
flokinet-003 - Introduction to the Arista CLI, continued

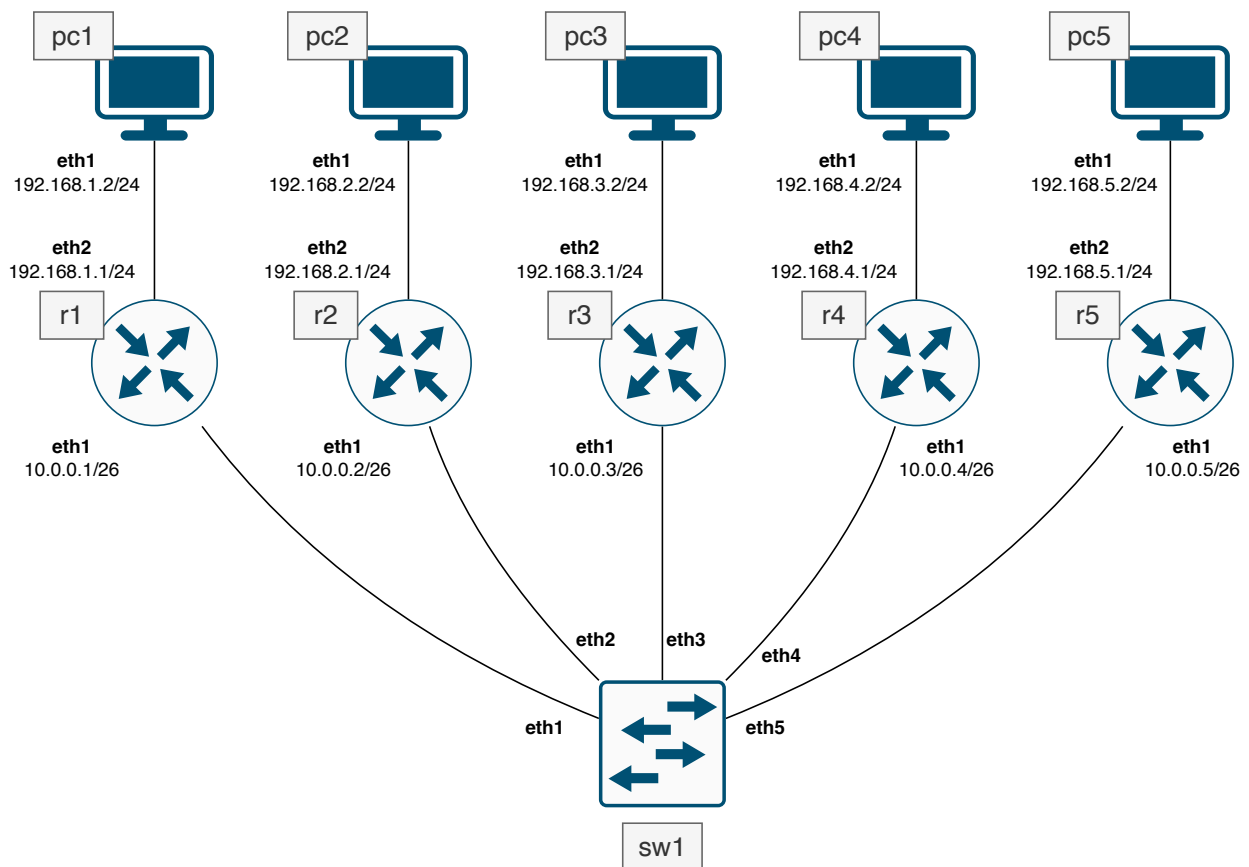
Nicholas Morrison nick@nanocat.net



Connecting to the lab server

- Open your favourite Terminal Emulator
- SSH to the netlab server:
 - `$ ssh-keygen -R netlab.nanocat.net` <- delete the cached fingerprint
(lab server rebuilt frequently)
 - `$ ssh lab@netlab.nanocat.net`
Password: (generated fresh each week)
- List the running containerlab devices:
 - `$ sudo containerlab inspect --all`
- Connect to an **Arista** device:
 - `$ sudo docker exec -it clab-device-name Cli`
- .. or connect to a **Linux** device:
 - `$ sudo docker exec -it clab-pcXX-name bash`

Diagram



Enabling the RestConf API: SSL

Set up a self-signed certificate + ssl profile

```
r5#security pki certificate generate self-signed restconf.crt key restconf.key generate rsa 2048
↔ parameters common-name restconf
r5#config
r5(config)#management security
r5(config-mgmt-security)#ssl profile restconf
r5(config-mgmt-sec-ssl-profile-restconf)#certificate restconf.crt key restconf.key
r5(config-mgmt-sec-ssl-profile-restconf)#end
r5#
!
```

Enabling the RestConf API: local user

Create a new user. configure, then:

```
!
username foo privilege 15 secret bar
aaa authorization exec default local
!
```

Enabling the RestConf API: enable restconf

Set up RestConf. configure, then:

```
!
management api restconf
  transport https test
  ssl profile restconf
!
```

Enabling the RestConf API: control-plane ACL

- look at the default control-plane ACL with `show ip access-lists default-control-plane-acl`
- set a new control-plane ACL. configure, then:
- !

```
ip access-list my-control-plane-acl
  10 permit icmp any any
  20 permit ip any any tracked
  30 permit udp any any eq bfd ttl eq 255
  40 permit udp any any eq bfd-echo ttl eq 254
  50 permit udp any any eq multihop-bfd micro-bfd sbfd
  60 permit udp any eq sbfd any eq sbfd-initiator
  70 permit ospf any any
  80 permit tcp any any eq ssh telnet www snmp bgp https msdp ldp netconf-ssh gnmi
  90 permit udp any any eq bootps bootpc ntp snmp ptp-event ptp-general rip ldp
  100 permit tcp any any eq mlag ttl eq 255
  110 permit udp any any eq mlag ttl eq 255
  120 permit vrrp any any
  130 permit ahp any any
```

```
140 permit pim any any
150 permit igmp any any
160 permit tcp any any range 5900 5910
170 permit tcp any any range 50000 50100
180 permit udp any any range 51000 51100
190 permit tcp any any eq 3333
200 permit tcp any any eq nat ttl eq 255
210 permit tcp any eq bgp any
220 permit rsvp any any
230 permit tcp any any eq 6040
240 permit tcp any any eq 5541 ttl eq 255
250 permit tcp any any eq 5542 ttl eq 255
260 permit tcp any any eq 9559
270 permit udp any any eq 8503
280 permit udp any any eq lsp-ping
290 permit udp any eq lsp-ping any
! this is the new one:
300 permit tcp any any eq 6020
!
system control-plane
  ip access-group my-control-plane-acl in
!
```

Testing the RestConf API

```
r5#bash
```

```
Arista Networks EOS shell
```

```
[arista@r5 ~]$ curl -s GET 'https://172.16.0.x:6020/restconf/data/openconfig-interfaces:interfaces' \
  --header 'Accept: application/yang-data+json' \
  --insecure \
  -u foo:bar
```

Get an interface description:

```
curl -s GET 'https://172.16.0.x:6020/restconf/data/openconfig-
↪ interfaces:interfaces/interface=Ethernet1/config/description'
↪ \
  --header 'Accept: application/yang-data+json' \
  --insecure \
  -u foo:bar
```

Get info for a specific interface:

```
curl -s GET
↪ 'https://172.16.0.x:6020/restconf/data/openconfig-interfaces:interfaces/interface=Ethernet1' \
  --header 'Accept: application/yang-data+json' \
  --insecure \
  -u foo:bar
```

Browse the JSON using your favourite JSON browser.

eg <http://jsonviewer.stack.hu>