

# NETWORKX TOOL

## AUTOMATION

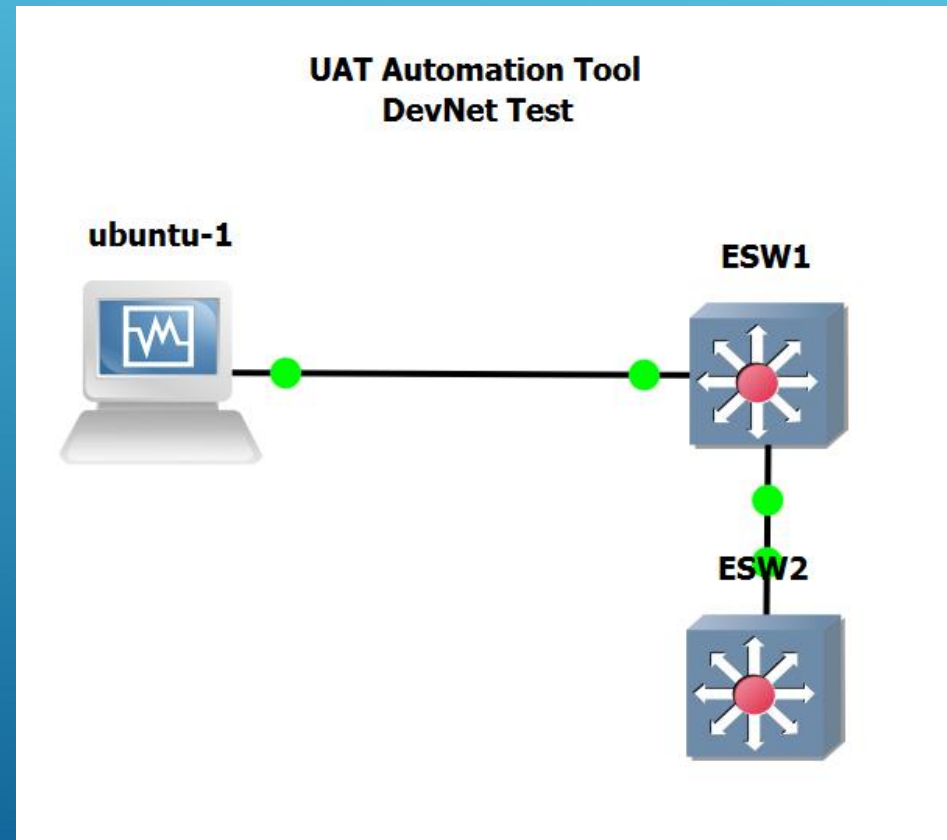
**DEVELOPED BY SM@DEVEL**

# OBJECTIVE

1. Designing Automation Tool written in Python and using a Framework
2. To test Automation Tool for Cisco Switch/Router
3. Connecting to device shall use SSH

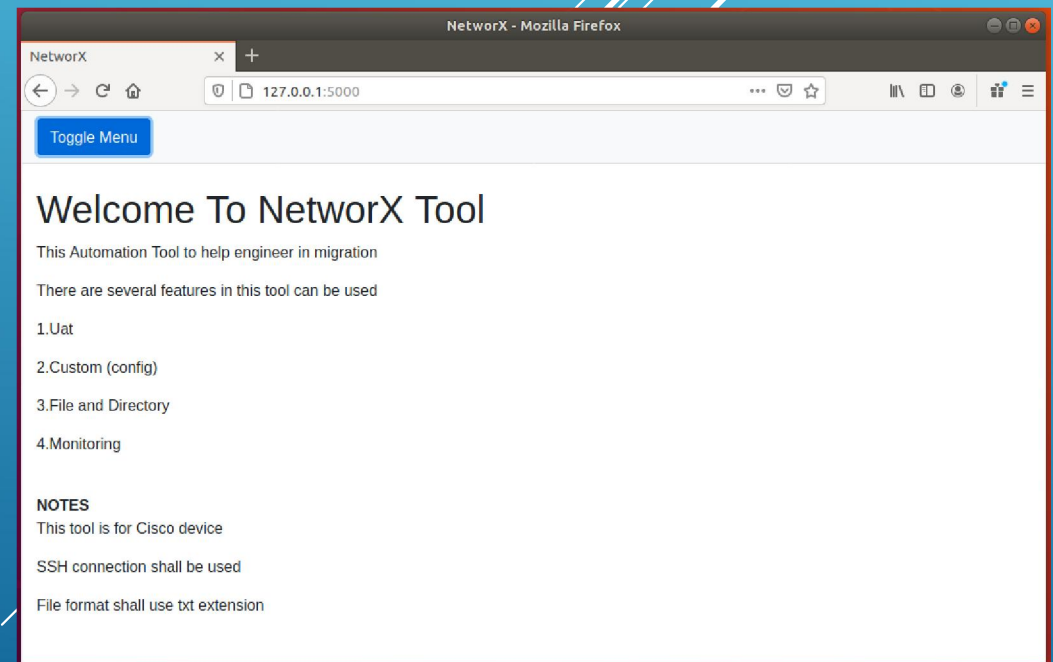
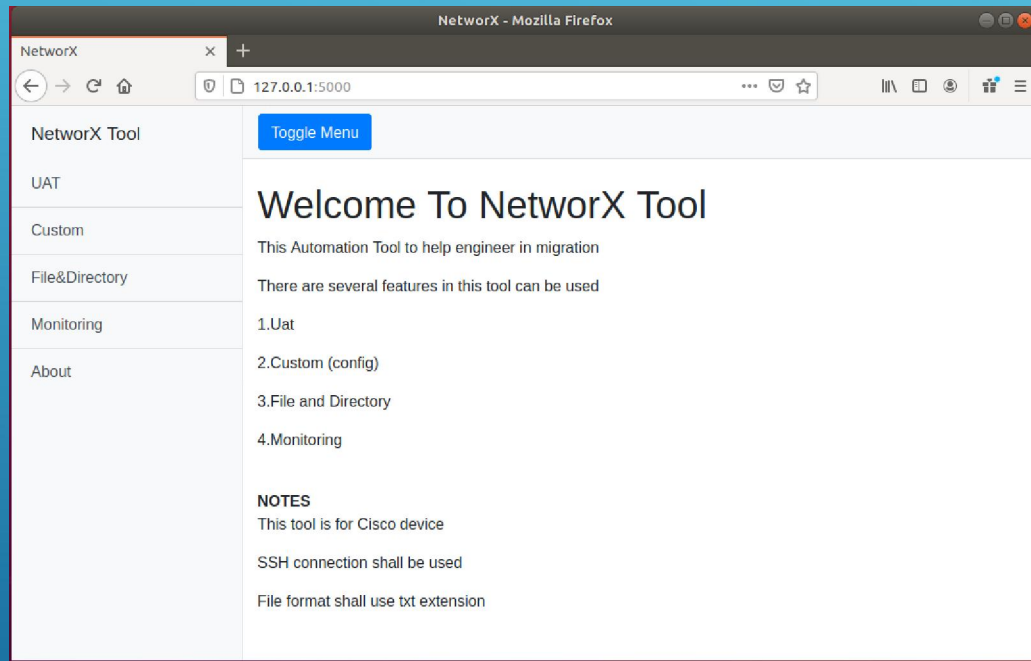
# NETWORK TOPOLOGY

Network diagram



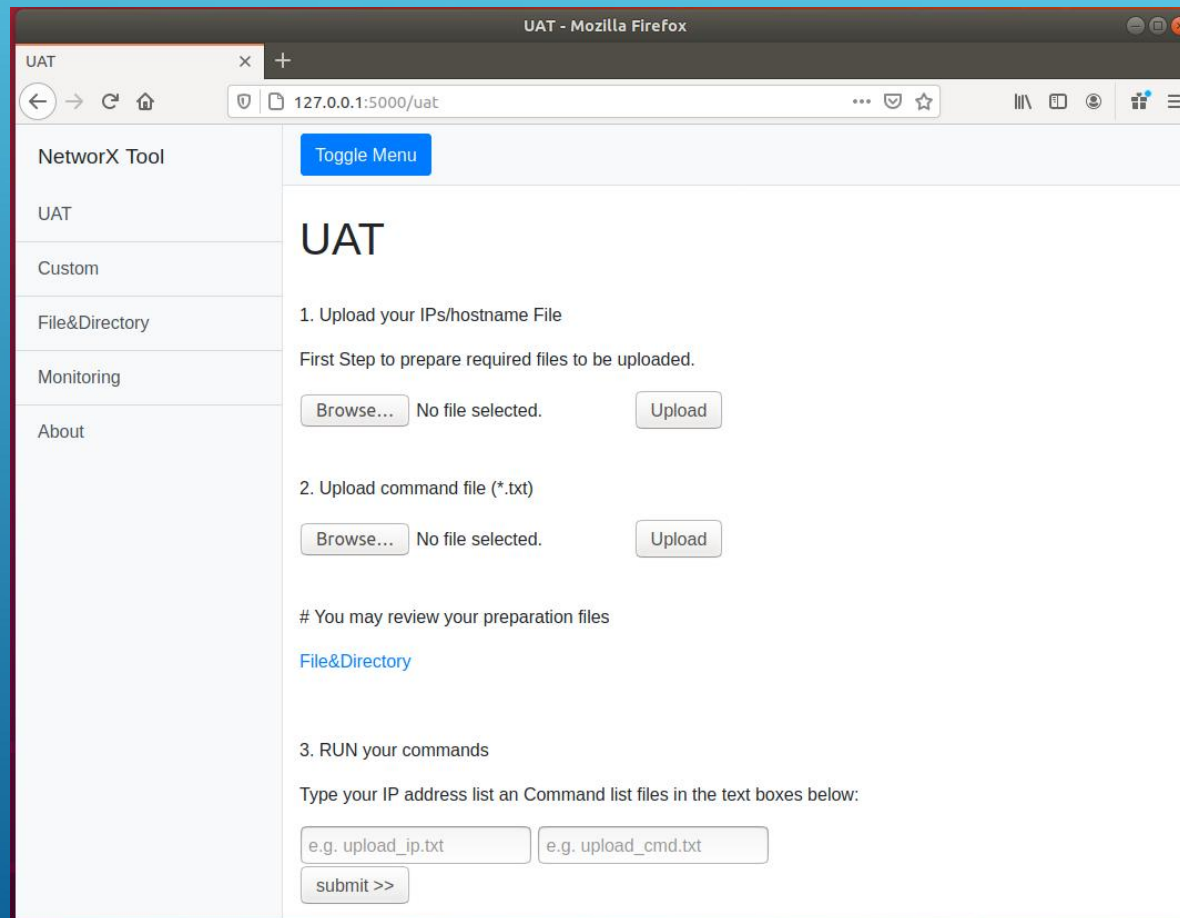
# MAIN MENU LANDING PAGE

<http://127.0.0.1:5000>



# UAT MENU LANDING PAGE

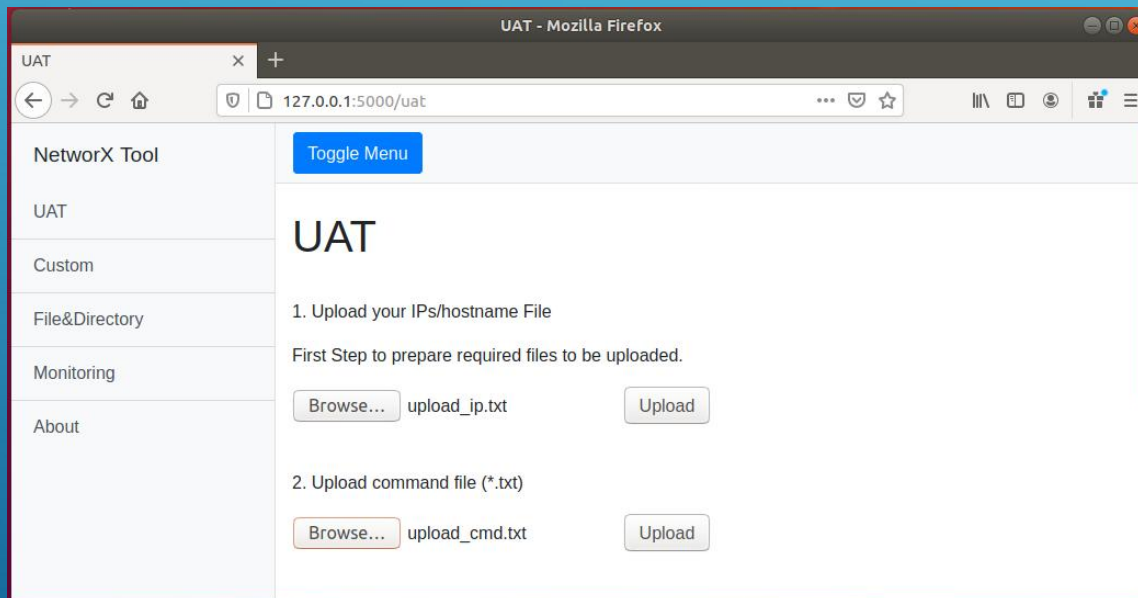
<http://127.0.0.1:5000/uat>



# UAT MENU – FILE PREPARATION

<http://127.0.0.1:5000/uat>

Source files to upload from dir: /home/sams/Documents



```
sams@sams-VirtualBox: ~/Documents
File Edit View Search Terminal Help
sams@sams-VirtualBox:~/Documents$ pwd
/home/sams/Documents
sams@sams-VirtualBox:~/Documents$ ls -l *.txt
-rw-r--r-- 1 sams sams 58 Sep 21 10:03 upload_cmd.txt
-rw-r--r-- 1 sams sams 18 Sep 21 10:06 upload_ip.txt
sams@sams-VirtualBox:~/Documents$
```

Files uploaded into dir: /home/sams/Documents

```
sams@sams-VirtualBox: ~/flask/UAT/transfer/upload/uat
File Edit View Search Terminal Help
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$ pwd
/home/sams/flask/UAT/transfer/upload/uat
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$ ls
old
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$ ls
old upload_ip.txt
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$ ls
old upload_cmd.txt upload_ip.txt
sams@sams-VirtualBox:~/flask/UAT/transfer/upload/uat$
```

# UAT MENU - DEBUG OUTPUT

<http://127.0.0.1:5000/uat>

## Executing commands

### 3. RUN your commands

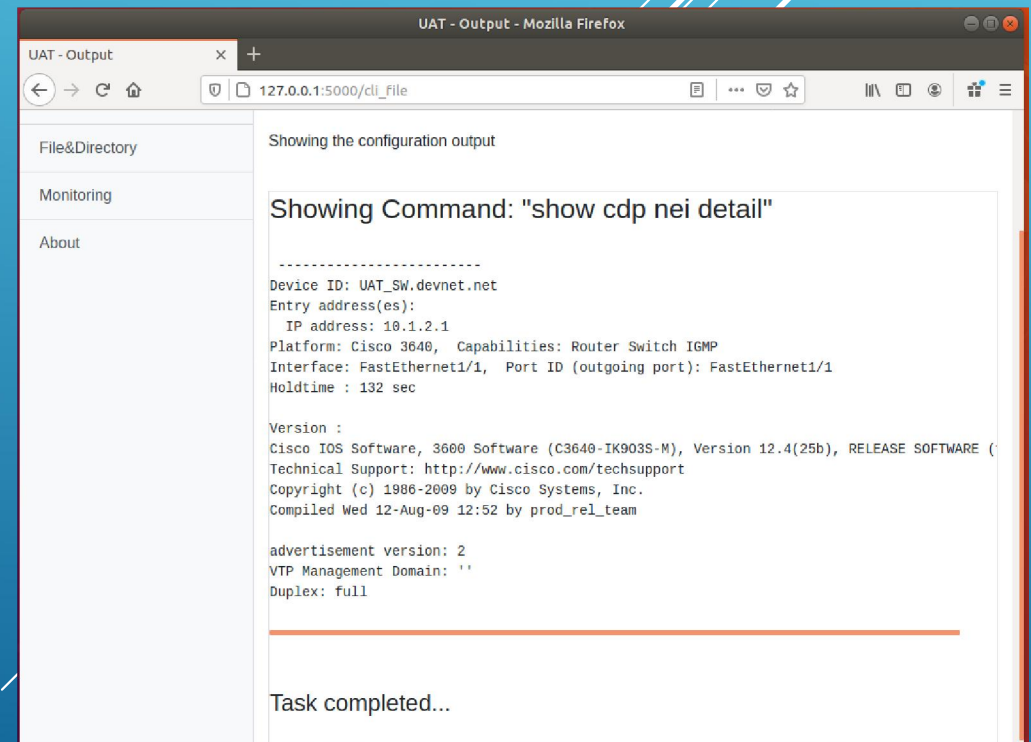
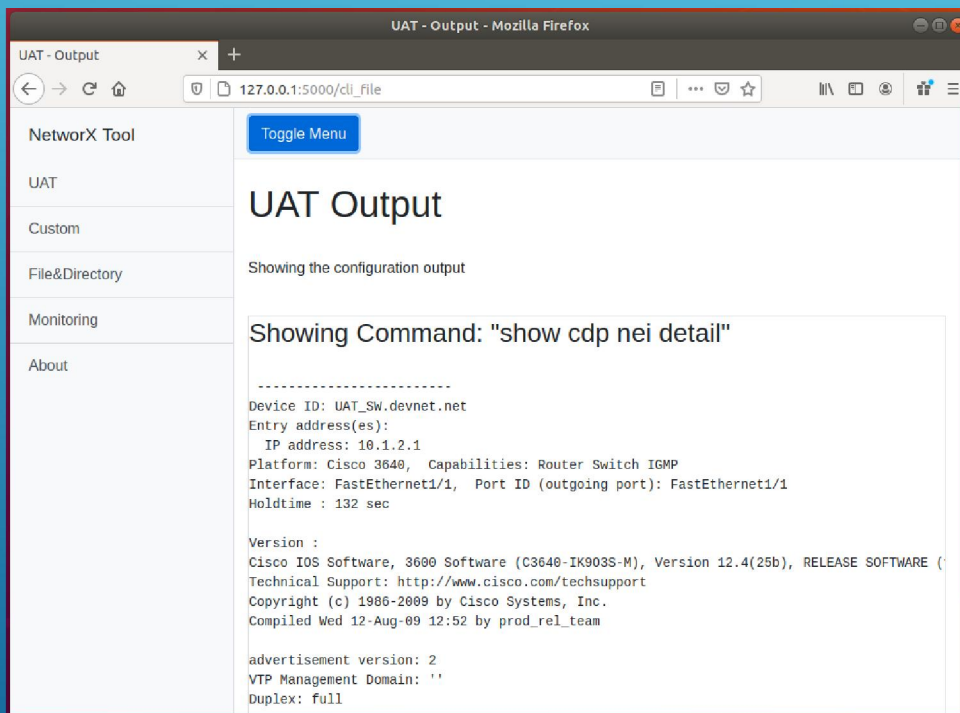
Type your IP address list an Command list files in the text boxes below:

## Debug terminal > Observing background process

```
sams@sams-VirtualBox: ~/flask/UAT
File Edit View Search Terminal Help
127.0.0.1 - - [23/Sep/2020 01:27:18] "GET /uat HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 01:27:19] "GET /custom HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 01:27:21] "GET /filedir HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 01:27:22] "GET /monitoring HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 01:27:23] "GET /about HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 01:28:54] "GET /uat HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 10:55:23] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 10:58:13] "GET /uat HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 11:00:21] "GET /custom HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 11:01:21] "GET /about HTTP/1.1" 200 -
127.0.0.1 - - [23/Sep/2020 11:03:15] "GET /uat HTTP/1.1" 200 -
10.1.1.1
show ver
show ip int br
show ip route
show run | sec line
show env
show cdp nei
show cdp nei detail
10.1.2.2
show ver
show ip int br
show ip route
show run | sec line
show env
show cdp nei
show cdp nei detail
127.0.0.1 - - [23/Sep/2020 11:11:05] "POST /cli_file HTTP/1.1" 200 -
```

# UAT MENU - OUTPUT ON SCREEN

<http://127.0.0.1:5000/uat>





# UAT MENU - OUTPUT FILE IN DIR

<http://127.0.0.1:5000/uat>

```
sams@sams-VirtualBox: ~/flask/UAT/output/uat
File Edit View Search Terminal Help

sams@sams-VirtualBox:~/Documents$ cd ..
sams@sams-VirtualBox:~$ cd flask/UAT/output/uat/
sams@sams-VirtualBox:~/flask/UAT/output/uat$ pwd
/home/sams/flask/UAT/output/uat
sams@sams-VirtualBox:~/flask/UAT/output/uat$ ls
'10.1.1.1_show ip int br_2020-09-22_091117.txt'      '10.1.2.2_show ip int br_2020-09-22_091148.txt'
'10.1.1.1_show ip route_2020-09-22_091123.txt'      '10.1.2.2_show ip route_2020-09-22_091153.txt'
'10.1.1.1_show run | sec line_2020-09-22_091130.txt' '10.1.2.2_show run | sec line_2020-09-22_091200.txt'
'10.1.1.1_show ver_2020-09-22_091112.txt'          '10.1.2.2_show ver_2020-09-22_091142.txt'
sams@sams-VirtualBox:~/flask/UAT/output/uat$
```

```
sams@sams-VirtualBox: ~/flask/UAT/output/uat
File Edit View Search Terminal Help

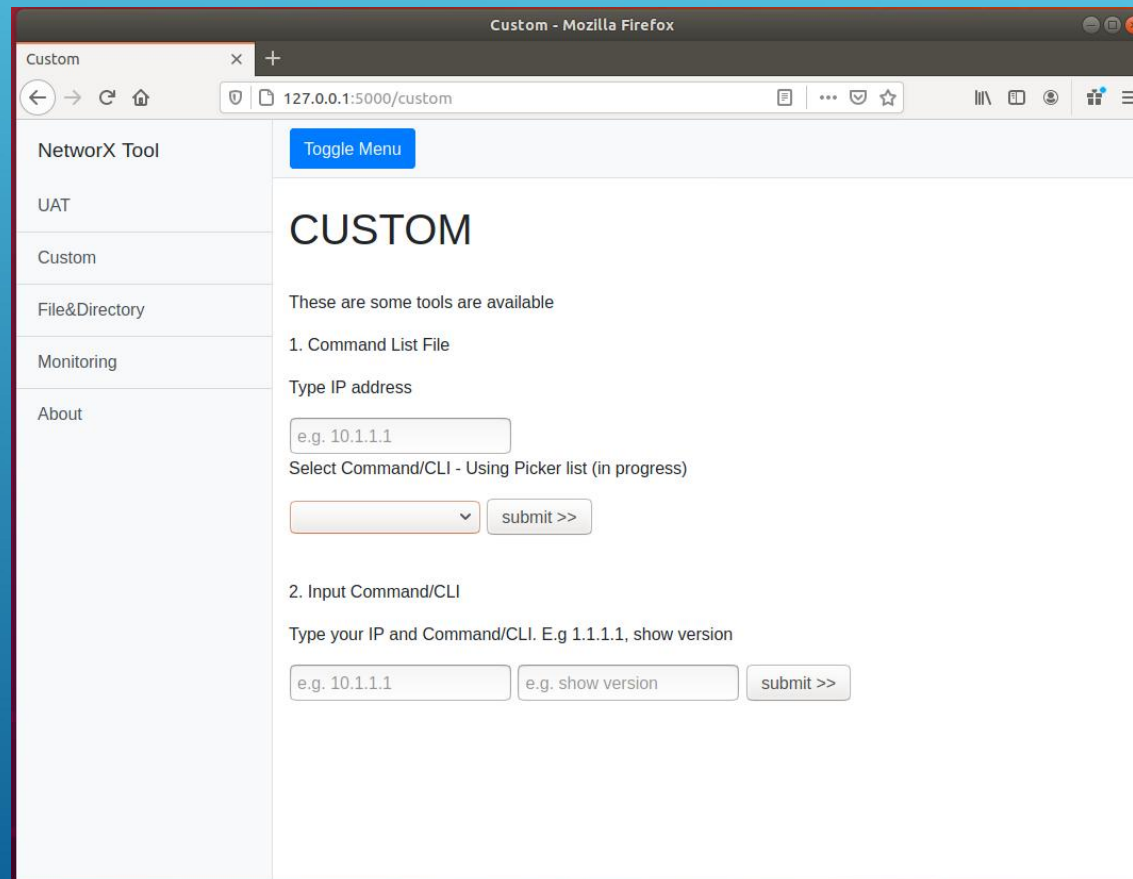
sams@sams-VirtualBox:~/flask/UAT/output/uat$ cat 10.1.1.1_show\ ip\ int\ br_2020-09-22_091117.txt
Interface      IP-Address    OK? Method Status Protocol
FastEthernet1/0 10.1.1.1      YES NVRAM  up        up
FastEthernet1/1 10.1.2.1      YES manual  up        up
FastEthernet1/2 unassigned    YES unset   up        down
FastEthernet1/3 unassigned    YES unset   up        down
FastEthernet1/4 unassigned    YES unset   up        down
FastEthernet1/5 unassigned    YES unset   up        down
FastEthernet1/6 unassigned    YES unset   up        down
FastEthernet1/7 unassigned    YES unset   up        down
FastEthernet1/8 unassigned    YES unset   up        down
FastEthernet1/9 unassigned    YES unset   up        down
FastEthernet1/10 unassigned    YES unset   up        down
FastEthernet1/11 unassigned    YES unset   up        down
FastEthernet1/12 unassigned    YES unset   up        down
FastEthernet1/13 unassigned    YES unset   up        down
FastEthernet1/14 unassigned    YES unset   up        down
FastEthernet1/15 unassigned    YES unset   up        down
Vlan1           unassigned    YES NVRAM  administratively down down
sams@sams-VirtualBox:~/flask/UAT/output/uat$
```

```
sams@sams-VirtualBox: ~/flask/UAT/output/uat
File Edit View Search Terminal Help

sams@sams-VirtualBox:~/flask/UAT/output/uat$ cat 10.1.2.2_show\ ip\ int\ br_2020-09-22_091148.txt
Interface      IP-Address    OK? Method Status Protocol
FastEthernet1/0 unassigned    YES unset   up        down
FastEthernet1/1 10.1.2.2      YES manual  up        up
FastEthernet1/2 unassigned    YES unset   up        down
FastEthernet1/3 unassigned    YES unset   up        down
FastEthernet1/4 unassigned    YES unset   up        down
FastEthernet1/5 unassigned    YES unset   up        down
FastEthernet1/6 unassigned    YES unset   up        down
FastEthernet1/7 unassigned    YES unset   up        down
FastEthernet1/8 unassigned    YES unset   up        down
FastEthernet1/9 unassigned    YES unset   up        down
FastEthernet1/10 unassigned    YES unset   up        down
FastEthernet1/11 unassigned    YES unset   up        down
FastEthernet1/12 unassigned    YES unset   up        down
FastEthernet1/13 unassigned    YES unset   up        down
FastEthernet1/14 unassigned    YES unset   up        down
FastEthernet1/15 unassigned    YES unset   up        down
Vlan1           unassigned    YES NVRAM  administratively down down
sams@sams-VirtualBox:~/flask/UAT/output/uat$
```

# CUSTOM MENU LANDING PAGE

<http://127.0.0.1:5000/custom>



# ABOUT LANDING PAGE

<http://127.0.0.1:5000/about>

