Microsoft 365 Cloud Storage
Audit Report # 23-105
August 30, 2023

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

“Committed to Service, Independence and Quality”
August 30, 2023

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 Microsoft 365 Cloud Storage. During the audit, we identified opportunities for improvement and offered the corresponding recommendations in a separate management letter. 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 the Data Center and Infrastructure Operations staff as well as the Information Security Office during our audit.

Sincerely,

Lori Wertz
Chief Audit Executive
EXECUTIVE SUMMARY

The Office of Auditing and Consulting Services has completed a limited scope audit of Microsoft 365 Cloud Storage to determine adherence to State and University security controls and standards. Due to the confidential nature of the audit, we issued a separate management letter which details specific findings and recommendations. These confidential results are exempt from the Texas Public Information Act under Texas Government Code §552.139.

Background

The University uses the Microsoft 365 (M365) Education A5 service plan, which includes a suite of productivity and collaboration products, such as SharePoint (SP), OneDrive (OD) and Teams. These applications are available to faculty, staff, and students. Per Microsoft documentation, SP and OD in M365 are cloud-based services that help organizations share and manage content, knowledge, and applications to collaborate across the organization and with external users. Also, SP and OD are the information repositories for other applications such as Teams.

As part of the cloud shared responsibility model, Microsoft provides the physical infrastructure and ensures applications and data are always available. Regardless of the type of service agreement, the following responsibilities are retained by the University: data, endpoints, and account and access management.

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 Objectives and Scope

The audit objectives were to:

- determine if controls are implemented in the M365 applications SP and OD to ensure University data stored in the cloud is protected, and
- evaluate the controls over third-party applications connected to the University’s M365 environment.

The scope of the audit is limited to the SP and OD responsibilities retained by the University under the Microsoft cloud shared responsibility model such as data, endpoints, and account and access management, for the test period of September 2022 through July 2023.
Strengths

The Information Resources division works collaboratively to ensure the University leverages the M365 platform capabilities, including cloud storage, to provide services to faculty, staff, and students. Security controls such as multifactor authentication for administrators and a review process for integrating external applications in the M365 environment were implemented.
Summary of Audit Results

<table>
<thead>
<tr>
<th>Audit Area</th>
<th>Number of Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Microsoft 365 Cloud Storage Governance</td>
<td>0</td>
</tr>
<tr>
<td>B. Security Control Environment</td>
<td>1</td>
</tr>
<tr>
<td>C. Orphan Data and Sharing Settings</td>
<td>2</td>
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</tbody>
</table>

Conclusion

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

We wish to thank management and staff at the Data Center and Infrastructure Operations as well as the Information Security Office for their assistance and cooperation throughout the audit.
Report Distribution:

University of Texas System (UT System):
System Audit Office

External:
Governor’s Office of Budget, Planning and Policy
Legislative Budget Board
Internal Audit Coordinator, State Auditor’s Office

Auditor Assigned to the Audit:
Cecilia Estrada, IT Auditor II