

May 13, 2010

MEMORANDUM FOR AGENCY HEADS

FROM: /S/
 SETH D. HARRIS
 Deputy Secretary

SUBJECT: Green IT – Federal Data Center Consolidation Initiative

This Fiscal Year, OMB began an iterative process with Federal agencies to develop a government-wide strategy for agency data center consolidation aimed at reducing the number and cost of Federal data centers, associated energy costs, and physical space allocations. This Federal Data Center Consolidation Initiative provides the Department with the opportunity to create an IT infrastructure that is consistent and uniform, and it is imperative that all DOL agencies play a role.

Federal agencies will be required to begin execution of this data center consolidation plan in FY 2011. This memorandum describes the “green” context for this initiative and actions agencies must take immediately with Deputy Chief Information Officer (CIO) Thomas Wiesner to ensure a successful outcome at DOL.

Background

In conjunction with this OMB initiative, Executive Order 13423 and the Energy Independence and Security Act of 2007 (known as “Green IT”) require all Federal agencies to steadily reduce energy usage. Additionally, Executive Order 13514 requires all agencies to establish and meet a proposed greenhouse gas (GHG) reduction target by 2020 and submit a comprehensive Strategic Sustainability Performance Plan (SSPP) in June 2010. The scope of this plan is broad, covering building design, travel and transportation, water usage, pollution prevention, and waste elimination. This plan includes goals for electronic stewardship and data centers which address power usage and overall efficiency of these operations. The Green IT initiative is now being integrated into the larger, more comprehensive SSPP which is well-aligned with the Secretary’s goals of bringing the Frances Perkins Building up to current standards for environmentally sustainable design and operation and making DOL an Energy-Star department. The goal is for the FPB to soon gain the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) Silver Certification.

The design of the FPB predates current Green Building standards, which creates many challenges. Data centers are one area where there are opportunities for improving efficiency and reliability while reducing power usage. Using current server hardware and configurations in a facility with a modern design will yield significant improvements in power usage efficiency. Eliminating and consolidating data centers also will reclaim floor space for other uses and reduce power consumption for special air conditioning.

In 2006, the EPA estimated the nation's data centers and servers consumed about 61 billion kilowatt-hours, double the figure from 2000. Consumption is estimated to exceed 100 billion kilowatt-hours by 2011—a level of electricity consumption sufficient to power approximately 5.8 million average U.S. households (or about five percent of the total U.S. housing stock). The Federal sector alone accounted for approximately 10% of the total data center energy consumed (6 billion kilowatt-hours) for a cost of about \$450 million annually. As these facts illustrate, there is ample opportunity for improved efficiency and savings in the server consolidation initiative and DOL needs to maximize its contribution.

Current Activities

This spring, Departments have been collecting baseline information on data centers for reporting to OMB. The current inventory for DOL includes 3,490 servers across 326 sites (i.e., 225 DOL sites, 85 state sites, and 12 vendor managed centers). The initial findings show very little sharing of data center facilities across agencies. For example, the Frances Perkins Building alone has seven production data center facilities and 11 other DOL-occupied buildings account for a total of 57 server rooms.

Before undertaking the relocation of production activities in support of the Data Center Consolidation Initiative, we will develop a set of project plans that define the scope and goals of this initiative. Our primary focus over the next 12 months will be to develop a set of tasks and a schedule that minimizes risk to our operations, thereby ensuring that each agency is able to accomplish its mission-critical tasks before, during, and after this consolidation. Every effort will be made to develop a risk-mitigation plan which addresses all operational requirements while providing simulation and testing prior to cutover for production. In addition, this project will address the goals of the SSPP to ensure we converge to a target state that satisfies both initiatives while achieving DOL goals for reliability of our IT infrastructure.

The current schedule for the Data Center Consolidation Initiative will use the remainder of FY 2010 and most of FY 2011 for data analysis, alternative identification, and facility acquisition. Migration activities will be defined and scheduled but will not begin until late FY 2011. This schedule will not coincide with our current work to refine the New Core Financial Management System (NCFMS). As such, the facilities that operate NCFMS are considered out of scope for the Data Center Consolidation Initiative.

Moving Forward

Effective immediately with the issuance of this memorandum, all agencies are to suspend any data center relocation plans and facility upgrade or expansion activities until such plans have been presented to Thomas Wiesner. This direction applies also to server consolidation, optimization activities including server virtualization, and acquisition activities either planned or in progress.

Each agency that maintains its own IT infrastructure must schedule a meeting with Mr. Wiesner to present all current and planned infrastructure or server upgrades to confirm they are in accordance with a DOL-wide plan for greening DOL, reducing energy consumption and other OMB mandated targets. These meetings should be concluded not later than June 1, 2010.

As we move forward with the Data Center Consolidation Initiative, I want to reiterate how important it is that we take an approach that will yield a unified solution which addresses DOL requirements. It is critical that DOL move forward with the Data Center Consolidation Initiative as one Department to ensure alignment and integration with the multiple Federal and DOL-wide initiatives, including the Secretary's desire to create an exemplary green building.

Thank you for your cooperation on this Department-wide effort.