

April 23, 2018

VPL Software Licence Audit

Background

A software licence is an agreement between the software vendor and software user that outlines the user's entitlement to use the software. Software licences may take various forms, including a single user licence, a network licence, or a site licence that allows users to run software at the same time.

The value of the City's software assets at 2017 year-end was \$116 million. There are over 500 software applications, including multiple versions of the same software in the City's inventory. Larger licences such as Microsoft licences are more tightly managed and regularly reviewed.

Not all software applications installed on the City's IT assets require a software licence. This includes applications that are developed in-house and freeware such as Adobe Reader.

Cloud software applications are run over the internet without the need to install it on a computer. Due to privacy requirements personal data stored in the cloud is required to stay in Canada.

The processes pertaining to the procurement, maintenance, and decommissioning of software are handled by multiple groups. Information Technology manages software for most City departments, with the exception of the Vancouver Police Department (VPD) and the Vancouver Public Library (VPL). VPL manages its own software purchases, distribution, and inventory. In addition to these groups there are also dedicated staff that manage specialized or departmental-specific software and related user access such as SAP.

Scope

Our audit objective was to provide reasonable independent assurance that the existing internal controls and business processes relating to software licences are adequate and effective. Our work looked at management of City's software assets and reviewed:

- Governance and responsibilities for managing software licences;
- Processes in place to track software assets;
- Inventory controls and other controls around maintaining compliance with software licence terms;
- Contracts and other documentation supporting licence entitlement; and
- Authorization of software purchases and installations.

The audit is not designed to detect fraud. Accordingly there should be no such reliance.

Conclusion

While no violations were found at VPL, management finds it valuable to improve communication by educating VPL employees on cloud and privacy requirements.

The more significant findings and recommendations are:

E.1 Educate employees on cloud software and privacy requirements

A review of the City's credit card purchases found multiple purchases of cloud software for business use. These purchases of cloud software used for scheduling, surveys and project management did not follow the proper software procurement process. None of the software purchases identified were by VPL staff.

Software users are not aware if the servers used by the cloud service providers reside in Canada. This is important as privacy legislation for securing personal information requires that this data not leave Canada. We did not find evidence of personal information being stored in these cloud solutions but there is a risk of additional cloud software being used by unaware employees.

There is a need to educate employees on how to procure cloud software. To ensure departments employ a consistent and comprehensive approach in considering cloud software, the Director of Collections and Technology should establish an effective communication process to educate employees regarding cloud software.

Findings and recommendations have been discussed with management and work is underway to address them.