

ABBYY



ABBYY Vantage

Commercial Invoice Document Skill Guide

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About ABBYY Vantage

ABBYY Vantage is a comprehensive Content Intelligence platform that provides AI-powered cognitive services and pre-trained and trainable skills that can "understand" business documents and extract actionable data and insights.

This no-code / low-code platform makes today's digital worker and processes smarter and empowers the new citizen developer to accelerate digital transformation initiatives and expand automation to new processes in a fast and simple way, making an immediate impact on business results and customer experience.

Types of documents that can be processed with Vantage

Vantage is capable of processing structured, semi-structured, and unstructured documents in a variety of input formats and languages.

- **Structured documents** are documents which always include the exact type of information in the exact same locations. One example of structured documents are pre-formatted forms.
- **Semi-structured documents** are documents which generally include the same or similar information, but in each document the location, size, and number of fields may vary from document to document. Examples of semi-structured documents are bills, payment orders, and invoices.
- **Unstructured documents** are documents which consist of continuous text. Required information is usually located inside a sentence that can be on any page of the document. Examples of unstructured documents are contracts, lease agreements, and e-mail messages.



Note: Use Advanced Designer to create skills for extracting data from unstructured documents.

The Vantage platform comes with a set of built-in skills, which can extract data from certain document types out-of-the-box (i.e. invoices, purchase orders, receipts, bills of lading, delivery notes). These skills can be adjusted according to specific requirements and further trained based on customer-specific documents.

Vantage users have also the option to design and train a completely new Document skill, Classification skill, and/or Process skill based on their own document set.

Commercial Invoice - Document Skill

The **Commercial Invoice** skill extracts data from commercial invoices. A commercial invoice is a customs declaration document that contains information about the parties involved in the transaction, the goods being transported (including their value), and the terms of delivery.

The Commercial Invoice skill is a production skill. It has been fully trained on a large document set and provides high accuracy of data identification and extraction. The skill is ready to be used in production and does not require further training on your specific documents.

Supported Languages

- English

Extracted Fields

Field		Description
Consignee	Name	The name of the consignee.
	Tax ID	The international tax ID of the consignee.
	Address	The address of the consignee.
	Consignee ID	The unique identifier of the consignee. This field is extracted only when a consignee data catalog is used.
	Postal Code	The postal code of the consignee. This field is extracted only when a consignee data catalog is used.
	Street	The Street component of the consignee address. This field is extracted only when a consignee data catalog is used.
	City	The City component of the consignee address. This field is extracted only when a consignee data catalog is used.
	State or Province	The State or Province component of the consignee address. This field is extracted only when a consignee data catalog is used.
	Country	The Country component of the consignee address. This field is extracted only when a consignee data catalog is used.
Vendor	Name	The name of the sender of the goods.
	Tax ID	The international tax ID of the sender of the goods.
	Address	The address of the sender of the goods.
	Vendor ID	The unique identifier of the sender of the goods. This field is extracted only when a vendor data catalog is used.
	Postal Code	The postal code of the sender of the goods.

Field		Description
		This field is extracted only when a vendor data catalog is used.
	Street	The Street component of the sender of the goods address. This field is extracted only when a vendor data catalog is used.
	City	The City component of the sender of the goods address. This field is extracted only when a vendor data catalog is used.
	State or Province	The State or Province component of the sender of the goods address. This field is extracted only when a vendor data catalog is used.
	Country	The Country component of the sender of the goods address. This field is extracted only when a vendor data catalog is used.
	National Tax ID	The national tax ID of the sender of the goods. This field is extracted only when a vendor data catalog is used.
	IBAN	The IBAN number of the sender of the goods. This field is extracted only when a vendor data catalog is used.
	Bank Code	The bank code of the sender of the goods. This field is extracted only when a vendor data catalog is used.
	Bank Account	The bank account of the sender of the goods. This field is extracted only when a vendor data catalog is used.
Ship to	Name	The name of the recipient of the goods.
	Address	The address of the recipient of the goods.

Field		Description
Bill to	Name	The name of the recipient of the invoice for the goods specified in the document.
	Address	The address of the recipient of the invoice for the goods specified in the document.
Invoice Number		The number of the invoice.
Invoice Date		The date on which the invoice was issued.
Due Date		The date by which the invoice should be paid.
Country of Origin		The country where the goods were manufactured.
Country of Export		The country from which the goods are being exported.
Country of Destination		The country into which the goods are being imported.
INCO Term		<p>The terms of shipment. Possible values:</p> <ul style="list-style-type: none"> • EXW: EX Works, • FCA: Free Carrier, • FAS: Free Alongside Ship, • FOB: Free On Board, • CFR: Cost And Freight (variant: CNF), • CIF: Cost Insurance Freight, • DAP: Delivered At Place (variant: DTU), • DPU: Delivered at Place Unloaded, • CPT: Carriage Paid To, • CIP: Carriage Insurance Paid, • DDP: Delivered Duty Paid, • DDU: Delivered Duty Unpaid, • DAT: Delivered at Terminal.
Weight		The total weight of the goods.
Weight UoM		The unit of measurement used for the weight of the goods (kilos, pounds, etc.).
Total Pallets		The total number of pallets containing the goods.

Field		Description
Total		The total price of the goods.
Currency		The currency of the price.
Additional Costs (repeating group)	Type	The type, amount, and currency of any additional costs, such as insurance, freight, packing etc.
	Amount	
	Currency	
Line Items (repeating group)	Position	The number of the line item.
	Country of Origin	The country where the line item was manufactured.
	HS Code	The Harmonized System code of the goods.
	Description	A description of the line item.
	Quantity	The number of units purchased.
	UoM	The unit of measurement used for the line item.
	Unit Price	The price of one unit of the goods.
	Total Price	The total price of the line item, including additional charges and discounts.
	Currency	The currency of the line item.
	Net Weight	The net weight of the line item (that is, without the packaging).
	Net Weight UoM	The unit of measurement used for the net weight (kilos, pounds, etc.).
	Gross Weight	The gross weight of the line item (that is, with the packaging).
Gross Weight UoM	The unit of measurement used for the gross weight (kilos, pounds, etc.).	

Key Fields

- Vendor/Name
- Consignee/Name
- Invoice Number
- Invoice Date

- Total
- Currency

Validation Rules

Rule	Description
Sum of Line Items amount should be equal to Total	Verifies that the sum of all line item amounts and Additional Costs is equal to the total invoiced amount.
Separate currency from amount in money fields	Splits the amount and the currency in the Total and Additional Costs fields and copies the currency into the Currency field if it is empty.
Separate currency from amount in Line Items	Splits the amount and the currency in Line Items fields, and copies the currency into the Currency fields if they are empty.
Check item amount	Multiplies the number of units in the line item by the price of one unit and checks that the result is equal to the total price of the line item.
Complete currency in amounts fields	<p>If the Currency field next to the Total field is empty, the rule will populate that field with the currency indicated in the Currency field in the Line Items group. If multiple currencies are specified in the Line Items group, the Currency field will be left empty. Likewise, the rule will populate the Currency field in the Line Items group with the currency from the main Currency field. This rule also applies to the Currency field in the Additional Costs group.</p> <p>Only ISO-standard alphabetic currency values are copied. If the currency is specified using a symbol (e.g., "\$", "€", "US\$", "CA\$", "AU\$", "NZ\$", or "£"), the value is still copied, but is then formatted to be the standard alphabetic value for that currency type.</p>
Check currency in amounts fields	Checks that the currency in the Currency field matches the currency code in the invoice and in the line items. Offers a list of suggestions if the field is empty or if the value doesn't match the currency code.
Add INCOTerm value from the list:	<p>If the INCO Term has been detected on the document and is filled in, adds a standardized INCOTerm value and its expansion for that delivery type.</p> <p>Example: DDP: Delivered Duty Paid.</p>

Rule	Description
Vendor DB lookup	<p>Checks information about the vendor against the corresponding catalog. If the catalog contains information about that vendor, but the values are either different or incomplete, fills in the appropriate fields using data from the catalog.</p> <p>The ID, Name, Street, CountryCode, and Consignee ID fields should be filled in in the vendor catalog.</p>
Consignee DB lookup	<p>Checks information about the consignee against the corresponding catalog. If the catalog contains information about the consignee, but the values are either different or incomplete, fills in the appropriate fields using data from the catalog.</p> <p>The ID, Name, Street, and CountryCode fields should be filled in in the consignee catalog.</p>

Parameters

The **Commercial Invoice** skill has default parameters that refer to data catalogs used for Vendor and Consignee lookup. You can change the values of these parameters in Vantage or Advanced Designer to modify field extraction. For more information, see Skill parameters.

Parameter	Description
CommercialInvoiceVendors	<p>The predefined data catalog used for Vendor lookup.</p> <p>The default value of this parameter is CommercialInvoiceVendors. You can change this value by choosing another available data catalog of the same type (Document Issuer Companies).</p>
Consignees	<p>The predefined data catalog used for Consignee lookup.</p> <p>The default value of this parameter is Consignees. You can change this value by choosing another available data catalog of the same type (Document Receiver Companies).</p>

Using a Skill in ABBYY Vantage

To use a skill in ABBYY Vantage, you need to import it to your **Skill Catalog**.

To import a skill, open the **Skill Catalog** and click the  **Import** button in the toolbar. In the dialog box that will open, specify a path to the archive that contains the skill you are importing.

This skill will be uploaded to your **Skill Catalog** and published.

If the chosen archive is larger than 2 GB, you will see a dialog box with a link to a shared folder and its credentials.

You should open this folder and upload the archive. The skill will be imported to Vantage automatically. The archive will then be deleted from the shared folder. All files uploaded to this folder afterwards will be transferred to the exception folder. Hence you may use this folder to import only one skill. The folder remains active for 14 days.

The version of the imported skill will be 1.0. If such a skill previously existed in the tenant and was deleted, the version number of the deleted skill will be incremented and assigned to the imported skill. The version number of the imported built-in skills is always the same as at the time of export.

If the skill you are importing already exists in your **Skill Catalog**, ABBYY Vantage will display a warning message and will ask whether you want to create a new version of the existing skill or save the new skill under a different name. If you choose the latter, the new skill will be called *<Imported skill name New>*.

Note: Vantage supports the import of skills exported from Advanced Designer. However, such skills will only be trainable in Vantage if a Fast Learning activity was added to the document processing flow in Advanced Designer.

Importing a Document skill with data catalogs

Data catalogs exported with a skill are imported according to the table below:

Does a catalog with the same name exist in your tenant?		Import of the catalog	Import of the data (if data was exported)
No		The catalog is imported.	The data is imported.
Yes	The set of columns and their types are the same.	The catalog is not imported.	The data is imported. Previous data in the catalog is lost.
	The set of columns and/or their types differ.	The catalog is imported with the name <Catalog_name Skill_name>.	The data is imported.


Importing a Process skill

If you import a Process skill that was exported without referenced skills, you have to make sure that all the referenced skills exist in the **Skill Catalog**. If necessary, such skills should be imported before the Process skill, otherwise you'll get an error when importing the Process skill.


If you import a Process skill that was exported with referenced skills, they will be imported as follows:


- If such a skill exists in the Catalog, it will not be imported. The skill from the Catalog will be used, even if the skill in the import archive has a newer version.
- If a skill with the same name exists in the Catalog, the skill will be imported and renamed. The link in the Process skill will be updated.

If the imported skill has shared folder import set up, this feature needs to be enabled manually after the import.

 **Note:** The availability of this feature depends on the user's role. For more information about roles, see Role-Based Access Control.

To publish a skill:

1. Select one by left-clicking it and then click  **Publish** in the toolbar. This will open the Skill Designer's **Publish** tab, where you will have to fill out some information.
2. Click the **Publish Skill** button either at the bottom of the Skill Designer window or in the **Actions** pane.

 **Note:** The availability of this feature depends on the user's role. For more information about roles, see Role-Based Access Control.

You can start using a skill right away or try it out on your documents first. To try out a skill, click the **Try** button in the **Skill Catalog**.

For more information on importing, publishing, or trying out skills, please refer to the ABBYY Vantage Skill Catalog Guide.

If a skill does not fully meet your processing requirements, you can edit it to suit your needs. For detailed instructions, please refer to the ABBYY Vantage Skill Designer Guide.

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