

Ingram on-demand XML API

Date: November 2014
Version: 3.1

1. Introduction

This document describes the latest version of the on-demand XML API of Ingram Publishing. The XML API allows partners to integrate their website with Ingram's website and seamlessly publishing content of Ingram Publishing on the website without hosting it or loading it into the 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)
- 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=<APIpassword>>
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 Inimage 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.

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 UriEncoded. 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
Pagnumber	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: - 'photos' for photos only - 'font' for fonts only - 'vectors' for vectors only (omit this parameter to search for all content without filtering for content type)

Examples

- 1) To search all types of content for keywords 'dog AND sun', but only color with 50 results per page:
www.ingramapi.com/assetSearch.do?keywords=dog+AND+sun&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>
```

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

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. 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
Keywords	The keywords of the asset
Thumburl	URL of the thumbnail of the asset

4. Displaying images 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

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.

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.

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¤cyISO=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 response 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 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.

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