

Meperia Strategic Sourcing

Contract Interface HL7 Guide

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Contract Interface HL7 Guide

Overview

Purpose

The Contract Interface is used to import contracts into Meperia Strategic Sourcing™ (Strategic Sourcing) in HL7, CSV (tab-delimited), or Microsoft Excel format.

Meperia recommends and prefers the CSV (tab-delimited) format.

This guide covers the HL7 format only.

The contract data file you create can be imported into Strategic Sourcing using the **Load Data** function in **Content Management**.

Audience

The Contract Interface HL7 Guide is intended for the healthcare organization's administration staff responsible for populating the Strategic Sourcing database with GPO contract data.

In this guide

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Contract Import Interface HL7 file format

Contract Master File - Message Structure

The following segments are required: MSH, MFI, MFE, CTR, ITM, and VND.

PKG is optional, because a contract can be saved as Active with no items on it. The message would have MSH, MFI, MFE, CTR, ITM (blank), VND, and PKG (blank)

MSH – Message Header Segment

Sequences 1,2, 7, and 9 are required. Sample output:

MSH|^~\&|SupplyChain|||2012100110215357||MFN^M18^MFN_M18|153335234|P|2.9

Seq	HL7 Element Name	Data Type	Description
1	Field Separator	ST	Sample output:
2	Encoding Characters	ST	Sample output: ^~\&
3	Sending Application	HD	Sample output: SupplyChain
4	Sending Facility	HD	
5	Receiving Application	HD	
6	Receiving Facility	HD	
7	Date/Time of Message	DTM	Current System Date when interface transaction is created in format: YYYYMMDDHHMMSS Sample output: 20110810102150
8	Security	ST	
9	Message Type	MSG	Hardcode MFN^M18^MFN_M18

Seq	HL7 Element Name	Data Type	Description
10	Message Control ID	ST	System generated number that uniquely identifies the message. Receiving system echoes this ID back in the Message Ack segment (MSA).
11	Processing ID	PT	P = Production T = Test
12	Version ID	VID	Hardcode 2.9

MFI - Master File Identification Segment

Sequences 1, 3, and 6 are required. Sample output: MFI|CTR||UPD||AL

Seq	HL7 Element Name	Data Type	Description
1	Master File Identifier	CWE	Hardcode CTR (Contract master file) Sample Output: CTR
2	Master File Application Identifier	HD	
3	File-Level Event Code	ID	Hardcode UPD (update) Other possible value could be REP for replace Sample Output: UPD
4	Entered Date/Time	DTM	
5	Effective Date/Time	DTM	
6	Response Level Code	ID	We send AL for TCP/IP and NE for file output. Values: AL - Always NE – Never ER – Error/Reject conditions only SU – Success Sample Output: AL, NE

MFE – Master File Entry Segment

Sequences 1, 4, and 5 are required Sample output:

MFE|MUP|||253443|EI|20131001102150357|lfaceMgr

Seq	HL7 Element Name	Data Type	Description
1	Record-Level Event code	ID	MAD = Add record to master file MDL = Delete record from master file MUP – Update record for master file MDC = Deactivate; discontinue using record in master file but do not delete from database MAC = reactivate deactivated record
2	MFN Control ID	ST	
3	Effective Date/Time	DTM	
4	Primary Key Value – MFE	Varies	Send Contract number sent in CTR^1
5	Primary Key Value Type	ID	EI
6	Entered Date/Time	DTM	YYYYMMDDHHMMSS Date when the contract add/update record was sent to the Hub.
7	Entered By	XCN	

Contract Master Outbound – CTR

Sequences 1, 4, 5, and 19 are required. Sample output:

Seq	HL7 Element Name	Data Type	Description
1	Contract Identifier	EI	Contract number. We do not receive Distributor contracts.
2	Contract Description	ST	Description of the Contract.
3	Contract Status	CWE	Status of the contract (active, inactive, expired, etc).
4	Effective Date	DTM	Date the contract is available for purchases.
5	Expiration Date	DTM	Date the contract is unavailable for purchases.
6	Contract Owner Name	ST	Person who manages the contract.
7	Contract Originator Name	ST	Person who created the contract in the application.
8	Contract Type	EI	Suggested values: L = Local or G = Global. Can be user defined.
9	FOB	ST	Freight terms applied to the contract.
10	Price Protection Date	DTM	Date through which contract item prices are protected by agreement with vendor.
11	Fixed Price Contract Indicator	CNE	Whether or not items on the contract are purchased at the price indicated in Contract Price.
12	GPO ID		Obtained from the hub.
13	GPO Name	ST	For a GPO contract, name of a Group Pricing Organization
14	Cost Plus/List Less Discount Indicator	CNE	Whether or not a percentage is applied to each item's Product Cost and the result displayed in Contract Price.
15	Maximum Markup	CP	Highest percentage that can be applied to each item's Product Cost.
16	Actual Markup	CP	Actual percentage (markup or discount) applied to each item's Product Cost.

Seq	HL7 Element Name	Data Type	Description
17	Corporation Identifier^Corporation Name	XON	Entity identifier allowed to purchase from this contract. Required if IDN is sent. Repeats.
18	IDN		Integrated delivery network (parent of corporation)
19	Supplier Type		Valid values: D = Distributor contract M = Manufacturer contract
20	Tier Level		Tier level of contract prices for corporations sent in CTR-17 and description of the tier level.
21	Contract Priority		Hierarchy to determine default contract price when multiple contracts are available for the same item.
22	Class of Trade		Purchasing channel. For example, Hospital, Retail, etc
23	Associated Contract ID		To be used for contracts that are extended or renewed and assigned a new contract number.

ITM – Material Item Segment

The Material Item segment (ITM) contains data about inventory supply items (stocked or non-stocked). All sequences are optional.

Seq	HL7 Element Name	Data Type	Description
1	Item Identifier	EI	Item number
2	Item Description	ST	Description of the item.
3	Item Status	CWE	Status of an item (A=Active, I=inactive)
4	Item Type	CWE	Classification of material items into a group; parent of Item category. Example- Equipment, Supply, etc
5	Item Category	CWE	Classification of material items into a group; child of Item type.
6	Subject to Expiration Indicator	CNE	Indicates whether this item is subject to expiration.
7	Manufacturer Identifier	EI	Identifier of manufacturer.
8	Manufacturer Name	ST	Manufacturer name.
9	Manufacturer Catalog Number	ST	Manufacturer catalog number.
10	Manufacturer Labeler Identification Code	CWE	LIC number of item manufacturer
11	Patient Chargeable Indicator	CNE	Whether item is patient chargeable or not
12	Transaction Code	CWE	Patient billing code
13	Transaction amount - unit	CP	Patient Charge amount
14	Stocked Item Indicator	CNE	Whether item is stocked at a supply location

Seq	HL7 Element Name	Data Type	Description
15	Supply Risk Codes	CWE	Whether there is any known suspect or hazard associated with this item
16	Approving Regulatory Agency	XON	Regulatory agency the item has been approved by, such as the FDA or AMA. Repeats.
17	Latex Indicator	CNE	Whether this item contains latex
18	Ruling Act	CWE	Act containing a rule that the item is legally required to be included in notification reporting. Repeats.
19	Item Natural Account Code	CWE	Expense/natural account number from the GL chart of accounts associated with the item.
20	Approved To Buy Quantity	NM	Quantity of item that can be purchased within a user-defined time frame (e.g., one year) at the order unit of measure.
21	Approved To Buy Price	MO	Dollar limit of item that can be purchased within a user-defined time frame (e.g., one year).
22	Taxable Item Indicator	CNE	Whether item is taxable when purchasing or issuing to patients.
23	Freight Charge Indicator	CNE	Whether freight is an allowable charge to allocate to the line of an invoice containing the item.
24	Item Set Indicator	CNE	Whether the item is an item set rather than an individual item.
25	Item Set Identifier	EI	Unique code assigned to item set by the Item Inventory Master catalog to identify the item.
26	Track Department Usage Indicator	CNE	Whether usage figures are tracked for item by department.
27	Procedure Code	CNE	HCPCS code
28	Procedure Code Modifier	CNE	Modifies the HCPCS procedure code. Repeats.

Seq	HL7 Element Name	Data Type	Description
29	Special Handling Code	CWE	Describes special handling considerations for item.
30	Hazardous Indicator	CNE	Whether the item contains hazardous material or not.
31	Sterile Indicator	CNE	Whether the item is sterile or not.
32	Material Data Safety Sheet Number	EI	Manufacturers ID number for the Material Safety Data Sheet (if one exists for item).
33	United Nations Standard Products and Services Code (UNSPSC)	CWE	UNSPSC Code
34	Contract Start Date		Date the contract becomes available to purchase from
35	Contract Expiration Date		Date the contract becomes unavailable to purchase from
36	Manufacturer Contact phone^email		Contact name and email of the Manufacturer
37	Class of Trade		Purchasing channel. For example, Hospital, Retail, etc

VND – Purchasing Vendor Segment

Contains information on purchasing vendors that supply the inventory supply item in the ITM segment. When VND is the Manufacturer, the value in VND-2 matches the value in ITM-7 (Manufacturer ID).

Sequences 2, 3, and 6 are required.

Seq	HL7 Element Name	Data Type	Description
1	Set Id – VND	SI	Auto generated, same value as PKG-1 to make sure the pair are associated.
2	Vendor Identifier	EI	GPO Internal vendor identifier
3	Vendor Name	ST	Name of Vendor
4	Vendor Catalog Number	EI	Vendor Catalog number
5	Primary Vendor Indicator	CNE	Whether vendor is primary for purchasing the item
6	Corporation	EI	Identifier code and name of the corporation. We send the Supply Chain Mgmt corporation code^GPO member ID^GPO Member Name. Provides for one corp to many member relationships. Repeats
7	Primary contact phone^Email		
8	Contract Adjustment		For example, 1.000 (if no adjustment) or 0.9968 (four decimals of precision)
9	Associated Contract ID		Associated with CTR segment contract number. To be used for contracts that are extended or renewed and assigned a new contract number. Repeats.
10	Class of Trade		Channel the item can be purchased through. Associated with corporation from sequence 6. Repeats in the same order as corporation. For examples, Hospital, Retail, etc. Repeats

Seq	HL7 Element Name	Data Type	Description
11	Tier Level		Tier level where the contract is priced for corporations sent in VND-6, and description of the tier level.
12	Distributor Contract Number		Contract number of the distributor when VND is for a distributor.
13	Distributor Contract Effective Date	DTM	Date the distributor contract becomes available to purchase from.
14	Distributor Contract Expiration Date	DTM	Date the distributor contract becomes unavailable to purchase from.

PKG – Packaging Segment

Contains packaging data for the inventory supply item ordered for or issued to a department or other supply location for a Purchasing Vendor. Meperia recommends sending this segment in descending unit of measure order corresponding with the ascending Set ID.

Sequences 1, 2, 9, 10, and 11 are required.

Seq	HL7 Element Name	Data Type	Description
1	Set Id – PKG	SI	Auto generated. Same value as the related VND-1 to ensure the pair are associated/grouped.
2	Packaging Units	CWE	Unit of measure.
3	Default Order Unit Of Measure Indicator	CNE	Default UM of item
4	Package Quantity	NM	Quantity in the UM sent in sequence 3
5	Price	CP	Price of the item UM sent in sequence 3
6	Future Item Price	CP	Future price of the item UM sent in sequence 3

Seq	HL7 Element Name	Data Type	Description
7	Future Item Price Effective Date	DTM	Effective date of the future price of the item UM sent in sequence 3
8	Global Trade Item Number	CWE	GTIN of the item in the item UM sent in sequence 3
9	Contract Price	CP	Contract price of the item UM sent in sequence 3.
10	Quantity of Each		Quantity of lowest UM in the UM sent in sequence 3
11	Vendor Catalog Number		Catalog number of the item UM sent in sequence 3

Sample message

MSH|^~&|SupplyChain|||2013090910215357||MFN^M18^MFN_M18|153335234|P|2.9
MFI|CTR||UPD||AL
MFE|MAD|||MS54671-A|EI|20121001102150357|
CTR|MS54671-A| CSPG-Ophthalmic Surgical Products CSP, Custom pricing for MS02332, Ophthalmic Surgical Products|| 20130701|20160331|||CH|||GP001|GPO Name|||M|||
ITM|| FLEXIBXLE IRIS RETRACTORS 1 BXOX|||59|Alcon Laboratories, Inc|611.74|||20130701|20160331||
VND|123|59|Alcon Laboratories, Inc|||01~5446~08~90078~0100~5830~0300~36309~0500~21258~0600~35952~0700~20624~0800~3213~1200~7863~20~637|~Hospital A~~Hospital B~~Hospital C~~Hospital D~~Hospital E~~Hospital F~~Hospital G~~Hospital H~~Hospital I~~Hospital J||1.0000||~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~340B/DSH Inpatient|Available to your facility|4653001|
PKG|123|EA|||110.00|1|611.74
VND|124|3559|Cardinal Health 200, LLC|||01~5446~08~90078~0100~5830~0300~36309~0500~21258~0600~35952~0700~20624~0800~3213~1200~7863~20~637|~Hospital A~~Hospital B~~Hospital C~~Hospital D~~Hospital E~~Hospital F~~Hospital G~~Hospital H~~Hospital I~~Hospital J||1.0360||~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~340B/DSH Inpatient|Available to your facility|4653001|
PKG|124|EA|||113.96|1|611.74
ITM|| BXSS 500ML GLASS<USA|||59|Alcon Laboratories, Inc|0065079550|||20130701|20160331||
VND|125|59|Alcon Laboratories, Inc|||01~5446~08~90078~0100~5830~0300~36309~0500~21258~0600~35952~0700~20624~0800~3213~1200~7863~20~637|~Hospital A~~Hospital B~~Hospital C~~Hospital D~~Hospital E~~Hospital F~~Hospital G~~Hospital H~~Hospital I~~Hospital J||1.0000||~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~340B/DSH Inpatient|Available to your facility|4653001|
PKG|125|BX|||33.0000|1|0065079550
VND|126|3559|Cardinal Health 200, LLC|||01~5446~08~90078~0100~5830~0300~36309~0500~21258~0600~35952~0700~20624~0800~3213~1200~7863~20~637|~Hospital A~~Hospital B~~Hospital C~~Hospital D~~Hospital E~~Hospital F~~Hospital G~~Hospital H~~Hospital I~~Hospital J||1.0000||~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~Hospital~~340B/DSH Inpatient~~Hospital~~Hospital~~340B/DSH Inpatient|Available to your facility|4653001|
PKG|126|BX|||34.1880|1|0065079550

HL7 file format processing notes

Event codes

The first load of contracts are sent to Strategic Sourcing with the MAD event code.

Updates to contracts that are not expired are sent to Strategic Sourcing with the MUP event code.

Updates to contracts that are expired are sent to Strategic Sourcing with the MDC event code.

Updates to contracts that previously expired and have an extended expiration date are sent to Strategic Sourcing with the MAC event code.

Troubleshooting

Potential Contract Upload Issues

Potential issues from uploading contracts are listed in the following table.

When...	Then the system...
required fields (Mfr Name, Mfr Item ID, Vendor Name) are missing	does not upload the contract.
Contract Price is less than or equal to zero	
UOM is missing	
Corporation ID/Corporation Name is missing	uploads the contracts with "Unknown" Corporation.
GPO is missing	uploads the contract with "Unknown" GPO.

The following error messages indicate that the Contract Import Interface file cannot be processed because it is in an invalid format:

- Too few columns on the header line. The minimum is #####.
- Too many columns on the header line. The maximum is #####.
- Too long column header. The maximum is #####.
- Duplicate column header.
- The file is too large. The maximum is #####.
- Insupportable file type. The system can only handle .zip or .txt file.
- Too few lines on the file. The minimum is #####.
- Too many lines on the file. The maximum is #####.
- Too many files in this zip folder. The system allows only one text file with the same name in this zip folder.