Attachments

Exchange format

mentba |
Attachments – exchange format

Table of Contents

Version / revision history

In this chapter, changes in relation to the previous format and history of the document can be found. The last changes are listed below.

The version number of the format contains a <mainnumber> and a <subnumber>, e.g. 1.8. In case of small changes, only the sub number will be increased. When major changes occur the main number will be increased and the sub number set to 0. Also in the case of an increase of the main number, the history table below will be updated

Document-revision	Format-version	Comments
2011-02-25	2.0	• Total revision based on format 1.1 • Change in version numbering method (document revision and format version) • Added possibility in the format for removals/additions. • Code lists in accordance to ETIM methodology • Code lists extended with new types and possibilities • Possibility for detailed metadata per attachment added (attributes)
2011-05-13	2.1	• Added comments about thumbnails • Multiple corrections and clarifications • Added missing attribute "Dimensions" (was already included in examples) • Attachment type "COT" and "TET" (for the moment) expired • Deletion by using a * has been removed • Mutation code 3 added for mutations • DPI mandatory removed with PPI (DPI only relevant in case of printing with a format size) • Filename changed for clarifying which format version it concerns • Attachment location renamed to attachment source
2011-08-11	2.2	• AttachmentType URL removed • Attachment Source Type "WWW" added • Marking key-fields • Methodology added and described for a complete file or mutation file in section "Filename"
2012-04-17	2.3	• Changed the default mutation action for a file to "mutate"
2013-07-25	2.4	• d.59262: Attachmenttype "COL" deleted (please use "OTD") • d.59263: New attachmenttypes "PAR" en "MTE" • d.56031: New attribute "Background" • Extra notes added for Action Code
2015-03-10	2.5	• d.78667: New attributes "CADFormat","CADVersion", "CADTypeFilter"
2016-01-14	2.6	• Added attachment type "EEP" (EnergyLabel)
2016-03-03	2.7	• Existing attachments can be removed using a wildcard character in field RefferedItemID.
2016-05-06	2.8	• Added specifications of high resolution images (PHI) (§ 3.2)
2016-06-21	2.9	• Added .ai format for attachment type PHI (§ 3.2)
2017-01-23	2.10	• BBAIMPORT-230 New attribute "clip_path"
2017-04-12	2.11	• BBAIMPORT-61 Added more information about multiple deletes (§ 1.3.1)

see next page

Document-revision	Format-version	Remark
2017-06-12	2.12	• BBACIN-40 New attribute "STRCategory" • New value "LDT" for attribute "CADFormat" • Changed method to use semicolumn (mandatory) after every attribute-value combination. • Rewrite paragraph about multi-deletes
2022-07-04	2.13	• BBAADHOC-1512 New attribute OriginalFileSource • BBAADHOC-1512 New attribute AttachmentHash
2023-06-19	2.14	• BBAIMPORT-2897 / BBAIMPORT-2776 When removing attachments, the original URL must be specified for the Attachment source type.

Introduction

For optimal product positioning information has to be presented in a clear and visual attracting manner. Products can therefore be enriched with attachments, also referred as digital assets.

Digital assets are mainly used by wholesalers to support them with product information on the Internet, (online) catalogs but also for (print) media such as leaflets, newsletters and flyers. In addition attachments are available for download. The basic principle is that a product is provided at least as a (free cut) image preferably in high resolution.

Digital assets are defined as:
• Photographs (incl. metadata, such as resolution, number of pixels, dimensions, 3D views)
• Film material (incl. metadata, such as resolution, number of pixels, dimensions, 3D views)
• Technical documents such as drawings, plans, specifications
• CAD / 3D objects and symbols
• User manuals and processing instructions
• Animations, diagrams and drawings
• Sound clips
• Certificates
• Other documents, including emails, presentations, etc.

These attachments must be submitted in accordance with the exchange format "Attachment Index v2.9. Attachments can be physically attached to a file or a link can be provided as reference (URL) in the attachment. If a reference is provided, then if possible, 2BA will download the attachment, and add it to the database.

1 Filestructure

The file attachmentindex is a text file according ASCII (ISO-8859-1 / Latin1) coding, in which the fields are separated by a [TAB]-code (ASCII character 9). In this format there is no mandatory field length, but every line has to end with an enter (ASCI character 13 and 10).

1.1 File name

The filename is mandatory and ends with a mutation indicator. The mutation indicator is optional but recommend and can be either a complete file (C) or mutation file (U): AttachmentIndex2<mutationindicator>.txt.

Example: *AttachmentIndex2U.txt*

If the mutation indicator is omitted the file will processed as mutation file.

1.2 Attachment File definition

In the attachments-file one attachment is defined per record.

Nr.	Name of field	Format	Mandatory	Explanation
1	Action code	N 1	●	See "Action code"
Attachment reference				
2 🔑	Reference type	A 3	●	See "Attachment reference"
3 🔑	Reference GLN	N 13	●	See "Attachment reference"
4 🔑	Reference item	A 0..120	●	See "Attachment reference"
Attachment content				
5 🔑	Attachment type	A 3	●	See "Attachment content", for example PPI for picture
6 🔑	Attachment source type	A 3	●	See "Attachment content", URL, LOC of WWW
7 🔑	Attachment source	A 1..512	●	See "Attachment content"
Attachment metadata				
8	Attachment title	A 0..80	(preferably)	See "Attachment metadata"
9	Attachment description	A 0..250		See "Attachment metadata"
10	Attachment language	A 2		See "Attachment metadata", ISO 639 (2-characters)
11	Attachment order	N 0..3		See "Attachment metadata", displayorder within attachment type and Reference
12	Attachment attributes	A 0..4000		See "Attachment metadata"
13	(record separator)	A 2	●	Mandatory: CR/LF

The maximum record length is 4992 characters

➔ Some mandatory fields can be omitted in the case of a multi-delete command in a mutation file (more info at § 1.3.1)

1.3 Action code

1.3.1 Mutation file

Filename: AttachmentIndex2U.txt

When a mutation file is used, the desired operation can be chosen using the following Action codes:

Code	Description
1	Add Attachment
2	Remove Attachment (based on equal key, e.g. fields 2 to 7 must be the same as delivered before, some fields may be omitted or filled with a wildcard, see below)
3	Mutate Attachment (based on equal key, e.g. fields 2 to 7 must be the same as delivered before)

When the actioncode is "remove" the physical file can be omitted

Remove using "Action Code" 2

When using action code 2 it is possible to do a multi-delete by leaving certain fields from the key (fields 2 to 7) empty or providing them with a wildcard.

If the 'Attachment source type' field ever supplied is an URL, then enter the original URL that was used in the original delivery. To obtain the original URL, go to: https://my.2ba.nl/Company/Queries and choose report: '01 - All products with or without attachment(s).'

Field	Name	Description
2	Reference type	May be left empty to omit this field from comparison
3	Reference GLN	May be left empty to omit this field from comparison
4	Reference item	May be left empty to omit this field from comparison or use the *-wildcard to match only partly
5	Attachment type	May be left empty to omit this field from comparison
6	Attachment source type	May be left empty to omit this field from comparison
7	Attachment source	May be left empty to omit this field from comparison

With these parameters, you can accomplish

- A delete of all attachments for one product
- A delete of all attachments
- A delete of all attachments for attachment type "CAD"
- Etc.

1.3.2 Complete file

Filename: AttachmentIndex2C.txt

For a complete file, action code 1 for each record is mandatory. Records that are not included (so where the key fields 2 - 7 are omitted) will be removed.

Both removal via a mutation code and removal by not including the record in a complete set will not lead to a removal of the physical attachment until all references are removed.

2 Attachment reference

"Attachment reference" is the reference between the attachment and the object/item to which the attachment is connected.

The "Attachment reference" consists of the fields 'reference type' and 'reference item'. The following types are possible:

2.1 Reference type

Code	Description	"Reference item" contains
PRT	Attachment via product code manufacturer	Product code
PRG	Attachment via GTIN manufacturer	GTIN

Please note: This table can be extended with e.g. "MST" for a coupling based on mark/series/type or "EPC" for coupling to all products within an ETIM Productclass.

2.2 Reference GLN

In the field GLN reference use the GLN number of the party who wants to deliver the attachments.

2.3 Reference item

The chosen reference type (PRT or PRG) determines what must be used in the field "reference item". For example, if the reference type is "PRT" a product code should be used as "Reference item".

3 Attachment content

3.1 Attachment type

Attachment type determines in which way (content / content type) the attachment is allowed to be supplied. Some types have strict rules (see last column).

In all cases, but especially with the "free types" it is useful to provide additional information about the attachment. This can be provided via the "attachment metadata" especially with the attributes.

Type	Description	Conditions and preferences
PPI	Picture (for display on internet or in an application)	See par. 3.2
PHI	Highres picture for printing	See par. 3.2
PVI	Presentation video / movie	
PRT	Presentation document / presentation file	
MAN	Manual	Preferably ext: pdf, mp3 or link, for example YouTube
MTE	Installation- and maintenance documents	
CHR	Link to or sheet with characteristics	Preferably: pdf; xls
SOF	Software	Preferably: compressed
STR	Standards & regulation, certificates etc.	
CAD	CAD object or symbol via attributes more details	
SCH	Diagram	
PAR	Exploded views / part lists	
LOG	Logo (for example brand logo)	
OTV	Other visual element	
OTD	Other document	Preferably ext: pdf
OTA	Other not categorised attachment	
EEP	EnergyLabel	Preferably ext: jpg; gif; png

Please note: this list can be extended. If you want to upload a type that is not on this list you can use "OTA" as Attachment type.

It is possible for customers to download the attachments via the selection profile or Product Attachments Webservice. See https://api.2ba.nl/1/docs/index.html?url=/1/docs/swagger.json#/Product/RESTServices.Product.GetAttachmentsA

Thumbnails (a small, visual show-case of an attachment) cannot be exchanged as a type. 2BA provides a solution so you can use 2BA generated thumbnails. This specific 2BA information called Thumbnail Service is available via https://api.2ba.nl/1/docs/index.html?url=/1/docs/swagger.json#/Thumbnail/RESTServices.Thumbnail.GetProduct

3.2   Image specifications (PPI / PHI)

<u>**Type PPI**</u>

Images used for web/internet or other applications.

Dimensions   : 1772x1772px (15x15cm)
Color mode   : RGB
Format   : jpg, gif or png
Filename   : product number or GTIN/EAN (preferably).

<u>**Type PHI**</u>
Images used for printing

Dimensions   : 1772x1772px (15x15cm)
Resolution   : 300 DPI
Color mode   : CMYK
Format   : tiff, eps, ai or jpg
Filename   : product number or GTIN/EAN (preferably).

Preferably a free cut, without a drop shadow etc. If this is not possible the image should be provided with a clipping path.
Please note: At 72 DPI the image should have a format of 62 cm.

3.3   Attachment source type & Attachment source

The attachment can be added in different ways.

1. A reference with an URL or
2. A (relative) reference to a supplied file

When multiple records use the same reference to a supplied attachment (Attachment source type = "LOC") than this will be used for all records. This means that if you deliver a photo named a.jpg for product 1, 2 and 3 and in a following delivery you have a different photo but with the same name a.jpg for product 5 the photo for product 1, 2 and 3 will also be updated.

Attachment source type	Description	"Attachement source" contains in that case……
URL	Attachment not delivered but downloadable via URL	An URL to the attachment on the internet. Normally starts with http://, https:// of ftp://. It is not allowed to link to files within the 2BA domain (*.2BA.nl). The URL is a direct link to the attachment and can be downloaded via this link. (See example 1 in Chapter "Examples")
LOC	Attachment physical included	The relative reference to the file which is physically included If you supply images in directories you should also indicate that full path in the ZIP file. The attachment source field is according the following structure: /directory/ + {name of the file}.{extension}. (See example 2 in Chapter "Examples") Be aware that directories and files containing any of the following characters won't be accepted: ~ " # % & * : < > ? / \ {	}.
WWW	Attachment is a resource / page on the internet	An URL to the attachment on the internet. Normally starts with http://, https:// or ftp://. For example: a description or manual on an external internet page.. Please note: If an attachment is directly downloadable (for example a manual as pdf) usage of an Attachment source type URL is recommended. WWW is not allowed to be used in combination with attachment type "PPI"

4 Attachment metadata

With the metadata additional characteristics about the attachment are provided.

4.1 Attachment title

A short description of the attachment. The title will, if possible, be shown with the attachment.

4.2 Attachment description

A more detailed description of the attachment. This description can if necessary also be used as an alternative show-case, when the attachment itself cannot be shown.

4.3 Attachment language

If the contents of an attachment is language dependable, for example (spoken) text, it is recommended to use this field. The used code list is ISO 639 (2-characters).

4.4 Attachment order

With this field the display order of the attachments within a certain attachment type can be controlled. When for example there are more PPI attachments for a product, than the pictures will be shown in the assigned order. The most important picture can be shown first in this way.

Within sub attachments the order is also following the rule as above. This means that for example an order number with thumbnails only is relevant if there are more than one thumbnails with the same picture.

4.5 Attachment attributes

By using attachment attributes (where more than one can be used) extra detailed information about the type, purpose and characteristics of an attachment can be given. These attributes and their value are separated by a semicolon. (attribute=value; attribute=value; attribute=value;…….).

Selection

Based on these attributes a selection can be made to use or not use some attachments for a certain purpose.

Suppose a high-quality brochure has to be made by a supplier. That supplier needs to have highres pictures for example pictures with 600 DPI. In that case a query can be constructed for only those PHI pictures which are DPI=600.

Remarks & rules

- Attribute names are not case-sensitive. DPI, dpi and dPi therefore do have the same meaning
- The unit should not be included, this is already enclosed in the attribute. Width=1280px is therefore not right.
- Every attribute-value combination must be terminated with a semicolon (;)
- Between attributes and their value, an "is equal" sign is used (=).
- The "is equal" sign and the semicolon are therefore not allowed to be used in the attribute value
- Also see the examples in chapter 5 in which these attributes are used.

4.5.1 Attributes overview

Attribute	Value according unit	Possible Values	Explanation	Example
DPI		(integer)	Resolution of picture or other visual element expressed in dots per inch	DPI=300
ColorModel		RGB, CMYK		ColorMode=CMYK
Background		Isolated	When isolated is specified it means that the background and picture itself are easy separated. Usually the background is white or transparent	
BithDepth		(integer)	The colordepth expressed in bits. Usually 4, 8, 16, 24 of 32	BithDepth=24
PrintWidth	Centimeter	(integer)		PrintWidth=15
PrintHeight	Centimeter	(integer)		PrintHeight=22
Width	Pixels	(integer)		Width=1280
Height	Pixels	(integer)		Height=1024
Latitude	Degrees	(decimaal)		
Longtitude	Degrees	(decimaal)		
Altitude	Meter	(decimaal)	Absolute altitude	Altitude=30
NAP	Meter	(decimaal)	Altitude above NAP	NAP=20
Dimensions		(decimaal)	Number of dimensions (for example with CAD) 2; 2.5 or 3 are standard values	Dimensions=3
Face		Front, Left, Back, Right, Top, Bottom	Primary use for visual, 2D elements	Face=Bottom
CreateDate		(date)	Date according the ISO 8601 format: YYYY MM-DDThh:mm:ss. For example the date of the creation of the picture	CreateDate=2011-03-04T14:52:56
Author		(string)		Author=2BA
Copyright		(string)		Copyright=2011 2BA
MimeType			See http://en.wikipedia.org/wiki/Mimetype	MimeType= audio/mpeg
Duration	Seconds	(decimal)	For example for video or audio	Duration=3600
FileSize	Bytes	(integer)	The file size	FileSize=512021
CADFormat		(string, See List box A	Code to define CAD platform / format	CADFormat=RFA
CADVersion		(string)	Version of CAD format For AutoCAD and Revit a number with four digits is required.	CADVersion=2014
CADTypeFilter		(string)	Filter expression to select the correct object from an container- / family file. When used for CADFormat=RFA only the a..z, A..Z, 0..9, _-+ characters are accepted	CADTypeFilter=type_abc123
Clip_path		(string)	See http://www.awaresystems.be/imaging/tiff/tifftags/clippath.html	
STRCategory		(string, See list box B)	Code to define certificate category	STRCategory=DOP
AttachmentHash		(string)	Calculated MD5 Hash of the file contents	
OriginalFileSource		(string)	Original file name / path	

4.5.2 AttachmentHash & OriginalFileSource

When data is published through the 2BA datapool, the import routine automatically creates an MD5 Hash from each downloaded file. An MD5 Hash makes it possible to determine whether it is a new file or a duplicate. The MD5 Hash is sent per attachment with a requested dataset using the attachment attribute AttachmentHash. In addition, the original file name/path published by the data supplier is also included in the OrginalFileSource attribute.

4.5.3 List box A "CADFormat"

Code	Description
DWG	AutoCAD DWG
DXF	AutoCAD DXF
RFA	Autodesk Revit Family File
IFC	IFC (Industry Foundation Classes) format
DGN	Microstation vector format
LDT	Eulumdat Formatted Luminaire Data File

4.5.4 List box B "STRCategory"

Code	Description
DOP	Declaration of Performance
RoHs	Restriction of Hazardous Substances
DOC_CE	Declaration of conformity CE
Guarantee	Guarantee statement

5   Example records with explanation

	Action code	Reference type	GLN	Reference item	Attachment type	Attachment source type	Attachment source	Attachment title	Attachment description	Attachment language	Attachment order	Attachment attributes
1	1	PRT	871425....	123123	PPI	URL	http://www.fabr.nl/plaatje.jpg	Binnengebruik (voora..			1	FACE=Front;DPI=96
2	1	PRT	871425....	123123	PPI	LOC	/attachments/plaatjes/plaatje.jpg	Buitengebruik	Dit sfeerplaatje laat het bu..		2	
3	1	PRT	871425....	123123	PHI	LOC	/attachments/highres/123123.eps	Achterzijde				DPI=600;ColorModel=CMYK;FACE=Back
4	1	PRG	871425....	871425201....	CAD	LOC	/attachments/cadsym/12345.dwg	AutoCAD object				Dimensions=3
5	1	PRT	871425....	123123	PVI	WWW	http://www.youtube.com/watch?v	Filmpje van de lamp	Deze presentatievideo belic	NL		Width=1080;Height=1050;Duration=300
6	2	PRT	871425....	123123	PPI	URL	http://www.fabr.nl/plaatje.jpg					
7	1	PRT	871425....	123123	PPI	URL	http://www.fabr.nl/plaatje.jpg	Binnengebruik (voora..			1	FACE=Front;DPI=96;Width=800
8	1	PRT	871425....	12501-02-17	CAD	URL	http://www.fabr.nl/BIM/63.rfa	Revit family				CADFormat=RFA;CADVersion=2014;CADTy
9	2	PRT	871425....	400453171								
10	2	PRT	871425....	*	PPI							
11	2	PRT	871425....	400*	MAN							

Example 1:
Addition of a picture (PPI) to a productcode (Reference type=PRT, Reference item contains the productcode). The content is a URL to the picture. Content type is therefore "URL" . Also two attributes are specified, FACE and DPI.

Example 2:
Addition of a second picture with the same product. The difference with the previous is the fact that this picture is a attached as physical file (content type=LOC). With this attachment, also a description is supplied.

Example 3:
Example of a highres (printing) picture, type = PHI. The picture is a attached as physical file (content type=LOC). See also the attributes.

Example 4:
A CAD object, with a reference to the product via the GTIN. From the attachment attributes it appears that this is a 3D object. From the extension of the file we can automatically deduct that it is an autocad drawing (dwg). This is also mentioned in the title.

Example 5:
An examplerecord of a movie. The languagecode is set to NL because the language of the movie is Dutch. The attachment source is WWW because this is a not a direct downloadable object.

Example 6:
Removal instruction of one specific attachment (the attachment of examplerecord 1). More information in paragraph 1.3.

Example 7:
The addition of an attachment which already exists (examplerecord 1). In this case the reference and attachment content fields are equal whereby the data is updated and not added.

Example 8:
The addition of an CAD object with attributes

Example 9:
Remove of all attachments for one product

Example 10:
Remove of all attachments, for all products, of type "PPI"

Example 11:
Remove of all manuals (attachment type = MAN) for products with productcode starting with 400