

## One Page Series: Windows XP -- IPv6 and Browsing the World Wide Web Via Firefox, Opera and IE

[If you haven't already done so, begin with One Page Series: Windows XP -- Enabling IPv6 With Teredo ]

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

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

Internet Explorer 8 is another option; it is available by default on all PCs running Windows XP Service Pack 2

### Browsing the IPv6 Web With Firefox

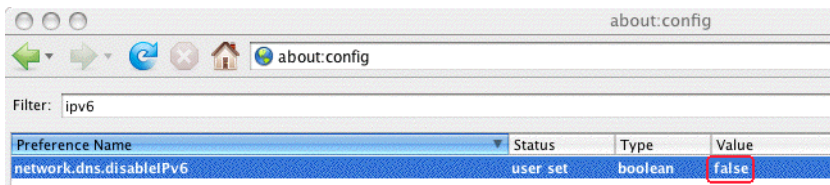
Firefox is IPv6 aware, but needs one tweak to its configuration to work properly with IPv6.

Launch Firefox and go to `about:config`

Filter on `ipv6`

Double 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 you'll go to that site.

### Browsing the IPv6 Web With Internet Explorer 8

IE is all set to work with IPv6 web sites, just launch Internet Explorer 8 and stick in an IPv6 URL and you'll go to that site.

### What Are Some IPv6 Web Sites I Can Explore?

Please see the list on the back of this sheet.

### How Can I Be Sure That I'm Accessing Those Web Sites Via IPv6, and Not Via IPv4?

In the case of web sites which are accessible via both IPv4 and IPv6, you can force your web browser to access them via IPv6 by using an RFC2732-format IPv6 literal address for the site.

To construct an address of that sort, take the IPv6 address listed in the right most column on the back of this page, enclose that numeric IPv6 address in square brackets, and then prefix that expression with `http://`

For example, to force your browser to access the ICANN web site via IPv6, which has the IPv6 address `2620:0:2d0:1::103`, you'd enter the address `http://[2620:0:2d0:1::103]` in your browser's address bar. Note that literal IPv6 server addresses may change over time.

### How Can I Look Up the Numeric IPv6 Address for A Site Other Than The Ones on the Back of This Page?

Use the `nslookup` program that comes with Windows XP. For example, to find the IPv6 address of `ftp.netbsd.org`, you'd do:

Start ==> Programs ==> Accessories ==> Command Prompt

```
c:\> nslookup
```

```
> set q=aaaa
```

```
> ftp.netbsd.org
```

```
[snip]
```

```
ftp.netbsd.org AAAA IPv6 address = 2001:4f8:3:7:230:48ff:fe31:43f2
```

```
[snip]
```

```
>exit
```

## 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))