

Packet Tracer - Verify IPv4 and IPv6 Addressing

ipconfig : for both IPv6 and IPv4.

```
C:\>ipconfig

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::260:47FF:FECA:4DEE
    IPv6 Address . . . . .: 2001:DB8:1:1::A
    IPv4 Address . . . . .: 10.10.1.100
    Subnet Mask . . . . .: 255.255.255.224
    Default Gateway . . . . .: FE80::1
                               10.10.1.97

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                               0.0.0.0
```

ipv6config

```
C:\>ipv6config

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::260:47FF:FECA:4DEE
    IPv6 Address . . . . .: 2001:DB8:1:1::A
    Default Gateway . . . . .: FE80::1
    DHCPv6 IAID . . . . .:
    DHCPv6 Client DUID . . . . .: 00-01-00-01-16-28-EE-50-00-60-47-CA-4D-EE

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    Default Gateway . . . . .: ::
    DHCPv6 IAID . . . . .:
    DHCPv6 Client DUID . . . . .: 00-01-00-01-16-28-EE-50-00-60-47-CA-4D-EE
```

ipv6config /all

```
C:\>ipv6config /all

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Physical Address . . . . .: 0060.47CA.4DEE
    Link-local IPv6 Address . . . . .: FE80::260:47FF:FECA:4DEE
    IPv6 Address . . . . .: 2001:DB8:1:1::A
    Default Gateway . . . . .: FE80::1
    DNS Servers . . . . .: ::
    DHCPv6 IAID . . . . .:
    DHCPv6 Client DUID . . . . .: 00-01-00-01-16-28-EE-50-00-60-47-CA-4D-EE

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Physical Address . . . . .: 0007.ECE0.556B
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    Default Gateway . . . . .: ::
    DNS Servers . . . . .: ::
    DHCPv6 IAID . . . . .:
    DHCPv6 Client DUID . . . . .: 00-01-00-01-16-28-EE-50-00-60-47-CA-4D-EE
```

ping 2001:DB8:1:4::A

```
C:\>ping 2001:DB8:1:4::A

Pinging 2001:DB8:1:4::A with 32 bytes of data:

Reply from 2001:DB8:1:4::A: bytes=32 time=13ms TTL=125
Reply from 2001:DB8:1:4::A: bytes=32 time=19ms TTL=125
Reply from 2001:DB8:1:4::A: bytes=32 time=17ms TTL=125
Reply from 2001:DB8:1:4::A: bytes=32 time=2ms TTL=125

Ping statistics for 2001:DB8:1:4::A:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 19ms, Average = 12ms
```

tracert 10.10.1.20: trace all routes to a destination.

```
C:\>tracert 10.10.1.20

Tracing route to 10.10.1.20 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    10.10.1.97
  2  0 ms    0 ms    0 ms    10.10.1.5
  3  10 ms   0 ms   12 ms   10.10.1.10
  4  0 ms    0 ms    0 ms   10.10.1.20

Trace complete.
```

tracert 2001:DB8:1:4::A

```
C:\>tracert 2001:DB8:1:4::A

Tracing route to 2001:DB8:1:4::A over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    2001:DB8:1:1::1
  2  7 ms    4 ms    4 ms    2001:DB8:1:2::1
  3  0 ms   16 ms    9 ms    2001:DB8:1:3::2
  4  5 ms    9 ms    1 ms    2001:DB8:1:4::A

Trace complete.
```