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**LAB-4**

# POWERCFG ENERGY

Microsoft Windows [Version 10.0.19041.804]

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C:\Windows\system32>powercfg /energy

Enabling tracing for 60 seconds...

Observing system behavior...

Analyzing trace data...

Analysis complete.

Energy efficiency problems were found.

7 Errors

8 Warnings

38 Informational

See C:\Windows\system32\energy-report.html for more details.

C:\Windows\system32>

## Power and Attrib Commands

Microsoft Windows [Version 10.0.19041.804]

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```
C:\Users\user>powercfg /?
```

**POWERCFG /COMMAND [ARGUMENTS]**

### Description:

Enables users to control power settings on a local system.

For detailed command and option information, run "POWERCFG /? <COMMAND>"

### Command List:

/LIST, /L       Lists all power schemes.

/QUERY, /Q       Displays the contents of a power scheme.

/CHANGE, /X       Modifies a setting value in the current power scheme.

/CHANGENAME       Modifies the name and description of a power scheme.

/DELETE, /D      Deletes a power scheme.

/DELETEDSETTING      Deletes a power setting.

/SETACTIVE, /S      Makes a power scheme active on the system.

/GETACTIVESCHEME      Retrieves the currently active power scheme.

/SETACVALUEINDEX      Sets the value associated with a power setting  
while the system is powered by AC power.

/SETDCVALUEINDEX      Sets the value associated with a power setting  
while the system is powered by DC power.

/IMPORT      Imports all power settings from a file.

/EXPORT      Exports a power scheme to a file.

/ALIASES      Displays all aliases and their corresponding GUIDs.

**/GETSECURITYDESCRIPTOR**

Gets a security descriptor associated with a specified power setting, power scheme, or action.

**/SETSECURITYDESCRIPTOR**

Sets a security descriptor associated with a power setting, power scheme, or action.

**/HIBERNATE, /H** Enables and disables the hibernate feature.

**/AVAILABLESLEEPSTATES, /A**

Reports the sleep states available on the system.

**/DEVICEQUERY** Returns a list of devices that meet specified criteria.

**/DEVICEENABLEWAKE** Enables a device to wake the system from a sleep state.

**/DEVICEDISABLEWAKE** Disables a device from waking the system from a sleep state.

/WAKETIMERS Enumerates active wake timers.

/REQUESTS Enumerates application and driver Power Requests.

/REQUESTSOVERRIDE Sets a Power Request override for a particular Process, Service, or Driver.

/ENERGY Analyzes the system for common energy-efficiency and battery life problems.

/BATTERYREPORT Generates a report of battery usage.

/SLEEPSTUDY Generates a diagnostic system power transition report.

/SRUMUTIL Dumps Energy Estimation data from System Resource Usage Monitor (SRUM).

/SYSTEMSLEEPDIAGNOSTICS  
Generates a diagnostic report of system sleep transitions.

/SYSTEMPOWERREPORT Generates a diagnostic system power transition report.

/POWERTHROTTLING Control power throttling for an application.

```
C:\Users\user>powercfg lastwake
```

```
Wake History Count - 1
```

```
Wake History [0]
```

```
Wake Source Count - 0
```

```
C:\Users\user>cd Desktop
```

```
C:\Users\user\Desktop>dir
```

```
Volume in drive C has no label.
```

```
Volume Serial Number is A0D4-F368
```

```
Directory of C:\Users\user\Desktop
```

25-02-2021	22:20	<DIR>	.
25-02-2021	22:20	<DIR>	..
25-02-2021	22:20		0 attrib
25-02-2021	22:20		0 cd
25-02-2021	22:20		0 mkdir

```
25-02-2021 22:29      5,200 New Text Document.txt
20-02-2021 14:27      1,032 Nmap - Zenmap GUI.Ink
08-01-2021 10:29 <DIR>      Old Firefox Data
27-01-2021 16:38 <DIR>      Secure
25-02-2021 22:10 <DIR>      SecureLab
      5 File(s)      6,232 bytes
      5 Dir(s) 161,523,335,168 bytes free
```

C:\Users\user\Desktop>attrib /?  
Displays or changes file attributes.

ATTRIB [+R | -R] [+A | -A] [+S | -S] [+H | -H] [+O | -O] [+I | -I] [+X | -X] [+P | -P] [+U | -U]  
[drive:][path][filename] [/S [/D]] [/L]

- + Sets an attribute.
- Clears an attribute.
- R Read-only file attribute.
- A Archive file attribute.
- S System file attribute.
- H Hidden file attribute.
- O Offline attribute.
- I Not content indexed file attribute.
- X No scrub file attribute.
- V Integrity attribute.



P Pinned attribute.

U Unpinned attribute.

B SMR Blob attribute.

[drive:][path][filename]

Specifies a file or files for attrib to process.

/S Processes matching files in the current folder  
and all subfolders.

/D Processes folders as well.

/L Work on the attributes of the Symbolic Link versus  
the target of the Symbolic Link

```
C:\Users\user\Desktop>attrib +h +r +s /s /d Old Firefox Data  
Parameter format not correct -
```

```
C:\Users\user\Desktop>attrib +h +r +s /s /d Old_Firefox_Data
```

```
C:\Users\user\Desktop>dir
```

Volume in drive C has no label.

Volume Serial Number is A0D4-F368

## Directory of C:\Users\user\Desktop

```
03-03-2021 21:50 <DIR>      .
03-03-2021 21:50 <DIR>      ..
25-02-2021 22:20          0 attrib
25-02-2021 22:20          0 cd
25-02-2021 22:20          0 mkdir
25-02-2021 22:29        5,200 New Text Document.txt
20-02-2021 14:27        1,032 Nmap - Zenmap GUI.lnk
27-01-2021 16:38 <DIR>      Secure
25-02-2021 22:10 <DIR>      SecureLab
          5 File(s)      6,232 bytes
          4 Dir(s) 161,521,524,736 bytes free
```

```
C:\Users\user\Desktop>attrib -h -r -s /s /d Old_Firefox_Data
```

```
C:\Users\user\Desktop>dir
```

Volume in drive C has no label.

Volume Serial Number is A0D4-F368

## Directory of C:\Users\user\Desktop

## Directory of C:\Users\user\Desktop

```
03-03-2021 21:50 <DIR>      .
03-03-2021 21:50 <DIR>      ..
25-02-2021 22:20          0 attrib
25-02-2021 22:20          0 cd
25-02-2021 22:20          0 mkdir
25-02-2021 22:29        5,200 New Text Document.txt
20-02-2021 14:27        1,032 Nmap - Zenmap GUI.lnk
08-01-2021 10:29 <DIR>      Old_Firefox_Data
27-01-2021 16:38 <DIR>      Secure
25-02-2021 22:10 <DIR>      SecureLab
          5 File(s)      6,232 bytes
          5 Dir(s) 161,521,442,816 bytes free
```

C:\Users\user\Desktop>

## SCRIPT TO DO JOBS

### 1. Lock Windows PC

```
import ctypes
ctypes.windll.user32.LockWorkStation()
```

### 2. Clear Recycle Bin

```
import winshell
winshell.recycle_bin().empty(confirm=False,show_progress=False,sound=False)
```