

## NDPPD to enable fully routed /64 for IPv6

Written by BiRU

Monday, 11 May 2020 17:51 - Last Updated Monday, 11 May 2020 17:53

---

Recently VSHELL has rolled out IPv6 connectivity in some locations and each virtual machine is provided with its own /64. However, the /64 is not fully routed.

When any request ( eg. an ICMPv6 echo request ) whose destination address is in the /64 but not yet configured/assigned is sent from a remote host, the default gateway instead send a neighbor solicitation multicast to ask who has this address. If it receives no reply, the original request will never reach the interface.

In this situation, **ndppd** ( NDP Proxy Daemon ) can be used to reply to the default gateway for the whole subnet. Here is an example with `2001:19f0:5c00:802a::/64`.

Since **ndppd** is not available in the repo, just download the latest tarball to build it from source with `g++`.

```
wget http://data.vshell.net/files/ndppd-0.2.5.tar.gz
```

```
tar -zxvf ndppd-0.2.5.tar.gz
```

```
cd ndppd-0.2.5 make make install
```

```
- create /etc/ndppd.conf -
```

```
route-ttl 30000 proxy eth0 { router yes timeout 500 ttl 30000 rule 2001:19f0:5c00:802a::/64 {  
static }  
}
```

```
}
```

```
--- start ndppd
```

```
ndppd -d -c /etc/ndppd.conf
```