

# Field mapping syntax for EDIFACT Invoice files

Data import loads EDIFACT invoice files to create FOLIO invoices and invoice lines.

**Background information on the EDIFACT invoice format:** (from [EDItEUR](#))

- [Monographic invoices](#)
- [Subscription invoices](#)

**Default field mapping profiles** are provided for a number of common vendors, listed below. The default profiles can be edited, duplicated, or deleted, as needed by an individual library. These default profiles are **not** complete enough to import invoices until they are edited, linked to an action profile, and linked to a job profile.

- Amalivre (formerly Aux Amateurs)
- Casalini
- CNPIEC
- Coutts
- EBSCO
- Erasmus
- GOBI
- Harrassowitz
- Hein
- Midwest
- Nardi
- WT Cox

For each data element in the field mapping profile, the library can specify default (constant) data or a mapping to one or more areas in the EDIFACT file or in the invoice line's related purchase order line (POL).

Adapting the default field mapping profiles for individual library use:

*Add details here - which fields need to be added, creating action profile, creating job profile*

## Default data

- Must be enclosed in double quotation marks, e.g. Terms: "Net 30"
- If the field has pre-defined reference data, a dropdown list appears. When a value is selected from a dropdown list, it will automatically be enclosed in quotation marks. To avoid types if a field has a dropdown list, libraries are encouraged to select a default value from the list, rather than typing the value into the field.

## EDIFACT field mapping

- An EDIFACT invoice consists of a header, one or more invoice lines, and a footer.
  - Segments of the invoice are separated by an apostrophe ( ' ) or caret ( ^ )
  - Within a segment, each field is separated by a plus sign ( + )
  - Within a field, each subfield is separated by a colon ( : )
  - A qualifier may also be appended to a subfield, following the subfield's data, and pre-pended with a colon

## Sample syntax

### Invoice date:

Sample	Vendor	FOLIO field mapping syntax	Resulting value (excluding tenant localization)
DTM+137:20191002:102'	(EBSCO)	DTM+137[2]	2019-10-02
DTM<137^20201030^102>	(Hein)	DTM<137[2]	2020-10-30
DTM+137:20201102:102'	(Amalivre)	DTM+137[2]	2020-11-02

### Invoice line description:

Sample	Vendor	FOLIO field mapping syntax	Resulting value (if taken from invoice data rather than POL)
IMD+L+050+:::ACI MATERIALS JOURNAL - ONLINE -MULTI USER'	(EBSCO)	{POL_title}; else IMD+L+050+[4-5]	ACI MATERIALS JOURNAL - ONLINE: MULTI-USER
IMD+F+050+:::Les Maisons de Mandres'	(Amalivre)	{POL_title}; else IMD+F+050+[4-5]	Les Maisons de Mandres
IMD<F<JTI<^^^USER'S GUIDE TO THE BLUEBOOK>	(Hein)	{POL_title}; else IMD<F<JTI<[4-5]	USER'S GUIDE TO THE BLUEBOOK
IMD++050+:::post-digital times?.'	(Erasmus)	{POL_title}; else IMD++050+[4-5]	post-digital times

PIA+5+9787100178655:IB'	(CNPIEC)	{POL_title}; else PIA+5+?IB [1]	978100178655
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**Invoice lock total amount:**

Sample	Vendor	FOLIO field mapping syntax	Resulting value
MOA+9:18929.07'	(EBSCO)	MOA+9[2]	18929.07
MOA+86:1083.08'	(GOBI)	MOA+86[2]	1083.08
MOA<86^458.94>	(Hein)	MOA<86[2]	458.94
MOA+8:56.13:USD:4'	(Amalivre)	MOA+8?4[2]	56.13
MOA+39:213.85:USD:4'	(Harrassowitz)	MOA+39?4[2]	213.85

**Vendor invoice number:**

Sample	Vendor	FOLIO field mapping syntax	Resulting value
BGM+380:::JINV+0704159+43'	(EBSCO)	BGM+380+[1]	0704159
BGM<380<267908<43>	(Hein)	BGM<380<[1]	267908
BGM+380+649039+9'	(Amalivre)	BGM+380+[1]	649039
BGM+380+583607'	(GOBI)	BGM+380+[1]	583607
BGM+380:::JINV+448603+55'	(Harrassowitz)	BGM+380+[1]	448603

**Kinds of prices**

EDIFACT invoices can include many types of prices at the invoice level and at the invoice line level. Details for them are available in the [EDIFACT documentation](#). Here is a list of the most common ones:

EDIFACT field	Description
MOA+146	Line item unit price
MOA+203	Line item amount, excluding tax
PRI+AAA	Line item net amount, excluding tax
PRI+AAB	Line item gross amount, excluding all adjustments
MOA+79	Total of the line item amounts, excluding tax
MOA+9	Total amount payable, including any adjustments and tax

**Some field mapping examples for prices**

Sample	Vendor	FOLIO Field mapping syntax	Resulting value
MOA+9:18929.07'	(EBSCO)	MOA+9[2]	18929.07
MOA<86^458.94>	(Hein)	MOA<86[2]	458.94
MOA+8:56.13:USD:4'	(Amalivre)	MOA+8?4[2]	56.13
MOA+203:81.42:USD:4'	(Harrassowitz)	MOA+203?4[2]	81.42
MOA+203:28:EUR:4A'	(Amalivre)	MOA+203?4A[2]	28.00

**Purchase order line (POL) matching and field mapping**

- An invoice line can be matched to its corresponding purchase order line (POL) via the POL number or any Vendor reference number recorded in the FOLIO POL and the incoming invoice line. Data import will first attempt to match to the POL via the POL referenced in the invoice line.
  - If the invoice line POL matches one Open FOLIO POL, the invoice line is linked, and any data mapped from the POL is added to the FOLIO invoice line.
  - If the invoice line POL 1) does not match any Open FOLIO POL, or 2) matches multiple Open FOLIO POLs, or 3) there is no POL in the invoice line, then the invoice line can attempt to match to a POL via a vendor reference number.

- If an invoice line vendor reference number matches one Open FOLIO POL, the invoice line is linked, and any data mapped from the POL is added to the FOLIO invoice line.
- If an invoice line vendor reference number 1) does not match any Open FOLIO POL, or 2) matches multiple Open FOLIO POLs, or 3) there is no vendor reference number in the invoice line, then the invoice line data will load to FOLIO without a link to a POL
  - When the invoice is manually reviewed, any unlinked invoice lines can be manually linked to corresponding POLs before invoice approval or payment.
- Note: When manually linking a POL to an invoice line, the POL's PO can be Pending, Open, or Closed. When Data Import automatically links a POL to an invoice line, the POL is only linked if its PO status is Open.
- Once a POL is linked to an invoice line, libraries may prefer to populate some of the invoice line data from the POL rather than the invoice line. Such data elements might include Description (from the POL Title field), Acquisition units, POL number, Fund, Expense class, and/or Value. The POL number field of the invoice line can only be populated from the POL if the POL is matched to the invoice line via a Vendor reference number. Otherwise, the POL must be mapped from the incoming EDIFACT data or manually entered into the invoice line after import.
- As of **Juniper**, a user can link or re-link an invoice line to its corresponding purchase order line. If the library expects to be invoiced again for that purchase order line in the future, it's best to 1) update the POL with whatever vendor reference number the vendor is citing on the invoice line, or to 2) alert the vendor to change that reference number in the vendor's system for future invoices against that POL.
- EDIFACT invoice field mapping syntax for individual POL fields: These are not case sensitive, so they can be entered in the field mapping profile in upper-case, lower-case, or mixed-case. The value must be enclosed in braces, as shown in this table.

POL Field	Field Mapping Syntax
POL title	{POL_TITLE}
Acquisition units (from the PO)	{PO_ACQUISITION_UNITS}
POL number	{POL_NUMBER}
POL fund id	{POL_FUND_ID}
POL expense class	{POL_EXPENSE_CLASS}
POL value	{POL_VALUE}

#### Sample POL and Vendor reference number mappings

Sample	FOLIO field mapping syntax	Resulting value
PIA+1+99985113084:SA'	PIA+1+?SA[1]	99985113084
PIA+5+288357478:SA'	PIA+5+?SA[1]	288357478
PIA<5<00008163^SA>'	PIA<5<?SA[1]	00008163
RFF+LI:1150816'	RFF+LI[2]	1150816
RFF+LI:VLI835774AM'	RFF+LI[2]	VLI835774AM
RFF+LI:S174547'	RFF+LI[2]	S174547
RFF+LI:VLI839337YL'	RFF+LI[2]	VLI839337YL
RFF+LI:281990'	RFF+LI[2]	281990
RFF+LI:1032123'	RFF+LI[2]	1032123
RFF+ON:1ABG9102'	RFF+ON[2]	1ABG9102
RFF<ON^1ALC5559>'	RFF<ON[2]	1ALC5559
RFF+SLI:99985428503'	RFF+SLI[2]	99985428503
RFF+SLI:10008-1'	RFF+SLI[2]	10008-1
RFF+SNA:BR7770675AA000579790'	RFF+SNA[2]	BR7770675AA000579790
RFF+SNA:D1427558'	RFF+SNA[2]	D1427558
RFF+SNA:60400123'	RFF+SNA[2]	60400123
RFF+SNA:7719687'	RFF+SNA[2]	7719687
RFF+SNA:1AEL3378'	RFF+SNA[2]	1AEL3378
RFF+SNL:1AEL3378'	RFF+SNL[2]	1AEL3378

#### Combining mappings

EDIFACT field mappings, POL field mappings, and defaults can be combined for individual fields, to create a cascade of options for the field. The most common example is the invoice line **Description** field, which is a required field. If the incoming invoice line matches to a purchase order line (POL), usually the library will want the invoice line Description field to be populated with the POL's title field. If the incoming invoice line does not match to a POL, then the library usually will want the invoice line's description to be populated from the incoming EDIFACT data.

Sample	Vendor	FOLIO field mapping syntax	Resulting value (if invoice line is not matched to POL)
IMD+L+050+:::ACI MATERIALS JOURNAL - ONLINE - :MULTI USER'	(EBSCO)	{POL_title}; else IMD+L+050+[4-5]	ACI MATERIALS JOURNAL - ONLINE:MULTI USER
IMD+F+050+:::Les Maisons de Mandres'	(Amalivre)	{POL_title}; else IMD+F+050+[4-5]	Les Maisons de Mandres
IMD<F<JTI<^^USER'S GUIDE TO THE BLUEBOOK>	(Hein)	{POL_title}; else IMD<F<JTI<[4-5]	USER'S GUIDE TO THE BLUEBOOK
IMD++050+:::post-digital times?.'	(Erasmus)	{POL_title}; else IMD++050+[4-5]	post-digital times?'
PIA+5+9787100178655:IB'	(CNPIEC)	{POL_title}; else PIA+5+?IB[1]	9787100178655

*Add info about FOLIO POLs, and storing previous POLs as vendor reference numbers*

#### EDIFACT mapping issues still to be resolved

Field	Issue	Related Jira	Workaround
Currency	Default CUX+2 mapping does not work properly		Replace the currency mapping in the field mapping profile with the default currency <b>code</b> from the dropdown list
Invoice level adjustments	Mapping is not yet working properly	<a href="#">MODDICO RE-125</a>	Add manually after the rest of the invoice has been imported
Invoice line level adjustments	Mapping is not yet working properly	<a href="#">MODDICO RE-124</a>	Add manually after the rest of the invoice has been imported, or consider mapping the net amount, rather than the gross amount and separate adjustments.
Price qualifiers on a separate line from the amounts	Mapping pattern needs to be created	<a href="#">MODDICO RE-123</a>	Add manually after the rest of the invoice has been imported
Subscription start and end dates	Mapping pattern needs to be created for the more complex PIA+5S/PIA+5E segments		Ask vendor to deliver subscription start/end dates in the simpler DTM+194 /DTM+196 segments or IMD+L+085/IMD+L+086 segments instead