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# **realvalidation Documentation**

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# CHAPTER 1

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## RealValidation API Reference

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### 1.1 Application Object

```
class realvalidation.RealValidation(workbooks=None,      token=None,      output='json',
                                     url='https://api.realvalidation.com/rpvWebService/DNCLookup.php',
                                     phone_regex='^\d{10}$', staging=False)
```

RealValidation Application Object

#### Parameters

- **workbooks** (*list*) – List of workbook paths to validate against RealValidation DNC API
- **token** (*str*) – RealValidation API Token. Defaults to environmental variable RV\_TOKEN
- **output** (*str*) – RealValidation API Output. Defaults to json
- **url** (*str*) – RealValidation API URL. Defaults to https://api.realvalidation.com/rpvWebService/DNCLookup.php
- **phone\_regex** (*str*) – Regex to use when validating phone numbers. Defaults to r'^\d{10}\$'
- **staging** (*bool*) – If True RealValidation utilizes the Mock API, overrides url parameter

**lookup\_phone** (*phone*)

Makes a request to the RealValidation DNC API

**Parameters** **phone** (*str*) – 10 numerical digits representing a phone number.

**Returns** Dictionary representing JSON response from RealValidation DNC API.

**Return type** *dict*

**lookup\_phone\_from\_row** (*row, phone\_column\_index*)

Lookup phone from row at index

**Parameters**

- **row** (`list`) – List of strings containing phone
- **phone\_column\_index** (`int`) – Index/Position of phone in row list

**Returns** True/False value whether phone is on dnc or not

**Return type** `bool`

`lookup_phones_from_workbooks()`

Validates Workbooks against RealValidation DNC API

**Returns** Dictionary with values of valid and invalid rows

**Return type** `dict`

## 1.2 Utilities

`realvalidation.utils.enumerate_phone_column_index_from_row(row)`

Enumerates the phone column index from a given row. Uses Regexes

**Parameters** `row` (`list`) – list of cell values from row

**Returns** phone column index enumerated from row

**Return type** `int`

`realvalidation.utils.get_cell_values_from_row(row)`

Returns string representation of cell values from row in a list

**Parameters** `row` (`list`) – list of values

**Returns** string representation of cell values from row in a list

**Return type** `list`

`realvalidation.utils.is_dnc_json_response_on_dnc(response)`

Determines if json response from DNC API is on dnc

**Parameters** `response` (`dict`) – dictionary response from RealValidation DNC API

**Returns** True/False value whether response is on DNC or not

**Return type** `bool`

`realvalidation.utils.is_value_phone_identifier(value)`

Returns True/False whether value is [Pp]hone or 10 numerical digits only

**Parameters** `value` (`str`) – Value to determine if phone identifier

**Returns** True/False value whether phone is a valid identifier

**Return type** `bool`

`realvalidation.utils.sanitize_phone(phone, regex='[^0-9]')`

Uses regex sub to sanitize characters from phone

**Parameters**

- **phone** (`str`) – Phone string to sanitize

- **regex** (`regex`) – Regex to use to sub characters from string. Defaults to `r'[^0-9]'`

**Returns** sanitized phone string

**Return type** `str`

```
realvalidation.utils.write_rows_to_workbook(rows, workbook_path, workbook_name)
```

Writes row to workbook

#### Parameters

- **rows** (*list*) – list of rows to write to workbook
- **workbook\_path** (*str*) – Path to write workbook to
- **workbook\_name** (*str*) – Name of the workbook

## 1.3 Errors

```
exception realvalidation.errors.InvalidJSONResponseError
```

Raised when we couldn't decode a JSON response from a RealValidation API Request

```
exception realvalidation.errors.InvalidPhoneFormatError
```

Raised when a phone string doesn't match PHONE\_REGEX

```
exception realvalidation.errors.InvalidTokenError
```

Raised when a token couldn't be enumerated. Tokens can be passed as a parameter when initializing a RealValidation object or by setting the RV\_TOKEN environmental variable before execution.

```
exception realvalidation.errors.RealValidationError
```

Base class for exceptions in this module.

```
exception realvalidation.errors.ResponseCodeNotOkError
```

Raised when RESPONSECODE in a RealValidation JSON response does not equal OK



# CHAPTER 2

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## Basic Usage

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```
$ pip install realvalidation  
$ export RV_TOKEN=realvalidation_api_token  
realvalidation --workbook sample.xlsx
```



# CHAPTER 3

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