SDK SPEC Manager API

March 3, 2021

1 SPEC Utils

sdks for SPEC, SA and third applications

1.1 Install

```
Can use:

pip install spec-utils

Or:

python -m pip install spec-utils
```

1.2 SPEC Manager API

1.2.1 Import module

```
[]: from spec_utils import specmanagerapi as smapi
```

Dev only *

```
[1]: import sys, os
import datetime
sys.path.append(os.path.join(os.getcwd(), '..', 'spec_utils'))
```

```
[99]: from importlib import reload import specmanagerapi as smapi reload(smapi)
```

1.2.2 Client settings

```
[115]: URL = 'http://localhost:5050/api/'
USERNAME = 'Admin'
PWD = 'spec'
```

1.2.3 Create a client

```
[101]: client = smapi.Client(url=URL, username=USERNAME, pwd=PWD) client.is_connected
```

[101]: True

1.2.4 Get Clockings

```
[124]: client.get_clockings(
    _type="contractor",
    _from=datetime.datetime(2018, 4, 1, 5, 6, 7),
    _to=datetime.datetime(2018, 4, 30, 23, 59, 59),
    fromHistory=True,
    employeeDetail=True,
    employeeData=[1, 2], # employee optional data
    pageSize=10
)

[124]: {'ok': True,
    'error': None,
    'response': {'count': 320,
        'pages': 32,
        'clockings': [{'id': 72493,
```

```
'employee': {'code': 774,
  'mat': '774',
  'card': '02812635',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Diego Emiliano',
  'lastName': 'MORILLO',
  'dni': '26689122',
  'company': '',
  'optionalData': []},
 'type': 71,
 'card': '02812635',
 'tmp': '20180430030408',
 'result': 66,
 'offline': 0,
 'gl': 34,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 23,
'version': 0},
{'id': 72494,
 'employee': {'code': 774,
```

```
'mat': '774',
  'card': '02812635',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Diego Emiliano',
  'lastName': 'MORILLO',
  'dni': '26689122',
  'company': '',
  'optionalData': []},
 'type': 71,
 'card': '02812635',
 'tmp': '20180430031111',
 'result': 66,
 'offline': 0,
 'gl': 34,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 23,
 'version': 0},
{'id': 72496,
 'employee': {'code': 239,
  'mat': '239',
  'card': '02536953',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Ignacio Matías',
  'lastName': 'CAMBLONG',
  'dni': '34318327',
  'company': '',
  'optionalData': []},
 'type': 71,
 'card': '02536953',
 'tmp': '20180430032139',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72497,
 'employee': {'code': 239,
  'mat': '239',
  'card': '02536953',
  'centerCode': 'AR',
```

```
'centerDesc': 'DEMO',
  'firstname': 'Ignacio Matías',
  'lastName': 'CAMBLONG',
  'dni': '34318327',
  'company': '',
  'optionalData': []},
 'type': 71,
 'card': '02536953',
 'tmp': '20180430032141',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72498,
 'employee': {'code': 692,
  'mat': '00692',
  'card': '04922689',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Diana Lorena',
  'lastName': 'FUENTES CEPEDA',
  'dni': '36900810',
  'company': '',
  'optionalData': []},
 'type': 71,
 'card': '04922689',
 'tmp': '20180430032945',
 'result': 66,
 'offline': 0,
 'gl': 51,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 35,
 'version': 0},
{'id': 72499,
 'employee': {'code': 481,
  'mat': '00481',
  'card': '03737926',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Jorge Norberto',
  'lastName': 'PISILLI',
```

```
'dni': '22630868',
  'company': '',
  'optionalData': [{'id': 1, 'value': 'prestamos'},
   {'id': 2, 'value': 'global id'}]},
 'type': 71,
 'card': '03737926',
 'tmp': '20180430033607',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72500,
 'employee': {'code': 481,
  'mat': '00481',
  'card': '03737926',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Jorge Norberto',
  'lastName': 'PISILLI',
  'dni': '22630868',
  'company': '',
  'optionalData': [{'id': 1, 'value': 'prestamos'},
  {'id': 2, 'value': 'global id'}]},
 'type': 71,
 'card': '03737926',
 'tmp': '20180430033610',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72501,
 'employee': {'code': 712,
  'mat': '712',
  'card': '04922630',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'David Alberto',
  'lastName': 'PICON',
  'dni': '28706535',
```

```
'company': '',
  'optionalData': []},
 'type': 71,
 'card': '04922630',
 'tmp': '20180430034244',
 'result': 66,
 'offline': 0,
 'gl': 34,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 23,
 'version': 0},
{'id': 72502,
 'employee': {'code': 481,
  'mat': '00481',
  'card': '03737926',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Jorge Norberto',
  'lastName': 'PISILLI',
  'dni': '22630868',
  'company': '',
  'optionalData': [{'id': 1, 'value': 'prestamos'},
   {'id': 2, 'value': 'global id'}]},
 'type': 71,
 'card': '03737926',
 'tmp': '20180430050704',
 'result': 66,
 'offline': 0,
 'gl': 49,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 34,
 'version': 0},
{'id': 72503,
 'employee': {'code': 481,
  'mat': '00481',
  'card': '03737926',
  'centerCode': 'AR',
  'centerDesc': 'DEMO',
  'firstname': 'Jorge Norberto',
  'lastName': 'PISILLI',
  'dni': '22630868',
  'company': '',
  'optionalData': [{'id': 1, 'value': 'prestamos'},
```

```
{'id': 2, 'value': 'global id'}]},
'type': 71,
'card': '03737926',
'tmp': '20180430050754',
'result': 66,
'offline': 0,
'gl': 18,
'reader': 66,
'aux': '0000',
'value': 0,
'terminal': 11,
'version': 0}]}}
```

1.2.5 Get Contractor Clockings with specific method

```
[122]: client.get_clockings_contractor(
           _from=datetime.datetime(2018, 4, 1, 5, 6, 7),
           _to=datetime.datetime(2018, 4, 30, 23, 59, 59),
           fromHistory=True,
           employeeDetail=False,
           pageSize=10
       )
[122]: {'ok': True,
        'error': None,
        'response': {'count': 320,
         'pages': 32,
         'clockings': [{'id': 72493,
           'employee': 774,
           'type': 71,
           'card': '02812635',
           'tmp': '20180430030408',
           'result': 66,
           'offline': 0,
           'gl': 34,
           'reader': 66,
           'aux': '0000',
           'value': 0,
           'terminal': 23,
           'version': 0},
          {'id': 72494,
           'employee': 774,
           'type': 71,
           'card': '02812635',
           'tmp': '20180430031111',
           'result': 66,
           'offline': 0,
```

```
'gl': 34,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 23,
 'version': 0},
{'id': 72496,
 'employee': 239,
 'type': 71,
 'card': '02536953',
 'tmp': '20180430032139',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72497,
 'employee': 239,
 'type': 71,
 'card': '02536953',
 'tmp': '20180430032141',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72498,
 'employee': 692,
 'type': 71,
 'card': '04922689',
 'tmp': '20180430032945',
 'result': 66,
 'offline': 0,
 'gl': 51,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 35,
 'version': 0},
{'id': 72499,
 'employee': 481,
```

```
'type': 71,
 'card': '03737926',
 'tmp': '20180430033607',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72500,
 'employee': 481,
 'type': 71,
 'card': '03737926',
 'tmp': '20180430033610',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0},
{'id': 72501,
 'employee': 712,
 'type': 71,
 'card': '04922630',
 'tmp': '20180430034244',
 'result': 66,
 'offline': 0,
 'gl': 34,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 23,
'version': 0},
{'id': 72502,
 'employee': 481,
 'type': 71,
 'card': '03737926',
 'tmp': '20180430050704',
 'result': 66,
 'offline': 0,
 'gl': 49,
 'reader': 66,
 'aux': '0000',
```

```
'value': 0,
 'terminal': 34,
 'version': 0},
{'id': 72503,
 'employee': 481,
 'type': 71,
 'card': '03737926',
 'tmp': '20180430050754',
 'result': 66,
 'offline': 0,
 'gl': 18,
 'reader': 66,
 'aux': '0000',
 'value': 0,
 'terminal': 11,
 'version': 0}]}}
```

1.2.6 Import Employee

Centers prepare

```
[103]: centers=[{
        "center": "AR",
        "dueDate": datetime.date(2024, 12, 31)
}, {
        "center": "150",
        "dueDate": datetime.date(2024, 12, 31)
}]
```

Send data

```
[92]: client.post_employee(
    _type='encae',
    code=273,
    nif='204',
    ss='20-20420420-9',
    lastName='Doe',
    firstName='John',
    companyCode='spec',
    companyName='SPEC, SA',
    centers=centers
)
```

[92]: {'ok': True, 'error': None, 'response': 'Datos importados correctamente.'}

Import ENCAE employee

[98]: {'ok': True, 'error': None, 'response': 'Datos importados correctamente.'}

1.2.7 Import employees from list

Data prepare

```
[119]: ed1 = {
           "_type": 'encae',
           "code": 273,
           "nif": '204',
           "ss": '20-20420420-9',
           "lastName": 'Doe',
           "firstName": 'John',
           "companyCode": 'spec',
           "companyName": 'SPEC, SA',
           "centers": centers
       }
       ed2 = {
           "_type": 'encae',
           "code": 274,
           "nif": '205',
           "ss": '20-20420420-9',
           "lastName": 'Lucyk',
           "firstName": 'Lucas',
           "companyCode": 'spec',
           "companyName": 'SPEC, SA',
           "centers": centers
       }
```

Data send

```
[120]: client.post_employees(employeeData=[ed1, ed2])
[120]: {'ok': True, 'error': None, 'response': 'Datos importados correctamente.'}
[]:
```