Package ‘shroomDK’

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Type Package
Title Accessing the Flipside Crypto ShroomDK REST API
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Description Programmatic access to Flipside Crypto data via the REST API: <https://sdk.flipsidecrypto.xyz/shroomdk>. As simple as auto_paginate_query() but with core functions as needed for troubleshooting.
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auto_paginate_query  Auto Paginate Queries

Description
Grabs up to maxrows in a query by going through each page 100k rows at a time.

Usage
auto_paginate_query(query, api_key, maxrows = 1e+06)

Arguments
- query: The SQL query to pass to ShroomDK
- api_key: ShroomDK API key.
- maxrows: Max rows allowed in ShroomDK, 1M at time of writing.

Value
data frame of up to 1M rows, see ?clean_query for more details on column classes.

Examples
## Not run:
pull_data <- auto_paginate_query("SELECT * FROM ETHEREUM.CORE.FACT_TRANSACTIONS LIMIT 10000",
api_key = readLines("api_key.txt"))
## End(Not run)

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clean_query  Clean Query

Description
converts query response to data frame while attempting to coerce classes intelligently.

Usage
clean_query(request, try_simplify = TRUE)
**create_query_token**

**Create Query Token**

**Description**

Uses Flipside ShroomDK to create a Query Token to access Flipside Crypto data. The query token is cached up to ttl minutes allowing for pagination and multiple requests before expending more daily request uses.

**Usage**

```r
create_query_token(query, api_key, ttl = 10, cache = TRUE)
```

**Arguments**

- **query**: Flipside Crypto Snowflake SQL compatible query as a string.
- **api_key**: Flipside Crypto ShroomDK API Key
- **ttl**: time (in minutes) to keep query in cache.
- **cache**: Use cached results; set as FALSE to re-execute.

**Value**

A data frame. If `try_simplify` is FALSE OR if `try_simplify` TRUE fails: the data frame is comprised of lists, where each column must be coerced to a desired class (e.g., with `as.numeric()`).

### Examples

```r
## Not run:
query = create_query_token("SELECT * FROM ETHEREUM.Core.FACT_TRANSACTIONS LIMIT 10000", api_key)
request = get_query_from_token(query$token, api_key, 1, 10000)
clean_query(request, try_simplify = FALSE)
## End(Not run)
```

**Arguments**

- **request**: The request output from `get_query_from_token()`
- **try_simplify**: because requests can return JSON and may not have the same length across values, they may not be data frame compliant (all columns having the same number of rows). A key example would be TX_JSON in EVM FACT_TRANSACTION tables which include 50+ extra details from transaction logs. But other examples like NULLs TO_ADDRESS can have similar issues. Default TRUE.

**Value**

A data frame. If `try_simplify` is FALSE OR if `try_simplify` TRUE fails: the data frame is comprised of lists, where each column must be coerced to a desired class (e.g., with `as.numeric()`).
get_query_from_token

Examples

## Not run:
```r
create_query_token(
query = "SELECT * FROM ethereum.core.fact_transactions LIMIT 1",
api_key = readLines("api_key.txt"),
ttl = 15,
cache = TRUE)
```

## End(Not run)

get_query_from_token  Get Query From Token

Description

Uses Flipside ShroomDK to access a Query Token. Query tokens are cached up to `ttl` minutes for each `query`. This function is for pagination and multiple requests while . Note: To reduce payload it returns a list of outputs (separating column names from rows).

Usage

```r
get_query_from_token(query_token, api_key, page_number = 1, page_size = 1e+05)
```

Arguments

- `query_token`: token from `create_query_token()`
- `api_key`: Flipside Crypto ShroomDK API Key
- `page_number`: Query tokens are cached and 100k rows max. Get up to 1M rows by going through pages.
- `page_size`: Default 100,000. Paginate via page_number.

Value

returns a request of length 8: `results`, `columnLabels`, `columnTypes`, `startedAt`, `endedAt`, `pageNumber`, `pageSize`, `status`

Examples

## Not run:
```r
query = create_query_token("SELECT * FROM ETHEREUM.NODE.FACT_TRANSACTIONS LIMIT 10000", api_key)
get_query_from_token(query$token, api_key, 1, 10000)
```

## End(Not run)
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