Package ‘adobeanalyticsr’

November 9, 2023

Type Package
Version 0.4.0
Title R Client for 'Adobe Analytics' API 2.0
Description Connect to the 'Adobe Analytics' API v2.0 <https://github.com/AdobeDocs/analytics-2.0-apis> which powers 'Analysis Workspace'. The package was developed with the analyst in mind, and it will continue to be developed with the guiding principles of iterative, repeatable, timely analysis.
License MIT + file LICENSE
Encoding UTF-8
LazyData true
Depends R (>= 3.2.0)
Imports assertthat (>= 0.2.0), jsonlite (>= 1.5), dplyr (>= 0.8.1), stringr (>= 1.4.0), purrr (>= 0.3.3), httr (>= 1.3.1), tidyr (>= 1.0.0), rlang (>= 0.4.8), lubridate (>= 1.7.9), ggplot2 (>= 3.3.2), scales (>= 1.1.1), R6, jose, openssl, lifecycle, glue, vctrs, progress, memoise, utils
Suggests knitr, testthat (>= 3.0.0), rmarkdown
RoxygenNote 7.2.3
RdMacros lifecycle
VignetteBuilder knitr
BugReports https://github.com/benrwoodard/adobeanalyticsr/issues
URL https://github.com/benrwoodard/adobeanalyticsr
NeedsCompilation no
Author Ben Woodard [aut, cre], Tim Wilson [aut, ctb], Charles Gallagher [ctb], Mark Edmondson [ctb]
Maintainer Ben Woodard <benrwoodard@gmail.com>
Repository  CRAN
Date/Publication  2023-11-09 11:40:06 UTC

R topics documented:

aw_anomaly_report ........................................... 3
aw_auth ......................................................... 4
aw_auth_with .................................................. 5
aw_freeform_table ............................................. 6
aw_get_calculatedmetrics .................................... 10
aw_get_dimensions ............................................ 12
aw_get_metrics ................................................ 13
aw_get_projects ................................................ 15
aw_get_project_config ........................................ 16
aw_get_reportsuites .......................................... 16
aw_get_segments .............................................. 17
aw_get_tags ..................................................... 19
aw_segment_table ............................................. 20
aw_token ......................................................... 21
aw_workspace_report .......................................... 22
cm_build ......................................................... 22
cm_copy ........................................................ 24
cm_delete ....................................................... 25
cm_formula ...................................................... 26
cm_function .................................................... 27
cm_update ....................................................... 28
cm_val .......................................................... 29
get_cm_functions ................................................ 30
get_me .......................................................... 30
get_usage_logs .................................................. 31
get_users ........................................................ 32
proj_build ....................................................... 33
proj_update ..................................................... 34
seg_build ........................................................ 35
seg_con .......................................................... 37
seg_copy ........................................................ 38
seg_delete ....................................................... 39
seg_rule ........................................................ 40
seg_seq .......................................................... 41
seg_then ......................................................... 43
seg_update ....................................................... 44
seg_val .......................................................... 44
seg_verbs ....................................................... 45
tags_add ........................................................ 46

Index  47
aw_anomaly_report

Anomaly Report

Description

Get an anomaly report for one or more metrics

Usage

```r
aw_anomaly_report(
  company_id = Sys.getenv("AW_COMPANY_ID"),
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  date_range = c(Sys.Date() - 31, Sys.Date() - 1),
  metrics,
  granularity = "day",
  segmentId = NA,
  quickView = FALSE,
  anomalyDetection = TRUE,
  countRepeatInstances = TRUE,
  debug = FALSE
)
```

Arguments

- **company_id**: Company Id. Taken from the global environment by default if not provided.
- **rsid**: Adobe report number
- **date_range**: A two length vector of start and end Date objects (default set to show last 30 days)
- **metrics**: Metric to request the anomaly detection. If multiple metrics, each metric and date will have it’s own row.
- **granularity**: Use either hour, day (default), week, or month
- **segmentId**: Use segments to globally filter the results. Use 1 or many.
- **quickView**: Return a list of 3 lists per metric. 1. All Data 2. Data filtered to include only anomalous rows 3. Interactive ggplot line graph
- **anomalyDetection**: logical statement for including anomaly. Default is TRUE
- **countRepeatInstances**: Should the data include repeat instances
- **debug**: default is FALSE but set to TRUE to see the json request being sent to the Adobe API
Value

If quickView = 'FALSE' (default) then a data frame including the day, metric, data, dataExpected, dataUpperBound, dataLowerBound, and dataAnomalyDetected will be returned. If quickView = 'TRUE' then a list of three lists will be returned. The first list will be a data frame including all the default columns. The second list item will be a filtered data frame that includes rows where dataAnomalyDetected = 'TRUE'. The third list item is a visual made using 'ggplot2' with the error band and points where the dataAnomalyDetected = 'TRUE'. If more than one metric is in the request and quickView is set to TRUE then the lists will be split by each metric requested.

Description

*Note*: `aw_auth()` is the primary function used for authorization. `auth_oauth()` and `auth_jwt()` should typically not be called directly.

Usage

```
aw_auth(type = aw_auth_with(), ...)

auth_jwt(
  file = Sys.getenv("AW_AUTH_FILE"),
  private_key = Sys.getenv("AW_PRIVATE_KEY"),
  jwt_token = NULL,
  ...
)

auth_oauth(
  client_id = Sys.getenv("AW_CLIENT_ID"),
  client_secret = Sys.getenv("AW_CLIENT_SECRET"),
  use_oob = TRUE
)
```

Arguments

- **type**: Either 'jwt' or 'oauth'. This can be set explicitly, but a best practice is to run `aw_auth_with()` to set the authorization type as an environment variable before running `aw_auth()`
- **...**: Additional arguments passed to auth functions.
- **file**: A JSON file containing service account credentials required for JWT authentication. This file can be downloaded directly from the Adobe Console, and should minimally have the fields `API_KEY`, `CLIENT_SECRET`, `ORG_ID`, and `TECHNICAL_ACCOUNT_ID`.
- **private_key**: Filename of the private key for JWT authentication.
- **jwt_token**: *(Optional)* A custom, encoded, signed JWT claim. If used, `client_id` and `client_secret` are still required.
aw_auth_with

client_id: The client ID, defined by a global variable or manually defined
client_secret: The client secret, defined by a global variable or manually defined
use_oob: if FALSE, use a local webserver for the OAuth dance. Otherwise, provide a URL to the user and prompt for a validation code. Defaults to the value of the httr_oob_default default, or TRUE if httpuv is not installed.

Value

The path of the cached token. This is returned invisibly.

Functions

- auth_jwt(): Authenticate with JWT token
- auth_oauth(): Authorize via OAuth 2.0

See Also

aw_auth_with()

Description

Get or set various authorization options. If called without an argument, then these functions return the current setting for the requested option (which can be NULL if the option has not been set). To clear the setting, pass NULL as an argument.

aw_auth_with sets the type of authorization for the session. This is used as the default by aw_auth() when no specific option is given.

aw_auth_path sets the file path for the cached authorization token. It should be a directory, rather than a filename. If this option is not set, the current working directory is used instead.

aw_auth_name sets the file name for the cached authorization token. If this option is not set, the default filename is aw_auth.rds

Usage

aw_auth_with(type)

aw_auth_path(path)

aw_auth_name(name)
Arguments

- **type**
  The authorization type: 'oauth' or 'jwt'

- **path**
  The location for the cached authorization token. It should be a directory, rather than a filename. If this option is not set, the current working directory is used instead. If the location does not exist, it will be created the first time a token is cached.

- **name**
  The filename, such as `aw_auth.rds` for the cached authorization token file. The file is stored as an RDS file, but there is no requirement for the `.rds` file extension. `.rds` is not appended automatically.

Value

- The option value, invisibly

See Also

- `aw_auth()`

---

aw_freeform_table  
Get a freeform table

Description

Get a report analogous to a **Freeform Table** visualization in Analysis Workspace. The function uses the arguments to construct and execute a JSON-based query to the Adobe Analytics API and then returns the results as a data frame.

Usage

```r
aw_freeform_table(
  company_id = Sys.getenv("AW_COMPANY_ID"),
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  date_range = c(Sys.Date() - 30, Sys.Date() - 1),
  dimensions = c("page", "lasttouchchannel", "mobiledevicetype"),
  metrics = c("visits", "visitors"),
  top = c(5),
  page = 0,
  filterType = "breakdown",
  segmentId = NA,
  metricSort = "desc",
  include_unspecified = TRUE,
  search = NA,
  prettynames = FALSE,
  debug = FALSE,
  check_components = TRUE
)
```
Arguments

company_id  Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.

rsid  Adobe report suite ID (RSID). If an environment variable called AW_REPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AW_REPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.

date_range  A length-2 vector with a start date and an end date. POSIXt objects are sent as is, for fine control over the date range. Numeric values are automatically converted to dates.

dimensions  A character vector of dimensions. There is currently a limit of 20 dimension breakdowns. Each dimension value that gets broken down by another dimension requires an additional API call, so the more dimensions that are included, the longer the function will take to return results. This is how the Adobe Analytics API works. Use aw_get_dimensions() to get a list of available dimensions IDs.

metrics  A character vector of metrics. Use aw_get_metrics() and aw_get_calculatedmetrics() to get a list of available metrics IDs.

top  The number of values to be pulled for each dimension. The default is 5 and the "top" is based on the first metric value (along with metricSort). If there are multiple dimensions, then this argument can either be a vector that includes the number of values to include at each level (each breakdown) or, if a single value is used, then that will be the maximum number of values to return at each level. See the Details for information on the unique handling of daterange...

page  Used in combination with top to return the next page of results. Uses 0-based numbering (e.g., top = 50000 and page = 1 will return the top 50,000 items starting at 50,001).

filterType  This is a placeholder argument for use as additional functionality is added to the package. Currently, it defaults to breakdown, and that is the only supported value.

segmentId  A single segment ID or a vector of multiple segment IDs to apply to the overall report. If multiple segmentId values are included, the segments will be effectived ANDed together, just as if multiple segments were added to the header of an Analysis Workspace panel. Use aw_get_segments() to get a list of available segmentId values.

metricSort  Pre-sorts the table by metrics. Values are either asc (ascending) or desc (descending).

include_unspecified  Whether or not to include Unspecified values in the results. This is the equivalent of the Include Unspecified (None) checkbox in freeform tables in Analysis Workspace. This defaults to TRUE, which includes Unspecified values in the results.
search Criteria to filter the results by one or more dimensions. Searches are case-insensitive. Refer to the Details for more information on constructing values for this argument.

prettynames A logical that determines whether the column names in the results use the API field name (e.g., "mobiledevicetype", "pageviews") or the "pretty name" for the field (e.g., "Mobile Device Type", "Page Views"). This applies to both dimensions and metrics. The default value is FALSE, which returns the API field names. For custom eVars, props, and events, the non-pretty values are simply the variable number (e.g., "evar2", "prop3", "event15"). If TRUE, undoes any efficiency gains from setting check_components to FALSE.

default Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.

check_components Specifies whether to check the validity of metrics and dimensions before running the query. This defaults to TRUE, which triggers several additional API calls behind the scenes to retrieve all dimensions and metrics from the API. This has a nominal performance impact and may not be ideal if you are running many queries. If you have many queries, consider implementing validity checking through other means (manually or within the code) and then set this value to FALSE.

Details

This function is based on the Freeform Table visualization in Analysis Workspace. It is accessing the same API call type that is used to generate those visualizations.

**Dimension Ordering:**

Adobe Analytics only queries one dimension at a time, even though the results get returned in a single data frame (or table in the case of Analysis Workspace). The more dimensions are included in the report—the more breakdowns of the data—the more queries are required. As a result, the order of the dimensions can have a dramatic impact on the total query time, even if the resulting data is essentially identical.

One way to understand this is to consider how much dragging and dropping would be required to return the data in Analysis Workspace.

Consider a scenario where you are pulling metrics for the last 30 days (daterangeday) for Mobile Device Type (mobiledevicetype), which has 7 unique values. Setting dimensions = c("daterangeday", "mobiledevicetype") would make one query to get the values of the 30 days included. The query would then run a separate query for each of those 7 mobile device type values for the 30 days within each device type. So, this would be 31 API calls.

If, instead, the function was called with the dimension values reversed (dimensions = c("mobiledevicetype", "daterangeday")), then the first query would return the 7 mobiledevicetype values, and then would run an additional query for each of those 7 mobile device type values to return the results for the 30 days within each device type. This would be only 7 API calls.

Strategically ordering dimensions—and then wrangling the resulting data set as needed—is one of the best ways to improve query performance.

**Date Handling:**

Date handling has several special characteristics that are worth getting familiar with:
The API names for day, week, month, etc. are prepended with `daterange`, so daily data uses `daterangeday`, weekly data uses `daterangeweek`, monthly data uses `daterangemonth`, etc.

When setting the argument for `top`, if the first (or only) dimension value is a `daterange` object, then, if this argument is not explicitly specified or if it uses only a single value (e.g., `top = 10`), the function will still return all of the values that fall in that date range. For instance, if the `date_range` was set for a 30-day period and the first dimension value was `daterangeday`, and no value is specified for `top`, rather than simply returning the first 5 dates in the range, all 30 days will be returned. In the same scenario, if `top = 10` was set, then all 30 days would still be returned, and the 10 would simply be applied to the additional dimensions.

If you want to return all of the date/time values but then have specific control over the number of values returned for each of the drilldown dimensions, then set 0 as the first value in the `top` argument and then specify different numbers for each breakdown (e.g., `top = c(0, 3, 10)` would return all of the date/time values for the specified `date_range`, the top 3 values for the second specified dimension, and then the top 10 values for each of the next dimension’s results).

If you are using a `daterange` value not as the first dimension, then simply using 0 at the same level in the `top` argument specification will return all of the values for that date/time value.

**Search/Filtering:**

There are powerful filtering abilities within the function. However, to support that power requires a syntax that can feel a bit cumbersome for simple queries. **Note:** search filters are case-insensitive. This is Adobe Analytics API functionality and can not be specified otherwise in queries.

The `search` argument takes a vector of search strings, with each value in the vector corresponding to the dimension value that is at the same position. These search strings support a range of operators, including AND, OR, NOT, MATCH, CONTAINS, BEGINS-WITH, and ENDS-WITH.

The default for any search string is to use CONTAINS. Consider a query where dimensions = `c("mobiledevicetype", "lasttouchchannel")`:

- `search = "CONTAINS 'mobile'"` will return results where `mobiledevicetype` contains "mobile", so would return all rows for `Mobile Phone`.
- This could be shortened to `search = "mobile"` and would behave exactly the same, since `CONTAINS` is the default operator
- `search = c("CONTAINS 'mobile'", "CONTAINS 'search'")` will return results where `mobiledevicetype` contains "mobile" and, within those results, results where `lasttouchchannel` contains "search".
- `search = c("(CONTAINS 'mobile') OR (CONTAINS 'tablet')", "(MATCH 'paid search')")` will return results where `mobiledevicetype` contains "mobile" or "tablet" and, within those results, will only include results where `lasttouchchannel` exactly matches "paid search" (but is case-insensitive, so would return "Paid Search" values).

**Value**

A data frame with the specified dimensions and metrics.

**See Also**

`get_me()`, `aw_get_reportsuites()`, `aw_get_segments()`, `aw_get_dimensions()`, `aw_get_metrics()`, `aw_get_calculatedmetrics()`, `aw_segment_table()`
aw_get_calculatedmetrics

Get a list of calculated metrics.

Description

Retrieve a list of available calculated metrics. The results will always include these default items: id, name, description, rsid, owner, polarity, precision, type. Other attributes can be optionally requested through the expansion field.

Usage

aw_get_calculatedmetrics(
  company_id = Sys.getenv("AW_COMPANY_ID"),
  rsids = NULL,
  ownerId = NULL,
  filterByIds = NULL,
  toBeUsedInRsid = NULL,
  locale = "en_US",
  name = NULL,
  tagNames = NULL,
  favorite = NULL,
  approved = NULL,
  limit = 1000,
  page = 0,
  sortDirection = "DESC",
  sortProperty = NULL,
  expansion = NULL,
  includeType = "all",
  debug = FALSE
)

Arguments

company_id  Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me to get a list of available company_id values.

rсидs  Filter the list to only include calculated metrics tied to a specified RSID or list of RSIDs. Specify multiple RSIDs as a vector (i.e., "rsids = c("rsid_1", rsid_2",...rsid_n")"). Use aw_get_reportsuites to get a list of available rsid values.

ownerId  Filter the list to only include calculated metrics owned by the specified loginId.

filterByIds  Filter the list to only include calculated metrics in the specified list as specified by a single string or as a vector of strings.

toBeUsedInRsid  The report suite where the calculated metric is intended to be used. This report suite is used to determine things like compatibility and permissions. If it is not specified, then the permissions will be calculated based on the union of all
metrics authorized in all groups the user belongs to. If `compatibility` is specified for expansion, and `toBeUsedInRsid` is not, then the compatibility returned is based off of the compatibility from the last time the calculated metric was saved.

**locale**
The locale that system-named metrics should be returned in. Non-localized values will be returned for title, name, description, etc. if a localized value is not available.

**name**
Filter the list to only include calculated metrics that contain the specified `name`. This is case-insensitive and is a simple, single string match.

**tagNames**
Filter the list to only include calculated metrics that contain one of the tags as specified by a single string or vector of strings.

**favorite**
Set to TRUE to only include calculated metrics that are favorites in the results. A value of FALSE will return all calculated metrics, including those that are favorites.

**approved**
Set to TRUE to only include calculated metrics that are approved in the results. A value of FALSE will return all calculated metrics, including those that are approved and those that are not.

**limit**
The number of results to return per page. The default is 1,000.

**page**
The "page" of results to display. This works in conjunction with the `limit` argument and is zero-based. For instance, if `limit = 10` and `page = 1`, the results returned would be 11 through 20.

**sortDirection**
The sort direction for the results: ASC (default) for ascending or DESC for descending. (This is case insensitive, so asc and desc work as well.)

**sortProperty**
The property to sort the results by. Currently available values are id (default), name, and modified_date. Note that setting `expansion = modified` returns results with a column added called `modified`, which is the last date the calculated metric was modified. When using this value for `sortProperty`, though, the name of the argument is `modified_date`, because why would we expect locked-in consistency from Adobe?

**expansion**
Additional calculated metric metadata fields to include in the results: reportSuiteName, ownerFullname, modified, tags, definition, compatability, categories. See Details for more information about the quirks of this argument.

**includeType**
Include additional calculated metrics not owned by user. Available values are all (default), shared, and templates. The all option takes precedence over "shared"

**debug**
Include the output and input of the api call in the console for debugging. Default is FALSE

**Details**
This function is useful/needed to identify the specific ID of a calculated metric for use in other functions like `aw_freeform_report`.

The `expansion` argument accepts the following values, which will then include additional columns in the results:

- **ownerFullName**: adds owner.name and owner.login columns to the results (owner.id is already included by default).
• **modified**: adds a modified column to the output with the date (ISO 8601 format) each calculated metric was last modified.

• **definition**: adds multiple columns (the number will vary based on the number and complexity of calculated metrics returns) that provide the actual formula for each of the calculated metrics. This is returned from the API as a JSON object and converted into columns by the function, which means it is pretty messy, so, really, it’s not recommended that you use this value.

• **compatibility**: should add a column with the products that the metric is compatible with, but this behavior has not actually been shown to be true, so this may actually do nothing if included.

• **reportSuiteName**: adds a reportSuiteName and a siteTitle column with the friendly report suite name for the RSID.

• **tags**: adds a column with an embedded data frame with all of the existing tags that are associated with the calculated metric. This can be a bit messy to work with, but the information is, at least, there.

Multiple values for expansion can be included in the argument as a vector. For instance, expansion = c("tags", "modified") will add both a tags column and a modified column to the output.

**Value**

A data frame of calculated metrics and their metadata.

**See Also**

aw_get_metrics

---

**aw_get_dimensions**

**Get list of dimensions**

**Description**

This will generate an extensive list of all the dimensions in the reportsuite.

**Usage**

```r
aw_get_dimensions(
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  locale = "en_US",
  segmentable = FALSE,
  reportable = FALSE,
  classifiable = FALSE,
  expansion = NULL,
  debug = FALSE,
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```
Arguments

rsid  Adobe report suite ID (RSID). If an environment variable called \texttt{AW_REPORTSUITE\_ID} exists in .Renviron or elsewhere and no \texttt{rsid} argument is provided, then the \texttt{AW_REPORTSUITE\_ID} value will be used. Use \texttt{aw\_get\_reportsuites} to get a list of available \texttt{rsid} values.

locale  The locale that dimension details should be returned in. The default is \texttt{en\_US}.

segmentable  Boolean that determines whether or not to include dimensions that can be used in segments. \texttt{FALSE} (the default) returns all dimensions (\textit{not} just the non-segmentable ones). Examples of dimensions that cannot be used in segments are \texttt{clickmapaction}, \texttt{codeversion}, \texttt{newvisit}, and \texttt{pageurl}.

reportable  Boolean that determines whether or not to include dimensions that can be used in reports \texttt{FALSE} (the default) returns all dimensions (\textit{not} just the non-segmentable ones).

classifiable  Boolean that determines whether or not to include dimensions that can be used in classifications \texttt{FALSE} (the default) returns all dimensions (\textit{not} just the non-segmentable ones).

expansion  Additional dimension metadata to include in the results: \texttt{tags}, \texttt{allowedForReporting}, and \texttt{categories}. This argument takes a single value (e.g., \texttt{expansion = \"tags\"}) or a vector of values (e.g., \texttt{expansion = \texttt{c\texttt{\("tags", \"categories\")}}}).

debug  Include the output and input of the api call in the console for debugging. Default is \texttt{FALSE}

company\_id  Company ID. If an environment variable called \texttt{AW\_COMPANY\_ID} exists in .Renviron or elsewhere and no \texttt{company\_id} argument is provided, then the \texttt{AW\_COMPANY\_ID} value will be used. Use \texttt{get\_me} to get a list of available \texttt{company\_id} values.

Value

A data frame of dimensions and their meta data.

\begin{knitrout}
\small
\begin{verbatim}
aw_get_metrics
Get list of metrics
\end{verbatim}
\end{knitrout}

Description

Get a data frame with all of the standard (non-calculated) metrics (measures) in the report suite.

Usage

\begin{verbatim}
aw_get_metrics(
  rsid = Sys.getenv("AW\_REPORTSUITE\_ID"),
  locale = "en\_US",
  segmentable = "NULL",
  expansion = NULL,
  company\_id = Sys.getenv("AW\_COMPANY\_ID"),
  debug = FALSE
)
\end{verbatim}
Arguments

rsid  Adobe report suite ID (RSID). If an environment variable called AW_REPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AW_REPORTSUITE_ID value will be used. Use aw_get_reportsuites to get a list of available rsid values.

locale The locale that system-named metrics should be returned in. Non-localized values will be returned for title, name, description, etc. if a localized value is not available.

segmentable Boolean that determines whether or not to include metrics that can be used in segments. NULL (the default) and FALSE return all metrics (not just the non-segmentable ones). Examples of metrics that cannot be used in segments are bounces, bounce rate, entries, and visitors.

expansion Additional metrics metadata to include in the results: tags, allowedForReporting, and categories. This argument takes a single value (e.g., expansion = "tags") or a vector of values (e.g., expansion = c("tags", "categories")).

company_id Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me to get a list of available company_id values.

debbug Include the output and input of the api call in the console for debugging. Default is FALSE

Details

This function is commonly used to get the correct ID for a specific metric or metrics that will be used in other function calls. The results returned are:

- All of the "out of the box" metrics like visits, page views, visitors, orders, revenue, bounce rate, etc.
- All of the enabled events that are configured in the report suite.
- An instances metric for each enabled eVar.

This function does not return calculated metrics.

Value

A data frame of metrics (excluding calculated metrics) and their meta data.

See Also

aw_get_calculatedmetrics
Description

A list of projects in the account

Usage

```r
aw_get_projects(
    includeType = "all",
    expansion = NULL,
    locale = "en_US",
    limit = 1000,
    page = 0,
    debug = FALSE,
    company_id = Sys.getenv("AW_COMPANY_ID")
)
```

Arguments

- **includeType**: Include additional projects not owned by user. The "all" option takes precedence over "shared". If neither guided, or project is included, both types are returned.
- **expansion**: Comma-delimited list of additional project metadata fields to include on response. Available values: reportSuiteName, ownerFullName, modified, tags, accessLevel, externalReferences, definition.
- **locale**: Locale. Default value: en_US.
- **limit**: Number of results per page. Default value: 1000.
- **page**: Page number (base 0 - first page is "0").
- **debug**: Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.
- **company_id**: Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use `get_me()` to get a list of available company_id values.

Value

A data frame
### aw_get_project_config  
*Pull a project configuration*

**Description**

Returns a project configuration json string

**Usage**

```r
aw_get_project_config(
  projectId = NULL,
  expansion = NULL,
  locale = "en_US",
  debug = FALSE,
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

**Arguments**

- `projectId`: The Project id for which to retrieve information
- `expansion`: Comma-delimited list of additional project metadata fields to include on response. Available values: reportSuiteName, shares, tags, accessLevel, modified, externalReferences, definition
- `locale`: Locale Default value: en_US
- `debug`: Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.
- `company_id`: Company ID. If an environment variable called `AW_COMPANY_ID` exists in `.Renviron` or elsewhere and no `company_id` argument is provided, then the `AW_COMPANY_ID` value will be used. Use `get_me()` to get a list of available `company_id` values.

**Value**

A json string

### aw_get_reportsuites  
*Get list of report suites*

**Description**

Retrieve a list of report suites and meta data about each one.
Usage

```r
aw_get_reportsuites(
  company_id = Sys.getenv("AW_COMPANY_ID"),
  rsids = NULL,
  rsidContains = NULL,
  limit = 10,
  page = 0,
  expansion = NULL,
  debug = FALSE
)
```

Arguments

- **company_id**: Company ID. If an environment variable called `AW_COMPANY_ID` exists in `.Renviron` or elsewhere and no `company_id` argument is provided, then the `AW_COMPANY_ID` value will be used. Use `get_me` to get a list of available `company_id` values.
- **rsids**: Filter the results to include one or more specific report suites. Specify multiple RSIDs as a vector (i.e., `"rsids = c("rsid_1", rsid_2",...rsid_n")`).
- **rsidContains**: Filter the results list to only include suites that contain the specified string within the RSID. This is case-insensitive and is a simple, single string match.
- **limit**: The number of results to return per page. This argument works in conjunction with the `page` argument. The default is 10.
- **page**: The "page" of results to display. This works in conjunction with the `limit` argument and is zero-based. For instance, if `limit = 20` and `page = 1`, the results returned would be 21 through 40.
- **expansion**: Additional segment metadata fields to include in the results: name, parentRsid, currency, calendarType, timezoneZoneinfo. This argument takes a single value (e.g., `expansion = "name"`) or a vector of values (e.g., `expansion = c("name", "currency")`).
- **debug**: Include the output and input of the api call in the console for debugging. Default is FALSE

Value

A data frame of report suites and their meta data.

---

**aw_get_segments**

*Get a list of segments*

**Description**

Retrieve all segments or a filtered list of segments
aw_get_segments

Usage

aw_get_segments(
  company_id = Sys.getenv(“AW_COMPANY_ID”),
  rsids = NULL,
  segmentFilter = NULL,
  locale = “en_US”,
  name = NULL,
  tagNames = NULL,
  filterByPublishedSegments = “all”,
  limit = 10,
  page = 0,
  sortDirection = “ASC”,
  sortProperty = “id”,
  expansion = NULL,
  includeType = “all”,
  debug = FALSE
)

Arguments

company_id     Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me to get a list of available company_id values.

rsids     Filter the list to only include segments tied to a specified RSID or list of RSIDs. Specify multiple RSIDs as a vector (i.e., “rsids = c("rsid_1", rsid_2", ..., rsid_n")”). Use aw_get_reportsuites to get a list of available rsid values.

segmentFilter     Filter list to only include segments in the list of segment IDs (comma-delimited)

locale     The locale that segment details should be returned in. The default is en_US.

ame     Filter the list to only include segments that contain the specified name. This is case-insensitive and is a simple, single string match.

tagNames     Filter the list to only include segments that contain one of the tags.

filterByPublishedSegments     Filter the list to only include segments where the published field is set to one of the allowable values: all (the default), TRUE, or FALSE.

limit     The number of results to return per page. This argument works in conjunction with the page argument. The default is 10.

page     The "page" of results to display. This works in conjunction with the limit argument and is zero-based. For instance, if limit = 20 and page = 1, the results returned would be 21 through 40.

sortDirection     The sort direction for the results: ASC (default) for ascending or DESC for descending. (This is case insensitive, so asc and desc work as well.)

sortProperty     The property to sort the results by. Currently available values are id (default), name, and modified_date. Note that setting expansion = modified returns results with a column added called modified, which is the last date the calculated metric was modified. When using this value for sortProperty, though,
the name of the argument is `modified_date`, because why would we expect
locked-in consistency from Adobe?

**expansion**

Additional segment metadata fields to include in the results: `reportSuiteName`,
`ownerFullName`, `modified`, `tags`, `compatibility`, `definition`, `publishingStatus`,
`definitionLastModified`, and `categories`. This argument takes a single
value (e.g., `expansion = "modified"`) or a vector of values (e.g., `expansion
= c("modified", "ownerFullName").

**includeType**

Include additional segments not owned by the user. Available values are all (de-
default), shared, and templates. The all option takes precedence over "shared".

depex

Include the output and input of the api call in the console for debugging. Default
is FALSE

**Value**

A data frame of segments and their meta data.

---

### aw_get_tags

*Get a list of tags*

---

### Description

Retrieve all tag names or search by component id or tag names

### Usage

```r
aw_get_tags(
  company_id = Sys.getenv("AW_COMPANY_ID"),
  componentId = NULL,
  componentType = NULL,
  tagNames = NULL,
  limit = 1000,
  page = 0,
  debug = FALSE
)
```

### Arguments

- **company_id**: Company ID. If an environment variable called `AW_COMPANY_ID` exists in `.Renviron` or elsewhere and no `company_id` argument is provided, then the `AW_COMPANY_ID` value will be used. Use `get_me` to get a list of available `company_id` values.
- **componentId**: The component id being requested. Default is NULL
- **componentType**: The component type being requested. Options include segment, dashboard, bookmark, calculatedMetric, project, dateRange, metric, dimension, virtualReportSuite, scheduledJob, alert, classification. Default is NULL
- **tagNames**: Comma separated vector of tag names. `componentType`
```r
aw_segment_table

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>limit</td>
<td>The number of results to return per page. This argument works in conjunction with the page argument. The default is 10.</td>
</tr>
<tr>
<td>page</td>
<td>The &quot;page&quot; of results to display. This works in conjunction with the limit argument and is zero-based. For instance, if limit = 20 and page = 1, the results returned would be 21 through 40.</td>
</tr>
<tr>
<td>debug</td>
<td>Include the output and input of the api call in the console for debugging. Default is FALSE</td>
</tr>
</tbody>
</table>

Value

A data frame of tags and the associated meta data.

Description

This is the equivalent of a freeform table with segments as the row components. This type of table offers a few components that `aw_freeform_table` does not. For example, this function does not require (or allow) dimensions to be included in the breakdown. Segment IDs are automatically translated into their human-readable names.

Usage

```r
aw_segment_table(
  company_id = Sys.getenv("AW_COMPANY_ID"),
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  segmentRsids,
  date_range = c(Sys.Date() - 30, Sys.Date() - 1),
  metrics = c("visits", "visitors"),
  globalSegment = NULL,
  segmentIds = NULL,
  debug = FALSE
)
```

Arguments

- **company_id**: Company ID
- **rsid**: Report suite ID for the data pull
- **segmentRsids**: Deprecated.
- **date_range**: Date range
- **metrics**: Metrics to request for each segment
- **globalSegment**: One or more segments to apply globally over all other segments
- **segmentIds**: One or more segments that will compose the rows of the table
- **debug**: Logical, whether to make verbose requests to the API and view the whole exchange
```
Details

This is a specialized function. To see segments broken down by dimensions, we recommend making multiple requests to `aw_freeform_table` with different global segments applied, and then row-binding them together yourself.

Unlike `aw_freeform_table`, this function automatically handles the 10-metric restriction imposed by the API.

Efficiency:
In short, segments are cheap, metrics are expensive. Adding 1 metric is the equivalent of adding 10 segments, judging by the number of requests necessary to collect the data.

Stacking segments:
The function does not currently support segment breakdowns, but you can stack segments by applying a global segment to your query.

Value

tibble::tibble() of segments and metrics. Rows are returned with segments in the order they were requested, not by metric sorting.

See Also

 `aw_freeform_table()`

---

**aw_token**

OAuth2 Token for Adobe Analytics (deprecated)

Description

This is the legacy mechanism for retrieving the authorization token using OAuth. It has been replaced by `aw_auth()`.

[Deprecated]

Usage

```r
aw_token(
  client_id = Sys.getenv("AW_CLIENT_ID"),
  client_secret = Sys.getenv("AW_CLIENT_SECRET"),
  use_oob = TRUE
)
```

Arguments

- `client_id`: defined by global variable or manually defined
- `client_secret`: defined by global variable or manually defined
- `use_oob`: for the purpose of testing. Default is set to TRUE
An authorization token is saved the file name aa.oauth. If the file aa.oauth does not exist then one will be created at the end of the authorization process.

**See Also**

aw_auth()

---

**aw_workspace_report**  
*Use a prebuilt json query to pull a ranked report*

**Description**

Organizes the arguments into a json string and then structures the data after the internal function makes the api call. Only runs a single dimension with as many metrics as you want.

**Usage**

```r
aw_workspace_report(req_body = "", company_id = Sys.getenv("AW_COMPANY_ID"))
```

**Arguments**

- `req_body`  
The json string copied from Workspace
- `company_id`  
Company Id. Taken from the global environment by default if not provided.

**Value**

A data frame of dimensions and metrics

---

**cm_build**  
*Build a Calculated Metric*

**Description**

This function combines formulas to create calculated metrics in Adobe Analytics
Usage

cm_build(
    name = NULL,
    description = NULL,
    formula = NULL,
    seg_filter = NULL,
    polarity = "positive",
    precision = 0,
    type = "decimal",
    create_cm = FALSE,
    tagNames = NULL,
    internal = FALSE,
    debug = FALSE,
    rsid = Sys.getenv("AW_REPORTSUITE_ID"),
    company_id = Sys.getenv("AW_COMPANY_ID")
)

Arguments

name  This is the name of the new calculated metric (required)
description  This is the description of the segment (optional)
formula  Formulas are list objects created using the cm_formula() function.
seg_filter  A segment filter to be added to a metric in the formula
polarity  Also known as 'Show Upward Trend As' in the UI. Options include 'positive' (default) or 'negative'. This metric polarity setting shows whether Analytics should consider an upward trend in the metric as good (green) or bad (red). As a result, the report’s graph will show as green or red when it’s going up.
precision  Shows how many decimal places will be shown in the report. The maximum number of decimal places you can specify is 10. Also known as 'Decimal Places' in the UI. Default is 0. Must be a numeric.
type  Choices include Decimal (default), Time, Percent, and Currency. Also known as 'Format' in the UI.
create_cm  Used to determine if the segment should be created in the report suite or if the definition should be returned to be validated using cm_validate. Default is FALSE
tagNames  Apply tag names to the newly created calculated metric. Single string or a vector.
internal  Determines if this segment is to be available in the UI. Default is FALSE, meaning the segment will not be available in the UI, nor will the ID be available in the aw_get_segments function call.
debug  This enables the api call information to show in the console for help with debugging issues. default is FALSE
rsid  Adobe report suite ID (RSID). If an environment variable called AW_REPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AW_REPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.
cm_copy

**cm_copy**

*Copy a Calculated Metric*

---

**Description**

This function copies and existing function and creates a duplicate based on the definition.

**Usage**

```r
cm_copy(
  id,
  name = NULL,
  description = NULL,
  polarity = NULL,
  precision = NULL,
  type = NULL,
  create_cm = FALSE,
  debug = FALSE,
  rsid = NULL,
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

**Arguments**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>The id of the old calculated metric</td>
</tr>
<tr>
<td>name</td>
<td>This is the name of the new calculated metric. If not provided, the prefix &quot;Copy_&quot; will be added to the existing name. (optional)</td>
</tr>
<tr>
<td>description</td>
<td>This is the description of the segment (optional)</td>
</tr>
<tr>
<td>polarity</td>
<td>Also known as 'Show Upward Trend As' in the UI. Options include 'positive' or 'negative'. Default is based on original calculated metric definition. This metric polarity setting shows whether Analytics should consider an upward trend in the metric as good (green) or bad (red). As a result, the report's graph will show as</td>
</tr>
</tbody>
</table>
cm_delete

green or red when it’s going up. Default is based on original calculated metric definition.

precision  Shows how many decimal places will be shown in the report. The maximum number of decimal places you can specify is 10. Also known as 'Decimal Places' in the UI. Default is based on original calculated metric definition.

type  Choices include decimal (default), time, percent, and currency. Also known as 'Format' in the UI. Default is based on original calculated metric definition.

create_cm  Used to determine if the segment should be created in the report suite or if the definition should be returned to be validated using cm_validate. Default is FALSE

debug  This enables the api call information to show in the console for help with debugging issues. default is FALSE

rsid  Adobe report suite ID (RSID). If an environment variable called AW_REPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AW_REPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.

company_id  Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.

Details

See more information here

Value

If the "create_cm" argument is set to FALSE a list object definition will be returned. If the "create_cm" argument is set to TRUE and the calculated metric is valid it will return a data frame of the newly created calculated metric id along with some other basic meta data. If it returns an error then the error response will be returned to help understand what needs to be corrected.

---

**cm_delete**  *Delete A Calculated Metric Function*

**Description**

Use this function to delete a specific calculated metric.

**Usage**

```r
cm_delete(
  id = NULL,
  warn = TRUE,
  locale = "en_US",
  debug = FALSE,
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```
Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>Calculated Metric ID to be deleted.</td>
</tr>
<tr>
<td>warn</td>
<td>Boolean of whether or not to include a warning message.</td>
</tr>
<tr>
<td>locale</td>
<td>language - default 'en_US'</td>
</tr>
<tr>
<td>debug</td>
<td>Default FALSE. Set this to TRUE to see the information about the api calls as they happen.</td>
</tr>
<tr>
<td>rsid</td>
<td>Adobe report suite ID (RSID). If an environment variable called AWREPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AWREPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.</td>
</tr>
<tr>
<td>company_id</td>
<td>Company ID. If an environment variable called Aw_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the Aw_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.</td>
</tr>
</tbody>
</table>

Value

A string confirming the calculated metric is deleted

---

**cm_formula**

Create A Calculated Metric Formula

Description

Returns a JSON string formula to be used to build a calculated (derived) metric.

Usage

```r
cm_formula(
  operator = c("divide", "multiply", "subtract", "add"),
  metrics = c("visits", "singlepagevisits"),
  seg_filters = NA,
  rsid = Sys.getenv("AWREPORTSUITE_ID"),
  company_id = Sys.getenv("Aw_COMPANY_ID")
)
```

Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>operator</td>
<td>Formula operators are divide (default), multiply, subtract, or add.</td>
</tr>
<tr>
<td>metrics</td>
<td>The one or two metrics in a formula calculation</td>
</tr>
<tr>
<td>seg_filters</td>
<td>A vector of segment filters to be added to a metric in the formula</td>
</tr>
<tr>
<td>rsid</td>
<td>Adobe report suite ID (RSID). If an environment variable called AWREPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AWREPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.</td>
</tr>
<tr>
<td>company_id</td>
<td>Company ID. If an environment variable called Aw_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the Aw_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.</td>
</tr>
</tbody>
</table>
**cm_function**

### Value

A JSON string formula to be used in a calculated metric

---

**cm_function**  
_Create A Calculated Metric Function_

---

### Description

Returns a JSON string defining a function to be used to build a calculated (derived) metric.

### Usage

```r
cm_function(
  func = "col-sum",
  metric = "visits",
  dimension = NULL,
  seg_filter = NULL,
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

### Arguments

- **func**  
  Calculated function id. Only Basic single metric functions are able to be used.

- **metric**  
  The metric to be used in the functional metric calculation. Default is visits

- **dimension**  
  The dimension to be used in the functional metric calculation. Default is NULL

- **seg_filter**  
  A segment filter to be added to a metric in the formula

- **rsid**  
  Adobe report suite ID (RSID). If an environment variable called `AW_REPORTSUITE_ID` exists in `.Renviron` or elsewhere and no rsid argument is provided, then the `AW_REPORTSUITE_ID` value will be used. Use `aw_get_reportsuites()` to get a list of available rsid values.

- **company_id**  
  Company ID. If an environment variable called `AW_COMPANY_ID` exists in `.Renviron` or elsewhere and no company_id argument is provided, then the `AW_COMPANY_ID` value will be used. Use `get_me()` to get a list of available company_id values.

### Value

Returns a full list of calculated metric functions or a specified function that the user can access.
Description

Update a specific calculated metric.

Usage

```r
cm_update(
  id = NULL,
  updates = NULL,
  locale = "en_US",
  debug = FALSE,
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

Arguments

- **id**
  Returns details around a single calculated metric function if you specify the id. You can obtain the desired id by not including an ID value and finding the function in the results.

- **updates**
  List of changes or entire JSON definition object.

- **locale**
  All calculated metrics endpoints support the URL query parameter locale. Supported values are en_US, fr_FR, ja_JP, de_DE, es_ES, ko_KR, pt_BR, zh_CN, and zh_TW. This argument specifies which language is to be used for localized sections of responses.

- **debug**
  Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.

- **company_id**
  Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use `get_me()` to get a list of available company_id values.

Value

Returns a json string of information about the updated calculated metric.
cm_val  

Validate the definition of a Calculated Metric

Description

This function checks if a calculated metric JSON string is valid.

Usage

```r
cm_val(
  definition = NULL,
  locale = "en_US",
  migrating = FALSE,
  debug = FALSE,
  rsid = Sys.getenv("AW_REPORTSUITE_ID")
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

Arguments

- `definition` json string definition of a calculated metric
- `locale` The location of the language. en-US is default.
- `migrating` Include migration functions in validation. FALSE is default.
- `debug` This enables the api call information to show in the console for help with debugging issues. default is FALSE
- `rsid` Adobe report suite ID (RSID). If an environment variable called AW_REPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AW_REPORTSUITE_ID value will be used. Use `aw_get_reportsuites()` to get a list of available rsid values.
- `company_id` Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use `get_me()` to get a list of available company_id values.

Details

See more information [here](#).

Value

A string confirming the calculated metric is valid or is not valid.
get_cm_functions  
Get Calculated Metric Functions

Description
Returns a full list of calculated metric functions that the user can access.

Usage
get_cm_functions(
    id = NULL,
    debug = FALSE,
    company_id = Sys.getenv("AW_COMPANY_ID")
)

Arguments
id
Returns details around a single calculated metric function if you specify the id. You can obtain the desired id by not including an ID value and finding the function in the results.
debug
Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.
company_id
Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.

Value
Returns a full list of calculated metric functions or a specified function that the user can access.

get_me  
Get Company Ids

Description
This function will quickly pull the list of company ids that you have access to.

Usage
get_me(req_path = "discovery/me")

Arguments
req_path  The endpoint for that particular report
get_usage_logs

Value

A data frame of company ids and company names

Examples

## Not run:
get_me()

## End(Not run)

Description

This function returns the usage and access logs for a given date range within a 3 month period. The user must have Admin Console / Logs permissions (must be able to view the Usage & Access Log data in the web interface) in order to use this function.

Usage

get_usage_logs(
  startDate = Sys.Date() - 91,
  endDate = Sys.Date() - 1,
  login = NULL,
  ip = NULL,
  rsid = NULL,
  eventType = NULL,
  event = NULL,
  limit = 100,
  page = 0,
  debug = FALSE,
  company_id = Sys.getenv("AWCompanyId")
)

Arguments

startDate Start date for the maximum of a 3 month period.
endDate End date for the maximum of a 3 month period.
login The login value of the user you want to filter logs by.
ip The IP address you want to filter logs by.
rsid The report suite ID you want to filter logs by.
eventType The numeric id for the event type you want to filter logs by. Leaving this blank returns all events. See the Usage Logs API Guide for a complete list of event types.
get_users

event  The event description you want to filter logs by. No wildcards are permitted.
limit  The number of results to return per page. This argument works in conjunction
        with the page argument. The default is 10.
page   The "page" of results to display. This works in conjunction with the limit
        argument and is zero-based. For instance, if limit = 20 and page = 1, the results
        returned would be 21 through 40.
debug  Include the output and input of the api call in the console for debugging. Default
        is FALSE
company_id  Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron
            or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID
            value will be used. Use get_me to get a list of available company_id values.

Value

A data frame of logged events and the event meta data.

Examples

## Not run:
get_usage_logs(startDate = Sys.Date()-91, endDate = Sys.Date()-1, limit = 100, page = 0)
## End(Not run)

get_users  Get list of users

Description

Retrieves a list of all users for the company designated by the auth token.

Usage

get_users(company_id = Sys.getenv("AW_COMPANY_ID"), limit = 10, page = 0)

Arguments

company_id  Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron
            or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID
            value will be used. Use get_me to get a list of available company_id values.
limit  The number of results to return per page. This argument works in conjunction
        with the page argument. The default is 10.
page   The "page" of results to display. This works in conjunction with the limit
        argument and is zero-based. For instance, if limit = 20 and page = 1, the results
        returned would be 21 through 40.
proj_build

Value
A data frame of users and their meta data.

Examples
## Not run:
get_users(limit = 10, page = 0)
## End(Not run)

Description
Creates a new project in Adobe. Note: very early in development

Usage
proj_build(
  body = NULL,
  expansion = NULL,
  locale = "en_US",
  debug = FALSE,
  company_id = Sys.getenv("AW_COMPANY_ID")
)

Arguments

body The project json string which include the configuration and definition

expansion Comma-delimited list of additional project metadata fields to include on response. Available values: reportSuiteName, shares, tags, accessLevel, modified, externalReferences, definition

locale Locale Default value: en_US

debug Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.

company_id Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.

Value
A json string
proj_update

Edit a project in Adobe

Description
Edits an existing project in Adobe. Note: very early in development

Usage
proj_update(
  projectId = NULL,
  body = NULL,
  expansion = NULL,
  locale = "en_US",
  debug = FALSE,
  company_id = Sys.getenv("AW_COMPANY_ID")
)

Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>projectId</td>
<td>The project id to be edited</td>
</tr>
<tr>
<td>body</td>
<td>The json string in list format which includes the edits to be made</td>
</tr>
<tr>
<td>expansion</td>
<td>Comma-delimited list of additional project metadata fields to include on response. Available values: reportSuiteName, shares, tags, accessLevel, modified, externalReferences, definition</td>
</tr>
<tr>
<td>locale</td>
<td>Locale Default value : en_US</td>
</tr>
<tr>
<td>debug</td>
<td>Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.</td>
</tr>
<tr>
<td>company_id</td>
<td>Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.</td>
</tr>
</tbody>
</table>

Value

A json string
**seg_build**  

*Build the Segment in Adobe Analytics*

**Description**

This function combines rules, containers and/or sequences into a single JSON string and can then make the post call to create the segment in Adobe Analytics or return the json string for use in other api calls or for validation.

**Usage**

```r
seg_build(
  name = NULL,
  description = NULL,
  containers = NULL,
  rules = NULL,
  sequences = NULL,
  context = "hits",
  conjunction = "and",
  sequence = "in_order",
  sequence_context = "hits",
  exclude = FALSE,
  create_seg = FALSE,
  tagNames = NULL,
  internal = FALSE,
  debug = FALSE,
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

**Arguments**

- **name**: This is the name of the new segment (required)
- **description**: This is the description of the segment (required)
- **containers**: List of the container(s) that make up the segment. Containers are list objects created using the `seg_con()` function.
- **rules**: List of the rule(s) to create a segment. Rules are list objects created using the `seg_rule()` function.
- **sequences**: List of the rule(s) and sequence container(s) that are combined to make a segment. Sequence containers are list objects created using the `seg_seq()` function.
- **context**: Defines the level that the segment logic should operate on. Valid values are visitors, visits, and hits. See Details
- **conjunction**: This will tell how the different containers and rules should be compared. Use either ‘and’ or ‘or’.
sequence
Used to define if the segment should be 'in_order' (default), 'after', or 'before' the sequence of events

sequence_context
Used to define the sequential items context which should be below the container context. ex. if container context is visitors then the sequence_context should be visits or hits

exclude
Excludes the main container which will include all rules. Only used when the rule arguments are used.

create_seg
Used to determine if the segment should be created in the report suite or if the definition should be returned to be used in a freeform table API call. Default is FALSE

tagNames
Apply tag names to the newly created calculated metric. Single string or a vector.

internal
Determines if this segment is to be available in the UI. Default is FALSE, meaning the segment will not be available in the UI, nor will the ID be available in the aw_get_segments function call.

debug
This enables the api call information to show in the console for help with debugging issues. default is FALSE

rsid
Adobe report suite ID (RSID). If an environment variable called AWREPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AWREPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.

company_id
Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.

Details

Context
The rules in a segment have a context that specify the level of operation. The context can be "visitors", "visits" or "hits." As an example, let's build a segment rule where revenue is greater than 0 (meaning a purchase took place) and change the context to see how things change. If the context is set to "visitors", the segment includes all hits from visitors that have a purchase of some kind during a visit. This is useful in analyzing customer behavior in visits leading up to a purchase and possibly behavior after a purchase. If the context is set to "visits", the segment includes all hits from visits where a purchase occurred. This is useful for seeing the behavior of a visitor in immediate page views leading up to the purchase. If the context is set to "hits", the segment only includes hits where a purchase occurred, and no other hits. This is useful in seeing which products were most popular. In the above example, the context for the container listed is hits. This means that the container only evaluates data at the hit level, (in contrast to visit or visitor level). The rows in the container are also at the hit level.

Value
If the "create_seg" argument is set to FALSE a JSON string definition will be returned. If the "create_seg" argument is set to TRUE and the segment is valid it will return a data frame of the
newly created segment id along with some other basic meta data. If it returns an error then the error response will be returned to help understand what needs to be corrected.

---

**seg_con**

Create the segment container

**Description**

This function combines rules into a container.

**Usage**

```r
seg_con(context = "hits", conjunction = "and", rules = NULL, exclude = FALSE)
```

**Arguments**

- **context**
  - Defines the level that the segment logic should operate on. Valid values are visitors, visits, and hits. See Details

- **conjunction**
  - This defines the relationship of the rules. And (default) and or are the two options.

- **rules**
  - List of rules and/or containers. Must be wrapped in a list() function. Adding a container list item will nest it within a container.

- **exclude**
  - Exclude the entire container

**Details**

**Context**

The rules in a segment have a context that specify the level of operation. The context can be "visitors", "visits" or "hits." As an example, let's build a segment rule where revenue is greater than 0 (meaning a purchase took place) and change the context to see how things change. If the context is set to "visitors", the segment includes all hits from visitors that have a purchase of some kind during a visit. This is useful in analyzing customer behavior in visits leading up to a purchase and possibly behavior after a purchase. If the context is set to "visits", the segment includes all hits from visits where a purchase occurred. This is useful for seeing the behavior of a visitor in immediate page views leading up to the purchase. If the context is set to "hit", the segment only includes hits where a purchase occurred, and no other hits. This is useful in seeing which products were most popular. In the above example, the context for the container listed is hits. This means that the container only evaluates data at the hit level, (in contrast to visit or visitor level). The rules in the container are also at the hit level.

**Value**

a structured list of containers to be used to build the segment
Copy a segment in Adobe Analytics

Description

This function copies and existing function and creates a duplicate based on the definition.

Usage

```
seg_copy(
  id,
  name = NULL,
  description = NULL,
  polarity = NULL,
  precision = NULL,
  type = NULL,
  create_seg = FALSE,
  debug = FALSE,
  rsid = NULL,
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

Arguments

- **id**  
The id of the old segment
- **name**  
This is the name of the new segment. If not provided, the prefix “Copy_” will be added to the existing name. (optional)
- **description**  
This is the description of the segment (optional)
- **polarity**  
Also known as ‘Show Upward Trend As’ in the UI. Options include ‘positive’ or ‘negative’. Default is based on original segment definition. This metric polarity setting shows whether Analytics should consider an upward trend in the metric as good (green) or bad (red). As a result, the report's graph will show as green or red when it's going up. Default is based on original segment definition.
- **precision**  
Shows how many decimal places will be shown in the report. The maximum number of decimal places you can specify is 10. Also known as 'Decimal Places' in the UI. Default is based on original segment definition.
- **type**  
Choices include decimal (default), time, percent, and currency. Also known as 'Format' in the UI. Default is based on original segment definition.
- **create_seg**  
Used to determine if the segment should be created in the report suite or if the definition should be returned to be validated using seg_val. Default is FALSE
- **debug**  
This enables the api call information to show in the console for help with debugging issues. default is FALSE
- **rsid**  
Adobe report suite ID (RSID). If an environment variable called AW_REPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AW_REPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.
company_id  Company ID. If an environment variable called `AW_COMPANY_ID` exists in `.Renviron` or elsewhere and no company_id argument is provided, then the `AW_COMPANY_ID` value will be used. Use `get_me()` to get a list of available company_id values.

Details

See more information here

Value

If the "create_seg" argument is set to FALSE a list object definition will be returned. If the "create_seg" argument is set to TRUE and the segment is valid it will return a data frame of the newly created segment id along with some other basic meta data. If it returns an error then the error response will be returned to help understand what needs to be corrected.

---

**seg_delete**

*Delete A Segment*

Description

Use this function to delete a specific segment in Adobe Analytics

Usage

```r
seg_delete(
  id = NULL,
  warn = TRUE,
  locale = "en_US",
  debug = FALSE,
  rsid = Sys.getenv("AW_REPORTSUITE_ID"),
  company_id = Sys.getenv("AW_COMPANY_ID")
)
```

Arguments

- **id**  Segment ID to be deleted.
- **warn**  Boolean of whether or not to include a warning message.
- **locale**  language - default 'en_US'
- **debug**  Default FALSE. Set this to TRUE to see the information about the api calls as they happen.
- **rsid**  Adobe report suite ID (RSID). If an environment variable called `AWREPORTSUITE_ID` exists in `.Renviron` or elsewhere and no rsid argument is provided, then the `AWREPORTSUITE_ID` value will be used. Use `aw_get_reportsuites()` to get a list of available rsid values.
- **company_id**  Company ID. If an environment variable called `AW_COMPANY_ID` exists in `.Renviron` or elsewhere and no company_id argument is provided, then the `AW_COMPANY_ID` value will be used. Use `get_me()` to get a list of available company_id values.
**Value**

A string confirming the segment has or has not been deleted

---

**seg_rule**  
Create the segment rule

---

**Description**

This function creates the simple rule of a segment.

**Usage**

```r
seg_rule(
    dimension = NULL,
    metric = NULL,
    verb = NULL,
    object = NULL,
    description = NULL,
    is_distinct = FALSE,
    attribution = "repeating",
    attribution_context = "visitors",
    validate = FALSE,
    rsid = Sys.getenv("AWREPORTSUITIE_ID"),
    company_id = Sys.getenv("AW_COMPANY_ID")
)
```

**Arguments**

- **dimension**
  This is the subject of the rule. The value should be the dimension id. Only the dimension or metric can be used at a time.

- **metric**
  This is the subject of the rule. The value should be the metric id. Only the dimension or metric can be used at a time.

- **verb**
  Choose from any of the 30 different verbs. Use the `seg_verbs` package data to see all available verbs along with the descriptions.

- **object**
  This is the object of the rule and answers the question what or how many

- **description**
  The internal description for the rule. (optional) This will not show in the UI but could be very helpful when using the API.

- **is_distinct**
  This will segment on a distinct count of items within a dimension. Examples:
  “Visitors who viewed more than 5 distinct products,” or “Visits where more than 5 distinct pages were seen.”

- **attribution**
  Define the type of attribution. Either repeating (default), instance, or nonrepeating. See Details for more information.

- **attribution_context**
  When applying a non-repeating instance attribution model to a rule the context for the attribution must be `visitors` (default) or `visits`
validate  Set to TRUE when metric or dimension validation is preferred. Default is FALSE. Validation will slow down the function response time but ensure a valid rule result.

rsid  Adobe report suite ID (RSID). If an environment variable called AW_REPORTSUITE_ID exists in .Renviron or elsewhere and no rsid argument is provided, then the AW_REPORTSUITE_ID value will be used. Use aw_get_reportsuites() to get a list of available rsid values.

company_id  Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me() to get a list of available company_id values.

Details

**Attribution Models** Available for dimensions only, these models determine what values in a dimension to segment for. Dimension models are particularly useful in sequential segmentation.

- **repeating** (default): Includes instances and persisted values for the dimension.
- **instance**: Includes instances for the dimension.
- **nonrepeating instance**: Includes unique instances (non-repeating) for the dimension. This is the model applied in Flow when repeat instances are excluded.

Value

A structured list defining the rule for a segment

---

**seg_seq**  
Create the segment sequence container

Description

This function combines rules into a sequence container.

Usage

```r
seg_seq(
  context = "visits",
  rules = NULL,
  sequence = "in_order",
  exclude = FALSE,
  exclude_checkpoint = NULL
)
```
Arguments

context  Defines the level that the segment logic should operate on. Valid values for sequential segments is visitors and visits. See Details

rules  List of rules created using `seg_rule()` function. Must be wrapped in a list() function.

sequence  How should the sequence of items be considered. Options: in_order (default), before, after, and, or

exclude  Excludes the entire sequence container which will include all rules.

exclude_checkpoint  Which checkpoints (rules) should be excluded. Example `c(1, 4)`. See Details

Details

Context

The rules in a segment have a context that specify the level of operation. The context can be "visitors", "visits" or "hits." As an example, let's build a segment rule where revenue is greater than 0 (meaning a purchase took place) and change the context to see how things change. If the context is set to "visitors", the segment includes all hits from visitors that have a purchase of some kind during a visit. This is useful in analyzing customer behavior in visits leading up to a purchase and possibly behavior after a purchase. If the context is set to "visits", the segment includes all hits from visits where a purchase occurred. This is useful for seeing the behavior of a visitor in immediate page views leading up to the purchase. If the context is set to "hits", the segment only includes hits where a purchase occurred, and no other hits. This is useful in seeing which products were most popular. In the above example, the context for the container listed is hits. This means that the container only evaluates data at the hit level, (in contrast to visit or visitor level). The rows in the container are also at the hit level.

Exclude checkpoint

Ensures the next checkpoint doesn't happen between the preceding checkpoint and the subsequent checkpoint. If there is no subsequent checkpoint then the excluded checkpoint must not occur at any point after the preceding checkpoint. If there is no preceding checkpoint then the excluded checkpoint must not have occurred at any point preceding the subsequent checkpoint.

More Information

Sequential segments can be difficult to get right. Referencing this article can help: https://experienceleague.adobe.com/docs/analytics/components/segmentation/segmentation-workflow/seg-sequential-build.html?lang=en

Value

a structured list of containers to be used to build the segment
Create the segment sequence then object

Description

This function creates a then list object which restricts the time constraint of a segment to be added to a sequence segment.

Usage

seg_then(limit = "within", count = 1, unit = "year")

Arguments

- **limit**: The limitation of the restriction. Either within (default) or after
- **count**: How many of the units should be used. 1 is set as default.
- **unit**: A unit of time. Valid values are hit, visit, minute, hour, day, week (default), month, quarter, or year. Always use the singular form.

Details

**Combining seg_then arguments:**
In the UI you can add 'after' and 'within' statements to create a more complex time restriction. The same can be accomplished using this function by listing the limits, counts, and units in a c() function. This would look like: `limit = c('within', 'after'), count = c(5, 1), unit = c('hit', 'visit')`

**Using within and after in the same time seg_then function call:**
Time restrictions can only be combined using 'within' first before 'after'. The function will automatically align these to be in the correct list item order.

**A word about unit values:**
Currently pageviews and dimensions are not supported unit values.

Value

a structured list of time restrictions to be used to build the sequential segment
 seg_update  
**Update A Segment**

**Description**

Update a specific segment

**Usage**

```r
seg_update(  
  id = NULL,  
  updates = NULL,  
  locale = "en_US",  
  debug = FALSE,  
  company_id = Sys.getenv("AW_COMPANY_ID")  
)
```

**Arguments**

- **id** The id of the segment you are wanting to update
- **updates** List of changes or entire definition object as a list object.
- **locale** The URL query parameter locale. Supported values are en_US, fr_FR, ja_JP, de_DE, es_ES, ko_KR, pt_BR, zh_CN, and zh_TW. This argument specifies which language is to be used for localized sections of responses.
- **debug** Set to TRUE to publish the full JSON request(s) being sent to the API to the console when the function is called. The default is FALSE.
- **company_id** Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use `get_me()` to get a list of available company_id values.

**Value**

json string of updated segment information

---

**seg_val**

**Validate a segment**

**Description**

Returns a segment validation response for a segment contained in a json string object.
Usage

```
seg_val(
    segment_body = NULL,
    rsid = Sys.getenv("AW_REPORTSUITE_ID"),
    debug = FALSE,
    company_id = Sys.getenv("AW_COMPANY_ID")
)
```

Arguments

- **segment_body**: The json string of the segment that is being validated (required)
- **rsid**: Adobe report suite ID (RSID). If an environment variable called `AW_REPORTSUITE_ID` exists in `.Renviron` or elsewhere and no `rsid` argument is provided, then the `AW_REPORTSUITE_ID` value will be used. Use `aw_get_reportsuites()` to get a list of available `rsid` values.
- **debug**: This enables the api call information to show in the console for help with debugging issues. default is `FALSE`
- **company_id**: Company ID. If an environment variable called `AW_COMPANY_ID` exists in `.Renviron` or elsewhere and no `company_id` argument is provided, then the `AW_COMPANY_ID` value will be used. Use `get_me()` to get a list of available `company_id` values.

Value

If the segment is valid a message saying the segment validates is returned. If the segment doesn’t validate the errors are returned in a data frame.

---

**seg_verbs**  
*Verbs available in segment rules.*

Description

A dataset containing the list of available verbs to be used in segment rules.

Usage

```
seg_verbs
```

Format

A data frame with 34 rows and 5 variables:

- **type**: one of number, string, or exists
- **class**: gives the context of the type of value is expected, either string, list, glob, number, or exists
- **verb**: the actual verb id to be used in the segment definition
- **description**: a simple description of the verb
- **arg**: specifies what argument to use when building the segment verb function...
tags_add

Add a tag to a component

Description
Enables the creation of a new tag and applies the new tag to the passed component

Usage
tags_add(
  company_id = Sys.getenv("AW_COMPANY_ID"),
  componentId = NULL,
  componentType = NULL,
  tagNames = NULL,
  overwrite = FALSE,
  debug = FALSE
)

Arguments
- company_id: Company ID. If an environment variable called AW_COMPANY_ID exists in .Renviron or elsewhere and no company_id argument is provided, then the AW_COMPANY_ID value will be used. Use get_me to get a list of available company_id values.
- componentId: The component id being requested. Default is NULL
- componentType: The component type being requested. Options include segment, dashboard, bookmark, calculatedMetric, project, dateRange, metric, dimension, virtualReportSuite, scheduledJob, alert, classification. Default is NULL
- tagNames: Comma separated vector of tag names.
- overwrite: Overwrite the existing tag names on a component. To append a new tag name use FALSE (default). To overwrite the existing tags on a component use TRUE.
- debug: Include the output and input of the api call in the console for debugging. Default is FALSE

Value
A data frame of segments and their meta data.

Source
https://developer.adobe.com/analytics-apis/docs/2.0/guides/endpoints/segments/definition/#available-data-comparison-functions
Index

* auth
  aw_auth, 4
* datasets
  seg_verbs, 45
* options
  aw_auth_with, 5

auth_jwt (aw_auth), 4
auth_oauth (aw_auth), 4
aw_anomaly_report, 3
aw_auth, 4
aw_auth(), 6, 22
aw_auth_name (aw_auth_with), 5
aw_auth_path (aw_auth_with), 5
aw_auth_with, 5
aw_auth_with(), 5
aw_freeform_table, 6
aw_freeform_table(), 21
aw_get_calculatedmetrics, 10, 14
aw_get_calculatedmetrics(), 7, 9
aw_get_dimensions, 12
aw_get_dimensions(), 7, 9
aw_get_metrics, 12, 13
aw_get_metrics(), 7, 9
aw_get_project_config, 16
aw_get_projects, 15
aw_get_reportsuites, 10, 13, 14, 16, 18
aw_get_reportsuites(), 7, 9, 23, 25-27, 29, 36, 38, 39, 41, 45
aw_get_segments, 17
aw_get_segments(), 7, 9
aw_get_tags, 19
aw_segment_table, 20
aw_segment_table(), 9
aw_token, 21
aw_workspace_report, 22

cm_build, 22
cm_copy, 24
cm_delete, 25
cm_formula, 26
cm_formula(), 23
cm_function, 27
cm_update, 28
cm_val, 29
get_cm_functions, 30
get_me, 10, 13, 14, 17-19, 30, 32, 46
get_me(), 7, 9, 15, 16, 24-30, 33, 34, 36, 39, 41, 44, 45
get_usage_logs, 31
get_users, 32
proj_build, 33
proj_update, 34
seg_build, 35
seg_con, 37
seg_con(), 35
seg_copy, 38
seg_delete, 39
seg_rule, 40
seg_rule(), 35, 42
seg_seq, 37
seg_seq(), 35
seg_then, 43
seg_update, 44
seg_val, 44
seg_verbs, 40, 45
tags_add, 46
tibble::tibble(), 21