

REFLECTION PAPER 3

Diego Izquierdo

01269416

CYSE 368

April 2, 2025

Reflection paper 3

Reporting Period: March 3, 2025, to March 28, 2025

Primary Objectives

1. Enhance security posture for private and public cloud environments
2. Develop policies and procedures for securing Azure storage accounts and Key Vaults
3. Implement IAM solution for Azure Cloud
4. Learn procedures and best practices for managing Cisco Firewalls

Overview

This period was fairly busy with my main duties, so I had to put some of the cybersecurity tasks on the back burner. I was able to accomplish several key objectives around IAM and standardize the configuration and deployment of single sign-on applications.

What went well?

- Spent a significant amount of time dealing with SSO tasks, we had around six SSO applications with expiring SAML certificates. One of the things I noticed is that the majority of notifications for expiring SAML certificates were being sent to the wrong e-mail addresses, so I had to go through all the SSO configurations and update the notifications to make sure they go to the right teams.
- Made some progress on developing standards for service principals and came up with a standardized naming convention for these objects.
- Not sure if this counts as something that went well, but I had started a proof of concept of Microsoft Entra Permissions management, but then on April fools' day, Microsoft announced that they were discontinuing this product and advised customers to migrate to a third-party CIEM tool. I thought it was just another April fools' joke from Microsoft, but they are serious about it. Pro tip for all marketing teams out there, don't ever announce a new product or product retirements on April 1st.

<https://techcommunity.microsoft.com/blog/microsoft-entra-blog/important-change-announcement-microsoft-entra-permissions-management-end-of-sale/4399382>

- Worked on patching and addressing several vulnerabilities in our VMware environment. Earlier last month, VMware announced three vulnerabilities with CVSS scores of 7.1-9.3, so these vulnerabilities had to be addressed immediately.

<https://support.broadcom.com/web/ecx/support-content-notification/-/external/content/SecurityAdvisories/0/25390>

Conclusion.

This internship has been a very rewarding and enlightening experience for me. Being able to put into practical use the cybersecurity concepts I have learned in school has provided immeasurable value from an educational and professional perspective. I have been in IT for over a decade and my exposure to cybersecurity has been limited, but this internship afforded me the opportunity to experience the day-to-day joys and challenges of working in cyber. I know the job market is in a weird state right now, but this is a good time to be in Cybersecurity. The ever-growing threat of cybersecurity breaches and attacks provides a constant demand for cybersecurity specialists. My advice to anybody getting ready to graduate and jump into the cybersecurity market is to be smart, humble and hungry.