# Materialogic

# Master Records

## Master Record

### Data Types

The following characters may be used:

- A-Z  (Must be upper case)
- 0-9
- .   (dot)
- /
- _   (underscore)
- +
- (
- )
- #
- -   (dash)
- Dates should be in the format "mm/dd/yyyy"
- The SMALLINT data type as used here allows for numeric values between 0 and 9999
- The INTEGER data type as used here, allows for numeric values between 0 and 999999999
- A decimal specification such as DECIMAL(5,2) indicates that there may be up to 5 digits, two of which are after the decimal.
- No extended ASCII values may be used (beware of copying and pasting from a word processor)

### File Content

The following section outlines the information available for placement in the master record table.

The field requirements below are basic to INFOplus.  If your inventory has additional requirements it is up to you to properly implement them within your data.  Materialogic will perform general validity checks but it is your responsibility to provide accurate data that supports your requirements and is compatible with INFOplus.

If a column is shown as required, it must be included in the data feed and every row must have a value.

If a column is not required, it can either be included in the data feed or not, however if it is included it must be populated appropriately.  If it is included, any rows that do not contain a value will have that field blanked out in its record in INFOplus.

Master record update records may use the tilde "~" character to reflect no change is being made to a given field.  This will allow the update to focus on only the changed values.  Use of the tilde in a new master record will cause the parser to return an error.  Inventory number and control numbers must be included on all new records and updates to existing records

Materialogic supports the use of a template master record, which is used when building new master records.  A template record contains default values, which are used for all **new** master records, when that field is missing from the data feed that initiates the item.

### Master Record Fields

| Field Name | Description | Format | Required Y/N/Recommended | Acceptable Values |
|---|---|---|---|---|
| | | | | |

| Inventory# | Account designator, unique to each inventory | SMALLINT | Y | 1-9999 - Supplied by Materialogic |
|---|---|---|---|---|
| Control Number | SKU for the item (Item Number) | CHAR(20) | Y | A-Z, 0-9, ., /, _, +, (, ), #, -<br><br>Spaces are allowed but only one in a row and not as the first or last |
| Item Description | Primary description for the item | CHAR(40) | Y | A-Z, 0-9, ., /, _, +, (, ), #, - |
| Additional Description | Supplemental description | CHAR(40) | N | A-Z, 0-9, ., /, _, +, (, ), #, - |
| Reorder Code | How an item is supplied to INFOplus<br><br>Detailed Information | CHAR(1) | Y | • 1 - Print on Demand<br>• 5 - Lowstock<br>• 6 - Obsolete, Distribute Until Gone<br>• 7 - Obsolete, Stop Distribution<br>• 8 - Master Lite<br>• V - Outside Vendor |
| POD Req Suffix | Print Resource Designator (901-999) | SMALLINT | Y (if reorder-code = 1) | |
| POD Rev Date | mm/yy of revision of POD item | CHAR(5) | Y (if reorder-code = 1) | |
| Summary Code | A means of grouping items from like budget categories on month-end inventory summary | INTEGER | R | Must be identified as a translation under the category of "SUMMARY |
| Account Code | Accounting category that this item belongs to | INTEGER | Y | Must be identified as a translation under the category of "ACCOUNT |
| Production Code | Assign the same number ot items with similar production requirements that could be ordered together for a discount | SMALLINT | N | Must be identified as a translation under the category of "PROD CO |

| Companion Code | Items with the same companion code are recognized on a lowstock notice in case a change to one might require a change to another. | SMALLINT | N | |
|---|---|---|---|---|
| Lowstock Code | Code for a standardized note to associate with a lowstock notice | INTEGER | N | Must be identified as a translation under the category of "L/S CODE |
| Lowstock Contact | Code for the person who is responsible for reordering the item. Required only for reorder-code 5 items | INTEGER | Y | Must be identified as a translation under the category of "L/S CONT |
| Buyer Code | Code for the person who is responsible for buying more of the item | INTEGER | N | Must be identified as a translation under the category of "BUYER" |
| Major Group | Major Groups are like chapters in the catalog | INTEGER | Y | Must be identified as a translation under the category of "MAJOR G |
| Sub Group | Sub groups are like sub-chapters in the catalog | SMALLINT | Y | Must be identified as a translation under the category of "SUB GRO |

| | | | | |
|---|---|---|---|---|
| Unit Code | Physical characteristic of one piece of the item. | SMALLINT | Y | <ul><li>1 - SINGLES LOOSE</li><li>2 - SINGLES PADDED</li><li>3 - SNAPSETS</li><li>4 - CONT. SINGLES</li><li>5 - CONT. SETS</li><li>6 - BOOKS</li><li>7 - FOLDERS</li><li>8 - CARD</li><li>9 - EACH</li><li>10 - BINDERS</li><li>11 - BOOKLET</li><li>12 - BROCHURES</li></ul><ul><li>13 - CARBONS</li><li>14 - CARDS</li><li>15 - CHECKS</li><li>16 - CONTINUOUS</li><li>17 - COVERS</li><li>18 - CUTSHEETS</li><li>19 - DISKETTES</li><li>20 - ENVELOPE</li><li>21 - IR</li><li>22 - LABEL</li><li>23 - LETTERHEAD</li><li>24 - LOGO</li></ul><ul><li>25 - MENU</li><li>26 - NCR</li><li>27 - PADS</li><li>28 - TABS</li><li>29 - TICKET</li><li>30 - FORMS</li><li>31 - PROSPECTUS</li><li>32 - INSERTS</li><li>33 - KITS</li><li>34 - MANUALS</li><li>35 - MEMOS</li><li>36 - SLIDES</li></ul> |

| | | | | |
|---|---|---|---|---|
| Wrap Code | Packaging for the item | CHR(3) | Y | *(see table below)* |

| Code | Abbr | Description |
|---|---|---|
| 1 | EAC | EACH |
| 2 | PCK | PACK |
| 3 | BOX | BOX |
| 4 | CSE | CASE |
| 5 | RLL | ROLL |
| 6 | PAD | PAD |
| 7 | BTL | BOTTLE |
| 8 | PLT | PALLET |

| | | | | |
|---|---|---|---|---|
| Units per Wrap | Number of units of an item that are packaged together in a wrap | INTEGER | Y | Any positive number |
| Secure | Should the item be stored in a high security area | CHAR(1) | Y | Y/N |

| Serial Code | Is item numbered? | CHAR(1) | Y | <ul><li>0=No</li><li>1=Sequenced (like checks)</li><li>2=Serial (like office equipment)<ul><li>Numbers must be entered any time qty is moved in or out</li></ul></li><li>3=Serial (like office equipment)<ul><li>Numbers must only be recorded at time of shipping</li></ul></li><li>5=Causes historical data to be retained for this item.</li></ul> |
|---|---|---|---|---|
| Lead Time | Advance notice before running out of stock, for generating lowstock notice. Dynamic based on activity. | INTEGER | R | Number of days to be notified in advance of an item running out of s or Fixed Reorder Point may be used for an item, but not both. Lead due to its dynamic nature. |
| Fixed Reorder Point | Alternative to lead time, just indicate a quantity level at which to issue a lowstock notice | INTEGER | N | Number of pieces of inventory at which a lowstock notice should be Reorder Point or Lead Time may be used for an item, but not both. I recommended due to its dynamic nature. |
| Charge Code | Indicates whether this item will be charged to the field | CHAR(1) | Y | <ul><li>0 - Item is not chargeable to the ordering branch</li><li>1 - Item is chargeable to the ordering branch</li><li>2 - Item is designated as retail</li></ul> |
| BackOrder Code | Should backorders be allowed for this item? | SMALLINT | Y | <ul><li>0 - Backorders are not allowed</li><li>1 - Backorders are allowed</li></ul> |
| Critical Item | Indicates whether this item is considered critical to the branches | SMALLINT | Y | 0 or non-zero. Required if reorder-code = 5 |
| Sector | Determines visibility of the item on the order catalog | CHAR(36) | N | Any string of alpha or numeric characters to match branches and ite catalogs |
| Maximum Cycle Order Qty | Maximum quantity allowed for a cycle order (req-type 2) | INTEGER | Y | 0-99999999<br><br>Negative numbers can be used, but if so, special actions will take pl translations in the category of "REQ APPROVAL" where the transla number equal to the maximum cycle order quantity. If the negative r and -1000, the translation value appears as a message to the user. something like, "PLEASE CONTACT JOHN DOE FOR APPROVAL" placement of the order but it advises the user of some information o<br><br>If the negative number is less than -1000 the translation value is hid they must enter it as a password in order to have their order for that for a maximum cycle order qty, the code might be -1 and the transla the user does not know the password ABC, they will not be able to p |

| | | | | |
|---|---|---|---|---|
| Maximum Interim Order Qty | Maximum quantity allowed for an interim order (req-type 1) | INTEGER | Y | See the description for the maximum cycle order quantity. |
| Absolute Max | Identifies if the item's restrictions are absolute, not modifiable by the branch's restriction percent | CHAR(1) | Y | Y/N |
| Contract Vendor | Vendor with contract to supply this item | INTEGER | N | If used, there must be a corresponding vendor record. |
| Contract Price | Price contracted with Contract Vendor (per contract per) | DECIMAL(12,4) | N | |
| Contract Per | Quantity that contract price is for | CHAR(1) | N | • E - 1<br>• D - 12<br>• C - 100<br>• G - 144<br>• M - 1000 |
| Contract Expire | Expiration date of contract with contract vendor | DATE | N | |
| Create Date | Date that the item was defined in INFOplus | DATE | Y | Not editable. |
| Void Date | Date that the item should be taken out of service | DATE | N | |
| Asset Code | Is the item considered an asset to the inventory? | CHAR(1) | Y | Y or N. If "Y", when the item is shipped the asset code must be ente |
| Outside Vendor | Number of vendor to associate the item with if has a reorder-code of "V" | INTEGER | N | The value entered here must be found in a vendor record for the cus |

| | | | | |
|---|---|---|---|---|
| Bill-as-Ship Vendor | **Do we want to get into this?** | | | |
| Pick Number | Used to relate items to a section of the warehouse for picking | INTEGER | N | Splits pick list into groups, such as for sending pickers out to this or warehouse |
| Pick Rank | Scores item by frequency of picking. Can be used to optimize item placement in the warehouse so that most frequently picked items are most conveniently placed. | SMALLINT | N | 0-9 Updated weekly. Items with rank of 1 are 100 most frequently pi most frequently picked. 3 are 300 next most frequently picked. Etc. |
| Capitalize | | | | |
| Units/Case | If item is distributed in cases, this is the default packing per case | INTEGER | N | 0-99999999 |
| Lot Control | Indicates whether item is controlled by PO lot | CHAR(1) | Y | Y/N |
| Estimated Usage | 12 months of projected usage for each item. | | Y | See note below |

## Alternate SKUs

The design of INFOplus constrains item numbers (control numbers) to a standard set of commonly available, upper-case characters, not more than 20 in length.  If longer item numbers are used by a customer (as identified by their Integration Partner ID and Order Source ID), we can implement a translator between INFOplus and the outside world through the user of Alternate SKUs.

An Alternate SKU can be up to 255 characters in length and can contain any of the characters in the standard ASCII set including lower case characters.  This allows items to be acceptably identified within INFOplus and also be communicated outside of INFOplus in a way that is understood by the customer.

Once an Integration Partner / Order Source are defined to use alternate SKUs, all item references must use them.

## Codes and Translations:

Many fields in INFOplus have a set number of predefined possible values.  Rather than store a term or phrase hundreds or thousands of times in the table we translate those terms into a code and store the code instead.  Those translations are stored in a table called translate.  A

code's value must be defined in the translate table prior to being submitted in a data feed.

| Category |
| --- |
| ACCOUNT CODE |
| ACTIVITY |
| BILLING PARTY |
| BRANCH# |
| BUDGET CODE |
| BUYER |
| CONTROL # |
| DIVISION |
| EMPLOYEE |
| L/S CODE |
| L/S CONTACT |
| MAJOR GROUP |
| MINORITY CD |
| OUTSIDE VEND |
| PO ACCT CODE |
| PRICE LEVEL |
| PROD CODE |
| REQ APPROVAL |
| REQ CATEGORY |
| RETURN ACTN |
| RETURN RSN |
| SECTOR |
| SUB GROUP |
| SUMMARY CODE |

## Sector

The sector code can be used to control access to ordering items from the view of the catalog.  In general, there needs to be a match between one or more of the characters in the branch's sector and one or more of the characters in the master record's sector in order for a branch to see that item on their catalog.  For example, if the branch record's sector contains 1BDR and the master record's sector contains 246ABC, there would be a match on the B so the branch could see the item. .  An exception is that if either sector is blank, the branch can see the item.

## Maximum Cycle / Interim Order Quantity

For "old-style" restriction handling, this is where you specify the maximum number of pieces that a branch with "average" activity can be shipped on a single order.  Cycle orders refer to periodic (often quarterly) orders where the intention is to allow a large enough supply of product to last until the following cycle order.  Interim orders are those that are placed between cycles, if a branch finds themselves coming

up short and needs to order a few more to get by until their next cycle order.  If this account doesn't use a scheduled order cycle both values should be the same.

For inventories, which do not require Materialogic to manage restrictions, these fields should be populated with 999999999.

# Contract Vendor, Price, Per, Expire:

INFOplus can help manage the purchasing of items from specific vendors.  If the purchasing of an item has been contracted to a particular vendor and a Purchase Order is placed to a different vendor, the user will be advised that they are buying outside of the contract.  All four fields must be populated.

# Estimated Usage

Estimated usage is used in projecting future usage for new items.  In order to have any chance of creating lowstock notices in a timely manner, INFOplus needs to know how much demand to anticipate.  If true usage is available from historical activity, it is recommended that it be used.  If it is not available, any estimate is acceptable as long as the numbers are non-negative integers.  Every month must have a non-blank value.  As live usage becomes available, it replaces estimated usage on a month-by-month basis.  If an item is defined in January and 6 months go by, updating the estimate usage for the months of January through June will no longer have any effect.

# Lead Time / Fixed Reorder Point

Every item with a reorder-code of 5 must have either a lead-time or a fixed reorder point.  This is the point at which a lowstock notice is issued.  The preferred method is lead-time.

Lead-time is the number of days you would like a lowstock notice to be issued in advance of running out of stock.  With a lead-time, INFOplus will check to see if the current supply, used at the projected rate, will last the number of days specified.  This approach will automatically handle changes in usage and seasonality without constant monitoring and adjustment.

If you provide a fixed reorder point, a lowstock notice is simply created when the available stock falls below the designated quantity.

# Absolute Max

One of the controls in INFOplus is to allow a branch's level of activity to influence how restrictions apply to it.  An item may have a normal maximum allowable quantity of 100, but a branch might be rated with a restriction percent of 200, meaning that it can have two hundred percent of the normal restriction.  A "Y" in the Absolute Max field says that the branch restriction factor does not apply to this item.

# Critical Item

Some items are considered more critical than others.  In the case of an item declared as critical, special care is taken to try to make sure that everybody gets some.  It is up to the customer to keep an adequate supply in the warehouse, but failing that, if the available inventory level falls below an predetermined inventory-wide percent of the reorder point, shipments are reduced to one package per order.  If the item is back orderable, a back-order will be created for the portion that did not ship.  The item will not ship to zero.  The last package will be retained for manual handling.

# Special Notations

### Master record field dependencies

- Items in Lowstock status – changing the item's lead-time, fixed-reorder point, reorder-code, or seasonality will take the item out of lowstock status. When the next Good Morning Report is run the item will be re-evaluated for lowstock status.
- Making items obsolete (reorder-code 7) – causes any open, unprocessed shipments for that item to be cancelled; the item will be removed from the catalog; the item will be removed from standard orders; and all inventory will be frozen.
- Designating an item as retail (charge-code 2) - causes it to be deleted from substitutions.
- Changing item charge-codes – causes the charge code on the item to be changed for all shipments since the close of the previous accounting period.  It is recommended that any changes to charge codes be made immediately after the beginning of an accounting period, or as soon as possible thereafter, to minimize changes to customer billing.