

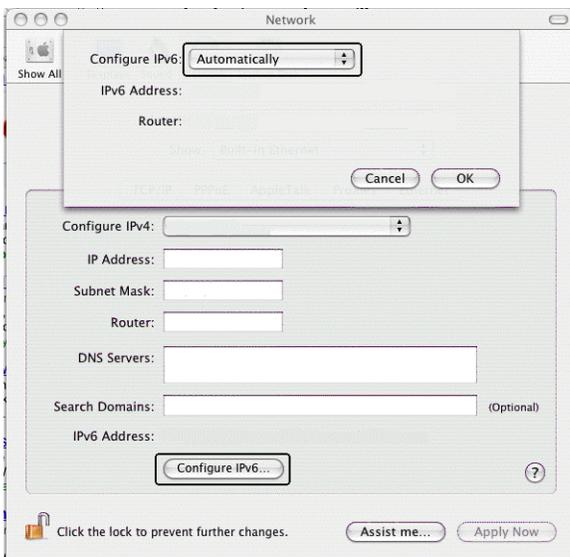
One Page Series: Mac OS X -- Enabling Native IPv6 Via Stateless Autoconfiguration



Apple Menu ==> System Preferences ==> Network



On the network preferences screen, choose the drop down item: Network Status
Select the interface to be configured (e.g., wireless, built-in ethernet, etc.)
Click Configure



On the TCP/IP tab
Click on Configure IPv6 near the bottom of the pane
When the Configure IPv6 panel comes up, select Automatically
Click OK to close the Configure IPv6 panel

Click Apply Now

Close the Network Preferences window by clicking the red X button in the upper left corner
You should now have IPv6 enabled on your Mac

See the reverse side of this sheet for information on how to verify your connectivity.

Verifying Your IPv6 Connectivity

Applications ==> Utilities ==> Terminal

```
Terminal — tcsh — 80x24
% ifconfig -a | grep inet6
    inet6 ::1 prefixlen 128
    inet6 fe80::1 prefixlen 64 scopeid 0x1
    inet6 fe80::                prefixlen 64 scopeid 0x4
    inet6 2001:468:                prefixlen 64 autoconf
% █
```

```
Terminal — tcsh — 80x24
% ping6 -c 5 ::1
PING6(56=40+8+8 bytes) ::1 --> ::1
16 bytes from ::1, icmp_seq=0 hlim=64 time=0.229 ms
16 bytes from ::1, icmp_seq=1 hlim=64 time=0.271 ms
16 bytes from ::1, icmp_seq=2 hlim=64 time=0.272 ms
16 bytes from ::1, icmp_seq=3 hlim=64 time=0.259 ms
16 bytes from ::1, icmp_seq=4 hlim=64 time=0.6 ms

--- localhost ping6 statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 0.229/0.326/0.600 ms
% █
```

```
Terminal — tcsh — 80x24
% dig www.ietf.org aaaa +short
2001:1890:1112:1::20
% █
```

```
Terminal — tcsh — 80x24
% traceroute6 www.ietf.org
traceroute6 to www.ietf.org (2001:1890:1112:1::20) from
      30 hops max, 12 byte packets
 1
 2
 3
 4 ge-3-2-0.201.rtr.losa.net.internet2.edu 25.229 ms 25.181 ms 25.175 ms
 5 2001:504:d::37 33.45 ms 33.457 ms 33.38 ms
 6 att-gw.gblx.net 95.343 ms 97.563 ms 97.037 ms
 7 att-gw.gblx.net 97.124 ms 98.158 ms 98.349 ms
 8 2001:450:1:1::29 98.342 ms 96.61 ms 95.763 ms
 9 gblx-gw.mdnj.ipv6.att.net 122.372 ms 122.09 ms 166.467 ms
10 2001:1890:61:9017::2 196.906 ms 194.834 ms 196.456 ms
11 mail.ietf.org 194.251 ms 198.296 ms 194.966 ms
% █
```

Technical/Miscellaneous Notes:

- 1) This document assume that you ll have native IPv6 connectivity, not tunnelled connectivity nor 6to4 or other transitional connectivity.
- 2) The procedure shown on this document are applicable to sites doing stateless autoconfiguration. If you are told that you ll be using a static IPv6 address (e.g., for a server) or if you re told that you ll be using DHCPv6, this information doesn t apply to you.
- 3) We assume that you will be running dual stack, with both IPv4 and IPv6 connectivity, and that your access will include access to an } IPv6-aware recursive resolver (nameserver). That recursive resolver may have been statically defined, or defined via IPv4 DHCP.
- 4) The screen shots/procedure shown above were taken on Mac OS X. 10.3.9 Other version of OS X may have minor differences.
- 5) Some specific addresses shown above have been obscured; do not be surprised when you see actual values present on your Mac. :-)