

## One Page Series: Mac OS X -- IPv6 and Browsing the Web Via Firefox, Camino, Opera and Safari

[If you haven't already done so, begin with [One Page Series: Mac OS X -- Enabling Native IPv6 Via Stateless Autoconfiguration](#) ]

If you don't already have Firefox on your Mac, you can download it for free from <http://www.mozilla.com/firefox/>

If you don't already have Camino on your Mac, you can download it for free from <http://caminobrowser.org/>

If you don't already have Opera on your Mac, you can download it for free from <http://www.opera.com/>

Safari is another option, bundled for free with Mac OS X. You can find Safari in your Mac's Applications folder.

### Browsing the IPv6 Web With Firefox (or Camino)

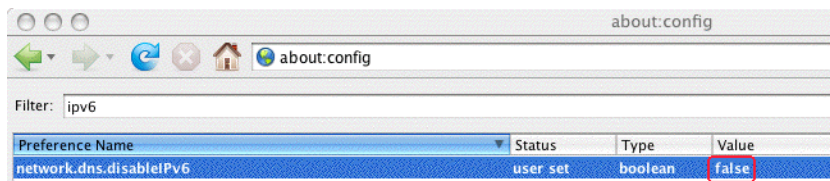
Firefox (and Camino) are both IPv6 aware, but need one tweak to work properly with IPv6.

Launch Firefox (or Camino) and go to `about:config`

Filter on `ipv6`

Click on `network.dns.disableIPv6` to set the value for that preference item to **false**

You only need to adjust this setting once -- it will be remembered from then on



Now try using IPv6 by going to <http://ipv6.google.com/>

You should see a dancing Google

### Browsing the IPv6 Web With Opera

Opera is all set to work with IPv6 web sites, just launch Opera and stick in an IPv6 URL and Opera will go to that site.

### Browsing the IPv6 Web With Safari

There is one key thing to know about Safari and IPv6, and that is that in some versions of OS X and Safari, it likes IPv4 more than it likes IPv6. Thus if a web site is available via both IPv6 and IPv4 addresses, Safari will always attempt to connect to that site via IPv4 rather than via IPv6, unlike some other web browsers where IPv6 is preferred to IPv4.

If you'd like Safari to prefer IPv6 connections when both IPv6 and IPv4 are available, do the following...

Open a terminal window on your Mac (Applications ==> Utilities ==> Terminal)

Enable the Safari Debug menu by entering the following command at the unix prompt:

```
defaults write com.apple.Safari IncludeDebugMenu 1
```

You can then close the terminal window by clicking on the red X ball in the upper left corner.

Now launch Safari, and go to Safari's Debug Menu (it will be on the far right side of the main Safari menu), and come all the way down to Supported Protocols and **uncheck** `http: (Simple Loader)`

If you then go to a site that has both IPv4 and IPv6 versions, the IPv6 version will be preferred (try going to <http://www.kame.net> )

## A Somewhat Random Selection of IPv6-Accessible Web Sites

Google	<a href="http://ipv6.google.com/">http://ipv6.google.com/</a>	<b>2001:4860:b005::68</b>
AFRINIC	<a href="http://www.afrinic.net/">http://www.afrinic.net/</a>	2001:42d0::200:80:1
APNIC	<a href="http://www.apnic.net/">http://www.apnic.net/</a>	2001:dc0:2001:b:4608::115
Arctic Regional Supercomputer Center	<a href="http://www.arsc.edu/">http://www.arsc.edu/</a>	2001:480:150:75::109
Argonne National Lab Public Software Mirror	<a href="http://mirror.anl.gov/">http://mirror.anl.gov/</a>	2620::dc0:1800:214:4fff:fe7d:1b9
ARIN	<a href="http://www.arin.net/">http://www.arin.net/</a>	2001:500:4:13::80 and 2001:500:4:13::81
Berkeley	<a href="http://www.ipv6.berkeley.edu/">http://www.ipv6.berkeley.edu/</a>	2607:f140:ffff:ffff::80
DANTE	<a href="http://www.dante.net/">http://www.dante.net/</a>	2001:798:2:284d::60
deepspace6.net (Linux IPv6 portal)	<a href="http://www.deepspace6.net/">http://www.deepspace6.net/</a>	2001:760:2e01:1::dead:beef
DREN	<a href="http://www.ipv6.dren.net/">http://www.ipv6.dren.net/</a>	2001:480:10:1050::5
ESNet	<a href="http://www.es.net/">http://www.es.net/</a>	2001:400:14:3::d
Fort Scott Community College	<a href="http://www.fortscott.edu/">http://www.fortscott.edu/</a>	2001:49d0:2c02::214:22ff:fe0f:38f4
Hexago	<a href="http://www.hexago.com/">http://www.hexago.com/</a>	2001:5c0:1000:10::2
HPCMO	<a href="http://www.hpcmo.hpc.mil/">http://www.hpcmo.hpc.mil/</a>	2001:480:430:dddd:68b0:bff:fed5:f128
Hurricane Electric	<a href="http://ipv6.he.net/">http://ipv6.he.net/</a>	2001:470:0:64::2
IANA	<a href="http://www.iana.org/">http://www.iana.org/</a>	2620:0:2d0:1::193
ICANN	<a href="http://www.icann.org/">http://www.icann.org/</a>	2620:0:2d0:1::103
IETF	<a href="http://www.ietf.org/">http://www.ietf.org/</a>	2001:1890:1112:1::20
Internet2	<a href="http://www.ipv6.internet2.edu/">http://www.ipv6.internet2.edu/</a>	2001:468:1420::151
Iowa State University	<a href="http://www.iastate.edu/">http://www.iastate.edu/</a>	2610:130:101:100::7
IPv6.org	<a href="http://www.ipv6.org/">http://www.ipv6.org/</a>	2001:6b0:1:ea:202:a5ff:fedc:13a6
IPv6 Portal	<a href="http://www.ipv6tf.org/">http://www.ipv6tf.org/</a>	2a01:48:1::2e0:81ff:fe05:4658
IPv6 Task Force	<a href="http://www.ipv6.eu/">http://www.ipv6.eu/</a>	2001:690:1fff:200::226
ISC	<a href="http://www.isc.org/">http://www.isc.org/</a>	2001:4f8:0:2::d
KAME Project	<a href="http://www.kame.net/">http://www.kame.net/</a>	2001:200::8002:203:47ff:fea5:3085
KANREN	<a href="http://www.kanren.net/">http://www.kanren.net/</a>	2001:49d0:3c00:1:209:6bff:fe7f:6c06
Kenya NIC	<a href="http://www.kenic.or.ke/">http://www.kenic.or.ke/</a>	2001:43f8:10:50::2655
LACNIC	<a href="http://www.lacnic.net/">http://www.lacnic.net/</a>	2001:13c7:7002:4000::10
Linkopings University	<a href="http://www.liu.se/">http://www.liu.se/</a>	2001:6b0:17:f005::148
MAGPI	<a href="http://www.magpi.net/">http://www.magpi.net/</a>	2001:468:1802:101::805b:22c
Michigan Tech	<a href="http://www.ipv6.mtu.edu/">http://www.ipv6.mtu.edu/</a>	2001:48a8:0:2::1:22
NANOG	<a href="http://www.nanog.org/">http://www.nanog.org/</a>	2001:48a8:6880:95::21
Nederlandse IPv6 Task Force	<a href="http://www.ipv6-taskforce.nl/">http://www.ipv6-taskforce.nl/</a>	2001:610:512::1000
NREN	<a href="http://www.nren.nasa.gov/">http://www.nren.nasa.gov/</a>	2001:4d0:8102:8:198:10:138:131
NTT	<a href="http://www.nttv6.net/">http://www.nttv6.net/</a>	2001:fa8::80
Peter Bieringer	<a href="http://www.ipv6.bieringer.de/">http://www.ipv6.bieringer.de/</a>	2001:a60:9002:1::186:6
RIPE	<a href="http://www.ripe.net/">http://www.ripe.net/</a>	2001:610:240:11::c100:1319
Sauk Valley Community College	<a href="http://www.svcc.edu/">http://www.svcc.edu/</a>	2001:470:c10b::214:5eff:fe28:7878
Space and Naval Warfare Systems Command	<a href="http://www.spawar.navy.mil/">http://www.spawar.navy.mil/</a>	2001:480:10:1048:a00:20ff:fe9a:58c1
SURFNet	<a href="http://www.ipv6.surfnet.nl/">http://www.ipv6.surfnet.nl/</a>	2001:610:510::192:42:113:60
SWITCH	<a href="http://www.switch.ch/">http://www.switch.ch/</a>	2001:620:0:1b::b
TERENA	<a href="http://www.terena.org/">http://www.terena.org/</a>	2001:610:148:dead::6
Tsinghua University	<a href="http://www.tsinghua.edu.cn/">http://www.tsinghua.edu.cn/</a>	2001:da8:200:200::4:100
UCLA	<a href="http://www.ucla.edu/">http://www.ucla.edu/</a>	2607:f010:3fe:301:101d:9ff:fe32:a7db (etc)
University of Hawaii	<a href="http://www.ipv6.hawaii.edu/">http://www.ipv6.hawaii.edu/</a>	2607:f278:4101:11:209:5bff:fe8f:6609
University of Oregon video archive	<a href="http://limestone.uoregon.edu/">http://limestone.uoregon.edu/</a>	2001:468:d01:103::80df:9d0c
Virginia Tech	<a href="http://www.ipv6.vt.edu/">http://www.ipv6.vt.edu/</a>	2001:468:c80:210f::173:2bc6:4145
WPI	<a href="http://www.wpi.edu/">http://www.wpi.edu/</a>	2001:468:616:824::31
3ROX	<a href="http://www.3rox.net/">http://www.3rox.net/</a>	2001:5e8:0:1000::fa
6TAP	<a href="http://www.6tap.net/">http://www.6tap.net/</a>	2001:400:14:3::9

Track the IPv6-ification of some of your favorite web sites at [http://www.mrp.net/IPv6\\_Survey.html](http://www.mrp.net/IPv6_Survey.html)

Access most any IPv4-only web site via IPv6 using sixxs.org's IPv4-to-IPv6 gateway by just appending sixxs.org to the normal IPv4 only domain name. For example, to access [www.cnn.com](http://www.cnn.com) via IPv6, you'd go to <http://www.cnn.com.sixxs.org/>

Ver 0.1 (5/27/2009) Questions/comments about this document? Please contact Joe St Sauver ([joe@uoregon.edu](mailto:joe@uoregon.edu))