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21 Sep 2024

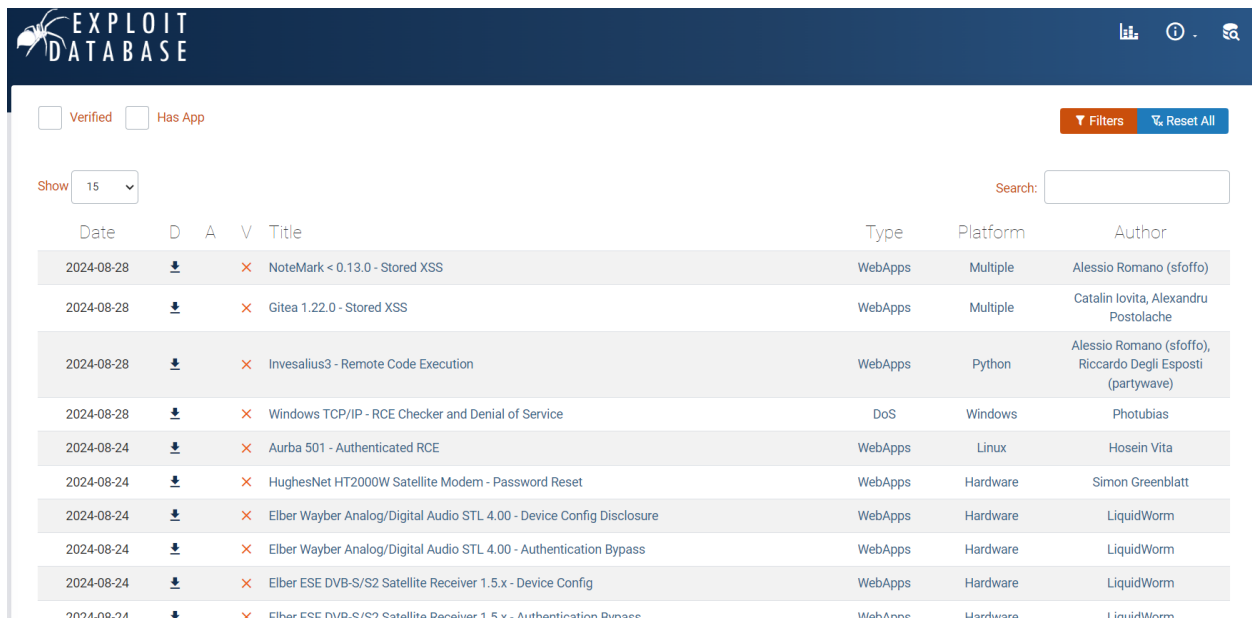
## Assignment no 2: OSINT Framework

### Three (3) Topic about Threat Intelligence:

#### 1. Threat Intelligence → TTPs → Malware Exploit TTP Database:

The TTP (Tactics, Techniques, and Procedures) Database refers to a structured way to understand and classify the behavior of cyber adversaries. TTPs help cybersecurity teams to identify and respond to cyberattacks by analyzing the methods and patterns used by threat actors. These frameworks can be used for activities like threat hunting, malware detection, and exploit analysis.

For example, MITRE's ATT&CK Framework is widely recognized for its comprehensive collection of real-world attack techniques used by adversaries.



The screenshot shows the Exploit Database website interface. At the top, there's a dark blue header with the 'EXPLOIT DATABASE' logo and navigation icons. Below the header, there are filters for 'Verified' and 'Has App', a 'Show' dropdown set to 15, and a search bar. The main content is a table of exploits with columns: Date, D (download icon), A (author icon), V (verified icon), Title, Type, Platform, and Author. The table lists several exploits, including NoteMark < 0.13.0 - Stored XSS, Gitea 1.22.0 - Stored XSS, Invesalius3 - Remote Code Execution, Windows TCP/IP - RCE Checker and Denial of Service, Aurba 501 - Authenticated RCE, HughesNet HT2000W Satellite Modem - Password Reset, Elber Wayber Analog/Digital Audio STL 4.00 - Device Config Disclosure, Elber Wayber Analog/Digital Audio STL 4.00 - Authentication Bypass, and Elber ESE DVB-S/S2 Satellite Receiver 1.5.x - Device Config.

Date	D	A	V	Title	Type	Platform	Author
2024-08-28				NoteMark < 0.13.0 - Stored XSS	WebApps	Multiple	Alessio Romano (sfoffo)
2024-08-28				Gitea 1.22.0 - Stored XSS	WebApps	Multiple	Catalin Iovita, Alexandru Postolache
2024-08-28				Invesalius3 - Remote Code Execution	WebApps	Python	Alessio Romano (sfoffo), Riccardo Degli Esposti (partywave)
2024-08-28				Windows TCP/IP - RCE Checker and Denial of Service	DoS	Windows	Photubias
2024-08-24				Aurba 501 - Authenticated RCE	WebApps	Linux	Hosein Vita
2024-08-24				HughesNet HT2000W Satellite Modem - Password Reset	WebApps	Hardware	Simon Greenblatt
2024-08-24				Elber Wayber Analog/Digital Audio STL 4.00 - Device Config Disclosure	WebApps	Hardware	LiquidWorm
2024-08-24				Elber Wayber Analog/Digital Audio STL 4.00 - Authentication Bypass	WebApps	Hardware	LiquidWorm
2024-08-24				Elber ESE DVB-S/S2 Satellite Receiver 1.5.x - Device Config	WebApps	Hardware	LiquidWorm
2024-08-24				Elber ESE DVB-S/S2 Satellite Receiver 1.5.x - Authentication Bypass	WebApps	Hardware	LiquidWorm

Fig: Exploit TTP Database

layer x +												Selection Controls			Layer Controls			Technique Controls		
Reconnaissance	Resource Development	Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Command and Control									
10 techniques	8 techniques	10 techniques	14 techniques	20 techniques	14 techniques	43 techniques	17 techniques	32 techniques	9 techniques	17 techniques	18 techniques									
Active Scanning (0/3)	Scanning IP Blocks Vulnerability Scanning Wordlist Scanning	Acquire Access Acquire Infrastructure (0/8)	Content Injection Drive-by Compromise Exploit Public-Facing Application (0/10)	Cloud Administration Command Command and Scripting Interpreter (0/10)	Account Manipulation (0/6) BITS Jobs Boot or Logon Autostart Execution (0/14)	Abuse Elevation Control Mechanism (0/6) Access Token Manipulation (0/5) BITS Jobs Build Image on Host Debugger Evasion Deobfuscate/Decode Files or Information (0/6)	Adversary-in-the-Middle (0/4) Brute Force (0/4) Credentials from Password Stores (0/6) Exploitation for Credential Access Forced Authentication Forge Web Credentials (0/2) Input Capture	Account Discovery (0/4) Application Window Discovery Browser Information Discovery Cloud Infrastructure Discovery Cloud Service Dashboard Cloud Service Discovery Cloud Storage Object Discovery Container and Resource Discovery	Exploitation of Remote Services Internal Spearphishing Lateral Tool Transfer Remote Service Session Hijacking (0/2) Remote Services (0/8) Replication Through Removable Media Software	Adversary-in-the-Middle (0/5) Archive Collected Data (0/7) Audio Capture Automated Collection Browser Session Hijacking (0/3) Clipboard Data Data from Cloud Storage	Application Layer Protocol (0/6) Communication Through Removable Media Content Injection Data Encoding (0/2) Data Obfuscation (0/3) Dynamic Resolution (0/7) Encrypted Channel (0/2)									

Fig: MITRE's ATT&CK: Real-world att&ck techniques

## 2. Threat Intelligence → Malware Information Sharing Platform:

The Malware Information Sharing Platform (MISP) is an open-source threat intelligence platform that facilitates the sharing, storing, and correlation of indicators of compromise (IOCs) related to malware, cybersecurity threats, and vulnerability information.

### Key Features of MISP:

- Threat Intelligence Sharing
- Automation and Integration
- Correlation Engine
- Taxonomy and Tagging
- Community-Driven

### Use Case:

- Reverse Engineering

## 3. Threat Intelligence → Malware Patrol:

Malware Patrol is a cybersecurity service provider that specializes in malware intelligence, threat feeds, and cybersecurity solutions to help organizations protect themselves from cyber threats.

### Key Services Offered by Malware Patrol:

- Threat Data Feeds
- Malware Analysis
- Phishing Detection

**Use Cases:**

- Enterprises
- Researchers

**Malware Patrol's evaluation portal provides:**

- Anti-Cryptomining
- Bitcoin Block chain Strings
- Bitcoin Transactions
- C2 Addresses
- Domain Names Generated via DGAs
- DNS-over-HTTPS (DoH) Servers
- DNS RPZ Firewall
- Integration Feeds: Fortinet / MISP / PAN-OS
- Intrusion Insights
- Malicious IPs
- Malware & Ransomware URLs
- Malware Hashes
- Malware Samples (Binaries)
- Newly Registered Domains
- Phishing
- Phishing Screenshots and Raw HTML
- Scam Domains