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# **Python vManage**

***Release 0.2.3***

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*python-viptela* provides a PYthon SDK for interacting with Cisco SDWAN (formerly Viptela).



## API REFERENCE

This page contains auto-generated API reference documentation<sup>1</sup>.

### 1.1 utils

#### 1.1.1 Module Contents

```
utils.list_to_dict(lst, key_name, remove_key=True)
```

### 1.2 \_\_main\_\_

#### 1.2.1 Module Contents

```
class __main__.CatchAllExceptions(name=None, commands=None, **attrs)
    Bases: click.Group

    __call__(self, *args, **kwargs)

class __main__.Viptela(host, username, password)
    Bases: object

    property auth(self)

__main__.vmanage(ctx, host, username, password)
```

### 1.3 api

#### 1.3.1 Submodules

```
api.authentication
```

Cisco vManage Authentication API Methods.

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<sup>1</sup> Created with sphinx-autoapi

## Module Contents

```
class api.authentication.Authentication(host=None, user=None, password=None,
                                         port=443, validate_certs=False, timeout=10)
```

Bases: object

vManage Authentication API

Responsible for retrieving the JSESSIONID after a username/password has been authenticated. If the vManage version is >= 19.2.0 then the X-XSRF-TOKEN will be retrieved and added to the header. An HTTP(S) Request session object will be returned.

**login(self)**

Executes login tasks against vManage to retrieve token(s).

**Parameters** `None`. –

**Returns** a Requests session with JSESSIONID and an X-XSRF-TOKEN for vManage version  
>= 19.2.0.

**Return type** `self.session`

**Raises**

- `LoginFailure` – If the username/password are incorrect.
- `RequestException` – If the host is not accessible.

`api.central_policy`

Cisco vManage Centralized Policy API Methods.

## Module Contents

```
class api.central_policy.CentralPolicy(session, host, port=443)
```

Bases: object

vManage Central Policy API

Responsible for DELETE, GET, POST, PUT methods against vManage Central Policy.

**activate\_central\_policy(self, policy\_name, policy\_id)**

Activates the current active centralized policy

**Parameters** `policyId(str)` – ID of the active centralized policy

**Returns** The Action ID from the activation.

**Return type** `result(str)`

**deactivate\_central\_policy(self, policy\_id)**

Deactivates the current active centralized policy

**Parameters** `policyId(str)` – ID of the deactivate centralized policy

**Returns** The Action ID from the activation.

**Return type** `result(str)`

**add\_central\_policy(self, policy)**

Delete a Central Policy from vManage.

**Parameters** `policy` – The Central Policy

**Returns** All data associated with a response.

**Return type** result (dict)

**update\_central\_policy** (self, policy, policy\_id)

Update a Central from vManage.

**Parameters**

- **policy** – The Central Policy
- **policy\_id** – The ID of the Central Policy to update

**Returns** All data associated with a response.

**Return type** result (dict)

**delete\_central\_policy** (self, policyId)

Deletes the specified centralized policy

**Parameters** **policyId** (str) – ID of the active centralized policy

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_central\_policy\_list** (self)

Get all Central Policies from vManage.

**Returns**

A list of all policy lists currently in vManage.

**Return type** response (dict)

**get\_central\_policy\_dict** (self, key\_name='policyName', remove\_key=False)

**import\_central\_policy\_list** (self, central\_policy\_list, update=False, push=False, check\_mode=False, force=False)

**waitfor\_action\_completion** (self, action\_id)

## api.centralized\_policy

Cisco vManage Centralized Policy API Methods.

### Module Contents

**class** api.centralized\_policy.CentralizedPolicy(session, host, port=443)

Bases: object

vManage Centralized Policy API

Responsible for DELETE, GET, POST, PUT methods against vManage Centralized Policy.

**deactivate\_centralized\_policy** (self, policyId)

Deactivates the current active centralized policy

**Parameters** **policyId** (str) – ID of the active centralized policy

**Returns** All data associated with a response.

**Return type** result (dict)

**delete\_centralized\_policy** (*self*, *policyId*)

Deletes the specified centralized policy

**Parameters** **policyId** (*str*) – ID of the active centralized policy

**Returns** All data associated with a response.

**Return type** result (dict)

**delete\_policy\_definition** (*self*, *definition*, *definitionId*)

Deletes the specified policy definition which include: ‘control’, ‘mesh’, ‘hubandspoke’, ‘vpnmembershipgroup’, ‘approuute’, ‘data’, ‘cflowd’

**Parameters**

- **definition** (*str*) – One of the above policy types
- **definitionId** (*str*) – ID of the policy definition

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_centralized\_policy** (*self*)

Obtain a list of all configured centralized policies

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_policy\_definition** (*self*, *definition*)

Obtain a list of various policy definitions which include: ‘control’, ‘mesh’, ‘hubandspoke’, ‘vpnmembershipgroup’, ‘approuute’, ‘data’, ‘cflowd’

**Parameters** **definition** (*str*) – One of the above policy types

**Returns** All data associated with a response.

**Return type** result (dict)

## api.certificate

Cisco vManage Certificate API Methods.

### Module Contents

**class** `api.certificate.Certificate` (*session*, *host*, *port*=443)

Bases: object

vManage Certificate API

Responsible for DELETE, GET, POST, PUT methods against vManage Certificates.

**generate\_csr** (*self*, *device\_ip*)

**install\_device\_cert** (*self*, *cert*)

**push\_certificates** (*self*)

Push certificates to all controllers

**Returns** The action ID of the push command.

**Return type** result (str)

**api.device**

Cisco vManage Device Inventory API Methods.

**Module Contents**

**class** `api.device.Device(session, host, port=443)`

Bases: `object`

vManage Device Inventory API

Responsible for DELETE, GET, POST, PUT methods against vManage Device Inventory.

**get\_device\_status\_list(self)**

Obtain a list of specified device type

Args: None

**Returns** Device status

**Return type** result (list)

**get\_device\_status\_dict(self, key\_name='host-name', remove\_key=False)**

Obtain a dict of specified device type

**Parameters** `category(str)` – vedges or controllers

**Returns** Device status

**Return type** result (dict)

**get\_device\_status(self, value, key='system-ip')**

Get the status of a specific device

**Parameters**

- **string(value)** – The value of the key to match
- **key(string)** – The key on which to match (e.g. system-ip)

**Returns** Device status

**Return type** result (dict)

**get\_device\_config(self, device\_type, value, key='system-ip')**

Get the config of a specific device

**Parameters**

- **string(value)** – The value of the key to match
- **key(string)** – The key on which to match (e.g. system-ip)

**Returns** Device config

**Return type** result (dict)

**get\_device\_dict(self, key\_name='host-name', remove\_key=False)**

**get\_device\_config\_list(self, device\_type)**

Get the config status of a list of devices

**Parameters** `device_type(str)` – vedge or controller

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_device\_config\_dict** (self, device\_type, key\_name='host-name', remove\_key=False)

**get\_device\_data** (self, path, device\_ip)

Get the data from a device

**Parameters**

- **path** (str) – The path of the data
- **device\_ip** (str) – The IP address of the device

**Returns** All data associated with a response.

**Return type** result (dict)

## api.device\_inventory

Cisco vManage Device Inventory API Methods.

### Module Contents

**class** api.device\_inventory.DeviceInventory(session, host, port=443)

Bases: object

vManage Device Inventory API

Responsible for DELETE, GET, POST, PUT methods against vManage Device Inventory.

**get\_device\_list** (self, category)

Obtain a list of specified device type

**Parameters** **category** (str) – vedges or controllers

**Returns** All data associated with a response.

**Return type** result (dict)

**post\_device\_cli\_mode** (self, deviceId, deviceIP, deviceType)

Update a device to CLI mode

**Parameters**

- **deviceId** (str) – uuid for device object
- **deviceIP** (str) – system IP equivalent
- **deviceType** (str) – vedge or controller

## api.device\_templates

Cisco vManage Device Templates API Methods.

## Module Contents

```
class api.device_templates.DeviceTemplates(session, host, port=443)
    Bases: object

    vManage Device Templates API

    Responsible for DELETE, GET, POST, PUT methods against vManage Device Templates.

    delete_device_template(self, templateId)
        Obtain a list of all configured device templates.

        Parameters templateId(str) – Object ID for device template

        Returns All data associated with a response.

        Return type result(dict)

    get_device_templates(self)
        Obtain a list of all configured device templates.

        Returns All data associated with a response.

        Return type result(dict)

    get_device_template_object(self, template_id)
        Obtain a device template object.

        Returns All data associated with a response.

        Return type result(dict)

    get_device_template_list(self, factory_default=False, name_list=None)
        Get the list of device templates.

        Parameters
            • factory_default(bool) – Include factory default
            • name_list(list of strings) – A list of template names to retrieve.

        Returns All data associated with a response.

        Return type result(dict)

    get_device_template_dict(self, factory_default=False, key_name='templateName', remove_key=True, name_list=None)
        Obtain a dictionary of all configured device templates.

        Parameters
            • factory_default(bool) – Wheter to return factory default templates
            • key_name(string) – The name of the attribute to use as the dictionary key
            • remove_key(boolean) – remove the search key from the element

        Returns All data associated with a response.

        Return type result(dict)

    get_template_attachments(self, template_id, key='host-name')
        Get the devices that a template is attached to.

        Parameters
            • template_id(string) – Template ID
```

- **key** (*string*) – The key of the device to put in the list (default: host-name)

**Returns** List of keys.

**Return type** result (list)

**get\_template\_input** (*self*, *template\_id*, *device\_id\_list=None*)

Get the input associated with a device attachment.

**Parameters** **template\_id** (*string*) – Template ID

**Returns** All data associated with a response.

**Return type** result (dict)

**add\_device\_template** (*self*, *device\_template*)

Add a single device template to Vmanage.

**Parameters** **device\_template** (*dict*) – Device Template

**Returns** Response from Vmanage

**Return type** result (list)

**update\_device\_template** (*self*, *device\_template*)

Update a single device template to Vmanage.

**Parameters** **device\_template** (*dict*) – Device Template

**Returns** Response from Vmanage

**Return type** result (list)

**import\_device\_template\_list** (*self*, *device\_template\_list*, *check\_mode=False*, *update=False*)

Import a list of feature templates to vManage.

**Parameters**

- **check\_mode** (*bool*) – Only check to see if changes would be made
- **update** (*bool*) – Update the template if it exists

**Returns** Returns the diffs of the updates.

**Return type** result (list)

**import\_attachment\_list** (*self*, *attachment\_list*, *check\_mode=False*, *update=False*)

Import a list of device attachments to vManage.

**Parameters**

- **check\_mode** (*bool*) – Only check to see if changes would be made
- **update** (*bool*) – Update the template if it exists

**Returns** Returns the diffs of the updates.

**Return type** result (list)

**attach\_to\_template** (*self*, *template\_id*, *uuid*, *system\_ip*, *host\_name*, *site\_id*, *variables*)

Attach and device to a template

**Parameters**

- **template\_id** (*str*) – The template ID to attach to
- **uuid** (*str*) – The UUID of the device to attach
- **system\_ip** (*str*) – The System IP of the system to attach

- **host\_name** (*str*) – The host-name of the device to attach
- **variables** (*dict*) – The variables needed by the template

**Returns** Returns the action id of the attachment

**Return type** action\_id (str)

**detach\_from\_template** (*self*, *uuid*, *device\_ip*, *device\_type*)

Detach a device from a template (i.e. Put in CLI mode)

**Parameters**

- **uuid** (*str*) – The UUID of the device to detach
- **system\_ip** (*str*) – The System IP of the system to detach
- **device\_type** (*str*) – The device type of the device to detach

**Returns** Returns the action id of the attachment

**Return type** action\_id (str)

**get\_attachments** (*self*, *template\_id*, *key='host-name'*)

Get a list of attachments to a particular template.

**Parameters**

- **template\_id** (*str*) – Template ID of the template
- **key** (*str*) – The key of the elements to return

**Returns** Returns the specified key of the attached devices.

**Return type** result (list)

**generalTemplates\_to\_id** (*self*, *generalTemplates*)

## api.feature\_templates

Cisco vManage Feature Templates API Methods.

### Module Contents

**class** *api.feature\_templates.FeatureTemplates* (*session*, *host*, *port=443*)  
Bases: object

vManage Feature Templates API

Responsible for DELETE, GET, POST, PUT methods against vManage Feature Templates.

**delete\_feature\_template** (*self*, *templateId*)

Obtain a list of all configured feature templates.

**Parameters** **templateId** (*str*) – Object ID for feature template

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_feature\_templates** (*self*)

Obtain a list of all configured feature templates.

**Returns** All data associated with a response.

**Return type** result (dict)

**add\_feature\_template** (*self*, *feature\_template*)

Add a feature template to Vmanage.

**Parameters** **feature\_template** (*dict*) – Feature Template

**Returns** Response from Vmanage

**Return type** result (list)

**update\_feature\_template** (*self*, *feature\_template*)

Add a feature template to Vmanage.

**Parameters** **feature\_template** (*dict*) – Feature Template

**Returns** Response from Vmanage

**Return type** result (list)

**get\_feature\_template\_list** (*self*, *factory\_default=False*, *name\_list=None*)

Obtain a list of all configured feature templates.

**Parameters**

- **factory\_default** (*bool*) – Wheter to return factory default templates
- **name\_list** (*list of strings*) – A list of the template names to return

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_feature\_template\_dict** (*self*, *factory\_default=False*, *key\_name='templateName'*, *remove\_key=True*, *name\_list=None*)

Obtain a dictionary of all configured feature templates.

**Parameters**

- **factory\_default** (*bool*) – Wheter to return factory default templates
- **key\_name** (*string*) – The name of the attribute to use as the dictionary key
- **remove\_key** (*boolean*) – remove the search key from the element

**Returns** All data associated with a response.

**Return type** result (dict)

**import\_feature\_template\_list** (*self*, *feature\_template\_list*, *check\_mode=False*, *update=False*)

Add a list of feature templates to vManage.

**Parameters**

- **check\_mode** (*bool*) – Only check to see if changes would be made
- **update** (*bool*) – Update the template if it exists

**Returns** Returns the diffs of the updates.

**Return type** result (list)

**api.http\_methods****Module Contents**

```
api.http_methods.STANDARD_HEADERS
api.http_methods.STANDARD_TIMEOUT = 10
api.http_methods.VALID_STATUS_CODES = [200, 201, 202, 203, 204, 205, 206, 207, 208, 226]
class api.http_methods.HttpMethods(session, url)
Bases: object
```

HTTP Methods for vManage API Interaction

Provides a consistent interaction with the vManage REST API. Contains error handling for common HTTP interaction issues.

**request** (*self, method, headers=None, payload=None, files=None*)

Performs HTTP REST API Call.

**Parameters**

- **method** (*str*) – DELETE, GET, POST, PUT
- **headers** (*dict*) – Use standard vManage header provided in module or custom header for specific API interaction
- **payload** (*str*) – A formatted string to be delivered to vManage via POST or PUT REST call
- **file** (*obj*) – A file to be sent to vManage

**Returns**

A parsable dictionary containing the full response from vManage for an interaction

**Return type** result (dict)

**Raises**

- **JSONDecodeError** – Payload format error.
- **ConnectionError** – Connection error.
- **HTTPError** – An HTTP error occurred.
- **URLRequired** – A valid URL is required to make a request.
- **TooManyRedirects** – Too many redirects.
- **Timeout** – The request timed out.
- **RequestException** – There was an ambiguous exception.

## api.local\_policy

Cisco vManage Localized Policy API Methods.

### Module Contents

**class** `api.local_policy.LocalPolicy(session, host, port=443)`

Bases: `object`

vManage Local Policy API

Responsible for DELETE, GET, POST, PUT methods against vManage Local Policy.

**add\_local\_policy(self, policy)**

Delete a Central Policy from vManage.

**Parameters** `policy` – The Central Policy

**Returns** All data associated with a response.

**Return type** result (dict)

**update\_local\_policy(self, policy, policy\_id)**

Update a Central from vManage.

**Parameters**

• `policy` – The Central Policy

• `policy_id` – The ID of the Central Policy to update

**Returns** All data associated with a response.

**Return type** result (dict)

**delete\_localized\_policy(self, policy\_id)**

Deletes the specified local policy

**Parameters** `policyId(str)` – ID of the active local policy

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_local\_policy\_list(self)**

Get all Central Policies from vManage.

**Returns**

A list of all policy lists currently in vManage.

**Return type** response (dict)

**get\_local\_policy\_dict(self, key\_name='policyName', remove\_key=False)**

**import\_local\_policy\_list(self, local\_policy\_list, update=False, push=False, check\_mode=False, force=False)**

**api.localized\_policy**

Cisco vManage Localized Policy API Methods.

**Module Contents**

```
class api.localized_policy.LocalizedPolicy(session, host, port=443)
Bases: object

vManage Localized Policy API

Responsible for DELETE, GET, POST, PUT methods against vManage Localized Policy.

delete_localized_definition(self, definition, definitionId)
    Deletes the specified policy definition which include: 'qosmap','rewriterule','acl','aclv6','vedgeroute'

    Parameters
        • definition (str) – One of the above policy types
        • definitionId (str) – ID of the policy definition

    Returns All data associated with a response.

    Return type result (dict)

delete_localized_policy(self, policy_id)
    Deletes the specified localized policy

    Parameters policyId (str) – ID of the active localized policy

    Returns All data associated with a response.

    Return type result (dict)

get_localized_definition(self, definition)
    Obtain a list of various policy definitions which include: 'qosmap','rewriterule','acl','aclv6','vedgeroute'

    Parameters definition (str) – One of the above policy types

    Returns All data associated with a response.

    Return type result (dict)

get_localized_policy(self)
    Obtain a list of all configured localized policies

    Returns All data associated with a response.

    Return type result (dict)
```

**api.monitor\_network**

Cisco vManage Monitor Networks API Methods.

## Module Contents

```
class api.monitor_network.MonitorNetwork(session, host, port=443)
    Bases: object

    vManage Monitor Networks API

    Responsible for GET methods against vManage Real Time Monitoring for network devices.

    get_control_connections(self, system_ip)
        Provides current control connections for device.

            Parameters system_ip (str) – Device System IP

            Returns All data associated with a response.

            Return type result (dict)

    get_control_connections_history(self, system_ip)
        Provides control connections history for device.

            Parameters system_ip (str) – Device System IP

            Returns All data associated with a response.

            Return type result (dict)

    get_device_status(self, system_ip)
        Provides status for device.

            Parameters system_ip (str) – Device System IP

            Returns All data associated with a response.

            Return type result (dict)

    get_omp_peers(self, system_ip)
        Provides OMP peers for device.

            Parameters system_ip (str) – Device System IP

            Returns All data associated with a response.

            Return type result (dict)
```

## api.policy\_definitions

Cisco vManage Policy Definitions API Methods.

## Module Contents

```
class api.policy_definitions.PolicyDefinitions(session, host, port=443)
    Bases: object

    vManage Policy Definitions API

    Responsible for DELETE, GET, POST, PUT methods against vManage Policy Definitions used in Centralized,
    Localized, and Security Policy.

    convert_list_id_to_name(self, id_list)
    convert_list_name_to_id(self, name_list)
```

---

```
convert_definition_id_to_name(self, policy_definition)
convert_definition_name_to_id(self, policy_definition)
delete_policy_definition(self, definition_type, definition_id)
    Delete a Policy Definition from vManage.
```

**Parameters**

- **definition\_type** (*str*) – The defintion type of the requested policy definition
- **definition\_id** (*str*) – The defintion ID of the requested policy definition

**Returns** All data associated with a response.**Return type** result (dict)

```
add_policy_definition(self, policy_definition)
    Delete a Policy Definition from vManage.
```

**Parameters**

- **definition\_type** (*str*) – The defintion type of the requested policy definition
- **definition\_id** (*str*) – The defintion ID of the requested policy definition

**Returns** All data associated with a response.**Return type** result (dict)

```
update_policy_definition(self, policy_definition, policy_definition_id)
    Update a Policy Definition from vManage.
```

**Parameters**

- **definition\_type** (*str*) – The defintion type of the requested policy definition
- **definition\_id** (*str*) – The defintion ID of the requested policy definition

**Returns** All data associated with a response.**Return type** result (dict)

```
get_policy_definition(self, definition_type, definition_id)
    Get a Policy Definition from vManage.
```

**Parameters**

- **definition\_type** (*str*) – The defintion type of the requested policy definition
- **definition\_id** (*str*) – The defintion ID of the requested policy definition

**Returns** All data associated with a response.**Return type** result (dict)

```
get_policy_definition_list(self, definition_type='all')
    Get all Policy Definition Lists from vManage.
```

**Parameters** **definition\_type** (*string*) – The type of Definition List to retreive**Returns**

A list of all definition lists currently in vManage.

**Return type** response (dict)

```
get_policy_definition_dict(self, t, key_name='name', remove_key=False)
```

```
convert_sequences_to_id(self, sequence_list)
```

```
import_policy_definition_list(self, policy_definition_list, update=False, push=False,
                               check_mode=False, force=False)

api.policy_lists
```

Cisco vManage Policy Lists API Methods.

## Module Contents

```
class api.policy_lists.PolicyLists(session, host, port=443)
Bases: object
```

vManage Policy Lists API

Responsible for DELETE, GET, POST, PUT methods against vManage Policy Lists used in Centralized, Localized, and Security Policy.

```
delete_data_prefix_list(self, listid)
```

Delete a Data Prefix List from vManage.

**Parameters** `listid` (`str`) – vManaged assigned list identifier

**Returns** Results from deletion attempt.

**Return type** response (dict)

```
get_data_prefix_list(self)
```

Get all Data Prefix Lists from vManage.

**Returns**

A list of all data prefix lists currently in vManage.

**Return type** response (dict)

```
get_policy_list_all(self)
```

Get all Policy Lists from vManage.

**Returns**

A list of all policy lists currently in vManage.

**Return type** response (dict)

```
post_data_prefix_list(self, name, entries)
```

Add a new Data Prefix List to vManage.

**Parameters**

- `name` (`str`) – name of the data prefix list
- `entries` (`list`) – a list of prefixes to add to the list

**Returns**

Results from attempting to add a new data prefix list.

**Return type** response (dict)

```
put_data_prefix_list(self, name, listid, entries)
```

Update an existing Data Prefix List on vManage.

**Parameters**

- **name** (*str*) – name of the data prefix list
- **listid** (*str*) – vManaged assigned list identifier
- **entries** (*list*) – a list of prefixes to add to the list

**Returns**

**Results from attempting to update an** existing data prefix list.

**Return type** response (dict)

**delete\_policy\_list** (*self*, *listType*, *listId*)

Deletes the specified policy list type

**Parameters**

- **listType** (*str*) – Policy list type
- **listId** (*str*) – ID of the policy list

**Returns** All data associated with a response.**Return type** result (dict)

**clear\_policy\_list\_cache** (*self*)

**get\_policy\_list\_list** (*self*, *policy\_list\_type='all'*, *cache=True*)

Get a list of policy lists

**Parameters**

- **policy\_list\_type** (*str*) – Policy list type
- **cache** (*bool*) – Whether to cache the response

**Returns** All data associated with a response.**Return type** result (dict)

**get\_policy\_list\_dict** (*self*, *policy\_list\_type='all'*, *key\_name='name'*, *remove\_key=False*, *cache=True*)

**add\_policy\_list** (*self*, *policy\_list*)

Add a new Policy List to vManage.

**Parameters** **policy\_list** (*dict*) – The Policy List**Returns**

**Results from attempting to add a new** prefix list.

**Return type** response (dict)

**update\_policy\_list** (*self*, *policy\_list*)

Update an existing Policy List on vManage.

**Parameters** **policy\_list** (*dict*) – The Policy List**Returns**

**Results from attempting to update an** existing data prefix list.

**Return type** response (dict)

**import\_policy\_list\_list** (*self*, *policy\_list\_list*, *push=False*, *update=False*, *check\_mode=False*, *force=False*)

Import a list of policy lists into vManage

**Parameters**

- **policy\_list\_list** – A list of policies
- **push (bool)** – Whether to push a change out
- **update (bool)** – Whether to update when the list exists
- **check\_mode (bool)** – Report what updates would happen, but don't update

**Returns** All data associated with a response.

**Return type** result (dict)

## api.security\_policy

Cisco vManage Security Policy API Methods.

### Module Contents

**class** api.security\_policy.**SecurityPolicy**(session, host, port=443)

Bases: object

vManage Security Policy API

Responsible for DELETE, GET, POST, PUT methods against vManage Security Policy.

**delete\_security\_definition (self, definition, definitionId)**

Deletes the specified policy definition which include: ‘zonebasedfw’, ‘urlfiltering’, ‘dnssecurity’, ‘intrusionprevention’, ‘advancedMalwareProtection’ for 18.4.0 or greater and ‘zonebasedfw’ for

#### Parameters

- **definition (str)** – One of the above policy types
- **definitionId (str)** – ID of the policy definition

**Returns** All data associated with a response.

**Return type** result (dict)

**delete\_security\_policy (self, policyId)**

Deletes the specified security policy

**Parameters** **policyId (str)** – ID of the active security policy

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_security\_definition (self, definition)**

Obtain a list of various security definitions which include: ‘zonebasedfw’, ‘urlfiltering’, ‘intrusionprevention’, ‘advancedMalwareProtection’, ‘dnssecurity’

**Parameters** **definition (str)** – One of the above policy types

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_security\_policy (self)**

Obtain a list of all configured security policies

**Returns** All data associated with a response.

**Return type** result (dict)

## api.utilities

Cisco vManage Utilities API Methods.

### Module Contents

**class** api.utilities.**Utilities**(session, host, port=443)

Bases: object

Access to Various vManage Utilities instance.

vManage has several utilities that are needed for correct execution of applications against the API. For example, this includes waiting for an action to complete before moving onto the next task.

**get\_active\_count**(self)

Provides number of active tasks on vManage.

**Returns** All data associated with a response.

**Return type** result (dict)

**get\_vmanage\_version**(self)

**waitfor\_action\_completion**(self, action\_id)

**upload\_file**(self, input\_file)

Upload a file to vManage.

**Parameters** **input\_file** (str) – The name of the file to upload.

**Returns** The status of the file upload.

**Return type** upload\_status (str)

### 1.3.2 Package Contents

api.name = vmanage.api

## 1.4 apps

### 1.4.1 Submodules

#### apps.files

Cisco vManage Files API Methods.

## Module Contents

```
class apps.files.Files(session, host, port=443)
Bases: object
```

Access to Various vManage Utilitiesinstance.

vManage has several utilities that are needed for correct execution of applications against the API. For example, this includes waiting for an action to complete before moving onto the next task.

```
export_templates_to_file(self, export_file, name_list=None, template_type=None)
import_templates_from_file(self, file, update=False, check_mode=False, name_list=None,
                           template_type=None)
export_policy_to_file(self, export_file)
import_policy_from_file(self, file, update=False, check_mode=False, push=False)
export_attachments_to_file(self, export_file, name_list=None, device_type=None)
import_attachments_from_file(self, file, update=False, check_mode=False, name_list=None,
                             template_type=None)
```

```
apps.reset_vmanage
```

Reset vManage Application.

## Module Contents

```
class apps.reset_vmanage.ResetVmanage(session, host, port=443)
Bases: object
```

Reset all configuratios on a vManage instance.

Executes the necessary REST calls in specific order to remove configurations applied to a vManage instance.

```
active_count_delay(self)
execute(self)
```

## 1.4.2 Package Contents

```
apps.name = vmanage.apps
```

## 1.5 data

### 1.5.1 Submodules

```
data.parse_methods
```

Parse Methods for Data Returned by Cisco vManage.

## Module Contents

```
data.parse_methods.VALID_STATUS_CODES = [200, 201, 202, 203, 204, 205, 206, 207, 208, 226]
class data.parse_methods.ParseMethods
    Reset all configuratios on a vManage instance.

    Executes the necessary REST calls in specific order to remove configurations applied to a vManage instance.

    static parse_data(response)
        Parse data and provide error handling for missing data.

            Parameters response (obj) – Requests response object
            Returns All data associated with a response.
            Return type result (dict)
            Raises Exception – Provides error message and details of issue.

    static parse_status(response)
        Retrieve status code for transactions that do not receive a response.

            Parameters response (obj) – Requests response object
            Returns All data associated with a response.
            Return type result (dict)
```

## 1.5.2 Package Contents

```
data.name = vmanage.data
```

## 1.6 cli

### 1.6.1 Subpackages

```
cli.activate
```

#### Submodules

```
cli.activate.central_policy
```

## Module Contents

```
cli.activate.central_policy.central_policy(ctx, name)
    Activate Central Policy
```

## Package Contents

```
cli.activate.activate()  
    Activate commands
```

```
cli.certificate
```

## Package Contents

```
cli.certificate.push(ctx)  
    Push certificates to all controllers  
  
cli.certificate.certificate()  
    Certificate commands
```

```
cli.deactivate
```

## Submodules

```
cli.deactivate.central_policy
```

## Module Contents

```
cli.deactivate.central_policy.central_policy(ctx, name, policy_id)  
    deactivate Central Policy
```

## Package Contents

```
cli.deactivate.deactivate()  
    Deactivate commands
```

```
cli.export
```

## Submodules

```
cli.export.attachments
```

## Module Contents

```
cli.export.attachments.attachments(ctx, device_type, name, output_file)  
    Export attachments to file
```

`cli.export.policies`

#### Module Contents

`cli.export.policies.policies(ctx, export_file)`

Export policies to file

`cli.export.templates`

#### Module Contents

`cli.export.templates.templates(ctx, template_type, name, export_file)`

Export templates to file

### Package Contents

`cli.export.export()`

Export commands

`cli.import_cmd`

#### Submodules

`cli.import_cmd.attachments`

#### Module Contents

`cli.import_cmd.attachments.attachments(ctx, input_file, check, update, name, template_type)`

Import attachments from file

`cli.import_cmd.policies`

#### Module Contents

`cli.import_cmd.policies.policies(ctx, input_file, check, update, push, diff)`

Import policies from file

`cli.import_cmd.serial_file`

#### Module Contents

`cli.import_cmd.serial_file.serial_file(ctx, input_file)`

Import serial file

```
cli.import_cmd.templates
```

## Module Contents

```
cli.import_cmd.templates.templates(ctx, input_file, check, update, diff, name, template_type)
```

Import templates from file

## Package Contents

```
cli.import_cmd.import_cmd()
```

Import commands

```
cli.show
```

## Submodules

```
cli.show.control
```

## Module Contents

```
cli.show.control.connections(ctx, device, json)
```

Show control connections

```
cli.show.control.connections_history(ctx, device, json)
```

Show control connections history

```
cli.show.control.control()
```

Show control information

```
cli.show.device
```

## Module Contents

```
cli.show.device.status(ctx, dev, device_type, json)
```

Show device status information

```
cli.show.device.config(ctx, dev, device_type, json)
```

Show device config information

```
cli.show.device.device()
```

Show device information

```
cli.show.interface
```

## Module Contents

```
cli.show.interface.list_interface(ctx, device, json)
```

Show Interfaces

```
cli.show.interface.interface()
```

Show real-time information

```
cli.show.omp
```

## Module Contents

```
cli.show.omp.peers(ctx, device, json)
```

Show OMP peer information

```
cli.show.omp.omp()
```

Show OMP information

```
cli.show.policies
```

## Module Contents

```
cli.show.policies.list_cmd(ctx, name, json, policy_list_type)
```

Show policy list information

```
cli.show.policies.definition(ctx, name, json, definition_type)
```

Show policy definition information

```
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```

Show central policy information

```
cli.show.policies.local(ctx, name, json)
```

Show local policy information

```
cli.show.policies.policies()
```

Show policy information

```
cli.show.route
```

## Module Contents

```
cli.show.route.table(ctx, device, json)
```

Show Interfaces

```
cli.show.route.route()
```

Show device route information

```
cli.show.templates
```

## Module Contents

```
cli.show.templates.templates(ctx, template_type, diff, default, name, json)
```

Show template information

## Package Contents

```
cli.show.show()
```

Show commands

### 1.6.2 Package Contents

```
cli.name = vmanage.cli
```

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