In this article we will show you the steps involved in configuring you Windows XP device with IPv6.

All commands should be run via the command prompt.

Enable IPv6

```
ipv6 install
```

Configure IP

If you are not using Stateful or Statless IPv6 address Autoconfiguration you can manually configure your settings using the following commands :

```
netsh interface ipv6 add address "Local Area Connection 2" [ipv6 address]
netsh interface ipv6 add route ::/0 "Local Area Connection 2" [default gateway ipv6 address]
netsh interface ipv6 add dns "Local Area Connection 2"  [ipv6 address]
netsh interface ipv6 add dns "Local Area Connection 2" [ipv6 address] index=2
```

Additonal Commands

You can use the following commands to show all IPv6 routes and the Neighbor Discovery table. The Neighbor Discovery table is the equivalent to the arp cache but with IPv6 addresses instead of IPv4. It is also worth noting that Neighbor Discovery is part of ICMP6.

```
netsh interface ipv6 show neighbors
netsh interface ipv6 show routes
```

DNS

Instead of using A records for DNS like IPv4, IPv6 uses AAAA records for domain to IP name resolution. Below shows a brief example,

```
C:\Documents and Settings\admin>nslookup
Default  Server:  dns1.isp.net.uk
Address:  x.x.x.x
> set type=AAAA
>  ipv6.google.com
Server:  dns1.isp.net.uk
Address:  x.x.x.x

DNS  request timed out.
timeout was 2 seconds.
Non-authoritative  answer:
ipv6.google.com canonical name = ipv6.l.google.com
ipv6.l.google.com         AAAA IPv6 address = 2a00:1450:8006::63
ipv6.l.google.com         AAAA  IPv6 address = 2a00:1450:8006::93
ipv6.l.google.com         AAAA IPv6  address = 2a00:1450:8006::68
```

Ping

You can use the standard ping command to ping a IPv6 IP. But you will need to use the "-6" ping switch to ping a IPv6 name.

```
C:\Documents and Settings\admin>ping -6 ipv6.google.com

Pinging ipv6.l.google.com [2a00:1450:8006::93] with 32 bytes of data:

Reply from 2a00:1450:8006::93: time=35ms
Reply from 2a00:1450:8006::93: time=39ms
Reply from 2a00:1450:8006::93: time=34ms
Reply from 2a00:1450:8006::93: time=34ms

Ping statistics for 2a00:1450:8006::93:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
```

```
Minimum = 34ms, Maximum = 39ms, Average = 35ms
C:\Documents and Settings\admin>ping 2a00:1450:8006::93

Pinging 2a00:1450:8006::93 with 32 bytes of data:

Reply from 2a00:1450:8006::93: time=34ms
Reply from 2a00:1450:8006::93: time=33ms
Reply from 2a00:1450:8006::93: time=35ms
Reply from 2a00:1450:8006::93: time=34ms

Ping statistics for 2a00:1450:8006::93:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 33ms, Maximum = 35ms, Average = 34ms
```