

ORACLE ERP PRODUCT HUB CLOUD CONFIGURATIONS

FOR

ORACLE ERP PRODUCT HUB CLOUD
INTEGRATION TO ORACLE UTILITIES
WORK AND ASSET CLOUD SERVICE
STOCK ITEM

SETUP GUIDE

RELEASE 21C



Disclaimer

Oracle ERP Product Hub Cloud Configurations for Oracle Product Hub Cloud Integration to Oracle Utilities Work and Asset Cloud

January 2022

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Preface

Welcome to Oracle Product Hub Cloud Configurations for Oracle Product hub Cloud Integration to Oracle Utilities Customer Cloud Service. This document focuses on the configuration for Oracle Product hub Cloud.

The preface includes the following:

- [Audience](#)
- [Documentation and Accessibility](#)
- [Abbreviations](#)

Audience

This document is intended for anyone implementing the Oracle Product Hub Integration with Oracle Utilities Work and Asset Cloud Service. This integration covers two Integration flow.

- Item Sync (Bulk)
- Item Update/Create (Incremental)

Documentation and Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit:

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or
<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs>

Abbreviations

Terms	Expanded Form
WACS	Oracle Utilities Work and Asset Cloud Service
PIM	Product Information Management
ERP	Oracle Fusion Application Cloud
ERP PH	Oracle Application Cloud Product Hub
OIC	Oracle Integration Cloud

Chapter 1: Oracle ERP Product Hub Configuration

This document describes the configuration required for integration from Oracle ERP Product Hub to Oracle Utilities Work and Asset Cloud Service only. It includes:

- [Introduction](#)
- [Overview of the Integration](#)
- [Configuration Overview for Oracle ERP Product Hub](#)

Introduction

This integration provides the ability for a customer to manage all the item information and details in one primary instance (Oracle ERP Product Hub) and communicate with Oracle Utilities Work and Asset Cloud Service:


- Oracle ERP Product Hub will be master for all Item information.
- This seamless integration between Oracle ERP Product Hub and Oracle Utilities Work and Asset Cloud Service helps to have the same Item definition across both platforms.
- The integration will support Bulk upload and incremental updates to Oracle Utilities Work and Asset Cloud Service.
 - Bulk Upload
 - Oracle ERP Product Hub to Oracle Utilities Work and Asset Cloud Service
 - Incremental Update
 - Oracle ERP Product Hub to Oracle Utilities Work and Asset Cloud Service

The goals for Oracle ERP Product Hub to Oracle Utilities Work and Asset Cloud Service one-directional interface are to make sure there is a seamless integration between Oracle ERP Product Hub and Oracle Utilities Work and Asset Cloud Service.

- To make sure the items are synched
- To make sure Oracle ERP Product Hub is the source of record for Items and Item attributes
- To make sure Oracle Utilities Work and Asset Cloud Service is always a mirror image of Oracle ERP Product Hub
- To document all required columns to be mapped between Oracle ERP Product Hub and Oracle Utilities Work and Asset Cloud Service

Overview of the Integration

Oracle ERP Product Hub is the central repository of items. Items are created and managed in this module. Item data quality, data management and data governance are managed and maintained in this module. This is the source of items for the Oracle Utilities Work and Asset Cloud Service module.



Items are uploaded in Oracle ERP Product Hub using two methods - Bulk Upload using FDBI templates and manually creating/updating the items in the Oracle ERP Product Hub module. When the items are created/updated using Bulk Upload, the items that belong to Oracle Utilities Work and Asset Cloud Service should be simultaneously interfaced with Oracle Utilities Work and Asset Cloud Service. When items are manually created/updated in Oracle ERP Product Hub, the items that meet Oracle Utilities Work and Asset Cloud Service items criteria are interfaced with Oracle Utilities Work and Asset Cloud Service.

Product Hub Portal

Product Information Management (PIM) is a central repository of all items in Oracle Cloud Fusion. PIM helps end users to analyze and make a decision for critical business requirements. It is foundational for an end-to-end supply chain and provides a business process framework around the company's master data.

It centralizes product data across heterogeneous systems so that it can create a blended product master record that is clean, standardized, accurate, and current. From products that are manufactured internally to finished goods that are sourced from suppliers, Oracle ERP Product Hub enables to aggregate, enrich, and share product data for various manufacturing and omnichannel commerce processes.

Use robust business rules and workflows to make sure the data shared across the Enterprise is clean, complete, and valid. Rapidly commercialize products that use centralized product information for manufacturing, marketing, and sales across global manufacturing sites, sales channels, and trading partners.

Product Hub Features

- **Managing Imports:** Manages the import of items and related entities using industry-standard open interface tables, allowing you to import the data quickly into the production schema as well as enabling migration of data from existing applications.
- **Defining Items:** Defines and manages base reference data and profile options related to items such as cross-reference types, item relationship types, related value sets, item templates, item types, and item statuses.
- **Defining Catalogs**
 - Defines and manages catalogs to categorize items in a structured hierarchy.
 - Associates images and attachments to catalogs and categories to help build rich catalog content.
 - Shares category and item associations from a source or master catalog with multiple catalogs enabling the reuse of existing data and ease administration of catalogs.
- **Defining Product:** Creates items and apply predefined templates that provide all of the basic information to help you get started quickly.
- **Managing Product Attachments:** Associates unstructured content as attachments to a product. Categorize attachments in various predefined and user-defined categories to organize and provide quick access to important documents for the product.
- **Defining Product Structures**
 - Defines and manages product structure types to categorize various product structure hierarchies.

- Creates and administers structure names and associated usage rules, allowing further classification and identification of different product hierarchies.
- Enables lifecycle phase and structure usage rules to make sure to maintain correct and accurate structure information.
- Defines component usage rules to make sure that only valid components are used in the product structure.

PIM allows users to create personal charts and analytic report tools to understand consumption, data metrics of item based on organization and other business-related graphs.

The Main Work Area page details for PIM are as below:

- The Oracle ERP Product Hub implementation details are available here: <https://docs.oracle.com/en/cloud/saas/supply-chain-management/21a/faipr/index.html>
- Graphs created by report and analytics.
- Access all pages under PIM from **TASK** on the right of the screen.

The following tasks are performed in PIM:

- Item Organizations
- Items
- Catalogs and Structures
- Item Mass Update
- Advanced Catalogs
- Change Orders
- Product Rules
- Audit Trail
- Product Spoke System
- Item Batches
- Data Pool Integration

Configuration Overview for Oracle ERP Product Hub

Certain configurations are required in Product Management Cloud for the integration to run.

As a part of a strategic enhancement to improve functionality between Oracle products, integration between different platforms is required to ease implementation.

- Customers using Oracle ERP Product Hub and planning to implement Oracle Utilities Work and Asset Cloud Service will have readily available integration to manage items in Oracle ERP Product Hub through this Integration.
- Real-time incremental updates to Oracle Utilities Work and Asset Cloud Service from Oracle ERP Product Hub to make sure the information between these systems is in sync.
- Helps customers to jump-start their implementation using this integration and in quick deployment.

Managing Item Rule Set

Rules define integrity constraints on the attributes of items and structures. You can define integrity constraints on operational as well as on user-defined attributes. Integrity constraints can implement business rules and are created through the rules framework.

Example: The minimum speed must be less than maximum speed. This could be a rule.

Each attribute is referenced by its business entity and attribute group name followed by the attribute name.

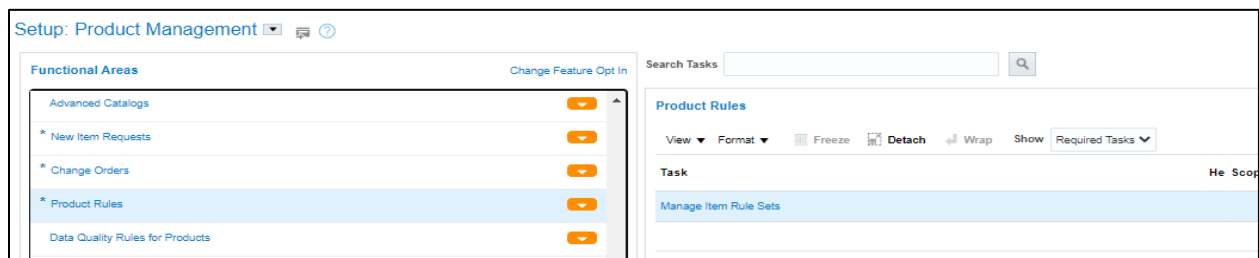
Example: [Item].[Physical Attributes].[Unit Volume]

In this example:

- [Item] indicates that it is an item attribute
- [Physical Attributes] is the display name of the attribute group
- [Unit Volume] is the display name of the attribute

To manage an item rule set:

1. Navigate to **Setup and Maintenance > Product Hub > Item > Manage Item Rule Set.**



2. Click **Add** and enter the following details.
 - Display Name: WACS_ITEM_STATUS
 - Composite: No
 - Association Type: Attribute Group
 - Association Name: Main
 - Validation Condition: [Item].[Main].[Item Status] == "Active"

Edit Rule Set: WACS_ITEM_STATUS Save and Close Save Cancel

General Information

* Display Name: WACS_ITEM_STATUS
 Description: Filter for Item Status for WACS Integration
 Internal Name: WACS_ITEM_STATUS
 Type: Validations
 Composite: No

Association Type: Attribute group
 Association Name: Main
 Draft

Rules Usage Rule Sets Where Included

Actions View Format + - X >> EF

Sequence	Name	Description	Business Entities	Valid Component Rules	Severity	Stop further processing when rejected	Last Updated By	Last Updated Date
10	WACS_ITEM_STATUS	Filter for WACS ...	Item	No	Reject	No	SCM_IMPL	8/14/20 9:07 AM

WACS_ITEM_STATUS: Details Validate

IF Expression: true

* Validation Condition: [Item].[Main].[Item Status] == "Active"

User Message:

Managing Trading Community Source System

Oracle Product Management Cloud offers functionality to extract an item through publication for integration. Define the target application that sends an extract to the source system.

This setup helps to communicate systems outside the cloud. Filters are setup in configuration to extract items based on the business requirement.

Defining the Spoke System

To define a spoke system:

1. Login to the system.
2. Navigate to **My Enterprise > Set up and Maintenance > Product Management > Product Spoke System**.
3. Open **Manage Trading Community Source System**.

Setup: Product Management Change Feature Opt In

Search Tasks

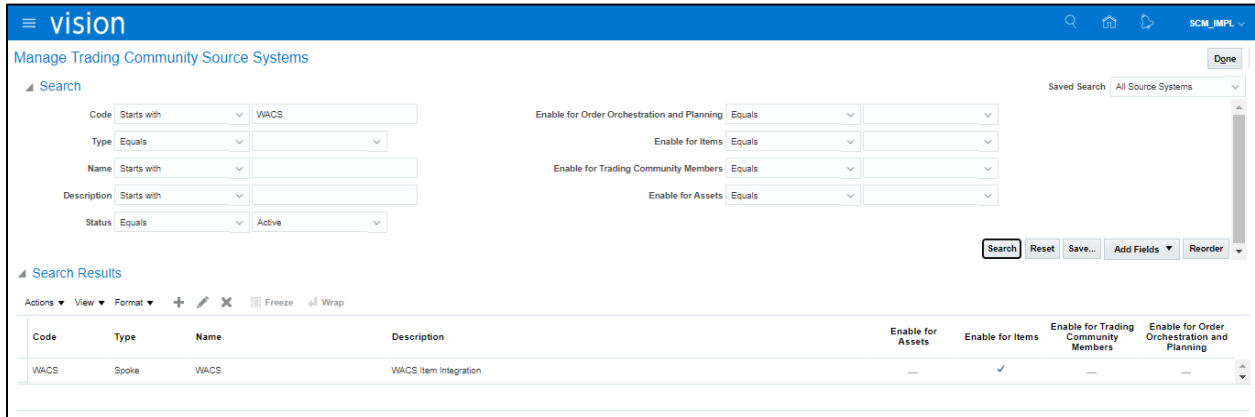
Functional Areas

- * Item Mass Update
- Advanced Catalogs
- * New Item Requests
- * Change Orders
- * Product Rules
- Data Quality Rules for Products
- Audit Trail
- Product Spoke Systems

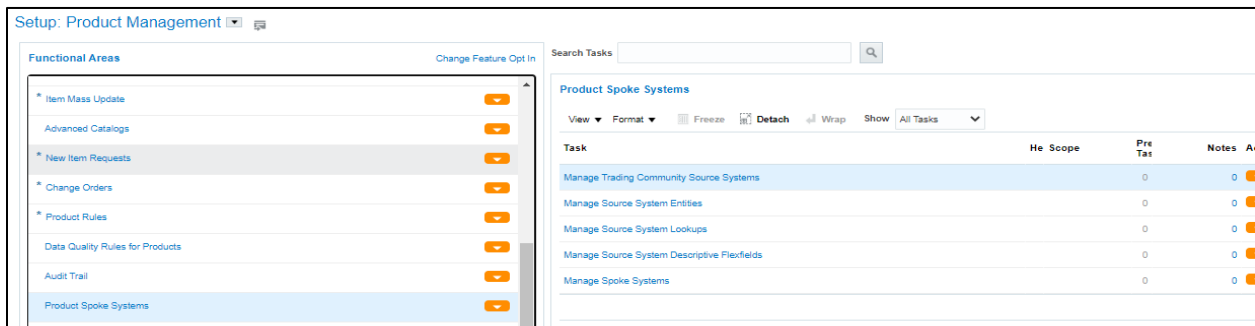
Product Spoke Systems

View Format Freeze Detach Wrap Show All Tasks

Task	He Scope	Pre Tas	Notes	Av
Manage Trading Community Source Systems		0	0	
Manage Source System Entities		0	0	
Manage Source System Lookups		0	0	
Manage Source System Descriptive Flexfields		0	0	
Manage Spoke Systems		0	0	

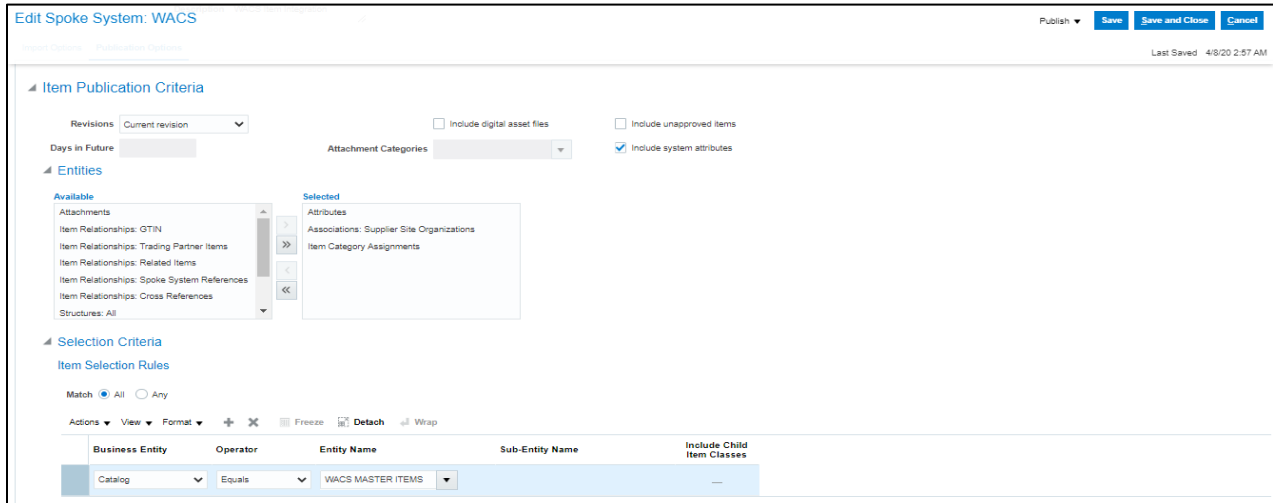


4. Create a Manage Trading Community Source.
5. Open Manage Spoke System.



6. Set up the publication. Add the following:
 - Attributed
 - Association: Supplier Site Organization
 - Item Category Assignment
 - Enable “Include system attributes”
 - Validation rule

For instructions to create a validation rule, refer to: <https://docs.oracle.com/en/cloud/saas/supply-chain-management/20c/faipr/product-rules.html#FAIPR133688>



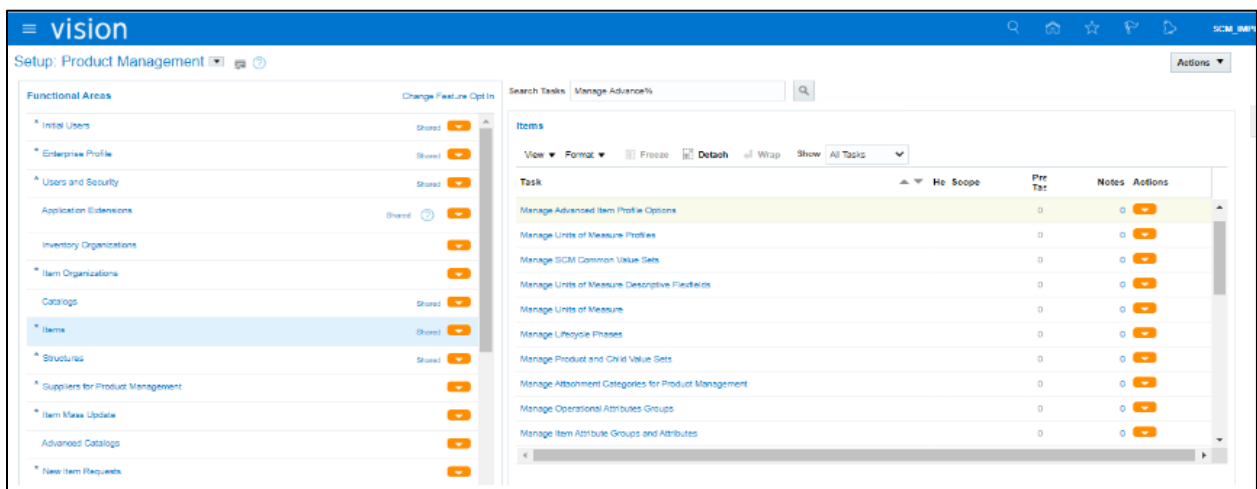
7. Add the filter for WACS MASTER ITEM. Select the respective filters for bulk upload.
8. Publish the file. It is sent to the Universal Content Server.

For more information refer to Oracle Supply Chain Management Cloud 21A library at: <https://docs.oracle.com/en/cloud/saas/supply-chain-management/21a/index.html>

Defining File size of the Extract

As of this release, Oracle Integration Cloud accepts file sizes that are less than 10MB. To make sure that the publication size is less than 10MB, limit the number of items in each extract file.

1. Navigate to **Setup and Maintenance > Product Hub > Item > Manage Advance Item Profile**.



2. Update the profile options. EGI_PUBLICATION_ITEMS_PER_PAYLOAD= 250

Profile Option Code	Profile Option Name	Purpose
EGI_PUBLICATION_ITEMS_PER_PAYLOAD SET SIZE TO 250	Number of Items per Payload for Publication	Number of items in each XML file. This profile option determines the number of items to be used per payload in the publication process. The predefined value is 500 MB.
EGI_PUBLICATION_NUMBER_OF_PAYLOADS	Number of Parallel Payloads for Publication	Number of scheduled subprocess that gets launched in the extraction process. This profile option determines the number of parallel payloads to be used in the publication process. The predefined value is 100.
EGP_PUBLICATION_SIZE_OF_ZIP_FILE	Size of the Publication Payload File in Megabytes	This profile option controls the overall size of the payload Zip file. The payload Zip file can contain more than one XML file for the item object. This profile option lets you chunk large publication jobs into multiple XML files. This profile option controls the overall size of the payload Zip file.

Creating a Catalog/Category

A catalog is a collection of categories used to classify items, such as:

- Organizing the categories into a hierarchy that represents a taxonomy.
- Creating new categories only in the context of a catalog.
- Adding existing categories to one or more catalogs, either from another catalog or as shared categories from a source catalog.
- Controlling the assignment of items and categories in the catalog by controlling the catalog content.

Example: Set the value of the **Catalog Content** field on the **Edit Catalog** page to items at all levels, allowing items to be assigned to any level within the category hierarchy, not only to the leaf levels.

Catalog

A catalog is a collection of categories that are organized to define a classification of items. The top most level of a catalog is the catalog root. All categories for the first level in the category hierarchy are associated with the catalog root through the catalog category association component.

Category

A category is a component of a catalog that represents a set of items. A category can be associated to a catalog through the catalog category association. Both the shared category and the native category are associated through the catalog category association.

Catalog Category Association

Catalog category association represents the relationship between a catalog and a category, or a parent category and a child category. Each catalog category association represents one relationship between the catalog and a category or one relationship between a parent category and a child category.

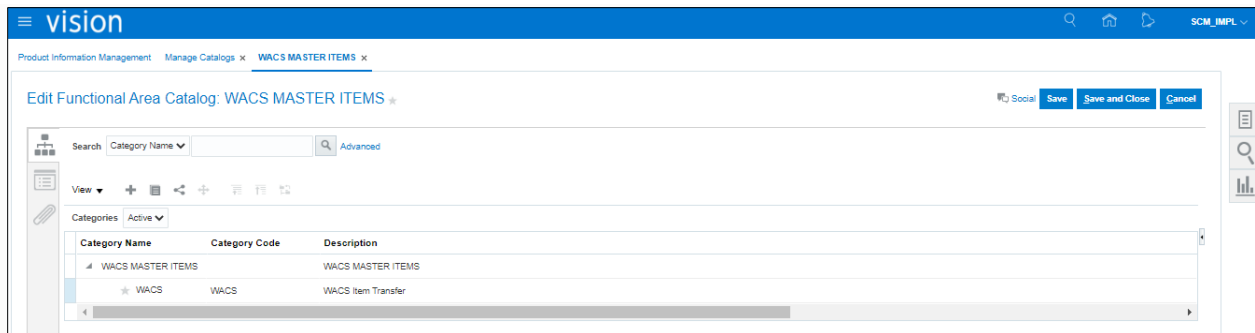
Item Category Assignment

Item category assignment represents the assignment of the item to a category in a catalog. Each item category assignment represents the relationship between a category and an item.

1. Login to the system.
2. Navigate to **Product Management > Product Information Management > Manage Functional area catalogs.**
3. Click **Add** to add catalog and category.

Catalog Name: WACS MASTER ITEM

Category Name: WACS , Description : WACS Item Transfer



To add a catalog to multiple categories:

1. Browse all the items from Product Management Information that are required to sync with Oracle Utilities Work and Asset Management.
2. After identifying the items, create the Item Import FBDI using the template at: <https://docs.oracle.com/en/cloud/saas/supply-chain-management/20a/oefsc/product-master-data-management.html#itemimport-3041>
3. Download the Item Categories Import Control file.

4. The spreadsheet should include the same columns and they should be in the same order as in the template. The value in the first column is always the interface table name.
5. After extracting the data into the temporary spreadsheet, cut and paste the data into the relevant sheets provided in the template.
6. For ID columns, develop a mapping between existing values and Oracle Fusion values. Use the implementation pages in the **Setup and Maintenance** work area to extract the identifier. For columns where the **Setup and Maintenance** work area should be used to get the Oracle Fusion values, the comments in the column header of the spreadsheet mentions the task name to navigate to in the **Setup and Maintenance** work area.

Importing the Data

After successfully loading the data, submit the Item Import process to import the data into the application tables to create items and their child entities.

To submit the Item Import process:

1. Navigate to the **Manage Item Batches** task in the Product Information Management work area.
2. Make sure that the appropriate Batch Options are set for the batch.
3. Navigate to the **Scheduled Processes** task.
4. Click **Schedule New Process** and select **Item Import Process**.
5. Enter the value for **Batch ID** and submit the process.
6. Monitor the process in the **Search Results** section.
7. If the Item Import Process ends in error or warning, review the log file for details.

Rectifying the Errors

To correct the import errors:

1. Click the **Manage Item Batches** task in the **Product Information Management** work area.
2. Search for the batch for which the Item Import process is run.
3. Click the batch name to navigate to batch details.
4. Review the errors for each item.
5. Select the item rows that are in error and click **Manage in Spreadsheet** to export item data to the spreadsheet.
6. Once all the rows are rectified, click **Upload** to resubmit the process and then submit the Item Import process.
7. Repeat the submission and error correction steps in this section until all rows are imported successfully and the items, along with their child entities, are created.

The table below shows a sample template.

Transaction Type	Batch ID	Batch Number	Item Number	Organization Code	Catalog	Category Name	Category Code	Old Category Name	Old Category Code	Source System Code	Source System Reference	Start Date	End Date
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						
CREATE	3.00E+14	89754	WACS_0000301	0	WACS MASTER ITEMS	WACS	WACS						