
servicenowpy

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servicenowpy is a library that helps you consume the ServiceNow Table API.

[Github Repository](#) | [Contributing](#)

1.1 Installation

Install servicenowpy using pip:

```
pip install servicenowpy
```

servicenowpy completely depends on the great **Requests** library.

1.2 Examples

1.2.1 Basic usage

The simplest piece of code you can write with servicenowpy:

```
from servicenowpy import Client

sn_client = Client('instance.service-now.com', 'user', 'password')
inc_table = sn_client.table('incident')
inc_records = inc_table.get()
```

1.2.2 Getting large datasets

You can get massive datasets using servicenowpy with threads, for example:

```
from concurrent.futures import ThreadPoolExecutor
from servicenowpy import Client

sn_client = Client('instance.service-now.com', 'user', 'password')

def get_table_records(table_name):
    table_obj = sn_client.table(table_name)
    return table_obj.get()

with ThreadPoolExecutor() as executor:
    inc_future = executor.submit(get_table_records, 'incident')
    ritm_future = executor.submit(get_table_records, 'sc_req_item')
```

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```
inc_records = inc_future.result()
ritm_records = ritm_future.result()
```

If you are using **pandas**, for example:

```
import pandas as pd

inc_df = pd.DataFrame(inc_records)
```

1.2.3 Query params

Query parameters must be passed as follows:

```
records = inc_table.get(
    sysparm_fields="number,short_description",
    sysparm_display_value="true"
)
```


API REFERENCE

2.1 Client objects

class servicenowpy.servicenow.**Client**
Represents a ServiceNow instance.

Parameters

- **instance_url** – ServiceNow instance URL.
- **user** – Instance user.
- **pwd** – Instance password.

make_api_url(*instance_url*)
Returns instance URL with '/api/now/' appended.

table(*table*)
Returns servicenowpy.Table object.

Parameters **table** – The table name.

Return type servicenowpy.Table

2.2 Table objects

class servicenowpy.servicenow.**Table**
Represents ServiceNow's Table API.

Parameters

- **table** – The table name.
- **instance_url** – ServiceNow instance URL.
- **credentials** – Tuple containing user and password, respectively.

get(*api_version=None, headers={'Accept': 'application/json'}, verbose=False, **kwargs*)
Sends a GET request to the instance table.

Parameters

- **api_version** – API version, if API versioning is enabled.
- **headers** – Request headers.
- **verbose** – If set to True, prints the full URL before it sends the request.

- ****kwargs** – All query parameters to the URL.

Return type list

get_record(*sys_id: str, api_version=None, headers={'Accept': 'application/json'}, verbose=False, **kwargs*)

Sends a GET request to the instance table. Returns only one record, with the given sys_id.

Parameters

- **sys_id** – Record unique ID.
- **api_version** – API version, if API versioning is enabled.
- **headers** – Request headers.
- **verbose** – If set to True, prints the full URL before it sends the request.
- ****kwargs** – All query parameters to the URL.

Return type dict

get_record_by_number(*number: str, api_version=None, headers={'Accept': 'application/json'}, verbose=False, **kwargs*)

Sends a GET request to the instance table. Adds 'number' to the query parameters.

Parameters

- **number** – Record number.
- **api_version** – API version, if API versioning is enabled.
- **headers** – Request headers.
- **verbose** – If set to True, prints the full URL before it sends the request.
- ****kwargs** – Other query parameters to the URL.

Return type list

patch(*sys_id: str, data: dict, api_version=None, headers={'Accept': 'application/json'}, verbose=False, **kwargs*)

Sends a PATCH request to the instance table.

Parameters

- **sys_id** – Record unique ID.
- **data** – Fields and values to update in the record.
- **api_version** – API version (if API versioning is enabled).
- **headers** – Request headers.
- **verbose** – If set to True, prints the full URL before it sends the request.
- ****kwargs** – All query parameters to the URL.

Return type dict

post(*data: dict, api_version=None, headers={'Accept': 'application/json'}, verbose=False, **kwargs*)

Sends a POST request to the instance table.

Parameters

- **data** – Fields and values to the new record.
- **api_version** – API version (if API versioning is enabled).

- **headers** – Request headers.
- **verbose** – If set to True, prints the full URL before it sends the request.
- ****kwargs** – All query parameters to the URL.

Return type dict

put(*sys_id: str, data: dict, api_version=None, headers={'Accept': 'application/json'}, verbose=False, **kwargs*)

Sends a PUT request to the instance table.

Parameters

- **sys_id** – Record unique ID.
- **data** – New values to the record.
- **api_version** – API version (if API versioning is enabled).
- **headers** – Request headers.
- **verbose** – If set to True, prints the full URL before it sends the request.
- ****kwargs** – All query parameters to the URL.

Return type dict

delete(*sys_id: str, api_version=None, headers={'Accept': 'application/json'}, verbose=False, **kwargs*)

Sends a DELETE request to the instance table.

Parameters

- **sys_id** – Record unique ID.
- **api_version** – API version (if API versioning is enabled).
- **headers** – Request headers.
- **verbose** – If set to True, prints the full URL before it sends the request.
- ****kwargs** – All query parameters to the URL.

get_session(*headers*)

Returns a requests.Session object.

Parameters **headers** – Request headers.

check_status_code(*response: requests.models.Response, expected=200*)

Checks if the given response status code is as expected. Raises a `StatusCodeError` if it is not.

Parameters

- **response** – Response object.
- **expected** – Expected status code.

make_url(*api_version=None, sys_id=None, **kwargs*)

Returns a complete url to send in the request.

Return type str

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