

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

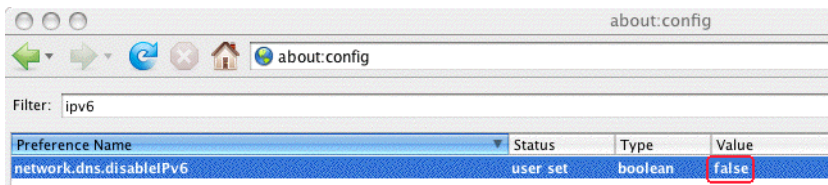
Firefox is IPv6 aware, but needs one tweak to its configuration to work properly with IPv6.

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

Track the IPv6-ification of some of your favorite web sites at 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 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@oregon.uoregon.edu)