Package 'GAR'

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Type Package

Title Authorize and Request Google Analytics Data

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BugReports https://github.com/andrewgeisler/GAR/issues

Description The functions included are used to obtain initial authentication with Google Analytics as well as simple and organized data retrieval from the API. Allows for retrieval from multiple profiles at once.

License GPL-2

Depends httr, jsonlite

R topics documented:

GAR-package   *Authorize and Request Google Analytics data.*

Description

This package is designed to aid in obtaining initial authentication with Google Analytics using the getCode() and getRefresh() functions.

Once authenticated you will have an refresh token which can be repeated traded for an access token via the tokenRefresh() function. Once traded for an access token, data can be retreived used the gaRequest() function.

Details

Package:	GAR
Type:	Package
Version:	1.2
Date:	2015-03-10
License:	R Version 3.1
Depends:	httr, jsonlite

Package includes four main functions: getCode(), getRefresh(), gaRequest() and tokenRefresh().

Author(s)

Andrew Geisler

Maintainer: Andrew Geisler <andrew.geisler@gmail.com>

References

https://developers.google.com/analytics/devguides/reporting/core/v3/

See Also

GAR gaRequest getCode getRefresh tokenRefresh

Examples

```
## Not run:

getCode(
        client_id="ABCDEFG"
        )

getRefresh(
           client_id="ABCDEFG",
           client_secret="HIJKLMNOP",
           code="QRSTUVWX"
           )

gaRequest(
        id=c('ga:123456789','ga:987654321'),
        dimensions='ga:date,ga:month',
        metrics='ga:sessions,ga:users,ga:pageviews',
        start='YYYY-MM-DD',
        end='YYYY-MM-DDD',
        sort='-ga:sessions,ga:users',
        max='1000',
        filters='ga:browser==VALUE,ga:city==VALUE',
        segment='abcdef'
        token='abcdef'
        )

tokenRefresh(
           client_id="ABCDEFG",
           client_secret="HIJKLMNOP",
           token="QRSTUVWX"
           )
```

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

---

gaRequest *Request data from Google Analytics API*

Description

This function compiles a Google Analytics API request, retrieves the results and outputs a dataframe. Input formats based on documented Google Analytic's Core Reporting API requirements. The function is designed to loop through the same request to multiple GA account ids. The result will still be one data frame. Additionally, the function attemps to output the error message if there is an issue.

Usage

```
gaRequest(
          id, dimensions = NA, metrics, start, end,
          token, sort = NA, max = NA, segment = NA, filters = NA
          )
```

Arguments

id	Required. Profile ID including the ga: prefix. Can be a more than one. See example below.
dimensions	Not Required. Parameter can be a single dimension or a string of multiple dimensions separated by commas.
metrics	Required. Parameter can be a single metric or a string of multiple metrics separated by commas.
start	Required. Start date formated as a string (YYYY-MM-DD).
end	Required. End date formated as a string (YYYY-MM-DD).
token	Required.
sort	Not Required. Can be a single parameter or can be a string of multiple parameters separated by commas.
max	Not Required. Google Analytics default is 100 and their max is 10,000.
segment	Not Required.
filters	Not Required. Can be a single parameter or can be a string of multiple parameters separated by commas.

Details

The function returns a dataframe.

Value

profileId	Profile/view ID in request.
accountId	Account ID.
webPropertyId	Property UA number.
internalWebPropertyId	
	Internal web property ID.
profileName	Name of profile in the request.
tableId	Table ID from Google Analytics.
start.date	Start date of the request.
end.date	End date of the request.
dimension(s)	Each requested dimension will be a separate field in Data Frame.
metric(s)	Each requested metric will be a separate field in Data Frame.

Author(s)

Andrew Geisler

References

https://developers.google.com/analytics/devguides/reporting/core/v3/

See Also

GAR gaRequest getCode getRefresh tokenRefresh

Examples

```
## Not run:
gaRequest(
        id=c('ga:123456789','ga:987654321'),
        dimensions='ga:date,ga:month',
        metrics='ga:sessions,ga:users,ga:pageviews',
        start='YYYY-MM-DD',
        end='YYYY-MM-DDD',
        sort='-ga:sessions,ga:users',
        max='1000',
        filters='ga:browser==VALUE,ga:city==VALUE',
        segment='abcdef'
        token='abcdef'
        )

## End(Not run)
```

getCode *Authenticates a Google Analytics.*

Description

This function launches an URL in a broswer for authentication. Once authenticated, the value after code= appearing in the resulting URL needs to be manually copied and stored for later use. This code will allow you to get a refresh token that can be refreshed until revoked. This should be a one-time process unless code is revoked,lost or expires before used to get a refresh token.

Usage

```
getCode(client_id)
```

Arguments

client_id   Client ID found in API Console. String format.

Details

Function opens a webiste URL in a browser for authenication. A code can be retrieved from the redirect URL.

Value

Code is a string to be used in conjunction with gaRefresh() function.

Author(s)

Andrew Geisler

References

https://developers.google.com/analytics/devguides/reporting/core/v3/

See Also

GAR gaRequest getCode getRefresh tokenRefresh

Examples

```
## Not run:
getCode(
        client_id="ABCDEFG"
        )

## End(Not run)
```

---

getRefresh   *Retrieves a Google Analytics refresh token using a pre-retrieved and
                              authenciated code. A refresh token can be used to repeating obtain a
                              new access token without additional manual authentication.*

Description

This function retrieves a Google Analytics refresh token using a supplied credentials and code. A
refresh token can be traded for an access token repeatedly. As a result, this should only be needed
one time unless the refresh token is revoked or lost.

Usage

```
getRefresh(client_id, client_secret, code)
```

Arguments

client_id   Client ID found in API Console. String format.

client_secret   Client Secret found in API Console. String format.

code   Code obtained from the redirect URL provided by the getCode() function. String
                 format.

Details

Function returns a GA refresh token.

Value

Refresh token is a string to be used in conjunction with tokenRefresh() function.

Author(s)

Andrew Geisler

References

https://developers.google.com/analytics/devguides/reporting/core/v3/

See Also

GAR gaRequest getCode getRefresh tokenRefresh

Examples

```
## Not run:
getRefresh(
           client_id="ABCDEFG",
           client_secret="HIJKLMNOP",
           code="QRSTUVWX"
           )

## End(Not run)
```

---

tokenRefresh   *Retrieves a Google Analytics access token using a refresh token.*

Description

This function retrieves a Google Analytics access token using a supplied refresh token. Refresh tokens do not expire and can be traded for an access token repeatedly.

Usage

```
tokenRefresh(client_id, client_secret, token)
```

Arguments

client_id	Client ID found in API Console. String format.
client_secret	Client Secret found in API Console. String format.
token	Refresh token as originally generated manually. String format.

Details

Function returns a GA access token.

Value

Access token is a string to be used in conjunction with gaRequest() function.

Author(s)

Andrew Geisler

References

https://developers.google.com/analytics/devguides/reporting/core/v3/

See Also

GAR gaRequest getCode getRefresh tokenRefresh

Examples

```
## Not run:
tokenRefresh(
          client_id="ABCDEFG",
          client_secret="HIJKLMNOP",
          token="QRSTUVWX"
          )

## End(Not run)
```

Index