

City Council Regular Meeting

I.5

Meeting Date: 08/19/2019
Recommended by: Aaron Card, Information Technology Manager
Prepared by: Aaron Card, Information Technology Manager
Finance Director Review: Celina Morris
City Attorney Review: Brett Wallace
Approved by: Larry Rains **Date Submitted:** 07/29/2019
Type of Action Requested: Ordinance

SUBJECT:

Request to utilize a CDW-G state and local government contract vehicle to replace the Check Point 4800 hardware cluster that safeguards the City of Casa Grande network from electronic security threats inside and outside of the agency.

RECOMMENDATION:

Staff recommends that the City Council approve the use of a CDW-G contract vehicle to replace the Check Point 4800 hardware cluster in an amount not to exceed \$46,300.

DISCUSSION:

This Capital Improvement Project (CIP) will replace the principal Check Point 4800 hardware cluster that safeguards the City of Casa Grande network from electronic security threats inside and outside of the agency. The present solution is approaching End of Engineering Support and it would be prudent to refresh the deprecated Check Point 4800 solution with the Check Point 6500 product line. This should last another 5-year rotation.

The existing Check Point solution has been reliable but it is beginning to lag behind malicious Internet software threats (e.g. malware, ransomware and “destructive-ware”) that are a constant danger to the City of Casa Grande’s electronic infrastructure and associated data. On average per month Check Point automatically detects and prevents approximately:

- 18,639 “critical” security events.
- 15,282 “high” security events.
- 4,405 “medium” security events.

This solution will contribute to cyber security-related statutes that mandate the safeguard of electronic data stored or maintained by the City of Casa Grande. Casa Grande Information Technology (IT) is aware of multiple databases and other stored electronic data that contains sensitive information such as social security numbers, driver’s licenses, criminal histories and engineering-grade diagrams that could expose restricted

infrastructure schematics.

Much like the 4800 solution, the 6500 solution would be a high-availability cluster located at Casa Grande City Hall – Building B, which is the main ingress/egress point for all Internet traffic that passes between the Internet, the general staff network and the public safety network.

Check Point is also the solution utilized by the City of Casa Grande to provide virtual private network (VPN) remote access to eligible staff.

FISCAL IMPACT:

This Capital Improvement Project (CIP) would have another 5-year rotation attached to it. There is an annual maintenance cost associated with the 6500 product line that would be off-set by the present 4800 product line maintenance cost.

ALTERNATIVES:

In fiscal year 2019, Casa Grande Information Technology (IT) and Check Point conducted a network security assessment to close dangerous electronic vulnerabilities and identify this necessary upgrade path. Replacement of the 4800 high-availability cluster is also expected to provide more granular data protection mechanisms and “geographic fencing” capabilities. Russia, China and numerous locations throughout the United States are perpetually scanning the City of Casa Grande ingress/egress Internet Protocol (IP) address ranges for exploitable attack vectors. Without a current threat-prevention solution in place, the City of Casa Grande will eventually be the target of a successful electronic attack.

After reaching End of Engineering Support the decision to opt-out of a replacement would critically damage ongoing operations in the event of hardware failure and no technical assistance available from Check Point. Without the ability to physically traverse the core firewall no inbound or outbound traffic would be able to pass through the Internet, the general staff network and the public safety network (on-premise and mobile). All internal access to multiple cloud applications would immediately halt for the amount of time necessary to research, acquire, deliver, configure and deploy a suitable replacement.

The City of Casa Grande does not have a practical option beyond a preference to search for another next-generation threat prevention solution or not have one at all. Check Point has been a reliable security product to date and the option is either replace it or opt to have no defensive mechanism separating north/south malicious Internet traffic from the general staff network or the public safety network.

This is effectively planned obsolescence from an industry leader in the electronic security space.