

**DEPARTMENT OF JUSTICE
INFORMATION TECHNOLOGY
STANDARD
POWER MANAGEMENT**



Version 1.0
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950 Pennsylvania Avenue NW
Suite 1310
Washington, DC 20530

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FOREWORD

PURPOSE - This mandatory standard provides minimum Department of Justice (DOJ) requirements for implementing power management features on desktop and laptop computers and monitors in compliance with Executive Order 13423. The standard supplements, but does not supersede any DOJ Order. Components may impose more stringent measures to supplement this standard.

SCOPE - This standard applies to Components and entities that own, maintain, or manage computers, monitors, and associated policy settings.

AUTHORITIES - The Deputy Chief Information Officer (CIO), Enterprise Solutions Staff, is responsible for providing policy guidance and oversight. Questions or comments regarding this standard should be directed to the Enterprise Solutions Staff.

VANCE E. HITCH
Chief Information Officer
Department of Justice

1.0 GENERAL

1.1 Review and Update

Questions or comments concerning this document should be addressed to:

Deputy Director, Enterprise Solutions Staff
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Suite 1308
Washington, DC 20530

This standard will be reviewed annually and updated, if required, to respond to questions and comments, and to address additional guidance received from national policy authorities (e.g. National Institute of Standards and Technology).

1.2 Roles and Responsibilities

Component CIOs are responsible for the implementation and compliance with this standard.

1.3 References

Executive Order 13423, “Strengthening Federal Environmental, Energy, and Transportation Management.” January 24, 2007.

DOJ Electronics Stewardship Plan, signed December 2007 by Assistant Attorney General for Administration, Lee Lofthus.

1.4 Definitions

Systems – All desktop and laptop computers and monitors.

2.0 DEPARTMENT PROCEDURES

2.1 Policy Requirements for DOJ Component Organizations

Policy

Executive Order (EO) 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, requires federal agencies to “enable the Energy Star® feature on agency computers and monitors.” The Implementing Instructions for EO 13423 further clarify that agencies must “ensure that Energy Star® features are enabled on 100% of computers and monitors or to the maximum extent practicable if limited by mission need.”

Energy Star Power Management Settings and Features

DOJ should enable Energy Star® energy-saving power management features on all new AND currently in use desktop and laptop computers and monitors (collectively referred to as “systems”). If limited by mission need or security reasons, DOJ should enable these features to the maximum extent practicable. The following policy should be applied based on Energy Star® guidance and best management practices to receive maximum benefits of these features. These features should be applied for when employees are logged in and logged off their workstations.

Monitor recommendations:

- Set monitors to power off no later than 60 minutes of user inactivity. Energy Star and The Environmental Protection Agency (EPA) recommend this feature be set to no later than 5-20 minutes to maximize power savings

Desktop computer recommendations:

- Set desktop computers to enter system standby mode no later than 120 minutes of user inactivity. Energy Star and EPA recommend this feature be set to no later than 30-60 minutes to maximize power savings
- Turn “adaptive display” on (Vista only)
- Turn “allow hybrid sleep” on (Vista only)

Laptop computer recommendations:

- In “plugged in” mode, set monitors to power off no later than 60 minutes of user inactivity. Energy Star and EPA recommend this feature be set to no later than 5-20 minutes to maximize power savings
- In “plugged in” mode, set laptop computers to enter system standby mode no later than 120 minutes of user inactivity. Energy Star and EPA recommend this feature be set to no later than 30-60 minutes to maximize power savings
- In “running on battery” mode, set monitors to power off no later than 60 minutes of user inactivity. Energy Star and EPA recommend this feature be set to no later than 5-20 minutes to maximize power savings
- In “running on battery” mode, set laptop computers to enter system standby mode no later than 120 minutes of user inactivity. Energy Star and EPA recommend this feature be set to no later than 30-60 minutes to maximize power savings

Configure the screen saver, if applicable, to use the blank screen saver or limited graphical screen saver. Consider setting the screen saver to come on shortly after the display is blanked for user convenience. Graphics-intensive screen savers can prevent PCs from entering sleep mode, and should be disabled.

Consider educating users on the difference between monitors in powered-off mode and system standby to avoid accidental manual PC shutdown.

It is recommended that Components encourage DOJ employees to turn off their desktop/laptop computers and monitors when they leave the office at the conclusion of their work day, in

coordination with operations and network security (see “System Updates and Power Requirements” section for more information).

EPA reports that the "Turn off hard disks" setting does not save much power, and is not required in power management implementation.

2.2 Power Management Implementation Guidance

DOJ should implement and enable power management settings on new and existing systems – recommended methods include using Group Policy Objects (GPO) and template images when upgrading operating systems and/or rolling out new hardware. Settings should also be applied to systems that currently do not have power management features enabled. Additional implementation guidance is provided to users by Energy Star at http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_implementation_res.

Group Policy (option)

Components may implement power management features using group policy. Network administrators who run Windows Active Directory and manage client workstations using Group Policy Objects (GPOs) may use DOJ-supported tools. These tools provide GPOs for centrally configuring power management settings, as they are not native in Windows 2000 or XP; however, power management can be managed through Group Policy on Windows Vista machines. Other tools are available to assist network administrators that do not run Active Directory. Administrators should either modify an already existing policy or group of policies, or create new power management policies, and implement power management settings (as defined above) as the default setting.

Template Images (option)

Power management settings may be included in the master template hard drive image or standard desktop image. Energy Star features will be enabled on desktop and laptop computers and monitors during initial installation of operating system. Implement power management settings (as defined above) as the default setting.

System Updates and Power Requirements

Ensure that power management settings do not interfere with the distribution of administrative software updates (such as security patches and antivirus definitions). Recommended/optional methods include utilizing wake-on-LAN features or configuring client computers to apply software patches and updates as soon as computers become available on the network. Wake-on-LAN is an Ethernet computer networking standard that allows a computer to be turned on or woken up remotely from standby mode, hibernate mode, or powered off mode. It is necessary to enable wake-on-LAN in BIOS, and may also be necessary to configure the computer to reserve power for the network card when the system is shutdown. Components must ensure that IT administrators have the appropriate capabilities to wake up computers prior to applying or distributing software or system updates. Additional implementation guidance is provided to

users by Energy Star at http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_wol and http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_config.

If using wake-on-LAN, ensure that desktop and laptop computers are plugged directly into an AC power source. Do not unplug computers from any power source in attempt to save power. If computers are using power from a surge protector, power strip, or similar device, ensure that the device is powered on and connected directly to an AC power source. This ensures that the wake-on-LAN feature is accessible to provide required security updates.

Administrative Privileges

Non-administrators should not have rights/privileges to change Power Management settings. If a user has a need to disable power management settings temporarily for mission critical or security reasons, rights/privileges may be granted to the user/machine to temporarily disable the settings. In this case, original power management settings should be automatically reset. Components are not required to grant rights/privileges to non-administrators and should only do so for mission critical or security reasons and in conjunction with DOJ and Component policies. Components should ensure that granting rights/privileges to non-administrators does not compromise security in any form.

Legacy Systems

If system standby is not an available power option, make sure that the system has the latest video driver from the manufacturer. The default Windows driver may not support system standby. Instruct users to turn off desktop and laptop computers and monitors at the end of each day if automatic power management features are not available.

2.3 Reporting and Timeline Requirements

Reporting Exempt Systems

DOJ Components or sections are eligible to opt out of certain power management policies for specifically identified exempt systems (i.e., laptops, desktops, and monitors) with written explanation of why (1) policies interfere with the Component mission or security, or (2) power management features cannot be implemented on systems or computers. Examples of exemptions include: operating system does not support power management features, system testing is required before implementation, system does not support wake-on-LAN capability, and system must run applications or requires extended availability due to Component mission. The number of exempt systems will also be reported. In the case that desktop or laptop computers are exempt, monitor features should still be enabled to the maximum extent possible. If systems are temporarily exempt, please include in the report the mitigating strategy, including new procurements if it is part of the Component plan, and timelines for when these systems will be compliant.

Report exempt systems using the reporting template in Appendix 1 to Environmental.Program@usdoj.gov by November 30, 2009.

Future Reporting Requirements

OMB requires that the Department of Justice reports compliance and progress status via the Environmental Stewardship Scorecard each year. Components will be required to report the number of exempt and non-exempt desktop and laptop computers and monitors, including a report on enabling power management features, by November 30 each year, to demonstrate compliance with Executive Order 13423.

Timeline

Non-exempt desktop and laptop computers and monitors must be compliant by November 30, 2009.

All new non-exempt procurements, beginning September 30, 2009, must be capable of enabling power management settings.

2.4 Supplemental Procedures

DOJ Components may, but are not required to supplement this standard as needed to support their operational environment and technical configurations.

3.0 Appendix: Power Management Reporting Template

Instructions:

DOJ Component organizations should complete (1) Component Information and (2) Policy Requirements sections below. There are nine policy requirements in total; for each requirement, enter the total number of systems, select the appropriate compliance category, and complete the identified subsequent sections. If applicable, identify any system groups, types, categories, etc. that are exempt from compliance. If systems are temporarily exempt, please include the mitigating strategy and timelines for when these systems will be compliant. Submit the completed DOJ power management reporting template to Environmental.Program@usdoj.gov, by November 30, 2009.

Component Information:

Component Name:	Component Acronym:
Point of Contact (POC) Name:	POC Title:
POC Email:	POC Phone:

Overview:

DOJ should enable Energy Star® energy-saving power management features on all new AND currently in use desktop and laptop computers and monitors (collectively referred to as “systems”). If limited by mission need or security reasons, DOJ should enable these features to the maximum extent practicable. To ensure maximum benefits, these features should be applied for when employees are logged in AND logged off their workstations.

Policy Requirements:

MONITOR	
Total number of monitors:	
Policy requirement #1: set monitors to power off no later than 60 minutes of user inactivity. Energy Star and EPA recommend that this feature be set to no later than 5-20 minutes to maximize power savings	
Selection:	
(choose one: A, B, or C; complete appropriate section(s) below)	
A. All monitors compliant (do not complete Section I or II)	
B. Some monitors compliant / some monitors exempt (complete Section I and Section II)	
C. All monitors exempt (complete Section II only)	
Section I	Number of exempt monitors:
	Number of compliant monitors:
Section II	Exemption rationale*:

Mitigating strategy:

Mitigation timeline:

* please explain why policy interferes with Component mission or security

DESKTOP COMPUTER

Total number of desktop computers:

Policy requirement #2: set desktop computers to enter system standby mode no later than 120 minutes of user inactivity. Energy Star and EPA recommend that this feature be set to no later than 30-60 minutes to maximize power savings

Selection:

(choose one: A, B, or C; complete appropriate section(s) below)

A. All desktop computers compliant (do not complete Section I or II)

B. Some desktop computers compliant / some desktop computers exempt (complete Section I and Section II)

C. All desktop computers exempt (complete Section II only)

Section I Number of exempt desktop computers:

Number of compliant desktop computers:

Section II Exemption rationale*:

Mitigating strategy:

Mitigation timeline:

Policy requirement #3: for Vista machines only, turn “adaptive display” on and turn “allow hybrid sleep” on

Selection:

(choose one: A, B, C, or N/A; complete appropriate section(s) below)

A. All desktop computers compliant (do not complete Section I or II)

B. Some desktop computers compliant / some desktop computers exempt (complete Section I and Section II)

C. All desktop computers exempt (complete Section II only)

Section I Number of exempt desktop computers:

Number of compliant desktop computers:

Section II Exemption rationale*:

Mitigating strategy:

Mitigation timeline:

Policy requirement #4: configure the screen saver, if applicable, to use the blank screen saver or limited graphical screen saver

Selection:

(choose one: A, B, or C; complete appropriate section(s) below)

- A. All desktop computers compliant (do not complete Section I or II)
- B. Some desktop computers compliant / some desktop computers exempt (complete Section I and Section II)
- C. All desktop computers exempt (complete Section II only)

Section I Number of exempt desktop computers:
 Number of compliant desktop computers:

Section II Exemption rationale*:
 Mitigating strategy:
 Mitigation timeline:

* please explain why policy interferes with Component mission or security

LAPTOP COMPUTER

Total number of laptop computers:

Policy requirement #5: in “plugged in” mode, set monitors to power off no later than 60 minutes of user inactivity. Energy Star and EPA recommend that this feature be set to no later than 5-20 minutes to maximize power savings

Selection:

(choose one: A, B, or C; complete appropriate section(s) below)

- A. All laptop computers compliant (do not complete Section I or II)
- B. Some laptop computers compliant / some laptop computers exempt (complete Section I and Section II)
- C. All laptop computers exempt (complete Section II only)

Section I Number of exempt laptop computers:
 Number of compliant laptop computers:

Section II Exemption rationale*:
 Mitigating strategy:
 Mitigation timeline:

Policy requirement #6: in “plugged in” mode, set laptop computers to enter system standby mode no later than 120 minutes of user inactivity. Energy Star and EPA recommend that this feature be set to no later than 30-60 minutes to maximize power savings

Section II Exemption rationale*:

Mitigating strategy:

Mitigation timeline:

Policy requirement #9: configure the screen saver, if applicable, to use the blank screen saver or limited graphical screen saver

Selection:

(choose one: A, B, or C; complete appropriate section(s) below)

A. All laptop computers compliant (do not complete Section I or II)

B. Some laptop computers compliant / some laptop computers exempt (complete Section I and Section II)

C. All laptop computers exempt (complete Section II only)

Section I Number of exempt laptop computers:

Number of compliant laptop computers:

Section II Exemption rationale*:

Mitigating strategy:

Mitigation timeline:

* please explain why policy interferes with Component mission or security

COMMENTS