1WorldSync Catalog1 API Guide

Version 1.5

REVISION HISTORY

Date	Ver #	Description of Change	Author
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TABLE OF CONTENTS

1 If you are new to 1WorldSync Catalog1 API

To get started with using the Catalog1 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 Secret Key, a 32-character identifier

The app_id must be included in all 1WorldSync web service requests to identify the sender of the request. The Secret Key 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 Secret Key then authenticate your signature.

To call the APIs you must do the following:

1. Concatenate the Secret Key and a timestamp in ISO 8601 for UTC time zone in the following format:
    "app_id=" + <app_id> + "&timestamp=" + <timestamp>
2. Calculate a keyed-hash message authentication code (HMAC-SHA256) signature (i.e. hash_code) using the Secret Key for this value.
3. Include the hash_code and app_id parameter with value into the request and send the request to the 1Worldsync API.

For additional details on HMAC routines refer to HMAC Guide

JavaScript example in Node.js:

```
var crypto = require('crypto');

var app_id = <app_id goes here>;
var app_secret =<secret_key goes here>;
var ts = (new Date()).toISOString();  // datestamp in ISO 8601 format

var hmac = crypto.createHmac('sha256', app_secret);  // create signature
hmac.update('app_id=' + app_id + '&timestamp=' + ts); // apply signature to required values
hash_code = hmac.digest('hex');  // produce hash code
```

1.1 Schema Repository

1.1.1 Schema Definition

GET	/schema/item/base
	The Catalog1 API uses JSON to represent item data. Throughout this document, we will refer it as item JSON. Each item JSON must conform to a schema defined by the JSON Schema specification. We follow the JSON Schema Core and JSON Schema Validation Specification specified here: http://json-schema.org/latest/json-schema-core.html and here: http://json-schema.org/latest/json-schema-validation.html. This API returns a JSON schema can you can use with one of the tools listed here: http://json-schema.org/implementations.html to ensure the item JSON format is correct.

Parameter		Parameter Type	Data Type
app_id		Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services. 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			
timestamp		Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.			
hash_code		Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.			

HTTP Status Code	Reason
200	Schema generated
400	Bad Request. Make sure you have the correct query string parameters in your request.
401	Authorization failed
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

```
curl example:
```

```
curl -X GET --header 'Accept: application/json'
'https://developer.pic.1worldsync.com/ext/api/schema/item/base?app_id=<APP_
ID_GOES_HERE>&timestamp=2016-10-28T19%3A36%3A53.013Z&hash_code=<HASH_CODE_G
OES_HERE>'
```

```
request url example:
```

```
'https://developer.pic.1worldsync.com/ext/api/schema/item/base?app_id=<APP_
ID_GOES_HERE>&timestamp=2016-11-04T17%3A30%3A35.653Z&hash_code=<SECRET_KEY_
GOES_HERE>
```

```
response headers example:
```

```
{
 "content-type": "application/json; charset=utf-8"
}
```

1.1.2 Fetch Item JSON sample

GET	/schema/item/base/sample
	This API call is used to fetch a sample Item JSON based on JSON schema used by 1WorldSync to represent item data.

Parameter	Paramete r Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services. 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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		

HTTP Status Code	Reason
200	A sample item json is included in the response
400	Bad request
401	Authorization failed
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.9
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

```
curl example:

curl -X GET --header 'Accept: application/json'
'https://developer.pic.1worldsync.com/ext/api/schema/item/base/sample?app_i
d=<APP_ID_GOES_HERE>&timestamp=2016-11-07T15%3A32%3A05.771Z&hash_code=<HASH
```

```
_CODE_GOES_HERE>'
```

```
request url example:
```

```
https://developer.pic.1worldsync.com/ext/api/schema/item/base/sample?app_id
=<APP_ID_GOES_HERE>&timestamp=2016-11-07T15%3A32%3A05.771Z&hash_code=<HASH_
CODE_GOES_HERE>
```

```
response headers example:
```

```
{
 "content-type": "application/json; charset=utf-8"
}
```

1.2 Publication Management

1.2.1 Publication Export

POST	/publication/bulkexport
	This API call allows you to export all item data published to your account. Calling this API will return a URL that will allow you to fetch a file containing any items published to you from 1WorldSync's Catalog1 application.

Parameter	Parameter Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services.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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		

HTTP Status Code	Reason
200	Publications found
400	Bad request
401	Authorization failed
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

```
curl example:

curl -X POST --header 'Accept: text/html'
'https://developer.pic.1worldsync.com/ext/api/publication/bulkexport?app_id
=<APP_ID_GOES_HERE>&timestamp=2016-11-07T15%3A32%3A05.771Z&hash_code=<HASH_
CODE_GOES_HERE>'
```

request url example:

https://developer.pic.1worldsync.com/ext/api/publication/bulkexport?app_id=
<APP_ID_GOES_HERE>&timestamp=2016-11-07T15%3A32%3A05.771Z&hash_code=<HASH_C
ODE_GOES_HERE>

response code example:

200

response body example:

https://s3-us-west-2.amazonaws.com/bulk.1worldsync.com/0614141735013_GLN_14
78533070322.txt?AWSAccessKeyId=AKIAINYMB2SRAGXCWFFA&Expires=1478533131&Sign
ature=FuDnQXzyt%2B6l9ieUkltQI7q6VTM%3D

response headers example:

{
 "content-type": "text/html; charset=utf-8"
}

<table>
<tr><td rowspan="2">POST</td><td>/items/{item_uid}/publications</td></tr>
<tr><td>This API call allows you to publish an item into your 1WorldSync Catalog1 account to a list of recipients.</td></tr>
</table>

Parameter	Parameter Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services.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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		
item_uid	Path	String
This is the ID used to identify the item. It is returned following a successful call of the Item Status endpoint.		
body	Body	String
You will provide a list of recipients for the item in the request body. The content-type of the request body must be set to 'application/json'. The request must be in the following format: {"recipientNames": ["recipient name 1", "recipient name 2", ...]}. **Sample data: {'recipientNames':['SmartLabel', 'Walmart']}**		

HTTP Status Code	Reason
200	Item has been submitted for publication
400	Bad request
401	Authorization failed. You do not have access to the item. Please make sure you have access to the information provider account associated with the item.
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

---

curl example:

```
curl -X POST --header 'Content-Type: application/json' --header 'Accept:
application/json' -d '{"recipientNames":["SmartLabel"]}'
'https://onews-api-gateway-test.herokuapp.com/ext/api/items/15ad475d-975a-4
c0d-b171-608395e4c91e/publications?app_id=<APP_ID_GOES_HERE>&timestamp=2016
-11-07T19%3A10%3A48.142Z&hash_code=<HASH_CODE_GOES_HERE>'
```

---

response body example

```
{
  "published": true,
  "reason": "You have successfully published to SmartLabel"
}
```

---

response headers example:

```
{
 "content-type": "application/json; charset=utf-8"
}
```

1.3 Item Management

1.3.1 Import an Item (item JSON import)

POST	/items/ITEMJSON/{filename}
	This API call allows you to import an item into your 1WorldSync Catalog1 account. The item must be in a valid 1WorldSync Item JSON format. This format can be validated using the "schema" API call. The call returns an ID that can be used to call the Item Status endpoint.

Parameter	Parameter Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services.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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		
filename	Path	String
This is a name you assign to help identify the information you are importing.		
body	Body	String
This is the item data you are importing. This data must conform the 1WorldSync's item JSON. You can use "Schema" web service to obtain a schema that can be used to validate the item JSON to ensure that it will be able to be validated and imported by 1WorldSync.		

HTTP Status Code	Reason
200	Item added to import queue
400	Bad request
401	Authorization failed
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.

500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

curl example:

```
curl -X POST --header 'Content-Type: application/json' --header 'Accept:
application/json' -d '{ <ITEM_JSON_GOES_HERE>
 }'
'https://developer.pic.1worldsync.com/ext/api/items/ITEMJSON/sample_file?ap
p_id=<APP_ID_GOES_HERE>&timestamp=2016-11-07T19%3A10%3A48.142Z&hash_code=<H
ASH_CODE_GOES_HERE>'
```

response body example

```
Response:
{
  "id": 5751
}
```

response headers example:

```
{
 "content-type": "application/json; charset=utf-8"
}
```

1.3.2 Validate an Item (item)

GET	/items/{item_uid}/validate
	This API call allows you to validate an item in your 1WorldSync Catalog1 account.

Parameter	Parameter Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services.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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		
item_uid	Path	String
This is the ID used to identify the item. It is returned following a successful call of the Item Status endpoint.		

HTTP Status Code	Reason
200	Item has been validated
400	Bad request
401	Authorization failed. You do not have access to the item. Please make sure you have access to the information provider account associated with the item.
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

```
curl example:

curl -X GET --header 'Accept: application/json'
'https://onews-api-gateway-test.herokuapp.com/ext/api/items/15ad475d-975a-4
```

```
c0d-b171-608395e4c91e/validate?app_id=<APP_ID_GOES_HERE>&timestamp=2016-11-
07T19%3A10%3A48.142Z&hash_code=<HASH_CODE_GOES_HERE>'
```

response body example

```
[
  {
    "keyword": null,
    "dataPath":
"itemIdentificationInformation.itemIdInformation[?(@.isPrimary ==
\"true\")]",
    "message": "One type of Item Identification Information must be
selected as Primary."
  }
]
```

response headers example:

```
{
 "content-type": "application/json; charset=utf-8"
}
```

1.3.3 **Validate an item against a single playlist (item)**

GET	/items/{item_uid}/validate/{playlist_name}
	This API call allows you to validate an item in your 1WorldSync Catalog1 account.

Parameter	Parameter Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services.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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		
item_uid	Path	String
This is the ID used to identify the item. It is returned following a successful call of the Item Status endpoint.		
playlist_name	Path	String
The External ID name of the playlist you wish to validate against.		

HTTP Status Code	Reason
200	Item has been validated
400	Bad request
401	Authorization failed. You do not have access to the item. Please make sure you have access to the information provider account associated with the item.
402	No Playlist found
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

25-Apr-2017   17
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curl example:

```
curl -X GET --header 'Accept: application/json'
'https://developer.pic.1worldsync.com/ext/api/items/98a50586-1e1a
-4904-b421-c1052701e713/validate/Google?app_id=<APP_ID_GOES_HERE>&t
imestamp=2017-02-10T14%3A20%3A35.721Z&hash_code=<HASH_CODE_GOES_HERE
>'
```

response body example

```
{
  "result": {
    "errorMsg": {},
    "status": "failure",
    "itemUID": "string"
  }
}
```

response headers example:

```
{
 "content-type": "application/json; charset=utf-8"
}
```

1.3.4 Check the status of an import

GET	/importstatus/{import_id}
	This API call allows you to retrieve a list of item UID that are updated/created as part of import.

Parameter	Parameter Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services. 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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		
import_id	Path	String
The import_id is the ID that is received in the response after a successful item import.		

HTTP Status Code	Reason
200	A list of item UIDs will be returned in the response.
400	Bad request
401	Authorization failed. You do not have access to the item. Please make sure you have access to the information provider account associated with the item.
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

```
curl example:

curl -X GET --header 'Accept: application/json'
'https://onews-api-gateway-test.herokuapp.com/ext/api/importstatu
s/1234?app_id=<APP_ID_GOES_HERE>&timestamp=2017-02-10T14%3A20%3A3
5.721Z&hash_code=<HASH_CODE_GOES_HERE>'
```

25-Apr-2017   19
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```
response body example
```

```
{
  "errors": {
    "errorCode": 0,
    "message": "No data returned from the query.",
    "longDesc": ""
  }
}
```

```
response headers example:
```

```
{
  "content-type": "application/json; charset=utf-8"
}
```

1.4 Mass Publication/Validation Management

1.4.1 Mass Publish/Validate an Item

GET	/importstatus/{import_id}
	This API call allows you to apply a playlist, operation name, list of items and the URI in the request body to make a mass operation (mass validation/mass publication). It returns an id which refers to the batch that was processed.

Parameter	Parameter Type	Data Type
app_id	Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services. 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		
timestamp	Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.		
hash_code	Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.		
import_id	Path	String
An object containing playlist, operation name, list of items and the URL.		

```
{
  "itemUids": [
    "string"
  ],
  "playlist": "string",
  "searchPageUrl": "string",
  "operation": "string"
}
```

- **ItemUIDs** are used to identify the specific items you wish to validate or publish.
- **playlist** allows you to specify the external ID of the playlist you wish to publish to.
- **searchPageURL** is where you'd specify the page in the UI where you'd see the items you validated. (ie.
- https://pic.1worldsync.com/#GS1P1_Catalog1?searchTerm=%26Sort=LastModifyDate_Desc%26Playlist=Google)
- **operation** can be either "validate" or "publish".

HTTP Status Code	Reason
200	An item has been submitted for validation/publication
400	Bad request. One of the required parameters is missing
401	Authorization failed. You do not have access to the playlist to perform this option. Please make sure you have access to the information provider account associated with the item.
403	Authentication failed. Make sure you are sending the correct app_id and the hash_code is generated based on the current time and the secret_key associated with the app_id.
401	No accounts found for provided item UIDs.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

curl example:

```
curl -X POST --header 'Content-Type: application/json' --header
'Accept: application/json' -d '{"itemUids":
["98a50586-1e1a-4904-b421-c1052701e713"], "playlist": "Google",
"searchPageUrl":
"https://pic.1worldsync.com/#GS1P1_Catalog1?searchTerm=%26Sort=La
stModifyDate_Desc%26Playlist=Google","operation":"validate"}'
'https://developer.pic.1worldsync.com/ext/api/items/massoperation
?app_id=<APP_ID_GOES_HERE>&timestamp=2017-02-10T14%3A20%3A35.721Z
&hash_code=<HASH_CODE_GOES_HERE>'
```

response body example

```
{
  "result": 215
}
```

response headers example:

```
{
  "content-type": "application/json; charset=utf-8"
}
```

1.5.1 Playlist List

GET	//items/getplaylistnamesforoperation/{operation_name}
	This API call allows you to provide an operation name and receive a list of playlists against which you can perform that operation.

Parameter		Parameter Type	Data Type
app_id		Query	String
This is your unique 1Worldsync Developer app_id which was provided to you when you registered for the web services. 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			
timestamp		Query	String
This is the current time in ISO 8601 timestamp in UTC time zone format.			
hash_code		Query	String
The Hash code is generated by applying the client secret to the app_id and the timestamp using a keyed-hash message authentication code (HMAC-SHA256) signature.			
operation_name		Path	String
This is an operation name: publication or validation			

HTTP Status Code	Reason
200	Schema generated
400	Bad Request. Make sure you have the correct query string parameters in your request.
500	An unexpected error has occurred on the server side. If you get this error more than a few times, please contact 1WorldSync support.

2 Contact Us

In case you face any problem, please reach our Customer Support at CustomerSupport@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