
BEApy

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This package provides high(er) level methods for interacting with the Bureau of Economic Analysis (BEA) API. If you want to learn how to use BEApy check out the [Examples](#), and if you want to see the documentation, go to [Module reference](#).

1.1 Examples

1.2 Module reference

1.2.1 Constructor

<i>BEA</i> (api_key)	The primary class in the BEApy package, handles sending requests and manipulating the results.
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1.2.2 Raw API call

<i>BEAAPI.send_request</i> (params)	Base method for sending a GET request to the API.
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1.2.3 Metadata

<i>BEA.dataset_list</i> ()	Get a list of all available datasets (API method <i>getDatasetList</i>)
<i>BEA.parameter_list</i> (dataset)	Get a list of available parameters for the dataset (API method <i>getParameterList</i>)
<i>BEA.parameter_values</i> (dataset, parameter[, ...])	Get a list of possible values for the parameter in a dataset (API method <i>getParameterValues</i>).

1.2.4 References

Module for sending requests to BEA API and handling errors

class beapy.api.**BEAAPI** (api_key)

Base class for communicating with the API, outputs raw JSON results.

This class communicates with the BEA API and handles possible errors, returning unfiltered JSON results in case of success. It stores your API key on initiation, and uses it for future requests. It serves as a base class to enable the *BEA* class to abstract from requests and error handling.

Parameters `api_key` (`str`) – Your BEA API key

send_request (`params`)

Base method for sending a GET request to the API.

This method sends a GET request to the base url with the params + the API key + JSON format and handles error messages. If successful, returns the `Results` part of the response.

Parameters `params` (`dict`) – Additional params to add to the GET request

Return type `dict`

exception `beapy.api.BEAError` (`status_code`, `message`)

Error class to handle BEA API specific errors

class `beapy.BEA` (`api_key`)

The primary class in the BEApy package, handles sending requests and manipulating the results. Needs to be initiated with your BEA API key once, it is stored for all later requests.

Parameters `api_key` (`str`) – Your BEA API key

dataset_list ()

Get a list of all available datasets (API method `getDatasetList`)

Returns A `DataFrame` with a description and name of available datasets.

Return type `pd.DataFrame`

parameter_list (`dataset`)

Get a list of available parameters for the dataset (API method `getParameterList`)

Usually the parameter list will also include the value of the ALL option, as well as data type, whether the parameter is required, and whether it accepts multiple values.

Parameters `dataset` (`str`) – The name of the dataset

Returns A `DataFrame` with a description and name of available parameters, as well as some other options.

Return type `pd.DataFrame`

parameter_values (`dataset`, `parameter`, `filtering=None`)

Get a list of possible values for the parameter in a dataset (API method `getParameterValues`).

Optionally, filter the list based on values of other parameters (API method `getParameterValuesFiltered`). Be careful in this case, as the filtered method is not implemented for all datasets.

Parameters

- **dataset** (`str`) – The name of the dataset
- **parameter** (`str`) – The name of the (target) parameter whose values you are retrieving
- **filter** – A dictionary of parameter-value pairs, based on which to filter the target parameter. If set to `None`, `getParameterValues` API method is used. Otherwise, `getParameterValuesFiltered` is used.

Returns A `DataFrame` with a description and name (key) of available parameters values

Return type `pd.DataFrame`

1.3 Changelog

1.3.1 0.5.0

- First release

CHAPTER 2

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