

# ORACLE COMMUNICATIONS BILLING AND REVENUE MANAGEMENT RELEASE 7.3



KEY FEATURE AREAS

- Centralized Operations management
- Real-time architecture enhancements
- Business platform enhancements
- Performance enhancements

*With the release of Oracle Communications Billing and Revenue Management Release 7.3, Oracle continues to build upon the innovation established in the previous releases of Oracle’s Portal software solution for the communications and media industry.*

**Oracle Communications Billing and Revenue Management Release 7.3 Objectives**

In response to market drivers and customer requests, the release of Oracle Communications Billing and Revenue Management Release 7.3 achieves the following objectives:

- Deliver superior platform operations management
- Enhance the upgrade process for real-time environments
- Enhance the next-generation real-time architecture
- Enhance the business platform
- Improve performance

**Operations Management**

Oracle Communications Billing and Revenue Management Release 7.3 gives service providers more ways to manage and control their systems while lowering costs.

<b>Centralized Management Console</b>	
<ul style="list-style-type: none"> <li>• Provide the ability to view a graphical representation of the distributed Oracle Communications Billing and Revenue Management Release 7.3 process topology</li> <li>• Let administrators easily visualize, monitor, and control Oracle Communications Billing and Revenue Management Release 7.3 processes from one central location</li> <li>• Integrate with HP OpenView or use open APIs for field developed integrations to other enterprise management tools</li> </ul>	<ul style="list-style-type: none"> <li>• Ease-of-use</li> <li>• Increase quality of service</li> <li>• Simplify implementation and keep costs low with prebuilt integration to HP OpenView</li> </ul>
<b>Process Monitoring and Management</b>	
<ul style="list-style-type: none"> <li>• Monitor all Oracle Communications Billing and Revenue Management Release 7.3 processes across all distributed systems from the central management console</li> <li>• Control key Oracle Communications Billing and Revenue Management Release 7.3 processes with the ability to start, stop, and restart</li> <li>• In high availability configurations, let administrator perform a live switchover from an active to a stand-by TIMOS system</li> </ul>	<ul style="list-style-type: none"> <li>• Simplify systems management</li> <li>• Provide high quality of service</li> <li>• Increase systems uptime</li> <li>• Achieve greater system control</li> <li>• Provide prebuilt integration to HP OpenView</li> </ul>

<b>Alarms and Alerts</b>	
<ul style="list-style-type: none"> <li>Alert administrators to possible systems issues with prebuilt (out of the box) and/or configurable alarms</li> <li>Indicate the general health of Oracle Communications Billing and Revenue Management Release 7.3 processes with health check alerts for continuously monitored processes</li> <li>Alarm examples include:                             <ul style="list-style-type: none"> <li>Failed or non-responding processes</li> <li>Error severity or specific errors</li> </ul> </li> <li>Performance alert examples include:                             <ul style="list-style-type: none"> <li>CPU Usage</li> <li>Memory Usage</li> <li>Disk Usage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Increase quality of service</li> <li>Provide proactive systems management</li> <li>Reduce downtime</li> <li>Lower systems costs</li> </ul>
<b>Performance History</b>	
<ul style="list-style-type: none"> <li>Capture and save performance related information for specific time periods to be analyzed and compared to other historical time periods</li> </ul>	<ul style="list-style-type: none"> <li>Increase understanding of systems usage and peak periods</li> <li>Increase quality of service</li> <li>Proactively plan for unusual peak periods.</li> </ul>

### Real-Time Architecture Enhancements

Enhancements to real-time architecture increase system uptime, give a higher quality of service, and offer improved customer service.

<b>Zero Downtime Upgrades</b>	
<ul style="list-style-type: none"> <li>Install patches or perform system upgrades without disruption to AAA operations using high availability features</li> </ul>	<ul style="list-style-type: none"> <li>No impact on overall service availability</li> <li>Increase system uptime</li> <li>Provide high quality of service</li> </ul>
<b>Lightweight Authorization</b>	
<ul style="list-style-type: none"> <li>Using lightweight authorization, immediately authorize a service based upon the available resource balance, without performing all of the rating and discounting processes</li> <li>Use “traffic light” concept to identify green, yellow, or red scenarios to determine whether an authorization request is immediate, processed normally, or rejected</li> </ul>	<ul style="list-style-type: none"> <li>Improve customer service</li> <li>Reduce latencies</li> <li>Reduce CPU requirements that would normally be needed for real-time environments</li> <li>Lower system costs</li> </ul>
<b>Level-Out Reauthorization Requests</b>	
<ul style="list-style-type: none"> <li>Spread out reauthorization requests over time to mitigate system delays (certain tariff plans that change rates at specific times of the day result in network authorization requests arriving to the system at the same time)</li> </ul>	<ul style="list-style-type: none"> <li>Improve customer service because real-time authorization requests aren’t delayed due to system constraints</li> <li>Lower costs and system requirements</li> <li>Increase system performance</li> </ul>

<b>Overload Reject</b>	
<ul style="list-style-type: none"> <li>• In case of system overloads:</li> <li>• New feature in the AAA Gateway allows timeout scenario if a downstream response is not delivered, and a preconfigured response is sent</li> <li>• If timeout mechanism is invoked, user-defined requests are buffered to allow later processing</li> <li>• Let administrator define overload threshold in CM layer and customize responses based upon business rules</li> </ul>	<ul style="list-style-type: none"> <li>• Increase system uptime</li> <li>• Increase quality of service</li> <li>• Increase customer service</li> <li>• Allow business flexibility in responding to overload requests—put control in the hands of the business</li> <li>• Improve revenue assurance</li> </ul>
<b>Transient Object Pool</b>	
<ul style="list-style-type: none"> <li>• Provide the ability to retain transient objects in TIMOS for a specified period of time</li> </ul>	<ul style="list-style-type: none"> <li>• Provide for ability to perform duplicate checks</li> <li>• Increase quality assurance</li> <li>• Increase customer service</li> </ul>
<b>Hot Standby TIMOS Configuration</b>	
<ul style="list-style-type: none"> <li>• Provide a “hot” standby TIMOS option for secondary synchronized instance for high availability purposes in addition to a “warm” standby option</li> </ul>	<ul style="list-style-type: none"> <li>• Virtually instantaneous switchover to a secondary TIMOS instance</li> <li>• Increase system uptime</li> <li>• Provide higher quality of service</li> <li>• Increase customer service</li> </ul>
<b>Graceful Switchover for High Availability</b>	
<ul style="list-style-type: none"> <li>• Allow for planned switchovers for scenarios such as regular maintenance</li> <li>• Ensure that all transient objects and dynamic data are successfully migrated from the active to the backup system</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure data integrity</li> <li>• Reduce system errors</li> <li>• Provide high quality of service</li> </ul>
<b>Diameter Balance Manager</b>	
<ul style="list-style-type: none"> <li>• Enable direct communication with the Intelligent Network (IN) through the Diameter protocol.</li> <li>• Enable service providers to provide real-time services that leverage prepaid balances existing in the IN</li> <li>• Debit/credit/check prepaid balances existing in the IN</li> </ul>	<ul style="list-style-type: none"> <li>• Transitional, low risk approach for providing convergent services that share a single prepaid balance</li> </ul>
<b>Prepaid/Postpaid Distinction and Optimization</b>	
<ul style="list-style-type: none"> <li>• Predefined configurations allow for certain types of accounts to be loaded into TIMOS</li> <li>• Extends the business profile functionality of previous Portal 7 releases</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce amount of memory used by TIMOS</li> <li>• Improve TIMOS load times during startup and switchover</li> <li>• Improve system performance</li> </ul>
<b>TIMOS Account Migration Manager</b>	
<ul style="list-style-type: none"> <li>• Enhance Account Migration Manager (AMM) to support migration of accounts and objects between multiple TIMOS instances (previously AMM supported only migration between multiple databases).</li> </ul>	<ul style="list-style-type: none"> <li>• Increase support of high availability systems</li> <li>• Increase quality of service</li> </ul>

## Business Platform and Performance Enhancements

An enhanced business platform means added flexibility and functionality along with increases in system performance and customer satisfaction.

<b>Flexible Billing</b>	
<ul style="list-style-type: none"> <li>Support for billing cycles of any number of months through drop-down box functionality during customer account creation or modification</li> </ul>	<ul style="list-style-type: none"> <li>Greater system flexibility</li> <li>Increase customer service</li> <li>Improve functionality for corporate customers</li> </ul>
<b>Trial Billing</b>	
<ul style="list-style-type: none"> <li>Option to run trial billing without generating an invoice</li> </ul>	<ul style="list-style-type: none"> <li>Identify potential errors early</li> <li>Improve trial billing performance</li> <li>Increase support for revenue assurance</li> </ul>
<b>Invoicing and Online Payments</b>	
<ul style="list-style-type: none"> <li>Generate summary invoices for hierarchical accounts containing a list of items instead of event details</li> <li>For direct debit of funds using Paymentech, Release 7.3 supports the "heartbeat" functionality that ensures an active connection port for payment</li> </ul>	<ul style="list-style-type: none"> <li>Increase platform functionality</li> <li>Reduce memory requirements and consumption</li> <li>Increase system performance</li> <li>Increase support for revenue assurance</li> </ul>
<b>Shared Friends and Family Lists</b>	
<ul style="list-style-type: none"> <li>Create multiple "friends and family" lists per service and share those lists with other subscribers of the same service type</li> <li>Make each list eligible for different promotional rates</li> </ul>	<ul style="list-style-type: none"> <li>Provide greater flexibility for customers</li> <li>Increase customer satisfaction</li> <li>Roll out innovative promotions</li> <li>Simplify F&amp;F setup</li> </ul>
<b>Global Charge Sharing</b>	
<ul style="list-style-type: none"> <li>Provide for creation of Global Charge Sharing Groups</li> <li>Allow charging for a call, or a portion of a call, to the called number</li> </ul>	<ul style="list-style-type: none"> <li>Allow service providers to support toll free or special numbers</li> <li>Increase system functionality</li> <li>Improve customer service</li> </ul>
<b>Model Selector</b>	
<ul style="list-style-type: none"> <li>Give users the Model Selector to configure rules that will match extended data retrieval (EDR) fields to a pricing and discounting model</li> </ul>	<ul style="list-style-type: none"> <li>Provide greater flexibility in creating pricing and discounting structures</li> </ul>
<b>Rerating Triggers</b>	
<ul style="list-style-type: none"> <li>Enhance the rerating functionality to include the reason for rerating in the system</li> </ul>	<ul style="list-style-type: none"> <li>Greater flexibility</li> <li>Greater control of rating</li> <li>Prevents duplicate rerate jobs</li> </ul>
<b>Provisioning Tag Framework</b>	
<ul style="list-style-type: none"> <li>Provide options for varying levels of service and promotions within the same product or discount, for any type of service</li> </ul>	<ul style="list-style-type: none"> <li>Greater system flexibility</li> <li>Provide more options for the provider to increase customer satisfaction</li> </ul>
<b>Tailor-Made Plans</b>	
<ul style="list-style-type: none"> <li>Allow a wide range of customer-specific customizations to be made to a subscriber's products on a very granular basis</li> </ul>	<ul style="list-style-type: none"> <li>Quickly tailor existing plans without having to create new product offerings</li> <li>Increase customer satisfaction</li> <li>Provide greater flexibility in plan creations to increase revenue generating capabilities</li> </ul>

**PLATFORM SUPPORT**

Portal Billing and Revenue Management Release 7.3 supports these hardware platforms and operating systems.

- Sun (32/64 bit)
  - Solaris 9
  - Solaris 10
- HP (PA-RISC) (32/64 bit)
  - HP-UX 11i v1 (11.11)
  - HP-UX 11i v2 (11.23)
- HP (IA-64)
  - HP-UX 11i v2 (11.23)
- Microsoft
  - Windows XP (*Portal 7.3 client applications only*)
  - Windows 2000 SP4 or greater (*Pipeline, TIMOS and AAA Gateway not supported*)
  - Windows 2003 (*TIMOS and AAA Gateway not supported*)

Portal Billing and Revenue Management Release 7.3 supports these databases.

- Oracle
  - Oracle 9i
  - Oracle 10g
  - Oracle 10g RAC
- Microsoft
  - SQL Server 2000
  - SQL Server 2005

<b>Configurable Consumption Rules</b>	
<ul style="list-style-type: none"> <li>• Extend the options for consumption of resource sub-balances</li> </ul>	<ul style="list-style-type: none"> <li>• Provide greater system flexibility</li> </ul>
<b>Roaming Enhancements</b>	
<ul style="list-style-type: none"> <li>• Enhance Roaming Manager for full compliance with global system for mobile communications (GSM) roaming standards (as specified by the GSM Association)</li> </ul>	<ul style="list-style-type: none"> <li>• Support all TAP 3 fields</li> <li>• Support RAP 1.3</li> <li>• Provide standard, out of box GSM reports</li> </ul>
<b>GPRS Manager</b>	
<ul style="list-style-type: none"> <li>• Offer support for any session-based general packet radio service (GPRS) service with new GPRS Manager</li> </ul>	<ul style="list-style-type: none"> <li>• Greater system functionality</li> <li>• Improve customer service</li> </ul>
<b>Suspense Manager Enhancements</b>	
<ul style="list-style-type: none"> <li>• Enable user to recycle millions of records in a single operation</li> <li>• Support other bulk operations such as edit, write-off, and purge</li> <li>• Support the ability to suspend EDR batches at a file level, rather than only the individual EDR level</li> </ul>	<ul style="list-style-type: none"> <li>• Improve performance when cycling large numbers of EDRs</li> <li>• Provide greater efficiency in handling file level errors</li> </ul>
<b>Multi-Threaded Framework</b>	
<ul style="list-style-type: none"> <li>• Convert from a multi-process framework to a multi-threaded framework</li> </ul>	<ul style="list-style-type: none"> <li>• Make better use of available processors and system resources</li> <li>• Use fewer hardware resources</li> <li>• Lower customer total cost of ownership (TCO)</li> </ul>
<b>Account Product Split</b>	
<ul style="list-style-type: none"> <li>• Redefine the account object by creating a separate object for products and discounts</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the amount of storage required for audit tables</li> <li>• Create a more efficient system structure, especially for accounts with numerous products</li> </ul>
<b>Security Enhancements</b>	
<ul style="list-style-type: none"> <li>• Provide support for the payment card industry standards, including Advanced Encryption Standard (AES)</li> </ul>	<ul style="list-style-type: none"> <li>• Protect customer-sensitive information such as credit card and account numbers with industry standard encryption support</li> </ul>
<b>Partner Integrations</b>	
<ul style="list-style-type: none"> <li>• Authentication support for Microsoft platform</li> <li>• BizTalk callout enhancement</li> <li>• Multi-database support for SAP RM-CA Manager</li> </ul>	<ul style="list-style-type: none"> <li>• Extend functionality for partner supported products</li> <li>• Reduce implementation costs</li> </ul>

Copyright 2006, 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 is it 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, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.