

OneMain Financial: Data Center Operator Internship

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1. Introduction

I decided to do an internship at OneMain Financial as a Data Center Operator to take my first step into a professional environment. The role interested me due to the opportunity to work with complex systems and start to gain experience to become a subject matter expert. Specifically, I aimed to achieve four learning objectives:

1. Learn the daily duties and responsibilities of a Data Center Operator.
2. Learn how to operate the IBM Mainframe series and complete daily tasks.
3. Learn how to operate the AS-400 I-Series and complete daily tasks.
4. Learn how to monitor FTP packets and troubleshoot their status.

This paper will reflect on my internship experiences, including the knowledge I have gained, the challenges I have faced, and how this experience has prepared me for my future professional career. The following sections will provide an overview of the organization, detail my initial orientation and training, describe the management environment, and discuss the specific tasks and projects I undertook during my internship. Additionally, I will explore how my cybersecurity skills were applied, assess the preparation provided by the ODU curriculum, evaluate the fulfillment of my learning objectives, and share my reflections on the most motivating, discouraging, and challenging aspects of the internship. Finally, I will offer recommendations for future interns and conclude with my overall takeaway from this internship.

2. What is OneMain Financial?

OneMain Financial is a prominent personal loan provider in the United States, originally established to offer accessible financial solutions to everyday consumers. Today, it provides a range of financial services, including personal and auto loans, insurance products, and other financial services. OneMain Financial has hundreds of branches across the country and the company's primary demographic includes individuals seeking financial assistance for personal or automotive needs, often those who may not qualify for traditional bank loans due to credit constraints.

3. Orientation and Training

My initial orientation and training at OneMain Financial was short and concise but split between an introduction to the facility and my job duties. The orientation began with an introduction to the company's headquarters and my department which provided valuable context for understanding the positions goals and operations.

The training phase was focused on the technical aspects of my role. I received detailed instructions on operating the IBM Mainframe and AS-400 I-Series systems, which are crucial for the data center's operations. The initial training sessions included hands-on practice with these systems, allowing me to familiarize myself with their controls and commands. I also learned how to monitor and manage FTP transfers using Axway SecureTransport, a tool for monitoring and troubleshooting the transmission of FTP packets within the network.

My initial impressions of the company were positive. My colleagues were knowledgeable and supportive, making the steep learning curve less worrying. The emphasis on adhering to established protocols was evident from the extensive binders of procedures, reinforcing the importance of attention to detail in my daily tasks.

4. Work Duties, Assignments, and Projects

My main work duties include operating the IBM Mainframe, AS-400 I-Series, and monitoring FTP status through Axway SecureTransport. Each of these components played a critical role in the smooth functioning of the data center and therefore are split between the operators who are on shift.

The IBM Mainframe is a central part of our operations, used for monitoring and troubleshooting jobs that are in the queue for that day. Daily responsibilities on the Mainframe include monitoring jobs in the daily queue, restarting failed jobs or completely closing them out if all else fails. The system's command-line interface required meticulous attention to detail due to its case-sensitive requirement. Similarly, the AS-400 I-Series also requires daily monitoring. This system, slightly more forgiving than the Mainframe, involves monitoring the jobs coming from each of the branch locations and responding to any errors. Tasks included canceling or restarting failed jobs and verifying that corrections were successful.

Monitoring FTP packets through Axway SecureTransport was another critical component of my role. This program allowed me to filter and analyze FTPs across the

Mainframe and I-Series, providing a quick overview of file contents and success rates. My duty was to resubmit failed FTPs and report transfers that had consistently failed.

5. Specific Use of Cybersecurity Skills

My cybersecurity skills were put to the test in monitoring and troubleshooting the data center systems at OneMain Financial. Before the internship, my knowledge of system operations and cybersecurity principles was largely theoretical, having been gained through textbooks and classroom instruction. I had no hands-on experience within a live data center environment. This internship provided the invaluable opportunity to apply my theoretical knowledge to real-world scenarios, significantly enhancing my understanding and proficiency.

On the job, I learned specific commands and troubleshooting techniques for the IBM Mainframe and AS-400 I-Series systems. This hands-on experience was crucial in developing my practical skills. For instance, navigating the Mainframe's command-line interface required a precise understanding of case-sensitive commands and the ability to execute troubleshooting protocols efficiently. Similarly, managing the automated job scheduler and handling failed jobs on the AS-400 I-Series demanded a quick, accurate response to system alerts and logs.

6. ODU Curriculum and Internship Preparation

The ODU curriculum provided a foundational understanding of cybersecurity principles, which were applicable during my internship. Courses on operating systems like Linux and Windows helped my understanding when dealing with Command Line interfaces and new GUIs and cybersecurity protocols prepared me for the technical aspects of the role. I made connections between theoretical knowledge and practical applications, reinforcing what I learned in school and introducing new concepts and techniques.

Throughout the internship, I was able to make significant connections between the theoretical knowledge acquired in school and its practical applications in a real-world setting. For instance, the hands-on experience with system alerts, logs, and troubleshooting on the Mainframe and I-Series directly correlated with what I had learned about system security and operations in my courses. This practical application

of academic concepts not only reinforced my learning but also introduced me to new techniques and approaches that were not covered in the classroom.

7. Fulfillment of Learning Objectives

Before starting the internship, I had a foundational understanding of cybersecurity principles, including basic system operations and network security. However, my role as a Data Center Operator required me to deepen my knowledge and adapt my skills to the practical challenges encountered in the data center environment.

Operating the IBM Mainframe and AS-400 I-Series systems involved a significant amount of cybersecurity-related work. The IBM Mainframe, with its case-sensitive and syntax-specific command-line interface, required me to be vigilant about security protocols and to understand how to manage system alerts and logs effectively. This experience enhanced my ability to identify and address potential security issues in real time, which is crucial for maintaining the integrity of the system.

Similarly, managing the AS-400 I-Series and its automated job scheduler involved understanding the security implications of job failures and restarts. I had to ensure that all actions taken in response to failed jobs were secure and did not introduce vulnerabilities into the system. This required a methodical approach to problem-solving and an understanding of how to maintain security while resolving operational issues.

Monitoring FTP packets with Axway SecureTransport was another area where my cybersecurity skills were crucial. This task involved filtering and analyzing data transfers to ensure they were secure and successful. Understanding the nuances of each FTP transfer and addressing any failures required a solid grasp of data security principles and practices. My experience with Axway SecureTransport helped me develop a more systematic approach to managing data transfers and addressing security concerns.

Overall, the internship provided a valuable opportunity to apply my cybersecurity knowledge in a practical setting, enhancing my skills and understanding of system security and data integrity. The hands-on experience with these complex systems and security tools has significantly contributed to my growth as a cybersecurity professional.

8. Exciting Aspects

The most motivating aspect of my internship at OneMain Financial, besides the pay, was that this was the first job that trusted me with working from home. Early in my career I feel like my character and honor would be questioned when questioning about the option of work from home. In this new position, work from home is

One of the most gratifying moments was when I no longer needed to consult my notes to navigate through the IBM Mainframe and AS-400 I-Series systems. This moment represented a significant achievement, as it indicated that I had developed enough knowledge and muscle memory that allowed me to handle tasks with confidence. The sense of accomplishment from being able to manage these complex systems with minimal supervision was highly motivating.

Additionally, being entrusted with more responsibilities and being added to the first shift rotation schedule were significant milestones. These experiences reinforced my belief in my capabilities and provided a clear indication of my progress. The trust and responsibility bestowed upon me by my supervisors and colleagues were both validating and inspiring, driving me to further excel in my role.

Another exciting aspect was the opportunity to work and interact with a supportive team of colleagues. The willingness of my team to offer assistance and share their knowledge created a positive and motivating work environment. Another intern who had started about a month before me even shared his personal notes that he had been taking up to that point. This support was instrumental in helping me get up to speed as fast as possible.

Overall, the combination of tangible progress, increased responsibilities, and a supportive work environment made my internship a motivating and rewarding experience. It has inspired me to pursue further opportunities for growth and development in the field of data center operations and cybersecurity.

9. Discouraging Aspects

One of the most discouraging aspects of the internship was the steep learning curve associated with the IBM Mainframe and AS-400 I-Series systems. Initially, the complexity of these systems was overwhelming as I had zero experience with them and was just hired into a role managing them. The frequent need to consult colleagues for help was disheartening to say the least. The command-line interfaces, particularly on

the IBM Mainframe, were case-sensitive and required precise syntax, which made the learning process annoying.

10. Challenging Aspects

The most challenging aspect of my internship was adjusting to the schedule. Coming from a standard 9-5 position, the rotating schedule at OneMain Financial required significant adaptation. The schedule rotates every three weeks, with some days being in the office and others at home. This hybrid setup, while flexible, was initially confusing and required a period of adjustment to manage effectively. Furthermore, the data center operates 24/7, 365 days a year, meaning that weekend and holiday shifts are part of the rotation. Working these shifts can be particularly challenging as it often means being alone in the data center, responsible for maintaining operations without the immediate support of colleagues. Balancing these irregular hours with personal life and ensuring consistent performance regardless of the shift was a significant challenge that tested my time management and adaptability skills.

11. Recommendations for Interns

Future interns should come prepared with a solid understanding of command-line interfaces and basic system operations. Familiarity with these technical aspects will ease the initial learning curve and enable them to focus on learning the system versus learning how to navigate as I did. It is also advisable to be proactive in seeking assistance from colleagues when needed. Building a network of supportive peers and mentors can provide valuable guidance and support throughout the internship. Establishing these connections can facilitate smoother problem-solving and enhance the overall learning experience.

Interns should also prepare for the unique challenges posed by the rotating schedule. Flexibility and strong organizational skills are crucial for managing the varying shifts, including weekend and holiday work. Setting a consistent routine for both in-office and remote work days can help maintain productivity and work-life balance. Being adaptable and open to the demands of a 24/7 operational environment will significantly enhance the internship experience. It's important for interns to develop strategies for managing the irregular hours, such as prioritizing tasks effectively and maintaining clear communication with supervisors and team members.

12. Conclusion

Overall, I really enjoy my position at OneMain Financial. It is my highest paid position so far and the ability to work from home is something I will miss if I ever change roles. The hands-on experience with the IBM Mainframe, AS-400 I-Series, and Axway SecureTransport has added to my technical skills and provided a better understanding into data center operations. The challenges I faced and overcame have prepared me for more advanced roles in the field of data center management and cybersecurity. This internship has not only reinforced the knowledge I gained through my coursework at ODU but also introduced me to new concepts and techniques that will shape my future career. As I wrap up this internship, I am excited about the opportunities ahead and look forward to continuing my career path at OneMain Financial or similar organizations in the future.