What's New in the Enterprise Business Object Library for Oracle Application Integration Architecture Foundation Pack 11g Release 1 (11.1.1.5.0)

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Contents

About This Document

This document describes the significant enhancements made to the Enterprise Business Object (EBO) library delivered with Oracle Application Integration Architecture (AIA) Foundation Pack 11*g* Release 1 (11.1.1.5.0). Existing functionality from prior releases is not covered in this document.

The Core section describes cross-industry enhancements to the EBO library.

Note. All enhancements discussed in the Core section are also available under each of the industries.

Business analysts, data modelers, integration specialists, and anyone else interested in learning about Foundation Pack 11*g* Release 1 (11.1.1.5.0) EBO library enhancements should read this document.

1. Core

This chapter includes the following sections:

- EBO Enhancements
- Common Components Enhancements

1.1. EBO Enhancements

This section includes the following topics:

- FulfillmentOrder
- InventoryReservation
- Invoice
- SalesOrder
- ShipmentAdvice
- ShipmentReceipt
- ShipmentRequest
- Task

1.1.1. FulfillmentOrder

FulfillmentOrderEBO was enhanced to support the integration between Distributed Order Orchestration (DOO) and the order-to-cash (O2C) process. DOO, being an Orchestration system, uses Fulfillment Order to communicate with third party systems about scheduling, shipping, returns, holds etc.

Added the following components to FulfillmentOrder:

- FulfillmentOrderRelatedFulfillmentOrder: This component captures the relationship between fulfillment orders.
- FulfillmentOrderRelatedFulfillmentOrderLine: This component captures the relationship between fulfillment order lines in different FulfillmentOrder instances.
- FulfillmentOrderRelatedFulfillmentOrderSchedule: This component captures the relationship between fulfillment order schedules in different FulfillementOrder instances.

The following non-standard operations were added to FulfillmentOrderEBM:

- ProcessFulfillmentOrderNotification: A message used for notifying an event associated with the FulfillmentOrder object.
- ProcessFulfillmentOrderNotificationResponse: A response message to notification of an event associated with the FulfillmentOrder object to indicate the detail of the success or failure of

notification processing.

- CancelFulfillmentOrder: A message associated to the cancelling of the FulfillmentOrder
- CancelFulfillmentOrderResponse: A response message to indicate whether cancellation of the FulfillmentOrder processing is succesfully accepted. Note that this is an immediate response. Cancellation statuses should be communicated via the ProcessFulfillmentOrderNotification.
- ExecuteFulfillmentOrderFulfillmentTask: A message for conveying the request for a system to perform a new fulfillment task on the given fulfillment order content. The task to be performed is indicated via the FulfillmentTaskTypeCode. Examples of the fulfillment task types are Credit Check, Contract Management, Asseting, and more. This message is used with a generic operation for requesting for a fulfillment task service. An example use case is the Order Orchestration System using this operation to request for a fulfillment task service not pre-defined in the off-the-shelf Order Orchestration System. For known/predefined fulfillment tasks (such as shipping and invoicing), the Order Orchestration System uses messages on specific object (such as ShipmentReqeustEBO and InvoiceEBO) (this is known as a seeded task layer functionality).
- ExecuteFulfillmentOrderFulfillmentTaskResponse: A response message for indicating whether the corresponding ExecuteFulfillmentOrderFulfillmentTask request was successfully received and understood. In the case where the fulfillment task is not a long running process such as a credit check, this message can be used to convey the business outcome. Generally this is used for an immediate response as opposed to the intermediate response associated with status changes where the ProcessFulfillmentOrderFulfillmentTaskNotification is mroe appropriate.
- ExecuteUpdatedFulfillmentOrderFulfillmentTask: A message for conveying an update to an earlier request for a fulfillment task service (via the ExecuteFulfillmentOrderFulfillmentTask message).
- ExecuteUpdatedFulfillmentOrderFulfillmentTaskResponse: A response message for indicating whether the corresponding ExecuteUpdatedFulfillmentOrderFulfillmentTask was successfully received and understood. This is used as an immediate response as opposed to the intermediate response associated with status changes where the ProcessFulfillmentOrderFulfillmentTaskNotification is more appropriate.
- HoldFulfillmentOrderFulfillmentTask: A message for conveying the request for holding/pausing the fulfillment task execution for the whole FulfillmentOrder from progressing further. If the hold is successful, it also implies that update to the fulfillment task for the whole fulfillment order is still feasible. An example use case is an upstream Order Orchestration System issuing a hold request to an Asset Management System before attempting to make some changes to its scheduling which would result in some changes to an earlier request to the Asset Managment System. If the Asset Management System cannot hold, then the Order Orchestration System may decide to drop the scheduling modification. Only if the hold is successful, then the Order Orchestration System will proceed with its scheduling modification. In short, the operation associated with this message allows for the Order Orchestration System to find out if the downstream system has reached a point of no return in the prior fulfillment task execution request.
- HoldFulfillmentOrderFulfillmentTaskResponse: A response message for indicating whether the corresponding HoldFulfillmentOrderFulfillmentTask request was successful.
- ReleaseFulfillmentOrderFulfillmentTaskHold: A message for conveying the request for releasing the fulfillment task of a fulfillment order from the prior hold to continue progress its execution.
- ReleaseFulfillmentOrderFulfillmentTaskHoldResponse: A response message for indicating whether

the corresponding ReleaseFulfillmentOrderFulfillmentTaskHold request was successful.

- HoldFulfillmentOrderLineFulfillmentTaskList: This message provides the same functionality as the HoldFulfillmentOrderFulfillmentTaskEBM. However, as opposed to a full fulfillment order hold, this message allows for a fulfillment task holding on specific fulfillment order lines of a particular fulfillment order (all lines must be of the same order).
- HoldFulfillmentOrderLineFulfillmentTaskListResponse: A response message for indicating whether the corresponding HoldFulfillmentOrderLineFulfillmentTaskList request was successful.
- ReleaseFulfillmentOrderLineFulfillmentTaskHoldList: This message provides the same functionality as the ReleaseFulfillmentOrderFulfillmentTaskHoldEBM. However, as opposed to a full fulfillment order release, this message allows for releasing of the fulfillment task hold on specific fulfillment order lines of a particular fulfillment order (all lines must be of the same order).
- ReleaseFulfillmentOrderLineFulfillmentTaskHoldListResponse: A response message for indicating whether the corresponding ReleaseFulfillmentOrderLineFulfillmentTaskHoldList request was successful.
- CancelFulfillmentOrderFulfillmentTask: A message for conveying the request for cancelling the processing of a fulfillment task associated with a FulfillmentOrder.
- CancelFulfillmentOrderFulfillmentTaskResponse: A response message to indicate whether cancellation of the fulfillment task of a FulfillmentOrder processing is succesfully accepted. Note that this is an immediate response. Cancellation statuses should be communicated via the ProcessFulfillmentOrderFulfillmentTaskNotification.
- ProcessFulfillmentOrderFulfillmentTaskNotification: A message used for notifying the service provider of an event associated with processing of the fulfillment task of a fulfillment order. This message is specifically used for publishing an event by the service provider of the ExecuteFulfillmentOrderFulfillmentTask and the ExecuteUpdatedFulfillmentOrderFulfillmentTask operations such as when there is a processing status change.
- ProcessFulfillmentOrderFulfillmentTaskNotificationResponse: A response message for indicating whether the corresponding ProcessFulfillmentOrderFulfillmentTaskNotification request message was successfully understood (note that this is typically not used for communicating a business success of the ProcessFulfillmentOrderFulfillmentTaskNotification request).

1.1.2. InventoryReservation

Added the following components to InventoryReservation EBO:

InventoryReservationAttachment: This component captures Binary, URI or other attachments that applies to the InventoryReservation.

1.1.3. Invoice

Added the following components to InvoiceEBO:

InvoiceCustomerParty: This is a Business Reference for capturing information about the sold to customer on the associated order.

InvoicePaymentInstrument: This business component captures details about a payment instrument that will be used for payment in the case of non-prepayment where payment maybe charged after the product/service has been rendered. Multiple payment instruments may be provided by the customer.

InvoiceInvoicingRule: This is a Business Reference for capturing information about the Invoicing Rule on Invoice.

InvoiceAccountingRule: This is a Business Reference for capturing information about the Accounting Rule on Invoice.

InvoiceCarrierParty: This is a Business Reference component for capturing information about the Carrier of the item in this invoice line.

InvoiceCustomerPurchaseOrder: This is a Business Reference for capturing Customer Purchase Order Reference.

InvoiceCustomerPurchaseOrderLine: This is a Business Reference for capturing Customer Purchase Order Reference.

InvoiceFulfillmentOrderSchedule: This is a Business Reference for capturing information about the FulfillmentOrderSchedule which resulted in this InvoiceLine.

InvoiceSalesOrderLine: This is a Business Reference for capturing information about the SalesOrderLine which resulted in this InvoiceLine.

The following operations were added to InvoiceEBM:

ProcessInvoiceNotificationEBM: A message used for notifying an event associated with the Invoice object.

ProcessInvoiceNotificationResponseEBM: A response message to notification of an event associated with the Invoice object to indicate the detail of the success or failure of notification processing.

1.1.4. SalesOrder

Added the following components to SalesOrder:

SalesOrderLegalEntity: This is a Business Reference to the Legal Entity of the Sales Order.

SalesOrderRelatedSalesOrder: This Business component captures the relationship between orders.

SalesOrderRelatedSalesOrderLine: This Business component captures the relationship between order lines.

SalesOrderRelatedSalesOrderSchedule: This Business component captures the relationship between order schedules.

SalesOrderSchedulePaymentInstrument: This business component captures details about a payment instrument that will be used for payment in the case of non-prepayment where payment maybe charged after the product/service has been rendered. Multiple payment instruments may be provided by the customer.

1.1.5. ShipmentAdvice

The following operation was added to ShipmentAdviceEBM:

ProcessShipmentAdviceNotificationResponseEBM: A response message to notification of an event associated with the ShipmentAdvice object to indicate the detail of the success or failure of notification processing.

The ShipmentUnit CommonEBO was enhanced and ShipmentUnitAttachment was added. This component captures Binary, URI or other attachments that applies to the ShipmentUnit. ShipmentAdviceEBO extends ShipmentUnit and hence this enhancement is now available under ShipmentAdvice.

1.1.6. ShipmentReceipt

The following components were added to ShipmentReceiptEBO:

ShipmentReceiptFulfillmentOrderSchedule: This is a Business Reference to Shipment Receipt's Fulfillment Order Schedule.

The following operations were added to ShipmentReceiptEBM:

ProcessShipmentReceiptNotificationEBM: A message used for notifying an event associated with the ShipmentReceipt object.

ProcessShipmentReceiptNotificationResponseEBM: A response message to notification of an event associated with the ShipmentReceipt object to indicate the detail of the success or failure of notification processing.

1.1.7. ShipmentRequest

The following components were added to ShipmentRequestEBO:

ShipmentRequestOrderAttachment: This component captures Binary, URI or other attachments that apply to the ShipmentRequestOrder.

ShipmentRequestOrderLineAttachment: This component captures Binary, URI or other attachments that apply to the ShipmentRequestOrderLine.

The following operation was added to ShipmentRequestEBM:

ProcessShipmentRequestNotificationResponseEBM: A response message to notification of an event associated with the ShipmentRequest object to indicate the detail of the success or failure of notification processing.

1.1.8. Task

The following component was added to TaskEBO:

TaskAttachment: This component captures Binary, URI or other attachments that apply to the Task.

The cardinality of TaskRelatedObject was set to unbounded for maximum number of occurrences.

The following operation was added to TaskEBM:

ProcessTaskNotificationResponseEBM: A response message to notification of an event associated with the Task object to indicate the detail of the success or failure of notification processing.

1.2. Common Components Enhancements

This section lists out new common components and significant additions to existing common components added since Foundation Pack 11*g* Release 1 (11.1.1.2.0).

Common Component	Description	New/Existing
FundCaptureTransactionExtensionIdentification	Unique identification of a FundCaptureTransactionExtension	New
FundCaptureTransactionExtensionReference	Refers to a FundCaptureTransactionExtension. FundCaptureTransactionExtension is an object in the Payment System which keeps information about a payment transaction made from another application. This information is later used to do an authorization and subsequent settlement. It has a 1-n relationship with the FundCaptureTransaction entity which contains details about the actual authorization or settle transaction (among others). FundCaptureTransactionExtension allows for other applications to interact with the Payment system without exchanging details of the payment instrument involved in the payment.	New
ParentInvoiceLineIdentification	Unique identification to an InvoiceLine which is a parent of the InvoiceLine in context. The parent InvoiceLine contains the Item which is a parent item of the Item in the InvoiceLine in context	
RootParentInvoiceLineIdentification	Unique identification to an InvoiceLine which is a root parent of the InvoiceLine in context. The root parent InvoiceLine contains the Item which is a root parent item (a complex item) of the Item in the InvoiceLine in context.	New
ReceiptMethodIdentification	Unique identification of a ReceiptMethod	New
ReceiptMethodReference	Refers to a ReceiptMethod. ReceiptMethod is Account Receivable (AR) object which stores information about payment methods that are receipt attributes defined and assigned by a user to receipt classes. Account Receivables System uses receipt methods to account for receipt entries and their applications. Receipt methods also determine a customer remittance bank information e.g. Cash receipt method specifies that Debit Memos should inherit Receipt Numbers and remittance bank account is 'WFg-216'; Automatic receipt method specifies to create one receipt per invoice inheriting its invoice number, and remittance bank account is Bank Of America account 'BofA-204'.	New
ShipmentAttachment	Additional information about the shipment provided in the form of location pointer or binary content	New
ShipmentItemAttachment	Additional information about this shipped item provided in the form of pointer to a location or binary content	New
PaymentInstrument	Added ReceiptMethodReference as an alternative option to check, EFT, bank draft, credit / debit card etc.	Existing
Shipment	Added ShipmentAttachment as a child component to support	Existing

Common Component	Description	New/Existing
	attachments within Shipment.	
ShipmentItem	Added ShipmentItemAttachment as a child component to support attachments within ShipmentItem.	Existing