

Oracle Financial Services Revenue Management and Billing

Version 6.0.0.0.0

Licensing Guide

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Oracle Financial Services Revenue Management and Billing Licensing Guide

Note: To improve the content readability, the Oracle Financial Services Revenue Management and Billing product is referred to as Oracle Revenue Management and Billing throughout this document.

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Preface

About This Document

This document will help you to understand different features which are offered when you acquire a license for Oracle Financial Services Revenue Management and Billing. It also provides the licensing information about the third-party products and components which are included in this product.

Intended Audience

This document is intended for the following audience:

- End-Users
- System Administrators
- Consulting Team
- Implementation Team

Organization of the Document

The information in this document is organized into the following sections:

Section No.	Section Name	Description
Section 1	Oracle Revenue Management and Billing Licensing	Lists the features which are available in Oracle Financial Services Revenue Management and Billing.
Section 2	Third-Party Licensing for ORMB	Provides the licensing information about the third-party products and components which are included in Oracle Revenue Management and Billing.

Conventions

The following conventions are used across the document:

Convention	Meaning
boldface	Boldface indicates graphical user interface elements associated with an action, or terms defined in the text.
<i>italic</i>	Italic indicates a document or book title.
<code>monospace</code>	Monospace indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or information that an end-user needs to enter in the application.

Acronyms

The following acronyms are used in this document:

Acronym	Meaning
ORMB	Oracle Revenue Management and Billing
OUIAF	Oracle Utilities Application Framework
FW	Framework
ILM	Information Lifecycle Management
TFM	Transaction Feed Management
PDF	Portable Document Format
EDI	Electronic Data Exchange
ICU	International Components for Unicode
FOP	Formatting Objects Processor

Related Documents

You can refer to the following documents for more information:

Document	Description
<i>Oracle Revenue Management and Billing Version 6.0.0.0.0 Release Notes</i>	Provides a brief description about the new features, enhancements, and UI level changes introduced in the current release. The new features and enhancements are classified under three distinct heads – Generic (which is intended for both domains), Financial Services, and Health Insurance. It also contains high-level information about the supported platforms, framework upgrade, supported upgrades, and documentation updates. In addition, it contains a list of discontinued features, planned deprecation notices, customer bugs fixed or forward ported and known issues in the current release.
<i>Oracle Utilities Application Framework Business Process Guide</i>	Explains how to get acquainted with the user interface. It explains the different types of pages or portals that you may come across in the application. It explains how to set the user preferences and how to create, manage, assign, and complete a To Do in the application. It also explains how to submit reports and view historic reports in the application.

Document	Description
<i>Oracle Utilities Application Framework Administrative Guide</i>	Explains the general, security, user, designing, developing, and scripting options available in Oracle Utilities Application Framework (OUAF). It describes the user interface, database, configuration, and reporting tools available in OUAF. In addition, it provides information on how to configure incoming and outgoing messages and how to integrate Lightweight Directory Access Protocol (LDAP), Oracle Identity Manager (OIM), and Batch Scheduler with Oracle Revenue Management and Billing (ORMB).
<i>Oracle Revenue Management and Billing Business Process Guide</i>	Explains how to maintain the demographic, geographic, and financial objects (i.e. accounts) of a customer. It explains how to manage a customer's bills, payments, adjustments, credits, collections processing, statements and deposits in ORMB. It also describes the financial transactions, case management, sales and marketing functions, rates engine, quotations, loans, how to monitor and execute job streams, and how to manage workflows, notifications and overdue processing. In addition, it explains how to extract the data from the system using an extract template. The features listed and described in this document can be used in both financial services and health insurance domains.
<i>Oracle Revenue Management and Billing Administrative Guide</i>	Explains how to configure various features and functionalities in ORMB. For example, billing, payments, adjustments, financial transactions, credits, collections processing, loans, service credits, background processes, quotations, case management, security, overdue processing, batch scheduler, workflow and notifications. The information available in this document can be used in both financial services and health insurance domains.

Document	Description
<i>Oracle Revenue Management and Billing Banking User Guide</i>	<p>Describes various features which are available for the financial services business. For example, customer registration, customer 360° view, invoicing group, pricing management, multi-currency accounts, currency conversion, construct based billing and settlement, trial billing, product lifecycle management, subscription billing, mass pricing update, accrual, foreign exchange gain loss, transaction feed management, upload validated payment and adjustment data, freeze payments on notification, payment request, offset request, funding request, hold request, refund/write off request, dispute request, upload request, earnings credit rate, payment agreement request, invoice request, deal management, etc.</p> <p>It describes all screens related to these features and explains how to perform various tasks related to the feature in the application.</p>
<i>Oracle Revenue Management and Billing Installation Guide</i>	<p>Provides an overview about the application architecture. It contains detailed information about the software and hardware requirements, supported platforms, application server and database space requirements, and application server pre-requisites for supported platforms. It explains the installation and configuration menu options which are available during installation and advanced menu options which are available post installation. It also explains how to configure WebSphere application server and how to install OUAF, OUAF rollup packs, ORMB, and ORMB patches or rollup packs.</p> <p>It contains appendices which lists ORMB rollup packs and notices about third-party JAR and other components.</p>
<i>Oracle Revenue Management and Billing Quick Installation Guide</i>	<p>Provides information about the media packs which are available for the current release. It contains information about the supported platforms, space requirements, and release-specific documentation library. In addition, it contains high-level information on how to install ORMB and selected additional software.</p>

Document	Description
<i>Oracle Revenue Management and Billing Database Administrator's Guide</i>	<p>Provides information about the supported database platforms and explains how to install database with or without demo data. It contains the standards and conventions that should be followed while working with ORMB database. In addition, it lists various configurations and implementation guidelines with respect to tablespace, encryption, storage, compression, indexes, initialization parameters, listener, table partitioning, performance monitoring, memory resource management, optimizer statistics and segment advisors, etc.</p> <p>It contains various appendices which lists the new objects added in ORMB, application services configured for default user groups, new objects added in OUAF, information about OUAF system tables and ORMB rollup packs, notices about third-party JAR and other components.</p>
<i>Oracle Revenue Management and Billing Server Administration Guide</i>	<p>Provides detailed information about the product architecture, native support, directory structures, environment variables, logs, etc. It explains various concepts related to the batch server and lists and describes the scripts required for installing and configuring ORMB. It explains how to monitor the system and configure Web browser, Web application server, business application server, inbound web services, and batch server. It explains how to provide Oracle Cloud Support and how to integrate and monitor Oracle Scheduler.</p> <p>It contains various appendices which lists and describes the parameters available in the ENVIRON.INI, Web.xml, spl.properties, hibernate.properties, submitbatch.properties, threadpoolworker, coherence-cache.config.xml, and tangosol-coherence-override.xml files.</p>
<i>Oracle Revenue Management and Billing Security Guide</i>	<p>Highlights what's new in security! Describes all the security features available in ORMB for authentication, authorization, user access, database access, LDAP and SSO integration, audit, encryption, web services, and JNDI access. It also describes how to provide support for data masking, Oracle cloud object storage, groovy, HTTP proxy, keystore, truststore, whitelist, federated architecture, and object erasure. In addition, it explains how to garble the customer information.</p>

Document	Description
<i>ORMB - Transaction Feed Management - Batch Execution Guide</i>	<p>Explains the sequence in which the batches should be executed while performing various tasks in the Transaction Feed Management module.</p> <p>It provides detailed information about each TFM batch and its parameters. It also indicates the restart and multi-threading ability of each batch. In addition, it recommends values for various parameters which can be used for tuning batch performance as per the available hardware.</p>
<i>Oracle Revenue Management and Billing Batch Guide</i>	<p>Provides detailed information about various batches which are used in different modules, such as billing, payments, financial transaction, pricing management, funding request, offset request, hold request, upload request, inbound message, payment agreement request, accruals, earnings credit rate, ILM, deferred revenue recognition, reconciliation, garbling, repricing, entity audit, statements, etc. It also contains information about the batch parameters and the batch restart and multi-threading abilities.</p>
<i>Oracle Revenue Management and Billing Upgrade Guide</i>	<p>Explains how to upgrade the ORMB application server and database from one version to another. It also explains how to migrate the ORMB data from one version to another and describes the additional tasks that you need to perform after upgrading from one version to another.</p> <p>It includes various appendices that contain information about new tables introduced in the current release, existing tables which are modified in the current release, dropped algorithms and algorithm types, dropped characteristic types, dropped algorithm parameters, dropped option types in feature configurations, ORMB rollup packs, and SQL statements used for data migration.</p>
<i>Oracle Revenue Management and Billing Upgrade Path Guide</i>	<p>Explains the path and pre-requisites for upgrading Oracle Revenue Management and Billing from one version to another.</p>
<i>Oracle Revenue Management and Billing Direct Database Upgrade Guide</i>	<p>Explains how to directly upgrade the ORMB database from 2.5.0.1.0 or any later version to the current release. It also highlights any known issues during direct database upgrade and how to handle these issues in the database.</p>
<i>Oracle Revenue Management and Billing Information Lifecycle Management (ILM) Implementation Guide</i>	<p>Provides an overview of the Information Lifecycle Management (ILM) feature. It describes how to implement ILM for the Transaction Feed Management (TFM) and Billing modules. It also provides detailed information about the ILM batches and their parameters.</p>

Document	Description
<i>Oracle Revenue Management and Billing FOP Reports Guide</i>	Explains how to extract data from the system using various FOP reports in Oracle Revenue Management and Billing.
<i>Oracle Revenue Management and Billing Chatbot Configuration Guide</i>	Explains how to integrate Oracle Digital Assistant (ODA) with Oracle Revenue Management and Billing.
<i>Oracle Revenue Management and Billing Chatbot User Guide</i>	Explains how to use the menu based Chatbot introduced in Oracle Revenue Management and Billing.
<i>Oracle Revenue Management and Billing ML Integration Guide</i>	Explains how to integrate Machine Learning (ML) with Oracle Revenue Management and Billing for anomaly detection.

Change Log

Revision	Last Update	Updated Section	Comments
1.1	14-Dec-2023	Section 1.3: Product Documentation	Updated Information

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.

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1. Oracle Revenue Management and Billing Licensing

Oracle Revenue Management and Billing (ORMB) is a complete pricing and billing engine for different lines of businesses (LOBs). It enables end-to-end AI/ML-powered pricing, billing, and revenue realization on a single platform to help businesses improve revenue assurance, navigate and value the complex client or member relationships, boost business agility, and accelerate product and organizational innovation.

It is designed to drive incremental revenue and profitability for today's financial services and health insurance enterprises. It empowers financial institutions and healthcare payers to closely focus on core business objectives, including dynamic pricing, revenue uptick, and driving more flexible and innovative billing options for customers. It helps financial institutions and healthcare payers plug revenue leakage and generate new sources of revenue.

More than 70 global enterprises trust ORMB to help them drive growth by transforming their billing, pricing, and product strategies.

1.1 Licensing Information

This Licensing Information document is a part of the product or program documentation under the terms of your Oracle license agreement and is intended to help you understand the program editions, entitlements, restrictions, prerequisites, special license rights, and/or separately licensed third-party technology terms associated with the Oracle software program(s) covered by this document (the "Program(s)"). Entitled or restricted use products or components identified in this document that are not provided with the particular Program may be obtained from the Oracle Software Delivery Cloud website (<https://edelivery.oracle.com>) or from media Oracle may provide. If you have a question about your license rights and obligations, please contact your Oracle sales representative, review the information provided in Oracle's Software Investment Guide (<http://www.oracle.com/us/corporate/pricing/software-investment-guide/index.html>), and/or contact the applicable Oracle License Management Services representative listed on <http://www.oracle.com/us/corporate/license-management-services/index.html>.

1.2 ORMB Offerings

Oracle offers Oracle Financial Services Revenue Management and Billing for the financial services domain and Oracle Insurance Revenue Management and Billing for the insurance domain. We offer both the perpetual and annual subscription software license models for Oracle Financial Services Revenue Management and Billing and only the perpetual license model for Oracle Insurance Revenue Management and Billing. For more information about the license and its use, and rights and obligations, you can contact the Oracle License Management Services representative listed on:

<http://www.oracle.com/us/corporate/license-management-services/index.html>.

This release version is only applicable for Oracle Financial Services Revenue Management and Billing and not for Oracle Insurance Revenue Management and Billing. Therefore, only Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 media pack is released which is common for all platforms. You can download the media pack from [Oracle Software Delivery Cloud](#).

Oracle customers who have purchased support have access to electronic support through [My Oracle Support](#). If anyone in the team is deaf, hard-of-hearing, or have a speech disability, they can refer to <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> for technical assistance.

1.2.1 Oracle Financial Services Revenue Management and Billing

Oracle Financial Services Revenue Management and Billing contains various modules which offer the following features:

Module	It enables you to...
Customer Management	<ul style="list-style-type: none"> • Maintain the customers, customer hierarchy, and their accounts • Maintain the automatic payment instructions for accounts • Configure the multi-currency feature for accounts and thereby enable them to create bills, payments, and adjustment in a currency which is different from the account's invoice currency • Configure the approval workflow process for various actions or entities in the system • View 360-degree information of the customers and their accounts • Configure notifications for the File Upload Interface utility to create an alert for the records which are in the Error status • Configure notifications for the Transaction Feed Management feature to create an alert for the records which are in the Ignored or Error status
Pricing	<ul style="list-style-type: none"> • Design a simple, medium, or complex pricing for the banking services offered to the customers • Design the multi-parameter based pricing or two-dimensional pricing for the banking services • Inherit pricing from different entities, such as customer, parent customer, parent price list, and so on • Design rates which help to control how the service charges are calculated, how charges appear on the customer's bills, and how general ledger is affected by the charges • Update multiple active pricing for a price item assigned at different levels at once • Manage the entire lifecycle of the corporate banking products from their inception to retirement • Manage the entire lifecycle of the retail banking products, market products, promotional offers, and bundles from their inception to retirement • Ability to simulate a price list and analyze the original and proposed revenue and the revenue variation for an account where the price list is assigned

Module	It enables you to...
Billing	<ul style="list-style-type: none"> • Create and manage customer's regular and adhoc bills • Create and review trial bills for customer's accounts • Generate regular and trial bills for an account through an invoice request • Adjust a contract's balance • Process banking transactional data to automatically create service charges based on certain rules • Upload adjustment data received from an external source system and then create adjustments • Define the billing hierarchy using the construct-based billing feature • Configure the subscription-based billing for accounts • Generate earnings credit rate (i.e. reward points) and distribute them to offset the bills of the source account, bills of other accounts of the source customer, or the bills of the accounts identified in the distribution hierarchy • Upload data related to service charges received from the external system • Create, manage, and print customer's statements
Accounting	<ul style="list-style-type: none"> • Generate financial transactions for bills, payments, and adjustments • Post the financial transactions to the general ledger using the standard or configurable process • Enables you to validate the extracts which are sent to the GL system • Transfer deferred revenue to earned revenue using deferred revenue recognition schedule • Track the foreign exchange gain or loss due to fluctuations in the exchange rate and accordingly post it to different general ledger • Accrue revenues that have been earned and expenses that have been incurred for customers' accounts
Payments and Receivables	<ul style="list-style-type: none"> • Create and manage customer's payments • Interface payments from an external source, such as remittance processor • Freeze payments on notification from auto clearing house • Create and transfer payments through a payment request • Offset the credit and debit bills across accounts of the person and/or its hierarchy in the same currency or in the different currencies • Refund or write off amount through a refund or write off request • Hold a person, account, or bill through a hold request • Create a hold request from the user interface or through a REST based inbound web service

Module	It enables you to...
	<ul style="list-style-type: none"> • Schedule payments for unpaid bills through a payment arrangement, payment agreement request, or a promise to pay • Upload data received from the external system and then accordingly create multiple hold requests, refund requests, or write off requests at once
Collections	<ul style="list-style-type: none"> • Periodically monitor how much the customers owe to ensure they haven't violated your collection criteria • View overdue bills of the delinquent accounts • Manage complaints by logging a case • Track disputes against a bill, bill line item, or adjustment through a dispute request • Hold overdue processes of accounts • Help collections through different processes, such as dunning letters, flexible payment plans, etc.
Deal Management	<ul style="list-style-type: none"> • Complete functionality designed to manage the entire deal pricing and execution process with a more predictable and profitable outcome • Create deals for existing customers, accounts, and prospects to simulate proposed pricing on proposed commitments and thereby analyze the profitability and revenue from the deal • Design a simple, medium, or complex approval process for deals • Review deals at regular intervals on customer orchestration • Leveraging deal template to create new deals • Provision to select the price items and hierarchy entities that should be included in the deal • Provision to update the pricing and commitments of a deal in the Excel format and then upload the updated sheet in the system for simulation • Compare the financial summary (i.e. profitability, profit, profit variation, and revenue) of the deal using the current, proposed, and standard pricing • Detailed dashboards listing the holistic views of deal, revenue metrics, customer metrics, Top N customers by revenue, variation from last period, etc. • Supports API integration between ORMB and external system using which you can do the following: <ul style="list-style-type: none"> ○ Create, edit, and view the details of a prospect person and its accounts ○ Create, edit, and view the details of a prospect account

Module	It enables you to...
	<ul style="list-style-type: none"> ○ Assign a price list to an existing or prospect customer or account in a deal ○ Edit, delete, and view the details of a price list assignment in a deal ○ Override, edit, and recommend a pricing for a price item ○ Add or edit commitments for a price item pricing ○ Create, edit, and manage a deal throughout its lifecycle
Information Lifecycle Management	<ul style="list-style-type: none"> ● Archive a voluminous transactional data ensuring that referential integrity of the overall system is maintained
Reporting	<ul style="list-style-type: none"> ● Enables you to extract the invoice aging, adjustment, user access, payment, To Do, hold process, and transaction data from ORMB using the respective FOP report in the supported formats
Chatbot	<ul style="list-style-type: none"> ● Provides digital assistance with ODA to have conversational experiences with ORMB through text, chat, and voice interfaces
Billing Anomaly Detection with Artificial Intelligence (AI) and Machine Learning (ML)	<ul style="list-style-type: none"> ● Enables you to use artificial intelligence and machine learning to detect anomalies in the bills and bill segments before the bill completion.

1.3 Product Documentation

User manuals and other technical documents are available in the Portable Document Format (PDF) format. You can download the release-specific documentation from either of the following locations:

- **Oracle Technology Network (OTN)** – You can access the ORMB release-specific documentation libraries from OTN using the following URL:

<http://www.oracle.com/technetwork/indexes/documentation/fsgbu-1364781.html>

It contains the **Documentation Library for Oracle Revenue Management and Billing On-Premise Solution** section. You can view and download a release-specific documentation library by clicking the **View Library** and **Download** links, respectively, corresponding to the respective ORMB version.

- **Oracle Help Center (OHC)** – You can access the ORMB release-specific documentation from OHC using the following URL:

<https://docs.oracle.com/en/industries/financial-services/revenue-management-billing/index.html>

The ORMB OHC page contains a drop-down list which allows you to select the ORMB version for which you want to access the documentation.

Points to Note:

You can access the documentation of a release prior to 5.0.0.0.0 from OHC by selecting the **Previous Releases** option from the list.

Always ensure that you download latest revision of the document from **OTN** or **OHC**.

From 6.0.0.0.0 release onwards, the Oracle Revenue Management and Billing Online Help (i.e., help.ear file) is not packaged with the application. The ORMB Online Help is published on Oracle Help Center (OHC). You can continue to use context-sensitive help from the application which will point to the respective topic on OHC.

2. Third-Party Licensing for ORMB

This section provides the licensing information about the third-party products and components which are included in Oracle Revenue Management and Billing. It includes the following sections:

- [Third-Party Products Used by OUAF](#)
- [Third-Party Products Used by the ORMB Database](#)
- [Third-Party Products Used by the ORMB Application](#)
- [License and Copyright Notices](#)

2.1 Third-Party Products Used by OUAF

The following table lists the open source and third-party jars used by Oracle Utilities Application Framework Version 4.5.0.1.1:

Third-Party Jar	Provider
accessors-smart-2.4.7.jar	Apache Software Foundation
ant-1.10.11.jar	Apache Software Foundation
antlr-2.7.7.jar	Terence Parr and Sam Harwell
antlr4-runtime-4.9.2.jar	Terence Parr and Sam Harwell
apache-xmlbeans-4.0.0.jar	Apache Software Foundation
asm-9.3.jar	INRIA, France Telecom
bcpj-jdk15to18-1.70.jar	The Legion of the Bouncy Castle Inc.
bcpkix-jdk15to18-1.70.jar	The Legion of the Bouncy Castle Inc.
bcprov-jdk15to18-1.70.jar	The Legion of the Bouncy Castle Inc.
cglib-3.3.0-975e481.jar	Apache Software Foundation
commons-beanutils2-2.0.0-ca7cf2c.jar	Apache Software Foundation
commons-cli-1.5.0.jar	Apache Software Foundation
commons-codec-1.17-744c1c9.jar	Apache Software Foundation
commons-collections-3.2.2.jar	Apache Software Foundation
commons-fileupload-1.4-ce5ce15.jar	Apache Software Foundation
commons-io-2.11.0.jar	Apache Software Foundation
commons-lang3-3.12.0.jar	Apache Software Foundation
commons-logging-1.2-1e55e8f.jar	Apache Software Foundation
commons-text-1.10.0.jar	Apache Software Foundation
dom4j-2.1.3.jar	MetaStuff, Ltd.
ehcache-core-2.5.2.jar	Apache Software Foundation

Third-Party Jar	Provider
groovy-3.0.7.jar	Apache Software Foundation
groovy-xml-3.0.7.jar	Apache Software Foundation
httpClient5-5.1.3.jar	Apache Software Foundation
httpcore5-5.1.3.jar	Apache Software Foundation
icu4j-69.1.jar	Unicode, Inc.
jackson-annotations-2.14.0-rc2.jar	Apache Software Foundation
jackson-core-2.14.0-rc2.jar	Apache Software Foundation
jackson-databind-2.14.0-rc2.jar	Apache Software Foundation
jaxen-mod-1.2.0.jar	The Werken Company
jboss-logging-3.4.3.Final.jar	Apache Software Foundation
jcl-over-slf4j-1.7.30.jar	Apache Software Foundation
jettison-1.4.1.jar	Apache Software Foundation
json-smart-2.4.7.jar	Apache Software Foundation
log4j-api-2.17.1.jar	Apache Software Foundation
log4j-core-2.17.1.jar	Apache Software Foundation
nimbus-jose-jwt-9.23.jar	Apache Software Foundation
slf4j-api-2.0.3.jar	Quality Open Software
staxmate-2.4.0.jar	Tatu Saloranta
velocity-engine-core-2.3.jar	Apache Software Foundation
xmlschema-core-2.3.0.jar	Apache Software Foundation
xpp3-1.1.4c.jar	Apache Software Foundation
xstream-1.4.20.jar	Joe Walnes
org.apache.http.components.httpClient-5.1.3.jar	Apache Software Foundation
org.apache.http.components.httpcore-5.1.3.jar	Apache Software Foundation

The following table lists the open source and third-party components used by Oracle Utilities Application Framework Version 4.5.0.1.1:

Third-Party Component	Version	Provider
Apache Cordova	7.0.0	Apache Software Foundation
CodeMirror	5	Marijn Haverbeke
Cordova App-Event Plugin	1.2.1	Apache Software Foundation

Third-Party Component	Version	Provider
Cordova BackgroundFetch	5.3.0	Opensource
Cordova BackgroundMode Plugin	0.7.2	Sebastián Katzer
Cordova Camera Plugin	4.0.3	Apache Software Foundation
Cordova Device Plugin	2.0.2	Apache Software Foundation
Cordova File Plugin	6.0.1	Apache Software Foundation
Cordova File Transfer Plugin	1.7.1	Apache Software Foundation
Cordova Geolocation Plugin	4.0.1	Apache Software Foundation
Cordova inappbrowser plugin	3.0.0	Apache Software Foundation
Cordova Local Notification Plugin	0.8.5	Apache Software Foundation
Cordova Network Information Plugin	2.0.1	Apache Software Foundation
Cordova Plugin Fingerprint aio	1.7.0	Niklas Merz
Cordova Plugin for Barcode Scanner	8.0.0	PhoneGap
Cordova Plugin Pin Check	0.0.6	Crypho AS
Cordova SQLite storage adapter	2.3.3	Apache Software Foundation
Cordova Websocket Plugin	0.12.2	Open source
Cordova WebSQL Plugin	0.0.10	Apache Software Foundation
Cordova Whitelist Plugin	1.0.0	Apache Software Foundation
Cordova Zip Plugin	3.1.0	Chromium
cordova-plugin-ios-keychain	3.0.1	Ionic
cordova-plugin-secure-keystore	1.5.6	Pradeep Singh
cordova-plugin-shared-preferences	0.1.0	Adriano Di Giovanni
FullCalendar	5.11.3	Adam Shaw
jQuery	3.6.1	JS Foundation and other contributors
jQueryMobile	1.4.2	jQuery Foundation and other contributors
jQueryUI	1.13.2	Paul Bakaus
JSignature	2	Willow Systems Corp
Knockout Mapping	2.4.1	Steven Sanderson, Roy Jacobs
Knockout.js	3.5.1	Steven Sanderson, Roy Jacobs
swagger-ui	3	SmartBear Software
naturalCompare.js	-	SCK-CEN (Belgian Nuclear Research Centre)
JavaScript Extension Toolkit (JET)	13.1.2	Oracle

Third-Party Component	Version	Provider
tz_database	2022f	Public Domain
dompurify	2.4.1	Mario Heiderich
Timezone Data 2010j	38	David Olson

2.2 Third-Party Products Used by the ORMB Database

The following table lists the third-party jars used by the Oracle Revenue Management and Billing database:

Third-Party Jar	Provider
commons-cli-1.5.0.jar	Apache Software Foundation
commons-codec-1.17-744c1c9.jar	Apache Software Foundation
jackson-annotations-2.14.0-rc2.jar	Apache Software Foundation
jackson-core-2.14.0-rc2.jar	Apache Software Foundation
jackson-databind-2.14.0-rc2.jar	Apache Software Foundation
log4j-api-2.17.1.jar	Apache Software Foundation
log4j-core-2.17.1.jar	Apache Software Foundation

2.3 Third-Party Products Used by the ORMB Application

The following table lists the third-party jars used by the Oracle Revenue Management and Billing application:

Third-Party Jar	Provider
batik-all-1.16.jar	Apache Software Foundation
bcpjg-jdk15to18-1.70.jar	The Legion of the Bouncy Castle Inc.
fontbox-2.0.27.jar	Apache Software Foundation
fop-2.8.jar	Apache Software Foundation
jfreechart-1.5.4.jar	Free Software Foundation, Inc.
qrcode.jar	Kazuhiko Arase
serializer-2.7.2.jar	Apache Software Foundation
xml-apis-1.4.01.jar	Apache Software Foundation
xml-apis-ext-1.3.04.jar	Apache Software Foundation
xmlgraphics-commons-2.8.jar	Apache Software Foundation

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- [Notice Concerning Usage of ANTLR and ANTLR4](#)
- [Notice Concerning Usage of Apache Software](#)
- [Notice Concerning Usage of ASM](#)
- [Notice Concerning Usage of Bouncy Castle Crypto](#)
- [Notice Concerning Usage of CodeMirror](#)
- [Notice Concerning Usage of Concurrent](#)
- [Notice Concerning Usage of Cordova Plugin Pin Check](#)
- [Notice Concerning Usage of Cordova Plugin Fingerprint aio](#)
- [Notice Concerning Usage of Cordova Plugin Secure Keystore](#)
- [Notice Concerning Usage of Cordova Plugin Shared Preferences](#)
- [Notice Concerning Usage of DOM4J](#)
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- [Notice Concerning Usage of Jaxen](#)
- [Notice Concerning Usage of JfreeChart Library](#)
- [Notice Concerning Usage of JQuery \(3.6.1\)](#)
- [Notice Concerning Usage of JQueryMobile](#)
- [Notice Concerning Usage of JQuery UI](#)
- [Notice Concerning Usage of JSignature](#)
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- [Notice Concerning Usage of QR Code](#)
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- [Notice Concerning Usage of Swagger-UI](#)
- [Notice Concerning Usage of XStream](#)
- [Notice Concerning Usage of naturalCompare.js](#)

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- antlr4-runtime-4.9.2.jar

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- ant-1.10.11.jar
- apache-xmlbeans-4.0.0.jar
- batik-all-1.16.jar
- cglib-3.3.0-975e481.jar
- commons-beanutils2-2.0.0-ca7cf2c.jar
- commons-cli-1.5.0.jar
- commons-codec-1.17-744c1c9.jar
- commons-collections-3.2.2.jar
- commons-fileupload-1.4-ce5ce15.jar
- commons-io-2.11.0.jar
- commons-lang3-3.12.0.jar
- commons-logging-1.2-1e55e8f.jar
- commons-text-1.10.0.jar
- ehcache-core-2.5.2.jar
- fontbox-2.0.27.jar
- fop-2.8.jar
- groovy-3.0.7.jar
- groovy-xml-3.0.7.jar

- httpclient5-5.1.3.jar
- httpcore5-5.1.3.jar
- jackson-annotations-2.14.0-rc2.jar
- jackson-core-2.14.0-rc2.jar
- jackson-databind-2.14.0-rc2.jar
- jboss-logging-3.4.3.Final.jar
- jcl-over-slf4j-1.7.30.jar
- jettison-1.4.1.jar
- json-smart-2.4.7.jar
- log4j-api-2.17.1.jar
- log4j-core-2.17.1.jar
- nimbus-jose-jwt-9.23.jar
- serializer-2.7.2.jar
- velocity-engine-core-2.3.jar
- xml-apis-1.4.01.jar
- xml-apis-ext-1.3.04.jar
- xmlgraphics-commons-2.8.jar
- xmlschema-core-2.3.0.jar
- xpp3-1.1.4c.jar
- org.apache.http.components.httpclient-5.1.3.jar
- org.apache.http.components.httpcore-5.1.3.jar

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- Cordova BackgroundFetch plugin
- Cordova BackgroundMode plugin
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- Cordova File Transfer plugin
- Cordova Geolocation plugin
- Cordova InAppBrowser plugin
- Cordova Local Notification plugin
- Cordova Network Information plugin
- Cordova-plugin-ios-keychain
- Cordova Plugin StatusBar

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Written by Kristof Coomans

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