

Steps for Creating and Publishing PunchOut[®] Catalogs for RR Donnelley

INTERNAL

Agenda

Setting up your Ariba Network Account for PunchOut

- PunchOut URL and Authentication

Templates and Catalog File Creation

- Level 1 and Level 2 Catalog Files

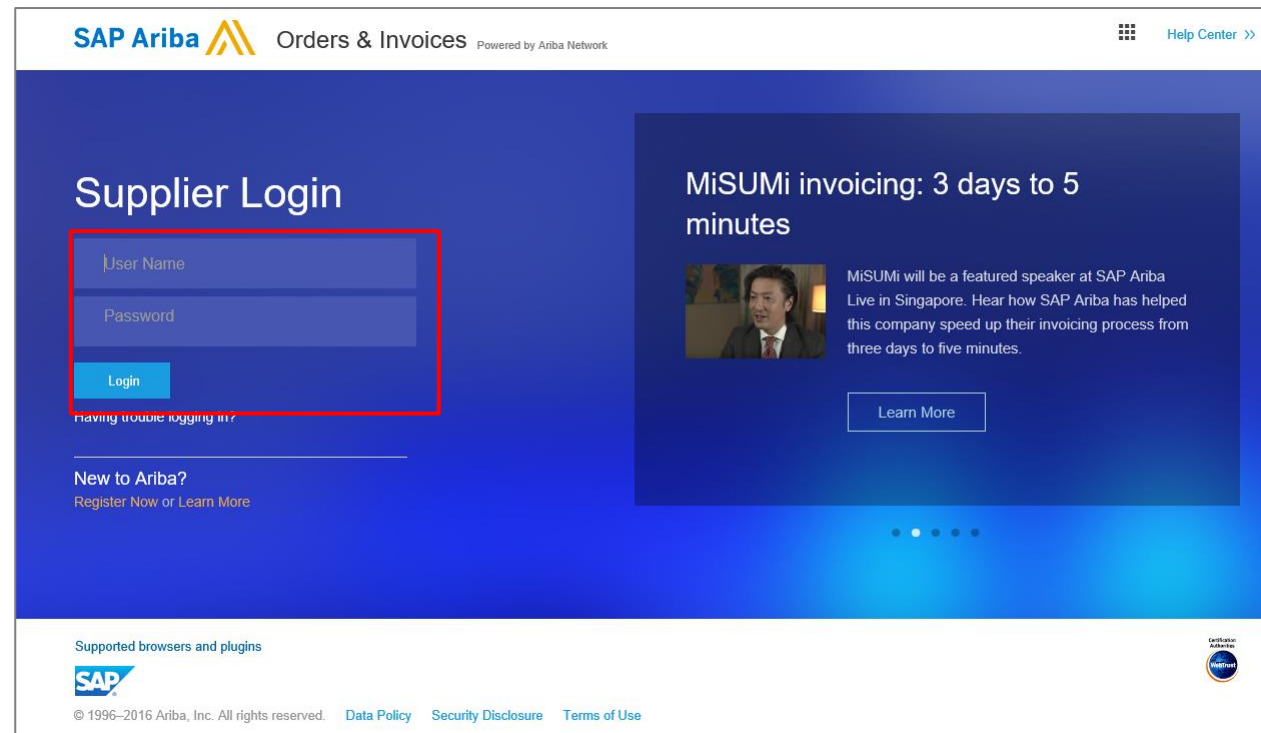
Appendix

- Creating a CIF from an Excel File

Setting up an Ariba Network Account for PunchOut

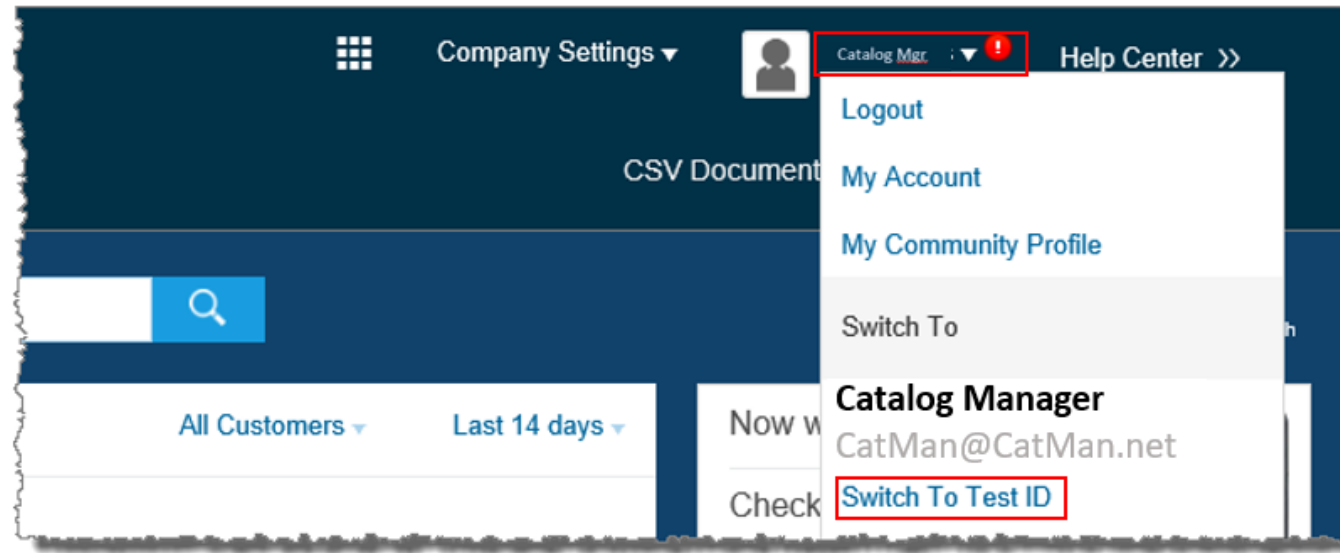
Setting up an AN account for PunchOut

- Login to your **Ariba Supplier Account** (supplier.ariba.com)



Setting up Ariba Network account for PunchOut

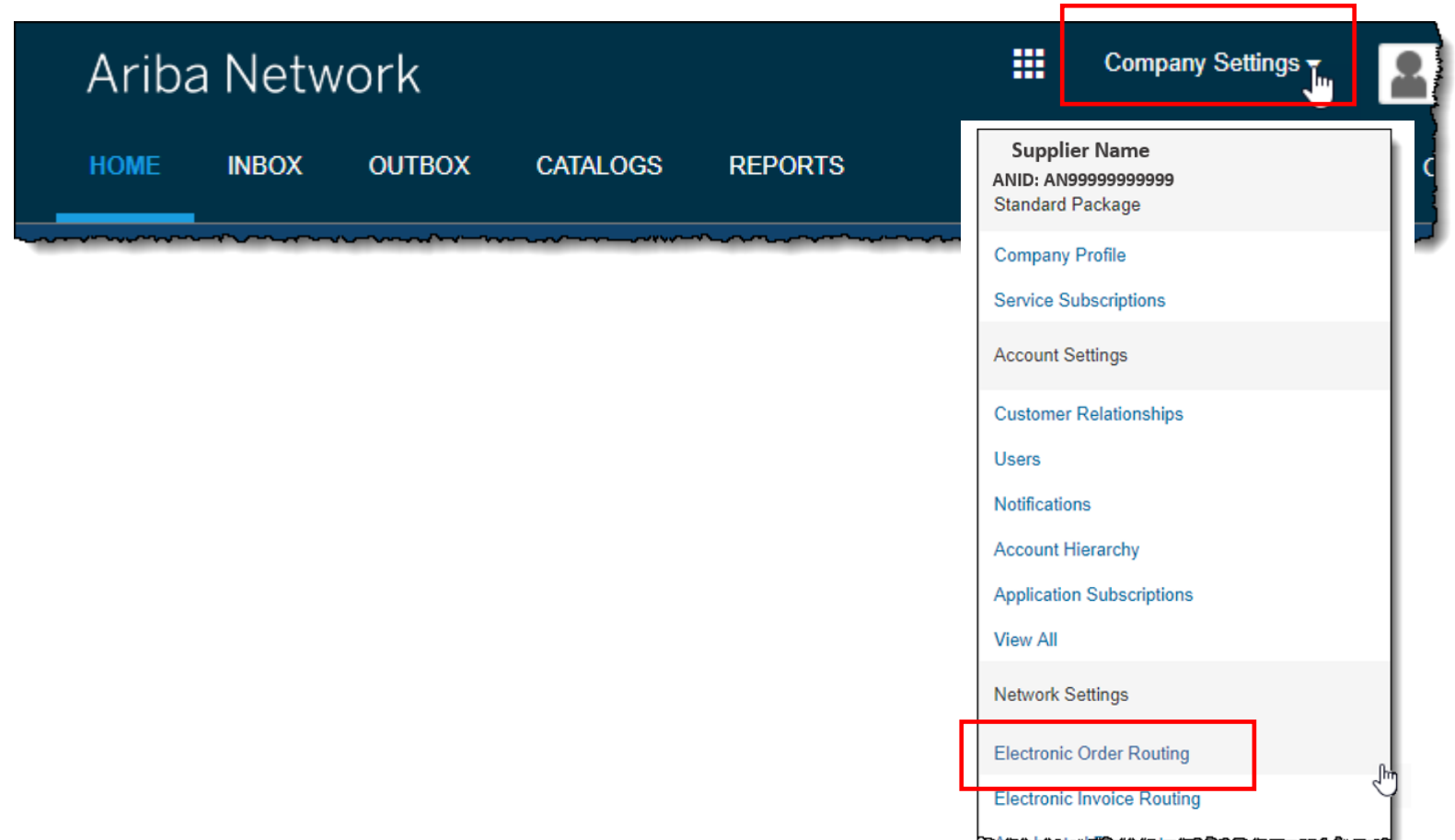
- Switch to your Test Account
 - Your Network Account needs to be set up in both your Test and Production environments
 - Find your name and click for the pull down menu, then click “Switch To Test ID”
 - If you don’t see a “Switch to Test ID” link, your Test account has not yet been set up. Contact your Ariba Network Administrator



- You will get a warning. **“You are about to switch to Test Mode.”** Click “OK”

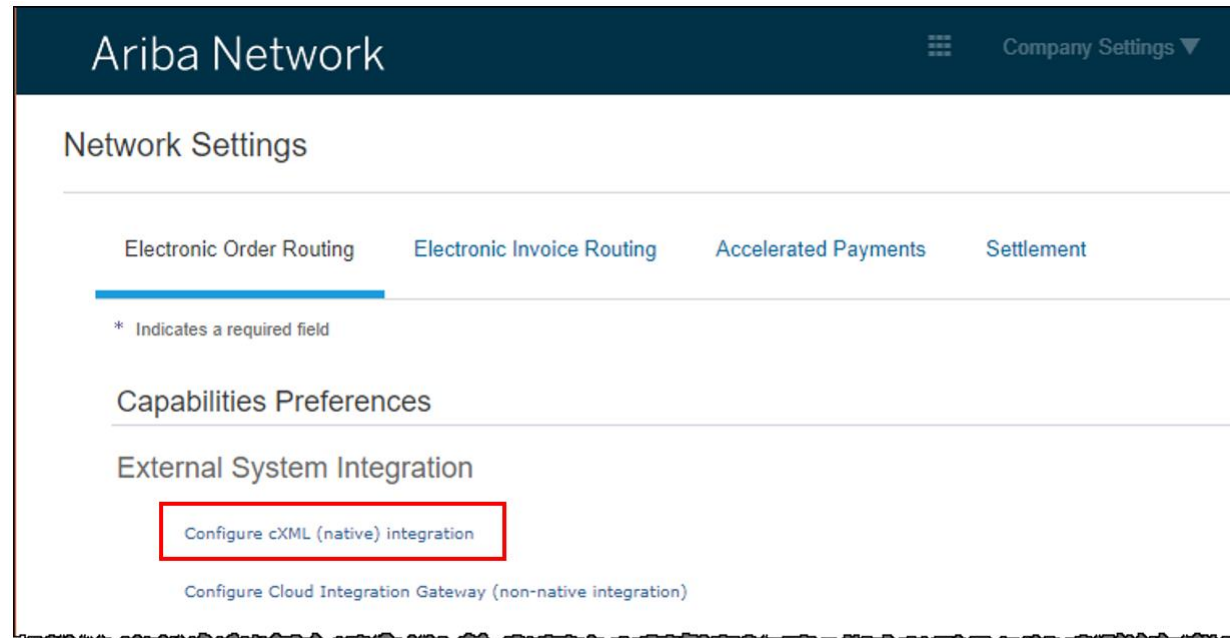
Setting up an AN account for PunchOut

- Go to **Company Settings**, and click the pulldown menu
- Scroll down to click on **Electronic Order Routing**
- Please note the next three steps need to be done in your Test and Production environments



Setting up an AN account for PunchOut

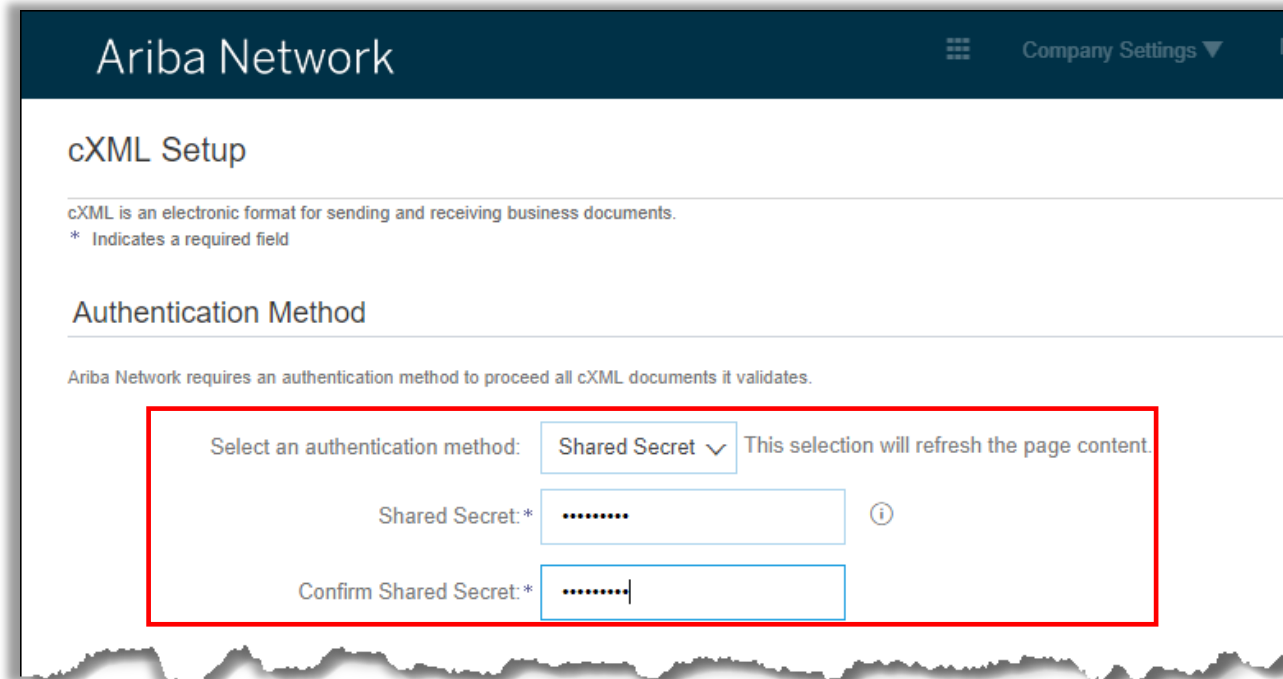
- Under **Electronic Order Routing**, click on **Configure cXML (native) integration**



Setting up Ariba Network account for PunchOut

Two things need to be set up for you to provide PunchOut catalogs.

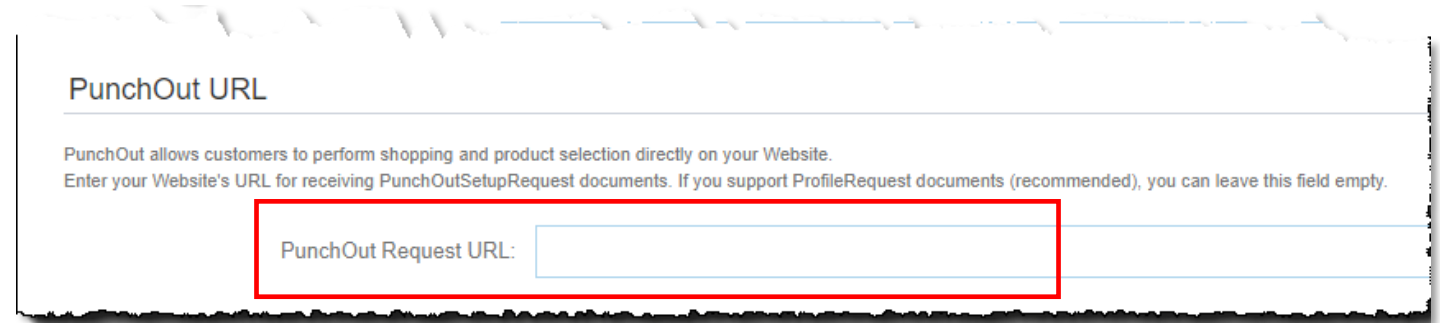
- First, an **Authentication Method**. The Preferred method is **Shared Secret**. Type in your Shared Secret, and confirm it. This Shared Secret will be sent to you to authenticate requests from your Buyers
- Please be aware that the Shared Secret cannot be the same in both your Test and Production Accounts



The screenshot shows the 'Ariba Network' interface with a 'Company Settings' dropdown in the top right. The main heading is 'cXML Setup'. Below it, a note states 'cXML is an electronic format for sending and receiving business documents.' and a legend indicates '* Indicates a required field'. The section is titled 'Authentication Method' and includes a note: 'Ariba Network requires an authentication method to proceed all cXML documents it validates.' A red box highlights the configuration area, which contains a dropdown menu set to 'Shared Secret' with the text 'This selection will refresh the page content.' Below the dropdown are two required text input fields: 'Shared Secret:*' and 'Confirm Shared Secret:*', both containing masked characters (dots).

Setting up Ariba Network account for PunchOut

- Second, your company's complete **PunchOut Request URL**. This is location where PunchOut requests will be sent. This field is checked, and its value used each time a Buyer punches out to your site



The screenshot shows a web form titled "PunchOut URL". Below the title, there is a horizontal line. Underneath, a paragraph of text reads: "PunchOut allows customers to perform shopping and product selection directly on your Website. Enter your Website's URL for receiving PunchOutSetupRequest documents. If you support ProfileRequest documents (recommended), you can leave this field empty." Below this text is a text input field with the label "PunchOut Request URL:" to its left. The input field is highlighted with a red rectangular border.

Templates and Catalog File Creation

PunchOut Templates

A **PunchOut Template** is a special **CIF Template** that creates a **PunchOut Index file**. The addition of two fields changes a CIF file to a PunchOut Index file. The fields are:

- **PunchOut Enabled** and
- **PunchOutLevel**

Here is a sample **L1 PunchOut Template** in Excel format.

FIELDNAMES:	Supplier Part ID	Manufacturer Part ID	Item Description	SPSC Code	Unit Price	Unit of Measure	Supplier Part Auxiliary ID	Short Name	Image	PunchOut Enabled	PunchOutLevel
DATA	AN999999999999	2772882	Microsoft, Cisco, Adobe, switcher, router.	43191504	1.00	EA		Supplier PunchOut Catalog	http://supplierlogo.jpg	TRUE	
ENDOFDATA											

Required field

The UNUOM key in the header specifies whether the values in this column are UNUOM or ANSI codes. for a list of codes, see the Help@Ariba site.

Not required for punchout items (set appropriate boolean value in PunchOut.Enabled column).

Type: String
Length: 32

The Template is color coded and has Tool Tips that provide information about how to treat each field.

Each Template includes specific instructions, including custom fields or other requirements set by RR Donnelley.

Templates and Catalog Creation – L1 PunchOut

In **Level 1 PunchOut**, the catalog file is a simple, one line Index file. This is because a L1 Catalog appears on the catalog interface just as a link to the Supplier's website.

The PunchOut icon tells the User that this is an external catalog, as well as the “Buy From Supplier” button.



Creating a L1 PunchOut Catalog

The Header Section

	A	B
1	CIF_I_V3.0	
2	CHARSET:	UTF-8
3	LOADMODE:	F
4	CODEFORMAT:	UNSPSC_V13.5
5	CURRENCY:	USD
6	SUPPLIERID_DOMAIN:	NetworkID
7	ITEMCOUNT:	5
8	TIMESTAMP:	5/15/2005
9	UNUOM:	TRUE
10	COMMENTS:	Any comments can go here.

Note: The only fields that Suppliers should modify in the Template are indicated in red: **CURRENCY**, **ITEMCOUNT**, **TIMESTAMP** and **COMMENTS**. All the other fields are predefined in the Template for the Customer and should not be modified, unless instructed by a Catalog Expert.

FIELD COLOR CODES	
	Required
	Optional
	Optional, but preferred
	Do not use

- **CIF_I_V3.0**—Specifies the Catalog format (CIF 3.0). Do not change this value
- **CHARSET**—UTF-8 Specifies the data coding type. Do not change this value, unless instructed by your Catalog Expert
- **LOADMODE**—F (Full) or I (Incremental)
- **CODEFORMAT**—Specifies the commodity coding (UNSPSC: United Nations Standard Products and Services Code) in the field “SPSC Code”
- **CURRENCY**—Specifies the currency used for the prices. The value “USD” (United States Dollar) is here by default and can be changed to a different currency
- **SUPPLIERID_DOMAIN**—Specifies the Domain used. The preferred value is the Supplier’s Ariba Network ID Number—“NetworkID”. Other values include “DUNS”, “internalsupplierid” or other custom values
- **ITEMCOUNT**—Specifies the number of items of the Catalog. Enter the total number of all items between the DATA and ENDOFDATA markers
- **TIMESTAMP**—Enter the date you created your Catalog.
- **UNUOM**—If set to “TRUE”, the Unit Of Measure is set to UNUOM (United Nations Unit of Measure); if set to “FALSE”, the value is set to ANSI. (Ariba recommends UNUOM)
- **COMMENTS**—This field is optional, but can be used for comments related to your Catalog. It is a good place to enter the Supplier Name, the Customer Name and Catalog Name

Ariba Network – File Size Limits

- CIF Format : When using the catalog wizard, the catalog file can't exceed 95 MB or 400,000 lines.
- Excel Format : The maximum size of zipped Excel file that you can upload is 1 MB (uncompressed). If your Excel files exceed these size, you can convert them to CIF manually and upload the CIF files. Ariba Network uploads the file, unzips it if necessary, converts it to CIF format, and starts validation. Conversion from Excel to CIF can take several minutes depending on the catalog size. As Excel files convert, their status is Validating.
- cXML Format: If you use the cXML CatalogUploadRequest transaction, the zipped catalog file cannot exceed 10 MB, and the unzipped CIF file cannot exceed 95 MB (approximately 400,000 line items). To have this default size limit increased to 200 MB, contact SAP Ariba Customer Support.

Creating a L1 PunchOut Catalog – RR Donnelley

The Data Section

Supplier ID	Supplier Part ID	Manufacturer Part ID
AN99999999999	2772882	

- **Supplier ID - Required**

Description: If the Header is set to “NetworkID”, then enter the Supplier’s Ariba Network ID, otherwise the appropriate value for the Domain used—DUNS, internalsystem, etc. Ask your Catalog Expert if you have questions. For PunchOut, be sure the Supplier can accept the Domain and value in their system for authentication

Type of data: String

Maximum length: 255

Example: AN99999999999

Note: If you publish the Catalog in your test account, add a suffix –T to your ANID or DUNS number like this: AN99999999999-T

- **Supplier Part ID - Required**

Description: In L1 PunchOut this can be any value. It is required to be populated. You could set a keyword for the Supplier to evaluate here if you wish

Type of data: String

Maximum length: 255

Example: 2772882

- **Manufacturer Part ID – Do Not Use in L1 File**

Description: In L1 PunchOut this can be any value. It is not required to be populated, but the field must remain. You could set a keyword for the Supplier to evaluate here if you wish

Type of data: String

Maximum length: 255

Example: TTSIBM412CID

Creating a L1 PunchOut Catalog – RR Donnelley

Item Description	SPSC Code	Unit Price
Pen, Pencil, desk, paper, notebook, computer accessories	43191504	1.00

- **Item Description - Required**

Description: In L1 PunchOut, include keywords for items you sell in the catalog.

Type of data: String

Maximum length: 2000

Example: Pen, Pencil, desk, paper, notebook, computer accessories

- **SPSC Code – Required**

Description: Classification of the main product or service you sell. For L1 PunchOut, this will only determine where the Supplier link appears in the catalog hierarchy—not what the actual items are

Type of data: String

Maximum length: 40

Example: 45678900 (level 3) and 45678923 (level 4)

Note: Ariba supports UNSPSC Version 13.5. A code list is available in your Customer’s Supplier Information Portal

- **Unit Price - Required**

Description: In Level 1 PunchOut, the price is not used, but must be populated. It is suggested that you set the value to 1.00

Type of data: Decimal

Example: 1.00

Note: To separate the integer from the decimal, you must use a ‘dot’ and not a comma. Also, do not use a comma to indicate ‘thousands’. Do not include any currency symbols such as \$, £ or ¥.

Creating a L1 PunchOut Catalog – RR Donnelley

Unit of Measure	Lead Time	Manufacturer Name
EA		

- **Unit of Measure - Required**

Description: For L1 PunchOut, this is just populated to meet the system requirement—UOM is not used. It is suggested that you use EA

Type of data: String

Maximum length: 32

Example: EA

- **Lead Time – Do Not Use in L1 File**

Description: For L1 PunchOut, this is not used, but the field must remain

Type of data: Integer

Maximum length: 40

Example: 1

- **Manufacturer Name - Do Not Use in L1 File**

Description: For L1 PunchOut, this is not used, but the field must remain

Type of data: String

Maximum length: 255

Example: Epson

Creating a L1 PunchOut Catalog – RR Donnelley

Supplier URL	Manufacturer URL	Market Price

- **Supplier URL – Do Not Use in L1 File**
Description: For L1 PunchOut, this is not used, but the field must remain
Type of data: String
Maximum length: 255
Example: <http://www.supply.com/Catalog/product18.htm>
- **Manufacturer URL – Do Not Use in L1 File**
Description: For L1 PunchOut, this is not used, but the field must remain
Type of data: String
Maximum length: 255
Example: <http://www.manu.com/Catalog/product18.htm>
- **Market Price – Do Not Use in L1 File**
Description: For L1 PunchOut, this is not used, but the field must remain
Type of data: Decimal
Example: 4.32 or 1234.78

Creating a L1 PunchOut Catalog – RR Donnelley

Supplier Part Auxiliary ID	Language	Currency
Seattle		

- **Supplier Part Auxiliary ID - Optional**

Description: In L1 PunchOut, this can be used to convey a value for the Supplier to process, and send back the appropriate catalog URL

Type of data: String

Maximum length: 255

Example: 1234 French

Note: If any items have the same reference (Supplier Part ID column), this column allows you to differentiate them

- **Language – Do Not Use in L1 File** (If blank, defaults to 'en_US')

Description: Specifies the language used to describe the item. Not used in L1 catalogs but field must remain.

Type of data: String

Maximum length: 255

Example: en_US

Note: A listing of language codes is in your Customer's Supplier Information Portal

- **Currency – Do Not Use in L1 File** (Set in Header)

Description: Specifies the currency used for the prices. Not used in L1 catalogs but field must remain.

Type of data: String

Maximum length: 32

Example: USD, CAD (Canadian Dollar)

Note: A listing of currency codes is in your Customer's Supplier Information Portal

Creating a L1 PunchOut Catalog – RR Donnelley

Short Name
<SupplierName> Catalog Name

- **Short Name - Required**

Description: In L1 PunchOut, this is what will actually display to the User on the UI and on a Guided Buying Tile

Type of data: String

Example: Acme PunchOut Catalog

Maximum length: 50 characters

Creating a L1 PunchOut Catalog – RR Donnelley

Image	Thumbnail
http://www.logoimages.com/Your_Company_Logo_URL	

▪ Image – Required/Supplier Logo

Description: A remote image using a URL is preferred. URL address must be complete (including http://) and point directly to the image itself.

A local image can be used. The local image file name in the Image field of the template must be exact (including upper and lower case). The image file should be loaded on the Network in a ZIP file format with the Customer Name and Supplier Name.

Type of data: String

Length: 255

Preferred Image Format: .jpg

Remote Image Size Maximum: 500 x 500 pixels

Local Image Size Maximum: 250 x 250 pixels

Other supported image formats: JPEG, GIF, PNG, BMP—(JPG preferred)

▪ Thumbnail – Do Not Use in L1 Files

Description: For L1 PunchOut, this is not used.

Supported image formats: JPG, JPEG, GIF, PNG, BMP—(JPG preferred)

Type of data: String

Maximum length: 255

Recommended Size: 85 x 85 pixels

Creating a L1 PunchOut Catalog – RR Donnelley

Effective Date	Expiration Date

- **Effective Date – Do Not Use in L1 Files**

Description: For L1 PunchOut, this field is not used.

This field is Optional to be included on the supplier's website.

Date that the catalog item becomes valid and visible.

Type of data: Date

Format: YYYY-MM-DD

Note: If you load an item with a date prior to today, the item will be seen immediately, regardless of the Effective Date.

- **Expiration Date - Do Not Use in L1 Files**

Description: For L1 PunchOut, this field is not used.

This field is Optional to be included on the supplier's website.

Date that the catalog item expires and is removed from catalog visibility.

Type of data: Date

Format: YYYY-MM-DD

Note: In Ariba catalogs there is no warning about items' expiring. When the date occurs, the item(s) are removed from visibility automatically.

Creating a L1 PunchOut Catalog – RR Donnelley

IsInternalPartId

- **IsInternalPartId - Do Not Use in L1 Files**

Description: For L1 PunchOut, this field is not used.

Part identifier used by the Buyer. Set to yes to indicate that the catalog item is a non-standard item.

Type of data: Flag

Format/Input: Yes

Creating a L1 PunchOut Catalog – RR Donnelley

Price Unit Quantity	Price Unit

Unit Conversion	Pricing Description

- **Price Unit Quantity – Do Not Use in L1 Files**

Description: For L1 PunchOut, this field is not used. **This field is Optional to be included on the supplier's website.**

The quantity corresponding to the unit price of the item specified by the supplier. The unit price is based on the price unit quantity of the item. This is a mandatory field if you want to specify the catalog item with advanced pricing details.

Type of data: Decimal

- **Price Unit - Do Not Use in L1 Files**

Description: For L1 PunchOut, this field is not used. **This field is Optional to be included on the supplier's website.**

The unit of measure for the unit price. This is a mandatory field if you want to specify the catalog item with advanced pricing details.

Type of data: String

- **Unit Conversion – Do Not Use in L1 Files**

Description: For L1 PunchOut, this field is not used. **This field is Optional to be included on the supplier's website.**

Ratio used to convert the ordered unit to the price unit. The unit price is based on the price unit quantity and the price unit. Ariba uses the unit conversion to calculate the subtotal of an item using the following formula: $Subtotal = Quantity * (Unit\ Conversion / Price\ Unit\ Quantity) * Unit\ Price$

This is a mandatory field if you want to specify the catalog item with advanced pricing details.

Type of data: Decimal

- **Pricing Description - Do Not Use in L1 Files**

Description: For L1 PunchOut, this field is not used. **This field is Optional to be included on the supplier's website.**

Any information for advanced pricing details. You can use this field to store additional information on the unit conversion calculation.

Type of data: String

Creating a L1 PunchOut Catalog – RR Donnelley

DefaultRelevance
1000

- **DefaultRelevance – Required - DO NOT CHANGE THIS DEFAULT FIELD**
- **THIS VALUE MUST REMAIN IN THE FILE**

Description: Partially determines the relevance ranking the procurement application uses to display catalog items in a search. For example, 1000 is most relevant, and 0 is least relevant.

Default Value: 1000

Type of data: Integer

Maximum length: 4 (0 – 1000)

Creating a L1 PunchOut Catalog – RR Donnelley

PunchOut Enabled	PunchOutLevel
TRUE	

- **PunchOut Enabled - Required**

Description: Tells the system that this file is a PunchOut Index file. Must be set to TRUE for the system to see this as a PunchOut item.

Type of data: Boolean

Input: TRUE or FALSE

Example: True

- **PunchOutLevel - Do Not Use in L1 Files**

Description: For L1 PunchOut, this is not used. Tells the system that this item is a L2 PunchOut item that will take the User to the Supplier's site at the **Store** Level (like a L1), the **Aisle** level (a category, that requires then to further refine the search on the Supplier's site), the **Shelf** level (a refined category that results in only a few items that will all be displayed in the PunchOut) or the **Product** level (this takes the User to the exact item on the Supplier's site that they searched for in Ariba). **Product** is the most common level.

Type of data: String

Values: Store, Aisle, Shelf, Product

Example: Product

Note: This field is used only by SAP Ariba Buying and Invoicing. L2 PunchOut is not available in Ariba Catalogs or Ariba Procurement Content.

Creating a L1 PunchOut Catalog

Special Notes for Images


- In the Catalog file, you can refer to a Remote Image—using a URL—or you can refer to a Local Image, and send that image to Ariba to store
- Using Remote Images is preferred
 - Be sure the URL in the Template is *complete* (including http://) *Example:*
http://server/directory/imagefilename.jpg
 - Point to the image itself—not a program that serves up images
- If you use Local Images
 - Be sure the filename in the Template is *exact*—including upper and lower case
Example: FileName.jpg -or- lowercasename.jpg
 - Load images in a zip file format with the Customer Name and Supplier Name on the AN

Creating a L2 PunchOut Catalog

In **Level 2 PunchOut**, the catalog file is a combination of static catalog information (this is used to search) and it also contains the **PunchOut Enabled** and **PunchOutLevel** fields, to tell the system that this is a PunchOut catalog, and the User will be taken to the Supplier's website to add items to their cart as they shop.

L2 PunchOut items appear on the Catalog interface just as a static item does, but has the "Buy from Supplier" button instead of "Add to Cart".

The PunchOut icon tells you that this is an external catalog, as well as the "Buy From Supplier" button.

 Convertible Tablet: ThinkPad Yoga 12

Supplier: [Supplier Name](#)

Supplier Part #: 20DKS26G00

Available in: 20 Day(s)

ThinkPad Yoga 12 - Windows 8.1 Professional - Intel Core i5-5200U Processor (3MB Cache, up to 2.70GHz) - 4GB On-board Memory PC3-12800L - Security Chip Enabled - Intel HD Graphics 5500 - 12.5 inch FHD (1920x1080) Multitouch Display, Anti-Glare, Digitizer Pen, Black - Backlit Keyboard - Clickpad - Intel 7265 AC/B/G/N Dual Band Wireless + Bluetooth Version 4.0 - 128GB Solid State Drive, SATA3 - 8 cell Li-Polymer Battery, 47WHr - 720p HD Camera - 45W AC adapter (2 pin) - 3 Year On-site Parts and Labor Warranty - EPEAT Gold, ENERGY STAR, RoHS

\$1,132.24 USD * / each

[Buy from Supplier](#)

[Add to Favorites](#)

Creating a L2 PunchOut Catalog

The Header Section

	A	B
1	CIF_I_V3.0	
2	CHARSET:	UTF-8
3	LOADMODE:	F
4	CODEFORMAT:	UNSPSC_V13.5
5	CURRENCY:	USD
6	SUPPLIERID_DOMAIN:	NetworkID
7	ITEMCOUNT:	5
8	TIMESTAMP:	5/15/2005
9	UNUOM:	TRUE
10	COMMENTS:	Any comments can go here.

Note: The only fields that Suppliers should modify in the Template are indicated in red: **CURRENCY**, **ITEMCOUNT**, **TIMESTAMP** and **COMMENTS**. All the other fields are predefined in the Template for the Customer and should not be modified, unless instructed by a Catalog Expert.

FIELD COLOR CODES	
	Required
	Optional
	Optional, but preferred
	Do not use

- **CIF_I_V3.0**—Specifies the Catalog format (CIF 3.0). Do not change this value
- **CHARSET**—UTF-8 Specifies the data coding type. Do not change this value, unless instructed by your Catalog Expert
- **LOADMODE**—F (Full) or I (Incremental)
- **CODEFORMAT**—Specifies the commodity coding (UNSPSC: United Nations Standard Products and Services Code) in the field “SPSC Code”
- **CURRENCY**—Specifies the currency used for the prices. The value “USD” (United States Dollar) is here by default and can be changed to a different currency
- **SUPPLIERID_DOMAIN**—Specifies the Domain used. The preferred value is the Supplier’s Ariba Network ID Number—“NetworkID”. Other values include “DUNS”, “internalsupplierid” or other custom values
- **ITEMCOUNT**—Specifies the number of items of the Catalog. Enter the total number of all items between the DATA and ENDOFDATA markers
- **TIMESTAMP**—Enter the date you created your Catalog.
- **UNUOM**—If set to “TRUE”, the Unit Of Measure is set to UNUOM (United Nations Unit of Measure); if set to “FALSE”, the value is set to ANSI. (Ariba recommends UNUOM)
- **COMMENTS**—This field is optional, but can be used for comments related to your Catalog. It is a good place to enter the Supplier Name, the Customer Name and Catalog Name

Ariba Network – File Size Limits

- CIF Format : When using the catalog wizard, the catalog file can't exceed 95 MB or 400,000 lines.
- Excel Format : The maximum size of zipped Excel file that you can upload is 1 MB (uncompressed). If your Excel files exceed these size, you can convert them to CIF manually and upload the CIF files. Ariba Network uploads the file, unzips it if necessary, converts it to CIF format, and starts validation. Conversion from Excel to CIF can take several minutes depending on the catalog size. As Excel files convert, their status is Validating.
- cXML Format: If you use the cXML CatalogUploadRequest transaction, the zipped catalog file cannot exceed 10 MB, and the unzipped CIF file cannot exceed 95 MB (approximately 400,000 line items). To have this default size limit increased to 200 MB, contact SAP Ariba Customer Support.

Creating a L2 PunchOut Catalog – RR Donnelley

The Data Section

Supplier ID	Supplier Part ID	Manufacturer Part ID
AN9999999999	12345	CFG 11562
AN9999999999	87690	87690-12
AN9999999999	479-56	A100-BLK

- **Supplier ID - Required**

Description: If the Header is set to “NetworkID”, then enter the Supplier’s Ariba Network ID, otherwise the appropriate value for the Domain used—DUNS, internalsystem, etc. Ask your Catalog Expert if you have questions. For PunchOut, be sure the Supplier can accept the Domain and value in their system for authentication

Type of data: String

Maximum length: 255

Example: AN9999999999

Note: If you publish the Catalog in your test account, add a suffix –T to your ANID or DUNS number like this: AN9999999999-T

- **Supplier Part ID - Required**

Description: Part Number used by the Supplier. The Part Number must be unique for each item in the Catalog.

Type of data: String

Maximum length: 255

Example: 2772882

- **Manufacturer Part ID – Optional, but Preferred**

Description: A Part Number that a Manufacturer uses

Type of data: String

Maximum length: 255

Example: TTSIBM412CID

Creating a L2 PunchOut Catalog – RR Donnelley

Item Description	SPSC Code	Unit Price
Pens, Bic, Ballpoint, Blue, 1 dozen	43191504	5.32
Stapler, Swingline, Black	55010125	
Post-It, Yellow, 1"x2", pad of 100	15874236	1.38
Folders, Letter, Manilla, 100	89745125	

▪ Item Description - Required

Description: Description of the product or service. Make your descriptions as clear and complete as possible (Item type, brand, model, color, etc.)

Note: To use a special character as a literal value, you need to “escape” it by putting a backslash (\) in front of it. For example, \" lets a double quote be seen as a quote instead of a delimiter for an entry. To escape a quote (") within a quoted field, use two quotes ("")

Type of data: String

Maximum length: 2000

Example: Printer, Laser, A4, Epson Stylus Color 740

▪ SPSC Code – Required

Description: Classification of the product or service. Use a UNSPSC code if the Header specifies “UNSPSC” as the CODEFORMAT

Type of data: String

Maximum length: 40

Example: 45678900 (level 3) and 45678923 (level 4)

Note: Ariba supports UNSPSC Version 13.5.

▪ Unit Price – Required

Description: Customer-specific price. For L2 PunchOuts the price can be left blank if the Buyer agrees.

Type of data: Decimal

Example: 4.32 or 1234.78

Note: To separate the integer from the decimal, you must use a ‘dot’ and not a comma. Also, do not use a comma to indicate ‘thousands’. Do not include any currency symbols such as \$, £ or ¥.

Creating a L2 PunchOut Catalog – RR Donnelley

Unit of Measure	Lead Time	Manufacturer Name
EA	1	Intelidata
EA	1	IDG Book
DZN	3	Bic
EA	1	Swingline

- **Unit of Measure - Required**

Description: Unit of measure related to the Unit Price. Use a United Nations UOM if the UNUOM in the Header is set to “True”

Type of data: String

Maximum length: 32

Example: BX

Note: A file containing the Units of Measure is available in your Customer’s Supplier Information Portal

- **Lead Time – Optional, but Preferred**

Description: Number of working days for the product to be shipped from the date you receive the Purchase Order.

Type of data: Integer

Maximum length: 40

Example: 1

- **Manufacturer Name – Optional, but Preferred**

Description: Name of the manufacturer

Type of data: String

Maximum length: 255

Example: Epson

Creating a L2 PunchOut Catalog – RR Donnelley

Supplier URL	Manufacturer URL	Market Price
http://www.supplier.com	http://www.manu.com	12.95
http://www.supplier.com		2296.56
http://www.supplier.com		4.86
http://www.supplier.com		12.86

- **Supplier URL – Optional, but Preferred**

Description: A URL that links to a Supplier static page about the item (could be a MSDS, construction info, packaging info, etc.)

Type of data: String

Maximum length: 255

Example: <http://www.supply.com/Catalog/product18.htm>

- **Manufacturer URL – Optional, but Preferred**

Description: A URL that links to a Manufacturer's static page about the item (could be a MSDS, construction info, packaging info, etc.)

Type of data: String

Maximum length: 255

Example: <http://www.manu.com/Catalog/product18.htm>

- **Market Price – Optional**

Description: List or retail price.

Note: Does not show on the Ariba UI—this is an informational-only field for Suppliers

Type of data: Decimal

Example: 4.32 or 1234.78

Note: To separate the integer from the decimal, you must use a 'dot' and not a comma. Also, do not use a comma to indicate 'thousands'. Do not include any currency symbols such as \$, £ or ¥.

Creating a L2 PunchOut Catalog – RR Donnelley

Supplier Part Auxiliary ID	Language	Currency
1234-75	en_US	USD
	en_US	USD
	en_US	USD
	en_US	USD

- **Supplier Part Auxiliary ID - Optional**

Description: Uniquely identifies a single item. For example, items in multiple languages or available in multiple units of measure

Type of data: String

Maximum length: 255

Example: 1234 French

Note: If any items have the same reference (Supplier Part ID column), this column allows you to differentiate them

- **Language – Optional** (If blank, defaults to 'en_US')

Description: Specifies the language used to describe the item.

Type of data: String

Maximum length: 255

Example: en_US

Note: A listing of language codes is in your Customer's Supplier Information Portal

- **Currency – Optional** (Set in Header)

Description: Specifies the currency used for the prices

Type of data: String

Maximum length: Up to 5 - Use ISO 4217 Codes (case-insensitive)

Example: USD, CAD (Canadian Dollar)

Note: A listing of currency codes is in your Customer's Supplier Information Portal

Creating a L2 PunchOut Catalog – RR Donnelley

Short Name
Soft Drink, Soda, Dr Pepper
Dairy, Milk, 1% milkfat
Coffee, Dark Roast, Starbucks
Soft Drink, Juice, Minute Maid

- **Short Name – Optional, but Preferred**

Description: Short description of the item. The Short Name is displayed first in the UI, and is in a larger type face and blue color. You can use the Short Name to describe a category or Item type, then give the specifics in the Item Description

Type of data: String

Example: Nylon Glove, Blue

Maximum length: 40 characters Note: Use 30 characters or less to avoid formatting issues.

Note: If the “Short Name” field is left blank, the first 40 characters of the Item Description column will automatically fill the “Short Name” field

Creating a L2 PunchOut Catalog – RR Donnelley

Image	Thumbnail
12354.Jpg	http://www.1.com/12354.jpg
http://www.1.com/34.jpg	http://www.1.com/34.jpg
587.jpg	http://www.1.com/587.Jpg
http://www.1.36.jpg	http://www.1.36.jpg

▪ Image - Optional, but Preferred

Description: A remote image using a URL is preferred. URL address must be complete (including http://) and point directly to the image itself.

A local image can be used. The local image file name in the Image field of the template must be exact (including upper and lower case). The image file should be loaded on the Network in a ZIP file format with the Customer Name and Supplier Name.

Type of data: String

Length: 255

Preferred Image Format: .jpg

Remote Image Size Maximum: 500 x 500 pixels

Local Image Size Maximum: 250 x 250 pixels

Other supported image formats: JPEG, GIF, PNG, BMP—(JPG preferred)

▪ Thumbnail - Optional, but Preferred

Description: URL of an Icon-size image of the item, or filename of the image (sent in the zip file)—can be different from the product's full-size Image

Supported image formats: JPG, JPEG, GIF, PNG, BMP—(JPG preferred)

Type of data: String

Maximum length: 255

Recommended Size: 85 x 85 pixels

Note: If the "Thumbnail" field is left blank, the file in the "Image" field will be resized and populate the Thumbnail

Creating a L2 PunchOut Catalog – RR Donnelley

Effective Date	Expiration Date
2018-01-06	2018-12-31
	2018-01-08
2018-01-06	

- **Effective Date – Optional**

Description: Date that the catalog item becomes valid and visible.

Type of data: Date

Format: YYYY-MM-DD

Note: If you load an item with a date prior to today, the item will be seen immediately, regardless of the Effective Date.

- **Expiration Date - Optional**

Description: Date that the catalog item expires and is removed from catalog visibility.

Type of data: Date

Format: YYYY-MM-DD

Note: In Ariba catalogs there is no warning about items' expiring. When the date occurs, the item(s) are removed from visibility automatically.

Creating a L2 PunchOut Catalog – RR Donnelley

IsInternalPartId
Yes

- **IsInternalPartId – Optional**

Description: Part identifier used by the Buyer. Set to yes to indicate that the catalog item is a non-standard item.

Type of data: Flag

Format/Input: Yes

Creating a L2 PunchOut Catalog – RR Donnelley

Price Unit Quantity	Price Unit
1	Box

Unit Conversion	Pricing Description
0.2	Price quoted for one box

- **Price Unit Quantity – Optional**

Description: The quantity corresponding to the unit price of the item specified by the supplier. The unit price is based on the price unit quantity of the item. This is a mandatory field if you want to specify the catalog item with advanced pricing details.

Type of data: Decimal

- **Price Unit - Optional**

Description: The unit of measure for the unit price. This is a mandatory field if you want to specify the catalog item with advanced pricing details.

Type of data: String

- **Unit Conversion – Optional**

Description: Ratio used to convert the ordered unit to the price unit. The unit price is based on the price unit quantity and the price unit. Ariba uses the unit conversion to calculate the subtotal of an item using the following formula:

$$\text{Subtotal} = \text{Quantity} * (\text{Unit Conversion} / \text{Price Unit Quantity}) * \text{Unit Price}$$

This is a mandatory field if you want to specify the catalog item with advanced pricing details.

Type of data: Decimal

- **Pricing Description - Optional**

Description: Any information for advanced pricing details. You can use this field to store additional information on the unit conversion calculation.

Type of data: String

Creating a L2 PunchOut Catalog – RR Donnelley

PunchOut Enabled	PunchOutLevel
TRUE	Product

- **PunchOut Enabled - Required**

Description: Tells the system that this file is a PunchOut Index file. Must be set to TRUE for the system to see this as a PunchOut item.

Type of data: Boolean

Input: TRUE or FALSE

Example: True

- **PunchOutLevel - Required**

Description: Tells the system that this item is a L2 PunchOut item that will take the User to the Supplier's site at the **Store** Level (like a L1), the **Aisle** level (a category, that requires then to further refine the search on the Supplier's site), the **Shelf** level (a refined category that results in only a few items that will all be displayed in the PunchOut) or the **Product** level (this takes the User to the exact item on the Supplier's site that they searched for in Ariba). **Product** is the most common level

Type of data: String

Values: Store, Aisle, Shelf, Product

Example: Product

Note: This field is used only by SAP Ariba Buying and Invoicing. L2 PunchOut is not available in Ariba Catalogs or Ariba Procurement Content.

Creating a L2 PunchOut Catalog


Special Notes for Images

- In the Catalog file, you can refer to a Remote Image—using a URL—or you can refer to a Local Image, and send that image to Ariba to store
- Using Remote Images is preferred
 - Be sure the URL in the Template is *complete* (including http://) *Example:*
http://server/directory/imagefilename.jpg
 - Point to the image itself—not a program that serves up images
- If you use Local Images
 - Be sure the filename in the Template is *exact*—including upper and lower case
Example: FileName.jpg -or- lowercasename.jpg
 - Load images in a zip file format with the Customer Name and Supplier Name on the AN

Uploading and Publishing PunchOut Catalogs

Uploading and Publishing PunchOut Catalogs

- Login to Ariba Network
 - Go to: <http://supplier.ariba.com>
 - Log in with your Username and Password

SAP Ariba  Orders & Invoices Powered by Ariba Network Help Center >>

Supplier Login

User Name

Password

Login

[having trouble logging in?](#)



New to Ariba?
[Register Now](#) or [Learn More](#)

MiSUMi invoicing: 3 days to 5 minutes

MiSUMi will be a featured speaker at SAP Ariba Live in Singapore. Hear how SAP Ariba has helped this company speed up their invoicing process from three days to five minutes.

[Learn More](#)

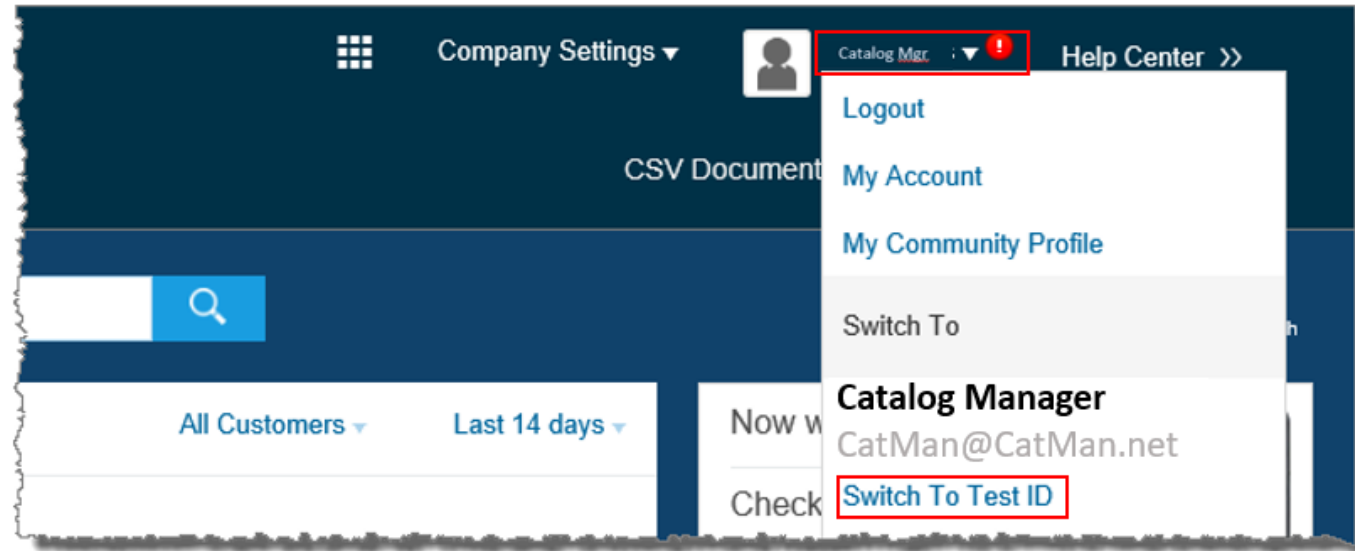
Supported browsers and plugins

© 1996–2016 Ariba, Inc. All rights reserved. [Data Policy](#) [Security Disclosure](#) [Terms of Use](#)

Uploading and Publishing PunchOut Catalogs

- Switch to your Test Account
 - Your Catalog should be loaded and tested in your Test Account. (*Note:* If you are instructed to load a Catalog to a Production account, just skip this step)
 - Find your name and click for the pull down menu, then click “Switch To Test ID”
 - If you don’t see a “Switch to Test ID” link, your Test account has not yet been set up. Contact your Ariba Network Administrator



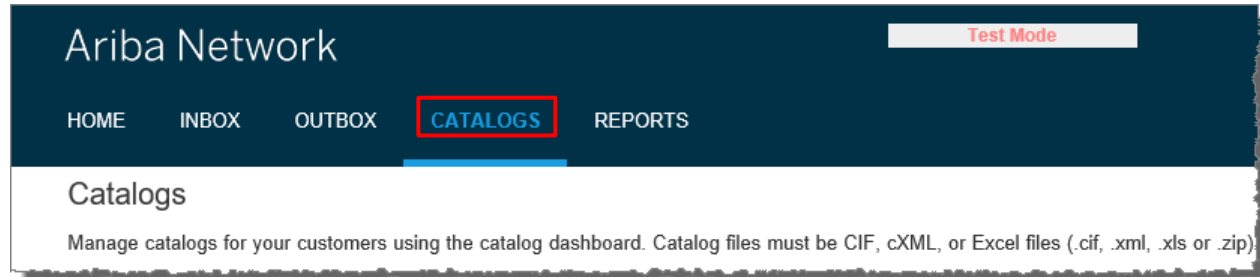
- You will get a warning. **“You are about to switch to Test Mode.”** Click “OK”

Uploading and Publishing PunchOut Catalogs

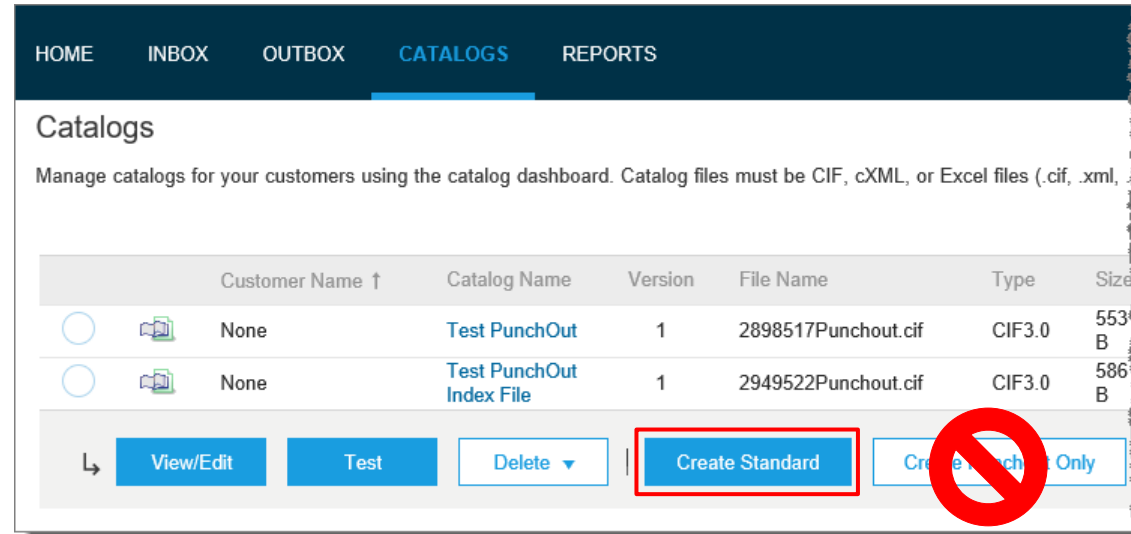
- When uploading a Catalog on Ariba Network, there are four steps you will follow:
 - 1. Uploading**—Transfers the Catalog file from your local drive to Ariba Network. During the upload process, you enter the Catalog name (this becomes the “Subscription Name” in the Buyer’s local Catalog) descriptive text, and classify it so that buying organizations that are looking for specific products and services can find your Catalog
 - 2. Setting Visibility**—Allows you to specify whether the Catalog version is “Public” or “Private” and determines which of your Customers can access it
 - 3. Validating**—The Network checks the Catalog for errors, checks for zero price values and does a high-level validation of UNSPSC codes and Units of Measure
*(Note: Customer-specific validation rules for UNSPSC and UOM codes, and zero price values can be more detailed and much more strict than the high-level Network validations, therefore your Catalog may **pass** the Network validations but **fail** the Customer-specific validations for these same items)*
 - 4. Publishing**—Freezes the current version and notifies your Customer of the Catalog’s availability

Uploading and Publishing PunchOut Catalogs

- Navigate to the Catalogs Tab



- On the Catalogs screen, click the “Create Standard” button. Even though you are loading a PunchOut Catalog, use the “Create Standard” button



Uploading and Publishing PunchOut Catalogs

- You are now on the **Create a New Catalog** Screen
- To create the Catalog, there is a 3-step Wizard:
 - ① **Details**—General information about the Catalog
 - ② **Subscriptions**—Who you are publishing the Catalog to
 - ③ **Content**—Uploading the actual Catalog file

- Click “Next”

Create a New Catalog

Next Exit

Enter a catalog name and descriptive text. Customers can search using this information. Add commodity codes to your catalog. * indicates required field

1 Details

2 Subscriptions

3 Content

Catalog Name: *

Created By: Catalog Manager

Date Created: Tuesday 30 Aug 2016 10:59 PM GMT-07:00

Description:

Characters left: 1000

The maximum number of characters allowed is 1000, including spaces.

Commodities: ⓘ

Description
No items

Delete Add

Next Exit

Uploading and Publishing PunchOut Catalogs

① Details

- **Catalog Name:** This becomes the “Subscription Name” for this Catalog that **will not change**. The format for this Name is set by your Customer. RR Donnelley has requested the following naming convention for their CIF catalogs: **SupplierName_RRDonnelley_Country_CatalogType (L1/L2)**
- **Description:** *(Optional)* Brief description of the content of your Catalog
- **Commodities:** *(Optional)* The UNSPSC code(s) that corresponds to the items family/ group of your Catalog. Use the “Add” button to find the code
- When you complete this screen, click “Next”

Create a New Catalog

Enter a catalog name and descriptive text. Customers can search using this information. Add commodity codes to your catalog. * indicates required field

1 Details

2 Subscriptions

3 Content

Catalog Name: *

Created By: Catalog Manager

Date Created: Tuesday 30 Aug 2016 10:59 PM GMT-07:00

Description:

Characters left: 1000

The maximum number of characters allowed is 1000, including spaces.

Description

No items

Commodities: ⌵

Delete Add

Next Exit

Uploading and Publishing PunchOut Catalogs

② Subscriptions

- You determine which Customers subscribe to your Catalog—specific Customer(s) or to all Customers on the Network
- Set the Visibility to “Private”. You can select a single customer.
- To select RR Donnelley check the box next to the “Customers” list.
- If the Supplier does not appear, it means that they have not established a relationship with your company yet. This is required prior to uploading a Catalog to them
- When you complete this screen, click “Next”

Create a New Catalog

Previous Next Exit

1 Details

2 Subscriptions

3 Content

Add customers and set the catalog visibility for customers. Click the customer's name to view validation rules on your [More](#)

You can receive status updates on catalogs, including catalog errors from your customer through email. To receive emails, click [Manage Profile](#) and enter the email address in the Email notification section.

Visibility: Private - Only the selected customers that have a trading relationship with you can view and receive the catalog
 Public - All customers can view the catalog. Customers that have a trading relationship with you can also receive the published catalog

Customers

<input type="checkbox"/>	Customers ↑	Catalog Validation Rules	Validation Status for Version 1
<input checked="" type="checkbox"/>	GSO Sandbox - P20 - TEST	View	Pending Validation
<input type="checkbox"/>	Supplier Name	View	Pending Validation
<input type="checkbox"/>	Supplier Name	View	Pending Validation

Previous Next Exit

Uploading and Publishing PunchOut Catalogs

③ Content

- Select your **Catalog File**, by clicking “Browse” and pointing to your file
 - Your Excel file must not exceed 1 Mb, however you can use zip compression
 - If your Excel file is too large, you will need to convert it to a CIF. See the Appendix—“How to convert an Excel file to CIF”
- After you have selected your Catalog file, click the “Validate and Publish” button
- As your Catalog loads, the status will read “Validating”
Click the “Refresh” button at the bottom of the screen to see the status change

The screenshot displays the 'Create a New Catalog' interface. On the left, a sidebar shows three steps: 1 Details, 2 Subscriptions, and 3 Content (the current step). The main area contains the following elements:

- Top right: 'Previous' and 'Exit' buttons.
- Text: 'Choose the catalog file for upload. Catalog files must be CIF, cXML, or Excel files (.cif, .xml, .xls or .zip). To download the [More](#)
- Section: 'UPLOAD YOUR CATALOG FILE' (highlighted with a red box), containing a file selection area with a 'Browse...' button.
- Warning: A yellow box with an exclamation mark icon stating: '! After you click Validate and Publish, do not use your Web browser until your catalog is finished uploading. Large catalogs can take several minutes to upload.'
- Bottom: A blue 'Validate and Publish' button (highlighted with a red box).

Uploading and Publishing PunchOut Catalogs

■ Network Catalog Validation

- After the Network completes validation, it changes the Catalog status from “Validating” to one of the following statuses:
 - **Validated, Published or Pending Buyer Validation**—your Catalog is error-free
 - **Errors Found by Ariba Network**—the Network detected Catalog content that violates validation rules
 - **Bad Format**—your Catalog failed the file validation check. Audit the file for problems in format
- A Catalog with an error status means you need to review the error results and correct them before going on

Catalogs

Manage catalogs for your customers using the catalog dashboard. Catalog files must be CIF, cXML, or Excel files (.cif, .xml, .xls or .zip). Some customers might have defined specific catalog validation rules, [More](#)

	Customer Name ↑	Catalog Name	Version	File Name	Type	Size	Visibility	Created By	Date Created	Status	Date Status Received
	None	Test PunchOut	1	2898517Punchout.cif	CIF3.0	553 B		Catalog Manager	Apr 2014	Validated	
	Buyer Name	Buyer Test CIF	1	99089.cif	CIF3.0	4 KB	Private	Catalog Manager	5 Jan 2017	3 Errors Found by Ariba Network	
	Buyer Name	Buyer Test CIF	1	BuyerCat.cif	CIF3.0	2 KB	Private	Catalog Manager	30 Jun 2015	Pending Buyer Validation	
	Buyer Name	Buyer Test CIF	1	Catalog.cif	CIF3.0	2 KB	Private	Catalog Manager	11 Nov 2013	Published	

Uploading and Publishing PunchOut Catalogs

- Correcting Validation Errors
 - To see the error detail, click on the “Errors Found” hyperlink:

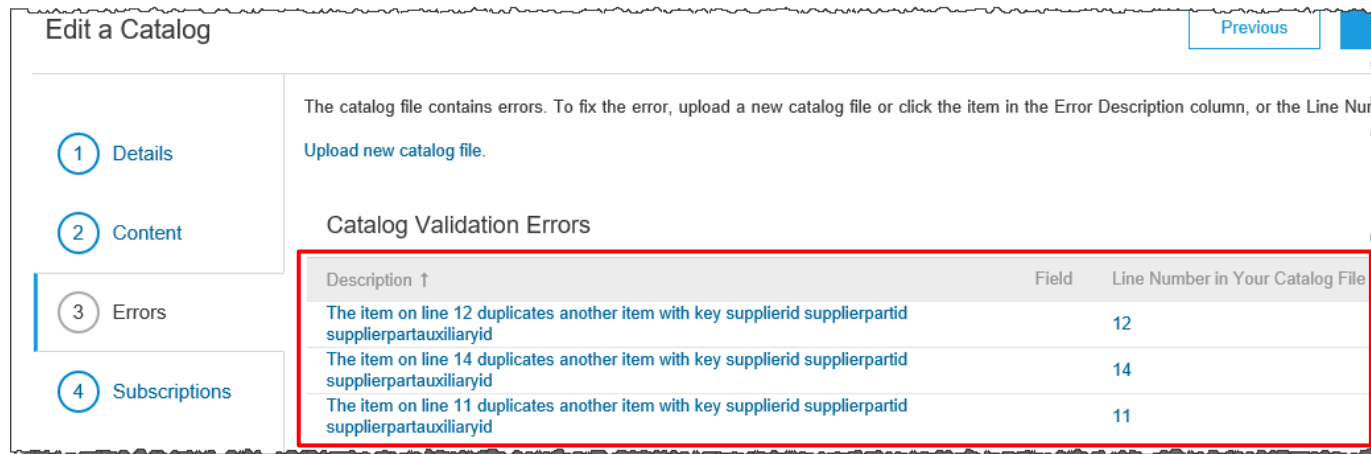
Catalogs

Manage catalogs for your customers using the catalog dashboard. Catalog files must be CIF, cXML, or Excel files (.cif, .xml, .xls or .zip). Some customers might have defined specific catalog validation rules, [More](#)

	Customer Name ↑	Catalog Name	Version	File Name	Type	Size	Visibility	Created By	Date Created	Status	Date Status Received
	None	Test PunchOut	1	2898517Punchout.cif	CIF3.0	553 B		Catalog Manager	Apr 2014	Validated	
	Buyer Name	Buyer Test CIF	1	99089.cif	CIF3.0	4 KB	Private	Catalog Manager	5 Jan 2017	3 Errors Found by Ariba Network	
	Buyer Name	Buyer Test CIF	1	BuyerCat.cif	CIF3.0	2 KB	Private	Catalog Manager	30 Jun 2015	Pending Buyer Validation	
	Buyer Name	Buyer Test CIF	1	Catalog.cif	CIF3.0	2 KB	Private	Catalog Manager	11 Nov 2013	Published	

Uploading and Publishing PunchOut Catalogs

- Viewing Validation Errors
 - The Network displays Description, Field and Line Number for each error



The screenshot shows the 'Edit a Catalog' interface. On the left, there is a navigation menu with four items: '1 Details', '2 Content', '3 Errors', and '4 Subscriptions'. The 'Errors' item is selected. The main content area displays a message: 'The catalog file contains errors. To fix the error, upload a new catalog file or click the item in the Error Description column, or the Line Number.' Below this message is a link 'Upload new catalog file.' and a section titled 'Catalog Validation Errors'. This section contains a table with three columns: 'Description ↑', 'Field', and 'Line Number in Your Catalog File'. The table lists three errors, all related to duplicate 'supplierpartid' values.

Description ↑	Field	Line Number in Your Catalog File
The item on line 12 duplicates another item with key supplierid supplierpartid supplierpartauxiliaryid		12
The item on line 14 duplicates another item with key supplierid supplierpartid supplierpartauxiliaryid		14
The item on line 11 duplicates another item with key supplierid supplierpartid supplierpartauxiliaryid		11

- In this case, the Network is telling us that the **Supplier Part Number** is not unique on lines 11, 12 and 14
- To correct any issues, go back to the original Excel Catalog file, make the corrections, then update the Catalog file, and upload the new version to replace the existing Catalog

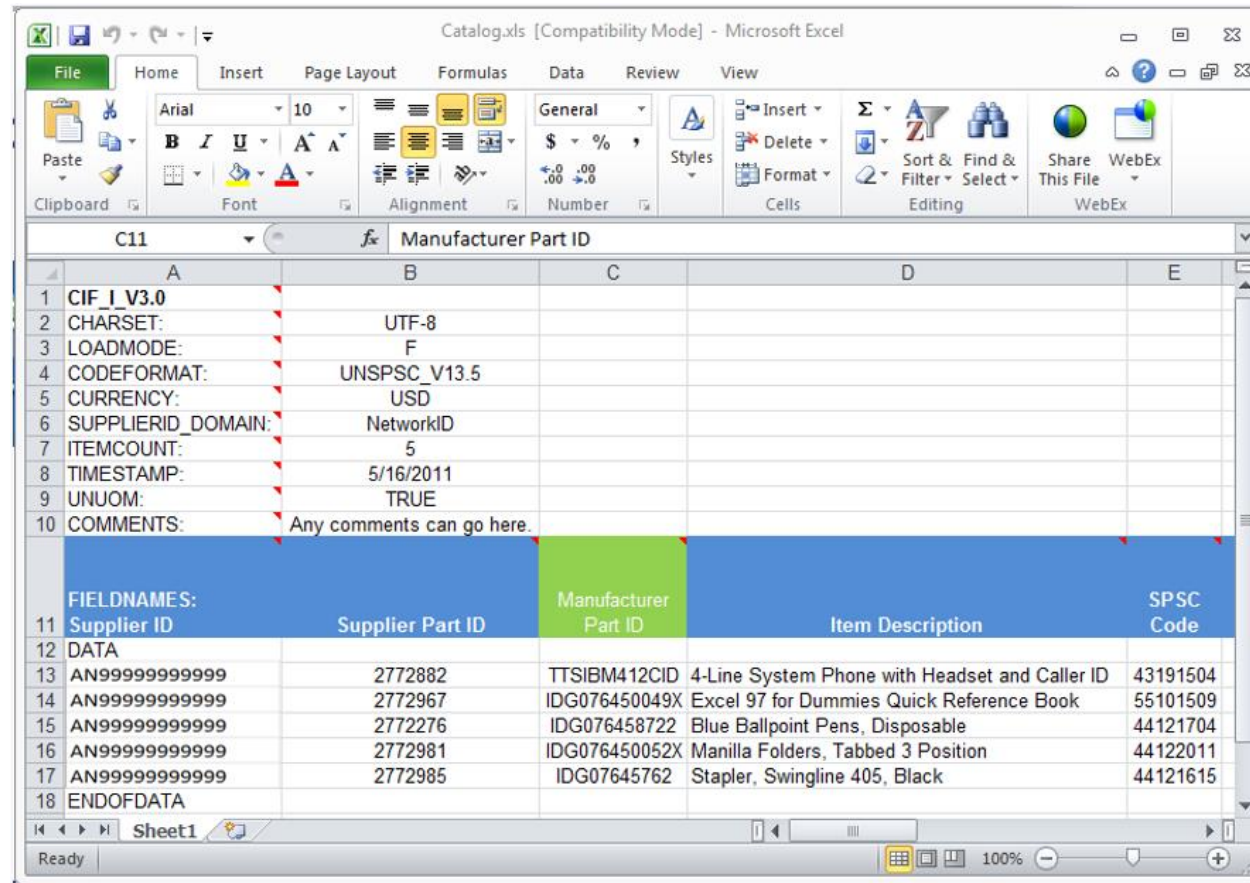
Uploading and Publishing PunchOut Catalogs

- Customer Approval
 - When your Catalog passes the Network upload validation, your Customer is then notified to audit, validate and approve your Catalog. The Network may show any of these statuses: **“Published”**, **“Validated by Customer”** or **“Pending Buyer Validation”**—*note that these are all valid statuses*
 - Each Customer may have specific validation rules—and these rules may be more strict than the standard Network rules. This means that your Catalog could pass the Network validation, but fail the Customer-specific rules and be returned to you
 - If your Customer finds anything in your Catalog file that requires your attention, you will be notified by e-Mail
 - Corrections should be made to the original Excel file, then the corrected Catalog file needs to be uploaded to the Network
 - Each Catalog must pass both the Network validation, and the Customer audit before it can be loaded into the Customer’s buying application and be available for their Users

Appendix

Appendix - Creating a CIF from an Excel File

- Open your Excel Catalog file

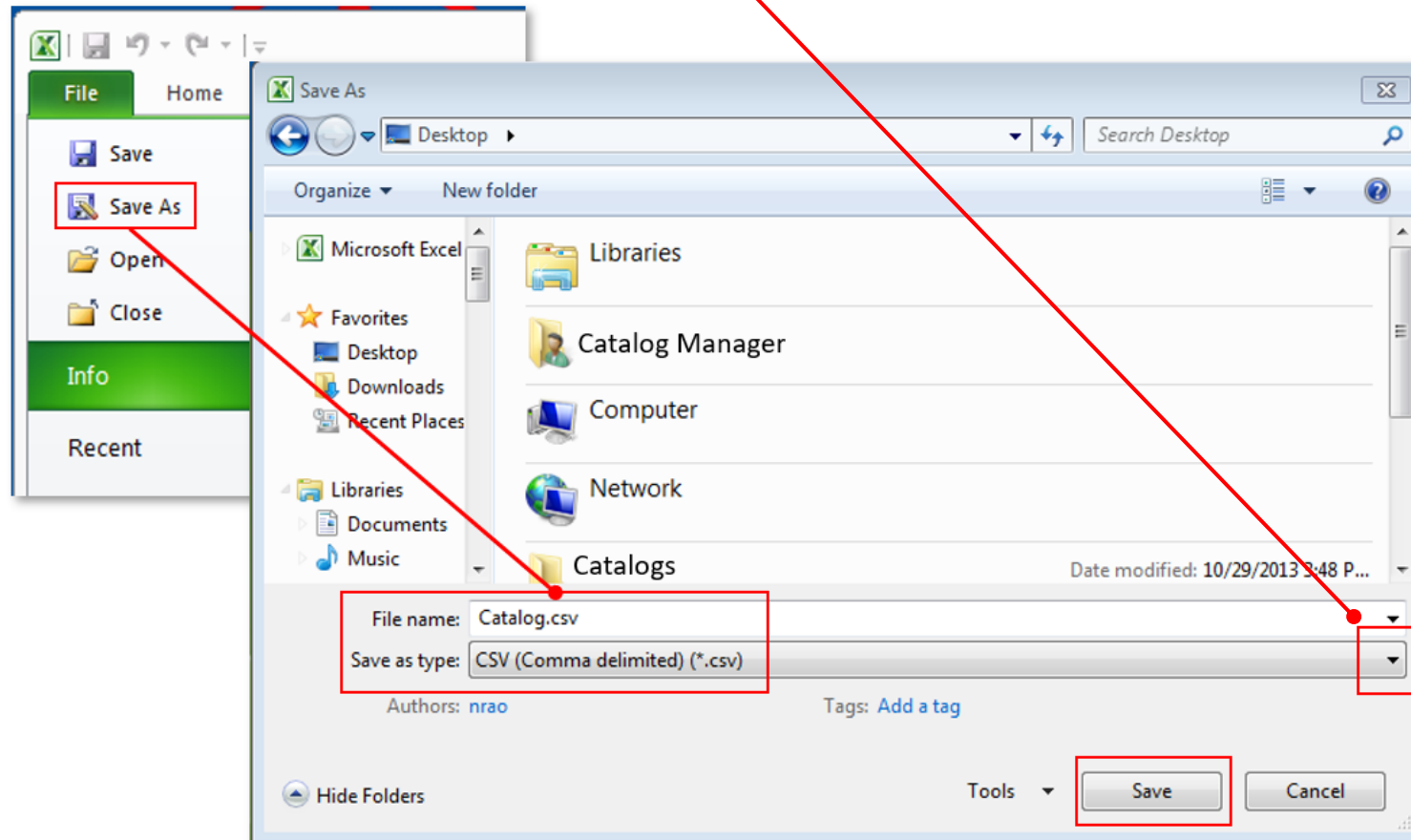


The screenshot shows a Microsoft Excel spreadsheet titled 'Catalog.xls [Compatibility Mode]'. The spreadsheet contains a list of catalog items with various fields. The first 10 rows are for metadata, and rows 11-18 are for item data. The data is as follows:

Supplier ID	Supplier Part ID	Manufacturer Part ID	Item Description	SPSC Code
AN9999999999	2772882	TTSIBM412CID	4-Line System Phone with Headset and Caller ID	43191504
AN9999999999	2772967	IDG076450049X	Excel 97 for Dummies Quick Reference Book	55101509
AN9999999999	2772276	IDG076458722	Blue Ballpoint Pens, Disposable	44121704
AN9999999999	2772981	IDG076450052X	Manilla Folders, Tabbed 3 Position	44122011
AN9999999999	2772985	IDG07645762	Stapler, Swingline 405, Black	44121615

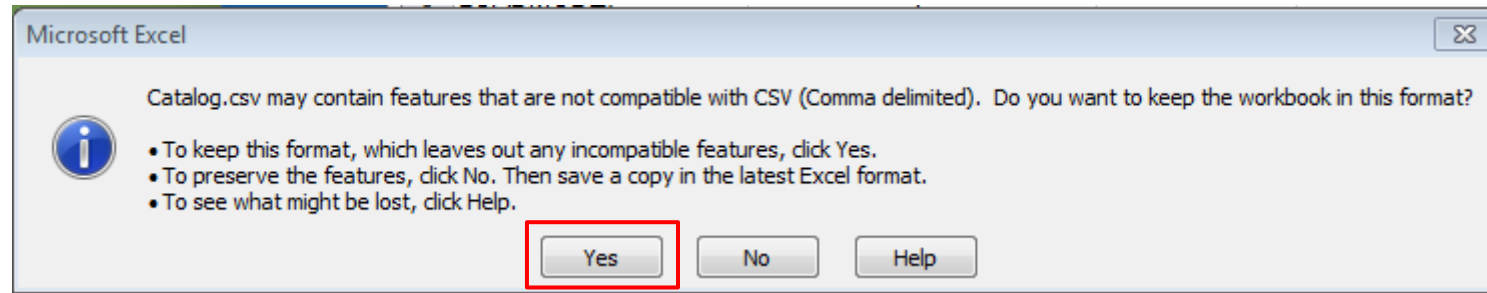
Appendix - Creating a CIF from an Excel File

- Save it as a “.csv” file. To see the choices, click on the drop down menu



Appendix - Creating a CIF from an Excel File

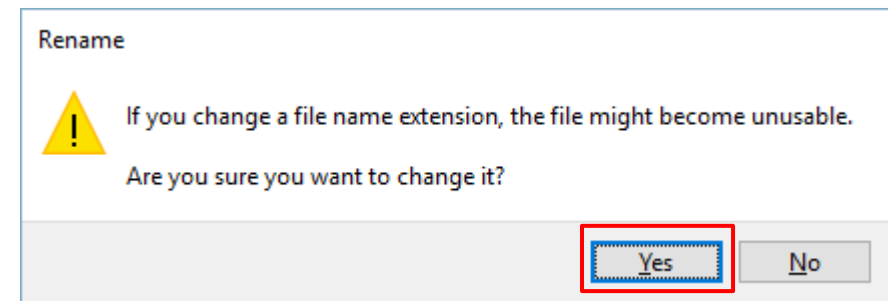
- You will get a system warning about saving it as a .csv—click “Yes” to continue



- Rename your saved file, by changing the extension to “.cif”

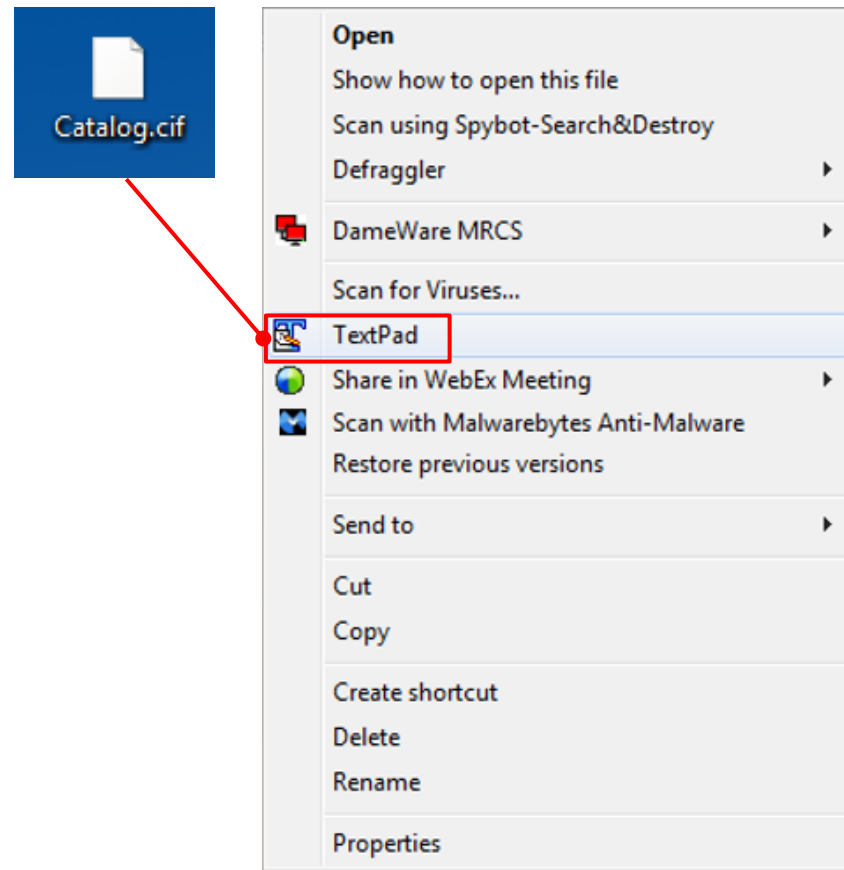


- The system will warn you about changing the extension. Click “Yes” to continue



Appendix - Creating a CIF from an Excel File

- Open your CIF Catalog file with Notepad, or your favorite text editor



Appendix - Creating a CIF from an Excel File

- Notice that the file has new, added commas in the Header, and after the DATA and ENDOFDATA markers

```
TextPad - C:\Users\CATMAN\Desktop\Catalog.cif
File Edit Search View Tools Macros Configure Window Help
Find incrementally Match case
Catalog.cif
CIF_I_V3.0
CHARSET:,U
LOADMODE:,F,
CODEFORMAT:,UNSPSC_V13.5
CURRENCY:,USD,
SUPPLIERID_DOMAIN:,NetworkID,
ITEMCOUNT:,5,
TIMESTAMP:,5/16/2011,
UNUOM:,TRUE,
COMMENTS:,Any comments can go here
FIELDNAMES: Supplier ID,Supplier Part ID,Manufacturer Part ID,Item Description,SPSC Code,Unit Price,Un,
DATA,
AN9999999999 ,2772882,TTSIBM412CID,4-Line System Phone with Headset and Caller ID,43191504,45.24,EA
AN9999999999 ,2772967,IDG076450049X,Excel 97 for Dummies Quick Reference Book,55101509,19.99,EA,1,I
AN9999999999 ,2772276,IDG076458722,"Blue Ballpoint Pens, Disposable",44121704,5.45,DZN,1,Bic,http:/
AN9999999999 ,2772981,IDG076450052X,"Manilla Folders, Tabbed 3 Position",44122011,19.99,GRO,1,Mead,
AN9999999999 ,2772985,IDG07645762,"Stapler, Swingline 405, Black",44121615,4.95,EA,1,Swingline,http
ENDOFDATA,
```


Thank you.

Contact information:

AskAribaCatalog@sap.com

Follow us



www.sap.com/contactsap

© 2019-2022 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platforms, directions, and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

See www.sap.com/copyright for additional trademark information and notices.

SAP folgen auf



www.sap.com/germany/contactsap

© 2019-2022 SAP SE oder ein SAP-Konzernunternehmen. Alle Rechte vorbehalten.

Weitergabe und Vervielfältigung dieser Publikation oder von Teilen daraus sind, zu welchem Zweck und in welcher Form auch immer, ohne die ausdrückliche schriftliche Genehmigung durch SAP SE oder ein SAP-Konzernunternehmen nicht gestattet.

In dieser Publikation enthaltene Informationen können ohne vorherige Ankündigung geändert werden. Die von SAP SE oder deren Vertriebsfirmen angebotenen Softwareprodukte können Softwarekomponenten auch anderer Softwarehersteller enthalten. Produkte können länderspezifische Unterschiede aufweisen.

Die vorliegenden Unterlagen werden von der SAP SE oder einem SAP-Konzernunternehmen bereitgestellt und dienen ausschließlich zu Informationszwecken. Die SAP SE oder ihre Konzernunternehmen übernehmen keinerlei Haftung oder Gewährleistung für Fehler oder Unvollständigkeiten in dieser Publikation. Die SAP SE oder ein SAP-Konzernunternehmen steht lediglich für Produkte und Dienstleistungen nach der Maßgabe ein, die in der Vereinbarung über die jeweiligen Produkte und Dienstleistungen ausdrücklich geregelt ist. Keine der hierin enthaltenen Informationen ist als zusätzliche Garantie zu interpretieren.

Inbesondere sind die SAP SE oder ihre Konzernunternehmen in keiner Weise verpflichtet, in dieser Publikation oder einer zugehörigen Präsentation dargestellte Geschäftsabläufe zu verfolgen oder hierin wiedergegebene Funktionen zu entwickeln oder zu veröffentlichen. Diese Publikation oder eine zugehörige Präsentation, die Strategie und etwaige künftige Entwicklungen, Produkte und/oder Plattformen der SAP SE oder ihrer Konzernunternehmen können von der SAP SE oder ihren Konzernunternehmen jederzeit und ohne Angabe von Gründen unangekündigt geändert werden. Die in dieser Publikation enthaltenen Informationen stellen keine Zusage, kein Versprechen und keine rechtliche Verpflichtung zur Lieferung von Material, Code oder Funktionen dar. Sämtliche vorausschauenden Aussagen unterliegen unterschiedlichen Risiken und Unsicherheiten, durch die die tatsächlichen Ergebnisse von den Erwartungen abweichen können. Dem Leser wird empfohlen, diesen vorausschauenden Aussagen kein übertriebenes Vertrauen zu schenken und sich bei Kaufentscheidungen nicht auf sie zu stützen.

SAP und andere in diesem Dokument erwähnte Produkte und Dienstleistungen von SAP sowie die dazugehörigen Logos sind Marken oder eingetragene Marken der SAP SE (oder von einem SAP-Konzernunternehmen) in Deutschland und verschiedenen anderen Ländern weltweit. Alle anderen Namen von Produkten und Dienstleistungen sind Marken der jeweiligen Firmen.

Zusätzliche Informationen zur Marke und Vermerke finden Sie auf der Seite www.sap.com/corporate/de/legal/copyright.html.