# Package 'oRion'

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Type Package
Title Integrate R & Cheetah Mobile Orion
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<b>Description</b> Integrate R and Cheetah Mobile Orion platform. All API calls are implemented as individual functions.
License GPL (>= 2)
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Imports jsonlite, httr, plyr, methods
<pre>URL https://github.com/JohnCoene/oRion</pre>
BugReports https://github.com/JohnCoene/oRion/issues  Suggests testthat, lintr  R topics documented:
createAd createAdset createAudience createCampaign createImage createObject deleteAd deleteAdset deleteAudience deleteCampaign 1 deleteCampaign 1 deleteObject 1 dictBehaviour 1 dictCity

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createAd

Create an ad

# Description

Create an ad.

# Usage

createAd(body)

# Arguments

body

Body of request that includes ad settings. See examples and details.

# **Details**

Valid ad settings (body):

- adset\_id Adset id to which the ad belongs.
- name Ad name, unique.

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• icon\_url Logo image url. Must be larger than 84\*84 px and have an aspect ratio of 1:1, in JPG or PNG format. File must not exceed 100KB.

- title Ad headline
- desc Description tells people a bit more about your Application. Make sure to clearly explain what you are promoting.
- button\_text Button display text, use buttonText to generate otherwise, 1: Download, 2: Install, 3: Check, 4: Free, 5: Play, 6: Buy, 7: More.
- image\_url Image url. Must be larger than 600\*314 px and have an aspect ratio of 1.9:1. Best is 1200\*628 px, JPG or PNG format. File size must not exceed 500KB. Image should come from Orion CDN server, please upload image using createImage, see uploaded images with listImages.
- video\_url URL to video
- video\_img\_before\_url Image which will be show before video starts.
- video\_img\_after\_url Image which will be show after video ends.

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, createAdset, createImage, helpers
```

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x000000000x00x0x0000xxx0000x0xx0")
# list adsets
adsets <- listAdsets()</pre>
# list images
images <- listImages()</pre>
# define ad settings
body <- list(</pre>
   adset_id = adsets$id[1],
   name = "testAd",
   icon_url = images$thumb[1],
   title = "Download oRion",
   desc = "Download oRion and interact with Orion from your R console",
   button_text = buttonText("install"),
   image_url = images$local_url[1])
# post ad
createAd(body = body)
## End(Not run)
```

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createAdset

Create an adset

#### **Description**

Create an adset.

#### **Usage**

createAdset(body)

#### **Arguments**

body

body of request that includes adset settings. See examples and details

#### **Details**

Valid adset settings (body):

- campaign\_id The campaign id which the ad set is to belongs to
- audience\_create\_way 0: Create audience targeting parameters directly. Audience should be
  along with this API if choose this audience\_create\_way.
   1: Create audience targeting by a
  template. Note: Once audience created, any changes made on the template will not affect this
  audience.
- audience\_template\_id Required when audience\_create\_way: 1 or 2
- bid\_type Use bidType to generate otherwise, 1: Install (CPI) [Only for KA user], 3: Click (CPC), 4 Impressions (CPM)
- app\_show\_type Use appShowType to generate otherwise, 50000: Native News Feed, 50001: Mini Native News Feed, 50003: Video Ad, 50008: App Locker Ad
- name Ad set name (unique)
- unit\_price Unit Price. Amount you want to spend to pay per click (CPC) or per 1,000 impressions (CPM)
- click\_url click\_url, protocol is required (http://, https://).
- deeplink Deep link is the ability to link into a specific page or function inside of your app, making an app linkable just like a web site. If you are only targeting people who already installed your app, you do not need to add deferred deep linking. Used when the objective of campaign which ad set belonged to is "Get App Reengagement" (objective = 4)
- imp\_url Impression Tracking. An Impression tracking is an optional URL that allows you to track how many people viewed your ads through third-party tracking system, and our system supported macro is Gaid, e.g. http://host/imp?gaid=gaid. Used when the bid type is "CPM" bid\_type = 4
- budget\_lifetime Your budget is the maximum amount you want to spend. If you choose lifetime, the amount you enter is the maximum you'll spend during the lifetime of your ad set. At least one of budget\_daily and budget\_lifetime is filled.
- budget\_daily Your budget is the maximum amount you want to spend. If you choose Per Day, the amount you enter is the maximum you'll spend each day. At least one of "budget daily" and "budget lifetime" is filled.
- start\_time Start time for the adset (i.e.: 2015-09-09 10:10)

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- end\_time End time for the adset (i.e.: 2015-09-09 10:10)
- ad\_scheduling Your ad set will either run continuously within some days or within some hours range you select. (JSON) i.e.: {1:[1,2],7:[1,2,23]}
- delivery\_type Use deliveryType to generate otherwise, 0: Standard delivery, 1: Accelerated delivery. Standard delivery is recommended and the preferred option for most advertisers. Accelerated delivery can be useful for promoting time-sensitive events and quickly reaching a target audience.
- target\_cpi Target CPI. Only for KA user. 3: Click (CPC)
- freq\_type Frequency Capping type. Frequency capping controls frequency capping of the ad set per user.
- freq\_times Frequency Capping type. Frequency capping controls frequency capping of the ad set per user.
- country Audience country code. Narrow your potential audience to the people in those countries. Using 'l' separated if more than one country. i.e.: US|ID|CN. See dictCountry
- language Audience language code, i.e.: en see dictLanguage
- gender Use gender to generate otherwise, 0: All, 1: Male, 2 Female
- age Audience age. Use age to generate otherwise, 1: 18-24, 2: 25-30, 3: 32-40, 4: 41+.
- interest Audience interest. Reach users based on their specific interests. See dictInterest
- behavior Audience behavior. Reach users based on app usage and other behaviors. See dictBehaviour
- device\_brand Audience device brand. See dictDevice
- min\_device\_os Min OS version of audience used, blank for unrestricted. See dictOS
- max\_device\_os Max OS version of audience used, blank for unrestricted. See dictOS
- net\_type Use netType to generate otherwise, 0: All, 1: Wifi, 2: 2G/3G/4G
- dsp\_url Bid request url of DSP when this pre-targeting condition meets.

# Author(s)

```
John Coene <jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, createCampaign, helpers
```

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```
name = "testAdset",
bid_type = bidType("cpi"),
unit_price = 1000,
budget_lifetime = 10000,
campaign_id = sample(camps$id, 1),
audience_create_way = 2,
app_show_type = appShowType("newsfeed"),
audience_template_id = sample(audiences$id, 1),
click_url = "http://app.adjust.io"))
## End(Not run)
```

createAudience

Create an audience targeting template

### **Description**

Create an audience targeting template.

### Usage

createAudience(body)

### **Arguments**

body

body of request that includes audience targeting template settings. See examples and details.

#### **Details**

Valid audience target template settings (body):

- audience\_template\_name Audience targeting template name (unique).
- audience\_template\_desc Description for the audience targeting template.
- country Audience country code. Narrow your potential audience to the people in those countries. Using 'l' separated if more than one country. i.e.: US|ID|CN, typically returned by dictCountry
- language Audience language code, i.e.: en, typically returned by dictLanguage
- gender Use gender to generate otherwise, 0: All, 1: Male, 2 Female
- age Audience age. Use age to generate otherwise, 1: 18-24, 2: 25-30, 3: 32-40, 4: 41+.
- interest Audience interest. Reach users based on their specific interests, typically returned by dictInterest
- behavior Audience behavior. Reach users based on app usage and other behaviors, typically returned by dictBehaviour
- device\_brand Audience device brand, typically returned by dictDevice
- min\_device\_os Min OS version of audience used, blank for unrestricted, typically returned by dictOS
- max\_device\_os Max OS version of audience used, blank for unrestricted, typically returned by dictOS
- net\_type Use netType to generate otherwise, 0: All, 1: Wifi, 2: 2G/3G/4G
- dsp\_url Bid request url of DSP when this pre-targeting condition meets.

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#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

# See Also

or ion OA uth, helpers, dict Country, dict Language, dict Interest, dict Behaviour, dict Device, dict OS

# **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x000000000x00x0x0000xxx0000x0xx0")
# pick two random countries
locations <- paste0(sample(dictCountry()$code, 1), "|",</pre>
                    sample(dictCountry()$code, 1))
# create audience
createAudience(body = list(
   audience_template_name = "test",
   audience_template_desc = "test template",
   country = locations,
   language = sample(dictLanguage()$code, 1),
   net_type = netType("wifi")),
   interest = dictInterst()$pid[1])
# retrieve audience
aud <- listAudiences(n = 100)</pre>
## End(Not run)
```

createCampaign

Create a campaign.

### **Description**

Create a campaign

### Usage

```
createCampaign(body)
```

### **Arguments**

body

Body of request that includes campaigns settings. See examples and details.

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#### **Details**

Valid campaign settings (body):

- name Campaign name should be unique under the same user account.
- budget\_type can take either daily or lifetime, see budgetType.
- budget\_daily Required when budget\_type equals to daily
- budget\_lifetime Required when budget\_type equals to lifetime
- pkg\_name App package name or website domain
- objective Use objective to generate, otherwise, 1: Drive App Installs, 2: Drive Mobile Site Traffic, 3: Build Brand Awareness, 4: Get App Re-engagement, 5: Get Video Views
- app\_type Use appType to generate, otherwise, 1: Game, 2: App
- web\_type Use webType to generate, otherwise, if objective == 2. 0: None, 1: Ordinary Website, 2: E-commerce Website, 3: Game Website
- landing\_page Use landingPage to generate, otherwise, if objective == 3. 1: Redirect to Google Play, 2: Website

#### Author(s)

```
John Coene <jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, helpers
```

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# set body of request
camp <- list(name = "test",</pre>
             budget_type = "daily",
             budget_daily = "1000";
             pkg_name = "someting.test.com",
             objective = objective("installs"),
             app_type = "2",
             web_{type} = "1",
             landing_page = landingPage("googlePlay"))
# create campaign
createCampaign(body = camp)
## End(Not run)
```

createImage 9

createImage

Upload an image

### **Description**

Upload an image

# Usage

```
createImage(file)
```

### **Arguments**

file

Image data, supports JPEG, GIF and PNG.

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

# See Also

orionOAuth

# **Examples**

createObject

Create any object

# Description

Create any object, see details.

### Usage

```
createObject(object, body)
```

# Arguments

object

Object to be created, see details for valid values.

body

Body of request that includes campaigns settings. See examples.

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#### **Details**

Valid values for object:

- audience, see createAudience for details.
- campaign, see createCampaign for details.
- adset, see createAdset for details.
- ad, see createAd for details.

createObject can essentially replace any other create family functions. See examples.

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

### See Also

orionOAuth, createAudience, createCampaign, createAdset, createAd and helpers

### **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# set body of request for campaign
camp <- list(name = "test",</pre>
             budget_type = "daily",
             budget_daily = "1000",
             pkg_name = "test",
             objective = objective("traffic"),
             app_type = appType("game"),
             web_type = webType("game"),
             landing_page = "2")
# create campaign
new_camp <- createObject(body = camp, object = "campaign")</pre>
# equivalent to
# new_camp <- createCampaign(body = camp)</pre>
showCampaign(campaign.id = new_camp$id)
## End(Not run)
```

deleteAd

Delete an ad

### **Description**

Delete an ad.

deleteAdset 11

### Usage

```
deleteAd(ad.id)
```

### **Arguments**

ad.id id of object to delete

#### Author(s)

John Coene < jcoenep@gmail.com>

#### See Also

orionOAuth, createAd

### **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# list adsets
adsets <- listAdsets()</pre>
# list images
images <- listImages()</pre>
# create an ad
# define ad settings
body <- list(</pre>
   adset_id = adsets$id[1],
   name = "My Ad",
   icon_url = images$thumb[1],
   title = "Ad Title",
   desc = "Ad description",
   button_text = buttonText("install"),
   image_url = images$local_url[1])
# post ad
ad <- createAd(body = body)</pre>
# delete the ad
deleteAd(ad.id = ad$id)
## End(Not run)
```

deleteAdset

Delete an adset

### **Description**

Delete an adset.

12 deleteAudience

#### Usage

```
deleteAdset(adset.id)
```

#### **Arguments**

```
adset.id id of object to delete
```

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, createAdset
```

### **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# list of campaigns
camps <- listCampaigns()</pre>
# list of audience templates
audiences <- listAudiences()</pre>
# create adset using random template, in random campaign
adset <- createAdset(body = list(</pre>
  name = "My Adset",
   bid_type = bidType("CPI"),
   unit_price = 1000,
   budget_lifetime = 10000,
   campaign_id = sample(camps$id, 1),
   audience_create_way = 2,
   app_show_type = appShowType("newsfeed"),
   audience_template_id = sample(audiences$id, 1),
   click_url = "http://app.adjust.io"))
# delete random adset
deleteAdset(adset.id = adset$id)
## End(Not run)
```

deleteAudience

Delete an audience targeting template

### **Description**

Delete audience targeting template.

deleteCampaign 13

```
Usage
```

```
deleteAudience(audience.id)
```

### **Arguments**

```
audience.id id of object to delete
```

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, createAudience
```

# **Examples**

deleteCampaign

Delete a campaign

# Description

Delete a campaign.

# Usage

```
deleteCampaign(campaign.id)
```

# Arguments

```
campaign.id id of object to delete
```

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

# See Also

```
or ion OAuth, create Campaign\\
```

14 deleteObject

### **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# set body of request
camp <- list(name = "My Campaign",</pre>
             budget_type = "daily",
             budget_daily = "1000",
             pkg_name = "someting.test.com",
             objective = objective("installs"),
             app_type = "2",
             web_type = "1")
# create campaign
campaign <- createCampaign(body = camp)</pre>
# delete random campaign
deleteCampaign(campaign.id = campaign$id)
## End(Not run)
```

deleteObject

Delete any object

# Description

Delete campaign, adsets, ads or audience temapltes, see details and examples.

### Usage

```
deleteObject(object, id)
```

# Arguments

Object to be deleted, see details for valid values.

id id of object to delete

#### **Details**

Valid values for object:

- audience, see deleteAudience for details.
- campaign, see deleteCampaign for details.
- adset, see deleteAdset for details.
- ad, see deleteAd for details.

deleteObject can essentially replace any other delete family functions. See examples.

dictBehaviour 15

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

orionOAuth, deleteAudience, deleteCampaign, deleteAdset and deleteAd

# **Examples**

dictBehaviour

List available behaviours

# Description

Fetch list of behaviours.

# Usage

```
dictBehaviour()
```

# Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, createAudience
```

16 dictCity

### **Examples**

dictCity

List valid cities

### **Description**

Fetch list of cities.

### Usage

```
dictCity(state.code)
```

### **Arguments**

state.code Code of country as returned by dictState, see examples.

#### Author(s)

John Coene < jcoenep@gmail.com>

dictCountry 17

dictCountry

List valid countries

# Description

Fetch list of countries.

#### Usage

```
dictCountry()
```

### Author(s)

John Coene < jcoenep@gmail.com>

#### See Also

```
orionOAuth, createAudience
```

### **Examples**

dictDevice

List valid device models

# Description

Fetch list of device models.

# Usage

```
dictDevice()
```

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

18 dictInterest

#### See Also

```
orionOAuth, createAudience
```

### **Examples**

dictInterest

List available interests

### **Description**

Fetch list of interests.

### Usage

```
dictInterest()
```

#### Author(s)

John Coene < jcoenep@gmail.com>

dictLanguage 19

```
))
## End(Not run)
```

dictLanguage

List valid languages

# Description

Fetch list of languages.

### Usage

```
dictLanguage()
```

# Author(s)

John Coene < jcoenep@gmail.com>

### See Also

orionOAuth, createAudience

20 dictState

dict0S

List valid OS versions

# Description

Fetch list of OS versions.

# Usage

dictOS()

### Author(s)

John Coene < jcoenep@gmail.com>

### See Also

orionOAuth, createAudience

# **Examples**

dictState

List valid states

### **Description**

Fetch list of states.

### Usage

```
dictState(country.code)
```

# **Arguments**

country.code Code of country as returned by dictCountry, see examples.

getReport 21

#### Author(s)

John Coene < jcoenep@gmail.com>

# **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# dict countries
country <- dictCountry()</pre>
# dict states of random country
states <- dictState(country.code = sample(country$code, 1))</pre>
# dict US states
us <- dictState(country.code = "US")</pre>
# filter states starting with A (because why not?)
a_states <- us[grep("^A", us$value),]</pre>
# create audience
createAudience(body = list(
               audience_template_name = "A-states",
               country = "US",
               region = paste0(a_states$code, collapse="|")
))
## End(Not run)
```

getReport

Get data

# Description

Fetch data.

### Usage

```
getReport(column = c("impression", "click"), group.by = c("datetime",
    "campaign"), action = "advertiser", filter = NULL, start,
    end = Sys.Date())
```

### **Arguments**

column	Variables to retrieve, see details for valid values. Defaults to c("impression", "click"). Must pass at least 2 values (vector of length >= 2). Required.
group.by	How to breakdown the data, see @details for valid values. Defaults to c("datetime", "campaign"). Must pass at least 2 values (vector of length >= 2). Required.
action	target node, currently only supports "advertiser" (default).

22 getReport

filter Defaults to NULL. Optional.

start date (YYYY-MM-DD). Required.

end End date (YYYY-MM-DD), defaults to Sys.Date(). Required.

### **Details**

The official documentation can be found here.

Valid values for column:

- impression
- click
- conversion
- revenue
- ctr
- cpm

Valid values for group.by:

- age
- gender
- location
- brand
- ad
- adset
- campaign
- videotype

### Author(s)

John Coene < jcoenep@gmail.com>

### See Also

orionOAuth

helpers 23

helpers

Get the settings right

# Description

These functions attempt to facilitate setting up campaigns, adsets, ads and audience targeting templates by allowing to pass more readable settings

# Usage

```
budgetType(x)
objective(x)
appType(x)
webType(x)
landingPage(x)
bidType(x)
appShowType(x)
deliveryType(x)
gender(x)
age(x)
netType(x)
buttonText(x)
switchIt(x)
audienceCreation(x)
```

# Arguments

X

Setting to convert

# Value

Returns correct value to pass to API.

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

24 listAds

#### See Also

orionOAuth, createCampaign, createAdset, createAd and createAudience

#### **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# settings with helpers
settings <- list(name = "test",</pre>
                   budget_type = budgetType("daily"),
                   budget_daily = "1000",
                   pkg_name = "test.com",
                   objective = objective("installs"),
                   app_type = appType("game"),
                   web_type = webType("ecommerce"),
                   landing_page = landingPage("googlePlay"))
# settings WITHOUT helpers
nohelpers <- list(name = "test",</pre>
                    budget_type = "daily",
                    budget_daily = "1000",
                    pkg_name = "test.com",
                    objective = "1",
                    app_type = "1",
web_type = "2",
                    landing_page = "1")
identical(settings, nohelpers)
# create campaign
createCampaign(body = settings)
## End(Not run)
```

listAds

List ads

### **Description**

List ads under the authenticated account.

### Usage

```
listAds(n = 50)
```

# **Arguments**

n Number of ads to retrieve, defaults to 50

listAdsets 25

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

orionOAuth

### **Examples**

listAdsets

List adsets

# Description

List of adsets under the authenticated account.

# Usage

```
listAdsets(n = 50)
```

# **Arguments**

n

Number of adsets to retrieve, defaults to 50

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

### See Also

orionOAuth

26 listCampaigns

listAudiences

List audience targeting templates

# Description

List of audience templates under the authenticated account.

### Usage

```
listAudiences(n = 50)
```

### **Arguments**

n

Number of audience templates to retrieve, defaults to 50

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

### See Also

orionOAuth

# **Examples**

listCampaigns

List campaigns

# Description

List of campaigns under the authenticated account.

# Usage

```
listCampaigns(n = 50)
```

# Arguments

n

Number of campaigns to retrieve, defaults to 50

listImages 27

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth
```

#### **Examples**

listImages

List images

# Description

List of images under the authenticated account.

# Usage

```
listImages(n = 50)
```

### **Arguments**

n

Number of images to retrieve, defaults to 50

# Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

orionOAuth

28 listObjects

listObjects

List any object

### Description

List any objects from the API, see details for valid values.

# Usage

```
listObjects(object, n = 50)
```

# Arguments

object Nodes to target. See details

n Number of objects to retrieve, defaults to 50

#### **Details**

Valid values for objects:

- image, see listImages for details.
- audience, see listAudiences for details.
- campaign, see listCampaigns for details.
- adset, see listAdsets for details.
- ad, see listAds for details.

listObject can essentially replace any other list family functions. See examples.

# Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, listImages, listAudiences, listCampaigns, listAdsets and listAds
```

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тар	Visualise your account	
-----	------------------------	--

# Description

Return edge list of objects in the authenticated user's account, to help one visualise campaigns, adsets, ads and audience templates.

### Usage

```
map(campaigns, adsets, ads, audiences)
```

### **Arguments**

campaigns	Data frame of campaigns as returned by listCampaigns
adsets	Data frame of campaigns as returned by listAdsets
ads	Data frame of campaigns as returned by listAds
audiences	Data frame of campaigns as returned by listAudiences

# **Details**

Maps the network of object under the authenticated user, follows the typical advertising structure.

- 1User
- 2Campaigns
- 3Adsets
- 4Ads
- 4Audiences

Under the uaudthenticated user are campaigns, under campaigns lie adsets to which audience targeting templates and ads belong.

# Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, listAudiences, listCampaigns, listAdsets, listAds
```

30 oRion

oRion

**oRion** Integrate R and Orion.

# Description

Interact with Cheetah Mobile's Orion Platform from your R console.

#### **Functions**

Families.

OAuth

• orionOAuth

Get

• getReport

show family Show items

- showAd
- showAdset
- showAdsetAudience
- showCampaign
- showObject

create family Create items

- createAd
- createAdset
- createCampaign
- createImage

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# • createObject

# delete family Create items

- deleteAd
- deleteAdset
- deleteCampaign
- deleteAudience
- deleteObject

# dict family Fetch dictionaries

- dictCity
- dictCountry
- dictDevice
- dictInterest
- dictLanguage
- dictOS
- dictState

# update family Update items

- updateAd
- updateAdset
- updateCampaign
- updateObject

# list family List items

- listAds
- listAdsets
- listCampaigns
- listImages
- listObjects

# helpers List items

- budgetType
- objective
- appType
- webType
- landingPage
- bidType
- appShowType
- deliveryType
- gender
- age
- netType
- buttonText
- switchIt

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```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# set body of campaign
camp <- list(name = "test",</pre>
             budget_type = "daily",
             budget_daily = "1000",
             pkg_name = "test",
             objective = objective("installs"),
             app_type = "2",
             web_type = "1",
             landing_page = landingPage("googlePlay"))
# create campaign
createCampaign(camp)
# list campaigns
campaigns <- listCampaigns(n = 100)</pre>
# pick two random countries
locations <- paste0(sample(dictCountry()$code, 1), "|",</pre>
                    sample(dictCountry()$code, 1))
# create audience template to use in adset
createAudience(body = list(
   audience_template_name = "test",
   audience_template_desc = "test template",
   country = locations,
   language = sample(dictLanguage()$code, 1),
   net_type = netType("wifi")),
   interest = dictInterst()$pid[1])
# list audience template
audiences <- listAudiences(n = 50)</pre>
# create adset
createAdset(body = list(
   name = "testAdset",
   bid_type = appShowType("CPI"),
   unit_price = 1000,
   budget_lifetime = 10000,
   campaign_id = sample(camps$id, 1),
   audience_create_way = 2,
   app_show_type = appShowType("newsfeed"),
   audience_template_id = sample(audiences$id, 1),
   click_url = "http://app.myApp.io"))
# list adsets
adsets <- listAdsets()</pre>
# upload image to use in ad
createImage(file = paste0(.libPaths(), "/png/img/Rlogo.png"))
```

orionOAuth 33

```
# list images
images <- listImages()</pre>
# define ad settings
body <- list(</pre>
   adset_id = adsets$id[1],
   name = "testAd",
   icon_url = images$thumb[1],
   title = "Download oRion",
   desc = "Download oRion and interact with Orion from your R console",
   button_text = buttonText("install"),
   image_url = images$local_url[1])
# post ad
createAd(body = body)
# list ads
ads <- listAds()</pre>
# update ad name
update <- updateAd(ad.id = ad$id[1], body = list(name = "New Ad Name"))</pre>
# show updated ad
showAd(ad.id = ads$id[1])
map <- map(campaigns, adsets, ads, audiences)</pre>
g <- igraph::graph.data.frame(network[,3:4], directed = TRUE)</pre>
plot(g)
# get data
# get daily campaign impressions and conversions for the past 7 days
start = Sys.Date() - 7)
## End(Not run)
```

orionOAuth

orionAuthenticate

### **Description**

Authenticate the Orion API.

# Usage

```
orionOAuth(client.id, client.secret, grant.type = "client_credentials",
    save = FALSE)
```

#### **Arguments**

```
client.id Your client_id
```

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```
client.secret Your client_secret

grant.type Currently only supports client_credentials (default)

save If TRUE will save the token for future sessions, default to FALSE
```

#### **Details**

Please see the official documentation to apply for the API and get your client\_id and client\_secret: api.ori.cmcm.com/doc/#api-Auth-access\_token. If the token is stored (save = TRUE) then orionOAuth does not need to be run in future sessions, see example.

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

### **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# test
camp_oauth <- listCampaigns()</pre>
# authenticate and save
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0",
           save = TRUE)
# detach and unload package
detach("package:oRion", unload = TRUE)
# no oauth
library(oRion)
camp_noauth <- listCampaigns()</pre>
identical(camp_oauth, camp_noauth)
## End(Not run)
```

showAd

Show an ad settings

# Description

Retrieve settings of a specfic ad.

# Usage

```
showAd(ad.id)
```

showAdset 35

### **Arguments**

ad.id id of ad to retrieve

# Author(s)

John Coene < jcoenep@gmail.com>

#### See Also

```
orionOAuth, listAds
```

# **Examples**

showAdset

Show an adset settings

# Description

Retrieve settings of a specfic adset.

# Usage

```
showAdset(adset.id)
```

# Arguments

adset.id id of adset to retrieve

# Author(s)

John Coene < jcoenep@gmail.com>

### See Also

```
orionOAuth, listAdsets
```

36 showAdsetAudience

### **Examples**

showAdsetAudience

Show an adset audience targeting template

### **Description**

Retrieve the audience templates under a specific adset.

### Usage

```
showAdsetAudience(adset.id)
```

# **Arguments**

```
adset.id id of adset's template to retrieve
```

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

### See Also

```
orionOAuth, showAdset, showAudience, listAdsets, listAudiences
```

showAudience 37

showAudience

Show an audience targeting template

### **Description**

Retrieve settings of a specfic audience targeting template.

# Usage

```
showAudience(audience.id)
```

### **Arguments**

```
audience.id id of audience template to retrieve
```

### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, listAudiences
```

### **Examples**

showCampaign

Show a campaign settings

# Description

Retrieve settings of a specfic campaign.

# Usage

```
showCampaign(campaign.id)
```

38 showObject

#### **Arguments**

```
campaign.id id of campaign to retrieve
```

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

### See Also

```
orionOAuth, listCampaigns
```

### **Examples**

showObject

Show any object settings

# Description

Retrieve settings of an object, see details.

# Usage

```
showObject(object, id)
```

### **Arguments**

object Object to retrieve, see details for valid values.
id id of object to retrieve

#### **Details**

Valid values for object:

- audience see showAudience for details.
- campaign see showCampaign for details.
- adset see showAdset for details.
- ad see showAd for details.

showObject can essentially replace any other show family functions a the execption of showAdsetAudience. See examples.

updateAd 39

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

orionOAuth, showAudience, showCampaign, showAdset and showAd

#### **Examples**

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x00000000x00x0x0000xxx0000x0xx0")
# list ads
ads <- listObjects(object = "ad", n = 100)</pre>
# fetch first ad
ad <- showObject(object = "ad", id = ads$id[1])</pre>
# list campaigns
campaigns <- listObjects(object = "campaign")</pre>
# fetch random campaign
campaign <- showObject(id = campaigns$id[1])</pre>
# equivalent to
campaign2 <- showCampaign(campaign.id = campaigns$id[1])</pre>
identical(campaign, campaign2)
## End(Not run)
```

updateAd

Update an ad

# **Description**

Update ad settings, see details and example.

# Usage

```
updateAd(ad.id, body)
```

# Arguments

ad.id id of ad to update

body Body of request that includes ad settings. See examples and details.

40 updateAd

#### **Details**

Valid values for body:

- switch Ad switch, use switchIt otherwise, 1: On, 0: Off.
- name Ad name, unique.
- icon\_url Logo image url. Must be larger than 84\*84 px and have an aspect ratio of 1:1, in JPG or PNG format. File must not exceed 100KB.
- title Ad headline
- desc Description tells people a bit more about your Application. Make sure to clearly explain what you are promoting.
- button\_text Button display text, use buttonText to generate otherwise, 1: Download, 2: Install, 3: Check, 4: Free, 5: Play, 6: Buy, 7: More.
- image\_url Image url. Must be larger than 600\*314 px and have an aspect ratio of 1.9:1. Best is 1200\*628 px, JPG or PNG format. File size must not exceed 500KB. Image should come from Orion CDN server, please upload image using createImage.
- video\_url URL to video
- video\_img\_before\_url Image which will be show before video starts.
- video\_img\_after\_url Image which will be show after video ends.

#### Author(s)

```
John Coene <jcoenep@gmail.com>
```

#### See Also

```
orionOAuth, listAds, createAd, helpers
```

updateAdset 41

updateAdset Update an adset

#### **Description**

Update adset settings, see details and example.

### Usage

```
updateAdset(adset.id, body)
```

#### **Arguments**

adset.id id of adset to update

body Body of request that includes adset settings. See examples and details.

#### **Details**

Valid values for body:

- switch Ad switch, use switchIt otherwise, 1: On, 0: Off.
- name Ad set name (unique)
- unit\_price Unit Price. Amount you want to spend to pay per click (CPC) or per 1,000 impressions (CPM)
- click\_url click\_url, protocol is required (http://, https://).
- deeplink Deep link is the ability to link into a specific page or function inside of your app, making an app linkable just like a web site. If you are only targeting people who already installed your app, you do not need to add deferred deep linking. Used when the objective of campaign which ad set belonged to is "Get App Reengagement" (objective = 4)
- imp\_url Impression Tracking. An Impression tracking is an optional URL that allows you to track how many people viewed your ads through third-party tracking system, and our system supported macro is Gaid, e.g. http://host/imp?gaid=gaid. Used when the bid type is "CPM" bid\_type = 4
- budget\_lifetime Your budget is the maximum amount you want to spend. If you choose lifetime, the amount you enter is the maximum you'll spend during the lifetime of your ad set. At least one of budget\_daily and budget\_lifetime is filled.
- budget\_daily Your budget is the maximum amount you want to spend. If you choose Per Day, the amount you enter is the maximum you'll spend each day. At least one of "budget\_daily" and "budget\_lifetime" is filled.
- start\_time Start time for the adset (i.e.: 2015-09-09 10:10)
- end\_time End time for the adset (i.e.: 2015-09-09 10:10)
- ad\_scheduling Your ad set will either run continuously within some days or within some hours range you select. (JSON) i.e.: {1:[1,2],7:[1,2,23]}
- delivery\_type Use deliveryType to generate otherwise, 0: Standard delivery, 1: Accelerated delivery. Standard delivery is recommended and the preferred option for most advertisers. Accelerated delivery can be useful for promoting time-sensitive events and quickly reaching a target audience.

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- target\_cpi Target CPI. Only for KA user. 3: Click (CPC)
- freq\_type Frequency Capping type. Frequency capping controls frequency capping of the ad set per user.
- freq\_times Frequency Capping type. Frequency capping controls frequency capping of the ad set per user.
- country Audience country code. Narrow your potential audience to the people in those countries. Using 'l' separated if more than one country. i.e.: US|ID|CN. See dictCountry
- language Audience language code, i.e.: en see dictLanguage
- gender Use gender to generate otherwise, 0: All, 1: Male, 2 Female
- age Use age to generate otherwise, Audience age. 1: 18-24, 2: 25-30, 3: 32-40, 4: 41+.
- interest Audience interest. Reach users based on their specific interests. See dictInterest
- behavior Audience behaviour. Reach users based on app usage and other behaviors. See dictBehaviour
- device\_brand Audience device brand. See dictDevice
- min\_device\_os Min OS version of audience used, blank for unrestricted. See dictOS
- max\_device\_os Max OS version of audience used, blank for unrestricted. See dictOS
- net\_type Use netType to generate otherwise, 0: All, 1: Wifi, 2: 2G/3G/4G
- dsp\_url Bid request url of DSP when this pre-targeting condition meets.

### Author(s)

```
John Coene <jcoenep@gmail.com>
```

#### See Also

or ion OA uth, list Adsets, create Adset, helpers, dict Country, dict Language, dict Interest, dict Behaviour, dict Device, dict OS

updateAudience 43

updateAudience	Update an audience targeting template

#### **Description**

Update audience targeting template settings, see details and example.

#### Usage

```
updateAudience(audience.id, body)
```

#### **Arguments**

audience.id id of audience to update

Body of request that includes audience template settings. See examples and

details.

#### **Details**

Valid values for body:

- audience\_template\_name Audience targeting template name (unique).
- audience\_template\_desc Description for the audience targeting template.
- country Audience country code. Narrow your potential audience to the people in those countries. Using 'l' separated if more than one country. i.e.: US|ID|CN, typically returned by dictCountry
- language Audience language code, i.e.: en, typically returned by dictLanguage
- gender Use gender to generate otherwise, 0: All, 1: Male, 2 Female
- age Audience age. Use age to generate otherwise, 1: 18-24, 2: 25-30, 3: 32-40, 4: 41+.
- interest Audience interest. Reach users based on their specific interests, typically returned by dictInterest
- behavior Audience behavior. Reach users based on app usage and other behaviors, typically returned by dictBehaviour
- device\_brand Audience device brand, typically returned by dictDevice
- min\_device\_os Min OS version of audience used, blank for unrestricted, typically returned by dictOS
- max\_device\_os Max OS version of audience used, blank for unrestricted, typically returned by dictOS
- net\_type Use netType to generate otherwise, 0: All, 1: Wifi, 2: 2G/3G/4G
- dsp\_url Bid request url of DSP when this pre-targeting condition meets.

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

```
orion OA uth, \ list Audiences, \ create Audience, \ helpers
```

44 updateCampaign

#### **Examples**

updateCampaign

Update a campaign

### **Description**

Update campaign settings, see details and example.

### Usage

```
updateCampaign(campaign.id, body)
```

### **Arguments**

campaign.id id of campaign to update

body Body of request that includes campaigns settings. See examples and details.

### **Details**

Valid values for body:

- switch Ad switch, use switchIt otherwise, 1: On, 0: Off.
- name Campaign name should be unique under the same user account.
- budget\_type can take either daily or lifetime, see budgetType.
- budget\_daily Required when budget\_type equals to daily
- budget\_lifetime Required when budget\_type equals to lifetime

### Author(s)

John Coene < jcoenep@gmail.com>

updateObject 45

#### See Also

```
orionOAuth, listCampaigns, createCampaign, helpers
```

### **Examples**

updateObject

Update any object

### **Description**

Update any object, see details and example.

# Usage

```
updateObject(object, body, id)
```

### **Arguments**

object to be updated, see details for valid values.

body Body of request that includes campaigns settings. See examples.

id id of object to update

### **Details**

Valid values for object:

- audience see updateAudience for details.
- campaign see updateCampaign for details.
- adset see updateAdset for details.
- ad see updateAd for details.

upodateObject can essentially replace any other update family functions. See examples.

46 updateObject

#### Author(s)

```
John Coene < jcoenep@gmail.com>
```

#### See Also

orionOAuth, updateAudience, updateCampaign, updateAdset, updateAd and helpers

```
## Not run:
# authenticate
orionOAuth(client.id = 0000,
           client.secret = "0x000000000x00x0x0000xxx0000x0xx0")
# list current adsets
adsets <- listAdsets()</pre>
# new settings
settings <- list(switch = switchIt("on"), name = "New Adset Name")</pre>
# update adset
update <- updateObject(object = "adset", adset.id = adsets$id[1],</pre>
                        body = settings)
# equivalent to
# update <- updateAdset(adset.id = adsets$id[1], body = settings)</pre>
# fetch updated list
adsets <- listAdsets()</pre>
## End(Not run)
```

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