IT Patch Management

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December 29, 2021

IT Patch Management Audit
Executive Summary

Objective

This audit was conducted to assess controls related to IT patch management.

Background

Focal Point Data Risk, LLC ("Focal Point") was engaged by the City to assess certain Information Technology processes and controls related to patch management of production systems, including firewalls, applications, servers and databases for the period April 1, 2020 through April 30, 2021.

They focused on the following areas:

- Patch management procedures,
- Roles and responsibilities,
- Inventory update process,
- System update process,
- Patch testing and approval,
- Security exception process, and
- Reporting.

Conclusion

The City has implemented some processes and procedures that incorporate industry best practices relevant to the patch management process; however, the results of testing performed identified various controls that were not designed appropriately, or controls that were not operating effectively.

Highlights

This engagement was performed using control objectives based on ISACA's COBIT 2019 framework for the governance of enterprise IT (GEIT). COBIT 2019 is an IT governance framework and supporting toolset that allows managers to bridge the gap between control requirements, technical issues, and business risks. Specifically, the framework guidance was used to determine the controls that should be in place and to identify control gaps within the patch management processes.

Focal Point's Recommendations

Detailed findings, recommendations, and management responses are addressed in Focal Point's report. This report has been distributed to management. Management has taken or planned actions to address the recommendations.

Detailed results of this audit are confidential, in accordance with state statutes (G.S. §§ 132-6.1 and 132-1.7).

Actions Planned

Internal Audit will follow-up the Focal Point recommendations and management responses to determine that planned actions are completed timely.