Cybersecurity Daily Dairy

Day 15: Session Hijacking & Network Scanning

Date: July 4, 2025

Topics Covered:

- Session hijacking basics
- Vulnerability scanning using Nmap
- Introduction to NetVision Nmap GUI Tool
- File encryption using FileCrypti

What is Session Hijacking?

Session hijacking is a cyberattack where an attacker gains unauthorized access to an active session between a client and a server. This often leads to account compromise without requiring login credentials. It usually targets web applications by capturing session tokens or cookies.

Types of session hijacking:

- Active hijacking – the attacker takes over the session and communicates with the server as the victim.
- Passive hijacking – the attacker silently monitors the session traffic for information.

Attackers may use tools like Wireshark, Burp Suite, or custom scripts to exploit these vulnerabilities.

Nmap: Vulnerability & Port Scanner

Nmap (Network Mapper) is a powerful open-source tool used for network scanning and security auditing.

Common features:

- Host discovery
- Port scanning
- Service/version detection
- OS fingerprinting

Nmap helps in identifying open ports and services on target machines, making it useful for reconnaissance in penetration testing.

NetVision: GUI-based Nmap Scanner

NetVision is a graphical interface built on top of Nmap to make scanning more accessible.

Highlights:

By Ritesh Kumar Gupta CRN : 2315195 URN : 2302650

- User-friendly interface
- Target-based scanning
- Real-time results dashboard
- Custom scan profiles for different purposes

FileCrypti: File Encryption Utility

FileCrypti is a command-line tool used for encrypting and decrypting files.

Features:

- Applies strong encryption techniques
- Protects sensitive files and logs
- Easy to use through simple commands
- Useful in data protection workflows for cybersecurity tasks

---

Key Learnings:

- Session hijacking poses a significant risk and requires proper session management and encryption for mitigation.
- Nmap is a foundational tool in cybersecurity for scanning and auditing networks.
- NetVision helps beginners use Nmap without needing to memorize commands.
- FileCrypti ensures local file security through basic but effective encryption.