API Integration Guide

iSpot.tv

Contents

Who should read this guide

The *iSpot API Integration Guide* is for:

- iSpot clients.
- Customer Success (CS) representatives and account supervisors.

Overview

This guide outlines how iSpot clients can integrate with the iSpot REST API to obtain data dynamically without navigating through either the iSpot Analytics Dashboard or downloading data manually. The iSpot REST API offers improved data expediency, simplicity in making requests, and data accuracy/congruency.

We recommend making requests to the API using Python, curl, Postman, Insomnia, or any other HTTP client. To access the full documentation, as well as detailed instructions on using our Python SDK, request credentials to access the [iSpot.tv REST API](#) developer site from your CS representative.

This guide provides instructions and best practices on the following topics:

- How to filter API requests.
- Pagination and rate limiting.
- Using Python to authenticate to the API and make requests.
- API FAQ.

Authentication

Use the following instructions to authenticate with your client credentials to generate an OAuth v2.0 token, and then use the token to authorize your access the iSpot REST API.

> Important: You must obtain a **Client ID** and **Client Secret** to complete the following steps. The CS account manager creates the OAuth v2.0 credentials.

To use OAuth v2.0 to gain authorized access the iSpot API:

1. Generate an OAuth v2.0 token by making a request to this endpoint: **https://api.ispot.tv/v4/oauth2/token**.

   To do this, provide the following required information:

   a) client_id

   b) client_secret

   c) **grant_type**: This is set to **client_credentials** by default to generate the OAuth token.

   Note: We recommend using Python, curl, Postman, or any other HTTP client to make requests to the API.

   For example, use the following curl POST request to generate an OAuth token:

   ```
   curl --request POST \
      --url 'https://api.ispot.tv/v4/oauth2/token' \ --data
   'client_id=YOUR_CLIENT_ID&client_secret=YOUR_CLIENT_SECRET&grant_type=client_credentials'
   ```

2. Use your OAuth v2.0 token to authorize access in a request.

   To do this, provide the valid bearer token that you generated in an HTTP header.

   Note: The token is valid for 24 hours. Please do not create a new token until your current one has expired.

   For example, use the following example curl GET request to make an authorized call to the iSpot API:

   ```
   curl --request GET \
   --url 'https://api.ispot.tv/v4/metrics/tv/airings?' \
   --header 'Authorization: Bearer YOUR_AUTH_TOKEN' \
   --header 'iSpot-Version: 2017-08-16'
   ```

How to filter

Your account access to the iSpot REST API is limited according to your subscription level with iSpot. The API is generally already filtered for you to access the appropriate brand or industry. In order to filter further, you can use the prefix *filter* parameter in brackets with the following general filters and TV conversion filters.

General filters

General filters in this section are available for most endpoints. Format these filters according to the examples in the following table. There are two forms of filtering: by row values and by column values. You can use both forms with the following preset values or any field that is returned in the response.

iSpot REST API metric filters

Filter	Parameter	Value
Start Date*	*filter[start_date]=*	YYYY-MM-DD
End Date*	*filter[end_date]=*	YYYY-MM-DD
Industry	*filter[industry]=*	Number
Network	*filter[network]=*	Number
Brand	*filter[brand]=*	Number
Parent Brand	*filter[parent_brand]=*	Number
Spot	*filter[spot]=*	Number
Show	*filter[show]=*	Number

*Supports a valid [ISO 8601](#) datetime format. Example: YYYY-MM-DDThh:mm:ssZ

Note:
Only filters that require a number value will also support a comma separated list of values.

TV conversion endpoint & filters

The following pertains only to the TV Conversion endpoint. You must be subscribed to TV Conversions in order to access this endpoint: *https://api.ispot.tv/v4/metrics/conversions/[id]*?

Your ID in the endpoint will be the same as the ID in the tracking pixel placed on your website. (**Format:** TC-####-#) This ID is tied to your primary TV brand, so all TV impressions and matched conversions will be filtered appropriately in the response.

The filter parameters in the API are the same as those in the Analytics Dashboard. You can reference them by either the value or the corresponding ID. If a filter is omitted, the parameters will have default values according to those in the following table.

iSpot REST API TV Conversion filters

Filter	Parameter	Value	Default
Conversion Application*	*filter[conversion_application]=*	WEB or APP	All
Conversion Type*	*filter[conversion_type]=*	Alphanumeric	All
Conversion Custom Data	*filter[conversion_custom_data_tag]=*	Alphanumeric (preferred) Number (accepted)	All
Conversion Attribution Window	*filter[conversion_attribution_window]=*	1d, 7d, 14d, 30d	14 Days
Use Attribution Window	*filter[use_attribution_window]=*	0 or 1	0

*Filter must contain a value or it should be omitted entirely.

Return available values/IDs for app, type, and custom data

Clients use the following endpoints to extract data, which they then insert into the filters with the correct values.

Examples of this include: Application type, Conversion type, and Custom data type.

https://api.ispot.tv/v4/metrics/conversions/[id]/types

https://api.ispot.tv/v4/metrics/conversions/[id]/custom-data

Pagination

Using pagination ensures that returned API responses are easier to handle. For example, a given response may retrieve hundreds of thousands of results that are likely not very useful. Pagination also allows you to request multiple pages in parallel. The pagination parameters in this section let you control the volume of information that is returned in the response.

Values specified in the pagination parameters must be valid and within the specified range in order for the response to succeed. Note the default and maximum values for this in the following table.

iSpot REST API pagination parameters filters

Type	Parameter	Value
Use to specify page number.	*page[number]=*	Number
Use to specify response values per page.	*page[size]=*	Number Default: 100　　Max: 1,000*

Note: You can specify the airings endpoint to return up to 10,000 results.
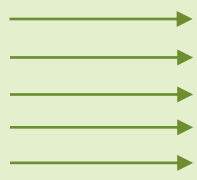
The following sample request uses both parameters:

https://api.ispot.tv/v4/metrics/tv/airings?page[number]=3&page[size]=10&filter[start_date]=2019-01-01&filter[end_date]=2019-01-07&sort=est_spend,-date

To get one day's worth of data (24 hours), make the start and end date filters the same in your API request.

Example: filter[start_date]=2019-06-05&filter[end_date]=2019-06-05

Pagination response format

Pagination data is located in the metadata section of the response. The metadata also includes next page and previous page links in order to traverse all available pages.

```
"pagination": {
      "total": #,              ─────────▶      Total response values
      "count": #,              ─────────▶      Values on given page
      "per_page": #,           ─────────▶      Values per page
      "current_page": #,       ─────────▶      Current page number
      "total_pages": #,        ─────────▶      Total number of pages
      "links": {
            "previous": "link"
            "next": "link"
```

Rate limiting

Rate limiting controls the amount of incoming and outgoing network traffic. For example, if a particular API service is configured to allow 100 requests per minute, when a user exceeds that request limit, an error is triggered. Implementing rate limits allows for better data flow and data management.

The returned HTTP headers from an iSpot API request provide rate limit status on the following: the maximum number of requests you're permitted to make per minute, the number of requests remaining in the current rate limit window, and the amount of Coordinated Universal Time (UTC) in seconds before the current rate limit window resets. In this way, iSpot enforces rate limits to manage the network load.

Rate limits can be found here on the developer site

Note: iSpot API rate limits may change without notice.

Python sample

Use the following Python sample to authenticate to the iSpot REST API, and then make a request.

```python
import http.client

conn = http.client.HTTPSConnection("api.ispot.tv")

payload = ""

headers = {
    'Authorization': "Bearer YOUR_AUTH_TOKEN_REPLACE_ME",
    'iSpot-Version': "2017-08-16"
}

conn.request("GET",
"/v4/metrics/tv/airings?page[number]=1&page[size]=10&filter[start_date]=2017-01-
01&filter[end_date]=2017-01-07&sort=est_spend,-date", payload, headers)

res = conn.getresponse()
data = res.read()

print(data.decode("utf-8"))
```

FAQ

- **What exactly is an API, and what does the iSpot REST API do?**

  An Application Programming Interface (API) allows applications to communicate with one another. Based on client requests, a publicly available web-based API returns data, most likely in either JSON or XML.

  The iSpot REST API uses Representational State Transfer (REST) that allows for the use of multiple standards like HTTP, JSON, URL, and XML.

  Benefits and improvements of the iSpot REST API include:

  o Predictable resource URLs.
  o HTTP response codes that indicate errors and the success status of requests.
  o Consistent data returns formatted in JSON that include metadata, such as pagination information.
  o Capability to accept both JSON and form data in the HTTP body.
  o Strong authentication via OAuth v2.0.

- **What type of authorization is required to access the iSpot REST API?**

  The iSpot REST API requires OAuth v2.0.

- **Can iSpot REST API credentials also be used to access developer site?**

  No. iSpot API credentials are not interchangeable with *either* developer site credentials *or* iSpot Analytics Dashboard credentials.

- **Does the iSpot API contain all historical data?**

  Yes. The API contains all historical data. However, if you require more than 1 year of historical data, please contact us.

- **Is TV Conversions data available in the iSpot API?**

  Yes. TV Conversions data is available in the iSpot API.
  Note: Extra security in the iSpot API protects access to this first-party data for all of our clients.

- **Where is the ads data, and what is the endpoint?**

  Ads data is called "spots" in the iSpot REST API.

  Endpoint: **https://api.ispot.tv/v4/spots**

- Are all of the specific data points by module in the iSpot Analytics Dashboard available in the iSpot REST API?

  Yes. All of the specific data points by module in the iSpot Analytics Dashboard are available in the iSpot REST API.

  > Note: In some cases, the API can provide more detailed information. For example, Lift analytics in the Conversion Module of the dashboard are available in more detail through the iSpot API. Accessing Lift analytics via the API allows you to create custom reports that use many variables.

- Which fields are included in each endpoint of the iSpot REST API?

  There is a potentially unlimited combination of fields that can be included in each endpoint request, depending on which filters are specified. You can use the *include* parameter to return a specific piece of data in your API request. For example, **include=network,creative**. You can add any number of CSV values in this way to obtain any combination of results where applicable. For more information, see the [iSpot.tv REST API](#) developer site.

- Why can't I retrieve unlimited data from an iSpot API request?

  The iSpot API uses pagination, which makes the data more manageable and responses faster. For more information, see the "[Pagination](#)" section.

- Is Integrated User Level Data (IULD) data available from the iSpot REST API?

  No. IULD data is not currently available through the iSpot REST API. Please contact your Customer Success (CS) representative to coordinate an access request to IULD data.

- How do I pull one day's worth of data (24 hours)?

  To get one day's worth of data (24 hours), make the start and end date filters the same in your iSpot API request.

  Example: **filter[start_date]=2019-06-05&filter[end_date]=2019-06-05**

- How can I obtain a particular piece of data?

  If a specific piece of data is not returned by default in your iSpot API request, use the *include* parameter to specify the data in the request. Example: **include=network,creative**