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| **Napalm**[](https://docs.vyos.io/en/latest/automation/vyos-napalm.html#napalm) |

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| VyOS supports some napalm functions for configuration and op-mode. It requires more |

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| tests.  Install napalm-vyos module   |  | | --- | |  | |

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| --- |
| apt install python3-pip  pip3 install napalm  pip3 install napalm-vyos |

**Op-mode**[](https://docs.vyos.io/en/latest/automation/vyos-napalm.html#op-mode)

#!/usr/bin/env python3

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| --- |
| import json  from napalm import get\_network\_driver |

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| --- |
| driver = get\_network\_driver('vyos') |

|  |
| --- |
| vyos\_router = driver(  hostname="192.0.2.1",  username="vyos",  password="vyospass",  optional\_args={"port": 22},  ) |

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| --- |
| vyos\_router.open()  output = vyos\_router.get\_facts()  print(json.dumps(output, indent=4)) |

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| --- |
| output = vyos\_router.get\_arp\_table() print(json.dumps(output, indent=4)) |

vyos\_router.close()   
Output op-mode

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| $ ./vyos-napalm.py  {  "uptime": 7185,  "vendor": "VyOS",  "os\_version": "1.3.0-rc5",  "serial\_number": "",  "model": "Standard PC (Q35 + ICH9, 2009)",  "hostname": "r4-1.3",  "fqdn": "vyos.local",  "interface\_list": [  "eth0",  "eth1",  "eth2",  "lo",  "vtun10"  ] |

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| --- | --- | --- |
| } | { | "interface": "eth1", |
| [ |
| ] | }, |
| "mac": "52:54:00:b2:38:2c", |
| "ip": "192.0.2.2", |
| "age": 0.0 |
| { | "interface": "eth0", |
| "mac": "52:54:00:a2:b9:5b", |
| } | "ip": "203.0.113.11", |
| "age": 0.0 |

**Configuration**[](https://docs.vyos.io/en/latest/automation/vyos-napalm.html#configuration)

We need 2 files, commands.conf and script itself.

Content of commands.conf

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| --- |
| set service ssh disable-host-validation  set service ssh port '2222'  set system name-server '192.0.2.8'  set system name-server '203.0.113.8'  set interfaces ethernet eth1 description 'FOO' |

Script vyos-napalm.py

#!/usr/bin/env python3

|  |
| --- |
| from napalm import get\_network\_driver |

|  |
| --- |
| driver = get\_network\_driver('vyos') |

|  |
| --- |
| vyos\_router = driver(  hostname="192.0.2.1",  username="vyos",  password="vyospass",  optional\_args={"port": 22},  ) |

|  |
| --- |
| vyos\_router.open()  vyos\_router.load\_merge\_candidate(filename='commands.conf') diffs = vyos\_router.compare\_config() |

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| --- |
| if bool(diffs) == True:  print(diffs)  vyos\_router.commit\_config()  else:  print('No configuration changes to commit') vyos\_router.discard\_config() |

vyos\_router.close()   
Output

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| --- |
| $./vyos-napalm.py  [edit interfaces ethernet eth1]  +description FOO  [edit service ssh]  +disable-host-validation  +port 2222  [edit system]  +name-server 192.0.2.8  +name-server 203.0.113.8  [edit] |