



IBM Global Data Synchronization for WebSphere Product Center
V1.1.0

Installation, Configuration and Administration Guide – Demand Side

Version 1.0

Note: Before using this information and the product it supports, read the information in “Notices” on page 131.

19 November, 2004

This edition of this document applies to IBM Global Data Synchronization for Websphere Product Center, version 1.1, and to all subsequent releases and modifications until otherwise indicated in new editions.

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About This Document

Audience

The objective of this guide is to facilitate the installation and configuration of the IBM Global Data Synchronization for WebSphere Product Center solution.

The intended audiences for this guide are the system administrators and the IT analysts.

Related Documentation

The following related Global Data Synchronization Demand documentation is also available:

- User Guide
- Release Notes

Typographic Conventions

This document uses the following conventions:

- `Courier New font` - Indicates commands, directory names, user names, path names, and file names.
- **Note** - Indicates important or clarifying information including exceptions, interdependencies, and special situations.
- **Tip** - Indicates a helpful action that will simplify or streamline the current procedure.
- **bold font** - Indicates buttons, tabs, menus, and keyboard key names. For example, the **Save** button.
- *Italics font* - Indicates screen names. For example, the *Login* screen.

IBM Software Support

IBM Software Support provides assistance with product defects.

Before contacting IBM Software Support, your company must have an active IBM software maintenance contract, and you must be authorized to submit problems to IBM.

If you are not sure what type of software maintenance contract you need, call 1-800-IBMSERV (1-800-426-7378) in the United States or, from other countries, go to the contacts page of the IBM Software Support Handbook on the Web (techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region for phone numbers of people who provide support for your location.

Follow the steps in this topic to contact IBM Software Support:

1. [Determine the Business Impact of your Problem](#)
2. [Describe your Problem and Gather Background Information](#)
3. [Submit your Problem to IBM Software Support](#)

Determine the Business Impact of your Problem

When you report a problem to IBM, you will be asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem you are reporting. Use the following criteria:

Severity 1	Critical business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution.
Severity 2	Significant business impact: The program is usable but is severely limited.
Severity 3	Some business impact: The program is usable with less significant features (not critical to operations) unavailable.
Severity 4	Minimal business impact: The problem causes little impact on operations, or a reasonable circumvention to the problem has been implemented.

Describe your Problem and Gather Background Information

When explaining a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Software Support specialists can help you solve the problem efficiently. To save time, know the answers to these questions:

- What software versions were you running when the problem occurred?
- Do you have logs, traces, and messages that are related to the problem symptoms? IBM Software Support is likely to ask for this information.
- Can the problem be recreated? If so, what steps led to the failure?
- Have any changes been made to the system? (For example, hardware, operating system, networking software, and so on.)
- Are you currently using a workaround for this problem? If so, please be prepared to explain it when you report the problem.

Submit your Problem to IBM Software Support

You can submit your problem in one of two ways:

- Online: Go to the Submit and track problems page on the IBM WebSphere Product Center Software Support site (www.ibm.com/software/integration/wpc/support/). Enter your information into the appropriate problem submission tool.
- By phone: For the phone number to call in your country, go to the contacts page of the IBM Software Support Handbook on the Web (techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region.

If the problem you submit is for a software defect or for missing or inaccurate documentation, IBM Software Support will create an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail.

Whenever possible, IBM Software Support will provide a workaround for you to implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM product support Web pages daily, so that other users who experience the same problem can benefit from the same resolutions.

Ch 1 Overview

Global Data Synchronization is the process by which trading partners exchange basic information about products on an ongoing basis. The information can be on price, party, and other relationship-specific details. This process ensures that all stakeholders for a product are kept in “sync” about the latest information on the product.

Global Data Synchronization enables you to:

- Reduce costs and increase competitiveness through the efficient and accurate transfer and on-going synchronization of information.
- Lay the foundation for future supply chain collaboration initiatives which require that trading partners are in “sync” on the basic product, price, party, and relationship specific information.

IBM Global Data Synchronization for WebSphere Product Center Business Processes

The IBM Global Data Synchronization for WebSphere Product Center enables the demand side trading partner (retailer) to perform key business functions. These include:

- Managing information on trade items and trading partners.
- Creating new items and trading partners
- Managing subscriptions
- Processing published item information

The IBM Global Data Synchronization for WebSphere Product Center connects to the UCCnet data pool services to enable a trading partner to perform demand side data synchronization via the UCCnet data pool services.

Ch 2 Installation

This chapter provides complete instructions for installing the solution along with a list of pre-requisites and the necessary hardware and software components.

Topics:

- [System Requirements](#)
- [Installation Pre-requisites](#)
- [Supported Platforms](#)
- [Installation](#)
- [Post Installation Tasks](#)
- [Uninstallation](#)

System Requirements

This chapter details the minimum hardware and software required for installing the IBM Global Data Synchronization for WebSphere Product Center solution.

Note: The requirements listed in this section are the minimum hardware and software recommendations. Prior to installation, a requirement analysis is recommended by WebSphere Professional Services to plan hardware considerations based on the choice of software used and the projected load volume of the servers (that is, the number of SKU's and transaction rates.)

Hardware Requirements

Server Hardware Requirements

- Processor: 2 CPU configuration on IBM pSeries 630 Model 6C4 with a minimum processor speed of 1.0 GHz
- Memory: 6 GB
- Disk space: 20 GB (dedicated for application server), 4 GB (temporary partition)

Additional Server Hardware Requirements

- Additional CPUs may be required based on capacity requirements
- Additional memory may be required based on capacity requirements
- Additional servers for added capacity and/or redundancy
- Multi-server installations require network attached shared storage

Client Hardware Requirements

- Processor: Intel-based system with a Pentium 3 processor and a minimum processor speed of 750 MHz
- Memory: 256 MB

Software Requirements

The following represents the software requirements:

Operating System

AIX Version 5L v5.2

Web Server

IBM WebSphere Application Server Network Deployment Version 5.0.2

Database

IBM DB2 Universal Database Information Integrator Version 8.1 Advanced Edition

Other required software (based on needed function)

- IBM Java Development Kit Version 1.3.1 (Available as part of IBM's WebSphere Application)
- Server Network Deployment Version 5.0.2
- WebSphere MQ Series Version 5.3
- WebSphere Business Integration Adapter for WebSphere MQ Version 2.5.0
- WebSphere Business Integration Adapter Framework Version 2.4.0
- WebSphere InterChange Server V4.2.2
- IBM HTTP 2.0.4.7
- Apache 1.3.1

Client Software Requirements

- Operating system (one of the following)
 - Microsoft Windows 2000 Professional Service Pack 3
 - Microsoft Windows XP Professional Service Pack 1
- Browser - Microsoft Internet Explorer Version 6.0 Service Pack 1
- Document Viewer - Adobe Acrobat Reader Version 4.0 (required to view WebSphere Product Center product documentation)

Note: If your IE browser displays any other tool bar other than a IE tool bar(for example, the Yahoo toolbar), then error messages such as Page not found may be displayed when working with the IBM Global Data Synchronization for WebSphere Product Center solution. Therefore, ensure that you do not have any other toolbars other than IE toolbars. Also ensure that no other utilities are installed on your IE browser.

Installation Pre-requisites

This section provides the pre-requisites necessary before installing the IBM Global Data Synchronization for WebSphere Product Center solution.

Prior to installing IBM Global Data Synchronization for WebSphere Product Center application, ensure that the WebSphere Product Center version 5.0.0.4 is installed on your system. For information about installing WebSphere Product Center version 5.0.0.4, refer *WebSphere Product Center 5.0.0.4 Installation Guide*.

The pre-requisites are:

1. WPC 5.0.0.4 Patch must be applied with the necessary schema updates as required.
2. WPC 5.0.0.4 should be installed and configured.
3. Company should be created other than IBM. For example, Walmart.

Supported Platforms

The supported platforms are:

- AIX v 5.2
- WAS
- DB2

Note: WebSphere Business Integration Connect(WBIC) and IBM Global Data Synchronization for WebSphere Product Center should each be deployed in operating environments consistent with the technology platforms supported by the individual products. There is no technology platform dependency between these two products.

IBM Global Data Synchronization for WebSphere Product Center Installation

This chapter provides the installation procedure to install the IBM Global Data Synchronization for WebSphere Product Center solution. Before installing the IBM Global Data Synchronization for WebSphere Product Center, ensure that WebSphere Product Center is not running.

The IBM Global Data Synchronization for WebSphere Product Center solution can be installed in two ways:

- Using Command Line
- Using Installer

Using Command Line

There are two ways to install IBM Global Data Synchronization for WebSphere Product Center using the command line. They are:

- Run the following command available in GDS_Demand_AIX dir:

```
./setupAIX.bin -P installLocation=<value> -silent
```

- Install from a response file. Run the following command

```
./setupAIX.bin -P -options <options file name> -silent
```

In the response file replace the <value> with the correct install location "-P installLocation=<value>",

Using Installer

The Installer is used to unzip the files to the required directory.

To install the IBM Global Data Synchronization for WebSphere Product Center solution using the installer:

1. Untar the .tar file and run the setupAix.bin executable available in GDS_Demand_AIX directory. The *Splash* window is displayed for a few seconds and then the *Welcome* window is displayed. This provides a basic introduction to the installation process. The product name, version, vendor name, and the Website information are also provided.

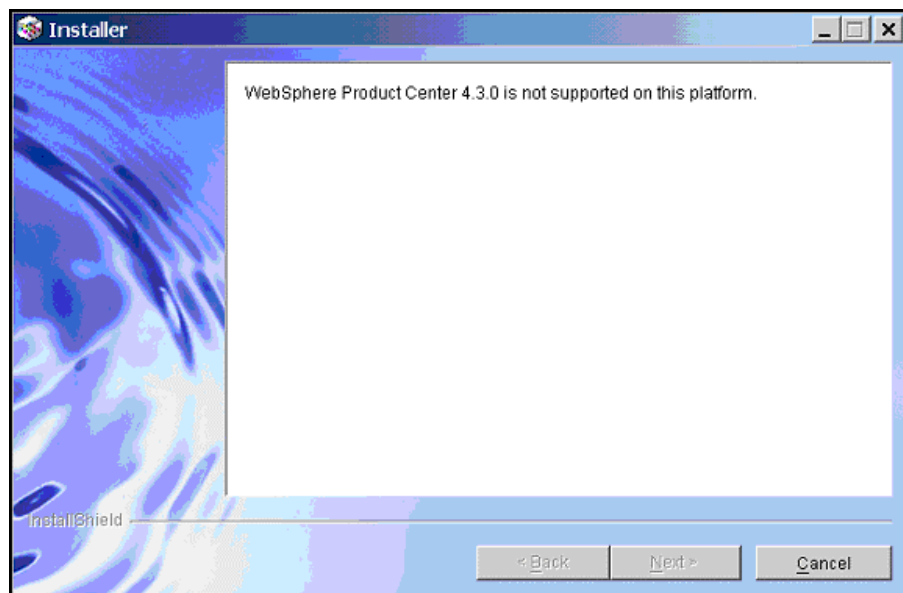


Splash



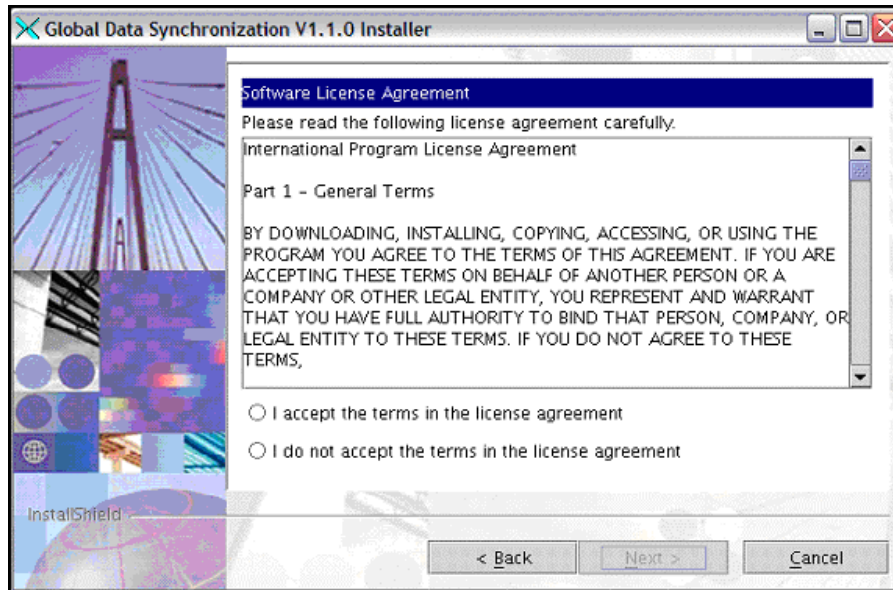
Welcome

If the IBM Global Data Synchronization for WebSphere Product Center solution does not support the platform on which you want to install, then the *Unsupported Platforms* window is displayed.



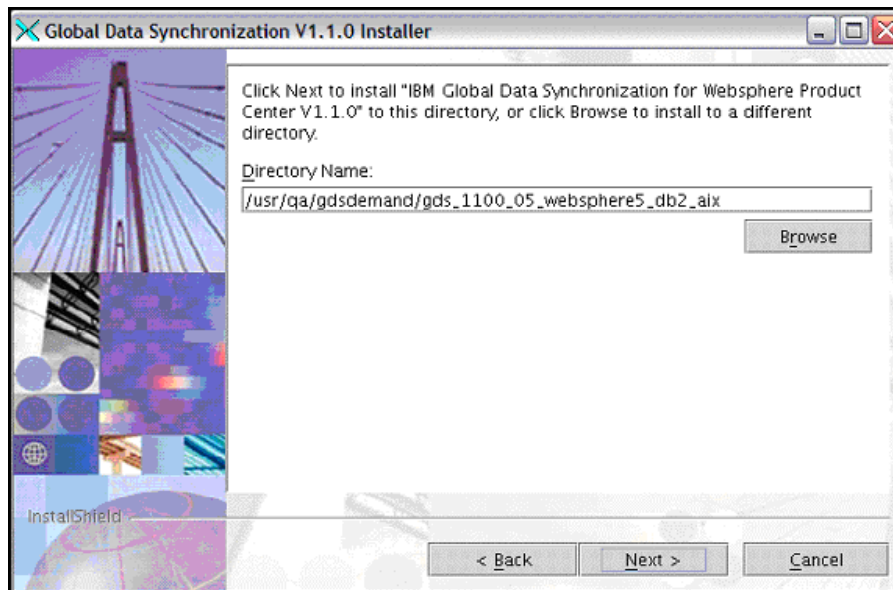
Unsupported Platforms

2. Click **Next**. The *Software License Agreement* window is displayed.



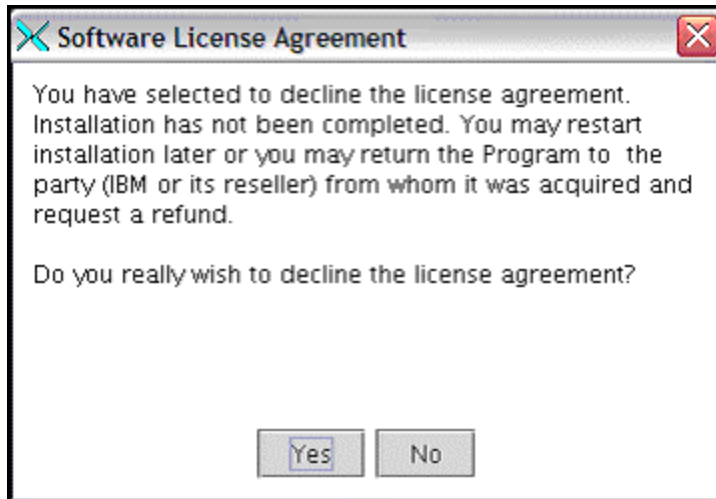
Software License Agreement

3. Select **I accept the terms in the license agreement** and click **Next**. The window that allows you to specify the location for the installation is displayed. The default directory is also displayed.



Installation Location

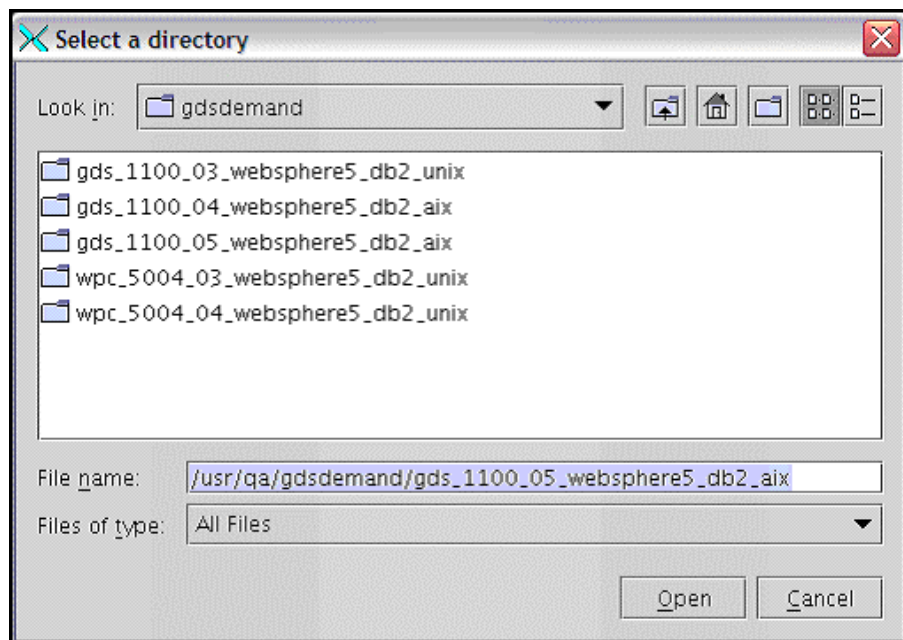
If you select **I do not accept the terms in the license agreement** and then click **Next**, the *Decline License Agreement* window is displayed. On this window, if you click **Yes**, the installation process stops.



Decline License Agreement

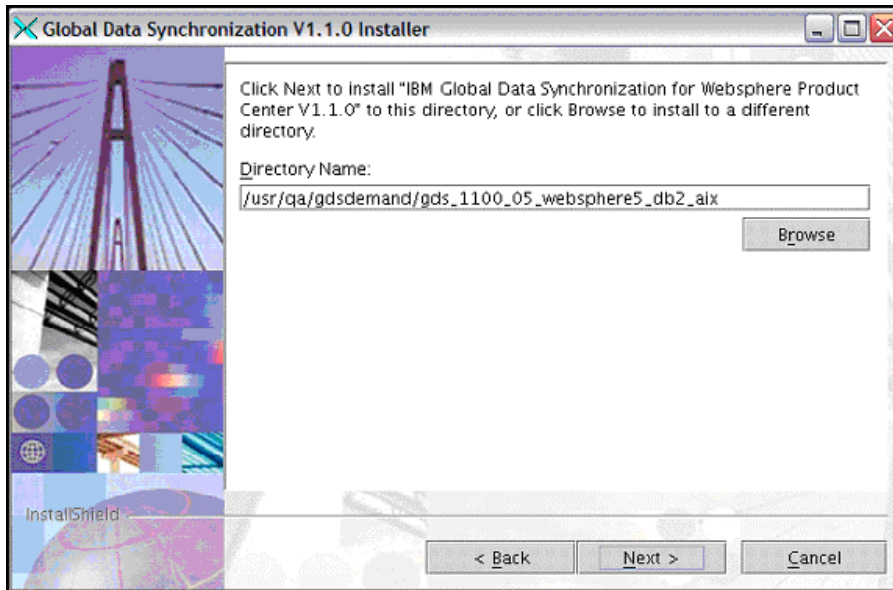
4. In the *Installation Location* window, you can either install the files in the default directory or you can specify another directory.

To select a different directory, click **Browse**. The *Select Directory* window is displayed.



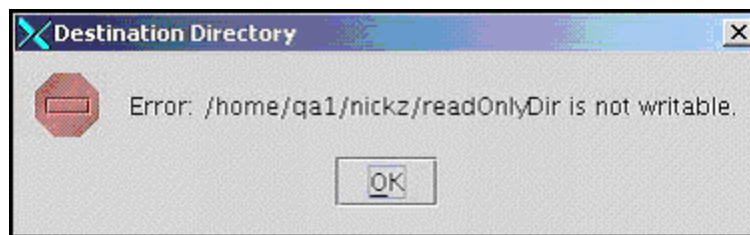
Select Directory

Browse and select a directory and then click **Next**. The *Select Directory* window closes and the selected directory and its path are displayed in the **Directory Name** field.



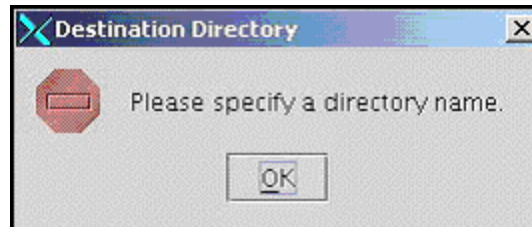
Installation Location

If a read only directory is selected for installation, an error message will display saying that the directory is not writable:

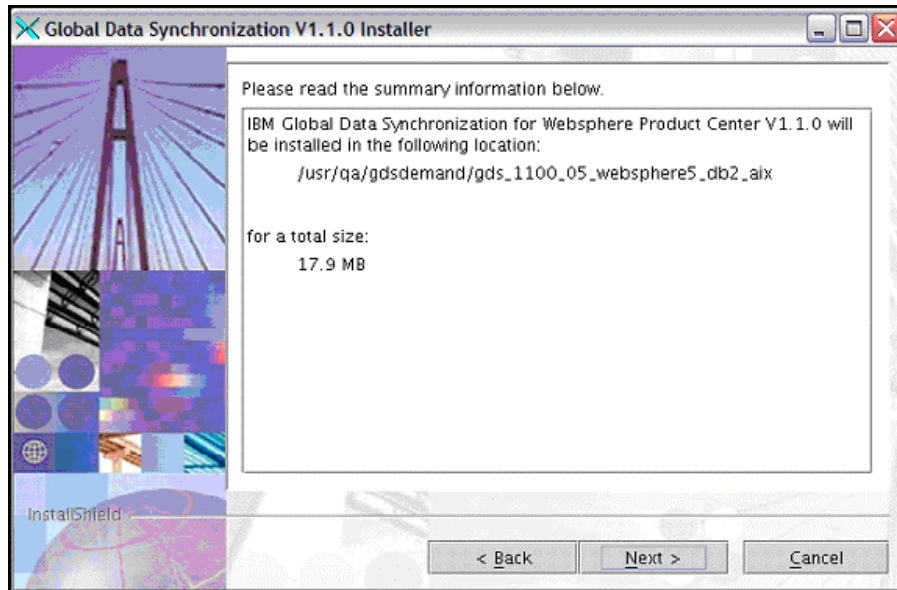


Directory Read Only

If no directory is selected for installation, an error message will appear asking the user to specify a directory for installation:

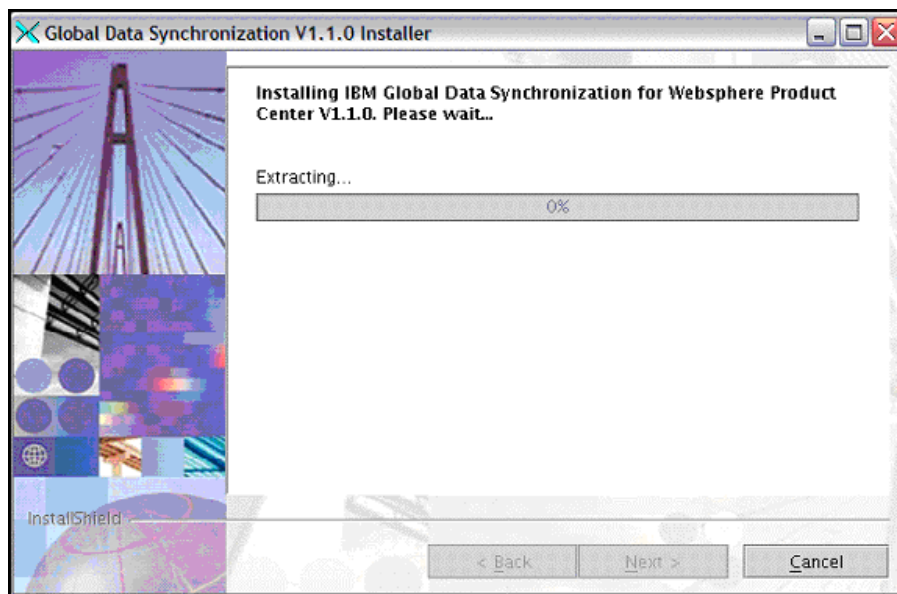


5. Click **Next**. The *Install Preview* window is displayed. This provides a summary of the components to be installed and the total disk space required for installation.



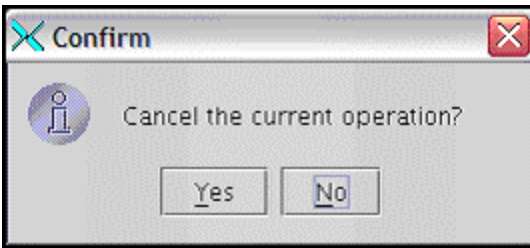
Installation Summary Information

6. Click **Next**. The *Installation* window is displayed. This indicates the progress of the installation.



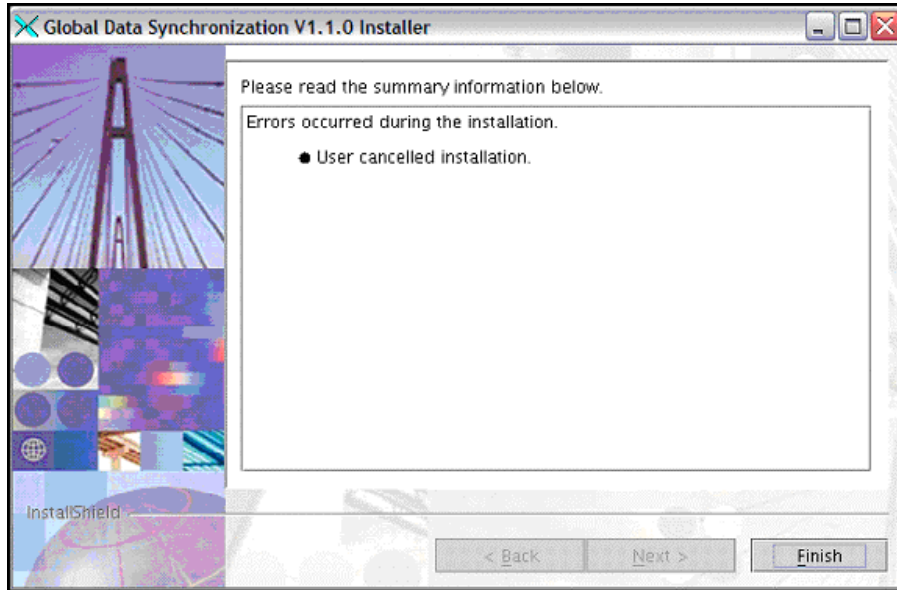
Installation Progress

In case you click **Cancel** to cancel the installation, the *Confirm* dialog box is displayed.



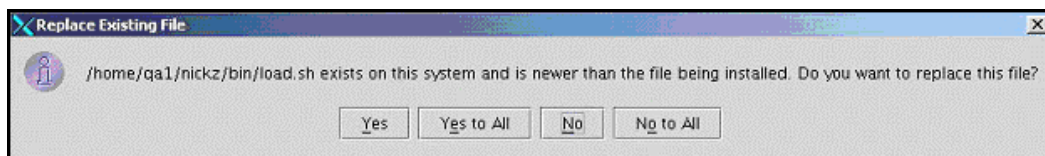
Confirm

If you click **Yes**, the *Installation Cancelled* window is displayed.



Installation – Cancelled

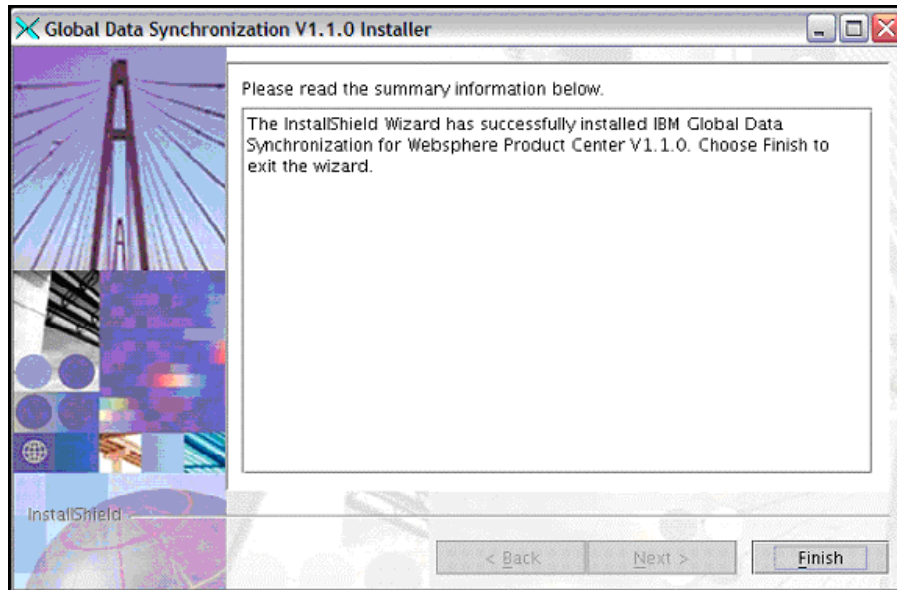
If there is a IBM Global Data Synchronization for WebSphere Product Center application already installed on your system, then the installer might ask your confirmation to replace any existing files.



Replace existing files dialog box

Click **Yes to All** and accept all the files to be replaced.

7. When all the files are installed, the *Installation Successful* window is displayed. This provides information whether the installation was successful or not and if there were any errors that occurred during installation.



Installation Successful

8. Click **Finish**. This completes the installation process.

Log Files

The installer log file is `log.txt`. The installed and uninstalled components are logged in this file. The location of the file is `<install location>` directory.

Post Installation Tasks

This section provides the post installation tasks for WebSphere Product Center 5.0.0.4 and IBM Global Data Synchronization for WebSphere Product Center.

Configuration Changes for WebSphere Product Center 5.0.0.4

The following configuration changes should be made in WebSphere Product Center 5.0.0.4 instance after installing IBM Global Data Synchronization for WebSphere Product Center:

1. Copy `gds.properties` located in `$TOP/etc/default/` directory in the IBM Global Data Synchronization for WebSphere Product Center instance to `WPC_$TOP/etc/default/` directory in the WebSphere Product Center 5.0.0.4 instance.

Or

Give a link to `gds.properties` in IBM Global Data Synchronization for WebSphere Product Center instance. For example,

```
ln -s /usr/qa/gds/gds_1000_09_websphere5_db2_unix/etc/default/gds.properties  
gds.properties
```

2. Copy `gdsTradeItemFunctions.properties` located in `$TOP/etc/default/` directory in the IBM Global Data Synchronization for WebSphere Product Center instance to `WPC $TOP/etc/default/` directory in the WebSphere Product Center 5.0.0.4 instance.

Or

Give a link to `gdsTradeItemFunctions.properties` in IBM Global Data Synchronization for WebSphere Product Center instance. For example,

```
ln -s /usr/qa/gds/gds_1000_09_websphere5_db2_unix/etc/default/  
gdsTradeItemFunctions.properties gdsTradeItemFunctions.properties
```

3. Update the path of `cgd_svr.jar`, `com.ibm.mqbind.jar`, `connector.jar`, `fscontext.jar`, `jms.jar`, `jndi.jar`, `providerutil.jar` in the `cod_rc` file of WebSphere Product Center 5.0.0.4 located in `$TOP/setup` directory. For example,

```
AddJar /usr/qa/gds/gds_1000_09_websphere5_db2_unix/jars/cgd_svr.jar
```

```
AddJar $TOP/jars/jndi.jar
```

4. Also, manually update this path in CLASSPATH of the `appsvr` created for WebSphere Product Center 5.0.0.4 from WAS Console. Restart WebSphere Product Center 5.0.0.4
5. Copy `.bindings` file located in `$TOP/etc/default/` directory in the IBM GLOBAL instance to `WPC $TOP/etc/default/` directory in the WebSphere Product Center 5.0.0.4 instance.
6. Add the following jars to `$TOP/jars` directory from GDS jars directory
 - `com.ibm.mqbind.jar`
 - `connector.jar`
 - `fscontext.jar`
 - `jms.jar`
 - `jndi.jar`
 - `providerutil.jar`

IBM Global Data Synchronization for WebSphere Product Center Post Installation Tasks

The post installation tasks that are required to be done once IBM Global Data Synchronization for WebSphere Product Center solution is installed are:

1. In the `.bashrc` file of the IBM Global Data Synchronization for WebSphere Product Center solution, do the following changes:

- a. Point `$TOP` to the GDS directory.
- b. Add a parameter `export WPC_INSTALL_DIR=<Directory where WPC is installed>`

For example:

```
export WPC_INSTALL_DIR=/usr/gds/wpc_5002_07_websphere5_db2_unix
```

- c. Add a parameter `WPC_JAR_DIR=<Directory where WPC Jars are located>`

For example:

```
export WPC_JAR_DIR=/usr/gds/wpc_5002_07_websphere5_db2_unix/jars
```

-Or-

```
export WPC_JAR_DIR=WPC_INSTALL_DIR/jars
```

2. Modify the `init_cgd_vars.sh` file located in `$TOP/setup` directory for the parameters `JDK_HOME`, `WAS_HOME`, `WAS_NODENAME`, `WAS_APPSERVERNAME`, and `WAS_VHOST`.

For example,

```
export JDK_HOME=/usr/WebSphere/AppServer/java
```

```
export WAS_HOME=/usr/WebSphere/AppServer
```

```
export WAS_NODENAME=localhost
```

```
export WAS_APPSERVERNAME=gds_reg
```

```
export WAS_VHOST=gds_reg
```

Note: Ensure that the same values are not specified for `WAS_APPSERVERNAME` and `WAS_VHOST` as given in WebSphere Product Center. Specify different values for IBM Global Data Synchronization for WebSphere Product Center instance.

3. Modify the `common.properties` file located in `$TOP/etc/default` directory for the db connection details, `rmi_port`, and `app_svr` port.

Note: Ensure that the same values are specified for db connection and `rmi_port` as given in WebSphere Product Center. Specify different value for `app_svr` port for IBM Global Data Synchronization for WebSphere Product Center instance.

4. Modify the `gds.properties` file located at `$TOP/etc/default` directory for the `company_code` and `gds_app_type` parameters. The value for `company_code` should be the company name as created in Installation Pre-requisites, Step 3.

For example,

```
company_code=<Name of company>
gds_app_type=Demand
```

Note: The `gds.properties` in `etc/default` directory of the IBM Global Data Synchronization for WebSphere Product Center instance and in the WebSphere Product Center instance should have the same changes. Do the changes in one location and then copy it to the `etc/default` directory of WebSphere Product Center. This is for any future change in IBM Global.properties also. This is not required if you put a link for IBM Global.properties in WebSphere Product Center.

5. Run the `test_db.sh` script located in the `$TOP/bin` directory to check for database connection. It should be successful.

For example,

```
bash-2.05b# ./test_db.sh
```

The following is displayed.

```
=====
Setting up database connection
=====
database username: dbusr1
database user passwd: dbusr1
database service name: stack6

Database Connection Information
Database server      = DB2/6000 8.1.5
SQL authorization ID = DBUSR1
Local database alias = STACK6
```


6. Run the scripts `create_vhost.sh`, `create_appsvr.sh`, and `install_war.sh` located in the `$TOP/bin/websphere` directory.

Note: If you are running Node Manager for WAS, create the `vhost` manually from WAS Admin Console and specify the port on which the IBM Global Data Synchronization for WebSphere Product Center solution will run.

7. Run the script `create_gds_demand_schema.sh` located in the `$TOP/src/db/schema/create` directory. This loads the data model for IBM Global Data Synchronization for WebSphere Product Center.

For example,

```
create_gds_demand_schema.sh --company_code=<Name of company>
```

This value should be same as given in Step 4.

Note: Before loading the data model, ensure that WebSphere Product Center is not running. Once the data model is loaded, restart WebSphere Product Center.

8. Run the `start_appsvr.sh` script located in the `$TOP/bin/go/start` directory to start the IBM Global Data Synchronization for WebSphere Product Center application. Ensure that WPC instance is running.
9. Access the IBM Global Data Synchronization for WebSphere Product Center application at the `appsvr_port` number as specified in the `common.properties` file. For example, <http://9.182.74.226:9777/Login.do>.

Note: If you stop the IBM Global Data Synchronization for WebSphere Product Center solution, it may stop the rmi service of WPC. Therefore, ensure that all services are running correctly for WPC.

Locale/Language Specific Configurations

To configure the language specific attributes, follow the steps explained in Configure Language Specific Attributes section in Chapter 3 – Configuration. After this, create a folder for the locale and copy the files within `en_US` folder to the newly created folder. For example, if the locale is French, create a folder `fr_FR` and then copy the files from `en_US` to `fr_FR`.

Configure DataPool Catalog

The following table provides the configurations that need to be done in DataPoolCatalog in WebSphere Product Center.

Key	Value	Description
MessageID	0	This is a unique ID sequence. This has to be reset to 0 or any value that the user wants as the initial value. Consequently the value increases by one for each message. This will be prepended with a unique date-time combination.
UserID	xxxxx	This is the user – id to access the UCCnet data pool services
UserPWD	xxxxx	This is the password to access the UCCnet data pool services
uniqueCreatorIdentification	0	The unique creator identifier is a unique id that will identify each block in the same XML message that is sent o UCCnet data pool services. For example, while adding multiple trade items, each block will have a different unique creator identification id. This value has to be reset to 0 or any value that the user wants as the initial value, for the first time and consequently the value increases by one for each block in the same message.
ExchangeGLN	8380160030003	GLN of the respective exchange, this needs to be updated as per the target exchange GLN value
SelfGLN	xxxxxx	This is the GLN of the trading partner who is using this application.
DefaultLocaleString	en_US	This is the default locale.

IBM Global Data Synchronization for WebSphere Product Center Uninstallation

This section provides the steps for uninstalling IBM Global Data Synchronization for WebSphere Product Center solution.

Uninstallation can be done in two ways.

- Using Command Line
- Using Installer

Using Command Line

To uninstall the IBM Global Data Synchronization for WebSphere Product Center solution using the command line, type the following at the command prompt:

```
<GDS_installLocation>/_uninst/uninstaller.bin -silent
```

Using Installer

To uninstall the IBM Global Data Synchronization for WebSphere Product Center solution using the installer:

1. Access the .bin executable. The *Splash* window is displayed for a few seconds and then the *Welcome* window is displayed. This provides the product name and version that you are uninstalling. Also displays the vendor name and the Website information.

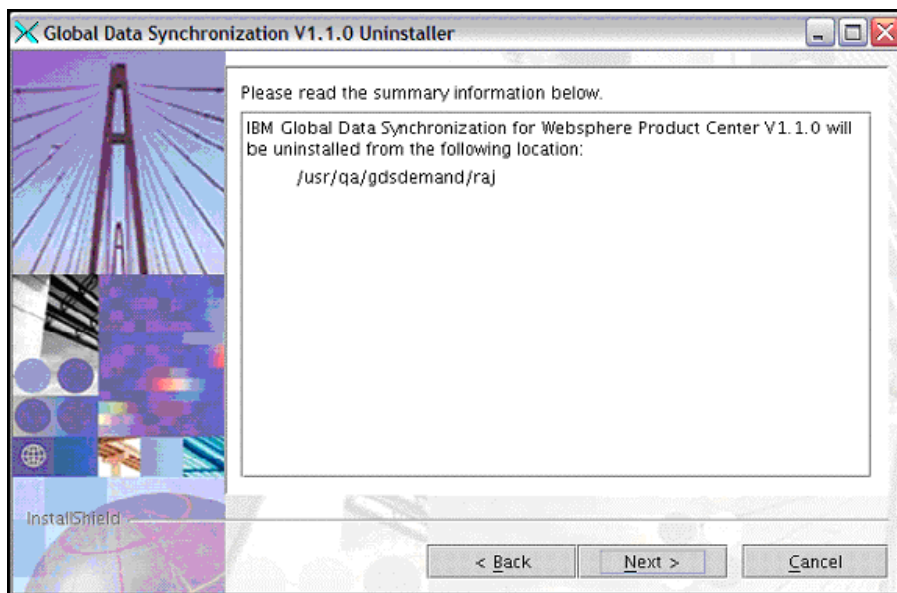


Splash



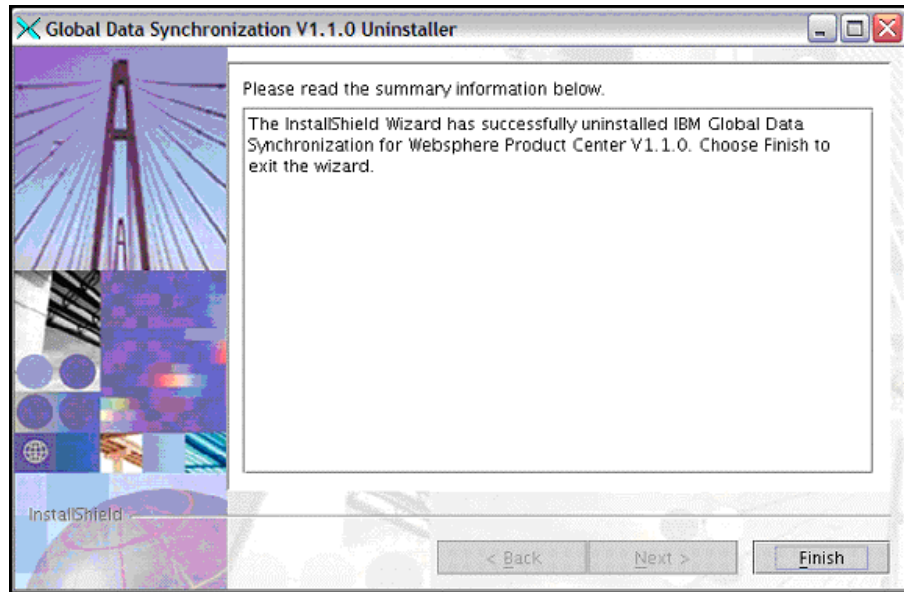
Welcome

2. Click **Next**. The *Summary Information* screen displays the directory location from which IBM Global Data Synchronization for WebSphere Product Center is uninstalled. It also provides the features that were selected to be uninstalled.



Summary Information

3. Click **Next**. The uninstallation process starts. Once the process is completed the *Uninstallation Complete* window is displayed.



Uninstallation Complete

4. Click **Finish**. This completes the uninstallation process.

Ch 3 Configuration

This chapter details the configurations that you can make for the IBM Global Data Synchronization for WebSphere Product Center Demand solution, according to your requirement. These configurations need to be made in WebSphere Product Center version 5.0.0.4. The settings reflect in the IBM Global Data Synchronization for WebSphere Product Center solution.

Note: You need to have working knowledge of WebSphere Product Center version 5.0.0.4

Topics:

- [Modify or Move the Names of Attributes](#)
- [Modify or Move the Names of Attribute Groups](#)
- [Configure Target Markets](#)
- [Configure Language Specific Attributes](#)
- [Configure Trade Item Status](#)
- [Configure Enrichment Completion Criteria](#)
- [Configure Item Data Compliance Check](#)
- [Configure Approval Process](#)
- [Configure Classification Scheme](#)
- [Configure Users and Roles](#)
- [Configure Workflows](#)
- [Mapping Between Internal Category and the UDEX Category](#)

For configuring, you need to log on to WebSphere Product Center version 5.0.0.4.

Modify or Move the Names of Attributes






You can change the names of global and global-local attributes that is displayed in the IBM Global Data Synchronization for WebSphere Product Center application.

Modify Global Attributes

The Global Attributes of the data pool is mapped to the Global Catalog in WebSphere Product Center.

To change the names of Global Attributes:






1. Go to Product Manager>Catalogs>Catalog Console. You can also modify the spec from the Data Model Manager> Specs/Mappings>Specs Console.
2. Click Global_Attributes_Spec next to Global_Catalog.
3. Click **Edit** to edit the Global_Attribute_Spec.

4. Click  next to Global_Attributes_Spec to add a new attribute.
5. To modify the names of the attributes, click on the attribute name.
6. To move an attribute, click on the  to move the attribute up or  to move the attribute down.
7. To add attributes, click  next to the attribute name for which you want to add a attribute.
8. To delete an attribute, click  for the attribute that you want to delete.
9. Click **Save** to save your changes.

Modify Global-Local Attributes

The Global-local Attributes of the data pool is mapped to the Global-Local Catalog in WebSphere Product Center.

To change the names of Global-Local Attributes:

1. Go to Product Manager>Catalogs>Catalog Console. You can also modify the spec from the Data Model Manager> Specs/Mappings>Specs Console.
2. Click Global_Local_Attributes_Spec next to Global_Local_Catalog.
3. Click **Edit** to edit the Global_Local_Attribute_Spec.
4. Click  next to Global_Local_Attributes_Spec to add a new attribute.
5. To modify the names of the attributes, click on the attribute name.
6. To move an attribute, click on the  to move the attribute up or  to move the attribute down.
7. To add attributes, click  next to the attribute name for which you want to add a attribute.
8. To delete an attribute, click  for the attribute that you want to delete.

Modify or Move the Names of Attribute Groups

Multiple attributes can be arranged into a named group. Attribute groups are defined and named in one place so that they can be reused and easily updated. For example, in the IBM Global Data Synchronization for WebSphere Product Center solution, all attributes related to Logistics are grouped under the Logistics tab. The names of these groups can be modified. These changes are done in WebSphere Product Center and they reflect in the IBM Global Data Synchronization for WebSphere Product Center solution.

To change the names of Attributes Groups:


1. Go to Data Model Manager>Attribute Collections>Attribute Collection Console.

2. Click on the attribute group that you want to modify. The list of specs associated with the group is displayed.
3. Under **Specs in Collection**, double-click on the spec. The list of attributes for that spec is displayed under **Attributes for Collection in Spec**.
4. To delete the attribute(s), select those attributes that you want to delete, and click **Remove selected attributes**.
5. To add attributes, click **Search**. The list of attributes is displayed.
6. Select the attributes that you want to add and click **Selected**. The selected attributes are added to the attribute collection.
7. Click **Save** to commit your changes.

Configure Target Markets

The list of target markets that are accessible in the IBM Global Data Synchronization for WebSphere Product Center solution is preset using WebSphere Product Center.

To setup the Target Markets:

1. Go to Product Manager>Lookup Tables> Lookup Table Console.
2. Select Target_Market_Lookup and click .
3. You can add new target markets, edit or remove existing target markets.
4. You can also enable or disable target markets.
5. Save your settings.

All these changes should reflect in the IBM Global Data Synchronization for WebSphere Product Center application.

Configure Language Specific Attributes

WebSphere Product Center provides the ability to localize attribute values for any catalog attribute or hierarchy node. Locales are created based on language/country pairs, which provide variances across countries (that is, U.S. English, British English). You can localize a single attribute value or display name.

To localize the Language Specific Attributes:



1. Go to Data Model Manager>Security> Company Attributes.
2. Select the language/country pairs supported.
3. You can also remove the supported languages and countries.
4. Click **Save** to save the spec.

5. Go to each spec, and enable the **Localized** option. The set of locales are displayed. Select the locale and click **Add**.
6. Click on the attribute to localize the attribute's display name.
7. Enable the Localized option under Attribute Collection Associations. The attribute is localized for all the locales.
8. Save your settings.
9. To view these localized attributes data from the UI perspective go to Home->My Settings and Add Locales from the Available Locales to Selected Locales and save the settings.

Configure Trade Item Status

A trade item goes through a number of statuses in the IBM Global Data Synchronization for WebSphere Product Center application. If the status display name is changed in WebSphere Product Center, the same will be reflected in IBM Global Data Synchronization for WebSphere Product Center UI.

To change the display name for the Trade Item Status:

1. Go to Product Manager>Lookup Tables> Lookup Table Console.
2. For Item_Status_Lookup and click .
3. Click on the status name or the **Edit** icon  to rename the status.
4. Click **Save** to commit the changes.

Configure Enrichment Completion Criteria

To configure the Enrichment Completion Criteria:

1. Go to Data Model Manager>Attribute Collections>Attribute Collection Console.
2. Click **Required**.
3. Under **Specs in Collection**, double-click on the spec. The list of attributes for that spec is displayed under **Attributes for Collection in Spec**.
4. To delete the attribute(s), select those attributes that you want to delete, and click **Remove selected attributes**.
5. To add attributes, click **Search**. The list of attributes is displayed.
6. Select the attributes that you want to add and click **Selected**. The selected attributes are added to the attribute collection.
7. Click **Save** to commit your changes.

Configure Approval Process

The approval process for trade items, trade item links, and trading partners can be automated. This is done by setting the required approval process to ON or OFF in the `gds.properties` file.

To set the Approval Process:

1. At the command prompt, type `$TOP/etc/default/gds.properties`.
2. Change the settings to ON or OFF.

Configure Classification Scheme

Classification scheme is a hierarchical structure of product categories and product attributes. Currently, IBM Global Data Synchronization for WebSphere Product Center supports the UDEX classification scheme.

The configuration can be done through the hierarchy mapping console or selecting the hierarchy from the left navigation pane.

To configure the Classification Scheme:

1. Go to hierarchy Mapping console
2. Map the required classification hierarchy to the UDEX classification.

Configure Users and Roles

The roles are pre-seeded in the solution. The users need to be created. For more information, refer the *Appendix A – Pre-seeded Roles, Access Control Groups, and Selections for IBM Global Data Synchronization for WebSphere Product Center*.

To create a new user:

1. In the left navigation pane, from the drop-down menu, select Default Organization Hierarchy. The hierarchy is displayed under the drop-down menu.
2. Click on the plus sign to expand Default Organization Hierarchy.
3. Point the cursor on Default Organization. Right-click and select **Add User**.
4. Fill in the fields under User Profile.
5. Specify the password for this user.
6. From the list of roles that are displayed, select a role for this user.
7. Click **Save**.
8. Refresh the left navigation pane.
9. Click on view users. The *User Console* displays the newly created user.
10. Enable the new user.

Configure Workflows

During solution setup, you have the option to turn on/off the global attributes enrichment process, variant attribute enrichment process, and the approval process. The following list of approval process can be turned on/ff. If any of the approval process is turned OFF, then it is automated within the solution.

- New Item Approval
- Modify Item Approval
- Delete Item Approval
- New Link Approval
- Delete Link Approval
- Modify Link Approval
- New Trading Partner Approval
- Modify Trading Partner Approval
- Delete Trading Partner Approval

Item workflow configurations

NEW_ITEM_APPROVAL

If this property is turned ON then a notification will be sent to the appropriate user(s) to approve the item

MODIFY_ITEM_APPROVAL

If this property is turned ON, then a notification will be sent to the appropriate user(s), to approve modifications of item.

DELETE_ITEM_APPROVAL

If this property is turned ON, then notification will be sent to the appropriate user(s) to approve deletion of item.

Item Link workflow configurations

NEW_LINK_APPROVAL

If this property is turned ON, then a notification will be sent to the appropriate user(s) to approve the Item Link.

MODIFY_LINK_APPROVAL

If this property is turned ON, then a notification will be sent to the appropriate user(s) to approve modifications of item link.

Trading Partner workflow configurations

NEW_TP_APPROVAL

If this property is turned ON, then a notification will be sent to the appropriate user(s) to approve the trading partner

DELETE_TP_APPROVAL

If this property is ON, then a notification will be sent to the appropriate user(s) to approve the deletion of trading partner

Publication workflow configurations

INITIAL_LOAD_PUBLICATION_AUTO_REJECT

If this property is turned ON, a reject message will be sent to the appropriate user(s) in case an Initial Load Publication fails the validation process.

INITIAL_LOAD_PUBLICATION_ENRICHMENT

If this property is turned ON, an enrichment process will be started after the approval, for each item present in the Initial Load Publication.

INITIAL_LOAD_PUBLICATION_INTERNAL_SYNC

If this property is turned ON, a notification will be sent to the appropriate user(s), to complete internal synchronization.

INITIAL_LOAD_PUBLICATION_SEND_INTERNAL_SYNC_MSG

If this property is turned ON, Catalog Item Confirmation message of type Synchronized will be sent to the appropriate user(s), after the user completes Internal Synchronization.

NEW_ITEM_PUBLICATION_AUTO_REJECT

If this property is turned ON, a reject message will be sent to the appropriate user(s) in case a New Item Publication fails in validation.

NEW_ITEM_PUBLICATION_ENRICHMENT

If this property is turned ON, an enrichment process will be started after the approval, for each item present in a New Item Publication.

NEW_ITEM_PUBLICATION_INTERNAL_SYNC

If this property is turned ON, a notification will be sent to the appropriate user(s) to complete Internal Synchronization for New Item Publication.

NEW_ITEM_PUBLICATION_SEND_INTERNAL_SYNC_MSG

If this property is turned ON, a Catalog Item Confirmation message of type Synchronized will be sent to the appropriate user(s) after user completes Internal Synchronization.

ITEM_CHANGE_PUBLICATION_AUTO_REJECT

If this property is turned ON, a reject message will be sent to the appropriate user(s) in case the Item Change Publication fails the validation process.

ITEM_CHANGE_PUBLICATION_ENRICHMENT

If this property is turned ON, an enrichment process will be started after the approval, for each item present in the Item Change Publication.

ITEM_CHANGE_PUBLICATION_INTERNAL_SYNC

If this property is turned ON, a notification will be sent to the appropriate user(s) to do internal synchronization for New Item Publication.

ITEM_CHANGE_PUBLICATION_SEND_INTERNAL_SYNC_MSG

If this property is turned ON, Catalog Item Confirmation message of type Synchronized will be sent to the appropriate user(s), after user completes Internal Synchronization.

To configure the workflows:

1. Go to `$TOP/etc/default/gds.properties` file using any editor.
2. For configuring the global enrichment, set `global_enrichment` to true or false. Similarly for switching the variant enrichment, set `local_enrichment` to true or false.
3. For configuring the approval processes, set the respective process to ON or OFF.
4. Restart the server.

Note: This configuration can be done when installing the solution using the Install Shield.

Configure Information Provider

The list of information providers that are accessible in the IBM Global Data Synchronization for WebSphere Product Center solution is preset using WebSphere Product Center.

To configure the Information Providers:

1. In the left navigation pane, from the drop-down menu, select `Trading_Partner_Catalog`. The hierarchy is displayed under the drop-down menu.
2. Right-click on the country and click **Add Item**. The details page for the trading partner is displayed.
3. Specify the following:
 - a. In the **Name** field, type the name for the Information Provider.
 - b. In the **GLN** field, type the Global Location Number.
 - c. In the **GLN Identifier** field, select any of the available options. Options available are Manufacturer, Exchange, Retailer, and Supplier.
 - d. In the **Country** field, type the country of the Information Provider.
 - e. Specify the status as Approved and the TP status as Active.
 - f. Specify the item type as Information Provider.

4. Click **Save** to save the settings.

Note: When creating selections, ensure that the Information Provider that is configured is selected. For more information, refer Create Selections in *Chapter 4 – Administration*.

Mapping Between Internal Category and the UDEX Category

Internal Category is the categories maintained by the organization. UDEX-UK category is the category in the UDEX UK data pool.

To map the attributes between the Internal Category and the UDEX Category:

1. Go to Product Manager>Hierarchy Maps>Hierarchy Mapping Console.
2. You can create a new map or modify an existing map.
3. Click New to create a new map.
4. Select the Internal Category and then the UDEX category. This maps the selected internal category to the UDEX category.
5. The settings are saved automatically.

Ensure that mapping to UDEX Categories are done only for the Categories accessible by a user. Also, the field "udex_to_internal_hierarchy_mapping_without_security_breach" should be set to true in the `gds.properties` file. If this is not set to true, there will be a performance penalty.

Ch 4 Administration

This chapter provides information about security and user management in IBM Global Data Synchronization for WebSphere Product Center solution. WebSphere Product Center 5.0.0.4 is used for setting the security and the roles for the various users.

Topics:

- [Security](#)
- [Security Steps](#)

Security

Security requirements for IBM Global Data Synchronization for WebSphere Product Center are divided into two parts. They are:

- Functional Security
- Data Security

Functional Security

Functional Security controls the actions that can be performed by the user on the System. Depending on the privileges granted, the user will be able to perform a limited set of actions.

Data Security

Data Security is implemented using the Selections feature in WebSphere Product Center. Security is provided for the Trade Items, Trade Item Links, Trading Partners, Target Markets and Transactions.

Security Steps

The steps to set the security are:

1. Log on to WebSphere Product Center
2. Create a Role
3. Create an Access Control Group (ACG)
4. Create Selections
5. Provide Data Access Privileges
6. Create User

Create a Role

The role is one of the central concepts of the IBM Global Data Synchronization for WebSphere Product Center solution. A role is a collection of tasks, services, and information for a user or a group of users. The role defines which service and information the user should be able to access and the activities that can be performed. The role also defines the visualization of the contents and the navigation structure within the solution.

Roles are stored in the WebSphere Product Center database. For information about the roles pre-seeded in the solution, refer *Appendix B – Pre-seeded Roles and Selections for IBM Global Data Synchronization for WebSphere Product Center*.

Alternatively, you can create new roles. To do this

1. Log on to WebSphere Product Center.
2. Go to Data Model Manager > Security > Role Console.
3. Click **New**.
4. Type the name for the role.
5. From the drop-down menu select default ACG and provide the access privileges for this role.
6. Save the settings.

The roles and Access Control Groups (ACG) that are set in WebSphere Product Center are applied in IBM Global Data Synchronization for WebSphere Product Center.

Create an Access Control Group (ACG)

The Access Control Group is used to control the access levels for each role. Permissions are set to define the type of access granted to the role and the associated entity. When you set up permissions, you specify the level of access for the role and the entity. To specify access rights, you identify them in access control groups.

The ability to control a user's access to view, edit, and delete entities can be restricted based on the access privilege definition of the role that is assigned to the user. To restrict access to an entity, the role defined with restricted access privileges must be associated with the ACG that the entity is using.

Therefore, a single selection can be made available to a specific ACG and all roles that are part of the ACG will have access to that entity. A user is allowed access to an entity once they are assigned to the role.

There are two types of Access Control Groups. They are:

- [UDEX CAT SPECIFIC] ACG – This is the UDEX category specific access control group. The available roles can be:
 - [UDEX CAT SPECIFIC] Global Brand Manager

- [UDEX CAT SPECIFIC] Global Product Executive
- [UDEX CAT - TM SPECIFIC] Brand Manager
- [[UDEX CAT - TM - ATTR GROUP SPECIFIC] Product Executive
- [[UDEX CAT - TM - ATTR GROUP SPECIFIC] User
- [UDEX CAT - TM SPECIFIC] Variant Publisher
- [TM Specific] ACG – This is the target market specific access control group. The available roles can be:
 - [UDEX CAT - TM SPECIFIC] Brand Manager
 - [[UDEX CAT - TM - ATTR GROUP SPECIFIC] Product Executive
 - [[UDEX CAT - TM - ATTR GROUP SPECIFIC] User
 - [UDEX CAT - TM SPECIFIC] Variant Publisher
 - [TM Specific] Marketing Manager

You can create new ACGs. To do this:

1. Log on to WebSphere Product Center.
2. Go to Data Model Manager > Security > Access Control Groups > Access Control Group Console.
3. Click New.
4. Type the name for the ACG. From the Role drop-down menu, select the role that is created in step2.
5. Provide access privileges for the default ACG. Select the checkboxes for Catalog list, Hierarchy list, Selection list, and Selection Measures list.
6. Save the settings.

Create Selections

The created ACGs are linked to Selections that are created through WebSphere Product Center. These Selections are used to achieve Category and Target Market based security.

When a Selection is created, it is associated with an ACG, a catalog, and a hierarchy. So, for achieving category-level security, a Selection is created for [UDEX CAT SPECIFIC] ACG, Global_Catalog and UDEX_Hierarchy_UCCNet hierarchy. Similarly, for Target Market based security, Selection is created for [TM Specific] ACG, Global_Local_Catalog and Target_Market hierarchy.

Once the Selection is created, the required Categories are selected. Once this is done, the users associated with the ACGs will have visibility into only those categories/ target markets that are selected in the Selection.

Note: All Categories (Internal and UDEX) that are accessible through selections must be enabled. If that is not done, the pagination will not be proper, that is the result size may not correspond to the defined page size.

The following selections need to be done:

1. Global Catalog Selection
2. Global Local Catalog Selection
3. Trading Partner Catalog Selection
4. GLN Selection
5. Filter Selection
6. Internal Hierarchy Selection
7. UCCNet Message Archive Catalog Selection

For information about pre-seeded Selections, refer *Appendix B – Pre-seeded Roles and Selections for IBM Global Data Synchronization for WebSphere Product Center*.

Global Catalog Selection

1. Go to Product Manager > Selections > Selection Console. Click New Basic Selection.
2. Select Global Catalog from the drop-down.
3. Select the version.
4. Select the Access Control Group.
5. Select the hierarchy as UDEX_Hierarchy_UCCNet. All the categories under Global Catalog Hierarchy are displayed.
6. Type a name for the selection and then select the categories.
7. Click Save to save the selection.

Global Local Catalog Selection

1. Go to Product Manager > Selections > Selection Console. Click New Basic Selection.
2. Select the version.
3. Select the Access Control Group.
4. Select the hierarchy as Target_Market_Hierarchy. All the target markets under Global Local Catalog Hierarchy are displayed.
5. Type a name for the selection and then select the categories.
6. Click Save to save the selection.

Trading Partner Catalog Selection

1. Go to Product Manager > Selections > Selection Console. Click New Basic Selection.
2. Select Trading Partner Catalog from the drop-down. Select the version.
3. Select the Access Control Group.
4. Select the hierarchy as Target_Market_Hierarchy. All the target markets under Target_Market_Hierarchy are displayed.
5. Type a name for the selection and then select the target markets.
6. Click Save to save the selection.

GLN Catalog Selection

1. Go to Product Manager > Selections > Selection Console. Click New Basic Selection.
2. Select <> from the drop-down.
3. Select the version.
4. Select the Access Control Group.
5. Select the hierarchy as IP_Hierarchy. All the target markets under IP_Hierarchy are displayed.
6. Type a name for the selection and then select the information providers.
7. Click Save to save the selection.

Filter Selection

1. Go to Product Manager > Selections > Selection Console. Click New Basic Selection.
2. Select Filter Catalog from the drop-down.
3. Select the version.
4. Select the Access Control Group.
5. Select the hierarchy as Default Filter Hierarchy. All the categories under Filter Catalog are displayed.
6. Type a name for the selection and then select the categories.
7. Click Save to save the selection.

Internal Hierarchy Selection

1. Go to Product Manager > Selections > Selection Console. Click New Basic Selection.
2. Select Global Catalog from the drop-down.
3. Select the version.
4. Select the Access Control Group.

5. Select the hierarchy as Internal Hierarchy. All the categories under Global Catalog Hierarchy are displayed.
6. Type a name for the selection and then select the categories.
7. Click Save to save the selection.

UCCNet Message Archive Catalog Selection

1. Go to Product Manager > Selections > Selection Console. Click New Basic Selection.
2. Select UCCNet Message Archive Catalog from the drop-down.
3. Select the version.
4. Select the Access Control Group.
5. Select the hierarchy as UCCNetMessageArchiveHierarchy. All the categories under UCCNet Message Archive Catalog Hierarchy are displayed.
6. Type a name for the selection and then select the categories.
7. Click Save to save the selection.

Provide Data Access Privileges

Go to Security > Access Privileges > Catalog Access Console. Provide access privileges to the attribute groups for the Global Catalog and the Global Local Catalog. You can either make the attribute groups viewable or editable.

Create User

For information about creating the user, refer the section Configure Users and Roles in *Chapter 3 – Configuration*.

Ch 5 Import/Export in IBM Global Data Synchronization for WebSphere Product Center

The Import/Export operation allows the user to export or import information from or to IBM Global Data Synchronization for WebSphere Product Center. The user can import or export information about trade items, trade item links, and trading partners. This chapter provides a few guidelines for the PSS personnel while implementing IBM Global Data Synchronization for WebSphere Product Center for the customer. The various scenarios for import/export are explained. Also provided are sample scripts which show how the scenarios are implemented.

Note: IBM Global Data Synchronization for WebSphere Product Center does not have separate import/export module. For release 1.1, WebSphere Product Center 5.0.0.4 is used for import/export.

The import or export depends a lot on the data available at the customer location. Some may not have GTIN as the primary key for trade items, while for some the mandatory fields may be missing. In such cases, the PSS team should setup the import or export process correctly.

If the GTIN is not present in legacy systems, a GTIN generator needs to be plugged in while importing the data from legacy systems. The generated GTIN need not be stored in the legacy systems and can be dynamically generated. Ensure that the generated GTIN is unique. It should be the same every time the data is imported or exported and not be a randomly generated number.

If the source data does not contain mandatory fields (required by IBM Global Data Synchronization for WebSphere Product Center), a dummy value needs to be generated. The trade items can be modified after the import.

The trade items can be imported in any desired status. This can be done while performing import or export by modifying the import/export script.

File Formats for Import/Export

The data can be imported or exported in different file formats. As a sample, imports or exports is provided in CSV (Comma Separated Values) and XML formats. This can be extended to suite the customer's requirements.

Implementation Approach for CSV

A trade item is represented by two specs:

- Global_Attributes_Spec
- Global_Local_Attributes_Spec.

When setting up an export operation, a destination spec needs to be defined that maps to these two specs. The destination spec maps the attribute names of the trade items in the legacy systems to the attribute names of trade items in IBM Global Data Synchronization for Websphere Product Center.

Similarly, when setting up import, a file spec needs to be defined that maps to these two specs. The file spec maps the attribute names of the trade items in IBM Global Data Synchronization for Websphere Product center to the attribute names of trade items in the legacy systems.

Implementation Approach for XML

Using the GDS Business Object script operation, the xml/csv file can be imported into IBM Global Data Synchronization for WebSphere Product Center.

Sample XML

This sample xml file has just the mandatory attributes that is required to create a trade item.

```
<TrigoXML>
  <Header>
    <Transaction_Id></Transaction_Id>
    <File_Id>01</File_Id>
    <Record_Id>01</Record_Id>
    <Creation_Date>11092004</Creation_Date>
    <Creation_Time>123020</Creation_Time>
  </Header>

  <Item>
    <Attribs>
      <GlobalAttribs>
        <EANUCCCode> </EANUCCCode>
        <EANUCCCodeType> </EANUCCCodeType>

        <GlobalTradeItemNumber>11111111111113</GlobalTradeItemNumber>
        <GTINName>test</GTINName>
        <CoreExtensionType> <CoreExtensionType>
        <ProductType>EACH</ProductType>
        <ItemStatus>Draft</ItemStatus>
        <BrandName>test</BrandName>
        <Pack>7</Pack>
        <Classification>

        <GlobalClassificationCode>000000001.000000002.000000012</GlobalClassificationCode>
        <GlobalClassificationDescription>ALCOHOL
        BASED COCKTAILS/MIXES</GlobalClassificationDescription>

        <InternalClassificationCode>10000056</InternalClassificationCode>
      </GlobalAttribs>
    </Attribs>
  </Item>
</TrigoXML>
```



```
<InternalClassificationDescription>Cocktails</InternalClassificationDe
scription>

    </Classification>

    </GlobalAttribs>

    <LocalAttribs>
        <TargetMarket></TargetMarket>
        <InformationProvider></InformationProvider>

    <InformationProviderName></InformationProviderName>
    </LocalAttribs>
    </Attribs>
</Item>
</TrigoXML>
```

Scenarios and Sample Scripts

This section lists down the various customer scenarios for import and export and also provides sample scripts for those scenarios.

Note!

For information about how to import or export trade items, links, and trading partners, refer the *WebSphere Product Center User's Guide*.

For Import

The various scenarios for import are:

- [Import Global Trade Items](#)
- [Import Global and Local Trade Items](#)
- [Import Trade Item in a Particular Status](#)
- [Update an Already Existing Trade Item through Import](#)
- [Auto-update the Status of a Trade Item after Import](#)
- [Import the Trade Item and Ensure that it is Compliant with a Particular Exchange](#)
- [Import Trade Item Links in a Particular Status](#)
- [Updating Trade Item Links through Import](#)
- [Auto-update the Status of Trade Item Link after Import](#)
- [Import Trading Partners](#)
- [Import Trading Partners in a Particular Status](#)

- [Auto Update the Status of the Trading Partner after Import](#)
- [Catalog to Catalog Import](#)
- [Notifications after Import](#)

Import Global Trade Items

For this scenario a specmap is created in the system which maps the xml attributes to the Global_Attributes_Spec of the Global_Catalog. Then use the script function specMap.getMappings () which returns a hashmap of the destination paths to the source paths. Using this, the xml nodes are parsed and the corresponding attribute path values are set.

```

logFile = createOtherOut("GDS Sample Import - Import Global Items
Only.txt");

var sEANUCCCode = "";
var sGTIN = "";
var sGTINName = "";
var sProductType = "";
var sInternalCategoryCode = "";
var sDataPoolCategoryCode = "";
var status = "";

var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample Import -
Import Global Items Only/");
docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);
var hmAttributePathsToValues = [];

var specMap = getSpecMapByName("GDS XML Global Attributes Spec Map");
if(specMap != null)
{
    var hmDstPathsToSrcPaths = [];
    var hmDstPathsToSrcPaths = specMap.getMappings();

    forEachHmElement(hmDstPathsToSrcPaths, dstPath, srcPath)
    {
        if(dstPath.endsWith("eanuccCode"))
        {
            sEANUCCCode =
parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName());
            logFile.writeln(dstPath+", "+sEANUCCCode);
        }
        else if(dstPath.endsWith("eanuccType"))
        {
            sEANUCCCodeType =
parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName());
            logFile.writeln(dstPath+", "+sEANUCCCodeType);
        }
        else if(dstPath.endsWith("ProductType"))
        {
            sProductType =
parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName());

```

```

        logfile.writeln(dstPath+", "+sProductType);
    }
    else
    {
        var value =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
        logfile.writeln(dstPath+", "+value);
        if(value != "")
        {
            hmGlobalAttributePathsToValues[dstPath] =
value;
            logfile.writeln(dstPath+", "+value);
        }
    }
}

sExtensionType =
parseXMLNode("Attribs/GlobalAttribs/CoreExtensionType");
logfile.writeln("ExtensionType, "+sExtensionType);
sInternalCategoryCode =
parseXMLNode("Attribs/GlobalAttribs/Classification/InternalClassificationCode
");
logfile.writeln("InternalCategoryCode, "+sInternalCategoryCode);

if(sEANUCCCode != ""
    && sEANUCCCodeType != ""
    && sExtensionType != ""
    && sProductType != ""
    && sInternalCategoryCode != ""
)
{
    tradeItem = new
TradeItemDS(sEANUCCCode, sEANUCCCodeType, sExtensionType, sProductType, sInternal
CategoryCode);

    if(tradeItem != null && (hmGlobalAttributePathsToValues
!= null && hmGlobalAttributePathsToValues.size() != 0))
    {
        logfile.writeln("Setting attributes for Global
Item "+hmGlobalAttributePathsToValues);

        tradeItem.setTradeItemAttributesDS(hmGlobalAttributePathsToValues);
    }

    tradeItem.saveTradeItemDS();

    createTransaction(tradeItem, "ITEM_GLOBAL_ENRICHMENT_COMPLETED", "master
");
    createNotification(tradeItem, "ITEM_GLOBAL_ENRICHMENT_COMPLETED", "maste
r");

    out.writeln("=====");
    out.writeln("Global Item Saved");

    out.writeln("=====");
    out.writeln(tradeItem);

    out.writeln("=====");

```

```

        out.writeln("Creating Transaction");
        var bCreateTxn =
createTransaction(tradeItem,"ITEM_GLOBAL_ENRICHMENT_COMPLETED","master");

        out.writeln("=====");

        out.writeln("=====");
        out.writeln("Creating Notification");
        var bCreateNotf =
createNotification(tradeItem,"ITEM_GLOBAL_ENRICHMENT_COMPLETED","master");

        out.writeln("=====");
    }
}

logFile.save("GDS Sample Import - Import Global Items Only.txt");

```

Import Global and Local Trade Items

```

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
// This script inserts a trade item (a global item and its variant) into GDS
// in any given status
//
// Assumptions: -
// *****
// 1. Both Global Item and Local Item are being imported.
// 2. The GDS Item Status is mentioned in the Sample XML file.
// 3. The Notification Type is set to Approved while creating Transaction and
// Notification. This can be set to anything.
//    But it should correspond to the Item status given in the XML file. In
// this sample scenario,
//    we have set the local item status to Approved and therefore we are
// setting the Notification Type to NEW_ITEM_APPROVED.
// 4. The XML file is taken from the import and it is always the latest file.
// The name of the Import is hardcoded here.
// 5. There are two spec maps created in the system, called,
//    a) GDS XML Global Attributes Spec Map (this maps the Mandatory Global
// Attributes to the Sample XML file ).
//    b) GDS XML Local Attributes Spec Map (this maps the Mandatory Local
// Attributes to the Sample XML file ).
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

function removeTradeItem(tradeItem, sGTIN)
{
    logFile.writeln("Performing Cleanup....");
    var items = [];
    items = tradeItem.getItems();

    if(items != null && items.size() != 0)
    {
        var globalItem = items[0];
        var localItem = items[1];
        var gtin_tm_ip = "";

        if(localItem != null)

```

```

        {
            logfile.writeln("Local Item Deleted :
"+tradeItem.deleteTMIPVariant());
        }

        if(globalItem != null)
        {
            logfile.writeln("Global and TradeItem Deleted :
"+tradeItem.deleteGTIN());
        }
    }

    logfile.writeln("Cleanup complete...");
}

var logfile = createOtherOut("GDS Sample TradeItem Import - New
TradeItems.txt");
var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample TradeItem
Import - New TradeItems/");
docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);

var globalSpecMap = getSpecMapByName("GDS XML Global Attributes Spec Map");
var localSpecMap = getSpecMapByName("GDS XML Local Attributes Spec Map");
catchError(oErr)
{
    foreachXMLNode("Item/")
    {
        var statusFromXML = "";
        var bValueSetForLocal = false;
        var hmGlobalAttributePathsToValues = [];
        var hmLocalAttributePathsToValues = [];

        if(globalSpecMap != null)
        {
            var sEANUCCCode = "";
            var sEANUCCCodeType = "";
            var sExtensionType = "";
            var sProductType = "";
            var sInternalCategoryCode = "";

            var hmDstPathsToSrcPaths = [];
            var hmDstPathsToSrcPaths = globalSpecMap.getMappings();

            foreachHmElement(hmDstPathsToSrcPaths, dstPath,
srcPath)
            {
                if(dstPath.endsWith("eanuccCode"))
                {
                    sEANUCCCode =
parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName());

                    logfile.writeln(dstPath+" "+sEANUCCCode);
                }
                else if(dstPath.endsWith("eanuccType"))
                {

```

```

        sEANUCCCodeType =
parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName());

        logFile.writeln(dstPath+", "+sEANUCCCodeType);
    }
    else if(dstPath.endsWith("ProductType"))
    {
        sProductType =
parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName());

        logFile.writeln(dstPath+", "+sProductType);
    }
    else if(dstPath.endsWith("GDSItemStatus"))
    {
        var globalStatusCtg =
getCtgByName("Item_Status_LookUp");

        statusFromXML =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");

        if(statusFromXML != "" &&
globalStatusCtg.containsByPrimaryKey(statusFromXML))
        {

            hmGlobalAttributePathsToValues[dstPath] = statusFromXML;
        }
        else
        {

            hmGlobalAttributePathsToValues[dstPath] = "Draft";
        }
    }
    else
    {
        var value =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
        logFile.writeln(dstPath+", "+value);
        if(value != "")
        {

            hmGlobalAttributePathsToValues[dstPath] = value;

            logFile.writeln(dstPath+", "+value);
        }
    }
}

        sExtensionType =
parseXMLNode("Attribs/GlobalAttribs/CoreExtensionType");
        logFile.writeln("ExtensionType, "+sExtensionType);
        sInternalCategoryCode =
parseXMLNode("Attribs/GlobalAttribs/Classification/InternalClassificationCode
");

        logFile.writeln("InternalCategoryCode, "+sInternalCategoryCode);

        if(sEANUCCCode != ""
            && sEANUCCCodeType != ""
            && sExtensionType != ""
            && sProductType != ""
            && sInternalCategoryCode != ""
        )
    {

```

```

        tradeItem = new
TradeItemDS(sEANUCCCode,sEANUCCCodeType,sExtensionType,sProductType,sInternal
CategoryCode);

        if(tradeItem != null &&
(hmGlobalAttributePathsToValues != null &&
hmGlobalAttributePathsToValues.size() != 0))
        {
                logFile.writeln("Setting attributes for
Global Item "+hmGlobalAttributePathsToValues);

                tradeItem.setTradeItemAttributesDS(hmGlobalAttributePathsToValues);
        }
    }

    // Now set the Local Item

    if(localSpecMap != null)
    {
        hmDstPathsToSrcPaths = [];
        hmDstPathsToSrcPaths = localSpecMap.getMappings();

        forEachHmElement(hmDstPathsToSrcPaths, dstPath, srcPath)
        {
            if(dstPath.endsWith("GDSItemStatus"))
            {
                var localStatusCtg =
getCtgByName("Item_Status_Local_LookUp");
                statusFromXML =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");

                if(statusFromXML != "" &&
localStatusCtg.containsByPrimaryKey(statusFromXML))
                {
                    hmLocalAttributePathsToValues[dstPath] = statusFromXML;
                }
                else
                {
                    hmLocalAttributePathsToValues[dstPath] = "Draft";
                }
            }
            else
            {
                var value =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                if(value != "")
                {
                    hmLocalAttributePathsToValues[dstPath] = value;
                    logFile.writeln(dstPath+", "+value);

                    if(!dstPath.contains("GlobalTradeItemNumber"))
                    {
                        bValueSetForLocal = true;
                    }
                }
            }
        }
    }
}

```

```

        if(bValueSetForLocal == true)
        {
            if(tradeItem != null &&
(hmLocalAttributePathsToValues != null &&
hmLocalAttributePathsToValues.size() != 0))
            {
                logFile.writeln("Setting attributes for
Local Item "+hmLocalAttributePathsToValues);

                tradeItem.setTradeItemAttributesDS(hmLocalAttributePathsToValues);

                if(checkString(hmGlobalAttributePathsToValues["Global_Attributes_Spec/
GDSItemStatus"], "") == "Draft")
                {

                    tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/GDSItemStatu
s", "Draft With Variant");

                    logFile.writeln("Updating Global
status to Draft with Variant since local Item is being inserted");
                }
            }
        }

        var tradeItemSaved = false;

        if(tradeItem != null)
        {
            catchError(saveError)
            {
                tradeItemSaved = tradeItem.saveTradeItemDS();
            }
            if(saveError != null || tradeItemSaved == false)
            {
                logFile.writeln("There was an error/failure while
saving the tradeitem....");
                logFile.writeln(""+saveError);
                logFile.writeln("Now rolling back the
changes....");

                removeTradeItem(tradeItem, tradeItem.getTradeItemAttributeValueDS("Glob
al_Attributes_Spec/GlobalTradeItemNumber"));
            }
            else
            {

                logFile.writeln("=====");
                logFile.writeln("Trade Item Saved");

                logFile.writeln("====="+tradeItemSaved+"=====");

                logFile.writeln(tradeItem);

                logFile.writeln("=====");
                logFile.writeln("Creating Transaction");
                var bCreateTxn =
createTransaction(tradeItem, "NEW_ITEM_APPROVAL_PENDING", "master");

                logFile.writeln("====="+bCreateTxn+"=====");
            }
        }

```



```

        logFile.writeln("=====");
                logFile.writeln("Creating Notification");
                var bCreateNotf =
createNotification(tradeItem, "NEW_ITEM_APPROVAL_PENDING", "master");

        logFile.writeln("====="+bCreateNotf+"=====");
=====");
                }
            }
        else
        {
            logFile.writeln("TradeItem is null");
        }
    }

logFile.save("GDS Sample TradeItem Import - New TradeItems.txt");
}
if(oErr != null)
{
    logFile.writeln("ERROR!! "+oErr);
    logFile.save("GDS Sample TradeItem Import - New TradeItems.txt");
}

```

Import Trade Item in a Particular Status

```

////////////////////////////////////
////////////////////////////////////
// This script updates a trade item into GDS in any given status
//
// Assumptions: -
// *****
// 1. The GDS Item Status is mentioned in the Sample XML file.
// 2. The Notification Type is set to Approved while creating Transaction and
Notification. This can be set to anything.
//    But it should correspond to the Item status given in the XML file.
// 3. The XML file is taken from the import and it is always the latest file.
The name of the Import is hardcoded here.
// 4. There are two spec maps created in the system, called,
//    a) GDS XML Global Attributes Spec Map (this maps the Mandatory Global
Attributes to the Sample XML file ).
//    b) GDS XML Local Attributes Spec Map (this maps the Mandatory Local
Attributes to the Sample XML file ).
////////////////////////////////////
////////////////////////////////////

logFile = createOtherOut("GDS Sample TradeItem Import - Update
TradeItems.txt");
var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample TradeItem
Import - Update TradeItems/");
docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);

var globalSpecMap = getSpecMapByName("GDS XML Global Attributes Spec Map");
var localSpecMap = getSpecMapByName("GDS XML Local Attributes Spec Map");

```

```

forEachXMLNode("Item/")
{
    var sEANUCCCode = "";
    var sGTIN = "";
    var sTM = "";
    var sIP = "";
    var localStatusFound = false;

    var hmGlobalAttributePathsToValues = [];
    var hmLocalAttributePathsToValues = [];
    var bCheckGlobalStatus = false;

    if(globalSpecMap != null)
    {
        var hmDstPathsToSrcPaths = [];
        var hmDstPathsToSrcPaths = globalSpecMap.getMappings();

        forEachHmElement(hmDstPathsToSrcPaths, dstPath, srcPath)
        {
            if(!dstPath.endsWith("ProductType"))
            {
                if(dstPath.endsWith("eanuccCode"))
                {
                    sEANUCCCode =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                    logFile.writeln(dstPath+", "+sEANUCCCode);
                }
                else if(dstPath.endsWith("GlobalTradeItemNumber"))
                {
                    sGTIN =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                    logFile.writeln(dstPath+", "+sGTIN);
                }
                else if(dstPath.endsWith("GDSItemStatus"))
                {
                    var globalStatusCtg =
getCtgByName("Item_Status_LookUp");
                    statusFromXML =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");

                    if(statusFromXML != "" &&
globalStatusCtg.containsByPrimaryKey(statusFromXML))
                    {
                        hmGlobalAttributePathsToValues[dstPath] = statusFromXML;
                    }
                }
                else
                {
                    var value =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                    logFile.writeln(dstPath+", "+value);
                    if(value != "")
                    {
                        hmGlobalAttributePathsToValues[dstPath] = value;
                        logFile.writeln(dstPath+", "+value);
                    }
                }
            }
        }
    }
}

```

```

// Now set local attributes

localSpecMap = getSpecMapByName("GDS XML Local Attributes Spec Map");

if(localSpecMap != null)
{
    hmDstPathsToSrcPaths = [];
    hmDstPathsToSrcPaths = localSpecMap.getMappings();

    forEachHmElement(hmDstPathsToSrcPaths, dstPath, srcPath)
    {
        if(dstPath.endsWith("TargetMarket"))
        {
            sTM =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
            hmLocalAttributePathsToValues[dstPath] = sTM;
            logfile.writeln(dstPath+", "+sTM);
        }
        else if(dstPath.endsWith("InformationProvider"))
        {
            sIP =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
            hmLocalAttributePathsToValues[dstPath] = sIP;
            logfile.writeln(dstPath+", "+sIP);
        }
        else if(dstPath.endsWith("GDSItemStatus"))
        {
            var localStatusCtg =
getCtgByName("Item_Status_Local_LookUp");
            statusFromXML =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");

            if(statusFromXML != "" &&
localStatusCtg.containsByPrimaryKey(statusFromXML))
            {
                hmLocalAttributePathsToValues[dstPath] =
statusFromXML;

                bCheckGlobalStatus = true;
            }
            else
            {
                var value =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                if(value != "")
                {
                    hmLocalAttributePathsToValues[dstPath] =
value;

                    logfile.writeln(dstPath+", "+value);
                }
            }
        }
    }

    var tradeItem = getTradeItemDS(sEANUCCCode, sTM, sIP, sGTIN);
    if(tradeItem != null)
    {

        if(bCheckGlobalStatus == true)
        {
            var iItems = tradeItem.getItems();

```

```

        if(iItems != null && iItems.size() != 0)
        {
            if(iItems[0] != null && iItems[1] == null) // That
means the local item doesnt exist and we are trying to create one.
            {

                if(checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attribut
es_Spec/GDSItemStatus"), "") == "Draft")
                {

                    tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/GDSItemStatu
s", "Draft With Variant");

                    tradeItem.saveTradeItemDS();
                    logFile.writeln("Updating Global
status to Draft with Variant since local Item is being set");
                }
            }
        }

        if(hmGlobalAttributePathsToValues != null &&
hmGlobalAttributePathsToValues.size() != 0)
        {
            logFile.writeln("setting global attributes
"+hmGlobalAttributePathsToValues);

            tradeItem.setTradeItemAttributesDS(hmGlobalAttributePathsToValues);
        }

        if(hmLocalAttributePathsToValues != null &&
hmLocalAttributePathsToValues.size() != 0)
        {
            logFile.writeln("setting local attributes
"+hmLocalAttributePathsToValues);

            tradeItem.setTradeItemAttributesDS(hmLocalAttributePathsToValues);
        }

        var tradeItemSaved = false;
        catchError(saveError)
        {
            tradeItemSaved = tradeItem.saveTradeItemDS();
        }
        if(saveError != null || tradeItemSaved == false)
        {
            logFile.writeln("There was an error/failure while saving
the tradeitem...");
        }
        else
        {

            logFile.writeln("=====");
            logFile.writeln("Item Saved");

            logFile.writeln("====="+tradeItemSaved+"====="
);
            logFile.writeln(tradeItem);

            logFile.writeln("=====");
            logFile.writeln("Creating Transaction");
            var bCreateTxn =
createTransaction(tradeItem, "MODIFY_ITEM_APPROVED", "master");

```

```

        logFile.writeln("====="+bCreateTxn+"=====");
    }

    logFile.writeln("=====");
        logFile.writeln("Creating Notification");
        var bCreateNotf =
createNotification(tradeItem, "MODIFY_ITEM_APPROVED" , "master" );

        logFile.writeln("====="+bCreateNotf+"=====");
    }
}

logFile.save("GDS Sample TradeItem Import - Update TradeItems.txt");

```

Update an Already Existing Trade Item through Import

Refer the scripts for Import an item in a particular status and Import an item through auto status

Auto-update the Status of the Trade Item after Import

Trade items can be updated with the auto status functionality. It means that if a trade item is being updated and the status is not set in the xml file, the script can correctly set the status of the trade item based on its existing status in the system.

```

////////////////////////////////////
////////////////////////////////////
// This script updates a trade item (a global item and its variant) into GDS
// in any given status
//
// Assumptions: -
// *****
// 1. Both Global Item and Local Item are being imported.
// 2. The GDS Item Status is mentioned in the Sample XML file and it is Local
// Item status.
// 3. The Notification Type is set to Approved while creating Transaction and
// Notification. This can be set to anything.
// But it should correspond to the Item status given in the XML file. In
// this sample scenario,
// we have set the local item status to Approved and therefore we are
// setting the Notification Type to NEW_ITEM_APPROVED.
// 4. The XML file is taken from the import and it is always the latest file.
// The name of the Import is hardcoded here.
// 5. There are two spec maps created in the system, called,
// a) GDS XML Global Attributes Spec Map (this maps the Mandatory Global
// Attributes to the Sample XML file ).
// b) GDS XML Local Attributes Spec Map (this maps the Mandatory Local
// Attributes to the Sample XML file ).
////////////////////////////////////
////////////////////////////////////

function getToStatus(strStatus,checkCompliance)
{

```

```

        var setStatus = "";
        var tradeItemStatusSet =
tradeItemStatusLkp.getCtgItemByAttributeValue("TradeItem_AutoStatus_Lookup
Spec/From_Status",strStatus);
        if(tradeItemStatusSet != null)
        {
            foreachItemSetElement(tradeItemStatusSet, statusItem)
            {
                var toStatus =
checkString(statusItem.getCtgItemAttrib("TradeItem_AutoStatus_Lookup
Spec/To_Status"),"");
                if(toStatus != "")
                {
                    setStatus = toStatus;
                    notf =
checkString(statusItem.getCtgItemAttrib("TradeItem_AutoStatus_Lookup
Spec/Notification"),"");
                    txn =
checkString(statusItem.getCtgItemAttrib("TradeItem_AutoStatus_Lookup
Spec/Transaction"),"");
                    break;
                }
            }
        }
        return setStatus;
    }

catchError(oError)
{
logFile = createOtherOut("GDS Sample Import - Update Global And Local Items -
Auto Status");
var tradeItemStatusLkp = getCtgByName("TradeItem_AutoStatus_Lookup");
var notf = "";
var txn = "";

var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample TradeItem
Import - Update TradeItems With AutoStatus/");
docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
logFile.writeln(xmlFilePath);
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);

var globalSpecMap = getSpecMapByName("GDS XML Global Attributes Spec Map");
var localSpecMap = getSpecMapByName("GDS XML Local Attributes Spec Map");

    foreachXMLNode("Item/")
    {
        var sEANUCCCode = "";
        var sGTIN = "";
        var sTM = "";
        var sIP = "";
        var globalAttributesModified = false;
        var localAttributesModified = false;

        var hmAttributeGlobalPathsToValues = [];
        var hmAttributeLocalPathsToValues = [];
        var bProcessVariant = false;

```

```

        if(globalSpecMap != null)
        {
            var hmDstPathsToSrcPaths = [];
            var hmDstPathsToSrcPaths = globalSpecMap.getMappings();

            forEachHmElement(hmDstPathsToSrcPaths, dstPath, srcPath)
            {
                if(!dstPath.endsWith("ProductType"))
                {
                    if(dstPath.endsWith("eanuccCode"))
                    {
                        sEANUCCCode =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");

                        logfile.writeln(dstPath+", "+sEANUCCCode);
                    }
                    else
                if(dstPath.endsWith("GlobalTradeItemNumber"))
                {
                    sGTIN =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                    logfile.writeln(dstPath+", "+sGTIN);
                }
                else
                {
                    var value =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                    if(value != "")
                    {

                        hmAttributeGlobalPathsToValues[dstPath] = value;

                        logfile.writeln(dstPath+", "+value);
                        globalAttributesModified =
true;
                    }
                }
            }
        }

        // Now set local attributes

        if(localSpecMap != null)
        {
            hmDstPathsToSrcPaths = [];
            hmDstPathsToSrcPaths = localSpecMap.getMappings();

            forEachHmElement(hmDstPathsToSrcPaths, dstPath, srcPath)
            {
                if(dstPath.endsWith("TargetMarket"))
                {
                    sTM =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                    if(sTM != "")
                    {

                        hmAttributeLocalPathsToValues[dstPath] = sTM;
                        logfile.writeln(dstPath+", "+sTM);
                        localAttributesModified = true;
                        bProcessVariant = true;
                    }
                }
            }
        }
    }
}

```

```

        else if(dstPath.endsWith("InformationProvider"))
        {
            sIP =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
            if(sIP != "")
            {
                hmAttributeLocalPathsToValues[dstPath] = sIP;
                logFile.writeln(dstPath+", "+sIP);
                localAttributesModified = true;
                bProcessVariant = true;
            }
        }
        else
        {
            var value =
checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
            if(value != "")
            {
                hmAttributeLocalPathsToValues[dstPath] = value;
                logFile.writeln(dstPath+", "+value);
            }
        }
    }
}

if(sEANUCCCode != "")
{
    tradeItem = getTradeItemDS(sEANUCCCode, sTM, sIP, sGTIN);

    if(tradeItem != null)
    {
        // Get the current global item status
        var globalStatus =
checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attributes_Spec/GD
SItemStatus"), "");
        logFile.writeln("Global Status is "+globalStatus);
        var localStatus =
checkString(tradeItem.getTradeItemAttributeValueDS("Global_Local_Attributes_S
pec/GDSItemStatus"), "");
        logFile.writeln("Local Status is "+localStatus);

        if(globalStatus != "" && globalAttributesModified
== true)
        {
            var globalStatusToBeSet =
getToStatus(globalStatus, false);
            if(globalStatusToBeSet != "")
            {
                tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/GDSItemStatu
s", globalStatusToBeSet);
                logFile.writeln("Setting Global
status to "+globalStatusToBeSet);
            }
            else
            {
                logFile.writeln("Could not retrieve
Global Status from Lookup table");
            }
        }
    }
}

```



```

        if((localAttributesModified == true &&
globalStatus != "") && bProcessVariant == true)
        {
            logFile.writeln(" localStatus is
:"+localStatus);
            if(localStatus == "")
            {
                // Local item is currently not
                // Update the global item status to
                Pending Variant Creation.and set the Local Item status to Draft

                tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/GDSItemStatu
s", "Pending Variant Creation");
                var globalItemSaved =
                tradeItem.saveTradeItemDS();
                logFile.writeln("Global Item Saved =
"+globalItemSaved);
                localStatus = "Draft";
                tradeItem =
                getTradeItemDS(sEANUCCCode, sTM, sIP, sGTIN);
            }

            var localStatusToBeSet =
            getToStatus(localStatus, false);
            if(localStatusToBeSet != "")
            {
                tradeItem.setTradeItemAttributeDS("Global_Local_Attributes_Spec/GDSIte
mStatus", localStatusToBeSet);
                logFile.writeln("Setting Local status
to "+localStatusToBeSet);
            }
            else
            {
                logFile.writeln("Could not retrieve
Local Status from Lookup table");
            }
        }

        if(hmAttributeGlobalPathsToValues != null &&
hmAttributeGlobalPathsToValues.size() != 0)
        {
            logFile.writeln("setting Global attributes
"+hmAttributeGlobalPathsToValues);
            tradeItem.setTradeItemAttributesDS(hmAttributeGlobalPathsToValues);
        }

        if((hmAttributeLocalPathsToValues != null &&
hmAttributeLocalPathsToValues.size() != 0) && bProcessVariant == true)
        {
            logFile.writeln("setting Local attributes
"+hmAttributeLocalPathsToValues);
            tradeItem.setTradeItemAttributesDS(hmAttributeLocalPathsToValues);
        }

        var tradeItemSaved = false;
        catchError(saveError)
        {

```

```

        tradeItemSaved =
tradeItem.saveTradeItemDS();
    }
    if(saveError != null || tradeItemSaved == false)
    {
        logFile.writeln("There was an error/failure
while saving the tradeitem...");
    }
    else
    {

        logFile.writeln("=====");
        logFile.writeln("Item Saved ");

        logFile.writeln("====="+tradeItemSaved+"=====");
        logFile.writeln(tradeItem);

        if(txn != "" && txn != null)
        {

            logFile.writeln("=====");
            logFile.writeln("Creating
Transaction");
            var bCreateTxn =
createTransaction(tradeItem,txn,"master");

            logFile.writeln("====="+bCreateTxn+"=====");

            }

            if(notf != "" && notf != null)
            {

                logFile.writeln("=====");
                logFile.writeln("Creating
Notification");
                var bCreateNotf =
createNotification(tradeItem,notf,"master");

                logFile.writeln("====="+bCreateNotf+"=====");

            }

        }

    }
}
if(oError != null)
{
    logFile.save("GDS Sample Import - Update Global And Local Items - Auto
Status");
}
logFile.save("GDS Sample Import - Update Global And Local Items - Auto
Status");

```

The following table shows the rules that govern auto status of trade items. In the sample script shown above, a lookup table with the name TradeItem_AutoStatus_Lookup is referenced which is the same as shown.

From Status	To Status	Item Type	Notification	Transaction
Draft	Draft	Local Item and Global Item		0
Draft With Variant	Draft With Variant	Global Item		
Global Attributes Modified Locally	Global Attributes Modified Locally	Global Item		0
Global Enrichment Completed	Global Enrichment Completed	Global Item		
Pending Variant Creation	Pending Variant Creation	Global Item		
Modified Compliant	Modified Compliant	Global Item		
Modified Compliant Approval Pending	Modified Compliant Approval Pending	Global Item		
Modified Locally	Modified Compliant Approval Pending	Global Item	MODIFY_ITEM_APPROVAL_PENDING	MODIFY_ITEM_APPROVAL_PENDING
Complete	Edited	Local Item		0
Compliant	Edited	Local Item		0
Compliant	Compliant	Local Item		
Approved	Edited	Local Item		0
Rejected	Compliant	Local Item		
Synchronized	Modified Locally	Local Item and Global Item	MODIFY_ITEM_APPROVED	MODIFY_ITEM_APPROVED

Import Trade Item and Ensure that it is Compliant with a Particular Exchange

To check for trade item compliancy a script operation named `validateTradeItem()` is exposed which can be used within the import scripts to check for tradeitem compliancy with a particular exchange.

Import Trade Item Links in a Particular Status

```
logFile = createOtherOut("GDS Sample TradeItemLinks Import - All
TradeItemLinks");

var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample
TradeItemLinks Import - All TradeItemLinks/");
docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);

forEachXMLNode("Links/Link")
{
    var sParentGTIN = checkString(parseXMLNode("Parent/ParentGTIN"), "");
    out.writeln(sParentGTIN);
    if(sParentGTIN != "")
    {
        forEachXMLNode("Child")
        {
            var childGTIN =
checkString(parseXMLNode("ChildGTIN"), "");
            var quantity = checkInt(parseXMLNode("Quantity"), 0);
            var status = checkString(parseXMLNode("Status"), "");
            out.writeln(childGTIN);

            if(childGTIN != "")
            {
                var tradeItemLink = new
TradeItemLink(sParentGTIN, childGTIN, quantity);
                if(tradeItemLink != null)
                {
                    if(status != "")
                    {
                        tradeItemLink.setLinkAttribute("Status", status);
                    }

                    var linkSaved =
tradeItemLink.saveTradeItemLink();

                    logFile.writeln("=====");
                    logFile.writeln("TradeItem Link
"+sParentGTIN+ " <====>"+childGTIN+ " Saved");

                    logFile.writeln("====="+linkSaved+"=====");
                    logFile.writeln("=====");

                    logFile.writeln("=====");
                    logFile.writeln("Creating Transaction");
```

```

                                var bCreateTxn =
createTransaction(tradeItemLink,"MODIFY_ITEM_LINK_APPROVAL_PENDING", "master")
;
                                //          logFile.writeln((bCreateTxn ==
true) ? "Done":"Failure");

        logFile.writeln("====="+bCreateTxn+"=====");

        logFile.writeln("=====");
                                logFile.writeln("Creating Notification");
                                var bCreateNotf =
createNotification(tradeItemLink,"MODIFY_ITEM_LINK_APPROVAL_PENDING", "master"
);
                                //          logFile.writeln((bCreateNotf
== true) ? "Done":"Failure");

        logFile.writeln("====="+bCreateNotf+"=====");

                                }
        }
}

logFile.save("GDS Sample TradeItemLinks Import - All TradeItemLinks");

```

Sample XML

The sample XML for trade item link is as shown.

```

<TrigoXML>
<Header>
<Transaction_Id></Transaction_Id>
<File_Id>01</File_Id>
<Record_Id>01</Record_Id>
<Creation_Date>09092004</Creation_Date>
<Creation_Time>161226</Creation_Time>
</Header>
<Links>
<Link>
<Parent>
<ParentGTIN>30000000000001</ParentGTIN>
</Parent>
<Child>
<ChildGTIN>11111111111113</ChildGTIN>
<Quantity>1</Quantity>
<Status>Approved</Status>
</Child>
</Link>
<Link>
<Parent>
<ParentGTIN>30000000000001</ParentGTIN>
</Parent>
<Child>
<ChildGTIN>55555555555555</ChildGTIN>
<Quantity>1</Quantity>
<Status>Approved</Status>
</Child>
</Link>

```

```

<Link>
<Parent>
<ParentGTIN>65555555555552</ParentGTIN>
</Parent>
<Child>
<ChildGTIN>5555555555555</ChildGTIN>
<Quantity>1</Quantity>
<Status>Approved</Status>
</Child>
</Link>
<Link>
<Parent>
<ParentGTIN>79819384738924</ParentGTIN>
</Parent>
<Child>
<ChildGTIN>11111111111113</ChildGTIN>
<Quantity>1</Quantity>
<Status>Draft</Status>
</Child>
</Link>
</Links>
</TrigoXML>

```

Update Trade Item Links through Import

```

function getToStatus(strStatus,checkCompliance)
{
    var setStatus = "";
    var tradeItemLinksStatusSet =
tradeItemStatusLkp.getCtgItemByAttributeValue("TradingItemLink_AutoStatus_Lookup_Spec/From_Status",strStatus);
    if(tradeItemLinksStatusSet != null)
    {
        forEachItemSetElement(tradeItemLinksStatusSet, statusItem)
        {
            var toStatus =
checkString(statusItem.getCtgItemAttrib("TradingItemLink_AutoStatus_Lookup_Spec/To_Status"),"");
            if(toStatus != "")
            {
                setStatus = toStatus;
                notf =
checkString(statusItem.getCtgItemAttrib("TradingItemLink_AutoStatus_Lookup_Spec/Notification"),"");
                txn =
checkString(statusItem.getCtgItemAttrib("TradingItemLink_AutoStatus_Lookup_Spec/Transaction"),"");
                break;
            }
        }
    }

    return setStatus;
}

logFile = createOtherOut("GDS Sample Import - Update TradeItem Links");
var tradeItemStatusLkp = getCtgByName("TradingItemLink_AutoStatus_Lookup");

var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample Import - Update TradeItem Links/");

```

```

docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);

forEachXMLNode("Links/Link")
{
    var sParentGTIN = checkString(parseXMLNode("Parent/ParentGTIN"), "");
    out.writeln(sParentGTIN);
    if(sParentGTIN != "")
    {
        forEachXMLNode("Child")
        {
            var childGTIN =
checkString(parseXMLNode("ChildGTIN"), "");
            var quantity = checkInt(parseXMLNode("Quantity"), 0);
            var status = checkString(parseXMLNode("Status"), "");
            out.writeln(childGTIN);

            if(childGTIN != "" && sParentGTIN != "")
            {
                var tradeItemLink = getTradeItemLink(sParentGTIN,
childGTIN);
                if(tradeItemLink != null)
                {
                    tradeItemLink.setLinkAttribute("Quantity", "0");

                    if(status != "")
                    {
                        tradeItemLink.setLinkAttribute("Status", status);
                    }
                    else
                    {
                        var currentStatus =
tradeItemLink.getLinkAttributeValue("Status");
                        var toStatus =
checkString(getToStatus(currentStatus, false), "");
                        if(toStatus != "")
                        {
                            tradeItemLink.setLinkAttribute("Status", toStatus);
                        }
                    }

                    var linkSaved =
tradeItemLink.saveTradeItemLink();

                    logfile.writeln("=====");
                    logfile.writeln("TradeItem Link
"+sParentGTIN+" <====>"+childGTIN+" Saved");

                    logfile.writeln("====="+linkSaved+"=====");
                    if(txn != "" && txn != null)
                    {
                        logfile.writeln("=====");
                    }
                }
            }
        }
    }
}

```


Import Trading Partners

```
logFile = createOtherOut("GDS Sample TradingPartners Import - New
TradingPartners");

var sGLN = "";
var sTPName = "";
var sCountry = "";
var sGLNID = "";
var status = "";
var tpSaved = false;

var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample
TradingPartners Import - New TradingPartners/");
docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);

forEachXMLNode("TradingPartner/")
{
    sGLN = checkString(parseXMLNode("Attribs/GlobalLocationNumber"), "");
    sTPName = checkString(parseXMLNode("Attribs/TradingPartnerName"), "");
    sCountry = checkString(parseXMLNode("Attribs/Country"), "");
    sGLNID = checkString(parseXMLNode("Attribs/GLNIdentifier"), "");
    status = checkString(parseXMLNode("Attribs/Status"), "");

    if(sGLN != "" && sTPName != "" && sCountry != "" && sGLNID != "" &&
status != "")
    {
        var tradingPartner = getTradingPartner(sGLN);

        if(tradingPartner == null)
        {
            tradingPartner = new
TradingPartner(sGLN, sTPName, sCountry, sGLNID);
            if(status != null && status != "")
            {
                tradingPartner.setPartnerAttribute("GLN_Spec/Status", status);
            }

            tpSaved = tradingPartner.saveTradingPartner();

            logFile.writeln("=====");
            logFile.writeln("Trading Partner Saved "+sGLNs);

            logFile.writeln("====="+tpSaved+"=====");
            logFile.writeln("=====");

            logFile.writeln("=====");
            logFile.writeln("Creating Transaction");
            var bCreateTxn =
createTransaction(tradingPartner, "NEW_TRADING_PARTNER_APPROVED", "master");
            //          logFile.writeln((bCreateTxn == true) ?
"Done":"Failure");
        }
    }
}
```

```

        logFile.writeln("====="+bCreateTxn+"=====");
        logFile.writeln("=====");
        logFile.writeln("Creating Notification");
        var bCreateNotf =
createNotification(tradingPartner,"NEW_TRADING_PARTNER_APPROVED","master");
        //          logFile.writeln((bCreateNotf == true) ?
"Done":"Failure");

        logFile.writeln("====="+bCreateNotf+"=====");
        }
        else
        {
            logFile.writeln("Trading Partner "+sGLN+" already
exists");
        }
        }
        else
        {
            logFile.writeln("Some Mandatory Attribute is missing");
        }
    }
logFile.save("GDS Sample TradingPartners Import - New TradingPartners");

```

Sample XML

The Sample XML file for TradingPartners is given below

```

<TrigoXML>
<Header>
<Transaction_Id></Transaction_Id>
<File_Id>01</File_Id>
<Record_Id>01</Record_Id>
<Creation_Date>08092004</Creation_Date>
<Creation_Time>114441</Creation_Time>
</Header>
<TradingPartner>
<Attribs>
<GlobalLocationNumber>4444444444772</GlobalLocationNumber>
<TradingPartnerName>test</TradingPartnerName>
<GLNIdentifier>Retailer</GLNIdentifier>
<Country>Egypt</Country>
<Status>Draft</Status>
</Attribs>
</TradingPartner>
<TradingPartner>
<Attribs>
<GlobalLocationNumber>4444576777779</GlobalLocationNumber>
<TradingPartnerName>test ff</TradingPartnerName>
<GLNIdentifier>Manufacturer</GLNIdentifier>
<Country>Egypt</Country>
<Status>Draft</Status>
</Attribs>
</TradingPartner>

```

```
</TrigoXML>
```

Import Trading Partners in a Particular Status

```
function getToStatus(strStatus,checkCompliance)
{
    var setStatus = "";
    var tradingPartnerStatusSet =
tradingPartnerStatusLkp.getCtgItemByAttributeValue("TradingPartner_AutoStatus
_Lookup_Spec/From_Status",strStatus);
    if(tradingPartnerStatusSet != null)
    {
        forEachItemSetElement(tradingPartnerStatusSet, statusItem)
        {
            var toStatus =
checkString(statusItem.getCtgItemAttrib("TradingPartner_AutoStatus_Lookup_Spe
c/To_Status"),"");
            if(toStatus != "")
            {
                setStatus = toStatus;
                notf =
checkString(statusItem.getCtgItemAttrib("TradingPartner_AutoStatus_Lookup_Spe
c/Notification"),"");
                txn =
checkString(statusItem.getCtgItemAttrib("TradingPartner_AutoStatus_Lookup_Spe
c/Transaction"),"");
                break;
            }
        }
        logFile.writeln(setStatus);
        return setStatus;
    }
}

logFile = createOtherOut("GDS Sample Import - Update Trading Partner.txt");
var tradingPartnerStatusLkp =
getCtgByName("TradingPartner_AutoStatus_Lookup");

var sGLN = "";
var notf = "";
var txn = "";

var docFiles = getDocStoreFilesInDirectory("/feed_files/GDS Sample
TradingPartners Import - Update TradingPartners With AutoStatus/");
docFiles = docFiles.sort();

var xmlFilePath = docFiles[docFiles.size() - 1];
var xmlFile = getDocByPath(xmlFilePath);
var xmlDoc = new XmlDocument(xmlFile);
var hmAttributePathsToValues = [];
var tpSaved = false;

specMap = getSpecMapByName("GDS XML GLN Attributes Spec Map");
if(specMap != null)
{
    forEachXMLNode("TradingPartner/")
    {
        var hmDstPathsToSrcPaths = [];
        var hmDstPathsToSrcPaths = specMap.getMappings();
    }
}
```

```

        forEachHmElement(hmDstPathsToSrcPaths, dstPath, srcPath)
        {
            if(srcPath.endsWith("GlobalLocationNumber"))
            {
                sGLN =
                checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
            }
            else
            {
                var value =
                checkString(parseXMLNode(srcPath.getRidOfRootName().getRidOfRootName()), "");
                if(value != "")
                {
                    hmAttributePathsToValues[dstPath] = value;
                }
            }
        }

        if(sGLN != null || sGLN != "")
        {
            var tradingPartner = getTradingPartner(sGLN);
            if(tradingPartner != null)
            {
                if(hmAttributePathsToValues != null &&
                hmAttributePathsToValues.size() != 0)
                {
                    tradingPartner.setPartnerAttributes(hmAttributePathsToValues);
                }

                var xmlTPStatus =
                checkString(hmAttributePathsToValues["GLN_Spec/Status"], "");

                if(xmlTPStatus == "")
                {
                    var tpStatus =
                    checkString(tradingPartner.getPartnerAttributeValue("GLN_Spec/Status"), "");

                    if(tpStatus != "")
                    {
                        var status =
                        checkString(getToStatus(tpStatus, false), "");
                        if(status != "")
                        {
                            tradingPartner.setPartnerAttribute("GLN_Spec/Status", status);
                        }
                    }
                }

                tpSaved = tradingPartner.saveTradingPartner();
            }
        }

        logFile.writeln("=====");
        logFile.writeln("Trading Partner Saved");

```

```

        logFile.writeln("====="+tpSaved+"=====");
    };

        if(txn != "" && txn != null)
        {

            logFile.writeln("=====");
                logFile.writeln("Creating Transaction");
                var bCreateTxn =
createTransaction(tradingPartner,txn,"master");
                //          logFile.writeln((bCreateTxn == true)
? "Done":"Failure");

            logFile.writeln("====="+bCreateTxn+"=====");
        };

        if(notf != "" && notf != null)
        {

            logFile.writeln("=====");
                logFile.writeln("Creating Notification");
                var bCreateNotf =
createNotification(tradingPartner,notf,"master");
                //          logFile.writeln((bCreateNotf == true)
? "Done":"Failure");

            logFile.writeln("====="+bCreateNotf+"=====");
        };
    };
}

logFile.save("GDS Sample Import - Update Trading Partner.txt");

```

Auto-update the Status of the Trading Partner after Import

Trading Partners can be updated with the auto status functionality. It means that if a trading partner is being updated and the status is not set in the xml file, the script can correctly set the status of the trading partner based on its existing status in the system. The following table shows the rules that govern auto status of trading partners. In the sample script shown above a lookup table with the name TradingPartner AutoStatus Lookup is referenced which is the same as shown.

Existing Status	After Import	Notification	Transaction
Draft	Draft		0
Approved	Edited		0
Rejected	Edited		0
Edited	Edited		0

Catalog to Catalog Import

For information about catalog to catalog import, refer the *WebSphere Product Version 5.0.0.4 User Guide*.

Notifications after Import

Most of the scripts above demonstrate how notifications can be created using createNotification() script operation.

For Export

The various scenarios for export are:

- [Export Trade Items that have changed after some day or newly synched items](#)
- [Export Trade Items which are in a Particular Status](#)
- [Export Trade Items which belong to a Particular Category](#)
- [Export Few Attributes of a Trade Item](#)
- [Export Based on Certain Conditions](#)
- [Export Trade Items Based on Local Status](#)
- [Export All Trade Item Links](#)
- [Export Trade Item Links Based on Status](#)
- [Export All Trading Partners](#)
- [Export Trading Partners – Search Based](#)

Export Trade Items that have changed after some day or newly synched items

```
var libScript = getScriptByPath("/scripts/triggers/GDSLlibrary.GenerateXML");

var txnType = inputs["Transaction_Type"];
var startDateStr = inputs["StartDate"];
var endDateStr = inputs["EndDate"];

var startDate = new Date("dd-MMM-yyyy HH:mm",startDateStr);
var endDate = new Date("dd-MMM-yyyy HH:mm",endDateStr);

var tradeItems = [];
tradeItems = getModifiedTradeItems(txnType,startDate,endDate);

libScript.getFunctionByName("generateXMLHeader").invoke(out);

if(tradeItems != null && tradeItems.size() != 0)
{
    for(iVar = 0; iVar < tradeItems.size(); iVar++)
    {
        libScript.getFunctionByName("generateXMLForTradeItem").invoke(tradeItems[iVar],out);
    }
}
libScript.getFunctionByName("generateXMLFooter").invoke(out);
```

Export Trade Items which are in a Particular Status

```
var libScript = getScriptByPath("/scripts/triggers/GDSLibrary.GenerateXML");
catchError(oErr)
{
    var hmSearchKeysToValues = [];
    forEachHmElement(inputs,searchKey,searchValue)
    {
        if(checkString(searchValue,"") != "")
        {
            hmSearchKeysToValues[searchKey] = searchValue;
        }
    }

    var tradeItems = [];
    tradeItems = searchTradeItems(hmSearchKeysToValues);

    libScript.getFunctionByName("generateXMLHeader").invoke(out);

    if(tradeItems != null && tradeItems.size() != 0)
    {
        for(iVar = 0; iVar < tradeItems.size(); iVar++)
        {
            libScript.getFunctionByName("generateXMLForTradeItem").invoke(tradeItems[iVar],out);
        }
    }

    libScript.getFunctionByName("generateXMLFooter").invoke(out);
}
```

Export Trade Items which belong to a Particular Category

Refer the script given for Export Items which are in a Particular Status.

Export Few Attributes of a Trade Item

Refer the script given for Export Items which are in a Particular Status.

The Exports scripts above which search for trade items based on status or category make use of an input spec whose xml is given below. Using this input spec, the same level of search functionality that is provided in the GUI can be achieved.

```
<?xml version="1.0" encoding="UTF-8"?>
<TrigoXML>
  <Header>
    <Type>Spec</Type>
    <Action>Create</Action>
    <CompanyName>demand-side</CompanyName>
    <SpecName>GDS Sample Export - Search Input Spec</SpecName>
    <Attribs>
      <Attrib>
        <Name>TYPE</Name>
        <Value>SCRIPT_INPUT_SPEC</Value>
      </Attrib>
    </Attribs>
  </Header>
```

```

<Nodes>
  <Node>
    <Name>EAN_UCC_CODE</Name>
    <Type>ATTRIBUTE</Type>
    <Attribs>
      <Attrib>
        <Name>MAXLENGTH</Name>
        <Value><![CDATA[3000]]></Value>
      </Attrib>
      <Attrib>
        <Name>MAX_OCCURRENCE</Name>
        <Value><![CDATA[1]]></Value>
      </Attrib>
      <Attrib>
        <Name>MIN_OCCURRENCE</Name>
        <Value><![CDATA[0]]></Value>
      </Attrib>
      <Attrib>
        <Name>TYPE</Name>
        <Value><![CDATA[STRING]]></Value>
      </Attrib>
    </Attribs>
  </Node>
  <Node>
    <Name>GTIN</Name>
    <Type>ATTRIBUTE</Type>
    <Attribs>
      <Attrib>
        <Name>MAXLENGTH</Name>
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var ctgSpecName = ctg.getCatalogSpec().getSpecName();
var itemSet = ctg.getItemSetForCatalog();

forEachItemSetElement(itemSet,item)
{
    var prodTypeDesc = checkString(item.getCtgItemAttrib(ctgSpecName+"/Product
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    if(prodTypeDesc != "")
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        hmProdTypes.add(prodTypeDesc);
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var ctg = getCtgByName("Product_Type_LookUp");
var ctgSpecName = ctg.getCatalogSpec().getSpecName();
var itemSet = ctg.getItemSetForCatalog();

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{
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    if(prodTypeDesc != "")
    {
        hmProdTypes.add(prodTypeDesc);
    }
}

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    </Attrib>
</Attribs>
</Node>
</Nodes>
</TrigoXML>

```

Export Based on Certain Conditions

Use the script given for Export Items which are in a Particular Status.

Export Trade Items Based on Local Status

```

var status = checkString(inputs["Status"], "");
var globalLocalCtg = getCtgByName("Global_Local_Catalog");
var globalCtg = getCtgByName("Global_Catalog");
var libScript = getScriptByPath("/scripts/triggers/GDSLibrary.GenerateXML");
libScript.getFunctionByName("generateXMLHeader").invoke(out);

if(status != "")
{
    var selQuery =
"[Global_Local_Catalog:Global_Local_Attributes_Spec/GDSItemStatus] =
"+"\""+status+"\"";
    var sel = new AdvancedSelection(globalLocalCtg, "Test
Selection", selQuery);
    var itemSet = sel.getItemSetForSelection();

    if(itemSet != null && itemSet.getItemSetSize() != 0)
    {
        forEachItemSetElement(itemSet, item)
        {
            var gtin_tm_ip = item.getCtgItemPrimaryKey();
            var gtin_tm_ip_tokens = gtin_tm_ip.parseDelim("_");

            var gtin = gtin_tm_ip_tokens[0];
            var tm = gtin_tm_ip_tokens[1];
            var ip = gtin_tm_ip_tokens[2];
            var eanUccCode =
globalCtg.getCtgItemByPrimaryKey(gtin).getCtgItemAttrib("Global_Attributes_Sp
ec/tradeItemIdentification/alternateTradeItemIdentification/eanuccCode");
            var tradeItem = getTradeItemDS(eanUccCode, tm, ip, gtin);

            libScript.getFunctionByName("generateXMLForTradeItem").invoke(tradeIte
m, out);
        }
    }
}

libScript.getFunctionByName("generateXMLFooter").invoke(out);

```

Export All Trade Item Links

```

var libScript = getScriptByPath("/scripts/triggers/GDSLibrary.GenerateXML");

// Generate the Header
libScript.getFunctionByName("generateXMLHeader").invoke(out);

```

```

var ctg = getCtgByName("TradeCatalog");
var globalCtg = getCtgByName("Global_Catalog");

// This is For now.....a search can be put in place if there are too many
// items in the catalog
// This contains all gtins that are processed. We can use this to ignore
// variants.
var hmGTINs = [];

var itemSet = ctg.getItemSetForCatalog();
out.writeln("<Links>");
forEachItemSetElement(itemSet,item)
{
    var gtin_tm_ip = item.getCtgItemPrimaryKey();
    var gtin_tm_ip_tokens = gtin_tm_ip.parseDelim("_");

    var gtin = gtin_tm_ip_tokens[0];
    var tm = gtin_tm_ip_tokens[1];
    var ip = gtin_tm_ip_tokens[2];
    var eanUccCode =
globalCtg.getCtgItemByPrimaryKey(gtin).getCtgItemAttrib("Global_Attributes_Sp
ec/tradeItemIdentification/alternateTradeItemIdentification/eanuccCode");
    var tradeItem = getTradeItemDS(eanUccCode,tm,ip,gtin);

    // Get all the child links
    var childLinks = tradeItem.getTradeItemChildLinks();

    if(childLinks != null && childLinks.size() != 0 &&
!hmGTINs.containsKey(gtin))
    {
        libScript.getFunctionByName("generateXMLForTradeItemLinks").invoke(gti
n,childLinks,out);
        hmGTINs[gtin] = "0";
    }
}
out.writeln("</Links>");
// Generate the Footer
libScript.getFunctionByName("generateXMLFooter").invoke(out);

```

Export All Trading Partners

```

var ctg = getCtgByName("Trading_Partner_Catalog");
var ctgSpecName = ctg.getCatalogSpec().getSpecName();
var libScript = getScriptByPath("/scripts/triggers/GDSLibrary.GenerateXML");

libScript.getFunctionByName("generateXMLHeader").invoke(out);

forEachCtgItem(item)
{
    var gln = checkString(item.getCtgItemAttrib(ctgSpecName+"/Global Location
Number(GLN)","");
    var tradingPartner = getTradingPartner(gln);
    if(tradingPartner != null)
    {
        libScript.getFunctionByName("generateXMLForTradingPartner").invoke(gln
,tradingPartner,out);
    }
}

```

```
libScript.getFunctionByName("generateXMLFooter").invoke(out);
```

Export Trading Partners – Search Based

```
var libScript = getScriptByPath("/scripts/triggers/GDSLlibrary.GenerateXML");
catchError(oErr)
{
    var hmSearchKeysToValues = [];
    forEachHmElement(inputs, searchKey, searchValue)
    {
        if(checkString(searchValue, "") != "")
        {
            hmSearchKeysToValues[searchKey] = searchValue;
        }
    }

    var tradingPartners = [];
    tradingPartners = searchTradingPartners(hmSearchKeysToValues);

    libScript.getFunctionByName("generateXMLHeader").invoke(out);

    if(tradingPartners != null && tradingPartners.size() != 0)
    {
        for(iVar = 0; iVar < tradingPartners.size(); iVar++)
        {
            var tradingPartner = tradingPartners[iVar];

            libScript.getFunctionByName("generateXMLForTradingPartner").invoke(nul
l, tradingPartner, out);
        }
    }

    libScript.getFunctionByName("generateXMLFooter").invoke(out);
}
```

This script has an input spec whose attributes match the keys of the hashmap that needs to be passed as an argument to the searchTradingPartners() function. This way the search functionality that is provided by the GUI can be stimulated.

All the Export scripts refer to a library script called GDSLlibrary.GenerateXML. This script basically generates the xml definition for trade item, trading partners, and trade item links. This script is as shown.

```
function generateXMLHeader(xmlFile)
{
    xmlFile.writeln("<TrigoXML>");
    xmlFile.writeln("<Header>");
        xmlFile.writeln("<Transaction_Id></Transaction_Id>");
        xmlFile.writeln("<File_Id>01</File_Id>");
        xmlFile.writeln("<Record_Id>01</Record_Id>");

        xmlFile.writeln("<Creation_Date>"+today().formatDate("ddMMyyyy")+"</Cr
eation_Date>");

        xmlFile.writeln("<Creation_Time>"+today().formatDate("HHmmss")+"</Crea
tion_Time>");
    xmlFile.writeln("</Header>");
}
```

```

}

function generateXMLFooter(xmlFile)
{
    xmlFile.writeln("</TrigoXML>");
}

function generateXMLForTradeItem(tradeItem,xmlFile)
{
    xmlFile.writeln("<Item>");
    xmlFile.writeln("<Attribs>");

        xmlFile.writeln("<GlobalAttribs>");

            xmlFile.writeln("<EANUCCCode>"+checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attributes_Spec/tradeItemIdentification/alternateTradeItemIdentification/eanuccCode"),"")+ "</EANUCCCode>");

            xmlFile.writeln("<EANUCCCodeType>"+checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attributes_Spec/tradeItemIdentification/alternateTradeItemIdentification/eanuccType"),"")+ "</EANUCCCodeType>");

            xmlFile.writeln("<GlobalTradeItemNumber>"+checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attributes_Spec/GlobalTradeItemNumber"),"")+ "</GlobalTradeItemNumber>");

            xmlFile.writeln("<GTINName>"+checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attributes_Spec/GTINName/en_US"),"")+ "</GTINName>");
                var item = tradeItem.getItems()[0];

                if(item != null)
                {
                    var coreExtTypeCat =
item.getCtgItemCategories("Global_Extension_Hierarchy")[0];
                    if(coreExtTypeCat != null)
                    {

                        xmlFile.writeln("<CoreExtensionType>"+coreExtTypeCat.getPrimaryKey()+ "</CoreExtensionType>");

                            }
                        else
                            {

                                xmlFile.writeln("<CoreExtensionType></CoreExtensionType>");

                                    }
                                }

                            // Format the Product Type
                            var sProdType =
checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attributes_Spec/ProductType"),"");

                                var sProdTypeAbbr =
getCtgByName("Product_Type_LookUp").getCtgItemByPrimaryKey(sProdType).getCtgItemAttrib("Product_Type_Spec/Product Type Description");

                                    xmlFile.writeln("<ProductType>"+sProdTypeAbbr+"</ProductType>");

                                        xmlFile.writeln("<ItemStatus>"+checkString(tradeItem.getTradeItemAttributeValueDS("Global_Local_Attributes_Spec/GDSItemStatus"),tradeItem.getTradeI

```



```

temAttributeValueDS("Global_Attributes_Spec/GDSItemStatus"))+"</ItemStatus>"
;

        xmlFile.writeln("<BrandName>"+checkString(tradeItem.getTradeItemAttribute
        uteValueDS("Global_Attributes_Spec/tradeItemInformation/tradeItemDescriptionI
        nformation/brandName/en_US"), "")+"</BrandName>");

        xmlFile.writeln("<Pack>"+checkString(tradeItem.getTradeItemAttributeVa
        lueDS("Global_Attributes_Spec/Pack"), "")+"</Pack>");

                xmlFile.writeln("<Classification>");

        xmlFile.writeln("<GlobalClassificationCode>"+tradeItem.getItems()[0].g
        etCtgItemCategories("UDEX_Hierarchy_UCCNet")[0].getPrimaryKey()+"</GlobalClas
        sificationCode>");

        xmlFile.writeln("<GlobalClassificationDescription>"+tradeItem.getItems
        ([0].getCtgItemCategories("UDEX_Hierarchy_UCCNet")[0].getDisplayValue(getUse
        rLocale()))+"</GlobalClassificationDescription>");

        xmlFile.writeln("<InternalClassificationCode>"+tradeItem.getItems()[0]
        .getCtgItemCategories("Internal_Hierarchy")[0].getPrimaryKey()+"</InternalCla
        ssificationCode>");

        xmlFile.writeln("<InternalClassificationDescription>"+tradeItem.getIte
        ms()[0].getCtgItemCategories("Internal_Hierarchy")[0].getDisplayValue(getUser
        Locale()))+"</InternalClassificationDescription>");
                xmlFile.writeln("</Classification>");
        xmlFile.writeln("</GlobalAttribs>");

        xmlFile.writeln("<LocalAttribs>");

        xmlFile.writeln("<TargetMarket>"+checkString(tradeItem.getTradeItemAtt
        ributeValueDS("Global_Local_Attributes_Spec/TargetMarket"), "")+"</TargetMarke
        t>");

        xmlFile.writeln("<InformationProvider>"+checkString(tradeItem.getTrade
        ItemAttributeValueDS("Global_Local_Attributes_Spec/InformationProvider"), "")+
        "</InformationProvider>");

        xmlFile.writeln("<InformationProviderName>"+checkString(tradeItem.getT
        radeItemAttributeValueDS("Global_Local_Attributes_Spec/InformationProviderNam
        e"), "")+"</InformationProviderName>");
                xmlFile.writeln("</LocalAttribs>");

        xmlFile.writeln("</Attribs>");
        xmlFile.writeln("</Item>");
}

function generateXMLForTradeItemLinks(gtin,tradeItemChildLinks,logFile)
{
    forEachHmElement(tradeItemChildLinks,dummy,tradeItemLink)
    {
        logFile.writeln("<Link>");
        logFile.writeln("<Parent>");

        logFile.writeln("<ParentGTIN>"+gtin+"</ParentGTIN>");
        logFile.writeln("</Parent>");

        logFile.writeln("<Child>");

```

```

        logFile.writeln("<ChildGTIN>"+checkString(tradeItemLink.getLinkAttributeValue("GlobalTradeItemNumber"),"")+ "</ChildGTIN>");

        logFile.writeln("<Quantity>"+checkString(tradeItemLink.getLinkAttributeValue("Quantity"),"")+ "</Quantity>");

        logFile.writeln("<Status>"+checkString(tradeItemLink.getLinkAttributeValue("Status"),"")+ "</Status>");
        logFile.writeln("</Child>");
        logFile.writeln("</Link>");
    }
}

function generateXMLForTradingPartner(gln,tradingPartner,logFile)
{
    logFile.writeln("<TradingPartner>");
    logFile.writeln("<Attribs>");

    logFile.writeln("<GlobalLocationNumber>"+checkString(gln,tradingPartner.getPartnerAttributeValue("GLN_Spec/Global Location Number (GLN)"))+"</GlobalLocationNumber>");

    logFile.writeln("<TradingPartnerName>"+checkString(tradingPartner.getPartnerAttributeValue("GLN_Spec/Trading Partner Name"),"")+ "</TradingPartnerName>");

    logFile.writeln("<GLNIdentifier>"+checkString(tradingPartner.getPartnerAttributeValue("GLN_Spec/GLN Identifier"),"")+ "</GLNIdentifier>");

    logFile.writeln("<Country>"+checkString(tradingPartner.getPartnerAttributeValue("GLN_Spec/Trading Partner Country"),"")+ "</Country>");

    logFile.writeln("<Status>"+checkString(tradingPartner.getPartnerAttributeValue("GLN_Spec/Status"),"")+ "</Status>");
    logFile.writeln("</Attribs>");

    logFile.writeln("</TradingPartner>");
}

```

Script Table

The following table lists the script operations, the arguments that each operation accepts and their descriptions. You can use a combination of these script operations to import/export data.

Module	Script Operation Name	Arguments	Description
Notifications	createNotification	IBusinessObject iObj, String notifType, String userName	<ul style="list-style-type: none"> Creates a notification object and returns true if the notification was successful. iObj is the Business Object. The business object can be a trade item or trading partner or and item link. notifType is the notification

Module	Script Operation Name	Arguments	Description
			<p>type. This can be retrieved from the NotificationSecurityMappingTable lookup table.</p> <ul style="list-style-type: none"> • userName is the user ID of the user who is initiating the notification or the person who is responsible for the import/export of the item.
Transaction	createTransaction	IBusinessObject iObj, String txnType, String userName	<ul style="list-style-type: none"> • Creates a transaction object and returns true if the operation was successful. • iObj is the Business Object. The business object can be a trade item or trading partner or and item link. • txnType is the notification type. This can be retrieved from the NotificationSecurityMappingTable lookup table. • userName is the user ID of the user who is initiating the notification or the person who is responsible for the import/export of the item.
Trade Item	newTradeItemDS	String sEANUCCCode, String sEANUCCCodeType, String sExtensionName, String sProductType, String sInternalCatCode, [[String sGTIN],[String sGTINName],[String sDataPoolCatCode]]	Creates a new TradeItem with the given EAN UCC Code, EAN UCC Type, Core Extensions, Product Type and maps it to sInternalCatCode. Optionally the GTIN, GTIN Name and the UDEX category code can be supplied
	getTradeItemDS	String	Returns a Trade Item

Module	Script Operation Name	Arguments	Description
		sEANUCCCode,String sTM,String sIP,[String sGTIN]	with the given sEANUCCCode, sTM, sIP values and optionally sGTIN, else returns null.
	TradeItem.setTradeItemAttributeDS	String attributePath,String attributeValue	Sets the attribute value for the attribute path of the trade item.
	TradeItem.setTradeItemAttributesDS	HashMap hmAttributePathsToValues	Sets the trade item with the given hashmap of attribute paths and their corresponding values. Note: Multi occurrence attribute paths need to be indexed with #0,#1 and so on in their paths.
	TradeItem.saveTradeItemDS	NONE	Saves the trade item to the database and returns true if the save was successful.
	searchTradeItemsDS	HashMap hmSearchParamsToValues	Searches and retrieves trade Items based on a set of search parameters. The input is a hashmap of search keys and their values. The Keys should be one of the following and the case has to be upper case. <ul style="list-style-type: none"> • EAN_UCC_CODE • GTIN • GTIN_NAME • BRAND_NAME • PRODUCT_NAME • DESCRIPTION • TARGET_MARKET • LANGUAGE_CODE • IP_GLN • IP_NAME • BRAND_OWNER_NAME • MANUFACTURER_GLN • MANUFACTURER_NAME • PRODUCT_TYPE

Module	Script Operation Name	Arguments	Description
			<ul style="list-style-type: none"> • UDEX_CODE • UDEX_CATEGORY_DESC • GLOBAL_ITEM_STATUS • UNIT_INDICATOR_YES(Value should be YES or NO) • UNIT_INDICATOR_NO(Value should be YES or NO) • UNIT_INDICATOR_NONE (Value should be YES or NO)
	getTradeItemParentLinks	NONE	Searches for parent trade item links for this trade item.
	getTradeItemChildLinks	NONE	Searches for child trade item links for this trade item.
	getModifiedTradeItems	String transactionType, Date startDate, Date endDate	Searches and retrieves trade items modified between start date and end date for a given transaction type.
	TradeItem.getTradeItemAttributeValueDS	String sAttrPath	Returns the attribute value of the TradeItem.
	TradeItem.getItems	NONE	Gets the Global and the local item for this TradeItem.
	TradeItem.setUDEXCategoryCode	String code	Sets the trade item with the given UDEX category code.
	TradeItem.setInternalCategoryCode	String code	Sets the trade item with the given internal category code.
	TradeItem.deleteTMIPVariant	NONE	Deletes the TMIP variant of this tradeItem.
	TradeItem.deleteGTIN	NONE	Deletes the GTIN of this tradeItem. This can only be used when the tradeItem does not have any variants.
	getAllTradeItemAttributes	NONE	Returns a hashmap of all tradeItem attributes to their values
TradingPartner	new\$TradingPartner	String sGLN	Creates a new Trading Partner with the given GLN.

Module	Script Operation Name	Arguments	Description
	getTradingPartner	String sGLN	Returns a TradingPartner with the given GLN, else returns null.
	TradingPartner.setPartnerAttribute	String attributePath,String attributeValue	Sets the attribute value for the attribute path of the Trading Partner.
	TradingPartner.setPartnerAttributes	HashMap hmAttributePathsToValues	Sets the Trading Partner with the given hashmap of attributepaths and their corresponding values. Note: Multi occurrence attribute paths need to be indexed with #0,#1 and so on in their paths.
	TradingPartner.saveTradingPartner	NONE	Saves the trading partner to the database and returns true if the save was successful.
	searchTradingPartners	HashMap hmSearchParamsToValues	Searches and retrieves trading partners based on a set of search parameters. The input is a hashmap of search keys and their values. The Keys should be one of the following and the case has to be upper case. <ul style="list-style-type: none"> • GLN • PARTNER_NAME • STATUS • CONTACT • PARTY_ROLE • CITY_NAME • COUNTRY_CODE • LANGUAGE
	TradingPartner.getPartnerAttributeValue	String sAttrPath	Returns the attribute value for the given path in the trade item link.
TradeItemLinks	new\$TradeItemLink	String parentGTIN, String childGTIN, [Integer linkQuantity]	Returns a new trade item link with the parent GTIN and child GTIN. Optionally a link quantity can be passed. The

Module	Script Operation Name	Arguments	Description
			default link quantity is zero. Note: For the trade item link to be created the parent GTIN and the child GTIN should exist in the system.
	getTradeItemLink	String parentGTIN, String childGTIN	Returns a trade item link between parent GTIN and the child GTIN.
	TradeItemLink.setLinkAttribute	String attributePath,String attributeValue	Sets the attribute value for the attribute path of the trade item link.
	TradeItemLink.setLinkAttributes	HashMap hmAttributePathsToValues	Sets the trade item link with the given hashmap of attribute paths and their corresponding values. Note: Multi occurrence attribute paths need to be indexed with #0,#1 and so on in their paths.
	TradeItemLink.saveTradeItemLink	NONE	Saves the trade item link to the database and returns true if the save was successful.
	TradeItemLinks:getLinkAttributeValue	String sAttrPath	Returns the attribute value for the given path in the Trade Item Link
	getModifiedTradeItemLinks	TBD	TBD
SpecMap	getMappings	NONE	Returns a hashmap of destination paths to their corresponding source paths in a specmap.

Using Script Operations

This section provides the sample implementations for trade items, trading partners, and trade item links.

Trade Items

The sample scripts for the following are provided:

- Create a New Trade Item, Create Transaction and Notification

- Global Enrichment of a Trade Item
- Getting a Trade Item
- Global and Local Enrichment of Trade Item
- Setting Attributes to a Trade Item
- Getting Attribute Values of a Trade Item
- Search Trade Items
- Get Modified Trade Items Between Dates
- Validating Trade Item
- Get Trade Items
- Get All TradeItem Attributes

Create a New Trade Item, Create Transaction, and Notification

The script operations used are new TradeItem, saveTradeItem, createTransaction, and createNotification.

```
tradeItem = new
TradeItemDS("12345678908765", "U2", "FMCG", "CASE", "10000056", "76857635353536", "
Test", "000000001.000000002.000000012");
    tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/Pack", "8");
    out.writeln(tradeItem);
    out.writeln(tradeItem.saveTradeItemDS());

    var txnCreated =
createTransaction(tradeItem, "ITEM_GLOBAL_ENRICHMENT_PENDING", "master");
    out.writeln("Transaction Created ? : "+txnCreated);

    var notfCreated =
createNotification(tradeItem, "ITEM_GLOBAL_ENRICHMENT_PENDING", "master");
    out.writeln("Notification sent ? : "+notfCreated);
```

Global Enrichment of a Trade Item

The script operations used are getTradeItem, setTradeItemAttribute, saveTradeItem, createTransaction, and createNotification.

```
var tradeItem = getTradeItemDS("12345678908765", "XX", "XX", "76857635353536");
tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/tradeItemInformatio
n/tradeItemDescriptionInformation/brandName/en_US", "Coca Cola");
tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/Pack", "8");
tradeItem.setTradeItemAttributeDS("FMCG_Global_Attributes_Spec/tradeItemIdent
ification/TradeItemIdentificationListType", "CA");
tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/GDSItemStatus", "Glo
bal Enrichment Completed");

var itemSaved = tradeItem.saveTradeItemDS();
out.writeln("TradeItem [44444444444442] Saved ? : "+itemSaved);

var txnCreated =
createTransaction(tradeItem, "ITEM_GLOBAL_ENRICHMENT_COMPLETED", "master");
out.writeln("Transaction Created ? : "+txnCreated);

var notfCreated =
createNotification(tradeItem, "ITEM_GLOBAL_ENRICHMENT_COMPLETED", "master");
out.writeln("Notification sent ? : "+notfCreated);
```

Getting a Trade Item

```
var tradeItem = getTradeItemDS("12345678908765", "XX", "XX", "76857635353536");
out.writeln(tradeItem);

//Global and Local Enrichment of Trade Item
tradeItem = new
TradeItemDS("46456456", "U2", "FMCG", "CASE", "10000056", "93653453453451", "Test",
"000000001.000000002.000000012");
if(tradeItem != null)
{
    tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/tradeItemInf
ormation/tradeItemDescriptionInformation/brandName/en_US", "Coca Cola");
    tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/Pack", "8");
```

```

        tradeItem.setTradeItemAttributeDS("FMCG_Global_Attributes_Spec/tradeItemIdentification/TradeItemIdentificationListType","CA");
        tradeItem.setTradeItemAttributeDS("Global_Attributes_Spec/GDSItemStatus","Draft With Variant");
        tradeItem.setTradeItemAttributeDS("Global_Local_Attributes_Spec/TargetMarket","US");
        tradeItem.setTradeItemAttributeDS("Global_Local_Attributes_Spec/InformationProvider","7981315112271");
        tradeItem.setTradeItemAttributeDS("Global_Local_Attributes_Spec/InformationProviderName","TEST_GLN");
        tradeItem.setTradeItemAttributeDS("Global_Local_Attributes_Spec/IsPrivate","true");
        tradeItem.setTradeItemAttributeDS("Global_Local_Attributes_Spec/GDSItemStatus","Approved");

        var itemSaved = tradeItem.saveTradeItemDS();
        out.writeln("TradeItem [45645666666660] Saved ? : "+itemSaved);

        var txnCreated =
createTransaction(tradeItem,"NEW_ITEM_APPROVED","master");
        out.writeln("Transaction Created ? : "+txnCreated);

        var notfCreated =
createNotification(tradeItem,"NEW_ITEM_APPROVED","master");
        out.writeln("Notification sent ? : "+notfCreated);
}

```

Setting Attributes to a Trade Item

```

//The script operation used is settradeitemattributesDS().
var tradeItem =
getTradeItemDS("46456456","US","7981315112271","93653453453451");
if(tradeItem != null)
{
    var hmAttrPathsToValues = [];
    hmAttrPathsToValues["Global_Attributes_Spec/GTINName/en_US"] =
"Manju23";
    hmAttrPathsToValues["Global_Local_Attributes_Spec/PartnerSpecificAttributes/Attr1"] = "Test Description5";
    tradeItem.setTradeItemAttributesDS(hmAttrPathsToValues);
    var itemSaved = tradeItem.saveTradeItemDS();
    out.writeln("TradeItem [46456456] Saved ? : "+itemSaved);
}

```

Getting Attribute Values of a Trade Item

```

var tradeItem =
getTradeItemDS("46456456","US","7981315112271","93653453453451");
if(tradeItem != null)
{
    var gtinName =
checkString(tradeItem.getTradeItemAttributeValueDS("Global_Attributes_Spec/GTINName/en_US"),"");
    var attr1 =
checkString(tradeItem.getTradeItemAttributeValueDS("Global_Local_Attributes_Spec/PartnerSpecificAttributes/Attr1"),"");
    var ipName =
checkString(tradeItem.getTradeItemAttributeValueDS("Global_Local_Attributes_Spec/InformationProviderName"),"");
}

```

```
    out.writeln("GTINName is "+gtinName);
    out.writeln("Attr2 is "+attr1);
    out.writeln("ipName is "+ipName);
}
```

Search Trade Items

```
var hmTradeItems = [];
var hmSearchKeysToValues = [];

hmSearchKeysToValues["EAN_UCC_CODE"] = "46456456";
hmSearchKeysToValues["GTIN"] = "93653453453451";
hmSearchKeysToValues["UDEX_CODE"] = "000000001.000000002.000000012*";

hmTradeItems = searchTradeItemsDS(hmSearchKeysToValues);

if(hmTradeItems != null)
{
    out.writeln("Returned Trade Items are \n");
    for(i = 0; i < hmTradeItems.size(); i++)
    {
        out.writeln(hmTradeItems[i]);
    }
}
else
{
    out.writeln("No Trade Items found in Search");
}
```

Get Modified Trade Items between Dates

```
var txnType = "Global Attribute Enrichment";
var startDate = new Date("dd-MMM-yyyy", "07-OCT-2004");
var endDate = new Date("dd-MMM-yyyy", "09-OCT-2004");

var hmTradeItems = [];
hmTradeItems = getModifiedTradeItems(txnType,startDate,endDate);

if(hmTradeItems != null)
{
    out.writeln("Returned Trade Items are \n");
    for(i = 0; i < hmTradeItems.size(); i++)
    {
        out.writeln(hmTradeItems[i]);
    }
}
else
{
    out.writeln("No Trade Items found in Search");
}
```

Validating Trade Item

```
var tradeItem =
getTradeItemDS("46456456","US","7981315112271","93653453453451");
hmErrors = tradeItem.validateTradeItem();

out.writeln(hmErrors);
```

Get Trade Items

```
var tradeItem =
getTradeItemDS("46456456","US","7981315112271","93653453453451");
var items = tradeItem.getItems();

out.writeln(items);
```

Get All TradeItem Attributes

```
var tradeItem = getTradeItemDS("46456456","US","7981315112271","93653453453451");
var hmAttrPathsToValues = tradeItem.getAllTradeItemAttributes();
forEachHmElement(hmAttrPathsToValues,attrPath,attrValue)
{
    out.writeln(attrPath+" : "+attrValue);
}
```

```
}
```

Trading Partners

The scripts are provided for the following:

- Create a New Trading Partner
- Update an Existing Trading Partner
- Get Trading Partner Attribute Value
- Search Trading Partner

Create a New Trading Partner

```
var tradingPartner = new
TradingPartner("6701115112124", "TEST_GLN", "US", "Supplier");
tradingPartner.setPartnerAttribute("GLN_Spec/Status", "Approved");
var tpSaved = tradingPartner.saveTradingPartner();

out.writeln("TradingPartner [6701115112124] Saved ? : "+tpSaved);

var txnCreated =
createTransaction(tradingPartner, "NEW_TRADING_PARTNER_APPROVED", "master");
out.writeln("Transaction Created ? : "+txnCreated);

var notifCreated =
createNotification(tradingPartner, "NEW_TRADING_PARTNER_APPROVED", "master");
out.writeln("Notification sent ? : "+notifCreated);
```

Update an Existing Trading Partner

```
var tradingPartner = getTradingPartner("6701115112124");
var hmAttrPathsToValues = [];
hmAttrPathsToValues["GLN_Spec/Trading Partner State"] = "CA";
tradingPartner.setPartnerAttributes(hmAttrPathsToValues);

var tpSaved = tradingPartner.saveTradingPartner();
out.writeln("TradingPartner [6701115112124] Saved ? : "+tpSaved);

var txnCreated =
createTransaction(tradingPartner, "MODIFY_TRADING_PARTNER_APPROVED", "master");
out.writeln("Transaction Created ? : "+txnCreated);

var notifCreated =
createNotification(tradingPartner, "MODIFY_TRADING_PARTNER_APPROVED", "master")
;
out.writeln("Notification sent ? : "+notifCreated);
```

Get Trading Partner Attribute Value

```
var tradingPartner = getTradingPartner("6701115112124");
var tpLanguage = tradingPartner.getPartnerAttributeValue("GLN_Spec/Trading
Partner Language");
var tpID = tradingPartner.getPartnerAttributeValue("GLN_Spec/GLN
Identifier");
```

```

var tpState = tradingPartner.getPartnerAttributeValue("GLN_Spec/Trading
Partner State");
out.writeln("Trading Partner language is "+tpLanguage);
out.writeln("Trading Partner ID is "+tpID);
out.writeln("Trading Partner State is "+tpState);

```

Search Trading Partners

```

var hmSearchKeysToValues = [];
hmSearchKeysToValues["PARTNER_NAME"] = "TEST_GLN";
var hmTradingPartners = searchTradingPartners(hmSearchKeysToValues);

if(hmTradingPartners != null)
{
    out.writeln("Returned Trading Partners are \n");
    for(i = 0; i < hmTradingPartners.size(); i++)
    {
        out.writeln(hmTradingPartners[i]);
    }
}
else
{
    out.writeln("No hmTradingPartners found in Search");
}

```

Trade Item Links

The scripts are provided for the following:

- Create a New Trade Item Link
- Update Trade Item Links
- Get Trade Item Links Attributes
- Get Child Links
- Get Parent Links

Create a New Trade Item Link

```

var tradeItem = new
TradeItemDS("45645666666677", "CHILD", "EACH", "10000056", "000000001.000000002.0
00000012");

var itemSaved = tradeItem.saveTradeItemDS();
out.writeln("TradeItem [45645666666677] Saved ? : "+itemSaved);

var txnCreated =
createTransaction(tradeItem, "ITEM_GLOBAL_ENRICHMENT_PENDING", "master");
out.writeln("Transaction Created ? : "+txnCreated);

var notifCreated =
createNotification(tradeItem, "ITEM_GLOBAL_ENRICHMENT_PENDING", "master");
out.writeln("Notification sent ? : "+notifCreated);

var tradeItemLink = new TradeItemLink("45645666666660", "45645666666677", 1);
var linkSaved = tradeItemLink.saveTradeItemLink();

```

```

out.writeln("45645666666660 < == > 45645666666677 [LINK] Saved ?
:"+linkSaved);
var bCreateTxn =
createTransaction(tradeItemLink,"MODIFY_ITEM_LINK_APPROVAL_PENDING","master")
;
out.writeln("Transaction Created ? : "+bCreateTxn);
var bCreateNotf =
createNotification(tradeItemLink,"MODIFY_ITEM_LINK_APPROVAL_PENDING","master"
);
out.writeln("Notification sent ? : "+bCreateNotf);

```

Update Trade Item Links

```

var tradeItemLink = getTradeItemLink("45645666666660","45645666666677");
tradeItemLink.setLinkAttribute("Status","Approved");
var hmAttrsToValues = [];
hmAttrsToValues["Quantity"] = "2";
tradeItemLink.setLinkAttributes(hmAttrsToValues);
var linkSaved = tradeItemLink.saveTradeItemLink();
out.writeln("45645666666660 < == > 45645666666677 [LINK] Saved ?
:"+linkSaved);
var bCreateTxn =
createTransaction(tradeItemLink,"MODIFY_ITEM_LINK_APPROVAL_PENDING","master")
;
out.writeln("Transaction Created ? : "+bCreateTxn);
var bCreateNotf =
createNotification(tradeItemLink,"MODIFY_ITEM_LINK_APPROVAL_PENDING","master"
);
out.writeln("Notification sent ? : "+bCreateNotf);

```

Get Trade Item Links Attributes

```

var tradeItemLink = getTradeItemLink("45645666666660","45645666666677");

var qty = tradeItemLink.getLinkAttributeValue("Quantity");
var status = tradeItemLink.getLinkAttributeValue("Status");
var childGtin = tradeItemLink.getLinkAttributeValue("GlobalTradeItemNumber");

out.writeln("Quantity is "+qty);
out.writeln("Status is "+status);
out.writeln("ChildGtin is "+childGtin);

```

Get Child Links

```

var tradeItem = getTradeItemDS("45645666666660","US","7981315112271");

var hmChildLinks = [];
hmChildLinks = tradeItem.getTradeItemChildLinks();

if(hmChildLinks != null)
{
    out.writeln("Returned Child Trade Item Links are \n");
    for(i = 0; i < hmChildLinks.size(); i++)
    {
        out.writeln(hmChildLinks[i]);
    }
}
else
{
    out.writeln("No Child TradeItem Links found in Search");
}

```

```
}
```

Get Parent Links

```
var tradeItem = getTradeItemDS("45645666666677","XX","XX");

var hmParentLinks = [];
hmParentLinks = tradeItem.getTradeItemParentLinks();

if(hmParentLinks != null)
{
    out.writeln("Returned Parent Trade Item Links are \n");
    for(i = 0; i < hmParentLinks.size(); i++)
    {
        out.writeln(hmParentLinks[i]);
    }
}
else
{
    out.writeln("No Parent TradeItem Links found in Search");
}
```

Spec Maps

```
specMap = getSpecMapByName("GDS XML GLN Attributes Spec Map");
var hmDstPathsToSrcPaths = specMap.getMappings();

out.writeln(hmDstPathsToSrcPaths);
```

Appendix A – Pre-seeded Roles, Access Control Groups, and Selections

This appendix provides information about the various Roles, Access Control Groups (ACGs), and Selections that are pre-seeded in the solution. It also provides the list of accessible features and operations that can be performed by the respective roles.

Roles

For every IBM Global Data Synchronization for WebSphere Product Center user a set of Roles can be assigned. As an example, consider the company XYZ. This company has four main departments such as Lighting, Consumer Electronics, Software, and Components. Each of these departments has a Global Brand Manager. They are:

- Lighting Global Brand Manager
- Consumer Electronics Global Brand Manager
- Software Global Brand Manager
- Components Global Brand Manager

Note! The naming convention is [UDEX CAT SPECIFIC] Global Brand Manager. That is, Lighting is the UDEX specific category.

The Global Brand Managers are responsible for creating a GTIN. Each of these Global Brand Managers has product executives. Once the Global Brand Manager creates the GTIN, a notification is sent to the product executives to enrich the global attributes. The respective product executives are:

- Lighting Global Product Executive
- Consumer Electronics Global Product Executive
- Software Global Product Executive
- Components Global Product Executive

Note! The Global Brand Manager can also enrich some or all the global attributes.

When all the product executives have completed enriching the global attributes, only then is the global enrichment process complete. A notification that the global enrichment for the trade item is complete is sent to the Global Brand Manager.

Now, if company XYZ has business relations with US, Holland, and Singapore, there will be target market specific Brand Managers for each category. They are:

- Lighting US Brand Manager
- Lighting Holland Brand Manager
- Lighting Singapore Brand Manager

- Consumer Electronics US Brand Manager
- Consumer Electronics Holland Brand Manager
- Consumer Electronics Singapore Brand Manager

Similarly there will be target market specific Brand Managers for each category.

The Global Brand Managers will send the notification to these target market specific Brand Managers to enrich the variants. Each of the target market specific Brand Managers has Product Executives. The Product Executives enrich the variant attributes. Once the variant attributes have been enriched, a notification for variant enrichment completion is sent to the brand managers.

The various roles that are pre-seeded in the IBM Global Data Synchronization for WebSphere Product Center solution are:

- WebSphere Product Centre Administrator
- Global Data Synchronization Administrator
- [UDEX CAT SPECIFIC] Global Brand Manager
- [UDEX CAT SPECIFIC] Global Product Executive
- Target Market Brand Manager
- Target Market Product Executive
- Marketing Manager
- Marketing Executive
- Data Sync Manager
- Data Sync Executive

Note! These roles can be changed based on your requirements.

WebSphere Product Centre Administrator

The WebSphere Product Centre Administrator has access to the data model. Typically, the administrator is the PSS user.

The operations that can be setup for IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • Create • Edit • View • Modify • Delete • Explore 	<ul style="list-style-type: none"> • Create • Edit • View • List • Modify • Delete • Explore 	<ul style="list-style-type: none"> • Create • Edit • View • List • Modify • Delete • Approve/R 	<ul style="list-style-type: none"> • Publish Transactions • View Generated XML • Item Transactions 	<ul style="list-style-type: none"> • Publications • Initial Load • Item Add • Item Link Add • New Item Request • Item Change Request • New Item Hierarchy

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • Create Variant • Delete Variant • Enrich Global • Enrich Variant • Approve /Reject • Publish New Item • Send Initial Load • Add Item • Synchronize Changes 	<ul style="list-style-type: none"> • Approve /Reject 	<ul style="list-style-type: none"> • eject • Add Item Link 	<ul style="list-style-type: none"> • Hierarchy Transactions • Trading Partner Transactions 	<ul style="list-style-type: none"> Request • Item Hierarchy Change Request • New Trading Partner Request Trading Partner Change Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List • Edit Catalog Views • View Items • Add Items • Modify Items • Delete Items • Recategorize Items • Summary Items • Export Attributes • Differences • Rollback • Search • Delete • Run Preview Script 	<ul style="list-style-type: none"> • List • Edit Hierarchy Views • View Hierarchy Nodes • Add Hierarchy Nodes • Modify Hierarchy Node Attributes • Delete Hierarchy Nodes • Recategorize Hierarchy Nodes • Summary Hierarchy Nodes • Specmap Hierarchy Nodes • Attributes • Rollback • Delete 	<ul style="list-style-type: none"> • List • Edit Rule • Delete 	<ul style="list-style-type: none"> • List • Perform Import • Delete 	<ul style="list-style-type: none"> • View Items • Add Items • Modify Items • Delete Items • Recategorize Items • View Hierarchy Nodes • Add Hierarchy Nodes • Modify Hierarchy Node Attributes • Delete Hierarchy Nodes • Recategorize Hierarchy Nodes • Specmap Hierarchy Nodes 	<ul style="list-style-type: none"> • View Files • Delete Files

WebSphere Product Center					
Workflow	Collaboration Area	Spec	Screen	Script	Scheduler
<ul style="list-style-type: none"> • List • Edit 	<ul style="list-style-type: none"> • List • Checkout 	<ul style="list-style-type: none"> • Modify Spec 	<ul style="list-style-type: none"> • View 	<ul style="list-style-type: none"> • Create • Modify 	<ul style="list-style-type: none"> • View Company

• Delete	Entries	• Modify Spec Map		Scripts	Jobs
----------	---------	----------------------	--	---------	------

Global Data Synchronization Administrator

The IBM Global Data Synchronization for WebSphere Product Center administrator has access to all the functionalities in IBM Global Data Synchronization for WebSphere Product Center and some of the functionalities in WebSphere Product Centre such as import/export & user management. The IBM Global Data Synchronization for WebSphere Product Center administrator does not have access to the data model.

The IBM Global Data Synchronization for WebSphere Product Center Administrator has access to the following:

- Notifications
- Quick Search, Basic Search, and Advanced Search for Trade Items, Trade Item Links, and Trading Partners
- Publish New Item, Send Initial Load, Add Item, Add Link, and Synchronize Changes
- Explore Transactions
- Manage Items (Create GTIN, Create GTIN Variant (that is, target market and Information provider), View/Edit GTIN Global Attributes, View/Edit Variant Attributes, Enrich GTIN Global Attributes, Enrich Variant Attributes, Delete GTIN, and Delete GTIN Variant)
- Approve/Reject Items
- Create/View/Edit/Delete/Approve Trading Partner
- Import/Export Items, Item Links
- User Management & Security

The operations that can be setup for IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • Create • Edit • View • Modify • Delete 	<ul style="list-style-type: none"> • Create • Edit • View • List • Modify • Delete 	<ul style="list-style-type: none"> • Create • Edit • View • List • Modify • Delete 	<ul style="list-style-type: none"> • Publish Transactions • View Generated XML • Item Transactions 	<ul style="list-style-type: none"> • Publications • Initial Load • Item Add • Item Link Add • New Item Request • Item Change Request

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • Explore • Create Variant • Delete Variant • Enrich Global • Enrich Variant • Approve/Reject • Publish New Item • Send Initial Load • Add Item • Synchronize Changes 	<ul style="list-style-type: none"> • Explore • Approve/Reject 	<ul style="list-style-type: none"> • Approve/Reject • Add Item Link 	<ul style="list-style-type: none"> • Hierarchy Transactions • Trading Partner Transactions 	<ul style="list-style-type: none"> • New Item Hierarchy Request • Item Hierarchy Change • New Trading Partner Request • Trading Partner Change Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List • Perform Import • Delete 	<ul style="list-style-type: none"> • View Items 	

WebSphere Product Center					
Workflow	Collaboration Area	Spec	Screen	Script	Scheduler
			<ul style="list-style-type: none"> • View 	<ul style="list-style-type: none"> • Create Modify Scripts 	<ul style="list-style-type: none"> • View Company Jobs

[UDEX CAT SPECIFIC] Global Brand Manager

The Global Brand Manager is responsible for creating new trade items (global variant). The Global Brand Manager can also edit local variant, delete an item and its local variant. There will be one Global Brand Manager for each category.

The Global Brand Manager has access to the following:

- Notifications
- Quick Search, Basic Search, and Advanced Search for Trade Items, Trade Item Links, and Trading Partners
- Explore Transactions
- Manage Items (Create GTIN, View/Edit GTIN Global Attributes, View/Edit Variant Attributes, Delete GTIN, and Delete GTIN Variant)
- View Trading Partner

The operations that the Global Brand Manager can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • Create • Edit • View • Modify • Delete • Delete Variant • Explore 	<ul style="list-style-type: none"> • View • List • Explore 	<ul style="list-style-type: none"> • Create • Edit • View • List • Modify • Delete • Approve/Reject 	<ul style="list-style-type: none"> • Item Transactions • Hierarchy Transactions • Trading Partner Transactions 	<ul style="list-style-type: none"> • New Item Request • Item Change Request • New Item Hierarchy Request • Item Hierarchy Change Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 		<ul style="list-style-type: none"> • View Items 	<ul style="list-style-type: none"> • View Files • Delete Files

[UDEX CAT Specific] Global Product Executive

The Global Product Executive can enrich GTIN global attributes and also view or edit the variant attributes.

The Global Product Executive has access to the following:

- Notifications
- Quick Search, Basic Search, and Advanced Search for Trade Items, Trade Item Links, and Trading Partners
- Manage Items (View/Edit GTIN Global Attributes, View/Edit Variant Attributes, and Enrich GTIN Global Attributes)
- View Trading Partner

The operations that the Global Product Executive can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • Edit • View • Modify • Explore • Enrich Global 	<ul style="list-style-type: none"> • List • View • Explore 	<ul style="list-style-type: none"> • List • View 	<ul style="list-style-type: none"> • Item Transaction 	New Item Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 		<ul style="list-style-type: none"> • View Items • 	<ul style="list-style-type: none"> • View Files • Delete Files

Target Market Brand Manager

The [UDEX CAT – TM Specific] Brand Manager can create, delete a variant of an item, approve, or disapprove the variant.

The Brand Manager has access to the following:

- Notifications
- Quick Search, Basic Search , and Advanced Search for Trade Items, Trade Item Links, and Trading Partners
- Explore Transactions
- Manage Items (Create GTIN Variant, View GTIN Global Attributes, View/Edit Variant Attributes, Enrich Variant Attributes, and Delete GTIN Variant)
- Approve/Disapprove GTIN Variant

The operations that the Target Market Brand Manager can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • Edit • View • Modify • Explore • Create Variant • Delete Variant 	<ul style="list-style-type: none"> • List • View • Explore 	<ul style="list-style-type: none"> • List • View • Edit • Delete • Create • Modify 	<ul style="list-style-type: none"> • Item Transactions • Hierarchy Transactions 	<ul style="list-style-type: none"> • New Item Request • Item Change Request • New Item Hierarchy Request Item Hierarchy Change Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 		<ul style="list-style-type: none"> • View Items 	<ul style="list-style-type: none"> • View Files • Delete Files

Target Market Product Executive

The Target Market Product Executive can enrich variant attributes.

The Target Market Product Executive has access to the following:

- Notifications
- Quick Search, Basic Search , and Advanced Search for Trade Items, and Trading Partner
- Manage Items (View GTIN Global Attributes, View/Edit Variant Attributes, and Enrich Variant Attributes)
- View Trading Partner

The operations that the Target Market Product Executive can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • Edit • View • Modify • Explore • Enrich Variant 	<ul style="list-style-type: none"> • List • View • Explore 			<ul style="list-style-type: none"> • New Item Request • Item Change Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 		<ul style="list-style-type: none"> • View Items 	View Files Delete Files

Marketing Manager

The Marketing Manager can view trade Items and trading partner information.

The Marketing Manager has access to the following:

- Notifications
- Quick Search, Basic Search, and Advanced Search for Trade Items, Trade Item Links, and Trading Partner
- Manage Items (View GTIN Global Attributes, View Variant Attributes)
- View Trading Partner

The operations that the Marketing Manager can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • View • Explore 	<ul style="list-style-type: none"> • List • View • Edit • Delete • Create • Modify • Explore • Approve /Reject 	<ul style="list-style-type: none"> • List • View 	Trading Partner Transactions	<ul style="list-style-type: none"> New Trading Partner Request Trading Partner Change Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 		<ul style="list-style-type: none"> • View Items 	<ul style="list-style-type: none"> View Files Delete Files

Marketing Executive

The Marketing Executive can view Trade Items and Trading Partner Information

- Notifications
- Quick Search, Basic Search , and Advanced Search for Trade Items, Trade Item Links, and Trading Partner
- Add Link

- Explore Transactions
- Manage Items (View GTIN Global Attributes, View Variant Attributes)
- View Trading Partner

The operations that the Marketing Executive can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • List • View • Explore 	<ul style="list-style-type: none"> • List • View • Edit • Delete • Create • Modify • Explore 	<ul style="list-style-type: none"> • List • View 	<ul style="list-style-type: none"> • Trading Partner Transactions 	<ul style="list-style-type: none"> New Trading Partner Request Trading Partner Change Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 		<ul style="list-style-type: none"> • View Items 	<ul style="list-style-type: none"> View Files Delete Files

Data Sync Manager

The Data Sync Manager can process and approve Subscriptions and has access to the following:

- Notifications
- Quick Search, Basic Search , and Advanced Search for Trade Items
- Publish New Item, Send Initial Load, Add Item, Synchronize Changes, Request for Publication, Process Initial Load and Process Item Change and Item Delist
- Explore Transactions

The operations that the Data Sync Manager can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • Request For Publication • Stop Synchronization • Process Initial Load • Process New Item • Process Item Change • Process Item Delist • Process item withdraw • Submit For Enrichment • Classify Item • Synchronize Internally • Publication Explore • Query Item 			<ul style="list-style-type: none"> • Publish Transactions • View Generated XML 	<ul style="list-style-type: none"> • New Item Publications • Initial Load Publications • Item Change Publication • Item Delist Publication • Item Withdraw Publication • Subscription Request • Filter Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 	<ul style="list-style-type: none"> • List 		<ul style="list-style-type: none"> • View Items 	<ul style="list-style-type: none"> View Files Delete Files

Data Synch Executive

The Data Synch Executive can process Subscriptions and Filters.

The Data Synch Executive has access to the following:

- Notifications
- Publish New Item, Send Initial Load, Add Item, Synchronize Changes, Request for Publication, Process Initial and Query Items
- Explore Transactions

The operations that the Marketing Manager can perform in IBM Global Data Synchronization for WebSphere Product Center solution and WebSphere Product Center are provided in the table.

IBM Global Data Synchronization for WebSphere Product Center Solution				
Trade Item	Trading Partner	Trade Item Link	Transactions	Notifications
<ul style="list-style-type: none"> • Request For Publication • Stop Synchronization • Process Initial Load • Process New Item • Process Item Change • Process Item Delist • Process item withdraw • Submit For Enrichment • Classify Item • Synchronize Internally • Publication Explore • Synchronize Changes • Classify Item • Synchronize Internally • Query Item 			<ul style="list-style-type: none"> • Publish Transactions • View Generated XML 	<ul style="list-style-type: none"> • New Item Publications • Initial Load Publications • Item Change Publication • Item Delist Publication • Item Withdraw Publication • Subscription Request • Filter Request

WebSphere Product Center					
Catalog	Hierarchy	Selection	Import	Selection Members	DocStore
• List	• List	• List		• View Items	View Files Delete Files

Workflow Roles

The following workflow roles are pre-seeded in the solution. The user needs to have these roles to do actions related to workflows. When creating new users to do some action(s) in a specified workflow, then that user should be assigned with a specific role(s).

- Administrators
- GDS_ALL_WF_Role
- GDS_Approve_Filter_Deletion_WF_Role
This role is required to approve filter deletions.
- GDS_Approve_Filter_WF_Role
This role is required to approve filter creations.
- GDS_Approve_Item_Deletion_WF_Role
This role is required to approve item deletions.
- GDS_Approve_Item_WF_Role
This role is required to approve Item creations.
- GDS_Approve_Link_Deletion_WF_Role
This role is required to approve Item Link deletions.
- GDS_Approve_Link_WF_Role
This role is required to approve Link creation.
- GDS_Approve_Modified_Filter_WF_Role
This role is required to approve filter modifications.
- GDS_Approve_Modified_TP_WF_Role
This role is required to approve trading partner modifications.
- GDS_Approve_Modify_Link_WF_Role
This role is required to approve Item Link modifications.
- GDS_Approve_Modify_Trade_Item_WF_Role
This role is required to approve trade item modifications.

- GDS_Approve_New_TP_WF_Role
This role is required to approve creation of new trading partners.
- GDS_Approve_Subscription_Deletion_WF_Role
This role is required to approve subscription deletion.
- GDS_Approve_Subscription_WF_Role
This role is required to approve subscription creation.
- GDS_Approve_TP_Deletion_WF_Role
This role is required to approve trading partner deletion.
- GDS_Enrich_Global_Attributes_WF_Role
This role is required to enrich global attributes for a trade item.
- GDS_Enrich_Local_Attributes_WF_Role
This role is required to enrich Local Attributes for a trade item.
- GDS_Internal_Sync_WF_Role
This role is required to perform internal synchronization of a trade item.
- GDS_Modify_Filter_WF_Role
This role is required to modify a filter.
- GDS_Modify_Trade_Item_WF_Role
This role is required to modify a trade item.
- GDS_Process_Initial_Load_Publication_WF_Role
This role is required to process an initial load publication.
- GDS_Process_Item_Change_Publication_WF_Role
This role is required to process an item change publication.
- GDS_Process_Item_Delist_Publication_WF_Role
This role is required to process an item delist publication.
- GDS_Process_Item_Withdraw_Publication_WF_Role
This role is required to process an item withdraw publication.
- GDS_Process_New_Item_Publication_WF_Role
This role is required to process new item publication.
- GDS_Set_Category_Mapping_WF_Role
This role is required to set category mapping
- GDS_Submit_For_Enrichment_WF_Role
This role is required to submit a trade item for enrichment

Access Control Groups

Examples of UDEX Category and Target Market Specific ACGs are provided in the following table.

ACG	Roles	
ALCOHOL BASED MIXERS ACG	ALCOHOL BASED MIXERS Global Brand Manager	[UDEX CAT SPECIFIC] Global Brand Manager
	ALCOHOL BASED MIXERS Global Product Executive	[UDEX CAT SPECIFIC] Global Product Executive
	ALCOHOL BASED MIXERS - US Brand Manager	[UDEX CAT - TM SPECIFIC] Brand Manager
	ALCOHOL BASED MIXERS UK Brand Manager	
	ALCOHOL BASED MIXERS - US - Logistics Product Executive	[[UDEX CAT - TM - ATTR GROUP SPECIFIC] Product Executive
	ALCOHOL BASED MIXERS - US - Measures Product Executive	
	ALCOHOL BASED MIXERS - US - Nutrition Product Executive	
	ALCOHOL BASED MIXERS - UK - Logistics Product Executive	
	ALCOHOL BASED MIXERS - UK - Measures Product Executive	
	ALCOHOL BASED MIXERS - UK - Nutrition Product Executive	
US ACG	ALCOHOL BASED MIXERS - US Brand Manager	[UDEX CAT - TM SPECIFIC] Brand Manager
	ALCOHOL BREWING_MAKING KITS US Brand Manager	
	ALCOHOL BASED MIXERS - US - Logistics Product Executive	[[UDEX CAT - TM - ATTR GROUP SPECIFIC] Product Executive
	ALCOHOL BASED MIXERS - US - Measures Product Executive	
	ALCOHOL BASED MIXERS - US - Nutrition Product Executive	
	ALCOHOL BREWING_MAKING KITS - US - Logistics Product Executive	

ACG	Roles	
	ALCOHOL BREWING_MAKING KITS - US - Measures Product Executive	
	ALCOHOL BASED MIXERS - US - Logistics User	[[UDEX CAT - TM - ATTR GROUP SPECIFIC] User
	ALCOHOL BASED MIXERS - US - Measures User	
	ALCOHOL BASED MIXERS - US - Nutrition User	
	ALCOHOL BREWING_MAKING KITS - US - Logistics User	
	ALCOHOL BASED MIXERS - US Variant Publisher	[UDEX CAT - TM SPECIFIC] Variant Publisher
	ALCOHOL BREWING_MAKING KITS US Variant Publisher	

Selections

The following Selections have been pre-seeded into the model which means that the following selections will be added to the model, during the installation process of the application.

Selection	ACG	Catalog	Hierarchy	Selected Categories
UNET_ALCOHOL BASED MIXES/MIXERS	Alcohol ACG	Globa_Catalog	UDEX_Hierarchy_UCCNet	<ul style="list-style-type: none"> • ALCOHOL BASED MIXES/MIXERS • ALCOHOL BASED COCKTAILS/MIXES • ALCOHOL BASED MIXERS
UNET_ANIMAL/PET ACCESSORIES OTHER	Animal Pet ACG	Global_Catalog	UDEX_Hierarchy_UCCNet	<ul style="list-style-type: none"> • ANIMAL/PET ACCESSORIES OTHER • ANIMAL/PET ACCESSORIES OTHER • ANIMAL/PET ACCESSORIES OTHER VARIETY PACKS/SETS
UNET_CEREAL GRAINS WITH ADDITIONS - DRY (SHELF STABLE)	Cereal Grains ACG	Global_Catalog	UDEX_Hierarchy_UCCNet	<ul style="list-style-type: none"> • CEREAL GRAINS WITH ADDITIONS - DRY (SHELF STABLE) • BULGUR WHEAT WITH ADDITIONS - DRY (SHELF STABLE) • CEREAL GRAINS OTHER WITH ADDITIONS - DRY (SHELF STABLE)
TM_Africa	Africa ACG	Global_Local_Catalog	Target_Market_Hierarchy	<ul style="list-style-type: none"> • EG • SA
TM_North America	North America ACG	Global_Local_Catalog	Target_Market_Hierarchy	<ul style="list-style-type: none"> • US • CA

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