

How To Ping IPv6 using the Windows 7 Command line.

These slides demonstrate ping using the Windows 7 command line.

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C:\temp>

In this example, open the windows command prompt. You do not need to be an administrator on the computer.

```
C:\temp>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . . . : mait.local
    IPv6 Address . . . . . : 2001:470:1f11:455:f5d1:a044:ebde:d129
    Temporary IPv6 Address . . . . . : 2001:470:1f11:455:11b3:76db:9a35:98da
    Link-local IPv6 Address . . . . . : fe80::f5d1:a044:ebde:d129%11
    IPv4 Address . . . . . : 192.168.65.96
    Subnet Mask . . . . . : 255.255.252.0
    Default Gateway . . . . . : fe80::211:43ff:fee7:f195%11
                                192.168.64.1
```

```
Wireless LAN adapter Wireless Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . :
```

```
Ethernet adapter VMware Network Adapter VMnet1:

    Connection-specific DNS Suffix . . . :
    Link-local IPv6 Address . . . . . : fe80::d7a7:7ba2%18
    IPv4 Address . . . . . :
    Subnet Mask . . . . . :
    Default Gateway . . . . . :
```

```
Ethernet adapter VMware Network Adapter VMnet8:

    Connection-specific DNS Suffix . . . :
    Link-local IPv6 Address . . . . . : fe80::3:f3aa:4f52%19
    IPv4 Address . . . . . :
    Subnet Mask . . . . . :
    Default Gateway . . . . . :
```

```
Tunnel adapter isatap.{CB15A496-BEB2-42CD-B19D-E0EF5617234D}:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . :
```

```
Tunnel adapter Teredo Tunneling Pseudo-Interface:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . :
```

```
Tunnel adapter isatap.{4CA212DF-FB7B-44E1-907B-2B64AA43170D}:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . :
```

```
Tunnel adapter isatap.mait.local:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . : mait.local
```

```
Tunnel adapter isatap.mnstate.edu:
```

This is the output for ipconfig. The IPv6 address to report is on the line IPv6 Address. The other IPv6 addresses are being used. However, lab grading requires the address on the line IPv6 Address.

C:\temp>ipconfig /all

Windows IP Configuration

```

Host Name . . . . . : G6TMBT1
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : mait.local

```

Ethernet adapter Local Area Connection:

```

Connection-specific DNS Suffix . . . : mait.local
Description . . . . . : Intel(R) 82579LM Gigabit Network Connection
Physical Address. . . . . : D0-67-E5-50-43-9C
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
IPv6 Address. . . . . : 2001:470:1f11:455:f5d1:a044:ebde:d129(Preferred)
Temporary IPv6 Address. . . . . : 2001:470:1f11:455:11b3:76db:9a35:98da(Preferred)
Link-local IPv6 Address . . . . . : fe80::f5d1:a044:ebde:d129%11(Preferred)
IPv4 Address. . . . . : 192.168.65.96(Preferred)
Subnet Mask . . . . . : 255.255.252.0
Lease Obtained. . . . . : Friday, September 21, 2012 3:10:04 PM
Lease Expires . . . . . : Friday, September 21, 2012 5:10:04 PM
Default Gateway . . . . . : fe80::211:43ff:fee7:f195%11
                               192.168.64.1
DHCP Server . . . . . : 192.168.64.4
DNS Servers . . . . . : 192.168.64.13
NetBIOS over Tcpip. . . . . : Enabled

```

This is ipconfig /all output. Once again, report your IPv6 address from the line IPv6 Address from your active adapter.

As a note, try the command
 ipconfig /all >> ipv6-info.txt
 This will put all the information from the screen in a file. This option works for other commands on the command line.

Wireless LAN adapter Wireless Network Connection:

```

Media disconnected
. . . . . : mnstate.edu
. . . . . : DW1501 Wireless-N WLAN Half-Mini Card
. . . . . : 84-4B-F5-5C-34-22
. . . . . : Yes
. . . . . : Yes

```

Ethernet adapter VMnet1:

```

. . . . . : VMware Virtual Ethernet Adapter for VMnet1
Physical Address. . . . . : 00-50-56-C0-00-01
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::c165:3c6a:d7a7:7ba2%18(Preferred)
IPv4 Address. . . . . : 192.168.244.1(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . :
DHCPv6 IAID . . . . . : 335564886
DHCPv6 Client DUID. . . . . : 00-01-00-01-17-A8-B4-B1-84-4B-F5-5C-34-22

```

C:\temp>netsh interface ipv6 sh address

```

Interface 1: Loopback Pseudo-Interface 1
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Other      Preferred  infinite  infinite  ::1

Interface 10: W
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Other      Deprecat  infinite  infinite  fe80::bb9f:a222:c2ee%10

Interface 12: i
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Other      Deprecat  infinite  infinite  fe80::234D}

Interface 11: Local Area Connection
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Temporary Preferred  6d23h56m2s  23h56m2s  2001:470:1f11:455:11b3:76db:9a35:98da
Public     Preferred  29d23h56m2s  6d23h56m2s  2001:470:1f11:455:f5d1:a044:ebde:d129
Other      Preferred  infinite    infinite    fe80::f5d1:a044:ebde:d129%11

Interface 13: Teredo Tunneling Pseudo-Interface
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Other      Deprecated infinite    infinite    fe80::e0:0:0:0%13

Interface 14: isatap.{4CA212DF-FB7B-44E1-907B-2B64AA43170D}
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Other      Deprecated infinite    infinite    fe80::5efe:192.168.157.1%14

Interface 22: isatap.mait.local
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Other      Deprecated infinite    infinite    fe80::5efe:192.168.65.96%22

Interface 18: VMware Network Adapter VMnet1
Addr Type  DAD State  Valid Life Pref. Life Address
-----
Other      Preferred  infinite    infinite    fe80::c165:3c6a:d7a7:7ba2%18

Interface 19: VMware Network Adapter VMnet8
Addr Type  DAD State  Valid Life Pref. Life Address
-----

```

This slide shows using the netsh command to get the IPv6 address. The example uses the Local Area Connection. Under Local Area Connection, report the Public Preferred IPv6 address for labs.

```
C:\temp>ping -6 argentina.mait.local

Pinging argentina.mait.local [2001:470:1f11:455:d92:8903:d568:9495] with 32 bytes of data:
Reply from 2001:470:1f11:455:d92:8903:d568:9495: time=1ms
Reply from 2001:470:1f11:455:d92:8903:d568:9495: time<1ms
Reply from 2001:470:1f11:455:d92:8903:d568:9495: time<1ms
Reply from 2001:470:1f11:455:d92:8903:d568:9495: time=1ms

Ping statistics for 2001:470:1f11:455:d92:8903:d568:9495:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\temp>
```

This is a successful IPv6 ping of argentina.mait.local.

```
C:\temp>ping -6 honduras.dragon.local
Ping request could not find host honduras.dragon.local. Please check the name and try again.
C:\temp>
```

This is an unsuccessful IPv6 ping of honduras.dragon.local.

C:\temp>ping -6 ::1

Pinging ::1 with 32 bytes of data:

Reply from ::1: time<1ms
Reply from ::1: time<1ms
Reply from ::1: time<1ms
Reply from ::1: time<1ms

Ping statistics for ::1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\temp>

This is a successful IPv6 loopback ping.