Guide*

  - *Services Gatekeeper SDK User's Guide*

These books have been renamed:

- The *Services Gatekeeper Partner Relationship Manager Developer's Guide* has been renamed to the *Services Gatekeeper Portal Developer's Guide*.

- The *Services Gatekeeper Communication Service Guide* has been renamed to *Services Gatekeeper Communication Service Reference Guide*.

- The *Services Gatekeeper Platform Developer's Studio Developer's Guide* has been renamed to *Services Gatekeeper Extension Developer's Guide*.

- The *Services Gatekeeper Deployment Guide* is now included in the *Services Gatekeeper Multi-tier Installation Guide*.

New Alarms, CDRs, and EDRs

Table 1–1 lists the new alarms.

Table 1–1   New Alarms

Service	Added Range
ParlayX QoS	98000101 to 98000108
Terminal Status/SIP	400400 to 400417

Table 1–2 lists the new Access Tier EDRs.

Table 1–2   New Access Tier EDRs

Service	Added Range
ParlayX QoS	91863, 91864
PRM Portals Actions Tab actions	48000
Terminal Status/SIP	4000 to 4021

Table 1–3 lists the new Network Tier EDRs.

Table 1–3   New Network Tier EDRs

Service	Added Range
ParlayX QoS	91851 to 91862
PRM Portals Actions Tab actions	48000
Terminal Status/SIP	91631 to 91634

Oracle WebLogic Server Upgrade

This release of Services Gatekeeper is built on Oracle Fusion Middleware WebLogic Server 12c (12.1.3).

SIP Servlet Container Upgrade

This release of Services Gatekeeper is preintegrated with SIP Servlet Container 7.1.0.13 through Oracle Communications Converged Application Server.

Removed/Deprecated Features

The features listed below either have been removed from this release, or will be removed in the next release (deprecated).

SS7 Support Removed

Support for the SS7 stack has been removed in this release, including these communication services:

- ParlayX 2.1 Third Party Call/INAP-SS7
- RESTful Third Party Call/INAP-SS7

Support for Oracle Service Bus Removed

The Oracle Service Bus domain option is no longer supported.

Resolved Issues

Table 1–4 describes known issues from the previous release that have been resolved in this release.

Table 1–4   Issues Resolved in This Release

Bug ID/SR ID	Description
14178804	Service Gatekeeper cannot reconnect automatically to a Diameter server that has been stopped and then restarted. If this issue occurs, connect to the service manually using the **PaymentMBean.connect** method. This MBean operation disconnects Services Gatekeeper from the Diameter server, and then reconnects to it.
16676196	An application name must not start with a blank character. The application approval process in Partner Manager Portal rejects any application that is named with an initial blank character such as "my app" with a message requesting the partner to contact the administrator. Ensure that all application names do not start with a blank character.
16677204	When you access Partner Manager Portal using Internet Explorer, and attempt to create a partner group service level agreement for an interface, the Interface selection does not display correctly in the **Contract Details** section of the **Create Partner Group Service Level Agreements** panel. This problem is specific to the Internet Explorer browser. If you encounter this issue, use Mozilla Firefox to access Partner manager Portal and Partner Portal.
17957244 3-8880592738, 3-8874490641, 3-8233238751 (primary)	Services Gatekeeper now supports **senderName**, an optional parameter in OneAPI SMS **OutboundRequests**. If the **senderName** parameter is used in a OneAPI SMS **OutboundRequest**, Services Gatekeeper displays the **senderName** value as the sender entry in the SMS message delivered to the mobile subscriber. If the **senderName** parameter is not used in the OneAPI SMS **OutboundRequest**, Services Gatekeeper displays the senderAddress from the OneAPI SendSMS OutboundRequest as the sender entry in the SMS message delivered to the mobile subscriber.

Table 1–4   (Cont.) Issues Resolved in This Release

Bug ID/SR ID	Description
17992911	Previously, OneAPI MMS delivery receipt notification received by an application did not contain the callback data found in the subscription request the application made for such notification. This issue has been corrected.
	The callback data that an application provides when it sends messages using OneAPI MMS is now returned in the delivery report notification sent to the application.
18020857 SR 3-8247142011	When the Multimedia Messaging Service (MMSC) received a multimedia message (MMS) sent to multiple destination addresses, the MMSC sent Services Gatekeeper delivery reports for each of the destination addresses. However, Services Gatekeeper only handled the first delivery report correctly. This issue has been corrected.
	Services Gatekeeper now handles all delivery reports related to an MMS sent to multiple destination addresses correctly.
18020862 SR:3-8232657461	When the delivery state for an MM7 message was "Expired", the message state in the delivery report notification or status query response delivered to the application was incorrect. This issue has been corrected.
	The message state delivered to applications in delivery report notifications or status query responses for such messages is now set to **DeliveryImpossible**.
18122755 3-8233378061	When Services Gatekeeper cannot deliver an MMS message sent by an application to the multimedia messaging service (MMSC), the response from the MMSC contains the **statusCode** and **statusText**.
	Services Gatekeeper returns these values to the application in the **requestError** object. The **requestError** object contains the SVC0001 serviceException with the error code MMS-000005.
	The format for the error code is
	MMS-000005:*MMSC_status_code*:*MMSC_status_text*

Known Issues

Table 1–5 lists the other known issues in this release.

Table 1–5   Known Issues in this Release

Bug ID	Description
20649220	Connecting the Platform Test Environment (PTE) to the Services Gatekeeper single-tier Derby (JavaDB) implementation requires this workaround using the Java `ij` command.
	First, set your path:
	export *Derby_install_home***=$***Middleware_home***/wlserver/common/derby**
	export CLASSPATH=$**Derby_install_home**/lib/derby.jar:$Derby_install_ home**/lib/derbytools.jar:$**Derby_install_ home**/lib/derbyclient.jar:.:$CLASSPATH**
	In a shell enter this command:
	java org.apache.derby.tools.ij
	The ij> prompt appears. Enter this command to connect to the Derby database:
	ij> connect 'jdbc:derby://*admin_server_IP_addr*:*admin_server_listen_ port*/**gatekeeper;create=true;user=gatekeeper;***domain_user_ password*=12345678';
	You can now connect the PTE to the derby database using the instructions in "Configuring and Using a Database Connection" in *Platform Test Environment User's Guide*.
	When you are finished using the PTE-database connection, close the `ij` process by typing **disconnect**.
N/A	The API and Partner Portal GUI tool offers an **Actions** tab that you use to affect traffic requests/responses for an application. Using the features in this tab prevents the application from receiving or sending notifications.
20211024	Upgrading from Services Gatekeeper 5.1 to 6.0 requires these additional steps to send and receive SMS and MMS messages correctly:
	1. While redeploying the **rest.jar** application as directed in "Upgrading Services Gatekeeper" in *Services Gatekeeper Multi-tier Installation Guide*, you must click the Administration Console **Activate Changes** button twice. The first time you can ignore the error messages about dependencies. The second time you click **Activate Changes** the process succeeds.
	2. Restart all application tier and network tier servers in your implementation.
20209404	The Partner and API Management Portal does not allow you to change an API Exposure Type from **Private** to **Public**.
	The workaround is to update the private API by assigning it to all the available partner groups. For any API that is made public in this manner, manually assign the API to any new partner group that you create afterward.
20208361	REST requests from applications that subscribe to APIs configured with **com.bea.wlcp.wlng.px40.plugin.ApplicationQoSPlugin** interface display the generic **500 Internal Server Error** message, when the API is in dynamic service mode.

Table 1–5   (Cont.) Known Issues in this Release

Bug ID	Description
20116778	This issue affects default (single-tier) Services Gatekeeper implementations using SIP as the network-facing protocol. Adding a new node to a Services Gatekeeper cluster results in **Replicated call state manager could not initialize all partitions** error messages. The new node's log file also includes some of these messages: **<New view for partition part-1: Partition viewId=0 Name=part-1 @ CreatingReplicaId:Name=0:Node1 Replicas=[0:Node1]>** To work around this problem: 1. Log in to the Administration console. 2. In the **SIP Server Data** Tab, remove all existing data tier configuration settings. 3. Create a new data tier configuration, including all of the managed servers in the cluster.
20071950	This applies to both Partner and API Manager Portal and Partner Portal. If the connection between Services Gatekeeper and the OBIEE (analytics) server is not configured correctly, clicking the portal **Help** button on the **Statistics** tab brings up this OBIEE error message: **OBIEE Server Connection Error Reference** Thereafter, all attempts to connect to the online help from the portal result in the same error message. Once you correct the OBIEE connection problem, you must also clear your browser cache before you can connect to the online help again.
20055977	When you install Services Gatekeeper using Microsoft Windows platform, the **Start** menu displays Services Gatekeeper as "OracleHome" (and not "Services Gatekeeper").
19894744	The **Actions** tab in Partner and API Management Portal does not display the entries you input in the **Content** field for the **SchemeValidation** action.
19666987	Google Chrome browsers do not display all Analytics report pages correctly. The Partner Portal and Partner and API Management Portal calendar date selection fields to filter statistics reports fail to display in the Chrome browser. The workaround is to use Mozilla Firefox when using the Statistics feature in the portal applications for API management.
19161610	For a REST to SOAP web service, if the schema definition for a **sendSMS** operation contains the entry **xsd:element name="addresses" type="xsd:anyURI"**, Services Gatekeeper does not validate the addresses in the request against the schema.
14396654	When the PTE environment is set to a sessionless mode, **sendSMS** operations associated with plug-ins based on a SOAP service throw an exception indicating that the application instance does not exist.
20212931	The Region Subscriber Report does not show the number of subscribers in a specific region for a selected application.
20117812	At times, a viewed notification remains in the New Notifications table even after you click Close in the view dialog for the notification. In this case, refresh the view in your browser window (F5) to move the notification to the Notification History tab.

Documentation Notes

This section contains late-breaking documentation updates that were not included in main documentation set.

New AcrExpiredLifeTime Attributed Added to the ACR Plug-in

A new **AcrExpiredLifeTime** attribute was added to the ACR plug-in. For details, see "Setting ACR Plug-in Parameters" in *Services Gatekeeper Application Developer's Guide*. This feature was added in the Services Gatekeeper 6.0 Patch Set 1 release.

New Attribute for Parlay X 3.0 Payment/Diameter Communication Service

This attribute has been added to the Parlay X 3.0 Payment/Diameter communication service MBean to forward AVPs to the application.

Attribute: IncludeXParamAVPListInResponse

Scope: Cluster

Unit: Not applicable

Format: Boolean

If this attribute is set to TRUE, the AVP-list in the response message from the charging server to the application is forwarded as an xparam. The xparam key name is **AVP_LIST** and the list of key value pairs is encoded into an XML string. For example:

```
<Avp-List>
    <Session-Id Flags="64">192.168.1.22;1417686781;1</Session-Id>
    <Origin-Host Flags="64">127.0.0.1</Origin-Host>
    <Origin-Realm Flags="64">destination.com</Origin-Realm>
    <Result-Code Flags="64">2001</Result-Code>
    <CC-Request-Type Flags="64">4</CC-Request-Type>
    <CC-Request-Number Flags="64">0</CC-Request-Number>
 </Avp-List>
```

If set to FALSE the attribute list is not included.

See "Reference: Attributes and Operations for Parlay X 3.0 Payment/Diameter" in *Services Gatekeeper Communication Service Reference Guide* for more information on the MBean attributes and operations.

Post-Release Documentation Updates

Table 1–6 lists changes and corrections to the Services Gatekeeper documentation after the 6.0 version was released in January 2015.

Table 1–6   Documentation Changes After Initial Release

Revision Date	Document	Section	Description
November 2015	*Services Gatekeeper Security Guide*	"Deploying Services Gatekeeper in a Demilitarized Zone"	This new chapter was added to specify a very secure Services Gatekeeper implementation.
November 2015	*Services Gatekeeper Multi-tier Installation Guide*	"Upgrading Services Gatekeeper"	Corrected the instructions to install Node Manager and upgrade the database. Added **wlng_at_portal_ service.ear** to the list of ear files to upgraded.
November 2015	*Services Gatekeeper System Administrator's Guide*	Various	The chapters in this document have been rearranged into "System Administration" and "Advanced System Administration" categories for clarity.
November 2015	*Services Gatekeeper API Management Guide*	Various	Miscellaneous editorial corrections.
November 2015	*Services Gatekeeper Portal Developer's Guide*	"API Management REST-Based API"	This appendix explains the tools that you use to create and manage APIs and extend or replace the API management GUI tools.
November 2015	*Services Gatekeeper Accounts and SLAs Guide* *Services Gatekeeper System Administrator's Guide* *Services Gatekeeper Communication Service Reference Guide* *Services Gatekeeper OAuth Guide*	Various	Removed documentation that duplicated the Java API reference documentation.
April 22, 2015	This document	*Known Issues*	Added description for bugid 20649220.
April 22, 2015	*Services Gatekeeper Administrator's Guide*	"Version Handling and Patching of Communication Services"	This section contained outdated instructions. They have been removed and replaced with a link to the correct procedure.
April 22, 2015	*Services Gatekeeper Concepts*	Access to Telecom Network Service Capabilities Using APIs Based on Well-Known Standards	Figure 1-4 contained an erroneous reference to Oracle Service Bus, which is no longer used by Services Gatekeeper. The figure has been corrected.
April 22, 2015	*Services Gatekeeper Multi-Tier Installation Guide*	Moved the Application Tier to Network Tier bandwidth requirements from this document to Chapter 2, Table 2-4 Bandwidth Requirements.	No change in content; this section was moved to the correct book.
April 22, 2015	*Services Gatekeeper Multi-Tier Installation Guide*	"Supported Databases"	MySQL Cluster 7.2.13 is now fully supported for full DB failover and fault tolerance.
April 22, 2015	*Services Gatekeeper Multi-Tier Installation Guide*	"Configuring the Domain in Console Mode"	Clarified that you need to copy the **SerializedSystemIni.dat** file on the new domain.

Table 1–6   (Cont.) Documentation Changes After Initial Release

Revision Date	Document	Section	Description
April 22, 2015	*Application Developer's Guide*	"Adding a SOAP2SOAP Communication Service"	This chapter replaced by the PRM Portals. Removed most of the chapter and added links to the new information.
April 22, 2015	*Services Gatekeeper API Management Guide*	Moved these late-breaking sections from the Documentation Notes section in this document to the *API Management Guide*: ■ Clarifying Partner Portal Authentication ■ Action Tab EDRs ■ Partner and API Management Portal Back-end Server Configuration ■ Creating a Multi-Tier User for the Partner and API Management Portal	No change in content; just moved these sections to the correct book.
April 22, 2015	*Services Gatekeeper Administrator's Guide*	Patching instructions.	The new instructions in "Patch Management of Services Gatekeeper Systems" replace the removed procedure.
April 22, 2015	*Services Gatekeeper Administrator's Guide*	Moved the "Late Change to SNMP Instructions" section from this document to the "Generating SNMP MIB Files" section in *Services Gatekeeper Administrator's Guide*.	No change in content; just moved this section to the correct book.
April 22, 2015	*Services Gatekeeper Administrator's Guide*	Moved information in the "EDR Performance and Configuration Enhancements" section from this document to the "About EDRs, CDRs, and Alarms" section in *Administrator's Guide*.	Corrected the existing section in *Services Gatekeeper Administrator's Guide*.

2

Database Schema Changes

This document lists the database schema changes between Services Gatekeeper 5.1 and Services Gatekeeper 6.0.

rest_qos_session_data Changes

Table 2–1 lists the changes to the **rest_qos_session_data** table.

Table 2–1   rest_qos_session_data Table Changes

New Column Name	Data Type
SESSIONID	VARCHAR2(255)
APPINSTGRPID	VARCHAR2(255)
ENDUSERID	VARCHAR2(255)
PLUGINID	VARCHAR2(255)
REQUESTID	VARCHAR2(255)
NODEID	NUMBER(38)
DURATION	NUMBER(38)
FEATURENAME	VARCHAR2(255)
SESSIONDATA	BLOB
STORED_TS	NUMBER(38)

rest_qos_template Changes

Table 2–2 lists the changes to the **rest_qos_template** table.

Table 2–2   rest_qos_template Table Changes

New Column Name	Data Type
NAME	VARCHAR2(255)
PLUGININSTANCEID	VARCHAR2(255)
MATCHRULE	VARCHAR2(255)
CONTENT	BLOB
QOSTEMPLATEDATA	BLOB
STORED_TS	NUMBER(38)

prm2_apis Changes

Table 2–3 lists the changes to the **prm2_apis** table.

Table 2–3   prm2_apis Table Changes

New Column Name	Data Type
APIID	VARCHAR2(100)
STATUS	NUMBER(38)
APIVERSION	VARCHAR2(50)
CONTRACTNAME	VARCHAR2(100)
ACCESSTYPE	NUMBER(38)
DESCRIPTION	VARCHAR2(1000)
PROTOCOL	VARCHAR2(200)
PRIVILEGELEVEL	NUMBER(38)
SERVICETYPE	VARCHAR2(100)
LINK	VARCHAR2(1000)
WADLCONTENT	BLOB
CSSERVICETYPE	VARCHAR2(500)
FACADE	VARCHAR2(100)
ICON	VARCHAR2(200)
NETWORKTOKENURI	VARCHAR2(200)
NORTHBOUNDWADLCONTENT	BLOB
CONTRACTVERSION	VARCHAR2(10)
NETWORKCLIENTREDIRECTURI	VARCHAR2(200)
DIRECTION	NUMBER(38)
APINAME	VARCHAR2(100)
AUTHTOKEN	VARCHAR2(100)
CSOPTION	NUMBER(38)
AUTHTYPE	NUMBER(38)
ACCESSURL	VARCHAR2(200)
NETWORKAUTHORIZATIONURI	VARCHAR2(200)
CONTRACTCONTENT	BLOB
NETWORKPROXY	VARCHAR2(200)
STORED_TS	NUMBER(38)

prm2_apiinterfacemethods Changes

Table 2–4 lists the changes to the **prm2_apiinterfacemethods** table.

Table 2–4   prm2_apiinterfacemethods Table Changes

New Column Name	Data Type
APINAME	VARCHAR2(100)

Table 2–4   (Cont.) prm2_apiinterfacemethods Table Changes

New Column Name	Data Type
INTERFACENAME	VARCHAR2(100)
METHODNAME	VARCHAR2(100)
SERVICEPATH	VARCHAR2(200)
DISPLAYNAME	VARCHAR2(100)
EXPOSE	NUMBER(38
PATH	VARCHAR2(200)
CHARGECODE	VARCHAR2(100)
SERVICEHTTPVERB	VARCHAR2(100)
HTTPVERB	VARCHAR2(100)
SETTLECODE	VARCHAR2(100)
STORED_TS	NUMBER(38)

prm2_application Changes

Table 2–5 lists the changes to the **prm2_application** table.

Table 2–5   prm2_application Table Changes

New Column Name	Data Type
ID	VARCHAR2(128)
STATUS	NUMBER(38)
APPINSTANCE	VARCHAR2(200)
DESCRIPTION	VARCHAR2(500)
ADDITIONALINFO	VARCHAR2(500)
EFFECTFROMDAT	NUMBER(38)
NEEDREAD	NUMBER(38)
ICON	VARCHAR2(200)
QTADAYS	NUMBER(38)
RTTIMEPERIOD	NUMBER(38)
RTREQLIMIT	NUMBER(38)
APPLICATIONNAME	VARCHAR2(100)
LOCKSTATUS	NUMBER(38)
QTALIMITEXCEEDOK	NUMBER(38)
QTALIMIT	NUMBER(38)
PARTNERNAME	VARCHAR2(100)
EFFECTTODATE	NUMBER(38)
SUBMITDATE	NUMBER(38)
STORED_TS	NUMBER(38)

prm2_notification Changes

Table 2–6 lists the changes to the **prm2_notification** table.

Table 2–6   prm2_notification Table Changes

New Column Name	Data Type
ID	VARCHAR2(64)
STATUS	NUMBER(38)
DATE_TIME	NUMBER(38)
CONTENT	VARCHAR2(255)
COMMENTS	VARCHAR2(2048)
RECEIVER	VARCHAR2(100)
SENDER_COMPANY	VARCHAR2(50)
REDIRECTOBJECT	BLOB
SENDER	VARCHAR2(100
STORED_TS	NUMBER(38)

prm2_partner_profile_data Changes

Table 2–7 lists the changes to the **prm2_portal_profile_data** table.

Table 2–7   prm2_partner_profile_data Table Changes

New Column Name	Data Type
USERNAME	VARCHAR2(100)
STATE	VARCHAR2(200)
BANKROUTINGNUMBER	VARCHAR2(100)
COMPANYURL	VARCHAR2(300)
SECURITYANSWER	VARCHAR2(200)
PHONENUMBER	VARCHAR2(100)
ZIPCODE	VARCHAR2(100)
EMAIL	VARCHAR2(100)
LASTNAME	VARCHAR2(100)
FINANCIALCITY	VARCHAR2(100)
COMPANY	VARCHAR2(200)
BANKACCOUNTNUMBER	VARCHAR2(200)
COUNTRY	VARCHAR2(100)
FINANCIALZIPCODE	VARCHAR2(200)
CITY	VARCHAR2(100)
STATUS	NUMBER(38)
PASSWORD	VARCHAR2(400)
STREETADDRESS	VARCHAR2(200)
INVOICETO	VARCHAR2(200)

Table 2–7 (Cont.) prm2_partner_profile_data Table Changes

New Column Name	Data Type
USERTYPE	NUMBER(38)
BANKNAME	VARCHAR2(200)
TAXID	VARCHAR2(100)
BANKADDRESS	VARCHAR2(200)
SECURITYQUESTION	VARCHAR2(200)
FINANCIALSTATE	VARCHAR2(100)
FINANCIALCOUNTRY	VARCHAR2(100)
FIRSTNAME	VARCHAR2(100)
REFERENCEACCOUNT	VARCHAR2(100)
STORED_TS	NUMBER(38)

prm2_app_apis_methods Changes

Table 2–8 lists the changes to the **prm2_app_apis_methods** table.

Table 2–8 prm2_app_apis_methods Table Changes

New Column Name	Data Type
ID	VARCHAR2(128)
APINAME	VARCHAR2(100
TYPE	NUMBER(38)
RTTIMEPERIOD	NUMBER(38)
RTREQLIMIT	NUMBER(38)
INTERFACENAME	VARCHAR2(100)
METHODNAME	VARCHAR2(100)
QTALIMITEXCEEDOK	NUMBER(38)
QTALIMIT	NUMBER(38)
TIMEPERIODGUARANTEE	NUMBER(38)
REQLIMITGUARANTEE	NUMBER(38)
APPLICATIONID	VARCHAR2(100)
QTADAYS	NUMBER(38)
STORED_TS	NUMBER(38)

wlng_configuration Changes

Table 2–9 lists the changes to the **wlng_configuration** table.

Table 2–9 wlng_configuration Table Changes

New Column Name	Data Type
PARAMETER_KEY	VARCHAR2(100)
NAME	VARCHAR2(100)

Table 2–9   (Cont.) wlng_configuration Table Changes

New Column Name	Data Type
INSTANCE	VARCHAR2(120)
VALUE	VARCHAR2(255)
VALUE_TYPE	NUMBER(38)
STORED_TS	NUMBER(38)

oauth2_resource_owner Changes

Table 2–10 lists the changes to the **oauth2_resource_owner** table.

Table 2–10   oauth2_resource_owner Table Changes

New Column Name	Data Type
ADDRESS	VARCHAR2(255)
RESOURCE_SCOPE	VARCHAR2(255)
ANONYMOUS_ID	VARCHAR2(64)
STORED_TS	NUMBER(38)
FROMRESOURCERULE	NUMBER(38)

oauth2_client Changes

Table 2–11 lists the changes to the **oauth2_client** table.

Table 2–11   oauth2_client Table Changes

New Column Name	Data Type
CLIENT_ID	VARCHAR2(32)
CLIENT_SECRET	VARCHAR2(64)
DESCRIPTION	VARCHAR2(255)
NAME	VARCHAR2(64)
APPINSTANCEID	VARCHAR2(32)
ALLOWEDREDIRECTIONURIS	VARCHAR2(2048)
STORED_TS	NUMBER(38)
SUPPORTIMPLICITGRANT	NUMBER(38)

wlng_internal_group_access Changes

Table 2–12 lists the changes to the **wlng_internal_group_access** table.

Table 2–12   wlng_internal_group_access Table Changes

New Column Name	Data Type
REQUESTER	VARCHAR2(255)
GROUP_ADDRESS	VARCHAR2(255)
STORED_TS	NUMBER(38)
ADMINPERMISSION	NUMBER(38)

Table 2–12   (Cont.) wlng_internal_group_access Table Changes

New Column Name	Data Type
ADDPERMISSION	NUMBER(38)
DELETEPERMISSION	NUMBER(38)
QUERYPERMISSION	NUMBER(38)

prm2_partnercontracts Changes

Table 2–13 lists the changes to the **prm2_partnercontracts** table.

Table 2–13   prm2_partnercontracts Table Changes

New Column Name	Data Type
APINAME	VARCHAR2(100)
PARTNERNAME	VARCHAR2(100)
READSTATUS	NUMBER(38)
STORED_TS	NUMBER(38)
NEEDREAD	NUMBER(38)