

Changing Computer State

To reset a computer in PowerShell, use either a standard command-line tool, WMI, or a CIM class. Although you are using PowerShell only to run the tool, learning how to change a computer's power state in PowerShell illustrates some of the important details about working with external tools in PowerShell.

Locking a Computer

The only way to lock a computer directly with the standard available tools is to call the **LockWorkstation()** function in **user32.dll**:

```
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rundll32.exe user32.dll,LockWorkStation
```

To shut down particular sessions on a Terminal Server, use the **tsshutdown.exe** command-line tool.

Logging Off the Current Session

You can use several different techniques to log off of a session on the local system. The simplest way is to use the Remote Desktop/Terminal Services command-line tool, **logoff.exe** (For details, at the PowerShell prompt, type `logoff /?`). To log off the current active session, type `logoff` with no arguments.

You can also use the **shutdown.exe** tool with its `logoff` option:

```
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shutdown.exe -l
```

Another option is to use WMI. The **Win32_OperatingSystem** class has a **Shutdown** method. Invoking the method with the 0 flag initiates logoff

```
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Get-CimInstance -ClassName Win32_OperatingSystem | Invoke-CimMethod -MethodName  
Shutdown
```

Shutting Down or Restarting a Computer

Shutting down and restarting computers are generally the same types of task. Tools that shut down a computer will generally restart it as well—and vice versa. There are two straightforward options for restarting a computer from PowerShell. Use either `tsshutdown.exe` or `shutdown.exe` with appropriate arguments. You can get detailed usage information from `tsshutdown.exe /?` or `shutdown.exe /?`.

You can also perform shutdown and restart operations directly from PowerShell as well.

To shut down the computer, use the Stop-Computer command

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`Stop-Computer`

To restart the operating system, use the Restart-Computer command

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`Restart-Computer`

To force an immediate restart of the computer, use the -Force parameter.

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`Restart-Computer -Force`