As I continue my internship in Active Directory (AD) I am excited to share the experiences I have had over the 50 hours of this learning journey. This phase has given me the opportunity to further develop my knowledge and skills in AD administration take on projects and contribute to network infrastructure management. In this report I will discuss the tasks I have undertaken. The insights gained during this internship period. During the week, my focus was on integrating Active Directory with Azure Active Directory Domain Services (AAD DS). With guidance from mentors, I learned how to set up AAD DS and establish synchronization between our on-premises AD and AAD DS. This integration has extended the benefits of AD to Azure based resources making it easier for users to access them seamlessly and enabling identity management across environments. Moving into the week, my work revolved around upgrading and migrating Active Directory domain controllers to newer operating systems. Collaborating with a project team we carefully. Executed the upgrade process while ensuring disruption to business operations.

This experience taught me about the importance of planning, testing and risk mitigation during infrastructure upgrades. Throughout this phase of my internship, I also delved into understanding the complexities of Active Directory Forest environments. During my time collaborating with professionals, I had the opportunity to focus on establishing and overseeing trusts between AD forests. This allowed for collaboration and access to resources across business units while maintaining administrative independence. Through this experience I gained an understanding of AD architecture within decentralized organizations. In the twenty weeks I delved into the extension of Active Directory schema to accommodate customized attributes and classes required for applications. With guidance from mentors, I successfully expanded the schema to meet data requirements. Implemented appropriate access controls. This experience

emphasized the importance of planning and thorough testing when making changes to the AD schema.

The final phase of my internship was dedicated to conducting security assessments for Active Directory environments. Collaborating closely with professionals we performed security audits, reviewed AD configurations, and identified potential vulnerabilities. Subsequently we implemented security measures to enhance the safety of the AD infrastructure. This experience enhanced my ability to proactively identify and address security risks. Continuing beyond that milestone over 50 hours were dedicated to exploring aspects of Active Directory administration such as integration with AAD DS (Azure Active Directory Domain Services) domain controller upgrade and migration management in forest environments, schema extension as well as conducting security assessments. These tasks have further enriched my expertise as an administrator, in the realm of Active Directory. As I continue with the remaining hours of my internship, I am excited to delve into concepts, in AD and make meaningful contributions to important projects. The knowledge and skills I have acquired during this phase have equipped me to tackle challenges in the realm of Active Directory administration. My goal is to play a role in managing network infrastructure ensuring data security and enhancing efficiency.