Search Ads API Reference

Apple Advertising Platforms

November 2018

Contents

Search Ads at a Glance

Search Ads is an efficient and easy way for developers to promote their app at the top of App Store search results — right at the very moment people are searching for apps to download.

Search Ads pricing is a second-price auction cost-per-tap model (CPT). Effective campaign management tools and flexible audience refinement features; including keywords, customer type, location, and device, give advertisers all the control they need to optimize their campaigns and find new customers.

About the Search Ads API

The Search Ads API provides developers and tech-savvy advertisers with programmatic access to the Search Ads platform. Advertisers and agencies can create and manage a large number of campaigns programmatically and run reports for customer insights and trends.

You should be familiar with REST APIs and tools such as cURL or Postman before using this API.

Note: Administrative tasks, such as account management, are restricted to the web-based UI.

Access & Authentication

API calls must establish two-way SSL authentications using client-side certificates, which can be generated and managed in your Search Ads accounts in the web-based UI.

The following are cURL examples to establish two-way SSL authentications. However, any other mechanism to establish SSL authentications should work the same.

Note: In this document most sample cURL calls are presented without the -H (header), -d (document), and client-side certificate related arguments. However, they are required.

Method 1: establish SSL connection via the received PEM file and private key file

To fetch a specific campaign within a specific org, use the following curl command:

```
curl -X GET \

 https://api.searchads.apple.com/api/v1/campaigns/<campaignId> \

 -H 'Authorization: orgId=<ORG_ID>' \

 -H 'Content-Type: application/json' \

 -E <FILE_NAME>.pem \

--key <PRIVATE_KEY>.key
```

Method 2: establish SSL connection via PKCS#12 certificate

1. Convert the received PEM file and private key file into a PKCS#12 (.p12) file using the OpenSSL command:

```
openssl pkcs12 -export -in <PEM_file>.pem -inkey <PRIVATE_KEY>.key -out <FILENAME>.p12
```

2. Authenticate using the .p12 file and the specified password.

For example, to fetch a specific campaign within a specific org, use the following cURL command:

```
     curl -X GET \

 https://api.searchads.apple.com/api/v1/campaigns \

 -H 'Authorization: orgId=<OrgID>' \

 -H 'Content-Type: application/json' \

 --cert-type p12 \

 --cert <FILENAME>.p12 \

 --pass <PASSWORD>
```

3. The cURL example assumes your version of cURL has been compiled with SSL support. You can verify through the following command:

```
curl-config --feature | grep SSL
```

orgID

An `orgID` is the org for which you make API calls. Your `orgID` can be obtained from the web UI or by calling GET /v1/acls. However, the `orgId` is not required when using a User ACL. The User ACL uses a certificate to return the org roles within an org tree format. In the API, calls are used to manage campaigns and create reports within the context of an org.

User ACL

User Access Control Lists (ACL) identify what each user has access to within each org. Each certificate may have access to all or a subset of orgs in the account org tree. What the certificate can do within each org is dependent on the role it is assigned. The User ACL method is used to obtain the roles in all organizations that the certificate is a member of.

The account structure used to manage campaigns allows for limiting user access. If you need to manage Search Ads for multiple clients, or if you need to restrict user access to a subset of your campaigns, you can create additional campaign groups under your account and manage each set of campaigns in a different campaign group. Otherwise, you can create and manage all your campaigns under your default campaign group.

Possible `roleNames` for a certificate include the following.

roleName	Value Description
Account Read Only	View campaigns, `adgroups`, and keywords, pull reporting.
Read Only	View campaigns, `adgroups`, and keywords, pull reporting.
Campaign Manager	View and edit campaigns, `adgroups`, and keywords, pull reporting.
Campaign Group Manager	View and edit campaigns, `adgroups`, and keywords, pull reporting.
Admin	View and edit campaigns, `adgroups`, and keywords, pull reporting.

Possible `paymentModel` values include the following.

PaymentModel	Value Description
LOC	Line of credit.
PAYG	Pay as you go.
<empty string>	Payment method hasn't been set yet.

GET /v1/acls

`GET /v1/acls` returns the roles in an org within an org tree format.

HTTP Method	URI	Description
GET	/v1/acls	Returns what roles and orgs the API certificate has access to. Output is is in org tree format.

User ACLs Sample cURL Request

```
curl \
    --cert <FILENAME>.p12 \
    --pass <PASSWORD> \
    "https://api.searchads.apple.com/api/v1/acls"
```

User ACLs Sample JSON Response

```
{
        "data": [
        {
            "currency": "USD",
            "orgId": <OrgID>,
            "orgName": "<OrgName1>",
            "paymentModel": "LOC",
            "roleNames": ["Admin"]
        },
        {
            "currency": "USD",
            "orgId": <OrgID>;,
            "orgName": "<OrgName2>",
            "paymentModel": "LOC",
            "roleNames": ["Admin"]
        }],
    }
```

Structure and Format

This section describes the requirements and results of your interactions with the Search Ads API. It describes the structure and format of Search Ads API calls including versioning, URI hierarchy, and data format, and authentication for each call.

Responses from the API will include HTTP response codes, response data, and error messages. You can also control the returned response using pagination parameters, partial fetch, and selectors. Field values can be edited using partial updates. Fields that may be updated are noted. Fields that are required or optional are also noted.

New properties and attributes may be added to the returned JSON objects at any time.

Versioning
API method endpoints are versioned. The current version is /v1, as shown in the following example.

```
https://api.searchads.apple.com/api/v1/<ENDPOINT>
```

Deprecation
From time to time, fields and endpoints will be deprecated. For backwards compatibility purpose, deprecated documented fields and endpoints will be supported for up to three months. Compatibility with future updates to the current version requires users of the Search Ads API to write their programs to ignore any new and unknown properties that may be returned. This will allow Apple Ad Platforms to add new attributes to existing objects without breaking users' programs.

- Any field(s) not officially documented will not be supported and can be deprecated at any time. You should not rely on those fields.

- Documented fields and endpoints may be marked as deprecated.

URI Hierarchy
An API method endpoint may be a single name or may include elements of a hierarchy and parameters. The following example returns all campaigns that belong to your org (called campaign group in the web UI).

```
curl \
    "https://api.searchads.apple.com/api/v1/campaigns"
```

The following example returns detailed information about a specific campaign.

```
curl \
    "https://api.searchads.apple.com/api/v1/campaigns/<campaignId>"
```

Refer to the section on Pagination for details on parameters that can be applied to most method calls.

Data Format
JSON data formats are used exclusively in the API.

Responses
All HTTP 200 OK responses will look approximately like the following example.

```
{
      "data":[
        { },
        ...
      ],
      "pagination"{
        "totalResults": <NUMBER>,
        "startIndex": <NUMBER>,
        "itemsPerPage": <NUMBER>
      },
    }
```

Errors
HTTP status codes to indicate the general class of problem.

Status Code	Response	Description
400	Bad Request	Invalid query or post parameters. Or missing required parameters.
403	Forbidden	Error related to authorization.
404	Not Found	Endpoint does not exist.
500	Internal Server Error	Search Ads server is temporary down or not reachable. The request is probably valid, but needs to be retried later.

Additional details are provided in the response body, as shown in the following example.

```
{
      "errorMessage": [
        {
          "messageCode": "<CODE>",
          "message": "<MESSAGE>",
          "field": "<FIELD>"
        },
        ...
      ]
    }
```

The `field` value provides detailed information for the application developer.

The `message` value is a non-localized (US English only) user-friendly string that describes the error.

Pagination

Offset pagination can be used to limit the number of records returned.

Parameter	Description
limit	The number of items to return per request. • Default is 20 for most objects. • Max is 1000 for most objects.
offset	Offsets the start of each page by the number specified. This is the index of the first matching result that should be included in the result set. Default is 0.

In the following example, the two optional parameters are used to limit the number of campaigns returned.

```
  curl \

    "https://api.searchads.apple.com/api/v1/campaigns?
limit=<LIMIT>&offset=<OFFSET>"
```

Partial Fetch

When getting a list of records, users may use the optional fields parameter to limit the fields within each record that are returned.

For example, user may choose to only return `name,` `id` and associated `adgroupids` and names for each campaign:

```
curl \

  "https://api.searchads.apple.com/api/v1/campaigns?
fields=id,name,adGroups.id,adGroups.name"
```

Selector Object

You can use Selector objects to filter and limit the number of records returned. Selector objects are often used with the .../<OBJECT>/`find` and .../`reporting` methods.

A Selector object consists of one or more of the following elements.

Element	Description	Object Elements
`conditions`	A list of condition objects, which allows users to filter the list of records. This is analogous to the SQL WHERE clause.	Multiple conditions are ANDed together. Each condition object consists of the following elements: • `field`: the name of a field. • `operator` - IN: value is in the given list. - EQUALS: value is as specified. - GREATER_THAN: value is greater than the given value. May be used with time parameters. - LESS_THAN: value is less than the given value. May be used with time parameters. - STARTSWITH: Used with the /`reporting` API only. `values:` a list of matching values.

`fields`	A list of field names to return within each record. For an example, refer to the Partial Fetch section.	
`orderBy`	• Optionally specify the field to use to sort the records • Optionally specify the sort order (ASCENDING or DESCENDING)	
`pagination`	Limits the number of records returned. For details, refer to the Pagination section.	

Selector Sample Call

The following is an example of a Selector call:

```
curl /

-X POST "https://api.searchads.apple.com/api/v1/campaigns/find"

-d "@findCampaigns.json"
```

Content of the `findCampaigns.json` file:

```
    {
        "orderBy":[{"field":"id","sortOrder":"DESCENDING"}],
        "fields":
["id","name","adamId","budgetAmount","dailyBudgetAmount","status","serv
ingStatus"],
        "conditions":[
            {
                "field":"servingStatus",
                "operator":"IN",
                "values":["NOT_RUNNING"]
            }
        ],
        "pagination":{"offset":0,"limit":10}
    }
```

Partial Updates

When updating a record, you only need to specify the fields that need to be updated.

For example, to update the name and budget of a specific campaign, use a construction such as the following:

```
 curl /

  -X PUT "https://api.searchads.apple.com/api/v1/campaigns/
<campaignId>/

  -d "@testCampaign.json"
```

Content of the `testCampaign.json` file:

```
{
        "name": "<NEW NAME>",
        "budgetAmount": {
            "amount": "500",
            "currency": "USD"
    }
    }
```

API Resources and Methods Summary

The following list summarizes the resources and methods available in the Search Ads API.

Campaign Management

Campaign Objects

Object	Description	Sub-Objects
Campaign Object	Description of a campaign	
Adgroup Object	A collection of keywords and targeting dimensions for the app you are promoting, and the ads associated with them.	
Creative Set Object	A grouping of screenshots and app previews you select from your App Store product page to create more ad variations.	
Targeted Keywords Object	Relevant words or phrases that someone may use to search for your app and that you want to bid on.	

Object	Description	Sub-Objects
Negative Keywords Object	Words or phrases that you want to exclude your ad from being shown in response to.	- Targeting Dimensions Object: Optional criteria to narrow the audience for your ad. You may target users by their devices, demographic groups, locations, time of day, and whether they had downloaded the app. - Age Object, Gender Object: Targeting your ads to users in a specific demographic group. - Device Class Object: Target or exclude users who are on a specific type of device. - Admin Area, Locality Objects: Target or exclude users in specific states (admin areas) or specific cities (localities). - Daypart Object: Limit when you want to show your ad. - App Downloaders Object: Targeting your ads to users who have or have not downloaded one of your apps, or who have never downloaded the app that you are promoting. - Amount Object: Specifies a monetary amount, which includes the currency and the amount.

Object	Description	Sub-Objects
LOC Invoice Details Object	Allows selected clients, who are approved to pay by monthly invoices, to specify how their campaigns that are not tied to budget orders should be invoiced. All non-budget order campaigns that have the same client and order fields are invoiced together.	
Budget Order Object	Optional feature for selected clients, who are approved to pay by monthly invoices, to control their spend across a set of campaigns, and to determine how these campaigns should be invoiced.	

Campaign Methods

In this section, the HTTP method and the URI are followed by a brief description and a sample cURL command.

Method/URI	Description	cURL Command
GET /v1/campaigns/ <campaignId>	Get a specific campaign within a specific org.	```curl \ "https:// api.searchads.apple.com/ api/v1/campaigns/ <campaignId>"```
POST /v1/campaigns/find	Find a list of campaigns within a specific org.	```curl \ -d @testFindCampaigns.json \ -X POST "https:// api.searchads.apple.com/ api/v1/campaigns/find"``` • By default, soft deleted campaigns will not be returned • Selectors can be used to also find the list of soft deleted campaigns
POST /v1/campaigns	Create a new campaign within a specific org.	```curl \ -d @testCreateCampaign.json \ -X POST "https:// api.searchads.apple.com/ api/v1/campaigns"```

`PUT /v1/campaigns/` `<campaignId>`	Update an existing campaign within a specific org.	```curl \ -d @testUpdateCampaign.json \ -X PUT "https:// api.searchads.apple.com/ api/v1/campaigns/ <campaignId>"``` **Note**: Soft deleted campaigns cannot be modified

`GET /v1/campaigns/`
`<campaignId>/adgroups/`
`<adGroupId>`
	Get a specific adgroup within a specific campaign.	```curl \ "https:// api.searchads.apple.com/ api/v1/campaigns/ <campaignId>/adgroups/ <adGroupId>"```

`POST /v1/campaigns/` `<campaignId>/adgroups/find`	Find a list of adgroups within a specific campaign.	```curl \ -d @testFindAdgroups.json \ -X POST "https:// api.searchads.apple.com/ api/v1/campaigns/ <campaignId>/adgroups/ find"``` • By default, soft deleted adgroups will not be returned • Selectors can be used to also find the list of soft deleted adgroups
`POST /v1/campaigns/` `<campaignId>/adgroups`	Create a new adgroup within a specific campaign.	```curl \ -d @testCreateAdGroup.json \ -X POST "https:// api.searchads.apple.com/ api/v1/campaigns/ <campaignId>/adgroups"```

`PUT /v1/campaigns/`
`<campaignId>/adgroups/`
`<adGroupId>`
	Update an existing adgroup within a specific campaign.	```
		curl \
		
		     -d
		@testEditAdGroup.json \
		
		     -X PUT "https://
		api.searchads.apple.com/
		api/v1/campaigns/
		<campaignId>/adgroups/
		<adGroupId>"
		``
		
		Note: Soft deleted adgroups cannot be modified.

`DELETE /v1/campaigns/` `<campaignId>`	Soft delete a specific campaign.	``` curl \ -X DELETE "https:// api.searchads.apple.com/ api/v1/campaigns/ <campaignId>" ```

`DELETE /v1/campaigns/`
`<campaignId>/adgroups/`
`<adGroupId>`
	Soft delete a specific adgroup.	```
		curl \
		
		     -X DELETE
		"https://
		api.searchads.apple.com/
		api/v1/campaigns/
		<campaignId>/adgroups/
		<adGroupId>"
		``

Keyword Management

Keyword Objects

Method	Description
Bulk Targeted Keywords Object	Relevant words or phrases that someone may use to search for your app and that you want to bid on.
Bulk Negative Keywords Object	Words or phrases that you want to prevent your ad from being shown.

Keyword Methods

In the following sections, the HTTP method and the URI are followed by a description and a sample cURL command.

Method/URI	Description	cURL Command
`POST /v1/keywords/targeting/find`	Find a list of targeted keywords within a specific org.	```curl \ −d @testFindTargetedKeywords.json −X POST "https://api.searchads.apple.com/api/v1/keywords/targeting/find"``` • By default, soft deleted keywords, which are part of soft deleted `adgroups`, are not returned. • Selectors can be used to also find the list of soft deleted keywords.
`POST /v1/keywords/negative/find`	Find a list of negative keywords within a specific org.	```curl \ −d @testFindNegativeKeywords.json −X POST "https://api.searchads.apple.com/api/v1/keywords/negative/find"``` • By default, soft deleted negative keywords, which are part of soft deleted campaigns or `adgroups`, are not returned • Selectors can be used to also find the list of soft deleted negative keywords

POST /v1/keywords/targeting	Create or update a list of targeted keywords within a specific org.	```
		curl \
		    -d
		@testUpdateTargetedKeywords.json
		    -X POST "https://
		api.searchads.apple.com/api/v1/
		keywords/targeting"
		``

POST /v1/keywords/negative	Create or update a list of negative keywords within a specific org.	```
		curl \
		    -d
		@testUpdateNegativeKeywords.json
		    -X POST "https://
		api.searchads.apple.com/api/v1/
		keywords/negative"
		``

Reporting

Reporting Request

Method	Description
Request Body	Use a Reporting Request to get information about your campaign results, with a wide range of configurable details.

Reporting Responses

Method	Description
Reporting Response Object	The container for your returned data.
Total Object	Get tap, conversion, and monetary totals.
Granularity Object	Get data organized by hour, day, week, and month.
Campaign Metadata	Your report includes detailed campaign data.
Ad-Group Metadata	Your report includes detailed `adgroup` data.
Targeted-Keyword Metadata	Your report includes detailed targeted keyword data.
Search-Term Metadata	Your report includes detailed search term data.
Group-By Metadata	If you specify a `groupBy` dimension, then returned metadata will also contain data organized by that specific `groupBy` parameter.

Reporting Methods

In this section, the HTTP method and the URI are followed by a description and a sample cURL command.

Method/URI	Description	cURL Command
`POST /v1/reports/campaigns`	Get reports on campaigns within a specific org.	```curl \ -H ...\ -d "@TestCampaignReport.json" -X POST "<ROOT_PATH>/v1/reports/campaigns"``` By default, soft deleted campaigns are not returned Selectors can be used to also get reporting on soft deleted campaigns

| `POST /v1/reports/ campaigns/ <campaignId>/adgroups` | Get reports on adgroups within a specific campaign. | ```
curl \

    -H ...\

    -d
"@TestAdgroupReport.json"

    -X POST "<ROOT_PATH>/
v1/reports/campaigns/
campaignId/adgroups"
```<br>• By default, soft deleted adgroups are not returned.<br><br>• Selectors can be used to also get reporting on soft deleted adgroups. |
| `POST /v1/reports/ campaigns/ <campaignId>/keywords` | Get reports on targeted keywords within a specific adgroup. | ```
curl \

    -H ...\

    -d
"@TestKeywordReport.json"

    -X POST "<ROOT_PATH>/
v1/reports/campaigns/
campaignId/keywords"
```<br>• By default, soft deleted targeted keywords, which belong to soft deleted adgroups, are not returned.<br><br>• Selectors can be used to also get reporting on soft deleted keywords.<br><br>• Grouping by `countryCode`, `adminArea`, `deviceClass`, `ageRange`, or `gender` are not supported for this endpoint.<br><br>• To get the sum of the metrics, `returnRowTotals` or `returnGrandTotals` may be used, but they cannot be used in conjunction with `Granularity`. |

| POST /v1/reports/
campaigns/
<campaignId>/
searchterms | Get reports on search terms for a specific adgroup. | ```
—H ...\

    —d
"@TestSearchTermReport.json"

    —X POST "<ROOT_PATH>/
v1/reports/campaigns/
campaignId/searchterms"
```

• By default, search terms associated with soft deleted adgroups are not returned

• Selectors can be used to also get reporting on search terms associated with soft deleted adgroups

• Grouping by countryCode, adminArea, deviceClass, ageRange, or gender are not supported for this endpoint. |

Campaign Resources

The following objects are for use with Campaign Methods.

- Campaign Object

- Adgroup Object

- Creative Set Object

- AdGroupCreativeSet

- Targeted Keywords Object

- KeywordExport Object

- Negative Keywords Object

- NegativeKeywordExport Object

- Targeting Dimensions Object — Includes the following sub-objects:

  - Age Object

  - Gender Object

  - Device Class Object

  - Admin Area, Locality Objects

  - Daypart Object

  - App Downloaders Object

- Amount Object

- LOC Invoice Details Object

- Budget Order Object

Campaign Object

A Campaign object provides access to campaign-related parameters.

Campaign JSON Representation

```
{
        "id": number,
        "orgId": number,
        "name": string,
        "budgetAmount": {Amount Object},
        "dailyBudgetAmount": {Amount Object},
        "adamId": number,
        "negativeKeywords": [list of NegativeKeyword Objects],
        "paymentModel": enum,
        "locInvoiceDetails": {LocInvoiceDetails Object},
        "adGroups": [list of AdGroup Objects],
        "budgetOrders": [list of strings],
        "startTime": UTC-timestamp,
        "endTime": UTC-timestamp,
        "deleted": bool,
        "status": enum,
        "servingStatus": enum,
        "servingStateReasons": [list of strings],
        "storefront": ISO-ALPHA2-country-code,
        "modificationTime": UTC-timestamp,
        "sapinLawResponse": enum string
    }
```

Campaign Fields

Required fields must be included when objects are created. Optional fields may be included during creation. Updatable fields may be modified after the object has been created. Fields that are neither required nor updatable are read-only and may be obtained after the object has been created.

Field Name	Type	Properties	Selectors	Description
id	Number	• Read Only	EQUALS, IN	Search Ads-assigned, globally unique identifier.
orgId	Number	• Read Only		Set according to authorization. The orgId is the ID associated with your account in the web UI.
name	String	• Required • Updatable	EQUALS, IN, STARTSWITH	Has to be unique within the org.
budgetAmount	Amount Object	• Required • Updatable	EQUALS LESS_THAN GREATER_THAN	

dailyBudgetAmount	Amount Object	• Optional • Updatable	EQUALS LESS_THAN GREATER_T HAN	When this daily cap is reached, your ads will stop appearing for that day and will restart on the next day, if there is still budget remaining for your campaign.
adamId	Number	• Required • Not updatable	EQUALS, IN	AdamID of the promoted app.
paymentModel	Enum	• Read Only	EQUALS, IN	LOC, PAYG May be null if the payment method is not set up . Inherit from that of the org.
locInvoiceDetails	Object	• Optional. Must specify either locInvoic eDetails or budgetOrd ers. • Updatable		Only for LOC campaigns.
budgetOrders	List of Number	• Optional. Must specify either locInvoic eDetails or budgetOrd ers. • Updatable		Only for LOC campaigns.
status	Enum string	• Optional • Updatable	EQUALS, IN	Values are: ENABLED (default) PAUSED
servingStatus	Enum string	• Read Only	EQUALS, IN	Whether the campaign/adgroup is actually serving or not. Values are: RUNNING NOT_RUNNING

`servingStateReasons`	List of Strings	• Read Only		When a campaign is not running, a list of reasons will be returned as strings.
`negativeKeywords`	Negative Keyword Object list	• Optional		List of words or phrases to not serve an ad in response to.
`adGroups`	Adgroup Object list	• Required		Need to specify at least one on create.
`modificationTime`	UTC-timestamp	• Read Only	EQUALS LESS_THAN GREATER_THAN	When the object was last modified.
`startTime`	UTC-timestamp	• Read Only	EQUALS LESS_THAN GREATER_THAN	The designated campaign `startTime` (the `adgroup` with the soonest startTime associated with your campaign).
`endTime`	UTC-timestamp	• Read Only	EQUALS LESS_THAN GREATER_THAN	The designated campaign `endTime` (the `adgroup` with the last endTime associated with your campaign).
`deleted`	Boolean	• Read Only	EQUALS, IN	Indicates whether the campaign has been soft deleted or not.
`storefront`	ISO ALPHA-2 country code string list	• Read Only	EQUALS, IN	The app store territory in which you want to promote your app. Territory choices are AU, CA, CH, DE, ES, FR, GB, IT, JP, KR, MX, NZ, and US is supported. Default is US.

sapinLawResponse	Enum string	• Read Only		Identifies the account as agency or non-agency. This parameter is only settable in the web UI. Possible values: NOT_ANSWERED FRENCH_BUSINESS NOT_FRENCH_BUSINESS

Deprecated Campaign Fields

Field Name	Type	Properties	Description
displayStatus	Enum (String)	• Read Only	Values are: RUNNING ON_HOLD PAUSED DELETED

Adgroup Object

A collection of keywords and targeting dimensions for the app you are promoting, and the ads associated with them. You can set specific targeting criteria and bid amounts for each `adgroup`.

Adgroup JSON Representation

```
{
     "id": number,
     "campaignId": number,
     "name": string,
     "defaultCpcBid": {Amount Object},
     "cpaGoal": {Amount Object},
     "storefronts": ISO-ALPHA2-country-code,
     "startTime": UTC-timestamp,
     "endTime": UTC-timestamp,
     "keywords": [list of TargetedKeyword Objects],
     "negativeKeywords": [list of NegativeKeyword Objects],
     "automatedKeywordsOptIn": boolean,
     "targetingDimensions": [list of TargetingDimensions Objects],
     "deleted": boolean,
     "status": enum,
     "servingStatus": enum,
     "servingStateReasons": [list of strings],
     "orgId": number,
     "modificationTime": UTC-timestamp,
     "adGroupCreativeSets":


    }
```

Adgroup Fields

Descriptions of the `AdGroup` object fields.

Field Name	Type	Properties	Description
`id`	Number	• Read Only	Search Ads-assigned, globally unique identifier.
`campaignId`	Number	• Required	Set by the services based on context. • On createCampaign, the ID is set after the campaign is created. • On createAdGroup, the ID is set based on the campaignID in the URI.
`name`	String	• Required • Updatable	Has to be unique within the org.
`defaultCpcBid`	Amount Object	• Required • Updatable	You must define your default Cost Per Click bid when creating a campaign.
`cpaGoal`	Amount Object	• Optional • Updatable	You may optionally define your Cost Per Acquisition goal.
`storefronts`	ISO ALPHA-2 country code string list	• Read Only	The app store territory in which you want to promote your app. Territory choices are AU, CA, CH, DE, ES, FR, GB, IT, JP, KR, MX, NZ, and US is supported. Default is US.
`startTime`	UTC-timestamp	• Required • Updatable	The time the designated adgroup starts.
`endTime`	UTC-timestamp	• Required • Updatable	The time the designated adgroup ends.

keywords	TargetedKeyword Object list	• Optional	List of Targeted Keyword objects, the terms you want to show your ad for. See Targeted Keywords Object for details.
negativeKeywords	NegativeKeyword Object list	• Optional	List of Negative Keyword objects, terms not to show your ad for. See Negative Keywords Object for details.
automatedKeywordsOptIn	Boolean	• Optional • Updatable	Indicates whether Search Match has been enabled for this adgroup or not.
targetingDimensions	TargetingDimensions Object	• Optional • Updatable	If not set, defaults to currently supported devices of the promoted app. See Targeting Dimensions Object for details.
deleted	Boolean	• Read Only	Indicates whether the adgroup has been soft-deleted or not.
status	Enum	• Optional • Updatable	Values are: ENABLED (default) PAUSED
servingStatus	Enum	• Read Only	Whether the campaign/adgroup is actually serving or not. Values are: RUNNING NOT_RUNNING
servingStateReasons	List of strings	• Read Only	When an adgroup is not running, a list of reasons will be returned as strings.
orgId	Number	• Read Only	Set according to authorization. The orgId is the ID associated with your account in the web UI.

modificationTime	UTC-timestamp	• Read Only	When the object was last modified.

Deprecated AdGroup Fields

Field Name	Type	Properties	Description
displayStatus	Enum (String)	• Read Only	Values are: RUNNING ON_HOLD PAUSED DELETED

CreativeSet Object

A CreativeSet is a grouping of screenshots and app previews you select from your App Store product page to create more ad variations. Creative Sets enable you to leverage additional App Store assets to create ad variations that align to your `adgroup` keyword themes or audiences.

CreativeSet can only be created and updated through the UI, API users have limited visibility into a CreativeSet. Learn More about Creative Sets.

You can filter creative sets by specifying `id` or `name` in the selector.

CreativeSet Fields

Field	Type	Properties	Selectors	Description
`id`	Number	Read Only	EQUALS, IN	The identifier of a `CreativeSet`.
`name`	String	Read Only	EQUALS, CONTAINS	The name of a `CreativeSet`.

AdGroupCreativeSet Object

`AdGroupCreativeSet` relationships must be created through the web UI. API users can only Read and Update `AdGroupCreativeSet`.

Each `AdGroupCreativeSet` relationship has a unique entry and can be managed independently per `AdGroup` (e.g. Enabled, Paused, Removed). A Creative Set can only serve if the `AdGroupCreativeSet` status is Enabled and the `AdGroup` Serving Status is Running.

AdGroupCreativeSet Fields

Field	Type	Properties	Selectors	Description
`id`	Number	• Read Only	EQUALS, IN	`id` represents the identifier for the `AdGroupCreativeSet`
`campaignId`	Number		EQUALS, IN	Represents the identifier for the Campaign.
`adGroupId`	Number		EQUALS, IN	Represents the identifier for the AdGroup.
`creativeSetId`	Number			`CreativeSetId` represents the identifier for the `CreativeSet`.
`status`	Enum String		EQUALS, IN	Values are: ENABLED (default) PAUSED
`servingStatus`	Enum String	• Read Only		Whether the campaign/adgroup is actually serving or not. Values: RUNNING NOT_RUNNING
`servingStatus Reasons`	Set Enum String	• Read Only		When an adgroup is not running, a list of reasons will be returned as strings.

| deleted | Boolean | • Read Only | EQUALS, IN | Indicates whether the adgroup has been soft-deleted or not. All keywords, which belong to an adgroup that had been soft deleted, are also soft deleted. |
| modificationTime | UTC Date | • Read Only | | When the object was last modified. |

Request JSON Representation

```
{
    "startTime": "2018-11-01",
    "endTime": "2018-11-02",
    "selector": {
        "fields": [],
        "conditions": [
{
                "field": "adGroupId",
                "operator": "EQUALS",
                "values": [
                    "7923412"
                ]
            }
        ],
         "orderBy": [
{
                "field": "localSpend",
                "sortOrder": "DESCENDING"
            }
        ],
         "pagination": {
            "offset": 0,
            "limit": 100
        }
    },
     "granularity": "DAILY"
}
```

CreativeSet Management

There are three methods which can help you manage creative sets in your account.

Method	Description
POST /v1/campaigns/<campaignId>/ adgroupcreativesets/find	Find a list of AdGroupCreativeSets by adgroup or campaignId.
POST /v1/creativesets/find	Retrieves all the creative sets in your account/campaign group.
PUT /v1/campaigns/<campaignId>/ adgroup/<adgroupId>/ adgroupcreativeset/ <adgroupcreativesetId>	Updates the status of AdGroupCreativeSet.

Note: creative sets can only be set up in the UI. The API only supports helper methods to help find and change the status of creative sets.

Find a list of AdGroupCreativeSets by adgroup or campaignId

```
POST /v1/campaigns/<campaignId>/adgroupcreativesets/find

1. curl \

2. -d @testFindAdGroupCreativeSets.json \

3. -X POST "https://api.searchads.apple.com/api/v1/campaigns/
   <campaignId>/adgroupcreativesets/find"
```

Request JSON Representation

```
{
    "selector":{
        "fields":null,
        "conditions":[
{
                "field":"adGroupId",
                "operator":"EQUALS",
                "values":[
                    "106595061"
                ],
                "ignoreCase":false
            }
        ],
        "orderBy":null,
        "pagination":{
            "offset":0,
            "limit":20
        }
    }
}
```

Retrieve all the creative sets in your Account/Campaign Group

```
POST /v1/creativesets/find

1| curl \
2| -d @testFindCreativeSets.json \
3| -X POST "https://api.searchads.apple.com/api/v1/creativesets/find"
```

Request JSON Representation

```
{
   "selector":{
      "fields":null,
      "conditions":[
         {
            "field":"id",
            "operator":"EQUALS",
            "values":[
               "106595061"
            ]
         }
      ],
      "orderBy":null,
      "pagination":{
         "offset":0,
         "limit":20
      }
   }
}
```

Update the status of AdGroupCreativeSets

```
PUT /v1/campaigns/<campaignId>/adgroup/<adgroupId>/
adgroupcreativeset/<adgroupcreativesetId>

1| curl \
2| -d @testUpdateAdGroupCreativeSets.json \
3| -X PUT "https://api.searchads.apple.com/api/v1/campaigns/
<campaignId>/adgroup/<adgroupId>/adgroupcreativeset/
<adgroupcreativesetId>"
```

Field	Values
status	ENABLED PAUSED

Request JSON Representation

```
{"status":"PAUSED"}
```

Examples
There are two ways to find a `adGroupCreativeSetId` to Pause or Enable (e.g. Unpause) a Creative Set assigned to an `Adgroup`:

Option 1

1. Use `POST /v1/reports/campaigns/<campaignId>/creativesets` to determine the following:
     - `creativeSetId,`
     - `creativeSetName,`
     - `adGroupCreativeSetId`

2. Use PUT `/v1/campaigns/<campaignId>/adgroup/<adgroupId>/adgroupcreativeset/<adgroupcreativesetId>` endpoint to pause or enable a Creative Set.

Option 2

1. Call POST `v1/campaigns/<campaignId>/adgroupcreativesets/find` to get `AdGroupCreativeSetID` and the `creativeSetID.`

Note: To get the `CreativeSet` Name, call POST `v1/creativesets/find` using the `creativeSetID` returned above.

`CreativeSetID` and `CreativeSetName` can be used to verify which Creative Set should be Paused or Enabled.

2. Use PUT `/v1/campaigns/<campaignId>/adgroup/<adgroupId>/adgroupcreativeset/<adgroupcreativesetId>` to pause or enable the creative set in the specified campaign and `adgroup`.

Reporting
Use the following endpoint to get reports on `AdGroupCreativeSets` within a campaign.

```
POST /v1/reports/campaigns/<campaignId>/creativesets

1.    curl \

2.    –d @testCreativeSetReport.json \

3.    –X POST "https://api.searchads.apple.com/api/v1/campaigns/
      creativesets"
```

Note:

- To find creatives sets in an `adgroup`, utilize selector conditions to filter the list

- `HOURLY` granularity is not accepted for creative sets

- `groupBy` is not supported

Targeted Keywords Object

Relevant words or phrases that someone may use to search for your app and that you want to bid on.

Targeted Keywords JSON Representation

```
{

    "id": number,
    "adGroupId": number,
    "text": string,
    "matchType": enum,
    "bidAmount": {Amount Object},
    "status": enum,
    "deleted": boolean
    "modificationTime": UTC-timestamp
}
```

Targeted Keywords Fields

Field Name	Type	Properties	Selectors	Description
id	Number	• Read Only	EQUALS IN	Search Ads-assigned, globally unique identifier.
text	String	• Required		The word or phrase to match in user searches, to show your ad.
matchType	Enum	• Optional • Updatable		Values are: EXACT BROAD (default)
bidAmount	Amount Object	• Required • Updatable		Your bid amount to display your ad for the matching text value. If not specified then fields remains NULL. They system will use the AdGroup defaultCpcBid to charge the spend.
status	Enum String	• Optional • Updatable		Values are: ACTIVE (default) PAUSED
deleted	Boolean	• Read Only	EQUALS IN	Indicates whether the keyword has been soft deleted or not. All keywords, which belong to an adgroup that had been soft deleted, are also soft deleted.

`adGroupId`	Number	• Read Only	EQUALS IN	Set by the service based on context.
`modificat ionTime`	UTC-timestamp	• Read Only		When the object was last modified.

KeywordExport Object

Used in exportTargetingKeywords method.

Field Name	Type	Properties	Selectors	Description
id	Number	• Read Only	EQUALS IN	Search Ads-assigned, globally unique identifier.
text	String	• Required		The word or phrase to match in user searches, to show your ad.
matchType	Enum	• Optional • Updatable		Values are: EXACT BROAD (default)
bidAmount	Amount Object	• Required • Updatable		Your bid amount to display your ad for the matching text value.
status	Enum String	• Optional • Updatable		Values are: ACTIVE (default) PAUSED
deleted	Boolean	• Read Only	EQUALS IN	Indicates whether the keyword has been soft deleted or not. All keywords, which belong to an adgroup that had been soft deleted, are also soft deleted.
adGroupId	Number	• Read Only	EQUALS IN	Set by the service based on context.
modificationTime	UTC-timestamp	• Read Only		When the object was last modified.

Negative Keywords Object

Words or phrases for which you want to prevent your ad from being shown when a user creates searches containing the selected negative keyword.

Negative Keywords JSON Representation

```
{
     "id": number,
     "campaignId": number,
     "adGroupId": number,
     "modificationTime":
     "text": string,
     "matchType": enum,
     "deleted": boolean
    }
```

Negative Keywords Fields

Field Name	Type	Properties	Selectors	Description
id	Number	• Read Only	EQUALS IN	Search Ads-assigned, globally unique identifier.
campaignId	Number	• Required to create • Required to update	EQUALS IN	Represents the identifier for the Campaign.
adGroupId	Number	• Required to create • Required to update	EQUALS IN	Represents the identifier for the AdGroup.
modification Time	UTC-timestamp	• Read Only		When the object was last modified.
text	String	• Required		The word or phrase to match in user searches, to show your ad.
matchType	Enum	• Required		Values are: EXACT BROAD (default)
Status	Enum String	• Optional • Updatable		Values are: ACTIVE (default) PAUSED

| deleted | Boolean | • Read Only | | • Indicates whether the negative keyword has been soft deleted or not.
• All negative keywords, which belong to a soft deleted campaign or adgroup, are also soft deleted. |

NegativeKeywordExport Object
Used in exportNegativeKeywords method, is exactly the same as NegativeKeyword.

NegativeKeywordExport Fields

Field Name	Type	Properties	Selectors	Description
`id`	Number	• Read Only	EQUALS IN	Search Ads-assigned, globally unique identifier.
`campaignId`	Number	• Required to create • Required to update	EQUALS IN	Represents the identifier for the Campaign.
`adGroupId`	Number	• Required to create • Required to update	EQUALS IN	Represents the identifier for the `AdGroup`.
`modification Time`	UTC-timestamp	• Read Only		When the object was last modified.
`text`	String	• Required		The word or phrase to match in user searches, to show your ad.
`matchType`	Enum	• Required		EXACT, BROAD
`Status`	Enum String	• Optional • Updatable		ACTIVE, ACTIVE
`deleted`	Boolean	• Read Only		• Indicates whether the negative keyword has been soft deleted or not. • All negative keywords, which belong to a soft deleted campaign or `adgroup`, are also soft deleted.

Targeting Dimensions Object

Optional criteria to narrow who to show your ad to with the following criteria:

- on specific devices

- in a specific geographic area

- by specific demographic (gender, age)

- by those who have or have not downloaded the app

- during a specific time of day

Note : currently, the API does not support country-level, DMA-level, and Zip-level targeting.

Note: on AdGroup update, if updating targetingDimensions fields then all dimensions must be specified.

Targeting Dimensions JSON Representation

```
{
     "age": {Age Object},
     "gender": {Gender Object},
     "deviceClass": {DeviceClass Object},
     "adminArea": {AdminArea Object},
     "locality": {Locality Object},
     "appDownloaders": {AppDownloaders Object},
     "dayPart": {DayPart Object}
   }
```

Targeting Dimensions Fields

Field Name	Type	Properties	Description
age	Age Object	• Optional • Updatable	See detailed description in Age Object.
gender	Gender Object	• Optional • Updatable	See detailed description in Gender Object.
deviceClass	DeviceClass Object	• Optional • Updatable	See detailed description in Device Class Object.
adminArea	AdminArea Object	• Optional • Updatable	See detailed description in Admin Area, Locality Object.

locality	Locality Object	• Optional • Updatable	See detailed description in Admin Area, Locality Object.
appDownloaders	AppDownloaders Object	• Optional • Updatable	See detailed description in App Downloader Object.
daypart	Daypart Object	• Optional • Updatable	See detailed description in Daypart Object.

Age Object

Limit the age group who you want to show your ad to.

Age JSON Representation

```
{
     "included": [
       {
         "minAge": string,
         "maxAge": string
       }
     ]
    }
```

Age Fields

Field Name	Type	Properties	Description
minAge	String	• Required	Must be greater than 18.
maxAge	String	• Optional • Updatable	May be null. If specified, must be less than or equal to 65.

Gender Object

Specify the gender you want to show your ad to. To specify both male and female, pass NULL. Male and female cannot be targeted at the same time.

Gender JSON Representation

```
{
     "included": [gender id string]
    }
```

Gender ID String

• Gender: M, F

Device Class Object

Target or exclude users by device type.

Device Class JSON Representation

```
{
    "included": [list of strings]
}
```

Device Class ID Strings

- Device class is acceptable device classes: IPAD, IPHONE (which includes iPhone and iPod Touch).

Admin Area, Locality Objects

Target users by geographic location. In all geographic locations, campaigns are restricted to admin areas or localities in the country of the storefront that you are promoting. For example, a campaign promoting a US storefront can only target admin areas (states) and localities (cities) within the US.

Admin Area, Locality JSON Representation

```
{
    "included": [list of strings]
}
```

Admin Area, Locality ID Strings

- For Admin area, locality, use the list of targetable geo location identifiers that can be obtained using GET /search/geo.

Daypart Object

Limit when you want to show your ad. The hours of a week are represented by numbers.

Daypart JSON Representation

```
{
    "userTime": {
      "included": [list of numbers]
    }
}
```

- Numbers can be in the range 0-167, which represent hours of the week, starting from Sunday 12AM. For example, the hour beginning Monday at 1:00AM is 25.

App Downloaders Object

Use the App Downloaders targeting dimension to limit who should see your ad to those who have or have not downloaded one of your apps, or those who have not downloaded the app that you're trying to promote. You can only include those apps that you own. You can only exclude the `adamId` of the app that you're trying to promote with your campaign.

App Downloaders JSON Representation

```
{
    "included": [list of strings],
    "excluded": [list of strings]
}
```

App Downloaders ID Strings

- A list of `adamIds` of your apps. You may also search for the `adamId` using `/v1/search/apps`.

- You cannot specify both included and excluded fields.

- The lists may only include `adamIds`.

- The included list may only include an `adamId` that belongs to the ITC that the parent-org is associated with.

- The excluded list may only contain the `adamId` of the app that you're trying to promote with your campaign.

Amount Object

An Amount object is used whenever a currency value is needed.

Amount JSON Representation

```
{
    "currency": string,
    "amount": string
}
```

Amount Fields

Field Name	Type	Properties	Description
currency	String	• Required • Updatable	The currency string should match that of the org currency.
amount	String	• Required • Updatable	The monetary value in the specified currency.

LOC Invoice Details Object

The LOC Invoice Details object applies only to advertisers who are approved to pay by monthly invoicing. It contains billing information to be included on the invoices. Campaigns that are not associated with budget orders and have the same client names and order numbers, are invoiced together.

Either an LOC Invoice Details object or a Budget-Order object may be used, but not both.

LOC Invoice Details JSON Representation

```
{
    "clientName" : string,
    "orderNumber" : string,
    "buyerName" : string,
    "buyerEmail" : string,
    "billingContactEmail" : string
}
```

LOC Invoice Details Fields

Field Name	Type	Properties	Description
clientName	String	• Optional • Updatable	Required for agency-type accounts. Typically denotes the advertiser or product.
orderNumber	String	• Optional • Updatable	Required for agency-type accounts. Typically denotes a PO number.
buyerName	String	• Required • Updatable	The appropriate name.
buyerEmail	String	• Required • Updatable	A valid email address.
billingContactEmail	String	• Required • Updatable	A valid email address.

Budget Order Object

A Budget Order object is an optional feature for advertisers who are approved to pay by monthly invoicing. It allows these advertisers to set the maximum amount they would like to spend across associated campaigns over a specific period of time. All campaigns that are associated with the same budget order appear on the same invoice

Budget Order JSON Representation

```
{
    "id": number,
    "name": string,
    "startDate": MM-DD-YYYY,
    "endDate": MM-DD-YYYY,
    "budget": {Amount Object},
    "orderNumber": string,
    "clientName": string,
    "primaryBuyerName": string,
    "primaryBuyerEmail": string,
    "billingAddress": {Address Object},
    "billingEmail": string,
    "parentOrgId" : number,
    "status": enum
}
```

Budget Order Fields

When you are only getting a single, specific budget order, using `GET /v1/budgetorders/<BUDGET_ORDER_ID>`, the `numCampaigns` and `spendPerDate` fields will also be included.

Field Name	Type	Properties	Selectors	Description
id	Number	• Read Only	EQUALS IN	Search Ads-assigned, globally unique identifier.
name	String		EQUALS IN STARTSWITH CONTAINS ENDSWITH	Has to be unique within the org.
startDate	Date string			The starting date for the budget, in the format MM-DD-YYYY.

endDate	Date string			The ending date for the budget, in the format MM-DD-YYYY.
budget	Amount Object			Once set, can only be increased.
orderNumber	String		EQUALS IN STARTSWITH CONTAINS ENDSWITH	Required for agency-type accounts. Typically denotes a PO number.
clientName	String		EQUALS IN STARTSWITH CONTAINS ENDSWITH	Required for agency-type accounts. Typically denotes the advertiser or product.
primaryBuyerName	String			The primary buyer's name.
primaryBuyerEmail	String			A valid email address.
billingAddress	Address Object			The billing address.
billingEmail	String			The billing email.
parentOrgId	Number			The org which owns the Budget Order.

status	Enum String		EQUALS IN	The status field is an enum with the following values: INACTIVE: the budget order has not started. ACTIVE: budget order has started. COMPLETED: budget order has reached its end date. EXHAUSTED: budget order has exhausted its budget, but has not reached its end date. CANCELLED: budget order has been cancelled. Only INACTIVE, ACTIVE, or EXHAUSTED budget orders will be returned.

BudgetOrderResponse Object

This object is the response for the following two helper methods:

Method	URI	Description
GET	/v1/budgetorders	Retrieves a list of budget orders that have been assigned to the specified `orgId` and have not completed or been cancelled.
GET	/v1/budgetorders/ <BUDGET_ORDER_ID>	• Retrieves a specific budget order if it has been assigned to the specified org and also returns orders that have been completed or cancelled. • Returns a `spendToDate` value

Budget Orders Sample cURL Request

```
curl \

  "https://api.searchads.apple.com/api/v1/budgetorders"
```

Budget Orders ID Sample cURL Request

```
curl \

  "https://api.searchads.apple.com/api/v1/budgetorders/
<BUDGET_ORDER_ID>"
```

Budget Orders ID Sample JSON Response

```json
{
    "data":
    {
        "bo":
        {
            "billingEmail": "<EMAIL_ADDRESS>",
            "budget":
            {
                "amount": "<AMOUNT>",
                "currency": "USD"
            },
            "clientName": "<CLIENT_NAME>",
            "endDate": "2016-09-29T00:40:13.379",
            "id": <CLIENT_ID>,
            "name": "<NAME>",
            "orderNumber": "<ORDER_NUM>",
            "parentOrgId": <ORG_ID>,
            "primaryBuyerEmail": "<EMAIL_ADDRESS>",
            "primaryBuyerName": "<USER_NAME>",
            "startDate": "2016-08-27T00:40:13.379",
            "status": "INACTIVE"
        },
        "campaignCount": number,
        "entireAccount": boolean,
        "orgIdNameMap":
        {
            "<ORG_ID>": "<NAME>"
        },
        "spent":
        {
            "amount": "0",
            "currency": "USD"
        }
    },
}
```

BudgetOrderResponse Fields

Field Name	Type	Properties	Selectors	Description
bo	Object BudgetOrder	• Read Only		See Budget Order Fields
orgIdNameMap	Object Map (Number, String)	• Read Only		Map of Campaign Group Id and Name where the Budget Order is being used.
spent	Amount	• Read Only		Amount of budget spent to date. **Note:** only returned when a budget order ID is supplied.
entireAccount	Boolean			Specifies whether the budget order was assigned to all orgs within the org tree.
campaignCount	Amount	• Read Only		Number of campaigns the budget order is assigned to. Includes archived campaigns. **Note:** only returned when a budget order ID is supplied.

Search

Search calls allow you to retrieve targetable locations and their display names or a list of apps related to the `orgId` specified in the header.

Method/URI	Parameter	Description
`GET /v1/search/geo`	`query=<QUERY>` `entity=<ENUM>,` `Locality or` `AdminArea` `countrycode` `limit`	Search for a list of targetable user locations (country, admin area, sub-admin area) prefix matching the query.
`POST /v1/search/geo`	JSON syntax: `"query":<QUERY>,` `"entity":<ENUM>,` `"countrycode":<ISO-` `ALPHA2-COUNTRYCODE>,` `"limit":<NUMBER>`	Given a list of (geo location id, entity type), return display names. entity is a `Locality` or `AdminArea`.
`GET /v1/search/apps`	`query=<QUERY>` `limit` `returnedOwnApps=True` `or False`	Search for a list of iOS apps based on the `AdamID` or the app name matching the query prefix. Use `returnedOwnApps` to parameter to return the list of apps that are owned by the iTC accounts (if any) linked to the org in context.

Search Sample cURL Request: Targetable User Locations

```
curl \

    "https://api.searchads.apple.com/api/v1/search/geo?
query=<QUERY>&entity=<ENUM>&countrycode="<ISO-ALPHA2-COUNTRYCODE>"
```

- query is a required parameter.

- `entity` and `countrycode` are optional parameters. `countrycode` supports

AU, CA, CH, DE, ES, FR, GB, IT, JP, KR, MX, NZ, and US.

- If no parameters are supplied, all applicable values will be returned.

- Supported entities in initial release: `Locality`, `AdminArea`.

- All search patterns use a prefix-matching algorithm.

- Spaces are allowed in search patterns, but the entire patter much be enclosed in internal quotes. If you are sending a quoted search string via cURL, use HTML encoding, as in the following example. This also illustrates prefix searching.

```
curl "https://api.searchads.apple.com/api/v1/search/geo?
query=%22New%20H%22"
```

Search Sample JSON Response: Targetable User Locations

```
{
        "data": [
        {
            "id": ""US|CT|New Haven",
            "entity": "Locality",
            "displayName": "New Haven, Connecticut, United States"
        },
        ...
        ],
        ...
    }
```

- The targetable location id returned from this call can be used as an input value when setting the applicable targeting location dimensions.

Search Sample cURL Request: Query Targetable Locations

```
curl \

    -d "testTargetableLocations.json" \

  -X POST "https://api.searchads.apple.com/api/v1/search/geo"
```

Search Sample JSON Request Body: Query Targetable Locations

```
[
    {
      "id": "US|NY",
      "entity": "AdminArea"
    },
    {
      "id": "US|NY|New York Mills",
      "entity": "Locality"
    }
  ]
```

- `id` and `entity` are required.

- Supported entities: `Locality`, `AdminArea`.

Search Example: Query for an App

- A new app may take up to 24 hours to show up, after it's published and live in the App Store.

- Edits to app name or icon may take up to 24 hours to show up.

- query is a required parameter.

- All search patterns use a prefix-matching algorithm.

- Spaces are allowed in search patterns. However, the entire pattern needs to be enclosed in internal quotes. If you are sending a quoted search string via cURL, use HTML encoding, as in the following example. This also illustrates prefix searching.

Search Sample cURL Request: Query for an App

```
curl \

  "https://api.searchads.apple.com/api/v1/search/apps?query=Run%20Ke"
```

Search Sample JSON Response: Query for an App

```
[
    {
      "adamId": long,
      "appName": "string",
      "developerName": "string"
      "countryCodes": [list of "<ISO_ALPHA2_COUNTRYCODE>" strings]
    },
    ...
  ]
```

Sample cURL Request: Query for Own Apps

```
curl \

    "https://api.searchads.apple.com/api/v1/search/apps?
returnOwnedApps=true"
```

Search Sample JSON Response: Query for Own Apps

```
[
    {
      "adamId": long,
      "appName": "string",
      "developerName": "string"
      "countryCodes": [list of <ISO_ALPHA2_COUNTRYCODE> strings]
    },
    ...
  ]
```

Keyword Resources

Objects in this section are for use with Keyword Methods. Note that some are similar to objects used with Campaign Methods. However, Campaign and Keywords are different sets of objects.

There are two keyword object types:
- Targeted - used when you want to show ads according to keywords. Supports up to one thousand keywords.
- Negative - when you want to prevent keywords from displaying. Supports any amount of keywords.

Bulk Targeted Keywords Import Request Object

Relevant words or phrases that someone may use to search for your app and that you want to bid on. When you post to this method endpoint, you must provide a list of bulk targeted keyword objects.

Bulk Targeted Keywords JSON Representation

```
{
        "importAction": enum,
        "id": number,
        "campaignId": number,
        "adGroupId": number,
        "text": string,
        "matchType": enum,
        "status": enum,
        "deleted": boolean,
        "bidAmount": {Amount object}
    }
```

Bulk Targeted Keywords Fields

Field Name	Type	Properties	Description
importAction	Enum	• Required to create • Required to update	Values are: CREATE UPDATE
id	Number	• Required to update	• Search Ads assigned • globally unique
campaignId	Number	• Required to create • Required to update	• Search Ads assigned • globally unique
adGroupId	Number	• Required to create • Required to update	• Search Ads assigned • globally unique

matchType	Enum	• Required to create	Values are: BROAD EXACT
text	String	• Required to create • Optional to update	The word or phrase to match in user searches, to show your ad.
status	Enum	• Required to create • Optional to update	Values are: ACTIVE PAUSED
deleted	Boolean	• Read Only	• Indicates whether the keyword has been soft deleted or not. • All keywords, which belong to an adgroup that had been soft deleted, are also soft deleted.
bidAmount	Amount object	• Required to create • Optional to update	Your bid amount to display your ad for the matching text value.

Bulk Negative Keywords Object

Words or phrases that you want to prevent your ad from being shown. When you post to this method endpoint, you must provide a list of bulk negative keyword objects.

Bulk Negative Keywords JSON Representation

```
{
        "importAction": enum,
        "id": number,
        "campaignId": number,
        "adGroupId": number,
        "text": string,
        "matchType": enum
        "status": enum,
        "deleted": boolean
    }
```

Bulk Negative Keywords Fields

Field Name	Type	Properties	Selectors	Description
importAction	Enum	• Required to create • Required to update • Required to delete		Values are: CREATE UPDATE DELETE
id	Number	• Read Only	EQUALS IN	Search Ads assigned, globally unique.
campaignId	Number	• Read Only	EQUALS IN	Search Ads assigned, globally unique.
adGroupId	Number	• Read Only	EQUALS IN	Search Ads assigned, globally unique.
modification Time	UTC Time	• Read Only		
matchType	Enum String	• Required to create • Optional to update		Values are: BROAD EXACT
text	String	• Required to create • Optional to update		The word or phrase to not match in user searches, to not show your ad.

status	Enum	• Required to create • Optional to update		Values are: ACTIVE PAUSED
deleted	Boolean	• Read Only		• Indicates whether the negative keyword has been soft deleted or not. • All negative keywords, which belong to a soft deleted campaign or adgroup are also soft deleted.

Keyword Methods

In the following sections, the HTTP method and the URI are followed by a description and a sample cURL command. In all of these API calls, the `orgId` must be included in the header. The `orgId` is the ID associated with your account in the web UI.

Method/URI	Description	cURL Command
POST /v1/keywords/ targeting/find	Find a list of targeted keywords within a specific org.	```curl \ -d @testFindTargetedKeywords.json -X POST "https:// api.searchads.apple.com/api/v1/ keywords/targeting/find"``` • By default, soft deleted keywords, which are part of soft deleted `adgroups`, are not returned. • Selectors can be used to also find the list of soft deleted keywords.
POST /v1/keywords/ negative/find	Find a list of negative keywords within a specific org.	```curl \ -d @testFindNegativeKeywords.json -X POST "https:// api.searchads.apple.com/api/v1/ keywords/negative/find"``` • By default, soft deleted negative keywords, which are part of soft deleted campaigns or `adgroups`, are not returned • Selectors can be used to also find the list of soft deleted negative keywords
POST /v1/keywords/ targeting	Create or update a list of targeted keywords within a specific org.	```curl \ -d @testUpdateTargetedKeywords.json -X POST "https:// api.searchads.apple.com/api/v1/ keywords/targeting"```
POST /v1/keywords/ negative	Create or update a list of negative keywords within a specific org.	```curl \ -d @testUpdateNegativeKeywords.json -X POST "https:// api.searchads.apple.com/api/v1/ keywords/negative"```

Reporting Requests & Responses

Request Body

Use a Reporting Request to get information about your campaign results, with a wide range of configurable details. The core of a Reporting Request is the Selector Object.

Request Body JSON Representation

```
{
        "startTime": string,
        "endTime": string,
        "timeZone": enum,
        "granularity": enum,
        "selector": {Selector object},
        "groupBy": string,
        "returnRowTotals": boolean,
        "returnGrandTotals": boolean,
        "returnRecordsWithNoMetrics": bool
    }
```

Request Body Fields

Field Name	Type	Properties	Description
startTime	String	• Required	yyyy-mm-dd
endTime	String	• Required	yyyy-mm-dd
timeZone	Enum	• Optional	ORTZ, UTC ORTZ is the default timezone within Search Ads Dashboard settings. The default timezone is set during account creation. Reporting defaults to ORTZ.
groupBy	List of strings	• Optional	Field to groupby; maximum one in the list. Currently supported field options for /campaign & /adgroups endpoints: countryCode storefront adminArea deviceClass ageRange gender

selector	Selector	• Required	Selector consists of the following:
			`conditions`: additional types of filters (optional, used to further filter the data).
			`orderBy`: required, specify how the response should be sorted.
			• Can sort on most metadata (see tables below)
			• Can sort on all groupBy dimensions
			• Can sort on all metrics (other than conversion rate)
			• Only one field is allowed.
			`pagination`: optional, specify how many records to return per page (the default is 20).

granularity	Enum	Optional. Either `granularity` must be specified or `returnRowTotals` must be true.	Time granularity: HOURLY, DAILY, WEEKLY, MONTHLY If `granularity` is specified and meets the following criteria, return additional metrics in the granularity object: HOURLY — `startTime` and `endTime` <= 7 days apart and `startTime` <= 30 days in the past. HOURLY cannot be used with /keywords or /searchterms nor with `groupBy` dimensions. DAILY — `startTime` and `endTime` <= 90 days apart and `startTime` <= 24 months in the past. WEEKLY — `startTime` and `endTime` > 14 days and <= 365 days apart and `startTime` <= 24 months in the past. MONTHLY — `startTime` and `endTime` > 3 months apart and `startTime` <= 24 months in the past. Note that some combinations of `startTime` and `endTime` can be used with more than one `granularity`.
returnRowTotals	Boolean	Optional. Either `granularity` must be specified or `returnRowTotals` must be true.	Specify whether to return the total of each row. Default is `false`.
returnGrandTotals	Boolean	• Optional	• Used to return total for all the rows in the result set. • This can only be used if `returnRowTotals` is also true.

returnRecordsWith NoMetrics	Boolean	• Optional	Specify whether records with no stats should also be returned. Default is `false`.

Response Body

The Response Body includes:

A Reporting Response object which includes:

- a metadata object according to the search term
- a Total object
- a list of Granularity objects

Metadata objects include:

- Campaign metadata
- AdGroup metadata
- Targeted Keyword metadata
- CreativeSet metadata
- Search Term metadata
- GroupBy metadata

The Response Body also includes pagination details that refer to the rows in the Reporting Response object.

Response Body JSON Representation

```
{
        "data": [
            "reportingResponse": {Reporting Response object}
        ],
        "pagination"{
        "totalResults": <TOTAL_NUMBER_OF_ROWS>,
        "startIndex": <NUMBER>,
        "itemsPerPage": <NUMBER_OF_ROWS_PER_PAGE>
        },
        "error": null
    }
```

Reporting Response Object

The Reporting Response object returns data organized by rows, where the overall Response Body includes a `pagination` structure that aggregates the rows.

For each row, the primary dimension is the primary object in the URI, the campaign, adgroup, keyword, or search term. If groupBy is specified in the request, then that value is the primary dimension. The metadata returned varies according to the primary object being reported on, as specified in the following Metadata sections.

Note: Search terms that return fewer than ten impressions will be grouped into an "other" bucket.

When grouping or filtering by `age`, `gender`, or `geo`, records with fewer than 100 impressions will be grouped into an "other" bucket.

Reporting Response JSON Representation

```
{
"row": [
        {
            "metadata": {Metadata object},
            "total": {Total object},
            "granularity": [Granularity object list]
        },

... ],

"grandTotals" : {
     "total" : { Total object}
}

}
```

Total Object
The Total object in your report provides tap, conversion, and monetary totals.

Total JSON Representation

```
{
        "localSpend": {Amount object},
        "taps": Number,
        "conversions": Number,
        "avgCPA": {Amount object},
        "avgCPT": {Amount object},
        "ttr": Double,
        "conversionRate": Double,
        "impressions" : Number,
        "conversionsLATOn": Number,
        "conversionsLATOff": Number,
         "conversionsNewDownloads: Number,
         "conversionsRedownloads: Number
    }
```

Granularity Object

Granularity lets you see your data by hour, day, week, and month.

Hour

The hour, 00 to 23, is appended to the `date` string.

Hour Granularity JSON Representation

```
{
        "date": "MM–DD–YYYY HH",
        "taps": Number,
        "conversions": Number,
        "avgCPA": {Amount object},
        "avgCPT": {Amount object},
        "ttr": Double,
        "conversionRate": Double,
        "impressions" : Number,
        "conversionsLATOn": Number,
        "conversionsLATOff": Number,
        "conversionsNewDownloads: Number,
        "conversionsRedownloads: Number
    }
```

Day, Week, Month

- The date value for a response with `Week` granularity is the Monday of that week.

- The date value for a response with `Month` granularity is the first of that month.

Day, Week, Month Granularity JSON Representation

```
{
        "date": "MM–DD–YYYY",
        "taps": Number,
        "conversions": Number,
        "avgCPA": {Amount object},
        "avgCPT": {Amount object},
        "tapThroughRate": Double,
        "conversionRate": Double,
        "impressions" : Number,
        "conversionsLATOn": Number,
        "conversionsLATOff": Number,
        "conversionsNewDownloads: Number,
        "conversionsRedownloads: Number
    }
```

Campaign Metadata

The following metadata are returned by default with each campaign. All fields may be used with the `orderBy` selector except `app`, `app:{appName}`, `app:{adamId}` and `servingStateReasons`.

Returned Metadata Field	Format	Conditions: Operator
campaignId	Long	EQUALS, IN, STARTSWITH
campaignName	String	EQUALS
app	Object	
app:{appName}	String	EQUALS, IN, STARTSWITH
app:{adamId}	Long	EQUALS, IN, STARTSWITH
dailyBudget	Amount object	
totalBudget	Amount object	
campaignStatus	Enum: ENABLED, PAUSED	EQUALS
servingStatus	Enum: RUNNING, NOT_RUNNING	EQUALS
servingStateReasons	List of strings	
modificationTime	Timestamp	
storefront	String (ISO-ALPHA2 country code)	
deleted	Boolean (True, False)	EQUALS, IN

AdGroup Metadata

The following metadata are returned by default with each `adgroup`. All fields may be used with the `orderBy` selector except `adGroupServingStateReasons`.

Returned Metadata Field	Format	Conditions: Operator
`adGroupId`	Long	EQUALS, IN, STARTSWITH
`adGroupName`	String	EQUALS, IN, STARTSWITH
`startTime`	Timestamp	
`endTime`	Timestamp	
`cpaGoal`	Amount object	
`defaultCpcBid`	Amount object	
`adGroupStatus`	Enum: ENABLED, PAUSED	EQUALS
`adGroupServingStatus`	Enum: RUNNING, NOT_RUNNING	EQUALS
`adGroupServingStateReasons`	List of strings	
`adGroupDisplayStatus`	Enum: RUNNING, ON_HOLD, PAUSED	
`automatedKeywordsOptIn`	Boolean	EQUALS
`modificationTime`	Timestamp	
`deleted`	Boolean (True, False)	EQUALS, IN

Targeted Keyword Metadata

The following metadata are returned by default with each targeted keyword. All fields may be used with the `orderBy` selector.

Returned Metadata Field	Format	Conditions: Operator
keywordId	Long	EQUALS, IN, STARTSWITH
keyword	String	EQUALS, IN, STARTSWITH
keywordStatus	Enum:	
keywordDisplayStatus	Enum:	EQUALS
matchType	Enum: EXACT, BROAD	EQUALS
bidAmount	Amount object	
adGroupId	Long	EQUALS, IN, STARTSWITH
adGroupName	String	
adGroupDeleted	Boolean (True, False)	EQUALS, IN
modificationTime	Timestamp	
deleted	Boolean (True, False)	EQUALS, IN

CreativeSet Metadata

The following metadata is returned with every request and may be specified with each creative set.

Returned Metadata Field	Format	Conditions: Operators
creativeSetId	Long	EQUALS, IN, STARTSWITH
creativeSetName	String	EQUALS, IN, STARTSWITH, CONTAINS, ENDSWITH
displayStatus	String	EQUALS, IN
creativeSetLanguageDisplayName	String	
deleted	Boolean (True, False)	EQUALS, IN
status	String	
campaignId	Long	
adGroupId	Long	EQUALS, IN
adGroupCreativeSetId	Long	
creationTime	Timestamp	
modificationTime	Timestamp	
adFormat	String	
orgId	Long	

Search Term Metadata

The following metadata are returned by default with each search term. All fields may be used with the `orderBy` selector.

If `searchTermSource` is `AUTO`, then `keywordMatchType` will be `AUTO`.

If `searchTermSource` is `TARGETED`, then `keywordMatchType` will be either `BROAD` or `EXACT`.

Returned Metadata Field	Format	Conditions: Operator
`adGroupId`	Long	EQUALS, IN, STARTSWITH
`adGroupName`	String	
`adGroupDeleted`	Boolean (True, False)	EQUALS, IN
`searchTermText`	String	EQUALS, IN, STARTSWITH
`searchTermSource`	Enum: AUTO, TARGETED	EQUALS, IN
`keywordId`	Long	EQUALS, IN, STARTSWITH
`keyword`	String	EQUALS, IN, STARTSWITH
`keywordDisplayStatus`	Enum: ACTIVE, PAUSED	EQUALS, IN
`matchType`	Enum: BROAD, EXACT	
`deleted`	Boolean (True, False)	EQUALS, IN
`bidAmount`	Amount object	

GroupBy Metadata

If user specifies a `groupBy` dimension, then metadata will also contain the `groupBy` dimension. All fields may be used with the `orderBy` selector.

Grouping by fields such as `locality, adminArea, countryCode, ageRange,` and `gender` are not supported for both `/keywords` and `/searchterms` endpoints.

Returned Metadata Field	Format	Conditions: Operator
countryCode	ISO Alpha-2 UNKNOWN	EQUALS, IN
locality	String UNKNOWN	EQUALS, IN
storefront	String (ISO-ALPHA2 country code)	EQUALS, IN
adminArea	String UNKNOWN	EQUALS, IN
deviceClass	Enum: IPHONE, IPAD, UNKNOWN	EQUALS
ageRange	Enum: 18-24, 25-34, 35-44, 45-54, 55-64, 65\+, UNKNOWN	EQUALS, IN
gender	Enum: M, F, UNKNOWN	EQUALS

Document Revision History

Date	Notes
September, 2016	Initial version
July, 2018	Updated formatting, fixes
September, 2018	Updated formatting, fixes
November, 2018	Updated formatting, fixes