

STAFF REPORT ACTION REQUIRED

City of Toronto E-mail System Review – Progress Update

Date:	January 11, 2012
То:	Government Management Committee
From:	Chief Information Officer
Wards:	All
Reference Number:	P:\2012\Internal Services\I&T\gm12001i&t (AFS # 14910)

SUMMARY

The purpose of this report is to provide Government Management Committee with a progress update related to the review of the City's E-mail system. Included is a statement of the scope, approach and approximate timelines for the development of a comprehensive, consultant-assisted go-forward strategy that will be completed in 2012.

RECOMMENDATIONS

The Chief Information Officer (CIO) recommends that:

1. The Government Management Committee receive this report for information.

Financial Impact

There are no financial implications associated with this report.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting of September 15, 2011 the Government Management Committee approved a request by Chair Ainslie for the Information & Technology (I&T) Division and others to initiate a review of the City's E-mail system. http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.GM7.12

ISSUE BACKGROUND

The City has been using Novell GroupWise as the City-wide E-mail messaging system since 1998 after an RFP was initiated to consolidate various E-mail systems in use at the time of amalgamation.

Staff in the I&T Division periodically initiate reviews of products that have been in use in the City for a long time, to ensure that the technology deployed continues to serve the needs of the City in terms of overall value, including cost-effectiveness, business functionality, reliability and performance. A review specific to the Novell GroupWise system was planned and budgeted for 2012 and is consistent with Chair Ainslie's request.

COMMENTS

GroupWise E-Mail System Environment at City

The Novell GroupWise system consists of a licenced software product that has messaging, calendaring and other functionality. It is the City's primary business communications and messaging infrastructure and at this time is also used as a limited repository for business records. It is used by approximately 21,000 people in all divisions, as well as Members of Council, Accountability Officers and some of the City's agencies, boards, commissions and corporations (ABC's).

The messaging system is hosted at the City's data centre, on a high availability server and storage technology infrastructure. Integration must be maintained with the mobile BlackBerry devices as well as the new E-Mail archiving solution implemented in 2011. Three separate and distinct environments are maintained, one for Members of Council and their staff, one for Accountability Officers and one for City Divisions.

The largest City ABC's (Toronto Police Services, Toronto Transit Commission and Toronto Public Library) use Microsoft Exchange as their messaging system.

Industry Research into E-Mail Systems

I&T Division staff maintain their knowledge of various E-Mail/messaging systems through general research and use of established contracts for research services with Forrester and Gartner. Key research and consultation findings related to Novell GroupWise are summarized below:

- Novell GroupWise was purchased by Attachmate Inc. in early 2011.
- Attachmate continues to maintain Novell as a separate division and has expressed its commitment to GroupWise. Plans for the evolution of the Group Wise product

will be taken into account as part of the email strategy analysis. In particular, a more modern interface/email front-end of choice and improved integration will be looked at, given the challenges in the current GroupWise product.

- GroupWise has gradually lost market share over the past several years to key competitors, notably to Microsoft but also Google.
- Integration of GroupWise with 3rd party vendor products (such as RIM's BlackBerry) has been an issue, to date, for many corporations using GroupWise, due to market share erosion. These 3rd party vendors may give lower priority than GroupWise prime competitors when it comes to ensuring their software products continue to work as they are modified over time. This has been the City's experience as well.
- The majority of corporations continue to host their E-mail system in their own data centres.
- Strategic sourcing of E-Mail to external data centres is a slowly growing trend, particularly in the U.S. Advantages cited include possible lower costs (notably capital costs) for basic services. Concerns about security, privacy and reliability continue to be an issue, particularly in Canadian public sector organizations. Challenges with integration with archiving, BlackBerry and other solutions may eliminate the outsourcing cost advantage.
- The City's current cost per mailbox currently compares favourably with outsourced options (to be assessed in detail during the review noted below).
- Given the use of E-mail as a key part of messaging for many applications which is typical of large organizations (and consistent with the current situation at the City), migration to a new E-mail system/platform/service can be a major project and potentially costly. It is critical to gauge all of the risks and also work out a well planned change management approach, given that E-mail is the primary business tool for communications with staff and the public.
- Use of E-mail as a document storage system is not an optimal solution, with its limitations to meet life cycle management and other key information management requirements. Organizations, including the City, are moving to an Electronic Document Records Management System to replace E-mail for this functionality.
- Organizations are beginning to develop strategies for E-Mail as part of an overall collaboration strategy

E-Mail System Go-Forward Strategy Development

The I&T Division has initiated a project to undertake a comprehensive review of the current E-Mail system in order to conduct a cost-benefit and risk management analysis of

various options related to software products and service delivery approaches. This review, to be assisted by the competitive procurement of independent technical expertise described in the next sub-section of this report, will take into consideration total costs to implement and operate various alternatives that will ensure a balance between functionality, performance, cost, risks and accountabilities for managing City information.

Alternatives in service delivery approach will consider both maintaining an in-house based operation, versus strategic sourcing options. The latter will include a review of cloud-based computing for E-Mail. It will also include the lifecycle of the management of the information in the E-mail system.

The project team, who will work with the successful external consulting firm, will include representatives from: I&T Division, City Clerk's Office, City Manager's Office, Human Resources, Legal Services, and representative operating divisions such as Toronto Public Health, and others.

RFP for Strategy Development Assistance

The City has issued RFP Number 9144-11-7301, seeking an independent (i.e. not associated with any manufacturer or solution provider) consultant with relevant technical expertise in completing such work for large organizations, to assist in the development of the go-forward E-mail/messaging strategy.

The consultant will be responsible for the following phases/deliverables:

- Phase 1 Assessment of the City's messaging infrastructure and services. This
 will include reviewing the current installation, functions, capacity and limitations
 of the City's messaging technology. Also includes an environmental scan of Email systems used by major Canadian public sector organizations and the City's
 ABC's.
- 2. Phase 2 Assessment of key user requirements and corporate information management legislative, regulatory, security and privacy requirements and constraints.
- 3. Phase 3 Assessment of messaging provisioning options, including: evaluation of the current GroupWise installation's ability to meet current and future requirements including robust 3rd party product integration; data/content migration; evaluation of alternative provisioning methods such as in-house, offpremise hosting, cloud computing, and bundled provisioning options for mobile services. Staging options will also be considered. This phase will also include the development of comparative detailed cost-benefit and risk management analysis of these options for the preparation of recommendations and implementation plans.

- 4. Phase 4 Completion of a final report that documents all findings, conclusions and recommendations that will form the go-forward strategy and implementation plans.
- 5. Phase 5 If the approved go-forward strategy recommends a significant change, then the contract has a provision that allows City staff to engage the consultant for a final phase to assist with the preparation of a subsequent RFP for the implementation of a new messaging system and/or service delivery solution, as well as assist throughout the RFP process in terms of proposal evaluation.

Timing

The initial consultant RFP will close in January, 2012 and it is expected that the vendor evaluation and award could be completed by late Q1 with the contract execution and project commencement in early Q2. The Final Report, with solution recommendation is expected to be completed by Q4. The completion of a subsequent procurement call RFP for a new solution, if recommended and approved, would be ready for issuance by Q1, 2013 with an implementation project to follow.

The duration of an implementation project cannot be defined until the strategy has been developed; however, initial research indicates that for organizations of comparable size to the City, migration to a new E-mail system is a major change initiative that could take up to 18 - 24 months to complete from the time an implementation services contract was executed. This migration might possibly be eased by the potential implementation of a more modern E-mail front-end, to provide a better and more user friendly interface until the new E-mail system is in place. This will be looked at as part of the E-mail strategy analysis.

Budgeting for Possible Product and Data Content Migration

In the event that the go-forward strategy recommends a substantial change in the E-mail messaging product or/and delivery approach, there would be a number of significant costs associated with such a change, including data migration and integration testing with other City software applications. Estimates of various costs for such an implementation project will be included in the final report and approval for funding sought as part of I&T Division's 2013-2018 Capital Budget submission.

Ensuring State of Good Repair of Existing E-Mail System and Technology Infrastructure

In the meantime, the current E-mail system will remain critical to the operation of the City; it is heavily relied upon by staff for internal operations and communications with citizens. It must therefore be maintained in a state of good repair until the end of any potential transition to another product or/and service delivery method.

State of good repair activities include replacement of server hardware at the end of their useful life, as well as software upgrades. Significant software upgrades, beyond routine

maintenance or security patches, are planned to address major issues or introduce beneficial functionality. All GroupWise software product upgrades are typically included in the annual fees the City pays for software support and are rigorously evaluated and planned before deployment.

No significant investments will be made beyond those essential for state of good repair until the completion of the strategy review.

Conclusion

The future directions for City E-mail will form a significant strategic investment that will have to be considered in light of overall City business requirements and the supporting technology roadmap needs to be addressed in a comprehensive matter. The initiation of the E-Mail review project is intended to achieve this outcome.

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SIGNATURE

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