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QAD SOLUTIONS

Manufacturing Applications

User Guide
QAD QSYNC–CP 2.2

Installing QAD QSYNC–CP
Using QAD QSYNC–CP
Import File Column Headers

QAD

QSYNC-CP 2.2
MFG/PRO eB, eB2, eB2.1
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About This Guide

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Purpose

This guide provides product information for QAD QSYNC–CP 2.2. It describes:

- How to install the MFG/PRO components
- How to set up and use the MFG/PRO components

MFG/PRO Product Information

MFG/PRO and its related products have an extensive documentation set, including user guides and technical information. These books are available for viewing or downloading on the QAD Web site.

MFG/PRO also has an extensive online help system. Help is available for most fields found on a screen. Procedure help is available for most programs that update the database. Most inquiries, reports, and browses do not have procedure help.

QAD Web Site

The QAD Web site provides a wide variety of information about the company and its products. You can access the Web site at:

http://www.qad.com

For MFG/PRO users with a QAD Web account, product documentation is available for viewing or downloading at:

http://support.qad.com/

You can register for a QAD Web account by accessing the Web site and clicking the Accounts link at the top of the screen. Your customer ID number is required. Access to certain areas is dependent on the type of agreement you have with QAD.

Most user documentation is available in two formats:

- Portable document format (PDF). PDF files can be downloaded from the QAD Web site to your computer. You can view them with the free Adobe Acrobat Reader. A link for downloading this program is also available on the QAD Web site.

- HTML. You can view user documentation through your Web browser. The documents include search tools for easily locating topics of interest.

Features also include an online solution database to help MFG/PRO users answer questions about setting up and using the product. Additionally, the QAD Web site has information about training classes and other services that can help you learn about MFG/PRO.

Conventions

MFG/PRO is available in several interfaces: Desktop (Web browser), Windows, and character. To standardize presentation, the documentation uses the following conventions:

- MFG/PRO screen captures show the Desktop interface.
- References to keyboard commands are generic. For example, choose Go refers to:
  - The forward arrow in Desktop
  - F2 in the Windows interface
  - F1 in the character interface

  In the character and Windows interfaces, the progress status line at the bottom of a program window lists the main UI-specific keyboard commands used in that program. In Desktop, alternate commands are listed in the right-click context menu.

  For complete keyboard command summaries for each MFG/PRO interface, refer to the appropriate user documentation.

This document uses the text or typographic conventions listed in the following table.

If you see:	**It means:**
`monospaced text`	A command or file name.
`italicized monospaced text`	A variable name for a value you enter as part of an operating system command; for example, *`YourCDROMDir`*.
`indented command line`	A long command that you enter as one line, although it appears in the text as two lines.
Note	Alerts the reader to exceptions or special conditions.

If you see:	It means:
Important	Alerts the reader to critical information.
Warning	Used in situations where you can overwrite or corrupt data, unless you follow the instructions.

Chapter 1

Installing QAD QSYNC–CP

This chapter provides information to help you install QAD QSYNC–CP.

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Assumptions

Installation assumes one of the following combinations of MFG/PRO and Progress is already installed:

MFG/PRO Version	Progress Version
eB	9.1D+
eB2	9.1D+
eB2.1	9.1D+

If you are planning to use QSYNC–CP with QAD Desktop, you must install Desktop 2.8 or higher.

Overview

The QAD QSYNC–CP installation requires the following steps:

- Install the zip or tar file.
- Convert from QAD QSYNC–CP Version 2.1.
- Create the QAD QSYNC–CP database or add tables to your MFG/PRO database.
- Compile programs.
- For MFG/PRO eB2.1 only, convert generalized code data to reference the domains in your eB2.1 database.
- Load data into the MFG/PRO database.
- Modify connection parameters.
- Load online help.
- Set up QAD Desktop.

Install the Zip or Tar File

Take the following steps to install the zip or tar file:

1 Copy the zip or tar file containing the QAD QSYNC–CP software specific to your version of MFG/PRO to the operating system.

For example, if you are using MFG/PRO eB2, then copy either `qsync-cpeB2.zip` or `qsync-cpeB2.tar`.

2 On UNIX systems, take one of the following steps:

- If the unzip utility is available, extract the contents of the zip file using the following command:

  ```
  unzip qsync-cpeB2.zip
  ```

  If the unzip utility is not available, use your Windows unzip software and transfer the files to UNIX. To avoid corrupting the files during the transfer, make sure the transfer mode is set to binary.

  This extracts the contents of the zip file into a directory named `qsync-cp`*`MFGPROVersion`*; for example, `qsync-cpeB2`.

- If using the tar file, extract the contents of the tar file using the following command:

  ```
  tar xvf qsync-cpeB2.tar
  ```

3 Verify that the installation directory (*`QsyncCpInstallDir`*) contains the files listed in Table 1.1.

Table 1.1 Installation Files

Directory	File Name	Description
/char/xrc	*.p *.i	QAD QSYNC–CP source programs
/char/us/pp		Empty directory for saving compiled QAD QSYNC–CP programs
/database/us/qsync-cp	qsync-cp*`MFGPROVer`*.df	QAD QSYNC–CP database definition file
/database/us/hlp	qsync-cp.fhd	Online help file

Directory	File Name	Description
/conv	conv.bat conv.pf conv.sh flhmstr.txt gencode.txt lbldexec.txt menu.txt pgmimstr.txt utlbldel.p utucconv.i utucconv.p utucdmlk.p utucdmmp.p utucdmms.p utucdmpb.p utucdump.p utucmap.i utucopda.i	Directory containing conversion routines
/database/us/mfg	mnd_det.d mnt_det.d flh_mst.d code_mst.d	System data for qaddb
/database/us/admin	pgmi_mst.d lbld_det.d lbl_mstr.d	System data for admin database
/install	installation.pf ucconvcm.p InstallQSync.bat InstallQSync.sh utinst.p	Conversion tools for converting data in the code_mst.d in a target MFG/PRO eB2.1 database; exists only when you install for MFG/PRO eB2.1

4 Go to “Convert to QAD QSYNC–CP 2.2” on page 16 if you are already using QSYNC–CP Version 2.1. Otherwise, continue with the next section.

Create QAD QSYNC–CP Database Tables

QSYNC–CP requires new database tables for storing additional item attributes. You can add the tables to your existing MFG/PRO database, or create a new database for them. If you choose the second approach, you will need to make additional changes to include the new database in your production database set.

Take the following steps to create the QAD QSYNC–CP database or add tables to your existing MFG/PRO database:

1 Start your MFG/PRO database servers.

2 Log in to the MFG/PRO database.

3 Go to the Progress Editor by choosing End from the main menu. Enter P when prompted to confirm exit.

4 Access the Data Dictionary by choosing the menu option Tools|Data Dictionary.

5 Install the QAD QSYNC–CP table definitions using either of the following ways:

   a Add QAD QSYNC–CP tables to the existing MFG/PRO database:

      • Choose the menu option Database|Select Working Database.
      • Choose the qaddb database.

   b Create a new database:

      • Choose the menu option Database|Create.
      • Enter the new physical database name and choose OK.
      • After the database is created, a Connect Database window opens.
      • Enter the logical name of the database as qsynccp and choose OK.
      • After the database connects, a Working Database window opens; choose qsynccp as the working database.

6 Choose the menu option Admin|Load Data and Definitions|Data Definitions (.df file).

Important If you are adding the QAD QSYNC–CP tables to an existing MFG/PRO database, back up your database before performing this step.

7 Enter the following as the input file and then choose OK:

```
QsyncCpInstallDir/database/us/qsync-cp/
    qsync-cpMFGPROVersion.df
```

Depending on your installation choice in step 5, this step installs the table definitions to either the MFG/PRO database or the new qsynccp database.

Choose OK when the Load Completed information window appears.

8 Return to the Progress Editor by choosing the menu option Database|Exit.

Compile Programs

Take the following steps to compile programs:

1 Determine the location of the MFG/PRO source or encrypted source directory. This directory is referenced as *MfgproSourceDir* in this document.

Add the QAD QSYNC–CP and MFG/PRO source directories to the PROPATH. In the Progress Editor, enter the following:

```
propath = "QsyncCpInstallDir/char/xrc,MfgproSourceDir," +
propath
```

Press Go.

2 Access the application compiler by choosing the menu option Tools|Application Compiler.

3 Clear the Look in Subdirectories option.

4 Choose Modify and enter:

QsyncCpInstallDir/char/xrc

Then choose OK in the File Specification window.

5 Choose the menu option Options|Compiler.

6 In the Compiler Options window, enter the following in the Save into field:

QsyncCpInstallDir/char/us/pp

Then choose OK.

7 Choose Start Compile.

8 Once the compilation is complete, choose OK in the Compiler Results window.

9 Go to the Progress Editor by choosing the menu option File|Exit.

Update Domain System Data (eB2.1 Only)

Take the following steps to convert generalized code (code_mstr) data for use in an MFG/PRO eB2.1 environment:

1 Back up your MFG/PRO database.

2 At a command prompt, change the directory to:

QsyncCpInstallDir/install

3 On a UNIX system, use a text editor to:

a Open the InstallQSync.sh file.

b Replace <ProgressDirectory> with your Progress installation directory name.

c Save the file.

4 On a Windows system, use a text editor to:

a Open the InstallQSync.bat file.

b Replace <ProgressDirectory> with your Progress installation directory name.

c Save the file.

5 Open installation.pf and replace the following:

a <MFGPRODatabaseConnectionParameters> with the MFG/PRO database connection parameters

b <DomainList> with a comma-separated list of domain IDs that you want to load generalized code data into.

6 Ensure that the MFG/PRO database server has been started.

7 On a UNIX system, execute the following command:

```
./InstallQSync.sh
```

On a Windows system, execute the following command:

```
InstallQSync.bat
```

These commands convert the data in the `code_mst.d` into the format required for eB2.1 for each domain specified in `<DomainList>` and generate `converted_code_mstr.d` file for loading in step 5 below.

8 Check the `installation.log` for error message before continuing with the next section.

Load Data into MFG/PRO Database

Take the following steps to load data into the MFG/PRO database:

1 Access the Data Dictionary by choosing the menu option Tools|Data Dictionary.

2 Choose the menu option Database|Select Working Database.

3 Choose qaddb as the working database.

4 Choose the menu option Admin|Load Data and Definitions|Table Contents (.d file).

5 Choose the following tables:

- code_mstr (**Note**: Choose `converted_code_mstr.d` for an eB2.1 implementation.)
- flh_mstr
- mnd_det
- mnt_det

6 Enter *`QsyncCpInstallDir`*`/database/us/mfg` in the Input File field.

7 Enter the Acceptable Error Percentage as 100. This continues loading all the data even if an error is encountered.

8 Choose OK to start loading.

Note If you are converting from QSYNC–CP Version 2.1, you must have run the conversion routine as explained in “Convert to QAD QSYNC–CP 2.2” on page 16. Choose the database that contains the QSYNC–CP tables and then select the following tables:

- uccmap_det

- uccia_mstr
- uccia_link
- uccia_pub
- uccia_ctrl

Enter *QsyncCpInstallDir*/conv/convdata in the Input File field.

9 Repeat steps 3 through 8 to load data into the admin database. Substitute the following values:

- Enter *QsyncCpInstallDir*/database/us/admin in the Input File field.
- Choose qadadm as the database instead of qaddb.
- Choose the following tables:
  - pgmi_mstr
  - lbl_mstr
  - lbld_det

10 Return to the Progress Editor. Choose menu option Database|Exit.

11 Exit the session by choosing menu option File|Exit.

Modify Connection Parameters

Perform the following steps to modify the PROPATH, database, and client connection parameters. The steps vary depending on whether you loaded new tables into your existing database or created a new database for them.

1 If you created a new database in step 5 on page 9:

a Modify the database server startup scripts to include the QAD QSYNC–CP database.

b Modify the client connection scripts to include the QAD QSYNC–CP database. Use qsynccp as the logical name of the database.

2 In both cases, modify the PROPATH to include:

QsyncCpInstallDir/char

Load Field Help

Perform the following steps to add the QAD QSYNC–CP procedure and field help to the MFG/PRO help database; this does not affect custom help:

1. Log in to MFG/PRO.
2. Choose the Field Help Load (36.4.19) menu option.
3. Leave Field, Procedure, Status, and Text Type blank.
4. Complete the other fields:
   - Enter an appropriate two-letter code, such as US for US English.
   - In the Load File field, enter:

     QsyncCpInstallDir`/database/us/hlp/qsync-cp.fhd`
   - In the Skip loading help with lower status field, enter Yes.
5. Press Go to start the loading.
6. Exit Field Help Load when the load is finished.
7. Update user profiles to access character-format help. For MFG/PRO eB2, use User Maintenance (36.3.18); for MFG/PRO eB, use User Interface Profile (36.20.4).

   Note This step is not required for MFG/PRO eB2.1 since only character help is provided.
8. Leave Userid blank; this updates the profile for all users who do not have individual profiles. Press Go.
9. To set the profile for character-format help, ensure that WinHelp is cleared.
10. Press Go to save the changes.

Set Up QAD Desktop

If you plan to use QSYNC–CP with QAD Desktop, ensure you install the latest Desktop 2.8 version. Then use the following additional steps to set up the QAD Desktop environment. The steps vary depending on whether you loaded new tables into your existing database or created a new database for them.

If you created a new database in step 5 on page 9, do these additional steps:

1. Modify the Desktop parameter file to include the new qsynccp database.

   Refer to *Installation Guide: QAD Desktop* for more information on this step.

2. Modify the telnet connection scripts to include the new qsynccp database.

In both cases, complete these steps:

1. Modify the PROPATH to include:

   QsyncCpInstallDir`/char`

   Refer to *Installation Guide: QAD Desktop* for more information on this step.

2. Modify the format of the browse used to display generalized codes to accommodate the longer codes required by QSYNC–CP by following these steps:

   a. Access Browse Maintenance (36.20.13; 36.20.13.10 in MFG/PRO eB) and specify gp072 for the Name field.

   b. Press Go until you reach the Sequence frame. Leave the default sequence value of 1 to update the code_value record and press Go.

   c. In the Browse Field Data frame, change the format value of code_value from x(20) to x(55). Press Go to save your changes and exit the function.

3 Regenerate the Desktop menu pages and the search database.

Refer to *Installation Guide: QAD Desktop* for more information on this step.

Convert to QAD QSYNC–CP 2.2

Take the following steps to convert your existing QSYNC–CP data from QSYNC–CP Version 2.1 to Version 2.2:

1 Make backups of the following databases:

- a MFG/PRO
- b Admin
- c QSYNC–CP (if a separate database exists)

2 At the command prompt, change the directory to:

QsyncCpInstallDir`/conv`

3 On UNIX systems, use a file editor to:

- a Open the `conv.sh` file.
- b Replace `<progressInstallationLocation>` with your Progress installation directory name.
- c Save the file.

4 On Windows systems, take the following steps:

- a Open the `conv.bat` file.
- b Replace `<progressInstallationLocation>` with your Progress installation directory name.
- c Save the file.

5 Open the `conv.pf` file and replace the following:

- a `<MFGPRODatabaseConnectionParameters>` with the MFG/PRO database connection parameters.
- b `<ADMINDatabaseConnectionParameters>` with the Admin database connection parameters.

c Optionally, if QSYNC–CP is a separate database, replace `<QSYNCCPDatabaseConnectionParameters>` with the QSYNC–CP database connection parameters. If the QSYNC–CP tables have been loaded into the MFG/PRO database, then remove this line from the file.

d If your target MFG/PRO is eB2.1, replace `<DefaultDomainId>` with the domain code to which the QSYNC–CP data will be loaded. If your target MFG/PRO is eB2 or below, replace it with null (“”).

6 Ensure that the database servers have been started for MFG/PRO, Admin, and QSYNC–CP databases.

7 On UNIX systems, execute the following command:

```
./conv.sh
```

8 On Windows systems, execute the following command:

```
conv.bat
```

The commands executed in steps 7 and 8 perform the following tasks:

a Convert data from uccia_mstr, uccia_link, uccia_pub, uccmap_det, and uccia_ctrl to the new format. Data files `uccia_ms.d`, `uccmap_d.d`, `uccia_li.d`, `uccia_pu.d`, and `uccia_ct.d` are created in the *`QsyncCpInstallDir`*`/conv/convdata` directory.

b Remove data related to QSYNC–CP from the following MFG/PRO database tables:

- code_mstr (Generalized Codes)
- flh_mstr (Window Lookups)
- mnt_det (Menus)
- mnd_det (Menus)

c Remove data related to QSYNC–CP from the following Admin database tables:

- lbl_mstr (Label Master)
- lbld_det (Label Detail)
- pgmi_mstr (Program Information)

d Data deleted in steps b and c can be found in *QsyncCpInstallDir*/conv/dumpdata. The file names are:

- code_mst.d
- flh_mstr.d
- mnt_det.d
- mnd_det.d
- lbl_mstr.d
- lbld_det.d
- pgmi_mst.d

Note Existing security information on the QSYNC–CP menus is deleted during the conversion process. The security information will have to be re-entered once the new menus are loaded.

9 Check the conv.log file for error messages.

10 Log in to MFG/PRO and access the Data Dictionary. Delete the tables uccia_mstr, uccia_link, uccia_pub, uccmap_det, and uccia_ctrl from the schema. If these tables are frozen, unfreeze them before deleting the tables.

11 Continue with “Create QAD QSYNC–CP Database Tables” on page 8.

Chapter 2

Using QAD QSYNC–CP

This chapter provides an overview of QAD QSYNC–CP and describes how to set up and use its functions.

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About QAD QSYNC–CP

This section provides an overview of the business need for the QAD QSYNC–CP solution. It describes the global trade identification number (GTIN), provides a work flow of activities, and lists acronyms used throughout this user guide.

Business Need for QAD QSYNC–CP

In the consumer packaged goods industry, the time and resources spent by suppliers and retailers to maintain accurate trading data are growing dramatically.

To address the issue, the industry is moving to standard data formats and identifiers for products as well as data synchronization between trading partners to maintain integrity. UCCnet provides these services.

UCCnet is a not-for-profit subsidiary of the Uniform Codes Council, Inc., a global standards organization. UCCnet maintains a global item registry—a universal foundation for global electronic commerce. Suppliers publish item data to the registry where it is validated and then distributed in near-real time to subscribing trading partners, who can number in the thousands.

This publish-subscribe approach eliminates re-entry of item data and reduces the time and effort companies expend addressing the invoice and shipping errors that result from inaccurate item data. To take advantage of these benefits, major retailers including WalMart, Wegmans, and Royal Ahold are requiring that all information on items that they purchase from suppliers be available electronically through GLOBALregistry.

QAD Solution

QAD has a two-part solution. First, in the MFG/PRO component, suppliers can define and update the required item attributes. Then, using QAD QSYNC–CP on the MFGx.net portal, suppliers can load their item data for validation and submission to GLOBALregistry.

See “Generate GTINs” on page 25.

In MFG/PRO, suppliers can reduce data entry by mapping fields in the existing item master to the parallel fields in the global trade identification number (GTIN) attribute master. The GTIN is the primary identifier for

items in GLOBALregistry. Then, the only values that must be manually entered are those that are not defined in item master. Minimizing data entry minimizes the opportunities for introducing errors.

If suppliers make subsequent changes to mapped fields in item master, they can use an update program to update GTIN attribute master with these changes.

When GTIN attribute master is up to date, suppliers can export the data to a tab-delimited values file. They can then submit the data file through QAD QSYNC–CP on the MFGx.net portal for validation and submission to GLOBALregistry. The validated item attribute data on UCCnet is then available to retailers.

Note Version 2.2 of QAD QSYNC–CP supports the UCCnet v2.4.2.02 specification.

QAD QSYNC–CP Programs

Table 2.1 lists the programs added to MFG/PRO to support the QAD QAD QSYNC–CP solution.

Table 2.1
Programs for QAD QSYNC–CP

Menu Number	Description	Program Name
1.23	QAD QSYNC–CP Menu…	
1.23.1	Internal Item Mapping	ppuccmap.p
1.23.3	GTIN Attribute Maintenance	ppucmta.p
1.23.4	Update GTIN/EANUCC Code	ppchgtin.p
1.23.6	GTIN Link Data	ppuclink.p
1.23.7	GTIN Publication Data	ppucpub.p
1.23.8	GTIN Attribute Import	ppucimp.p
1.23.9	GTIN Attribute Export	ppuciaex.p
1.23.10	Mapped Attributes Report	ppucmprp.p
1.23.12	Mapped Attributes Update	ppucmpup.p
1.23.13	DATALOAD Attribute Maintenance	ppucmt01.p
1.23.14	DATAHARD Attribute Maintenance	ppucmt02.p
1.23.15	DATALOWE Attribute Maintenance	ppucmt03.p
1.23.24	QSYNC–CP Control	ppucctrl.p

GTINs

The primary identifier for items in GLOBALregistry is the global trade identification number (GTIN). The GTIN for each item is a unique 14-digit number:

- The first digit represents the item level in the product hierarchy.

  0: The lowest level in the product hierarchy; this GTIN does not include any other GTINs.

  1: The second level in the product hierarchy; this GTIN includes at least one other GTIN.

  2: The third level in the product hierarchy; this GTIN includes GTINs from two lower levels.

  The pattern continues through any further levels of the product hierarchy.
- The second digit is 0 (zero).
- The third to eighth digits represent the UCC Company Prefix.
- The ninth to thirteenth digits represent the Item Reference.
- The fourteenth digit is the check digit, which is validated against a UCCnet algorithm to ensure the accuracy of the previous 13 digits.

Note Position 3 is 0 (zero) when you have a 5-digit company prefix.

Note The EAN.UCC Company Prefix is created by the added 0 (zero) in position 2.

QAD QSYNC–CP generates a unique GTIN for each item based on the following parameters:

EANUCC code	This is the European article number universal consumer code (EANUCC), sometimes referred to as just the EAN code. The US and Canada equivalent is referred to as the universal product code (UPC).
EANUCC type	The code format for the EANUCC code such as UPC/EAN Case Code (2-5-5).
Trade Item Unit Descriptor	Defines the item level, such as case, in the product hierarchy.

QAD QSYNC–CP Work Flow

As illustrated in Figure 2.1, the basic work flow for registering items in GLOBALregistry moves back and forth between the MFG/PRO and MFGx.net components.

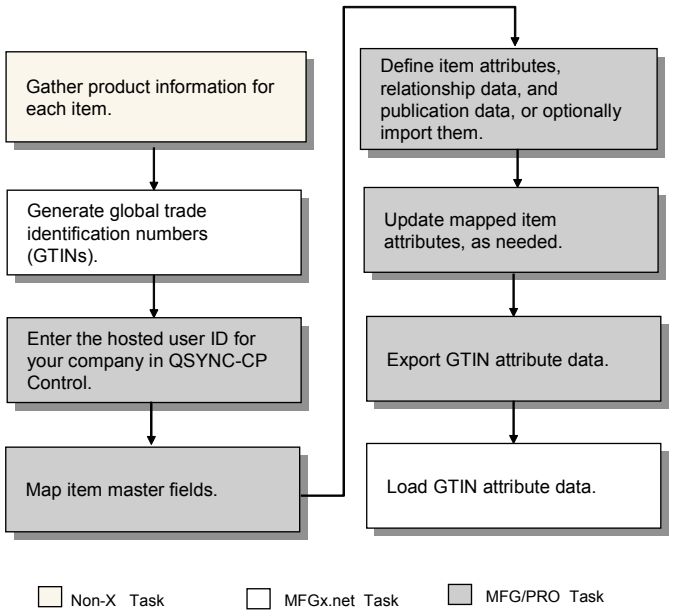


Fig. 2.1 QAD QSYNC–CP Solution Work Flow

To register your items in GLOBALregistry, follow these steps:

1. Gather the EANUCC or UPC code, EANUCC type, and unit descriptor for each item to be registered in UCCnet Registry.
2. In QAD QSYNC–CP on MFGx.net, use the Homework Assignment Worksheet to generate global trade identification numbers (GTINs). See page 23.
3. In MFG/PRO, define the control settings to identify your hosted user. See page 23.
4. In MFG/PRO, map fields in item master to fields in item attributes master. See page 26.
5. In MFG/PRO, define:
   - Attributes for items associated with GTINs See page 27.
   - Parent-child relationships See page 67.

See page 68.

- Publication data

See page 69.

If attribute information has already been defined outside of MFG/PRO, you can optionally import data.

See page 73.

6 Update mapped item attributes when values in the item master change.

See page 70.

7 In MFG/PRO, export item attribute data as a tab-delimited text file.

8 Return to QAD QSYNC–CP on MFGx.net and use the QAD QSYNC–CP Homework Assignment Worksheet to load your text file for validation and submission to UCCnet.

Acronyms Related to QAD QSYNC–CP

Table 2.2 lists acronyms used in this guide.

Table 2.2
Acronyms

Acronym	Full Description
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BOE	Bureau of Explosives
DOT	Department of Transportation
DUNS	Data Universal Numbering System
EANUCC	European Article Number Universal Consumer Code
EAS	Electronic Article Surveillance
GLN	Global Location Number
GTIN	Global Trade Identification Number
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	Intergovernmental Maritime Organization
ISO	International Organization for Standardization
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UDEX	Universal Descriptor Exchange
UNDG	United Nations Dangerous Goods
UPC	Universal Product Code

Generate GTINs

Global Trade Item Number is a required field for GTIN Attribute Maintenance (1.23.3), so you must generate the GTINs before you begin to define the item attribute records. When you generate the GTINs in MFGx.net, you are also asked to identify the correct universal descriptor exchange (UDEX) Category Code for the GTIN.

UCCnet Registry requires a unique GTIN and defined attributes for items at every level of product configuration—consumer selling unit, case, inner pack, pallet, shipper, and so on.

- Gather the EANUCC code, EANUCC type, and unit descriptor for each of your items at all levels of product configuration.
- Go to QAD QSYNC–CP on MFGx.net.
- Open the Homework Assignment Worksheet.
- Follow the steps on the Instructions tab to enter, save, and submit the data for generating GTINs.
- If you are informed of errors, follow the steps on the Instructions tab to address them.

Define Control Settings

Use QSYNC–CP Control (1.23.24) to designate your company's hosted user ID. QSYNC–CP import/export functions and the export programs require a user ID to work.

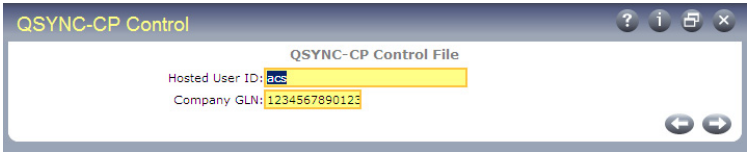


Fig. 2.2
QSYNC–CP Control (1.23.24)

Hosted User ID. Specify the ID of the user assigned for the online portion of QSYNC–CP.

Company GLN. Specify the global location number (GLN) assigned to your company.

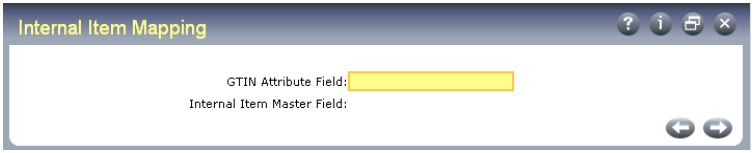
Map Item Master Fields

Use Internal Item Mapping (1.23.1) to define mappings between existing item master fields and corresponding GTIN attribute master fields. When defining new item attribute records in GTIN Attribute Maintenance (1.23.3), mapped item attribute fields are automatically populated with item master values. This automatic population saves data-entry time and reduces the chance of data errors.

See“Update Mapped Attributes” on page 73.

After making changes in item master, use Mapped Attributes Update (1.23.12) to update values in GTIN attribute master. Note, however, that there is no complementary menu choice for updating the item master with changes made in the GTIN attribute master. For best results, define a company procedure for ensuring that item master and GTIN attribute master stay synchronized.

Fig. 2.3
Internal Item Mapping (1.23.1)



You can delete a mapping when the cursor is in Internal Item Master Field. Deleting a mapping does not affect any item attribute records created when the mapping was in effect.

Table 2.3
Sample Mapping

Map this Item Attribute Field	To this Item Master Field
uccia_gross_wt	pt_ship_wt
uccia_item_desc	pt_desc1
uccia_max_order	pt_ord_max
uccia_min_order	pt_ord_min
uccia_net_wt	pt_net_wt
uccia_ord_incr	pt_ord_mult
uccia_product_days	pt_shelflife
uccia_product_type	pt_um
uccia_retail_price	pt_price
uccia_size	pt_size
uccia_size_units	pt_size_um

To review mapped fields at any time, use Report Mapped Attributes (1.23.10) to display those attributes in GTIN attribute master that are mapped to fields in item master. The report includes the item attribute field name, internal item field name, and data value for each internal item or GTIN selected.

See “Report Mapped Attributes” on page 73.

Define Item Attributes

You can use four programs for defining item attributes:

- Use GTIN Attribute Maintenance (1.23.3) to create, modify, or delete a GTIN and define and maintain all types of UCCnet attributes.
- Use DATALOAD Attribute Maintenance (1.23.13) to create or modify a GTIN and update dataload attributes only.
- Use DATAHARD Attribute Maintenance (1.23.14) to update datahard attributes only.
- Use DATALOWE Attribute Maintenance (1.23.15) to update datalowe attributes only.

Note You cannot create GTINs in DATAHARD Attribute Maintenance or DATALOWE Attribute Maintenance.

The frames that display in the attribute-specific maintenance programs are exactly the same as the ones that display in GTIN Attribute Maintenance. Separate screen displays and field descriptions are not included in this guide since the information is identical.

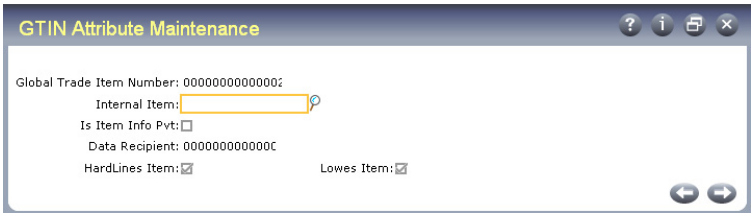
In all programs, entered values are validated against UCCnet-specified formats.

The following sections describe the frames in GTIN Attribute Maintenance.

Item Attribute Header

Figure 2.4 illustrates the first frame of GTIN Attribute Maintenance.

Fig. 2.4
GTIN Attribute Maintenance (1.23.3), Header



See "Generate GTINs" on page 25.

See "Update GTIN/EANUCC Code" on page 67.

Global Trade Item Num. Enter a GTIN that you have generated using the Homework Assignment Worksheet on MFGx.net.

You cannot update this field once the record is saved. If you have a problem with a GTIN number after the record is saved, use Update GTIN/EANUCC Code (1.23.4) to correct the GTIN.

You can delete a GTIN and its associated attributes when the cursor is in the Is Item Info Private field.

Note In an MFG/PRO eB2.1 environment, GTIN attributes are specific to the domain in which they are created; however, GTIN IDs must be unique across the entire database.

Internal Item. Optionally enter an item number, as defined in Item Master Maintenance (1.4.1), to associate with this GTIN. An internal item can be associated with only one GTIN.

When a GTIN is associated with an internal item, deleting the GTIN does not delete the associated internal item from item master.

See "Map Item Master Fields" on page 26.

When defining the attributes for a new GTIN, if you enter an internal item number in this field and you have previously defined field mappings in Internal Item Mapping (1.23.1), the mapped GTIN attribute fields default to the values in the corresponding internal item master fields. The values are only defaults and can be changed. This does not apply to updating existing records.

Tip
Data Recipient can be updated only when Is Trade Item Info Private is True.

Is Item Info Private. Indicate if master data is restricted to specific private users.

Data Recipient. For a private item, identify the global location number (GLN) of the retailer to receive the information.

Hardlines Item. Enter Yes when this item is a hardlines item; otherwise enter No.

When this field is Yes, you are prompted to enter additional information pertaining to hardlines item attributes.

See “Hardlines” on page 56.

Lowes Item. Enter Yes if this is a Lowes item; otherwise, enter No.

When this field is set to Yes, you are prompted to enter additional information pertaining to Lowes item attributes.

See “Lowes” on page 59.

Item Data

Figure 2.5 illustrates the Item Data frame of GTIN Attribute Maintenance.

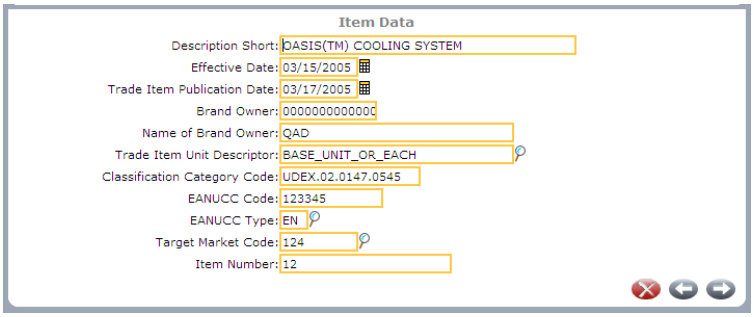


Fig. 2.5
GTIN Attribute Maintenance, Item Data

Description Short. Enter a short description (45-character maximum). This is the primary item description in the retailer’s system.

Effective Date. This effective date can be used for an initial trade item offering, or to mark when a change in the information related to an existing trade item takes effect.

Publication Date. On this date, all static data associated with the trade item becomes available for viewing and synchronization.

Brand Owner. This is the global location number (GLN) of the brand owner.

Name of Brand Owner. Specify the name of the party who owns the brand of the trade item.

Trade Item Unit Descriptor. Enter a code describing the hierarchical level of the trade item; for example, Base Unit, Each, Case, Pallet.

Classification Category Code. Specify the selected category for the product based on predefined, standard categories determined by UDEX. Categories are loosely defined and open to interpretation.

A list of these codes can be found in the initial worksheet on the online portion of QSYNC–CP, accessed at www.mfgx.net.

An example of a correct product category code is:

UDEX.02.0147.0545

EANUCC Code. Specify the unique UPC printed on the item.

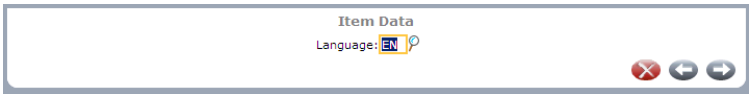
EANUCC Type. Specify the format of the unique UPC printed on the item. The system verifies that the UPC type corresponds to the UPC entered for the item.

Target Market Code. The target market code indicates the country and subdivision that makes the GTIN available to buyers. This indicator does not in any way govern where the buyer can resell the GTIN to consumers.

Item Number. Specify the internal trade item identifier. This identifier is not sent to UCCnet or any trading partner.

Figure 2.6 illustrates the second Item Data frame of GTIN Attribute Maintenance.

Fig. 2.6
GTIN Attribute Maintenance, Item Data, Language



Language. Enter the language used to describe the item.

Item Manufacturer Data

Figure 2.7 illustrates the Item Manufacturer Data frame of GTIN Attribute Maintenance.

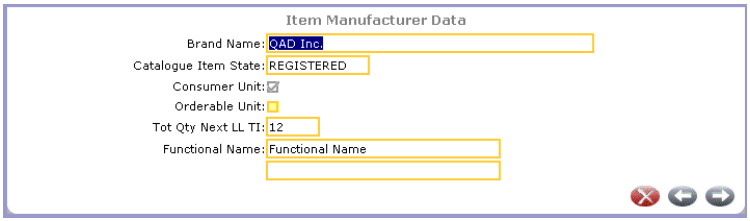


Fig. 2.7 GTIN Attribute Maintenance, Item Manufacturer Data

Brand Name. Specify the recognizable name used by a brand owner to uniquely identify line of trade items or services. This is the name that is recognizable by the consumer.

Catalogue Item State. Registered is the default attribute for initial loads. You can specify other values as needed in your organization.

Consumer Unit. Indicate if a trade item is ultimately intended for consumption, and is commonly used to select the GTINs that should be used for shelf planning. For retail, this trade item is scanned at the point of sale.

Orderable Unit. Indicate if the information provider considers this trade item to be at a hierarchical level where they will accept orders from customers. This can be different from what the information provider identifies as a dispatch unit.

False: Item is not orderable.

True: Item is orderable.

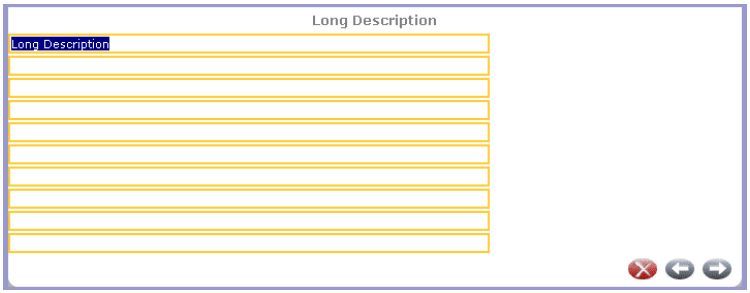
Tot Qty Next LL TI. This represents the total quantity of the next lower-level trade items that this trade item contains. The quantity can be mixed GTINs or the same GTIN. This should be set to 1 for an each-level item.

Functional Name. Enter a brief description of the functional use of the product (35-character maximum). This should help clarify the product classification associated with the GTIN.

Long Description

Figure 2.8 illustrates the Long Description frame of GTIN Attribute Maintenance.

Fig. 2.8
GTIN Attribute Maintenance, Long Description



Long Description. Enter text description (up to 750 characters) of the trade item.

Packaging Markings

Figure 2.9 illustrates the Packaging Markings frame of the GTIN Attribute Maintenance.

Fig. 2.9
GTIN Attribute Maintenance, Packaging Markings

Marked as Recyclable. Indicate if the packaging of the trade item is marked as recyclable.

Marked as Returnable. Indicate if the packaging of the trade item is marked as returnable.

Marked with Exp Date. Indicate if the packaging of the trade item has a freshness date stamped or imprinted.

Marked with Green Dot. Indicate if the packaging of the trade item is marked with a green point indicator. Laws in several European countries mandate the green point indicator.

Marked with Ingredients. Indicate if the packaging of the trade item has information pertaining to its ingredients. Trade item ingredients are required to be shown on the trade item (normally at base trade item level).

Trade Item

Figure 2.10 illustrates the Trade Item frame of GTIN Attribute Maintenance.

Fig. 2.10 GTIN Attribute Maintenance, Trade Item

Is Trade Item a Dispatch Unit. Indicate if the information provider considers the trade item as a dispatch (shipping) unit. This can be relationship dependent based on channel of trade or other point-to-point agreement.

Is Trade Item a Base Unit. Indicate if the trade item is the base unit level of the trade item hierarchy. A base unit is the smallest possible unit.

Is Trade Item a Variable Unit. Indicate the trade item is used or traded in continuous rather than discrete quantities. Certain hardlines products, such as sand, gravel and mulch, can be variable trade items.

Is Trade Item an Invoice Unit. This field indicates if the information provider includes this trade item on their billing or invoice notices. This can be relationship dependent based on channel of trade or other point-to-point agreement.

Is Trade Item Marked as Recyclable. This field indicates if the trade item is marked as recyclable.

Trade Item Has Batch Number. Indicate whether the trade item is batch or lot number allocated.

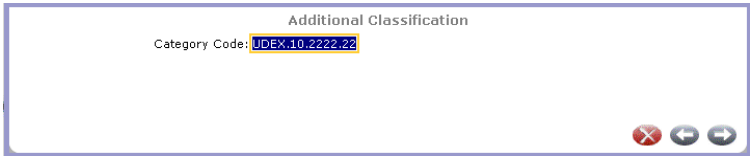
Is Non Sold Trade Item Returnable. Indicate whether the buyer can return articles that are not sold.

Net Content Declaration Indicated. This field is used to facilitate local business rules where a declaration of trade item net content is not on the product label.

Additional Classification

Figure 2.11 illustrates the Additional Classification frame of GTIM Attribute Maintenance.

Fig. 2.11 GTIN Attribute Maintenance, Additional Classification

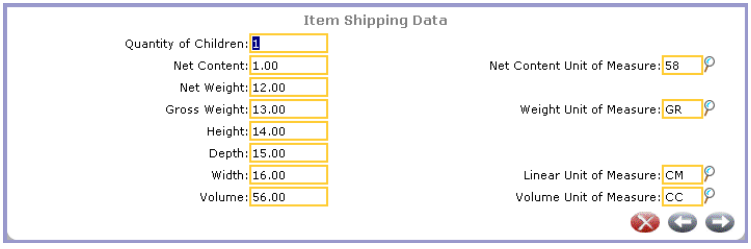


Category Code. The classification agency name and code are combined in one attribute; for example, UDEX.10.2222.22 (UDEX must be in all capital letters).

Item Shipping Data

Figure 2.12 illustrates the Item Shipping Data frame of GTIN Attribute Maintenance.

Fig. 2.12 GTIN Attribute Maintenance, Item Shipping Data



Quantity of Children. Specify the number of unique next lower level trade items contained in a complex trade item. A complex trade item can contain at least two different GTINs. This value must equal 0 (zero) or some other number.

Net Content. Specify the amount of the trade item contained by a package, as claimed on the label; for example, 50 nails in a box or 100 tablets in a bottle. This is a required entry when Consumer Unit is True. If this field has a value, Net Content Unit of Measure must have a value.

Tip
If Trade Item Unit Descriptor in the Item Data frame is set to Each (EA), then Consumer Unit must be set to True.

Net Content Unit of Measure. Specify the unit of measure used to calculate the value for the Net Content attribute. Required if the Net Content field has a value.

Net Weight. Specify the weight of the contents of the package, not including packaging, expressed as a numeric value. This field is a required entry when Consumer Unit is True.

If either this field or Gross Weight has a value, Weight Unit of Measure is required.

Tip
Consumer Unit and Orderable Unit are in the Item Manufacturer Data frame.

Gross Weight. Specify the gross weight of the trade item; this includes all packaging materials. At the pallet level, the trade item gross weight includes the weight of the pallet itself. This field is required if Orderable Unit is True.

If either this field or Net Weight has a value, then Weight Unit of Measure is required.

Weight Unit of Measure. Specify the unit of measure used to determine the value of the trade item Net Weight or Gross Weight attributes. This field must have a value if either Net Weight or Gross Weight has a value. Valid values are:

- GR: Grams
- KG: Kilograms
- LB: Pounds
- ME: Milligrams
- OZ: Ounces

Height. Specify the measurement of the height of the trade item. This is the vertical dimension from the lowest extremity to the highest extremity, including packaging. At the pallet level, the trade item height should not include the height of the pallet itself.

Depth. Specify the measurement from the front to the back of the trade item.

Enter the depth of the product as a decimal value.

Width. Specify the width measurement from left to right of the trade item.

Linear Unit of Measure. Specify the unit of measure used to determine the value of the trade item height, width, and depth.

Volume. Specify the measurement of the volume of the trade item.

Volume Unit of Measure. Specify the unit of measure used to calculate the value for the volume attribute. Valid values are:

- CC: Cubic centimeters
- CF: Cubic feet
- CI: Cubic inches
- CM: Cubic meters

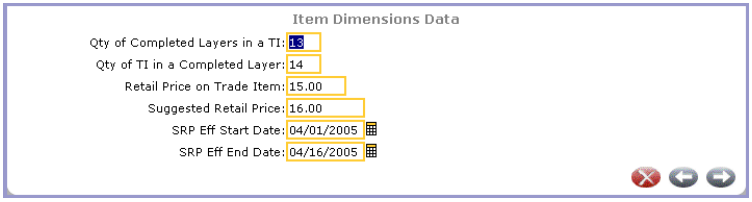
This field is required when Orderable Unit is True.

Height, length, and width are defined in the Item Dimensions Data frame.

Item Dimensions Data

Figure 2.13 illustrates the Item Dimensions Data frame of GTIN Attribute Maintenance.

Fig. 2.13
GTIN Attribute Maintenance, Item Dimensions Data



Quantity of Completed Layers in a TI. Indicate the number of trade items contained within the physical grouping. This field should have a value for pallet-level items.

Quantity of TI in a Completed Layer. Specify the number of trade items contained in a complete layer of a higher packaging configuration. This is used in the hierarchical packaging structure of a trade item. It cannot be used for the trade item base unit. This field should have a value for pallet-level items.

This field is required when the Trade Item Unit Descriptor in the Item Data frame is Case, Display, or Package.

Retail Price on Trade Item. Specify the retail price as marked on the trade item package. If this field contains a value, the Currency ISO Code field must contain a value.

Suggested Retail Price. Specify the retail (to consumer) price as suggested by the manufacturer. This is normally used to establish a proposed value for the trade item for marketing purposes. Can appear on the package. Usually used as a guideline by the retailer to establish their actual retail price. If this field contains a value, the Currency ISO Code field must contain a value.

SRP Eff Start Date. This is the effective start date of the price agreed to by the trading partners.

Various types of dates can be pre-aligned between buyer and seller. For example, based upon a prior agreement between trading partners, this date can relate to any of the following events: first order date, first ship date, or first arrival date.

SRP Eff End Date. The effective end date of the price is optional based upon the agreement by the trading partners. If an invalid end date is communicated, then it is implied that the price and its effective date are effective until further notice. Examples of invalid dates include 99/99/9999, 00/00/0000, and blank.

Various types of dates can be pre-aligned between buyer and seller. For example, based upon a prior agreement between trading partners, this date can relate to any of the following events: last order date, last ship date, or last arrival date.

Figure 2.14 illustrates the Trade Item frame of GTIN Attribute Maintenance.

Fig. 2.14
GTIN Attribute Maintenance, Trade Item

Trade Item Country Of Origin 1–5. Specify the two-letter country code for the country in which the goods have been produced or manufactured, according to criteria established for the purposes of application. The value may or may not be presented on the trade item label.

Currency ISO Code. Specify the ISO code for the currency used to describe pricing information for the item.

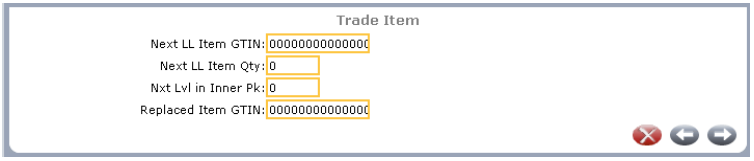
If any of the following values in the previous frame are entered, this code is mandatory:

- Retail Price On Trade Item
- Suggested Retail Price
- Catalogue Price

Trade Item

Figure 2.15 illustrates the Trade Item frame of GTIN Attribute Maintenance.

Fig. 2.15
GTIN Attribute Maintenance, Trade Item



Next LL Item GTIN. Specify the GTIN of the next lower level trade item that this trade item contains.

Next LL Item Qty. Specify the quantity of next lower level trade item that this trade item contains. This is required if Next LL Item GTIN has a value.

Next Lvl in Inner Pk. Define the quantity of inner pack. This is the number of next lower-level trade items contained within the physical non-coded grouping (inner pack).

Replaced Item GTIN. Enter the GTIN of the item being replaced.

Item Order Data

Figure 2.16 illustrates the Item Order Data frame of GTIN Attribute Maintenance.

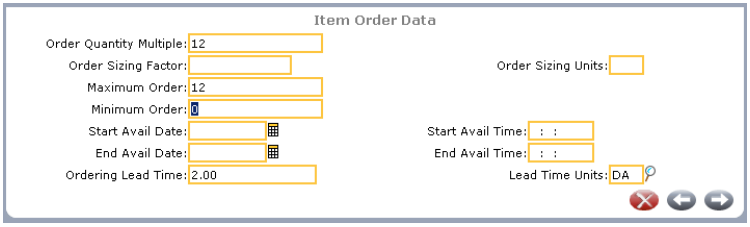


Fig. 2.16 GTIN Attribute Maintenance, Item Order Data

Order Quantity Multiple. The trade item can only be ordered in this order quantity multiple. If the Order Quantity Minimum is 100 and the Order Quantity Multiple is 20, the trade item can only be ordered in quantities that are greater than 100 and divisible by 20.

Order Sizing Factor. Enter a trade item specification other than gross, net weight, or cubic feet for a line trade item or a transaction, used for order sizing and pricing purposes; for example, factors can be used to cube a truck, reflecting different weights and dimensions of a trade item.

The sizing factor facilitates the sizing of truckload orders and price bracket fields. For truckload sizing, it addresses the situation where item cases are large or small relative to weight.

When a product is light relative to its size, use a weight factor for sizing a truckload:

Maximum case capacity = total cubic capacity/cubic feet per case

Weight factor = maximum weight capacity/maximum case capacity

When a product is heavy relative to its size, use a cube factor for sizing a truckload:

Maximum case capacity = total weight capacity/weight per case

Cube factor = maximum cube capacity/maximum case capacity

Example Assume that a truck has 40,000 lb and 3,000 cu ft capacity. For a lightweight item, 10 lb and 3 cubic feet, calculate a weight factor:

Maximum case capacity: 1,000 = 3,000 cubic feet/3 cubic feet

Weight factor: 40 = 40,000 lb/1,000 cases

Order Sizing Units. Specify the unit of measure used to calculate the value for the Order Sizing Factor attribute.

Maximum Order. Specify the maximum quantity of the trade item that can be ordered; this is a number or a count. This value can represent the total number of units ordered over a set period of time with multiple orders.

Minimum Order. Specify the minimum quantity of a trade item that can be ordered; this is a number or a count. It applies to each individual order. This can be a fixed amount for all customers in a target market.

Start Avail Date and Time. On this date and time, the trade item becomes available from the supplier, including seasonal or temporary trade items and services.

End Avail Date and Time. Specify the date and time that the trade item is no longer available from the information provider, including seasonal or temporary trade items and services. Used for seasonal, temporary, or special promotional items to show end of product availability when the product is no longer available to ship.

Ordering Lead Time. Specify the normal delivery time measured from receipt of order by the seller until trade item is shipped by the seller. Lead time is defined as from date of PO to shipment date. If Lead Time Units contains a value, this field must contain a value

Lead Time Units. Specify the unit of measure used to calculate the value for the Ordering Lead Time attribute. If Ordering Lead Time contains a value, this field must contain a value.

Pallet

Figure 2.17 illustrates the Pallet frame of GTIN Attribute Maintenance.

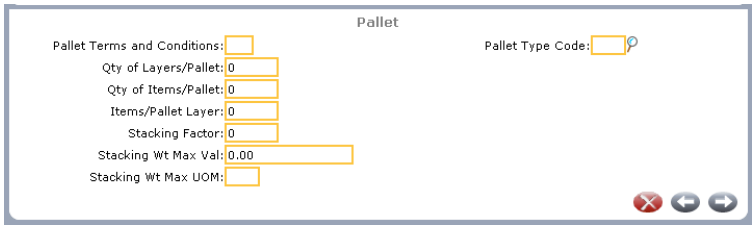


Fig. 2.17
GTIN Attribute Maintenance, Pallet

Pallet Terms and Conditions. Indicates if the pallet in the prescribed pallet configuration is rented, exchangeable, against deposit, or one way (not reusable).

Pallet Type Code. Indicates whether the described dispatch unit is delivered on a pallet. If the dispatch unit is delivered on a pallet, the pallet type must be specified here.

Qty of Layers/Pallet. Used to define the quantity of an unmarked inner pack, like doorknobs, that are separated by a sleeve. Not orderable. For example, if you have 12 doorknobs per sleeve, this field's value would be 12.

Qty of Items/Pallet. Specify the number of trade items contained in a pallet. Only used if the pallet has no GTIN. It indicates the number of trade items placed on a pallet according to supplier or retailer preferences.

Items/Pallet Layer. Specify the number of items that can fit on a single layer of a pallet. This value is required when the Trade Item Unit Description is case, display, or package.

Tip
The unit descriptor is specified in the Item Data frame.

Stacking Factor. Indicates the number of levels the product can be stacked. If the trade item is a case (Trade Item Unit Descriptor is CASE), it is typically a warehouse function.

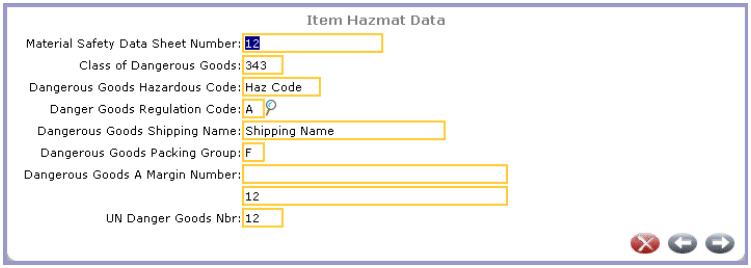
Stacking Wt Max Val. This is the maximum allowable weight that can be stacked on the trade item. Uses a measurement consisting of a unit of measure and a value, and is used in transport or storage. It lets you know by weight how to stack different trade items one on top of the other.

Stacking Wt Max Units. Specify the unit of measure used to determine the value of the trade item Stacking Weight Maximum Value.

Item Hazmat Data

Figure 2.18 illustrates the Item Hazmat Data frame of GTIN Attribute Maintenance.

Fig. 2.18
GTIN Attribute Maintenance, Item Hazmat Data



Material Safety Data Sheet Number. Specify the manufacturer's identification number for the material safety data sheet of a trade item.

Class of Dangerous Goods. Specify the dangerous goods classification of the trade item. Nine danger classes exist, with some classes being further subdivided into subclasses. Class number explains in general terms the nature and properties of the goods and serves to classify them together in terms of their most significant risk. Examples include Class 4.2, substances liable to spontaneous combustion, and Class 6.1, toxic substances.

Dangerous Goods Hazardous Codes. Specify a code relating to the hazardous material code qualifier for regulated hazardous materials.

Dangerous Goods Regulation Code. Specify the dangerous goods hazard ID number that must be applied to the vehicle when transporting this trade item (dangerous goods) by road or rail to inform the police, the fire brigade, and others in case of an accident about the kind of danger caused by the cargo.

See "Hardlines" on page 56.

Note This is covered if the UN Dangerous Goods Number attribute in this frame has a value.

Dangerous Goods Shipping Name. Enter the name of the hazardous material as well as any special instructions.

Dangerous Goods Packing Group. Enter a code identifying the degree of risk these dangerous goods present during transport according to IATA/IMDG/ADR/RID regulation.

Dangerous Goods A Margin Number. Indicate whether a defined limited quantity transport by road or rail for this dangerous goods is possible. If possible, it must be indicated.

UN Danger Goods Nbr. Specify the four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods to classify a substance or a particular group of substances. Typically called UNDG Number.

Miscellaneous Data

The Miscellaneous Data frame includes color, flash-point temperature, and the point-of-sale description.

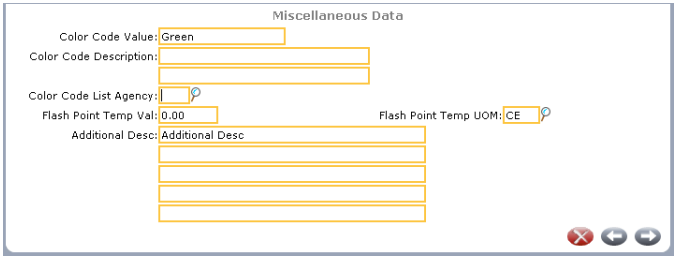


Fig. 2.19
GTIN Attribute Maintenance, Miscellaneous Data

Color Code Value. Specify the code list required to identify the color of the trade item. No ISO standards exist. Each industry needs to determine the code agency they will use.

Color Code Description. Enter a freeform text description of the color of the trade item.

Color Code List Agency. Specify the parties controlling the color code lists. This is dependent on color code value.

Flash Point Temp Value. At this temperature, a substance gives off enough vapor to support combustion. This uses a measurement consisting of a unit of measure and value. An entry is required if the trade item has a flashpoint temperature.

Flash Point Temp UOM. Specify the unit of measure used to determine the value of the trade item Flash Point Temperature.

Valid values are:

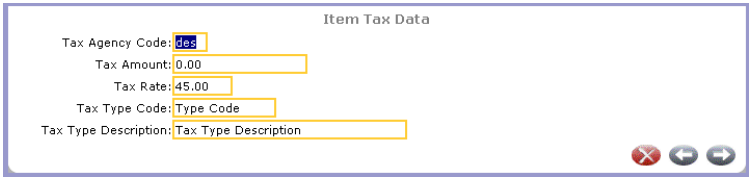
- CE: Degrees Celsius
- FA: Degrees Fahrenheit

Additional Desc. Enter any detailed information about the item.

Item Tax Data

Figure 2.20 illustrates the Item Tax Data frame of GTIN Attribute Maintenance.

Fig. 2.20
GTIN Attribute Maintenance, Item Tax Data



Tax Agency Code. Identify the agency responsible for the tax code list.

Tax Amount. Specify the current tax or duty or fee amount applicable to the trade item. If this field contains a value, the following apply:

- Tax Rate must be left blank.
- Tax Agency Code, Tax Type Code, and Tax Type Description must contain values.

Tax Rate. Specify the current tax or duty rate percentage applicable to the trade item. If this field contains a value, the following apply:

- Tax Amount must be left blank.
- Tax Agency Code, Tax Type Code, and Tax Type Description must contain values.

Tax Type Code. Identify the type of duty or tax or fee applicable to the trade item.

Tax Type Description. This is an automatically generated text description of tax type code.

Dangerous Goods Technical Name

Figure 2.21 illustrates the Dangerous Goods Technical Name frame of GTIN Attribute Maintenance.

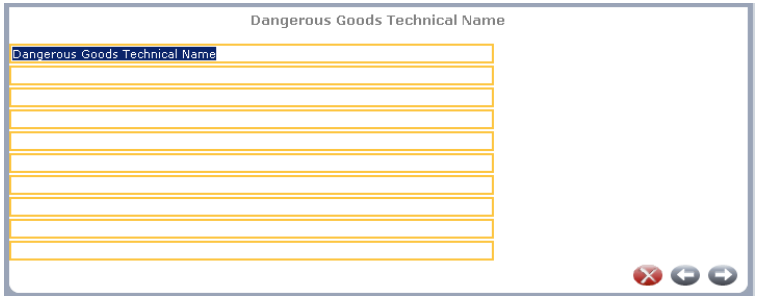


Fig. 2.21 GTIN Attribute Maintenance, Dangerous Goods Technical Name

Dangerous Goods Technical Name. Specify the chemical term of the trade item, listed by name and allowed in the substance list of GGVS (Dangerous Goods Ordinance for Roads) or GGVE (Dangerous Goods Ordinance for Rail). This is composed of both text and a language code. The language for text is specified using the two-digit ISO 639 list.

Deliver to Distribution Center Temperature

Figure 2.22 illustrates the Deliver to Distribution Center Temperature frame of GTIN Attribute Maintenance.

Fig. 2.22 GTIN Attribute Maintenance, Deliver to Distribution Center Temperature

Maximum Value. Specify the permitted maximum temperature of the trade item during transport to the distribution center. If the Units field contains a value, this field must also contain a value.

Units. Specify the unit of measure used to determine the value of the trade item's deliver-to-distribution-center temperature Maximum Value attribute. If the Maximum Value field contains a value, this field must also contain a value.

Minimum Value. Specify the permitted minimum temperature of the trade item during transport to the distribution center. If the Units field contains a value, this field must also contain a value.

Units. Specify the unit of measure used to determine the value of the trade item's deliver-to-distribution-center temperature Minimum Value attribute. If the Minimum Value field contains a value, this field must also contain a value.

Deliver to Market Temperature

Figure 2.23 illustrates the Deliver to Market Temperature frame of GTIN Attribute Maintenance.

Fig. 2.23 GTIN Attribute Maintenance, Deliver to Market Temperature

Maximum Value. Specify the permitted maximum temperature of the trade item during delivery to market. If the Units field contains a value, this field must also contain a value.

Units. Specify the unit of measure used to determine the trade item's maximum temperature for delivery to market. If the Maximum Value field contains a value, this field must also contain a value.

Minimum Value. Specify the permitted minimum temperature of the trade item during delivery to market. If the Units field contains a value, this field must also contain a value.

Units. Specify the unit of measure used to determine the trade item's minimum temperature for delivery to market. If the Minimum Value field contains a value, this field must also contain a value.

Storage Handling Temperature

Figure 2.24 illustrates the Storage Handling Temperature frame of GTIN Attribute Maintenance.

Fig. 2.24 GTIN Attribute Maintenance, Storage Handling Temperature

Maximum Value. Specify the maximum temperature allowed for storing the trade item. This uses a measurement consisting of a unit of measure and a value. If the Units field contains a value, this field must also contain a value.

Units. Specify the unit of measure used to determine the value of the trade item's storage handling temperature maximum . If the Maximum Value field contains a value, this field must also contain a value.

Minimum Value. Specify the minimum temperature allowed for storing the trade item. This uses a measurement consisting of a unit of measure and a value. If the Units field contains a value, this field must also contain a value.

Units. Specify the unit of measure used to determine the value of the trade item's storage handling temperature minimum. If the Minimum Value field contains a value, this field must also contain a value.

Packaging

Figure 2.25 illustrates the Packaging frame of GTIN Attribute Maintenance.

Fig. 2.25 GTIN Attribute Maintenance, Packaging

Material Code. This code identifies the packaging material of the trade item; for example, glass or cardboard.

List Maint Agency. Specify the agency or agencies controlling the packaging code lists of each country. This is a required entry if Material Code has a value.

Matl Comp Qty Value. Specify the quantity of the packaging of the trade item. Can be weight, volume, or surface, and can vary by country.

Matl Comp Qty UOM. Specify the unit of measure used to calculate the value for the Material Composition Quantity attribute.

Material Description. Specify the system-generated text description equivalent of the packaging material code.

Terms and Conditions. Indicate if the packaging given in the described packaging configuration is rented, exchangeable, against deposit, or one way/not reusable.

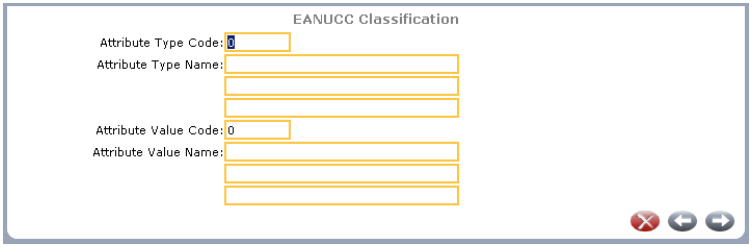
Type Code. Specify the code identifying the type of package used as a container of the trade item.

Type Description. Enter a system-generated text description of the type of packaging used for the trade item; for example, box or carton.

EANUCC Classification

Figure 2.26 illustrates the EANUCC Classification frame of GTIN Attribute Maintenance.

Fig. 2.26
GTIN Attribute Maintenance, EANUCC Classification



Attribute Type Code. Specify a unique eight-digit code that identifies the global EAN-UCC classification attribute. According to EAN-UCC standard, these attributes are reserved for the official EAN-UCC classification system when it is developed.

Attribute Type Name. According to the EAN-UCC definitions, this attribute is reserved for the AC Nielsen EAN-UCC classification system when it is developed.

Attribute Value Code. According to EAN-UCC standard, this attribute is reserved for the official EAN-UCC classification system when it is developed.

Attribute Value Name. According to EAN-UCC standard, this attribute is reserved for the official EAN-UCC classification system when it is developed.

EANUCC Classification Attribute Type Definition

Figure 2.27 illustrates the EANUCC Classification Attribute Type Definition frame of GTIN Attribute Maintenance.

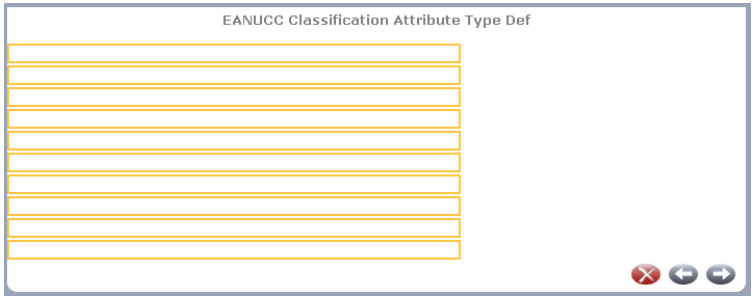


Fig. 2.27 GTIN Attribute Maintenance, EANUCC Classification Attribute Type Def

EANUCC Classification Attribute Type Def. According to EAN-UCC standard, this attribute is reserved for the official EAN-UCC classification system when it is developed.

Peg

Figure 2.28 illustrates the Peg frame of GTIN Attribute Maintenance.

Fig. 2.28
GTIN Attribute Maintenance, Peg

Peg Horizontal. Indicate the horizontal distance from the left edge of the trade item to the center of the hole that the peg is inserted into when the trade item is displayed on the pegboard.

Peg Horizontal Units. Specify the unit of measure used to calculate the value for the Peg Horizontal attribute.

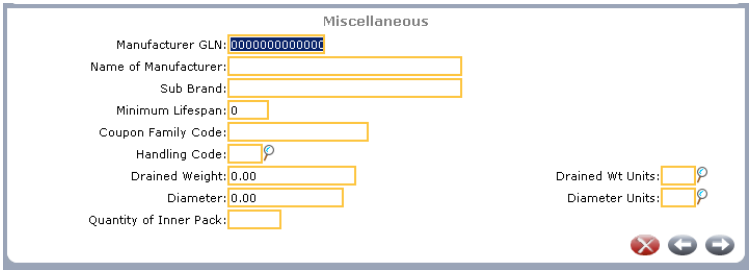
Peg Vertical. Indicate the vertical distance from the edge of the trade item to the center of the hole that the peg is inserted into when the trade item is displayed on a pegboard. The measurement is always taken from the top edge of the trade item to the hole. Only applies to a consumer unit. Must be provided if product is peggable.

Peg Vertical Units. Specify the unit of measure used to calculate the value for the Peg Vertical attribute.

Miscellaneous

Figure 2.29 illustrates the Miscellaneous frame of GTIN Attribute Maintenance.

Fig. 2.29
GTIN Attribute Maintenance, Miscellaneous



Manufacturer GLN. This is the global location number (GLN) or alternate party identification identifying the manufacturer of a trade item. Can be the brand owner, but not necessarily so. It could be a contract manufacturer GLN (or alternate party identification).

Name of Manufacturer. Specify the name of the manufacturer of the trade item.

Sub Brand. Specify the second level of brand; this can be a trademark. It is the primary differentiating factor that a brand owner wants to communicate to the consumer or buyer; for example, Yummy-Cola Classic, where Yummy-Cola is the brand and Classic is the sub-brand. This variable is defined by the manufacturer.

Minimum Lifespan. Specify the period of days guaranteed by the manufacturer before the expiration date of the trade item, based on arrival to a mutually agreed to point in the buyer's distribution system. This can be repeatable upon use of GLN.

Coupon Family Code. Specify the Coupon Family Code associated with the item. The family code identifies those items a coupon can be redeemed against. When suppliers issue a coupon, the family code on the coupon tells retailers which items the coupon applies to.

Handling Code. Enter a code that describes the information needed to safely handle the trade item. Handling instructions are composed of both text and a language code. The language for text is specified using the two-digit ISO 639-1988 list; for example, English is EN.

Drained Weight. Specify the trade item weight when drained of its liquid.

Drained Wt Units. Specify the unit of measure used to calculate the value for the Drained Weight attribute.

Diameter. Specify the diameter of the trade item at its largest point.

Diameter Units. Specify the unit of measure used to calculate the value for the Diameter attribute.

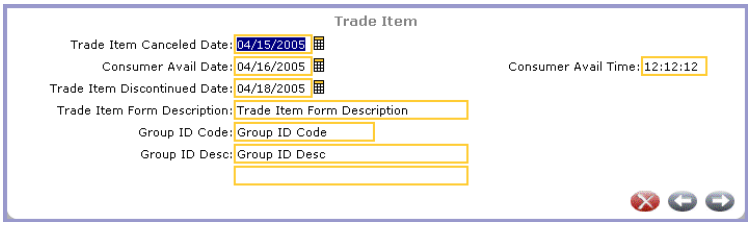
Quantity of Inner Package. Indicate the number of non-coded physical groupings (inner packs) of next lower-level trade items within the current GTIN level. They are not orderable; for example,

for unmarked inner packs, such as doorknobs that are separated by a sleeve with two sleeves of doorknobs in a case, this field value would be 2.

Trade Item

Figure 2.30 illustrates the Trade Item frame of GTIN Attribute Maintenance.

Fig. 2.30
GTIN Attribute Maintenance, Trade Item



Trade Item Canceled Data. Enter a date to communicate the cancellation of the launch of a trade item that was never (and will never be) manufactured, but could have been presented to buyers. You can reuse the GTIN 12 months after cancellation.

Consumer Avail Date. This is the first date that the buyer is allowed to sell the trade item to consumers. Usually related to a specific geography.

Avail Time. This is the time that the buyer is allowed to sell the trade item to consumers. Usually related to a specific geography. Time format is HH:MM:SS.

Trade Item Discontinued Date. On this date, the trade item will no longer be manufactured. You can reuse the GTIN after 48 months with the explicit exception of apparel (30 months) and specialty products, such as steel beams. This maps to the AHMA End Availability date.

Trade Item Form Description. Enter a brief description of the physical form or shape of the product and is distinct from the form of the packaging; for example, in the pharmaceutical industry indicate the formulation of the trade item.

Group ID Code. Specify a code assigned by the supplier or manufacturer to logically group trade items independently from the global classification.

Group ID Description. Enter a text description of the value represented by the Group ID Code.

Catalogue Item

Figure 2.31 illustrates the Catalogue Item frame of GTIN Attribute Maintenance.

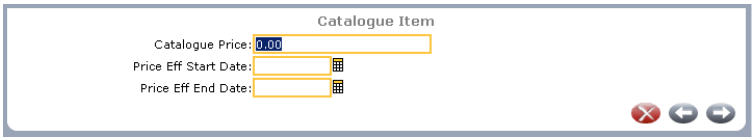


Fig. 2.31 GTIN Attribute Maintenance, Catalogue Item

Catalogue Price. Specify the gross price before application of any discounts, allowances, charges, taxes, and so on.

The value represented is the price that the manufacturer expects to receive for the trade item or service from any buyer prior to any relationship-specific negotiations; for example, a public catalog population. This is also called the list price.

If this field contains a value, the Currency ISO Code field must contain a value.

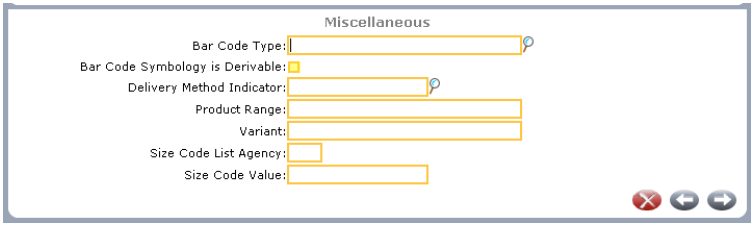
Price Eff Start Date. On this date, the catalogue price is available.

Price Eff End Date. This is the last date that the catalogue price is available.

Miscellaneous

Figure 2.32 and Figure 2.33 illustrate the two Miscellaneous frames of GTIN Attribute Maintenance.

Fig. 2.32
GTIN Attribute Maintenance, Miscellaneous (First Frame)



Bar Code Type. Specify the type of barcode visible on the item; for example, UPCA, EAN13, EAN8, or ITF14.

Bar Code Symbology is Derivable. Indicate whether the point of sale UPC value for a product correlates directly to its GTIN. This should only be used if Delivery Method Indicator is DSD.

False: The UPC code is not embedded and thus cannot be derived from the 14-digit GTIN.

True: The UPC code is embedded and thus can be derived from the 14-digit GTIN.

Delivery Method Indicator. Indicate the method of delivery. Currently, this attribute is only used to indicate direct store delivery items (DSD).

Product Range. Used by a brand owner that spans multiple categories.

Variant. Free text field used to identify the variant of the product. Variants are the distinguishing characteristics that differentiate products with the same brand and size including the particular flavor, fragrance, taste.

Size Code List Agency. Specify the party controlling the size code list. This is dependent on size code value.

Size Code Value. Specify the value from an industry-specific code list required to identify the size of the trade item. This can be a combination of values that fully describes the trade item size; for example, 32 waist, 36 inseam.

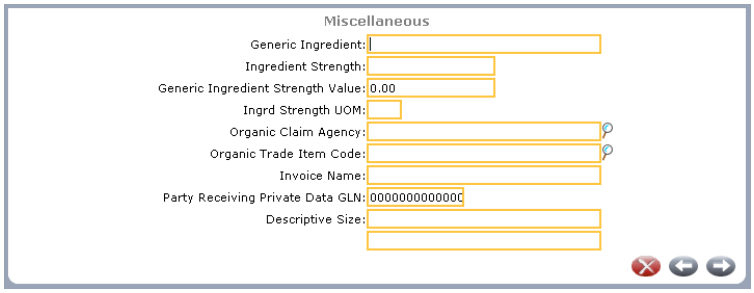


Fig. 2.33
GTIN Attribute Maintenance, Miscellaneous (Second Frame)

Generic Ingredient. Used for a pharmaceutical trade item to describe one or many generic ingredients within the trade item.

Ingredient Strength. Used for a pharmaceutical trade item to define the strength of each ingredient in a trade item or unit volume of the trade item.

Generic Ingredient Strength Value. Used for a pharmaceutical trade item to define the strength of each generic ingredient in a trade item or unit volume of the trade item.

Ingredient Strength UOM. Specify the unit of measure used to calculate the value for the Generic Ingredient Strength attribute.

Organic Claim Agency. A governing body that creates and maintains standards related to organic products.

Organic Trade Item Code. This code indicates the organic status of a trade item or one or more of its components.

Invoice Name. This field is a free-form description of the trade item that should match the trade item/service description on the invoice.

Party Receiving Private Data GLN. Unique location number identifying the party who is allowed access to the information by the data owner. If the trade item information is private, this field can be updated with the data recipient who will receive the private data. However, it is not required.

Descriptive Size. An alphanumeric size factor the brand owner wants to communicate to the consumer; for example, jumbo, capri, full length, or maxi.

Hardlines

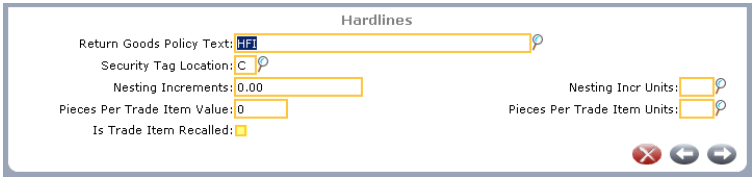
See page 28.

When Hardlines Item is Yes in the header frame, four additional frames display that let you enter associated data. Figure 2.34 through Figure 2.38 illustrate the Hardlines frames.

See page 66.

Note When that field is No, the program skips these frames and advances directly to the Additional User Defined Data frame.

Fig. 2.34 GTIN Attribute Maintenance, Hardlines (First Frame)



Return Goods Policy Text. Describes the policy for goods that are defective, damaged, or that cannot be sold.

Valid values are:

- DFC (Destroy for Credit)
- RFC (Return for Credit)
- HFI (Hold for Inspection)
- CFA (Call for Authorization)

Security Tag Location. If Security Tag Indicator is Yes, the location of the tag must be provided here. This is a code to indicate where the electronic article surveillance (EAS) tag is located on the trade item.

Valid values are:

- O for on outside of trade item
- C for concealed inside trade item
- I for integrated inside trade item

Nesting Increments. Indicates the incremental height of trade items nested together; for example, when two garbage cans are nested together the increment is the height between the lip of the lower can to the lip on the upper can. This only applies to a consumer level.

Nesting Increment Units. Specify the unit of measure used to determine the value of the trade item's Nesting Increments attribute. This only applies to the consumer level.

Nesting Quantity. Indicates the number of trade items to be safely nested; minimum value is 2. Required if the Nesting Increments field has a value.

Pieces Per Trade Item Value. Numeric value to indicate number of physical pieces used to make up the consumer unit. For example, 5 is the number of pieces used to construct a wheelbarrow; 2 is the number of pieces that make up a trash can. This is used if there is more than one piece in one trade item. This only applies to the consumer level.

Pieces Per Trade Item Units. Unit of measure used to describe Hardlines Pieces Per Trade Item Value attribute. This only applies to the consumer level.

Is Trade Item Recalled. A True/False indicator where true indicates the manufacturer or supplier has recalled the product.

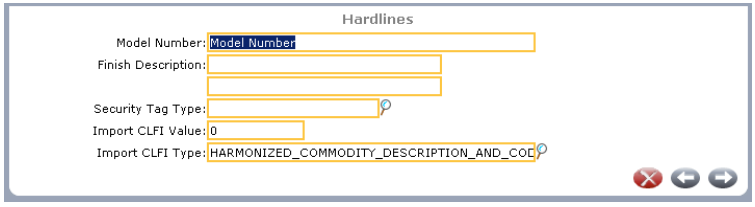


Fig. 2.35
GTIN Attribute Maintenance, Hardlines (Second Frame)

Model Number. An additional vendor identification number over and above the item number that defines the configuration of the product; for example, appliance model number 123WKX.

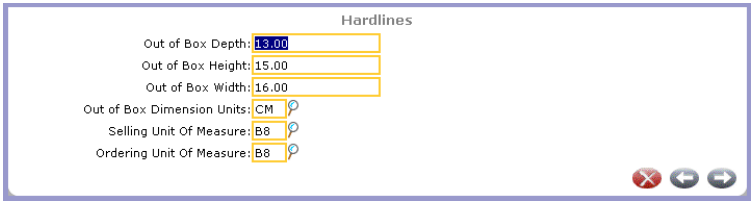
Finish Description. Additional attribute that defines the outer surface/appearance of the product; for example, antique brass, bright brass, oak, or walnut finish. Until approved in the standards, use of color attribute to define finish is acceptable. This only applies to the consumer level.

Security Tag Type. Specify the type of EAS (Electronic Article Surveillance) tag placed on or in the Consumer Unit item. This value is only applicable for Consumer Unit items.

Import Classification Value. Specify the import classification code assigned to the item

Import Classification Type. Specify the import classification system used to determine the Hardlines Import Classification Value.

Fig. 2.36
GTIN Attribute Maintenance, Hardlines (Third Frame)



Out of Box Depth. Specify the measurement of the depth of the actual trade item. This only applies to the consumer level.

Out of Box Height. This field is the measurement of the height of the actual trade item. It only applies to the consumer level.

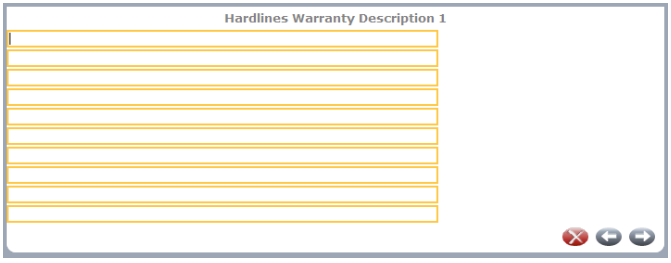
Out of Box Width. Specify the measurement of the width of the actual trade item. This only applies to the consumer level.

Out of Box Dimension Units. Unit of measure used to describe hardlines dimension attributes. This only applies to the consumer level.

Selling Unit of Measure. Specify the primary unit of measure by which the item is sold. This value is applicable only for consumer unit items.

Ordering Unit of Measure. Specify the primary unit of measure by which the item is ordered. This value is required for consumer unit items.

Fig. 2.37
GTIN Attribute Maintenance, Hardlines Warranty Description 1



Hardlines Warranty Description 1–5. Text description of warranty.

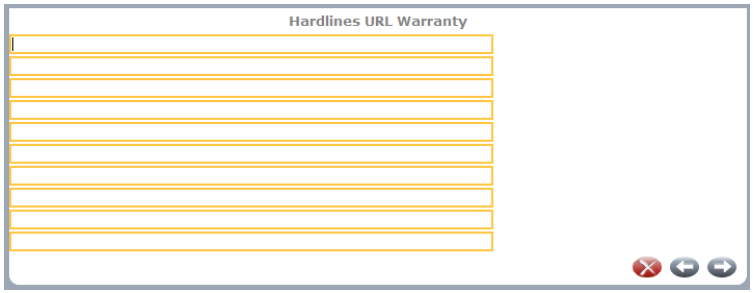


Fig. 2.38 GTIN Attribute Maintenance, Hardlines URL Warranty

Hardlines URL Warranty. Specify the Web URL where information regarding the item's warranty can be found.

Lowes

Figure 2.39 illustrates the first Lowes frame of GTIN Attribute Maintenance.

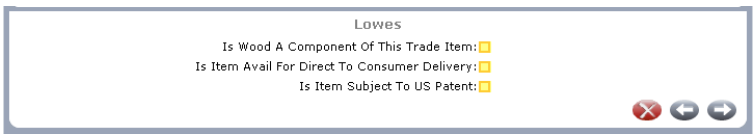


Fig. 2.39 GTIN Attribute Maintenance, Lowes First Frame

Is Wood A Component Of This Trade Item. A True/False field where True indicates the item is composed of wood in whole or in part. For items that do contain wood, Lowes will be looking for additional requirements, and will contact suppliers if they need more information. This field is required if this GTIN is marked as a consumer unit.

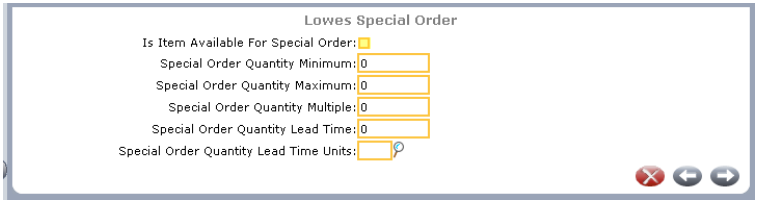
Is Item Available For Direct To Consumer Delivery. A True/False field where True indicates the item is available for direct to consumer delivery. This field is required if this GTIN is marked as a consumer unit.

Is Item Subject To US Patent. A True/False field where True indicates the item has a U.S. Patent. This field is required if this GTIN is marked as a consumer unit.

Lowes Special Order

Figure 2.40 illustrates the Lowes Special Order frame of GTIN Attribute Maintenance.

Fig. 2.40
GTIN Attribute Maintenance, Lowes Special Order



Is Item Available For Special Order. A True/False field where True indicates the item is available for special order. This field is required if this GTIN is marked as a consumer unit.

Special Order Quantity Minimum. If Is Item Available For Special Order is marked as True, this field is required. This is the minimum amount of the product that can be special ordered by the trading partner.

Special Order Quantity Maximum. If Is Item Available For Special Order is marked as True, this field is required. This is the maximum amount of the product that can be special ordered by the trading partner.

Special Order Quantity Multiple. If Is Item Available For Special Order is True, this field is required. It provides additional information about how a trade item should be special ordered. If the Order Quantity Multiple is 12, the item can only be ordered in multiples of 12, such as 24, 36, 48.

Special Order Quantity Lead Time. If Is Item Available For Special Order is True, this field is required. It indicates the normal delivery time measured from receipt of a purchase order by the seller until the trade item is shipped to the retailer.

Special Order Quantity Lead Time Units. Specify the unit of measure used to calculate the value for the Ordering Lead Time Attribute. An entry is required when Ordering Lead Time is supplied or if the Data Recipient is Lowes. Select from the list of allowed values, including hours, days, weeks, or months.

Lowes Second Frame

Figure 2.41 illustrates the second Lowes frame of GTIN Attribute Maintenance.

Fig. 2.41 GTIN Attribute Maintenance, Lowes Second Frame

Environmental ID 1. If a product has any environmental characteristics, select the appropriate choice from the lookup. Up to five values can be defined. If there is no environmental characteristic, select NO_ENVIRONMENTAL_ATTRIBUTE_SPECIFIED.

This field is required if this GTIN is marked as a consumer unit.

Environmental ID 2–5. If a product has any additional environmental characteristics, select the appropriate choice from the lookup. Up to five values can be defined. This field is optional.

Shelf Unit Qty Value. Specify the quantity of the item to be displayed on the shelf. This information is useful for planogramming/shelf allocation purposes. When a value is specified, you must enter a value for Lowes Shelf Unit Qty Units.

Shelf Unit Qty Units. Specify the unit of measure used to calculate the value of the quantity of the item to be displayed on the shelf. This field is required if Lowes Shelf Unit Qty Value is supplied.

Truckload Type Point. Enter a relative value assigned to each item in a program when item-level product densities and sizes cause truckload shipments to sometimes weight out and sometimes cube out. These values are normally calculated by dividing the total number of pieces it takes to fill (either weight out or cube out) a container (import or truckload) into 1000.

Truckload Qty Value. Specify the total number of pieces it takes to fill (either weight out or cube out) a container (import or truckload). If a value is specified, Truckload Qty Units is required.

Truckload Qty Units. Specify the unit of measure used to calculate the total number of pieces it takes to fill (either weight out or cube out) a container (import or truckload). This field is required when Truckload Qty Value is supplied.

Lowes Hazardous Material Classification

Figure 2.42 illustrates the Lowes Hazardous Material Classification frame of GTIN Attribute Maintenance.

Fig. 2.42 GTIN Attribute Maintenance, Hazardous Material Classification

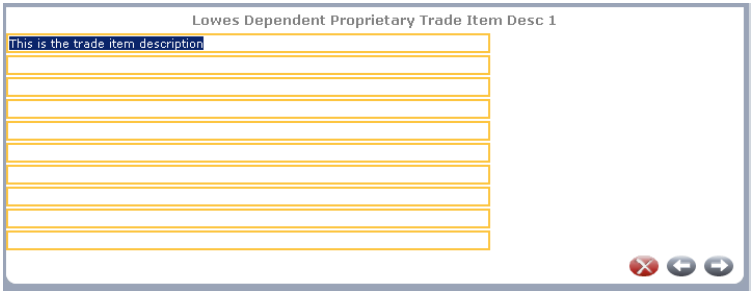
HazMat Class. Specify an attribute indicating the general classification of the hazardous material information that applies to this item. For trade items not classified as hazardous, NO_MSDS_AND_NOT_REGULATED_BY_DOT_(CFR49) should be selected as the entry for this attribute.

This field is required.

Lowes Dependent Proprietary Trade Item Description

Figure 2.43 illustrates the first Lowes Dependent Proprietary Trade Item Description frame of GTIN Attribute Maintenance.

Fig. 2.43 GTIN Attribute Maintenance, Lowes Dependent Proprietary Trade Item Description



Dependent Proprietary Trade Item Description 1–5. Enter a description (maximum 1000 characters) of additional products that are required to support the use of this product. Descriptions for up to five products can be specified.

This field is optional.

Lowes Product Features Benefits Description

Figure 2.44 illustrates the first Lowes Product Features Benefits Description frame of GTIN Attribute Maintenance.

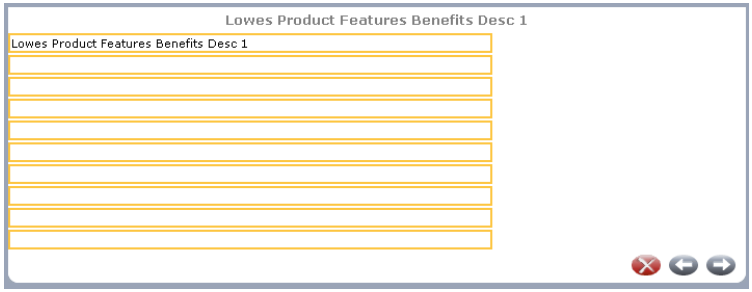


Fig. 2.44 GTIN Attribute Maintenance, Lowes Product Features Benefits Description

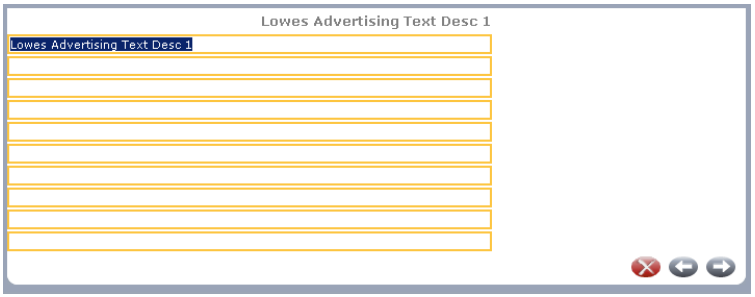
Product Features Benefits Description 1–5. Enter a description (maximum 1000 characters) of the primary feature or benefit of the item.

This field is optional.

Lowes Advertising Text Description

Figure 2.45 illustrates the first Lowes Advertising Text Description frame of GTIN Attribute Maintenance.

Fig. 2.45
GTIN Attribute Maintenance, Lowes Advertising Text



Advertising Text Description 1. Enter the primary advertising text the supplier wants associated with the item. This information is distinct from product specifications and descriptions of features and benefits. Up to 5 descriptions can be added.

Lowes Image

Figure 2.46 illustrates the first Lowes Image frame of GTIN Attribute Maintenance. Data for up to five images can be specified. Only the frames for image 1 are displayed.

Fig. 2.46
GTIN Attribute Maintenance, Lowes Image

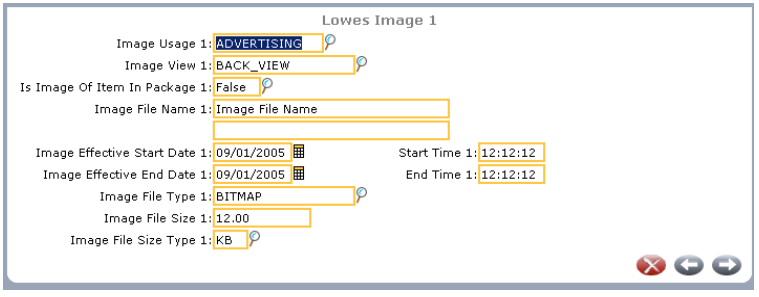


Image Usage 1. Indicate how the image should be utilized by the retailer. This attribute is required if any of the Image 1 attributes have been entered.

Image View 1. Indicate the view (top, front, right, back, bottom, or left) of the product in the image. This field must be populated if Image Usage 1 is Advertising or Planogramming.

Is Image Of Item In Package 1. Specify True if the image is of the item inside the package; otherwise, specify False. This attribute is required if it is a consumer unit.

Image File Name 1. Specify the file name (maximum 70 characters) of the image. This attribute must be populated if any of the Image 1 attributes have been entered.

Image Effective Start Date 1. Specify the date on which the image is effective. This attribute must be populated if any of the Image 1 attributes have been entered. This attribute is required if it is a consumer unit.

Start Time 1. Specify the time when the image is effective. This attribute must be populated if any of the Image 1 attributes have been entered. This attribute is required if it is a consumer unit.

Image Effective End Date 1. Specify the date when the image should no longer be used.

End Time 1. Specify the time when the image is no longer effective. This attribute must be populated if any of the Image 1 attributes have been entered. This attribute is required if it is a consumer unit.

Image File Type 1. Indicate the format of the image file, such as bitmap, EPS, or GIF. This attribute must be populated if any of the Image 1 attributes have been entered.

Image File Size 1. Indicate the size of the image file. This attribute must be populated if any of the other Image 1 attributes have been entered.

Image File Size Type 1. Indicate if the size of the image file is in either KB or MB. This attribute must be populated if any of the Image 1 attributes have been entered.

Lowes Image File URL

Figure 2.47 illustrates the first Lowes Image File URL frame of GTIN Attribute Maintenance.

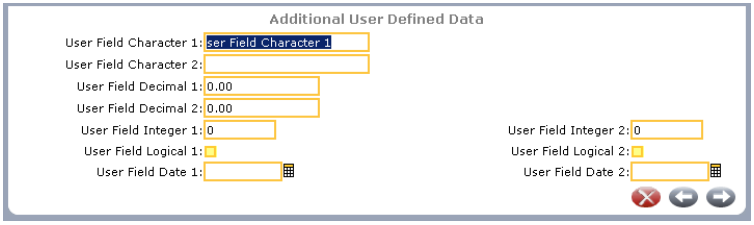
Fig. 2.47
GTIN Attribute Maintenance, Lowes Image File URL

Image File URL 1. Specify the URL (maximum 1000 characters) indicating the location of the image for retrieval by the retailer. This attribute must be populated if any of the Image 1 attributes have been entered.

Additional User-Defined Data

Figure 2.48 illustrates the Additional User Defined Data frame of GTIN Attribute Maintenance. You can define your own data with this frame.

Fig. 2.48
GTIN Attribute Maintenance, Additional User Defined Data



Update GTIN/EANUCC Code

Use Update GTIN/EANUCC Code (1.23.4) to update GTIN and EANUCC codes that have failed UCCnet validation or were entered in error.

You can use the up/down arrow keys to scroll through existing GTIN values or enter the GTIN manually. Choose Go to update the specified code in the New Data frame.

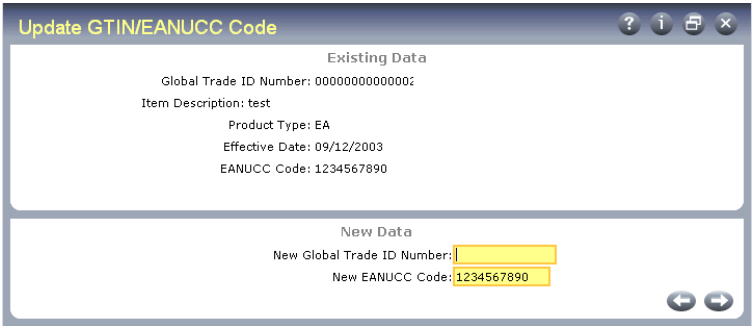


Fig. 2.49 Update GTIN/ EANUCC Code (1.23.4)

Global Trade Item Number. Optionally enter the new GTIN. This GTIN replaces the GTIN in the first frame.

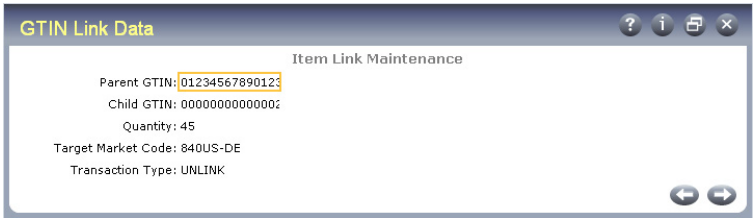
EANUCC Code. Optionally enter the new EANUCC. This EANUCC replaces the EANUCC in the first frame.

Specify GTIN Link Data

Use GTIN Link Data (1.23.6) to define the parent-child relationship between GTIN values that do not have a Trade Item Unit Descriptor value of Each specified in the Item Data frame of GTIN Attribute Maintenance.

Only one child GTN is entered at one time but an unlimited number of child GTNs can be entered for a parent GTIN.

Fig. 2.50
GTIN Link Data (1.23.6)



Parent GTIN. Enter the GTIN of the parent for this link. The parent GTIN should already be defined in GTIN Attribute Maintenance and should not have a Trade Item Unit Descriptor Value of BASE_UNIT_OR_EACH.

Child GTIN. Specify the GTIN contained within the next higher level GTIN for that item. For example, in a case/each relationship, case is the parent and each is the child.

Child GTIN Quantity. Specify the quantity of the child GTIN contained within the parent GTIN.

Target Market Code. Specify the target market code indicates the country and subdivision that makes the GTIN available to buyers. This indicator does not in any way govern where the buyer can resell the GTIN to consumers.

Transaction Type. The transaction type indicates whether a link is being added, changed, or removed.

Specify GTIN Publication Data

Use GTIN Publication Data (1.23.7) to maintain publication information for the highest level of the item hierarchy to be sent to the retailer.

Fig. 2.51
GTIN Publication Data (1.23.7)

Global Trade Item Number. Enter the GTIN of the highest of the item hierarchy to be sent to the retailer. For example, an item hierarchy consists of each, a pack, and a case. The highest product level the retailer receives is the case, so the case GTIN should be entered in this field.

Data Recipient. Specify the identifier for the GLN of the retailer.

Target Market Code. The target market code indicates the country and subdivision that makes the GTIN available to buyers. This indicator does not in any way govern where the buyer can resell the GTIN to consumers.

Item Notification Topic. Indicate the action to be performed when communicating item data to a retailer.

Valid options are:

- New-Item Publication. Synchronize item data that is not currently carried by the retailer.
- Initial Load Publication. Synchronize item data that is currently carried by the retailer.
- Data-Change Publication. Synchronize item data that has been previously published to the retailer, but has since been changed.
- Withdrawal Publication. Notify a specific retailer that an item will no longer be traded.
- De-Listing Publication. Notify all retailers that an item has been published and that the item will no longer be traded.

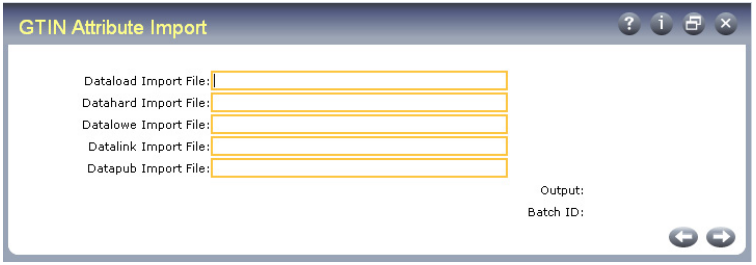
Import GTIN Attributes

Use GTIN Attribute Import (1.23.8) to import any GTINs that you have previously submitted online, using the QAD QSYNC–CP hosted portion, but that have not yet been created in MFG/PRO.

The purpose of this program is to synchronize the data in MFG/PRO with the data currently held in the hosted QAD QSYNC–CP database that is used to transmit information to the UCCnet organization. This is a one-time import of data. After the GTINs have been imported into MFG/PRO,

all GTIN attribute maintenance continues to take place in MFG/PRO, with changes exported to the hosted portion of the solution using GTIN Attribute Export.

Fig. 2.52
GTIN Attribute Import (1.23.8)



Import File. Enter the name of the file, including the entire file path, that the system will import for each type of attribute shown in Table 2.4. This file should reside on a server rather than on your hard drive.

Appendix A, “Import File Column Headers,” on page 75 contains information on how the tab-delimited import files must be structured for each type of attribute. Table 2.4 lists the specific table that shows each file structure.

Table 2.4
Import Files

Attributes	Reference
Dataload	Table A.1 on page 76
Datahard	Table A.2 on page 81
Datalowe	Table A.3 on page 82
Datalink	Table A.4 on page 85
Datapub	Table A.5 on page 85

Export GTIN Attributes

Use GTIN Attribute Export (1.23.9) to create pipe/vertical bar (|) delimited files for the following:

- Item attribute data
- Item hardlines data
- Item Lowes data

- Item link data
- Item publication data

The export process creates these files in your work directory. For private-label items, a directory with the same name as the retailer GLN is created within your work directory. The file naming convention is:

```
<filetype>_YYYYMMDDHHMMSS.dat
```

The filetypes are:

- DATALOAD for item attribute data
- DATAHARD for item hardlines data
- DATALOWE for Lowes item attribute data
- DATALINK for item link data
- DATAPUB for item publication data
- LOG for the optional log file created that lists the other exported file names

See “Group Name” on page 72.

For example, the item attribute data file would be something like:

```
DATALOAD_20040404110000.dat
```

Use ranges of GLNs to choose the items with attribute data to be exported. You can choose to export only particular types of files, but this is not recommended. It is best to export all the files together.

You can choose to export zero values as null. You can also choose to display a report of the exported data.

These files can then be imported to the online portion of QSYNC–CP.

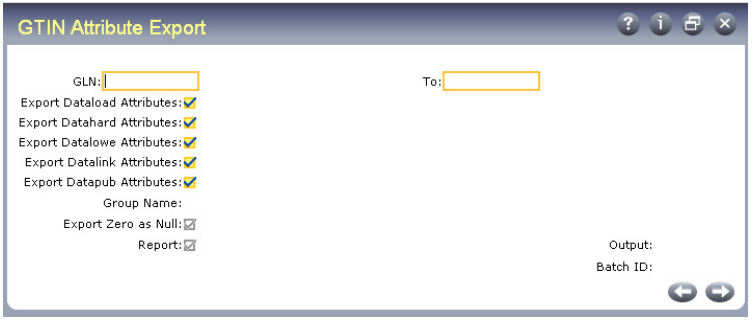


Fig. 2.53 GTIN Attribute Export (1.23.9)

GLN/To. Leave blank to export all items and all associated GLNs. For private-label items, enter the GLN range associated with a particular retailer so that you have a separate export file for each group of private-label items associated with the retailer.

Export Fields. Select the types of attributes you want to export. You can export multiple types at the same time.

Group Name. Enter a comment to be included in the log file generated during this export.

This field can be specified only when the export fields for DATALOAD, DATALINK, and DATAPUB are all set to Yes. In this case, you can optionally generate a log file for the exported files with a user-specified comment.

The log file is the last file sent for a group of files and indicates that a full set of files has been sent. None of the files are processed until the log file is received. It contains:

- A header row, including the user-specified comment, which indicates the name of the group
- The names of the individual files in the group, including all filetypes exported
- A footer row

When all three Export fields are Yes and a group name is not specified, a log file is not created.

Group name can be up to 40 characters long.

Export Zero as Null. This field determines whether the system exports zero values as null.

No: Field values set to zero are exported as zero (0.00).

Yes: Field values set to zero are exported as blank.

Report. Enter Yes to create a report of the exported items; otherwise, enter No.

Report Mapped Attributes

Use Mapped Attributes Report (1.23.10) to display the attributes in GTIN attribute master that are mapped to fields in item master using Internal Item Mapping (1.23.1).

The report includes the item attribute field name, internal item field name, and data value for each internal item or GTIN selected.

Fig. 2.54 Mapped Attributes Report (1.23.10)

Item Number/To. Enter a range of item numbers to include in the report.

GTIN/To. Enter a range of GTIN numbers to include in the report.

Update Mapped Attributes

If you have mapped fields in GTIN attribute master to fields in item master, it is important to keep the two masters synchronized.

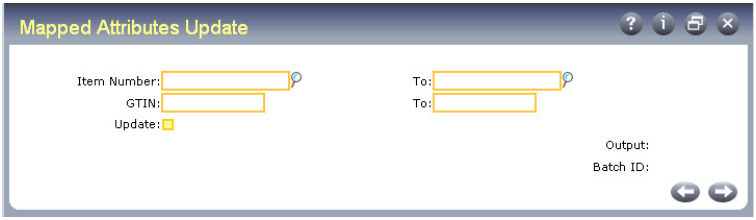
Use Mapped Attributes Update (1.23.12) to update mapped fields in GTIN attribute master with changed values from item master. Set Update to No to review the changes before updating the GTIN attribute master records.

After updating values to synchronize with item master with Update set to Yes, use GTIN Attribute Export (1.23.7) to create a tab-delimited file of the new data values and then follow your standard UCCnet Registry update procedure.

See “Export GTIN Attributes” on page 70.

No complementary menu program exists for updating the item master with changes made in the GTIN attribute master. Since you can synchronize in one direction but not in the other, you should define a company procedure to ensure that item master and GTIN attribute master stay synchronized.

Fig. 2.55
Mapped Attributes Update (1.23.12)



Item Number/To. Optionally enter a range of item numbers to be included in this update.

GTIN/To. Enter a range of GTINs to be updated with changes made to their corresponding items in item master.

Update. This field determines whether the system updates the values in item attribute data with the values in the mapped fields of the item master.

No: You receive a report of what mapped fields/values have changed, but no actual update occurs.

Yes: The values in the attribute master are updated with the values in the mapped fields of item master.

Appendix A

Import File Column Headers

The following import file column headers apply to QSYNC–CP:

Dataload Attributes **76**

Datahard Attributes **81**

Datalowe Attributes **82**

Datalink Attributes **85**

Datapub Attributes **85**

Import File Column Headers

Dataload Attributes

The import files for dataload attributes need to be tab delimited and have the column headers shown in Table A.1.

Table A.1
Dataload Attributes Import File Column Headers

Dataload Attributes Import File Column Headers
Additional Classification Category Code
Additional Trade Item Description
Bar Code Type
Barcode Symbology Is Derivable
Brand Name
Brand Owner
Catalogue Item State
Catalogue Price
Catalogue Price Effective End Date
Catalogue Price Effective Start Date
Class of Dangerous Goods
Classification Category Code
Color Code Description
Color Code List Agency
Color Code Value
Coupon Family Code
Dangerous Goods A Margin Number
Dangerous Goods Hazardous Code
Dangerous Goods Packing Group
Dangerous Goods Regulation Code
Dangerous Goods Shipping Name
Dangerous Goods Technical Name
Data Recipient
Deliver To Distribution Center Temperature Maximum Units
Deliver To Distribution Center Temperature Maximum Value

Table A.1 — *Dataload Attributes Import File Column Headers* — (Page 1 of 6)

Dataload Attributes Import File Column Headers
Deliver To Distribution Center Temperature Minimum Units
Deliver To Distribution Center Temperature Minimum Value
Deliver To Market Temperature Maximum Units
Deliver To Market Temperature Maximum Value
Deliver To Market Temperature Minimum Units
Deliver To Market Temperature Minimum Value
Delivery Method Indicator
Depth
Description Short
Descriptive Size
Diameter
Diameter Units
Drained Weight
Drained Weight Units
EANUCC Classification Attribute Type Code
EANUCC Classification Attribute Type Definition
EANUCC Classification Attribute Type Name
EANUCC Classification Attribute Value Code
EANUCC Classification Attribute Value Name
EANUCC Code
EANUCC Type
Effective Date
Flash Point Temperature Unit of Measure
Flash Point Temperature Value
Functional Name
Generic Ingredient
Generic Ingredient Strength Unit Of Measure
Generic Ingredient Strength Value
Global Trade Item Number
Gross Weight
Height
Ingredient Strength

Table A.1 — *Dataload Attributes Import File Column Headers* — (Page 2 of 6)

Dataload Attributes Import File Column Headers
Invoice Name
Is Net Content Declaration Indicated
Is Non Sold Trade Item Returnable
Is Packaging Marked as Recyclable
Is Packaging Marked as Returnable
Is Packaging Marked with Expiration Date
Is Packaging Marked with Green Dot
Is Packaging Marked with Ingredients
Is Trade Item a Base Unit
Is Trade Item A Consumer Unit
Is Trade Item a Dispatch Unit
Is Trade Item a Variable Unit
Is Trade Item an Invoice Unit
Is Trade Item an Orderable Unit
Is Trade Item Information Private
Is Trade Item Marked as Recyclable
Item Number
Name of Brand Owner
Language
Linear Unit of Measure
Long Description
Manufacturer of Trade Item GLN
Material Safety Data Sheet Number
Minimum Trade Item Lifespan From Time of Arrival
Name of Manufacturer
Net Content
Net Content Unit of Measure
Net Weight
Next Lower Level Trade Item GTIN
Next Lower Level Trade Item Quantity
Order Quantity Maximum
Order Quantity Minimum

Table A.1 — *Dataload Attributes Import File Column Headers* — (Page 3 of 6)

Dataload Attributes Import File Column Headers
Order Quantity Multiple
Order Sizing Factor
Order Sizing Units
Ordering Lead Time
Ordering Lead Time Units
Organic Claim Agency
Organic Trade Item Code
Packaging Material Code
Packaging Material Code List Maintenance Agency
Packaging Material Composition Quantity Unit of Measure
Packaging Material Composition Quantity Value
Packaging Material Description
Packaging Terms and Conditions
Packaging Type Code
Packaging Type Description
Pallet Terms and Conditions
Pallet Type Code
Party Receiving Private Data GLN
Peg Horizontal
Peg Horizontal Units
Peg Vertical
Peg Vertical Units
Product Range
Quantity of Children
Quantity of Completed Layers Contained in a Trade Item
Quantity of Inner Pack
Quantity of Layers per Pallet
Quantity of Next Level Trade Item Within Inner Pack
Quantity of Trade Items Contained in a Complete Layer
Quantity of Trade Items per Pallet
Quantity of Trade Items per Pallet Layer
Replaced Trade Item Identification GTIN

Table A.1 — *Dataload Attributes Import File Column Headers* — (Page 4 of 6)

Dataload Attributes Import File Column Headers
Retail Price on Trade Item
Size Code List Agency
Size Code Value
Stacking Factor
Stacking Weight Maximum Unit of Measure
Stacking Weight Maximum Value
Storage Handling Temperature Maximum Units
Storage Handling Temperature Maximum Value
Storage Handling Temperature Minimum Units
Storage Handling Temperature Minimum Value
Sub Brand
Suggested Retail Price
Suggested Retail Price Effective End Date
Suggested Retail Price Effective Start Date
Target Market Code
Tax Agency Code
Tax Amount
Tax Rate
Tax Type Code
Tax Type Description
Total Quantity of Next Lower Level Trade Item
Trade Item Canceled Date
Trade Item Consumer Availability Date Time
Trade Item Country Of Origin 1
Trade Item Country Of Origin 2
Trade Item Country Of Origin 3
Trade Item Country Of Origin 4
Trade Item Country Of Origin 5
Trade Item Discontinued Date
Trade Item End Availability Date Time
Trade Item Form Description
Trade Item Group Identification Code

Table A.1 — *Dataload Attributes Import File Column Headers* — (Page 5 of 6)

Dataload Attributes Import File Column Headers
Trade Item Group Identification Description
Trade Item Handling Instructions Code
Trade Item Has Batch Number
Trade Item Publication Date
Trade Item Start Availability Date
Trade Item Unit Descriptor
UCCIA Currency ISO Code
United Nations Dangerous Goods Number
Variant
Volume
Volume Unit of Measure
Weight Unit of Measure
Width

Table A.1 — *Dataload Attributes Import File Column Headers* — (Page 6 of 6)

Datahard Attributes

The import files for datahard attributes need to be tab delimited and have the column headers shown in Table A.2.

Table A.2
Datahard Attributes Import File Column Headers

Datahard Attributes Import File Column Headers
GTIN
Hardlines Finish Description
Hardlines Import Classification Type
Hardlines Import Classification Value
Hardlines Is Trade Item Recalled
Hardlines Model Number
Hardlines Nesting Increment Units
Hardlines Nesting Increments
Hardlines Ordering Unit of Measure
Hardlines Out of Box Depth
Hardlines Out of Box Dimension Units

Table A.2 — *Datahard Attributes Import File Column Headers* — (Page 1 of 2)

Datahard Attributes Import File Column Headers
Hardlines Out of Box Height
Hardlines Out of Box Width
Hardlines Pieces Per Trade Item Units
Hardlines Pieces Per Trade Item Value
Hardlines Return Goods Policy Text
Hardlines Security Tag Location
Hardlines Security Tag Type
Hardlines Selling Unit of Measure
Hardlines URL Warranty
Hardlines Warranty Description1
Hardlines Warranty Description2
Hardlines Warranty Description3
Hardlines Warranty Description4
Hardlines Warranty Description5

Table A.2 — *Datahard Attributes Import File Column Headers* — (Page 2 of 2)

Datalowe Attributes

The import files for datalowe attributes need to be tab delimited and have the column headers shown in Table A.3.

Table A.3 Datalowe Attributes Import File Column Headers

Datalowe Attributes Import File Column Headers
GTIN
Lowes Advertising Text Description 1
Lowes Advertising Text Description 2
Lowes Advertising Text Description 3
Lowes Advertising Text Description 4
Lowes Advertising Text Description 5
Lowes Dependent Proprietary Trade Item Description 1
Lowes Dependent Proprietary Trade Item Description 2
Lowes Dependent Proprietary Trade Item Description 3
Lowes Dependent Proprietary Trade Item Description 4

Table A.3 — *Datalowe Attributes Import File Column Headers* — (Page 1 of 4)

Datalowe Attributes Import File Column Headers
Lowes Dependent Proprietary Trade Item Description 5
Lowes Environmental Identifier 1
Lowes Environmental Identifier 2
Lowes Environmental Identifier 3
Lowes Environmental Identifier 4
Lowes Environmental Identifier 5
Lowes Hazardous Material Classification
Lowes Image Effective End Date 1
Lowes Image Effective End Date 2
Lowes Image Effective End Date 3
Lowes Image Effective End Date 4
Lowes Image Effective End Date 5
Lowes Image Effective Start Date 1
Lowes Image Effective Start Date 2
Lowes Image Effective Start Date 3
Lowes Image Effective Start Date 4
Lowes Image Effective Start Date 5
Lowes Image File Name 1
Lowes Image File Name 2
Lowes Image File Name 3
Lowes Image File Name 4
Lowes Image File Name 5
Lowes Image File Size 1
Lowes Image File Size 2
Lowes Image File Size 3
Lowes Image File Size 4
Lowes Image File Size 5
Lowes Image File Size Type 1
Lowes Image File Size Type 2
Lowes Image File Size Type 3
Lowes Image File Size Type 4
Lowes Image File Size Type 5

Table A.3 — *Datalowe Attributes Import File Column Headers* — (Page 2 of 4)

Datalowe Attributes Import File Column Headers
Lowes Image File Type 1
Lowes Image File Type 2
Lowes Image File Type 3
Lowes Image File Type 4
Lowes Image File Type 5
Lowes Image File URL 1
Lowes Image File URL 2
Lowes Image File URL 3
Lowes Image File URL 4
Lowes Image File URL 5
Lowes Image Usage 1
Lowes Image Usage 2
Lowes Image Usage 3
Lowes Image Usage 4
Lowes Image Usage 5
Lowes Image View 1
Lowes Image View 2
Lowes Image View 3
Lowes Image View 4
Lowes Image View 5
Lowes Is Image Of Item In Package 1
Lowes Is Image Of Item In Package 2
Lowes Is Image Of Item In Package 3
Lowes Is Image Of Item In Package 4
Lowes Is Image Of Item In Package 5
Lowes Is Item Available For Direct To Consumer Delivery
Lowes Is Item Available For Special Order
Lowes Is Item Subject To US Patent
Lowes Is Wood A Component Of This Trade Item
Lowes Product Features Benefits Description 1
Lowes Product Features Benefits Description 2
Lowes Product Features Benefits Description 3

Table A.3 — *Datalowe Attributes Import File Column Headers* — (Page 3 of 4)

Datalowe Attributes Import File Column Headers
Lowes Product Features Benefits Description 4
Lowes Product Features Benefits Description 5
Lowes Shelf Unit Quantity Units
Lowes Shelf Unit Quantity Value
Lowes Special Order Quantity Lead Time
Lowes Special Order Quantity Lead Time Units
Lowes Special Order Quantity Maximum
Lowes Special Order Quantity Minimum
Lowes Special Order Quantity Multiple
Lowes Truckload Quantity Units
Lowes Truckload Quantity Value
Lowes Truckload Type Point Value

Table A.3 — *Datalowe Attributes Import File Column Headers* — (Page 4 of 4)

Datalink Attributes

The import files for datalink attributes need to be tab delimited and have the column headers shown in Table A.4.

Table A.4 Datalink Attributes Import File Column Headers

Datalink Attributes Import File Column Headers
childGTIN
GTIN
Quantity
Target Market Code
Transaction Type

Datapub Attributes

The import files for datapub attributes need to be tab delimited and have the column headers shown in Table A.5.

Table A.5 Datapub Attributes Import File Column Headers

Datapub Attributes Import File Column Headers
Data Recipient
GTIN

Datapub Attributes Import File Column Headers
Publication Type
Target Market Code

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