O2\_GENAI\_INT3820

Techno-Functional Specification (Interface)

O2\_GENAI\_INT3820\_Vendors(Cloud to Logfire)

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Table of Contents

[1. Summary 5](#_Toc171262309)

[1.1 Purpose/Justification 5](#_Toc171262310)

[1.2 Integration Description and Overview 5](#_Toc171262311)

[1.3 Business Rules 5](#_Toc171262312)

[1.4 Sample Output / Screen Layout 5](#_Toc171262313)

[1.5 Definitions and Acronyms 6](#_Toc171262314)

[2. Functional Design 7](#_Toc171262315)

[2.1 Integration Details 7](#_Toc171262316)

[2.2 Launch Parameters 7](#_Toc171262317)

[2.3 Data Selection and Sorting 7](#_Toc171262318)

[2.4 Key Logic 7](#_Toc171262319)

[2.5 Data Mapping 8](#_Toc171262320)

[2.6 Interface Trigger Details 8](#_Toc171262321)

[2.7 Security & Control Requirements 8](#_Toc171262322)

[2.8 Encryption Requirements 8](#_Toc171262323)

[2.9 Error Handling Logic 8](#_Toc171262324)

[2.10 Assumptions 8](#_Toc171262325)

[2.11 Dependencies 8](#_Toc171262326)

[2.12 Application Setup Requirements 9](#_Toc171262327)

[2.13 User/Job Role Assignments 9](#_Toc171262328)

[2.14 Test Scenarios 9](#_Toc171262329)

[3. Oracle Cloud Technical Design 11](#_Toc171262330)

[3.1 Overview 11](#_Toc171262331)

[3.2 Detailed Integration Design 11](#_Toc171262332)

[3.3 High Level Flow Diagram 12](#_Toc171262333)

[3.4 Integration Process 12](#_Toc171262334)

[3.5 Integration Details 12](#_Toc171262335)

[3.5.1 Integration\_Name Integration Design 13](#_Toc171262336)

[3.5.2 HCM Extracts <Needed in case of HCM Extracts> 14](#_Toc171262337)

[3.5.3 BI Reports 14](#_Toc171262338)

[3.6 Data File Format 15](#_Toc171262339)

[3.7 Custom Database Objects 17](#_Toc171262340)

[3.8 Custom Stored Procedures 17](#_Toc171262341)

[3.9 BI Publisher Report Details 18](#_Toc171262342)

[3.10 FBDI Processing 18](#_Toc171262343)

[3.11 Web Services 18](#_Toc171262344)

[3.12 UCM Upload (for FBDI Processing) 18](#_Toc171262345)

[3.13 Enterprise Scheduler Services (ESS) 18](#_Toc171262346)

[3.13.1 ESS Job details 18](#_Toc171262347)

[3.13.2 ESS Parameters 18](#_Toc171262348)

[3.14 Conditions and Filters 19](#_Toc171262349)

[3.15 Environment Configurations 19](#_Toc171262350)

[3.16 Validation & Error Handling 19](#_Toc171262351)

[3.17 Rollback & Recovery 19](#_Toc171262352)

[3.18 Purging 19](#_Toc171262353)

[3.19 Notification Requirements 19](#_Toc171262354)

[3.20 Security Requirement 20](#_Toc171262355)

[3.21 File and Directory Locations 20](#_Toc171262356)

[3.22 Miscellaneous 20](#_Toc171262357)

[3.23 Components List 20](#_Toc171262358)

[3.24 Data Selection Criteria 21](#_Toc171262359)

[3.25 SQLs for Data Extraction/Selection/Filtration 21](#_Toc171262360)

[3.26 Data Transmission Mechanism (Required for Interfaces) 21](#_Toc171262361)

[3.27 File Layout / Report Output 21](#_Toc171262362)

[4. Technical Unit Test 22](#_Toc171262363)

[5. Application Setup and Technical Requirements 23](#_Toc171262364)

[5.1 Programs/Report and Parameters 23](#_Toc171262365)

[5.2 ESS Program, Scheduling and Executables 23](#_Toc171262366)

[5.3 Security and Controls Requirements 23](#_Toc171262367)

[5.4 Archiving & Purging 23](#_Toc171262368)

[6. Interface Reporting Requirements 24](#_Toc171262369)

[6.1 Data Validation & Error Reporting 24](#_Toc171262370)

[6.1.1 Data Processing / Derivation / Validation / Transformation Rules 24](#_Toc171262371)

[6.1.2 Error handling and Retry Mechanism 24](#_Toc171262372)

[Reprocessing 24](#_Toc171262373)

[Restart Strategy 24](#_Toc171262374)

[6.2 Data Reconciliation 24](#_Toc171262375)

[7. Open and Closed Issues 25](#_Toc171262376)

[7.1 Open Issues 25](#_Toc171262377)

[7.2 Closed Issues 25](#_Toc171262378)

[8. Appendix 26](#_Toc171262379)

# Summary

## Purpose/Justification

The scope of this document is to describe the process, how Oracle ICS will process the data from

## Oracle application to logfire systemIntegration Description and Overview

This document forms a basis for the detailed technical design for Vendors.It captures all technical details to address the business requirements given in the functional specification “**LOG\_INT\_25 – Vendors (Cloud to Logfire)**” for developing **the “ AP Vendors Cloud to Logfire ”.** Also it will portray the technical process flow diagram for the object along with necessary information to implement effective and accurate interface to Oracle Cloud WMS (LogFire).

## Business Rules

NA

## Sample Output / Screen Layout

NA

## Definitions and Acronyms

| Acronym | Meaning | Description |
| --- | --- | --- |
| API | Application Programming Interface | The interface that a computer system, library or application provides in order to allow requests for services to be made of it by other computer programs, and/or to allow data to be exchanged between them. |
| SOAP | Simple object access protocol | A [protocol](https://en.wikipedia.org/wiki/Protocol_(computing)) specification for exchanging structured information in the implementation of [web services](https://en.wikipedia.org/wiki/Web_service) in [computer networks](https://en.wikipedia.org/wiki/Computer_network). |
| ICS | Integration Cloud Service | Oracle cloud platform which supports end to end integration processes between multiple systems |
| DBCS | Database Cloud Service | Oracle Database deployed in Cloud platform which supports data definition and data manipulation language |

# Functional Design

## Integration Details

|  |  |
| --- | --- |
| Integration System Name | O2\_GENAI\_INT3820\_Vendors(Cloud to Logfire) |
| Integration Source | Oracle Cloud ERP |
| Integration Target | Logfire |
| Delivery or Retrieval Method | (MSV/SFTP/PGP/Web Service) <Ex: SFTP with PGP encryption.> |
| Full Extract / Changes Only | <Full file or changes only> |
| Expected Volume | <No of records> |
| Run Frequency/Schedule |  |
| Integration Notifications | <ex: Notifications will be sent to the production support team <insert contact details> when errors or warnings occur during an execution.  Triggers: Completed with Errors, Completed with Warnings, Failed, and Not Run due to Exceptions on Future Process> |

## Launch Parameters

| Parameter Name | Data Type | Parameter Type | Comments |
| --- | --- | --- | --- |
|  |  |  |  |

## Data Selection and Sorting

NA

## Key Logic

NA

## Data Mapping

Please refer the below document for detailed field mapping logic.

<https://xx>

**Sample Files:**

<https://xx>

## Interface Trigger Details

NA

## Security & Control Requirements

Below are the security and control requirements for this interface:

|  |  |  |
| --- | --- | --- |
| **Security/Control ID** | **Description** | **Comments** |
|  |  |  |

## Encryption Requirements

NA

## Error Handling Logic

NA

## Assumptions

NA

## Dependencies

* The required application configuration / setup for both the source and target systems is complete prior to unit testing this integration.
* All data translations are identified and mapped.
* Lookup INT\_VENDOR\_TYPE must be created

## Application Setup Requirements

NA

## User/Job Role Assignments

NA

## Test Scenarios

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Scenario** | **Test Step and Expected Result** | **Actual Result** |  | |
| Pass (Y/N) | Remark |
| 1 | When there are no data to process. | The user should get a notification that there are no files to process |  | Y |  |
| 2 | If there is any other due to which the ICS integration is not completed successfully | The user should get a notification about the same as unexpected Error |  | Y |  |
| 3 | If the vendor data load to logfire failed | 1. Last Updated run details should get populated in INTERFACE\_RUN\_DETAILS table.    2. Data should get populated in staging table ap\_vendors\_to\_Stg with status as Error.    3. Error Message Column Shows the Error Description. |  | Y | Updated Company code in Common Lookup |
| 4 | If the vendor data load to logfire was successful | 1. Last Updated run details should get populated in INTERFACE\_RUN\_DETAILS table.    2.Data should get populated in staging table ap\_vendors\_to\_Stg with Status as Success    3. Data should be loaded into Inbound Shipment Header/Serial Number in LogFire. |  |  |  |

# Oracle Cloud Technical Design

## Overview

This document defines the technical component details required to implement the vendors to logfire”. This Technical Specifications (Interface MD70 LOG-INT-25 Vendors document complements the Functional Specifications (LOG\_INT\_25 – Vendors (Cloud to Logfire) document for Vendors Integration from Oracle to Logfire and the set should be considered as the complete detailed design.

## Detailed Integration Design

The approach followed in order to build the interface for LOG-INT-25 Oracle to Logfire is:

* Integration in ICS is created and scheduled near real time.
* Integration will invoke DBCS procedure to get query based on the last run details.
* Vendor types specified in lookup \_INT\_VENDOR\_TYPE are fetched
* Query is based on the conditions specified in the mapping document.
* ICS integration invokes a SOAP connection for ERP query service with query as request to fetch the data.
* Fetched encoded records are written in ICS stage file using opaque schema.
* File is read in chunk and data inserted into the staging table - \_AP\_VENDORS\_TO\_STG and an update is performed on \_INTERFACE\_RUN\_DETAILS DBCS to track processed data.
* Post Validation and transformation, valid transaction records are fetched from the staging table and mapped to LogFire end point for processing.
* WSDL for LogFire endpoint is invoked with mapped data.

## High Level Flow Diagram

NA

## Integration Process

|  |  |
| --- | --- |
| **Process Step** | **Description** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## 

## Integration Details

NA

### Integration\_Name Integration Design

|  |  |
| --- | --- |
| **Integration Design** | |
| **Integration System Name** | O2\_GENAI\_INT3820 |
| **Integration Type** | Inbound  Outbound |
| **Integration Tool** | HCM Extract  BIP  HDL  PBL  REST Services |
| **Data Source** (check all that apply) | Custom Report <insert report name>  Cloud Connect Template Type <specify CCW/PICOF/Other>  Web Service <insert WWS name or external web service>  File Inbound into Oracle <insert file name> |
|  |  |
| **Transformation** | Doc Transformation <name of file>  XSLT <name of XSLT file(s)>  None |
| **Delivery / Retrieval Service** | <insert delivery/retrieval details such as UCM/SFTP/PAAS> |
| **Output/Inbound Filename** | <filename or Not Applicable> |
| **File Format** | <csv, pipe delimited, Not Applicable> |
| **Sequence Generators** | <list> |
| **Document Retention** | <number of days> |
| **Integration System User** | <document the ISU or user ID of custom report owner> |
| **Integration System Security Group** | <document the ISSG or Not Applicable> |
| Additional Information | <Document any details not described above.> |

**<Needed in case of HCM Extracts>**

|  |  |
| --- | --- |
| **HCM Extract Details** | |
| **Entity Names** | * <list if applicable> |
| **Parameters** | * <list if applicable> |
| **Links** | * <document the logic, if applicable> |
| **Filters** | * <list if applicable> |

### HCM Extracts <Needed in case of HCM Extracts>

<oracleCloudTechnicalDesign.integrationDetails.hcmExtractsNeededInCaseOfHcmExtracts>

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **HCM Extract Attribute Details** | | | | | |
| **Column** | **Entity Name** | **Attribute Name** | **Conditional Action** | **Conditional Replacement** | **Comments** |

### BI Reports

**NA**

|  |  |
| --- | --- |
| **Integration Details** | |
| **Entity Names** | * Provide the HDL or PBL entity/entities which are getting loaded |
| **Integration Attributes** | * List of attributes |
| **Integration Maps** | * <list if applicable> |
| **Validation** | * <list if applicable> |
| **Defaulting Logic** | <List of any attributes whose values are defaulted > |
| **Additional Logic** | Add any additional logic specific to the interface |
| **Deployment Details** | Details of Deployment (PaaS or Client Network) |
| **Database Details** | Database connection details for the program |

## Data File Format

Na

## Custom Database Objects

|  |  |  |  |
| --- | --- | --- | --- |
| Schema | Object Name | Object Type | Purpose |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Custom Stored Procedures

|  |  |  |  |
| --- | --- | --- | --- |
| Schema | Object Name | Object Type | Purpose |
|  |  | Procedure/Function/Package |  |
| Pseudocode |  | | |

## BI Publisher Report Details

|  |  |
| --- | --- |
| BI Publisher Details | |
| Data Model Name |  |
| Report SQL | <SQL Query> |

## FBDI Processing

NA

## Web Services

NA

## UCM Upload (for FBDI Processing)

NA

## Enterprise Scheduler Services (ESS)

NA

### ESS Job details

| Program | Short Name | Application | Description | Executable Name | Output Format |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

### ESS Parameters

| Program Name | Parameter Name | Value | Comment |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

## Conditions and Filters

| Sr. No | Data Condition | Business Rule |
| --- | --- | --- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

## Environment Configurations

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Parameter Name | Environment | Value |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |

## Validation & Error Handling

| Sr. No. | Error Scenario | Description | Handling Processing |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

## Rollback & Recovery

NA

## Purging

NA

## Notification Requirements

| Sr. No. | Error Scenario | Description | Action |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

## Security Requirement

|  |  |
| --- | --- |
| Transport Protocol | HTTP  FTP |
| Message Protocol | SOAP  REST  File  IDoc |
| Authentication Mode | Basic  Certificate based  PGP |

## File and Directory Locations

|  |
| --- |
| **ENVIRONMENT: Development** |

|  |  |
| --- | --- |
| SFTP Link |  |
| Folder Location for Output Data File |  |
| File Name for Output Data File |  |
| Output Data File Format | TXT  CSV  XML  Other |
| Folder Location for Error File (if any) |  |
| File Name for Error File (if any) |  |
| Error File Format (if any) | TXT  CSV  XML  Other |

## Miscellaneous

NA

## Components List

NA

## Data Selection Criteria

NA

## SQLs for Data Extraction/Selection/Filtration

NA

## Data Transmission Mechanism (Required for Interfaces)

NA

## File Layout / Report Output

NA

# Technical Unit Test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Scenario** | **Test Step and Expected Result** | **Actual Result** |  | |
| Pass (Y/N) | Remark |
| 1 | When there are no data to process. | The user should get a notification that there are no files to process |  | Y |  |
| 2 | If there is any other due to which the ICS integration is not completed successfully | The user should get a notification about the same as unexpected Error |  | Y |  |
| 3 | If the vendor data load to logfire failed | 1. Last Updated run details should get populated in INTERFACE\_RUN\_DETAILS table.    2. Data should get populated in staging table ap\_vendors\_to\_Stg with status as Error.    3. Error Message Column Shows the Error Description. |  | Y | Updated Company code in Common Lookup |
| 4 | If the vendor data load to logfire was successful | 1. Last Updated run details should get populated in INTERFACE\_RUN\_DETAILS table.    2.Data should get populated in staging table ap\_vendors\_to\_Stg with Status as Success    3. Data should be loaded into Inbound Shipment Header/Serial Number in LogFire. |  |  |  |

# Application Setup and Technical Requirements

## Programs/Report and Parameters

<applicationSetupAndTechnicalRequirements.programsReportAndParameters>

## ESS Program, Scheduling and Executables

NA

## Security and Controls Requirements

Below are the security and control requirements for this interface:

|  |  |  |
| --- | --- | --- |
| **Security/Control ID** | **Description** | **Comments** |
| SXXX | User generating BI report should have duty role of “Business Intelligence Authoring” | Exclusive User shall be used to generate BI report of projects detail extract in Oracle ERP Cloud |

## Archiving & Purging

NA

# Interface Reporting Requirements

## Data Validation & Error Reporting

NA

### Data Processing / Derivation / Validation / Transformation Rules

NA

### Error handling and Retry Mechanism

1. If invocation of LogFire REST- Processor service fails, an email notification is sent and Interface status is updated to "Error" in AP\_VENDOR\_TO\_STG.
2. Mentioned below are a few sample Error Code/Notification and messages encountered and the recommendations to resolve them

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | ERROR MESSAGE | CAUSE | RECOMMENDATIONS |
| No Data to be processed | There are no data to be processed for the interface. | There are no data in ERP Cloud for processing or DBCS staging table does not have data or the data records do not have the Interface status column set to ‘New’. | Create a Valid data or correct the Interface status column by setting it to ‘New’ for records to be picked up by the interface. |
| Unexpected Error | Some unexpected error happened while processing a batch for the interface. | This notification can be sent out if any of the process fails abruptly which can be either due to the ICS/ DBCS services being down/unresponsive or can also be due to incorrect package being called or any unhandled exception etc. | Check ICS Dashboard for details. |
| Company not found. | Company not found. | Company code was wrongly updated | Please correct Company code in lookup |

## Data Reconciliation

NA

# Open and Closed Issues

## Open Issues

| Issue Id | Description | Opened By | Responsible | Due Date |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Closed Issues

| Issue Id | Description | Resolution | Signoff | Closed Date |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |

# Appendix

<appendix>