TOG Order Reconciliation

SINN-9KQJV6

Service Request		
Title:	TOG Order Reconciliation	
Author:	Raghu Kammari	
Product:	IBM Sterling Order Management System (OMS)	
Project Number: (If COS)	SR: SINN-9KQJV6	
Client Information:	Client Name:	31 Gifts
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Requested Timeframe:	Friday, Aug 01, 2014.	

Document Revisions

Revision Number	Revision Date	Changes Made	Author	Reviewed
1.0	7/7/14	Original Document	R. Kammari	

Summary of Business Problem

The business problem that this SR seeks to solve:

1. TOG order Reconciliation

2. Risk avoidance. Currently there is no way to know whether or not the orders sent from the client have successfully made it into Exel OM.

Summary of Impacted Roles

N/A

Summary of New Requirements

Recap of Order Reconciliation Logic:
1. TOG sends order header file to OMS FTP location
2. OMS compares each header with in application and generate exception reports
3. Send email with the exceptions on missing orders
4. TOG then addresses the missing orders resend

Detailed Requirements

This section is used to document detailed, stand-alone requirements for what is needed. Screenshots and flow diagrams can also be included.
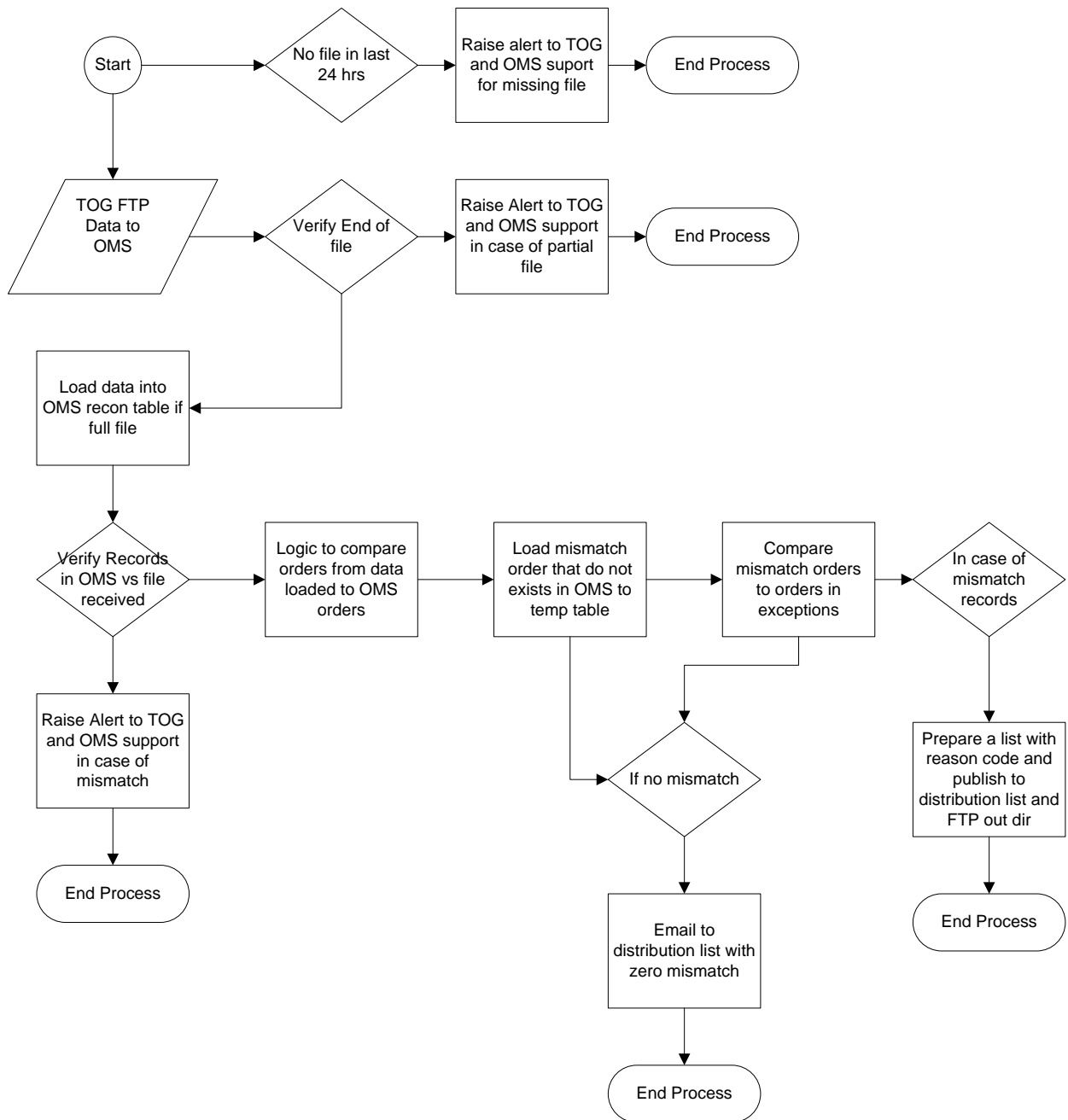
Req Number	Requirement Description
1	To implement an order reconciliation process for TOG, customer will be sending an order file to and Exel secure FTP site. From there, Exel's OMS will pick the file up and compare the file to the order file in OM.
2	If the orders from the TOG file are not in OM, then an email alert is sent stating there were errors and will have an attachment containing the order numbers. If there are no errors, there will be an email sent indicating that there were no errors.
3	If a file was not received from TOG, an email will be sent stating that no file was received.

Detailed Design

This section is used to document detailed design and flow of data required based on requirements. Screenshots and flow diagrams can also be included.

Design Number	Design Description
1	TOG sends comma delimited file to OMS FTP folder .
2	Logic to check for the end of file to verify if the full file is placed on ftp folder. Raise alerts in case of partial file.
3	OMS sqlloader script uploads the data into EXTN_ORDER_RECON table with data received from TOG.
4	Data compare script checks for number of records send in the input file vs records loaded into DB table. Raise alerts in case of mismatch.
5	Custom sql script then compares each records to OMS live table and stores the order numbers that do not exist ion OMS in EXTN_ORDER_RECON_MISMATCH table.
6	Script will also have Logic to check the orders from EXTN_ORDER_RECON_MISMATCH table against any exceptions created that day.
7	In case of no mismatch records, email will be sent to TOG disticbution list for 0 mismatches.
8	Consolidated order reconciallation list is generated for the orders in mismatch due to "Order Does not exists in OMS" and "Orders Failed in OMS".
9	Email is generated with the mismatch orders and reason code againt them to the distribution list for TOG to verify and perform the corrective actions.
10	As a fall back, mismatch records are also place in FTP out folder for TOG to pull in case of email delays.
11	Processing times and each steps processing is written to logs for support analysis and debug
12	Alert is raised if OMS does not receive order reconciliation file fro TOG in last 24 hrs of previous execution.

Flow chart below describes the process flow:

```
                                  ┌──────────────┐      ┌──────────────┐
         ┌───────┐        ◇          │Raise alert to│      │              │
         │ Start │ ──▶  No file in   │ TOG and OMS  │ ──▶  │ End Process  │
         └───────┘      last 24 hrs  │suport for    │      │              │
                          ◇          │missing file  │      └──────────────┘
                                     └──────────────┘
```

Flow diagram (top-to-bottom, left-to-right):

- **Start** → **No file in last 24 hrs** (decision) → **Raise alert to TOG and OMS suport for missing file** → **End Process**
- **Start** → **TOG FTP Data to OMS** → **Verify End of file** (decision) → **Raise Alert to TOG and OMS support in case of partial file** → **End Process**
- **Verify End of file** → **Load data into OMS recon table if full file** → **Verify Records in OMS vs file received** (decision)
- **Verify Records in OMS vs file received** → **Raise Alert to TOG and OMS support in case of mismatch** → **End Process**
- **Verify Records in OMS vs file received** → **Logic to compare orders from data loaded to OMS orders** → **Load mismatch order that do not exists in OMS to temp table** → **Compare mismatch orders to orders in exceptions** → **In case of mismatch records** (decision)
- **Compare mismatch orders to orders in exceptions** → **If no mismatch** (decision) → **Email to distribution list with zero mismatch** → **End Process**
- **In case of mismatch records** → **Prepare a list with reason code and publish to distribution list and FTP out dir** → **End Process**

Connection Details:
Below are the FTP folder details.

Inbound from 31Gifts:
Source IP address:
        Test: 10.1.67.70 or 10.1.67.125

Production: 10.1.67.83 or 10.1.67.111

Destination IP address:
Test:
Hostname: usapp-lktzomat1.amer.exel-app.net
IP: 10.58.2.127
In Directory: /u01/app/omsuat/Foundation/OMSExtracts/OrderReconciliation/FromTOG/

Prod:
Hostname: usapp-lrtlomap2.amer.exel-app.net
IP: 10.58.2.133
In Directory: /u01/app/omsprod/Foundation/OMSExtracts/OrderReconciliation/FromTOG/

Destination port/protocol: SFTP(22)

Outbound to 31Gifts: (Fall back for email distibution)
Source IP address:
Test:
Hostname: usapp-lktzomat1.amer.exel-app.net
IP: 10.58.2.127
Out Directory: /u01/app/omsuat/Foundation/OMSExtracts/OrderReconciliation/ToTOG/

Prod:
Hostname: usapp-lrtlomap2.amer.exel-app.net
IP: 10.58.2.133
Out Directory: /u01/app/ omsprod /Foundation/OMSExtracts/OrderReconciliation/ToTOG/

Destination IP address:
Test: 10.1.67.70 or 10.1.67.125
Production: 10.1.67.83 or 10.1.67.111
Destination port/protocol: SFTP(22)

Assumptions

1. Comma delimed order headers will be sent with end of file indicatot. T

2. This processing is to double-check the normal expected path of orders coming inbound from DHL Hub and does not voliate or change the normal path.

3. Schedule of data send to be fixed

4. Order compare file should NOT be sent in the middle of order drop but sent after order are created in OMS

5. Order compare is for headers only. Does not validate the number of lines on an order or qty

6. TOG to address the mismatch orders based on email and ftp out file

Use Cases

Case Number	Case Description	Expected Results
1.1	Verify TOG ftp file in in directory and verify TOG pulling files from out dir	Connections verified
2.1	Verify end of file for each comma separated data file	File complete with EOF message
3.1	Load data into OMS and compare records to data received	Records matches to the data sent
4.1	Partial file received from TOG	Process abort and generate alert
5.1	Mistaches found, orders do not exist in OMS	Email with mismatch orders
6.1	Order failed in exception and not created in OMS.	Mismatch records should be reported
7.1	No mismatches found	Email to TOG with 0 mismatch
4.1	Script failed due to issues	Alert raised

Definitions and Glossary

N/A

Workarounds and Alternatives Considered

N/A