Banglalink

Banglalink Point Of Sale System [POS]

Design Specification – POS-ESS Integrations

INT105BL – Inventory Transaction - Inbound POS to ESS

March 2022 (Release Draft 1)

# **Preface**

This document aims at documenting the integration proposed to be followed at Banglalink for the purpose of INT105BL 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 ESS team and POS 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 interface will carry the Inventory Transaction information of POS and create a CSV file in a FTP file location. |
| POS | ESS |
| Fusion Functional Area | ESS and External POS System |
| Fusion Process Area | Inventory Transaction information in POS system for ESS |
| Service/Integration Name | Inventory Transaction -Inbound FROM POS TO ESS |
| Type of Integration | Scheduled |
| Source | POS |
| Source Connector | CSV File in FTP file location |
| Target | ESS |
| Target Connector | Windows scheduler with .bat file |
| Input to the integration/what triggers this integration | Schedule |
| What do you want to call your integration? | INT105BL |
| Identifier | INT105BL |
| Version | 01.00.0000 |
| Which package does this integration belong to? | ESS – Inbound |
| Integration Tool Used | Windows scheduler with .bat file |

## **Purpose of the Integration**

The purpose of the integration is synchronizing Inventry Transaction information from POS system to ESS. POS system will be soul system to capture Inventory Transaction information.

And for this integration, ESS & POS system will be synced with each other so that Inventory Transaction information updated in both systems. INT105BL will facilitates Inventory Transaction synchronization between these both systems.

|  |  |  |
| --- | --- | --- |
| **Type** | **Reference** | **Short Description** |
| Integration | INT105BL | This Integration will carry the Inventory Transaction information of POS and create a CSV file in a FTP file location |

## **Audience**

This document is primarily aimed at:

* Banglalink POS Team
* ESS Integration development 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 Inventory Transaction information between POS and ESS.

Note: The yellow boxes indicate integration flow

## **High Level Integration Flow**

* POS system generate a CSV file and store it in a FTP file location.
* ESS team will fetch the CSV file and integrate it into their system.
* ESS system will receive the following information from POS.
  + organization\_name,sub\_inventory\_code,transfer\_sub\_inventory,source\_header\_id,source\_line\_id,transaction\_reference,transaction\_type\_name,transaction\_date,item\_code,transaction\_quantity

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

POS system

ESS

* Invoke Inventory Transaction information details from the CSV file
* Map POS to ESS attributes.

**INT105BL – Inventory Transaction from POS to ESS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Type | Component | Solution | Schedule Frequency |
| 1 | Integration | Fetching required Inventory Transaction information from POS system | Export data as CSV file in FTP file location | Daily |

## **Fields/Parameters Mapping**

Below is the templates and instructions from the user perspective on how the Inventory Transaction information will need to be populated. 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CSV file column | DB column | Table | DataType | Example |
| organization\_name | warehousename/ centername | tblwarehouse/ tblcenter | VARCHAR2(100 BYTE) | Banglalink Dhaka Warehouse |
| sub\_inventory\_code | warehousecode/ centercode | tblwarehouse/ tblcenter | VARCHAR2(100 BYTE) | BLWHDHK |
| transfer\_sub\_inventory | warehousecode/ centercode | tblwarehouse/ tblcenter | VARCHAR2(100 BYTE) | BLWHRAN |
| source\_header\_id | transferid | tbltransfermaster | NUMBER | 31484 |
| source\_line\_id | childid | tbltransferchild | NUMBER | 8 |
| transaction\_reference | transfercode | tbltransfermaster | VARCHAR2(20 BYTE) | TR11DHK31484 |
| transaction\_type\_name | transfer\_type | -- | VARCHAR2(100 BYTE) | Warehouse to Warehouse transfer |
| transaction\_date | transferdate | tbltransfermaster | DATE | 04-SEP-11 |
| item\_code | productcode | tblproduct | VARCHAR2(50 BYTE) | PRFREG |
| transaction\_quantity | qty | tbltransferchild | NUMBER(20,0) | 17500 |

**SQL Query: “**SELECT

From\_warehouse\_center\_name AS organization\_name

,from\_warehouse\_center\_code AS sub\_inventory\_code

,to\_warehouse\_center\_code AS transfer\_sub\_inventory

,transfer\_id AS source\_header\_id

,transfer\_child\_id AS source\_line\_id

,transfer\_code AS transaction\_reference

,transfer\_type AS transaction\_type\_name

,transfer\_date AS transaction\_date

,product\_code AS item\_code

,quantity AS transaction\_quantity

FROM

(SELECT tm.transfercode AS transfer\_code

, tm.transferid AS transfer\_id

, tm.transferdate AS transfer\_date

, 'Warehouse to Warehouse transfer' AS transfer\_type

, w.warehousename AS from\_warehouse\_center\_name

, w.warehousecode AS from\_warehouse\_center\_code

, w1.warehousename AS to\_warehouse\_center\_name

, w1.warehousecode AS to\_warehouse\_center\_code

, tc.childid AS transfer\_child\_id

, p.productcode AS product\_code

, tc.qty AS quantity

FROM tbltransfermaster tm JOIN tbltransferchild tc ON tc.transferid = tc.transferid JOIN tblproduct p

ON p.productid = tc.productid JOIN tblwarehouse w

ON w.warehouseid = tm.fromwarehousecenterid JOIN tblwarehouse w1 ON w1.warehouseid = tm.towarehousecenterid

WHERE tm.fromwarehouseorcenter = 'W' AND tm.towarehouseorcenter = 'W'

UNION

SELECT tm.transfercode AS transfer\_code

, tm.transferid AS transfer\_id

, tm.transferdate AS transfer\_date

, 'Warehouse to Center transfer' AS transfer\_type

, w.warehousename AS from\_warehouse\_center\_name

, w.warehousecode AS from\_warehouse\_center\_code

, c1.centername AS to\_warehouse\_center\_name

, c1.centercode AS to\_warehouse\_center\_code

, tc.childid AS transfer\_child\_id

, p.productcode AS product\_code

, tc.qty AS quantity

FROM tbltransfermaster tm JOIN tbltransferchild tc ON tc.transferid = tc.transferid JOIN tblproduct p

ON p.productid = tc.productid JOIN tblwarehouse w ON w.warehouseid = tm.fromwarehousecenterid

JOIN tblcenter c1 ON c1.centerid = tm.towarehousecenterid WHERE tm.fromwarehouseorcenter = 'W'

AND tm.towarehouseorcenter = 'C'

UNION

SELECT tm.transfercode AS transfer\_code

, tm.transferid AS transfer\_id

, tm.transferdate AS transfer\_date

, 'Center to Warehouse transfer' AS transfer\_type

, c.centername AS from\_warehouse\_center\_name

, c.centercode AS from\_warehouse\_center\_code

, w1.warehousename AS to\_warehouse\_center\_name

, w1.warehousecode AS to\_warehouse\_center\_code

, tc.childid AS transfer\_child\_id

, p.productcode AS product\_code

, tc.qty AS quantity

FROM tbltransfermaster tm JOIN tbltransferchild tc ON tc.transferid = tc.transferid

JOIN tblproduct p ON p.productid = tc.productid JOIN tblcenter c

ON c.centerid = tm.fromwarehousecenterid JOIN tblwarehouse w1 ON w1.warehouseid = tm.towarehousecenterid

WHERE tm.fromwarehouseorcenter = 'C' AND tm.towarehouseorcenter = 'W'

UNION

SELECT tm.transfercode AS transfer\_code

, tm.transferid AS transfer\_id

, tm.transferdate AS transfer\_date

, 'Center to Center transfer' AS transfer\_type

, c.centername AS from\_warehouse\_center\_name

, c.centercode AS from\_warehouse\_center\_code

, c1.centername AS to\_warehouse\_center\_name

, c1.centercode AS to\_warehouse\_center\_code

, tc.childid AS transfer\_child\_id

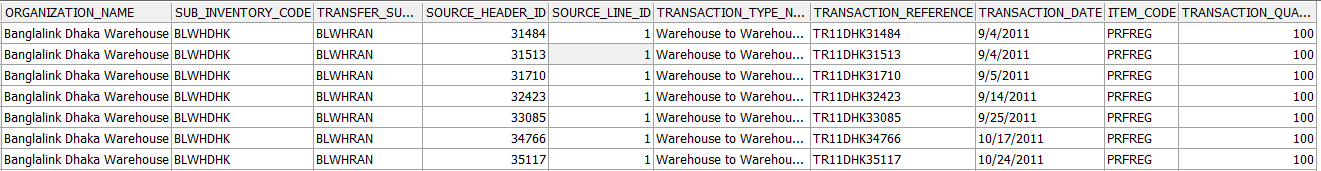
, p.productcode AS product\_code

, tc.qty AS quantity

FROM tbltransfermaster tm JOIN tbltransferchild tc ON tc.transferid = tc.transferid

JOIN tblproduct p ON p.productid = tc.productid JOIN tblcenter c ON c.centerid = tm.fromwarehousecenterid

JOIN tblcenter c1 ON c1.centerid = tm.towarehousecenterid WHERE tm.fromwarehouseorcenter = 'C' AND tm.towarehouseorcenter = 'C')**”**

**Data Tamplate:**

## **Change Record**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Author | Version | Change Reference |
| 23-03-2022 | Hasib Ahmed Abir | Draft 1a | No Previous Document |
|  |  |  |  |

## **Reviewers**

# **Open Questions**

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