Banglalink

Banglalink Point Of Sale System [POS]

Design Specification – POS-ESS Integrations

INT101BL - Supplier Receive - Outbound

March 2022 (Release Draft 1)

# Preface

This document aims at documenting the integration proposed to be followed at Banglalink for the purpose of INT101BL Integrations.

This document would form the basis for team to start preparing Build for integration and migration of the data as well as rollover to various test environments during this deployment, eventually leading to conversion and integration of data to applications within the specified timelines of the project.

The Integration and Data Conversion Requirements and Strategy document would enable team in the following ways:

* The primary use of this document is to record and communicate the integration and data conversion scope, objectives, approach, and requirements.
* The development team will use this document to communicate the strategy for successfully Integrating to source system between POS and ESS.

This document requires distribution and communication with:

* Banglalink POS team and ESS Team stakeholders, who should understand and sign-off on the integration and conversion requirements and strategy

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# 

# Integration BUSINESS Requirements

## Integration Definition

|  |  |
| --- | --- |
| Property | Value |
| Describe this integration | This integration will carry Supplier receive data with serial number information to POS through RESTAPI. |
| Fusion Functional Area | ESS and POS System |
| Fusion Process Area | Supplier Receiving Information from ESS to POS |
| Service/Integration Name | SUPPLIER RECEIVE TRANSACTIONS -OUTBOUND FROM ESS TO POS |
| Type of Integration | Scheduled |
| Source | ESS |
| Target | POS System |
| Target Connector | RESTAPI |
| Input to the integration/what triggers this integration | Schedule |
| What do you want to call your integration? | INT101BL |
| Identifier | INT101BL |
| Version | 01.00.0000 |
| Which package does this integration belong to? | ESS – outbound |
| Integration Tool Used | RESTAPI |

## Purpose of the Integration

The purpose of the integration is synchronizing supplier receive information between ESS Inventory module and POS system. ESS system will be soul system to capture supplier receiving information.

But ESS system has limitations to capture serial wise receiving & transactions due to performance constraint. Currently external POS system is being used to capture serializedcommercial Item quantity and sales transaction.

It has been decided by business that due to limitation of ESS Supply Chain Management, POS system will continue to act as Sales System.

And ESS & POS system will be synced with each other so that quantity can be reconciled. INT101BL will facilitates Purchase Quantity synchronization between these both systems.

|  |  |  |
| --- | --- | --- |
| **Type** | **Reference** | **Short Description** |
| Integration | INT101BL | This integration will carry Supplier receive data with serial number information to POS through RESTAPI. |

## Audience

This document is primarily aimed at:

* Banglalink POS Team
* EY Integration Development Team
* Bangalink Supply Chain Management Team

## Related Documents

The content of this document is based on the following reference documents.

| Reference | Description | Version |
| --- | --- | --- |
|  |  | V1.0 |

## Integration Design

This integration provides link between ESS and External POS system.

## High Level Integration Flow

* ESS will call an endpoint (RESTAPI) with all the receive data with serials,
* POS will store the valid data in a staging table
* POS system will store the receive info with proper mapping.
* POS will receive the following information below.
* receive\_code, receive\_date, invoice\_no, lcpo\_no, po\_no, warehouse\_code, product\_code, quantity, start\_serial, end\_serial, supplier\_code, supplier\_ name, supplier\_address1, supplier\_address2, supplier\_telephone\_no, supplier\_contactPerson, supplier\_contact\_no, supplier\_email

The below diagram represents the high-level steps/processes for this integration

ESS

POS

* Expose POST REST API(JSON)
* Store POST data in a staging table
* Map staging data to POS Attributes

**INT101BL - Supplier Receive – Outbound from ESS to POS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Type | Component | Solution | Schedule Frequency |
| 1 | Integration | Store REST API data in POS staging table | BL | API call basis |
| 2 | Integration | Insert data from Staging table to mapped tables | BL | Daily |

## Fields/Parameters Mapping

Below is the templates and instructions by which the staging data will be mapped in BL POS database tables. The data structure, such as field names, formats, references, are the same for file and needs to be treated as a rule for the source system.

|  |  |  |  |
| --- | --- | --- | --- |
| Excel column | Table Name | Table column | Data type |
| RECEIVECODE | TBLSUPLIERRECEIVEMASTER | RECEIVECODE | VARCHAR2 (20 Byte) |
| RECEIVEDATE | TBLSUPLIERRECEIVEMASTER | RECEIVEDATE | DATE |
| INVOICENO | TBLSUPLIERRECEIVEMASTER | INVOICENO | VARCHAR2 (50 Byte) |
| LCPONO | TBLSUPLIERRECEIVEMASTER | LCPONO | VARCHAR2 (50 Byte) |
| PONO | TBLSUPLIERRECEIVEMASTER | PONO | VARCHAR2 (100 Byte) |
| WAREHOUSECODE | TBLWAREHOUSE | WAREHOUSECODE | VARCHAR2 (20 Byte) |
| PRODUCTCODE | TBLPRODUCT | PRODUCTCODE | VARCHAR2 (50 Byte) |
| QTY | TBLSUPLIERRECEIVECHILD | QTY | NUMBER (20) |
| 30PRODUCTSTARTSERIAL | TBLSUPLIERRECEIVECHILD | SIMSTART | VARCHAR2 (20 Byte) |
| PRODUCTENDSERIAL | TBLSUPLIERRECEIVECHILD | SIMEND | VARCHAR2 (20 Byte) |
| SUPPLIERCODE | TBLSUPPLIER | SUPPLIERCODE | VARCHAR2 (20 Byte) |
| SUPPLIERNAME | TBLSUPPLIER | SUPPLIERNAME | VARCHAR2 (100 Byte) |
| ADDRESSLINE1 | TBLSUPPLIER | ADDRESSLINE1 | VARCHAR2 (100 Byte) |
| ADDRESSLINE2 | TBLSUPPLIER | ADDRESSLINE2 | VARCHAR2 (100 Byte) |
| TELEPHONE NO | TBLSUPPLIER | TELEPHONENO | VARCHAR2 (30 Byte) |
| CONTACT PERSON | TBLSUPPLIER | CONTACTPERSON | VARCHAR2 (100 Byte) |
| CONTACT NO | TBLSUPPLIER | CONTACTNO | VARCHAR2 (30 Byte) |
| EMAIL | TBLSUPPLIER | FLEXFIELD1 | VARCHAR2 (100 Byte) |

## 

## POST RESTAPI(JSON) Sample

REQUEST BODY:

[

{

"receive\_code": "",

"receive\_date": "",

"invoice\_no": "",

"lcpo\_no": "",

"po\_no": "",

"warehouse\_code": "",

"product\_code": "",

"quantity": "",

"start\_serial": "",

"end\_serial": "",

"supplier\_code": "",

"supplier\_ name": "",

"supplier\_address1": "",

"supplier\_address2": "",

"supplier\_telephone\_no": "",

"supplier\_contactPerson": "",

"supplier\_contact\_no": "",

"supplier\_email": ""

},

{

"receive\_code": "",

"receive\_date": "",

"invoice\_no": "",

"lcpo\_no": "",

"po\_no": "",

"warehouse\_code": "",

"product\_code": "",

"quantity": "",

"start\_serial": "",

"end\_serial": "",

"supplier\_code": "",

"supplier\_ name": "",

"supplier\_address1": "",

"supplier\_address2": "",

"supplier\_telephone\_no": "",

"supplier\_contactPerson": "",

"supplier\_contact\_no": "",

"supplier\_email": ""

}

]

RESPOSE BODY:

{

"success": true,

"requestTime": "13/03/2022 23:11:03",

"responseTime": "13/03/2022 23:11:03",

"requestURL": "",

"message": [

""

]

}

## Validations

Below are the validations which will be checked while calling the POST REST API (JSON). After checking these validations error massage elaborates about the problem in data in response body of the endpoint.

* Data duplication Check
* Invalid Product Code
* Data type validation.

## Assumptions

# Document Control

## Change Record

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Author | Version | Change Reference |
| 15-02-2022 | Manoj Rawat | Draft 1a | No Previous Document |
|  |  |  |  |

## Reviewers

# Open Questions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Topic | Question | Status | Response |
| 001 |  |  |  |  |