Ingram XML API description for distributors

Date:	April 2019
Version:	API2, v1.7

1. Introduction

This document describes the latest version of the XML API for distributors of Ingram Publishing. The XML API allows you to integrate your website with Ingram's website and seamlessly publishing content of Ingram Publishing on your website without hosting it or loading it into your website's search engine.

Knowledge of Web services and XML is prerequisite, as well as some knowledge of digital asset management systems.

Ingram's XML API allows for the following services:

- Search Ingram's content (images and/or video)
- Request details about an asset
- View assets
- Hi resolution media download

All other functions, such as customer registration, light boxes, shopping carts and payment processing are handled by the distributor's website.

Access to the XML API

To use the XML API, you need to have an API Key and API Password. If you don't have these, please contact Ingram Publishing.

Quick start guide

To get started quickly, you can review the API in your web browser. There, you can simply see what data is returned by the API in response to search calls, asset detail calls or previews. Details about the various calls are explained on the following pages.

To get an impression of how the API works, open a web browser and call the following examples, just fill in your own API Key and API password:

1. Search for keyword 'people'
   http://www.ingramAPI.com/assetSearch.do?keywords=people&apikey=<APIkey>&apipwd=<API password>

2. Search for keywords 'people AND house'
   http://www.ingramAPI.com/assetSearch.do?keywords=people+AND+house&apikey=<APIkey>&apipwd=<APIpassword>

3. Details of image H2aac969
   http://www.ingramAPI.com/assetDetails.do?imagecode=H2aac969&apikey=<APIkey>&apipwd=<APIpassword>

4. Preview of image H2aac969 of 350px and with text 'www.test.com' in it
   http://www.ingramAPI.com/assetPreview/350/H2aac969.jpg?t=www.test.com

API address

In the examples above, you see that the URL **www.ingramapi.com** is used. This URL should be used for all Ingimage subscription content. The same API is also available for content of Ingram's Signelements content. For that, you use **www.isignapi.com**. In this document, www.ingramapi.com is used for all examples. If you wish to use the API for Signelements content , simply use www.isignapi.com instead of www.ingramapi.com for all calls.

Subscription vs. single image content

The API can be used for both subscriptions (Ingimage or Signelements) or for single image content. The only difference between the two usages is found upon downloading a high resolution asset. Both use cases are described down this document.

Technical communication with the API

For all calls to the API, make sure that you pay attention to the following.

Use GET requests
The API is developed to be used with GET requests. Though the API may work well when using POST requests, this cannot be guaranteed.

URLENCODE parameters
All parameters that are passed in the URL should be UrlEncoded. A space for example should be replaced by %20.

Case sensitive URLs
The API is case-sensitive to filenames, not for arguments. Make sure you use the names as they are stated in this document. For example, use ‘assetSearch.do’ and not ‘Assetsearch.do’.

2. Searching content

As shown in the examples in chapter 1, conducting a search with the API is done using the following URL:

www.ingramapi.com/assetSearch.do?keywords=...&....

When calling this URL, you can pass the following parameters:

Parameter	Mandatory	Description
APIkey	Yes	Your API Key
APIpwd	Yes	Your API password
Keywords	Yes	The keywords to search for. Examples: - woman - woman+AND +sun - woman+NOT+animal
Language	No	Language of the keywords. Can be omitted for English. Possible values are: - en - de - it - fr - es - nl
Pagesize	No	Number of images per page. Default value is 20
Page	No	Page number.
Offset	No	Can be used as an alternative to Pagesize. Using Offset, you can have the results to starting listing at any desired position. Note that this parameter is one-base. To start listing at position 1, enter Offset=1, not offset=0
Color	No	Filter for colors. Possible values: - 1 for only color images - 0 for only black & white images (omit this parameter to search for all images without filtering for colors)
Orientation	No	Filter for orientation. Possible values: - 1 portrait images only - 2 landscape images only - 3 Square images only (omit this parameter to search for all images without filtering for orientation)
AssetType	No	Filter for type of content. Possible values (some may not apply for the content you are connecting to): - all (default) - Photosonly_RF - Vector - PhotosVectorsonly_RF (photos and vectors) - vinylReady - Wrap - Vehicles - Fonts

UseVideo	No	Include video in the search. Default value is 0. Possible values: - 0 to exclude video from search - 1 to include video in search
previewURLs	No	Include a URL to preview URLs in the response. If used, the response will contain a node 'previewurl' for every asset in the search results with the the URL to the 350px preview. Possible values: - 0 (default) - 1
wmFileName	No	Filename of the watermark to be applied in the 350px preview. Can only be used in combination previewURLs=1. If you wish to have a custom watermark, please send a transparent PNG file to Ingram Publishing. If you do not have your own watermark, use 'wm_ingimage.png'
withType	No	Include information about the file type in the response. If used, the response will contain a property 'filetype' for every asset in the search results with value 'Jpeg', 'Video', 'Font' or 'Vector'. Possible values: - 0 (default) - 1
searchProfileFilters	No	A list of ID's of filters to apply, comma separated, like searchProfileFilters=3,10,32. More details about search filters can be found further down this document.
withOrientation	No	Include information about the orientation in the response. If used, the response will contain a property 'orientation' for every asset in the search results with value 'L', 'P', 'S' or 'U', referring to Landscape, Portrait, Square or Unknown. Possible values: - 0 (default) - 1
Sort	No	State how the results should be sorted. Possible values are: - Relevance (default) - Editorsview - Popularity - Newest

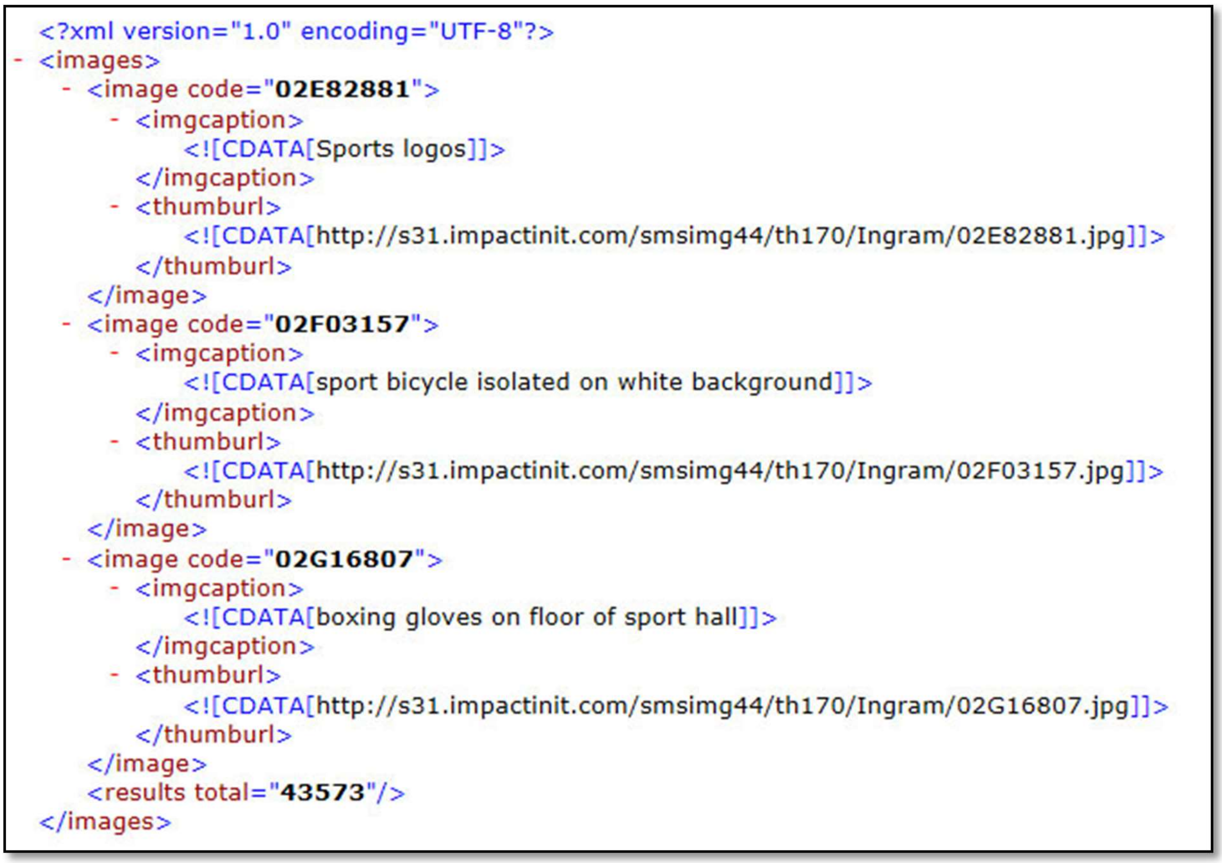
Examples

1) To search all types of content for keywords 'dog AND sun', including video, but only color with 50 results per page:
www.ingramapi.com/assetSearch.do?keywords=dog+AND+sun&useVideo=1&color=1&pagesize=50&apikey=<APIkey>&apipwd=<APIpassword>

2) To search in Spanish for photo-images of 'mujer' (woman) and return the 2nd page of results with 25 results page page:
www.ingramapi.com/assetSearch.do?keywords=mujer&language=es&pagesize=25&page=2&assetType=photos&apikey=<APIkey>&apipwd=<APIpassword>

Response

The search module always returns XML listing the results and stating the total number of assets found. The results list the imagecode of the found asset, the caption and URL for the thumbnail. Below is an example:



```
  <?xml version="1.0" encoding="UTF-8"?>
- <images>
  - <image code="02E82881">
    - <imgcaption>
        <![CDATA[Sports logos]]>
      </imgcaption>
    - <thumburl>
        <![CDATA[http://s31.impactinit.com/smsimg44/th170/Ingram/02E82881.jpg]]>
      </thumburl>
    </image>
  - <image code="02F03157">
    - <imgcaption>
        <![CDATA[sport bicycle isolated on white background]]>
      </imgcaption>
    - <thumburl>
        <![CDATA[http://s31.impactinit.com/smsimg44/th170/Ingram/02F03157.jpg]]>
      </thumburl>
    </image>
  - <image code="02G16807">
    - <imgcaption>
        <![CDATA[boxing gloves on floor of sport hall]]>
      </imgcaption>
    - <thumburl>
        <![CDATA[http://s31.impactinit.com/smsimg44/th170/Ingram/02G16807.jpg]]>
      </thumburl>
    </image>
    <results total="43573"/>
  </images>
```

2.1 Using search filters

Within your search you can apply filters to search for images with a certain number of people, of a certain age, of a certain gender, within various compositions and more. For this you can pass parameter ‘searchProfileFilters’ in your call to the search module, passing one or more ID’s of filters that you wish to apply.

A complete list of all filters is available by calling the URL below. This returns all existing filters with their ID’s:

http://www.ingramAPI.com/searchfilters.do?apikey=<APIkey>&apipwd=<APIpassword>

Besides your API key and API password, this call requires no further parameters.

2.2 Searching similar images

There are 2 ways to search for similar images. The first option is to search based on an image that you find through the API. For example on an image detail page you may find a button to search for images that are similar to the image you are reviewing. To do this on the API, you can simply search using keyword ‘smsx_sim_<imageid>’, where <imageid> should be replaced by the ID of the image that you want to use as a base.

For example, to search images that are similar to “ING_33594_112658”, simply call the API with: www.ingramapi.com/assetSearch.do?keywords=smsx_sim_ ING_33594_1123 &apikey=<APIkey>&apipwd=<APIpassword>. The result is a normal search results listing the similar images.

The other option for searching similars is for your client to upload an image into your website and then use that as a base. The image should be a valid JPG image. The actual upload into your website needs to be done on your end and the image should get uploaded into some location that is publically available on the internet, for example www.yourwebsite.com/tempuploads/myimage.jpg. Then to find images that are similar to the uploaded image, you call the API with a parameter ‘similarImageUrl’ which contains the URL of the uploaded image.

For example: www.ingramapi.com/assetSearch.do?similarImageUrl=http://www.yourwebsite.com/tempuploads/myimage.jpg&apikey=<APIkey>&apipwd=<APIpassword>

Best is to URLencode the URL of the image, so it gets to be:

www.ingramapi.com/assetSearch.do?similarImageUrl=http%3A%2F%2Fwww%2Eyourwebsite%2Ecom%2Ftempuploads%2Fmyimage%2Ejpg&apikey=<APIkey>&apipwd=<APIpassword>

3. Details of an asset

Requesting details about an asset with the API is done using the following URL:

www.ingramapi.com/assetDetails.do?imagecode=...

When calling this URL, you can pass the following parameters:

Parameter	Mandatory	Description
APIkey	Yes	Your API Key
APIpwd	Yes	Your API password
Imagecode	Yes	The code of the asset
Sizedetails	No	If 1, the XML response includes an array of available formats including the actual pixel size (if applicable).
previewURLs	No	If 1, the XML response includes URLs to the 350px and 1000px preview.
previewWMfilename	No	Filename of the watermark to be applied in the 350px preview. Can only be used in combination previewURLs=1. If you wish to have a custom watermark, please send a transparent PNG file to Ingram Publishing. If you do not have your own watermark, use 'wm_ingimage.png'. The URL to the 1000px preview is always to the blank preview and is only for further processing of the preview on your end. **IMPORTANT:** you may not pass the 1000px preview directly to clients. You must always watermark and/or scale this file.

Examples

1) Call for details of image H2aac969
http://www.ingramAPI.com/assetDetails.do?imagecode=H2aac969&apikey=<APIkey>&apipwd=<APIpassword>

Response

Also when calling details of an asset, the response is XML and differs between video and other types of assets. The table below describes all the returned information.

Attribute	Description
Code	The code of asset
Title	The caption of the asset
contributorId	ID the contributor if available. Can be ignored. This is only in for compatibility purposes with previous versions of the API.
colorType	Color of the asset. 'True' for color images, 'false' for black & white
Orientation	Orientation of the asset. 1 for Portrait, 2 for Landscape, 3 for square
licenceType	Always 1. Can be ignored. This is only in for compatibility purposes with previous versions of the API.
modelRelease	Model release of the asset. 'True' if model release is in place, 'false' if not

propertyRelease	Property release of the asset. 'True' if property release is in place, 'false' if not
availableAssetTypes	Type of asset. Can be: - 'jpg' for photos - 'eps' for vectors - 'font' for fonts - 'video' for video assets
Keywords	The keywords of the asset
Thumburl	URL of the thumbnail of the asset, for all types except video.
Previewurl	URL of the 350px preview of the asset, only if previewURLs=1
xlPreviewurl	URL of the 1000px preview of the asset, only if previewURLs=1
Formats	Array of available formats of the asset, only available if sizedetails=1
The following data is only returned for video assets:	
flvpreviewURLclear	URL of the FLV preview without watermark
flvpreviewURLwater	URL of the FLV preview with watermark
movpreviewURLclear	URL of the MOV preview without watermark
movpreviewURLwater	URL of the MOV preview with watermark

4. Displaying images/video on your website

Displaying assets on your website can be done easily with the API. The call to make depends on what you wish to display on your website. The following sections describe how to:

1) Display thumbnails
2) Display image previews
3) Display videos previews

Display thumbnails

To display a thumbnail on your website, use a call to the details of an asset and you can get the URL of the thumbnail from the response.

Display image previews

For displaying image previews, the API is equipped with advanced dynamic image generation functionality that allows for displaying image previews at any size up to 600px, optionally with text printed into the image. Below is an example URL to display an image preview for image H2aac969, at a size of 350px with a text 'www.test.com' in the bottom.

http://www.ingramapi.com/assetPreview/350/H2aac969.jpg?t=www.test.com

For all images, you can request previews similarly. In this case, you can use the following parameters. You do not need to pass you API key and API password for previews.

Parameter	Mandatory	Description
Size	Yes	The required size of the preview image, up to 600px on the longest edge. Simply replace '/350/' to the example URL above to the desired size.

Imagecode	Yes	The image code of the asset. Simply replace in the example URL.
T	No	Text to print in the image
As	No	Name of a watermark to use. Contact Ingram if you wish to supply your own watermark.

IMPORTANT: This module presents a relatively high load to the server. It should therefore **not** be used on pages that show many images, like search results pages. For those, you should use the direct URLs to the 350px previews.

Display video previews

Displaying video previews in your website requires that you have a suitable player embedded in your website. This might be Quicktime for example to play MOV-previews, but there are many different options. Within that player, you need to pass the URL of the actual preview file that you wish to play. You obtain that from the XML response in the details-call.

5. Download high resolution files

Downloading a high resolution asset file through the API is done in 2 steps. First you need to report a sale of an image. This leads to a download reference code. With that code, you can conduct the actual download. The details of this process depend on if your client purchased a subscription or a single image. Both processes are described below.

5.1 Reporting a sale – single image

When a client purchases a single image on your website, you need to report this purchase before you can download the image for this order. For this, you call the API like shown below:

http://www.ingramAPI.com/assetSale.do?type=single&imagecode=ING_33594_19778&format=1&orderid=test1&userid=1&price=100.25&currencyISO=EUR&apikey=<APIkey>&apipwd=<APIpassword>

In this call, you can pass the following parameters.

Parameter	Mandatory	Description
APIkey	Yes	Your API Key
APIpwd	Yes	Your API password
Type	Yes	Should be 'single' for a single image purchase
Imagecode	Yes	The imagecode of your asset
Format	No	The format ID of the size/format of your asset as listed in the reponse to an asset-details call. Default is 1, being the first listed format
OrderID	Yes	A unique reference for the order in your system. This can be a numeric ID or any other string that uniquely identifies the order in your system.
Userid	Yes	A unique reference for the client in your system. This can be a numeric ID or any other string that uniquely identifies the client in your system.
Price	Yes	Your sales price of the asset like 123.45
currencyISO	Yes	The currency of your sales price like EUR, GBP, USD etc.

The response of this call is a download reference code. With this code, you can make a call to the download module to get the actual image (described below).

5.2 Reporting a sale – subscription image

When a client purchases a subscription on your website, you need to report this purchase before you can download image for this subscription. For this, you call the API like shown below:

http://www.ingramAPI.com/assetSale.do?type=subscription&dateFrom=20141230&dateTo=20151229&limitday=10&limitmonth=250&limittotal=1000&orderid=test1&userid=1&price=100.25&currencyISO=EUR&apikey=<APIkey>&apipwd=<APIpassword>

In this call, you can pass the following parameters.

Parameter	Mandatory	Description
APIkey	Yes	Your API Key
APIpwd	Yes	Your API password
Type	Yes	Should be 'subscription' for a subscription purchase
DateFrom	Yes	The start date of the subscription formatted like yyyymmdd. E.g. 31 Dec 2014 is 20141231.
DateTo	Yes	The end date of the subscription formatted like yyyymmdd. E.g. 31 Dec 2014 is 20141231. The difference between dateFrom and dateTo can be maximum one year.
LimitDay	Yes	The maximum number of assets that your client can download per day. Any value between 1 and 1000 is valid.
LimitMonth	Yes	The maximum number of assets that your client can download per month. Any value between 1 and 1000 is valid.
LimitTotal	No	The maximum number of assets that your client can download during the entire subscription, if any.
OrderID	Yes	A unique reference for the order in your system. This can be a numeric ID or any other string that uniquely identifies the order in your system.
Userid	Yes	A unique reference for the client in your system. This can be a numeric ID or any other string that uniquely identifies the client in your system.
Price	Yes	Your sales price of the asset like 123.45
currencyISO	Yes	The currency of your sales price like EUR, GBP, USD etc.

The response of this call is a download reference code. For all downloads that are done within the scope of this subscription, you should pass this reference code to the download call (described below).

IMPORTANT: For downloading images within a subscription, you must first register the sale of the subscription, but you should do so only once. After that, you should use the returned download reference for all downloads that are done within this subscription.

5.3 Download a file

Downloading a high res asset can be done in 2 ways:

1) Download the file to your server and pass the file on to your client
2) Register a download on the API to get a token and redirect your client to the API with that token. The client then downloads the high res asset directly from the API to his computer. Generally this is faster.

5.3.1 Downloading a file to your server

Downloading a high resolution asset to your server is done with a URL like below.

http://www.ingramAPI.com/assetDownload.do?imagecode=02E82881&downloadreference=972086A3-933B-F6D6-E816CF52D2684C33&apikey=<APIkey>&apipwd=<APIpassword>

In this call, you can pass the following parameters.

Parameter	Mandatory	Description
APIkey	Yes	Your API Key
APIpwd	Yes	Your API password
Imagecode	Yes	The image code of the asset
Format	No	The format ID of the size/format of your asset as listed in the reponse to an asset-details call. Default is 1, being the first listed format
Downloadreference	Yes	The download reference you got from the call to assetSale.do (see above)

The response of this call is the actual file.

5.3.2 Get a download-token and redirect the client to the API

The second download method works very similar to the first, but works in 2 steps. First you call the API to get a token. Then you redirect your client to the API following the same download link, but passing on the token as authentication method. The client can download the file from any IP when the token is used.

First you call the API to get a token. For this, use the URL below. This is same download URL as in 5.3.1, but with an extra parameter 'gettoken=1'.

http://www.ingramAPI.com/assetDownload.do?imagecode=02E82881&downloadreference=972086A3-933B-F6D6-E816CF52D2684C33&gettoken=1&apikey=<APIkey>&apipwd=<APIpassword>

In this call, you can pass the following parameters.

Parameter	Mandatory	Description
APIkey	Yes	Your API Key
APIpwd	Yes	Your API password
Imagecode	Yes	The image code of the asset
Format	No	The format ID of the size/format of your asset as listed in the reponse to an asset-details call. Default is 1, being the first listed format
Downloadreference	Yes	The download reference you got from the call to assetSale.do (see above)
Gettoken	Yes	Must be 1 to receive a download token.

The response of this call is a download token code. After this, you redirect your client to the same URL, but instead of your API Key and API password, you pass the token code:

http://www.ingramAPI.com/assetDownload.do?imagecode=02E82881&downloadreference=972086A3-933B-F6D6-E816CF52D2684C33&token=9D50892C-021C-AC6C-23A9B2998E35AFDD

Your client will then download the file directly to his computer.