



BUSINESS SOLUTIONS ASSOCIATION

Standard for the Synchronization of Image Assets between Content Providers and Partners

STANDARD 11-14

Proposed Effective Date: January 1, 2015

Table of Contents

- A. Purpose**
- B. Considerations**
- C. Image Tagging**
- D. Data Exchange between Partners**
 - Figure 1 – Reporting Format/Structure – Excel
 - Figure 2 – Reporting Format/Structure – XML
 - Figure 3 – Overview of Image Synchronization Process
- E. Alternative Implementation by Downstream Partner**
- F. Notes**

A. Purpose

The purpose of this standard is to facilitate and expedite the synchronization of image assets between Content Providers (such as manufacturers) and their Downstream Partners (such as Wholesalers, Retailers and Dealers). Improving the image update process will greatly reduce the time and effort required by partners. It will also deliver more timely and accurate images resulting in a better end user experience.

B. Considerations

This standard only relates to the exchange of image assets that are associated with products. It does not apply to other image assets such as logos, lifestyle imagery, promotional images unless those images should be displayed with individual products.

This standard only addresses how two partners can synchronize image assets. It is beyond the scope of this standard to address how content flows from partner to partner through an ecosystem (e.g. Manufacturer→Wholesaler→Dealer/Retailer).

C. Image Tagging

Every image will have three new metadata tags associated with them. The tags will be created by the Content Provider. All images that Content Provider sends to Downstream Partner must include these tags. Software enabling viewing and/or editing of image metadata includes Adobe Photoshop, Adobe Lightroom and GIMP (free).

Tag 1	
Tag Name	OriginalFilename
Description	Contains the original filename that exists in Content Provider's asset repository.
Format/Methodology	This is expressed without the filename extension (e.g. .tif, .jpg). This name must uniquely identify only one image asset within Content Provider's repository.

Tag 2	
Tag Name	dateTimeCreated
Description	Contains the image creation date. This is the date the asset was created by the Content Provider. This is not the date the asset was supplied to Downstream Partner.
Format/Methodology	Date format YYYY-MM-DD HH:MM:SS (e.g. 2012-08-21 15:35:00). For additional formatting information, refer to W3C Note "Date and Time Formats" (http://www.w3.org/TR/NOTE-datetime) which defines a profile of ISO 8601.

Tag 3 - OPTIONAL	
Tag Name	dateTimeEffective
Description	Optional Tag. Contains the effective date that the image should be viewable by an end user/consumer. The effective date should coincide with the availability for sale of the corresponding inventory from the downstream trading partner.

Format/Methodology	Date format YYYY-MM-DD HH:MM:SS (e.g. 2012-08-21 15:35:00). For additional formatting information, refer to W3C Note “Date and Time Formats” (http://www.w3.org/TR/NOTE-datetime) which defines a profile of ISO 8601.
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D. Data Exchange between Partners

A series of simple reports will be exchanged between Partners. The objective of the reports is to allow the Content Provider to more easily identify which images the Downstream Partner should delete and which images the Downstream Partner should be provided with.

Report 1	
Report Name	Asset Report
Transmission	Sent from Downstream Partner to Content Provider.
Contents/Description	<p>List of all image assets related to the brand or manufacturer in question. Each image asset must be associated with one or more products.</p> <p>If Downstream Partner has the same image related to multiple products, they should list out each product in the report and repeat the corresponding image information.</p>
Recipient Action	Content Provider will use this report to compare report contents with similar metadata from their current image assets. Differences between the data will allow Content Provider to identify which assets are out of date and which assets Downstream Partner does not yet have.
Format	<p>Default is CSV. Format can also be XML (when reports are transmitted system-to-system), Excel.</p> <p>For Excel, see Figure 1. For XML, see Figure 2. For CSV, separate data elements by commas.</p>

Report 2

Report Name	Update Report (and Transmission of New Image Assets)
Transmission	Sent from Content Provider to Downstream Partner .
Contents/Description	<p>Identifies all image assets which are outdated and should be removed from Downstream Partner's asset repository.</p> <p>Concurrent with report 2, Content Provider to transmit all new image assets to Downstream Partner. Image assets should be tagged according to standards described above. Transmission of image assets can follow existing image protocols set up by trading partners (file naming structure, transmission format, etc.)</p>
Recipient Action	Downstream Partner should process Content Provider's new images and list of image deletions. Images that contain a value for Tag 3 (dateTimeEffective), should only be made viewable by an end user/consumer no earlier than the date specified.
Format	<p>Default is CSV. Format can also be XML (when reports are transmitted system-to-system), Excel.</p> <p>For Excel, see Figure 1. For XML, see Figure 2. For CSV, separate data elements by commas.</p>

Report 3

Report Name	Confirmation Report
Transmission	Sent from Downstream Partner to Content Provider.
Contents/Description	<p>Identical to Report 1 --list of all image assets related to the brand or manufacturer in question. Each image asset must be associated with one or more products.</p> <p>Once Downstream Partner has processed Report 2 and new image assets, they will generate a new Asset Report identical in format/structure to Report 1, but updated with latest image data.</p>

Recipient Action	Content Provider can use Report 3 to verify receipt and accuracy of image deletions and additions.
Format	<p>Default is CSV. Format can also be XML (when reports are transmitted system-to-system), Excel.</p> <p>For Excel, see Figure 1.</p> <p>For XML, see Figure 2.</p> <p>For CSV, separate data elements by commas.</p>

Figure 1 -- Reporting Format/Structure – Excel

Report 1: Asset Report

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Product UPC (12 Digit)	Wholesaler Number or Other Customer-Assigned SKU Number	Downstream Partner filename or image locator reference	Tag 1 'OriginalFilename'	Tag 2 'dateTimeCreated'	Tag 3 'dateTimeEffective'
(sample data)	072782051600	AVE5160	196113	72782-05160-p32t	2012-11-17 10:22	

Report 2: Update Report

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Product UPC (12 Digit)	Wholesaler Number or Other Customer-Assigned SKU Number	Downstream Partner filename or image locator reference	Tag 1 'OriginalFilename'	Tag 2 'dateTimeCreated'	Delete Confirmation (Y/N)
(sample data)	072782051600	AVE5160	196113	72782-05160-p32t	2013-03-21 14:22	Y

Report 3: Confirmation Report (same as Report 1: Asset Report)

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Product UPC (12 Digit)	Wholesaler Number or Other Customer-Assigned SKU Number	Downstream Partner filename or image locator reference	Tag 1 'OriginalFilename'	Tag 2 'dateTimeCreated'	Tag 3 'dateTimeEffective'
(sample data)	072782051600	AVE5160	177119	72782-05160-p36t	2014-03-21 14:22	

Figure 2 – Reporting Format/Structure* – XML

*Note: Bolded data is sample data for illustration purposes.

Report 1 – Asset Report

```
<?xml version="1.0" encoding="UTF-8"?>
- <asset>
  <productUPC>072782051600</productUPC>
  <skuNumber>AVE5160</skuNumber>
  <partnerFileName>196113</partnerFileName>
  <originalFileName>72782-05160-p32t</originalFileName>
  <dateTimeCreated>2012-11-17 10:22</dateTimeCreated>
</asset>
```

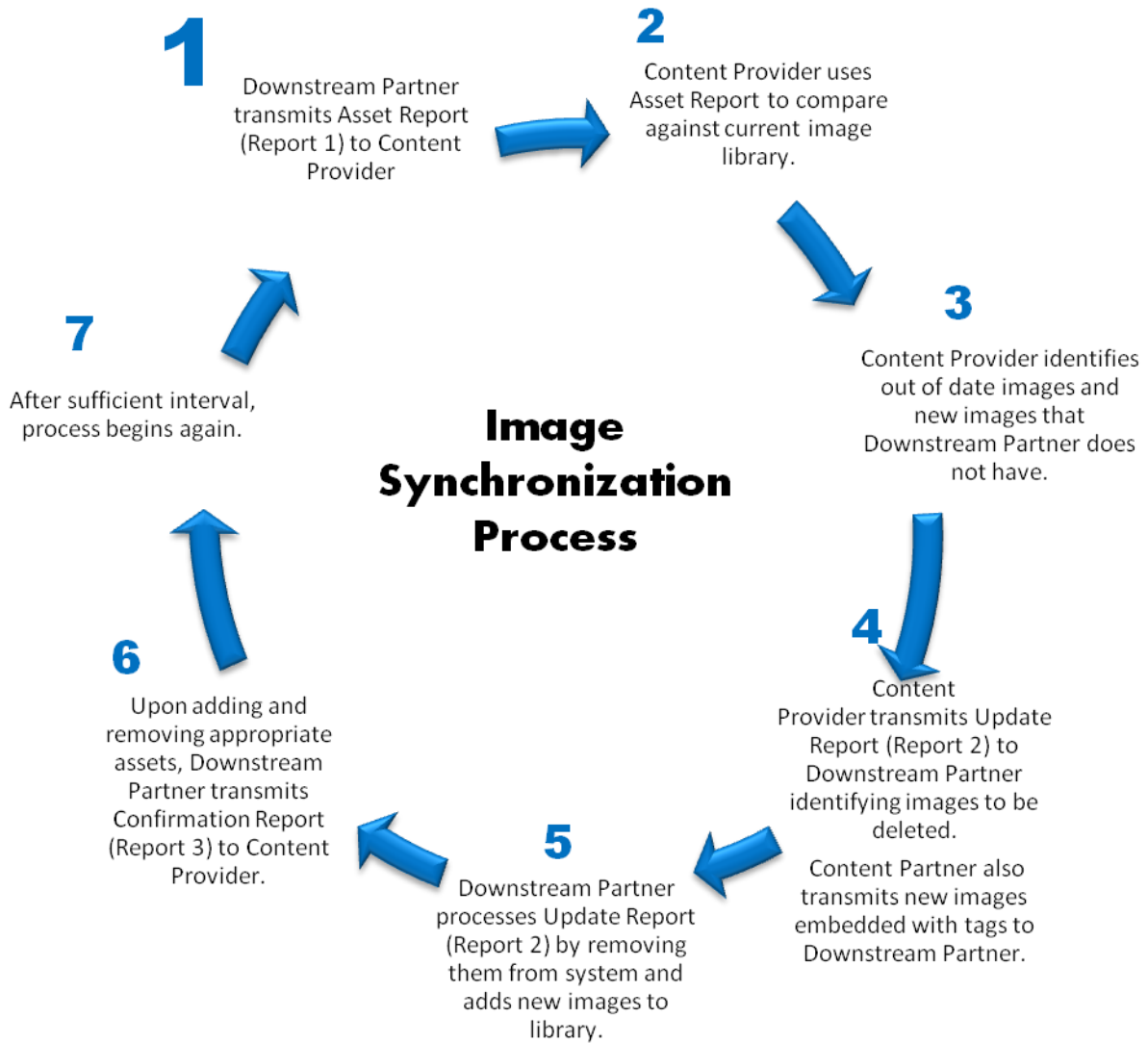
Report 2 – Update Report

```
<?xml version="1.0" encoding="UTF-8"?>
- <asset>
  <productUPC>072782051600</productUPC>
  <skuNumber>AVE5160</skuNumber>
  <partnerFileName>196113</partnerFileName>
  <originalFileName>72782-05160-p32t</originalFileName>
  <dateTimeCreated>2013-03-21 14:22</dateTimeCreated>
  <deleteConfirmation>Y</deleteConfirmation>
</asset>
```

Report 3 – Confirmation Report

Use same XML format/structure as Report 1 – Asset Report.

Figure 3 -- Overview of Image Synchronization Process



E. Alternative if Image Tags are not able to be Preserved by Downstream Partner

In situations where the Downstream Partner modifies or transforms images such that the Content Provider's tags are eliminated, the following option exists:

The Downstream Partner must transform the 3 tags supplied by the Content Provider into their content or other data system such that 3 new image-associated data fields are populated in their content or other data system and are associated with the related images.

The Downstream Partner must structure data fields such that they are able to create Report 1 and 3 described above. Reporting would continue as described in Sec D.

F. Notes

Implementation of Standard

Effective January 1, 2015 all new images transmitted from Content Providers to Downstream Partners should contain the new tags.

Maximum benefit of the standard will occur when all image assets or an entire category of image assets in Downstream Provider's repository contain tags. To that end, Content Provider/Downstream Partner may agree to implement a refresh of a category of images. In rare situations, Partners may agree to a complete image refresh. It is understood that category or complete image refreshes require partner resources and must be planned activities by two engaged Partners.

While the tagging process will take time to fully percolate through downstream partner's systems, it will lay a foundation that can ultimately facilitate a highly-resource intensive process.

One Image to Many Products Relationship

Content Providers may have a single image asset corresponding to multiple products. Content Providers should continue to provide Downstream Partners with these images in the format/structure they are requested (e.g. provide single image with product mappings or provide multiple images renamed per Downstream Partner specifications).

Downstream Partners reports 1 and 3 should list out each product and repeat the corresponding image information.

Creation or Transformation of Image Asset by Downstream Partner

There are occasions when the Downstream Partner becomes the content creator by shooting original photography or otherwise creating brand new image assets. In other scenarios, the Downstream Partner may be authorized to create derivative or hybrid images of the original asset.

This standard currently addresses only assets created by the original Content Provider and unaltered by Downstream Partners. If Downstream Partners create new image assets, they would then be responsible for managing the accuracy of those images.

Initiation and Frequency of Updates

It is up to trading partners to determine when and how often image updates occur.