Oracle® Revenue Management and Billing Cloud Service

Release 8.1

SaaS Reporting using OAS

Revision 1.1

F53254-01

February, 2022

ORACLE®

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F53254-01

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Preface

About This Document

This document will help you to understand the ORMB SaaS reporting architecture and how you can use Oracle Analytics Server for ORMB SaaS reporting.

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	SaaS Reporting	Explains how to use the ORMB SaaS reporting module.

Related Documents

You can refer to the following documents for more information:

Document	Description
Oracle Revenue Management and Billing Cloud Service 8.1 Release Notes	Describes the feature enhancements and supported client platforms and browsers in this release. It highlights different roles and responsibilities of Oracle and Customer. It also highlights the known issues in this release.
Oracle Revenue Management and Billing Cloud Service Federated Identity Configuration Guide	Provides an overview of federated SSO login. It explains how to configure federated SSO login with SAML for ORMB Cloud Service.
Oracle Revenue Management and Billing Cloud Service REST Services Configuration Guide	Explains how to configure federated Web service login in order to access protected REST services on the ORMB Cloud environments.
Oracle Revenue Management and Billing Cloud Service SFTP Authentication Guide	Explains how to configure SFTP authentication for the ORMB Cloud Service.

Document	Description
Oracle Revenue Management and Billing Cloud Service End User Provisioning Guide	Explains how to setup the security administrator account for the ORMB Cloud Service. It also explains how to manage users and user groups for the ORMB Cloud Service. In addition, it explains how to import and export bulk users and user groups for the ORMB Cloud Service.

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.
italic	Italic indicates a document or book title.
`monospace`	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
AI	Artificial Intelligence
OAS	Oracle Analytics Server
ML	Machine Learning
DML	Data Manipulation Language
DDL	Data Definition Language
IDCS	Oracle Identity Cloud Service

Change Log

Revision	Last Update	Updated Section	Comments
1.1	09-Mar-2022	Section 1.2: Pre-requisites	Removed Section
		Section 1.3: Oracle Analytics Server	Added Information

Contents

1. SaaS Reporting

Oracle Revenue Management and Billing Cloud Service (SaaS environments) provides self-service visualization and augmented artificial intelligence (AI) analytics platform using Oracle Analytics Server (OAS).

Oracle Analytics Server (OAS) provides a full range of capabilities including AI that quickly surfaces key insights in your datasets, data enrichment features that automatically recommend new elements for analysis, machine learning (ML) capabilities for both traditional and citizen data scientists, and stunning data visualizations for your dashboards with pixel perfect reporting.

1.1 SaaS Reporting Architecture

Oracle Revenue Management and Billing SaaS Reporting module follows a layered architecture, which consists of the following logical layers:

- **Data Source Layer** – The data source layer is a layer where the data from online transaction processing system resides. In the ORMB SaaS reporting architecture, the data source layer is the ORMB database.

- **Replication Layer** – The replication layer is a layer where the data from the ORMB database is replicated for reporting through Oracle GoldenGate.

- **Presentation and Access Layer** – The presentation layer is a layer where you can design, develop, and generate various reports using the ORMB data from the reporting schema. Oracle Analytics Server (OAS) is an embedded tool in an ORMB SaaS environment. It is a powerful tool that empowers business analysts and consumers to uncover new insights and make faster, more informed business decisions.

> **Note**: The reporting and business analysts who are developing or generating the reports should be assigned the `BIContentAuthor` and `BIConsumer` roles, respectively, in Oracle Identity Cloud Service (IDCS).

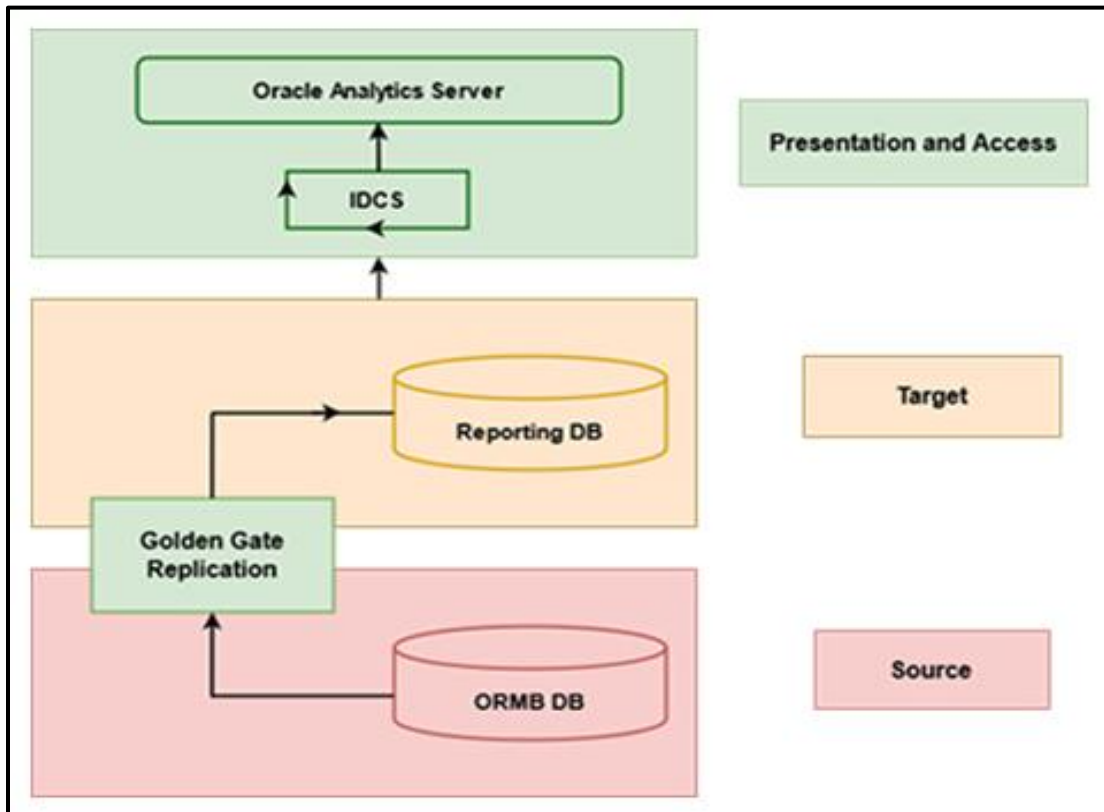The following diagram graphically represents the layered architecture of the ORMB SaaS Reporting module:

Figure 1 : SaaS Reporting Architecture

1.2   Oracle GoldenGate

The data from the ORMB SaaS database is replicated to the SaaS reporting database using Oracle GoldenGate Extractors and Replicators. Oracle GoldenGate is a software product that allows you to replicate, filter, and transform data from one database to another database. It enables the exchange and manipulation of data at the transaction level among databases. It moves committed transactions with transaction integrity and minimal overhead on the existing infrastructure. It is a comprehensive software package for real-time data integration and replication, and enables migration between databases in near zero-downtime.

In an ORMB SaaS environment, Oracle GoldenGate is configured to achieve the following objectives:

- Continuous extraction and replication of transactional Data Manipulation Language (DML) operations and data definition language (DDL) changes (for supported databases) to keep source and target data consistent.

- Perform a unidirectional replication from the ORMB database to the reporting database, as shown in the following figure:
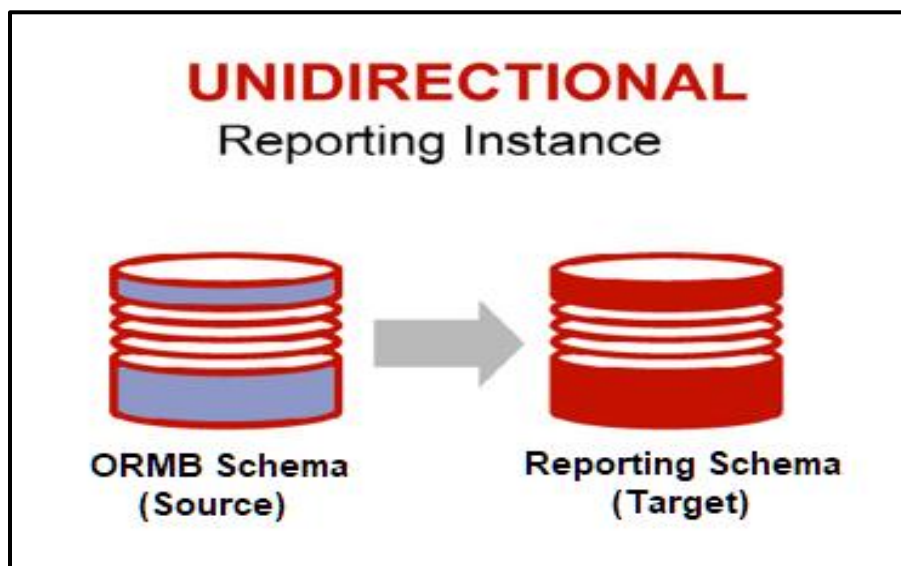

Figure 2 : Unidirectional Reporting

We use Oracle GoldenGate Microservices Architecture that provides REST-enabled services as part of the Oracle GoldenGate environment. The REST-enabled services provide remote configuration, administration, and monitoring through HTML5 web pages, command line, and APIs.

In the ORMB SaaS environment where the reporting option is enabled, we maintain separate databases for ORMB online transaction processing and reporting, and therefore it will not impact the performance of ORMB.

1.3 Oracle Analytics Server

Oracle Analytics Server (OAS) is an embedded tool in an ORMB SaaS environment. It provides capabilities required to address the entire analytics process from data ingestion and modeling, through data preparation and enrichment, to visualization and collaboration without compromising security and governance. Embedded machine learning and natural language processing technologies help increase productivity and build an analytics-driven culture in organizations.

Through the Oracle Analytics Server (OAS) tool, you can design, develop, and generate various reports using the data from the reporting database. The user access to the Oracle Analytics Server (OAS) tool is restricted. You can also design and develop reports using the RPD file available in the ORMB Cloud environment.

For more information on how to create reports in Oracle Analytics Server, refer to the following URLs:

- https://docs.oracle.com/en/middleware/bi/analytics-server/user-oas/create-analyses.html
- https://docs.oracle.com/en/middleware/bi/analytics-server/index.html
- https://www.oracle.com/pl/a/ocom/docs/solutions/business-analytics/oracle-analytics-server.pdf

Note: ORMB SaaS customers will be responsible for designing, developing, and maintaining their reports and dashboards using the SaaS reporting module.