



# Troubleshooting the Python API

- [Receiving Python API Errors, on page 1](#)

## 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 <code>NameError</code> .                              | Import the cli module into the global namespace.                                                    | <pre>&gt;&gt;&gt; cli('show clock') Traceback (most recent call last):   File "&lt;stdin&gt;", line 1, in &lt;module&gt; NameError: name 'cli' is not defined  &gt;&gt;&gt; from cli import * &gt;&gt;&gt; cli('show clock') '20:23:33.967 UTC Fri Nov 01 2013\n'</pre>                                |
| The Python clid API throws a <code>structured_output_not_supported_error</code> . | Use the cli or clip API. The clid API works only with commands that support structured data output. | <pre>&gt;&gt;&gt; clid('show clock') Traceback (most recent call last):   File "&lt;stdin&gt;", line 1, in &lt;module&gt;   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'</pre> |

| Symptom                                                               | Solution                                                                                                                                                              | Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The cli API and cisco objects throw a Permission denied error.</p> | <p>Make sure your login ID has sufficient permissions to access the command or resource. If necessary, ask your network administrator for additional permissions.</p> | <pre> &gt;&gt;&gt; from cli import * &gt;&gt;&gt; cli('clear counters') Traceback (most recent call last):   File "&lt;stdin&gt;", line 1, in &lt;module&gt;   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' &gt;&gt;&gt; from cisco.interface import * &gt;&gt;&gt; i=Interface('Ethernet3/2') Traceback (most recent call last):   File "&lt;stdin&gt;", line 1, in &lt;module&gt;   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.  &gt;&gt;&gt; import os &gt;&gt;&gt; os.system('whoami') test </pre> |

| Symptom                                                   | Solution                                                                                               | Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The urllib2 or socket connection is not processed.</p> | <p>Make sure you are using the correct virtual routing context. If not, switch to the correct one.</p> | <pre> &gt;&gt;&gt; import urllib2 &gt;&gt;&gt; u=urllib2('http://172.23.40.211:8000/welcome.html') Traceback (most recent call last):   File "&lt;stdin&gt;", line 1, in &lt;module&gt; TypeError: 'module' object is not callable &gt;&gt;&gt; u=urllib2.urlopen('http://172.23.40.211:8000/welcome.html') Traceback (most recent call last):   File "&lt;stdin&gt;", line 1, in &lt;module&gt;   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: &lt;urlopen error [Errno 113] No route to host&gt; &gt;&gt;&gt; from cisco.vrf import * &gt;&gt;&gt; VRF.get_vrf_name_by_id(get_global_vrf()) 'default' </pre> |

