**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 tsshutdn.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 tsshutdn.exe or shutdown.exe with appropriate

arguments. You can get detailed usage information from tsshutdn.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