



WORLD
SYNC

Digital Asset Management (DAM) API Guide

Version 10



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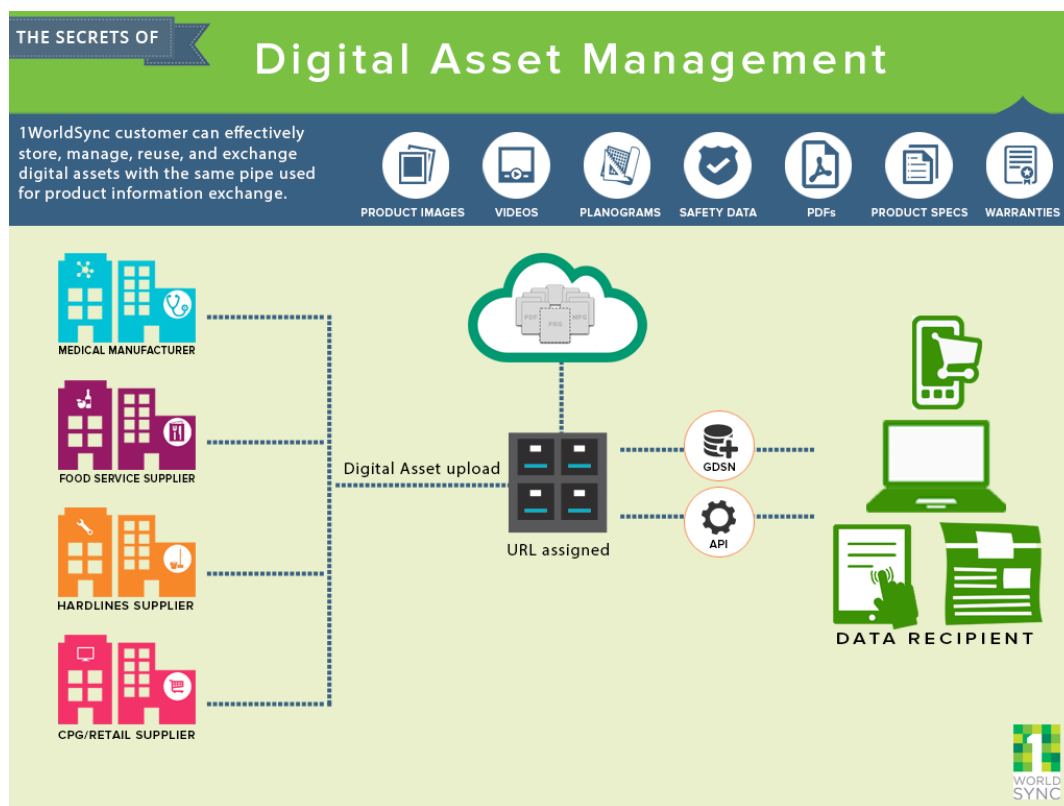
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1 OVERVIEW

1WorldSync offers Digital Asset Management capabilities for data sources to manage and exchange digital content. Digital Assets are any files about a product – such as product images, videos, and PDFs to support Safety Data Sheets and Warranties. These digital assets can be uploaded to 1WorldSync, where a URL is assigned for hosting the asset. The digital asset can also be assigned to a GTIN, which enables the digital asset to be available to data recipients along with the other product information.



1WorldSync's Digital Asset Management (DAM) Application Programming Interface (API) allows you to upload, host, and manage your digital assets. By using this API, you can:

- Upload images, PDFs, and other related digital content
- Host your digital assets (have a URL assigned to your digital asset)
- Associate the digital asset with one of your existing products in Item Management, enabling the content for distribution
- Supply information about the digital asset, such as descriptions and start / end dates



This document describes how to use the APIs to manage digital assets within 1WorldSync. It details the various parameters required to access and use the service, such as web service URLs, and request and response formats.

The intended audience of this document is any 1WorldSync partner or customer who will use Web services to manage digital assets.



2 IF YOU ARE NEW TO 1WORLDSYNC'S DIGITAL ASSET MANAGEMENT API

To get started with using the DAM APIs, please register using the "Sign Up" link at <https://developer.1worldsync.com/>, or contact us at technicalsupport@1worldsync.com. Upon registration, you'll receive the following credentials:

- Your app_id: a 8-character, alphanumeric identifier
- Your X-3SCALE-AUTH-SECRET: a 32-character identifier

The app_id must be included in all 1WorldSync DAM web service requests to identify the sender of the request. The X-3SCALE-AUTH-SECRET allows you to create the digital signature that provides proof that you truly are the sender of the request. For all requests you must calculate this signature (hash_code) using your X-3SCALE-AUTH-SECRET then authenticate your signature. You may refer to Section 8: Authorization Mechanism to Access 1WorldSync API for more details on the information you must supply for the authentication process.

If you would like to test our API's in a non-production environment, you can use our Pre-Production environment: <https://digasset-api.preprod.1worldsync.com/V2/assets> and <https://digasset-api.preprod.1worldsync.com/V2/metadata> . You will need a separate client id and secret key from your production account; contact us at technicalsupport@1worldsync.com if you need this additional access established.

Otherwise access to the production web services will be through: <https://digasset-api.1worldsync.com/V2/assets> and <https://digasset-api.1worldsync.com/V2/metadata>

This release also supports Item Agent functionality. Using the Item Agent functionality, Information Providers can authorize a 3rd party to manage digital assets on their behalf. To use this feature, customers must be approved for access to Digital Asset Management which requires an agreement and enablement from Technical Support. To learn more about how to gain access, please contact us at: technicalsupport@1worldsync.com.



3 USING 1WORLDSYNC DAM WEB SERVICES

Using 1WorldSync DAM web services, two APIs are available:

- (a) **DIGITAL ASSET API** – to host and manage digital assets. This API is available to all 1WorldSync customers. This call should be used when the digital asset is stored inside 1WorldSync’s digital asset repository.
- (b) **DIGITAL ASSET METADATA API** – to assign a digital asset to an item in Item Management (IM) and to manage the digital asset metadata (attributes). This API is available to Item Management customers only.

Both APIs have a REST interface and accept POST, PUT and DELETE requests.

You can use the Web Services to perform the following types of actions.

Action	Action Details	Description
POST	Add Digital Asset	This is used to add a digital asset to 1WorldSync’s digital asset repository. When an asset is uploaded it will be hosted at a 1WorldSync assigned URL. This URL will be returned in the response. Certain other asset information such as assetId, type, size, height and width are also returned.
PUT	Update Digital Asset	This is used to update an existing digital asset, by replacing the existing asset with a new one. When updating the digital asset, the new version of the digital asset is available at the same URL. Certain other asset information such as type, size, height and width are also returned. NOTE: For assets that are associated to an item in Item Management: the “Update Digital Asset” API call must always be followed by a “Update Digital Asset Metadata” API call, so that the system generated attributes (e.g., File Size, Version Number, Pixel Height / Width) get refreshed with values matching the updated asset.



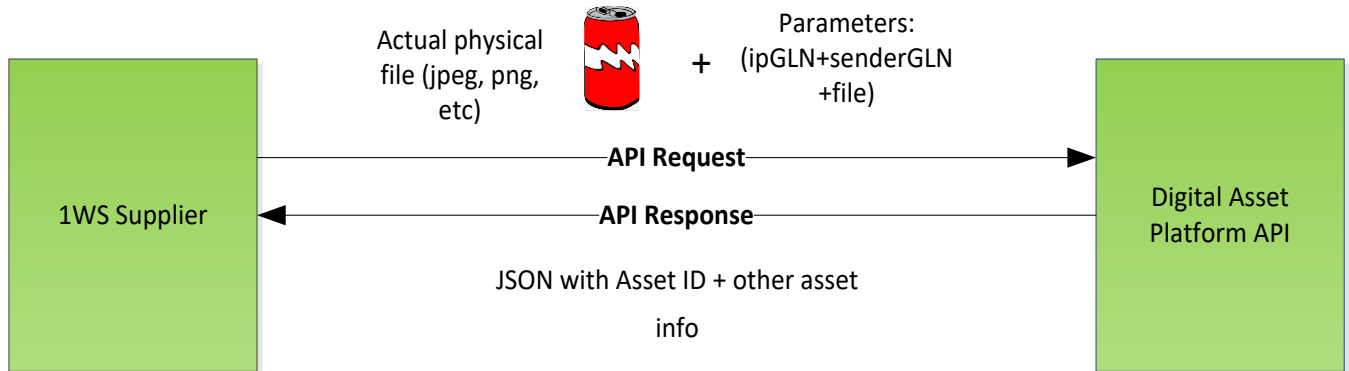
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DELETE	Delete Digital Asset	<p>This is used to delete a digital asset. This will remove the digital asset at the URL. Caution should be used when deleting a digital asset, as the URL will result in a broken link if the URL is in use (e.g., by one of your trading partners).</p> <p>NOTE: Digital Asset Meta data must be deleted prior to deleting the digital asset. (IM Users only)</p>
POST	Add Digital Asset Metadata	<p>This is used to add digital asset metadata to 1WorldSync Item Management (IM) – such as the item (GTIN), description, and start date and end date. This step is required to associate the digital asset to a GTIN in Item Management.</p> <p>If adding a non 1WorldSync digital asset, this call would be made passing the full url inside the meta data to the asset’s public location.</p> <p>Note: A given 1WorldSync-hosted digital asset can belong to just one GTIN.</p>
PUT	Update Digital Asset Metadata	<p>This is used to Update existing digital asset metadata.</p> <p>Note: While updating the metadata, all the attributes, including the attributes that have not changed need to be sent as part of API call. In other words, Update cannot be used to update only certain metadata fields.</p>
DELETE	Delete Digital Asset Metadata	<p>This is used to remove (delete) an asset metadata.</p> <p>Note: While deleting the metadata, all the attributes will be deleted. In other words, Delete cannot be used to delete only certain metadata fields.</p> <p>Digital Asset Meta data should be deleted prior to deleting the Digital Asset. (IM Users only)</p>

The following sub-sections describe in more detail the above options of 1WorldSync DAM Web Services.

4 DIGITAL ASSET API

4.1 Add Digital Asset



For adding a digital asset, the actual physical file (e.g., the jpeg, png, pdf) for the digital asset must be supplied in the API call to 1WorldSync. The format of an API request for adding a digital asset is as follows:

URL: [https://digasset-](https://digasset-api.1worldsync.com/V2/assets?app_id=&ipGLN=&senderGLN&fileName=&TIMESTAMP=&has_h_code=)

[api.1worldsync.com/V2/assets?app_id=&ipGLN=&senderGLN&fileName=&TIMESTAMP=&has_h_code=](https://digasset-api.1worldsync.com/V2/assets?app_id=&ipGLN=&senderGLN&fileName=&TIMESTAMP=&has_h_code=)

Action: POST

Request Content type: multipart/form-data

Content-Disposition: The following table provides details of the content disposition:

Part Type	Part Name	Mandatory	Description
String	app_id	✓	app_id is the Client ID, generated by 1WorldSync to access the Web Services. This can be accessed through your account at http://developer.1worldsync.com
String	ipGLN	✓	This is the GLN of the information provider of the item (product) the asset is associated to. The intention is that the digital asset will be associated with an item in 1WorldSync. This "ipGLN" should match the information provider of that item.
String	senderGLN	✓	This is the Sender GLN info. In the case that a 3 rd party or Item Agent is providing digital assets on behalf of an Information Provider (i.e., supplier), this GLN should be of the 3 rd party.

String	fileName	✗	This needs to be provided if the file name on the physical file should not by default be used for this attribute. File name must be at least 3 characters Note: for images, the fileName should follow GS1 file naming requirements: http://www.gs1.org/docs/gsm/gdsn/Product_Image_Specification.pdf
Image/jpeg	file	✓	This is the actual Asset file that needs to be supplied as part of API call (to be sent as attachment).
String	fileType	✗	This is only provided in the multi part portion of the API and is only used when submitting a 360 spin set of images. The value would be <i>360_DEGREE_IMAGE</i>
String	TIMESTAMP	✓	Security Checks for web service will retrieve the value and will compare with the (current time – 5 minutes). If the supplied time stamp is within the criteria, then it will allow the user to access the WS. TIMESTAMP should be provided as Coordinated Universal Time format, such as "2009-03-03T18:12:22Z" or "2009-03-03T23:12:22+05:00" or "2009-03-03T13:12:22-05:00" ("Z" to represent UTC, else an offset)
String	hash_code	✓	The string generated by calling the HMAC encryption / hash routine. The secret key (Client Secret) is used to generate the hash code. The secret key can be found by logging in to http://developer.1worldsync.com and navigating to the correct application in your account.

Response:

API will return the following in JSON format:

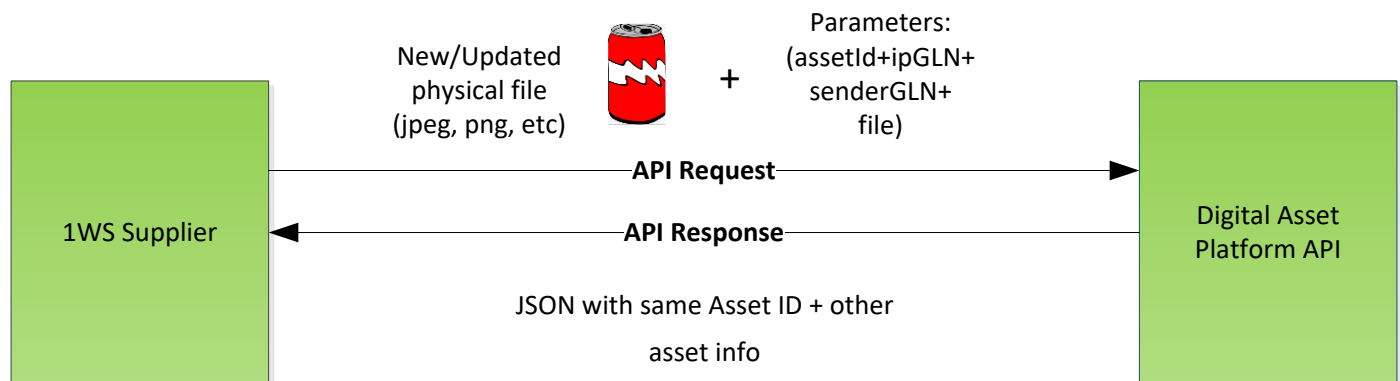
Name	Description	Sample
assetId	Asset ID assigned by 1WorldSync	"assetId": "1WS-37609"
fileName	Name of the asset that was uploaded	"fileName": "Tulips.jpg"
ipGLN	Information Provider GLN that uploaded that asset	"ipGLN": "0614141479993"
ipName	Information Provider Name that uploaded that asset	"ipName": "Information Provider Name"
type	Type (MIME Type) of asset that was uploaded	"type": "image/jpeg"
size	Size of the file in bytes	"size": 620888
height	Height in Pixels	"height": 768
width	Width in Pixels	"width": 1024

url	URL through which recipients can download the asset	"url": "https://dam.catalog.1worldsync.com/im/dwn/1WS-37609"
version	Version of the digital asset	"version" : 1



NOTE: For assets that are associated to an item in Item Management (IM): the "Add Digital Asset" API call should always be followed by an "Add Digital Asset Metadata" API call, so that the system generated attributes (e.g., File Size, Version Number, Pixel Height / Width) will be added to the item meta data.

4.2 Update Digital Asset



For updating a digital asset, the new version of the digital asset must be supplied. The format of an API request for updating a digital asset is as follows:

URL: https://digasset-

api.1worldsync.com/V2/assets/{assetId}?app_id=&ipGLN=&senderGLN&TIMESTAMP=&has_h_code=

Note that assetId needs to be provided as part of URL

Action: PUT

Request Content Type: multipart/form-data

Request Parameters: The following table provides details of the request parameters:

Parameter Names	Mandatory	Description
assetId	✓	Asset ID of the asset that needs to be updated

Content-Disposition: The following table provides details of the content disposition:

Part Type	Part Name	Mandatory	Description
String	app_id	✓	app_id is the Client ID, generated by 1WorldSync to access the Web Services. This can be accessed through your account at http://developer.1worldsync.com
String	ipGLN	✓	This is the GLN of the information provider of the item (product) the asset is associated to. The intention is that the digital asset will be associated with an item in 1WorldSync. This "ipGLN" should match the information provider of that item.
String	senderGLN	✓	This is the Sender GLN info. In the case that a 3 rd party is providing digital assets on behalf of an Information Provider (i.e., supplier), this GLN should be of the 3 rd party.
String	fileName	✗	This needs to be provided if the file name on the physical file should not by default be used for this attribute. File name must be atleast 3 characters Note: for images, the fileName should follow GS1 file naming requirements: http://www.gs1.org/docs/gsm/gdsn/Product_Image_Specification.pdf
String	TIMESTAMP	✓	Security Checks for web service will retrieve the value and will compare with the (current time – 5 minutes). If the supplied time stamp is within the criteria, then it will allow the user to access the WS. TIMESTAMP should be provided as Coordinated Universal Time format, such as "2009-03-03T18:12:22Z" or "2009-03-03T23:12:22+05:00" or "2009-03-03T13:12:22-05:00" ("Z" to represent UTC, else an offset)
String	hash_code	✓	The string generated by calling the HMAC encryption / hash routine. The secret key (Client Secret) is used to generate the hash code. The secret key can be found by logging in to http://developer.1worldsync.com and navigating to the correct application in your account.
Image/jpeg	file	✓	This is the actual Asset file that needs to be supplied as part of API call (to be sent as attachment).

Response:

API will return the following in JSON format:

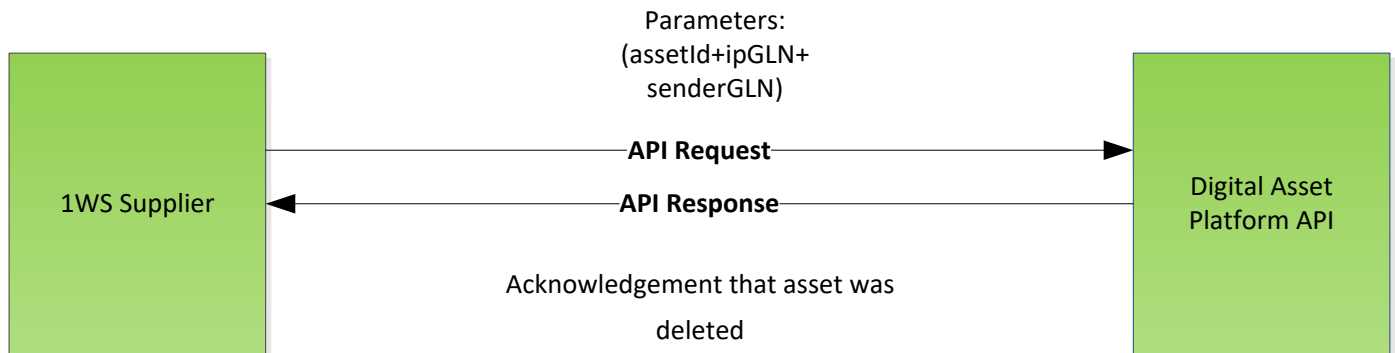
Name	Description	Sample
assetId	Asset ID assigned by 1WorldSync. Note: Asset ID remains the same in case of update.	"assetId": "1WS-37609"
fileName	Name of the asset that was uploaded	"fileName": "Tulips.jpg"
ipGLN	Information Provider GLN that uploaded that asset	"ipGLN": "0614141479993"
ipName	Information Provider Name that uploaded that asset	"ipName": "Information Provider Name"
type	Type (MIME Type) of asset that was uploaded	"type": "image/jpeg"
size	Size of the file in bytes	"size": 620888
height	Height in Pixels	"height": 768
width	Width in Pixels	"width": 1024
url	URL through which recipients can download the updated asset Note: URL remains the same in case of update.	"url": "https://dam.catalog.1worldsync.com/im/dwn/1WS-37609"
version	Version of the digital asset	"version" : 2



NOTE: For assets that are associated to an item in Item Management (IM): the "Update Digital Asset" API call should always be followed by an "Update Digital Asset Metadata" API call, so that the system generated attributes (e.g., File Size, Version Number, Pixel Height / Width) are updated to match the updated asset on the item.

This API call cannot be used for 360 Spin images if a 360 spin needs to be updated it should be deleted and a new one added.

4.3 Delete Digital Asset



For deleting a digital asset, the format of an API request for deleting a digital asset is as follows:

URL: https://digasset-api.1worldsync.com/V2/assets/{assetId}?app_id=&ipGLN=&senderGLN&TIMESTAMP=&hash_code=

Note that assetId needs to be provided as part of URL

Action: DELETE

Request Parameters: The following table provides details of the request parameters:

Parameter Names	Mandatory	Description
assetId	✓	Asset ID of the asset that needs to be deleted

Query Parameters: The following table provides details of the query parameters:

Part Type	Part Name	Mandatory	Description
String	app_id	✓	app_id is the Client ID, generated by 1WorldSync to access the Web Services. This can be accessed through your account at http://developer.1worldsync.com
String	ipGLN	✓	This is the GLN of the information provider of the item (product) the asset is associated to. The intention is that the digital asset will be associated with an item in 1WorldSync. This "ipGLN" should match the information provider of that item.



String	senderGLN	✓	This is the Sender GLN info. In the case that a 3 rd party is providing digital assets on behalf of an Information Provider (i.e., supplier), this GLN should be of the 3 rd party.
String	TIMESTAMP	✓	Security Checks for web service will retrieve the value and will compare with the (current time - 5 minutes). If the supplied time stamp is within the criteria, then it will allow the user to access the WS. TIMESTAMP should be provided as Coordinated Universal Time format, such as "2009-03-03T18:12:22Z" or "2009-03-03T23:12:22+05:00" or "2009-03-03T13:12:22-05:00" ("Z" to represent UTC, else an offset)
String	hash_code	✓	The string generated by calling the HMAC encryption / hash routine. The secret key (Client Secret) is used to generate the hash code. The secret key can be found by logging in to http://developer.1worldsync.com and navigating to the correct application in your account.

Response:

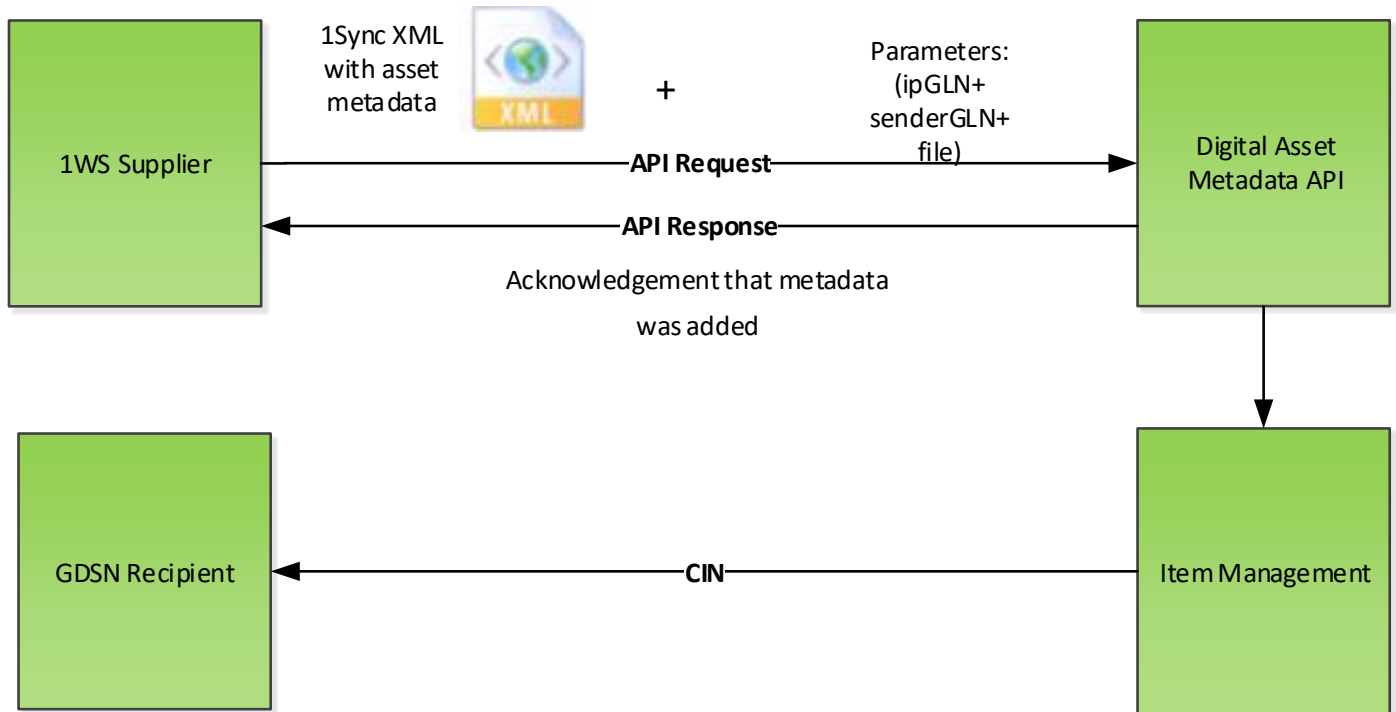
API will return the following in JSON format:

Name	Description	Sample
Status	Status of the API request Status 202 indicates Asset was deleted successfully	"status": 202

See [Appendix A](#) for sample response in JSON format

5 DIGITAL ASSET METADATA API

5.1 Add Asset Metadata



For adding asset metadata to Item Management, the metadata file in the 1SYNC XML format is supplied in the API call to 1WorldSync. For a sample of the 1SYNC XML Digital Asset Management ADD, please refer to section 6 below in this document. The format of an API request for adding asset metadata is as follows:

URL: https://digasset-api.1worldsync.com/V2/assets/metadata?app_id=&ipGLN=&senderGLN&TIMESTAMP=&hash_code=

Action: POST

Request Content Type: multipart/form-data

Content-Disposition: The following table provides details of the content disposition:

Part Type	Part Name	Mandatory	Description
String	app_id	✓	app_id is the Client ID, generated by 1WorldSync to access the Web Services. This can be accessed through your account at http://developer.1worldsync.com



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String	ipGLN	✓	<p>This is the GLN of the information provider of the item (product) the asset is associated to.</p> <p>The intention is that the digital asset will be associated with an item in 1WorldSync. This "ipGLN" should match the information provider of that item.</p>
String	assetId	✓ (conditional)	<p>Asset id of the asset for which metadata needs to be added.</p> <p>If Asset was added through API, then assetId is mandatory.</p> <p>If Asset is hosted outside of 1Worldsync then this field should be left blank</p> <p>Eg. 1WS=XXXX</p>
String	senderGLN	✓	<p>This is the Sender GLN info.</p> <p>In the case that a 3rd party is providing digital assets on behalf of an Information Provider (i.e., supplier), this GLN should be of the 3rd party.</p>
String	TIMESTAMP	✓	<p>Security Checks for web service will retrieve the value and will compare with the (current time – 5 minutes). If the supplied time stamp is within the criteria, then it will allow the user to access the WS.</p> <p>TIMESTAMP should be provided as Coordinated Universal Time format, such as "2009-03-03T18:12:22Z" or "2009-03-03T23:12:22+05:00" or "2009-03-03T13:12:22-05:00" ("Z" to represent UTC, else an offset)</p>
String	hash_code	✓	<p>The string generated by calling the HMAC encryption / hash routine. The secret key (Client Secret) is used to generate the hash code. The secret key can be found by logging in to http://developer.1worldsync.com and navigating to the correct application in your account.</p>
Text	file	✓	<p>This is the actual metadata file in 1Sync XML format.</p>

Response:

API will return the following in JSON format:

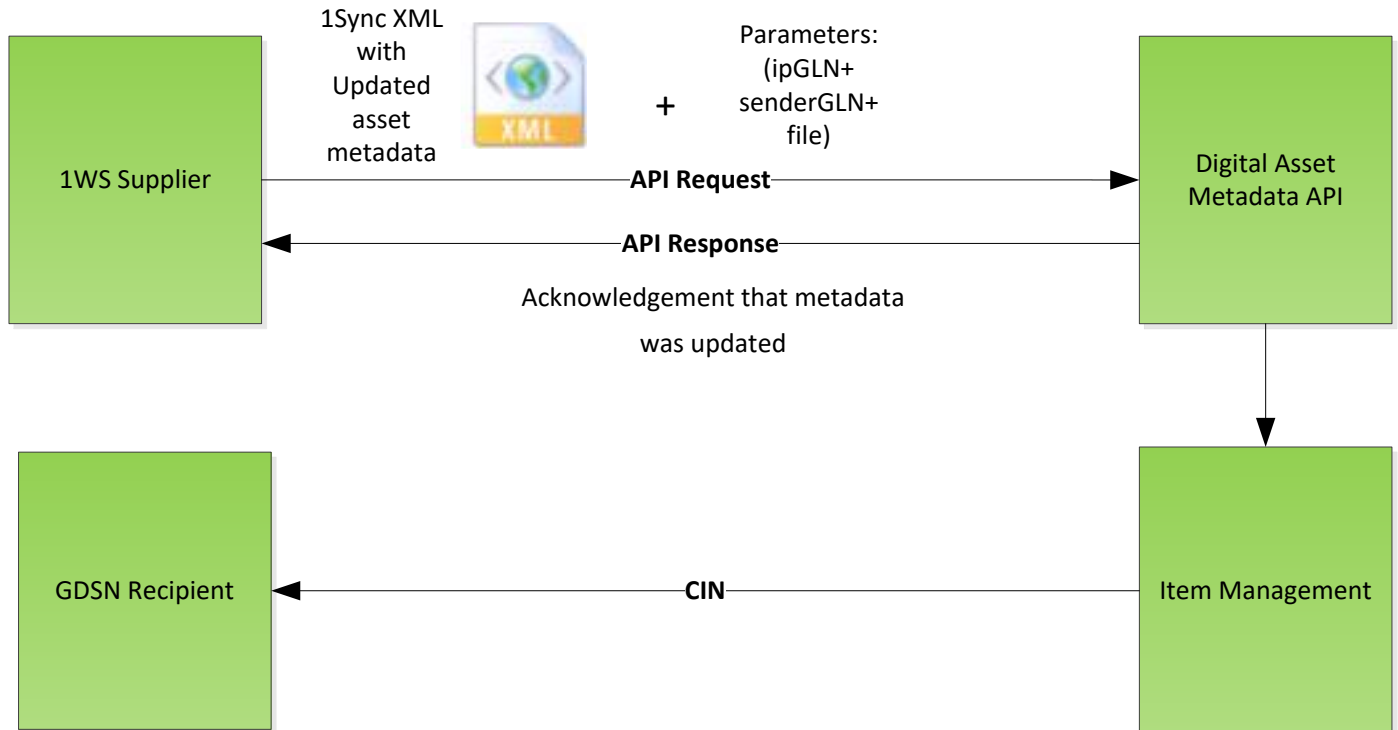
Name	Description	Sample
Status	Status of the API request Status 200 indicates Metadata was added successfully	"status": 200
assetId	will return the assetId assigned to the meta data. If it is 1WorldSync hosted the assetId will match the one submitted. If it is externally hosted, the assetId will be a new unique id assigned and should be stored in your internal systems for use during an update API call	"assetId": EXT-12345

Note:



Certain attributes such as File Size, File Pixel Height, File Pixel Width, and File Version are system determined. If these attributes are sent as part of digital asset attributes, they will be ignored and overwritten with 1WorldSync system determined values. If these attributes are not sent as part of digital asset attributes, they will be system determined by 1WorldSync.

5.2 Update Asset Metadata



For updating an asset metadata, updated metadata file in 1Sync XML is supplied in the API call to 1WorldSync. The format of an API request for updating asset metadata is as follows:

Format: https://digasset-api.1worldsync.com/V2/assets/{assetId}/metadata?app_id=&ipGLN=&senderGLN&TIMESTAMP=&hash_code=

Note that assetId needs to be provided as part of URL

Action: PUT

Request Content Type: multipart/form-data

Request parameters: The following table provides details of the request parameters:

Parameter Names	Mandatory	Description
assetId	✓	Asset ID of the asset for which metadata needs to be updated. This should be a 1WS-XXX or EXT-XXX format

Content-Disposition: The following table provides details of the content disposition:

Part Type	Part Name	Mandatory	Description
String	App_id	✓	app_id is the Client ID, generated by 1WorldSync to access the Web Services. This can be accessed through your account at http://developer.1worldsync.com
String	ipGLN	✓	This is the GLN of the information provider of the item (product) the asset is associated to. The intention is that the digital asset will be associated with an item in 1WorldSync. This "ipGLN" should match the information provider of that item.
Text	file	✓	This is the actual metadata file in 1Sync XML format
String	senderGLN	✓	This is the Sender GLN info. In the case that a 3 rd party is providing digital assets on behalf of an Information Provider (i.e., supplier), this GLN should be of the 3 rd party.
String	TIMESTAMP	✓	Security Checks for web service will retrieve the value and will compare with the (current time – 5 minutes). If the supplied time stamp is within the criteria, then it will allow the user to access the WS. TIMESTAMP should be provided as Coordinated Universal Time format, such as "2009-03-03T18:12:22Z" or "2009-03-03T23:12:22+05:00" or "2009-03-03T13:12:22-05:00" ("Z" to represent UTC, else an offset)
String	hash_code	✓	The string generated by calling the HMAC encryption / hash

			<p>routine. The secret key (Client Secret) is used to generate the hash code. The secret key can be found by logging in to http://developer.1worldsync.com and navigating to the correct application in your account.</p>
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Note:

Certain attributes such as File Size, File Pixel Height, File Pixel Width and File Version are system determined. If these attributes are sent as part of digital asset attributes, they will be ignored and overwritten with system determined values. If these attributes are not sent as part of digital asset attributes, they will be appended (system determined) to the XML message sent by user.

Response:

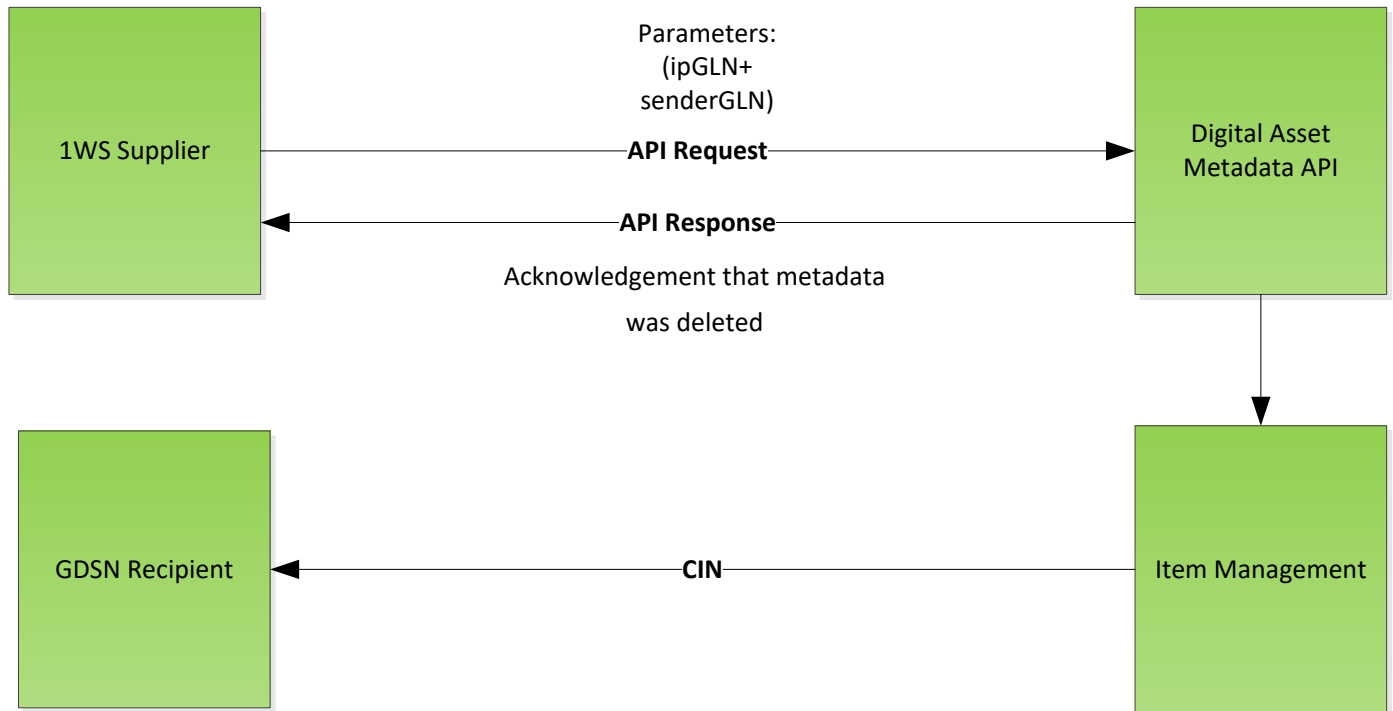
API will return the following in JSON format:

Name	Description	Sample
Status	Status of the API request Status 200 indicates Metadata was updated successfully	"status": 200



NOTE: This API call cannot be used to update 360 Spin specific attributes. If those attributes need to be updated, The 360 spin set should be deleted and a new one added.

5.3 Delete Asset Metadata



The format of an API request for deleting asset metadata is as follows:

Format: https://digasset-api.1worldsync.com/V2/assets/{assetId}/metadata?app_id=&ipGLN=&senderGLN&TIMESTAMP=&hash_code=

Action: DELETE

Request Parameters: The following table provides details of the request parameters:

Parameter Names	Mandatory	Description
assetId	✓	Asset ID of the asset for which metadata needs to be deleted This should be a 1WS-XXX or EXT-XXX format

Query Parameters: The following table provides details of the query parameters:

Part Type	Part Name	Mandatory	Description
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String	App_id	✓	app_id is the Client ID, generated by 1WorldSync to access the Web Services. This can be accessed through your account at http://developer.1worldsync.com
String	ipGLN	✓	This is the GLN of the information provider of the item (product) the asset is associated to. The intention is that the digital asset will be associated with an item in 1WorldSync. This "ipGLN" should match the information provider of that item.
String	senderGLN	✓	This is the Sender GLN info. In the case that a 3 rd party is providing digital assets on behalf of an Information Provider (i.e., supplier), this GLN should be of the 3 rd party.
String	TIMESTAMP	✓	Security Checks for web service will retrieve the value and will compare with the (current time - 5 minutes). If the supplied time stamp is within the criteria, then it will allow the user to access the WS. TIMESTAMP should be provided as Coordinated Universal Time format, such as "2009-03-03T18:12:22Z" or "2009-03-03T23:12:22+05:00" or "2009-03-03T13:12:22-05:00" ("Z" to represent UTC, else an offset)
String	hash_code	✓	The string generated by calling the HMAC encryption / hash routine. The secret key (Client Secret) is used to generate the hash code. The secret key can be found by logging in to http://developer.1worldsync.com and navigating to the correct application in your account.

Response:

API will return the following in JSON format:



Name	Description	Sample
Status	Status of the API request Status 202 indicates Metadata was deleted successfully	"status": 202

6 360 SPIN SUPPORT

360 degree & 3D spin product photography is the most effective way to provide visual information that builds customer trust in your products and your brand. Combining rotating imagery and zoom functionality is an even more powerful way to empower your visitors with an in-store experience and a sense of relief to instill them with confidence to make more online purchases.

As of the IM 8.8.2 release, Item Management will support 360 spin set of images. The DAM API will also support the upload of 360 spin sets for both the Image and Meta Data API calls.

To send a 360 spin set:

1. All spin images which are part of the set (24 or 72 images most likely) should be zipped together into a single zip file
2. Call the Add Image API and add the optional *fileType parameter*
3. Capture the returned meta data to be used for the Add MetaData API Call
4. Call the Add MetaData API to add the 360 spin set to an item.

Please note: The Update Digital Asset API cannot be used for 360 spin sets, if you need to make a change, the Delete Digital Asset API should be called to remove the 360 spin set and then the new 360 spin set should be added using the Add Digital Asset API. Images in the spin set are processed in the order they appear in the zip file. Images should be ordered sequentially within a spin row. There is currently a limit of 100mb for the total size of the zip file which can be submitted.

The preferred naming convention for spin images is as follows: ImageName_RX_CY.jpg

X is the row number starting with 0 or 1
C is the column number starting with 0 or 1

To Delete a 360 spin set:

1. Use the Delete Digital Asset API call with the Digital Asset ID returned from the Add Digital Asset API call (this will also be the DA number in the URL for the anchor image).

Please note: 360 spin sets are treated as a single object, removing the anchor image will delete all images from the Digital Asset Management system.

7 AUTHORIZED RECIPIENT

With the IM 8.9 release, Item Management will now support Authorized recipients for Digital Assets. A supplier can now dictate who can see the Digital Asset in both the UI as well as what is synced out to each retailer. Using the new functionality the supplier can also make the Digital Asset private, meaning it will not sync out or be visible to anyone other than the supplier.

There are 2 new attributes being added to the DAM XML which control how this works.

- shareType
- authorizedRecipients

Share Type (shareType) (A) has 2 possible values: Public, Private. If the Share Type is set to Public (default) then the Digital Asset will be seen by all recipients both in the UI and XML. If the Share Type is Private then the system will use the authorizedRecipients to determine which recipients can see that Digital Asset.

Note: if shareType is set to public and authorizedRecipients contains any data, an error will be thrown. If shareType is not provided then the Digital Asset will default to Public.

Authorized Recipients (AM) is a list of Recipients that can view the Digital Asset in the UI and receive it in the XML. The value is a list of GLNs and can also be left blank. If the Authorized Recipient is blank it means that the image can only be seen in the UI by that supplier.

Note: If the supplier is syncing data to themselves, and they want the private images to sync in the xml, they should include their own GLN in the Authorized Recipient list.

8 SAMPLE 1SYNC XML FOR DIGITAL ASSET MANAGEMENT

Below is a sample of the 1SYNC XML Digital Asset Management Catalogue Request. For more information, please refer to the following sections of the *Data Source 1SYNC XML Guide* as posted on the 1WorldSync Solution Center:

- *Digital Asset Add*
- *Digital Asset Modify*
- *Digital Asset Delete*



```
<?xml version="1.0"?>
<os:envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:os="http://www.1sync.org" xsi:schemaLocation="http://www.1sync.org
http://www.1worldsync.com/schemas/item/2.0/CatalogueRequestProxy.xsd">
  <header version="2.0">
    <sender>7701115113014</sender>
    <representedParty>7701115113014</representedParty>
    <receiver>8380160030003</receiver>
    <messageId>msg.L75GB180800012.ssk.05232007.M002</messageId>
    <creationDateTime>>2018-11-23T12:11:26Z</creationDateTime>
  </header>
  <catalogueRequest xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:os="http://www.1sync.org" version="2.0">
    <header>
      <userGLN>7701115113014</userGLN>
      <userId>bu.7701115113014.user</userId>
    </header>
    <document>

      <documentId>msg.L75GB180800012.ssk.05232007.M002.D001</documentId>
      <digitalAsset>
        <operation>ADD</operation>
        <gtin>08581892981179</gtin>

        <informationProviderGLN>7701115113014</informationProviderGLN>
        <targetMarket>NL</targetMarket>
        <flex>
          <attr
name="externalFileLinkFileName">Deer.jpg</attr>
          <attrQualMany
name="externalFileLinkContentDescription">
            <value qual="en">File
Description</value>
          </attrQualMany>
          <attrQualMany name="fileFormatDescription">
            <value qual="en">image/jpg</value>
          </attrQualMany>
          <attr name="fileFormatName">JPEG</attr>
          <attr name="fileEffectiveStartDateTime">2018-
11-23T12:11:26Z</attr>
          <attr
name="uniformResourceIdentifier">https://dam.preprod.catalog.1worldsync.co
m/im/dwn/1WS-101114</attr>
          <attr
name="typeOfInformation">PRODUCT_IMAGE</attr>
```

```

                                <attr
name="filePixelHeight">2400</attr>
                                <attr
name="filePixelWidth">2400</attr>
<attr name="shareType">Private</attr>
<attrMany name="authorizedRecipients">
                                <value>7701115113014</value>
                                </attrMany>
                                </flex>
                                </digitalAsset>
                                </document>
                                </catalogueRequest>
</os:envelope>

```

9 SAMPLE REQUESTS

Sample request for each action is given below
Using secret key: 6b904a0c5ceefa991b2ebc9cfec202b6

Note: each parameter must be URL Encoded individually prior to sending.

9.1 Digital Asset API

Action	Sample URL
Add asset	<p>https://digasset-api.1worldsync.com/V2/assets?app_id=12345&ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13:08:02Z&hash_code=xCimvrWfNZ3o83wugChCU0oaaaP9vIfztHi9TMhgoYA=</p> <p>Encoded:</p> <p>https://digasset-api.1worldsync.com/V2/assets?app_id=12345&ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13%3A08%3A02Z&hash_code=xCimvrWfNZ3o83wugChCU0oaaaP9vIfztHi9TMhgoYA%3D</p>
Update asset	<p>https://digasset-api.1worldsync.com/V2/assets/1WS-1234?app_id=12345&ipGLN=1234567891234&senderGLN=12345678912347&TIMESTAMP=2012-12-06T13:08:02Z&hash_code=F/aB/KSkzJe7u5vbKZZOGHkdazNI+HqhRN8TmN2RW1g=</p> <p>Encoded</p>



	<pre>https://digasset-api.1worldsync.com/V2/assets/1WS-1234? app_id=12345& ipGLN=1234567891234&senderGLN=12345678912347&TIMESTAMP=2 012-12-06T13%3A08%3A02Z& hash_code= F%2FaB%2FKSkzJe7u5vbKZZOGHkdazNI%2BHqhRN8TmN2RW1g%3D</pre>
Delete asset	<pre>https://digasset-api.1worldsync.com/V2/assets/1WS-1234? app_id=12345& ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=20 12-12-06T13:08:02Z& hash_code=XsG2GiFewoUFrjOJZkeGrTj+AVX84M+C+mcRRxcZf8M=</pre> <p>Encoded</p> <pre>https://digasset-api.1worldsync.com/V2/assets/1WS-1234? app_id=12345& ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=20 12-12-06T13%3A08%3A02Z& hash_code= XsG2GiFewoUFrjOJZkeGrTj%2BAVX84M%2BC%2BmcRRxcZf8M%3D</pre>

9.2 Digital Asset Metadata API

Action	Sample URL
Add Asset Metadata 1WS and Non 1WS hosted Asset	<pre>https://digasset- api.1worldsync.com/V2/assets/metadata?app_id=1234& ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=20 12-12-06T13:08:02Z& hash_code=rbsri2xM1RQYy8MvL2zpJuZGbmLFLGpULDnOre2A1zg=</pre> <p>Encoded:</p>



DAM API Guide

	<p>https://digasset-api.1worldsync.com/V2/assets/metadata?app_id=1234&ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13%3A08%3A02Z&hash_code=rbsri2xM1RQYy8MvL2zpJuZGbmLFLGpULDnOre2A1zg%3D</p>
Update Asset Metadata	<p>https://digasset-api.1worldsync.com/V2/assets/1WS-1234/metadata?app_id=1234&ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13:08:02Z&hash_code=hXJyEjQ7EJqFH6NOxoJsZlvnI9QpTjco3iHqgxUU3j4=</p> <p>Encoded:</p> <p>https://digasset-api.1worldsync.com/V2/assets/1WS-1234/metadata?ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13%3A08%3A02Z&hash_code=hXJyEjQ7EJqFH6NOxoJsZlvnI9QpTjco3iHqgxUU3j4%3D</p>
Delete Asset Metadata	<p>https://digasset-api.1worldsync.com/V2/assets/1WS-1234/metadata?app_id=1234&ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13:08:02Z&hash_code=KyfWil2fyXbaGR2a7kF722Ze9JkaFIIOYJ1/eDOvPjg=</p> <p>Encoded:</p> <p>https://digasset-api.1worldsync.com/V2/assets/1WS-1234/metadata?ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13%3A08%3A02Z&hash_code=KyfWil2fyXbaGR2a7kF722Ze9JkaFIIOYJ1%2FeDOvPjg%3D</p>

10 SAMPLE RESPONSE

10.1 Output Details

10.1.1 *DIGITAL ASSET API*

Action	Response
Add asset	On success – URL containing Asset ID + other asset info On failure – Error response with error details
Update asset	On success – URL containing Same Asset ID + other asset info On failure – Error response with error details
Delete asset	On success – Status code 202 On failure – Error response with error details

10.1.2 *DIGITAL ASSET METADATA API*

Action	Response
Add Metadata	On success – Status code 200 + Asset ID On failure – Error response with error details
Update Metadata	On success – Status code 200 On failure – Error response with error details
Delete Metadata	On success – Status code 202 On failure – Error response with error details

10.2 Sample JSON output

Please refer [Appendix A](#) and [Appendix B](#) for sample request and responses in JSON format

10.3 Response Codes

Following table describes the sample response codes:

Status	Response
202	
400	<pre>{ "serviceId": 5, "errorCode": "E50001", "debugMessage": "Asset ID is missing", "messageArgs": {} }</pre>

401	<pre>{ "serviceId": 5, "errorCode": "E50001", "debugMessage": "Asset ID is invalid", "messageArgs": {} }</pre>
500	<pre>{ "serviceId": 5, "errorCode": "E50012", "debugMessage": "Service is not available, please try later", "messageArgs": {} }</pre>

Error Body

An error message body from API service has following fields, and it returned as JSON format:

```
{
  "serviceId": 5,
  "errorCode": "GLN_ERROR",
  "debugMessage": "Provider GLN is missing",
  "messageArgs": {}
}
```

debugMessage: Detailed error message.

serviceId: this is Id of service you are calling. For example, 5 is DAM service.

errorCode: error code from service.

messageArgs: The list of error messages if multiple errors returned.

10.3.1 STATUS CODES

All status codes are standard HTTP status codes. The below ones are used in this API.

- 2XX - Success of some kind
- 4XX - Error occurred in client's part
- 5XX - Error occurred in server's part

Http Status Code	Description
200	OK
202	Accepted (Request accepted, and queued for execution)
400	Bad request
401	Authentication failure
403	Forbidden
405	Method not implemented
500	Internal Server Error
503	Service Unavailable

10.3.2 ERROR CODES

In addition to descriptive error text, error messages contain machine-parseable codes. While the text for an error message may change, the codes will stay the same. The following table describes the codes which may appear when working with the API:

Http Status Code	Text
E40039	You are not authorized to access this service, please check your App id and Security key
E40035	App ID is missing
E40036	Timestamp is missing
E40037	Hash code is missing
E40032	Invalid APP ID and Security Key combination
E40034	Timestamp is expired.
DAM10001	Information provider GLN is missing or invalid
DAM10002	Sender GLN is missing or invalid
DAM10003	User ID is missing or invalid
DAM10004	Invalid sender of Information provider, sender is not agent of the Information Provider
DAM30000	Service you are accessing is not available, please retry later or contact us at technicalsupport@1worldsync.com
DAM30001	Asset ID is missing or invalid
DAM30002	We are not able to process your request at this time, please retry later or contact us at technicalsupport@1worldsync.com
DAM30003	Digital asset file is missing or invalid



DAM30004	Digital asset file name should be at least 3 characters
DAM30005	Digital asset file size can not be more than 20M
DAM30006	Digital asset file type is not supported
DAM30007	Digital Asset has invalid extension; there is mismatch with MIME type
DAM30008	Asset Id already exists
DAM30009	Asset Id not recognized
DAM50001	GTIN is null or invalid
DAM50002	You are not authorized to send request to this IP GLN
DAM50004	You are not authorized to send request for this Sender GLN
DAM50005	Asset URL is invalid, either it is not exist, or you are not authorized to manage this asset
DAM50006	Unable to validate Digital Asset attributes
DAM50007	We are not able to process your request at this time, please retry later or contact us at technicalsupport@1worldsync.com
DAM50008	Invalid XML file, it is not valid or well formed
DAM50010	Information provider does not have package C offering

11 AUTHORIZATION MECHANISM TO ACCESS WEB SERVICES

11.1 Authentication

1WorldSync Platform API uses keyed-HMAC (Hash Message Authentication Code) for authentication. To authenticate a request, you need to add application id, request timestamp and hashed request string (using your private key) to parameters. Without these parameters, request will be rejected

Params	Values
app_id	string
hash_code	string
TIMESTAMP	string

app_id must be sent with all client requests. The app_id helps the server to validate the request source. Please refer to section 3 to obtain app_id.

hash_code hash of client request parameters using customer secret key. Please refer to section 8.2 to generate hash_code.

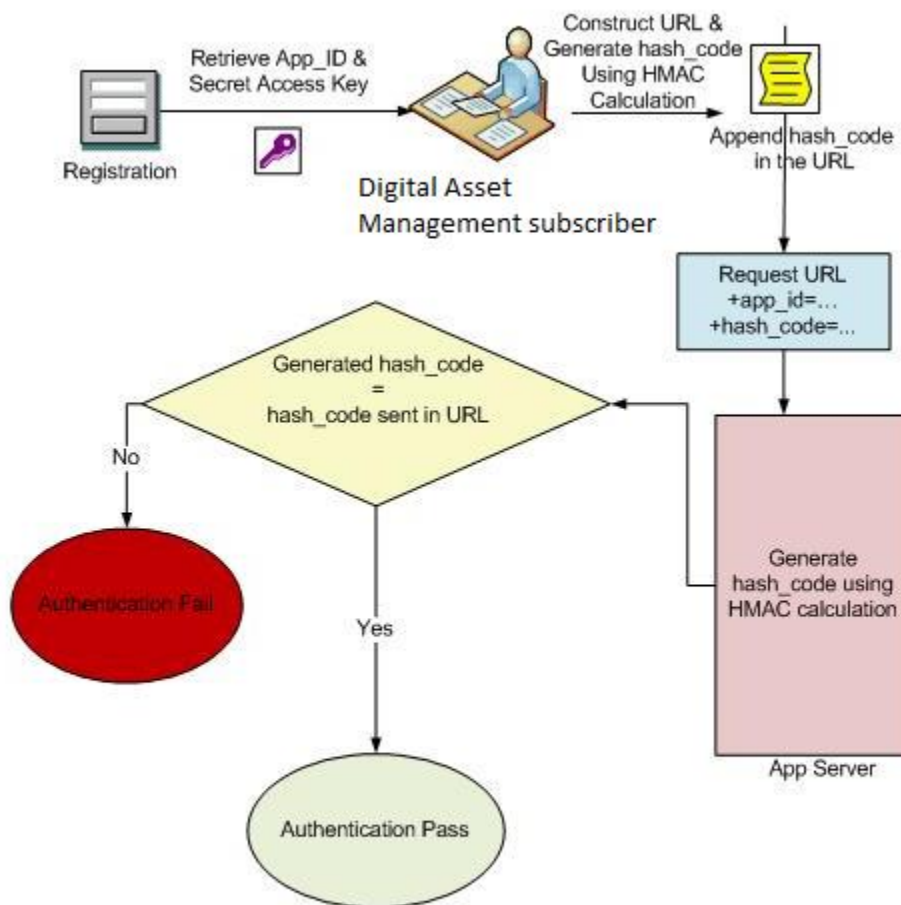
TIMESTAMP provide timestamp associated with request.

TIMESTAMP should be provided as Coordinated Universal Time (Greenwich Mean Time) time zone format, such as "2009-03-03T18:12:22Z" or "2009-03-03T23:12:22+05:00" or "2009-03-03T13:12:22-05:00" ("Z" to represent UTC, else an offset)

Example:

app_id=1234&TIMESTAMP=2013-12-03T16%3A20%3A18Z&hash_code=Wh%252BBWBbOPYKqdZkxmun8IAAn1LEJutzEyx%252FzIusbkFZc%253D

11.2 Generating HMAC



Please find the code snippet for HMAC calculation and Encoding:

```
public static String calculateRFC2104HMAC(String data, String key)

throws java.security.SignatureException, java.security.NoSuchAlgorithmException,
java.security.InvalidKeyException {
String result;

// get an hmac_sha1 key from the raw key bytes javax.crypto.spec.SecretKeySpec
signingKey = new javax.crypto.spec.SecretKeySpec(key.getBytes(), "HmacSHA256");

// get an hmac_sha1 Mac instance and initialize with the signing key
javax.crypto.Mac mac = javax.crypto.Mac.getInstance("HmacSHA256");
mac.init(signingKey);

// compute the hmac on input data bytes
byte[] rawHmac = mac.doFinal(data.getBytes());

// base64-encode the hmac

result = org.apache.commons.codec.binary.Base64.encodeBase64String(rawHmac);
result = java.net.URLEncoder.encode(result.trim(),"UTF-8");
return result;
}
```

Here data is the queryString (without hash_code) and key is your Secret Key (Client Secret).

For example:

data:

/V2/assets?app_id=12345& ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13:08:02Z

key: 6b904a0c5ceefa991b2ebc9cfec202b6

Generated Hash Code: xCimvrWfNZ3o83wugChCU0aaaaP9vIfztHi9TMhgoYA=

The request URL with hash_code parameter:

https://digasset.preprod.1worldsync.com/V2/assets?app_id=12345&
ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13:08:02Z&
hash_code=xCimvrWfNZ3o83wugChCU0aaaaP9vIfztHi9TMhgoYA=

Each parameter must be URL encoded before sending. This would yield the following URL which is ready to send.



https://digasset.preprod.1worldsync.com/V2/assets?app_id=12345&ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13%3A08%3A02Z&hash_code=xCimvrWfNZ3o83wugChCU0oaaaP9vIfztHi9TMhgoYA%3D

12 APPENDIX A – SAMPLE JSON OUTPUT FOR DIGITAL ASSET API

Use the secret key: 6b904a0c5ceefa991b2ebc9cfec202b6

12.1 Add Asset

POST https://digasset-api.1worldsync.com/V2/assets?app_id=3cea2db2&TIMESTAMP=2012-12-06T13%3A08%3A02Z&hash_code=MVx6O9WiI2cw%2FSb7kAcBnxUwFwUrbIapJhPVdj9jK8%3D

*Accept-Encoding: gzip,deflate
Content-Type: multipart/form-data; boundary="-----_Part_1_11825213.1413218030245"
MIME-Version: 1.0
Content-Length: 4503
Host: localhost:8080
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)*

*-----_Part_1_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="ipGLN"*

*0614141520015
-----_Part_1_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="fileName"*

*cola.flv
-----_Part_1_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="senderGLN"*

*0614141520015
-----_Part_1_11825213.1413218030245
Content-Type: image/jpeg; name=can.jpg
Content-Transfer-Encoding: binary
Content-Disposition: form-data; name="file"; fileName="can.jpg"*

-----=_Part_9_11825213.1413218030245--

Sample Response:

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:13:36 GMT
{
  "data": {
    "assetId": "1WS-37600",
    "fileName": "cola.flv",
    "ipGLN": "0914141750024",
    "ipName": null,
    "type": "image/jpeg",
    "size": 3567,
    "height": 253,
    "width": 199,
    "url": "https://dam.dev.catalog.1worldsync.com/im/dwn/1WS-37600",
    "version": 1
  },
  "serviceError": null,
  "status": 200
}
```

Error Response:

```
HTTP/1.1 400 Bad Request
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:19:40 GMT
Connection: close
{
  "data": null,
  "serviceError": {
    "httpStatus": 400,
    "serviceId": 5,
    "errorCode": "E50002",
    "debugMessage": "Provider GLN is not valid",
    "messageArgs": {}
  },
  "status": 400
}
```

12.2 Add Asset 360 SPIN

```
POST https://digasset-
api.1worldsync.com/V2/assets?app_id=3cea2db2&TIMESTAMP=2012-12-
06T13%3A08%3A02Z&
hash_code=MVx6O9WiI2cw%2FSb7kAcBnxUwFwUrbIapJhPVdj9jK8%3D
```

```
Accept-Encoding: gzip,deflate
Content-Type: multipart/form-data; boundary="-----_Part_1_11825213.1413218030245"
MIME-Version: 1.0
Content-Length: 4503
Host: localhost:8080
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)
```

```
-----_Part_1_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="ipGLN"
```

```
0614141520015
-----_Part_1_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
```



Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="fileName"

cola.flv
-----=_Part_1_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="senderGLN"

0614141520015
-----=_Part_1_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="fileType"

360_DEGREE_IMAGE
-----=_Part_1_11825213.1413218030245
Content-Type: image/jpeg; name=can.jpg
Content-Transfer-Encoding: binary
Content-Disposition: form-data; name="file"; fileName="can.jpg"

-----=_Part_9_11825213.1413218030245--

Sample Response:

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:13:36 GMT
{
  "data": {
    "assetId": "1WS-37600",
    "fileName": "cola.flv",
    "ipGLN": "0914141750024",
    "ipName": null,
    "type": "image/jpeg",
    "size": 3567,
    "height": 253,
    "width": 199,
    "url": "https://dam.dev.catalog.1worldsync.com/im/dwn/1WS-37600",
    "version": 1
  },
  "serviceError": null,
  "status": 200
}
```

```
}
```

Error Response:

```
HTTP/1.1 400 Bad Request
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:19:40 GMT
Connection: close
{
  "data": null,
  "serviceError": {
    "httpStatus": 400,
    "serviceId": 5,
    "errorCode": "E50002",
    "debugMessage": "Provider GLN is not valid",
    "messageArgs": {}
  },
  "status": 400
}
```

12.3 Update Asset

Sample Request

```
PUT https://digasset-api.1worldsync.com/V2/assets/1WS-
1243?app_id=3cea2db2&TIMESTAMP=2012-12-06T13%3A08%3A02Z&
hash_code=SfDuD0FGg6fcqAieOgzD5lQKzY%2Fd%2BDqalM5%2BUFau%2Bx0%3D
```

```
Accept-Encoding: gzip,deflate
Content-Type: multipart/form-data; boundary="-----_Part_2_11825213.1413218030245"
MIME-Version: 1.0
Content-Length: 4503
Host: localhost:8080
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)
```

```
-----_Part_9_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="ipGLN"
```

```
0614141520015
```



```
-----=_Part_2_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="fileName"
```

cola.flv

```
-----=_Part_4_11825213.1413218030245
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="senderGLN"
```

0614141520015

```
-----=_Part_5_11825213.1413218030245
Content-Type: image/jpeg; name=can.jpg
Content-Transfer-Encoding: binary
Content-Disposition: form-data; name="file"; fileName="can.jpg"
```

```
-----=_Part_6_11825213.1413218030245--
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="assetId"
```

1WS-1243

```
-----=_Part_7_11825213.1413218030245--
```

Sample Response:

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:13:36 GMT
{
  "data": {
    "assetId": "1WS-37600",
    "fileName": "cola.flv",
    "ipGLN": "0914141750024",
    "ipName": null,
    "type": "image/jpeg",
    "size": 3567,
    "height": 253,
    "width": 199,
    "url": "https://dam.dev.catalog.1worldsync.com/im/dwn/1WS-37600",
    "version": 2
  }
}
```

```
  },  
  "serviceError": null,  
  "status": 200  
}
```

Error Response:

```
HTTP/1.1 400 Bad Request  
Server: Apache-Coyote/1.1  
Content-Type: application/json  
Transfer-Encoding: chunked  
Date: Fri, 10 Oct 2014 16:19:40 GMT  
Connection: close  
{  
  "data": null,  
  "serviceError": {  
    "httpStatus": 400,  
    "serviceId": 5,  
    "errorCode": "E50002",  
    "debugMessage": "Provider GLN is not valid",  
    "messageArgs": {}  
  },  
  "status": 400  
}
```

12.4 Delete Asset

Sample Request

```
DELETE https://digasst-api.1worldsync.com/V2/assets/1WS-1232?  
app_id=3cea2db2&ipGLN=0614141520015&  
&senderGLN=0614141520015&TIMESTAMP=2012-12-06T13%3A08%3A02Z&  
hash_code=Qm0Sv4QCIIIGCo87ZC%2FvOr2ioSd2T7jCCgYGiZco4AI0%3D
```

```
HTTP/1.1  
Accept-Encoding: gzip,deflate  
Accept: application/json  
Host: localhost:8080  
Connection: Keep-Alive  
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)
```

Sample Response:

```
HTTP/1.1 202 Accepted  
Date: Fri, 10 Oct 2014 16:36:35 GMT  
Content-Type: application/json
```

Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Transfer-Encoding: chunked

```
{  
  "data": null,  
  "serviceError": null,  
  "status": 202  
}
```

Error Response:

HTTP/1.1 400 Bad Request
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:19:40 GMT
Connection: close

```
{  
  "data": null,  
  "serviceError": {  
    "httpStatus": 400,  
    "serviceId": 5,  
    "errorCode": "E50002",  
    "debugMessage": "Provider GLN is not valid",  
    "messageArgs": {}  
  },  
  "status": 400  
}
```

13 APPENDIX B - SAMPLE JSON OUTPUT FOR DIGITAL METADATA API

13.1 Add Asset Metadata

Sample Request:

https://digasset-api.1worldsync.com/V2/assets/metadata?app_id=1234&ipGLN=1234567891234&senderGLN=1234567891234&TIMESTAMP=2012-12-06T13%3A08%3A02Z&hash_code=rbsri2xM1RQYy8MvL2zpJuZGbmLFLGpULDnOre2A1zg%3D
Accept-Encoding: gzip, deflate
Content-Type: multipart/form-data; boundary="-----_Part_18_21717342.1413224338727"
MIME-Version: 1.0

```
-----=_Part_18_21717342.1413224338727
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="ipGLN"
```

```
1234567891234
-----=_Part_18_21717342.1413224338727
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="fileName"
```

```
SampleDAM.xml
-----=_Part_18_21717342.1413224338727
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="senderGLN"
```

```
1234567891234
-----=_Part_18_21717342.1413224338727
Content-Type: text/xml; charset=Cp1252; name=SampleDAM.xml
Content-Transfer-Encoding: binary
Content-Disposition: form-data; name="file"; fileName="SampleDAM.xml"
-----=_Part_18_21717342.1413224338727
```

```
<?xml version="1.0"?>
<os:envelope xsi:schemaLocation="http://www.1sync.org
http://www.1worldsync.com/schemas/item/2.0/CatalogueRequestProxy.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:os="http://www.1sync.org">
  <header version="2.0">
    <sender>1234567891234</sender>
    <representedParty>1234567891234</representedParty>
    <receiver>8380160030201</receiver>
    <messageId>MKR_9_18_14_0230</messageId>
    <creationDateTime>2009-04-29T13:10:14</creationDateTime>
  </header>
<catalogueRequest xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:os="http://www.1sync.org" version="2.0">
  <header>
    <userGLN>1234567891234</userGLN>
    <userId>user@1worldsync.com</userId>
  </header>
  <document>
    <documentId>doc.XL.20140829.2060.PL</documentId>
```



```

<digitalAsset>
  <operation>ADD</operation>
  <gtin>00612345001033</gtin>

  <informationProviderGLN>0614141479993</informationProviderGLN>
  <targetMarket>US</targetMarket>
  <flex>
    <attr
name="externalFileLinkFileName">deer.bmp</attr>
    <attrQualMany
name="externalFileLinkContentDescription">
      <value
qual="en">adhjkahfjkslhfkshfalhfhlghlghalh</value>
    </attrQualMany>
    <attrQualMany name="fileFormatDescription">
      <value qual="en">image/jpeg</value>
    </attrQualMany>
    <attr name="fileFormatName">BMP</attr>
    <attr
name="uniformResourceIdentifier">https://dam.qa.catalog.1worldsync.com/im/dwn/1WS-
8538</attr>
    <attr name="fileEffectiveEndDateTime">2014-12-
26T00:00:00</attr>
    <attr name="fileEffectiveStartDateTime">2014-04-
11T00:00:00</attr>

    <attr name="fileAspectRatio">4.0</attr>

    <attrQualMany name="filePrintWidth">
      <value qual="BI">23</value>
    </attrQualMany>
    <attrQualMany name="filePrintHeight">
      <value qual="BI">23</value>
    </attrQualMany>
    <attr
name="isFileBackgroundTransparent">NOT_APPLICABLE</attr>
    <attr name="fileColourSchemeCode">red</attr>
    <attrQualMany name="fileCameraPerspective">
      <value
qual="en">JHFSJKFHSJKLFHALAHFAHFLAFHLAFHA</value>
    </attrQualMany>
    <attr
name="canFilesBeEdited">NOT_APPLICABLE</attr>
    <attr name="isFileForInternalUseOnly">FALSE</attr>
    <attrQualMany name="fileUsageRestriction">

```

```

                                <value
qual="en">igjsiogjsogjisogjsiojgiosgjsiogpsjgiosjggjgsjsgiojgiogjsioj</value>
                                </attrQualMany>
                                <attrQualMany name="fileCopyrightDescription">
                                    <value
qual="en">JGISPJSIOGJIOPJSJGSPJGOJSSGGPJSXMVDKFKSJFLSGJSKLJ</value>
                                    </attrQualMany>
                                <attrQualMany name="fileDisclaimerInformation">
                                    <value
qual="en">DSGHSJGISOGJIOJGSIOJGJIOGJISJGSIOJGSIOJGSIOGJGISOJGSIOGJSGIO</valu
e>
                                </attrQualMany>
                                <attrMany name="intendedPublicationCountry">
                                    <value>840</value>
                                </attrMany>
                                <attr
name="isTalentReleaseOnFile">NOT_APPLICABLE</attr>
                                <attr
name="typeOfInformation">PRODUCT_IMAGE</attr>
                                </flex>
                            </digitalAsset>
                        </document>
                    </catalogueRequest>
                </os:envelope>

```

-----=_Part_18_21717342.1413224338727--

Sample Response:

```

HTTP/1.1 200 OK
Date: Fri, 10 Oct 2014 16:36:35 GMT
Content-Type: application/json
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Transfer-Encoding: chunked
{
  "data": {
    "assetId" : "1WS-1234",
    "fileName" : null,
    "ipGLN" : "1234567891234",
    "ipName" : null,
    "type" : null,
    "size" : 0,

```

```
    "height" : 0,  
    "width" : 0,  
    "url" : null,  
    "version" : 0  
  }  
,  
  "serviceError": null,  
  "status": 200  
}
```

Error Response:

```
HTTP/1.1 400 Bad Request  
Server: Apache-Coyote/1.1  
Content-Type: application/json  
Transfer-Encoding: chunked  
Date: Fri, 10 Oct 2014 16:19:40 GMT  
Connection: close  
{  
  "data": null,  
  "serviceError": {  
    "httpStatus": 400,  
    "serviceId": 5,  
    "errorCode": "E50002",  
    "debugMessage": "Provider GLN is not valid",  
    "messageArgs": {}  
  },  
  "status": 400  
}
```

13.2 Update Asset Metadata

Sample Request:

```
PUT https://digasset-api.1worldsync.com/V2/assets/1WS-  
8538/metadata?app_id=12345&ipGLN=1234567891234&senderGLN=1234567891234&TIM  
ESTAMP=2012-12-06T13%3A08%3A02Z&  
hash_code=RN8%2B6Hz0VBrjPa1qctKHfyaiL0JLGYzvikGPC%2FY%2F8Y8%3D
```

```
Accept-Encoding: gzip,deflate  
Content-Type: multipart/form-data; boundary="-----_Part_18_21717342.1413224338727"  
MIME-Version: 1.0
```

```
-----_Part_18_21717342.1413224338727  
Content-Type: text/plain; charset=us-ascii
```

Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="ipGLN"

1234567891234
-----=_Part_18_21717342.1413224338727
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="fileName"

SampleDAM.xml
-----=_Part_18_21717342.1413224338727
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="senderGLN"

1234567891234
-----=_Part_18_21717342.1413224338727
Content-Type: text/xml; charset=Cp1252; name=SampleDAM.xml
Content-Transfer-Encoding: binary
Content-Disposition: form-data; name="file"; fileName="SampleDAM.xml"
-----=_Part_18_21717342.1413224338727
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: form-data; name="assetId"

1WS-8538
-----=_Part_18_21717342.1413224338727

```
<?xml version="1.0"?>
<os:envelope xsi:schemaLocation="http://www.1sync.org
http://www.1worldsync.com/schemas/item/2.0/CatalogueRequestProxy.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:os="http://www.1sync.org">
  <header version="2.0">
    <sender>1234567891234</sender>
    <representedParty>1234567891234</representedParty>
    <receiver>8380160030201</receiver>
    <messageId>MKR_9_18_14_0230</messageId>
    <creationDateTime>2009-04-29T13:10:14</creationDateTime>
  </header>
<catalogueRequest xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:os="http://www.1sync.org" version="2.0">
  <header>
    <userGLN>1234567891234</userGLN>
```

```

        <userId>user@1worldsync.com</userId>
    </header>
    <document>
        <documentId>doc.XL.20140829.2060.PL</documentId>
        <digitalAsset>
            <operation>MODIFY</operation>
            <gtin>00612345001033</gtin>

    <informationProviderGLN>0614141479993</informationProviderGLN>
        <targetMarket>US</targetMarket>
        <flex>
            <attr
name="externalFileLinkFileName">deer.bmp</attr>
            <attrQualMany
name="externalFileLinkContentDescription">
                <value
qual="en">adhjka hfjkslhfk lshfalhf lghlghalh</value>
            </attrQualMany>
            <attrQualMany name="fileFormatDescription">
                <value qual="en">image/jpeg</value>
            </attrQualMany>
            <attr name="fileFormatName">BMP</attr>
            <attr
name="uniformResourceIdentifier">https://dam.qa.catalog.1worldsync.com/im/dwn/1WS-
8538</attr>
            <attr name="fileEffectiveEndDateTime">2014-12-
26T00:00:00</attr>
            <attr name="fileEffectiveStartDateTime">2014-04-
11T00:00:00</attr>

            <attr name="fileAspectRatio">4.0</attr>

            <attrQualMany name="filePrintWidth">
                <value qual="BI">23</value>
            </attrQualMany>
            <attrQualMany name="filePrintHeight">
                <value qual="BI">23</value>
            </attrQualMany>
            <attr
name="isFileBackgroundTransparent">NOT_APPLICABLE</attr>
            <attr name="fileColourSchemeCode">red</attr>
            <attrQualMany name="fileCameraPerspective">
                <value
qual="en">JHFSJKFHSJKLFHALAHFAHFLAFHLAFHA</value>
            </attrQualMany>

```



```

                                <attr
name="canFilesBeEdited">NOT_APPLICABLE</attr>
                                <attr name="isFileForInternalUseOnly">FALSE</attr>
                                <attrQualMany name="fileUsageRestriction">
                                  <value
qual="en">igjsiogjsogjisogjsiojgiosgjsiogpsjgiosjggjgsjsgiojgiogjsioj</value>
                                  </attrQualMany>
                                <attrQualMany name="fileCopyrightDescription">
                                  <value
qual="en">JGISPJSIOGJIOPSJGSPJGOJSSGGPJSXMVDKFKSJFLSGJSKLJ</value>
                                  </attrQualMany>
                                <attrQualMany name="fileDisclaimerInformation">
                                  <value
qual="en">DSGHSJGISOGJIOJGSIOJGIOGJISJGSIOJGSIOJGSIOGJGISOJGSIOGJSGIO</valu
e>
                                  </attrQualMany>
                                <attrMany name="intendedPublicationCountry">
                                  <value>840</value>
                                </attrMany>
                                <attr
name="isTalentReleaseOnFile">NOT_APPLICABLE</attr>
                                <attr
name="typeOfInformation">PRODUCT_IMAGE</attr>
                                  </flex>
                                </digitalAsset>
                              </document>
                            </catalogueRequest>
                          </os:envelope>

-----=_Part_18_21717342.1413224338727--
```

Sample Response:

```
HTTP/1.1 200 OK
Date: Fri, 10 Oct 2014 16:36:35 GMT
Content-Type: application/json
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Transfer-Encoding: chunked
{
  "data": null,
  "serviceError": null,
  "status": 200
}
```

Error Response:

```
HTTP/1.1 400 Bad Request
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:19:40 GMT
Connection: close
{
  "data": null,
  "serviceError": {
    "httpStatus": 400,
    "serviceId": 5,
    "errorCode": "E50002",
    "debugMessage": "Provider GLN is not valid",
    "messageArgs": {}
  },
  "status": 400
}
```

13.3 Delete Asset Metadata

Sample Request:

```
DELETE https://digasset-api.1worldsync.com/V2/assets/1WS-
1234/metadata?app_id=3cea2db2&ipGLN=0614141520015&ipName=Test&senderGLN=061
4141520015&TIMESTAMP=2012-12-06T13%3A08%3A02Z&
hash_code=KVbVsfM8br7nubzWfDCkcTg7kSHGcFqjupsLEObiZ6A%3D
```

```
HTTP/1.1
Accept-Encoding: gzip,deflate
Accept: application/json
Host: localhost:8080
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)
```

Sample Response:

```
HTTP/1.1 202 Accepted
Date: Fri, 10 Oct 2014 16:36:35 GMT
Content-Type: application/json
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Transfer-Encoding: chunked
{
  "data": null,
  "serviceError": null,
  "status": 202
}
```

Error Response:

```
HTTP/1.1 400 Bad Request
Server: Apache-Coyote/1.1
Content-Type: application/json
Transfer-Encoding: chunked
Date: Fri, 10 Oct 2014 16:19:40 GMT
Connection: close
{
  "data": null,
  "serviceError": {
    "httpStatus": 400,
    "serviceId": 5,
    "errorCode": "E50002",
    "debugMessage": "Provider GLN is not valid",
    "messageArgs": {}
  },
  "status": 400
}
```


14 APPENDIX C - SUPPORTED FILE TYPES

Name	MIME Type	File Extension
JPEG images	image/jpeg	.jpeg, .jpg
Graphics Interchange Format	image/gif	.gif
Bitmap Image File	image/bmp; image/x-ms-bmp	.bmp
Icon Image	image/x-icon	.ico
Portable Network Graphics (PNG)	image/png	.png
Tagged Image File Format	image/tiff	.tiff
Waveform Audio File Format (WAV)	audio/x-wav	.wav
Microsoft Windows Media Audio	audio/x-ms-wma	.wma
MIDI - Musical Instrument Digital Interface	audio/midi	.midi
MPEG Audio	audio/mpeg	.mpga
MPEG-4 audio	audio/mp4	.mp4a
Real Audio Sound	audio/x-pn-realaudio	.ram
RealMedia	application/vnd.rn-realmedia	.rm
Flash Video	video/x-flv	.flv
3GP/3GP2	video/3gpp; video/3gpp2	.3gp, 3g2
Audio Video Interleave (AVI)	video/x-msvideo	.avi
Microsoft Windows Media Video	video/x-ms-wmv	.wmv
MPEG Video	video/mpeg	.mpeg
MPEG4 Video	video/mp4	.mp4, .mov
Adobe Portable Document Format	application/pdf	.pdf



Digital multimedia file	video/webm	.webm
Zip Archive	application/zip	.zip



CONTACT US

If you need assistance please contact us at technicalsupport@1worldsync.com, or call any one of the following phone numbers:

Phone	From within USA	From outside USA
Global Customer Support	+1 866.280.4013	+1 312 463 4467