IPv6

ff::/8	multicast	ff0x is reserverd		
ff01::1	multicast	all nodes	interface local	
ff02::1	multicast	all nodes	link local	ping ff02::1%tun2
ff01::2	multicast	all routers	interface local	
ff02::2	multicast	all routers	link local	
ff03::2	multicast	all routers	site local	
fe80::/10	link local address			
fc00::/7	Unique Local Address (ULA)	fc00::/7 and fd00::/7		
2000::	Global address	first		
3fff:ffff:ffff:ffff:ffff:ffff:ffff:ffff	Global address	last		

/etc/network/interfaces

```
iface eth0 inet dhcp
iface eth0 inet6 static
  address 2001::2
  netmask 64
  up -ip -6 route add ::/0 via 2001::1 dev eth0
  down ip -6 route del ::/0 via 2001::1 dev eth0
```

Autoconfig and RA

http://strugglers.net/~andy/blog/2011/09/04/linux-ipv6-router-advertisements-and-forwarding/

Auto configuration can be disabled temporary for eth1 with:

```
sudo sysctl -w net.ipv6.conf.eth1.autoconf=0
sudo sysctl -w net.ipv6.conf.eth1.accept_ra=0
```

or for all interfaces with:

```
sudo sysctl -w net.ipv6.conf.all.autoconf=0
sudo sysctl -w net.ipv6.conf.all.accept_ra=0
```

Reenabling works by using 1 instead of 0 in the call.

RADVD

> **R**outer **ADV**ertisement **D**aemon. This daemon listens to router solicitations (RS)
> and answers with router advertisement (RA). Furthermore unsolicited RAs are also sent from time to time.
>
> This protocol is meant for host auto-configuration and not for route propagation between routers.