

CLAT (464XLAT client) LAB with OpenWRT VM

- 1) Make sure you're connected to the APNIC44-Routing SSID
- 2) Download the lab and Unzip the clat-lab folder
- 3) Install VirtualBox and the Extension Pack
Windows and OS X are in the folder
If you run Linux, download and follow instructions at
https://www.virtualbox.org/wiki/Linux_Downloads
- 4) Import virtualized service
apnic44-clat-lab.ova
MAKE SURE to mark "init MAC address in all networks"
- 5) Start the virtual machine, verify both networks use your Wireless interface (bridge)
- 6) cd to /etc/config
- 7) vi network (see page 3)

Router	IPv4	IPv6
1	192.168.201.1	2001:df0:a:607::/64
2	192.168.202.1	2001:df0:a:608::/64
3	192.168.203.1	2001:df0:a:609::/64
4	192.168.204.1	2001:df0:a:60a::/64
5	192.168.205.1	2001:df0:a:60b::/64
6	192.168.206.1	2001:df0:a:60c::/64
7	192.168.207.1	2001:df0:a:60d::/64
8	192.168.208.1	2001:df0:a:60e::/64
9	192.168.209.1	2001:df0:a:60f::/64
10	192.168.210.1	2001:df0:a:610::/64
11	192.168.211.1	2001:df0:a:611::/64
12	192.168.212.1	2001:df0:a:612::/64
13	192.168.213.1	2001:df0:a:613::/64
14	192.168.214.1	2001:df0:a:614::/64

- 8) Make sure your laptop network config takes the IPv4 and IPv6 config

Example, for R1

IPv4 address should be anything in the 192.168.201.x, mask 255.255.255.0

GW 192.168.201.1 DNS 192.168.201.1

IPv6 address should be anything in the 2001:df0:a:607::/64

GW 2001:df0:a:607::41 DNS 2001:df0:a:607::41

- 9) Open a shell (cmd in Windows)

- 10) Ping and ping6 www.google.com

- 11) Traceroute and traceroute6 www.google.com

- 12) Ping and ping6 8.8.8.8

- 13) Traceroute and traceroute6 8.8.8.8

All them should work, even if your CPE (the CLAT VM) is only connected to an IPv6-only WAN, the NAT6+DNS64 will to the job for IPv4 domain names, and both the CLAT and the NAT64+DNS64 will do it for the literal address.

Network file

```
config interface 'loopback'
    option ifname 'lo'
    option proto 'static'
    option ipaddr '127.0.0.1'
    option netmask '255.0.0.0'

config interface 'lan'
    option ifname 'eth1'
    option force_link '1'
    option type 'bridge'
    option proto 'static'
    option netmask '255.255.255.0'
    option ipaddr '192.168.11.1'
    option ip6addr '2001:df0:a:604::41/64'

config interface 'wan'
    option ifname 'eth0'
    option proto 'static'
    option dns '2001:df0:a:601::1'
    option ip6addr '2001:df0:a:601::21'
    option ip6gw 'fe80::a00:27ff:febb:ad02'
    option ip6prefix '2001:df0:a:604::/64'

config globals 'globals'

config interface 'clat'
    option proto '464xlat'
    option ip6prefix '64:ff9b::/96'
    option ip6addr '2001:df0:a:603::1'

config route6
    option interface 'wan'
    option target '64:ff9b::/96'
    option gateway '2001:df0:a:601::1'
```