Troubleshooting the Python API

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Receiving Python API Errors

Take these actions if any of the following Python API errors appear:

Symptom	Solution	Example

The Python cli API throws a NameError.	Import the cli module into the global namespace.	`>>> cli('show clock')`
		`Traceback (most recent call last):`
		`  File "<stdin>", line 1, in <module>`
		`NameError: name 'cli' is not defined`
		
		`>>> from cli import *`
		`>>> cli('show clock')`
		`'20:23:33.967 UTC Fri Nov 01 2013\n'`

The Python clid API throws a structured_output_not_supported_error.	Use the cli or clip API. The clid API works only with commands that support structured data output.	`>>> clid('show clock')`
		`Traceback (most recent call last):`
		`  File "<stdin>", line 1, in <module>`
		`  File "/isan/python/scripts/cli.py", line 45,`
		` in clid`
		`  raise`
		`structured_output_not_supported_error(cmd)`
		`errors.structured_output_not_supported_error:`
		` 'show clock'`

Symptom	Solution	Example

The cli API and cisco objects throw a Permission denied error.	Make sure your login ID has sufficient permissions to access the command or resource. If necessary, ask your network administrator for additional permissions.	`>>> from cli import *`
		`>>> cli('clear counters')`
		`Traceback (most recent call last):`
		`  File "<stdin>", line 1, in <module>`
		`  File "/isan/python/scripts/cli.py", line 20, in cli`
		`  raise cmd_exec_error(msg)`
		`errors.cmd_exec_error: '% Permission denied for the role\n\nCmd exec error.\n'`
		`>>> from cisco.interface import *`
		`>>> i=Interface('Ethernet3/2')`
		`Traceback (most recent call last):`
		`  File "<stdin>", line 1, in <module>`
		`  File "/isan/python/scripts/cisco/interface.py", line 75, in __new__`
		`  cls._Interfaces[name].config(True)`
		`  File "/isan/python/scripts/cisco/interface.py", line 91, in config`
		`  s, o = nxcli('show runn interface %s' % self.name)`
		`  File "/isan/python/scripts/cisco/nxcli.py", line 46, in nxcli`
		`  raise SyntaxError, 'Error status %d\n%s' % (status, output)`
		`SyntaxError: Error status 30`
		`% Permission denied for the role`
		
		`Cmd exec error.`
		
		`>>> import os`
		`>>> os.system('whoami')`
		`test`

Symptom	Solution	Example

The urllib2 or socket connection is not processed.	Make sure you are using the correct virtual routing context. If not, switch to the correct one.	`>>> import urllib2`
		`>>>`
		`u=urllib2('http://172.23.40.211:8000/welcome.html')`
		`Traceback (most recent call last):`
		`  File "<stdin>", line 1, in <module>`
		`TypeError: 'module' object is not callable`
		`>>>`
		`u=urllib2.urlopen('http://172.23.40.211:8000/welcome.html')`
		`Traceback (most recent call last):`
		`  File "<stdin>", line 1, in <module>`
		`  File "/isan/python/python2.7/urllib2.py", line 127, in urlopen`
		`  return _opener.open(url, data, timeout)`
		`  File "/isan/python/python2.7/urllib2.py", line 404, in open`
		`  response = self._open(req, data)`
		`  File "/isan/python/python2.7/urllib2.py", line 422, in _open`
		`  '_open', req)`
		`  File "/isan/python/python2.7/urllib2.py", line 382, in _call_chain`
		`  result = func(*args)`
		`  File "/isan/python/python2.7/urllib2.py", line 1214, in http_open`
		`  return self.do_open(httplib.HTTPConnection, req)`
		`  File "/isan/python/python2.7/urllib2.py", line 1184, in do_open`
		`  raise URLError(err)`
		`urllib2.URLError: <urlopen error [Errno 113] No route to host>`
		`>>> from cisco.vrf import *`
		`>>> VRF.get_vrf_name_by_id(get_global_vrf())`
		`'default'`