

Information Management

GE Healthcare ERP Integration

MD70 Technical Design – Service PLANNING DATA SOURCE

This document describes the design for the Service PLANNING DATA SOURCE Database

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Revision History

Revision	Date	Author	Change Reference	Reason for Change	Project/Control Number
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				Addition of backup fields to maintain previous data during Demand Data Conversion Introduction of ServiceMax PM Order Inbound Table to consider ServiceMax PM Orders for PM Order Transformation	
9.0	08-JUN-2018	Soumyadip Ghosh	Section 2.1.5 Section 1.3.4 and 2.1.5 Section 1.3.4 and 2.1.5 Section 2.2.6 and 7 Section 2.2.6 and 7 Section 2.2.6 and 7 Section 2.2.6 and 7 Section 7	Return Washrate Calculation Indicated Pool Size Priority Score, Number of Opportunity, Supply Health SKU Transformation Order Plan Transformation Onhand Balances Transformation SPM Review Reason Transformation PDS Tables file updates for Additional fields information	CC # CHG0144375
10.0	08-JUN-2018	Soumyadip Ghosh	Section 6	Code bug in Part Changeup Transformation	CC # CHG0144889
11.0	30-AUG-2018	Payal Thakur	Section 6	Additional relevant fields added and Irrelevant fields removed from the demand history reverse flow	CC # CHG0151165
12.0	13-SEP-2018	Soumyadip Ghosh	Section 2.2.6 and 7	Allocation Restriction Matrix	CC # GECHG0288132
13.0	20-SEP-2018	Soumyadip Ghosh	Section 7	Introduced new indexes corresponding to Demand flush and fill simplification setups	CC # GECHG0294732
14.0	14-JAN-2018	Soumyadip Ghosh	Section 1.3.4, Section 2.1.5, Section 2.2.1, Section 2.2.3, Section 2.2.4, Section 2.2.6 and Section 7 (Appendix) Section 7 (Appendix, Tables)	Transaction Data Conversion Order Plan Restructuring	CC # GECHG0380380

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15.0	18-FEB-2019	Soumyadip Ghosh	Section 2.1.2 (Pseudo Logic), Section 2.2.6 and Section 7 (Appendix, Tables)	Collaborative Planning Transformation	CC # GECHG0413770
16.0	06-MAR-2019	Soumyadip Ghosh	Section 1.3.4 Section 2.1, Section 2.2.6, Section 7 Section 2.2	Repair Options, Archive Logic Independence Program Logic for SKU, NFF rate, Wash Rate Forms for SKU Upload, SKU Edit, NFF Override, Wash Rate Override	CC # GECHG0422435
17.0	20-JUN-2019	Chandra Nandy	Section 2.1.5 Section 2.1.2, Section 2.2.6, Section 7	Priority Score logic change for Network Min Change for SCS	CC # GECHG0518618
18.0	02-JUL-2019	Chandra Nandy	Section 2.1.6	Change in GE_REIMAGING_EXECUTION package to remove condition to check Item Status for Part Changeup Transformation	CC # GECHG0528200
19.0	08-JUL-2019	Chandra Nandy	Section 2.1.5	Modification in calculation of Repair Wash Rate	CC # GECHG0531681
20.0	04-SEP-2019	Pushap Saini	Section 2.2.6, Section 7 (Appendix, Tables)	Changes in Country Restrictions Matrix corresponding to change in source of data from ITCS to GLPROD (Table structure changes)	CC # GECHG0584867
21.0	11-Feb-2020	Pushap Saini	Section 2.1	Modification in GE_PRSD_SPM_STUB package for Duplicate Recommendation Identification and Repair Customization Logic Changes	CC # GECHG0724717
22.0	02-JUN-2020	Chandra Nandy	Section 1.1.1 Section 1.3.2 Section 2.1.2 Section 2.2.4	Packages GE_PLN_TRANSFORMATION_CALL Package Logic and Flow Diagram Pseudo Logic for GE_PLN_TRANSFORMATION_CALL Package Form Description/Layout	CC # GECHG0831012
23.0	10-Jun-2020	Akhilesh Jha	Section 1.3.4 Section 2.1.5	Updated the procedure logic for GEMS_GPO_Priority_Score Updated program logic for package GE_VALIDATION_PROCESS	CC # GECHG0838455

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24.0	30-Jun-2020	Pushap Saini	Section 1.3.4, Appendix Section 2.2.6 Appendix	Added the SEND_MAIL procedure details in the GE_VALIDATION_PROCESS package. Added the details of tables newly added for Health Check. Tables for Health Check Table for SMR Report Extraction Tables for Wash Rate Analysis SPM Master Report Mapping Document Health Check Design	CC # GECHG0858356
25.0	25-Aug-2020	Pushap Saini	Section 2.2.1, 2.2.3, 2.2.4, 2.2.6, Appendix	Supply Conversion Implementation	CC # GECHG0911924
26.0	04-Sep-2020	Pushap Saini	Appendix	Added new column for Supply Max	CC # GECHG0924916
27.0	08-Sep-2020	Soumyadip Ghosh	Section 2.2.6 Appendix	Added newly created table for Portion of Allocation to CEX for Low Health Parts	CC # GECHG0922111
28.0	14-Sep-2020	Chandra Nandy	Section 1.1.1, 2.2.4 Appendix	Compilation Error to be showcased in Apex during Rule Setups	CC # GECHG0932152
29.0	05-Oct-2020	Pushap Saini	Section 2.2.1, 2.2.3, 2.2.4 Appendix	Added new functionality details into the Module Functionality Logic Section for Listing the Executable SQL Queries with respect to a Transformation and Automation of submission of Transformation in PDS through Apex Added indexes for BI Processing Performance Improvement	CC # GECHG0949853
30.0	03-Nov-2020	Pushap Saini	Section 2.2.4	Added the APEX Layouts with modified APEX Home Interface	CC # GECHG0977963
31.0	08-Feb-2021	Chandra Nandy	Section 2.2.4, 2.2.6 Section 1.3.7 Section 2.1.7	Added the APEX Layouts with OrderPlan Dashboard, Part Changeup Added the list of tables which are newly introduced for OrderPlan and Part Changeup Added Interface flow catalog for obsolete data clean-up program Added program logic for obsolete data clean-up program.	CC # GECHG1056486
32.0	14-Apr-2021	Pushap Saini	Section 7	Added new column names and indexes for Plan Execution Matric Tables for Approval Quantity Status, Planned Flag and Procurable Flag	CC # GECHG1117311

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33.0	13-Jul-2021	Pushap Saini	Section 7 (Appendix)	Changes in Trigger and Sequence for Allocation Restriction Matrix	CC # GECHG1187679
34.0	27-Aug-2021	Pushap Saini	Section 2.2, 2.2.1, 2.2.3, 2.2.4, 2.2.6, 7 (Appendix)	Addition of Table, Sequence and Trigger Details for PDS Data Mapping (APEX Section Added)	CC #GECHG1199450
35.0	01-Oct-2021	Pushap Saini	Section 2.2.1, 2.2.4, 7	Addition of Date Range Parameters for the (Repair/Return) Wash Rate Override Values.	CC # GECHG1249543
36.0	15-Nov-2021	Pushap Saini	Section 2.2.6, 7	Additional of Table, Indexes details for Supply Forecast Interface	CC #GECHG1287391
37.0	11-Jan-2022	Chandra Nandy	Section 7,6.1	Addition of Indexes for INBD transaction and Source tables Additional of Bug & Resolution details in Plan Execution Report	CC# GECHG1333670
38.0	15-Feb-2022	Pushap Saini	Section 7 (Appendix), 3.1.2.12, 3.1.2.13, Section 2.2	Addition of Columns into SMR PDS Table Addition of Columns into SKU Table Modification of SKU edit functionality to provide SKU overload	CC# GECHG1366314
39.0	08-Mar-2022	Pushap Saini	Section 7 (Appendix), 3.1.2.12, 3.1.2.13	Additional of Columns into SMR PDS Table	CC #GECHG1381430
40.0	07-Apr-2022	Pushap Saini	Section 7 (Appendix)	Addition of new Table of Onhand for MOVE Project Addition of new columns into Order Plan Check Engine Table	CC #GECHG1407218
41.0	30-Aug-2022	Chandra Nandy	Section 7 (Appendix)	Alter table for Part Masters (10 fields are added)	CC #GECHG1522304
42.0	18-Oct-2022	Saurav Pawar	Section 1.1.4,2.2.6 ,4.4, 5.1	Added the table details for IB Project And Boomi side IRS details	CC #GECHG1558448
43.0	06-Mar-2023	Saurav Pawar	Section 2.3	Added the server details that is useful for reporting purpose	CC #GECHG1668910
44.0	22-Aug-2023	Kummitha, Venkata Narayana	Section 7 (Appendix), 3.1.2.12, 3.1.2.13	Addition of BACKORDER_CHILD_ROLLEDUP Column into SMR Report	CC #GECHG1819671
45.0	5-Sep-2024	Chandra Nandy	3.1.2.14 3.1.2.15 3.1.2.16	Addition of some columns into Supplier forecast integrations and as a result there is a change in INBD, PRSD and SPM table	CC# GECHG1831903

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46.0	26-Sep-2024	Kummitha, Venkata Narayana	2.2.6 Table and Objects 7. Appendix	Addition of a column into Product rollout integrations and as a result there is a change in SPM table	CC# GECHG1851320
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1. Introduction

Planning Database System (PDS) is an On-premises software (sometimes abbreviated as "on-prem") installed and run on computers on the premises which serves as a platform for data storage. It holds the data which is being sent across various systems. Several logics can be applied on the raw data received from Oracle and other sources before sending it across to destination systems. It also serves the purpose to hold large historical data into PDS.

The data flow between systems via PDS is designed with below prerogatives:

a) Forward flow :

Data is brought in planning database from GEHC systems like GLPROD, ITCS, SBOM, IB and MWS as source and is sent over to Servigistics for planning post two layers of data massaging i.e. Business Rule and SPM Rule.

b) Reverse flow :

Data is brought in planning database from Servigistics and is sent over to GEHC systems like GLPROD, GLPROD FTP Locations, Informatica FTP Locations post data massaging

Briefly, data will be captured in PDS and several business logics will be applied and thereafter the transformed data will be fed to the destination system.

1.1. Approach

1.1.1. Technical Overview

Detailed PDS DB design below :

Execution Tables:

1. GE_PLN_TRANSFORMATION_TABLES: Contains the Table Name, Table Alias and Table Code
2. GE_SPM_RULE_HEADERS_ALL: Contains all the Rules Headers Details which is mentioned in the set up document.Refer appendix for set up document.
3. GE_SPM_RULE_LINES_ALL: Contains all the Rules Lines Details which is mentioned in the set up document.Refer appendix for set up document.
4. GE_PLN_TRANSFORMATION_BASE_DTL: Contains all the base queries for each activity. The base query will be determined by activity type and logical flow. Activity type depicts the type of data modification activity like insert or update. Logical flow determines the layer of flow of data i.e. IP (Dataflow from Inbound table to Processed table in PDS) and PS (Dataflow from Processed table to SPM table in PDS). All the base queries are mentioned in the set up document. Refer appendix for set up document.
5. GE_PLN_TRANSFORMATION_EXEC_DTL: Contains all the final validated query ready for execution.
6. GEMS_IFACE_SPM_TABLE: Contains the execution details of the activity .
7. GEMS_IFACE_SPM_TABLE_DETAILS: Contains every steps of the execution details for any activity .
8. GE_IFACE_SPM_RESTART_MW: Contains all the activity names with unique process_id and restart_step_id. This table is solely used by Boomi to restart an activity in case of any failure situation.
The activity restart identification denotes the mode of failure:
 - a. Restart id 1 signifies end to end flow needs to performed

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- b. Restart id 2 signifies the failure at PDS Stored Procedure
- c. Restart id 3 signifies the failure at file transfer from PDS to destination system

The Restart Id is maintained from Boomi when process starts. Also Boomi controls the id after completion of each individual steps and maintains the progress of the flow depending on this id.

- 9. GEMS_MW_IFACE_LOG_IT_TBL: Contains every steps of the execution details for any activity from Middle Ware end.

Packages :

1. GE_PLN_TRANSFORMATION:

This package is responsible to create a query as per the user created rules which will be executed at the time of data flow. It will build the executable query considering the base query from GE_PLN_TRANSFORMATION_BASE_DTL and the user provided conditions from GE_SPM_RULE_LINES_ALL for a particular activity_name, activity_type, data_stream and process_flow. After the executable is built, GE_PLN_TRANSFORMATION.VALIDATE_QUERY will validate the query . After successful validation , the executable query is saved in GE_PLN_TRANSFORMATION_EXEC_DTL table. The error will be stored into the table GE_RULE_COMPILATION_ERROR_DTL in case any failure happened during validation time .

- a. build_query: Builds the query from the rules details and base query using the tables GE_SPM_RULE_HEADERS_ALL,GE_SPM_RULE_LINES_ALL, GE_PLN_TRANSFORMATION_TABLES and GE_PLN_TRANSFORMATION_BASE_DTL.
- b. validate_query: Validates if the query is correct or not. Essentially validates the where clause. If there is any validation error, the same error messgae will be inserted into the table - GE_RULE_COMPILATION_ERROR_DTL
- c. save_query: Saves the query into the table GE_PLN_TRANSFORMATION_EXEC_DTL.
- d. execute_transformation: Executes the saved query from the table GE_PLN_TRANSFORMATION_EXEC_DTL.
- e. create_query: This procedure performs the following sequential actions:
 - i. Builds the query by calling the procedure build_query.
 - ii. Validate the query by calling the procedure validate_query .
- f. Save the query by calling the procedure save_query

2. GE_PLN_TRANSFORMATION_CALL

GE_PLN_TRANSFORMATION_CALL package has a single procedure GE_PLN_TRANSFORMATION_FLOW.

This is driving implementation of 2 layers of logic i.e business logic and SPM logic.

- a. This procedure allows user to enter the following parameters : Activity Name, Data Stream , Activity Type and the flow between layers.
- b. The program will accept the activity name and will check the following validations for each
- c. It will check if this program is already running for the given activity name within last 5 hours. If so, it will not allow rerunning this stored procedure. The stored procedure will only run if prior invoked stored procedures having the same activity name are completed with status success or error depending on the process flag.

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- d. This program will throw an error if the activity name is NULL.
- e. After the successful validation data will flow from Inbound (INBD) to Processed (PRSD) layer i.e. IP flow and then Processed (PRSD) to Outbound (SPM) layer of tables i.e. PS flow.
- f. A procedure GE_PLN_REQUEST_SET is introduced which will be invoked to call child transformations within any Parent transformations at below levels
 - i) Before-IP -> Prior to executing IP
 - ii) Before PS -> After executing IP, Before executing PS
 - iii) After-PS -> After executing PS
 - iv) Before-Archive -> After executing PS, before executing Archive
 The sequence and control will be defined in 'GE_PLN_FUNCTIONAL_MAPPING_TBL' Table where MAPPING_TYPE is 'REQUESTSET'.

3. GE_INBD_PRSD_STUB

This stub is for the execution of the logic needs to be executed before the records inserted into PRSD table from INBD table and also checks the mutual exclusiveness of the activity_name through lookup value in GE_PLN_TRANSLATION_LOOKUP table

4. GE_PRSD_SPM_STUB

This stub is for the execution of the logic needs to be executed before the records inserted into SPM table from PRSD table

5. GE_SPM_STUB_LOGIC

This stub is for the execution of the logic needs to be executed after the data inserted into the SPM table.

6. GE_SPM_STUB

This STUB is designed for implementing the archive logic.

1.1.2. Critical to Process Variables

PROCESSED_FLAG should be populated as 'N' means New in Inbound tables for data to be able to flow between INBD → PRSD → SPM Layer of tables.

1.1.3. Definitions

SPM	Service Parts Management - Global planning tool
PDS	Planning Data Source

1.1.4. Reference Documents

My Workshop: BOK98642

Document Name	Location
PDS_MD60_PLN_TRANSFORMATION	DOC1912194
Database_Build_Specification_SPM-PDS	DOC1899747
GLPROD_To_SPM_DataFlow_IRS	DOC1910982
BI_TO_SPM_IRS	DOC1911005

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SPM_TO_GLPROD_OR_FTP_DataFlow_IRS	DOC1910985
MWS-SPM_DataFlow_IRS	DOC1910992
SPM_To_PDS_Only_DataFlow_IRS	DOC1910984
ITCS_To_SPM_DataFlow_IRS	DOC1911162
BI_To_SPM_DataFlow_Field_Mapping	DOC1911005
GLPROD_TO_SPM_DATAFLOW_FIELD_MAPPING	DOC1910982
ITCS_TO_SPM_DATAFLOW_FIELD_MAPPING	DOC1911162
MWS_TO_SPM_DATAFLOW_FIELD_MAPPING	DOC1910992
SPM_TO_PDS_ONLY_DATAFLOW_FIELD_MAPPING	DOC1910984
SPM_TO_GLPROD_OR_FTP_DATAFLOW_FIELD_MAPPING	DOC1910985
PDS_SETUP_PLN_TRANSFORMATION	DOC1912200
ODP_To_SPM_Dataflow_IRS	DOC2783287
ODP_TO_SPM_DATAFLOW_FIELD_MAPPING	DOC2783287

1.1.5. Assumptions

1.1.5.1. Functional Assumptions:

1. Required data is being pulled from the source systems for planning like GLPROD, BI , ITCS, MWS
2. Manual files are being sent to SPM for initial setup like Location Master, Location Type, Location Hierarchy and Region.
3. One time setups are in-place in SPM

1.1.5.2. Technical Assumptions:

1. INBD layer will have fresh data pulled from source with processed_flag = 'N'
2. Processed data of the inbound table, processed table and outbound (SPM) table will be marked with processed_flag as 'Y' post stored procedure successful run.
3. Any unprocessed record of the inbound table, processed table and outbound (SPM) table will have Processed Flag as 'N'.
4. Middleware will set Processed Flag as 'Y' in outbound tables once the data is sent over to SPM.
5. Process flag of the tracking table : GEMS_IFACE_SPM_TABLE holds the status of the procedure.

The process flag denotes:

- **'I'**: When the Store procedure is initiated the status flag will be set as 'I'.
- **'C'**: When the Store procedure is completed successfully the status flag will be set as 'C'.
- **'W'**: When the store procedure is completed with warning then the status flag will be set as 'W'.
- **'E'**: When the Store procedure is completed with error the status flag will be set as 'E'

1.2. Application Information

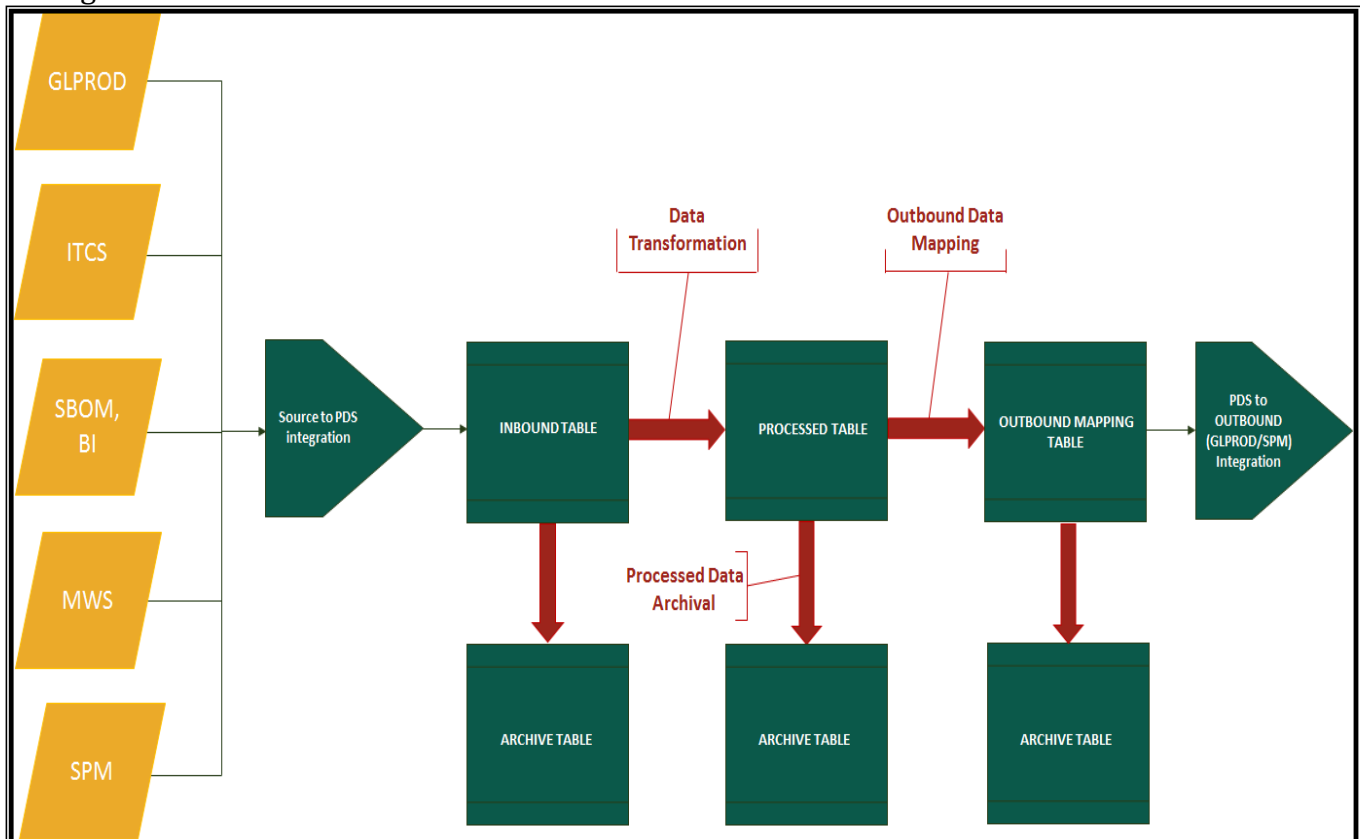
Information	Description
Application/version:	Oracle
Hostname:	DEV1PDS/STGPDS/PRDPDS(TBC)

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Information	Description
Instance Name:	PDS
Description of use:	Planning Database System
Programming language:	PL/SQL
Hardware platform:	PDS (Apache/2.2.15 (Unix))
Hardware O/S:	NA
Database/version:	NA
Transaction monitor:	None
API description:	None
Degree of modification to base application: (High/Medium/Low)	Medium
Notes and comments:	Not Applicable
Integration Adapters:	Not Applicable
System Contact:	Neel Sen

1.3. Interface Flow Catalog

Below is the data flow design depicting interface data flow from source via SPM PDS to target.



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Above is achieved by following procedure/packages :

1.3.1 **GE_PLN_TRANSFORMATION Package**

GE_PLN_TRANSFORMATION package is responsible for creating an executable query. The executable query for a particular activity_name, activity_type, data_stream and process_flow is built considering the details from base query i.e. GE_PLN_TRANSFORMATION_BASE_DTL table and the user provided conditions from GE_SPM_RULE_LINES_ALL table.

This program will first check the active rule condition in GE_SPM_RULE_LINES_ALL table corresponding to the active rule in GE_SPM_RULE_HEADERS_ALL table for a particular activity name.

After the executable is built, this program validates the query.

After successful validation the executable query is saved in GE_PLN_TRANSFORMATION_EXEC_DTL for a particular activity_name, activity_type, data_stream and process_flow.

1.3.2 **GE_PLN_TRANSFORMATION_CALL Package**

GE_PLN_TRANSFORMATION_CALL package is responsible for data flow from INBD table of PDS to outbound (SPM) table of PDS.

It will first move the data from INBD table to PRSD table which is identified as IP logical flow. Then the data will move from PRSD table to outbound (SPM) table which is identified as PS logical flow.

This program will take Activity Name as an input and will consider all the active rules (where ENABLE_FLAG is 'Y' for records in GE_SPM_RULE_HEADERS_ALL table) defined on the GE_SPM_RULE_HEADERS_ALL for the input activity name.

These active rules will be executed in order of priority defined in the DATASTREAM_WEIGHTAGE field of GE_SPM_RULE_HEADERS_ALL table.

For every active rules in logical flow IP, the execution query for activity type 'INSERT' will be executed in order of the priority set in the ACTIVITY_SEQUENCE. After this is successfully completed, the program will execute the execution query for activity type 'UPDATE' in order of the priority set in the ACTIVITY_SEQUENCE of logical flow IP. In this manner execution will be performed for all active rules.

After the successful completion of IP flow, all the rules having active SPM enabled flag (SPM_ENABLE_FLAG is 'Y' of GE_SPM_RULE_HEADERS_ALL table) will be considered subsequently for the PS logical flow.

Then again the execution query for the activity type 'INSERT' will be executed in order of the priority set in the ACTIVITY_SEQUENCE. After successful completion of PS 'INSERT' execution query, the execution query for activity type 'UPDATE' will be executed in order of the priority set in the ACTIVITY_SEQUENCE. After successful completion of PS flow, data will move to the outbound SPM table from PRSD table.

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There are four stubs which are triggered by this package.

1. **GE_INBD_PRSD_STUB** - This stub is executed before the commencement of IP flow. It executes the logic of all the intended amendments on the records in the INBD table which are inserted into PRSD table after checking the mutual exclusiveness. If the process gets initiated when any corresponding mutually exclusive process is already running, then the respective process will wait until the mutually exclusive process gets completed.
2. **GE_PRSD_SPM_STUB**:- This stub is executed after the IP flow and before the PS flow. Through this stub, records in PRSD table is amended
3. **GE_SPM_STUB_LOGIC**:- This stub is executed after the PS flow. Through this stub SPM table is amended.
4. **GE_SPM_STUB**:- This STUB is designed mainly for implementing the archive logic and purge logic

Archival of a particular table and Purging is at the discretion of users and can be handled through the control table i.e. GE_PLN_SYSTEM_CONTROLS

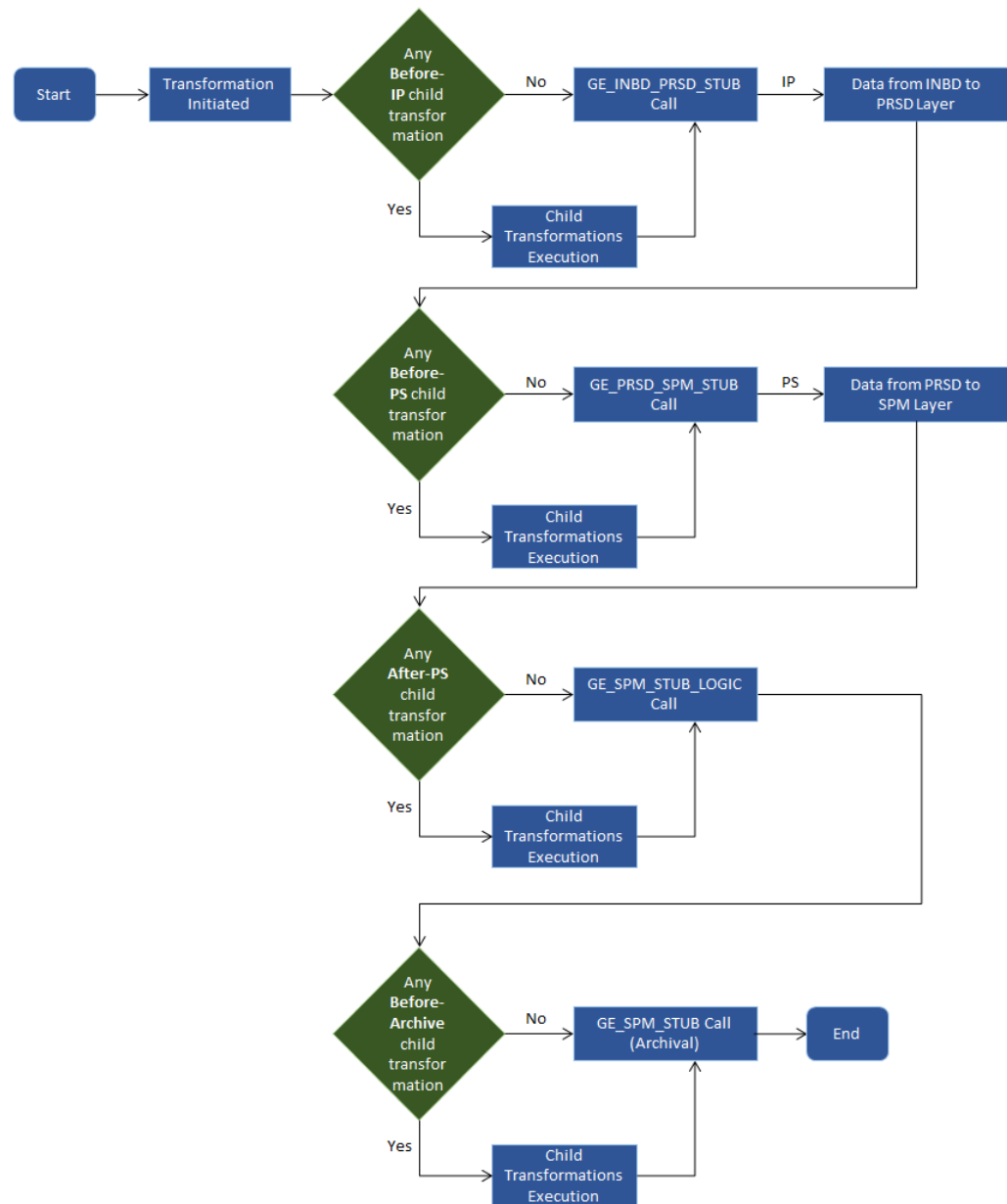
A procedure **GE_PLN_REQUEST_SET** is introduced which will be invoked to call child transformations within any Parent transformations at below levels

- i) Before-IP -> Prior to executing IP
- ii) Before PS -> After executing IP, Before executing PS
- iii) After-PS -> After executing PS
- iv) Before-Archive -> After executing PS, before executing Archive

The sequence and control will be defined in 'GE_PLN_FUNCTIONAL_MAPPING_TBL' Table where MAPPING_TYPE is 'REQUESTSET'. Below is how the mapping will be determined :

MAPPING_TYPE	REQUESTSET to determine the mapping for parent-child transformation relationships
INTERNAL_USE	Parent Transformation
ACTIVITY_NAME	Child Transformation
ACTIVITY_TYPE	Control for the level of run : BEFORE_IP, BEFORE_IP, BEFORE_PS, AFTER_PS
MAP_VALUE1	Frequency of child transformation runs
CHAR_VALUE1	Enabled/Disabled
NUMERIC_VALUE1	Priority
CREATED_BY	SSO of the creator of this parent-child transformation relationships
CREATION_DATE	Date of creation
MODIFIED_BY	SSO of the modifier of this parent-child transformation relationships
MODIFICATION_DATE	Date of modification

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1.3.3 GE_MW_INTF_UTIL Package

This program is designed for Middleware to be able to truncate and load inbound table in every run.

Parameters to be passed are

- ACTIVITY_NAME
- Layer : INBOUND

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1.3.4 GE_VALIDATION_PROCESS Package

This is a validation package used for Validation purposes

Has following functions or procedures

- 1. DATE_VALIDATION:** This function is used for Part Master date validation
- 2. RULE_COMPILE_ALL :** This procedure is used to compile all rules that are created by users and create execution query from base queries.
- 3. RESET_PROCESS :** Used for making the process flag = 'N' in inbound table.
- 4. UPDATE_TABLE :** Used for updating process flag = 'N' in inbound table. This function is used in RESET_PROCESS procedure.
- 5. DELETE_TABLE:** Used for truncating PRSD and SPM tables on basis of activity name and process id. This function is used in RESET_PROCESS procedure.
- 6. GEMS_GPO_DEMAND_CALCULATION:** This procedure is responsible to calculate the demand for each single item present in item master for the three poles (AS, US and EU) for last two year. It calculates the demand from GE_PRSD_GLP_PART_DEMAND table.
- 7. WASHRATE_CALCULATION:** This procedure is utilized to calculate the wash rate of individual items present in Item Master table GE_SPM_GLP_PART_MASTER_AR, considering the various types of transactions the item goes through in a particular date range. This calculation is done based on the record present in GE_PRSD_GLP_PART_TXN. Also the part hierarchy is honored calculate the cumulative washrate of topmost parts in the part chain as defined in GE_SPM_MWS_PARTCHANGEUP.
- 8. DMD_CONV_PROCESS :** This procedure enables the business to perform Conversion of Data for Demand for any functional changes that requires the same. Demand conversion could be required due to some change in business processes that requires some functional changes in the ERP and same needs to be transpired in PDS for further SPM planning operations. Also it can handle scenarios where demand data from the legacy system needs to be moved to PDS to appraise SPM on the historical demands.
- 9. GEMS_GPO_Indicated_Pool_Size :** This procedure calculates the Indicated Pool Size of individual items present in GE_SPM_GLP_PART_MASTER_AR. This is calculated through the summation of all available onhand for the part as derived from GE_PRSD_GLP_PART_ONHAND table. Also the part hierarchy is honored to calculate the cumulative Indicated Pool size of topmost parts in the part chain as defined in GE_SPM_MWS_PARTCHANGEUP.
- 10. GEMS_GPO_Priority_Score :** This procedure calculates the Priority Score, Number of Opportunities and Supply Health of Individual Parts. Priority Score determines the priority of individual parts considering the backorders, minimum quantity present in the network, available onhand, and average order quantity based on whether the location can either Procure, Repair or is the source pole location or replenishes from other location as fetched from GE_INBD_SPM_PLN_LVL. Also the part hierarchy is honored to calculate the cumulative Priority Score of the topmost parts in the part chain as defined in GE_SPM_MWS_PARTCHANGEUP.

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Number of Opportunities is calculated through the ratio of minimum quantity present in the network as defined in GE_INBD_SPM_PLN_LVL table with respect to average order quantity as seen in GE_PRSD_GLP_PART_DEMAND table. Supply health determines the supply provisioned for individual parts calculated as the ratio of Sum of Positive Priority Score with respect to Sum of Opportunities subtracted from 1.

11. TXN_CONV_PROCESS : This procedure enables the business to perform Conversion of Data for Transactions for any functional changes that requires the same. Transaction conversion could be required due to some change in business processes that requires some functional changes in the ERP and same needs to be transpired in PDS for further SPM planning operations. Also it can handle scenarios where Transaction data from the legacy system needs to be moved to PDS to appraise SPM on the historical transaction.

12. REPAIR_OPTIONS : Repair options is a break up of all probable repair combination for a particular part including with its part chain with respect to the repair orgs and associated repair vendors. The data is inserted into GE_INBD_REPAIR_OPTIONS table.

The logic works as, it would consider the Repair CDC of the part itself as well as the Repair CDC of all the parts present in the part chain.

13. SEND_MAIL: This procedure is introduced to add a mail functionality to the PDS environment. This is presently being called in the Health Check implemented on OAO file that is received from SPM as a reverse flow file. This could be used in other sections of PDS as well.

1.3.5 GE_IFACE_SPM_DETAILS Package

GE_IFACE_SPM_DETAILS package is responsible to modify GEMS_IFACE_SPM_TABLE table and GEMS_IFACE_SPM_TABLE_DETAILS table with activity name which is running in PDS. This is to monitor the activity which is running by initiating GE_PLN_TRANSFORMATION_CALL.GE_PLN_TRANSFORMATION_FLOW procedure .

Below functions are used in this package.

- **GE_IFACE_SPM_INSERT:** This procedure will be called to insert record into GEMS_IFACE_SPM_TABLE with PROGRAM_NAME,PROCEDURE_NAME,START_DATE,CREATION_DATE,MESSAGE,STATUS_FLAG, ACTIVITY_NAME, PROCESS_ID,DEBUG_MESSAGE.
- **GE_IFACE_SPM_UPDATE:** This procedure will be called to update GEMS_IFACE_SPM_TABLE as per PROCESS_ID.
- **GE_IFACE_SPM_UPDATE_END:** This procedure used to track when a program got executed.

1.3.6 GE_REIMAGING_EXECUTION Package

GE_REIMAGING_EXECUTION is a package which is utilized to remap the Part Changeup file coming in from MWS and transforming the hierarchy of parts and relevant flags to make it compatible with the requirement in SPM.

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The function which performs this activity is:

- **MWS_PARTCHANGEUP:** This procedure will be called to perform the re-imaging of the part hierarchies in the GE_PRSD_MWS_PARTCHANGEUP table. The GE_PRSD_MWS_PARTCHANGEUP_REF table is taken as an interim table to store the re-imaged data and finally it is inserted back to GE_PRSD_MWS_PARTCHANGEUP table.

1.3.7 DATA_CLEANUP_PRG Package

DATA_CLEANUP_PRG package is used to list down the obsolete tables and drop the tables after review. This package has 2 procedures:

- a) Table listing: This procedure will list down the tables that are not used by any other code objects, transformation rule or is not in the exception list of tables.
- b) Data cleanup: This procedure will drop the tables that have been identified to be dropped.

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2. Module Functionality Logic

2.1. Program Logic

Program Names:

- A. GE_PLN_TRANSFORMATION,
- B. GE_PLN_TRANSFORMATION_CALL
- C. GE_MW_INTF_UTIL
- D. GE_VALIDATION_PROCESS
- E. GE_IFACE_SPM_DETAILS
- F. GE_REIMAGING_EXECUTION

2.1.1. (A) Program Description

Package Name: GE_PLN_TRANSFORMATION

The parameters are

- Activity Name
- Data Stream
- Activity Type
- Process Flow

This procedure will build the executable query considering the base query from GE_PLN_TRANSFORMATION_BASE_DTL and the user provided conditions from GE_SPM_RULE_LINES_ALL for a particular activity_name, activity_type, data_stream and process_flow. After the executable is built, GE_PLN_TRANSFORMATION.VALIDATE_QUERY will validate the query. Once successful validation is done, the executable query is saved in GE_PLN_TRANSFORMATION_EXEC_DTL table.

Inputs / Outputs

2.1.1.1. Inputs

- Base query is in-place in GE_PLN_TRANSFORMATION_BASE_DTL table with a proper activity sequence for a particular activity name and logical flow.
- Setup Rules for a specific activity name in GE_SPM_RULE_HEADERS_ALL maintaining a proper sequence and conditions will be in GE_SPM_RULE_LINES_ALL for each rule stream.

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2.1.1.2. Outputs

An executable query will be built and saved into the GE_PLN_TRANSFORMATION_EXEC_DTL table.

Program Logic

Pseudo code for ‘GE_PLN_TRANSFORMATION Package’

1. GE_PLN_TRANSFORMATION.CREATE_QUERY() is called to create the executable query.
2. Parameters will take activity name, data stream, activity type and logical flow.
3. At the time of creation of the query, it will consider all the active rule lines from GE_SPM_RULE_LINES_ALL table for the given data stream name.
4. The conditions fetched from the rule lines are appended with the base query.
5. The query is validated.
6. After successful validation the query is saved into the GE_PLN_TRANSFORMATION_EXEC_DTL table.
7. For any exception error is thrown.

2.1.1.3. Error Conditions

Error conditions as depicted in the pseudo code are captured.

2.1.1.4. Warning Conditions

There are no warning conditions.

2.1.2. (A) Program Description

Package Name: GE_PLN_TRANSFORMATION_CALL

The parameter is –

- Activity Name

The package is responsible for the data flow from INBD table of PDS to Outbound (SPM) table of PDS. It will first move the data from INBD table to PRSD table depending on the active defined rules and processed_fag in Inbound Tables = ‘N’.

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Then the data will move from PRSD table to outbound (SPM) table depending on the spm enable defined rules.

Inputs / Outputs

2.1.1.1 Inputs

Inbound (INBD) table data needs to be populated with the process flag = 'N'

2.1.1.2 Outputs

All data in INBD table will move to the outbound (SPM) table based on the spm enable rule stream

Program Logic (pseudo code)

Pseudo code for 'GE_PLN_TRANSFORMATION_CALL Package'

1. GE_PLN_TRANSFORMATION_CALL.GE_PLN_TRANSFORMATION_FLOW procedure is called to initiate the procedure for a particular activity name.
2. GE_IFACE_SPM_DETAILS.GE_IFACE_SPM_INSERT procedure is called to insert into GEMS_IFACE_SPM_TABLE for this activity name with the status flag of 'I'
3. Check if the procedure is already running for this activity name for the commenced within last 5 hours. If yes the procedure will throw an error.
4. Else, GE_INBD_PRSD_STUB.GE_INBD_PRSD_FLOW procedure is called to execute the first STUB.
5. After successful completion of this stub it is checked if there exist any active rule for the activity name from GE_SPM_RULE_HEADERS_ALL. If No, It will follow from STEP:7
6. If Yes, Then for every single rule stream
 - a. GE_PLN_TRANSFORMATION.EXECUTE_TRANSFORMATION procedure is called to execute the INSERT query for IP flow.
 - b. It will throw an error if the INSERT query is not successfully completed.
 - c. GE_PLN_TRANSFORMATION.EXECUTE_TRANSFORMATION procedure is called to execute the UPDATE query for IP flow.
 - d. It will throw an error if the UPDATE query is not successfully completed.
7. GE_PRSD_SPM_STUB.GE_PRSD_SPM_FLOW procedure is called to execute the next STUB.

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8. After successful completion of this stub, it is checked if there exist any SPM enabled active rule for the activity name from GE_SPM_RULE_HEADERS_ALL.
If No, It will follow from STEP: 10
9. If Yes, Then for every single rule stream
 - a. GE_PLN_TRANSFORMATION.EXECUTE_TRANSFORMATION procedure is called to execute the INSERT query for PS flow.
 - b. It will throw an error if the INSERT query is not successfully completed.
 - c. GE_PLN_TRANSFORMATION.EXECUTE_TRANSFORMATION procedure is called to execute the UPDATE query for PS flow
 - d. It will throw an error if the UPDATE query is not successfully completed
10. GE_SPM_STUB_LOGIC.GE_SPM_FLOW procedure is called to execute the next STUB.
11. After successful execution of this STUB, IFACE table (GEMS_IFACE_SPM_TABLE) is UPDATED with the STATUS 'C'.
12. The procedure GE_PLN_TRANSFORMATION_CALL then will check if the GE_SPM_STUB is called by Middleware or not from the lookup value against the activity name. If it is not called by the MW then the procedure itself will call the below STUB.
13. GE_SPM_STUB.GE_SPM_FLOW procedure is called to execute the final STUB.
14. After successful execution, IFACE table (GEMS_IFACE_SPM_TABLE) is UPDATED with the STATUS 'C'.
15. **GE_PLN_REQUEST_SET** procedure is introduced which will be invoked to call child transformations within any Parent transformations at multiple levels.
The sequence and control will be defined in 'GE_PLN_FUNCTIONAL_MAPPING_TBL' Table where MAPPING_TYPE is 'REQUESTSET'. Below is how the mapping will be determined:

MAPPING_TYPE	REQUESTSET determining the mapping for parent-child transformation relationships
INTERNAL_USE	Parent Transformation
ACTIVITY_NAME	Child Transformation
ACTIVITY_TYPE	Control for the level of run : BEFORE_IP -> Prior to executing IP BEFORE_IP -> After executing IP, Before executing PS BEFORE_PS -> After executing PS AFTER_PS -> After executing PS, before executing Archive
MAP_VALUE1	Frequency of child transformation runs
CHAR_VALUE1	Enabled/Disabled
NUMERIC_VALUE1	Priority
CREATED_BY	SSO of the creator of this parent-child transformation relationships
CREATION_DATE	Date of creation

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MODIFIED_BY	SSO of the modifier of this parent-child transformation relationships
MODIFICATION_DATE	Date of modification

STUB:

1. GE_INBD_PRSD_STUB - This stub is executed before the commencement of IP flow. It executes the logic of all the intended amendments on the records in the INBD table which are inserted into PRSD table after checking the mutual exclusiveness . If the process gets initiated when any corresponding mutually exclusive process is already running, then the respective process will wait untill the mutually exclusive process gets completed.

As a part of this stub the Inbound data for Collaborative Planning Item and SupplyDemand forecast details is loaded into the GE_INBD_ITEM_CP table and GE_INBD_SUP_DMD_CP respectively :

- i) Item Forecast Inbound insertion – The data is picked for distinct items in the Order Plan Processed Layer table GE_PRSD_PLAN_ORDER and inserted into CP Inbound Item table based on below values, mapping and conditions :

Column in GE_INBD_ITEM_CP	Data	Comment
ITEM_NAME	Part_Number	Distinct Part_Number from GE_PRSD_PLAN_ORDER table
ORGANIZATION_CODE	'GPO',	Hard coded value
MRP_PLANNING_CODE	'3',	Hard coded value
UOM_CODE	'EA',	Hard coded value
BUILT_IN_WIP_FLAG	'2',	Hard coded value
PURCHASING_ENABLED_FLAG	'1',	Hard coded value
PLANNING_MAKE_BUY_CODE	'2',	Hard coded value
ENGINEERING_ITEM_FLAG	'2',	Hard coded value
EFFECTIVITY_CONTROL	'1',	Hard coded value
INVENTORY_PLANNING_CODE	'6',	Hard coded value
SOURCE_INSTANCE_CODE	'LEG',	Hard coded value
DESCRIPTION	Item_Description	Corresponding item_description extracted from GE_PRSD_GLP_PART_MASTER table. There should be no '~' sign in the description
PLANNER_CODE	planner_code	Corresponding planner_code derived from GE_PRSD_GLP_PART_MASTER table
BOM_ITEM_TYPE	'4',	Hard coded value
INVENTORY_ITEM_FLAG	'1',	Hard coded value
INVENTORY_ASSET_FLAG	'Y',	Hard coded value

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COMPANY_NAME	'GE Healthcare',	Hard coded value
PROCESSED_FLAG	N'	Hard coded value. Initial status of Inbound layer
INBD_PROCESSED_DATE	SYSDATE	System Date

Conditions:

- a) Order_Type in GE_PRSD_PLAN_ORDER table for the item is 'Procure'
 - b) Supplier_Type in the GE_PRSD_PLAN_ORDER table is 'EXTERNAL'
 - c) Should not consider the return forecasts in the GE_PRSD_PLAN_ORDER table
 - d) Should not consider the Open orders]
 - e) Only GPO items as defined in the GE_PRSD_GLP_PART_MASTER table should be considered
- ii) Supply Demand Forecast Inbound insertion – The sum of the forecast quantity is evaluated grouped on the basis of Part_Number, Supplier_Name, Site_Code, Available_Date, OP_RUN_DATE in the Order Plan Processed Layer table GE_PRSD_PLAN_ORDER and inserted into CP Inbound Supply-Demand forecast table based on below values, mapping and conditions :

Column in GE_INBD_SUP_DMD_CP	Value	Comment
SYNC_INDICATOR	R'	Hard coded value
ITEM_NAME	Part_Number	Part_Number from GE_PRSD_PLAN_ORDER table
ORDER_TYPE	Order forecast'	Hard coded value
UOM	EA'	Hard coded value
PUBLISHER_COMPANY	GE Healthcare'	Hard coded value
PUBLISHER_SITE	GPO'	Hard coded value
SUPPLIER_COMPANY	Supplier_Name	Supplier_Name from GE_PRSD_PLAN_ORDER table
SUPPLIER_SITE	Site_Code	Site_Code from GE_PRSD_PLAN_ORDER table
SHIP_FROM_PARTY_NAME	Supplier_Name	Supplier_Name from GE_PRSD_PLAN_ORDER table
SHIP_FROM_PARTY_SITE	Site_Code	Supplier_Code from GE_PRSD_PLAN_ORDER table
SHIP_TO_PARTY_NAME	GE Healthcare'	Hard coded value
SHIP_TO_PARTY_SITE	GPO'	Hard coded value
RECEIPT_DATE	Receipt Date	In 'DD-MON-YY' format
BUCKET_END_DATE	Bucket End Date	In 'DD-MON-YY' format
BUCKET_TYPE	Day'	Hard coded value
COMMENTS	TESTLOADv1'	Some identifiable comments in Hard coded value
DESIGNATOR	SVC-SPM'	Hard coded value
VERSION	OP_RUN_DATE	In 'YYYYMMDD' format
PROCESSED_FLAG	N'	Hard coded value. Initial status of Inbound
INBD_PROCESSED_DATE	SYSDATE	System Date

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QUANTITY	SUM of quantity within PLAN_QUANTITY or REC_QUANTITY	Grouped on the basis of Part_Number, Supplier_Name, Site_Code, Available_Date, OP_RUN_DATE in GE_PRSD_PLAN_ORDER. Also based on this grouping condition if there is a record on the previous week and not on the current week, a '0' Quantity record should be inserted
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Conditions :

- a) Order_Type in GE_PRSD_PLAN_ORDER table for the item is 'Procure'
- b) Supplier_Type in the GE_PRSD_PLAN_ORDER table is 'EXTERNAL'
- c) Should not consider the return forecasts in the GE_PRSD_PLAN_ORDER table
- d) Should not consider the Open orders
- e) Only GPO items as defined in the GE_PRSD_GLP_PART_MASTER table should be considered

2. GE_PRSD_SPM_STUB:- This stub is executed after the IP flow and before the PS flow. Through this stub, records in PRSD table is ammended before sending to SPM layer. The records which do not abide by any of the rule setups are segregated as Problem records and stopped from being sent to SPM layer. In this STUB the SPM layer is also archived before the fresh data gets inserted into it.

As a part of this stub in the Procedure 'GE_SCS_ORDER_LOGIC', the Processed layer data for Approved Orders details (i.e. activity name = 'APPROVED_ORDERS_TRANSFORMATION') goes through below logic before reaching the Outbound layer :

For Modification recommendation all the recommendations which arrive as SCS flag (i.e. additional_info_12) 'Y'/'y'/'yes'/'Yes'/'YES' needs to be restricted from being sent as part of normal flow. These records needs to be seperately stored in reference table 'GE_SCS_OAO_REFERENCE'. These records will further be honored during the forward flow runs at the time of sending Open supply, where these orders will be marked not to be further considered for SCS in SPM.

For the next new set of OAO records, if the records with additional_info_12 as Y already exists in the reference table 'GE_SCS_OAO_REFERENCE', the new records will update the old records in merge functionality. For no existing record the fresh record will get inserted.

There is purging logic as well to delete the records from the reference table 'GE_SCS_OAO_REFERENCE' based on the condition : if greater of need_by_date and plan_order_date (Additional_info_5 in reference table 'GE_SCS_OAO_REFERENCE') is less than sysdate

As a part of this stub in the Procedure 'GE_APP_ORDER_LOGIC', the Processed layer data for Approved Orders details (i.e. activity name =

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‘APPROVED_ORDERS_TRANSFORMATION’) goes through below logic before reaching the Outbound layer :

All the recommendations which are processed under DEFAULT rule_stream are checked for duplicate transaction id and are updated with a modified transaction id.

‘**TRXN_APPEND_ID_S**’ Sequence is created to make the TRANSACTION IDs unique. The duplicate TRANSACTION IDs are appended with a number from the ‘**TRXN_APPEND_ID_S**’ Sequence and all the duplicate TRANSACTION IDs are made unique.

The Transaction id of both the records having duplicate transaction id are modified.

Moreover, the repair orders having more than 1 quantity are split into multiple records having only 1 quantity for each repair recommendation. This change is done to remove the Repair Customization from the SPM end and make this customization from the PDS end.

Further, for the repair orders Sub Inventory information is also populated based on the defective Sub Inventory priority and onhand present at the respective location for that part.

3. Item Forecast Inbound insertion – The data is picked for distinct items in
4. GE_SPM_STUB_LOGIC:- This stub is executed after the PS flow. Through this stub SPM table is ammended.
5. GE_SPM_STUB:- This STUB is designed mainly for implementing the archive logic and purge logic. It is called by the MW separately. It is executed as the part of the SP excution if the last stub is not called by MW. When this process is executed, there will be no dependency for other activities on this step

2.1.1.3 Error Conditions

Error conditions as depicted in the pseudo code are captured.

2.1.1.4 Warning Conditions

There are no warning conditions.

2.1.3. (C) Program Description

Package Name: GE_MW_INTF_UTIL

The parameters are

- ACTIVITY_NAME
- Layer : INBOUND

This procedure is designed for Middleware to be able to truncate and load inbound table in every run.

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Inputs / Outputs

2.1.3.1. Inputs

Activity Name and Inbound layer will be the input

2.1.3.2. Outputs

Specified table in GE_PLN_TRANSLATION_LOOKUP will be truncated based on the inputs.

Program Logic

Pseudo code for 'GE_MW_INTF_UTIL Package'

1. GE_MW_INTF_UTIL.truncate_table () is called to truncate and load inbound table in every run for each interface.
2. Parameters will take activity name.
3. For any exception error is thrown.

2.1.3.3. Error Conditions

Error conditions as depicted in the pseudo code are captured.

2.1.3.4. Warning Conditions

There are no warning conditions.

2.1.4. (D) Program Description

Package Name: GE_IFACE_SPM_DETAILS

The parameters are

- PROGRAM_NAME
- PROCEDURE_NAME
- START_DATE
- CREATION_DATE
- MESSAGE
- STATUS_FLAG
- ACTIVITY_NAME
- PROCESS_ID
- DEBUG_MESSAGE

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Inputs / Outputs

2.1.4.1. Inputs

Details to update columns of table : GEMS_IFACE_SPM_TABLE.

2.1.4.2. Outputs

GEMS_IFACE_SPM_TABLE is updated with latest information.

Program Logic

Pseudo code for 'GE_IFACE_SPM_DETAILS '

- 1.GE_IFACE_SPM_DETAILS. GE_IFACE_SPM_INSERT() is called to insert into GEMS_IFACE_SPM_TABLE.
2. Parameters will take PROGRAM_NAME,PROCEDURE_NAME,START_DATE, CREATION_DATE,MESSAGE,STATUS_FLAG, ACTIVITY_NAME, PROCESS_ID,DEBUG_MESSAGE..
- 3.GE_IFACE_SPM_UPDATE procedure will be called to update GEMS_IFACE_SPM_TABLE for a PROCESS_ID.
- 4.GE_IFACE_SPM_UPDATE_END procedure used to track when a program got executed .
5. For any exception error is thrown.

2.1.4.3. Error Conditions

Error conditions as depicted in the pseudo code are captured.

2.1.4.4. Warning Conditions

There are no warning conditions.

2.1.5. (E) Program Description

Package Name: GE_VALIDATION_PROCESS

The parameters are:

Procedure	Parameters
DATE_VALIDATION	Date
RULE_COMPILE_ALL	process_id

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UPDATE_TABLE	table name , process_id
DELETE_TABLE	table name , process_id

Inputs / Outputs

2.1.5.1. Inputs

Production date and creation date for a particular part for Date_validation procedure

Activity name and the rulestream for Rule_compile_all procedure

Process_id for a particular activity_name is the input for the Reset_process Procedure.

Process_id and Table_name are the inputs for the Update_table procedure.

Process_id and Table_name are the inputs for the Delete_table procedure.

2.1.5.2. Outputs

Date_validation returns a value out of production_date or the value of creation_date if production_date is incorrect

Rule_compile_all validates the combination of the base query and the rules and saves it in the execution table after successful validation

Reset_process helps to clear the data from the INBD table, PRSD table and SPM (Outbound) table for the records having the corresponding process id. It also updates the process_flag to N for the INBD table and the process_id is set to NULL.

Update_table is called by the Reset_process to update the process_flag to N for the INBD table and the process_id is set to NULL for the records having the corresponding process id

Delete_table is called by the Reset_process to clear the data from the INBD table, PRSD table and SPM (Outbound) table which is taken as Input for the records having the corresponding process id.

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Program Logic

Pseudo code for 'GE_VALIDATION_PROCESS' with its respective procedures :

1. Date_validation returns a value out of production_date or the value of the creation_date if production_date is incorrect
2. Rule_compile_all validates the combination of the base query and the rules and saves it in the execution table after successful validation
3. Reset_process helps to clear the data from the INBD table, PRSD table and SPM (Outbound) table for the records having the corresponding process id. It also updates the process_flag to N for the INBD table and the process_id is set to NULL.
4. Update_table is called by the Reset_process to update the process_flag to N for the INBD table and the process_id is set to NULL for the records having the corresponding process id
5. Delete_table is called by the Reset_process to clear the data from the INBD table, PRSD table and SPM (Outbound) table which is taken as Input for the records having the corresponding process id.
6. The GEMS_GPO_DEMAND_CALCULATION will calculate the demand from GE_PRSD_GLP_PART_DEMAND table for each individual item present in item master for the three poles (Asia, US and EU) for last two years in set of one year each and will keep it stored.
7. Demand Conversion Process is done to load Oracle/Legacy system demands to Oracle as per the business needs
 - Initially technically correct records is inserted into the staging table GE_DEMAND_CONV_STAGING_TABLE in a proposed format (Attached in Appendix)
 - For these records as per the check from front end for Oracle or Legacy system demand data order_line_id is populated or auto generated respectively
 - The records are then inserted into the interface table GE_DEMAND_CONV_INTERFACE_TABLE with status 'V' validated or status 'E' error.
 - A snapshot of the current records in the GE_DEMAND_CONV_INTERFACE_TABLE table are inserted into a snapshot table GE_DMD_CONV_SNAPSHOT to provide users visibility to their inserted records
 - Also the entire set of records with errored data for a conversion_id is stored into

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GE_DMD_CONV_INTRFC_ERR_TABLE table to help users to make necessary rectification

- If the number of inserted records in GE_DEMAND_CONV_INTERFACE_TABLE is equal to the number of validated records i.e. all records are validated, the status of the records is changed to 'A' i.e. authenticated
- If the number of inserted records is not equal to the number of validated records in GE_DEMAND_CONV_INTERFACE_TABLE, all data from staging (GE_DEMAND_CONV_STAGING_TABLE) as well as interface table (GE_DEMAND_CONV_INTERFACE_TABLE) are deleted to keep the tables fresh for next data load and so that no partial records are available in the planning system
- Once the conversion process is initiated, all the loaded data in the GE_DEMAND_CONV_INTERFACE_TABLE with current status 'A' gets inserted into the DEMAND_CONV_INBD_TABLE which is Inbound Conversion Table.
- From DEMAND_CONV_INBD_TABLE the data gets loaded to the Processed Conversion Table i.e. DEMAND_CONV_PRSD_TABLE
- From DEMAND_CONV_PRSD_TABLE the data gets loaded to Demand Processed Table GE_PRSD_GLP_PART_DEMAND which holds all the pristine records
- The GE_PRSD_GLP_PART_DEMAND retains backup of the data prior to the conversion in the columns by updating the records during the Demand Conversion Process. The records which come as a part of the conversion is inserted into the GE_PRSD_GLP_PART_DEMAND table. If the records which are arriving through conversion is over an existing demand record, then the below fields are updated from the corresponding fields of the existing old records into the converted fresh records :

PRE_CNV_CUSTOMER_CATEGORY

PRE_CNV_FE_SSO

PRE_CNV_ORDERED_QUANTITY

PRE_CNV_SHIPPED_QUANTITY

PRE_CNV_RESERVED_QUANTITY

PRE_CNV_SHIP_FROM

PRE_CNV_HISTORY_DATE

PRE_CNV_SCHEDULED_SHIP_DATE

PRE_CNV_LINE_UPDATION_DATE

PRE_CNV_SOURCED_FROM

PRE_CNV_LCT

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PRE_CNV_FE_COUNTRY
PRE_CNV_FE_WAREHOUSE
PRE_CNV_REQUEST_DATE
PRE_CNV_ORDER_LINE_STATUS
PRE_CNV_HEADER_ORDER_STATUS

Later to this the existing old records which is being replaced by converted records are deleted. This helps maintain the reference of the details of the old records and keeps the Demand PRSD pristine.

- The full process is described with a Standard Operating Procedure in the Appendix section
- The description of the navigations are provided in the section 2.2.1
- The archival for the GE_INBD_GLP_PART_DEMAND_CONV and GE_PRSD_GLP_PART_DEMAND_CONV tables are done as per the existing process defined in section 2.2.9 into GE_INBD_GLP_PART_DMND_CONV_AR table and GE_PRSD_GLP_PART_DMD_CONV_AR table respectively

8. PRIORITY_SCORE, No_Of_Opportunities, Supply_health is calculated by considering the below categories of data

Priority Score Logic

Component

Logic

Network Min

For a location that can either Procure, Repair or is the source pole location

Safety Stock

For a location that replenishes or is FSL

ROP, if ROP = -1 then ROP = 0 and if ROP = 0 then ROP = 1

Backorder

Backorders shown in SPM

Total Available

Warehouse Good onhand + FSL Good Onhand + Allocation Intransit

Average Order Qty

Sum(Total order line quantity)/Sum(Total order lines)

, rounded to nearest integer.

If Sum(Total order lines) is 0 then consider it as 1 for calculation to avoid 0 divisor error

Priority Score = (Network Min + Backorders – Total Available)/Average Order Qty

Number of Opportunities = (Network Min / Average Order Qty)

Supply Heath = 1 – (Sum of positive priority scores/Sum of number of Opportunities)

9. Indicated Pool Size is calculated by considering the below categories of data

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Indicated Pool Size		
Step	Category	Transactions
A	Available OH GOOD	Good onhand for all parts within the part chain where use on hand is Yes
B	Available OH BAD	Defective onhand for all parts within the part chain where use on hand is Yes
C	FE UNUSED QTY	FE Unused onhand for all parts within the part chain where use on hand is Yes
D	FE USED QTY	FE Used onhand for all parts within the part chain where use on hand is Yes
E	PUDO OH QTY	PUDO onhand for all parts within the part chain where use on hand is Yes
F	DEFECTIVE IT QTY	Not Received PO for PO type 'DEFECTIVE' for all parts within the part chain where use onhand is Yes
G	REPAIR IT QTY	Not Received PO for PO type 'REPAIR' for all parts within the part chain where use onhand is Yes
Calculation		Formula
Indicated Pool Size		A + B + C + D + E + F + G

10. Priority Score is calculated by considering the below categories of data

Priority Score		
Step	Category	Transactions
A	Backorder	Backorders for all parts within the part chain
B	Network min	Sum of Safety Stock of parts for the locations that procures (i.e. source pole and/or local procure) + sum of ROP for the parts for all other locations
C	Avail OH	Good on hand for all parts within the part chain where <u>use onhand is Yes</u>
D	Avg Order Qty	Average order quantity for all parts within the part chain
Calculation		Formula
Priority Score		(A + B - C)/D

11. Transaction Conversion Process is done to load Oracle/Legacy system demands to Oracle as per the business needs

- Initially technically correct records is inserted into the staging table GE_TXN_CONV_STAGING_TABLE in a proposed format (Attached in Appendix)
- For these records as per the check from front end for Oracle or Legacy system transaction data transaction_id is populated or auto generated respectively
- The records are then inserted into the interface table GE_TXN_CONV_INTERFACE_TABLE with status 'V' validated or status 'E' error.
- A snapshot of the current records in the GE_TXN_CONV_INTERFACE_TABLE table are inserted into a snapshot table GE_TXN_CONV_SNAPSHOT to provide users visibility to their inserted records
- Also the entire set of records with errored data for a conversion_id is stored into

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GE_TXN_CONV_INTRFC_ERR_TABLE table to help users to make necessary rectification

- If the number of inserted records in GE_TXN_CONV_INTERFACE_TABLE is equal to the number of validated records i.e. all records are validated, the status of the records is changed to 'A' i.e. authenticated
- If the number of inserted records is not equal to the number of validated records in GE_TXN_CONV_INTERFACE_TABLE, all data from staging (GE_TXN_CONV_STAGING_TABLE) as well as interface table (GE_TXN_CONV_INTERFACE_TABLE) are deleted to keep the tables fresh for next data load and so that no partial records are available in the planning system
- Once the conversion process is initiated, all the loaded data in the GE_TXN_CONV_INTERFACE_TABLE with current status 'A' gets inserted into the GE_INBD_GLP_PART_TXN_CONV which is Inbound Conversion Table.
- From GE_INBD_GLP_PART_TXN_CONV the data gets loaded to the Processed Conversion Table i.e. GE_PRSD_GLP_PART_TXN_CONV
- From GE_PRSD_GLP_PART_TXN_CONV the data gets loaded to Transaction Processed Table GE_PRSD_GLP_PART_TXN which holds all the pristine records
- The full process is described with a Standard Operating Procedure in the Appendix section
- The description of the navigations are provided in the section 2.2.1
- The archival for the GE_INBD_GLP_PART_TXN_CONV and GE_PRSD_GLP_PART_TXN_CONV tables are done as per the existing process defined in section 2.2.9 into GE_PRSD_GLP_PART_TXN_CONV_AR table and GE_PRSD_GLP_PART_TXN_CONV_AR table respectively

12. NFF Rate is calculated based on the below logic :

9. NFF Rate (Part-Org Level)	
Calculation	Logic
Part Repairable	$(\text{good returns/demand}) * (1 + \text{return Wash Rate})$

User can override NFF rate from which would have precedence over the calculated data. Process of entering the NFF rate override is mentioned in Section 2.2

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13. SKU Transformation value for a Part-Org combination can be entered by the user. Process to enter this value is mentioned in Section 2.2

2.1.5.3. Error Conditions

Error conditions as depicted in the pseudo code are captured.

2.1.5.4. Warning Conditions

There are no warning conditions.

2.1.6. (F) Program Description

Package Name: GE_REIMAGING_EXECUTION

Inputs / Outputs

2.1.6.1. Inputs

Input will be the data from GE_PRSD_MWS_PARTCHANGEUP table

2.1.6.2. Outputs

Output will be the data for parts with remapped hierarchy in GE_PRSD_MWS_PARTCHANGEUP table

Program Logic

Pseudo code for 'GE_REIMAGING_EXECUTION '

1. Elimination of items are done in the input file whose status are not defined in GPO. There will be no check on the item_status. The Input file hierarchy structure of the parts are rebuilt so that all functionally correct parts are used to form the hierarchy
2. Also the Ultimate Primes which are not defined in GPO irrespective of the item_status are eliminated from the chain hierarchy and its subsequent parts are allowed to replace its position
3. We are considering all the Ultimate Primes from the GE_PRSD_MWS_PARTCHANGEUP table and undergoing the following steps :
 - a. The ultimate_prime part is designated as the Level 1 Part, for which data is inserted first. The relationship_type for these parts is 0
 - b. Under the Level 1 part, the topmost repairable part is looked for in the GE_PRSD_MWS_PARTCHANGEUP table and will be treated as alternate part with relationship_type as 1. All the other parts in the chain under the same ultimate

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prime are considered as replace part with relationship_type as 0. This part will be considered as Level 2.

- c. If repairable part is not found then Harvest part is looked for and it is the designated as the alternate with relationship_type as 1. All the other parts in the chain under the same ultimate prime are considered as replace part with relationship_type as 0. This part will be considered as Level 2.
 - d. Else it will consider the Used part as the alternative part with relationship_type as 1. All the other parts in the chain under the same ultimate prime are considered as replace part with relationship_type as 0. This part will be considered as Level 2.
 - e. All the Repairable parts under the same Ultimate Prime Part will follow suite of the Level 2 part if it is a Repairable part. These will be designated as Level 3 parts. Only the topmost harvest part will follow suite of the Level 2 part and will be designated as level 3 part. The other Harvest or Used parts will be considered as Level 4 and will follow the Level 3 harvest part
 - f. If no Repairable part are present in the Level 2 but Harvest part is present, all other Harvest and Used parts follow the Level 2 Harvest Part
 - g. If Used part present in Level 2, all the other used parts will follow the Used part in Level 2 and will be considered as Level 3
 - h. Finally all the other parts which are neither Repairable, Harvest nor Used are inserted as part of the Level 2.
 - i. Procurable Flag
 - Y for Ultimate Prime
 - N for Alternate
 - N for Replace
 - j. Repairable Flag
 - Y for Ultimate Prime if Item type is GP_Repairable
 - N for Ultimate Prime if Item type is not GP_Repairable
 - Y for Alternate
 - N for Replace
 - k. RollUpGood
 - Y, for ultimate prime
 - N, for alternate part
 - Y, for replace part when include inventory = Y
 - N, for replace part when include inventory = N
 - l. RollUpBad
 - N (Always)
 - m. RollUpGoodAsBad
 - N (Always)
 - n. RollUpDemand
 - N, for Alternate
 - Y, for Replace
 - Y, ultimate prime
4. All the remapped data is initially stored in the GE_PRSD_MWS_PARTCHANGEUP_REF table with Processed_flag N.
5. After remapping is done all the records in the GE_PRSD_MWS_PARTCHANGEUP table with processed_flag N is updated to Processed_flag C.

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6. The data in the GE_PRSD_MWS_PARTCHANGEUP_REF is finally moved back to GE_PRSD_MWS_PARTCHANGEUP table with Process_Flag N.

2.1.6.3. Error Conditions

Error conditions as depicted in the pseudo code are captured.

2.1.6.4. Warning Conditions

There are no warning conditions.

2.1.7. (G) Program Description

Package Name: DATA_CLEANUP_PRG

Inputs / Outputs

2.1.7.1. Inputs

This program has no input

2.1.7.2. Outputs

List of tables that are not used by any code objects or transformation rules

Program Logic

Pseudo code for 'DATA_CLEANUP_PRG '

a) Table listing:

A list of tables will be extracted from PDS schema of PDS database where the tables have no dependency on any other objects and the table is not listed in the table GE_PDS_DATA_CLN_UP_EXC. This list will then be validated against the list of tables used in transformations rules. All such tables that are not used in the transformation rules will be populated in table GE_PDS_OBSOLETE_TABLES along with its size.

b) Data Clean up:

Table GE_PDS_OBSOLETE_TABLES will have a column marked for deletion. This column will be updated to 'Y' when the table is reviewed and marked to be dropped. All such tables for which the value in column marked for deletion of table GE_PDS_OBSOLETE_TABLES is set to 'Y' will be dropped from the database.

2.1.7.3. Error Conditions

N/A

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2.1.7.4. Warning Conditions

N/A

2.2 Forms

APEX is used as Front End User Interface to PRDPDS for enhanced accessibility and usability.

2.2.1 Form Logic

Planning Rules Management –

Allows the user to change and create the different rules for various transformation logics depending on the business scenarios through which one can control the data streams for a particular transformation. The existing transformation rules are as defined in Setup Doc

Transformation Management –

Allows the user to change and create the different base queries through which one can control the data as mentioned in the underlying rule stream depending on the business scenarios. The existing transformation rules are as defined in Setup Doc

Archive Management –

Provides accessibility to users to control Archival of individual tables through a Flag to control if it requires to be archived or not through Y/N. The archive management control in PDS is as defined in Section 2.2.9

Debug Details Management –

Provides control to switch on Debug Mode or not for individual Activities types as defined in Setup Document. The Debug functionality is as defined in Section 2.2.11

Purge Details Management –

Provides control to purge records for specified amount of days for specific tables. The logic for Purge in PDS is as defined in Section 2.2.10

Reports –

Used to Display reports on the progress of different functionalities in PDS by extracting appropriate records from GEMS_IFACE_SPM_TABLE

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Wash Rate –

This provides a visibility to users on Washrates of Individual Items which gets submitted on the 1st day of every month. The logic is as defined in Washrate calculation in program logic section and Section 1.3.4.7

Demand Calculation –

Provides visibility to users to view the demands for different items which gets submitted on the 1st day of every month. The logic is as defined in Section 1.3.4.6

Wash Rate Override –

Allows the user to enter the Wash Rate override for Part-Location combinations which would get precedence over the calculated Wash Rate if entered from here.

As per the latest additions, Wash Rate Override would have the functionality to add the Date Range separately for Repair/Return Wash Rate Override Values. This functionality would help to control the override values which replaces the calculated values for Repair/Return Wash Rate in the Part Master Extract sent to SPM.

Demand Conversion Process –

Enables users to perform demand conversion

- a) Check for Oracle/Non-Oracle Demand Conversion – Allows users to select if Demand Conversion is to be done for Oracle System or some other Legacy System
- b) Demand Conversion Data Load – Allows users to load the data for Demand Conversion
- c) Demand Conversion Summary – Allows user to check the status of the Demand Data File Uploaded for the assigned Conversion_Id and also extract the data which got error
- d) Demand Conversion Transformation – This allows user to start off with the Demand Conversion Process

Supply Conversion Process –

Enables users to perform supply conversion

- a) Check for Oracle/Non-Oracle Supply Conversion – Allows users to select if Supply Conversion is to be done for Oracle System or some other Legacy System
- b) Supply Conversion Data Load – Allows users to load the data for Supply Conversion

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- c) Supply Conversion Summary – Allows user to check the status of the Supply Data File Uploaded for the assigned Conversion_Id and also extract the data which got error out
- d) Supply Conversion Transformation – This allows user to start off with the Supply Conversion Process

Repair and Allocation Block –

Allows users to block Repair and Allocation for a particular organization for desired time period

Planning Lookups Setup –

To provide visibility to access the lookup table of PDS

GE_PLN_TRANSLATION_LOOKUP where user can see any lookup value which is being used for various data references and transformation

Process Control Setup –

To provide visibility to access the different system controls on different tables and business functionalities as defined in GE_PLN_SYSTEM_CONTROLS table

Transformation Alias Setup –

Provides visibility to view the different aliases used for different tables in the base query as defined in setup doc

Transaction Conversion Process –

Enables users to perform Transaction conversion

- a) Check for Oracle/Non-Oracle Transaction Conversion – Allows users to select if Transaction Conversion is to be done for Oracle System or some other Legacy System
- b) Transaction Conversion Data Load – Allows users to load the data for Transaction Conversion
- c) Transaction Conversion Summary – Allows user to check the status of the Transaction Data File Uploaded for the assigned Conversion_Id and also extract the data which got error
- d) Transaction Conversion Transformation – This allows user to start off with the Transaction Conversion Process

SKU Data Upload –

Allows user to upload bulk SKU information

SKU Edit Information –

Allows user to edit SKU information for individual records.

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NFF Rate Override –

Allows users to override NFF Rate which will get precedence over the calculated NFF Rate if entered from here.

Detailed Transformation Sequencing –

Allows users to list down all the SQL queries executed as part of a Transformation run. This section also includes the Child Transformations triggered as part of the Transformation run.

Automation of submission of Transformation in PDS through Apex –

Allows users to reset a previously ran Transformation and helps to submit the PDS Transformation from APEX

PDS Data Mapping –

Allows the users to check on the data flow of the PDS Transformations, i.e. details of how the data moves from Inbound Layer to Processed Layer and to final SPM Layer. Along with this data flow/mapping of the PDS transformation, the functional meaning of each Field is also explained/showcased in this Section.

2.2.2 Pre-requisites

PDS Database must be up and functional

2.2.3 Navigation

Home -> Planning Rules Management

Home -> Transformation Management

Home -> Archive Management

Home -> Debug Details Management

Home -> Purge Details Management

Home -> Reports

Home -> Wash Rate

Home -> Demand Calculation

Home -> Demand Conversion Process

➔ Check for Oracle/Non-Oracle Demand Conversion

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- ➔ Demand Conversion Data Load
- ➔ Demand Conversion Summary – Allows user to check the status of the Demand Data File Uploaded for the assigned Conversion_Id and also extract the data which got error
- ➔ Demand Conversion Transformation – This allows user to start off with the Demand Conversion Process

Home -> Supply Conversion Process

- ➔ Check for Oracle/Non-Oracle Supply Conversion
- ➔ Supply Conversion Data Load
- ➔ Supply Conversion Summary – Allows user to check the status of the Supply Data File Uploaded for the assigned Conversion_Id and also extract the data which got error
- ➔ Supply Conversion Transformation – This allows user to start off with the Supply Conversion Process

Home -> Repair and Allocation Block

Home -> Planning Lookups Setup

Home -> Process Control Setup

Home -> Transformation Alias Setup

Home -> Transaction Conversion Process

- ➔ Check for Oracle/Non-Oracle Transaction Conversion
- ➔ Transaction Conversion Data Load
- ➔ Transaction Conversion Summary – Allows user to check the status of the Transaction Data File Uploaded for the assigned Conversion_Id and also extract the data which got error
- ➔ Transaction Conversion Transformation – This allows user to start off with the Transaction Conversion Process

Home -> Wash Rate Override

Home -> Detailed Transformation Sequencing

Home -> Submit PDS Transformation

LOG IN -> Sign Up

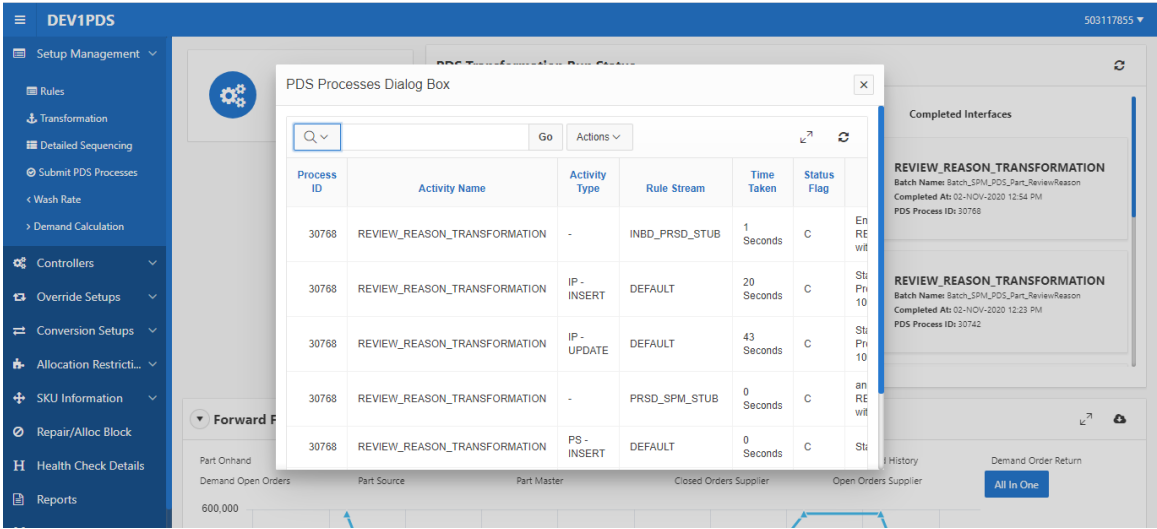
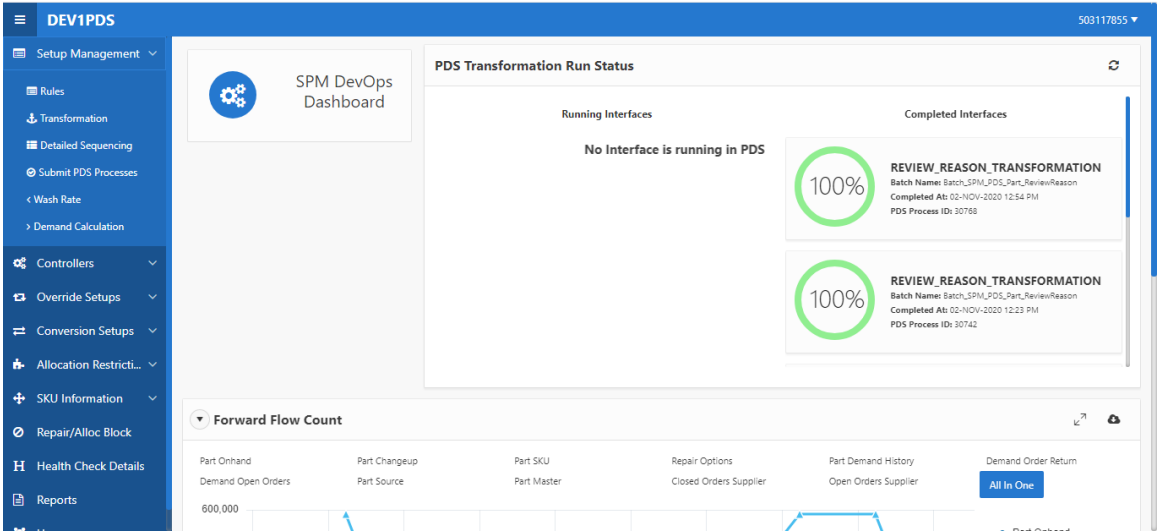
LOG IN -> Forgot Password

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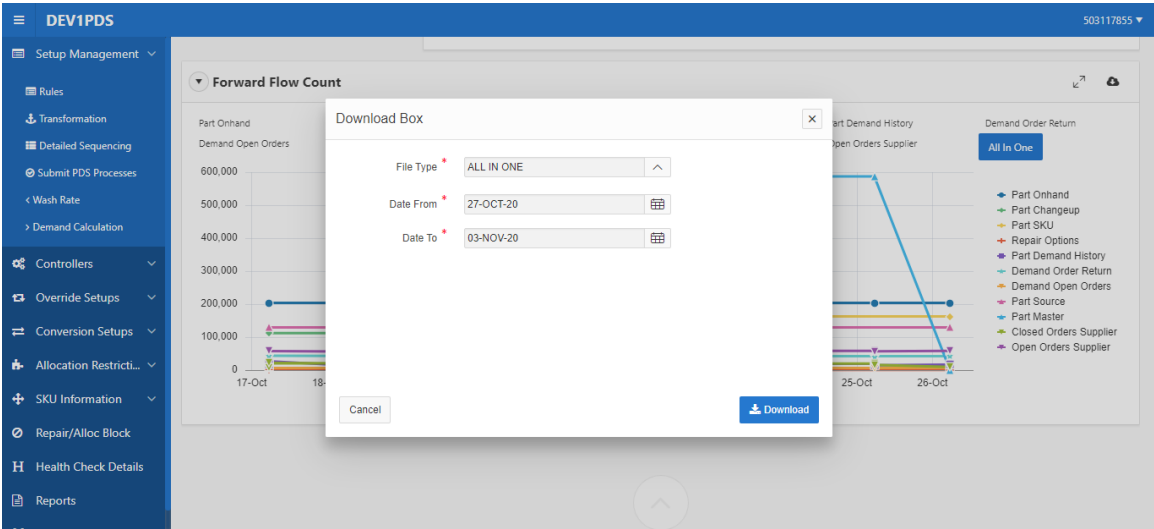
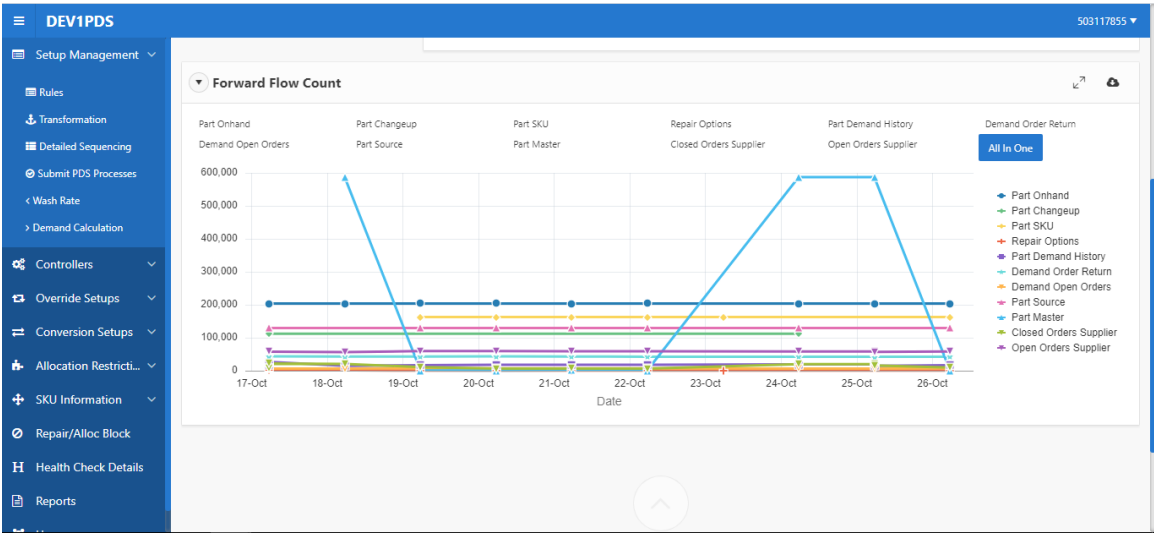
Home -> PDS Data Mapping

2.2.4 Form Description/Layout

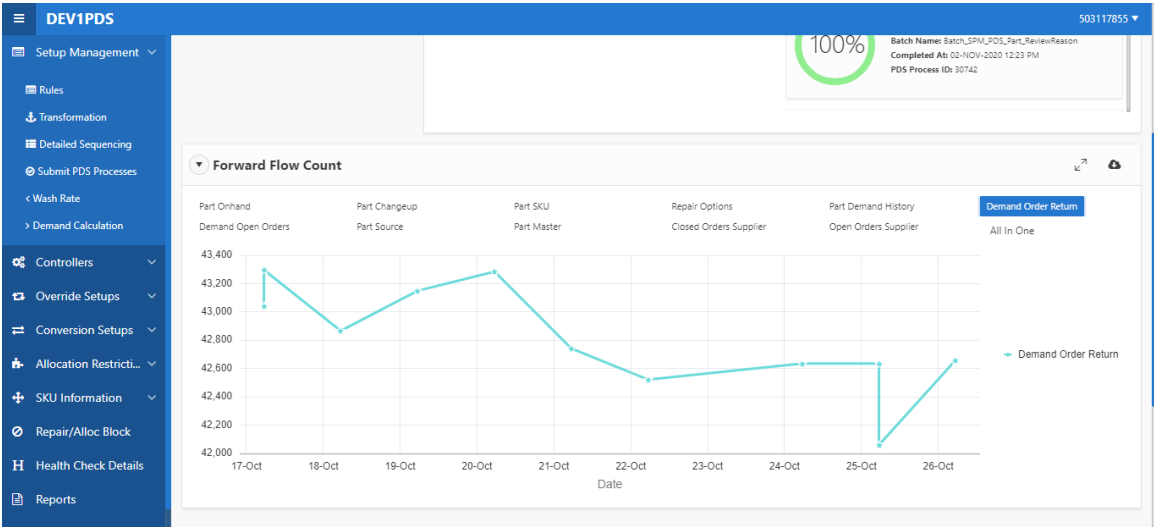
Page Layout



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Planning Rules Management –

Edit GE_SPM_RULE_HEADERS_ALL

Header Id: 2567

Activity Name: APPROVED_ORDERS_TRANSFORMATION

ACTIVITY TYPE: PARENT

Datastream Weightage: 10

Rule Stream: LCT

Enable Flag: Yes

Spom Enable Flag: No

8 of 275

Previous Delete Save




GE_SPM_RULE_LINES_ALL Detail

Header Id	Line Id	Activity Name	Data Stream	Sequence Num	Logical Join	Open Brace	Function	Table Code	Column Name	Function Value	Operation	Condition
2567	4068	APPROVED_ORDERS_TRANSFORMATION	LCT	10	AND			REV_FEEDBACK	DESTINATION_ORGANIZATION_CODE		LIKE	%LCT%

Activate Windows
Go to Settings to activate Windows

Transformation Management –

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PDS_FRONTEND								Log Out	
Home	<div><div><div><div></div><div>Q</div></div><div>Go</div><div>Actions</div></div></div>							Create	
PERSON									
	Activity Name	Activity Type	Activity Sequence	Logical Flow	Base Query	Created By	Modified By	Created Date	Modified Date
	SUPPLY_TRANSFORMATION	UPDATE	10	PS	update GE_PRSD_GLP_PART_SUPPLY Set PROCESSED_FLAG = 'Y' where rowid in (select P+ROWID(GPPS)/ GPPS.rowid from GE_PRSD_GLP_PART_SUPPLY GPPS where GPPS.processed_flag = 'N' LP_WHERE_CLAUSE) Insert into GE_SPM_GLP_PART_SUPPLY_RET (HostReturnOrderID, HostPcID, HostLocID, ReturnedQty, ExpectedAvailableDate, SalesReturnStatus, CountOrderPlan, ShipDate -- added in the table PROCESSED_FLAG, RULE_STREAM, PROCESSED_DATE, PROCESS_ID) SELECT GPPS.PO_NUMBER ' ' PO_LINE_LOCATION_ID -- delimiter - or ' ' -- HostReturnOrderID GPPS.Item_number, -- HostPcID GPPS.SHIP_TO_ORGANIZATION_CODE -- HostLocID nvl(GPPS.Item_quantity,ordered0) -- ReturnedQty (CASE WHEN GPPS.NEED_BY_DATE = trunc(sysdate) + 3 THEN to_char(trunc(sysdate) + 6, 'YYYYMMDD') ELSE to_char(GPPS.NEED_BY_DATE, 'YYYYMMDD') END) -- ExpectedAvailableDate decode(GPPS.PO_IDENTIFIER, 'CLOSED_PO', 'C', 'OPEN_PO', 'O', 'N') -- SalesReturnStatus '1', -- CountOrderPlan to_char(GPPS.PO_HEADERS_CREATION_DATE, 'YYYYMMDD') -- added in the table -- ShipDate GPPS.PROCESSED_FLAG -- PROCESSED_FLAG GPPS.RULE_STREAM -- RULE_STREAM SYSDATE -- PROCESSED_DATE GPPS.PROCESS_ID -- PROCESS_ID from GE_PRSD_GLP_PART_SUPPLY GPPS where P+ GPPS.processed_flag = 'N' 'Y' -- By Chandra 27/9/2016 /'and GPPS.PO_HEADER_CLASSIFICATION = 'DEFECTIVE' -- adddefy /'and GPPS.PO_DESTINATION_TYPE_CODE = 'INVENTORY' -- adddefy /'AND/ GPPS.RULE_STREAM = 'SALES_RETURNS_G_BAD' --AND (GPPS.ITEM_QUANTITY_ORDERED - GPPS.ITEM_QUANTITY_RECEIVED - GPPS.ITEM_QUANTITY_CANCELLED) > 0 AND GPPS.PO_IDENTIFIER = 'OPEN_PO' AND GPPS.po_line_item_update_date > SYSDATE - 180 -- By Chandra 27/9/2016 LP_WHERE_CLAUSE UNION SELECT DECODE (gggpo.subinventory_classification, 'GOOD', 'DUMMY_FENUSED', lgggpo.organization_code) gggpo.item_number ' ' gggpo.rowid -- HostReturnOrderID DEFECTIVE 'DUMMY_FENUSED', lgggpo.organization_code) gggpo.item_number ' ' gggpo.rowid) -- HostReturnOrderID gggpo.item_number -- HostPcID (SELECT HOSTPARENTLOCID from GE_PRSD_SPM_LOCATION WHERE HOSTLOCTYPED = 'LCT' AND HOSTLOCD LIKE '%(gggpo.organization_code)' SUBSTR(gggpo.subinventory_code,4) '%') AND ROWNUM = 1) *ORDER BY hostparentlocid) -- -- HostLocID nvl(gggpo.total_onhand_quantity,0) -- -- ReturnedQty to_char(SYSDATE+5 'YYYYMMDD') -- -- ExpectedAvailableDate 'O' -- -- SalesReturnStatus '1' -- -- CountOrderPlan to_char(SYSDATE+1, 'YYYYMMDD') -- -- ShipDate gggpo.PROCESSED_FLAG -- PROCESSED_FLAG gggpo.RULE_STREAM -- RULE_STREAM SYSDATE -- PROCESSED_DATE gggpo.PROCESS_ID -- PROCESS_ID from pds.ge_PRSD_GLP_PART_ONHAND GPPS WHERE gggpo.extract_type = 'SVS-ONHAND' AND gggpo.subinventory_classification IN ('GOOD', 'DEFECTIVE') AND (SELECT HOSTPARENTLOCID from GE_PRSD_SPM_LOCATION WHERE HOSTLOCTYPED = 'LCT' AND HOSTLOCD LIKE '%(gggpo.organization_code)' SUBSTR(gggpo.subinventory_code,4) '%') AND ROWNUM = 1) *ORDER BY hostparentlocid) IS NOT NULL AND NOT EXISTS (SELECT 1 FROM pds.ge_spm_glp_part_supply SET WHERE HostReturnOrderID LIKE 'DUMMY_FEN'))	502393052	502393052	19-OCT-16	19-OCT-16
	SUPPLY_TRANSFORMATION	INSERT	20	PS		502393052	502393052	19-OCT-16	19-OCT-16
	SUPPLY_TRANSFORMATION	UPDATE	10	SP	update GE_INBD_GLP_PART_SUPPLY Set PROCESSED_FLAG = 'Y', PROCESS_ID = (select mailprocess_id) from GEMS_FACE_SPM_TABLE where trunc(creation_date) = trunc(sysdate) and activity_name = 'SUPPLY_TRANSFORMATION' and status_flag = 'I' where rowid in (select P+ROWID(GPPS)/ GPPS.rowid from GE_INBD_GLP_PART_SUPPLY GPPS where GPPS.processed_flag = 'N' LP_WHERE_CLAUSE)	502393052	502393052	19-OCT-16	19-OCT-16

Archive Management –

PDS_FRONTEND		Log Out							
Home									
PERSON									
Edit ARCHIVAL									
Control Type	ARCHIVAL								
Table Name	GE_SPM_MWSPARTCHANGEUP								
Value	YES								
<div>Cancel</div> <div>Delete Apply Changes</div>									

Debug Details Management –

PDS_FRONTEND		Log Out							
Home									
PERSON									
Edit DEBUG CONTROL									
Control Type	DEBUG_CONTROL								
Activity	TRANSACTION_TRANSFORMATION								
Value	YES								
<div>Cancel</div> <div>Delete Apply Changes</div>									

Purge Details Management –

PDS_FRONTEND		Log Out							
Home									
PERSON									
Edit PURGE DAYS									
Control Type	PURGE_DAYS								
Table Name	GE_PRSD_SPM_DMD_HISTORY_AR								
Value	1								
<div>Cancel Go to Archive Management</div> <div>Delete Apply Changes</div>									

Reports –

PDS_FRONTEND

Log Out

Home

PERSON

Successful SP execution report

Unsuccessful SP report per day

All Details

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Wash Rate –

The screenshot shows the 'Wash Rate' process submission screen. The interface includes a blue header bar with 'PDS_FRONTEND' and a 'Log Out' link. A left sidebar contains 'Home' and 'PERSON' links. The main content area has a title 'Submit the wash rate process' and a 'Submit' button at the bottom right.

Demand Calculation –

The screenshot shows the 'Demand Calculation' process submission screen. The interface is consistent with the previous one, featuring a blue header bar with 'PDS_FRONTEND' and a 'Log Out' link. The left sidebar shows 'Home' and 'PERSON' links. The main content area is titled 'Submit Demand Calculation' and includes a 'Submit' button at the bottom right.

Demand Conversion Process Layout –

The screenshot displays the 'Demand Conversion Process' layout screen. The header bar shows 'PDS_FRONTEND' and 'Log Out'. The sidebar has 'Home' and 'PERSON' links. The main area is titled 'Demand Conversion Process' and contains four items in a grid: 'Check for Oracle/Non-Oracle Demand Conversion' (with a checkmark icon), 'Demand Conversion Data Load' (with an upload icon), 'Demand Conversion Summary' (with a minus icon), and 'Demand Conversion Transformation' (with a checkmark icon). At the bottom, there is a small text link: 'release 1.0 Set Screen Reader Mode On'.

Supply Conversion Process Layout –

The screenshot shows the 'Supply Conversion Process' layout screen. The interface features a blue header bar with 'PDS_FRONTEND' and 'Log Out'. The left sidebar contains 'Home' and 'PERSON' links. The main content area is titled 'Supply Conversion Process' and displays four items in a grid: 'Check for Oracle/Non-Oracle Supply Conversion' (with a checkmark icon), 'Supply Conversion Data Load' (with an upload icon), 'Supply Conversion Summary' (with a minus icon), and 'Supply Conversion Transformation' (with a checkmark icon).

Repair and Allocation Block –

The screenshot shows the 'Form on GE_PLN_SYSTEM_CONTROLS' for the 'Repair and Allocation Block'. The header bar displays 'PDS_FRONTEND' and 'Log Out'. The sidebar has 'Home' and 'PERSON' links. The form contains several fields: 'Control Type' (dropdown menu showing 'ALLOCATION_BLOCK'), 'Enabled Flag' (dropdown menu showing 'YES'), 'Activity' (dropdown menu showing 'FROM-TO'), 'Value' (text field showing 'A00-XXXX'), 'Start Date' (calendar icon), and 'End Date' (calendar icon). At the bottom, there are 'Cancel' and 'Apply Changes' buttons.

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Planning Lookups Setup –

The screenshot shows the 'Form on GE_PLN_TRANSLATION_LOOKUP' in the PDS_FRONTEND application. The left sidebar contains 'Home' and 'PERSON' links. The form fields are: 'Lookup Type' set to 'TABLE_COLUMN', 'Value' set to 'GE_PRSD_GUP_PART_MASTER', and 'Translated Value' set to 'PLANNING_CATEGORY_SEGMENT2'. At the bottom, there are 'Cancel', 'Delete', and 'Apply Changes' buttons.

Process Control Setup –

The screenshot shows the 'Form on GE_PLN_SYSTEM_CONTROLS' in the PDS_FRONTEND application. The left sidebar contains 'Home' and 'PERSON' links. The form fields are: 'Control Type' set to 'PURGE_DAYS', 'Internal Use' set to 'GE_PRSD_SPM_DMD_HISTORY_AR', 'Activity' is empty, and 'Value' set to '1'. At the bottom, there are 'Cancel', 'Delete', and 'Apply Changes' buttons.

Transformation Alias Setup –

The screenshot shows the 'Form on GE_PLN_TRANSFORMATION_TABLES' in the PDS_FRONTEND application. The left sidebar contains 'Home' and 'PERSON' links. The form fields are: 'Table Name' set to 'GE_INBD_SPM_FEEDBACK', 'Table Code' set to 'REV_FEEDBACK', and 'Table Alias' set to 'GGF'. At the bottom, there are 'Cancel', 'Delete', and 'Apply Changes' buttons.

Transaction Conversion Process Layout –

The screenshot shows the 'Transaction Conversion Process' layout in the PDS_FRONTEND application. The left sidebar contains 'Home' and 'PERSON' links. The main area displays four buttons: 'Transaction Conversion Data Load', 'Check For Oracle/ Non-Oracle Transaction Conversion', 'Transaction Conversion Summary', and 'Transaction Conversion Transformation'.

Wash Rate Override –

- Go to Washrate Override

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DEV1PDS

Setup Management

Process Submission

Override Settings

Wash Rate

NFF Rate

Conversion Settings

Allocation Restriction...

SKU Information

Repair/Alloc Block

Health Check Details

Reports

Users

PDS Data Mapping












PDS APEX Mapping

503117855

Q

Go

Actions

	Part Number	Relation Type	Total Consignment	Total RMA Receipts	Total GPO RMA Receipts	Total FE Inv	Total RET Wash	Total Scrap	Total MISDIR	Total MISID	Total LIT Write Off	Total Closed PO	Total Cancelled PO	Total Received PO	Repair Wash Rate	Repa Wash Rate Overri
	 P9141YLU	DOWNCHAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9143XU	DOWNCHAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9144NF	PRIME	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9151VJ-R	DOWNCHAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9151ZL	DOWNCHAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9153DV	PRIME	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9153SE-R	DOWNCHAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9153SG	PRIME	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9154AA	PRIME	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9154AA-RA	DOWNCHAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	
	 P9155BP	DOWNCHAIN	0	0	0	0	0	0	0	0	0	0	0	0	0	

- Select the Part-Location combination for which Override can be set, set the override value along with the date range and click on Apply changes :

DEV1PDS		503117855														
Setup Management																
Process Submission																
Override Settings																
Wash Rate																
NFF Rate																
Conversion Settings																
Allocation Restrictio...																
SKU Information																
Repair/Alloc Block																
Health Check Details																
Reports																
Users																
PDS Data Mapping																
PDS APEX Mapping																
Edit Wash Rate Override Values																
Part Number		P9144NF														
Relation Type		PRIME														
Repair Wash Rate		0														
Return Wash Rate		0														
Repair Wash Rate Override																
Repair Wash Rate Override Start Date																
Repair Wash Rate Override End Date																
Repair Wash Rate Override Status		INACTIVE														
Return Wash Rate Override																
Return Wash Rate Override start Date																
Return Wash Rate Override End Date																
Return Wash Rate Override Status		INACTIVE														
Cancel																
Create																

SKU Upload, Edit and NFF Rate

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Data Load Source

ADMIN

DEV1PDS

Override Setups

Allocation Restrictio...

SKU Information

Upload Data

Edit SKU Information

Repair/Alloc Block

Health Check Details

PDS Data Mapping

PDS APEX Mapping

Data Load Source

Data / Table Mapping

Data Validation

Data Load Results

Data Load Source

Cancel

Download Sample Data

Next

Import From

☐ Upload file, comma separated (*.csv) or tab delimited

☒ Copy and Paste

Separator

Optionally Enclosed By

First Row has Column Names

☒ Yes

Use Application Date Format

☒ Yes

File Character Set

Copy and Paste Delimited Data

SKU_INFORMATION

ADMIN

DEV1PDS

Override Setups

Allocation Restrictio...

SKU Information

Upload Data

Edit SKU Information

Repair/Alloc Block

Health Check Details

PDS Data Mapping

PDS APEX Mapping

Go

Actions

Create

	Hostpartid	Hostlocid	Loctype	Sourcepairblock	Destinationpairblock	Skucust1	Skucust2	Skucust3	Skucust4	Skucust5	Skucust6	Skucust7	Skucust8
	KTZ302696	U04	-	-	-	2	-	-	-	-	-	-	-
	KTZ302696	U07	-	-	-	3	-	-	-	-	-	-	-
	KTZ302696	U01	-	-	-	5	-	-	-	-	-	-	-
	KTZ302696	U06	-	-	-	1	-	-	-	-	-	-	-

1 - 4

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SKU_INFORMATION x +

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DEV1PDS

- Override Setups
- Allocation Restriction...
- SKU Information
- Upload Data
- Edit SKU Information
- Repair/Alloc Block
- Health Check Details
- PDS Data Mapping
- PDS APEX Mapping

Form on GE_PART_SKU_INFORMATION

Hostpartid * KTZ302696

Hostlocid * U04

Loctype

Sourcepairblock

Destinationpairblock

Override Start Date 11-FEB-22

Override End Date 21-FEB-22

Skucust1 1

Skucust1 Override 2

Skucust2

Skucust2 Override

Skucust3

Skucust3 Override

Skucust4

Skucust4 Override

Detailed Transformation Sequencing

PDS_FRONTEND Log Out

Home

PERSON

DEV1PDS

Welcome to Apex

Please enter your response

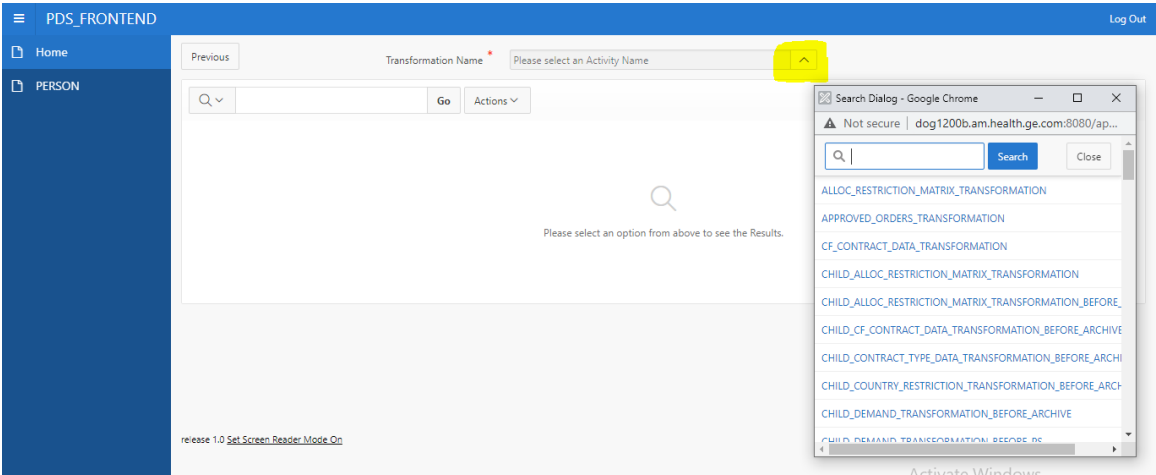
Planning Rules Management

Transformation Management

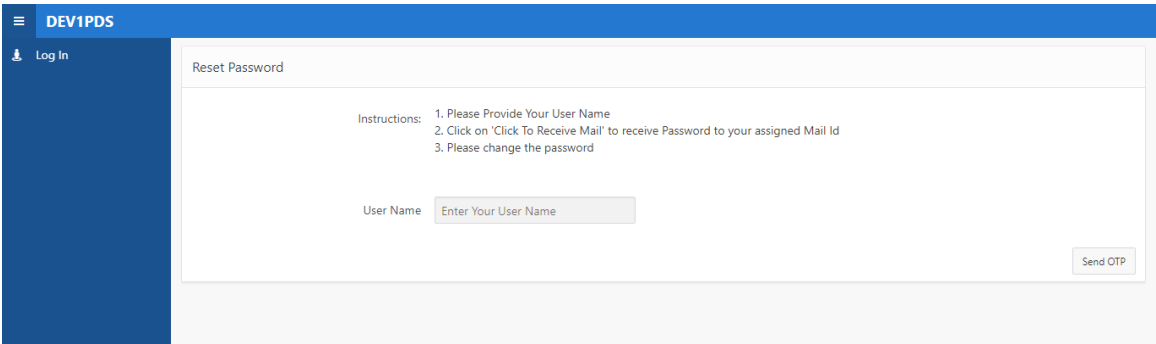
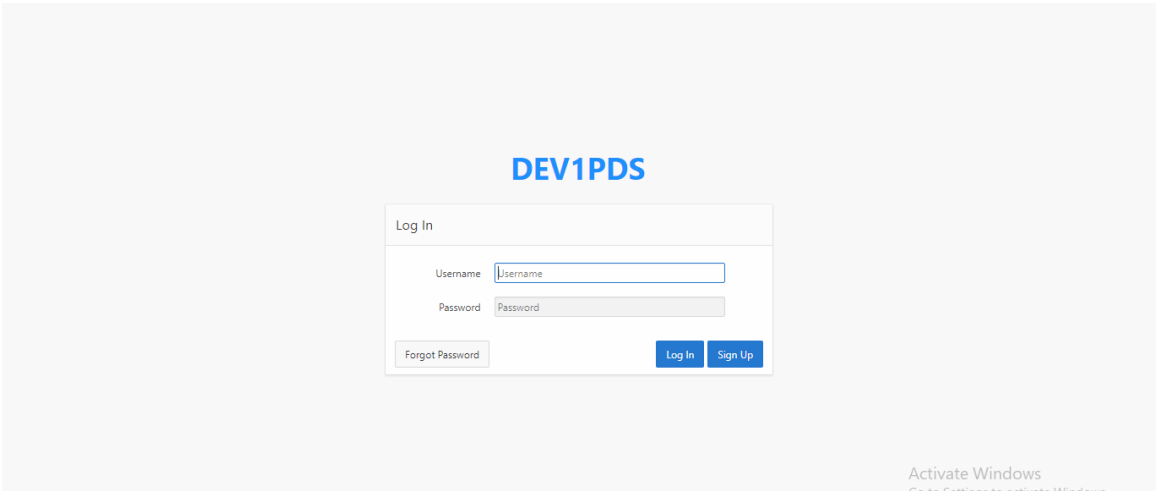
Create Request Set

Detailed Transformation Sequencing

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Reforming Apex Login



GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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Order Plan Check Engine

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Setup Management

Process Submission

Override Setups

Conversion Setups

Allocation Restriction...

SKU Information

Repair/Alloc Block

Health Check Details

Reports

Users

Go Rows 50 Actions

Processed Date	Run Type	Processed Day	Order Type	Supplier Type	Approval Status	A00 Order Count	A00 Total Quantity	A00 Order Cost MMICV	U00 Order Count	U00 Total Quantity	U00 Order Cost MMICV	R00 Order Count	R00 Total Quantity	R00 Order Cost MMICV	A On Cc
28-JAN-21	DAILY	THURSDAY	PROCURE	EXTERNAL	Not Approved	30	253	62525	40	783	109612	21	217	70905	
28-JAN-21	DAILY	THURSDAY	REPAIR	-	Not Approved	18	22	14633	89	136	121383	26	43	51205	
28-JAN-21	DAILY	THURSDAY	ALLOCATION	-	Not Approved	451	1381	918134	311	727	954790	319	1778	580478	
28-JAN-21	DAILY	THURSDAY	PROCURE	INTERNAL	Not Approved	15	823	47497	8	28	30074	12	150	269783	
22-JAN-21	DAILY	FRIDAY	PROCURE	EXTERNAL	Not Approved	58	456	127717	64	1102	352671	42	238	109622	
22-JAN-21	DAILY	FRIDAY	REPAIR	-	Not Approved	21	39	20229	154	296	368175	37	101	124275	
22-JAN-21	DAILY	FRIDAY	ALLOCATION	-	Not Approved	876	2720	1163283	608	1175	1414203	475	1851	752136	
22-JAN-21	DAILY	FRIDAY	PROCURE	INTERNAL	Not Approved	44	376	406702	15	54	938850	24	1554	320119	

Part ChangeUp Data

Application Express - Sign In

Manual PartChangeUp

GE Single Sign On

SPM Order Execution Report - G

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DEV1PDS 502393052

Setup Management

Rules

Transformation

Detailed Sequencing

Create Request Set

Data Restructure

Archival Setup

Debugging Setup

Purging Setup

Planning Lookups Setup

Process Control Setup

Transformation Alias Setup

Repair Upload Controller

PartChangeUp Manual Data

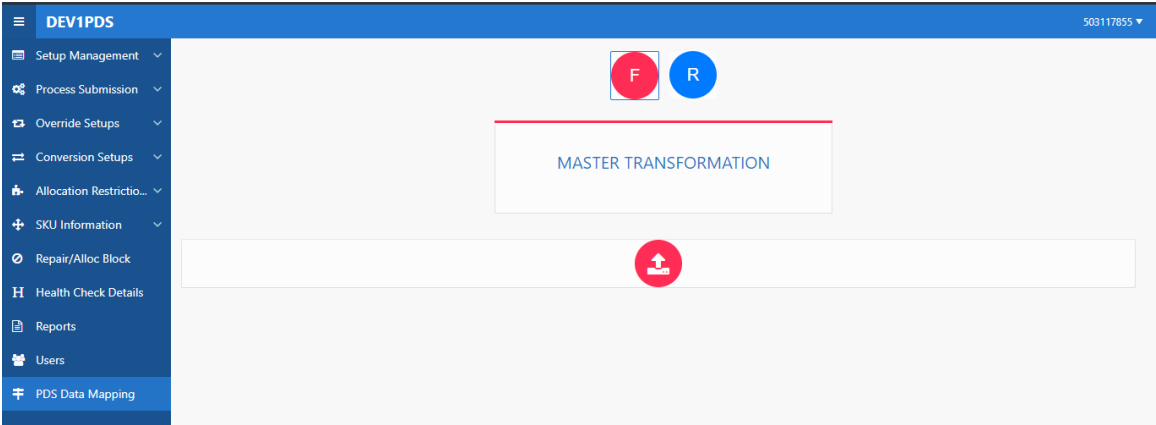
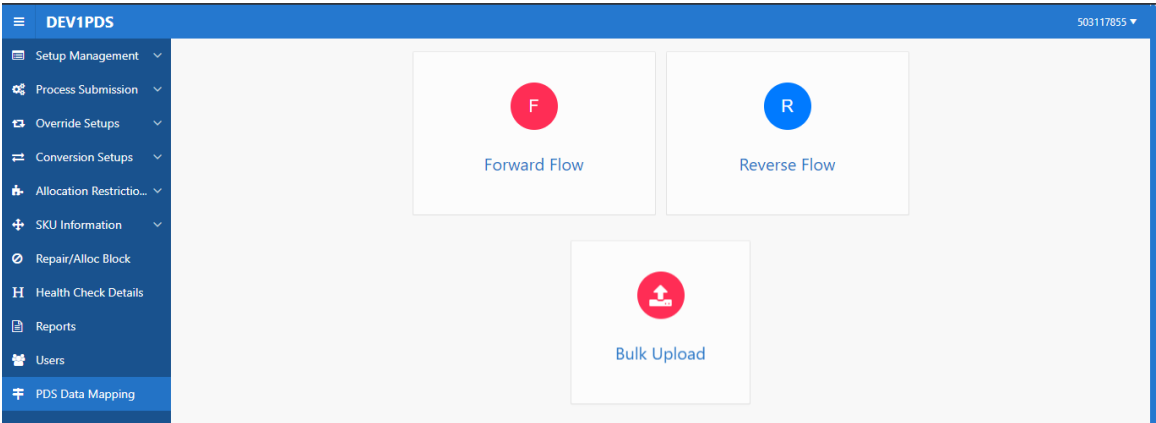
Process Submission

Go Actions Create

	Old Part Number	New Part Number	Ultimate Prime	Change Type	Use On Hands	Use Demand History	Refurbished Category	Item Type	New Fru Backward Compatible	Additional Fru Needed	Old Fru Compatible	Old Fru Usable	Old Fru Upgradable
	M1029209-X	M1029209	M1029209	Direct	Yes	Yes	Repairable	Refurbished	Yes	-	Yes	-	-
	2039793-002-R	2039793-002	2039793-002	Direct	Yes	Yes	Repairable	Refurbished	Yes	-	Yes	-	-
	422396-003-R	422396-003	422396-003	Direct	Yes	Yes	Repairable	Refurbished	Yes	-	Yes	-	-
	2079070-002-R	2079070-002	2079070-002	Direct	Yes	Yes	Repairable	Refurbished	Yes	-	Yes	-	-
	2030604-002-R	2030604-002	2030604-002	Direct	Yes	Yes	Repairable	Refurbished	Yes	-	Yes	-	-
	M1223519-X	M1223519	M1223519	Direct	Yes	Yes	Repairable	Refurbished	Yes	-	Yes	-	-

PDS Data Mapping –

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DEV1PDS									
Options * <input type="checkbox"/> GE_INBD_GLP_PART_MASTER <input type="checkbox"/> GE_PRSD_GLP_PART_MASTER <input type="checkbox"/> GE_SPM_GLP_PART_MASTER <input checked="" type="checkbox"/> ALL Refresh < Previous									
<div> <input type="text"/> <input type="button" value="Go"/> <input type="button" value="Actions"/> </div>									
	ID	Flow Type	Activity Name	Inbound Table Name	Inbound Functional Meaning	Inbound Column ID	Inbound Column Name	Inbound Column Type	Inbound Column Length
	1452	FORWARD	MASTER_TRANSFORMATION	GE_INBD_GLP_PART_MASTER	PART_MASTER	1	DATA_TYPE	VARCHAR2	20
	1453	FORWARD	MASTER_TRANSFORMATION	GE_INBD_GLP_PART_MASTER	DAILY/WEEKLY as passed in the concurrent program parameter. SPECIAL- when the is used as a parameter for a date interval parameter to the concurrent program	2	DATA_FREQUENCY	VARCHAR2	10
	1454	FORWARD	MASTER_TRANSFORMATION	GE_INBD_GLP_PART_MASTER	Number from Item Master	3	ITEM_NUMBER	VARCHAR2	40
	1455	FORWARD	MASTER_TRANSFORMATION	GE_INBD_GLP_PART_MASTER	Status of the part from Item Master	4	ITEM_STATUS	VARCHAR2	10
	1456	FORWARD	MASTER_TRANSFORMATION	GE_INBD_GLP_PART_MASTER	Description of the part	5	ITEM_DESCRIPTION	VARCHAR2	255

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Setup Management
Process Submission
Override Setups
Conversion Setups
Allocation Restrictio...
SKU Information
Repair/Alloc Block
Health Check Details
Reports
Users
PDS Data Mapping

Edit Master Transformation Data Mapping

Record ID: 1452
Flow Type: FORWARD
Activity Name: MASTER_TRANSFORMATION
Inbound Table Name: GE_INBD_GLP_PART_MASTER
Inbound Functional Meaning: PART_MASTER
Inbound Column ID: 1
Inbound Column Name: DATA_TYPE
Inbound Column Type: VARCHAR2
Inbound Column Length: 20
Inbound Transformation Phase:

DEV1PDS 503117855

Setup Management
Process Submission
Override Setups
Conversion Setups
Allocation Restrictio...
SKU Information
Repair/Alloc Block
Health Check Details
Reports
Users
PDS Data Mapping

Data Load Wizard Progress

Data Load Source | Data / Table Mapping | Data Validation | Data Load Results

Data Load Source

Cancel Next Download Sample Report

Data Flow: Forward Flow
Activity Name:
Import From: ☐ Upload file, comma separated (*.csv) or tab delimited ☒ Copy and Paste
Copy and Paste Delimited Data:

2.2.5 Zones Definition

NA

2.2.6 Tables and Objects

Source	Object Detail	Object Name	Object Name - Archive
GLPROD Forward Flow	INBD_TABLE	GE_INBD_GLP_PART_MASTER	GE_INBD_GLP_PART_MASTER
GLPROD Forward Flow	INBD_TABLE	GE_INBD_GLP_PART_ONHAND	GE_INBD_GLP_PART_ONHAND

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
Information Management	MD70 Technical Design – Planning Database System for SPM	Revision: 46.0

GLPROD Forward Flow	INBD_TABLE	GE_INBD_GLP_PART_SOURCE	GE_INBD_GLP_PART_SOURCE
GLPROD Forward Flow	INBD_TABLE	GE_INBD_GLP_PART_DEMAND	GE_INBD_GLP_PART_DEMAND
GLPROD Forward Flow	INBD_TABLE	GE_INBD_GLP_PART_TXN	GE_INBD_GLP_PART_TXN_AR
GLPROD Forward Flow	INBD_TABLE	GE_INBD_GLP_PART_SUPPLY	GE_INBD_GLP_PART_SUPPLY
GLPROD Forward Flow	INBD_TABLE	GE_INBD_GLP_SPM_FEEDBACK	GE_INBD_GLP_SPM_FEEDBACK
BI	INBD_TABLE	GE_INBD_BI_PRODUCT	GE_INBD_BI_PRODUCT_AR
BI	INBD_TABLE	GE_INBD_BI_PRODUCT_BOM	GE_INBD_BI_PRODUCT_BOM_A
BI	INBD_TABLE	GE_INBD_BI_PRODUCT_FR	GE_INBD_BI_PRODUCT_FR_AR
BI	INBD_TABLE	GE_INBD_BI_PRODUCT_ROLLOUT	GE_INBD_BI_PRODUCT_ROLLOUT

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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BI	INBD_TABLE	GE_INBD_BI_CONTRACT	GE_INBD_BI_CONTRACT_AR
BI	INBD_TABLE	GE_INBD_BI_CONTRACT_TYPE	GE_INBD_BI_CONTRACT_TYPE
BI	INBD_TABLE	GE_INBD_BI_INSTALL_SITE	GE_INBD_BI_INSTALL_SITE_AR
BI	INBD_TABLE	GE_INBD_BI_PRODUCT_CUSTOMER	GE_INBD_BI_PRODUCT_CUSTO
BI	INBD_TABLE	GE_INBD_BI_DEMAND_LINK	GE_INBD_BI_DEMAND_LINK_A
BI	INBD_TABLE	GE_INBD_BI_PM_ORDERS	GE_INBD_BI_PM_ORDERS_AR
MWS	INBD_TABLE	GE_INBD_MWS_PARTCHANGEUP	GE_INBD_MWS_PARTCHANGE
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_FEEDBACK	GE_INBD_SPM_FEEDBACK_AR
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_INTERNAL_SUPPLIER	GE_INBD_SPM_INT_SUPPLIER

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_EXT_SUPPLIER_ITEM	GE_INBD_SPM_EXT_SUP_ITEM
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_EXT_SUPPLIER_DMD	GE_INBD_SPM_EXT_SUP_DMD
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_DMD_FORECAST	GE_INBD_SPM_DMD_FORECAS
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_DMD_HISTORY	GE_INBD_SPM_DMD_HISTORY
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_HIERARCHY	GE_INBD_SPM_HIERARCHY_A
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_PLN_LVL	GE_INBD_SPM_PLN_LVL_AR
SPM Reverse Flow	INBD_TABLE	GE_INBD_SPM_LOCATION	GE_INBD_SPM_LOCATION_AR
GLPROD Forward Flow	PRSD_TABLE	GE_PRSD_GLP_PART_MASTER	GE_PRSD_GLP_PART_MASTER
GLPROD Forward Flow	PRSD_TABLE	GE_PRSD_GLP_PART_ONHAND	GE_PRSD_GLP_PART_ONHAND

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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GLPROD Forward Flow	PRSD_TABLE	GE_PRSD_GLP_PART_SOURCE	GE_PRSD_GLP_PART_SOURCE
GLPROD Forward Flow	PRSD_TABLE	GE_PRSD_GLP_PART_DEMAND	GE_PRSD_GLP_PART_DEMAND
GLPROD Forward Flow	PRSD_TABLE	GE_PRSD_GLP_PART_TXN	GE_PRSD_GLP_PART_TXN_AR
GLPROD Forward Flow	PRSD_TABLE	GE_PRSD_GLP_PART_SUPPLY	GE_PRSD_GLP_PART_SUPPLY
GLPROD Forward Flow	PRSD_TABLE	GE_PRSD_GLP_SPM_FEEDBACK	GE_PRSD_GLP_SPM_FEEDBACK
BI	PRSD_TABLE	GE_PRSD_BI_PRODUCT	GE_PRSD_BI_PRODUCT_AR
BI	PRSD_TABLE	GE_PRSD_BI_PRODUCT_BOM	GE_PRSD_BI_PRODUCT_BOM
BI	PRSD_TABLE	GE_PRSD_BI_PRODUCT_FR	GE_PRSD_BI_PRODUCT_FR_AR
BI	PRSD_TABLE	GE_PRSD_BI_PRODUCT_ROLLOUT	GE_PRSD_BI_PRODUCT_ROLLOUT

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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BI	PRSD_TABLE	GE_PRSD_BI_CONTRACT	GE_PRSD_BI_CONTRACT_AR
BI	PRSD_TABLE	GE_PRSD_BI_CONTRACT_TYPE	GE_PRSD_BI_CONTRACT_TYPE
BI	PRSD_TABLE	GE_PRSD_BI_INSTALL_SITE	GE_PRSD_BI_INSTALL_SITE_AR
BI	PRSD_TABLE	GE_PRSD_BI_PRODUCT_CUSTOMER	GE_PRSD_BI_PRODUCT_CUSTOMER
BI	PRSD_TABLE	GE_PRSD_BI_DEMAND_LINK	GE_PRSD_BI_DEMAND_LINK_AR
BI	PRSD_TABLE	GE_PRSD_BI_PM_ORDERS	GE_PRSD_BI_PM_ORDERS_AR
MWS	PRSD_TABLE	GE_PRSD_MWS_PARTCHANGEUP	GE_PRSD_MWS_PARTCHANGEUP
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_FEEDBACK	GE_PRSD_SPM_FEEDBACK_AR
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_INTERNAL_SUPPLIER	GE_INBD_SPM_INT_SUPPLIER

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_EXT_SUPPLIER_ITEM	GE_PRSD_SPM_EXT_SUP_ITEM
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_EXT_SUPPLIER_DMD	GE_PRSD_SPM_EXT_SUP_DMD
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_DMD_FORECAST	GE_PRSD_SPM_DMD_FORECAS
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_DMD_HISTORY	GE_PRSD_SPM_DMD_HISTORY
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_HIERARCHY	GE_PRSD_SPM_HIERARCHY_A
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_PLN_LVL	GE_PRSD_SPM_PLN_LVL_AR
SPM Reverse Flow	PRSD_TABLE	GE_PRSD_SPM_LOCATION	GE_PRSD_SPM_LOCATION_AR
GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_PART_MASTER	GE_SPM_GLP_PART_MASTER_
GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_PART_ONHAND	GE_SPM_GLP_PART_ONHAND_

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_PART_SOURCE	GE_SPM_GLP_PART_SOURCE_A
GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_PART_DEMAND_HST	GE_SPM_GLP_PART_DEMAND_A
GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_PART_DEMAND_OPEN	GE_SPM_GLP_PART_DEMAND_A
GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_PART_SUPPLY_RET	GE_SPM_GLP_PART_SUPPLY_R
GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_OPEN_PO	GE_SPM_GLP_OPEN_PO_AR
GLPROD Forward Flow	SPM_TABLE	GE_SPM_GLP_CLOSED_PO	GE_SPM_GLP_CLOSED_PO_AR
BI	SPM_TABLE	GE_SPM_BI_PRODUCT	GE_SPM_BI_PRODUCT_AR
BI	SPM_TABLE	GE_SPM_BI_PRODUCT_BOM	GE_SPM_BI_PRODUCT_BOM_A
BI	SPM_TABLE	GE_SPM_BI_PRODUCT_ROLLOUT	GE_SPM_BI_PRODUCT_ROLLO

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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BI	SPM_TABLE	GE_SPM_BI_CONTRACT	GE_SPM_BI_CONTRACT_AR
BI	SPM_TABLE	GE_SPM_BI_CONTRACT_TYPE	GE_SPM_BI_CONTRACT_TYPE
BI	SPM_TABLE	GE_SPM_BI_INSTALL_SITE	GE_SPM_BI_INSTALL_SITE_AR
MWS	SPM_TABLE	GE_SPM_MWS_PARTCHANGEUP	GE_SPM_MWS_PARTCHANGEUP
SPM Reverse Flow	SPM_TABLE	GE_SPM_GLP_FEEDBACK	GE_SPM_GLP_FEEDBACK_AR
SPM Reverse Flow	SPM_TABLE	GE_SPM_GLP_INTERNAL_SUPPLIER	GE_SPM_GLP_INT_SUPPLIER_A
SPM Reverse Flow	SPM_TABLE	GE_SPM_GLP_EXT_SUPPLIER_ITEM	GE_SPM_GLP_EXT_SUP_ITEM_A
SPM Reverse Flow	SPM_TABLE	GE_SPM_GLP_EXT_SUPPLIER_DMD	GE_SPM_GLP_EXT_SUP_DMD_A
PDS	PACKAGE	GE_IFACE_SPM_DETAILS	NA

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PDS	PACKAGE	GE_INBD_PRSD_STUB	NA
PDS	PACKAGE	GE_MW_INTF_UTIL	NA
PDS	PACKAGE	GE_PLN_TRANSFORMATION	NA
PDS	PACKAGE	GE_PLN_TRANSFORMATION_CALL	NA
PDS	PACKAGE	GE_PLN_TRANSFORMATION_MAIN	NA
PDS	PACKAGE	GE_PLN_TRANSFORMATIONS	NA
PDS	PACKAGE	GE_PRSD_SPM_STUB	NA
PDS	PACKAGE	GE_REIMAGING_EXECUTION	NA
PDS	PACKAGE	GE_SPM_STUB	NA

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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PDS	PACKAGE	GE_SPM_STUB_LOGIC	NA
PDS	PACKAGE	GE_VALIDATION_PROCESS	NA
PDS	PLN_Table	GE_PLN_TRANSFORMATION_TABLES	NA
PDS	PLN_Table	GE_PLN_TRANSFORMATION_BASE_DTL	NA
PDS	PLN_Table	GE_PLN_TRANSFORMATION_EXEC_DTL	NA
PDS	PLN_Table	GEMS_IFACE_SPM_TABLE	NA
PDS	PLN_Table	GE_SPM_RULE_HEADERS_ALL	NA
PDS	PLN_Table	GE_SPM_RULE_LINES_ALL	NA
PDS	PLN_Table	GE_PLN_TRANSLATION_LOOKUP	NA

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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PDS	PLN_Table	demand_lastyear	NA
PDS	PLN_Table	demand_secondlastyear	NA
PDS	PLN_Table	GE_ITEM_DEMAND_HISTORY	NA
PDS	PLN_Table	GE_ITEM_DEMAND_HISTORY_LCT	NA
PDS	PLN_Table	GE_ITEM_DEMAND_HISTORY_DMD	NA
PDS	PLN_Table	GE_ITEM_DEMAND_HISTORY_SHIP	NA
PDS	PLN_Table	GE_PRSD_MWS_PARTCHANGEUP_REF	NA
PDS	PLN_Table	GE_CUMULATIVE_WASH_RATES	NA
PDS	PLN_Table	GE_PRSD_BI_PRODUCT_ROLLOUT_REF	NA

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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PDS	PLN_Table	GE_PRSD_BI_PRODUCT_BOM_REF	NA
PDS	PLN_Table	GE_IFACE_SPM_RESTART_MW	NA
PDS	PLN_Table	GEMS_MW_IFACE_LOG_IT_TBL	NA
PDS	PLN_Table	GEMS_IFACE_SPM_TABLE_DETAILS	NA
PDS	PLN_Table	GE_PRSD_BI_PRODUCT_BOM_REF	NA
Demand Data Conversion	Staging Table	GE_DEMAND_CONV_STAGING_TABLE	NA
Demand Data Conversion	Interface Table	GE_DEMAND_CONV_INTERFACE_TABLE	NA
Demand Data Conversion	Error Table	GE_DMD_CONV_INTRFC_ERR_TABLE	NA
Demand Data Conversion	Snapshot Table	GE_DMD_CONV_SNAPSHOT	NA

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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Demand Data Conversion	INBD Table	DEMAND_CONV_INBD_TABLE	DEMAND_CONV_INBD_TABLE
Demand Data Conversion	PRSD Table	DEMAND_CONV_PRSD_TABLE	DEMAND_CONV_PRSD_TABLE
PM Order Transformation Table	INBD Table created to accommodate the ServiceMax PM Order Data. (Since ServiceMax Data does not interface into BI, data from this table along with GE_INBD_BI_PM_ORDERS must be considered for PM Order Transformation)	GE_INBD_SERVICE_MAX_PM_ORDERS	NA
SKU Transformation	INBD Table	GE_INBD_SKU_TRANSFORMATION	GE_INBD_SKU_TRANSFORMATION
SKU Transformation	PRSD Table	GE_PRSD_SKU_TRANSFORMATION	GE_PRSD_SKU_TRANSFORMATION
SKU Transformation	SPM table	GE_SPM_SKU_TRANSFORMATION	GE_SPM_SKU_TRANSFORMATION
Order Plan Transformation	INBD Table	GE_INBD_PLAN_ORDER	GE_INBD_PLAN_ORDER_AR
Order Plan Transformation	PRSD Table	GE_PRSD_PLAN_ORDER	GE_PRSD_PLAN_ORDER_AR

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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Onhand Balances Transformation	INBD Table	GE_INBD_SPM_ONHAND_BALANCE	GE_INBD_SPM_ONHAND_BALANCE
Onhand Balances Transformation	PRSD Table	GE_PRSD_SPM_ONHAND_BALANCE	GE_PRSD_SPM_ONHAND_BALANCE
SPM Review Reason Transformation	INBD Table	GE_INBD_SPM_REVIEW_REASON	GE_INBD_SPM_REVIEW_REASON
SPM Review Reason Transformation	PRSD Table	GE_PRSD_SPM_REVIEW_REASON	GE_PRSD_SPM_REVIEW_REASON
Allocation Restriction Matrix Transformation	INBD Table	GE_INBD_ALLOC_RESTRICT_MATRIX	GE_INBD_ALLC_RESTRICT_MATRIX
Allocation Restriction Matrix Transformation	PRSD Table	GE_PRSD_ALLOC_RESTRICT_MATRIX	GE_PRSD_ALLC_RESTRICT_MATRIX
Allocation Restriction Matrix Transformation	SPM Table	GE_SPM_ALLOC_RESTRICT_MATRIX	GE_SPM_ALLC_RESTRICT_MATRIX
Transaction Data Conversion	Staging Table	GE_TXN_CONV_STAGING_TABLE	NA
Transaction Data Conversion	Interface Table	GE_TXN_CONV_INTERFACE_TABLE	NA

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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Transaction Data Conversion	Error Table	GE_DMD_CONV_INTRFC_ERR_TABLE	NA
Transaction Data Conversion	Snapshot Table	GE_TXN_CONV_SNAPSHOT	NA
Transaction Data Conversion	INBD Table	GE_INBD_GLP_PART_TXN_CONV	GE_INBD_GLP_PART_TXN_CON
Transaction Data Conversion	PRSD Table	GE_PRSD_GLP_PART_TXN_CONV	GE_PRSD_GLP_PART_TXN_COM
Collaborative Planning Item Transformation	INBD Table	GE_INBD_ITEM_CP	GE_INBD_ITEM_CP_AR
Collaborative Planning Item Transformation	PRSD Table	GE_PRSD_ITEM_CP	GE_PRSD_ITEM_CP_AR
Collaborative Planning Item Transformation	Outbound Table	GE_SPM_ITEM_CP	GE_SPM_ITEM_CP_AR
Collaborative Planning Supply Transformation	INBD Table	GE_INBD_SUP_DMD_CP	GE_INBD_SUP_DMD_CP_AR
Collaborative Planning Supply Transformation	PRSD Table	GE_PRSD_SUP_DMD_CP	GE_PRSD_SUP_DMD_CP_AR

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Collaborative Planning Supply Transformation	Outbound Table	GE_SPM_SUP_DMD_CP	GE_SPM_SUP_DMD_CP_AR
NFF Rate Calculation	NFF Interface Table	GE_NFF_RATE_INTERFACE	NA
NFF Rate Override	NFF Override Table	GE_NFF_RATE_OVERRIDE	NA
NFF Rate Details	NFF Rate Table	GE_NFF_RATES_DETAILS	NA
SKU Information	SKU Information Table	GE_PART_SKU_INFORMATION	NA
SKU Interface	SKU Interface Table	GE_PART_SKU_INTERFACE	NA
Wash Rate Override	Wash Rate Override Table	GE_WASH_RATE_OVERRIDE	NA
Block Exclude SCS	Block Exclude SCS Table	GE_SCS_OAO_REFERENCE	NA
GLPROD Country Restriction Matrix	Inbound Table	GE_INBD_ITCS_CNTRY_REST_MATRIX	GE_INBD_ITCS_CNTRY_MATRI

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GLPROD Country Restriction Matrix	PRSD Table	GE_PRSD_ITCS_CNTRY_REST_MATRIX	GE_PRSD_ITCS_CNTRY_MATRI
GLPROD Country Restriction Matrix	Outbound Table	GE_SPM_ITCS_CNTRY_REST_MATRIX	GE_SPM_ITCS_CNTRY_MATRIX
SMR Table	SMR Table	GE_GPO_SPM_MASTER_DATA	GE_GPO_SPM_MASTER_DATA_
Wash Rate Analysis Table	Wash Rate Analysis Table	GE_PLN_WASH_RATE_TXN	NA
Wash Rate Analysis Table	Wash Rate Analysis Table	GE_PLN_WASH_RATE_SUPPLY	NA
HealthCheck	HealthCheck	GE_HEALTHCHECK_EXTRACTS_APEX	NA
HealthCheck	HealthCheck	GE_HEALTHCHECK_SNAPSHOT	NA
HealthCheck	HealthCheck	GE_HEALTHCHECK_EXTRACTS	NA
HealthCheck	HealthCheck	GE_THRESHOLD_TABLE	NA

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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HealthCheck	HealthCheck	GE_PDS_MAIL_SETTINGS	NA
HealthCheck	HealthCheck	GE_HC_LIMIT_TABLE	NA
HealthCheck	HealthCheck	GE_HEALTHCHECK_HEADERS_ALL	NA
HealthCheck	HealthCheck	GE_HEALTHCHECK_LINES_ALL	NA
HealthCheck	HealthCheck	GE_HEALTHCHECK_EXEC_DTL	NA
Supply Data Conversion	Staging Table	GE_APEX_STG_SUPPLY_CONV	NA
Supply Data Conversion	Interface Table	GE_IFACE_SUPPLY_CONV	NA
Supply Data Conversion	Error Table	GE_IFACE_ERR_SUPPLY_CONV	NA
Supply Data Conversion	Snapshot Table	GE_SNAPSHOT_SUPPLY_CONV	NA

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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Supply Data Conversion	INBD Table	GE_INBD_GLP_PART_SUPPLY_CONV	NA
Supply Data Conversion	PRSD Table	GE_PRSD_GLP_PART_SUPPLY_CONV	NA
Supply Data Conversion	Temp Table	GE_TEMP_SUPPLY_CONV	NA
Allocation CEX Transformation	Temp Table	GE_ALLOC_CEX_TEMP	NA
Forecast Variance Table	Variance Monitoring Table	GE_PLN_FRCST_PARTS_APEX	NA
Forecast Variance Table	Variance Monitoring Table	GE_PLN_FRCST_DFCT_PARTS_APEX	NA
Order Plan Variance Table	Variance Monitoring Table	GE_ORDER_PLAN_PERCENT_APEX	NA
Order Plan Variance Table	Variance Monitoring Table	GE_ORDER_PLAN_EXTRACT_APEX	NA
Manual Part ChangeUp Table	Table to store changeup relationship which is not maintained in MWS	GE_MANUAL_PARTCHANGEUP	NA

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Manual Part ChangeUp Table	Table to store the deleted record from GE_MANUAL_PARTCHANGEUP	GE_MANUAL_PARTCHANGEUP_AR	NA
OrderPlan Dashboard Data	Table to store OrderPlan dashboard	GE_ORDER_PLAN_DATA_STAT	NA
PDS Data Mapping	Table to store Functional Meaning and Transformation details for PDS Transformations displayed in APEX	APEX_DATA_MAPPING_TBL	NA
BI	Inbound table to get the data from BI (ODP) database with help of Middleware Interface	GE_INBD_SUPP_FRCST_PO_DETAILS	GE_INBD_SUPP_FRCST_PO_DT
BI	Processed Layer of Supply Forecast Data	GE_PRSD_SUPP_FRCST_PO_DETAILS	GE_PRSD_SUPP_FRCST_PO_DT
BI	Final Layer of Supply Forecast Data	GE_SPM_SUPP_FRCST_PO_DETAILS	GE_SPM_SUPP_FRCST_PO_DTL
IB Product Data	INBD table	GE_INBD_ODP_PRODUCT	GE_INBD_ODP_PRODUCT_AR
IB Product Data	PRSD table	GE_PRSD_ODP_PRODUCT	GE_PRSD_ODP_PRODUCT_AR
IB Product Data	SPM table	GE_SMP_ODP_PRODUCT	GE_SPM_ODP_PRODUCT_AR

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IB – Product Rollout data	INBD table	GE_INBD_ODP_PRODUCT_ROLLOUT	GE_INBD_ODP_PRODUCT_ROL
IB – Product Rollout data	PRSD table	GE_PRSD_ODP_PRODUCT_ROLLOUT	GE_PRSD_ODP_PRODUCT_ROL
IB – Product Rollout data	SPM table	GE_SMP_ODP_PRODUCT_ROLLOUT	GE_SPM_ODP_PRODUCT_ROL
IB – Early Life Failure	INBD table	GE_INBD_ODP_EARLY_LIFE_FAILURE	GE_INBD_ODP_ELF_AR
IB – Early Life Failure	PRSD table	GE_PRSD_ODP_EARLY_LIFE_FAILURE	GE_PRSD_ODP_ELF_AR
IB – Early Life Failure	SPM table	GE_SMP_ODP_EARLY_LIFE_FAILURE	GE_SPM_ODP_ELF_AR
IB- SBOM	INBD table	GE_INBD_ODP_PRODUCT_SBOM	GE_INBD_ODP_PRODUCT_SBO
IB- SBOM	PRSD table	GE_PRSD_ODP_PRODUCT_SBOM	GE_PRSD_ODP_PRODUCT_SBO
IB- SBOM	SPM table	GE_SMP_ODP_PRODUCT_SBOM	GE_SPM_ODP_PRODUCT_SBO

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IB- SCAN DATA	INBD table	GE_INBD_ODP_SCAN	GE_INBD_ODP_SCAN_AR
IB- SCAN DATA	PRSD table	GE_PRSD_ODP_SCAN	GE_PRSD_ODP_SCAN_AR
IB- SCAN DATA	SPM table	GE_SPM_ODP_SCAN	GE_SPM_ODP_SCAN_AR
IB -DBOM	PRSD table	GE_PRSD_DEMAND_BOM_FR	GE_PRSD_DEMAND_BOM_FR_A
IB-MONTHLY ROLLUP	PRSD table	MONTHLY_IB_ROLLUP_DATA	MONTHLY_IB_ROLLUP_DATA

2.2.7 Grants

Refer attached final Grant Script below.

Samples below

GRANT SELECT, INSERT, UPDATE ON PDS.GE_INBD_% TO INTF_ACCESS_USER;

GRANT SELECT, UPDATE ON PDS.GE_SPM_% TO INTF_ACCESS_USER;

GRANT SELECT ON PDS.GE_% TO PDS_RO;



GRANT_PDS_RO.sql



GRANT_PKG_INTF_A
CESS_USER.sql



Indexes.xlsx



GRANT_TABLE_INTF_
ACCESS_USER.sql

2.2.8 Validation Logic

GE_PLN_TRANSFORMATION.VALIDATE_QUERY will validate the Rules

2.2.8.1 Error Conditions

For future use

2.2.8.2 Warning Conditions

For future use

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2.2.9 Archive logic

Archive logic is utilized to Archive the data from INBD, PRSD and SPM table. It is at the discretion of the user to control the archival of the tables as per need.

If 'ARCHIVAL' Value of **Control_Type** column for particular table is set to 'YES' in GE_PLN_SYSTEM_CONTROLS, archive would be performed; else it would not be performed.

For BOOMI Interfaces to be able to call last stub explicitly, GE_PLN_TRANSLATION_LOOKUP table's value: 'MW_LAST_STUB_CALL' drives the call of PDS.GE_SPM_STUB procedure call from main PDS SP PDS. GE_PLN_TRANSFORMATION_CALL.

Translated Value 'Y' means main PDS SP will not initiate last stub and Translated Value 'N' means main call procedure will initiate last stub.

2.2.10 Purge logic

In this logic the user can control the deletion of the old data prior to the number of days provided.

'PURGE_DAYS' Value of **Control_Type** column of GE_PLN_SYSTEM_CONTROLS will drive the purging.

2.2.11 Debug logic

In this logic the user can control the enabling of debug through a flag. The debug message is visible for a particular process_id in PDS Tracking table GEMS_IFACE_SPM_TABLE

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2.3 Server (SQL Server)

SQL Server is hosted in Azure cloud platform which is connected to PDS database and used for reporting activity. There are some reports like SMR which are generated in PDS from SPM and PDS data, but it is also used by other teams. SQL server makes it visible for other teams so that they can use the report based on their requirement.

SQL Server is owned and supported by @GE HEALTHCARE AZURE MSSQL Team and maintained by SPM DevOps (spm_devops@ge.com)

2.3.1 Server details

Two SQL Servers are currently being used, below are the details.

Dev server

svc-spm-db-b8u.mgmt.cloud.ds.ge.com,2433 [10.210.27.100 (IP)]

Prod server

svc-spm-db-eoe.mgmt.cloud.ds.ge.com,3433 [10.155.88.236 (IP)]

2.3.2 Associated Database and DB link:

Three PDS databases are associated with SQL Server through DB links. Below are the details.

DB Link Name: PRD2PDS

DB Name: **PRD2PDS**

HOST = ora-mke1-scanp.am.health.ge.com

IP:

SCAN 1 IPv4 VIP: 3.231.202.103

SCAN 2 IPv4 VIP: 3.231.202.102

SCAN 3 IPv4 VIP: 3.231.202.101

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PORT = 1521

DB Link Name: STG2PDS

DB Name: **STG2PDS**

HOST = ora-mke1-scans.am.health.ge.com

IP:

SCAN 1 IPv4 VIP: 3.231.202.39

SCAN 2 IPv4 VIP: 3.231.202.38

SCAN 3 IPv4 VIP: 3.231.202.37

PORT = 1521

DB Link Name: DEV2PDS

DB Name: **DEV2PDS**

HOST = oramke1d-scan.am.health.ge.com

IP:

SCAN 1 IPv4 VIP: 3.231.203.198

SCAN 2 IPv4 VIP: 3.231.203.199

SCAN 3 IPv4 VIP: 3.231.203.197

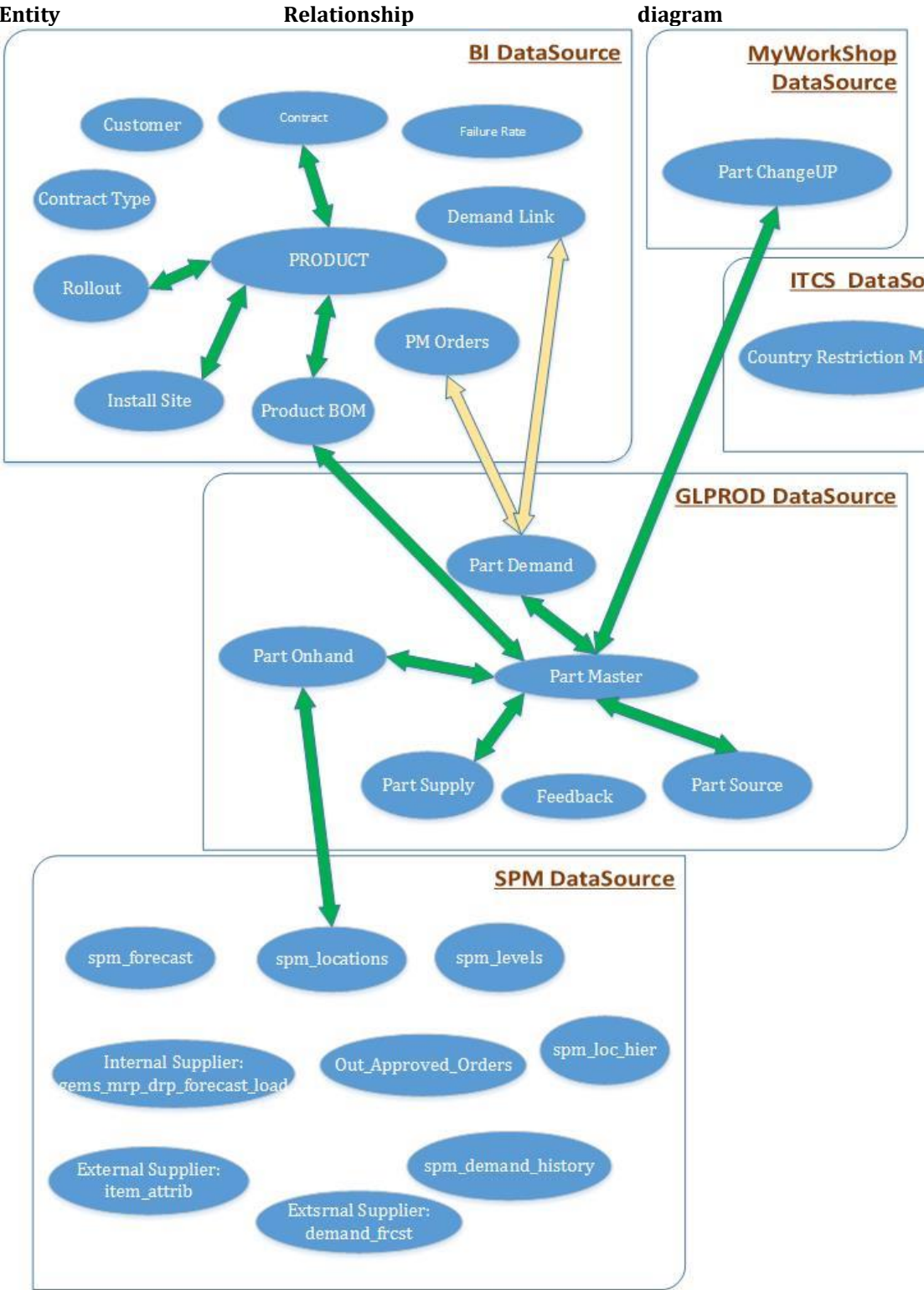
PORT = 1521

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3 Database Design

3.1 Logical Design

3.1.1 Entity



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Refer attached ER_diagram_detailed.xls for details of indexes and joining details.



ER_Diagram_Details
d.xlsx

3.1.2 Table details

3.1.2.1 GE_SPM_RULE_HEADERS_ALL

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
HEADER_ID	NUMBER	22	N	Unique number to identify row data in table
ACTIVITY_NAME	VARCHAR2	100	Y	Name of the transformation
DATASTREAM_WEIGHTAGE	NUMBER	22	Y	Sequence priority based on which the data_stream is executed
DATA_STREAM	VARCHAR2	100	Y	The standpoints on which data is segregated
ENABLE_FLAG	VARCHAR2	1	Y	Flag to determine whether a rule is enabled or not
SPM_ENABLE_FLAG	VARCHAR2	1	Y	Flag to determine if data will flow to Outbound (SPM) Table or not
DESCRIPTION	VARCHAR2	2000	Y	Description of data_stream
CREATED_BY	VARCHAR2	20	Y	Identification of user creating the rule
CREATED_DTTM	VARCHAR2	20	Y	Stores date and time of creation of rule
MODIFIED_BY	VARCHAR2	20	Y	Identification of user modifying the rule
MODIFIED_DTTM	VARCHAR2	20	Y	Stores date and time of modification of rule

3.1.2.2 GE_SPM_RULE_LINES_ALL

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
LINE_ID	NUMBER	22	N	Unique number to identify row data in table
HEADER_ID	NUMBER	22	Y	Foreign key connecting to header table
ACTIVITY_NAME	VARCHAR2	100	Y	Name of the transformation
DATA_STREAM	VARCHAR2	100	Y	The standpoints on which data is segregated

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SEQUENCE_NUM	NUMBER	22	Y	Sequence priority based on which the condition is added to the base query
LOGICAL_JOIN	VARCHAR2	3	Y	Identification of the level of flow of the data across various table layers
OPEN_BRACE	VARCHAR2	2	Y	(- to include conditional operations
FUNCTION	VARCHAR2	100	Y	Inclusion of functional operations
TABLE_CODE	VARCHAR2	20	Y	Alias name of the main table name
COLUMN_NAME	VARCHAR2	30	Y	Column names included in the queried tables
FUNCTION_VALUE	VARCHAR2	2000	Y	Value of the functional operations that is used
OPERATION	VARCHAR2	20	Y	The logical operators being used
CONDITION	VARCHAR2	2000	Y	The condition required to be met
CLOSE_BRACE	VARCHAR2	2	Y) - to include conditional operations
ENABLE_FLAG	VARCHAR2	1	Y	Determines whether a row of particular condition is enabled or not
CREATED_BY	VARCHAR2	20	Y	Identification of user creating the rule
CREATED_DTTM	VARCHAR2	20	Y	Stores date and time of creation of rule
MODIFIED_BY	VARCHAR2	20	Y	Identification of user modifying the rule
MODIFIED_DTTM	VARCHAR2	20	Y	Stores date and time of modification of rule

3.1.2.3. GE_PLN_TRANSFORMATION_BASE_DTL

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
ACTIVITY_NAME	VARCHAR2	100	Y	Name of the transformation
ACTIVITY_TYPE	VARCHAR2	100	Y	Activity_type determines the type of data modification query(Insert, Update)
ACTIVITY_SEQUENCE	NUMBER	22	Y	Sequence priority based on which the executable_query is executed
LOGICAL_FLOW	VARCHAR2	100	Y	Determines the data flow of the different layer. Mainly two types of data flows are there. IP: Data Flow from INBD to PRSD table. PS: Data Flow from PRSD to Outbound (SPM) table
BASE_QUERY	CLOB	4000	Y	Base Query
CREATED_BY	VARCHAR2	100	Y	Identification of user creating the rule
CREATED_DTTM	DATE	7	Y	Stores date and time of creation of rule
MODIFIED_BY	VARCHAR2	100	Y	Identification of user modifying the rule

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MODIFIED_DTTM	DATE	7	Y	Stores date and time of modification of rule
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3.1.2.4. GE_PLN_TRANSFORMATION_EXEC_DTL

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
ACTIVITY_NAME	VARCHAR2	100	Y	Name of the transformation
DATA_STREAM	VARCHAR2	100	Y	The standpoints on which data is segregated
WEIGHTAGE	NUMBER	22	Y	Sequence priority based on which the rule needs to be executed
ACTIVITY_TYPE	VARCHAR2	100	Y	Activity_type determines the type of data modification query (Insert, Update)
ACTIVITY_SEQUENCE	NUMBER	22	Y	Sequence priority based on which the executable_query for a particular rule is executed
LOGICAL_FLOW	VARCHAR2	100	Y	Determines the data flow of the different layer. Mainly two types of data flows are there. IP: Data Flow from INBD to PRSD table. PS: Data Flow from PRSD to Outbound (SPM) table
FINAL_QUERY	CLOB	4000	Y	Resultant of the base query and the rules which forms the ultimate query

3.1.2.5 GE_PLN_TRANSFORMATION_TABLES

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
TABLE_NAME	VARCHAR2	30	Y	Name of the table
TABLE_CODE	VARCHAR2	30	Y	The code which identifies the table
TABLE_ALIAS	VARCHAR2	20	Y	Alias of the table

3.1.2.6 GEMS_IFACE_SPM_TABLE

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
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PROCESS_ID	VARCHAR2	100	Y	Unique id which identifies individual processes
ACTIVITY_NAME	VARCHAR2	1000	Y	Name of the activity
CREATION_DATE	DATE	7	Y	The date when the activity is created
END_DATE	DATE	7	Y	The date when the activity gets completed
MESSAGE	CLOB	4000	Y	The status is written on the progress with the completion time
STATUS_FLAG	VARCHAR2	2	Y	The status flag denotes the completion status of the process
START_DATE	DATE	7	Y	Start date of individual activities
PROCEDURE_NAME	VARCHAR2	100	Y	Denotes which procedure is getting executed
PROGRAM_NAME	VARCHAR2	100	Y	Denotes which program for a particular procedure is getting executed
ACTIVITY_TYPE	VARCHAR2	1000	Y	Denotes the type of DML statement in base query
DATA_FLOW	VARCHAR2	1000	Y	It denotes if the data flow is for IP (Inbound to Process layer) or PS (Process to SPM layer)
DATA_STREAM	VARCHAR2	1000	Y	The name of the rule stream which is getting executed
DEBUG_MESSAGE	CLOB	4000	Y	If the debug mode is on, the debug message gets populated

3.1.2.7 GE_PLN_TRANSLATION_LOOKUP

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
LOOKUP_TYPE	VARCHAR2	250	Y	It denotes the purpose of look up
VALUE	VARCHAR2	250	Y	The value for which lookup is needed
TRANSLATED_VALUE	VARCHAR2	250	Y	The resulting value after translation depending on Lookup

3.1.2.8 GE_PLN_REFERENCE_LOOKUP

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
ITEM_NUMBER	VARCHAR2	40	Y	Stores the Item information
ADDITIONAL_INFO_10	VARCHAR2	500	Y	Stores the Organization Type where it is defined

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OLD_MODALITY	VARCHAR2	240	Y	Stores the old modality for each item
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3.1.2.9 GEMS_IFACE_SPM_TABLE_DETAILS

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
PROCESS_ID	NUMBER	22	Y	Unique id which identifies individual processes
ACTIVITY_NAME	VARCHAR2	100	Y	Name of the activity
FLOW	VARCHAR2	100	Y	It denotes if the data flow is for IP (Inbound to Process layer) or PS (Process to SPM layer)
DML_ACTIVITY	VARCHAR2	100	Y	Denotes the type of DML statement in base query
RULE_STREAM	VARCHAR2	100	Y	The name of the rule stream which is getting executed
EXEX_START_DATE	DATE	7	Y	Start date of individual activities
EXEC_END_DATE	DATE	7	Y	The date when the individual activity gets completed
STATUS_FLAG	VARCHAR2	10	Y	The status flag denotes the completion status of the process
STATUS_MESSAGE	CLOB	4000	Y	The status is written on the progress with the completion time
ROWS_PROCESSED	VARCHAR2	100	Y	Number of rows affected
ENTRY_LIST	NUMBER	22	Y	The sequence of the entry of records

3.1.2.10 GE_IFACE_SPM_RESTART_MW

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
PROCESS_ID	VARCHAR2	100	Y	Unique id which identifies individual processes
ACTIVITY_NAME	VARCHAR2	1000	Y	Name of the activity
MW_PROCESS_NAME	VARCHAR2	1000	Y	The batch name of the activity
RESTART_STEP_ID	NUMBER	22	Y	Restart id 1 signifies end to end flow needs to performed Restart id 2 signifies the failure at PDS Stored Procedure Restart id 3 signifies the failure at file transfer from PDS to destination system
CREATION_DATE	DATE	7	Y	The date of creation
CREATED_BY	VARCHAR2	1000	Y	The user who created the record
LAST_UPDATE_DATE	DATE	7	Y	The date of last updation
LAST_UPDATED_BY	VARCHAR2	1000	Y	The user who last updated the record
DESCRIPTION	VARCHAR2	500	Y	Description of RESTART_STEP_ID

3.1.2.11 GEMS_MW_IFACE_LOG_IT_TBL

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
PROCESS_ID	VARCHAR2	100	Y	Unique id which identifies individual processes
ACTIVITY_NAME	VARCHAR2	1000	Y	Name of the activity

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EXECUTION_SEQUENCE	NUMBER	22	Y	The sequence of execution of the activities
ACTIVITY_TYPE	VARCHAR2	1000	Y	Type of the activity
MESSAGE	VARCHAR2	4000	Y	Details of the execution of the activity
STATUS_FLAG	VARCHAR2	1	Y	Denotes status of the activity
START_DATE	DATE	7	Y	Start date of the activity execution
END_DATE	DATE	7	Y	End date of the activity execution
MW_PROCESS_NAME	VARCHAR2	1000	Y	Batch name of the middleware process

3.1.2.12 GE_GPO_SPM_MASTER_DATA

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
YEARFW	VARCHAR2	6	Y	
PART	VARCHAR2	80	Y	
PART_DESCRIPTION	VARCHAR2	255	Y	
LOC_HIERARCHY	VARCHAR2	80	Y	
SRC_POLE	VARCHAR2	8	Y	
PRIMARY_DEMAND_POLE	VARCHAR2	8	Y	
ANNUAL_AM_DMD	NUMBER	22	Y	
ANNUAL_AS_DMD	NUMBER	22	Y	
ANNUAL_EU_DMD	NUMBER	22	Y	
ANNUAL_AT_DMD	NUMBER	22	Y	
HAZARDOUS	VARCHAR2	1	Y	
PROPRIETARY_CODE	VARCHAR2	80	Y	
PART_PROCURABLE	VARCHAR2	1	Y	
PART_REPAIRABLE	VARCHAR2	1	Y	
MANUAL_NEW_BUY_OFF	VARCHAR2	1	Y	
PLANNED_FLAG	VARCHAR2	80	Y	
PLANNER_CODE	VARCHAR2	80	Y	
PLANNER_NAME	VARCHAR2	80	Y	
PLANNER	VARCHAR2	80	Y	
PART_STATUS	VARCHAR2	80	Y	
TCP	VARCHAR2	1	Y	
CREATION_DATE	VARCHAR2	20	Y	
BUSINESS	VARCHAR2	80	Y	
MODALITY_FAMILY	VARCHAR2	80	Y	
MODALITY	VARCHAR2	80	Y	
PART_CRITICAL	VARCHAR2	255	Y	
ABC_DMD_QTY	VARCHAR2	30	Y	
ABC_DMD_VALUE_GLOBAL	VARCHAR2	30	Y	
PRIMARY_VENDOR	VARCHAR2	80	Y	
PRIMARY_VENDOR_NAME	VARCHAR2	240	Y	

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PRIMARY_REPAIR_VENDOR	VARCHAR2	80	Y	
REPAIR_VENDOR_NAME	VARCHAR2	240	Y	
PROCUREMENT_LENGTH	NUMBER	22	Y	
REPAIR_LENGTH	NUMBER	22	Y	
MINOQ	NUMBER	22	Y	
LOTSIZE	NUMBER	22	Y	
EOQ	NUMBER	22	Y	
PART_COST	NUMBER	22	Y	
REPAIR_COST	NUMBER	22	Y	
ITEM_TYPE	VARCHAR2	80	Y	
LOCAL PROCUREMENT	VARCHAR2	971	Y	
REPAIR_LOCATIONS	VARCHAR2	647	Y	
INDICATED_POOL	NUMBER	22	Y	
REPAIR_WASH_RATE	NUMBER	22	Y	
RETURN_WASH_RATE	NUMBER	22	Y	
FROZEN_MIN	NUMBER	22	Y	
SAFETY_STOCK	NUMBER	22	Y	
ROP	NUMBER	22	Y	
STOCK_MAXIMUM	NUMBER	22	Y	
SRC_POLE_SL	NUMBER	22	Y	
SRC_POLE_SMAX	NUMBER	22	Y	
ONHANDGOODROLLEDUP	NUMBER	22	Y	
ONHANDCHILDONLY	NUMBER	22	Y	
ALLOCATIONINTRANSIT	NUMBER	22	Y	
INTRANSIT_WITHIN_POLE	NUMBER	22	Y	
RESERVEDQTY	NUMBER	22	Y	
AVAILABLEONHANDGOOD	NUMBER	22	Y	
BACKORDER	NUMBER	22	Y	
BACKORDER_CHILD_ROLLEDUP	NUMBER	22	Y	
REC_PROCURE_ORDERS	NUMBER	22	Y	
ON_ORDER	NUMBER	22	Y	
INREPAIR	NUMBER	22	Y	
ONHANDBAD	NUMBER	22	Y	
OHBADSALESRETURN	NUMBER	22	Y	
DEF_OH	NUMBER	22	Y	
FEUNUSEDQTY	NUMBER	22	Y	
FEUSEDQTY	NUMBER	22	Y	
PUDOUNUSEDQTY	NUMBER	22	Y	
PUDOUSEDQTY	NUMBER	22	Y	

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DEFECTIVEINTRANSIT	NUMBER	22	Y	
REPAIRINTRANSIT	NUMBER	22	Y	
GDRTNSFCSTATLT	NUMBER	22	Y	
DMD_FREQUENCY	NUMBER	22	Y	
DMD_25_36	NUMBER	22	Y	
DMD_13_24	NUMBER	22	Y	
DMD_PAST_12	NUMBER	22	Y	
DEMAND_TREND	NUMBER	22	Y	
ANNUAL_FE_GD_RETURN	NUMBER	22	Y	
FE_RETURN_RATE	NUMBER	22	Y	
DMD_WITH_ADJUST_PAST_12	NUMBER	22	Y	
CURRENT_MONTH_ADJ_DMD	NUMBER	22	Y	
MONTH1_ADJ_DMD	NUMBER	22	Y	
MONTH2_ADJ_DMD	NUMBER	22	Y	
MONTH3_ADJ_DMD	NUMBER	22	Y	
MONTH4_ADJ_DMD	NUMBER	22	Y	
MONTH5_ADJ_DMD	NUMBER	22	Y	
MONTH6_ADJ_DMD	NUMBER	22	Y	
MONTH7_ADJ_DMD	NUMBER	22	Y	
MONTH8_ADJ_DMD	NUMBER	22	Y	
MONTH9_ADJ_DMD	NUMBER	22	Y	
MONTH10_ADJ_DMD	NUMBER	22	Y	
MONTH11_ADJ_DMD	NUMBER	22	Y	
MONTH12_ADJ_DMD	NUMBER	22	Y	
CURRENT_MONTH_FCST	NUMBER	22	Y	
MONTH2_FCST	NUMBER	22	Y	
MONTH3_FCST	NUMBER	22	Y	
MONTH4_FCST	NUMBER	22	Y	
MONTH5_FCST	NUMBER	22	Y	
MONTH6_FCST	NUMBER	22	Y	
MONTH7_FCST	NUMBER	22	Y	
MONTH8_FCST	NUMBER	22	Y	
MONTH9_FCST	NUMBER	22	Y	
MONTH10_FCST	NUMBER	22	Y	
MONTH11_FCST	NUMBER	22	Y	
MONTH12_FCST	NUMBER	22	Y	
ANNUAL_FCST	NUMBER	22	Y	
NEXT_MTH_SWAP_FCST	NUMBER	22	Y	
ANNUAL_FE_GD_RETURN_FCST	NUMBER	22	Y	

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ANNUAL_HARVEST_FCST	NUMBER	22	Y	
TOTAL_FE_ORDERS	NUMBER	22	Y	
TOTAL_FE_ORDERED_QTY	NUMBER	22	Y	
AVG_ORDER_QTY	NUMBER	22	Y	
PASTDUEPROCUREMENTQTY	NUMBER	22	Y	
NONPASTDUEPROCUREMENTQTY	NUMBER	22	Y	
YEARPROCQTY	NUMBER	22	Y	
DAY1PROCQTY	NUMBER	22	Y	
CURRENT_MONTH_NET_CHANGE	NUMBER	22	Y	
MONTH1_NET_CHANGE	NUMBER	22	Y	
MONTH2_NET_CHANGE	NUMBER	22	Y	
MONTH3_NET_CHANGE	NUMBER	22	Y	
MONTH4_NET_CHANGE	NUMBER	22	Y	
MONTH5_NET_CHANGE	NUMBER	22	Y	
MONTH6_NET_CHANGE	NUMBER	22	Y	
MONTH_GREATER_THAN_6	NUMBER	22	Y	
PART_HOLD	VARCHAR2	80	Y	
NO_SOURCE	VARCHAR2	1	Y	
TECH_OBSO	VARCHAR2	1	Y	
FINANCIAL_OBSO	VARCHAR2	1	Y	
SOFTWARE	VARCHAR2	1	Y	
SHELF_LIFE	VARCHAR2	1	Y	
LTB	VARCHAR2	1	Y	
EARLY_REPAIR	VARCHAR2	1	Y	
SWAP	VARCHAR2	1	Y	
HARVEST	VARCHAR2	80	Y	
GPO_CAT_SET_CATEGORY	VARCHAR2	80	Y	
NPI	VARCHAR2	1	Y	
NPI_PROGRAM_NAME	VARCHAR2	255	Y	
TITAN_U07	CHAR	1	Y	
TITAN_U08	CHAR	1	Y	
TITAN_U09	CHAR	1	Y	
PART_YEARS_OLD	NUMBER	22	Y	
MILESTONE	VARCHAR2	80	Y	
BLOCKPROCURE	VARCHAR2	255	Y	
PRIORITYSCORE	NUMBER	22	Y	
SUPPLYHEALTHSCORE	NUMBER	22	Y	
NOOFOPPORTUNITIES	NUMBER	22	Y	
MAX	NUMBER	22	Y	

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SUPPLY_MIN	NUMBER	22	Y	
REPAIR_ALL	VARCHAR2	1	Y	
SUPPLY_MAX	NUMBER	22	Y	
HEAVY_WEIGHT_CAT	CHAR	1	Y	
EOSL_DATE	VARCHAR2	20	Y	
M8B_DATE	VARCHAR2	20	Y	
UNHEALTHY_ACTION	NUMBER	22	Y	
UNHEALTHY_ACTION_NONOVERDUE	NUMBER	22	Y	

3.1.2.13 GE_GPO_SPM_MASTER_DATA_AR

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE	EXPLANATION
YEARFW	VARCHAR2	6	Y	
PART	VARCHAR2	80	Y	
PART_DESCRIPTION	VARCHAR2	255	Y	
LOC_HIERARCHY	VARCHAR2	80	Y	
SRC_POLE	VARCHAR2	8	Y	
PRIMARY_DEMAND_POLE	VARCHAR2	8	Y	
ANNUAL_AM_DMD	NUMBER	22	Y	
ANNUAL_AS_DMD	NUMBER	22	Y	
ANNUAL_EU_DMD	NUMBER	22	Y	
ANNUAL_AT_DMD	NUMBER	22	Y	
HAZARDOUS	VARCHAR2	1	Y	
PROPRIETARY_CODE	VARCHAR2	80	Y	
PART_PROCURABLE	VARCHAR2	1	Y	
PART_REPAIRABLE	VARCHAR2	1	Y	
MANUAL_NEW_BUY_OFF	VARCHAR2	1	Y	
PLANNED_FLAG	VARCHAR2	80	Y	
PLANNER_CODE	VARCHAR2	80	Y	
PLANNER_NAME	VARCHAR2	80	Y	
PLANNER	VARCHAR2	80	Y	
PART_STATUS	VARCHAR2	80	Y	
TCP	VARCHAR2	1	Y	
CREATION_DATE	VARCHAR2	20	Y	
BUSINESS	VARCHAR2	80	Y	
MODALITY_FAMILY	VARCHAR2	80	Y	
MODALITY	VARCHAR2	80	Y	
PART_CRITICAL	VARCHAR2	255	Y	
ABC_DMD_QTY	VARCHAR2	30	Y	

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ABC_DMD_VALUE_GLOBAL	VARCHAR2	30	Y	
PRIMARY_VENDOR	VARCHAR2	80	Y	
PRIMARY_VENDOR_NAME	VARCHAR2	240	Y	
PRIMARY_REPAIR_VENDOR	VARCHAR2	80	Y	
REPAIR_VENDOR_NAME	VARCHAR2	240	Y	
PROCUREMENT_LENGTH	NUMBER	22	Y	
REPAIR_LENGTH	NUMBER	22	Y	
MINOQ	NUMBER	22	Y	
LOTSIZE	NUMBER	22	Y	
EOQ	NUMBER	22	Y	
PART_COST	NUMBER	22	Y	
REPAIR_COST	NUMBER	22	Y	
ITEM_TYPE	VARCHAR2	80	Y	
LOCAL_PROCURMENT	VARCHAR2	971	Y	
REPAIR_LOCATIONS	VARCHAR2	647	Y	
INDICATED_POOL	NUMBER	22	Y	
REPAIR_WASH_RATE	NUMBER	22	Y	
RETURN_WASH_RATE	NUMBER	22	Y	
FROZEN_MIN	NUMBER	22	Y	
SAFETY_STOCK	NUMBER	22	Y	
ROP	NUMBER	22	Y	
STOCK_MAXIMUM	NUMBER	22	Y	
SRC_POLE_SL	NUMBER	22	Y	
SRC_POLE_SMAX	NUMBER	22	Y	
ONHANDGOODROLLEDUP	NUMBER	22	Y	
ONHANDCHILDONLY	NUMBER	22	Y	
ALLOCATIONINTRANSIT	NUMBER	22	Y	
INTRANSIT_WITHIN_POLE	NUMBER	22	Y	
RESERVEDQTY	NUMBER	22	Y	
AVAILABLEONHANDGOOD	NUMBER	22	Y	
BACKORDER	NUMBER	22	Y	
BACKORDER_CHILD_ROLLEDUP	NUMBER	22	Y	
REC_PROCURE_ORDERS	NUMBER	22	Y	
ON_ORDER	NUMBER	22	Y	
INREPAIR	NUMBER	22	Y	
ONHANDBAD	NUMBER	22	Y	
OHBADSALESRETURN	NUMBER	22	Y	
DEF_OH	NUMBER	22	Y	
FEUNUSEDQTY	NUMBER	22	Y	

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FEUSEDQTY	NUMBER	22	Y	
PUDOUNUSEDQTY	NUMBER	22	Y	
PUDOUSEDQTY	NUMBER	22	Y	
DEFECTIVEINTRANSIT	NUMBER	22	Y	
REPAIRINTRANSIT	NUMBER	22	Y	
GDRSNSFCSTATLT	NUMBER	22	Y	
DMD_FREQUENCY	NUMBER	22	Y	
DMD_25_36	NUMBER	22	Y	
DMD_13_24	NUMBER	22	Y	
DMD_PAST_12	NUMBER	22	Y	
DEMAND_TREND	NUMBER	22	Y	
ANNUAL_FE_GD_RETURN	NUMBER	22	Y	
FE_RETURN_RATE	NUMBER	22	Y	
DMD_WITH_ADJUST_PAST_12	NUMBER	22	Y	
CURRENT_MONTH_ADJ_DMD	NUMBER	22	Y	
MONTH1_ADJ_DMD	NUMBER	22	Y	
MONTH2_ADJ_DMD	NUMBER	22	Y	
MONTH3_ADJ_DMD	NUMBER	22	Y	
MONTH4_ADJ_DMD	NUMBER	22	Y	
MONTH5_ADJ_DMD	NUMBER	22	Y	
MONTH6_ADJ_DMD	NUMBER	22	Y	
MONTH7_ADJ_DMD	NUMBER	22	Y	
MONTH8_ADJ_DMD	NUMBER	22	Y	
MONTH9_ADJ_DMD	NUMBER	22	Y	
MONTH10_ADJ_DMD	NUMBER	22	Y	
MONTH11_ADJ_DMD	NUMBER	22	Y	
MONTH12_ADJ_DMD	NUMBER	22	Y	
CURRENT_MONTH_FCST	NUMBER	22	Y	
MONTH2_FCST	NUMBER	22	Y	
MONTH3_FCST	NUMBER	22	Y	
MONTH4_FCST	NUMBER	22	Y	
MONTH5_FCST	NUMBER	22	Y	
MONTH6_FCST	NUMBER	22	Y	
MONTH7_FCST	NUMBER	22	Y	
MONTH8_FCST	NUMBER	22	Y	
MONTH9_FCST	NUMBER	22	Y	
MONTH10_FCST	NUMBER	22	Y	
MONTH11_FCST	NUMBER	22	Y	
MONTH12_FCST	NUMBER	22	Y	

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ANNUAL_FCST	NUMBER	22	Y	
NEXT_MTH_SWAP_FCST	NUMBER	22	Y	
ANNUAL_FE_GD_RETURN_FCST	NUMBER	22	Y	
ANNUAL_HARVEST_FCST	NUMBER	22	Y	
TOTAL_FE_ORDERS	NUMBER	22	Y	
TOTAL_FE_ORDERED_QTY	NUMBER	22	Y	
AVG_ORDER_QTY	NUMBER	22	Y	
PASTDUEPROCUREMENTQTY	NUMBER	22	Y	
NONPASTDUEPROCUREMENTQTY	NUMBER	22	Y	
YEARPROCQTY	NUMBER	22	Y	
DAY1PROCQTY	NUMBER	22	Y	
CURRENT_MONTH_NET_CHANGE	NUMBER	22	Y	
MONTH1_NET_CHANGE	NUMBER	22	Y	
MONTH2_NET_CHANGE	NUMBER	22	Y	
MONTH3_NET_CHANGE	NUMBER	22	Y	
MONTH4_NET_CHANGE	NUMBER	22	Y	
MONTH5_NET_CHANGE	NUMBER	22	Y	
MONTH6_NET_CHANGE	NUMBER	22	Y	
MONTH_GREATER_THAN_6	NUMBER	22	Y	
PART_HOLD	VARCHAR2	80	Y	
NO_SOURCE	VARCHAR2	1	Y	
TECH_OBSO	VARCHAR2	1	Y	
FINANCIAL_OBSO	VARCHAR2	1	Y	
SOFTWARE	VARCHAR2	1	Y	
SHELF_LIFE	VARCHAR2	1	Y	
LTB	VARCHAR2	1	Y	
EARLY_REPAIR	VARCHAR2	1	Y	
SWAP	VARCHAR2	1	Y	
HARVEST	VARCHAR2	80	Y	
GPO_CAT_SET_CATEGORY	VARCHAR2	80	Y	
NPI	VARCHAR2	1	Y	
NPI_PROGRAM_NAME	VARCHAR2	255	Y	
TITAN_U07	CHAR	1	Y	
TITAN_U08	CHAR	1	Y	
TITAN_U09	CHAR	1	Y	
PART_YEARS_OLD	NUMBER	22	Y	
MILESTONE	VARCHAR2	80	Y	
BLOCKPROCURE	VARCHAR2	255	Y	
PRIORITYSCORE	NUMBER	22	Y	

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SUPPLYHEALTHSCORE	NUMBER	22	Y	
NOOFOPPORTUNITIES	NUMBER	22	Y	
MAX	NUMBER	22	Y	
SUPPLY_MIN	NUMBER	22	Y	
REPAIR_ALL	VARCHAR2	1	Y	
SUPPLY_MAX	NUMBER	22	Y	
HEAVY_WEIGHT_CAT	CHAR	1	Y	
EOSL_DATE	VARCHAR2	20	Y	
M8B_DATE	VARCHAR2	20	Y	
UNHEALTHY_ACTION	NUMBER	22	Y	
UNHEALTHY_ACTION_NONOVERDUE	NUMBER	22	Y	

3.1.2.14 GE_INBD_SUPP_FRCST_PO_DETAILS

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
PO_HEADER_ID	NUMBER	22	Y
PO_NUMBER	VARCHAR2	20	Y
PO_TYPE	VARCHAR2	25	Y
PO_HEADER_CLOSED_CODE	VARCHAR2	25	Y
PO_HEADER_CLASSIFICATION	VARCHAR2	150	Y
PO_HEADER_AUTHORIZATION_STATUS	VARCHAR2	240	Y
SHIP_TO_ORGANIZATION_CODE	VARCHAR2	3	Y
VENDOR_NUMBER	VARCHAR2	30	Y
VENDOR_NAME	VARCHAR2	240	Y
VENDOR_SITE	VARCHAR2	45	Y
VENDOR_PRODUCT_NUMBER	VARCHAR2	25	Y
PO_HEADER_CREATION_DATE	DATE	7	Y
PO_HEADER_CREATED_BY	VARCHAR2	100	Y
PO_HEADER_LAST_UPDATE_DATE	DATE	7	Y
PO_HEADER_LAST_UPDATED_BY	VARCHAR2	100	Y
PO_HEADER_APPROVAL_DATE	DATE	7	Y
PO_LINE_ID	NUMBER	22	Y
LINE_NUM	NUMBER	22	Y
PO_LINE_CLOSED_CODE	VARCHAR2	25	Y
ITEM_NUMBER	VARCHAR2	40	Y
CURRENT_NEED_BY_DATE	DATE	7	Y
PROMISED_DATE	DATE	7	Y
PO_LINE_LAST_UPDATE_DATE	DATE	7	Y
LINE_LOCATION_ID	NUMBER	22	Y
SHIPMENT_NUMBER	NUMBER	22	Y
LOC_CLOSED_CODE	VARCHAR2	30	Y

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QUANTITY_ORDERED	NUMBER	22	Y
QUANTITY_RECEIVED	NUMBER	22	Y
QUANTITY_CANCELLED	NUMBER	22	Y
QTY_DELIVERED	NUMBER	22	Y
PUT_AWAY_QUANTITY	NUMBER	22	Y
LINKED_PO_SO_LINE_NUMBER	VARCHAR2	150	Y
LOC_CREATION_DATE	DATE	7	Y
LOC_LAST_UPDATE_DATE	DATE	7	Y
RELEASE_NUM	NUMBER	22	Y
RELEASE_PO_AUTH_STATUS	VARCHAR2	25	Y
PO_RELEASE_APPROVAL_DATE	DATE	7	Y
RELEASE_PO_CREATION_DATE	DATE	7	Y
REVISION_NUM	NUMBER	22	Y
APPROVED_REVISION_NUM	NUMBER	22	Y
REVISION_APPROVED_DATE	DATE	7	Y
FIRST_NEED_BY_DATE	DATE	7	Y
REVISION_NEED_BY_DATE	DATE	7	Y
INITIAL_ORDER_QUANTITY	NUMBER	22	Y
REVISION_ORDER_QUANTITY	NUMBER	22	Y
FIRST_RECEIPT_DATE	DATE	7	Y
FIRST_RECEIPT_QTY	NUMBER	22	Y
LAST_RECEIPT_DATE	DATE	7	Y
LAST_RECEIPT_QTY	NUMBER	22	Y
FIRST_PUTAWAY_DATE	DATE	7	Y
FIRST_PUTAWAY_QTY	NUMBER	22	Y
LAST_PUTAWAY_DATE	DATE	7	Y
LAST_PUTAWAY_QTY	NUMBER	22	Y
RECOMMENDATION_TYPE	VARCHAR2	25	Y
PO_CLASSIFICATION	VARCHAR2	150	Y
PO_PRICE	NUMBER	22	Y
PROMISED_DATE_OF_REVISION	DATE	7	Y
QUANTITY_RECEIVED_REV	NUMBER	22	Y
DUE_QUANTITY	NUMBER	22	Y
CHANGE_CATEGORY	VARCHAR2	1000	Y
DATE_CHANGE	VARCHAR2	1000	Y
DUE_QUANTITY_CHANGE	VARCHAR2	1000	Y
ADDITIONAL_INFO_1	VARCHAR2	1000	Y
ADDITIONAL_INFO_2	VARCHAR2	1000	Y
ADDITIONAL_INFO_3	VARCHAR2	1000	Y

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ADDITIONAL_INFO_4	VARCHAR2	1000	Y
ADDITIONAL_INFO_5	VARCHAR2	1000	Y
ADDITIONAL_INFO_6	NUMBER	22	Y
ADDITIONAL_INFO_7	NUMBER	22	Y
ADDITIONAL_INFO_8	NUMBER	22	Y
ADDITIONAL_INFO_9	DATE	7	Y
ADDITIONAL_INFO_10	VARCHAR2	1000	Y
PROCESSED_FLAG	VARCHAR2	1	Y
INBD_PROCESSED_DATE	DATE	7	Y
PROCESS_ID	VARCHAR2	100	Y

3.1.2.15 GE_PRSD_SUPP_FRCST_PO_DETAILS

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
PO_HEADER_ID	NUMBER	22	Y
PO_NUMBER	VARCHAR2	20	Y
PO_TYPE	VARCHAR2	25	Y
PO_HEADER_CLOSED_CODE	VARCHAR2	25	Y
PO_HEADER_CLASSIFICATION	VARCHAR2	150	Y
PO_HEADER_AUTHORIZATION_STATUS	VARCHAR2	240	Y
SHIP_TO_ORGANIZATION_CODE	VARCHAR2	3	Y
VENDOR_NUMBER	VARCHAR2	30	Y
VENDOR_NAME	VARCHAR2	240	Y
VENDOR_SITE	VARCHAR2	45	Y
VENDOR_PRODUCT_NUMBER	VARCHAR2	25	Y
PO_HEADER_CREATION_DATE	DATE	7	Y
PO_HEADER_CREATED_BY	VARCHAR2	100	Y
PO_HEADER_LAST_UPDATE_DATE	DATE	7	Y
PO_HEADER_LAST_UPDATED_BY	VARCHAR2	100	Y
PO_HEADER_APPROVAL_DATE	DATE	7	Y
PO_LINE_ID	NUMBER	22	Y
LINE_NUM	NUMBER	22	Y
PO_LINE_CLOSED_CODE	VARCHAR2	25	Y
ITEM_NUMBER	VARCHAR2	40	Y
CURRENT_NEED_BY_DATE	DATE	7	Y
PROMISED_DATE	DATE	7	Y
PO_LINE_LAST_UPDATE_DATE	DATE	7	Y
LINE_LOCATION_ID	NUMBER	22	Y
SHIPMENT_NUMBER	NUMBER	22	Y

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LOC_CLOSED_CODE	VARCHAR2	30	Y
QUANTITY_ORDERED	NUMBER	22	Y
QUANTITY_RECEIVED	NUMBER	22	Y
QUANTITY_CANCELLED	NUMBER	22	Y
QTY_DELIVERED	NUMBER	22	Y
PUT_AWAY_QUANTITY	NUMBER	22	Y
LINKED_PO_SO_LINE_NUMBER	VARCHAR2	150	Y
LOC_CREATION_DATE	DATE	7	Y
LOC_LAST_UPDATE_DATE	DATE	7	Y
RELEASE_NUM	NUMBER	22	Y
RELEASE_PO_AUTH_STATUS	VARCHAR2	25	Y
PO_RELEASE_APPROVAL_DATE	DATE	7	Y
RELEASE_PO_CREATION_DATE	DATE	7	Y
REVISION_NUM	NUMBER	22	Y
APPROVED_REVISION_NUM	NUMBER	22	Y
REVISION_APPROVED_DATE	DATE	7	Y
FIRST_NEED_BY_DATE	DATE	7	Y
REVISION_NEED_BY_DATE	DATE	7	Y
INITIAL_ORDER_QUANTITY	NUMBER	22	Y
REVISION_ORDER_QUANTITY	NUMBER	22	Y
FIRST_RECEIPT_DATE	DATE	7	Y
FIRST_RECEIPT_QTY	NUMBER	22	Y
LAST_RECEIPT_DATE	DATE	7	Y
LAST_RECEIPT_QTY	NUMBER	22	Y
FIRST_PUTAWAY_DATE	DATE	7	Y
FIRST_PUTAWAY_QTY	NUMBER	22	Y
LAST_PUTAWAY_DATE	DATE	7	Y
LAST_PUTAWAY_QTY	NUMBER	22	Y
RECOMMENDATION_TYPE	VARCHAR2	25	Y
PO_CLASSIFICATION	VARCHAR2	150	Y
PO_PRICE	NUMBER	22	Y
PROMISED_DATE_OF_REVISION	DATE	7	Y
QUANTITY_RECEIVED_REV	NUMBER	22	Y
DUE_QUANTITY	NUMBER	22	Y
CHANGE_CATEGORY	VARCHAR2	1000	Y
DATE_CHANGE	VARCHAR2	1000	Y
DUE_QUANTITY_CHANGE	VARCHAR2	1000	Y
ADDITIONAL_INFO_1	VARCHAR2	1000	Y
ADDITIONAL_INFO_2	VARCHAR2	1000	Y

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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ADDITIONAL_INFO_3	VARCHAR2	1000	Y
ADDITIONAL_INFO_4	VARCHAR2	1000	Y
ADDITIONAL_INFO_5	VARCHAR2	1000	Y
ADDITIONAL_INFO_6	NUMBER	22	Y
ADDITIONAL_INFO_7	NUMBER	22	Y
ADDITIONAL_INFO_8	NUMBER	22	Y
ADDITIONAL_INFO_9	DATE	7	Y
ADDITIONAL_INFO_10	VARCHAR2	1000	Y
PO_IDENTIFIER	VARCHAR2	1000	Y
PO_DT_IDENTIFIER	VARCHAR2	1000	Y
PO_RULES	VARCHAR2	1000	Y
RULE_STREAM	VARCHAR2	100	Y
PROCESSED_FLAG	VARCHAR2	1	Y
INBD_PROCESSED_DATE	DATE	7	Y
PRSD_PROCESSED_DATE	DATE	7	Y
PROCESS_ID	VARCHAR2	100	Y

3.1.2.16 GE_SPM_SUPP_FRCST_PO_DETAILS

COLUMN_NAME	DATA_TYPE	DATA_LENGTH	NULLABLE
HOSTORDERID	VARCHAR2	80	Y
HOSTLOCID	VARCHAR2	80	Y
HOSTPARTID	VARCHAR2	80	Y
HOSTVENDORLOCID	VARCHAR2	80	Y
HOSTTRANSPORTMODEID	VARCHAR2	80	Y
HOSTPURCHASEORDERID	VARCHAR2	80	Y
ORDERPLANNED	CHAR	1	Y
ORDERSTATUS	CHAR	1	Y
PLANORDERDATE	CHAR	8	Y
PLANRCVDATE	CHAR	8	Y
PLANAVAILDATE	CHAR	8	Y
PLANQUANTITY	NUMBER	22	Y
RECEIVEDQUANTITY	NUMBER	22	Y
ORDERSTATUSLASTUPDATE	CHAR	8	Y
ACTUALORDERDATE	CHAR	8	Y
ORDERTYPEID	NUMBER	22	Y
PWSCUSTOM1	VARCHAR2	80	Y
PWSCUSTOM2	VARCHAR2	255	Y
PWSCUSTOM3	VARCHAR2	80	Y
PWSCUSTOM4	VARCHAR2	80	Y

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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PWSCUSTOM5	VARCHAR2	80	Y
PWSCUSTOM6	VARCHAR2	80	Y
PWSCUSTOM7	VARCHAR2	80	Y
PWSCUSTOM8	VARCHAR2	80	Y
PWSCUSTOM10	VARCHAR2	80	Y
PWSCUSTOM11	VARCHAR2	80	Y
PWSCUSTOM12	VARCHAR2	80	Y
PWSCUSTOM13	VARCHAR2	80	Y
PWSCUSTOM14	VARCHAR2	80	Y
PWSCUSTOM15	VARCHAR2	80	Y
COUNTINOP	VARCHAR2	1	Y
PWSCUSTOM16	VARCHAR2	80	Y
PWSCUSTOM17	VARCHAR2	100	Y
PWSCUSTOM18	VARCHAR2	80	Y
PWSCUSTOM19	VARCHAR2	80	Y
PWSCUSTOM20	VARCHAR2	80	Y
PWSCUSTOM21	VARCHAR2	80	Y
PWSCUSTOM22	VARCHAR2	80	Y
PWSCUSTOM23	VARCHAR2	80	Y
PWSCUSTOM25	VARCHAR2	80	Y
PWSCUSTOM31	VARCHAR2	255	Y
PWSCUSTOM32	VARCHAR2	255	Y
PWSCUSTOM33	VARCHAR2	255	Y
PWSCUSTOM34	VARCHAR2	255	Y
PWSCUSTOM35	VARCHAR2	255	Y
PWSCUSTOM36	VARCHAR2	255	Y
PWSCUSTOM37	VARCHAR2	255	Y
PWSCUSTOM38	VARCHAR2	255	Y
PWSCUSTOM39	VARCHAR2	255	Y
PWSCUSTOM40	VARCHAR2	255	Y
PWSCUSTOM41	VARCHAR2	255	Y
LOC_CREATION_DATE	VARCHAR2	100	Y
QUANTITY_CANCELLED	VARCHAR2	100	Y
DUE_QUANTITY	VARCHAR2	100	Y
APPROVED_REVISION_NUM	NUMBER	22	Y
REVISION_APPROVE_DATE	VARCHAR2	100	Y
REVISION_NEED_BY_DATE	VARCHAR2	100	Y
REVISION_QUANTITY	NUMBER	22	Y
FIRST_NEED_BY_DATE	VARCHAR2	100	Y

GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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INITIAL_ORDER_QUANTITY	NUMBER	22	Y
FIRST_RECEIPT_QTY	NUMBER	22	Y
LAST_RECEIPT_DATE	VARCHAR2	100	Y
LAST_RECEIPT_QTY	NUMBER	22	Y
FIRST_PUTAWAY_DATE	VARCHAR2	100	Y
FIRST_PUTAWAY_QTY	NUMBER	22	Y
LAST_PUTAWAY_DATE	VARCHAR2	100	Y
LAST_PUTAWAY_QTY	NUMBER	22	Y
CANCEL_DATE	VARCHAR2	100	Y
PO_PRICE	NUMBER	22	Y
PROMISED_DATE_OF_REVISION	VARCHAR2	1000	Y
QUANTITY_RECEIVED_REV	NUMBER	22	Y
CHANGE_CATEGORY	VARCHAR2	1000	Y
DATE_CHANGE	VARCHAR2	1000	Y
DUE_QUANTITY_CHANGE	VARCHAR2	1000	Y
ADDITIONAL_INFO_1	VARCHAR2	1000	Y
ADDITIONAL_INFO_2	VARCHAR2	1000	Y
ADDITIONAL_INFO_3	VARCHAR2	1000	Y
ADDITIONAL_INFO_4	VARCHAR2	1000	Y
ADDITIONAL_INFO_5	VARCHAR2	1000	Y
ADDITIONAL_INFO_6	NUMBER	22	Y
ADDITIONAL_INFO_7	NUMBER	22	Y
ADDITIONAL_INFO_8	NUMBER	22	Y
ADDITIONAL_INFO_9	VARCHAR2	1000	Y
ADDITIONAL_INFO_10	VARCHAR2	1000	Y
RULE_STREAM	VARCHAR2	40	Y
PROCESSED_FLAG	VARCHAR2	1	Y
PROCESSED_DATE	DATE	7	Y
PROCESS_ID	VARCHAR2	100	Y

3.1.3 Desired Table Changes

All are new objects.

3.2 Physical Design

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3.2.1 Table Space Requirements

Tablespaces	Allocated to Schema	Minimum Size (MB)
PDS_DAT01	PDS	153600

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4 Integration Information

4.1 Application Interface Design

All the integration information is captured and maintained in Middleware documents – IRS. Refer Appendix or SPM Traceability Matrix.

4.2 Interface Process Design

All the integration information is captured and maintained in Middleware documents – IRS. Refer Appendix or SPM Traceability Matrix.

4.3 BOOMI

All the integration information is captured and maintained in Middleware documents – IRS. Refer Appendix or SPM Traceability Matrix.

4.4 Document Type Modifications

Reference	Document Type	Change Details
DOC1911005	BI_TO_SPM_IRS BI_To_SPM_DataFlow_Field_Mapping	NA
DOC1910992	MWS-SPM_DataFlow_IRS MWS_TO_SPM_DATAFLOW_FIELD_MAPPING	NA
DOC1911162	ITCS_To_SPM_DataFlow_IRS.docx ITCS_TO_SPM_DATAFLOW_FIELD_MAPPING	NA
DOC1910982	GLPROD_To_SPM_DataFlow_IRS GLPROD_TO_SPM_DATAFLOW_FIELD_MAPPING	NA
DOC1910985	SPM_TO_GLPROD_OR_FTP_DataFlow_IRS SPM_TO_GLPROD_OR_FTP_DATAFLOW_FIELD_MAPPING	NA
DOC1910984	SPM_To_PDS_Only_DataFlow_IRS SPM_TO_PDS_ONLY_DATAFLOW_FIELD_MAPPING	NA
DOC2783287	ODP_To_SPM_Dataflow_IRS ODP_TO_SPM_DATAFLOW_FIELD_MAPPING	NA

4.5 Error Handling

All the integration information is captured and maintained in Middleware documents – IRS. Refer Appendix or SPM Documents Traceability Matrix

4.6 Restartability

Refer - FMEA. Restart will be done as per the failure scenario.

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5 Supporting Information

5.1 Environment Mapping

Environment	Source Application	Middleware	Target Application
Oracle	Instance: GLPROD URL: http://erpplprod.health.ge.com:8800/OA_HTML/AppsLogin	BOOMI Instance:prod01c URL: https://platform.boomi.com	SPM Servigistics Instance:PTC Servigistics Prod (corpSFTP) \\3.40.64.86\home/500100591\tovan/PTC/Prod.
Teradata (BI)	Instance: TPRDM DB URL: http://erpplprod.health.ge.com:8800/OA_HTML/AppsLogin	BOOMI Instance:prod01c URL: https://platform.boomi.com	SPM Servigistics Instance:PTC Servigistics Prod (corpSFTP) \\3.40.64.86\home/500100591\tovan/PTC/Prod.
Oracle(ITCS)	Instance: TCGL PRD URL: http://glprod-itcs.health.ge.com/tcglprod/tc	BOOMI Instance:prod01c URL: https://platform.boomi.com	SPM Servigistics Instance:PTC Servigistics Prod (corpSFTP) \\3.40.64.86\home/500100591\tovan/PTC/Prod.
Oracle(MyWorkShop)	Instance:prdec2 Hostname : ora-twr16-scanp.am.health.ge.com	BOOMI Instance:prod01c URL: https://platform.boomi.com	SPM Servigistics Instance: PTC Servigistics Prod (corpSFTP) \\3.40.64.86\home/500100591\tovan/PTC/Prod.
Planning Tool(SPM)	SPM Servigistics Instance: PTC Servigistics Prod https://gehc-prod.ptcmanaged.com/WebUI	BOOMI Instance:prod01c URL: https://platform.boomi.com	GLPROD URL: http://erpplprod.health.ge.com:8800/OA_HTML/AppsLogin
Planning Tool(SPM)	SPM Servigistics Instance: PTC Servigistics Prod https://gehc-prod.ptcmanaged.com/WebUI	BOOMI Instance:prod01c URL: https://platform.boomi.com	Destination server : GLPROD Host name : 3.20.67.40 FTP PATH: /shrnterface/test/genesis/data/inbound
Planning Tool(SPM)	SPM Servigistics Instance: PTC Servigistics Prod https://gehc-prod.ptcmanaged.com/WebUI	BOOMI Instance:prod01c URL: https://platform.boomi.com	Destination server : Informatica Host name : dm-inf-prd-01.am.health.ge.com FTP PATH: /fct/service/srcfiles/incoming
ODP (ONE DATA PLATFORM)	ODP Instance: ODP-US-PROD	BOOMI Instance:prod01c	Destination server : Informatica

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		URL: https://platform.boomi.com	Host name : dm-inf-prd-01.am.health.ge.com FTP PATH: /fct/service/srcfiles/incoming
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5.2 Incompatibility

The Stored Procedure for a particular activity is incompatible with another stored procedure of same Activity name which has commenced within previous 5 hours.

The Stored procedure for activity types SUPPLY_TRANSFORMATION, DEMAND_TRANSFORMATION, TRANSACTION_TRANSFORMATION, FEEDBACK_TRANSFORMATION are incompatible within themselves.

5.3 Performance Considerations

Stored procedure will take approximately 60 - 80 minutes to complete for 1 M data. Performance time is directly proportional to the data message volume

5.4 Other considerations

Not Applicable.

5.5 Archiving

Archiving is done based on the user input that stores in the table GE_PLN_SYSTEM_CONTROLS.

5.6 Shared components

There are no shared components.

5.7 Alert conditions

There is no alert conditions necessary for this program.

5.8 Table Cleanup Strategy

Purging is done based on the user input that stores in the table GE_PLN_SYSTEM_CONTROLS.

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6 Issues

6.1 Issues Identified and Resolution

#	Issue	Resolution																						
1	<p>1.a. Extra fields are required in feedback transformation for functional team to get more fields pulled out of SPM to PDS</p> <p>1.b. PartCustom27 needs to be sent in open order supplier file in right format to SPM.</p>	<p>1.a.</p> <p>10 additional columns are added in the corresponding feedback table along with changes in procedures such that all the additional columns are archived successfully as well.</p> <p>10 additional columns are added in below table</p> <ul style="list-style-type: none">• GE_INBD_SPM_FEEDBACK• GE_INBD_SPM_FEEDBACK_AR• GE_PRSD_SPM_FEEDBACK• GE_PRSD_SPM_FEEDBACK_AR <p>Fields added :-</p> <table><tr><th>PDS</th><th>SPM columns for manual orders</th></tr><tr><td>ADDITIONAL_INFO_1</td><td>PWSCustom15</td></tr><tr><td>ADDITIONAL_INFO_2</td><td>PWSCustom28</td></tr><tr><td>ADDITIONAL_INFO_3</td><td>PWSCustom18</td></tr><tr><td>ADDITIONAL_INFO_4</td><td>PWSCustom19</td></tr><tr><td>ADDITIONAL_INFO_5</td><td>PWSCustom20</td></tr><tr><td>ADDITIONAL_INFO_6</td><td>PWSCustom21</td></tr><tr><td>ADDITIONAL_INFO_7</td><td>PWSCustom22</td></tr><tr><td>ADDITIONAL_INFO_8</td><td>PWSCustom23</td></tr><tr><td>ADDITIONAL_INFO_9</td><td>PWSCustom25</td></tr><tr><td>ADDITIONAL_INFO_10</td><td>PWSCustom27</td></tr></table> <p>For mapping details refer master mapping document for 'OpenOrdersSupplier' tab of SPM https://ge.box.com/s/ax6l2l76turuq3bipup7zpr8dco910</p> <p>PDS.GE_SPM_STUB is updated for archival of 10 additional fields from GE_INBD_SPM_FEEDBACK to GE_INBD_SPM_FEEDBACK_AR and GE_PRSD_SPM_FEEDBACK to GE_PRSD_SPM_FEEDBACK_AR Also, deletion of the duplicates will be on process_id instead of processed flag.</p> <p>1. b.</p> <p>PWSCustom27 added in below tables</p> <ul style="list-style-type: none">• 'GE_SPM_GLP_OPEN_PO'• 'GE_SPM_GLP_OPEN_PO_AR' <p>PDS.GE_PRSD_SPM_STUB is updated for archival of PWSCustom27 from GE_SPM_GLP_OPEN_PO to GE_SPM_GLP_OPEN_PO_AR.</p>	PDS	SPM columns for manual orders	ADDITIONAL_INFO_1	PWSCustom15	ADDITIONAL_INFO_2	PWSCustom28	ADDITIONAL_INFO_3	PWSCustom18	ADDITIONAL_INFO_4	PWSCustom19	ADDITIONAL_INFO_5	PWSCustom20	ADDITIONAL_INFO_6	PWSCustom21	ADDITIONAL_INFO_7	PWSCustom22	ADDITIONAL_INFO_8	PWSCustom23	ADDITIONAL_INFO_9	PWSCustom25	ADDITIONAL_INFO_10	PWSCustom27
PDS	SPM columns for manual orders																							
ADDITIONAL_INFO_1	PWSCustom15																							
ADDITIONAL_INFO_2	PWSCustom28																							
ADDITIONAL_INFO_3	PWSCustom18																							
ADDITIONAL_INFO_4	PWSCustom19																							
ADDITIONAL_INFO_5	PWSCustom20																							
ADDITIONAL_INFO_6	PWSCustom21																							
ADDITIONAL_INFO_7	PWSCustom22																							
ADDITIONAL_INFO_8	PWSCustom23																							
ADDITIONAL_INFO_9	PWSCustom25																							
ADDITIONAL_INFO_10	PWSCustom27																							

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		<p>Reference documents (1.1.4) :-</p> <ul style="list-style-type: none"> GLPROD_TO_SPM_DATAFLOW_FIELD_MAPPING(DOC1910985) SPM_TO_GLPROD_OR_FTP_DATAFLOW_FIELD_MAPPING(DOC1910985) DOC1912200 : Setup doc updated for base query updates required for mapping of the above specified columns for required for APPROVED_ORDERS_TRANSFORMATION , SUPPLY_TRANSFORMATION , FEEDBACK_TRANSFORMATION <p>For mapping details refer master mapping document for 'OpenOrdersSupplier' tab of SPM https://ge.box.com/s/ax6l2l76turuq3bipup7zpr8dco910</p>
2	BOOMI interfaces will call last clean up procedure for all interfaces.	<p>Updated GE_PLN_TRANSLATION_LOOKUP for activity 'INSTALL_SITE_DATA_TRANSFORMATION', 'PRODUCT_BOM_DATA_TRANSFORMATION', 'PRODUCT_DATA_TRANSFORMATION', 'PRODUCT_ROLLOUT_DATA_TRANSFORMATION') from 'N' to 'Y'</p> <p>Refer Section 2.2.9</p>
3	BI changes in customer name must be reciprocated to PDS	<p>Altered Data length of CUSTOMER_NAME for GE_INBD_BI_PRODUCT_CUSTOMER, GE_INBD_BI_PRODUCT_CUSTOMER_AR, GE_PRSD_BI_PRODUCT_CUSTOMER, GE_PRSD_BI_PRODUCT_CUSTOMER_AR tables. [CUSTOMER_NAME column updated from VARCHAR2(100) To VARCHAR2(500)]</p> <p>Reference documents (1.1.4) :-</p> <ul style="list-style-type: none"> BI_To_SPM_DataFlow_Field_Mapping(DOC1911005)
4	BOOMI interface restart logic table needs to have description for every record for default restart_step_id	<p>Add description column with details in GE_IFACE_SPM_RESTART_MW table</p> <p>Refer Appendix</p>
5	FE_IB rule stream data should be moved as FE rule stream	<p>1. GE_PRSD_SPM_STUB has a part of code which utilises BI demand link data for identifying FE IB data stream, this part of code is commented.</p> <p>2. The SPM enabled flag for the rule FE_IB is set to N in GE_SPM_RULE_HEADERS_ALL table i.e. disabled so that the data having CUSTOMER_CATEGORY as 'GPO_FE_CUSTOMER' is segregated into the rule stream FE exclusively</p> <p>Reference documents :-</p>

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		<ul style="list-style-type: none"> • Latest code can be found in GiTHuB @ https://github.build.ge.com/GSIT/SPM • DOC1912200: PDS Setup doc updated for rule change.
6	Child Parts should not have a Procurable Source	<p>1. New rules has been introduced in GE_SPM_RULE_HEADERS_ALL & GE_SPM_RULE_LINES_ALL tables , below are the details:- Two rule streams are created for source_transformation</p> <p>1. INTERNAL SUPPLIER CHILD PART - This identifies all Internal Newbuy source records for child parts based on the part changeup file. For this stream the SPM_ENABLE_FLAG in GE_SPM_RULE_HEADERS_ALL table is set to 'N' i.e. these records are disabled to move to SPM</p> <p>2. EXTERNAL SUPPLIER CHILD PART - This identifies all External Newbuy source records for child parts based on the part changeup file. For this stream the SPM_ENABLE_FLAG in GE_SPM_RULE_HEADERS_ALL table is set to 'N' i.e. these records are disabled to move to SPM</p> <p>2. Incompatibility is added in PDS lookup table 'GE_PLN_TRANSLATION_LOOKUP' for lookup_type 'MUTUAL_EXCLUSIVENESS' for the Values 'SOURCE_TRANSFORMATION' and 'PART_CHANGEUP_TRANSFORMATION'</p> <p>Reference Documents:- DOC1912200: PDS Setup doc updated for rule change.</p>
7	Part Source should not be send for parts with Invalid BPA's	<p>1. New rule has been introduced in GE_SPM_RULE_HEADERS_ALL & GE_SPM_RULE_LINES_ALL tables , below are the details:-</p> <p>One rule stream is created for source_transformation : EXTERNAL SUPPLIER NOT VALID - This identifies all External Newbuy source records with INVALID BPA's checked from supply PRSD layer. For this stream the SPM_ENABLE_FLAG in GE_SPM_RULE_HEADERS_ALL table is set to 'N' i.e. these records are disabled to move to SPM</p> <p>2. Incompatability addition in PDS lookup table 'GE_PLN_TRANSLATION_LOOKUP' for lookup_type 'MUTUAL_EXCLUSIVENESS' for the Values 'SOURCE_TRANSFORMATION' and 'SUPPLY_TRANSFORMATION'</p> <p>Reference Documents:- DOC1912200: PDS Setup doc updated for rule change.</p>
8	Need to send FE UNUSED onhand as Sales Returns similar to FE USED onhand	The base query in GE_PLN_TRANSFORMATION_BASE_DTL table for supply transformation is changed so that GE_SPM_GLP_PART_SUPPLY_RET table holds the data for both

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		<p>GOOD as well as DEFECTIVE subinventory onhand. These will represent FE Unused and FE Used onhand respectively. Reference Documents:-</p> <p>DOC1912200: PDS Setup doc updated for rule change.</p>
9	New Hierarchy for Repair Items	<p>The base query in GE_PLN_TRANSFORMATION_BASE_DTL table for master transformation is changed to maintain the proper location hierarchy since new Hierarchy for Repair Items have been created. The new Hierarchy is maintained through the translated value in look up table GE_PLN_TRANSLATION_LOOKUP in PDS with lookup type 'HIERARCHY_LOOKUP'</p>
10	Full segregation of PM Rollup data set from FE data set in Demand Transformation	<p>Package GE_PRSD_SPM_STUB has a part of code in procedure GE_DEMAND_PRSD_LOGIC which segregates PM demand data stream from BI Preventive Maintenance data set based on processed flag = 'N' meaning New. This part of code is commented out ,so, that PM re-classification can happen on historical demand data too (as BI PM data set from BI inflows every Thursday).</p> <p>Code Change :</p> <pre>UPDATE GE_PRSD_GLP_PART_DEMAND SET RULE_STREAM = 'PM_ROLLUP' WHERE ROWID IN (SELECT GPGPD.ROWID FROM GE_PRSD_GLP_PART_DEMAND GPGPD, GE_PRSD_BI_PM_ORDERS GPBPO WHERE GPGPD.HEADER_ID = GPBPO.HEADER_ID AND GPGPD.RULE_STREAM = 'FE' /*AND GPGPD.PROCESSED_FLAG = 'N'*/ -- This condition (PROCESSED_FLAG = 'N') is commented out to consider all the Demand Transformation Orders for the PM Stream);</pre> <p>Reference documents :-</p> <ul style="list-style-type: none"> • Latest code can be found in GiTHuB @ https://github.build.ge.com/GSIT/SPM
11	Performance Issue in Flush and Fill activity	<p>Below index changes were introduced by DBA to improve Performance of Stored Procedure for Supply, Demand, Transaction and Feedback transformation during Flush and Fill activity which also aids daily/weekly run.</p> <ol style="list-style-type: none"> 1. drop index PDS.IDX\$\$_6BC00001 2. drop index "PDS"."GEMS_IFACE_SPM_TABLE_IND1"; 3. create index PDS. INDEX_001 on PDS.GE_INBD_GLP_PART_DEMAND("HEADER_ID","ORDER_TYPE_NAME","SHIP_FROM");

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		<p>4. create index PDS.IDX\$\$_6BCC0002 on PDS.GE_PRSD_GLP_PART_SUPPLY("RULE_STREAM","PO_IDENTIFIER","RECEIVED_INTO_WAREHOUSE");</p> <p>5. create index PDS.IDX\$\$_6CED0001 on PDS.GEMS_IFACE_SPM_TABLE("STATUS_FLAG");</p> <p>6. create index PDS.IDX\$\$_6E140001 on PDS.GE_PRSD_GLP_PART_DEMAND("PROCESSED_FLAG","RULE_STREAM");</p> <p>7. create index PDS.IDX\$\$_6E140002 on PDS.GEMS_IFACE_SPM_TABLE("ACTIVITY_NAME","STATUS_FLAG","CREATION_DATE");</p> <p>8. create index PDS.IDX\$\$_6E140003 on PDS.GE_PLN_SYSTEM_CONTROLS("INTERNAL_USE","CONTROL_TYPE");</p> <p>9. create index PDS.IDX\$\$_6E140004 on PDS.GE_PRSD_GLP_PART_DEMAND("RULE_STREAM","HISTORY_DATE");</p> <p>10. create index PDS.IDX\$\$_6E140005 on PDS.GE_PRSD_GLP_PART_DEMAND("ORDER_LINE_STATUS");</p> <p>Reference : Updated document in Indexes section of Appendix.</p>
12	Code bug in Part Changeup Transformation	<p>Code bug while determining the Parent part number for a given Child part number to be sent to SPM (Service Parts Management, Planning application for Global Parts business). With current bug, a child part number is being shown as parent for itself.</p> <p>Code components impacted - GE_REIMAGING_EXECUTION</p> <p>The bug can be remediated by removing the planned flag & item status restriction</p> <p>CURSOR c_ultimate_prime_list IS SELECT DISTINCT ultimate_prime, GPGPM.item_type FROM GE_PRSD_MWS_PARTCHANGEUP GIMP, GE_PRSD_GLP_PART_MASTER GPGPM WHERE GIMP.ultimate_prime = GPGPM.item_number AND GPGPM.ADDITIONAL_INFO_10 = 'GPO' --AND GPGPM.DRP_PLANNED_FLAG = 'Yes' --AND GPGPM.ITEM_STATUS IN ('Active', 'TCP') AND GIMP.processed_flag = 'N'</p>
13	13.a. Additional relevant fields are required in demand history reverse flow transformation for referencing to compare Demand History information in SPM with respect to the current	<p>13.a. 14 additional columns are added in the below Demand History reverse flow tables</p> <p>Table Names “</p> <ul style="list-style-type: none"> • GE_INBD_SPM_DMD_HISTORY

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<p>Demand details in GLPROD sent as a part of Forward Flow</p> <p>13.b. Irrelevant fields to be removed from the demand history reverse flow transformation table</p>	<ul style="list-style-type: none">• GE_INBD_SPM_DMD_HISTORY_AR• GE_PRSD_SPM_DMD_HISTORY• GE_PRSD_SPM_DMD_HISTORY_AR <p>Fields added :</p> <table><tr><td>DEMANDCUST01</td></tr><tr><td>DEMANDCUST02</td></tr><tr><td>DEMANDCUST03</td></tr><tr><td>DEMANDCUST04</td></tr><tr><td>DEMANDCUST05</td></tr><tr><td>DEMANDCUST06</td></tr><tr><td>DEMANDCUST07</td></tr><tr><td>DEMANDCUST08</td></tr><tr><td>DEMANDCUST09</td></tr><tr><td>DEMANDCUST10</td></tr><tr><td>DEMANDCUST11</td></tr><tr><td>DEMANDCUST12</td></tr><tr><td>DEMANDCUST13</td></tr><tr><td>DEMANDCUST14</td></tr></table> <p>For mapping details refer master mapping document for ‘OUT-SPM Demand History’ tab of SPM https://ge.ent.box.com/folder/47842416480</p> <p>13. b. Below columns are removed from the demand history reverse flow transformation tables</p> <p>Table Names:</p> <ul style="list-style-type: none">• GE_INBD_SPM_DMD_HISTORY• GE_INBD_SPM_DMD_HISTORY_AR• GE_PRSD_SPM_DMD_HISTORY• GE_PRSD_SPM_DMD_HISTORY_AR <p>Remove Fields:</p> <table><tr><td>HISTORYEXTSCHAMOUNT</td></tr><tr><td>EXCLUDEFROMPRICING</td></tr><tr><td>LOSTUSAGE</td></tr></table>	DEMANDCUST01	DEMANDCUST02	DEMANDCUST03	DEMANDCUST04	DEMANDCUST05	DEMANDCUST06	DEMANDCUST07	DEMANDCUST08	DEMANDCUST09	DEMANDCUST10	DEMANDCUST11	DEMANDCUST12	DEMANDCUST13	DEMANDCUST14	HISTORYEXTSCHAMOUNT	EXCLUDEFROMPRICING	LOSTUSAGE
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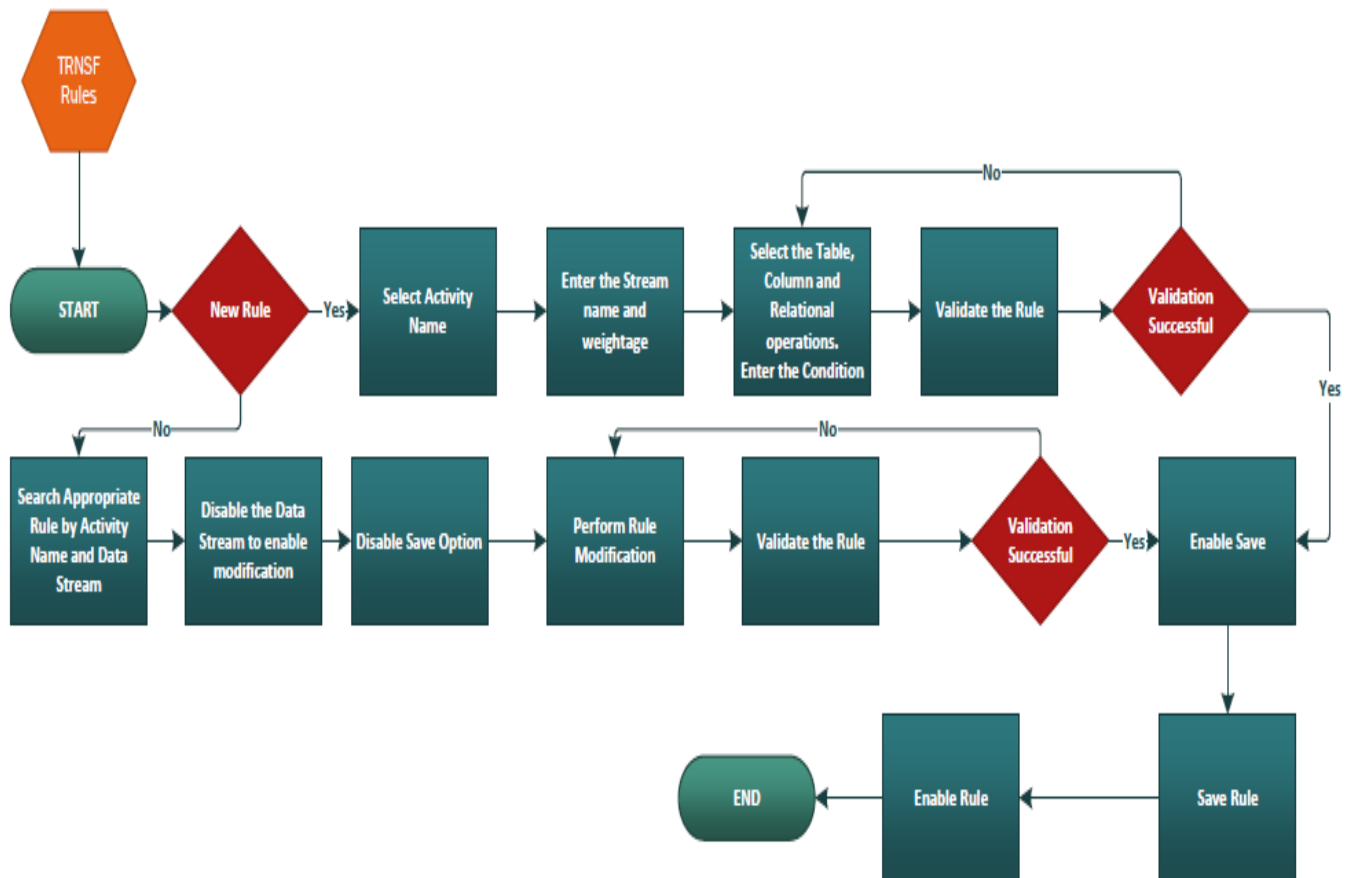
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		For mapping details refer master mapping document for 'OUT-SPM Demand History' tab of SPM https://ge.ent.box.com/folder/47842416480
14	Minor bug for Recommendation and Executed Quantity in Plan Execution Report	The Bug was identified for Repair Orders as in this type of orders the Source Org is provided, and this Source Org was not getting used to calculate the Recommended and Executed Quantity for Repair Order in this Report. To fix this we have included an additional condition in the logic for calculation of Executed and Recommended Quantity of any Repair Order.

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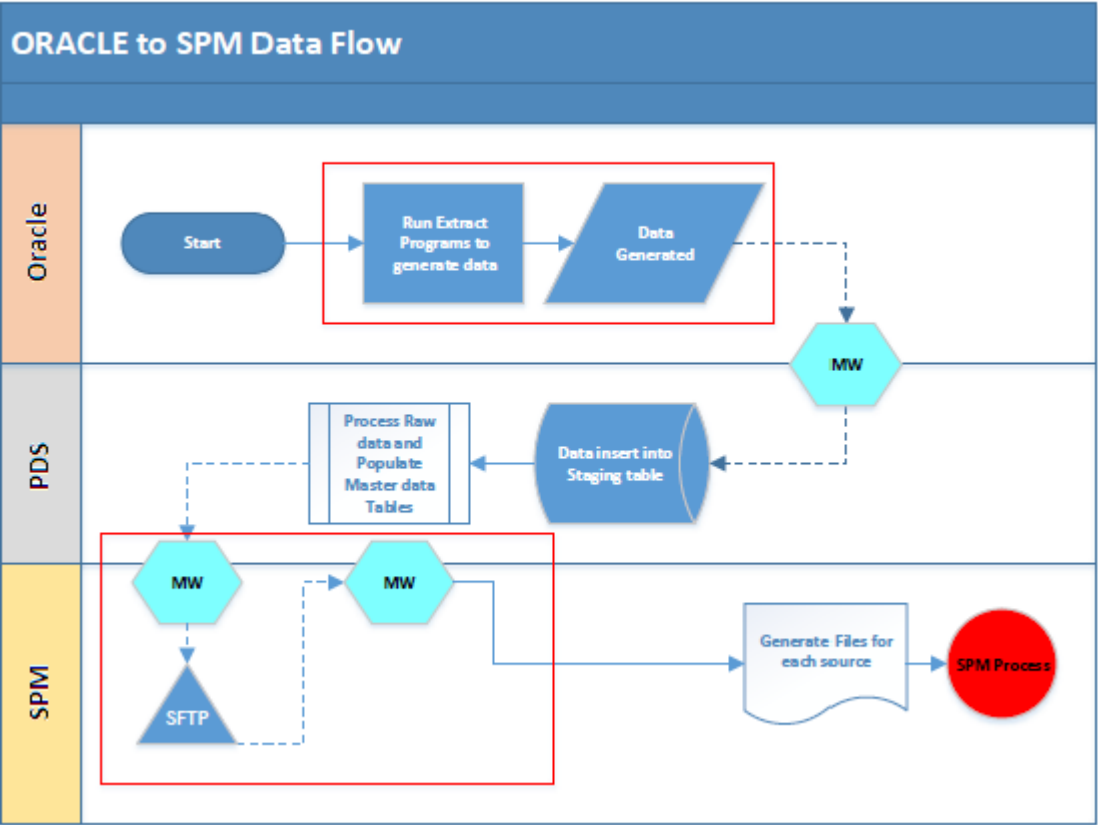
7 Appendix

PDS Rule Creation and Validation



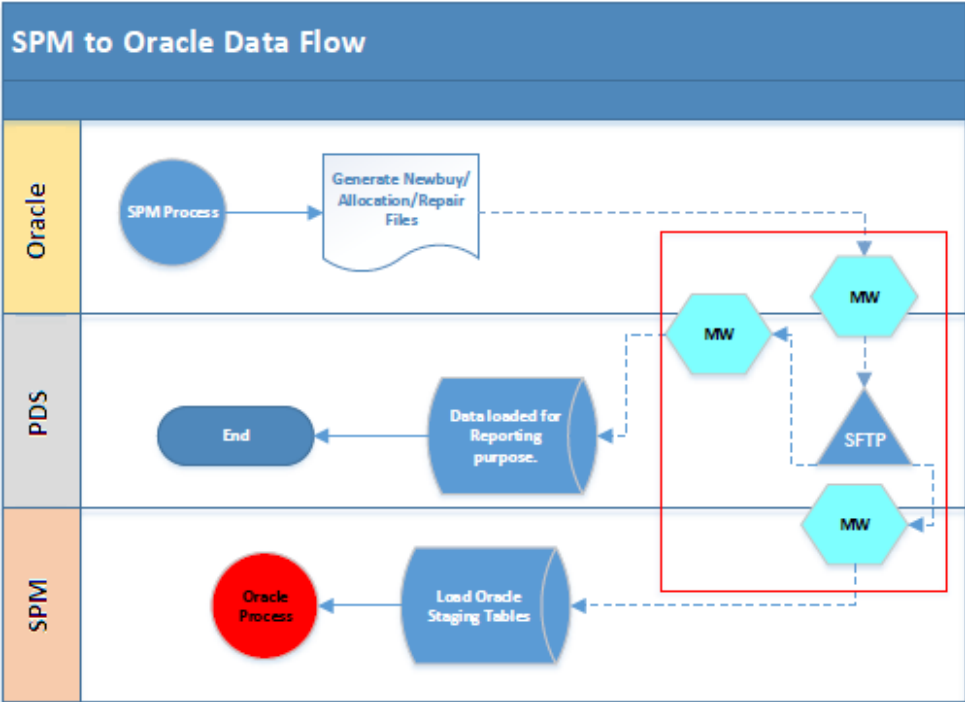
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Forward Flow Design

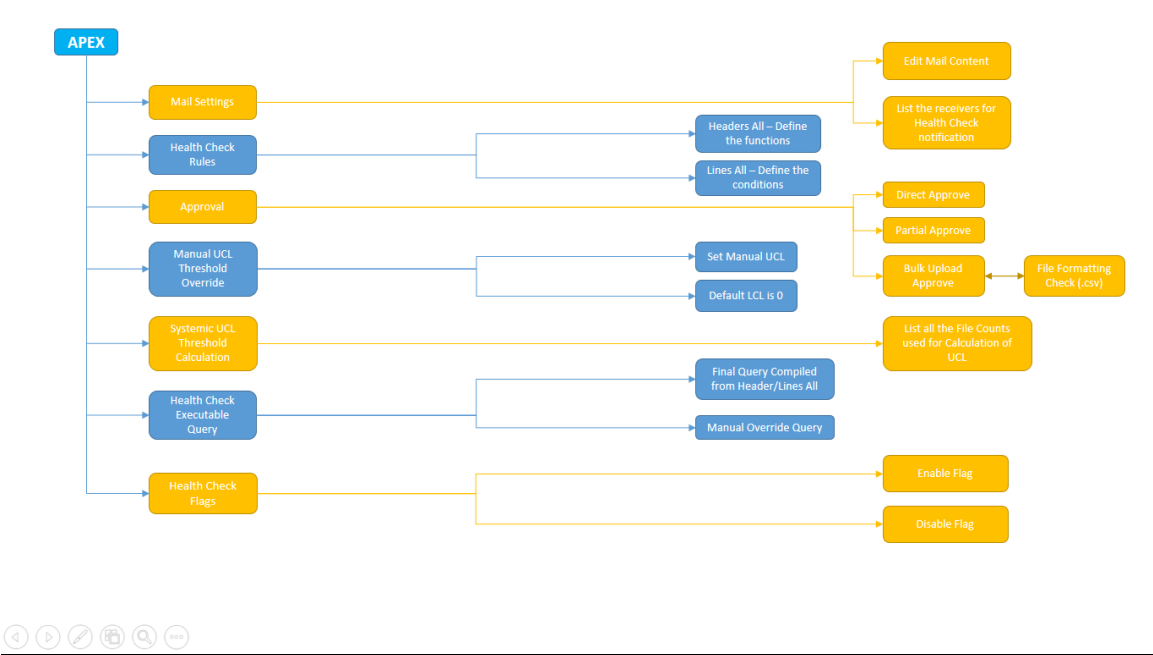


Reverse Flow Design

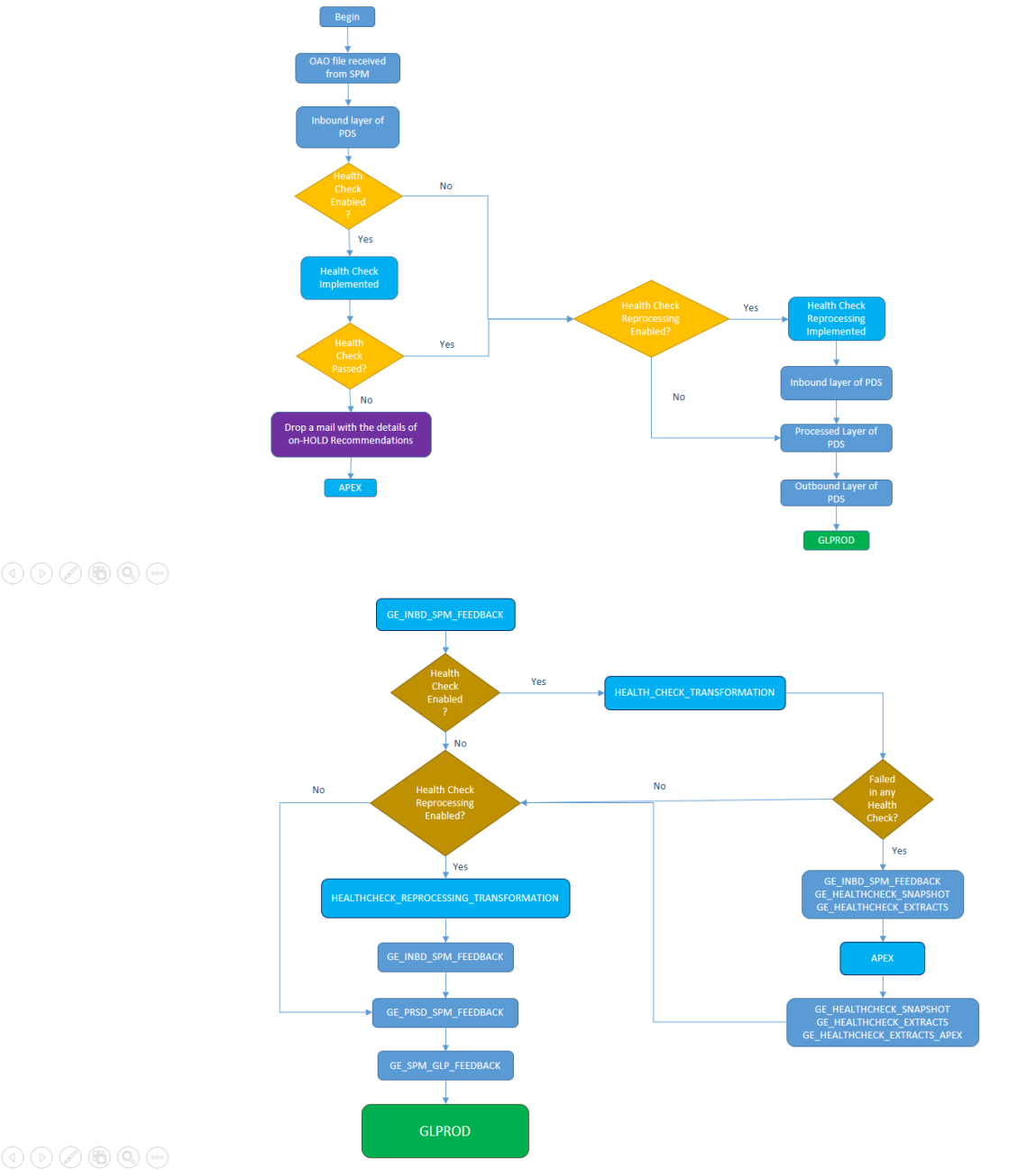
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Health Check Design:

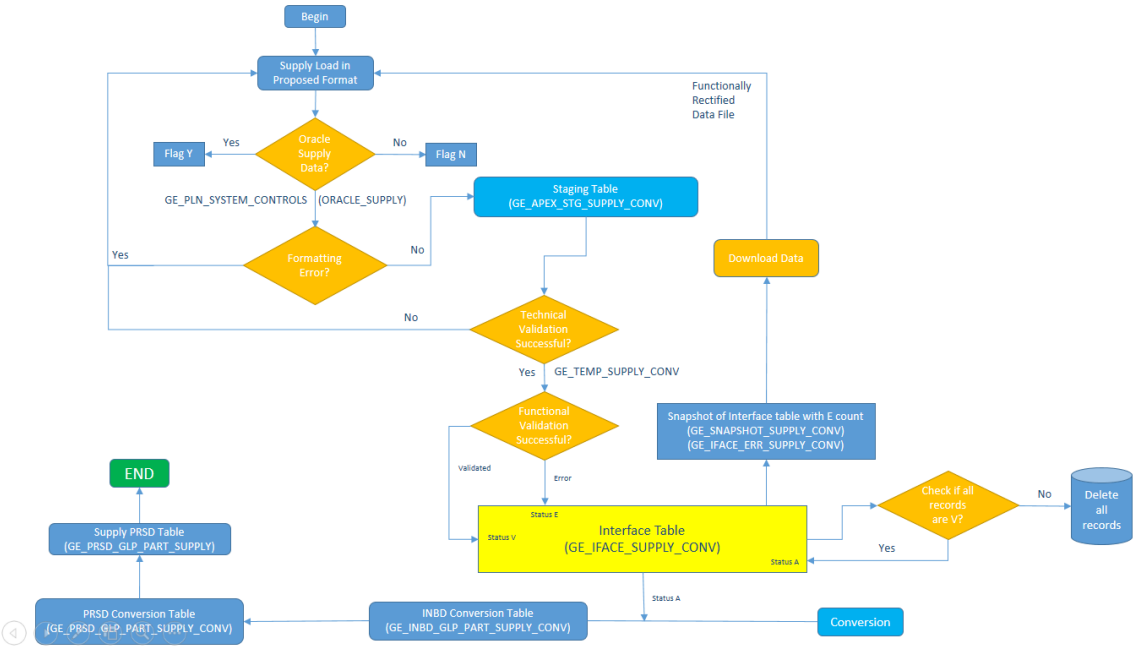


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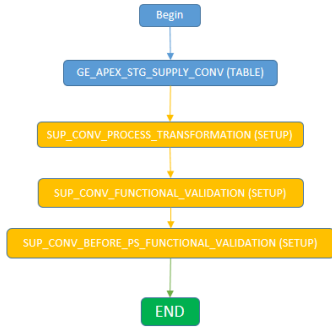


Supply Conversion Design:

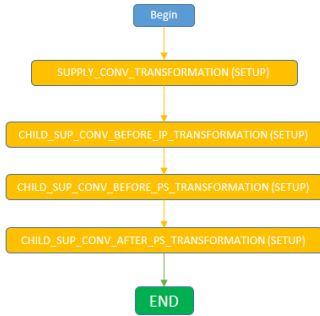
GE Healthcare	GE Healthcare ERP Integration	Effective Date: When released in My Workshop
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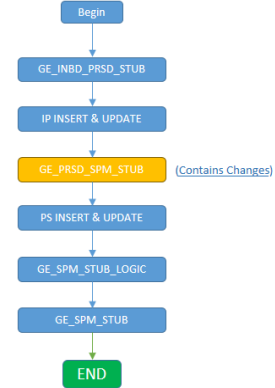
Data Uploading and PDS Validations



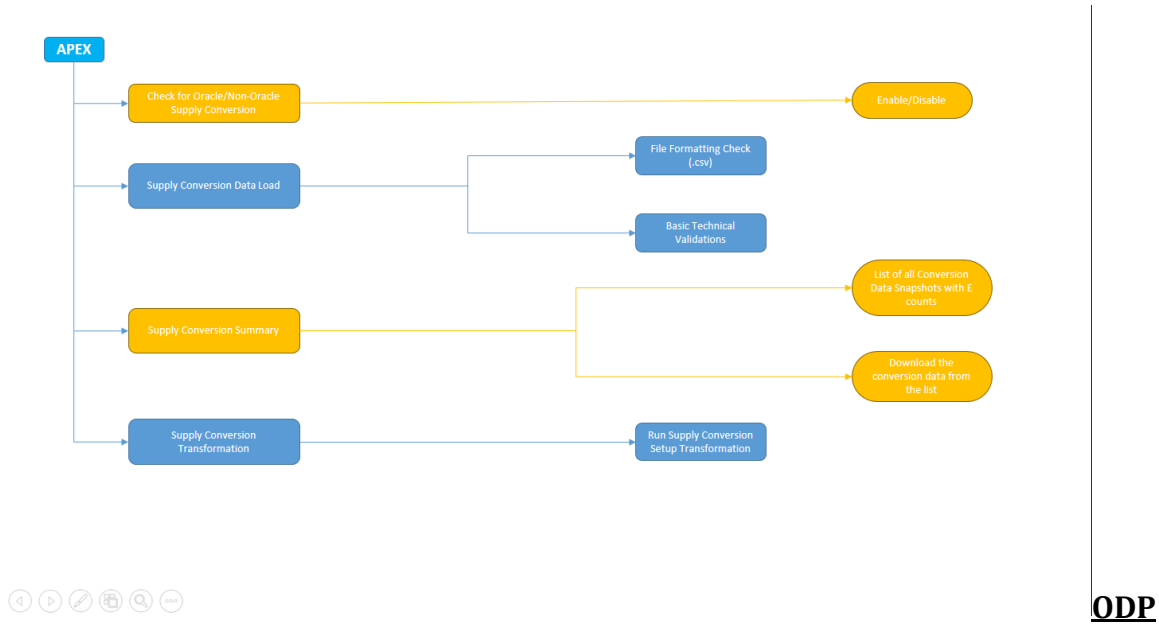
Supply Conversion Transformation Setups



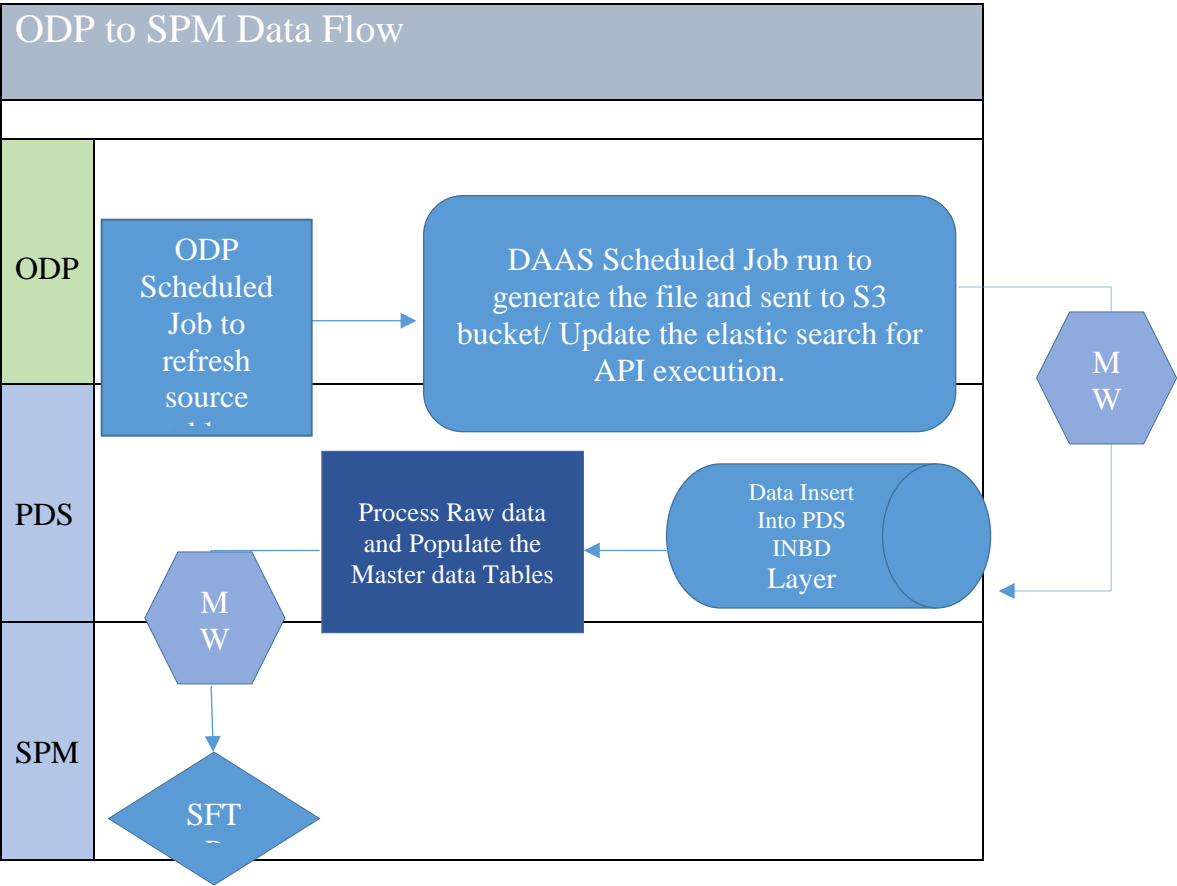
Supply Transformation
GE_PRSD_SPM_STUB Changes



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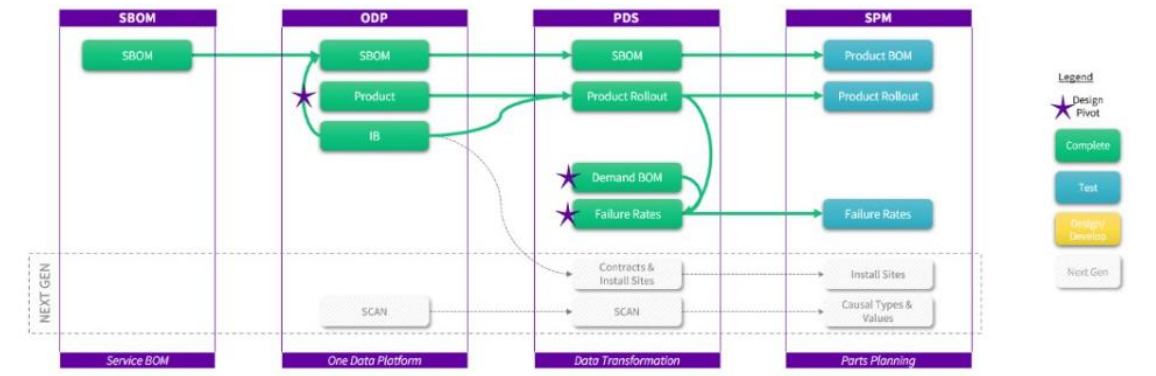


TO SPM data sending design:



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SBOM data flow



SPM Traceability Matrix:

Reference	Document Type	Location
DOC1912195	SPM Traceability Matrix	My Workshop: BOK98642

PDS Tables :



PDS_Table_Details.xl
SX

Indexes :



List_Of_Indexes.xlsx

Sequences :



List_of_Sequences.x
lsx

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Format for Demand Data Conversion:



Data_Conversion_F
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Demand_Conv_Sam
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Standard Operating Procedure for Demand Data Conversion:



SOP_for_Demand_C
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Format for Transaction Data Conversion:



Transaction_Data_Co
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Transaction_Conversi
on_Sample_Data_File.x

Standard Operating Procedure for Transaction Data Conversion:



SOP_for_Transaction_
Conversion_Procedure

SPM Master Report Mapping Document:



SMR Mapping
document.xlsx