

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

0150-08813-0006

Date: July 9, 2010

To: Chair, Information Technology and Government Affairs Committee

From: Miguel A. Santana, City Administrative Officer

Subject: **SECOND STATUS REPORT ON THE IMPLEMENTATION OF THE GOOGLE E-MAIL AND COLLABORATION SYSTEM (C.F. 97-1714)**

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On October 27, 2009, the City Council approved a request from the Information Technology Agency (ITA) to negotiate a contract with the Computer Science Corporation (CSC) to replace the City's GroupWise e-mail system with Google's e-mail and collaboration system. At the time, the City Council instructed this Office to report back to the Information Technology and Governmental Affairs Committee with periodic status reports regarding the implementation process.

On April 13, 2010, this Office submitted an initial status report on the implementation of the system that addressed:

- The establishment of a working group comprised of this Office, the Office of the Chief Legislative Analyst, the Office of the Mayor, ITA, the Office of City Attorney, the Los Angeles Police Department, and other City departments as necessary;
- Google system feature and performance concerns that had been identified by the initial 2,405 users of the system that caused the working group to expand the number of participants in the pilot and extend its termination; and,
- Concerns that several security features required for Los Angeles Police Department (LAPD) implementation had not yet been resolved.

Since our last report, progress has been made towards resolving the performance and features concerns, as well as the security issues raised by LAPD and other City law enforcement entities in the City (.e.g. Office of Public Safety; City Attorney). LAPD, ITA and CSC/Google are developing plans to begin implementation of interim security requirements acceptable to the State of California, Department of Justice (DOJ) within the first quarter of FY 2010-11. According to the schedule provided by CSC/Google, the final LAPD security requirements will be fully implemented by December 31, 2011.

This revised LAPD schedule will require retaining GroupWise licenses for at least one quarter of 2010-11. The cost of retaining the licenses and associated applications for both LAPD and the remaining 6,000 City employees that have not yet migrated is \$135,000. Given that ITA is reasonably confident that interim solutions to the LAPD security issues can be implemented in time to allow their migration within the first quarter of 2011-11, it is recommended that the remaining 6,000 City employees be migrated at this time. This will

minimize additional costs in the event that the LAPD migration is delayed beyond the first quarter.

If LAPD is unable to migrate before the end of the first quarter, the City will incur additional costs ranging from \$66,150 to \$147,150 per quarter, as detailed further in this report, up to a maximum of approximately \$414,450 for the full fiscal year. Discussions are currently underway with CSC/Google concerning cost sharing of the increased costs related to the delays in implementation.

Security Issues

In order for the LAPD and other selected law enforcement entities to use the Google system, data on the system must be secured in a manner that complies with state and federal requirements. The LAPD's compliance with these requirements is evaluated by the DOJ. The City has worked closely with DOJ and CSC/Google since prior to the contract's execution to ensure that Google's security features would meet the DOJ requirements. Through these efforts, the general security requirements were defined as follows:

- Data encryption;
- Segregation of City data from other data maintained by Google;
- Data storage only within the continental United States; and,
- Background checks for all Google employees with access to LAPD data.

These requirements differed from Google's standard features. As a result, Google introduced a new security offering, called "Gov Cloud," to meet the requirements. "Gov Cloud" was supposed to be fully implemented by the Spring of 2010 to enable the City to fully migrate by June 30, 2010. Through "Gov Cloud," Google has implemented many, but not yet all, of the required security features. Currently there continue to be issues with the e-Discovery application and the development of audit utility requirements. These features relate to the ability of LAPD to manage access to City data by Google employees, and storage of archived data in "Gov Cloud." Google states it will fully implement all required security features by December 31, 2011. The LAPD cannot migrate to the new system until these security issues are resolved or interim solutions are put in place.

There is no proactive software security for the "Gov Cloud" servers. This continues to be an issue of concern for both the LAPD and the DOJ. Google has agreed that two employees and a supervisor will be assigned responsibility for supporting the LAPD data following the migration, and that these three employees will be subject to DOJ-approved background checks. However, other Google employees not dedicated to the support function will also be able to access LAPD data without authorization; limited only by current company policy. Google indicates it will not subject these employees to the required background checks, nor can it develop access control restrictions to prevent employees who have not passed DOJ-background checks from accessing the data. Instead, Google has a policy restricting unauthorized employees from accessing the LAPD data and Google has offered to submit quarterly audits to the LAPD confirming there has been no unauthorized access by Google employees.

It is a contractual requirement that CSC/Google provide the City with the ability to log access to all City data by non-City staff (Section 1.1.10.3). Pursuant to this contract provision, LAPD has requested that it be given the ability to audit Google's employees' access of LAPD data at any time it chooses. Google has agreed to this request, and has stated that it will complete the development of the audit tool by December 31, 2011. As an interim measure, pending development and implementation of the audit tool, LAPD and ITA contacted DOJ to determine whether Google's self-audits would be adequate to meet its security requirements. If they are not, LAPD migration cannot occur until early 2012 to allow time for testing of the audit tool. As of July 6, 2010, ITA and LAPD are continuing to work with CSC/Google to develop an interim audit process acceptable to DOJ.

The contract also requires CSC/Google to segregate City data from other non-government data, and to store e-mail and e-Discovery data in the continental United States (Section 1.1.10.1 and 1.1.10.4). The e-Discovery feature maintains a pristine record of all e-mails received and sent regardless of whether they have been deleted by the user. While e-mail and e-Discovery data does currently reside in the continental United States, not all City data is segregated from other non-government data maintained by Google. CSC/Google intends to achieve this through Google's development of "Gov Cloud." The following table illustrates the dates by which data stored on Google's system will be segregated from other non-government data on the "Gov Cloud:"

<u>Data Source</u>	<u>Date of Segregation in "Gov Cloud"</u>
E-mail	June 21, 2010
Calendar	June 21, 2010
Google Sites (website development)	June 30, 2011
Google Docs (office applications)	March 31, 2011
E-Discovery	June 30, 2011
Video	Not planned for segregation

The LAPD has disabled Google Sites and Google Docs, and has chosen not to store video on Google's system. However, it cannot use Google's e-mail system without using Google's e-Discovery system as well. LAPD policy requires retention of all e-mail for three years. This is only possible in the Google system through the use of e-Discovery. Since LAPD must use e-Discovery, it can only migrate to Google's system once e-Discovery resides on "Gov Cloud", or an interim solution, acceptable to DOJ can be implemented. An interim solution is currently under development.

As of July 6, 2010, LAPD, ITA and CSC/Google continue work toward resolving the outstanding issues relating to e-Discovery and the new audit utility. The LAPD stated that it intends to release a separate report to the City Council with a more detailed, technical discussion of the security concerns briefly described here. That report was not released in time to review and address in this report.

Additional Costs

Implementation of the Google system for the LAPD has been delayed until all security requirements are met, either with suitable interim solutions or the permanent solutions. In addition, while approximately 10,200 employees from other City departments have already migrated to Google, approximately 6,000 additional employees are still using GroupWise. It

should be noted that while LAPD cannot use the system until its security requirements are met, the contract's security provisions apply to all City data, not just LAPD data.

The continued need for GroupWise will result in additional unbudgeted costs. The City must continue to pay for GroupWise licenses and its supporting applications. No funding for this purpose was included in the 2010-11 Budget. ITA will continue to dedicate one employee to provide ongoing support for GroupWise. ITA will absorb the workload without receiving an additional position authority or funding. The potential 2010-11 payments for GroupWise for both LAPD and the remaining City staff range from approximately \$135,000 to \$414,800 depending on how long City staff continue to use it. The costs by quarter, and cumulative costs are summarized below.

2010-11 Potential Costs by Quarter

<u>Application</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
GroupWise Licenses	\$ 94,500	\$ 66,150	\$ 66,150	\$ 66,150
Associated Applications	40,500	81,000	0	0
<i>Total Cost by Quarter</i>	<u>\$ 135,000</u>	<u>\$ 147,150</u>	<u>\$ 66,150</u>	<u>\$ 66,150</u>
<i>Cumulative Cost by Quarter</i>	\$ 135,000	\$ 282,150	\$ 348,300	\$ 414,450

The annual GroupWise licensing costs assume 20,000 licenses (14,000 for LAPD and 6,000 non-LAPD) at the quarterly rate of approximately \$4.73 per license for the first quarter. The associated applications must be paid annually, and the pricing above reflects the quarter in which the renewals must be paid. Beginning with quarter two, the GroupWise license cost reflects LAPD only as we recommend migrating the remaining 6,000 City employees.

ITA has indicated that CSC/Google may request additional resources for its continued support of the City's migration to Google during 2010-11. Since the contract executed was a fixed price for the service of implementing the Google system, this Office does not believe that additional payments should be required unless the City expands the scope of work, which it has not done. This Office recommends that CSC/Google should share in the City's costs resulting from the implementation delays. Discussions relative to cost-sharing for these increased costs are ongoing with CSC/Google.

The contract envisions the City's use of Google's e-Discovery feature, but it is now apparent that it will not be used in the near future. LAPD will not use the e-Discovery feature until it migrates to Google. The use of e-Discovery by other City departments for e-mail retention is a policy matter requiring further action by your Council. We recommend that ITA be directed to report on a Citywide e-mail retention policy and the use of e-Discovery by other City departments.

System Features and Performance Updates

In the first status report, this Office reported that ITA was in the process of compiling a list of features that are available in the GroupWise system but absent from the Google system that City users would like to have included as enhancements to future versions. With the assistance of City departments, the Working Group compiled, prioritized, and

submitted a list of these features to CSC/Google. Of the eight highest priority items submitted to CSC/Google, six are now planned for incorporation in future versions by September 30, 2011 (Attachment). The remaining two require ITA to develop a companion application and cannot be addressed through changes to the Google system. The working group continues to actively include City departments in its discussions, and will continue to monitor issues related to the system's features. New issues and concerns continue to arise, and are discussed at the working group meetings and with CSC/Google for assistance and potential resolution.

In the first status report, this Office reported that users of the new system raised performance concerns focused primarily on the slowness with which e-mails were sent, received, and accessed in the new system. There continue to be performance problems with Google where e-mails are not delivered in a timely fashion. Delays of one to 18 hours have been reported by users. ITA indicates that these delays are primarily the result of the use of two separate e-mail systems and that full implementation of the new system should resolve all delay issues. This Office is in the process of administering a survey for all of the City's Google users which is intended in part to determine the degree to which performance continues to be a concern.

The working group will continue to assess implementation of the Google system and this Office will report back to the Committee in the near future.

RECOMMENDATIONS

That the City Council:

1. Instruct the Google Implementation Working Group to delay the implementation of the Google e-mail and collaboration system for the Los Angeles Police Department until all security requirements are met;
2. Instruct the Information Technology Agency to begin migration of the remaining 6,000 City employees as soon as feasible but no later than the end of the first quarter of FY 2010-11;
3. Instruct the Information Technology Agency, with the assistance of the Google Implementation Working Group, to request that the Computer Science Corporation and Google share in the costs that will be incurred by the City as a result of these delays, and process any necessary contract amendments to implement; and,
4. Instruct the Information Technology Agency to report back on a Citywide policy e-mail retention and the use of e-Discovery by departments other than the Los Angeles Police Department.

FISCAL IMPACT STATEMENT

Delaying the implementation of the Google system, as recommended in this report, will result in additional costs associated with maintaining the City's current e-mail system for 20,000 City e-mail accounts for the entire year from \$135,000 to \$414,450 in 2010-11. The costs depend on the length of the delay. No funds are budgeted for this purpose.

It is also recommended that the Information Technology Agency, with the assistance of the Google Implementation Working Group, request that the Computer Science Corporation and Google share in the costs incurred by the City as a result of delaying implementation. These cost-sharing discussions have already begun with CSC/Google. Therefore, the recommendations in this report comply with the City's Financial Policies.

MAS: JWW:08100342c

Status (See Note for Status Definitions)	Item	Item Description	In Production (Date*) (See Note 1 for Status Definitions)	Alternate/Interim Strategy
In Development	4	Print Format for Single Appointment: Ability to print a formatted doc for a single appointment	Status: In Development Target: on or before March 31, 2011	Right click within the appointment and select print.
In Development	8	No read receipt (individual emails): Ability to request read receipts (return emails sent after item is opened) for emails sent.	Status: In Development Target: on or before March 31, 2011 Notes: (a) Feature will be implemented as a configuration option to (i) force read receipt; or (ii) allow recipients to decline read receipt. This configuration will be set as a policy at the domain or group level. (b) Read receipt notifications may or may not become part of the related email thread. Labels and filters can be used to isolate read receipt notifications.	For group mailings where an acknowledgement is required, ITA will set up an API-based tool such as the one used for eSubpoena.
On Roadmap	2	Rich contact information on hover: Ability to see more contact information on hover of contact, without having to go to specific contact. (Department, Location, and phone would be great)	Status: On Roadmap Target: on or before June 30, 2011	
On Roadmap	7	Setting priority on an e-mail: Can utilize a representative word in the Subject, like ACTION", "IMPORTANT", "CONFIDENTIAL" <i>Clarification: the language "Can utilize a representative word in the Subject, like "ACTION", "IMPORTANT", "CONFIDENTIAL" is ITA's suggested solution for characterizing certain email messages.</i>	Status: On Roadmap Target: on or before June 30, 2011 Note: This will be implemented as an 'Urgency flag' feature. Specifically, users will be able to mark a message at 2 priority levels: High and Low. This tag will be implemented such that it will be recognized by GMail as well as by other popular email systems	1. Can utilize a representative word in the Subject, like ACTION", "IMPORTANT", "URGENT", "CONFIDENTIAL". 2. Can utilize "Canned Responses: feature to place message attribute information at the beginning of the message. Create a filter to appropriately tag incoming messages which contain the representative word.

On Roadmap	6	BCC Indication: Ability to tell easily that you are a CC or BCC on an email sent to you.	Status: On Roadmap Target: on or before September 30, 2011	1. Set a filter and label to identify all email that comes into your inbox for cases where your email address is neither in the "TO" nor in the "CC" fields. 2. Use the "Personal Level Indicators" setting to indicate which messages in your Inbox have your email address in the "TO" "CC" or "BCC" fields.
Wish List	5	Sync Tasks to Blackberry: Ability to synch tasks to the blackberry devices	Status: Wish List No planned date Note: The Task feature within Google Apps is not intended to be a full-feature Task Manager. Full-feature, third party products may be considered for this functionality. Examples are: GQueues and Remember the Milk.	ITA will into implementing a full feature Task manager.
Declined	1	Confirm delivery Status: Ability to see delivery status for domain users. (For example: "opened", "Unread", and "Deleted:)"	Status: Declined No planned date Notes: (1) This feature has 2 elements to it: (a) ensuring a message sender of the delivery of a message; and (b) providing a message sender visibility to actions of the recipient. (2) Gmail will provide assurance of message delivery by providing the message sender notification regarding a failure to deliver. This functionality exists with most other emails systems. (3) The capability to know whether a recipient has opened a message will be met through the read receipt functionality described in Item 8.	The capability to know whether a recipient has opened a message will be met through the read receipt functionality described in Item 8. BOE-IT is working on an API to provide a delivery receipt.
Declined	3	File Send: Ability to utilize the file - send function of applications on the workstation.	Status: Declined No planned date Note: This functionality would be enabled by a piece of client-installed software (on Windows / OSX / etc.) that launches a default email application on users' machines.	ITA will look into developing the required client-installed software either through internal engineers or through a system integrator.

Note 1 - Status explanations:

- In Development. Engineering work is underway to deliver the feature.
- On Roadmap. Feature in queue to start engineering work. Target delivery date has been set.
- Wish List. Feature in queue to be reviewed by Google product management and engineering teams to determine alignment with overall product strategy and technical feasibility. Once review starts, status will be changed to Under Review.
- Declined. Feature will not be implemented after having been reviewed by Google product management and engineering teams either because it's misaligned with overall product direction or not technically feasible.