



Office of the City Manager

CONSENT CALENDAR
January 17, 2023

To: Honorable Mayor and Members of the City Council
 From: Dee Williams-Ridley, City Manager
 Submitted by: Kevin Fong, Director, Department of Information Technology
 Subject: Contract: Presidio for Micro-Segmentation

RECOMMENDATION

Adopt a Resolution authorizing the City Manager to award a contract to Presidio for implementing micro-segmentation for a total not to exceed amount of \$822,512, from January 18, 2023 to June 30, 2028.

FISCAL IMPACTS OF RECOMMENDATION

Funding for procurement and implementation of micro-segmentation in the amount of \$320,412.00 is allocated within Fiscal Year (FY) 2023 in the Department of Information Technology's General Funds as outlined below and any future expenditures are subject to Council approval of the proposed citywide budget and Annual Appropriations Ordinances.

FY 2023	Description	Funding Source
\$203,400.00	Professional Services	IT Gen Funds (011), IT Dept, Security
\$94,502.00	Illumio software subscription (year 1 of 5)	IT Gen Funds (011), IT Dept, Security
\$17,010.00	Illumio maintenance & support (year 1 of 5)	IT Gen Funds (011), IT Dept, Security
\$5,500.00	Illumio training	011-35-363-380-0000-000-412-612990- IT Gen Funds (011), IT Dept, Security
\$320,412.00	FY2023 Subtotal	

FY 2024-27	Description	Funding Source
\$425,510.00	Professional Services (years 2 thru 5)	IT Cost Alloc (680), IT Dept, Security
\$76,590.00	Illumio maintenance & support (yrs 2 thru 5)	IT Cost Alloc (680), IT Dept, Security
\$502,100.00	FY2024-2027 Subtotal	

\$822,512.00	Total FY2023-2027 Not To Exceed Value
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CURRENT SITUATION AND ITS EFFECTS

The City's 'As-Is' Cyber-Resilience Assessment evaluated the likelihood of an attack succeeding as "High" and our ability to contain it as "Low." The consequences of such a successful attack was identified as potentially "Critical" (meaning the City could suffer severe to catastrophic losses in its capacity to operate as well as deliver services to our community).

The City currently utilizes a traditional network perimeter security more commonly known as firewalls. Today however, many attacks are also coming from inside the firewall so security experts have recognized that the traditional “seal the perimeter” methodology is obsolete or inadequate. We can no longer simply watch the border; we must secure from within the system as well.

The contemporary solution is to implement micro-segmentation which is about protecting what’s inside our network from attacks that could already be inside. The concept is simple; we segment parts of our data center away from the rest of the network, which keeps our network protected. Even if an attacker was to be inside our network, they wouldn’t be able to steal much data or cause critical damage as they would be limited within a segment, unable to make any moves to elsewhere in the network.

With micro-segmentation, individual users can safely access the data they need to do their job from anywhere (on-site or remotely), anytime, and from any device without risking the loss or exposure of data.

BACKGROUND

In late 2018, the City began development of its Cyber Resilience Plan (CRP) to help ensure the City is sufficiently and prudently equipped to handle cyberattacks and to help the City mitigate the effects of a successful cyberattack, should one occur. Micro-segmentation was identified as a risk area to address.

In May 2022, the City of Berkeley issued RFP No. 22-11501-C for Micro-Segmentation Solutions. The City received five (5) proposals from top vendors in micro-segmentation. The Department of Information Technology conducted extensive research based on its architectural vision, defined technical prerequisites, needed solution requirements and capabilities, conversion and operational resource needs, potential vendors, and anticipated benefits to be realized. Department of Information Technology staff also consulted with other local governments that had implemented a similar contemporary security architecture. After extensive review of the proposals received, staff determined that Presidio, presenting the Illumio solution, provided the strongest bid for the City’s micro-segmentation project.

Micro-segmentation aligns with the City’s adopted Strategic Plan goals of creating a resilient, safe, connected, and prepared City and providing state-of-the-art, well-maintained infrastructure, amenities, and facilities.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

Both Presidio and Illumio are located in the Bay Area and all professional service technical staff will be local and available to work at all City sites. Additionally, delivery of some professional services may be conducted remotely, eliminating the need for travel to Berkeley and thus further reducing greenhouse gas emissions from commuting. This resolution continues to support the goals of environmental sustainability.

RATIONALE FOR RECOMMENDATION

In May 2022, the City of Berkeley issued RFP No. 22-11501-C for Micro-Segmentation Solutions. The City received five (5) proposals from top vendors in micro-segmentation. After extensive review of the proposals received, Department of Information Technology staff determined that Presidio, presenting the Illumio solution, provided the strongest bid for the City’s Micro-Segmentation Project.

The City has an existing work relationship with Presidio for networking procurements and implementations, and Presidio presented to the City the micro-segmentation solution by Illumio, a top tier vendor in this space. The bid and solution were selected based on their price, technical and market leadership, implementation details, and the evaluated combined reputations and credibility of both Presidio and Illumio.

ALTERNATIVE ACTIONS CONSIDERED

Staff considered not moving forward with implementing micro-segmentation and continuing with implementing network segmentation using switches and firewalls, but this approach can only provide limited visibility and few capabilities to contain an attacker’s movement within the City’s computer network. Micro-segmentation can be used to protect every virtual machine in our enterprise network with policy-driven, application-level security controls. Because security policies are applied at an application level, micro-segmentation tactics can significantly increase our security defense posture.

CONTACT PERSON

Kevin Fong, Director, Department of Information Technology, 981-6541

Attachments:
1: Resolution

RESOLUTION NO. ##,###-N.S.

CONTRACT: PRESIDIO FOR MICRO-SEGMENTATION SOLUTIONS

WHEREAS the City seeks to obtain the critical Information Technology capabilities of visibility and a cyber-resilience for its infrastructure, systems, business applications; and

WHEREAS in May 2022, the City issued a Request for Proposals (RFP) for Micro-Segmentation Solutions (Specification No. 22-11501-C) and received five (5) qualifying bids; and

WHEREAS the RFP review committee evaluated each proposal and determined that the proposal from Presidio specifying Illumio best met the City's operational, technological, and fiscal requirements; and

WHEREAS funding for professional services, training, maintenance and support services in the amount of \$320,412.00 is allocated within Fiscal Year (FY) 2023 in the Department of Information Technology's IT General funds; and spending in future fiscal years is subject to Council approval of the proposed citywide budget and annual appropriation ordinances; and

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley that the City Manager is authorized to award the contract to Presidio, for implementing Illumio's micro-segmentation solution for a total not to exceed amount of \$822,512, from January 18, 2023 to June 30, 2028.