DS.140 Integration Design Specification



GRN Put-away Integration

SCM\_RICE\_22

Author: Pranjul Garg

Creation Date: May 16, 2022

Last Updated: May 16, 2022

Version: 1.0

**Approvals:**

|  |  |
| --- | --- |
| <Approver 1> | <Rakesh Khanna / Naushad / Amit> |
| <Approver 2> | <Business Owner> |

# Document Control

## Change Record

| Date | Author | Version | Change Reference |
| --- | --- | --- | --- |
| 16-May-2022 | Pranjul Garg | 1.0 | No Previous Document |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

2

## Reviewers

| Name | Position |
| --- | --- |
| FHL Business | Business User |
| FHL IT Group | Fortis IT Team |
|  |  |
|  |  |

Contents

1 Document Control ii

1.1 Change Record ii

1.2 Reviewers ii

2 Introduction 4

2.1.1 Scope for this Document 4

2.1.2 Intended Audience 4

3 Overview 5

3.1 Business Objectives 5

3.2 Major Features 5

3.3 Glossary 5

4 High-Level Fusion Integration flow 6

5 Technical Design Details 7

5.1 OIC Services 7

5.2 Oracle PaaS DBCS components 8

5.3 Technical flow 8

6 Data FIELD Mapping 35

6.1 File format 35

6.2 Frequency 35

7 Exception handling 36

7.1 Scenarios 36

8 Assumptions / Considerations 37

9 Open and Closed Issues 38

9.1 Open Issues 38

9.2 Closed Issues 38

# Introduction

### Scope for this Document

This analysis specification document is prepared to layout the GRN Put-away integration.

### Intended Audience

This document is intended for the following groups to provide the action items and consideration that are required to complete the implementation of the various Supply Chain and Finance related functionalities from Oracle Fusion.

#### Fortis Business Users

This document will be helpful for Fortis Business users to understand the technical design and process change with the new structure implemented in Oracle. The business user will validate this document after the verification of the requirement.

#### PwC Technical Team

The PwC technical team will use this document as a source technical design document to develop the technical solution to implement / deploy in Oracle Fusion.

#### Fortis IT Team

The Fortis IT Team must facilitate the PwC technical team for requisite details and other elements required from Business. The Fortis IT team is also responsible to arrange and provide required technical information wherever is required.

# Overview

Fortis Healthcare Limited (FHL) is a chain of hospitals, headquartered in India. Fortis started its health care operations from Mohali where first Fortis hospital was started. Later, the hospital chain purchased the healthcare branch of the Escorts group and increased its strength in various parts of the country. The Fortis health care also operates its hospital in Vasant Kunj, Faridabad, Gurgaon. The FMRI hospital at Gurgaon is the headquarter of Fortis healthcare with all the major facilities at the hospital.

This specification document is prepared to layout the design of the custom integration to create the DELIVER leg (Put away) of the GRNs in a 2-step receiving process. Oracle PaaS DBCS has been used to store the transactional details to monitor the interface.

## Business Objectives

The following are the business objectives.

1. To have a secure, reliable, and scalable design flow to validate all the GRNs where receiving has been done and DELIVER leg has to be created via OICS.
2. To have a solution providing the monitoring capabilities.

## Major Features

The proposed solution will have the following features involved:

1. OIC integration uses a Fusion BI report to fetch the eligible record and invokes REST APIs to process the transaction in Fusion itself.
2. The OIC integrations also make an entry in a table in a PaaS DBCS for monitoring purpose.

## Glossary

REST

Representational State Transfer.

OIC

Oracle Integration Cloud

# High-Level Fusion Integration flow



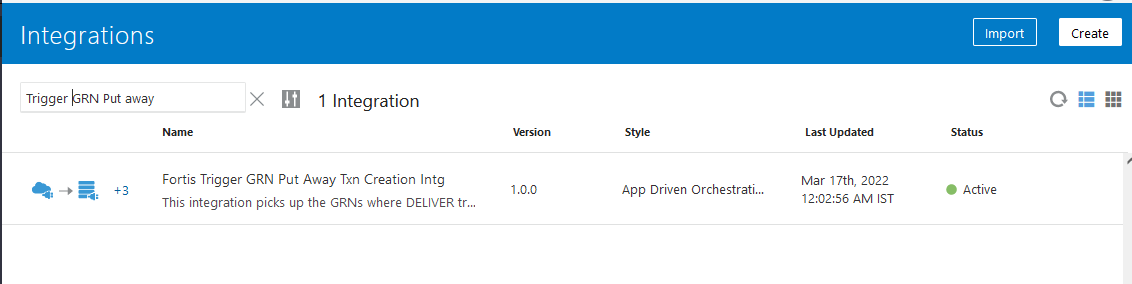
# Technical Design Details

This section describes the technical details of all the components involved in the design of GRN Put away integration.

## OIC Services

An App driven orchestration has been designed in OIC to build a REST Endpoint URL:.

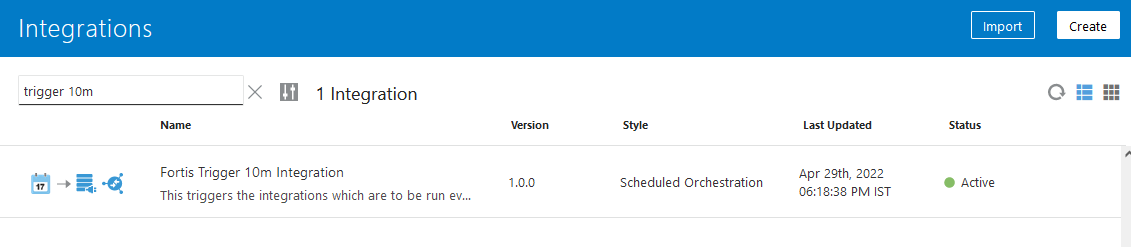
|  |  |
| --- | --- |
| **OIC Integration Name** | Fortis Trigger GRN Put Away Txn Creation Intg |
| **OIC REST Endpoint URL** | <https://oic-prod-nr5lr39yailj-bo.integration.ocp.oraclecloud.com:443/ic/api/integration/v1/flows/rest/FORTIS_TRIG_GRN_PUT_AWAY_TXN_INT/1.0/grnPutAway/> |
| **Method** | POST |



This is an app driven integration which is invoked via a following common scheduled OIC integration:

|  |  |
| --- | --- |
| **OIC Integration Name** | Fortis Trigger 10m Integration |
| **OIC REST Endpoint URL** | [NA](https://oic-prod-nr5lr39yailj-bo.integration.ocp.oraclecloud.com:443/ic/api/integration/v1/flows/rest/FORTIS_TRIG_GRN_PUT_AWAY_TXN_INT/1.0/grnPutAway/) |
| **Method** | NA |
| **Frequency** | Scheduled every 10 minutes |

This wrapper scheduled integration has been configured due to the limit of scheduled integrations within OIC. Hence all the required scheduled integrations have been clubbed together as per their required frequency.



## Oracle PaaS DBCS components

This integration design uses the following components from Oracle PaaS DBCS:

|  |  |  |
| --- | --- | --- |
| **DB Component** | **Component name** | **Details** |
| **Tables** | XXFH\_GRN\_CREATION\_TBL | This table stores all the GRN entries which are processed by this integration. |
| **Package** | XXFH\_GET\_RCV\_ERROR\_FN | This function takes GROUP\_ID as input and returns an error message string |

## Technical flow

Following is the complete technical flow for this integration design:

1. A common scheduled OIC integration (Fortis Trigger 10m Integration) invokes this GRN Put way integration at every 10 minutes.
2. Once the OIC integration is invoked, it internally invokes an ESS job (Fortis GRN Creation Report) with path as “/oracle/apps/ess/custom/receiving/GRN/”. This ESS job invokes a BIP report (Fortis GRN Creation Report).
3. This BIP report fetches all the eligible GRNs which is not yet delivered. It is checked based on the following condition:

(RCV\_SHIPMENT\_LINES.QUANTITY\_RECEIVED – RCV\_SHIPMENT\_LINES.QUANTITY\_DELIVERED) > 0

1. This BIP report also validates each & every GRN record against the given business validations and accordingly return “TRANSACTION\_TYPE” in its report output. If a GRN record passes all the validations, then it returns ‘DELIVER’, otherwise it returns the respective error message.
2. There are following validations:

* Either of Supplier Batch#,Batch MRP, Expiry Date, Security Gate DFF values is/are null or Security inward date is a future date
* MRP on received line or inventory org is not the same. (for margin controlled items)
* Batch MRP-LOT MRP & Lot Expiration Date-Expiration date are not matching. (For DPCO related items)
* Batch MRP >= DPCO Price or <= EPR (This validation uses a Fusion custom lookup: XXFH\_DPCO\_EPR\_MARGIN\_PROFILE to store 5% additional margin which is used to check the deviation between MRP & EPR)

1. There are the following 2 validations wherein the integration doesn’t process the given GRN and bypass it as such GRNs are to be manually processed by the respective Store manager.

* Expiry date is less than 180 days
* Given Subinventory is either Null or not defined or not active.

1. Once OIC gets the report output from the given ESS job (or BIP Report), it iterates through every record and process the GRN accordingly. If TRANSACTION\_TYPE for a given GRN is returned as ‘DELIVER’ from BI report output, then the OIC integration invokes the REST API to create its DELIVER leg.

|  |  |
| --- | --- |
| REST API URL | <https://fa-ermg-saasfaprod1.fa.ocs.oraclecloud.com/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests> |
| Method | POST |
| Request Payload | {  "BusinessUnit" : "FHsL - Faridabad",  "TransactionType" : "DELIVER",  "DestinationTypeCode" : "INVENTORY",  "OrganizationCode" : "FBD",  "ReceiptSourceCode" : "VENDOR",  "SourceDocumentCode" : "PO",  "ParentTransactionId" : 31001,  "DFF" : [ {  "cbuFlag" : "Y"  } ],  "POHeaderId" : 23001,  "POLineId" : 22001,  "Quantity" : 10,  "UOMCode" : "Ea",  "Subinventory" : "RTV",  "lotItemLots" : [ {  "TransactionQuantity" : 10,  "LotNumber" : "TEST1245",  "LotExpirationDate" : "2021-04-08",  "VendorLotNumber" : "SUP",  "lotNumbersDFF" : [ {  "\_\_FLEX\_Context" : null,  "\_\_FLEX\_Context\_DisplayValue" : null,  "supplierBatchNumber" : "abc",  "batchMrp" : "150"  } ]  } ]  } |
| Response Payload | {  "InterfaceTransactionId" : 300000004910679,  "HeaderInterfaceId" : null,  "CreatedBy" : "Integration.Developer",  "CreationDate" : "2021-04-08T08:39:46.002+00:00",  "LastUpdateDate" : "2021-04-08T08:39:46.093+00:00",  "LastUpdatedBy" : "Integration.Developer",  "TransactionType" : "DELIVER",  "AutoTransactCode" : null,  "TransactionDate" : "2021-04-08T08:39:46.003+00:00",  "OrganizationCode" : "FBD",  "OrganizationId" : null,  "ItemDescription" : null,  "ItemId" : null,  "ItemNumber" : null,  "ItemRevision" : null,  "ReceiptSourceCode" : "VENDOR",  "SourceDocumentCode" : "PO",  "DocumentNumber" : null,  "DocumentLineNumber" : null,  "DocumentShipmentLineNumber" : null,  "DocumentDistributionNumber" : null,  "PODistributionId" : null,  "POHeaderId" : 23001,  "POLineId" : 22001,  "POLineLocationId" : null,  "ShipmentHeaderId" : null,  "ShipmentLineId" : null,  "ShipmentNumber" : null,  "ASNLineNumber" : null,  "TransferOrderHeaderId" : null,  "TransferOrderLineId" : null,  "TransferOrderDistributionId" : null,  "SoldtoLegalEntity" : null,  "SoldtoLegalEntityId" : null,  "DestinationTypeCode" : "INVENTORY",  "Subinventory" : "RTV",  "Locator" : "1.1.1.1",  "LocatorId" : null,  "Quantity" : 10,  "UnitOfMeasure" : "Each",  "UOMCode" : null,  "PrimaryQuantity" : null,  "PrimaryUOMCode" : null,  "PrimaryUnitOfMeasure" : null,  "ProcessingStatusCode" : "PENDING",  "SecondaryUOMCode" : null,  "SecondaryUnitOfMeasure" : null,  "SecondaryQuantity" : null,  "EmployeeId" : null,  "EmployeeName" : null,  "ParentTransactionId" : 31001,  "SourceTransactionNumber" : null,  "ParentSourceTransactionNumber" : null,  "InterfaceSourceCode" : "REST",  "InterfaceSourceLineId" : null,  "ShipToLocationCode" : null,  "ShipToLocationId" : null,  "DeliverToLocationCode" : null,  "DeliverToLocationId" : null,  "DeliverToPersonId" : null,  "DeliverToPersonName" : null,  "RoutingCode" : null,  "RoutingHeaderId" : null,  "InspectionQualityCode" : null,  "Exception" : null,  "RMAReference" : null,  "RMANumber" : null,  "RMALineNumber" : null,  "RMAScheduleNumber" : null,  "ReceiptAdviceHeaderId" : null,  "ReceiptAdviceLineId" : null,  "CustomerId" : null,  "CustomerPartyName" : null,  "CustomerPartyNumber" : null,  "CustomerItemNumber" : null,  "CustomerItemId" : null,  "Amount" : null,  "CountryOfOriginCode" : null,  "CurrencyCode" : null,  "CurrencyConversionDate" : null,  "CurrencyConversionRate" : null,  "FromOrganizationCode" : null,  "FromOrganizationId" : null,  "ContainerNumber" : null,  "SubstituteItemNumber" : null,  "SubstituteItemId" : null,  "SubstituteUnorderedCode" : null,  "VendorName" : null,  "VendorId" : null,  "VendorNumber" : null,  "VendorSiteCode" : null,  "VendorSiteId" : null,  "VendorItemNumber" : null,  "BusinessUnit" : "FHsL - Faridabad",  "BusinessUnitId" : null,  "ConsignedLine" : null,  "ReasonId" : null,  "ReasonName" : null,  "PackingSlip" : null,  "Comments" : null,  "FromSubinventory" : null,  "FromLocator" : null,  "FromLocatorId" : null,  "TransactionStatusCode" : "PENDING",  "GroupId" : 109016,  "ExternalSystemPackingUnit" : null,  "DefaultTaxationCountry" : null,  "DocumentFiscalClassification" : null,  "FirstPartyRegistrationId" : null,  "ThirdPartyRegistrationId" : null,  "TransactionBusinessCategory" : null,  "TaxInvoiceNumber" : null,  "TaxInvoiceDate" : null,  "EwayBillNumber" : null,  "EwayBillDate" : null,  "UserDefinedFiscalClassification" : null,  "ProductFiscalClassificationId" : null,  "TaxClassificationCode" : null,  "IntendedUseClassificationId" : null,  "IntendedUse" : null,  "ProductCategory" : null,  "AssessableValue" : null,  "FinalDischargeLocationId" : null,  "ProductType" : null,  "FirstPartyRegistrationNumber" : null,  "ThirdPartyRegistrationNumber" : null,  "ProductFiscalClassName" : null,  "FinalDischargeLocationCode" : null,  "BarcodeLabel" : null,  "TruckNumber" : null,  "InsertAndProcessFlag" : "true",  "ReturnStatus" : "SUCCESS",  "LPNId" : null,  "LicensePlateNumber" : null,  "SaveAndSubmitFlag" : "false",  "CreateDebitMemoFlag" : null,  "PhysicalMaterialReturnRequiredFlag" : null,  "RecallHeaderId" : null,  "RecallLineId" : null,  "RecallLineNumber" : null,  "RecallNoticeNumber" : null,  "ExternalSystemTransactionReference" : null,  "lotItemLots" : [ {  "LotNumber" : "TEST1245",  "LotExpirationDate" : "2021-04-08",  "ParentLotNumber" : null,  "VendorLotNumber" : null,  "TransactionQuantity" : 10,  "PrimaryQuantity" : null,  "SecondaryTransactionQuantity" : null,  "OriginationDate" : null,  "OriginationType" : null,  "HoldDate" : null,  "ReasonId" : null,  "ReasonName" : null,  "MaturityDate" : null,  "GradeCode" : null,  "lotNumbersDFF" : [ {  "TransactionInterfaceId" : 300000004910680,  "LotNumber" : "TEST1245",  "supplierBatchNumber" : null,  "batchMrp" : "150",  "\_\_FLEX\_Context" : null,  "\_\_FLEX\_Context\_DisplayValue" : null,  "links" : [ {  "rel" : "self",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58/child/lotNumbersDFF/00020000000EACED00057708000110D931B9AE58000000085445535431323435",  "name" : "lotNumbersDFF",  "kind" : "item",  "properties" : {  "changeIndicator" : "ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A65787000000001770400000001737200116A6176612E6C616E672E496E746567657212E2A0A4F781873802000149000576616C7565787200106A6176612E6C616E672E4E756D62657286AC951D0B94E08B02000078700000000178"  }  }, {  "rel" : "canonical",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58/child/lotNumbersDFF/00020000000EACED00057708000110D931B9AE58000000085445535431323435",  "name" : "lotNumbersDFF",  "kind" : "item"  }, {  "rel" : "parent",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58",  "name" : "lotItemLots",  "kind" : "item"  }, {  "rel" : "lov",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58/child/lotNumbersDFF/00020000000EACED00057708000110D931B9AE58000000085445535431323435/lov/LVVO\_\_\_FLEX\_Context",  "name" : "LVVO\_\_\_FLEX\_Context",  "kind" : "collection"  } ]  } ],  "links" : [ {  "rel" : "self",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58",  "name" : "lotItemLots",  "kind" : "item",  "properties" : {  "changeIndicator" : "ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A65787000000001770400000001737200116A6176612E6C616E672E496E746567657212E2A0A4F781873802000149000576616C7565787200106A6176612E6C616E672E4E756D62657286AC951D0B94E08B02000078700000000178"  }  }, {  "rel" : "canonical",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58",  "name" : "lotItemLots",  "kind" : "item"  }, {  "rel" : "parent",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679",  "name" : "receivingReceiptTransactionRequests",  "kind" : "item"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58/child/lotAttributesDFF",  "name" : "lotAttributesDFF",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots/00020000000854455354313234350000000EACED00057708000110D931B9AE58/child/lotNumbersDFF",  "name" : "lotNumbersDFF",  "kind" : "collection"  } ]  } ],  "links" : [ {  "rel" : "self",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679",  "name" : "receivingReceiptTransactionRequests",  "kind" : "item",  "properties" : {  "changeIndicator" : "ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A65787000000001770400000001737200116A6176612E6C616E672E496E746567657212E2A0A4F781873802000149000576616C7565787200106A6176612E6C616E672E4E756D62657286AC951D0B94E08B02000078700000000178"  }  }, {  "rel" : "canonical",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679",  "name" : "receivingReceiptTransactionRequests",  "kind" : "item"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/ASNLineDFF",  "name" : "ASNLineDFF",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/DFF",  "name" : "DFF",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/attachments",  "name" : "attachments",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/inventoryStripingDFF",  "name" : "inventoryStripingDFF",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotItemLots",  "name" : "lotItemLots",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/lotSerialItemLots",  "name" : "lotSerialItemLots",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/processingErrors",  "name" : "processingErrors",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-dev1-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000004910679/child/serialItemSerials",  "name" : "serialItemSerials",  "kind" : "collection"  } ]  } |

1. If the TRANSACTION\_TYPE is returned as different than ‘DELIVER’, then the given GRN is RTVed using the following REST API along with the given error message:

|  |  |
| --- | --- |
| REST API URL | https://fa-ermg-saasfaprod1.fa.ocs.oraclecloud.com/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests |
| Method | POST |
| Request Payload | {  "DestinationTypeCode" : "RECEIVING",  "POHeaderId" : 300000004470443,  "POLineId" : 300000004470444,  "TransactionDate" : "2021-06-17 14:25:57",  "Quantity" : 1,  "UOMCode" : "S06",  "SourceDocumentCode" : "PO",  "TransactionType" : "RETURN TO VENDOR",  "ParentTransactionId" : 32003,  "CreateDebitMemoFlag" : "true",  "DFF" : [ {  "\_\_FLEX\_Context" : "RTV",  "rejectionReason" : "Either of Supplier Batch#,Batch MRP, Expiry Date, Security Gate DFF values is/are null"  } ]  } |
| Response Payload | {  "InterfaceTransactionId" : 300000016817393,  "HeaderInterfaceId" : null,  "CreatedBy" : "yashvir.singh@pwc.com",  "CreationDate" : "2021-06-17T14:26:59.001+00:00",  "LastUpdateDate" : "2021-06-17T14:26:59.043+00:00",  "LastUpdatedBy" : "yashvir.singh@pwc.com",  "TransactionType" : "RETURN TO VENDOR",  "AutoTransactCode" : null,  "TransactionDate" : "2021-06-17T14:25:57+00:00",  "OrganizationCode" : null,  "OrganizationId" : null,  "ItemDescription" : null,  "ItemId" : null,  "ItemNumber" : null,  "ItemRevision" : null,  "ReceiptSourceCode" : null,  "SourceDocumentCode" : "PO",  "DocumentNumber" : null,  "DocumentLineNumber" : null,  "DocumentShipmentLineNumber" : null,  "DocumentDistributionNumber" : null,  "PODistributionId" : null,  "POHeaderId" : 300000004470443,  "POLineId" : 300000004470444,  "POLineLocationId" : null,  "ShipmentHeaderId" : null,  "ShipmentLineId" : null,  "ShipmentNumber" : null,  "ASNLineNumber" : null,  "TransferOrderHeaderId" : null,  "TransferOrderLineId" : null,  "TransferOrderDistributionId" : null,  "SoldtoLegalEntity" : null,  "SoldtoLegalEntityId" : null,  "DestinationTypeCode" : "RECEIVING",  "Subinventory" : null,  "Locator" : null,  "LocatorId" : null,  "Quantity" : 1,  "UnitOfMeasure" : null,  "UOMCode" : "S06",  "PrimaryQuantity" : null,  "PrimaryUOMCode" : null,  "PrimaryUnitOfMeasure" : null,  "ProcessingStatusCode" : "PENDING",  "SecondaryUOMCode" : null,  "SecondaryUnitOfMeasure" : null,  "SecondaryQuantity" : null,  "EmployeeId" : null,  "EmployeeName" : null,  "ParentTransactionId" : 32003,  "SourceTransactionNumber" : null,  "ParentSourceTransactionNumber" : null,  "InterfaceSourceCode" : "REST",  "InterfaceSourceLineId" : null,  "ShipToLocationCode" : null,  "ShipToLocationId" : null,  "DeliverToLocationCode" : null,  "DeliverToLocationId" : null,  "DeliverToPersonId" : null,  "DeliverToPersonName" : null,  "RoutingCode" : null,  "RoutingHeaderId" : null,  "InspectionQualityCode" : null,  "Exception" : null,  "RMAReference" : null,  "RMANumber" : null,  "RMALineNumber" : null,  "RMAScheduleNumber" : null,  "ReceiptAdviceHeaderId" : null,  "ReceiptAdviceLineId" : null,  "CustomerId" : null,  "CustomerPartyName" : null,  "CustomerPartyNumber" : null,  "CustomerItemNumber" : null,  "CustomerItemId" : null,  "Amount" : null,  "CountryOfOriginCode" : null,  "CurrencyCode" : null,  "CurrencyConversionDate" : null,  "CurrencyConversionRate" : null,  "FromOrganizationCode" : null,  "FromOrganizationId" : null,  "ContainerNumber" : null,  "SubstituteItemNumber" : null,  "SubstituteItemId" : null,  "SubstituteUnorderedCode" : null,  "VendorName" : null,  "VendorId" : null,  "VendorNumber" : null,  "VendorSiteCode" : null,  "VendorSiteId" : null,  "VendorItemNumber" : null,  "BusinessUnit" : null,  "BusinessUnitId" : null,  "ConsignedLine" : null,  "ReasonId" : null,  "ReasonName" : null,  "PackingSlip" : null,  "Comments" : null,  "FromSubinventory" : null,  "FromLocator" : null,  "FromLocatorId" : null,  "TransactionStatusCode" : "PENDING",  "GroupId" : 33014,  "ExternalSystemPackingUnit" : null,  "DefaultTaxationCountry" : null,  "DocumentFiscalClassification" : null,  "FirstPartyRegistrationId" : null,  "ThirdPartyRegistrationId" : null,  "TransactionBusinessCategory" : null,  "TaxInvoiceNumber" : null,  "TaxInvoiceDate" : null,  "EwayBillNumber" : null,  "EwayBillDate" : null,  "UserDefinedFiscalClassification" : null,  "ProductFiscalClassificationId" : null,  "TaxClassificationCode" : null,  "IntendedUseClassificationId" : null,  "IntendedUse" : null,  "ProductCategory" : null,  "AssessableValue" : null,  "FinalDischargeLocationId" : null,  "ProductType" : null,  "FirstPartyRegistrationNumber" : null,  "ThirdPartyRegistrationNumber" : null,  "ProductFiscalClassName" : null,  "FinalDischargeLocationCode" : null,  "BarcodeLabel" : null,  "TruckNumber" : null,  "InsertAndProcessFlag" : "true",  "ReturnStatus" : "SUCCESS",  "LPNId" : null,  "LicensePlateNumber" : null,  "SaveAndSubmitFlag" : "false",  "CreateDebitMemoFlag" : null,  "PhysicalMaterialReturnRequiredFlag" : null,  "RecallHeaderId" : null,  "RecallLineId" : null,  "RecallLineNumber" : null,  "RecallNoticeNumber" : null,  "ExternalSystemTransactionReference" : null,  "DFF" : [ {  "InterfaceTransactionId" : 300000016817393,  "supplierLotNumber" : null,  "existingLot" : null,  "existingLot\_Display" : null,  "lotExpirationDate" : null,  "lotMrp" : null,  "securityGateNumber" : null,  "securityDate" : null,  "\_\_FLEX\_Context" : "RTV",  "\_\_FLEX\_Context\_DisplayValue" : "RTV",  "nrgpRefNo" : null,  "nrgpDate" : null,  "creditMemo" : null,  "creditMemoDate" : null,  "rejectionReason" : "Either of Supplier Batch#,Batch MRP, Expiry Date, Security Gate DFF values is/are null",  "links" : [ {  "rel" : "self",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/DFF/300000016817393",  "name" : "DFF",  "kind" : "item",  "properties" : {  "changeIndicator" : "ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A65787000000001770400000001737200116A6176612E6C616E672E496E746567657212E2A0A4F781873802000149000576616C7565787200106A6176612E6C616E672E4E756D62657286AC951D0B94E08B02000078700000000178"  }  }, {  "rel" : "canonical",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/DFF/300000016817393",  "name" : "DFF",  "kind" : "item"  }, {  "rel" : "parent",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393",  "name" : "receivingReceiptTransactionRequests",  "kind" : "item"  }, {  "rel" : "lov",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/DFF/300000016817393/lov/LVVO\_existingLot",  "name" : "LVVO\_existingLot",  "kind" : "collection"  }, {  "rel" : "lov",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/DFF/300000016817393/lov/LVVO\_\_\_FLEX\_Context",  "name" : "LVVO\_\_\_FLEX\_Context",  "kind" : "collection"  } ]  } ],  "links" : [ {  "rel" : "self",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393",  "name" : "receivingReceiptTransactionRequests",  "kind" : "item",  "properties" : {  "changeIndicator" : "ACED0005737200136A6176612E7574696C2E41727261794C6973747881D21D99C7619D03000149000473697A65787000000001770400000001737200116A6176612E6C616E672E496E746567657212E2A0A4F781873802000149000576616C7565787200106A6176612E6C616E672E4E756D62657286AC951D0B94E08B02000078700000000178"  }  }, {  "rel" : "canonical",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393",  "name" : "receivingReceiptTransactionRequests",  "kind" : "item"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/ASNLineDFF",  "name" : "ASNLineDFF",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/DFF",  "name" : "DFF",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/attachments",  "name" : "attachments",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/inventoryStripingDFF",  "name" : "inventoryStripingDFF",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/lotItemLots",  "name" : "lotItemLots",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/lotSerialItemLots",  "name" : "lotSerialItemLots",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/processingErrors",  "name" : "processingErrors",  "kind" : "collection"  }, {  "rel" : "child",  "href" : "https://fa-ermg-test-saasfaprod1.fa.ocs.oraclecloud.com:443/fscmRestApi/resources/11.13.18.05/receivingReceiptTransactionRequests/300000016817393/child/serialItemSerials",  "name" : "serialItemSerials",  "kind" : "collection"  } ]  } |

1. Once the transaction is processed, it’s entry is inserted into a table in PaaS DB: XXFH\_GRN\_CREATION\_TBL with the respective status.

* **Deprecated API update**
  1. RTV Process integrations created miscellaneous transactions. One of those is RTV without receipt. For this transaction the API used was deprecated in 24C patch, that’s why new API was used. The previous API(/fscmRestApi/resources/11.13.18.05/inventoryTransactions) took UOM code as an input to create transactions but the new API (/fscmRestApi/resources/11.13.18.05/inventoryStagedTransactions) takes the whole name of UOM to process the transactions.
  2. The same has been changed in the procedure: XXFH\_RTV\_TXN\_PKG. XXFH\_GET\_LOT\_INFO\_PRC to fetch UOM name instead of UOM Code.

**Bug Fix:**

The following new features appear in this release:

* In this RTV document report there is one issue reported that RTV number getting repeated means for duplicate records generated in the PDF output.
* It's due to the vendor site id column which is different for each record, and we are not using this column in the output.
* So, this column was removed from the select statement and now the data looks fine.

**Server details:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Server** | **Host name** | **Port** | **Service Name** | **Username** |
| Oracle PaaS DB | 140.238.225.129 | 1521 | PRODPDB1.fhpubsn.fhvcn.oraclevcn.com | XXFH & XXFH\_RO |

**Oracle PaaS Table design:**

* + - 1. Table: XXFH\_GRN\_CREATION\_TBL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Table Column** | **Data type** | **Length** | **Remarks** |
| 1 | OIC\_FLOW\_ID | NUMBER | 22 |  |
| 2 | RECEIPT\_NUM | VARCHAR2 | 30 |  |
| 3 | ORGANIZATION\_CODE | VARCHAR2 | 50 |  |
| 4 | TRANSACTION\_TYPE | VARCHAR2 | 30 |  |
| 5 | ESS\_JOB\_ID | VARCHAR2 | 30 |  |
| 6 | PROCESS\_FLAG | VARCHAR2 | 1 |  |
| 7 | ERROR\_MESSAGE | VARCHAR2 | 4000 |  |
| 8 | CREATION\_DATE | DATE | 7 |  |
| 9 | CREATED\_BY | VARCHAR2 | 30 |  |
| 10 | LAST\_UPDATE\_DATE | DATE | 7 |  |
| 11 | LAST\_UPDATED\_BY | VARCHAR2 | 30 |  |



# Data FIELD Mapping

NA

## File format

NA

## Frequency

The GRN Put away integration is scheduled to run every 10 minutes.

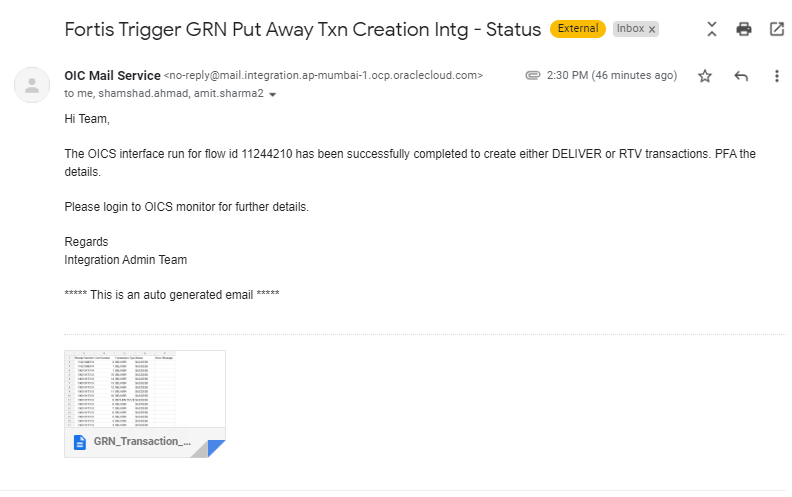
# Exception handling

There can be various scenarios for an error to occur. This section defines those error scenarios and the exception handling has been done to notify and act accordingly.

## Scenarios

In a tabular format give list of scenarios and exception handling

* If any of the step or node fails within the OIC integration, Global Fault section is configured within this OIC integration to send an OIC error notification with relevant details.
* The email id has been stored in OIC Lookup: Fortis\_FaultNotification\_EmailAddress\_Lookup against the given OIC integration name.
* It also sends a notification every 10 minutes with the details of the GRN which have been processed in the given run. This notification also acts as a confirmation that the integration has been running fine.



# Assumptions / Considerations

The Proposed Solution will have the following technical considerations.

In the future, if any product bug arises in functionality then this process needs to be revisited after the bug is fixed.

# Open and Closed Issues

## Open Issues

| ID | Issue | Resolution | Responsibility | Target Date | Impact Date |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## Closed Issues

| ID | Issue | Resolution | Responsibility | Target Date | Impact Date |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |