Backup and Recovery

Audit Report # 24-100
January 24, 2024

The University of Texas at El Paso

Office of Auditing and Consulting

The University of Texas at El Paso
Office of Auditing and Consulting Services

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January 24, 2024

Dr. Heather Wilson
President, The University of Texas at El Paso
Administration Building, Suite 500
El Paso, Texas 79968

Dear Dr. Wilson:

The Office of Auditing and Consulting Services has completed a limited-scope audit of *Backup and Recovery*. During the audit, we identified opportunities for improvement and offered the corresponding recommendations in a separate memo. We intend the recommendations will assist the department in strengthening controls and help ensure that the University's mission, goals, and objectives are achieved.

We appreciate the cooperation and assistance provided by Data Center Operations staff during our audit.

Sincerely,

Courtney H. Rios
Interim Chief Audit Executive

EXECUTIVE SUMMARY

The Office of Auditing and Consulting Services has completed a limited-scope audit of backup and recovery to determine adherence to State and University security controls and standards. Due to the confidential nature of the audit, we issued a separate memo which details specific findings and recommendations. These confidential results are exempt from the Texas Public Information Act under Title 5 Texas Government Code §552.139.

Background

The University's backup and recovery solution is Rubrik. Rubrik is a software-defined data management platform for physical, virtual, and hybrid environments. It delivers backup, recovery, data archival, and disaster recovery on-premises, at the edge, and in the cloud. Backup and recovery processes are integral components of the University's information security strategy. Having a backup and recovery solution in place, such as Rubrik, is essential to ensure business continuity and data protection. Also, it reduces the impact of malicious attacks, human error, and hardware failure.

The audit was conducted by the Institute of Internal *Auditors' International Standards for the Professional Practice of Internal Auditing and Generally Accepted Government Auditing Standards.*

Audit Objective and Scope

The objective of this audit was to determine if the University's mission-critical systems are backed up, protected, and recoverable as required by relevant Title 1 Texas Administrative Code §202.76 controls (TAC 202). The scope of the audit was limited to backup and recovery procedures in place for the test period from September 1, 2023 to December 8, 2023.

Strengths

Rubrik, a next-generation backup and recovery solution, was implemented in Fiscal Year 2022. This solution offers long-term archival of backups to the cloud and immutable (read-only) backup protection, which cannot be encrypted by malicious actors. Data Center Operations personnel have extensive knowledge of backup and recovery processes and have leveraged Rubrik capabilities effectively.

Summary of Audit Results

Audit Area	Number of Findings
A. Backup methodology and strategy	1
B. Backup application controls (Resolved)	1

Conclusion

Based on the audit procedures performed, we conclude that the Data Center Operations can strengthen existing security controls by implementing the recommendations in the memo.

We wish to thank management and staff at Data Center Operations for their assistance and cooperation throughout the audit.

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Auditor Assigned to the Audit:

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