Barcode Manager

Quick Reference Guide
Barcode Manager
The stress-free way to generate barcode numbers and symbols.

Barcode Manager is a new online tool from GS1 Ireland to help you allocate barcode numbers and generate barcode symbols accurately and effortlessly.

With Barcode Manager you can:
• Generate barcode numbers for a new product
• Store barcode details for existing products
• Compile a data profile for your products to include brand name, description and details such as weight, size, flavour or colour etc.
• Generate barcode symbols in a variety of file formats
• Upload and manage existing product information from other systems via spreadsheet
• Send your product data to the GS1 Cloud

Fast, accurate, effortless - barcodes made easy with Barcode Manager

Contents
1. Dashboard Orientation
2. Product Hierarchies
3. Prefix Management
4. Allocate a Consumer Unit GTIN
5. Allocate an Inner Pack, Outer Case, Display Unit or Pallet GTIN
6. Barcode Symbol Generation
7. Edit Existing Product Data
8. Exporting Product Data
9. Importing Product Data
10. Mandatory Product Data
11. Optional Product Data
12. Publishing to the GS1 Cloud
1. Dashboard Orientation

The Dashboard is the first page you will see after login. Each function is outlined below:

- **Accounts Summary**: Displays your account information including locations and products.
- **Active Prefix**: Shows the prefix details with allocation and available numbers.
- **Menu Bar**: Contains links for various sections like My Account, Dashboard, Prefix management, Training and Resources, etc.
- **Training Videos**: Provides access to training videos.
- **Terms & Conditions**: Must be accepted by the nominated account holder.
- **Add a new product**: Allows you to add new products.
- **View all products in selected range**: Enables viewing products in a specific range.
- **Available Prefixes**: Lists available prefixes with their ranges.
# 2. Product Hierarchies

Products and their associated packaging create levels known as hierarchies. Your product and packaging type will determine the level of the product hierarchy for which you will allocate a barcode number. Inner packs, cases, display units and pallets may all contain the same item (homogeneous) or may be of a mixed (heterogeneous) assortment. All hierarchy levels require a separate, unique identification number called a **GTIN** (Global Trade Item Number).

<table>
<thead>
<tr>
<th><strong>Base Unit or Each</strong></th>
<th><strong>Pack or Inner Pack</strong></th>
<th><strong>Case or Mixed Case</strong></th>
<th><strong>Display Unit</strong></th>
<th><strong>Pallet</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A Base Unit or Each is the smallest denomination of an item that is used by the end consumer, for example a product sold to a customer in a retail outlet.</td>
<td>Some products may be packed into intermediary groups such as shelf ready displays or as multipacks that are sold to consumers.</td>
<td>A case is a grouped set of products (base units or inner packs). It can contain a single type of product or multiple types. Cases are typically sold to business trade partners.</td>
<td>A unit used to display products for sale to the end customer. It can contain a single type of product or multiple types of product.</td>
<td>A pallet is a unit brought together for the purpose of transport or storage and typically consists of a number of outer cases.</td>
</tr>
</tbody>
</table>

**Example:**
- A single pot of yogurt
- A six-pack of yogurt pots
- A case of 18 six-packs of yogurt or a case of 108 single yogurt pots
- A display case of 18 yogurts
- 24 outer cases of yogurt
3. Prefix Management

**IMPORTANT**

Before starting to allocate a barcode number for a product or editing/reviewing the information associated with a product, it is necessary to ensure the required prefix is selected and set to the Active status.

You can only view, add to or edit numbers from the Active prefix range.

If you only have one Global Company Prefix (GCP) this will be the default active number range. Your Active Prefix is displayed at all times in the orange feature box on the left hand side of the screen.

**Changing your Active Prefix**

You can view or update your active prefix by clicking on any of the following:

- a) The Prefix management link in the left hand menu
- b) Any of the number ranges in the blue **Global Company Prefixes and GTIN Ranges** box on the Dashboard
- c) Or by selecting the “[Change]” option on the orange menu bar across the top of the screen, in the My Products section

**To set a prefix as Active**

1. Click the grey button to the left of the prefix you wish to work with
2. Choose one of the following actions:
   - Enter a new product in selected range
   - Set selected range as active and go to My Products
   - Set starting GTIN in selected range manually
   - Set starting GTIN to first available number
3. Click Continue and your selected prefix will now be Active
4. Allocate a Consumer Unit (base unit) GTIN

Before commencing ensure the prefix you wish to work with is the Active Prefix.

1. On the Dashboard or in My Products, click the Add Product button. Or, on the Prefix management page, select the correct prefix and click “Enter a new product in selected range”.

2. Select Packaging Level
   Select “Consumer Unit (Base unit/Each)” and click Next.

3. Select Product and Packaging Type
   From the drop down menu select the packaging option that best matches the product for which you are allocating a barcode number and click Next.

4. Enter Product Details
   a. Complete the Mandatory Product Data Fields:
      • Label Description
      • Brand Name
      • Product Type/Functional Name
      • Product/Trade Item Description. This field can be auto filled if Brand Name, Sub-Brand, Functional Name and Variant are entered and the Auto-Fill box is ticked.
      • Global Product Classification (select the appropriate Brick code)
      • Type of product (at least one option must be selected):
        - Is the item a Consumer Unit?
        - Is the item a Dispatch Unit?
        - Is the item a Variable Weight Product?
        - Is the item an Invoice Unit?
        - Is the item an Orderable Unit?

   Note: You will not be able to proceed until all of the mandatory product data fields have been completed. Fields marked with * are mandatory.

   b. Complete any or all of the optional data fields.

   c. Click Next when complete.

5. Review and check the accuracy of the data you have entered.

6. Click Finish to complete the new product set up.

7. On the next page Print a product summary sheet as a record, if required.
5. Allocate an Inner Pack, Outer Case, Display Unit or Pallet GTIN

Before commencing ensure that the prefix you wish to work with is the Active Prefix and you have allocated a GTIN for the item(s) contained in the case or pallet.

1. On the Dashboard or in My Products, click the Add Product button. Or, on the Prefix management page, select the correct prefix and select “Enter a new product in selected range”.

2. Select Packaging Level
   Select “Pack or Inner Case”, “Case or Mixed Case”, “Display Unit” or “Pallet” and click Next.

3. Select Product and Packaging Type
   From the drop down menu, select the packaging option that best matches the product for which you are allocating a barcode number and click Next.

4. Select item(s)
   Select the product(s)/base unit(s) that is/are contained within the Outer Case, Display Unit or Pallet.

5. Product Details
   a. Complete the mandatory product data fields. (See the Mandatory Product Data section for reference.)

   Note: You will not be able to proceed until all of the mandatory product data fields have been completed. Fields marked with * are mandatory.

   b. You can also complete any or all of the optional data fields. (See the Optional Product Data section for reference.)

   c. Click Next when complete.

6. Review and check the accuracy of the data you have entered.

7. Click Finish to complete the new product set up.

8. On the next page Print a product summary sheet as a record, if required.
6. Barcode Symbol Generation

To generate a barcode image follow these steps.

**Step 1**
Log into Barcode Manager via the Members’ Area of the GS1 Ireland website www.gs1ie.org-members-area

**Step 2**
On the Dashboard click on the “My Products” link in the left hand menu or click on the orange “View Products” button.

**Step 3**
Identify the product for which you wish to generate a barcode symbol and click the orange barcode icon beside that product.

**Step 4**
On the next screen click the blue Create barcode button and accept the deduction of one Barcode Symbol Credit from your account. (Please contact GS1 Membership Services if you require assistance purchasing barcode image credits.)

**Step 5**
Download the file type of your choice: png, gif or jpg (raster image), postscript (EPS) or PDF labels.

*Note: All mandatory attributes must be completed for the selected product before a barcode symbol can be created.*
7. Edit Existing Product Data

Adjustments to a product’s information profile are allowed within Barcode Manager. However these edits must not contravene the 10 GTIN Management Rules. Some product changes require the allocation of a new GTIN which can be created in Barcode Manager.

To see if your product changes require a new GTIN to be issued visit: www.gs1.org/do-i-need-new-gtin

Make edits to existing product information

**Step 1**
On the Dashboard select “My Products” on the left menu bar or click on the “View Products” button on the right hand side of the grey Account Summary box.

**Step 2**
Select the product that requires editing by clicking on the product’s description.

**Step 3**
Navigate to and edit the required fields (subject to the GTIN Management Rules).

**Step 4**
Click the “Update” button at the bottom right of the page to save the changes.
8. Exporting Product Data

The Barcode Manager Export function is used to create an Excel or text file containing product data or prefix range information.

There are three export options available:

<table>
<thead>
<tr>
<th>Export option</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export all products in this range</td>
<td>Export a list of all products currently stored in Barcode Manager</td>
</tr>
<tr>
<td>Export starred products in this range</td>
<td>Export all products that have been starred as favourites in the My Products page</td>
</tr>
<tr>
<td>Export available GTINs</td>
<td>Export a list of the barcode numbers not yet utilised</td>
</tr>
</tbody>
</table>

Steps to Export Product Data from Barcode Manager

**Option 1**
1. Select “Export products” from the left hand menu bar
2. Select the desired exporting option from the dropdown menu
3. Click “Export” and your file will download.

**Option 2**
1. Select “Prefix management” from the left hand menu bar
2. Select “Export available GTINs in this range”
3. Click “Continue” and your export file will download.
9. Importing Product Data

The import function is used to upload product information into Barcode Manager using a specially formatted file.

To import a file
1. Select “Import products” from the left menu bar
2. Select “Choose file” and find your upload file
3. Click “Import”

File types for import
To import data use an Excel (XLS, XLSX) or OpenOffice (ODS) spreadsheet or a comma separated file (CSV) with your GTINs and all mandatory data.

Importing Higher Level Packaging Items
To import a “container” item the following data attributes, as outlined in the table below, must be populated to detail the lower level items contained within it:

<table>
<thead>
<tr>
<th>Product Data Attribute</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTIN of Next Lower Item</td>
<td>The GTIN of the item inside the parent</td>
<td>05391532240008, 05391532240022</td>
</tr>
<tr>
<td>Amount of Next Lower Level Items</td>
<td>The quantity of the next lower level trade item contained in the parent trade item</td>
<td>10, 10</td>
</tr>
<tr>
<td>Quantity of Children</td>
<td>The quantity of the next lower level trade items (only used when a parent contains more next lower level than one product types (GTIN))</td>
<td>2</td>
</tr>
<tr>
<td>Total Quantity of Next Lower Level Trade Item</td>
<td>This represents the Total quantity of next lower level (the sum of the lower level items contained)</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: For items with multiple GTINs contained there are no spaces between the commas and the data in the import/export sheet.
10. Mandatory Product Data

This table outlines the data fields which must be completed for each product hierarchy level when data is manually entered into Barcode Manager.

These are the minimum required data attributes that must be completed in order to create a product and allocate a GTIN. For more detailed descriptions please see the attribute table overleaf.

<table>
<thead>
<tr>
<th>Product Data Attribute</th>
<th>Base unit</th>
<th>Inner pack</th>
<th>Outer case</th>
<th>Display unit</th>
<th>Pallet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Label Description</td>
<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Brand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Type/Functional Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product/Trade Item Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Product Classification (GPC) Code</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Item is a Base Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Type of Product - at least one of the options below must be selected**

- The Item is a Consumer Unit
- The Item is a Dispatch Unit*
- The Item is a Variable Weight Product
- The Item is an Invoice Unit
- The Item is an Orderable Unit

* If Dispatch Unit is selected Gross Weight must also be completed

**Contained Items - for levels higher than base unit:**

- Next Lower Level Trade Item(s) N/A
- Quantity of Contained Items N/A

**Legend:**
- Required
- Optional
- Autofilled from base unit

**Note:** Autofilled sections only auto-complete if a base unit or lower level product is selected, from which the data can be retrieved.
Mandatory Attributes and Definitions

Below is a list of all mandatory fields found in Barcode Manager.

<table>
<thead>
<tr>
<th>Data Attribute</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Item Unit Descriptor</td>
<td>Identifies the hierarchical level of the trade item (e.g., base unit, case, pallet.) Click to view</td>
</tr>
<tr>
<td>Packaging Type</td>
<td>A code that defines the packaging type used to contain the item. Click to view the Package Types Code List</td>
</tr>
<tr>
<td>GTIN</td>
<td>GTIN is the barcode number of the product; 14 digits long. Leading zeros are needed for GTIN 13, 12 and 8</td>
</tr>
<tr>
<td>Target Market</td>
<td>Code of the Country where the information is published to. Click to view the Country Code List</td>
</tr>
<tr>
<td>Company Name</td>
<td>Name of the Company responsible for the product data</td>
</tr>
<tr>
<td>Label Description</td>
<td>A literal reproduction of the text featured on a product’s label in the same word-by-word order in which it appears on the front of the product’s packaging</td>
</tr>
<tr>
<td>Brand</td>
<td>The name used by the brand owner to uniquely identify a line of trade items</td>
</tr>
<tr>
<td>Product Type/Functional Name</td>
<td>Describes the use of the item by the consumer, e.g. “salad dressing”, “soup”</td>
</tr>
<tr>
<td>Product/Trade Item Description</td>
<td>A free text concatenation of the Brand Name, Sub-Brand, Functional Name and Variant</td>
</tr>
<tr>
<td>GPC Brick Code</td>
<td>GPC (Global Product Classification) is a system for describing, classifying and coding products. Click here to find your GPC Brick Code</td>
</tr>
<tr>
<td>GLN of Information Provider</td>
<td>Global Location Number that uniquely identifies your company</td>
</tr>
<tr>
<td>Language Code</td>
<td>Language used to represent the data on the requested item</td>
</tr>
<tr>
<td>The Item is a Base Unit</td>
<td>Indicator identifying the item as the lowest unit in a hierarchy</td>
</tr>
</tbody>
</table>

**Contained Items - for levels higher than base unit:**

- GTIN of next Lower Level Trade Item: The GTIN of the item inside the parent
- Quantity of Contained Items: The quantity of the next lower level trade item contained in the parent trade item

**Descriptors of product/trade unit that match your product - at least one option from the list below must be selected**

**The Item is a:**

- Consumer Unit: Indicator identifying the trade item as intended for consumers at point-of-sale (POS)
- Dispatch Unit: Indicator identifying the item as a dispatch (shipping) unit
- Variable Weight Product: Indicator that the item is not a fixed quantity but is variable in weight, length or volume
- Invoice Unit: Indicator identifying the item as an invoicing unit
- Orderable Unit: Indicator identifying the item as an ordering unit
11. Optional Product Data

Below is a list of the most commonly used product data attributes which are optional. Please refer to the Barcode Manager Import / Export file for details of all fields and their definitions.

<table>
<thead>
<tr>
<th>Data Attribute</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub Brand</td>
<td>Second level of brand. Can be a trademark e.g. Yummy-Cola Classic</td>
</tr>
<tr>
<td>Variant</td>
<td>Free form text e.g. flavour, fragrance, etc</td>
</tr>
<tr>
<td>Company/Internal Product Code or SKU</td>
<td>The information provider’s internal number for the trade item; stock keeping unit (SKU)</td>
</tr>
<tr>
<td>Gross Weight</td>
<td>The trade item’s gross weight inclusive of its packaging</td>
</tr>
<tr>
<td>Net Weight</td>
<td>The trade item’s weight excluding packaging</td>
</tr>
<tr>
<td>Units of Measure for Weight</td>
<td>Units of measure for weights. Click to view accepted field values</td>
</tr>
<tr>
<td>Net Content</td>
<td>The amount of the item contained in a package, as claimed on the label</td>
</tr>
<tr>
<td>Units of Measure for Content</td>
<td>Units of measure for content. Click to view accepted field values</td>
</tr>
<tr>
<td>Depth</td>
<td>The depth of the trade item</td>
</tr>
<tr>
<td>Width</td>
<td>The width of the trade item</td>
</tr>
<tr>
<td>Height</td>
<td>The height of the trade item</td>
</tr>
<tr>
<td>Units of Measure for Dimensions</td>
<td>Units of measure for dimensions. Click to view accepted field values</td>
</tr>
<tr>
<td>Product Image URI</td>
<td>URI (Uniform Resource Identifier) - a simple text string that refers to a resource on the internet. URLs may refer to documents, resources, people, etc.</td>
</tr>
<tr>
<td>GS1 Cloud Status</td>
<td>Indicates if the product data is visible on the GS1 Cloud. Click to view accepted field values</td>
</tr>
<tr>
<td>Information Provider Name</td>
<td>Name of the party that owns the data</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>Code for Country in which the trade item has been produced or manufactured. Click to view Country Code List</td>
</tr>
<tr>
<td>Barcode Type</td>
<td>The symbology of the barcode that is visible on the trade item. Click to view accepted field values</td>
</tr>
</tbody>
</table>
12. Publish Product Information to the GS1 Cloud

The GS1 Cloud is fast becoming the largest source of trusted product information in the world, making it possible for businesses to meet the expectations of today’s digital consumers.

Required data attributes for publication to GS1 Cloud

There are currently 7 core product data attributes required to publish product data to the GS1 Cloud:

1) GTIN (Global Trade Item Number)
2) Brand
3) Label description
4) Medium resolution image URL
5) Target market
6) Company name
7) Product classification

How to upload/publish product information to the GS1 Cloud

TIP: If not already stored in Barcode Manager, set up a product profile for the Consumer Unit you wish to publish to the GS1 Cloud, complete with all 7 of the required data attributes and click **Save**.

1. Open the product details you wish to publish to the GS1 Cloud by clicking on the product description. Navigate to the GS1 Cloud section by clicking on the GS1 Cloud tab at the top of the screen.

2. On the GS1 Cloud Tab you can view:
   a. A summary of the selected product’s properties to be posted to the GS1 Cloud
   b. The GS1 Cloud **Current state** box.

3. To publish the product to the GS1 Cloud set the product’s current state to “Active”.

4. Click “Update” at the bottom right of the page to save the change. The product data is now published to the GS1 Cloud.

Note: Only Consumer Unit product data can be published to the GS1 Cloud i.e. no outer case or higher level product hierarchies.