



Office of Audits  
Office of Inspector General  
U.S. General Services Administration

IMPLEMENTATION REVIEW OF ACTION PLAN

Audit of GSA's Transition  
from Lotus Notes to the Cloud  
Report Number A120131/O/F/F12004  
September 28, 2012

*Assignment Number A150134  
December 23, 2015*



---

**Office of Audits  
Office of Inspector General  
U.S. General Services Administration**

---

DATE: December 23, 2015

TO: David Shive  
Chief Information Officer (I)

FROM: Susan P. Hall *Susan P. Hall*  
Audit Manager  
Real Property and Finance Audit Office (JA-R)

SUBJECT: Implementation Review of Action Plan  
Audit of GSA's Transition from Lotus Notes to the Cloud  
Report Number A120131/O/F/F12004  
September 28, 2012  
*Assignment Number A150134*

We completed an implementation review of the management actions taken in response to the recommendations contained in the subject audit report (see **Appendix A**). The objective of our review was to determine whether the Office of GSA IT<sup>1</sup> has taken the corrective actions as outlined in the action plan for the *Audit of GSA's Transition from Lotus Notes to the Cloud*. To accomplish our objective we:

1. Examined documentation submitted by the Office of GSA IT supporting completion of the action plan steps;
2. Performed limited testing of the corrective actions outlined in the action plan; and
3. Interviewed and corresponded with Office of GSA IT personnel.

Our implementation review found that the Office of GSA IT (GSA IT) did not fully implement all of the steps in its action plan, dated November 5, 2012. As a result, a revised action plan addressing these open recommendations must be submitted within 30 days to the GAO/IG Audit Response Division (H1C).

If you have any questions regarding this report, please contact me or any member of the audit team at the following:

Susan Hall     Audit Manager     [susan.hall@gsaig.gov](mailto:susan.hall@gsaig.gov)     (202) 501-2073  
Felicia Silver     Auditor-In-Charge     [felicia.silver@gsaig.gov](mailto:felicia.silver@gsaig.gov)     (202) 501-1360

---

<sup>1</sup> The original audit report was issued to the Office of the Chief Information Officer. This office was recently renamed the Office of GSA IT.

On behalf of the audit team, I would like to thank you and your staff for your assistance during this review.

## Background

On December 9, 2010, the U.S. Chief Information Officer issued the *25 Point Implementation Plan to Reform Federal Information Technology Management*. The purpose of the plan is to assist agencies in leveraging information technology to create a more efficient and effective government and deliver more value to the American taxpayer. A major facet of the plan is the “Cloud First” policy, which required that each agency Chief Information Officer identify three services that must move to cloud solutions and retire the corresponding legacy systems. GSA identified email, power management services, and correspondence tracking as the three services to be migrated to the cloud environment.

GSA migrated its email system (Lotus Notes) to reduce its in-house system maintenance burden and provide its users with the most up-to-date commercial service offerings. In December 2010, GSA awarded a firm-fixed price contract for the acquisition of email and collaboration services to Unisys. This migration was expected to provide faster upgrades, reduce management costs, curtail the need for lengthy and costly procurements of information technology assets, and improve customer service. In addition, users would have access to collaboration tools such as Google Docs, Google Calendar, and Google Sites. GSA estimated that it would save about \$15 million over five years from the email transition.

On September 28, 2012, we issued an audit report, *Audit of GSA’s Transition from Lotus Notes to the Cloud* to the GSA Chief Information Officer. The purpose of the audit was to determine whether: (1) the transition of email and collaboration tools to cloud services incorporated adequate performance measures and sufficient cost justifications to realize the stated goals; and (2) the transition of existing Lotus Notes applications to other platforms, including cloud platforms, incorporated project management controls necessary for retiring Lotus Notes in a timely manner.

Our audit found:

- Some aspects of the projected cost savings for the transition could not be verified because the Office of the Chief Information Officer (OCIO) had not updated the cost analysis or maintained the supporting documentation.
- The OCIO could not fully assess whether the transition project was accomplishing its goals because the performance measures were unclear, lacked targets, or were not updated.
- The OCIO did not perform an enterprise-wide assessment of the applications migrating to the cloud for redundancies, which could result in wasted resources.

To address the identified issues, we recommended that the Chief Information Officer:

1. Prepare an updated analysis/justification regarding the email and collaboration tools' project savings using actual figures and implement procedures for updating documentation related to the project savings analysis on a regular basis, as well as when significant changes occur.
2. Develop and implement a comprehensive performance measurement program to effectively monitor the progress of the email and collaboration tools' transition project in accomplishing the project objectives and goals.
3. Conduct an assessment of the current cloud environment to identify duplicate applications and take necessary actions to consolidate or eliminate any redundancies.

The former Chief Information Officer agreed with the report recommendations.

## **Results**

Our implementation review found that the following corrective actions have not been taken.

### Recommendation Number 1

GSA IT projected that the transition of the email and collaboration tools from Lotus notes to Google would save \$15 million over five years. However, the prior audit noted that GSA IT did not update the cost analysis associated with its projected cost savings. Additionally, GSA IT did not maintain supporting documentation for the cost analysis. As a result, the audit team was unable to verify whether GSA IT was achieving its projected savings.

As part of its corrective action for this recommendation, GSA IT provided a 5-year cost analysis comparing the Lotus Notes upgrade estimate, Google Apps migration estimate, and Google Apps actual costs. In addition, GSA IT was to provide updates of the cost analysis to the Office of Inspector General on a bi-annual basis and in the event of a significant change during the 5-year life cycle of the contract. The action plan also noted that GSA IT would provide instructions on how to update and manage the documentation related to the cost analysis.

We requested the bi-annual updates and instructions cited in the action plan since these documents were not in GSA's audit resolution tracking system. GSA IT provided all bi-annual updates to date. However, GSA IT did not provide the instructions on how to update and manage the documentation for the cost analysis. The bi-annual updates were Excel files that contained a cost summary worksheet, which reflected the projected and actual cost savings throughout the life of the project based on the most recent costs

at the time of the bi-annual update. The overall files were supported by worksheets for categories such as contract labor and government employee costs.

We did not verify the figures in the cost summary or related worksheets by comparing them to supporting records. Therefore, we offer no opinion on the accuracy of the cost savings figures. However, we did examine the Excel files to determine how the cost figures in the supporting worksheets generated the totals on the cost savings summary worksheet.

We found multiple discrepancies in the cost savings analysis updates. For example, amounts in the cost summary worksheet did not match the supporting worksheets. In addition, there were cost categories in the cost summary worksheet with no supporting worksheets. We sent these discrepancies to GSA IT for clarification. GSA IT responded with a second set of updates. This set also contained variances between the cost summary worksheet and supporting worksheets. We again requested clarification and GSA IT sent a third set of updates. The third set included updated figures on the cost summary worksheet that reconciled with the cost figures on all the supporting worksheets. The third set also included supporting worksheets for all cost categories in the cost summary worksheet. From the first to third set of cost savings analysis, GSA IT revised the projected cost savings from \$15.4 million to \$19.1 million. Therefore, our inquiries resulted in a \$3.7 million increase in GSA IT's projected cost savings. This raises questions regarding the sufficiency of the procedures GSA IT used in preparing the cost savings analysis, as our basic reconciliations resulted in a significant revision to the projected cost savings.

Despite several requests, GSA IT did not provide the instructions on how to update and manage the documentation related to the cost analysis. A GSA IT official confirmed that no procedures were developed for the cost analysis updates. Without the procedures for updating the cost analysis, we could not determine the basis for the multiple discrepancies we identified. Implementing appropriate procedures could assist GSA IT in preparing an accurate cost analysis that reflects the full savings from the transition from Lotus Notes to the cloud. These procedures would be especially useful in the event of employee turnover; to ensure the staff can complete the cost analysis updates accurately and consistently.

### Recommendation Number 2

GSA IT established four goals for the email and collaboration tools transition project: 1) modernization of email; 2) provision of an effective, collaborative environment; 3) reduction of the government's in-house system maintenance burden; and 4) application of appropriate security and privacy safeguards. Our 2012 audit found that GSA IT could not fully assess whether the transition project was accomplishing these goals because the performance measures were unclear, lacked targets, or were not updated. We recommended that GSA IT develop and implement a comprehensive performance measurement program.

As part of its corrective action for this recommendation, GSA IT stated it would revise the performance measurement program related to the email modernization including measures and metrics associated with each goal and examine and update the figures annually, if necessary.

We asked GSA IT officials if they had examined and updated the performance measurement program. GSA IT officials informed us that the original performance measurement program submitted with the action plan did not need to be updated since it was specific to the transition from Lotus Notes to the cloud; and that transition ended in June 2011.

However, Goal 2 of the performance measurement program submitted with the action plan included a 2012 survey that assessed end users' adoption of cloud-based collaboration products, such as Google Talk and Google Docs. The performance measurement program stated that GSA IT will "continue to conduct this survey on a yearly basis to track adoption of cloud based collaboration products." When asked if additional surveys were conducted to track the adoption trends of cloud-based collaboration products, GSA IT informed us that its current performance measure relates to the availability of Google Apps. However, GSA IT did not provide us with a revised performance measurement program reflecting this or any other changes. Without conducting additional surveys since 2012, GSA IT does not know if the GSA end users' adoption of cloud-based collaboration products has increased, decreased, or remained the same. Additionally, as noted in our 2012 report, without adequate performance measures, the GSA IT cannot fully assess how well the transition project is progressing in accomplishing its goals or determine areas in need of improvement.

## **Conclusion**

Our implementation review found that the Office of GSA IT did not fully implement all of the steps in its action plan, dated November 5, 2012. As a result, a revised action plan addressing these open recommendations must be submitted within 30 days to the GAO/IG Audit Response Division (H1C).

## Appendix A – Action Plan for Report Number A120131/O/F/F12004

### Action Plan

Designated Responding Official: [REDACTED]

Contact Person: [REDACTED]

Telephone Number: [REDACTED]

Date: 11/05/2012

Audit Report Number and Title	Recommendation Number	Proposed Recommendation Completion Date
Report Number A120131/O/F/F12004 GSA's Transition From Lotus Notes to the Cloud	1	October 31, 2013

**Recommendation:** Prepare an updated analysis/justification regarding the email and collaboration tools project savings using actual figures and implement procedures for updating documentation related to the project savings analysis on a regular basis, as well as when significant changes occur.

<u>Action to be Taken Step by Step</u>	<u>Supporting Documentation To be sent to H1C</u>	<u>Documentation Will be Sent Last Day of</u>
1. Develop an updated analysis using original estimates to compare Domino upgrade estimate, Google Apps migration estimate, and Google Actual costs.	GSA has developed an updated 5 year cost analysis comparing the original Domino upgrade estimate, Google Apps Migration estimate and the Google Apps Actual costs (and projects for the out years). We are attaching the outcomes of this analysis in the file outlined below.  The analysis clearly shows that GSA is on track to save over \$15M over the 5 year project life cycle by migrating to Google Apps.  1. OIG Audit Response Costing – Estimate vs. Actual Analysis.xls	<b>COMPLETED</b> <b>November 15, 2012</b> <b>Attachment # 1</b>   OIG Audit Response Costing - Estimate vs
2. OCIO will provide instructions on how to update and manage the documentation related to the project savings analysis. Updates to the project savings documentation will be provided on a bi-annual basis ( each	1. OCIO will provide updates to the attached analysis to the OIG based on actual costs on a bi-annual basis. The initial analysis is attached as "OIG Audit Response Costing - Estimate vs. Actual Analysis.xls." Updates	Jan 2013 and September 2013, ongoing

**Appendix A – Action Plan for Report Number A120131/O/F/F12004 (cont.)**

Q2 and Q4), as well as when significant changes occur.	will also be provided in the event of a significant change through the five year life cycle of the contract. Procedures on how to update this document are provided as costing_update_procedures.docx	
--	---	--

**Appendix A – Action Plan for Report Number A120131/O/F/F12004 (cont.)**

**Action Plan**

Designated Responding Official: [REDACTED]  
 Contact Person: [REDACTED]  
 Telephone Number: [REDACTED]  
 Date: 11/05/2012

Audit Report Number and Title	Recommendation Number	Proposed Recommendation Completion Date
Report Number <b>A120131/O/F/F12004</b> GSA's Transition From Lotus Notes to the Cloud	2	<b>COMPLETED</b> <b>November 23, 2012</b>

Recommendation: Develop and implement a comprehensive performance measurement program to effectively monitor the progress of the email and collaboration tools transition project in accomplishing the project objectives and goals.

<u>Action to be Taken Step by Step</u>	<u>Supporting Documentation To be sent to H1C</u>	<u>Documentation Will be Sent Last Day of</u>
1. OCIO will revise the performance measurement program related to the Enterprise email modernization project including measures and metrics associated with each goal. These measures will be examined and updated annually if required to ensure that they still provide meaningful results.	OCIO has revised the performance management program related to this project and is attached with this response:  1 - "Lotus Notes migration to cloud - Project performance management program.PDF"	<b>COMPLETED</b> <b>November 23, 2012</b> <b>Attachment # 2</b>   Lotus Notes migration to cloud-Prt

**Appendix A – Action Plan for Report Number A120131/O/F/F12004 (cont.)**

**Action Plan**

Designated Responding Official: [REDACTED]  
 Contact Person: [REDACTED]  
 Telephone Number: [REDACTED]  
 Date: 11/05/2012

Audit Report Number and Title	Recommendation Number	Proposed Recommendation Completion Date
Report Number <b>A120131/O/F/F12004</b> GSA's Transition From Lotus Notes to the Cloud	3	<b>COMPLETED</b> November 23, 2012

Recommendation: Conduct an assessment of the current cloud environment to identify duplicate applications. Take the necessary actions to consolidate or eliminate any duplicate applications that are identified through the assessment.

<u>Action to be Taken Step by Step</u>	<u>Supporting Documentation To be sent to H1C</u>	<u>Documentation Will be Sent Last Day of</u>
1. OCIO will perform an enterprise-wide inventory of the applications migrated to the cloud.	OCIO has developed an inventory of all legacy Domino applications migrated to the cloud to date. The inventory and associated details are attached  1. "Salesforce Cloud Application Inventory.xls"	<b>COMPLETED</b> <b>November 23, 2012</b> <b>Attachment # 3</b>   Salesforce cloud application inventory.
2. OCIO will conduct an assessment of the current cloud environment to identify duplicate applications and take the necessary actions to consolidate or eliminate any duplicate applications that are identified through the assessment.	OCIO has developed an analysis of the applications deployed to the cloud and concurs that one duplicate application exists. Actions have already been taken to eliminate this duplication. Moreover, OCIO has verified that further duplication does not exist. Detailed analysis is included in the attachment labeled:  1. "Salesforce Cloud Application Analysis.PDF"	<b>COMPLETED</b> <b>November 23, 2012</b> <b>Attachment # 4</b>   SalesforceCloudApplicationAnalysis.pdf
3. OCIO will ensure that appropriate controls are in place to prevent duplicative application	1. GSA will rely on the Cloud Center of Excellence (COE) to analyze each incoming	<b>COMPLETED</b> <b>November 23, 2012</b>

**Appendix A – Action Plan for Report Number A120131/O/F/F12004 (cont.)**

development in the cloud environment.	business requirement and ensure applicative applications are not developed. The COE Charter as finalized on June 14, 2011 is attached.  1) "COE Charter.PDF"	<b>Attachment # 5</b>   COE Charter.pdf
---------------------------------------	--	---

---

## ***Appendix B – Report Distribution***

---

Chief Information Officer (I)

Associate CIO of the Office of Financial and HR IT Services (IB)

Associate CIO of Public Buildings Information Technology Services (IP)

Associate CIO of Acquisition IT Services (IQ)

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

Audit Liaison, GSA IT (IA)

Assistant IG for Auditing (JA)

Deputy Assistant IG for Investigations (JID)

Director, Audit Planning, Policy, and Operations Staff (JAO)