Oracle® Application Integration Architecture

Oracle Communications Pre-Built Integrations Release Notes

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Contents

Value Proposition for Oracle Application Integration Architecture for Communications 11.1

This document provides an overview of the release value proposition (RVP) that is associated with the new features and enhancements that are planned for Oracle Application Integration Architecture (Oracle AIA) for Communications Release 11.1. It is a road map that is intended to help you assess the business benefits of Oracle AIA for Communications Release 11.1 and plan your information technology (IT) projects and investments.

The new features and enhancements that are planned for this release are grouped according to licensed product.

Our goal is to ensure that you leverage technology to its fullest to increase the efficiency and effectiveness of your operations. Please note that the final release may not have every feature that is discussed in this document, and a specific feature may become a part of a different application or have a product name that is different from those cited in this document.

This preface discusses:

- Oracle release information publications.

- Additional resources.

This RVP in any form, software or printed matter, contains proprietary information that is the exclusive property of Oracle Corporation.

The information provided in this document is intended to outline our general product direction and is intended for information purposes. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

Overview

Communication Service Providers (CSPs) face numerous challenges today: increased competition, rapidly changing market demands, pressure to launch more offers faster, control of operational expenses, and strengthening customer relationships. One of the keys to successfully navigating these challenges is to view them holistically while focusing locally on the highest impact areas. The creation of an integrated offer design and order delivery environment that quickly responds to changing business demands and promotes concerted efforts to fulfill customer commitments is now possible. Oracle's Rapid Offer Design and Order Delivery solution allows CSPs to design front- and back-office operations for new offers, capture and manage order provisioning tasks efficiently, and have complete end-to-end visibility into order processes.

The results are:

- Faster system implementation and time to market.

- Shorter order cycle time.

- Lower operations expenses through elimination of service-based silos.

Oracle provides the most comprehensive order to cash solution for enhanced customer experience, fast time to cash, and operational cost savings.

An essential component of the Rapid Offer Design and Order Delivery solution, Oracle Application Integration architecture (Oracle AIA) for Communications provides key extensible process integrations between the Product Hub for Communications, Siebel CRM, Oracle Billing & Revenue Management (Oracle BRM) and Oracle Order & Service Management (Oracle OSM) applications for both the offer design and order delivery processes.

Offer Design

The Offer Design solution is comprised of the following Oracle products:

- Siebel CRM for Sales Catalog and Sales data enrichment.

- Oracle BRM for billing data enrichment.

- Product Master Data Management Integration Base Pack and Options for extensible product data integration from Product Data Hub for Communications to Oracle BRM and Siebel CRM.

- Oracle Communications Order to Cash Integration Pack for Oracle Communications Order and Service Management and Oracle Communications Order to Cash Integration Pack for Siebel CRM for synchronization of product definition meta-data from Siebel CRM to Oracle Communications Order and Service Management.

- Order to Product Data Hub for Communications for enterprise product catalog.

- Oracle Communications Order to Cash Integration Pack for Oracle BRM and Oracle Communications Order to Cash Integration Pack for Siebel CRM for synchronization of billing product and discount definitions from Oracle BRM to Siebel CRM.

The Offer Design solution offers the following business benefits to CSPs:

- Decrease Time-to-Market for New Offer Introduction:

  - Speed up offer design with pre-built, extensible product data model.

  - Synchronize offer definition with productized integration to Siebel CRM, Oracle E-Business Suite, Oracle BRM, and Oracle OSM.

  - Eliminate errors and delays with workflow-driven offer introduction and change processes.

- Accelerate Integration Project Implementation:

  - Leverage extensible integration processes with Oracle "MDM-aware" applications.

  - Extend pre-built common objects and services provided by the Oracle AIA Foundation Pack to meet any additional customer requirements.

  - Reuse Product Hub for Communications robust publication services for accelerated integration with third-party applications.

- Reduce Total Cost of Ownership:

  - Reduce integration design and implementation costs with pre-built integration.

  - Allocate less work on maintenance and interoperability issues with the open, standards-based Oracle AIA framework.

Order Delivery

The Order Delivery solution is comprised of the following Oracle products:

- Siebel CRM for Sales Catalog definition, Multi-channel Order Capture and Trouble Ticketing.

- Oracle OSM for Order Mapping, Decomposition and Orchestration; Order Change Management; Order Fallout Management; and Order Status Management.

- Provisioning (Oracle OSM) for the orchestration of Service Design and Service Delivery.

- Oracle BRM for billing.

- Oracle Communications Order to Cash Integration Pack for Siebel CRM for order capture and service integration to any central order management system and any billing system through Oracle AIA for the purposes of billing rate plans synchronization into Siebel and customer order fulfillment interaction with central order management.

- Oracle Communications Order to Cash Integration Pack for Oracle Communications OSM for Oracle OSM central order management integration to any CRM, billing and service provisioning system through Oracle AIA for the purposes of customer order fulfillment.

- Oracle Communications Order to Cash Integration Pack for Oracle Communications BRM for Oracle BRM integration to any CRM and central order management system through Oracle AIA for the purposes of billing rate plans synchronization into CRM and customer order billing fulfillment requests coming from central order management.

The Order Delivery solution provides the following business benefits to CSPs:

- Shorten Order Cycle Time:

  - Manage all types of customer order requests including MACD orders, future-dated orders, follow-on orders, order revisions and cancelations, and priority orders.

  - Increase order accuracy with decomposition of the sales order and generation of a unique orchestration plan for it.

- Reduce Cost of Fallout Orders:

  - Decrease number of billing errors with billing update coordination as part of order fulfillment.

  - Pro-actively manage fallout incidents with trouble ticket integration

  - Keep closed-loop order status feedback to CRM with order lifecycle management status composition.

- Increase Operational Efficiency:

  - Prevent the need for thousands of fulfillment flows for commercial product offers with dynamic data-driven order orchestration.

  - Rationalize and prevent costly silo solutions with a single order delivery platform that can be implemented over time at your own pace.

  - Process integration packs and application connectors provide out-of-the-box Communications business logic and value in the order delivery chain.

Agent Assisted Billing Care

The Agent Assisted Billing Care solution is comprised of the following Oracle products:

- Siebel CRM.

- Oracle BRM for billing.

- Oracle Communications Integration Pack for Agent-Assisted Billing Care allows customer service representatives to access all customer-related information using Siebel CRM— including usage and billing data maintained within Oracle Communications BRM.

The Agent Assisted Billing Care solution provides the following business benefits to CSPs:

- Deliver excellence in customer service and improve call center productivity:

  - Rich set of Siebel CRM interfaces provide an integrated, accurate and real-time view of customer, billing, and collections data, improving effectiveness and speeding issue resolution.

  - Perform all billing care functions directly from Siebel CRM, reducing call transfers between departments.

  - Access from Siebel CRM to key customer retention features in Oracle Communications BRM.

- Maximize value to the business from customer interactions:

  - Enable real-time capture of payments and adjustments from Siebel CRM to Oracle Communications BRM.

  - Present customer usage data, charging details and profile information to Siebel CRM to enhance real time up-selling and cross-selling.

  - Provide integrated access to complete and accurate invoice details for customer inquiries and dispute handling.

- Reduce implementation and operational cost:

  - Pre-built integrations decrease systems implementation and maintenance costs, reduce risks and enable faster time-to-market for CSPs.

  - Reduce training costs through customer care agents being trained on a single system.

  - Improve efficiency of call center handling with pre-integrated front-office and back-office applications.

Revenue Accounting

The Revenue Accounting solution is comprised of the following Oracle products:

- Oracle E-Business Suite – Revenue Accounting.

- Oracle BRM for billing.

- Oracle Communications Integration Pack for Revenue Accounting provides a performance

optimized General Ledger (GL) integration between Oracle BRM and Oracle E-Business Suite improving GL accounting, reporting and accuracy. The integration pack takes GL reports produced by Oracle BRM and automatically posts the GL reports into Oracle E-Business Suite.

The Revenue Accounting solution provides the following business benefits to CSPs:

- Reduce integration time and cost:

  - Extract, load and transform GL data from Oracle BRM into Oracle General Ledger.

- Improve Operational control:

  - Schedule automatically the load of the GL data into Oracle General Ledger.

  - Provide email notification of successful or failed load of General Ledger data into Oracle General Ledger.

- Maintain regulatory compliances.

- Improve timeliness and accuracy of financial reporting.

Oracle AIA Foundation Pack Extension for Communications

Oracle AIA Foundation Pack extension for Communications complements Oracle's Foundation Pack solution by providing pre-built industry specific content to optimize business processes that are unique to your business. Together, Oracle AIA Foundation Pack and Foundation Pack Extension for Communications provide a comprehensive solution for building sustainable, agile composite applications.

Oracle AIA Communications Foundation Pack includes application independent Enterprise Business Objects (EBOs) and Services (EBSs), a standards-based reference architecture, programming methodology, and process governance tools, allowing you to create flexible business processes integrations across your Oracle and non-Oracle applications.

The Oracle AIA Foundation Pack extension for Communications provides the following business benefits to the CSPs:

- Integrates Oracle, 3rd Party or custom developed applications on an open architecture.

- Accelerates time-to-value with pre-built Communications EBOs and EBSs.

- Facilitates process optimization through pre-built best practice business processes for Communications.

- Minimizes integration cost and risk.

Product Enhancements

The new enhancements to the Oracle AIA for Communications Pack 11gR1 (11.1.1.5.0) fall into the following areas:

- Oracle Fusion Middleware 11g adoption

- New Packaging Model

- Simplified Installation, Deployment and Configuration of Pre-Built Integrations

The table below lists the pre-built integration for Communications certified in this release.

Pre-Built Integrations
Oracle Communications Order to Cash Integration Pack for Siebel CRM
Oracle Communications Order to Cash Integration Pack for Oracle Order and Service Management
Oracle Communications Order to Cash Integration Pack for Oracle Billing and Revenue Management
Siebel CRM Integration Pack for Oracle Communications Billing and Revenue Management: Agent Assisted Billing Care
Oracle Communications Billing and Revenue Management Integration Pack for Oracle E-Business Suite: Revenue Accounting
Oracle Product Master Data Management Integration Base Pack and Options

For more information about application versions certified by the pre-built integrations, see the *Oracle AIA Certification Matrix*.

Oracle Fusion Middleware 11g Adoption

Oracle Application Integration Architecture (Oracle AIA) for Communications 11.1 certifies pre-built integrations across Oracle Applications on Oracle Fusion Middleware 11gR1 (11.1.1.5.0). This release speeds time to value of the development of loosely coupled process integrations by harnessing the combined power of predefined application integration and Oracle Fusion Middleware 11gR1.

Oracle AIA Foundation Pack 11gR1 (11.1.1.5.0) is designed for use in developing and deploying service-oriented architecture (SOA) solutions on Oracle Fusion Middleware 11g.

Oracle AIA Foundation Pack 11gR1 (11.1.1.5.0) programming models are geared to take advantage of the following aspects of Oracle Fusion Middleware 11g:

- Adoption of the Service Component Architecture (SCA).

SOA composite application is an assembly of services, service components, references, and wires designed and deployed together to meet a business need. The SCA assembly model provides the service details and their interdependencies to form composite applications. The SCA enables you to represent business logic as reusable service components that can be easily integrated into any SCA-compliant application. The resulting application is known as a SOA composite application. The specification for the SCA standard is maintained by the Organization for the Advancement of Structured Information Standards (OASIS) through the Open Composite Services Architecture (CSA) Member Section.

For more information, see OASIS Open CSA.

The various Oracle AIA service artifacts – Application Business Connector Services (ABCSs), Enterprise Business Services (EBSs), Enterprise Business Flows (EBFs), and Composite Business Processes (CBPs) are SCA composites. This brings the SOA SCA advantage of standards-based deployment models and assembly models to Oracle AIA service artifacts.

The following programming models are provided:

- Detailed programming guidelines for various Oracle AIA service artifacts:

    - Synchronous request-response message exchange pattern (MEP).

    - Asynchronous one-way MEP.

    - Asynchronous request-delayed response MEP.

    - Publish-subscribe MEP.

    - Message aggregation MEP.

    - Error handling and recovery for various MEPs.

    - Security.

    - Managing transactions across multiple services in different MEPs.

    - Guidelines for transformation of messages.

- Use of the WebLogic Java Message Service (JMS) server.

    The WebLogic JMS server is leveraged in various MEPs, suggesting the use of store-and-forward mechanisms.

- Uptake of Oracle Metadata Services Repository (MDS) for asset centralization patterns.

    The following artifacts are stored in the MDS:

    All abstract WSDLs, schemas, and shared XSLs pertaining to the canonical model and applications.

    - AIAConfigurationProperties.xml and AIAEHNotification.xml.

    - Default fault policy.

    - Cross-reference metadata and domain value maps.

Oracle AIA 2.4 or 2.5 to Oracle AIA Foundation Pack 11gR1 (11.1.1.5.0) Migration

Oracle AIA for Communications 11.1 includes the pre-built integrations (listed in the Pre-Built Integrations table located at the beginning of the Product Enhancement chapter) on 11gR1. If customers have customized or extended the out-of-the-box 2.4 or 2.5 services, then they need to re-evaluate and merge those customizations and extensions into the shipped 11g services. Custom Oracle AIA services can be migrated with the help of the Oracle AIA Migration Utility, which is delivered as a part of Foundation Pack 11gR1 (11.1.1.5.0). Foundation Pack 11gR1 (11.1.1.5.0) provides a migration strategy for the Oracle AIA services developed on Foundation Pack 2.4 and 2.5 and later.
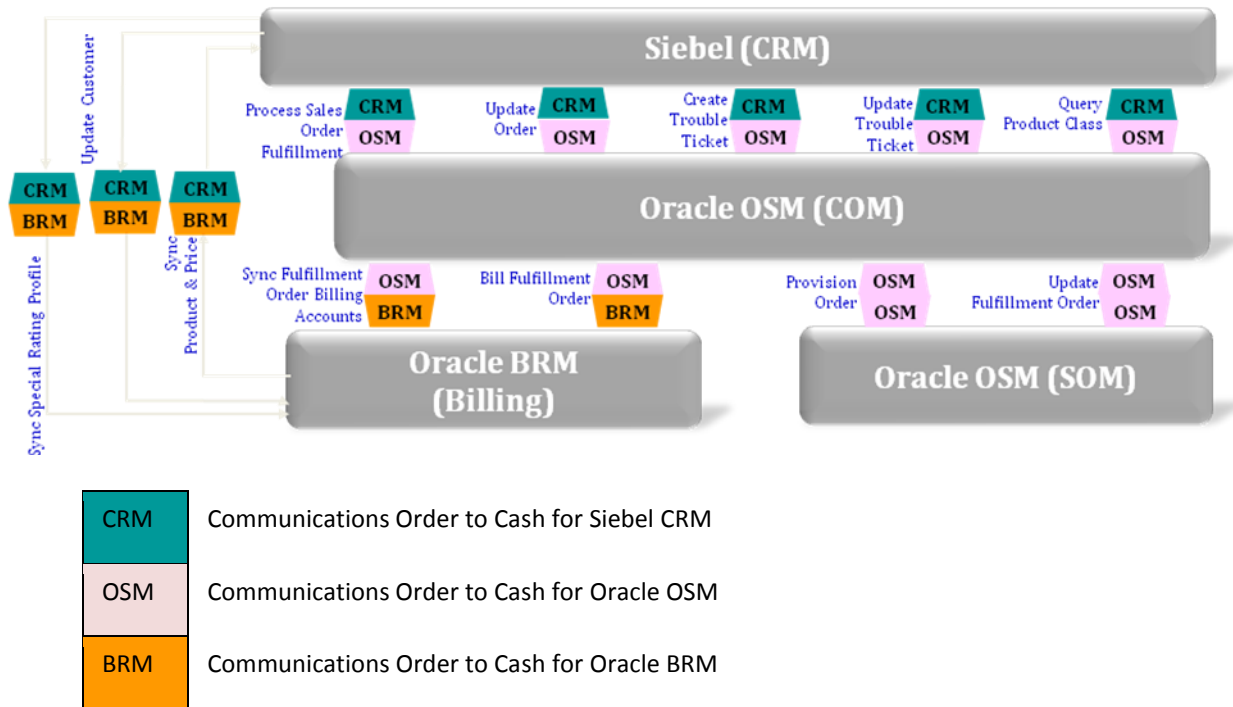
For more information about how to migrate AIA 2.4 or 2.5 artifacts to the 11.1 version artifacts, see *Oracle Fusion Middleware Migration Guide for Oracle Application Integration Architecture*.

New Packaging Model

Oracle Application Integration Architecture (Oracle AIA) for Communications release 11.1 introduces three new pre-built integrations to automate the Oracle Communications Order to Cash process for the Communications industry.

Pre-Built Integration Name	Description
Oracle Communications Order to Cash Integration Pack for **Siebel CRM**	Automates Siebel order capture and service integration to any central order management system and any billing system through Oracle AIA for the purposes of billing rate plans synchronization into Siebel and customer order fulfillment interaction with central order management
Oracle Communications Order to Cash Integration Pack for **Oracle Communications Order and Service Management**	Automates Oracle OSM central order management integration to any CRM, billing and service provisioning system through Oracle AIA for the purposes of customer order fulfillment
Oracle Communications Order to Cash Integration Pack **for Oracle Communications Billing and Revenue Management**	Automates Oracle BRM integration to any CRM and central order management system through Oracle AIA for the purposes of billing rate plans synchronization into CRM and customer order fulfillment requests coming from central order management

Oracle Communications Order to Cash pre-built integrations support the following business process as outlined graphic below

Siebel (CRM)

Update Customer

Process Sales Order Fulfillment — CRM / OSM   Update Order — CRM / OSM   Create Trouble Ticket — CRM / OSM   Update Trouble Ticket — CRM / OSM   Query Product Class — CRM / OSM

CRM / BRM   CRM / BRM   CRM / BRM

Sync Special Rating Profile   Sync Product & Price

Oracle OSM (COM)

Sync Fulfillment Order Billing Accounts — OSM / BRM   Bill Fulfillment Order — OSM / BRM   Provision Order — OSM / OSM   Update Fulfillment Order — OSM / OSM

Oracle BRM (Billing)

Oracle OSM (SOM)

CRM	Communications Order to Cash for Siebel CRM
OSM	Communications Order to Cash for Oracle OSM
BRM	Communications Order to Cash for Oracle BRM

This new package combines the functionality and replaces the two existing integration packs:

- Siebel CRM Integration Pack for Oracle Communications Billing and Revenue Management.

  Order to Bill automates the product synchronization between Oracle Billing and Revenue Management (Oracle BRM) and Siebel, sales order submission and status updates between Siebel and an assumed order management system, customer and order interfacing into Oracle BRM from an assumed order management system, and trouble ticket creation in Siebel in response to order fallout.

- Siebel CRM Integration Pack for Oracle Communications Order and Service Management.

  Order to Activate automates Oracle Order and Service Management (Oracle OSM) product class query from Siebel, sales order submission and status updates between Siebel and Oracle OSM, customer and order interfacing from Oracle OSM into an assumed billing system, order provisioning and updates between Oracle OSM central order management and Oracle OSM service provisioning, and trouble ticket creation and update in Siebel in response to order fallout.

The key benefits of componentized packaging are:

- Eliminates confusion on the differences between Order to Activate and Order to Bill packs.

- Provides additional flexibility for customers to choose and license components they really need.

As a result of this new packaging, there are:

- No changes to Agent Assisted Billing Care, and Revenue Accounting pre-built integrations.

- No changes to technical pre-requisites or interdependencies.

- No changes to license pre-requisites

- No changes to 3rd party involvement.

- No new features have been added or removed from Order to Activate and Order to Bill Integration packs available in Oracle AIA 2.5 release.

The existing Order to Bill customers are entitled to Oracle Communications Order to Cash for Siebel CRM and Oracle Communications Order to Cash for Oracle BRM – as a result they additionally get the Oracle AIA Siebel provider connector services for Query Class and Update Trouble Ticket. The existing Order to Activate customers are entitled to Oracle Communications Order to Cash for Siebel CRM and Oracle Communications Order to Cash for Oracle OSM – as a result they additionally get the Oracle AIA Siebel provider connector services to Synchronize Product & Price, Query Customer Account and Oracle AIA Siebel requester connector services for Update Customer Account and Synchronize Customer Special Rating Profile. Additional Integration Packs must be purchased separately.

Simplified Installation, Deployment, and Configuration of Pre-Built Integrations

In prior Oracle Application Integration Architecture (Oracle AIA) releases, installation, deployment and configuration of pre-built integrations was done in one step. With Oracle AIA 11.1, the installation, deployment and configuration process is three distinct steps enabling customers to complete each step as and when they are ready.

Known Issues and Workarounds

Please see the latest *Known Issues and Workarounds (KIWA)* document for the Oracle Communications 11.1 pre-built integrations on the My Oracle Support website.

Additional Resources

There are additional resources that can help your organization learn more about this release.

Resource	Navigation
Pre-Built Integration Implementation Guides	Oracle Technology Network: http://download.oracle.com/docs/cd/E24010_01/index.htm
Foundation Pack Guides	Oracle Technology Network: http://download.oracle.com/docs/cd/E21764_01/aia.htm
Installation and Upgrade Guide	Oracle Technology Network: http://download.oracle.com/docs/cd/E24010_01/index.htm
Oracle Product Master Data Management Integration Release Notes Oracle Customer Master Data Management Integration Notes	Oracle Technology Network: http://download.oracle.com/docs/cd/E24010_01/index.htm

Visit the My Oracle Support website frequently to keep apprised of ongoing changes.

For other sources of documentation, visit Oracle Technology Network: Oracle Documentation.

For training opportunities, visit Oracle University.