

Cool Things to Do with Netsh

Change almost any network configuration setting with this powerful tool

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The Netsh command is a powerful command-line tool for Windows 7, Windows Vista, Windows Server 2003, Windows XP, and Windows 2000. Netsh is available in the *Microsoft Windows 2000 Server Resource Kit* and is standard in Windows 2003, XP, Vista and 7. Netsh lets you change almost any network configuration setting as well as document network configurations. You can use the command in a batch file or from its own command shell. Netsh has a useful Help system that you can access by adding `/?` to almost any of its subcommands. Here are 10 cool things that you can use Netsh to do.

10. Show TCP/IP settings—The command

```
netsh interface ip show config
```

shows the system's current TCP/IP configuration settings. You can see whether the system is using DHCP or static addressing as well as view the system's current IP address, subnet mask, gateway address, and DNS servers.

9. Change network configuration—Netsh can change the current network configuration. The command

```
netsh interface ip set address "Local Area Connection" static 192.168.0.10 255.255.255.0 192.168.0.254
```

sets the IP address of the system configuration Local Area Connection to 192.168.0.10, the subnet mask to 255.255.255.0, and the gateway address to 192.168.0.254. This use of Netsh comes in handy for laptops that must switch between static and dynamic addressed networks.

8. Use a dynamic DHCP assigned address—The command

```
netsh interface ip set address "Local Area Connection" dhcp
```

sets the IP address of the Local Area Connection system configuration to use DHCP addressing.

7. Change a DNS server address—When you change the system's IP address type, you almost always have to change the DNS server's address as well. The command

```
netsh interface ip set dns "Local Area Connection" static 192.168.0.2
```

configures the Local Area Connection to use a DNS server whose address is 192.168.0.2.

6. Dynamically assign the DNS server address—When you switch to dynamic DHCP addressing, you typically also want the DNS server address to be assigned dynamically. The command

```
netsh interface ip set dns "Local Area Connection" dhcp
```

sets the Local Area Connection interface to use a DHCP-assigned DNS address.

5. Configure a WINS server—Netsh also lets you configure WINS servers. The following command configures a system's Local Area Connection interface to use a WINS server that has the IP address 192.168.100.3.

```
netsh interface ip set wins "Local Area Connection" static 192.168.100.3
```

4. Work with other interfaces—Netsh works with DHCP, Internet Authentication Service (IAS), and RAS interfaces as well as the local network interface. The command

```
netsh dhcp dump > dhcpcfg.dat
```

dumps the local DHCP server's configuration to the dhcpcfg.dat file. You can use this file in conjunction with Netsh to recreate the DHCP server.

3. Work with remote systems—One of Netsh's best hidden features is its ability to work with remote systems. The command

```
netsh set machine remotecomputer
```

sets the current computer to a different system on the network.

2. Save the current configuration—The Interface Dump subcommand saves your current network configuration and generates a script that you can use to regenerate the configuration. The command

```
netsh interface dump > mycfg.dat
```

redirects the Dump command to the mycfg.dat file.

1. Restore network configuration—The Netsh Exec command runs a Netsh script file. The command

```
netsh exec mycfg.dat
```

restores to your system the network configuration data that the preceding sample command saved.