Audit of GSA's Implementation of the Federal Data Center Consolidation Initiative

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Chief Information Officer (I)

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SUBJECT: Audit of GSA's Implementation of the
Federal Data Center Consolidation Initiative
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This report presents the results of our audit of the General Services Administration's (GSA) implementation of the Federal Data Center Consolidation (DCC) Initiative.

The audit objectives were (1) to determine if GSA's DCC Plan addresses the requirements of the Federal DCC Initiative and (2) to evaluate GSA's current progress implementing its DCC Plan and stated goals.

GSA has addressed the initial requirements of the Federal DCC Initiative with the submission of its DCC Plan to the Office of Management and Budget (OMB). The September 2011 DCC Plan stated that in calendar year 2011, three data centers would be consolidated through server consolidation/decommission. While GSA did reduce the physical footprint of three data centers they planned to consolidate in 2011, the agency is restarting the DCC process to adequately address changes to the scope of the Federal DCC Initiative.

See *Appendix A* – Purpose, Scope, and Methodology for additional details.

On behalf of the audit team, I would like to thank you and your staff for your assistance during this audit. Since this report does not contain findings or recommendations, a written reply is not required nor is the report subject to the audit resolution process.

If you have any questions regarding this report, please contact me or the Auditor-in-Charge at the following:

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Background

In February 2010, OMB's Federal Chief Information Officer (CIO) launched the Federal DCC Initiative with the aim of decreasing redundant, costly, inefficient, and unsustainable information technology (IT) infrastructure throughout the Federal Government. The focus of the Federal DCC Initiative is to:
- Promote the use of Green IT by reducing the overall energy and real estate footprint of government data centers;
- Reduce the cost of data center hardware, software, and operations;
- Increase the overall IT security posture of the Government; and
- Shift IT investments to more efficient computing platforms and technologies.

Initial guidance from OMB's Federal CIO called for agencies to inventory current data center assets, develop consolidation plans throughout fiscal year 2010, integrate those plans into agency fiscal year 2012 budgets, and consider how those plans would be included in future budget submissions. However, this initial guidance did not include specific details as to what constituted a data center for the purposes of the Federal DCC Initiative.

In October 2010, OMB's Federal CIO updated the Federal DCC Initiative guidance by instructing agencies to consider any room greater than 500 square feet and devoted to data processing as a data center. However, the scope of the Federal DCC Initiative was subsequently expanded to include the definition of a data center as any space used for the storage, management, and dissemination of data and information. Although OMB's Federal CIO announced the change to the public and federal agencies in October 2011, an official revision to the prior guidance was not issued to federal agencies until March 19, 2012. While the change of scope was expected to affect the progress agencies were making, the benefit of a more efficient Federal Government was considered paramount.

Results

GSA has addressed the initial requirements of the Federal DCC Initiative with the submission of its DCC Plan.[1] In its September 2011 DCC Plan based on the October 2010 guidance, GSA identified 15 regional data centers and 6 externally-hosted sites in its asset inventory. According to this DCC Plan, between calendar years 2011 and 2015, GSA would consolidate most of its data processing within three primary data centers. By reducing the physical footprint of the other data centers, GSA could then remove these centers from its inventory.

GSA has taken action to implement its plan and reduce the physical footprint of three data centers. GSA worked on implementing its 2011 DCC Plan at the data centers

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[1] All federal agencies submit their DCC Initiative deliverables to the GSA Federal DCC Initiative Program Management Office (PMO) for preliminary review. If the GSA Federal DCC Initiative PMO determines the deliverable is acceptable, it is then forwarded to OMB for final review.

located in regions 1, 8, and 10 during calendar year 2011. In these locations, GSA reduced the physical foot print of the data centers to less than 500 square feet, installed advanced energy meters, and decreased the number of servers in its inventory.

However, GSA's 2011 DCC Plan does not sufficiently address the updated Federal DCC Initiative implementation guidance issued by OMB's Federal CIO in March 2012. In particular, the new guidance changed the definition of what should be classified as a data center and as a result, GSA is re-evaluating its operations and developing a new plan on how it will address and implement the Federal DCC Initiative.

In developing its new DCC Plan, GSA will be revising its baseline inventory and establishing new goals and milestones that will address the expanded scope of the Initiative. GSA has also taken steps to centralize the coordination of implementing the Federal DCC Initiative across its services and regions and plans to address the shortfalls (e.g., incomplete asset inventory) noted by two Government Accountability Office (GAO) reports[2] in its revised DCC Plan. GSA's revised DCC Plan is due to OMB by September 30, 2012.

Conclusion

Due to the changes that will be made to GSA's DCC Plan as a result of the updated Federal DCC Initiative guidance, no recommendations are being made at this time. We may choose to review GSA's revised DCC Plan after it is submitted to OMB to evaluate how the baseline inventory and strategies have changed and determine if GSA is addressing the new Federal DCC Initiative requirements.

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[2] GAO-11-565 *Data Center Consolidation: Agencies Need to Complete Inventories and Plans to Achieve Expected Savings* dated July 2011 *and* GAO-12-742 *Data Center Consolidation: Agencies Making Progress on Efforts, but Inventories and Plans Need to Be Completed* dated July 2012. Both reports indicated GSA was missing, or had not completed, key elements in its plan.

Appendix A – Purpose, Scope, and Methodology

Purpose

This audit was included in the GSA Office of Inspector General (OIG) annual audit plan due to its correlation to GSA's Management Challenges in the areas of Information Technology and Greening Initiative - Sustainable Environmental Stewardship.

Scope

We reviewed GSA's Federal Data Center Consolidation Initiative implementation goals for calendar year 2011.

Methodology

To accomplish our objectives, we:

- Reviewed background information on the Federal DCC Initiative including executive orders, presidential directives and memorandums, congressional legislation, OMB and GSA guidance, GAO and other agency OIG reports, and private industry white papers/best practices;
- Met with GSA's Office of the CIO agency officials responsible for coordinating GSA's DCC effort;
- Obtained GSA's 2011 Data Center Consolidation Plan & Progress Report; and
- Obtained and reviewed supporting documentation on GSA's DCC effort.

We conducted the audit between April 2012 and August 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Internal Controls

We limited our assessment of internal controls to those related to GSA's process to consolidate the individual data centers. Furthermore, we obtained the Lessons Learned document, which is periodically updated, and the new processes being developed as the agency continues to implement the Federal DCC Initiative. We determined the controls to be effective and made no recommendations.

Appendix B – Report Distribution

Chief Information Office (I)

Division Director, GAO/IG Audit Response Division (H1C)

Audit Liaison, Office of the Chief Information Officer (I)

Assistant IG for Auditing (JA)

Deputy Assistant IG for Investigations (JID)

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