



Campaign Management API for News Publishers

Advertising on Apple News

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Contents

Overview	4
Access, Authentication, and Authorization	4
API Basics	5
Requests	5
Responses	6
API Endpoint	6
Versioning of the API	6
Limitations	6
Authentication	7
InitSession	7
Getting Started	8
Campaign and Line Creation and Management	8
Summary of Methods	8
CreateCampaign	9
CreateLine	11
UpdateCampaign	21
UpdateLine	23
DeleteCampaign	34
DeleteLine	35
Campaign and Line Helper Methods	36
Summary of Methods	36
GetAvailableCampaignCategories	36
GetTargetingDetails	38
GetSegments	41
Custom Audience Segments, First Party Data (Phone, Email, IDFA)	41
Publisher Audience Segments	41
GetAvailableTimeZones	43
GetLineInfo	44

GetAllChannels.....	45
Inventory Methods.....	46
Summary of Methods.....	46
CheckLineInventory.....	47
CheckInventory	50
ReserveInventory.....	62
UnreserveInventory	64
Reporting Methods.....	65
Summary of Methods.....	65
GetCampaignSummary	66
GetCampaignDetails	69
GetLineDetails	73
Reporting Metrics Methods.....	78
GetCampaignMetrics.....	78
GetLineMetrics	82
GetLinePerformance	86
Document Revision History	88

Overview

The Campaign Management API for News Publishers is available to all Apple News publisher accounts with access to News Publisher tools on [Workbench](#). You can use your tools and programs of choice to manage ad campaigns programmatically. With the API, you can do the following.

- Create and manage ad campaigns on Apple News.
- Retrieve performance metrics for ad campaigns.
- Estimate the availability of inventory for ad placements on Apple News.

Access, Authentication, and Authorization

Before you can interact with the Campaign Management API for News Publishers, you must provide your credentials, access token, and certificate, and obtain a session ID. Your session ID is used for the duration of your API interaction session.

A client-side SSL certificate is used to authenticate the user. An access token provides authorization to all of the API.

To access the Advertising Platforms API server, you need to request and download the required API keys, tokens, and certificates from [Workbench](#).

Note: certificates expire after twenty-five months, at which time you can download a new PEM and repeat the following process.

From Workbench, perform the following steps.

1. Click on the dropdown arrow next to your account name near the top right and choosing Account from the dropdown menu.
 2. Select the API tab under the page title.
 3. Click **Create Key**.
 4. Name your key and assign access to a tool set.
 5. Enter the Captcha text.
 6. Confirm and download your key in a ZIP file. You will receive the following.
- `certificate.pem` — a client-side SSL certificate signed by Apple Ad Platforms.

The certificate is a PEM file, which is typically used with Python.

- `private_key.key` — a client-side SSL private key
- `token.txt` — an access token

Note: the following commands use the publicly available [openssl](#) and `keytool` utilities. `Keytool` is obtained through the standard Java distribution.

7. Convert the PEM certificate to P12 format certificate.

```
openssl pkcs12 -export -in certificate.pem -inkey private_key.key -out
certificate.p12 -name "<NAME>"
```

8. Convert the P12-format certificate to a JKS-format certificate.

```
keytool -v -importkeystore -srckeystore certificate.p12 -srcstoretype
PKCS12 -destkeystore certificate.jks -deststoretype JKS
```

Use your client-side SSL certificate, key, and access token when you call the [InitSession](#) method. This call authenticates, establishes a secure connection, and provides the session ID required to make further API calls.

Important: as a security measure, ten successive invalid authentication attempts will lock the API access for a minimum of five hours.

API Basics

The Campaign Management API for News Publishers supports JSON-RPC 2.0 payloads over HTTP POST. Communication with the web service must use HTTPS.

Requests

- To make requests, use the Content-Type header of "application/json".
- The request payload contains the method name and the method parameters, which is a single dictionary object.
- Request objects must follow the JSON-RPC 2.0 specification and must include the following fields:
 - **jsonrpc:** A string specifying the version of JSON-RPC protocol. The string value must be exactly 2.0.
 - **method:** A string containing the name of the method to be invoked.
 - **ID:** A unique identifier established by your client program. It must be a string that is unique for each call. The server will reply back using the same ID. The output response will be uniquely associated with the call that generated it.
 - **params:** An array of name-value pairs of named parameters and their corresponding values.

Responses

- A response is a JSON-RPC 2.0 payload in a HTTP response with the Content-Type header of "application/json" encoded as UTF-8.
- The response payload contains the result, which will be a single dictionary object.
- Response objects follow the JSON-RPC 2.0 specification and include the following fields:
 - **jsonrpc**: A string specifying the version of JSON-RPC protocol, which is exactly 2.0.
 - **ID**: This will be provided in every response and is the same as the ID sent in the request object.
 - **result**: a result attribute is a boolean value of `true` or `false` indicating success or failure of the API call. If `Success` is `true`, then `result` includes the response to the method request. If `Success` is `false`, then `result` includes an error message and an error code.

API Endpoint

This document describes the /v1 version of the Campaign Management API for News Publishers.

<https://iadapi.apple.com/publisher/campaigns/v1>

Versioning of the API

Versioning is managed through the URL. When new features are added to the API, the URL will remain the same as long as features are backward compatible. If new features are added that are not backward compatible, a new URL will be introduced that supports those features in addition to the unchanged API features.

Limitations

There is a limit of 10,000 API calls per day (Midnight to Midnight, UTC), total for all Advertising Platforms APIs.

Authentication

InitSession

The `InitSession` method authenticates your account, establishes a secure connection, and provides the session ID required to make other API calls. The `InitSession` method must be used before every API interaction session to obtain a session ID that will be used with all subsequent calls during the session.

The `InitSession` method requires your access token and returns a `SessionId` string. Use the `SessionId` string to authenticate all other API operations. A `SessionId` expires after one hour of inactivity.

Method Name	Description
<code>InitSession</code>	Use the <code>InitSession</code> procedure to initiate access and get a session ID.

Input

Parameter	Type	Required?	Description
<code>accessToken</code>	String	Yes	<code>accessToken</code> is one of the keys given to a user along with client side certificate to initiate a session.

InitSession Sample Payload

```
{
  "method": "InitSession",
  "id": "<id>",
  "params": {
    "accessToken": "<accessToken>"
  },
  "jsonrpc": "2.0"
}
```

Output

Parameter	Type	Description
<code>SessionId</code>	String	<code>SessionId</code> that needs to be used for all other API operations.

Note: `InitSession` is the only function that does not return a `Success` value.

Getting Started

The API generally follows the functionality and workflow of [Workbench](#). If you are new to the API and have not used Workbench, it would be a good idea to familiarize yourself with the functionality through the Workbench UI. When utilizing the API, you will have better context for what you want to achieve.

A high level walkthrough of the API would start with using your access token and certificate to get a session ID through [InitSession](#). From there, you can [create a campaign](#). Next, [create a line](#). Lines require significant detail so you will need to use [Campaign and Line Helper Methods](#) to fetch parameters and values to use.

Use [inventory methods](#) to manage your inventory. Use [reporting methods](#) to measure the results of your campaign.

Campaign and Line Creation and Management

Methods in this section allow you to create campaigns and lines, and delete campaigns and lines.

Summary of Methods

Method Name	Description
CreateCampaign	Procedure to create a campaign.
CreateLine	Procedure to create a line.
UpdateCampaign	Procedure to update a campaign.
UpdateLine	Procedure to update a line.
DeleteCampaign	Procedure to delete a campaign.
DeleteLine	Procedure to delete a line.

CreateCampaign

Use CreateCampaign to specify campaign details when creating a campaign.

CreateCampaign Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
CampaignType	String	Yes	Valid values are: Direct House
AdvertiserName	String	Yes	This is a free-form name with a 255 character maximum.
ReferenceNumber	String	Optional	Campaign-level Reference ID. Free-form text input with a 255 character max. No validations.
CategoryId	Numeric String	Yes	Use GetAvailableCampaignCategories to retrieve a list of Category IDs and category information.
CampaignName	String	Yes	Name of the campaign. Must be a unique name within the org.
FrequencyCap	String	Optional	Campaign-level frequency cap per day. This ranges from 1-20 or unlimited. <ul style="list-style-type: none">• If no frequency cap is passed in, the default is set to unlimited.• The campaign-level frequency cap overrides the line-level cap for inventory purposes.
Timezone	String	Optional	Default is UTC. Use the GetAvailable- TimeZones method to retrieve a complete list of supported time zones. Note: if you change a campaign time zone value, it can result in newly created lines defaulting to the ReserveInventory parameter set to False.

CreateCampaign Sample Payload

```
{
  "method": "CreateCampaign",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "CampaignData": {
      "CampaignType": "Direct",
      "CampaignName": "DirectCampaign001",
      "CategoryId": "<CategoryId>",
      "ReferenceNumber": "<ReferenceNumber>",
      "FrequencyCap": "1",
      "AdvertiserName": "AdvName34",
      "Timezone": "Australia/ACT"
    }
  },
  "jsonrpc": "2.0"
}
```

CreateCampaign Output Parameters

Parameter	Type	Description
CampaignData: CampaignId	Numeric String	ID of the created campaign.
CampaignData: State	String	State of the campaign. In the initial creation of the campaign, the state will be New.
CampaignData: CampaignName	String	Name of the campaign.
Success	Boolean	true or false depending on whether the call succeeded or not.

CreateLine

A line (also known as a line item) controls the targeting and placement of an ad. An ad is a creative object such as a banner or a video. A line defines when, where, and to whom that ad will be shown.

It is recommended to first execute the [GetTargetingDetails](#) helper method to obtain the specific values needed for some parameters used with CreateLine.

CreateLine Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
LineData	Collection	Yes	LineData holds all parameters needed for line creation.
LineData: CampaignId	Numeric String	Yes	ID of the campaign which contains this line.
LineData: LineName	String	Yes	Name of the line. Must be unique within the campaign.
LineData: Applications	String	Optional	A NameValueList of supported applications. Allowed values: NEWS STOCKS <ul style="list-style-type: none">• Applications is allowed only if the org supports Stocks.• Stocks are only available via backfill.• Ads cannot be targeted to MacOS for either News or Stocks.
LineData: ReferenceNumber	String	Optional	Available to use to identify the line in external systems.

LineData: LineType	String	Yes	<p>Allowed values:</p> <p><u>For Direct Sold Campaign</u> StandardBanner StandardInterstitial StandardNative StandardVideo TakeoverBanner TakeoverInterstitial TakeoverNative TakeoverVideo</p> <p><u>For House Campaign</u> HouseBanner HouseInterstitial HouseNative HouseVideo</p>
LineData: CreativeType	String	Yes (at least 1 per line type)	<p>Allowed values:</p> <p>For Banner line type: HTML_BANNER DOUBLE_BANNER LARGE_BANNER MREC_BANNER IAB 300x250 IAB 728x90</p> <p>For Interstitial line type: INTERSTITIAL_BANNER</p> <p>For Native line type: NATIVE</p> <p>For Video line type: VIDEO</p>

LineData: AdPosition	List of Strings	Yes (at least 1 per line type)	Ad Position values determine exactly where the ad is shown. This depends on the creative type. The allowed values per line type are: <u>Banner</u> INFEED INARTICLE <u>Interstitial</u> BETWEENARTICLES <u>Native</u> INFEED <u>Video</u> VIDEOINFEED, VIDEOINARTICLE
LineData: ImpressionUrls	List of Strings	Optional	URLs for impression counting at the line level. Maximum of two URLs.
LineData: ClickUrls	List of Strings	Optional	URLs for click counting at the line level. Maximum of two URLs.
LineData: LineCountry	String	Yes	Two-character country code of line item. Country may be one of AU, GB, or US. Note: LineCountry cannot be changed after the line has been activated.
LineData: FrequencyCap	String	Optional	Line-level frequency cap per day. This ranges from 1-20 or unlimited. <ul style="list-style-type: none"> • If no frequency cap is passed in, the default is set to unlimited. • The campaign-level frequency cap overrides the line-level cap for inventory purposes.
LineData: LinePriority	Numeric String	Yes	Priority of the line, 1-100

LineData: StartDate	String	Yes	Start date and time of the line in the following format: yyyy-MM-dd HH:mm (if time is not specified, default to 00:00).
LineData: EndDate	String	Yes	End date and time of the line in the following format: yyyy-MM-dd HH:mm (if time is not specified, default to 23:59).
LineData: ImpressionGoal	Numeric String	Standard: Required House: Required Takeover: Optional	Impression goal for the line.
LineData: ReserveInventory	Boolean (true/false)	Standard: Required House: Optional Takeover: Optional	If True, only reserved lines will be eligible to run.
LineData: Override	Boolean (true/false)	Optional	If False (no override), and if there is not enough inventory available, your line will be created and RESERVATION_STATUS will be UNRESERVED. If True (override), even if there is not enough inventory available, your line will be created and RESERVATION_STATUS will be RESERVED.
LineData: TargetingDimensions	Collection	Optional in most cases.	Consists of two parts, a Country and a list of Dimensions, each containing a DimensionName and a NameValueList.

TargetingDimensions: AgeRange	List of Strings	Optional (based on campaign category)	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Default: none is selected. • Some AgeRange values are not allowed depending on the country and Campaign: Category. • The names for the ranges are not in numerical order and not all numbers are used. For example, to target users with ages from 18 to 24, provide the following input. "AgeRange": ["11","16"],
TargetingDimensions: ArticleId	List of Strings	Optional	<p>The Article ID is the article that you want to direct users to on the Apple News app. Articles can have no paywall, a soft paywall that suggests readers take an action, or a hard paywall that requires payment in order to view the content.</p> <p>To obtain an Article ID you will need to preview the article in Apple News Publisher.</p>
TargetingDimensions: Gender	List of Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Default: none is selected.
TargetingDimensions: States	List of Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Applies only to U.S. • Default: none is selected.

TargetingDimensions: DesignatedMarketAreas	List of Numeric Strings	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values. <ul style="list-style-type: none"> • Applies only to U.S. • Default: none is selected.
TargetingDimensions: Device	List of Strings	Optional	If Device is updated, then ads which are not eligible for the line will be disassociated. Allowed values: IPHONE_ONLY IPOD_ONLY IPAD If not specified, the default value depends on the LineData: CreativeType selected. If the CreativeType is IAB_300x250, the default device will be IPHONE_ONLY IPOD_ONLY If the CreativeType is IAB_728x90, the default device will be IPAD. For all other combinations, the default device will be all three: IPHONE_ONLY IPOD_ONLY IPAD
TargetingDimensions: Channels	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve UUID.

TargetingDimensions: Sections	List of Numeric Strings	Optional	If no sections are in input, all sections are targeted for the chosen channel. If sections are provided, they must belong to at least one chosen channel.
TargetingDimensions: Days	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values: SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY Default: all seven days are selected.
TargetingDimensions: Slots	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values: FIRST SECOND THIRD FOURTH FIFTH Default: all five time slots are selected.
TargetingDimensions: Segments	Collection	Optional	There are two types of segments: <ul style="list-style-type: none"> • Custom Audience Segments • Publisher Audience Segments See GetSegments for usage details.

Segments: Include	List of Strings	Optional. Either Include or Exclude is allowed, but not both.	Use the GetSegments helper method to retrieve a list of Segment IDs. Note: there is a 5k segment limit for both INCLUDE and EXCLUDE Segments.
Segments: Exclude	List of Strings	Optional. Either Include or Exclude is allowed, but not both.	Use the GetSegments helper method to retrieve a list of Segment IDs. Note: there is a 5k segment limit for both INCLUDE and EXCLUDE Segments.
TargetingDimensions: Categories	Groups of lists of Name and Value pairs.	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of all potential categories.
TargetingDimensions: KeyValueInclusionsOp	String	Optional	Options are (AND, OR). Default is AND.
TargetingDimensions: KeyValueInclusions	List of Objects	Optional	List of KeyWord and Values pairs.
KeyValueInclusions: KeyWord	String (no spaces)	Optional	The KeyWord must be a string without spaces. The keyword-value pairs should already be associated to your content. For example if your article is tagged with "author": "appleseed", you can add it here, setting the KeyWord to "author" and the Values to ["appleseed",] so that only articles with the tag "author": "appleseed" are shown this ad.
KeyValueInclusions: Values	List of Strings	Optional	List of values represented by the KeyWord.
TargetingDimensions: KeyValueExclusions	List of Objects	Optional	List of KeyWord and Values pairs.

KeyValueExclusions: KeyWord	String	Optional	Same as KeyValueInclusions, except that this insures that we exclude articles with the tag "author": "appleseed".
KeyValueExclusions: Values	List of Strings	Optional	See KeyWord description above.

CreateLine Sample Payload

```
{
  "method": "CreateLine",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "LineData": {
      "LineName": "<LineName>",
      "Applications": ["NEWS", "STOCKS"],
      "ReferenceNumber": "<ReferenceNumber>",
      "LineCountry": "US",
      "FrequencyCap": "17",
      "LineType": "StandardBanner",
      "CreativeType": [
        "DOUBLE_BANNER",
        "LARGE_BANNER",
        "HTML_BANNER",
        "MREC_BANNER",
        "IAB_728x90",
        "IAB_300x250"
      ],
      "AdPosition": ["INFEED", "INARTICLE"],
      "ImpressionUrls": ["www.google.com", "www.yahoo.com"],
      "ClickUrls": ["www.apple.com", "www.youtube.com"],
      "CampaignId": "<CampaignId>",
      "TargetingDimensions": {
        "AgeRange": ["11", "14", "-100"],
        "Gender": ["Male", "Female", "UNKNOWN"],
        "States": ["us|ak", "us|al"],
        "DesignatedMarketAreas": ["743"],
        "Device": ["IPAD", "IPHONE_ONLY", "IPOD_ONLY"],
        "Days":
["MONDAY", "TUESDAY", "WEDNESDAY", "THURSDAY", "FRIDAY", "SATURDAY", "SUNDAY"],
        "Slots": ["FIRST", "SECOND"],
        "Channels": ["<channel>"],
        "Sections": ["2364", "2139"],
        "KeyValueInclusionsOp": "AND",
        "KeyValueInclusions": [
          {
            "Keyword": "book",
            "Values": ["philosophy", "medicine"]
          },
          {
            "Keyword": "nook",
            "Values": ["ephilosophy", "emedicine"]
          }
        ],
        "KeyValueExclusions": [
          {
            "Keyword": "book",
            "Values": ["fiction"]
          }
        ],
        "ArticleID": ["AX8ArcghGMvi771DzX6RBGw"],

```

```

    "Segments":{
      "Include":[
        "krw",
        "c94"
      ],
      "Exclude":[
        "ktu",
        "bf64"
      ]
    }
  },
  "LinePriority": "70",
  "StartDate": "2019-11-01 11:25",
  "EndDate": "2019-02-28 12:48",
  "ImpressionGoal": "10",
  "ReserveInventory": true,
  "Override": true
}
},
"jsonrpc": "2.0"
}

```

CreateLine Output Parameters

Parameter	Type	Description
LineData	Collection or Array	Container of line data.
LineData: LineName	String	Name of the line.
LineData: LineStatus	String	Status of the line created. In the initial creation of the line, the status will be New.
LineData: InventoryStatus	String	This identifies whether or not the line was able to successfully reserve. Response can be RESERVED or UNRESERVED, or in the case of House lines, N/A.
LineData: LineId	Numeric	ID of the line created.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

UpdateCampaign

Use UpdateCampaign to change previously specified campaign parameters.

UpdateCampaign Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
CampaignId	String	Yes	ID of the campaign to be updated.
CampaignData: CampaignName	String	Yes (at least one CampaignName or ReferenceNumber is required.)	Name of the campaign. Supply this parameter to add or change this value.
CampaignData: ReferenceNumber	String	Yes (at least one CampaignName or ReferenceNumber is required.)	Optional external reference. While the parameter is called "number", it may be any string. Supply this parameter to add or change this value.
CampaignData: AdvertiserName	String	Optional	The advertiser name allows an agency to keep track of multiple campaigns for a single client. Supply this parameter to add or change this value.
CampaignData: FrequencyCap	String	Optional	Campaign-level frequency cap per day. This ranges from 1-20 or unlimited. <ul style="list-style-type: none">• If no frequency cap is passed in, the default is set to unlimited.• The campaign-level frequency cap overrides the line-level cap for inventory purposes.
CampaignData: Timezone	String	Optional	Use the GetAvailable- TimeZones method to retrieve a complete list of supported time zones. Note: if you change a campaign time zone value, it can result in newly created lines defaulting to the ReserveInventory parameter set to False.

UpdateCampaign Sample Payload

```
{
  "method": "UpdateCampaign",
  "id": "<id>",
  "params": {
    "CampaignId": "<CampaignId>",
    "SessionId": "<SessionId>",
    "CampaignData": {
      "CampaignName": "<CampaignName>",
      "ReferenceNumber": "<ReferenceNumber>",
      "AdvertiserName": "<AdvertiserName>",
      "FrequencyCap": "18",
      "Timezone": "Australia/ACT"
    }
  },
  "jsonrpc": "2.0"
}
```

UpdateCampaign Output Parameters

Parameter	Type	Description
CampaignData: State	String	State of the campaign. New: Just created. Pending: Ads are pending. Running = running. Paused: Ads are paused. Actualizing: Campaign is being actualized. Completed: Budget is completed or end date is past, which ever comes first. Ready: Creatives approved but start date is in future.
CampaignData: CampaignName	String	Name of the campaign.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

UpdateLine

The only parameters required to use UpdateLine are your SessionId, the LineId, and the parameter(s) you are changing. When you update an existing line, you do not need to specify all the parameters that you specified in creating the line. Note some exceptions within each parameter description.

Differences Between CreateLine and UpdateLine

- In the standard CreateLine workflow, when an entry is omitted the platform applies all allowed values as the default. For example, if Days is omitted, the platform assumes all days of the week.
- When using UpdateLine, if an optional parameter is not provided, the platform assumes there is no change from the original values of the line.

UpdateLine Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	Session ID obtained from InitSession call.
LineId	Numeric String	Yes	ID of the line created by CreateLine.
LineData	Collection	Yes	Collection containing all other line parameters.
LineData: LineName	String	Yes	Name of the line. Must be unique within the campaign.
LineData: Applications	String	Optional	A NameValueList of supported applications. Allowed values: NEWS STOCKS <ul style="list-style-type: none">• Applications is allowed only if the org supports Stocks.• Stocks are only available via backfill.• Ads cannot be targeted to MacOS for either News or Stocks.
LineData: ReferenceNumber	String	Optional	Available to use to identify the line in external systems.

LineData: LineType	String	Yes	<ul style="list-style-type: none"> • If LineType is updated, all associated ads are disassociated from the line. • LineType, CreativeType, and AdPosition act as linked triplets. If any of these parameters are updated, the others must also be provided as mandatory fields. • Allowed values: <ul style="list-style-type: none"> <u>For Direct Sold Campaign</u> StandardBanner StandardInterstitial StandardNative StandardVideo TakeoverBanner TakeoverInterstitial TakeoverNative TakeoverVideo <u>For House Campaign</u> HouseBanner HouseInterstitial HouseNative HouseVideo
--------------------	--------	-----	--

LineData: CreativeType	String	Yes (at least 1 per line type)	<ul style="list-style-type: none"> • If CreativeType is updated, all associated ads are disassociated from the line. • LineType, CreativeType, and AdPosition act as linked triplets. If any of these parameters are updated, the others must also be provided as mandatory fields. • Allowed values: For Banner line type: HTML_BANNER DOUBLE_BANNER LARGE_BANNER MREC_BANNER IAB 300x250 IAB 728x90 For Interstitial line type: INTERSTITIAL_BANNER For Native line type: NATIVE For Video line type: VIDEO
LineData: ImpressionUrls	List of Strings	Optional	URLs for impression counting at the line level. Maximum of two URLs.
LineData: ClickUrls	List of Strings	Optional	URLs for click counting at the line level. Maximum of two URLs.

LineData: AdPosition	List of Strings	Yes (at least 1 per line type)	<ul style="list-style-type: none"> • Ad Position values determine exactly where the ad is shown. This depends on the creative type. • LineType, CreativeType, and AdPosition act as linked triplets. If any of these parameters are updated, the others must also be provided as mandatory fields. • The allowed values per line type are: <ul style="list-style-type: none"> <u>Banner</u> INFEED INARTICLE <u>Interstitial</u> BETWEENARTICLES <u>Native</u> INFEED <u>Video</u> VIDEOINFEED, VIDEOINARTICLE
LineData: LineCountry	String	Yes	<p>Two-character country code of line item. Country may be one of AU, GB, or US.</p> <ul style="list-style-type: none"> • LineCountry cannot be changed after the line has been activated. • If State or DesignatedMarketAreas is updated, LineCountry becomes a mandatory field. • If LineCountry is updated, all associated ads are disassociated from the line.

LineData: FrequencyCap	String	Optional	<p>Line-level frequency cap per day. This ranges from 1-20 or unlimited.</p> <ul style="list-style-type: none"> • If no frequency cap is passed in, the default is set to unlimited. • The campaign-level frequency cap overrides the line-level cap for inventory purposes.
LineData: LinePriority	Numeric String	Yes	Priority of the line, 1-100
LineData: StartDate	String	Yes	Start date and time of the line in the following format: yyyy-MM-dd HH:mm (if time is not specified, default to 00:00).
LineData: EndDate	String	Yes	End date and time of the line in the following format: yyyy-MM-dd HH:mm (if time is not specified, default to 23:59).
LineData: ImpressionGoal	Numeric String	Standard: Required House: Required Takeover: Optional	Impression goal for the line.
LineData: ReserveInventory	Boolean (true/ false)	Standard: Required House: Optional Takeover: Optional	If True, only reserved lines will be eligible to run.

LineData: Override	Boolean (true/false)	Optional	<p>If False (no override), and if there is not enough inventory available, your line will be created and RESERVATION_STATUS will be UNRESERVED.</p> <p>If True (override), even if there is not enough inventory available, your line will be created and RESERVATION_STATUS will be RESERVED.</p>
LineData: TargetingDimensions	Collection	Optional in most cases.	Consists of two parts, a Country and a list of Dimensions, each containing a DimensionName and a NameValueList.
TargetingDimensions: AgeRange	List of Strings	Optional (based on campaign category)	<p>Use the GetTargetingDetails helper method to retrieve a NameValueList of allowed values.</p> <ul style="list-style-type: none"> • Default: none is selected. • Some AgeRange values are not allowed depending on the country and Campaign: Category. • The names for the ranges are not in numerical order and not all numbers are used. For example, to target users with ages from 18 to 24, provide the following input: "AgeRange": ["11","16"],

TargetingDimensions: ArticleId	List of Strings	Optional	<p>The Article ID is the article that you want to direct users to on the Apple News app. Articles can have no paywall, a soft paywall that suggests readers take an action, or a hard paywall that requires payment in order to view the content.</p> <p>To obtain an Article ID you will need to preview the article in Apple News Publisher.</p>
TargetingDimensions: Gender	List of Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Default: none is selected.
TargetingDimensions: States	List of Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Applies only to U.S. • Default: none is selected. • If States is updated, LineCountry becomes a mandatory field.
TargetingDimensions: DesignatedMarketAreas	List of Numeric Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Applies only to U.S. • Default: none is selected. • If DesignatedMarketAreas is updated, LineCountry becomes a mandatory field.

TargetingDimensions: Device	List of Strings	Optional	<p>If Device is updated, then ads which are not eligible for the line will be disassociated.</p> <p>Allowed values:</p> <p>IPHONE_ONLY IPOD_ONLY IPAD</p> <p>If not specified, the default value depends on the LineData: CreativeType selected.</p> <p>If the CreativeType is IAB_300x250, the default device will be</p> <p>IPHONE_ONLY IPOD_ONLY</p> <p>If the CreativeType is IAB_728x90, the default device will be IPAD.</p> <p>For all other combinations, the default device will be all three:</p> <p>IPHONE_ONLY IPOD_ONLY IPAD</p>
TargetingDimensions: Channels	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve UUID.
TargetingDimensions: Sections	List of Numeric Strings	Optional	<ul style="list-style-type: none"> • If no sections are in input, all sections are targeted for the channel. • If sections are provided, they must belong to at least one channel.

TargetingDimensions: Days	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values: SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY Default: all seven days are selected.
TargetingDimensions: Slots	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values: FIRST SECOND THIRD FOURTH FIFTH Default: all five time slots are selected.
TargetingDimensions: Segments	Collection	Optional	There are two types of segments: <ul style="list-style-type: none"> • Custom Audience Segments • Publisher Audience Segments See GetSegments for usage details.
Segments: Include	List of Strings	Optional. Either Include or Exclude is allowed, but not both.	Use the GetSegments helper method to retrieve a list of Segment IDs. Note: there is a 5k segment limit for both INCLUDE and EXCLUDE Segments.

Segments: Exclude	List of Strings	Optional. Either Include or Exclude is allowed, but not both.	Use the GetSegments helper method to retrieve a list of Segment IDs. Note: there is a 5k segment limit for both INCLUDE and EXCLUDE Segments.
TargetingDimensions: Categories	Groups of lists of Name and Value pairs.	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueList of all potential categories.

UpdateLine Sample Payload

```
{
  "method": "UpdateLine",
  "id": "<id>",
  "params": {
    "sessionId": "<sessionId>",
    "lineId": "<lineId>",
    "lineData": {
      "lineName": "<lineName>",
      "applications": ["NEWS", "STOCKS"],
      "referenceNumber": "<referenceNumber>",
      "lineCountry": "US",
      "frequencyCap": "17",
      "lineType": "StandardBanner",
      "creativeType": [
        "MREC_BANNER"
      ],
      "adPosition": [
        "INFEED"
      ],
      "impressionUrls": [
        "www.google.com",
        "www.yahoo.com"
      ],
      "clickUrls": [
        "www.apple.com",
        "www.youtube.com"
      ],
      "targetingDimensions": {
        "ageRange": [
          "11",
          "14",
          "-100"
        ],
        "gender": [
          "Male",
          "Female",
          "UNKNOWN"
        ],
        "states": [
          "us|ak",
          "us|al"
        ],
        "designatedMarketAreas": [
          "743"
        ],
        "device": [

```



```

    "IPAD"
  ],
  "Days":[
    "FRIDAY",
    "SATURDAY",
    "SUNDAY"
  ],
  "Slots":[
    "FIRST",
    "SECOND"
  ],
  "Channels":[
    "d871c87e-3412-4a2e-9bcf-67fca49176c7"
  ],
  "Sections":[
    "127249"
  ],
  "KeyValueInclusionsOp":"AND",
  "KeyValueInclusions":[
    {
      "KeyWord":"book",
      "Values":[
        "philosophy",
        "medicine"
      ]
    },
    {
      "KeyWord":"nook",
      "Values":[
        "epilosophy",
        "emedicine"
      ]
    }
  ],
  "KeyValueExclusions":[
    {
      "KeyWord":"book",
      "Values":[
        "fiction"
      ]
    }
  ],
  "ArticleID":[
    "AX8ArcghGMvi771DzX6RBGw"
  ],
  "Segments":{
    "Include":[
      "krw",
      "c94"
    ],
    "Exclude":[
      "ktu",
      "bf64"
    ]
  }
},
"LinePriority":"70",
"StartDate":"2019-11-01 11:25",
"EndDate":"2019-02-28 12:48",
"ImpressionGoal":"10",
"ReserveInventory": true,
"Override": true
}
},
"jsonrpc":"2.0"
}

```

UpdateLine Output Parameters

Parameter	Type	Description
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

DeleteCampaign

Use DeleteCampaign to remove an entire campaign.

DeleteCampaign Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
CampaignId	String	Yes	ID of the campaign to be deleted.

DeleteCampaign Sample Payload

```
{
  "method": "DeleteCampaign",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "CampaignId": "<CampaignId>"
  },
  "jsonrpc": "2.0"
}
```

DeleteCampaign Output Parameters

Parameter	Type	Description
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

DeleteLine

Use DeleteLine to remove a specific line from a campaign.

DeleteLine Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
LineId	String	Yes	ID of the line item to delete.

DeleteLine Sample Payload

```
{
  "method": "DeleteLine",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "LineId": "<LineId>"
  },
  "jsonrpc": "2.0"
}
```

DeleteLine Output Parameters

Parameter	Type	Available	Description
Success	Boolean (true/false)	/v3+	true or false depending on whether the call succeeded or not.

Campaign and Line Helper Methods

Summary of Methods

Method Name	Description
GetAvailableCampaignCategories	Procedure to get a complete list of available Category IDs and category information.
GetTargetingDetails	Procedure to get a detailed list of all line targeting parameters.
GetSegments	Procedure to get a list of audience segments, both custom and category interest.
GetAvailableTimeZones	Procedure to get a list of valid time zones.
GetLineInfo	Procedure to get information available about all lines in a campaign.
GetAllChannels	Procedure to get information available about all channels that may be used in a campaign.

GetAvailableCampaignCategories

Use `GetAvailableCampaignCategories` to retrieve an exhaustive list of category and subcategory names that can be used for campaign targeting. For example:

```
"Category":[
  [
    {
      "SubCategoryName":"Autos",
      "CategoryId":"10001390",
      "CategoryName":"Autos"
    }
  ],
  [
    {
      "SubCategoryName":"Business to Business (B2B)",
      "CategoryId":"10001391",
      "CategoryName":"Business to Business (B2B)"
    }
  ],
  [
    {
      "SubCategoryName":"Beauty & Cosmetics",
      "CategoryId":"10001397",
      "CategoryName":"CPG"
    }
  ],
]
```

Apply targeting dimensions using [CreateLine](#) and [UpdateLine](#). Note, when using targeting, ads in categories are served within specific channel feeds. If no categories are in input, then ads serve in all categories.

The `GetAvailableCampaignCategories` method requires only your `SessionId` as input.

GetAvailableCampaignCategories Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.

GetAvailableCampaignCategories Payload

```
{
  "method": "GetAvailableCampaignCategories",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>"
  },
  "jsonrpc": "2.0"
}
```

GetAvailableCampaignCategories Output Parameters

Parameter	Type	Description
Category	Collection	A collection of 3-tuples, each containing CategoryId, CategoryName, and SubCategoryName.
Category: CategoryId	Numeric String	Id of the category.
Category: CategoryName	String	Name of the category.
Category: SubCategoryName	String	Name of the subcategory.
Success	Boolean	true or false depending on whether the call succeeded or not.

GetTargetingDetails

The `GetTargetingDetails` method retrieves the targeting parameters that are available to a specific campaign in a specific country. A typical workflow would be creating a campaign and then using the `GetTargetingDetails` method to retrieve all possible targeting parameters for use in creating a line.

Targeting parameters are structured as dimensions which consist of a `DimensionName` and a `NameValueList`. When specifying line targeting, use the `DimensionName` and the name part of the name-value pair. For example, `DimensionName: Slots` is `"THIRD": "3PM - 7PM"` where the value part of the name-value pair displays the meaning of the dimension.

Note: Segments are not returned by `GetTargetingDetails`. Use [GetSegments](#) to retrieve Segments details.

GetTargetingDetails Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from <code>InitSession</code> call.
CountryCode	String	Yes	Two-character code of country, AU, GB, or US.
CampaignId	Numeric String	Yes	Id of the campaign.

GetTargetingDetails Sample Payload

```
{
  "method": "GetTargetingDetails",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "CountryCode": "US",
    "CampaignId": "<CampaignId>"
  },
  "jsonrpc": "2.0"
}
```

GetTargetingDetails Output Parameters

Parameter	Type	Description
TargetingDimensions	Collection	Consists of two parts, a Country and a list of Dimensions, each containing a DimensionName and a NameValueList.
TargetingDimensions: Country	String	Two-character country code, AU, GB or US.
TargetingDimensions: Dimensions	Collection	Each element of Dimensions contains a DimensionName and a NameValueList.
Dimensions: DimensionName	String	Names the contents of the dimension in question.
Dimensions: NameValueList	List of Name and Value pairs	Associates code numbers and code names with value strings to define the contents of the dimension.
TargetingDimensions	Collection	Consists of two parts, a Country and a list of Dimensions, each containing a DimensionName and a NameValueList.
DimensionName: Device	String	A NameValueList of device types available for use with LineData: CreativeType.
DimensionName: AgeRange	String	A NameValueList of Age ranges.
DimensionName: Gender	String	A NameValueList of Gender choices.
DimensionName: States	String	A NameValueList of U.S. States
DimensionName: DesignatedMarketArea	String	A NameValueList of supported U.S. market areas.
DimensionName: Slots	String	A NameValueList of specific hour slots available.
DimensionName: Days	String	A NameValueList of days available.
DimensionName: Applications	String	A NameValueList of supported applications.

DimensionName: Channels	Collection	Array of the channels IDs owned by the Publisher. Each name-and-value pair consists of a name part which is the channel UUID and a value part consisting of a Name parameter and a Sections parameter, where each of the Sections has name-and-value pairs similar to the NameValueList of the other Dimensions.
Channels: Channel UUID	String	Channel UUID, identifying the corresponding Name and Sections. Note: there is no parameter name associated with this value.
Channels: Name	String	Channel Name per channel UUID. There is only one channel, feed-FCSubscribedTopStories. For this initial channel, there are no sections.
Channels: Sections	List	List of name-value pairs per channel UUID.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

GetSegments

Use `GetSegments` to determine your available audience segment types.

There are two types of audience segments used in targeting and retargeting ads on Apple Advertising Platforms on Apple News: custom audience segments and publisher audience segments.

Custom Audience Segments, First Party Data (Phone, Email, IDFA)

First-party data you own and that has been uploaded through **My Audiences** in [Workbench](#). Includes groups of users who have interacted directly with your products and services. For example, users who have registered on your website. These can be lists of IDFAs, email addresses, or phone numbers.

Publisher Audience Segments

Apple generates publisher audience segment data based on users who read or follow your content on Apple News. Segment availability is determined by your org, not by campaign or line.

See [GetSegments Output Parameters](#) for Segment Types descriptions.

Apply targeting dimensions using [CreateLine](#) and [UpdateLine](#).

Note: Publisher Audience Segments and Custom Audience Segments targeting cannot be combined.

GetSegments Input Parameters

The `GetSegments` method requires only your `SessionId` as input.

Parameter	Type	Required?	Description
<code>SessionId</code>	String	Yes	<code>SessionId</code> obtained from <code>InitSession</code> call.

GetSegments Sample Payload

```
{
  "id": "<id>",
  "jsonrpc": "2.0",
  "method": "GetSegments",
  "params": {
    "SessionId": "<SessionId>"
  }
}
```

GetSegments Output Parameters

Parameter	Type	Description
Segments	Collection	A collection of ID-value pairs, containing the following IDs.
SegmentId	String	ID of the segment.
SegmentName	String	Name of the segment.
SegmentType	String	Type of segment. Channel: Include or exclude users who have shown specific interest in your content on Apple News through reading your content or following your channels. Publication Subscription: Selected publishers can include or exclude users who have subscribed to their content via Apple News. Notifications: Enables you to target users who have opted-in to receive notifications. You have the option to include and/or exclude Custom Audience Segments and Publisher Audience Segments.
SegmentSize	String	Estimated segment size or N/A.
DeveloperName	String	Identifies the owner of an app. This parameter is not applicable to News Publisher segment types.
Success	Boolean	true or false depending on whether the call succeeded or not.

GetAvailableTimeZones

Use GetAvailableTimeZones to retrieve a list of time zone names that can be used to specify campaign scheduling.

The GetAvailableTimeZones method requires only your SessionId as input.

GetAvailableTimeZones Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.

GetAvailableTimeZones Sample Payload

```
{
  "method": "GetAvailableTimeZones",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>"
  },
  "jsonrpc": "2.0"
}
```

GetAvailableTimeZones Output Parameters

Parameter	Type	Description
SupportedTimeZones	Array List	Array list of all the time zones supported and applicable country.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

GetLineInfo

Procedure to get information available about line types, creative types, and ad positions.

GetLineInfo Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
CampaignId	String	Yes	ID of the campaign. This determines whether the data returned is for House line types or Direct.

GetLineInfo Sample Payload

```
{
  "method": "GetLineInfo",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "CampaignId": "<CampaignId>"
  },
  "jsonrpc": "2.0"
}
```

GetLineInfo Output Parameters

Parameter	Type	Description
LineTypes	Array	List of available line types.
CreativeTypes	List of Maps	Maps of LineTypes to an array of allowed creative types.
AdPositions	List of Maps	Maps of LineTypes to an array of allowed position types.
Success	Boolean	true or false depending on whether the call succeeded or not.

GetAllChannels

Use GetAllChannels to retrieve a list of channels that can be used in a campaign. Listed by channel UUID, along with channel Name and channel Sections.

The GetAllChannels method requires only your SessionId as input.

GetAllChannels Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.

GetAllChannels Sample Payload

```
{
  "method": "GetAllChannels",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>"
  },
  "jsonrpc": "2.0"
}
```

GetAllChannels Output Parameters

Parameter	Type	Description
Channels	Collection	Array of the channel IDs owned, listed by channel UUID, with the channel Name and channel Sections.
Channels: <channelUUID>	Collection	UUIDs of channels, as defined.
Sections	Array of Strings	Channel Section IDs per channel UUID.
Name	String	Channel Name per channel UUID.
Success	Boolean	true or false depending on whether the call succeeded or not.

Inventory Methods

Inventory methods allow you to check and reserve ad placement inventory. The platform provides two ways to check inventory. You can create a line and then use the [CheckLineInventory](#) method to retrieve the inventory detail. In this case you will only need to pass the `LineId` of your existing line.

You can use the [CheckInventory](#) method which gives you the flexibility of checking total and/or available impressions for a specific targeting criteria that you select without having to create a line. This method takes in the same audience and contextual targeting criteria that is used in the [CreateLine](#) method.

You will receive three important sets of data:

- **Total Impressions:** indicates the total estimated ad placement supply. For example, you may have a total potential supply of 100,000 impressions to serve an interstitial ad for the next two weeks for Males, age 18-24, on a specific channel. This total makes no allowances for ads you have already booked to this audience for this time period.
- **Available Impressions:** If you already have campaigns booked, the total available inventory may be less than the total supply assuming that the lines you have previously booked overlap with the inventory you have requested. So if your previously booked lines take up 20,000 impressions of that pool, the Available Impressions might be returned as 80,000.
- **Competing Lines:** additional information about other lines that conflict with your proposed booking, broken out by day.

If you already have one or more campaigns which are booked in your inventory, the competing lines data will list all of those lines and detail how many impressions from these competing lines are intersecting with your proposed inventory. You can use this information to adjust your existing or proposed bookings depending on their relative priority.

Summary of Methods

The methods in this section allow you to check, reserve, and unreserve available inventory.

Method Name	Description
<code>CheckLineInventory</code>	Procedure to get an estimate of the inventory available to an existing line.
<code>CheckInventory</code>	Procedure to get an estimate of available inventory.
<code>ReserveInventory</code>	Procedure to declare intent to use specific estimated inventory and reserve it.
<code>UnreserveInventory</code>	Procedure to free up previously reserved inventory.

CheckLineInventory

The CheckLineInventory method uses the LineId to identify the previously created line, complete with its start and end dates and targeting dimensions. The returned values are estimates of future inventory available to that line.

CheckLineInventory Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
LineId	Numeric String	Yes	ID for the line that is being checked for inventory.

CheckLineInventory Sample Payload

```
{
  "method": "CheckLineInventory",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "LineId": "<LineId>"
  },
  "jsonrpc": "2.0"
}
```

CheckLineInventory Output Parameters

Parameter	Type	Description
LineId	Numeric String	The line ID of the inquiry.
Inventory	Collection	The complete returned data structure.
DailyInfo	Collection	The data structure returned for each day in the inquiry.
DailyInfo: InventoryDate	Date String	The date that identifies the data returned for each day in the response data.
DailyInfo: TotalImpressions	Number	Total estimated daily supply of ad placements that meet your targeting criteria.
DailyInfo: AvailableImpressions	Number	Estimated open impressions currently available for booking on the specific day. Not included if <code>ImpressionGoal = 0</code> .
DailyInfo: Competing	Array	Container for data about lines which compete with this proposed inventory booking. Not included if <code>ImpressionGoal = 0</code> .
Competing: LineId	Numeric String	Each line is represented by a unique line ID. For privacy and security, this is the only identifying information provided about competing advertisers. Not included if <code>ImpressionGoal = 0</code> .
Competing: MyOrg	Boolean (true/false)	true or false depending on whether the competing line belongs to your organization.
Competing: Impressions	Number	How many impressions are specifically competing with your requested inventory. This is not the same as that competing line's <code>ImpressionGoal</code> , which may include targets outside of your parameters. Not included if <code>ImpressionGoal = 0</code> .
TotalImpressions	Number	The total impressions for the full range of dates in the inquiry. This is the sum of all the <code>DailyInfo: TotalImpressions</code> values.

InventoryResponse	String	<p>Responses include:</p> <p>INVENTORY_AVAILABLE: There is enough inventory available for your impression goal.</p> <p>INVENTORY_NOT_AVAILABLE: There is not enough inventory for your impression goal or the forecasting module has determined that reserving this line is very risky because it cannot be allocated with complete confidence. For example you have a ten day campaign for 1,000 impressions with the first six days completely sold out. The line may be able to be fit in more impressions over the last four days but the platform forecasts not enough inventory. This is because running those 1,000 impressions over the four days will likely under-deliver.</p> <p>FORECAST_NOT_CONFIDENT: You will still see numbers. However, the underlying data available to the system is not complete so accuracy is not assured. The data should only be used directionally.</p> <p>This may occur due to the following scenarios:</p> <ul style="list-style-type: none"> • There are too few impressions per day or too few days where the publication was live to provide a forecast • The data is too spiky. <p>AUDIENCE_SIZE_LOW: Privacy rules on Advertising Platforms cannot target groups of users where the unique user count is less than 6,000. If you receive this response, your requested count may be less than what is available. In this case, the line will not be reserved. You should loosen your lines targeting parameters to widen the number of users who can be served your ad.</p>
AvailableImpressions	Number	<p>The total of available impressions for the full range of dates in the inquiry. This is the sum of all the DailyInfo: AvailableImpressions values.</p>

Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.
---------	-------------------------	---

CheckInventory

CheckInventory returns how much total inventory is available as well as how much of that total is available for booking. CheckInventory also gives you a set of lines which are currently competing with your targeting criteria. This detail is broken down daily to give you a detailed perspective.

CheckInventory accepts many of the same contextual and audience targeting input variables as [CreateLine](#).

Tip: If you are only interested in general supply, then set `ImpressionGoal` to 0. The output will be simplified with only Total Impressions without any information about total available inventory or competing lines.

CheckInventory Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionID obtained from <code>InitSession</code> call.
LineType	String	Yes	Allowed values: <u>For Direct Sold Campaign</u> StandardBanner StandardInterstitial StandardNative StandardVideo TakeoverBanner TakeoverInterstitial TakeoverNative TakeoverVideo <u>For House Campaign</u> HouseBanner HouseInterstitial HouseNative HouseVideo

Applications	String	Optional	<p>A NameValueList of supported applications.</p> <p>Allowed values:</p> <p>NEWS</p> <p>STOCKS</p> <ul style="list-style-type: none"> • Applications is allowed only if the org supports Stocks. • Stocks are only available via backfill. • Ads cannot be targeted to MacOS for either News or Stocks.
ImpressionGoal	Numeric String	<p>Standard: Required</p> <p>House: Required</p> <p>Takeover: Optional</p>	Impression goal for the line.
CreativeType	String	Yes (at least 1 per line type)	<p>Allowed values:</p> <p>For Banner line type:</p> <p>HTML_BANNER</p> <p>DOUBLE_BANNER</p> <p>LARGE_BANNER</p> <p>MREC_BANNER IAB 300x250</p> <p>IAB 728x90</p> <p>For Interstitial line type:</p> <p>INTERSTITIAL_BANNER</p> <p>For Native line type:</p> <p>NATIVE</p> <p>For Video line type:</p> <p>VIDEO</p>

AdPosition	List of Strings	Yes (at least 1 per line type)	Ad Position values determine exactly where the ad is shown. This depends on the creative type. The allowed values per line type are: <u>Banner</u> INFEED INARTICLE <u>Interstitial</u> BETWEENARTICLES <u>Native</u> INFEED <u>Video</u> VIDEOINFEED, VIDEOINARTICLE
CountryCode	String	Yes	Valid CountryCode such as US, AU, GB associated with the postal code.
FrequencyCap	String	Optional	Line and Campaign-level frequency cap per day. This ranges from 1-20 or unlimited. <ul style="list-style-type: none">• If no frequency cap is passed in, the default is set to unlimited.• The campaign-level frequency cap overrides the line-level cap for inventory purposes.
CategoryId	Numeric String	Yes	Use the GetAvailableCampaignCategories method to retrieve a list of Category IDs and category information.

Timezone	String	Optional	<p>Default is UTC. Use the GetAvailable-TimeZones method to retrieve a complete list of supported time zones.</p> <p>Note: if you change a campaign time zone value, it can result in newly created lines defaulting to the ReserveInventory parameter set to False.</p>
TargetingDimensions	Collection	Optional in most cases.	<p>Consists of two parts, a Country and a list of Dimensions, each containing a DimensionName and a NameValueList.</p>
TargetingDimensions: AgeRange	List of Strings	Optional (based on campaign category)	<p>Use the GetTargetingDetails helper method to retrieve a NameValueList of allowed values.</p> <ul style="list-style-type: none"> • Default: none is selected. • Some AgeRange values are not allowed depending on the country and Campaign: Category. • The names for the ranges are not in numerical order and not all numbers are used. For example, to target users with ages from 18 to 24, provide the following input: "AgeRange": ["11","16"],

TargetingDimensions: ArticleId	List of Strings	Optional	<p>The Article ID is the article that you want to direct users to on the Apple News app. Articles can have no paywall, a soft paywall that suggests readers take an action, or a hard paywall that requires payment in order to view the content.</p> <p>To obtain an Article ID you will need to preview the article in Apple News Publisher.</p>
TargetingDimensions: Gender	List of Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Default: none is selected.
TargetingDimensions: States	List of Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Applies only to U.S. • Default: none is selected.
TargetingDimensions: DesignatedMarketAreas	List of Numeric Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values.</p> <ul style="list-style-type: none"> • Applies only to U.S. • Default: none is selected.

TargetingDimensions: Device	List of Strings	Optional	<p>If Device is updated, then ads which are not eligible for the line will be disassociated.</p> <p>Allowed values:</p> <p>IPHONE_ONLY IPOD_ONLY IPAD</p> <p>If not specified, the default value depends on the LineData: CreativeType selected.</p> <p>If the CreativeType is IAB_300x250, the default device will be</p> <p>IPHONE_ONLY IPOD_ONLY</p> <p>If the CreativeType is IAB_728x90, the default device will be IPAD.</p> <p>For all other combinations, the default device will be all three:</p> <p>IPHONE_ONLY IPOD_ONLY IPAD</p>
TargetingDimensions: Channels	List of Strings	Optional	<p>Use the GetTargetingDetails helper method to retrieve UUID.</p>
TargetingDimensions: Sections	List of Numeric Strings	Optional	<ul style="list-style-type: none"> • If no sections are in input, all sections are targeted for the channel. • If sections are provided, they must belong to at least one channel.

TargetingDimensions: Days	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values: SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY Default: all seven days are selected.
TargetingDimensions: Slots	List of Strings	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueCollection of allowed values: FIRST SECOND THIRD FOURTH FIFTH Default: all five time slots are selected.
TargetingDimensions: Segments	Collection	Optional	There are two types of segments: <ul style="list-style-type: none"> • Custom Audience Segments • Publisher Audience Segments See GetSegments for usage details.
Segments: Include	List of Strings	Optional Either Include or Exclude is allowed, but not both.	Use the GetSegments helper method to retrieve a list of Segment IDs. Note: there is a 5k segment limit for both INCLUDE and EXCLUDE Segments.

Segments: Exclude	List of Strings	Optional Either Include or Exclude is allowed, but not both.	Use the GetSegments helper method to retrieve a list of Segment IDs. Note: there is a 5k segment limit for both INCLUDE and EXCLUDE Segments.
TargetingDimensions: Categories	Groups of lists of Name and Value pairs.	Optional	Use the GetTargetingDetails helper method to retrieve a NameValueList of all potential categories.

CheckInventory Sample Payload

```
{
  "method": "CheckInventory",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "LineType": "StandardBanner",
    "Applications": ["NEWS", "STOCKS"],
    "ImpressionGoal": "100",
    "CreativeType": [
      "DOUBLE_BANNER"
    ],
    "AdPosition": ["INFEED", "INARTICLE"],
    "CountryCode": "US",
    "FrequencyCap": "17",
    "CategoryId": "<CategoryId>",
    "Timezone": "US/Pacific",
    "TargetingDimensions": {
      "AgeRange": [
        "11",
        "14",
        "-100"
      ],
      "Gender": [
        "Male",
        "Female",
        "UNKNOWN"
      ],
      "States": [
        "us|ak",
        "us|al"
      ],
      "DesignatedMarketAreas": [
        "743"
      ],
      "Device": [
        "IPAD"
      ],
      "Days": [
        "MONDAY",
        "TUESDAY",
        "WEDNESDAY",
        "THURSDAY",
        "FRIDAY",
        "SATURDAY",
        "SUNDAY"
      ],
      "Slots": [
        "FIRST",
        "SECOND"
      ],
      "Channels": [
        "be466b0f-92d7-40ae-bc17-3a22adebdaea",
        "29d6bcb2-b914-4f68-ace6-7ce88fbffb11"
      ],
      "Sections": ["2364", "2139"],
      "KeyValueInclusionsOp": "AND",
      "KeyValueInclusions": [
        {
          "KeyWord": "book",
          "Values": [
            "philosophy",
            "medicine"
          ]
        }
      ]
    }
  }
}
```

```

    },
    {
      "KeyWord": "nook",
      "Values": [
        "ephiplosophy",
        "emedicine"
      ]
    }
  ],
  "Segments": {
    "Include": [
      "krw",
      "c94"
    ],
    "Exclude": [
      "ktu",
      "bf64"
    ]
  },
  "ArticleID": [
    "AX8ArcghGMvi771DzX6RBGw"
  ]
}
},
"StartDate": "2019-03-28 18:58",
"EndDate": "2019-04-27 11:25",
"jsonrpc": "2.0"
}

```

CheckInventory Output Parameters

Parameter	Type	Description
Inventory	Collection	The complete returned data structure.
InventoryStartDate	Date and Time String	The starting date and time of the inventory inquiry.
InventoryEndDate	Date and Time String	The ending date and time of the inventory inquiry.
DailyInfo	Collection	The data structure returned for each day in the inquiry.
DailyInfo: InventoryDate	Date String	The date that identifies the data returned for each day in the response data.
DailyInfo: TotalImpressions	Number	Total estimated daily supply of ad placements that meet your targeting criteria.
DailyInfo: AvailableImpressions	Number	Estimated open impressions currently available for booking on the specific day. Not included if <code>ImpressionGoal = 0</code> .

DailyInfo: Competing	Array	Container for data about lines which compete with this proposed inventory booking. Not included if ImpressionGoal = 0.
Competing: LineId	Numeric String	Each line is represented by a unique line ID. For privacy and security, this is the only identifying information provided about competing advertisers. Not included if ImpressionGoal = 0.
Competing: MyOrg	Boolean (true/false)	true or false depending on whether the competing line belongs to your organization.
Competing: Impressions	Number	How many impressions are specifically competing with your requested inventory. This is not the same as that competing line's ImpressionGoal, which may include targets outside of your parameters. Not included if ImpressionGoal = 0.
TotalImpressions	Number	The total impressions for the full range of dates in the inquiry. This is the sum of all the DailyInfo: TotalImpressions values.

InventoryResponse	String	<p>Responses include:</p> <p>INVENTORY_AVAILABLE: There is enough inventory available for your impression goal.</p> <p>INVENTORY_NOT_AVAILABLE: There is not enough inventory for your impression goal or the forecasting module has determined that reserving this line is very risky because it cannot be allocated with complete confidence. For example you have a ten day campaign for 1,000 impressions with the first six days completely sold out. The line may be able to be fit in more impressions over the last four days but the platform forecasts not enough inventory. This is because running those 1,000 impressions over the four days will likely under-deliver.</p> <p>FORECAST_NOT_CONFIDENT: You will still see numbers. However, the underlying data available to the system is not complete so accuracy is not assured. The data should only be used directionally.</p> <p>This may occur due to the following scenarios:</p> <ul style="list-style-type: none"> • There are too few impressions per day or too few days where the publication was live to provide a forecast • The data is too spiky. <p>AUDIENCE_SIZE_LOW: Privacy rules on Advertising Platforms cannot target groups of users where the unique user count is less than 6,000. If you receive this response, your requested count may be less than what is available. In this case, the line will not be reserved. You should loosen your lines targeting parameters to widen the number of users who can be served your ad.</p>
AvailableImpressions	Number	<p>The total of available impressions for the full range of dates in the inquiry. This is the sum of all the DailyInfo: AvailableImpressions values.</p>
Success	Boolean (true/false)	<p>true or false depending on whether the call succeeded or not.</p>

ReserveInventory

ReserveInventory enables a line to be reserved regardless of whether inventory is available. In this case, you can reserve impressions even if a forecast shows there is not enough inventory to serve all the placements requested by this line. You should do this if you have information to suggest that there will be more inventory available for your scheduled dates. Otherwise, you risk under-delivery for one or more of your lines.

The ReserveInventory parameter defaults to True while the Override parameter defaults to False. When set to False, inventory is not allocated for the line and will therefore not compete with future reservations.

If you are going to use the Apple Advertising Platforms inventory predictions, then you can implement your workflow as shown in the following example:

```
CreateCampaign -> CreateLine(ReserveInventory=FALSE)
```

In this case, the line will be created but not reserved, and will have the status UNRESERVED. Later, you will need to call ReserveLine (Line1).

If you are not concerned with inventory forecasts, you can implement your workflow as shown in the following example:

```
CreateCampaign -> CreateLine("Finance", M, "18-20", Override=TRUE) -  
> ... -> Submit
```

ReserveInventory Input Parameters

Parameter	Data Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
LineId	Numeric String	Yes	ID of line.
Override	Boolean (true/false)	Optional	true or false.

ReserveInventory Sample Payload

```
{
  "method": "ReserveInventory",
  "id": "<id>",
  "params": {
    "sessionId": "<sessionId>",
    "lineId": "<lineId>"
  },
  "jsonrpc": "2.0"
}
```

ReserveInventory Output Parameters

Parameter	Type	Description
LineId	Numeric String	The line ID of the reserved inventory.
LineName	String	The line name of the reserved inventory.
ReservationStatus	String	RESERVED, NOT_RESERVED
ReservationErrorCode	String	OK, NOT_ENOUGH_INVENTORY.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

UnreserveInventory

Procedure to free up previously reserved inventory.

UnreserveInventory Input Parameters

Parameter	Data Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
LineId	Numeric String	Yes	ID of line.

UnreserveInventory Sample Payload

```
{
  "method": "UnreserveInventory",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "LineId": "<LineId>"
  },
  "jsonrpc": "2.0"
}
```

UnreserveInventory Output Parameters

Parameter	Type	Description
LineId	Numeric String	The line ID of the line with inventory being unreserved.
LineName	String	The line name of the line with inventory being unreserved.
ReservationStatus	String	UNRESERVED or LINE_ALREADY_RUNNING. If the line is already UNRESERVED, it stays UNRESERVED.
ReservationErrorCode	String	OK or LINE_ALREADY_RUNNING.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

Reporting Methods

Retrieves reporting data for your campaigns lines, and ads that were created using [Workbench](#).

Summary of Methods

Method Name	Description
GetCampaignSummary	Procedure to get information for campaigns by State, Network, PlacementType, or a combination. If no options are specified, data entries for all campaigns are returned.
GetCampaignDetails	Procedure to get campaign details for one or more campaigns. Output includes details for the campaigns, corresponding lines, and ads.
GetLineDetails	Procedure to get line details for one or more lines. Output includes details for lines and corresponding ads.
GetCampaignMetrics	Procedure to get campaign metrics for one or more campaigns for a specified time period and time zone.
GetLineMetrics	Procedure to get line metrics for one or more lines for specified time period.
GetLinePerformance	Returns line item delivery by day for a specified period and time zone regardless of the campaign. Output contains campaign and line item details.
GetLinePerformance- ByChannel	Returns delivery information by line by channel for a particular date range. It will give you information about all lines that overlap with this date and time zone range, regardless of campaign.

GetCampaignSummary

The GetCampaignSummary method allows you to request information for campaigns by State, Network, PlacementType, or a combination. If no options are specified, data entries for all campaigns are returned.

GetCampaignSummary Input Parameters

Parameter	Data Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
State	String	Optional	The desired state of campaigns to find: running, not_running, or completed.
StartDate	Date and Time String	Optional. If StartDate is provided and EndDate is not, EndDate will be today's date.	Start date and time of the request, in the following format: yyyy-MM-dd HH:mm (if time is not specified, default to 00:00).
EndDate	Date and Time String	Optional. If EndDate is provided, then StartDate is mandatory.	End date and time of the request, in the following format: yyyy-MM-dd HH:mm (if time is not specified, default to 23:59).

GetCampaignSummary Sample Payload

```
{
  "method": "GetCampaignSummary",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "State": "Not_Running",
    "StartDate": "2019-02-29",
    "EndDate": "2019-03-30"
  },
  "jsonrpc": "2.0"
}
```

GetCampaignSummary Output Parameters

Parameter	Type	Description
CampaignSummary	Collection	Wrapper that contains all campaigns returned.
CampaignSummary: CampaignId	Numeric String	Campaign ID of campaign data returned.
CampaignSummary: CampaignName	String	Name of campaign of campaign data returned.
CampaignSummary: PlacementType	String	For Direct Sales, Direct Sold; otherwise House.
CampaignSummary: TimeZone	String	Default is UTC. Use the GetAvailable- TimeZones method to retrieve a complete list of supported time zones. Note: if you change a campaign time zone value, it can result in newly created lines defaulting to the ReserveInventory parameter set to False.
CampaignSummary: CampaignCategoryId	String	Category ID as created. Use the GetAvailableCampaignCategories to retrieve Category IDs and category information.
CampaignSummary: FrequencyCap	String	Campaign-level frequency cap per day. This ranges from 1-20 or unlimited. <ul style="list-style-type: none"> • If no frequency cap is passed in, the default is set to unlimited. • The campaign-level frequency cap overrides the line-level cap for inventory purposes.
CampaignSummary: StartDate	Date and Time String	Start date and time of campaign, formatted as yyyy-mm-dd hh:mm:ss.
CampaignSummary: EndDate	Date and Time String	End date and time of campaign, formatted as yyyy-mm-dd hh:mm:ss.
CampaignSummary: ImpressionsGoal	Numeric String	The target number of times users are exposed to ad, whether or not they tap to ad banner. This is only set for Standard lines, not Takeover lines.

CampaignSummary: CampaignStatus	String	Status of campaign: New, Paused, Running, Not_Running, or Completed.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

GetCampaignSummary Deprecated Fields

CampaignSummary: AdvertiserRefId
 CampaignSummary: ExternalCampaignReference

GetCampaignDetails

Procedure to retrieve campaign details for a period for one or more campaigns. Output includes details and metrics for the period for campaigns, corresponding lines, and ads.

GetCampaignDetails Input Parameters

Parameter	Data Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
CampaignIds	List of Numeric Strings	Yes	List of campaign IDs inquired about.

GetCampaignDetails Sample Payload

```
{
  "method": "GetCampaignDetails",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "CampaignIds": [
      "<CampaignId>"
    ]
  },
  "jsonrpc": "2.0"
}
```

GetCampaignDetails Output Parameters

Parameter	Type	Description
Campaigns	Collection	Wrapper to contain all campaigns returned. Each returned campaign is a 3-tuple containing Campaign, Lines, and Ads.
Campaign: CampaignId	Numeric String	ID of the campaign reported on.
Campaign: CampaignName	String	Name of campaign.
Campaign: PlacementType	String	For Direct Sales: Direct or House.
Campaign: ExternalCampaignReferenceId	String	External reference may be any alphanumeric string.
Campaign: AdvertiserName	String	External reference may be any alphanumeric string.

Campaign:AdvertiserRefId	String	External reference may be any alphanumeric string.
Campaign:StartDate	Date and Time String	Start date and time of campaign, formatted as yyyy-mm-dd hh:mm:ss.
Campaign:EndDate	Date and Time String	End date and time of campaign, formatted as yyyy-mm-dd hh:mm:ss.
Campaign:ImpressionsGoal	Numeric String	The target number of times users are exposed to ad, whether or not they tap to ad banner. This is only set for Standard lines, not Takeover lines.
Campaigns	Collection	Wrapper to contain all campaigns returned. Each returned campaign is a 3-tuple containing Campaign, Lines, and Ads.
Campaign: CampaignStatus	String	Status of campaign: New, Paused, Running, Not_Running, or Completed.
Campaign: TimeZone	String	Default is UTC. Use the GetAvailable- TimeZones method to retrieve a complete list of supported time zones. Note: if you change a campaign time zone value, it can result in newly created lines defaulting to the ReserveInventory parameter set to False.
Campaign: FrequencyCap	Numeric String	Campaign-level frequency cap. This ranges from 1-20 or unlimited. <ul style="list-style-type: none"> • If no frequency cap is passed in, the default is set to unlimited. • The campaign-level frequency cap overrides the line-level cap for inventory purposes.
Campaign: CampaignCategoryId	String	Category ID as created. Use the GetAvailableCampaignCategories method to retrieve Category IDs and category information.

Lines	Collection	Wrapper to contain all lines returned for a campaign.
Lines: LineId	Numeric String	ID of line.
Lines: LineName	String	Name of line.
Lines: ExternalLineReferenceId	String	External reference; may be any alphanumeric string.
Lines: StartDate	Date and Time String	Start date of campaign line, formatted as yyyy-mm-dd hh:mm:ss.
Lines: EndDate	Date and Time String	End date of campaign line, formatted as yyyy-mm-dd hh:mm:ss.
Lines: ImpressionsGoal	Numeric String	The target number of times users are exposed to ad, whether or not they tap to ad banner. This is only set for Standard lines, not Takeover Lines:
Lines: CountryCode	String	Two-character code of country, e.g., US.
Lines: LineStatus	String	Status of campaign line: New, Paused, Running, Not_Running, or Completed.
Ads	Collection	Wrapper to contain all ads returned for a campaign.
Ads: AdId	Numeric String	ID of advertisement.
Ads: AdName	String	Name of advertisement.
Ads: AdType	String	Type of advertisement, e.g., <ul style="list-style-type: none"> • Standard Banner • DoubleBanner • LargeBanner • Native • Interstitial Banner • Medium-Rectangle Banner • Pre-Roll Video • IAB 300x250 • IAB728x90

Ads: DeviceType	String	Type of device, e.g. iPhone.
Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.

GetLineDetails

The `GetLineDetails` procedure retrieves line details for one or more lines. Output includes details and metrics for the specified period for lines and corresponding ads. If no ads are associated with the line, no ad details are returned.

GetLineDetails Input Parameters

Parameter	Type	Required?	Description
SessionId	String	Yes	SessionId obtained from <code>InitSession</code> call.
LineIds	List of Numeric Strings	Yes	List of line item IDs.

GetLineDetails Sample Payload

```
{
  "method": "GetLineDetails",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "LineIds": [
      "<LineId>",
      "<LineId>"
    ]
  },
  "jsonrpc": "2.0"
}
```

GetLineDetails Output Parameters

Parameter	Type	Description
Lines	Collection	Array of lines.
Lines: CampaignId	Numeric String	ID of campaign this line is part of.
Lines: LineId	Numeric String	ID of campaign line item.
Lines: LineName	String	Name of campaign line item.

Lines: LineType	String	Line type of campaign line item. Possible values are: <ul style="list-style-type: none"> • StandardBanner • StandardInterstitial • StandardNative • StandardVideo • TakeoverBanner • TakeoverInterstitial • TakeoverNative • TakeoverVideo
Lines: ExternalLineReferenceId	String	Line-level external reference as created; any alphanumeric string.
Lines: ReferenceNumber	String	Campaign-level external reference ID as created. Free-form text of up to 255 characters.
Lines: StartDate	Date and Time String	Start date and time of campaign line as created, formatted as mm/dd/yyyy hh:mm.
Lines: EndDate	Date and Time String	End date and time of campaign line as created, formatted as mm/dd/yyyy hh:mm.
Lines: ImpressionsGoal	Numeric String	The target number of times users are exposed to ad, whether or not they tap to ad banner. This is only set for Standard lines, not Takeover lines.
Lines: CountryCode	String	Two-character code of country, e.g., US.
Lines: LineStatus	String	Status of campaign line: New, Paused, Running, Not_Running, or Completed.
Lines: LinePriority	Numeric String (1-100)	Priority of the line, 1-100

Lines: Override	Boolean (true/false)	true or false. If False (no override), and if there is not enough inventory available, your line will be created and RESERVATION_STATUS will be UNRESERVED. If True (override), even if there is not enough inventory available, your line will be created and RESERVATION_STATUS will be RESERVED.
Lines: InventoryStatus	String	Response can be RESERVED or UNRESERVED, or in the case of House lines, N/A.
Lines: ImpressionUrls	List of Strings	URLs for impression counting at the line level.
Lines: ClickUrls	List of Strings	URLs for click counting at the line level.
Lines: CreativeType	String	Returns identifying type as created.
Lines: AdPosition	List of Strings	Ad Position value, identifying where the ad is shown, as created.
Lines: FrequencyCap	Numeric String	Line-level frequency cap per day. This ranges from 1-20 or unlimited. <ul style="list-style-type: none">• If no frequency cap is passed in, the default is set to unlimited.• The campaign-level frequency cap overrides the line-level cap for inventory purposes.
Lines: Ads	Collection	Array of ads within the line.
Ads: AdId	Numeric String	ID of advertisement.
Ads: AdName	String	Name of advertisement.

Ads: AdType	String	Type of advertisement: <ul style="list-style-type: none"> • Standard Banner • Double Banner • Large Banner • Native • Interstitial Banner • Medium-Rectangle Banner • Pre-Roll Video • IAB 300x250 IAB 728x90
Ads: DeviceType	String	Type of device, e.g. iPhone.
Lines: TargetingDimensions	Collection	Collection containing all the specified targeting values.
TargetingDimensions: AgeRange	List of Strings	The strings returned are the numeric names of the various age range groups. See GetTargetingDetails for more details.
TargetingDimensions: Gender	List of Strings	Possible values: <p>Male</p> <p>Female</p> <ul style="list-style-type: none"> • Default: none is selected. • See GetTargetingDetails for more details.
TargetingDimensions: States	List of Strings	<ul style="list-style-type: none"> • Applies only to U.S. • See GetTargetingDetails for more details.
TargetingDimensions: DesignatedMarketAreas	List of Numeric Strings	<ul style="list-style-type: none"> • Applies only to U.S. • See GetTargetingDetails for more details.
TargetingDimensions: Devices	List of Strings	Possible values: <p>IPHONE_ONLY</p> <p>IPOD_ONLY</p> <p>IPAD</p> <ul style="list-style-type: none"> • Default: all three devices are selected. • See GetTargetingDetails for more details.

TargetingDimensions: Slots	List of Strings	<p>Possible values: FIRST SECOND THIRD FOURTH FIFTH</p> <ul style="list-style-type: none"> • Default: all five time slots are selected. • See GetTargetingDetails for more details.
TargetingDimensions: Days	List of Strings	<p>Possible values: SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY</p> <ul style="list-style-type: none"> • Default: all seven days are selected. • See GetTargetingDetails for more details.
	List of Mappings	<p>The ChannelSectionMapList correlates channels and sections in a parent-child relationship. Each channel UUID is mapped to a list of one or more section IDs.</p> <p>The channel UUID is the value returned from GetTargetingDetails.</p> <ul style="list-style-type: none"> • If no sections are in input, all sections are targeted for the channel. • If sections are provided, they must belong to at least one channel.
TargetingDimensions: ArticleId	List of Strings	<p>The Article ID is the article that you want to direct users to on the Apple News app. Articles can have no paywall, a soft paywall that suggests readers take an action, or a hard paywall that requires payment in order to view the content.</p> <p>To obtain an Article ID you will need to preview the article in Apple News Publisher.</p>
TargetingDimensions: KeyValueInclusionsOp	String	Possible values are (AND, OR). The default is AND.
TargetingDimensions: KeyValueInclusions	List of Objects	Possible values are (AND, OR). The default is AND.

Success	Boolean (true/false)	true or false depending on whether the call succeeded or not.
---------	----------------------	---

Reporting Metrics Methods

GetCampaignMetrics

To retrieve metrics of the performance of a campaign, provide `StartTime` and `EndTime` date strings to specify the date span you are inquiring about. Returned data will be aggregated depending on the values of `StartTime` and `EndTime`. If the dates are the same or if they specify a span up to 31 days, daily data will be returned. More than 31 days but less than 28 weeks, weekly data will be returned. More than 28 weeks, monthly data will be returned.

GetCampaignMetrics Input Parameters

Parameter	Data Type	Required?	Description
SessionId	String	Yes	SessionId obtained from <code>InitSession</code> call.
CampaignIds	List of Numeric Strings	Yes	List of campaign IDs inquired about.
StartTime	String (date)	Yes	Start date of campaign report period, formatted as yyyy-mm-dd.
EndTime	String (date)	Yes	End date of campaign report period, formatted as yyyy-mm-dd.
Timezone	String	Optional	Time zone as created. This field is case sensitive. <ul style="list-style-type: none"> • UTC is default timezone • CTZ is the campaign timezone. This is the timezone that is given during campaign creation. • ATZ is the Account timezone. This is the timezone that is set at the account page of the org during Org creation.

GetCampaignMetrics Sample Payload

```
{
  "method": "GetCampaignMetrics",
  "id": "<id>",
  "params": {
    "sessionId": "<sessionId>",
    "campaignIds": [
      "<campaignId,>"
      "<campaignId>"
    ],
    "startTime": "2019-04-04",
    "endTime": "2019-04-06",
    "timezone": "UTC"
  },
  "jsonrpc": "2.0"
}
```

GetCampaignMetrics Output Parameters

Parameter	Type	Description
StartDate	Date and Time String	Line start time, formatted as yyyy-mm-dd hh:mm:ss.
EndDate	Date and Time String	Line end time, formatted as yyyy-mm-dd hh:mm:ss.
MetricIntervalType	String	The metric interval reported. This is dependent on the period length and will be Hourly, Daily, Weekly, or Monthly.
Data	Collection	Data collection of all ads.
Data: CampaignId	String	ID of campaign that contains the lines inquired about.
Data: CampaignName	String	Name of campaign.
Data: LineId	String	Line ID.
Data: LineName	String	Name of line.
Data: LineCountry	String	Country of line.
Data: LineStartDate	Date and Time String	Line start time, formatted as yyyy-mm-dd hh:mm:ss.
Data: LineEndDate	Date and Time String	Line end time, formatted as yyyy-mm-dd hh:mm:ss.
Data: AdId	Numeric String	Ad ID.
Data: AdName	String	Name of ad.

Data: Impressions	String	The number of times users are exposed to an ad, whether or not they tap to ad banner.
Data: Taps	String	Number of taps.
Data: Conversions	String	Number of conversions.
Data: ConversionRate	Numeric String	Conversion Rate (%).
Data: TTR	String	Tap-through rate, the ratio of taps to impressions (e.g., if 100 users are exposed to an ad banner, and the banner is tapped five times, the TTR is 5%, presented as a value between 0.00 and 100.00).
Data: Visits	Numeric String	Number of visits.
Data: ContentViews	Numeric String	Number of content views.
Data: VideoImpressions	Numeric String	Number of video impressions.
Data: VideoCompletions25	Numeric String	Number of video views where amount of video watched is between 0-25%.
Data: VideoCompletions50	Numeric String	Number of video views where amount of video watched is between 25-50%.
Data: VideoCompletions75	Numeric String	Number of video views where amount of video watched is between 50-75%.
Data: VideoCompletions100	Numeric String	Number of video views where amount of video watched is between 75-100%.
Data: VideoCompletes	Numeric String	Number of video views where amount of video watched is 100%.
Data: ExpandedVideoImpressions	Numeric String	Number of expanded video impressions.
Data: ExpandedVideoCompletions25	Numeric String	Number of expanded video views where amount of video watched is between 0-25%.
Data: ExpandedVideoCompletions50	Numeric String	Number of expanded video views where amount of video watched is between 25-50%.

Data: ExpandedVideoCompletion s75	Numeric String	Number of expanded video views where amount of video watched is between 50-75%.
Data: ExpandedVideoCompletion s100	Numeric String	Number of expanded video views where amount of video watched is between 75-100%.
Data: ExpandedVideoCompletes	Numeric String	Number of expanded video views where amount of video watched is 100%.
Data: PeriodStartDate	Date and Time String	Report period start time, formatted as yyyy-mm-dd hh:mm:ss.
Data: PeriodEndDate	Date and Time String	Report period end time, formatted as yyyy-mm-dd hh:mm:ss.
Success	Boolean	true or false depending on whether the call succeeded or not.

GetLineMetrics

To retrieve metrics of the performance of a line, provide `StartTime` and `EndTime` date strings to specify the date span you are inquiring about. Returned data will be aggregated depending on the values of `StartTime` and `EndTime`. If the dates specify between 2 and 31 days, daily data will be returned. For 1 day, hourly data; more than 31 days but less than 28 weeks, weekly data; more than 28 weeks, monthly data will be returned.

GetLineMetrics Input Parameters

Parameter	Data Type	Required?	Description
SessionId	String	Yes	SessionId obtained from <code>InitSession</code> call.
CampaignId	Numeric String	Yes	ID of campaign that contains the lines inquired about.
LineIds	List of Numeric Strings	Yes	List of campaign line IDs.
StartTime	String (date)	Yes	Start date of line, formatted as yyyy-mm-dd.
EndTime	String (date)	Yes	End date of line, formatted as yyyy-mm-dd.
Timezone	String	Optional	Time zone as created. This field is case sensitive. <ul style="list-style-type: none">• UTC is default timezone• CTZ is the campaign timezone. This is the timezone that is given during campaign creation.• ATZ is the Account timezone. This is the timezone that is set at the account page of the org during Org creation.

GetLineMetrics Sample Payload

```
{
  "method": "GetLineMetrics",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "CampaignId": "<CampaignId>",
    "LineIds": [
      "15462723"
    ],
    "StartTime": "2019-07-14",
    "EndTime": "2019-07-21",
    "Timezone": "UTC"
  },
  "jsonrpc": "2.0"
}
```

GetLineMetrics Output Parameters

Parameter	Type	Description
StartDate	Date and Time String	Line start time, formatted as yyyy-mm-dd hh:mm:ss.
EndDate	Date and Time String	Line end time, formatted as yyyy-mm-dd hh:mm:ss.
MetricIntervalType	String	The metric interval reported. This is dependent on the period length and will be Hourly, Daily, Weekly, or Monthly.
Data	Collection	Data collection of all ads.
Data: CampaignId	String	ID of campaign that contains the lines inquired about.
Data: CampaignName	String	Name of campaign.
Data: LineId	String	Line ID.
Data: LineName	String	Name of line.
Data: LineCountry	String	Country of line.
Data: LineStartDate	Date and Time String	Line start time, formatted as yyyy-mm-dd hh:mm:ss.
Data: LineEndDate	Date and Time String	Line end time, formatted as yyyy-mm-dd hh:mm:ss.
Data: Impressions	String	The number of times users are exposed to an ad, whether or not they tap to ad banner.
Data: Taps	String	Number of taps.
Data: Conversions	String	Number of conversions.
Data: ConversionRate	Numeric String	Conversion Rate (%).
Data: TTR	String	Tap-through rate, the ratio of taps to impressions (e.g., if 100 users are exposed to an ad banner, and the banner is tapped five times, the TTR is 5%, presented as a value between 0.00 and 100.00).
Data: Visits	Numeric String	Number of visits.
Data: Views	Numeric String	Number of content views.

Data: ExpandedVideoImpressions	Numeric String	Number of expanded video impressions.
Data: ExpandedVideoCompletions25	Numeric String	Number of expanded video views where amount of video watched is between 0-25%.
Data: ExpandedVideoCompletions50	Numeric String	Number of expanded video views where amount of video watched is between 25-50%.
Data: ExpandedVideoCompletions75	Numeric String	Number of expanded video views where amount of video watched is between 50-75%.
Data: ExpandedVideoCompletions100	Numeric String	Number of expanded video views where amount of video watched is between 75-100%.
Data: ExpandedVideoCompletes	Numeric String	Number of expanded video views where amount of video watched is 100%.
Data: PeriodStartDate	Date and Time String	Report period start time, formatted as yyyy-mm-dd hh:mm:ss.
Data: PeriodEndDate	Date and Time String	Report period end time, formatted as yyyy-mm-dd hh:mm:ss.
Success	Boolean	true or false depending on whether the call succeeded or not.

GetLinePerformance

This method returns line item delivery by day for all active campaigns for a specified date range regardless of the campaign. Data range may not be more than five days. Output contains Campaign and Line item details.

GetLinePerformance Input Parameters

Parameter	Data Type	Required?	Description
SessionId	String	Yes	SessionId obtained from InitSession call.
Lines: StartDate	Date and Time String	Yes	Line start time, formatted as yyyy-mm-dd hh:mm:ss.
Lines: EndDate	Date and Time String	Yes	Line end time, formatted as yyyy-mm-dd hh:mm:ss.
TimeZone	String	Yes	Time zone as created, ATZ or UTC. Default is UTC.

GetLinePerformance Sample Payload

```
{
  "method": "GetLinePerformance",
  "id": "<id>",
  "params": {
    "SessionId": "<SessionId>",
    "StartDate": "2019-03-08",
    "EndDate": "2019-03-09",
    "Timezone": "UTC"
  },
  "jsonrpc": "2.0"
}
```

GetLinePerformance Output Parameters

Parameter	Type	Description
Success	Boolean	true or false depending on whether the call succeeded or not.
TimeZone	String	Time zone as created.
Lines: LineId	Numeric String	ID of line.
Lines: LineName	String	Name of line.
Lines: CampaignId	Numeric String	ID of campaign this line is part of.
Lines: CampaignName	String	Name of campaign this line is part of.
Lines: AdvertiserName	String	External reference, as created; maybe any alphanumeric string.
Lines: LineStartDate	Date and Time String	Line start time, formatted as yyyy-mm-dd hh:mm:ss.
Lines: LineEndDate	Date and Time String	Line end time, formatted as yyyy-mm-dd hh:mm:ss.
Lines: ImpressionsGoal	Numeric String	The target number of times the line specification set for users to be exposed to an ad. This is only set for Standard lines, not Takeover lines.
Data: Impressions	Numeric String	The number of times users have been exposed to an ad, whether or not they tap on it.
Data: Taps	Numeric String	Number of taps.
Data: Conversions	Numeric String	Number of conversions.
Data: Date	Date and Time String	Report date, formatted as yyyy-mm-dd.

Document Revision History

Date	Notes
January, 2016	Initial version
March, 2017	Feature updates
August, 2018	Updated doc structure and fixes.
October, 2018	Updates and fixes
February, 2019	See GetCampaignSummary Deprecated Fields .
March, 2019	SegmentType name change to Publication Subscription. See GetSegments Output Parameters .
June, 2019	Updated introductory content, fixed Timezone parameter for GetLineMetrics and GetCampaignMetrics, cleaned up payloads, re-organized sections for improved workflow.



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