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# Creating and managing catalogs SAP Business Network for Trading Partners





# **Content**

Creating and managing catalogs
Getting started with catalogs
Catalog workflow
Benefits of uploading catalogs
Making catalogs available to your customers
Catalog notifications
Catalog expiration and deletion
Test catalogs
Accessing pricing and availability updates
Maintaining catalog versions for different customers
Additional resources
How to create and publish catalogs
Publishing catalogs for CMS-enabled customers
How to upload and publish catalogs for CMS-enabled customers
How to view catalog validation errors
How to fix errors and revalidate a catalog in your customer's site
Validation and statuses for catalogs
How to correct errors in CIF files
How to edit CIF catalogs online
How to update or delete your catalog files
How to view and download your catalogs
Working with the Excel CIF template27
How to edit the Excel CIF template
How to open CIF files in Excel
How to save Excel files as CIF
Excel CIF template fields
How to set up a PunchOut catalog

# **Creating and managing catalogs**

This guide is for SAP Business Network suppliers and describes how to create, upload, and manage catalogs of the products and services that their company offers.

Catalogs are text files that describe the products and services offered by suppliers. Suppliers publish catalogs on the SAP Business Network for customers to subscribe to.

This guide applies to:

• SAP Business Network

### **Related guides**

Catalog format reference

# **Getting started with catalogs**

Catalogs are text files stored on SAP Business Network or on your own company's website that describe the products and services your organization offers and the prices you charge. You can create catalogs for any product or service, regardless of how it is measured, priced, or delivered.

Your customers access your catalogs through their procurement solutions to see what you offer and to make purchases from you. Catalogs are the main communication channel between you and your customers.

SAP Business Network supports the following catalog types:

- **CIF (Catalog Interchange Format)**: You can create CIF catalogs [page 27] with any word processor, text editor, or spreadsheet application.
- cXML (Commerce eXtensible Markup Language) format: You can create cXML catalogs using any XML or text editor.
- PunchOut catalogs: PunchOut catalogs [page 30] are interactive catalogs that use cXML to support two-way
  communication of electronic commerce details. A PunchOut catalog resides on your website; you provide your
  customers with a URL with which to access it.
- BMEcat (Bundesverband Materialwirtschaft, Einkauf und Logistik e. V. catalog): You can publish BMEcat catalogs [page 12] only to customers who use the content management system (CMS) in SAP Ariba solutions to manage their catalogs.
- Excel (Microsoft Excel): You can publish Excel catalogs [page 12] only to customers who use the content management system (CMS) in SAP Ariba solutions to manage their catalogs.

SAP Business Network supports any catalog in CIF or cXML format. A CIF catalog can be either a text file saved with a .cif extension or an Excel file saved with a .xls extension. You can upload a catalog using either the SAP Business Network catalog wizard or the cXML CatalogUploadRequest transaction. The cXML CatalogUploadRequest transaction supports CIF, cXML, BMEcat, and Excel catalogs. It also supports both new catalogs and updates to existing catalogs.

For help in deciding which catalog format is best for your company, see the Catalog format reference.

## **Catalog workflow**

The following is a typical example of the interaction between catalogs and your customer's purchasing solution:

- 1. You create catalog files [page 9] that describe products and services. You can download the CIF file template [page 27] or the CIF and CXML example files that are available in the SAP Business Network catalog wizard to create catalogs.
- 2. You specify how to publish the catalog. In the SAP Business Network catalog wizard, you:
  - 1. Designate a catalog as either private or public.
  - 2. View your customer's catalog preferences [page 17].
- 3. You upload the catalog files for a customer that has an active trading relationship on SAP Business Network. If your account is suspended, you can't publish catalogs to specific customers. SAP Business Network doesn't show your customers at the bottom of this page.

After the catalogs are validated, SAP Business Network publishes them to customers. You can verify the status [page 17] for your uploaded catalogs.

- 4. If your uploaded catalog has errors, correct the errors [page 20], and upload the catalog again.
- 5. SAP Business Network notifies the customer by email that new catalogs are available.
- 6. Your customer's purchasing site downloads and approves catalogs for use.
- 7. Users in your customer's organization browse the catalogs for products and services and initiate purchase requisitions, which are routed through their organizations for approval.
- 8. Upon approval, the purchasing site automatically sends purchase orders to SAP Business Network.

## Benefits of uploading catalogs

Storing your catalogs on SAP Business Network provides the following benefits:

- Security: SAP Business Network offers robust catalog security. After you upload catalogs, you publish them to individual customers or groups of customers. No other customers or suppliers can see them. For additional security, SAP Business Network uses Secure Hypertext Transfer Protocol (HTTPS) so catalogs are encrypted across the Internet. SAP Business Network also uses HTTPS when customers download catalogs.
- Versioning: SAP Business Network stores all versions of your catalogs, so you don't have to maintain local copies on your computer. Catalog versions are maintained on a "last in/first out" basis. When you upload a new catalog version, SAP Business Network maintains it as the current version. When you delete a version, SAP Business Network removes the most recently uploaded catalog.

#### i Note

While uploading a catalog, you must ensure that you always use the same filename for all versions of the selected catalog. Using the same name makes catalog management easier for customers.

#### i Note

Catalogs published for CMS-enabled customers [page 12] aren't stored on SAP Business Network.

## Making catalogs available to your customers

After you create your CIF or cXML catalog, you store it on SAP Business Network and publish it to your customers. Your catalogs don't automatically appear in your customers' purchasing systems immediately after you publish them.

Your customer's administrator must first validate, approve and activate catalogs before users can view them. A catalog subscription creates a link between your customer and your catalog so that you can send updated versions directly to your customer's purchasing system.

## **Catalog notifications**

If customers request notification of catalog changes, any future modification you make to that catalog automatically triggers another notification to the customer.

For private catalogs, customers receive notification only if you select them and they request notification. Customers that you don't select won't receive notification, even if they request it.

Publishing a catalog sends an automatic notification to the selected customer. Customers can download catalogs manually from SAP Business Network, or you can set up subscriptions so that SAP Business Network automatically updates your customer's existing catalogs when new versions are available.

## **Catalog expiration and deletion**

Catalogs that have never been published and contain more than one version expire 180 days after they were last viewed by the supplier. If a catalog has been published or contains only one version, it never expires.

When SAP Business Network deletes catalogs, it deletes them permanently. There is no way to retrieve deleted catalogs, either through the SAP Business Network user interface or by contacting SAP Ariba.

Deleting a catalog from SAP Business Network doesn't delete the catalog from your customer's purchasing system. Customers that previously downloaded these catalogs and imported them into their purchasing system can still use them. To ensure that customers don't continue to use old catalogs, add an expiration date to your catalogs (available in CIF 3.0 and cXML catalog formats).

## **Test catalogs**

Test accounts are optional and complementary SAP Business Network accounts that allow customers and suppliers to test catalogs and purchase order generation, routing, and receiving.

Test accounts enable transaction partners to send and receive test purchase orders without the risk of actually shipping products or disrupting production transactions.

The catalog tester, which is available only in your test account, lets you see how a customer would see the catalog contents. You can examine your item descriptions and other catalog fields to see how they appear. You can choose catalog items and add them to test purchase orders. You can also submit these test purchase orders to exercise the order routing method you configure in your test account.

For more information on test accounts, search for **Using test accounts in Ariba Network** in the help center.

#### i Note

You cannot test catalogs published for customers who use the content management system (CMS) available in SAP Ariba Procurement solutions to manage their catalog data.

## Accessing pricing and availability updates

If your customer's purchasing site supports PunchOut catalogs in both CIF and cXML formats, your customers can go directly to your website to search for and choose items and services.

In the case of a PunchOut item, the customer can click a link to punch out directly to your website and receive live pricing and customer-specific information.

Level 2 PunchOut enables customers to search for and find PunchOut items within their purchasing site, instead of having to search your website directly.

If you use Level 2 PunchOut, SAP Business Network allows you to configure and specify a cXML URL for pricing updates, where customers can request for updates on price and availability of catalog items. After you have published a catalog on SAP Business Network, you might change the price or availability of your catalog items. However, your published catalog continues to show the older information on SAP Business Network until you upload a newer version of the catalog. When you configure a cXML URL for the price and availability updates, customers can view the updated prices of catalog items in their purchasing site.

## Maintaining catalog versions for different customers

Customers that use SAP Ariba Buying solutions can define catalog validation rules to support unique codes in their purchasing systems.

You might have customers using a unique set of Unit of Measure (UOM) codes or commodity codes in SAP Ariba Buying solutions. SAP Business Network supports customer-specific catalog validation rules [page 17] and transforms the values provided by the customer to the equivalent values supported by SAP Business Network. This greatly eliminates the need for suppliers to maintain separate catalogs to support a different set of UOM, country code, commodity code, and currency code values for each customer. Suppliers can use a single set of values for the catalog each time an update is made.

For example, customer A supports "Each" as the UOM code and customer B supports "EA." The supplier supports "Each" as the UOM code. In order to support both the customers, the supplier had to create and maintain two sets of catalogs for these UOM codes. SAP Business Network allows customers of SAP Ariba Buying solutions to define specific catalog validation rules that allow suppliers to maintain a single set of UOM code to support both these customers. Using the catalog rules specified in SAP Ariba Buying solutions, SAP Ariba transforms the UOM code "EA" to "Each" allowing both the customers to receive their value of the UOM code each time the catalog is updated.

## **Additional resources**

The following table lists the resources available for catalog creation:

If you want to	See this guide
Create CIF or cXML catalogs	Catalog format reference (available in the help center)
	Explains how to work with the CIF (Catalog Interchange Format) 3.0 and cXML (commerce eXtensible Markup Language) catalog formats. It also describes how to use catalog features to reflect your business model and to differentiate your product and service content.
Implement a PunchOut website	cXML Solutions Guide (available in the help center)
	Describes how to implement a PunchOut-enabled website, receive cXML purchase orders, and send cXML invoices.
Learn about cXML	cXML User's Guide (available at http://www.cxml.org ≠ )
	The definitive source for information on the cXML language. Describes how to send and receive cXML documents.

# How to create and publish catalogs

To create catalogs, you can download the CIF file template or the CIF and CXML example files that are available in the SAP Business Network catalog wizard. The catalog wizard walks you through the process of naming, classifying, and transferring your catalog from your local drive and publishing it on SAP Business Network after validation.

#### **Prerequisites**

- We recommend that you view your customer's catalog validation rules [page 17] before you upload a catalog. Validation checks the catalog for syntactic and semantic errors and also for compatibility with the catalog rules set by specific customers.
- Catalog filenames must contain only the following characters: A Z, a z, 0 9, period (.), dash (-), and underscore (\_).
- If your customer wants you to upload advanced pricing details with your catalog, you must ensure that the catalog fields containing advanced pricing details don't violate syntactic validation rules, standards-based semantic validation rules, or a customer's catalog rules.
- When using the catalog wizard, the catalog file can't exceed 95 MB or 400,000 lines.
- The CIF 2.1 catalog supports only a basic set of 12 fields. It doesn't support multi-language descriptions, multicurrency pricing, multiple product commodity codes per line item, catalog expiration dates, PunchOut catalogs, or parametric searching parameters. These features require either CIF 3.0 or cXML catalogs.
- 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. SAP Business 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**.

#### !Limitations

- If you use the SAP Business Network catalog wizard, the catalog file can't exceed 95 MB (400,000 line items). 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. Before uploading a catalog file in Excel format, be sure the catalog file does not exceed 1 MB.
- SAP Business Network doesn't retain the original Excel files you upload. After it converts them to CIF, it deletes them.
- SAP Business Network doesn't support CIF or cXML contract files, which are catalog files that contain pricing information only. SAP Business Network currently supports index files, which contain both product and pricing information.
- If your account is suspended, you can't publish cXML and CIF catalogs to specific customers.

#### **Procedure**

- 1. On the home dashboard, click the **Catalogs** tab.
- 2. Click **Create Standard** to create a standard catalog. SAP Business Network displays the first page of the SAP Business Network create wizard.
- 3. Enter a unique catalog name and a brief description of your catalog. Customers can search for catalogs using this information.
- 4. To classify the products and services in your catalog, do the following:
  - a. Click Add in the Commodities section. SAP Business Network shows the Product and Service Category Selection page, which lists product and service categories, based on the United Nations Standard Products and Services Code (UNSPSC).
  - b. On the **Search** tab, enter a keyword or search phrase and click **Search**, or click the **Browse the Categories** tab to drill down through commodity families, classes, and individual commodities.
  - c. Choose a product and service category level, and click **Add**. The **My Selections** area shows the selected product and service category level.

#### !Limitations

If you are a supplier of all the items in a given product and service category level, choose the name of the higher-level product and service category instead of adding all of the lower-level product and service categories. For example, a furniture supplier should choose the category "Furniture and Furnishings" not the hundreds of individual items it sells. Customers can search for this information.

- d. To search for a product and service category by keyword, click the **Search** tab.
- e. Enter a search keyword and click **Search**. Choose a check box to select a search result, and click **Add**.
  - The **My Selections** area shows the selected product and service category segment.
- f. To remove a selected product and service category segment, choose the check box next to the product and service category segment in the **My Selections** area, and then click **Remove**.
- g. Click OK.
- h. Click Next.

The **Subscriptions** page in the catalog wizard lists only customers for whom the catalog is qualified. If you know customers are registered on SAP Business Network, but you can't see them, contact them directly and ask them to grant you permission to see them.

- 5. Choose who should see your catalog:
  - **Private**: SAP Business Network makes your catalog visible only to customers that you specify. You can choose this option for catalogs that contain contract prices. This option automatically creates a subscription to the catalog for all customers you choose.
  - **Public**: SAP Business Network makes your catalog visible to all customers. To receive a catalog, a customer must establish a relationship with you.

#### i Note

If you set the visibility to **Private**, you can choose customers or customer groups, which creates the catalog subscriptions and automatically notifies the selected customers by email.

6. To punch in to your customer's site and view the catalog content rules specified by your customer, click the **View** link in the **Catalog Validation Rules** column.

Click **Done** to return to the catalog creation wizard on SAP Business Network.

- 7. Click **Next** to reach the **Content** page.
- 8. Click **Browse** to choose a catalog file to upload.

You can download the CIF file template [page 27] or the example files from this step.

9. Click Validate And Publish.

#### i Note

Large catalog files can take a long time to upload, depending on the speed of your network connection. When uploading very large catalogs, you might encounter timeout errors. To avoid these problems, you can zip your catalog files to compress them, which substantially decreases upload time. Zip catalogs in CIF and cXML format that are larger than 10 MB to avoid a timeout error. SAP Business Network automatically unzips catalogs after upload. You can use any zip utility, such as WinZip. Each zip file can contain only one catalog, and the filename extension must be <code>.zip</code>.

Your web browser uploads the file to SAP Business Network, validates and publishes it. Do not navigate in the browser window until the next page shows up, as interrupting your web browser aborts the upload process. Your customers are subscribed to the current catalog version and are notified of its availability.

#### **Next Steps**

After SAP Business Network uploads the catalog, you can do the following:

- Review and fix CIF catalog errors [page 20] (for cXML catalogs, you must edit the catalog file and repeat the upload process)
- Qualify the catalog for additional customers
- Perform catalog management tasks, such as editing, downloading, and deleting catalogs

After SAP Business Network completes validation, it changes the catalog status from **Validating** to one of the following statuses:

- Validated means that your catalog is error-free.
- **Published** means that your private catalog has been validated and published.
- **Errors Found by** means that SAP Business Network detected catalog content that violates syntactic validation rules, standards-based semantic validation rules, or a customer's catalog rules.

# Publishing catalogs for CMS-enabled customers

Some customers use the content management system (CMS) avaiable in SAP Ariba Procurement solutions to manage catalog data. You can upload and publish catalogs in CIF and BMEcat format for customers who use CMS to manage catalogs.

You can punch in to your customer's site to view content rules and validation errors [page 15] of catalogs that fail these rules. You can also edit and revalidate the catalog content within the customer's CMS.

Keep the following in mind when publishing catalogs for CMS-enabled customers:

- You can't upload catalogs in cXML format for CMS-enabled customers.
- When uploading private catalogs on SAP Business Network, you can choose either CMS-enabled customers or customers who haven't enabled the CMS feature, but not a combination of both.
- You can't upload public catalogs for CMS-enabled customers.
- You can upload catalogs manually using the SAP Business Network catalog wizard or programmatically using the cXML CatalogUploadRequest transaction.

Publishing catalogs to CMS-enabled customers involves the following high-level steps:

- 1. An SAP Ariba Customer Support representative enables this feature for your site and the customer's procurement site.
- 2. You create catalog files that describe products and services. You can download the CIF and BMEcat file templates or the example files that are available in the SAP Business Network catalog wizard to create the catalogs.
- 3. You set the catalog visibility to **Private** and choose the CMS-enabled customers that you want to publish the catalog to.
- 4. You can punch in to each of your customer's sites to view their catalog content rules.
- 5. You return to the catalog creation wizard on SAP Business Network, choose the catalog format, and upload the required catalog and image files.

#### i Note

SAP Business Network doesn't check the catalog for syntactic and semantic errors.

- 6. The catalog file isn't uploaded to SAP Business Network but is sent to the CMS in the customer's procurement site. The catalog is processed according to the content rules in the CMS.
- 7. Catalogs that fail any catalog rules set up by the customer in the CMS have a **Validation Errors Found by Customer** status on SAP Business Network.
- 8. You can punch in to the customer's CMS, fix the errors, and revalidate the catalog.
- 9. Validated content documents are pushed from the CMS to the **Catalog Manager** workspace in the customer's site for master data validation, approval and activation.
- 10. The status of approved and activated catalogs is updated in the CMS and on SAP Business Network.

# How to upload and publish catalogs for CMS-enabled customers

You upload and publish private catalogs for your customers who use the CMS in SAP Ariba Buying solutions.

#### **Prerequisites**

- We recommend that you view your customer's catalog rules before you upload a catalog.
- When entering filenames for the catalog, you must ensure that the filenames don't contain any spaces or special characters.
- Ensure that the catalog file size doesn't exceed 200 MB.
- Ensure that the catalog images ZIP file size doesn't exceed 200 MB.

#### **Procedure**

- 1. On the home dashboard, click the **Catalogs** tab.
- 2. Click Create Standard to create a standard catalog.
- 3. Enter a unique catalog name and a brief description of your catalog. Customers can search for catalogs using this information.
- 4. To classify the products and services in your catalog, do the following:
  - a. Click Add in the Commodities section. SAP Business Network shows the Product and Service Category Selection page, which lists product and service categories, based on the United Nations Standard Products and Services Code (UNSPSC).
  - b. On the **Search** tab, enter a keyword or search phrase and click **Search**, or click the **Browse the Categories** tab to drill down through commodity families, classes, and individual commodities.
  - c. Choose a product and service category level, and click **Add**. The **My Selections** area shows the selected product and service category level.

#### !Limitations

If you are a supplier of all the items in a given product and service category level, choose the name of the higher-level product and service category instead of adding all of the lower-level product and service categories. For example, a furniture supplier should choose the category "Furniture and Furnishings" not the hundreds of individual items it sells. Customers can search for this information.

- d. To search for a product and service category by keyword, click the **Search** tab.
- e. Enter a search keyword and click **Search**. Choose a check box to select a search result, and click **Add**. The **My Selections** area shows the selected product and service category segment.
- f. To remove a selected product and service category segment, choose the check box next to the product and service category segment in the **My Selections** area, and then click **Remove**.
- g. Click OK.

#### h. Click Next.

The **Subscriptions** page in the catalog wizard lists only customers for whom the catalog is qualified. If you know customers are registered on SAP Business Network, but you can't see them, contact them directly and ask them to grant you permission to see them.

5. Set the catalog visibility to **Private**, and choose the customers that you want to publish the catalog to.

This step creates the catalog subscription and automatically notifies the customers by email. You can choose either CMS-enabled customers or customers who have not enabled the CMS feature, but not a combination of both.

6. To punch in to your customer's site and view the catalog content rules specified by your customer, click the **View** link in the **Catalog Validation Rules** column.

Click **Done** to return to the catalog creation wizard on SAP Business Network.

- 7. Click **Next** to reach the **Content** page.
- 8. Choose the format of the catalog that you want to publish from the **Select Format** dropdown.
- 9. Click **Browse** to navigate to, and choose a catalog file.

You can compress and upload large catalog files in ZIP file format to avoid time-out errors. The maximum size of a catalog file is 200 MB.

10. Click **Browse** to navigate to and choose a catalog image file.

You can upload the catalog images file in ZIP file format only. Ensure that the path names you provide in your catalogs match the image directory structure. If you choose to zip the folder containing the images, the paths of the image files in the catalog file must contain the folder name. For more information, see the Catalog format reference.

The maximum size of a catalog images ZIP file that can be uploaded is 200 MB.

11. Click Validate And Publish.

#### 

Don't navigate in your browser window until the next page appears. Interrupting your web browser stops the upload process.

#### **Next Steps**

The catalog file isn't uploaded to SAP Business Network but is sent to the CMS in your customer's procurement site. The catalog is then processed according to the content rules in the CMS and moves to one of the following statuses.

Catalog subscription status	Description
Pending Buyer Validation	The catalog is uploaded successfully in SAP Ariba Buying solutions and is pending processing by the CMS.
Validation Errors Found by Customers	The catalog violates one or more content rules specified in the CMS.

Catalog subscription status	Description
Validated	The catalog is successfully uploaded in SAP Ariba Buying solutions and has passed all content rules, but isn't approved by the customer yet.
Approved	The catalog is approved by the customer.
Rejected	The catalog is rejected by the customer.
Activated	The catalog is activated and available in SAP Ariba Buying solutions.
Deactivated	A previously activated catalog version is now deactivated in SAP Ariba Buying solutions.
Deleted	The catalog is deleted by the customer.
Changed	The customer made some changes to the catalog.

# How to view catalog validation errors

You view catalog validation errors in order to find out why a catalog failed and how to fix it.

#### **Procedure**

- 1. On the **Catalogs** tab, click the **Validation Errors Found by Customer** link in the **Status** column to punch in to your customer's site.
  - The page shows the total number of items that have been imported and the number of items that failed content rules, grouped by the following statuses: **Validation Error**, **Validation Warning**, **Cleansed**, and **Enriched**.
- 2. Expand each item status group to view the list of rules that caused failures and the item count per rule.
- 3. Click an item status link to view the items that are in that particular status. For example, click the **Validation Error** link to view the list of items with validation errors.

# How to fix errors and revalidate a catalog in your customer's site

You can punch in to the customer's site to edit catalogs that have errors and revalidate them.

#### **Procedure**

- 1. On the **Catalogs** tab, click the **Validation Errors Found by Customer** link in the **Status** column to punch in to your customer's site.
  - The page shows the total number of items that have been imported and the number of items that failed content rules.
- 2. Expand each item status group to view the list of rules that caused failures and the item count per rule.
- 3. Click **Edit Content** to edit the catalog.
  - The page shows the list of items in the catalog. Items that failed one or more catalog rule conditions are indicated by icons, and the associated field values are shown in red boxes.
- 4. You can use the options in the **See All Items** dropdown to narrow the list and view items that are in a particular status.
  - For example, choose **See All Items** > **See Enriched Items** to see only the list of items that have been enriched.
- 5. Click the value of the field that you want to edit, enter a new value, and click **OK**. Your changes are saved automatically.

#### i Note

You have to fix errors in each line individually. There is no provision to select multiple lines to edit catalog fields.

- 6. (Optional) Click Save to save your changes.
- 7. Click **Revalidate** to run the rules again and revalidate the entire catalog.

# Validation and statuses for catalogs

After you upload a catalog, SAP Business Network validates the catalog to ensure that the catalog content is correctly formed. Then, SAP Business Network publishes and qualifies the catalog for the designated customers. You can view the status of each catalog in the list on the **Catalogs** tab.

#### **Validation by SAP Business Network**

SAP Business Network validates the syntax and semantics of your catalog files:

- Syntactic validation ensures that a catalog's content is correctly formed. For example, every catalog entry
  must have the correct number of fields and the content of each field must match the field's data type. Every
  catalog file must be syntactically correct before you can publish it.
   During syntactic validation, SAP Business Network checks that:
  - All required fields are present.
  - No field exceeds its maximum field length.
  - · All integers and decimals are formatted correctly.
  - Price formats are correct and a currency specified.
  - No two items have the same combination of Supplier ID, Supplier Part ID, and Supplier Part Auxiliary ID.
  - The character set specified in the file is valid.
  - CIF file headers begin with a CIF version number and end with a DATA token. The DATA and ENDOFDATA tokens must exist and be in the correct locations. The lines between must be of the form key:value. Additionally, SAP Business Network displays an error if the itemcount field does not match the number of items in the file.
  - No invalid characters are present in any fields.
  - Descriptions are present. SAP Business Network issues a warning if it encounters invalid characters in the **Description** field.
- Semantic validation ensures that a catalog's content is compatible with specified catalog standards, such as
  UNSPSC commodity codes or standard unit of measure (UOM) codes. If you choose to qualify your catalog for
  a specific customer, SAP Business Network validates it against that customer's catalog rules. For example, if
  the customer's procurement system uses a custom commodity code set and the catalog uses a standard
  commodity code set, SAP Business Network can't validate the catalog for that customer. Your customers can
  choose to relax validation rules for UNSPSC, UOM, or zero price values.
  - During semantic validation, SAP Business Network checks the units and codes listed below for each catalog item to ensure they are compatible with specified catalog standards.
  - **Currency**: An item's currency must be valid. SAP Business Network maps currencies to translate the incoming currency names into the customer's procurement system's standard currency terminology. A currency is not valid unless it meets the following criteria:
    - The value to which the code is mapped in the simple map has a corresponding **Currency** object. There are no empty values. SAP Business Network generates an alert for items with zero or no cost.
  - Unit of measure (UOM): An item's unit of measure must be valid based on the UOM code specified in the catalog header. If a catalog doesn't use the customer's canonical units of measure, the customer must define a mapping file to be sure that the incoming terminology is interpreted correctly.

- Commodity code: An item must have at least one domain-specific commodity code that maps to a supported commodity code specified in the catalog header. You can override the commodity code at the line-item level. SAP Business Network supports UNSPSC, eCl@ss, NAICS, and ISICS commodity codes, but only validates UNSPSC commodity codes. By default, SAP Business Network uses ECCMA version 13.5 and UNSPSC version UNSPSC v9.0501. The UNSPSC codes used in catalogs support version 13.5.
- **Supplier ID**: An item's **Supplier ID** must match the ANID or D-U-N-S number of your supplier organization as specified in the catalog header file.
- URL formats: The Supplier URL and Manufacturer URL must have http://along with the URL string.
- Start/Expiration Dates: The item's Start Date must be before the expiration date.
- Territory and Language: The Territory and Language codes must validate against the ISO 3166-1 and 3166-2 codes and Java locale codes.

#### Your customers' catalog validation rules

To view your customers' catalog validation rules, go to the **Subscriptions** page of the SAP Business Network catalog wizard, and then click the **View** link in the **Catalog Validation Rules** column next to the customer's name.

Alternatively, you can punch into the customer's site to view the catalog preferences.

In some cases, when you punch in to the customer's site for the first time, you might see the following error message:

Cannot access customer's site. Your buying organization must approve your access to their system before you proceed with this action. Please try again later.

This error occurs when your customer hasn't approved your access to their procurement site. You should contact your customer to ask for access to their site.

#### i Note

SAP Business Network doesn't validate catalogs published for CMS-enabled customers.

#### Validation errors on catalogs

After you upload a catalog file, the catalog might have errors that prevent it from being published to your customers.

To view details of the validation errors, do one of the following:

- Go to your customer's site to view the error details.
- Check the error information in email notifications sent by SAP Business Network.
- On the Catalogs tab, click the Errors Found by Customer link in the Status column.

To resolve a catalog error [page 20], you can either upload a modified version of the catalog that meets your customer's requirements or contact your customer to ask them to disable a requirement. After correcting catalog errors on SAP Business Network, you must ensure that you make the same changes to the catalog file on your computer so the errors don't reappear.

## !Limitations

For cXML catalogs, you can't fix problems within your account. Instead, fix the file locally on your computer and click **Update content** to upload the updated version [page 23].

## **Catalog statuses**

Use the following table to interpret the different catalog subscription statuses.

Status	Description
Received, Pending Buyer Validation	The catalog is uploaded successfully in SAP Ariba Buying solutions and is pending validation from your customer. Catalogs published to all other procurement customers have a <b>Published</b> status.
Validation Errors Found by Customers	The catalog failed during validation against your customer's catalog rules in SAP Ariba Buying solutions. To view details of the error, click the <b>Validation Errors Found by Customer</b> link for this catalog on the catalog dashboard and view details of the error message by punching into your customer's site.
Validated	The catalog is successfully uploaded in SAP Ariba Buying solutions and has passed validation, but your customer hasn't approved it yet.
Approved	Your customer approved the catalog.
Rejected	Your customer rejected the catalog.
Activated	Your customer activated the catalog and made it available in SAP Ariba Buying solutions.
Deactivated	A catalog version activated earlier is now deactivated. Catalogs can change back and forth between <b>Activated</b> and <b>Deactivated</b> statuses.
Deleted	Your customer deleted the catalog.
Changed	Your customer made some changes to the catalog.

## How to correct errors in CIF files

You fix errors in your catalog files so you can reload them and publish them successfully to your customers.

#### **Procedure**

- 1. On the home dashboard, click the Catalogs tab.
- 2. Click a catalog name to view more information about it, or choose a catalog and click View/Edit.
- 3. Click the **Errors Found** status link.
- 4. To customize your view of the error list, click the table options icon in the upper right of the **Catalog Validation Errors** table, and then do one or all of the following:
  - To add or remove columns from view, check or uncheck them in the **Show/Hide Columns** section of the table menu.
  - To group errors by a specific column, choose the column name in the **Group by Column** section of the menu.
  - To export the errors to Excel, choose an option in the **Export to Excel** section of the menu.
- 5. When you are ready to view an error, click a line number or an error description.

If the error is in the catalog body, you're taken to a page where you can edit the line item.

If the error is in the catalog header, you'll see a text box for editing just the header.

6. For each error, enter a new value to replace the old value.

→ Tip

For information about syntax for CIF files, see the Catalog format reference.

7. Click **Update** to submit your changes.

SAP Business Network validates your changes and, if you selected a customer during upload, qualifies the catalog for that customer. It also revalidates the catalog against all qualified customers to ensure that you have introduced no new errors.

- 8. To delete a line from the catalog, do the following:
  - Click the **Content** page to view all the catalog items.
  - Click **Delete** in the **Action** column for the item that you want to delete.

The line is deleted and the status of the catalog is updated in the catalog dashboard.

#### **Related Information**

Validation and statuses for catalogs [page 17]

# How to edit CIF catalogs online

If you have a small catalog or only a few changes to make to an uploaded catalog, you might prefer to make the edits directly in the uploaded catalog instead of downloading the file and making the updates.

#### **Prerequisites**

• If you use Windows Notepad to edit catalogs, do not click the "Save as Unicode" check box. For the same reason, if you use Microsoft Word, do not select "Unicode Text" as the file type. Raw Unicode (also known as UCS-2) is not file-safe because its byte order varies depending on the operating system.

#### !Limitations

- You can't edit catalogs over 4 MB in size online. Download large catalogs [page 25], edit them on your computer [page 21], and then upload them to SAP Business Network.
- You can't view or edit cXML catalogs online.
- You can't edit Excel catalogs online; edit them on your computer in Microsoft Excel and upload them to your account.

#### **Procedure**

- 1. On the home dashboard, click the **Catalogs** tab.
- 2. Click the name of the catalog you want to edit, or choose the catalog and click View/Edit.
- 3. Click **Next** to view the **Content** step of the catalog wizard.
  - SAP Business Network shows a list of line items in the catalog.
- 4. If the catalog you want to edit has already been published, you must create a new version to edit it. Click **Create New Version**, update the information on the **Details** page, and click **Next**.
- 5. Do one of the following:
  - To delete an item, click **Delete** in the **Action** column next to the item.
  - To add an item, click **Add Item**. You'll see a page where you can enter field values for the new item.

→ Tip

For information about CIF syntax and format, see the Catalog format reference.

- 6. If you added or deleted any items, click **Update Header Data** on the **Contents** page to edit the catalog header details.
- 7. After updating the catalog header details, click **Next**.

### i Note

If SAP Business Network finds any errors, they are indicated on the **Errors** page. Click the item number of the item with the error to correct it.

- 8. On the **Subscriptions** page, configure the catalog visibility.
- 9. Click **Validate and Publish** to publish the new version of the catalog.

### **Next Steps**

After editing catalogs directly in your SAP Business Network account, be sure to make the same changes to the catalog files on your computer so the old values don't reappear.

## How to update or delete your catalog files

You can update catalog files when there are updates to your offerings or pricing. When a catalog subscription no longer applies, you can delete if from SAP Business Network.

#### Context

Keep the following points in mind when editing and uploading catalogs:

- You change the catalog by uploading another catalog. A new version of a catalog is created on SAP Business Network when a catalog is edited or a new catalog file is uploaded. SAP Business Network continues to store the previous versions of your catalog, but only the latest version is visible.
- Upload the entire updated catalog, not just the changes; SAP Business Network doesn't merge partial catalogs.
- Avoid changing catalog formats (CIF or cXML). While SAP Business Network doesn't prevent you from changing catalog formats during an update, it's important to use the same format for all versions of a catalog subscription.
- If the catalog contains numerous errors, it's easier to fix the original file and upload it again. If you update an existing catalog that SAP Business Network validated in the past, it might no longer pass validation when you upload it because of one or both of the following:
  - SAP Business Network's semantic validation checking was less sophisticated.
  - Your customer's catalog validation rules changed after you last validated the catalog.
- When updating a catalog, you don't need to create a new standard catalog. You can use an existing catalog, but make sure not to change the existing name for the catalog subscription when you upload a new version. This step is critical for your customer to be able to accurately update existing catalogs when a new version is available.

You can access previous versions of a catalog by deleting the current version. Deleting catalogs removes them from SAP Business Network. Customers can no longer view them online or download them.

When a new version is created or a current version is deleted, SAP Business Network sends an automatic notification to all customers that subscribed to it. Publishing your updated catalog sends automatic notification to any customers that subscribed to it. For private catalogs, customers receive notification only if you select them and they request notification. Customers that you don't select won't receive notifications, even if they request it.

#### Procedure

- 1. On the home dashboard, click the **Catalogs** tab.
- 2. Choose a catalog, and do one of the following:
  - To edit a catalog, click View/Edit.
  - To delete only the latest version of a catalog, choose **Delete** > **Latest Version Only**. SAP Business Network reverts to the previous version of the catalog, if one exists.

#### i Note

Use this feature if the latest version you uploaded has problems and you want to go back to the previous version or upload a new version.

- To delete all versions of a catalog, choose **Delete** > **All Versions**. SAP Business Network deletes all versions of the catalog and removes the catalog name.
- 3. To add product and service categories, click **Add** in the **Commodities** section, and then choose from the available product and service categories on the **Product and Service Category** page.
- 4. Click **Next** to view the **Content** step of the catalog wizard.
  - SAP Business Network shows a list of line items in the catalog.
- 5. Click **Upload Catalog File** to replace the existing catalog file.
- 6. Click **Browse** to find the location of the catalog file on your computer.



Use the same catalog filename for all versions of a catalog subscription. Using the same name makes catalog management easier for customers.

7. Click **Validate and Publish** to publish a new version of the catalog.

#### **Related Information**

How to edit CIF catalogs online [page 21]

# How to view and download your catalogs

You might want to download your catalogs from SAP Business Network if you have lost your local catalogs or if you need to verify the contents of uploaded catalogs.

#### **Prerequisites**

To download catalogs, they must be in CIF 3.0 format and smaller than 600 KB. You can download catalogs as Excel files if they are in CIF 3.0 format and are smaller than 400 KB.

#### **Procedure**

- 1. On the home dashboard, click the **Catalogs** tab.
- 2. To change the information you want to display on the **Catalog** page, click the table options menu icon in the upper right corner of the **Catalog** table.
- 3. If you are viewing the catalog dashboard, interpret the columns using the following table:

Column name	Description
Customer Name	The name of the customer that has subscribed to that catalog.
	The customer's name is shown for each private catalog. <b>None</b> means it is a public catalog with no subscriptions. When a customer subscribes to a public catalog, the customer's name shows up in this column. When multiple customers subscribe to the same public catalog, each subscription shows up as a new row with the name of that customer.
Catalog Name	The unique name of the catalog.
Version	The version number of the catalog.
	When you edit or update an existing catalog, SAP Business Network creates a new version and assigns a version number. SAP Business Network continues to store the previous versions of your catalog, but only the latest version is visible. You can access previous versions by deleting the current version.
File Name	The name of the catalog file.
Туре	The catalog file type. Catalog files must be CIF, cXML, or Excel files (.cif, .xml, .xls, or .zip).
Size	The file size of the catalog.
Visibility	Specifies whether a catalog is private or public.
Created By	The name of the catalog creator.
Date Created	The date the catalog was uploaded to SAP Business Network.

Column name	Description	
Status	The catalog or subscription status of the catalog:	
	<ul> <li>Catalog status: Whether the catalog was uploaded and published successfully on SAP Business Network.</li> </ul>	
	<ul> <li>Subscription status: Whether the catalog passed validation in SAP Ariba Buying solutions. When the catalog fails validation in SAP Ariba Buying solutions, a status update is sent to SAP Business Network and shown on the catalog dashboard. If SAP Business Network doesn't receive a status update for the catalog, the SAP Business Network catalog status remains.</li> </ul>	
Date Status Receive	The date the subscription status is received from SAP Ariba Buying solutions.	

- 4. Do any of the following from the table options menu:
  - To add or remove columns from view, check or uncheck them in the **Show/Hide Columns** section of the table menu.
  - To group catalogs by a specific column, choose the column name in the Group by Column section of the menu.
- 5. Click the name of one of your catalogs, or choose a catalog and click View/Edit.
- 6. Click **Next** to view the **Content** step of the catalog wizard.
- 7. Click Download Catalog File.
- 8. Choose the preferred download option:
  - **Download as cXML** (available for cXML catalogs)
  - **Download as CIF** (available for CIF 2.1 and CIF 3.0 catalogs)
  - **Download as Excel** (available for CIF 3.0 catalogs smaller than 400 KB)
- 9. If the **Download as Excel** is grayed out:
  - a. Click **Convert to Excel**. This step starts the conversion process, which can take several minutes, depending on catalog size.
  - b. Wait for the conversion to complete. Click **Refresh Status** to see the current conversion status; when complete, the **Download as Excel** button becomes active.
  - c. Click Download as Excel.

If your browser prompts you to specify a location for storing the downloaded file, choose a folder on a local drive. If your web browser opens and displays the template, choose **File** > **Save As** and save the template to a local drive.

#### **Related Information**

How to update or delete your catalog files [page 23]

# **Working with the Excel CIF template**

If you prefer to manage catalog content with spreadsheets, SAP Ariba provides a Microsoft Excel template containing the required information and an Excel-to-CIF converter. The Excel format CIF template helps you fill in the various fields for items in your catalogs.

#### i Note

Your customer's purchasing system recognizes CIF files, but not Excel catalogs. To convert Excel catalogs to CIF, you can either use the SAP Business Network Excel-to-CIF converter, or you can convert them yourself. It can also convert CIF files back to Excel format for downloading.

## **How to edit the Excel CIF template**

#### **Procedure**

- 1. To get the CIF file template, create a new standard catalog, and find the template on the **Content** step of the catalog wizard.
- 2. After you download and save the template, open the file in Excel.

#### → Tip

The CIF template contains useful descriptions of each field. To read them, put your pointer on the red comment markers.

3. Review the catalog header to make sure the fields are correct. For example:

```
CODEFORMAT: UNSPSC
CURRENCY: USD
SUPPLIERID DOMAIN: NETWORK ID
```

### i Note

Specify currency names with ISO 4217 three-letter (CodeA) currency codes.

4. Enter your catalog data into the body fields.

#### → Remember

For each catalog item, you must enter values for the first seven fields (or columns). Ensure that your entries don't exceed the field sizes (the Excel CIF template contains comments that indicate the field size).

5. To calculate the number of catalog items for the ITEMCOUNT field, subtract the number of the last line of data from the number of the first line of data, and then add one.

6. Save the file as an Excel (.xls) file.

## How to open CIF files in Excel

#### **Procedure**

- 1. In Excel, choose File > Open.
- 2. Choose the CIF file.

Excel shows the **Text Import Wizard**.

- 3. Select **Delimited** and then click **Next**.
- 4. Select **Comma** as the delimiter and quote (") as the text qualifier.
- 5. Uncheck Tab.
- 6. Click Next.
- 7. Select all columns in your spreadsheet, select **Text** as the column data format, and then click **Finish**.

→ Tip

Treat all columns as text so that Excel retains any leading or trailing zeros.

8. To make the resulting spreadsheet more readable, select all cells and choose **Format > Column > AutoFit Selection**.

## How to save Excel files as CIF

To convert to CIF manually, you save the Excel file to CSV format and delete extra commas with a text editor.

#### **Procedure**

- 1. In Excel, choose File > Save As.
- 2. Select CSV (MS-DOS) as the file type.

Excel inserts a comma between each field.

3. Enter an meaningful name for the file.

#### Example

The recommended format is <catalog\_description>\_<customer\_name>; for example, workchairs acme.

- 4. Click Save.
- 5. To remove extra commas in the CIF file, open the file in Notepad, Wordpad, or another ASCII text editor.
- 6. Delete extra commas from the header and the body.
- 7. Ensure that the leading or trailing zeros weren't deleted.
- 8. Save the file.
- 9. Change the file extension from .csv to .cif.

# **Excel CIF template fields**

The following table provides an overview of the fields that are available in the CIF template.

For each catalog item, you must enter the following values:

Field	Description
Supplier ID	Your SAP Business Network ID (ANID) or D-U-N-S number:
	<ul> <li>View your ANID at the bottom of any SAP Business Network page or by clicking Company Settings in the upper right corner of your dashboard.</li> </ul>
	<ul> <li>Look up your organization's D-U-N-S number on the Dun &amp; Bradstreet website .</li> </ul>
Item Description	A description of the catalog item. Don't use abbreviations.
SPSC Code	Enter the catalog item's United Nations Standard Products and Services Code (UNSPSC). To find the appropriate code, search for <b>catalog standards</b> in the help center.
	SAP Business Network uses ECCMA version 13.5 and UNSPSC version UNSPSC v9.0501. The UNSPSC version UNSPSC v9.0501 corresponds to the ECCMA version 13.5.
	The commodity codes used in catalogs support ECCMA version 13.5. However, SAP Business Network can translate any earlier version to 13.5 and vice versa.
Unit Price	Enter the price per unit for the catalog item. Specify numbers as you want them to appear to users. For example, for \$19.50, enter "19.50" (include the trailing zero). Do not include the currency symbol (\$).
Unit of Measure	Enter the unit of measure for the catalog item using the United Nations Units of Measure (UNUOM) standard . For a list of UNUOM codes, search for UN UOM in the help center.

## How to set up a PunchOut catalog

PunchOut catalogs are interactive catalogs stored on your website that use cXML to enable two-way communication of electronic commerce details. A PunchOut catalog allows your customer's purchasing system to communicate with live catalog content on your website, which often provides a better shopping experience for your customers and reduces your workload.

#### **Prerequisites**

You must configure your cXML profile and specify the PunchOut Setup Request URL. SAP Business Network uses this URL to send the PunchOut request documents. For more information about how to configure your cXML profile, see *Configuring document routing*.

#### Context

In your customer's purchasing system, PunchOut catalogs show a hyperlink instead of product or pricing details. When users click this hyperlink, their web browser leads them to a page from your local website.

Depending on how you implement this page, users can browse product options, specify configurations, and choose delivery methods. Your customer's system passes organization IDs to your website, and you can use them to look up previously agreed-upon prices (contract prices). When users finish with this page, they click a button that returns the order information to their purchasing system. The fully configured products and their prices appear within the purchasing system on users' purchase orders.

PunchOut catalogs allow you to leverage existing resources from simple online catalogs to advanced e-commerce sites. PunchOut catalogs can also use search engines to find items on your website.

Use PunchOut catalogs for:

- Products with a large number of configurations and options; for example, many colors or sizes, or many delivery methods (overnight, two-day, or five-day).
- Inventories containing more than a few thousand items.
- Products whose prices are based on prearranged contracts (custom pricing).
- Products that must be customized for each customer, such as nameplates or business cards. (Alternatively, your customers can implement custom catalog forms in the purchasing system, which allow users to attach personalized data to a purchase order).
- Products whose specifications or prices change often.
- Products with advanced pricing details.

When deciding whether to use PunchOut catalogs, consider the following trade-off:

- They require all users to have full Internet access, which some companies don't allow.
- They require you to implement and maintain an interactive website, accessible 24 hours a day, seven days a week.

If your account is suspended, your customers can still access your PunchOut catalogs, shop for products and services, and create a purchase order; however, SAP Business Network doesn't send you the purchase order. For more information about suspended accounts, see *Managing subscription services*.

PunchOut catalog users don't need to enter a user password for your site. They are pre-authenticated by SAP Business Network.

For information on how to implement a PunchOut website, see the cXML User's Guide and the cXML Solutions Guide.

#### i Note

You must ensure that your PunchOut website's use of cookies and online tracking is compliant with the General Data Protection Regulation (GDPR) and the ePrivacy Regulation (ePR).

SAP Ariba recommends that you use appropriate tools to test your site to ensure that it is GDPR and ePR compliant. These tools might indicate you to make changes such as, removing all external http references, and having a single cookie policy for site visitors.

#### **Procedure**

- 1. On the home dashboard, click the **Catalogs** tab.
- 2. Click Create PunchOut Only.
- 3. Enter information about your PunchOut catalog. Customers can search each of these fields. Note the following:
  - You must enter the prefix https:// for the **PunchOut URL** value. This URL is no longer used, but purchasing systems require a value for this field.
  - The UNSPSC field adds a commodity code to the PunchOut index catalog. The Commodities field allows
    you to classify the types of products or services you offer, which helps customers searching for specific
    products or services find your catalog. Click Add to get to the Product and Service Category Selection
    page. For more information about classifying commodities, see How to create and publish catalogs [page
    9].

#### !Limitations

SAP Business Network uses ECCMA version 13.5 and UNSPSC version UNSPSC v9.0501. The UNSPSC codes used in catalogs support version 13.5. However, it can translate any earlier version to 13.5 and vice versa.

#### 4. Click OK.

The PunchOut catalog is now validated and published.

#### i Note

SAP Business Network now forwards all PunchOut requests to the URL specified in your cXML profile. To specify the PunchOut URL that is actually used, click **Company Settings** in the upper right corner of your home dashboard, and choose **Electronic Order Routing**. In the **cXML Setup** section, click **Configure cXML setup**.

#### Results

You can review the status of the catalog [page 17] that has been published. If the catalog contains errors, correct the errors [page 20] and try to publish it again.

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