Posti

Detailed instructions for InItemMaster XML usage

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Document Revision History

REVISION	Date	Description (changes made)	Author
	28.11.2016	MOVE SerializedFlag to Primary information chapter	Ying Wang
	28.8.2017	- Added ItemList/Item/PrimaryInformation/IsParcelShippingAllowed. - Added ItemList/Item/PrimaryInformation/PrimarySupplier. - Added ItemList/Item/Extn/ExtnManufacturingDays. - Added ItemList/Item/Extn/ExtnHeatedTransport.	Maria Salo
	2.10.2017	Added ItemList/Item/ClassificationCodes/StorageType.	Maria Salo
	3.10.2017	- Added ItemList/Item/LanguageDescriptionList/LanguageDescription/Description. - Added ItemList/Item/LanguageDescriptionList/LanguageDescription/LocaleCode.	Maria Salo
	24.11.2017	Added ItemList/Item/Extn/ExtnItemConfigId.	Maria Salo
	28.11.2017	Modified description for ItemList/Item/InventoryTagAttributes/Extn/ExtnBestBeforeDate.	Maria Salo
	21.12.2017	Fixed typing mistake: GlobalItemId -> GlobalItemID.	Maria Salo
	7.2.2018	- Changed dimension UOM to METER (was CM). - Removed ItemList/Item/ClassificationCodes/StorageType (used internally). - Removed ItemList/Item/Extn/ExtnItemConfigId (used internally). - Updated description for PrimarySupplier.	Maria Salo
	8.10.2018	Added ItemList/Item/PrimaryInformation/DefaultProductClass.	Maria Hautala
	5.12.2018	Added 2 new UOM codes (PLO, KPL) for the item (ADBL-339)	Tanel Torn

REVI SION	Date	Description (changes made)	Author
	11.6.2019	Changed dimension UOM back to CM.	Maria Hautala

Document Approval History

Name	Signature	Date	Version Approved / Comments

Related or Reference Documents

Document Name	Description	Owner	Location
InItemMaster.xlsx	Description of InItemMaster XML fields.		
InItemMaster	Example of InItemMaster XML file.		

TABLE OF CONTENTS

1 General

1.1 Purpose

InItemMaster is the standard way to transfer item information to Posti Logistics and it consists of item information from principal to Posti WMS.

The purpose of this document is to define technically how InItemMaster message is used and what kind of data is needed in Posti's systems.

The actual logistics services are described in the contract between Posti and principal.

2 Overview

2.1 Item management principles

- Maintain items uniquely.
- Support for lot control items (e.g. time sensitive items).
  - If items are time sensitive then FEFO (First Expired, First Out) is used, otherwise FIFO (First In, First Out) is used.
- Support for stackability restrictions (e.g. how many pallets can be in a stack).
- Support for multiple item aliases (e.g. EAN codes).
- Support for cost items.
- Support for serial tracked inventory.
- Define an item as fragile.
- Support for hazardous material handling.
- Item's dimension measurement and general logistic properties.

2.2 Technical Requirements

- Interface for application to application integration. (High volume customers)
- WMS online web application. (Low volume customers)

3 Assumptions and Dependencies

3.1 Assumptions

- Item can be inventory item or non-inventory item or packaging item.
- Data is case sensitive.
- Decimal separator is dot.
- Date format is YYYY-MM-DDTHH:MM:SS+2:00.

3.2   Dependencies with agreed Posti WMS configurations

The following list consists of values which are predefined by Posti. More information later in this document.

- Item aliases.
- Units of measure.
- Additional attribute names.
- Item instruction types.
- Alternate units of measure.
- Product lines.

4   Item management

4.1   New item

If item does not exist in Posti WMS, it will be created.

If item data is not found in Posti's WMS system (not sent from principal) when the item is first received at the warehouse, it can be created by Posti based on the contract between Posti and the principal.

4.2   Update item

If item exists in Posti WMS, it will be updated.

4.3   Delete item

Items are not deleted from Posti WMS. If an item is not used anymore, the primary information status of the item should be changed to 2000 = Inactive. More information later in this document.

5   Component Design

5.1   ItemList/MetaData

MetaData is used for message quality control and routing purposes.

5.1.1   DocumentType

Name of the document. Default value is InItemMaster.

5.1.2   CreationDateTime

Date and time of item master creation. If principal sets the time, it will be used. Otherwise Posti will use the current date and time of when the message is received.

5.1.3   SourceOrganizationId

Code for the organization that sends the item master message. This code is provided by Posti (principal identifier). The correct code must be used or the message will fail in the integration layer.

5.1.4   Language

Language code of the item master in two-letter ISO 639-1 format, e.g. FI.

5.1.5   ExternalUserId

Identifier of the principal in external system (OVT code, EDI sender ID).

5.1.6   MessageIdentifier

Identifier of the message which is unique at least in the scope of message sender. If no value is given, Posti will generate a unique identifier (UUID).

MessageIdentifier can be used for troubleshooting purposes to uniquely identify any message that has been sent or received by Posti integration environment.

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5.2   ItemList/Item

5.2.1   UnitOfMeasure

Unit of measure (UOM) code of the item in ISO format.
Valid values:
- KG
- M
- H
- PLO
- KPL

Use of other unit of measure codes must be discussed and agreed with Posti. The same applies if multiple units of measure are needed (sales UOM, purchase UOM, etc.).

5.2.2   GlobalItemID

Global Trade Item Number (GTIN). Used in GS1 labeling. For more information, see www.gs1.fi.

5.2.3   ItemID

Principal's unique identifier for an item.

From logistics point of view the best kind of item code is the code that can be easily used in warehousing - receiving, stocking and delivering. E.g. EAN code can be used in both meanings – item code and EAN code.

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5.3   ItemList/Item/PrimaryInformation

If dimensions are not sent by principal, warehouse user will have the ability to manually measure items when they are received. They will measure and enter item dimensions to principal's items in Posti WMS.

5.3.1   UnitWidthUOM

Unit of measure (CM = centimeter) in which item width is measured.

5.3.2   UnitWidth

The width of one unit of item quantity.

5.3.3   UnitWeightUOM

Unit of measure (KG = kilogram) in which item weight is measured.

5.3.4   UnitWeight

The weight of one unit of item quantity.

5.3.5   UnitLengthUOM

Unit of measure (CM = centimeter) in which item length is measured.

5.3.6   UnitLength

The length of one unit of item quantity.

5.3.7   UnitHeightUOM

Unit of measure (CM = centimeter) in which item height is measured.

5.3.8   UnitHeight

The height of one unit of item quantity.

5.3.9   Status

3000 indicates that the item is published and active. Used with inventory items and packaging items. This is used as default value.

2000 indicates that the item is held and inactive. Used with non-inventory items.

5.3.10 ProductLine

Principal's product line. Product line is stored for item, but information is not used in logistic processes in Posti WMS. Might be used for reporting purposes and is agreed in the contract between principal and Posti.

5.3.11 ManufacturerName

Manufacturer (or vendor) name is stored for item, but information is not used in logistic processes in Posti WMS. Can be used for reporting purposes and agreed separately. Can be used in purchase orders for inventory replenishment, in cases where Posti is acting as a sourcing party for principal.

5.3.12 ManufacturerItem

Manufacturer's or vendor's item code is stored for item, but information is not used in logistic processes in Posti WMS. Can be used in purchase orders for inventory replenishment, in cases where Posti is acting as a sourcing party for principal. Might be used for reporting purposes and is agreed in the contract between principal and Posti.

5.3.13 ItemType

Principal's item type. Item Type is stored for item, but information is not used in logistic processes in Posti WMS. Might be used for reporting purposes and is agreed in the contract between principal and Posti.

5.3.14 IsHazmat

This flag indicates if item is hazardous material.

In all cases Posti controls the UN codes and other dangerous goods data and updates the correct information in its own system.

5.3.15 IsParcelShippingAllowed

This flag indicates whether the item can be shipped through parcel service. Default value: Y.

5.3.16 ExtendedDescription

Extended description and description will be the same if there is no need to have different descriptions. Different usage should be discussed and agreed in the contract between principal and Posti.

5.3.17 Description

Extended description and description will be the same if there is no need to have different descriptions. Different usage should be discussed and agreed in the contract between Principal and Posti.

5.3.18 EffectiveEndDate

Defines the end date for when the item is valid. After the effective end date the item is no longer valid for normal shipment.

5.3.19 CountryOfOrigin

The item's country of origin. ISO country codes are used.

5.3.20 SerializedFlag

This flag indicates whether an item is to be serial tracked during the outbound and return processes.

5.3.21 PrimarySupplier

The primary supplier. This will have the primary supplier organization code (Posti WMS organization code) for the item.

5.3.22 DefaultProductClass

The default product class of an item.

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5.4   ItemList/Item/InventoryParameters

Inventory parameters cause extra work in warehousing and are always based on the contract between Posti and principal.

5.4.1   TimeSensitive

Value Y (= yes) means the item can last only for a limited period of time. If you have selected the TimeSensitive value Y, then also give a value for DefaultExpirationDays.

5.4.2   DefaultExpirationDays

The default number of days after which an item will expire.

5.4.3   TagControlFlag

A tag number is used to identify an item in the system regardless of the inventory identification numbers used, e.g. lot number. Inventory identification numbers are used to differentiate products within inventory because different item instances have

different characteristics. Some common examples of identification numbers are lot number and manufacturing batch number.

Let us consider an example where you have item A, which is uniquely identified by a lot number. In this case, when an instance of item A is created with the lot number of 12345, it is also assigned a tag number of 12345.

TagControlFlag can have the following values:
- Y indicates that the item is always tag controlled. In this case, tag identifiers are mandatory.
- N indicates that the item is never tag controlled.

5.4.4 IsSerialTracked

This flag indicates whether an item is to be serial tracked in inventory.

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5.5 ItemList/Item/ClassificationCodes

5.5.1 HarmonizedCode

The harmonized code of an item. Codes from 01 to 99.

5.5.2 CommodityCode

The commodity code of an item. Codes e.g. 33051000.

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5.6 ItemList/Item/Extn

5.6.1 ExtnShelfLifeDays

Shelf life duration, i.e. period of time that the item is valid for use. Represented by ISO 8601, e.g. "P100D" means 100 days.

5.6.2 ExtnManufacturingDays

The amount of days between the manufacturing date and best before date.

5.6.3 ExtnMaxStack

Max stack quantity in different types of pallet.

5.6.4 ExtnIsBBDControlled

Indicates whether best before date is controlled. If the value here is Y (= Yes), the value for InventoryTagAttributes/Extn/ExtnBestBeforeDate must be 02. This also requires the use of attribute TimeSensitive.

Ship by date is calculated based on best before date and shelf life date.

5.6.5 ExtnQCValue

Quality inspection quantity.

Posti will inspect items which are received for the first time in warehouse.

5.6.6 ExtnIsFragileProduct

Indicates whether the item is a fragile product and needs extra work in warehousing.

If principal has fragile items, their handling is described and agreed in the contract between principal and Posti.

5.6.7 ExtnHeatedTransport

Flag to indicate if the item needs heated transport, i.e. cannot be frozen.
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5.7 ItemList/Item/ItemAliasList/ItemAlias

Item alias names have predefined values.

In Posti WMS there is no standard logistic process based on item aliases. For certain item aliases special usage can be defined from a special requirement based on the contract between principal and Posti.

5.7.1 AliasName

Name of the item alias.

List of possible alias names:
- EAN1   unit level code
- EAN2   package level code

5.7.2 AliasValue

Alias value for the corresponding alias name.
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5.8 ItemList/Item/AdditionalAttributeList/AdditionalAttribute

Additional attributes have some predefined values.

In Posti WMS there is no standard logistic process based on additional attributes. For certain additional attributes special usage can be defined from a special requirement based on the contract between principal and Posti.

5.8.1 AttributeDomainID

The unique identification of the attribute domain.
AttributeDomainID = Name.

5.8.2 AttributeGroupID

The unique identification of the attribute group.
AttributeGroupID = Name.

5.8.3 Name

Name of the predefined attribute.

5.8.4 Value

Value of the attribute.

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5.9 ItemList/Item/LanguageDescriptionList/LanguageDescription

5.9.1 Description

A localized description.

5.9.2 LocaleCode

Locale for which the extended description is stored.

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5.10 ItemList/Item/InventoryTagAttributes

If you have selected TagControlFlag to be Y = yes, you must select tag attribute to use for an item. Specify Tag Identifier with valid value.

5.10.1 ManufacturingDate

Specify if manufacturing date is used.
Valid values:
- 01 - Use as Tag Descriptor.
- 03 - Not used.

5.10.2 LotNumber

Specify if lot number is used.

Valid values:
- 02 - Use as Tag Identifier.
- 03 - Not used.

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5.10.3 ItemList/Item/InventoryTagAttributes/Extn

5.10.3.1 ExtnBestBeforeDate

Specify if best before date is used.
Valid values:
- 01 - Use as Tag Descriptor.
- 02 - Use as Tag Identifier.
- 03 - Not used.

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5.11 ItemList/Item/AlternateUOMList/AlternateUOM

Example of use:
Base unit of measure is set to 1 **PCS**. **Sales** unit of measure is set to **CRT** that holds 12 PCS.
If 12 PCS are ordered, warehouse process will pick 1 CRT.

Use of alternate UOM should be agreed in the contract between principal and Posti.

5.11.1 UnitOfMeasure

Alternate UOM applicable for the item.

5.11.2 WidthUOM

Unit of measure (CM = centimeter) in which item width is measured.

5.11.3 Width

Width of an item with alternate UOM.

5.11.4 WeightUOM

Unit of measure (KG = kilogram) in which item weight is measured.

5.11.5 Weight

Weight of an item with alternate UOM.

5.11.6 Quantity

Conversion quantity to the inventory UOM.

5.11.7 LengthUOM

Unit of measure (CM = centimeter) in which item length is measured.

5.11.8 Length

Length of an item with alternate UOM.

5.11.9 IsOrderingUOM

Indicates if UOM can be used as ordering unit of measure.

5.11.10 HeightUOM

Unit of measure (CM = centimeter) in which item height is measured.

5.11.11 Height

Height of an item with alternate UOM.

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5.12 ItemList/Item/ItemInstructionList/ItemInstruction

Item instructions have predefined types.

In Posti WMS there is no standard logistic process based on item instructions. For certain item instructions special usage can be defined from a special requirement based on the contract between principal and Posti.

5.12.1 SeqNo

Item instructions have sequence numbers in use.

In case you predefine item instructions you have to determine the sequence number for each and use it in integration.

5.12.2 InstructionType

Instruction type.

5.12.3 InstructionText

Free form instruction text for the given instruction type.