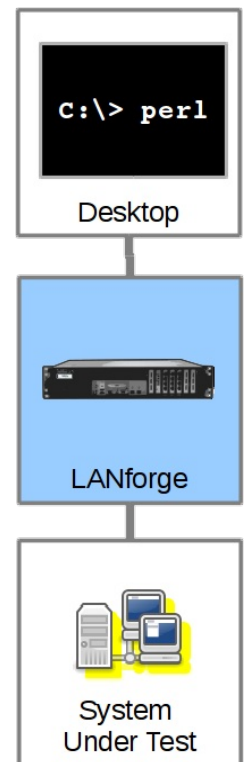


Inspecting Ports (Network Interfaces) using If_portmod

Goal: You will be able to report and reset ports on your LANforge server.

Port statistics can be programatically monitored using the script `lf_portmod.pl`. This script can also reset ports, alter WiFi station settings, and pass arbitrary LANforge CLI commands directly to the LANforge manager.



Ports of all kinds can be viewed with the **lf_portmod.pl** perl script. You can also do some limited manipulation of ports as well.

Listing Ports

You can show statistic on a port with the `--show_port` argument:

```
C:\> perl .\lf_portmod.pl --quiet 1 --manager jedtest --card 1 --port_name eth1 --show_port
```

i You can right-click to paste these commands into your DOS window

Produces:

```
Command Prompt
c:\Program Files (x86)\LANforge-Server\scripts>.\lf_portmod.pl --quiet 1 --manager jedtest --card 1 --port_name eth1 --show_port
>>RSLT: 0 Cmd: 'nc_show_port' '1' '1' 'eth1'

Shellf: 1, Card: 1, Port: 1 Type: Ethernet Alias:
Win32-Name: Win32-Desc: Parent/Peer: Rpt-Timer: 1000 CPU-Mask: 0
Current: UP LINK-UP 1000-FD AUTO-NEGOTIATE FLOW-CONTROL TSO GSO GRO
Supported: UP 10bt-HD 10bt-FD 100bt-HD 100bt-FD 1000-FD AUTO-NEGOTIATE SEND_TO_SELF
Partner: UP
Advertising: 10bt-HD 10bt-FD 100bt-HD 100bt-FD 1000-FD FLOW-CONTROL TSO-ENABLED GSO-ENABLED GRO-ENABLED
IP: 10.26.1.2 MASK: 255.255.255.0 GW: 10.26.1.1 VID: 0 ResetState: COMPLETE
DNS Servers:
IPv6-Global: DELETED
IPv6-Link: fe80::290:bff:fe29:6f9/64
IPv6-Gateway: DELETED
MAC: 00:90:0b:29:06:f9 DEV: eth1 MTU: 1500 TX Queue Len: 1000
LastDHCP: 0ms Driver: e1000e Tx-Rate: 1000000kbps
Bus-Speed: 25/25 Bus-Width: 1/1
Bridge-Port-Cost: Ignore Prio: Ignore Aging: 0
DHCP-Client-ID: NONE DHCP-Vendor-ID: NONE
pps_tx: 0 pps_rx: 0 bps_tx: 0 bps_rx: 563
Rxp: 605724 Txp: 10032570 Rxb: 791118580 Txb: 15116226082 RxERR: 0 TxERR: 0
RxDrop: 0 TxDrop: 0 Multi: 8 Coll: 0 RxLenERR: 0 RxOverflow: 0
RxCRC: 0 RxFrame: 0 RxFifo: 0 RxMissed: 0 TxAbort: 0 TxCarrier: 0
TxFifo: 0 TxHeartBeat: 0 TxWindow: 0 RxBytesLL: 805655956 TxBytesLL: 15357007762

default@btbits>>
c:\Program Files (x86)\LANforge-Server\scripts>
```

Listing Port Attributes

Individual port attributes can also be shown, which often makes automating reporting easier.

```
perl .\lf_portmod.pl --manager jedtest --card 1 --quiet 1 --port_name eth1 --show_port "RxDrop,Rxp,IP"
```

Produces:

```
c:\Program Files (x86)\LANforge-Server\scripts>perl .\lf_portmod.pl --manager jedtest --card 1 --quiet 1 --port_name eth1 --show_port
t "RxDrop,Rxp,IP"
IP: 10.26.1.2
RxDrop: 0
Rxp: 605725
c:\Program Files (x86)\LANforge-Server\scripts>
```

Consider that is a lot of text to type. If we want, we can reformat that command.

 Long DOS commands can be continued on the next line with the  character.

```
perl .\lf_portmod.pl --manager jedtest ^
--card 1 --quiet 1 --port_name eth1 ^
--show_port "RxDrop,Rxp,IP"
```

Produces the same output:

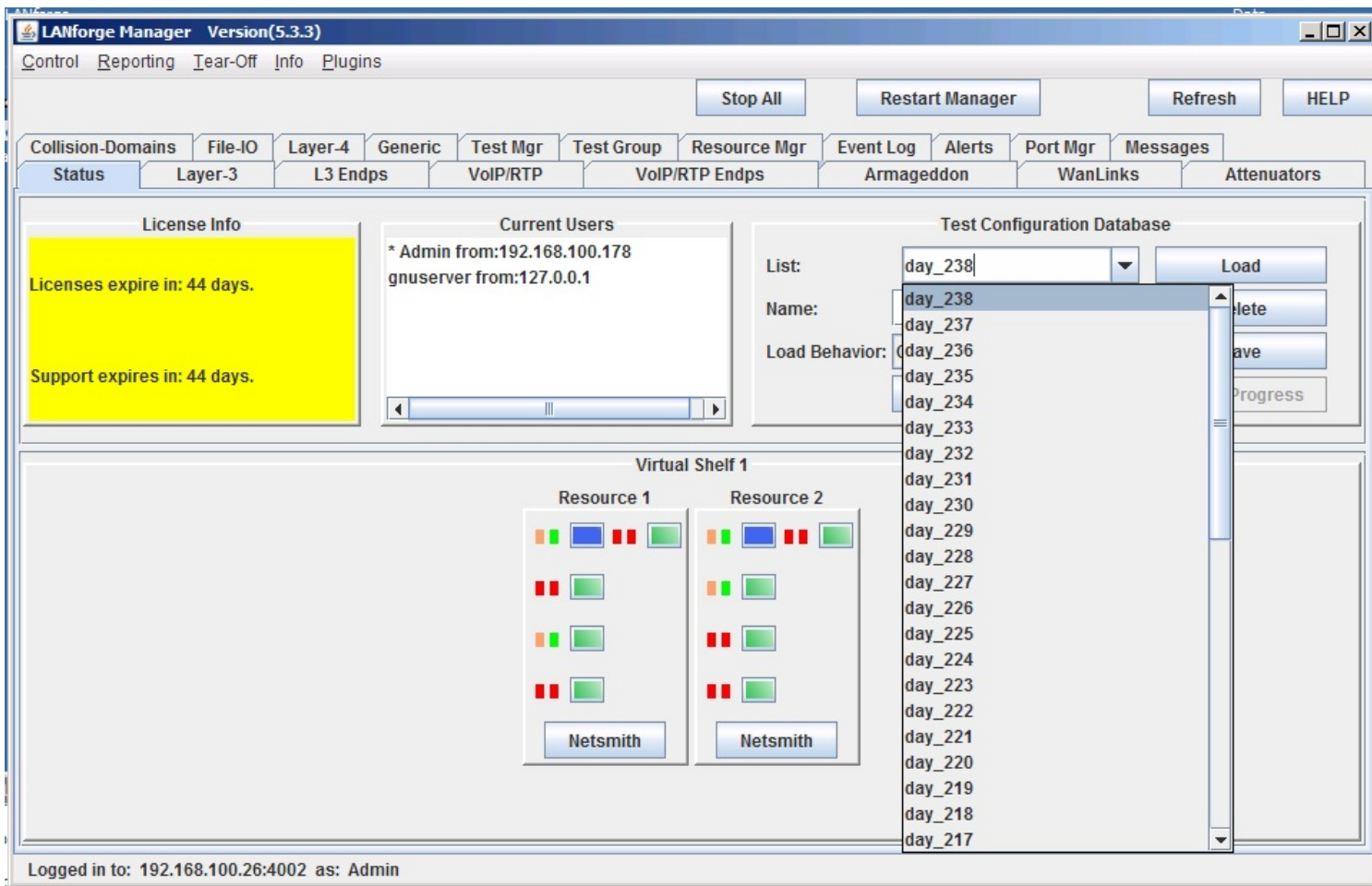
```
c:\Program Files (x86)\LANforge-Server\scripts>perl .\lf_portmod.pl --manager jedtest ^
More? --card 1 --quiet 1 --port_name eth1 ^
More? --show_port "RxDrop,Rxp,IP"
IP: 10.26.1.2
RxDrop: 0
Rxp: 605726
c:\Program Files (x86)\LANforge-Server\scripts>
```

Loading a test scenario

Saved test scenarios are often referred to as 'databases'

```
lf_portmod.pl --load day_238
```

This matches the same database name seen in the *Status* tab database dropdown.



Admin-down a port

```
lf_portmod.pl --manager 192.168.1.101 --card 1 --port_name eth2 --set_ifstate down
```

Resetting a Port

Resetting a port forces a port to unload and reload its configuration.

```
lf_portmod.pl --manager 192.168.1.101 --card 1 --port_name eth2 --cmd reset
```

Sending a specific CLI command to the LANforge manager:

It is possible to directly pass a command to the LANforge manager:

```
lf_portmod.pl --manager 192.168.1.101 --cli_cmd "scan 1 1 sta0"
```