

CYBER SECURITY INTERNSHIP REPORT

Name: Muhammed Shan Yoosuf

Task: Task 4 - Setup and Use a Firewall on Windows/Linux

Objective: Configure and test firewall rules to allow and block traffic.

Introduction

This task focused on configuring firewall rules using Windows Firewall and UFW (Uncomplicated Firewall) on Linux. The objective was to understand how firewalls filter network traffic and enhance system security.

Steps Performed

- Checked current firewall status and listed active rules.
- Blocked inbound traffic on port 23 (Telnet) to prevent insecure remote access.
- Allowed SSH traffic on port 22 (Linux environment).
- Tested rules by attempting connections to verify blocking and allowing behavior.
- Removed test rules to restore original firewall configuration.

Key Concepts Learned

- Difference between inbound and outbound firewall rules.
- Understanding stateful vs stateless firewall behavior.
- Importance of blocking insecure protocols like Telnet.
- Role of firewalls in network security and traffic filtering.

Conclusion

Through this task, I gained hands-on experience in managing firewall configurations. This improved my understanding of how firewalls protect systems by controlling network traffic based on defined security rules.