



SUBJECT: Cisco DUO Multifactor Authentication Multiyear Renewal
TO: Corporate Services, Strategy, Risk & Accountability Cttee.
FROM: Burlington Digital Service

Report Number: BDS-11-23

Wards Affected: All

Date to Committee: October 4, 2023

Date to Council: October 17, 2023

Recommendation:

Approve the single source purchase of Cisco DUO through licensing partner CDW Canada for the term and costing further outlined in this report; and

Authorize the Chief Financial Officer to execute the CDW Canada contract as outlined in Burlington Digital Service report BDS-11-23 regarding renewal of Cisco DUO, multifactor authentication service, with the content satisfactory to the Executive Director of Legal Services and Corporation Counsel.

PURPOSE:

Vision to Focus Alignment:

- Support sustainable infrastructure and a resilient environment
- Deliver customer centric services with a focus on efficiency and technology transformation

Executive Summary:

In 2020 the City entered into a Software as a Service (SaaS) licensing agreement with Cisco DUO through licensing partner CDW Canada. That licensing agreement expired in August 2023. The City has a goal to integrate one Multifactor Authentication (MFA) solution with the City's Identity and Access Management platform (Microsoft Azure Active Directory) to create consistency and security for authentication to City

applications regardless of the solutions hosting model. Since 2020, the use of Cisco DUO as a standard for security to authenticate to any solution has grown.

Multifactor authentication is required to allow staff to access applications and data securely from any location or device. MFA is a mandatory requirement for remote access as well to protect against cyber risks like phishing and credential theft.

To maintain this consistent user experience and level of security, BDS on behalf of the corporation, recommends the renewal of the Cisco Duo license agreement as a single source with CDW Canada for an additional three years. The extension includes anticipated growth for the ERP implementation of up to 2000 user licenses.

Additional funding is not required for this renewal. The commitment is to a multiyear renewal paid annually.

Background and Discussion:

In 2020 the City underwent an informal technical needs assessment to determine what Multifactor Authentication (MFA) solution would meet the City's security goal to provide one MFA solution for all on premise and externally hosted applications and services. The City investigated MFA solutions from the market leaders; Okta, Cisco, Microsoft and Idaptive. Based on the results of the assessment, staff recommend Cisco DUO. Cisco DUO was the only product that met all the technical needs outlined by BDS but also offered the best user experience from an onboarding and general use perspective. For an MFA solution to be effective, all staff must be enrolled to have complete protection from cyber threats like phishing and credential theft. The initial rollout of Cisco DUO in 2020 included 1300 licenses but has grown to 1800 in 2023 to cover all staff including boards, agencies, part-time and seasonal staff. Historically, some part-time and seasonal staff did not require City accounts but will with the implementation of Workday. When the City completes the ERP implementation, it is anticipated that the total user license count will be 2000 user licenses.

Burlington Digital Service (BDS) will investigate the replacement of Cisco DUO with the Microsoft equivalent product in 2025 as a result of the recent acquisition of Microsoft E5 Licensing.

To maintain a consistent user experience and level of security BDS staff entered into discussions with Cisco and their reseller CDW Canada. Two options were considered:

Option 1:

Renew annually at the higher upfront acquisition rate (\$54,792.00) and absorb the cost-of-living allocation increase of ~6% year over year. Assuming we maintain the product for the full three years, the total cost of ownership would be \$174,435.81.

Option 2:

Commit to a three-year renewal.

Key features:

- 3-year commitment provides a lower up-front acquisition cost (\$47,646.00).
- 3-year commitment, although invoiced annually, locks in today's price and mitigates annual subscription increases.

Below is an estimate of a 3-year total cost of ownership (TCO) comparison between 3-year commitment and annual renewals. The annual renewal considers a 6% year-over-year increase.

	<u>1 year Cost</u>	<u>3 year cost</u>
Year 1	\$54,792.00	\$47,646.00
Year 2	\$58,079.52	\$47,646.00
Year 3	\$61,564.29	\$47,646.00
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3 Year		
TCO	\$174,435.81	\$142,938.00
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Strategy/process/risk

Burlington Digital Service (BDS) will investigate the replacement of Cisco DUO with the Microsoft equivalent product in 2025 as a result of the recent acquisition of Microsoft E5 Licensing. Constraints that will be considered are integration compatibility, user experience and resources required to migrate applications and staff. The City requires MFA capability for various audit compliance and to qualify for services such as Cyber Insurance.

Options Considered

See above.

Financial Matters:

Fiscal 2023 – Fiscal 2026

The existing base budget (471000) has sufficient funding for the identified fiscal years.

Climate Implications:

Not Applicable

Engagement Matters:

Not Applicable

Conclusion:

As a normal course of business, staff will be exercising the renewal option for Cisco DUO through licensing partner CDW Canada locking in for the next three years using the 2023 market price.

No additional funding is required for this renewal. Existing approved operating funding is sufficient to meet the renewal costs.

Respectfully submitted,

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Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.