



## **Paketë Mjetesh dhe Rekomandimesh për Sigurinë Kibernetike**

*Version.1*

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## Lista e mjeteve falas të sigurisë kibernetike për të ndihmuar organizatat të zbulojnë malware

Gjatë janarit dhe shkurtit 2022, në Ukrainë janë identifikuar një sërë incidentesh të sigurisë kibernetike. Disa prej këtyre malware janë identifikuar si wipers (fshirës).

Incidenti i fundit i ndodhur më 23.02.2022 përfshinte një seri sulmesh DDoS të cilat synonin operatorët TIK në Ukrainë.

Sulmet malware u mundësuan përmes një GPO, duke nënkuptuar se kontrollorët e domenit ishin komprometuar. Ndërsa hetimi i incidentit është në vazhdim, nuk jemi në dijeni për hapat e mëparshëm të kompromisit dhe për këtë arsye, aktorët për menaxhimin e incidenteve kibernetikë ndodhen në pamundësi për të ofruar asnjë lloj treguesi për këtë.

Spektori i Menaxhimit të Incidenteve Kibernetike pranë AKCESK, së bashku me mbështetjen e Agjencisë Amerikane të Sigurisë Kibernetike (CISA), ka përpiluar së fundmi një listë të mjeteve dhe shërbimeve falas të sigurisë kibernetike për organizatat dhe kompanitë, përmes të cilave mund të asistohet në rritjen në mënyrën efikase të sigurisë së tyre dhe mbrojtjen ndaj sulmeve të mundshme kibernetike.

Lista e përpiluar përmban mjete dhe shërbime me kod të hapur (Open-Source) vetëm nga organizata publike dhe private.

### Kategoritë e Mjeteve dhe Shërbimeve

Në total, lista e ofruar nga CISA përmban 97 mjete dhe shërbime falas që ofrohen nga disa organizata si:

- Microsoft
- Google
- VMware
- IBM
- Mandiant
- Cisco
- Secureworks
- Cloudflare
- Center for Internet Security
- CrowdStrike
- Tenable

- AT&T Cybersecurity
- Kali Linux Project
- Splunk
- SANS
- Palo Alto Networks

Për më tepër, Agjencia e Sigurisë Kibernetike dhe Sigurisë së Infrastrukturës (CISA) i ka kategorizuar të gjitha mjetet dhe shërbimet në katër kategori:

- 1) Ulja e probabilitetit të një incidenti të dëmshëm kibernetik.
- 2) Zbulimi i shpejtë i aktivitetit me qëllim të keq.
- 3) Përgjigja ndaj çdo incidenti të konfirmuar në mënyrë efektive.
- 4) Maksimizimi i forcës dhe stabilitetit.

## Reduktimi i mundësisë së një incidenti të dëmshëm kibernetik

Cloudflare Universal Secure Socket Layer Certificate	Basic	Cloudflare	SSL (Secure Socket Layer) is the standard security technology for establishing an encrypted link between a web server and a browser. Cloudflare allows any internet property to use SSL with the click of a button.	<a href="https://www.cloudflare.com/plans/free/">https://www.cloudflare.com/plans/free/</a>
Microsoft Defender Application Guard	Basic	Microsoft	This capability offers isolated browsing by opening Microsoft Edge in an isolated browsing environment to better protect the device and data from malware.	<a href="https://docs.microsoft.com/en-us/windows/security/threat-protection/microsoft-defender-application-guard/md-app-guard-overview">https://docs.microsoft.com/en-us/windows/security/threat-protection/microsoft-defender-application-guard/md-app-guard-overview</a>
Controlled folder access/Ransomware protection in Windows	Basic	Microsoft	Controlled folder access in Windows helps protect against threats like ransomware by protecting folders, files, and memory areas on the device from unauthorized changes by unfriendly applications.	<a href="https://docs.microsoft.com/en-us/microsoft-365/security/defender-endpoint/controlled-folders">https://docs.microsoft.com/en-us/microsoft-365/security/defender-endpoint/controlled-folders</a>
Microsoft Defender Antivirus	Basic	Microsoft	This tool is used to protect and detect endpoint threats including file-based and fileless malware. Built into Windows 10 and 11 and in versions of Windows Server.	<a href="https://docs.microsoft.com/en-us/microsoft-365/security/defender-endpoint/microsoft-defender-antivirus-windows">https://docs.microsoft.com/en-us/microsoft-365/security/defender-endpoint/microsoft-defender-antivirus-windows</a>
Cybersecurity Evaluation Tool (CSET) and On-Site Cybersecurity Consulting	Basic	CISA	This tool assists organizations in protecting their key national cyber assets. The tool provides users with a systematic and repeatable approach to assessing the security posture of their cyber systems and networks. It includes both high-level and detailed questions related to all industrial control and IT systems.	<a href="https://github.com/cisagov/cset">https://github.com/cisagov/cset</a>
CIS Hardware and Software Asset Tracker	Basic	Center for Internet Security	This tool is designed to help identify devices and applications. The spreadsheet can be used to track hardware, software, and sensitive information.	<a href="https://www.cisecurity.org/white-papers/cis-hardware-and-software-asset-tracking-spreadsheet/">https://www.cisecurity.org/white-papers/cis-hardware-and-software-asset-tracking-spreadsheet/</a>
PGP	Basic	Open Source	This tool encrypts emails with public key cryptography.	<a href="https://www.openpgp.org/">https://www.openpgp.org/</a>
BitLocker for Microsoft Windows	Basic	Microsoft	This tool encrypts Microsoft Windows systems.	<a href="https://docs.microsoft.com/en-us/windows/security/information-protection/bitlocker/bitlocker-how-to-deploy-on-windows-server">https://docs.microsoft.com/en-us/windows/security/information-protection/bitlocker/bitlocker-how-to-deploy-on-windows-server</a>
AdBlock	Basic	Open Source	This tool blocks pop-up ads, videos and other unwanted content whilst browsing.	<a href="https://gcatoolkit.org/tool/adblock/">https://gcatoolkit.org/tool/adblock/</a>
Quad9 for Android	Basic	Open Source	This tool for Android devices is designed to help block users from accessing known sites that have viruses or other malware.	<a href="https://www.quad9.net/news/blog/quad9-connect-now-available-on-google-play/">https://www.quad9.net/news/blog/quad9-connect-now-available-on-google-play/</a>

AllStar	Basic	Open Source	AllStar is a GitHub application for enforcing security policies and permissions.	<a href="https://github.com/ossf/allstar">https://github.com/ossf/allstar</a>
Security Scorecards	Basic	Open Source	Security Scorecards is a collection of security health metrics for open source, allowing users to evaluate the security practices of an open source package before use. Results available publicly as a Google Cloud Big Query Dataset.	<a href="https://github.com/ossf/scorecard">https://github.com/ossf/scorecard</a>
Tink	Basic	Open Source	Tink is a multi-language, cross-platform, open-source library that provides cryptographic APIs that are secure, easy to use correctly, and hard(er) to misuse.	<a href="https://github.com/google/tink">https://github.com/google/tink</a>
Google Cybersecurity Action Team	Basic	Google	This service provides a number of security resources including security blueprints, whitepapers, threat reports, and information regarding recent vulnerabilities.	<a href="https://cloud.google.com/security/gcat">https://cloud.google.com/security/gcat</a>
Tsunami Security Scanner	Basic	Open Source	Tsunami is a general purpose network security scanner with an extensible plugin system for detecting high severity vulnerabilities with high confidence.	<a href="https://github.com/google/tsunami-security-scanner">https://github.com/google/tsunami-security-scanner</a>
OpenDNS Home	Basic	Cisco	OpenDNS blocks phishing websites that try to steal your identity and login information by pretending to be a legitimate website.	<a href="https://signup.opendns.com/homefree/">https://signup.opendns.com/homefree/</a>
CrowdStrike CRT	Advanced	CrowdStrike	CRT is a free community tool designed to help organizations quickly and easily review excessive permissions in their Azure AD environments. CRT helps determine configuration weaknesses and provides advice to mitigate this risk.	<a href="https://www.crowdstrike.com/resources/community-tools/crt-crowdstrike-reporting-tool-for-azure/">https://www.crowdstrike.com/resources/community-tools/crt-crowdstrike-reporting-tool-for-azure/</a>
Tenable Nessus Essentials	Advanced	Tenable	This free version of a vulnerability assessment solution includes remote and local (authenticated) security checks, a client/server architecture with a web-based interface, and an embedded scripting language for writing your own plugins or understanding existing ones. Limited by default to 16 hosts.	<a href="https://www.tenable.com/products/nessus/nessus-essentials">https://www.tenable.com/products/nessus/nessus-essentials</a>

Alien Labs Open Threat Exchange (OTX) Endpoint Security	Advanced	AT&T Cybersecurity	This tool leverages data from Alien Labs OTX to help identify if endpoints have been compromised in major cyberattacks. Provides quick visibility into threats on all endpoints by scanning IOCs using OTX.	<a href="https://cybersecurity.att.com/open-threat-exchange">https://cybersecurity.att.com/open-threat-exchange</a>
Alien Labs Open Threat Exchange (OTX)	Advanced	AT&T Cybersecurity	OTX provides open access to a global community of threat researchers and security professionals. It delivers community-generated threat data, enables collaborative research, and automates the process of updating security infrastructure with threat data from any source. OTX enables anyone in the security community to actively discuss, research, validate, and share the latest threat data, trends, and techniques.	<a href="https://cybersecurity.att.com/open-threat-exchange">https://cybersecurity.att.com/open-threat-exchange</a>
ClamAV	Advanced	Cisco	ClamAV is an open-source (general public license [GPL]) antivirus engine used in a variety of situations, including email and web scanning, and endpoint security. It provides many utilities for users, including a flexible and scalable multi-threaded daemon, a command-line scanner, and an advanced tool for automatic database updates.	<a href="http://www.clamav.net/">http://www.clamav.net/</a>
Kali Linux Penetration Testing Platform	Advanced	Kali Linux Project	Kali Linux contains several hundred tools targeted toward various information security tasks, such as penetration testing, security research, computer forensics, and reverse engineering.	<a href="https://www.kali.org/">https://www.kali.org/</a>
Cloudflare Zero Trust Services	Advanced	Cloudflare	Cloudflare Zero Trust Services are essential security controls to keep employees and apps protected online across 3 network locations and up to 50 users. Services include: Zero Trust Network Access; Secure Web Gateway, Private Routing to IP/Hosts; HTTP/S Inspection and Filters; Network Firewall as a Service; DNS Resolution and Filters; and Cloud Access Security Broker.	<a href="https://www.cloudflare.com/plans/free/">https://www.cloudflare.com/plans/free/</a>
Microsoft Sysinternals Security Utilities	Advanced	Microsoft	Sysinternals Security Utilities are free, downloadable tools for diagnosing, troubleshooting, and deeply understanding the Windows platform.	<a href="https://docs.microsoft.com/en-us/sysinternals/downloads/security-utilities">https://docs.microsoft.com/en-us/sysinternals/downloads/security-utilities</a>
Memory integrity	Advanced	Microsoft	Memory integrity in Windows—also known as Hypervisor-protected code integrity (HVCI)—is a Windows security feature that makes it difficult for malicious programs to use low-level drivers to hijack computers.	<a href="https://docs.microsoft.com/en-us/windows/security/threat-protection/device-guard/enable-virtualization-based-protection-of-code-integrity">https://docs.microsoft.com/en-us/windows/security/threat-protection/device-guard/enable-virtualization-based-protection-of-code-integrity</a>

RiskIQ Community	Advanced	Microsoft	The RiskIQ community offers free access to internet intelligence, including thousands of OSINT articles and artifacts. Community users can investigate threats by pivoting through attacker infrastructure data, understand what digital assets are internet-exposed, and map and monitor their external attack surface.	<a href="https://community.riskiq.com/home">https://community.riskiq.com/home</a>
IBM X-Force Exchange	Advanced	IBM	IBM X-Force Exchange is a cloud-based threat intelligence platform that allows users to consume, share, and act on threat intelligence. It enables users to conduct rapid research of the latest global security threats, aggregate actionable intelligence, consult with experts, and collaborate with peers.	<a href="https://www.ibm.com/products/xforce-exchange">https://www.ibm.com/products/xforce-exchange</a>
Mandiant Attack Surface Management	Advanced	Mandiant	This early warning system for information security allows you to: create comprehensive visibility through graph-based mapping; know when assets change to stay ahead of the threat; and empower security operations to mitigate real-world threats.	<a href="https://www.mandiant.com/advantage/attack-surface-management/get-started">https://www.mandiant.com/advantage/attack-surface-management/get-started</a>
Mandiant Threat Intelligence	Advanced	Mandiant	Free access to the Mandiant Threat Intelligence Portal helps users understand recent security trends, proactively hunt threat actors, and prioritize response activities.	<a href="https://www.mandiant.com/advantage/threat-intelligence/free-version">https://www.mandiant.com/advantage/threat-intelligence/free-version</a>
Splunk Synthetic Adversarial Log Objects (SALO)	Advanced	Splunk	SALO is a framework for generating synthetic log events without the need for infrastructure or actions to initiate the event that causes a log event.	<a href="https://github.com/splunk/salo">https://github.com/splunk/salo</a>
Splunk Attack Detection Collector (ADC)	Advanced	Splunk	This tool simplifies the process of collecting MITRE ATT&CK techniques from blogs or PDFs and mapping ATT&CK TTPs to Splunk detection content.	<a href="https://github.com/splunk/attack-detections-collector">https://github.com/splunk/attack-detections-collector</a>
Splunk Attack Range	Advanced	Splunk	This tool enables simulated attacks in a repeatable cloud-enabled (or on-premises) lab with a focus on Atomic Red Team integration.	<a href="https://github.com/splunk/attack_range">https://github.com/splunk/attack_range</a>
Splunk Training	Advanced	Splunk	Splunk Training is a free, hosted platform for on-demand training with hands-on practice addressing specific attacks and realistic scenarios.	<a href="https://bots.splunk.com">https://bots.splunk.com</a>



VMware Carbon Black User Exchange	Advanced	VMware	Carbon Black User Exchange provides access to real-time threat research data shared by a global community of security professionals.	<a href="https://community.carbonblack.com/">https://community.carbonblack.com/</a>
Carbon Black TAU Excel 4 Macro Analysis	Advanced	VMware	This tool tests endpoint security solutions against Excel 4.0 macro techniques.	<a href="https://github.com/carbonblack/excel4-tests">https://github.com/carbonblack/excel4-tests</a>
Paros Proxy	Advanced	Open Source	This Java-based tool is used to find vulnerabilities in web applications. It includes a web traffic recorder, web spider, hash calculator, and a scanner for testing common web application attacks, such as SQL injection and cross-site scripting.	<a href="https://www.parosproxy.org/">https://www.parosproxy.org/</a>
Cyber Security Tools by SANS Instructors	Advanced	SANS	This website includes links to an array of open-source tools built by cybersecurity instructors.	<a href="https://www.sans.org/tools/">https://www.sans.org/tools/</a>
Windows Management Instrumentation Command-line	Advanced	Microsoft	The WMI command-line (WMIC) utility provides a command-line interface for Windows Management Instrumentation (WMI). WMIC is compatible with existing shells and utility commands.	<a href="https://docs.microsoft.com/en-us/windows/win32/wmisdk/wmic">https://docs.microsoft.com/en-us/windows/win32/wmisdk/wmic</a>
Let's Encrypt	Advanced	Open Source	This tool provides a free digital certificate to enable HTTPS (SSL/TLS) for websites.	<a href="https://letsencrypt.org/getting-started/">https://letsencrypt.org/getting-started/</a>
Hping	Advanced	Open Source	This tool assembles and sends custom ICMP, UDP, or TCP packets and then displays any replies. It can be useful for performing security assessments.	<a href="http://www.hping.org/">http://www.hping.org/</a>
Aircrack	Advanced	Open Source	Aircrack is a suite of tools for testing the strength of passwords used for wireless networks.	<a href="https://www.aircrack-ng.org/">https://www.aircrack-ng.org/</a>
Nikto	Advanced	Open Source	Nikto is an open source (GPL) web server scanner that performs vulnerability scanning against web servers for multiple items, including dangerous files and programs. Nikto checks for outdated versions of web server software. It also checks for server configuration errors and any possible vulnerabilities they might have introduced.	<a href="https://cirt.net/nikto2">https://cirt.net/nikto2</a>
w3af	Advanced	Open Source	W3af is a flexible framework for finding and exploiting web application vulnerabilities, featuring dozens of web assessment and exploitation plugins.	<a href="http://w3af.org/">http://w3af.org/</a>

VMware Fusion Player	Advanced	VMware	This tool allows Mac users to run Windows, Linux, containers, Kubernetes, and more in virtual machines without rebooting.	<a href="https://customerconnect.vmware.com/web/vmware/evalcenter?p=fusion-player-personal">https://customerconnect.vmware.com/web/vmware/evalcenter?p=fusion-player-personal</a>
Secureworks PhishInSuits	Advanced	Secureworks	The PhishInSuits (pis.py) tool conducts security assessments and tests control frameworks against scenarios, such as BEC attacks. It combines this variation of illicit consent attacks with SMS-based phishing to emulate BEC campaigns and includes automated data-exfiltration capabilities.	<a href="https://github.com/secureworks/PhishInSuits">https://github.com/secureworks/PhishInSuits</a>
Secureworks WhiskeySAML	Advanced	Secureworks	The WhiskeySAML tool automates the remote extraction of an ADFS signing certificate. WhiskeySAML then uses this signing certificate to launch a Golden SAML attack and impersonate any user within the target organization.	<a href="https://github.com/secureworks/whiskeysamlandfriends">https://github.com/secureworks/whiskeysamlandfriends</a>
Collabfiltrator	Advanced	Secureworks	This tool is designed to exfiltrate blind remote code execution output over DNS via Burp Collaborator.	<a href="https://github.com/0xC01DF00D/Collabfiltrator">https://github.com/0xC01DF00D/Collabfiltrator</a>
O365Spray	Advanced	Secureworks	This tool is a username enumeration and password spraying tool aimed at Microsoft Office 365.	<a href="https://github.com/0xZDH/o365spray">https://github.com/0xZDH/o365spray</a>
Tachyon	Advanced	Secureworks	Tachyon is a rapid web application security reconnaissance tool. It is designed to crawl a web application and look for leftover or non-indexed files with the addition of reporting pages or scripts leaking internal data (a.k.a "blind" crawling). It is used from the command line and targeted at a specific domain. Tachyon uses an internal database to construct these blind queries swiftly.	<a href="https://github.com/delvelabs/tachyon">https://github.com/delvelabs/tachyon</a>
Vane2	Advanced	Secureworks	Vane2 is a WordPress site vulnerability scanner. It is meant to be targeted at WordPress websites and identifies the corresponding WordPress version as well as its installed plugins in order to report known vulnerabilities on each.	<a href="https://github.com/delvelabs/vane2">https://github.com/delvelabs/vane2</a>
Batea	Advanced	Secureworks	Batea is a practical application of machine learning for pentesting and network reconnaissance. It consumes map reports and uses a context-driven network device ranking framework based on the anomaly detection family of machine learning algorithms. The goal of Batea is to allow security teams to automatically filter interesting network assets in large networks using nmap scan reports.	<a href="https://github.com/delvelabs/batea">https://github.com/delvelabs/batea</a>
Checkov	Advanced	Palo Alto Networks	This tool scans Infrastructure as Code (IaC), container images, open-source packages, and pipeline configuration for security errors. With hundreds of built-in policies, Checkov surfaces misconfigurations and vulnerabilities in code across developer tools (CLI, IDE) and workflows (CI/CD pipelines).	<a href="https://github.com/bridgecrewio/checkov">https://github.com/bridgecrewio/checkov</a>
Palo Alto Networks Unit 42- Actionable Threat Objects and Mitigations (ATOMs)	Advanced	Palo Alto Networks	ATOMs is a free repository of observed behaviors of several common threat adversaries, mapped to the MITRE ATT&CK framework. ATOMs can be filtered by targeted sector, region, or malware used for ease of information sharing and deployment of recommended security mitigations.	<a href="https://unit42.paloaltonetworks.com/atoms/">https://unit42.paloaltonetworks.com/atoms/</a> ;
Google ClusterFuzz	Advanced	Google	ClusterFuzz is a scalable fuzzing infrastructure that finds security and stability issues in software. It is also the fuzzing backend for Google OSS-Fuzz. ClusterFuzz Lite is simple CI-integrated fuzzing based on ClusterFuzz.	<a href="https://google.github.io/clusterfuzz/">https://google.github.io/clusterfuzz/</a>

## Hapat për të zbuluar shpejt një ndërhyrje të mundshme :

Service	Skill Level	Owner	Description	Link
Microsoft Defender Antivirus	Basic	Microsoft	This tool protects and detects endpoint threats, including file-based and fileless malware. Built into Windows 10 and 11 and in versions of Windows Server.	<a href="https://docs.microsoft.com/en-us/microsoft-365/security/defender-endpoint/microsoft-defender-antivirus-windows">https://docs.microsoft.com/en-us/microsoft-365/security/defender-endpoint/microsoft-defender-antivirus-windows</a>
Microsoft Safety Scanner	Basic	Microsoft	Microsoft Safety Scanner is a scan tool designed to find and remove malware from Windows computers. It can run scans to find malware and try to reverse changes made by identified threats.	<a href="https://docs.microsoft.com/en-us/windows/security/threat-protection/intelligence/safety-scanner-download">https://docs.microsoft.com/en-us/windows/security/threat-protection/intelligence/safety-scanner-download</a>
Windows Malicious Software Removal tool	Basic	Microsoft	This tool is released by Microsoft on a monthly cadence as part of Windows Update or as a standalone tool. It can be used to find and remove specific prevalent threats and reverse the changes they have made.	<a href="https://support.microsoft.com/en-us/topic/remove-specific-prevalent-malware-with-windows-malicious-software-removal-tool-kb890830-ba51b71f-39cd-cdec-73eb-61979b0661e0">https://support.microsoft.com/en-us/topic/remove-specific-prevalent-malware-with-windows-malicious-software-removal-tool-kb890830-ba51b71f-39cd-cdec-73eb-61979b0661e0</a>
MSTICPy	Basic	Microsoft	MSTICPy is a SIEM-agnostic package of Python tools for security analysts to assist in investigations and threat hunting. It is primarily designed for use in Jupyter notebooks.	<a href="https://msticpy.readthedocs.io/en/latest/">https://msticpy.readthedocs.io/en/latest/</a>
Google Safe Browsing	Basic	Google	This service identifies known phishing and malware across the web and helps notify users and website owners of potential harm. It is integrated into many major products and provides tools to webmasters.	<a href="https://safebrowsing.google.com">https://safebrowsing.google.com</a>
Mandiant Red Team and Investigative Tools	Advanced	Mandiant	These tools are designed to confirm and investigate suspected security compromises.	<a href="https://github.com/Mandiant">https://github.com/Mandiant</a>
Splunk Connect for Syslog	Advanced	Splunk	This tool is used for getting syslog-based data into Splunk, including functions for data filtering and parsing.	<a href="https://splunkbase.splunk.com/app/4740/#/overview">https://splunkbase.splunk.com/app/4740/#/overview</a>
Enterprise Log Search and Archive (ELSA)	Advanced	Open source	Enterprise Log Search and Archive (ELSA) is a three-tier log receiver, archiver, indexer, and web front end for incoming syslog.	<a href="https://github.com/mcholste/elsa">https://github.com/mcholste/elsa</a>
Mandiant Azure AD Investigator	Advanced	Mandiant	This repository contains a PowerShell module for detecting artifacts that may be indicators of UNC2452 and other threat actor activity. Some indicators are "high-fidelity" indicators of compromise; other artifacts are so-called "dual-use" artifacts. Dual-use artifacts may be related to threat actor activity, but also may be related to legitimate functionality.	<a href="https://github.com/mandiant/Mandiant-Azure-AD-Investigator">https://github.com/mandiant/Mandiant-Azure-AD-Investigator</a>

VirusTotal	Advanced	Google	VirusTotal inspects items with over 70 antivirus scanners and URL/domain blocklisting services, in addition to a variety of tools, to extract signals from the studied content. Users can select a file from a computer via the browser and send it to VirusTotal. Submissions may be scripted in any programming language using the HTTP-based public API.	<a href="https://support.virustotal.com/hc/en-us/articles/115002126889-How-it-works">https://support.virustotal.com/hc/en-us/articles/115002126889-How-it-works</a>
Netfilter	Advanced	Open Source	Netfilter is a packet filter implemented in the standard Linux kernel. The user space iptables tool is used for configuration. It supports packet filtering (stateless or stateful), many kinds of network address and port translation (NAT/NAPT), and multiple API layers for third-party extensions. It includes many different modules for handling unruly protocols, such as FTP.	<a href="https://www.netfilter.org/">https://www.netfilter.org/</a>
Wireshark	Advanced	Open Source	Wireshark is an open-source multi-platform network protocol analyzer that allows users to examine data from a live network or from a capture file on disk. The tool can interactively browse capture data, delving down into just the level of packet detail needed. Wireshark has multiple features, including a rich display filter language and the ability to view the reconstructed stream of a TCP session. It also supports hundreds of protocols and media types.	<a href="https://www.wireshark.org/">https://www.wireshark.org/</a>
Ettercap	Advanced	Open Source	Ettercap is a suite for adversary-in-the-middle attacks on LAN that includes sniffing of live connections, content filtering on the fly, and many other features. It supports active and passive dissection of many protocols (including ciphered protocols) and includes many features for network and host analysis.	<a href="http://ettercap.sourceforge.net/">http://ettercap.sourceforge.net/</a>
Kismet	Advanced	Open Source	Kismet is a console (ncurses)-based 802.11 layer-2 wireless network detector, sniffer, and intrusion detection system. It identifies networks by passively sniffing and can decloak hidden (non-beaconing) networks if they are in use. It can automatically detect network IP blocks by sniffing TCP, UDP, ARP, and DHCP packets, log traffic in Wireshark/tcpdump compatible format, and even plot detected networks and estimated ranges on downloaded maps.	<a href="https://www.kismetwireless.net/">https://www.kismetwireless.net/</a>

Snort	Advanced	Cisco	This network intrusion detection and prevention system conducts traffic analysis and packet logging on IP networks. Through protocol analysis, content searching, and various pre-processors, Snort detects thousands of worms, vulnerability exploit attempts, port scans, and other suspicious behavior. Snort uses a flexible rule-based language to describe traffic that it should collect or pass, and a modular detection engine. The related free Basic Analysis and Security Engine (BASE) is a web interface for analyzing Snort alerts.	<a href="https://www.snort.org/">https://www.snort.org/</a>
sqlmap	Advanced	Open Source	sqlmap is an open source penetration testing tool that automates the process of detecting and exploiting SQL injection flaws and taking over of back-end database servers. It comes with a broad range of features, from database fingerprinting to fetching data from the DB and accessing the underlying file system and executing OS commands via out-of-band connections.	<a href="http://sqlmap.org/">http://sqlmap.org/</a>
RITA	Advanced	Open Source	Real Intelligence Threat Analytics (R-I-T-A) is an open-source framework for detecting command and control communication through network traffic analysis. The RITA framework ingests Zeek logs or PCAPs converted to Zeek logs for analysis.	<a href="https://www.activecountermeasures.com/free-tools/rita/">https://www.activecountermeasures.com/free-tools/rita/</a>
Secureworks Dalton	Advanced	Secureworks	Dalton is a system that allows a user to run network packet captures against a network sensor of their choice using defined rulesets and/or bespoke rules. Dalton covers Snort/Suricata/Zeek analysis in one system.	<a href="https://github.com/secureworks/dalton">https://github.com/secureworks/dalton</a>

## Mjetet për tu siguruar që organizata të jetë e përgatitur të përgjigjet nëse ndodh një ndërhyrje

Service	Skill Level	Owner	Description	Link
GRR Rapid Response	Basic	Google	GRR Rapid Response is an incident response framework focused on remote live forensics. The goal of GRR is to support forensics and investigations in a fast, scalable manner to allow analysts to quickly triage attacks and perform analysis remotely.	<a href="https://grr-doc.readthedocs.io/">https://grr-doc.readthedocs.io/</a>
Microsoft PsExec	Advanced	Microsoft	Psexec is a lightweight telnet replacement that lets users execute processes on other systems (complete with full interactivity for console applications) without having to manually install client software. Psexec's uses include launching interactive command-prompts on remote systems and remote-enabling tools such as IpConfig that otherwise do not have the ability to show information about remote systems.	<a href="https://docs.microsoft.com/en-us/sysinternals/downloads/psexec/">https://docs.microsoft.com/en-us/sysinternals/downloads/psexec/</a>
VMware Workstation Player	Advanced	VMware	This tool runs a single virtual machine on a Windows or Linux PC. It can be used when setting up an environment to analyze malware.	<a href="https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html">https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html</a>
VMware ESXi - Free	Advanced	VMware	This tool can be used when setting up an environment to analyze malware. It is a bare-metal hypervisor that installs directly onto a physical server, providing direct access to, and control of, underlying resources. It can be used to effectively partition hardware to consolidate applications.	<a href="https://www.vmware.com/products/esxi-and-esx.html">https://www.vmware.com/products/esxi-and-esx.html</a>
dTimeWolf	Advanced	Google	dTimeWolf is an open-source framework for orchestrating forensic collection, processing, and data export.	<a href="https://dtimewolf.readthedocs.io/">https://dtimewolf.readthedocs.io/</a>
Turbinia	Advanced	Google	Turbinia is an open-source framework for deploying, managing, and running distributed forensic workloads.	<a href="https://turbinia.readthedocs.io/">https://turbinia.readthedocs.io/</a>
Timesketch	Advanced	Open Source	Timesketch is an open-source tool for collaborative forensic timeline analysis. Using sketches, users and their collaborators can easily organize timelines and analyze them all at the same time.	<a href="https://timesketch.org/">https://timesketch.org/</a>

## Maksimizimi i qëndrueshmërisë së organizatës ndaj një incidenti shkatërrues kibernetik

Service	Skill Level	Owner	Description	Link
Windows Auto-Backup	Basic	Microsoft	This tool sets up automatic backups of Windows 10 and 11 operating systems.	<a href="https://support.microsoft.com/en-us/windows/backup-and-restore-in-windows-352091d2-bb9d-3ea3-ed18-52ef2b88cbef?">https://support.microsoft.com/en-us/windows/backup-and-restore-in-windows-352091d2-bb9d-3ea3-ed18-52ef2b88cbef?#</a>
Google Backup & Sync	Basic	Google	This tool backs up files on Windows or Mac computers. <b>Note:</b> it does not allow users to restore their system; it only saves copies of files.	<a href="https://support.google.com/drive/answer/7638428?">https://support.google.com/drive/answer/7638428?#</a>
Microsoft Threat Modeling Tool	Advanced	Microsoft	This tool is designed to make threat modeling easier for developers through a standard notation for visualizing system components, data flows, and security boundaries.	<a href="https://www.microsoft.com/en-us/securityengineering/sdl/threatmodeling?">https://www.microsoft.com/en-us/securityengineering/sdl/threatmodeling?#</a>
Microsoft SecCon Framework	Advanced	Microsoft	This framework is designed to help prioritize endpoint hardening recommendations.	<a href="https://github.com/microsoft/SecCon-Framework?">https://github.com/microsoft/SecCon-Framework?#</a>

## Rekomandime

Autoriteti Kombëtar për Certifikimin Elektronik dhe Sigurinë Kibernetike, AKCESK ka hartuar disa rekomandime dhe masa sigurie për organizatat dhe kompanitë për ti asistuar në vendosjen e një programi themelor të sigurisë kibernetike:

1. “Patch” të gjitha të metat e njohura të sigurisë në softuer që janë të instaluar në sistemet TIK.
2. Aktivizoni gjatë gjithë kohës autentikimin me disa apo shumë faktorë.
3. Ndalimin e përdorimit të çdo softueri ose mjeti të vjetërsuar dhe të pa mbështetur ne suport nga zhvilluesit përkatës.
4. Përdorimi i fjalëkalimeve të forta dhe kompleks, si dhe evitimin e ripërdorimit të fjalëkalimeve të mëparshëm.
5. Aplikimi periodik i Higjienës Kibernetike dhe Skanimi të Vulnerabiliteteve.
6. Sigurimi i sistemeve të ekspozuara në internet ndaj sulmeve apo incidenteve të ndryshëm.
7. Përditësimi periodik i pajisjeve dhe sistemeve që organizata disponon.
8. Vlerësimi dhe ri-vlerësimi i aksesit nga jashtë “remote”.
9. Testimi i procedurave Back-Up, Disaster-Recovery dhe Business Continuity.
10. Ndërveprimi me ekipin e menaxhimit të incidenteve kibernetike “CSIRT” të organizatës suaj në çdo rast sulmi apo incidenti.
11. Ndërveprimi me njësinë kombëtare te reagimit ndaj incidenteve AL-CSIRT në çdo rast sulmi apo incidenti

## Referenca

[1] <https://gbhackers-com.cdn.ampproject.org/c/s/gbhackers.com/free-cyber-security-tools/amp/>

[2] <https://www.cisa.gov/free-cybersecurity-services-and-tools>