IT BEST PRACTICES: GREEN PRINTING

Authored by:

California Information Technology Managers Academy, Class XVI

ITMA XVI

"California IT – A Commitment to Green"

May 2009

BACKGROUND

Inefficient use of printers can cause a significant waste of energy and paper usage. This can increase costs to the State of California, and create negative impact on the environment due to carbon dioxide (CO_2) emissions. Additionally, the California 2009 IT Strategic Plan Concept 5: Economic And Sustainable Strategy 1 states a goal to "Promote practices that protect the environment and reduce energy usage" [1].

BENEFITS

- The total cost of ownership for network (shared) printers are significantly less expensive than using desktop printers, since fewer are needed; they can handle higher volume, are less likely to experience breakdown, and can be more efficiently managed by centralized support staff.

- Use of double-sided (duplex) printing will achieve savings in paper usage, and reduce negative impact on the environment. The actual savings will depend on the typical usage of each printer.

- According to the Environmental Protection Agency (EPA), Energy Star certified printers are approximately 25% more energy efficient on average [2].

- Use of printer low power inactivity modes will achieve energy savings. The actual savings will depend on the level of usage of each printer.

- Decreased usage and quantity of printers can reduce the number and variety of refill cartridges, reducing costs and negative impact to the environment.

RECOMMENDED STRATEGIES FOR IMPLEMENTATION

- Establish policies and standards for printer procurement and configuration, which support these recommendations.

- Purchase only Energy Star certified printers.

- Purchase only networked, shared, duplex capable printers.

- Reduce use of desktop, standalone printers.

- Create an exception process for approval of desktop, standalone printers.

- Utilize the low power inactivity mode (sleep mode) on all printers.

- Set duplex as the default setting on all printers that have such capability.

- Reduce paper printing as much as possible by exploring electronic solutions, and re-evaluating the need for the printouts.

- Use paper with a minimum of 30% post-consumer recycled content [3].

- Metrics: Track percentage of printers which are Energy Star certified, ratio of networked printers to standalone printers, how many printers have duplex mode available and set as the default, how many have lower power inactivity mode set, and amount of printer paper usage [4].

REFERENCES

[1] California IT Strategic Plan: http://www.itsp.ca.gov/

[2] Energy Star, Printers, Scanners, and All-In-One Devices:
http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=PS

[3] Certifying Postconsumer Recycled Content:
http://www.ciwmb.ca.gov/buyrecycled/stateagency/Certify.htm

[4] Measuring the Success of Office Paper Reduction Efforts:
http://www.ciwmb.ca.gov/BIZWASTE/OfficePaper/Measure.htm

ADDITIONAL REFERENCES

California Office of the State CIO

California Office of the State CIO: http://www.cio.ca.gov/

Department of General Services (DGS)

Buy Green Best Practices Manual: http://www.green.ca.gov/EPP/Introduction/default.htm

Buy Green-Best Practices Manual-Office Machines:
http://www.green.ca.gov/EPP/OfficeMach/comp.htm

Strategically Sourced IT Hardware – Printers:
http://www.pd.dgs.ca.gov/StratSourcing/ITHardwarePCGoods.htm#printer

Procurements Website: http://www.pd.dgs.ca.gov/buy/default.htm

Environmentally Preferable Purchasing Requirements:
http://www.pd.dgs.ca.gov/deleg/PAMchapter03.htm#t9

California Integrated Waste Management Board

California Greenin' Resources: http://www.ciwmb.ca.gov/EPP/Procurement/Resources.htm

Other

Environmental Protection Agency (EPA) Environmental Preferred Purchasing Tools:
http://www.epa.gov/opptintr/epp/tools/index.htm

Federal Energy Management Program, How to buy an energy-efficient printer:
http://www1.eere.energy.gov/femp/procurement/eep_printer.html

Lawrence Berkeley National Laboratory, Information on reducing paper use:
http://eetd.lbl.gov/paper/

National Association of State Chief Information Officers (NASCIO), Green IT in Enterprise
Practices: The Essential Role of the State CIO, May 2008:
http://www.nascio.org/publications/documents/NASCIO-GreenIT.pdf

Using Printer energy saving features:
http://www.greenyour.com/home/electronics/printer/tips/use-your-printers-energy-saving-features