City of Mississauga
Corporate Report

MISSISSAUGA

Date: July 20, 2020	Originator's files:
To: Mayor and Members of Council	
From: Gary Kent, CPA, CGA, ICD.D, Commissioner of Corporate Services and Chief Financial Officer	Meeting date: August 5, 2020

Subject

City Wide Requirements for Virtualization Technology Software, Maintenance, Technical Support and Services – Adoption of Vendor of Record Province of Ontario Agreement "Tender 6718" (File Ref: PRC002464)

Recommendation

1. That Council approve the single source procurement for professional services, software licensing, maintenance and support for a period ending on July 24, 2021, with the option to extend the term for an additional two (2) one (1) year periods, as detailed in the corporate report entitled City Wide Requirements for Virtualization Technology Software, Maintenance, Technical Support and Services – Adoption of Vendor of Record Province of Ontario Agreement "Tender 6718", dated July 20, 2020, from the Commissioner of Corporate Services and Chief Financial Officer ("Purchase"), File Ref: PRC002464;

2. That the Purchasing Agent or designate be authorized to execute all contracts and related ancillary documents with respect to the Purchase between the City and OnX Enterprise Solutions Ltd. and between the City and TeraMach Technologies Inc. for an estimated combined amount of $1,183,927 exclusive of taxes, in accordance with the City's Purchasing By-law 374-06, as amended;

3. That the Purchasing Agent or designate be authorized to execute the necessary amendments to increase the value of the contracts between the City and OnX Enterprise Solutions Ltd. and between the City and TeraMach Technologies Inc. for professional services, software licensing, maintenance and support, including additional products, services, features, modules and systems, for the purpose of accommodating growth, if the funding for such contract increase has been approved by Council.

Report Highlights

- The City's virtual server landscape consists of approximately 900 systems in total, 765 pooled VMWare virtualized systems and 135 physical systems. Virtualization is a major

- driver and an important aspect of the decision to support ever-growing City business needs and requirements

- The City has standardised on VMWare architecture and leverages features and functionality to support High Availability (HA) system resiliency

- The Province of Ontario conducted an open and competitive procurement process, and as a result, on June 25, 2018 awarded TeraMach Technologies Inc. as the primary VMWare vendor and ONX Enterprise Solutions Ltd. as the successful Red Hat Solutions vendor

- The City has standardized with SAP financial systems since 1997. SAP HANA is the next major upgrade underway and servers that house the HANA databases are only supported by SAP on Enterprise Linux Operating Systems such as Red Hat

- The VOR Agreement provides cost certainty for Virtualization Technology Software

Background

The City of Mississauga's server infrastructure is currently managed by Information Technology's Infrastructure Services section and the majority of the servers contained within the data centres are virtual servers running on VMWare virtualization technology. Virtual host computers are large physical computers that emulate multiple operating systems (or servers) on a single physical computer. Virtual server technology has been around for a number of years and is a proven and robust technology that has many advantages over managing and supporting legacy style physical servers. Advantages include reduced cost, run cooler with less heat, faster deployment, faster migrations, improved data backup and recovery along with better resilience, high availability and disaster recovery. Currently, the City's virtual server landscape consists of approximately 900 systems in total, 135 physical systems and 765 pooled VMWare virtualized systems. Virtualization is a major driver and an important aspect of the decision to support ever-growing City business needs and requirements and VMWare has been market leader for many years in the virtualization space.

Increase in demand for open systems that provide enhanced security continues, requiring the City to utilize Red Hat Solutions for the deployment of Red Hat Enterprise Linux systems for mission critical applications such as SAP HANA Financial systems, Commvault Enterprise Backup Solutions, and Cloud Solutions. Tender-6718 of the Provincial Vendor of Record (VOR) program includes virtualization options selected through an open and competitive procurement process that align with the requirements and needs of the City's Infrastructure demands.

The City has standardized with SAP financial systems since 1997. SAP HANA is the next major upgrade underway and on-premises servers that house the HANA databases are only supported by SAP on Enterprise Linux Operating Systems. There are increasing demands for operating systems to be more resilient from system attacks by ransomware and malware which can only be mitigated through enhanced system security functionality. As a result, system vendors are now requiring Enterprise Linux to run their systems. Red Hat Solutions provides the agility to scale, and increased security and reliability. In 2019, the City upgraded its

Commvault Enterprise Backup Solutions using Red Hat Enterprise Linux to ensure enterprise backup systems are robust and secure.

Comments

The Virtualization Technology Software, Maintenance, Technical Support and Services available under Ontario's Vendor of Record (VOR) Arrangement # OSS Tender 6718 is a result of an open and competitive process completed by the Treasury Board Secretariat and awarded on July 25, 2018, for a period of three (3) years with an option to extend for two (2) additional one (1) year periods. Treasury Board Secretariat awarded TeraMach Technologies Inc. the successful vendor to provide VMWare licences and services and OnX Enterprise Solutions Ltd. the successful vendor to provide Red Hat licences and services.

The VOR Arrangement provides cost certainty for virtualization products and professional services and the City will be able to benefit as the awarded vendors on this VOR have previously completed a competitive process and will extend those prices already negotiated by the Province to the City.

The City will be required to enter into agreements with TeraMach Technologies Inc. and OnX Enterprise Solutions Ltd. to obtain the rates offered through the VOR Arrangement. These agreements will be in conjunction with the terms set out by the Province for a period of three (3) years, starting July 25, 2018 to July 24, 2021 for the initial term, with an option of the Ministry extending an additional two (2) one (1) year periods as outlined in the Ontario Vendor of Record Arrangement # OSS Tender 6718 – "Virtualization Technology Software, Maintenance, Technical Support and Services." The City may choose to expand the agreements to include any future software products, subscription licenses and professional services that are within the scope of the VOR Arrangement.

Staff recommends that Council also authorize the City to work with the vendors to add new items that are not part of the current VOR Arrangement, including professional services. The City will be able to use the existing terms and conditions as defined in the current VOR Ontario Agreements to obtain the best rate from the appropriate vendor for any required or expanded services. This will help reduce the amount of administration required for procurement of related Virtualization Technology by leveraging the currently completed competitive procurement process of the Province of Ontario.

Purchasing By-law Authorization

The recommendations in this report are made in accordance with Purchasing By-law 374-06, Schedule A, 1 (b) (vii) which states that "It is advantageous to the City to acquire the Goods and/or Services from a supplier pursuant to the procurement process conducted by another Public Body".

1. Information Technology, Materiel Management and Legal Services staff will collaborate to establish the detailed requirements, negotiate the final arrangements, prepare and execute the necessary contracts, and related ancillary documents with the vendors as

identified in this report, in accordance with the City's Purchasing By-law 374-06, as amended.

2. Materiel Management has reviewed and approved all Single Source justification forms that were submitted for ONX Enterprise Solutions Ltd. and TeraMach Technologies Inc.

Financial Impact

Information Technology plans and manages the growth of the VMWare Servers by submitting capital requests on an annual basis which are justified through approved business requests, enabling IT to maintain a good state of repair. The IT operating budget contains the yearly maintenance and support and all purchases of products and services related to VMWare.

The estimated spend for the term over the next three (3) years is $1,183,927; $563,927 from the operational budget cost centre #22344 (IT Infrastructure Services), and the remaining $420,000 from capital project PN20515 (Server Applications & Licensing) and approximately $200,000 additional licences due to forecasted growth. The Information Technology capital and operating budgets have sufficient funding and future purchases of licences and products and services and will be subject to budget approval.

Conclusion

The VMWare licenses and professional services will allow the City to continue to maintain and expand the server needs as required to support business driven initiatives well into the future, at competitive pricing obtained through the Provincial Vendor of Record agreement.

The Red Hat licenses and professional services will provide the platform and security necessary to support key City initiates that are dependent on this technology, such as SAP HANA project.

Attachments

Appendix 1 – Statement of Work

For _____

Gary Kent, CPA, CGA, ICD.D, Commissioner of Corporate Services and Chief Financial Officer
Prepared by: Jeff Rowsell, Acting Sr. IT Manager, Infrastructure Services