

WHAT IS NBTSTAT?

Nbtstat (**Nbtstat.exe**) is a command-line tool for troubleshooting **NetBIOS** name resolution problems.

NetBIOS is a *session-layer protocol* that formed the foundation of **Microsoft** network applications for several years. **NetBIOS** applications identify services on the network by using *16-character* **NetBIOS** names.

Each computer on a network might have several different **NetBIOS** names to identify **NetBIOS** services on that system. Today, **NetBIOS** is implemented on **TCP/IP** networks by using **NetBIOS** over **TCP/IP** (**NetBT**). **NetBT** includes its own form of name resolution to resolve **NetBIOS** names to IP addresses. Names might be resolved by broadcast queries to the local network segment or by queries to a **WINS** server.

Unfortunately, **NetBIOS** name resolution is a common source of problems. You can use **Nbtstat** to reveal the **NetBIOS** names available on the local computer or remote computers.

In troubleshooting scenarios, this helps you to verify that a **NetBIOS** service is available and its name is being correctly resolved.

To view the **NetBIOS** name cache, open a command prompt and run the following command.

```
nbtstat -c
```

To view the local **NetBIOS** service names, open a command prompt and run the following command.

```
nbtstat -n
```

To view the **NetBIOS** names on a remote system by using the computer name, open a command prompt and run the following command.

```
nbtstat -a computername
```

For example:

```
nbtstat -a win71
```

Notice that the output is similar to the output when running `nbtstat -n` locally. However, this output also displays the remote computer's **MAC** address. To view the **NetBIOS** names on a remote system by using the IP address, open a command prompt and run the following command.

```
nbtstat -A IP_Address
```

Windows 7 (and all recent versions of Windows) prefers to use **DNS** host names instead of NetBIOS names. Therefore, if you have an AD DS domain with a **DNS** server configured, you will rarely need to troubleshoot NetBIOS names.

However, Windows might still use **NetBIOS** names to communicate with computers on the local network and will use **NetBIOS** names if a host name cannot be resolved with DNS and you have configured a WINS server.