

Agenda

ABOUT

01

- Organizational unit
- Establishing
- Constituents

SERVICES

02

- Cybersecurity risk assessment
- Email security standards and policies
- Free Service WebCheck
- Interactive Training Courses
- Network Security Monitoring System
- AntibotNet
- MISP Threat Sharing Platform
- Cyber-Responsible Organization
- Awareness (Videos & Animations)
- Automatic Malware Analysis



About

Organizational Unit

AEC



The National Centre for Computer Incidents Response (MKD-CIRT) is set up within the Agency for Electronic Communications as a separate organizational unit.

Establishing

2016



Established **2016**
The official national point of contact and for coordination in dealing with security incidents in networks and information systems.
Identifies and provides response to security incidents and risks.

Constituents

+130



All ministries, public administration and services of the Government. Critical infrastructure operators in the Republic of N. Macedonia, and Large organizations in the banking, transport, communication, health, energy and other strategic sectors in the country.

MKD-CIRT Service 1

Cybersecurity risks - assessment



HELP MKD-CIRT provide a BitSight service to constituents to help them better understand their own cybersecurity risks and those of their third-party partners.

Cybersecurity Ratings - **identify and prioritize**

Continuous Monitoring - **identify and respond**

Third-Party Risk Management - **identify and mitigate**

Benchmarking – **understand and improve**

MKD-CIRT Service 2

Email security standards and policies

FREE PUBLIC SERVICE for new email security standards and policies
Generators & Validators
Analysis of reports



DKIM (DomainKeys Identified Mail)

email authentication protocol that allows organizations/companies to attach digital signatures to their email messages.

DMARC (Domain-based Message Authentication, Reporting & Conformance)

email authentication protocol that helps organizations/companies protect their email domains from spoofing and other types of email-based attacks.

SPF (Sender Policy Framework)

email authentication protocol that specifies which IP addresses are allowed to send email on behalf of a particular domain..

<https://mailcheck.mkd-cirt.mk>

MKD-CIRT Service 3

Free service **WEBCHECK**

WEBCHECK

WEB APPLICATION SCANING

Multitenant Model

- MKD-CIRT provides company level access
- Each organization can initiate discovery and vulnerability Scans
- Automated scanning and reporting

“

Better Visibility on
vulnerabilities in public web
sites for MKD-CIRT

”



MKD-CIRT Service 4

Free Interactive Training Courses

Enrolled

+12000 citizens

11 cybersecurity topics each

Completed

+9000 citizens

2-hours long material

Certificate

upon successful completion
of final quiz

Basic cyber security training

- public administration and private sector employees
- managerial staff in the public and private sector

Unique Certificate Code

Search by Certificate ID

by entering the code from the certificate, you can check the reliability and data of the training visitor.



MKD-CIRT Service 5

Network Security Monitoring System

Cisco Stealthwatch

Network monitoring for
+10 organizations

Cisco Umbrella

+2500 end-point sensors

Systems for network and end-point monitoring, analysis and cyber security protection for the government and public sectors in North Macedonia



Anomaly detection using behavioral modeling

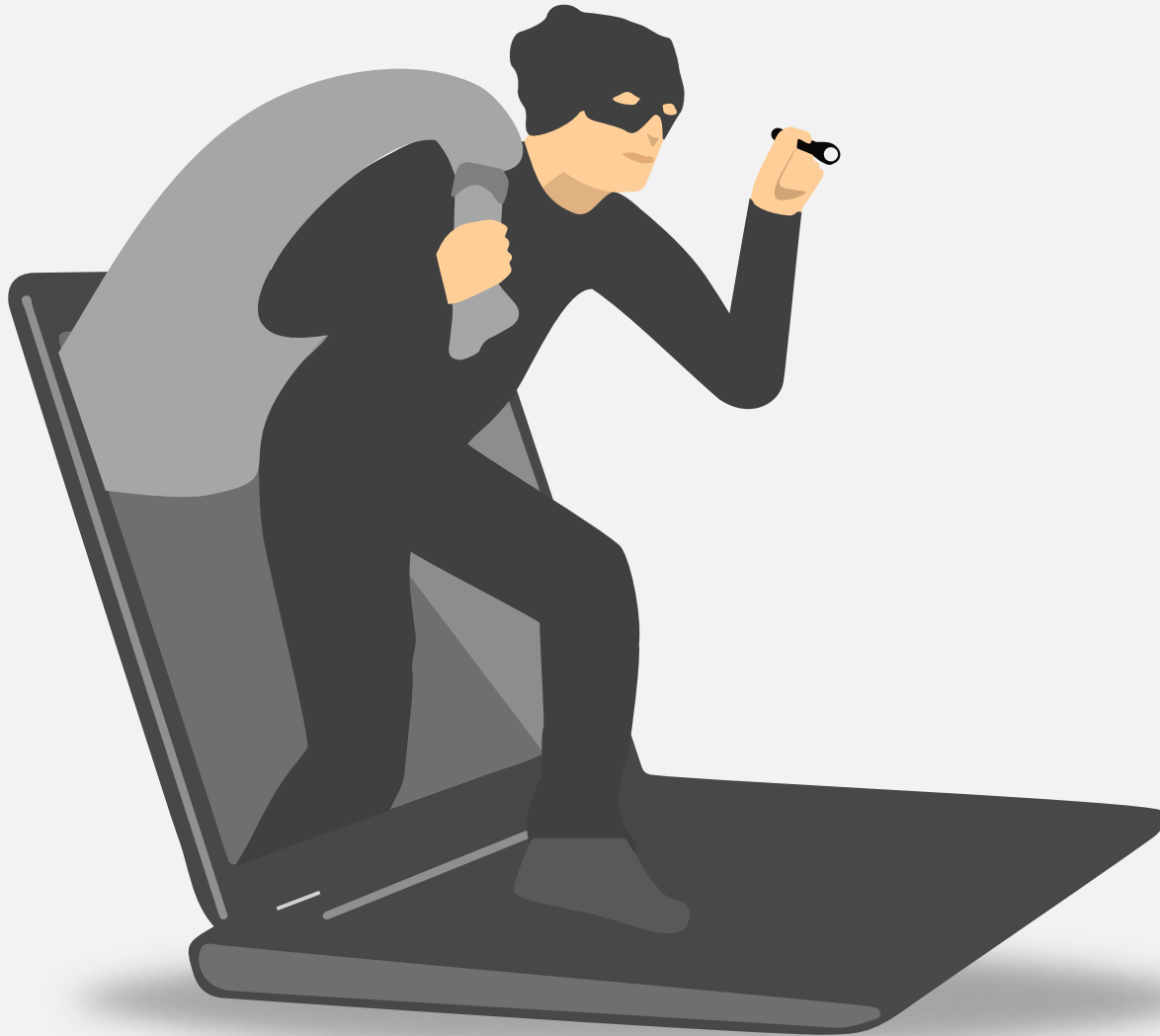
- Collect and analyze telemetry
- Create a baseline of normal behavior
- Alarm on anomalies and behavioral changes

Cloud-Based

- Prevention against phishing, malware, and ransomware attacks
- Visibility across all remote or on-site devices, ports, and cloud services
- Intelligence to uncover and defend against current and emerging threats



MKD-CIRT Service 6



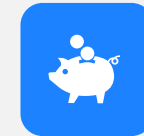
ANTIBOTNET

MKD-CIRT's AntiBotNet service allows you to check whether your public IP address has been identified as a source of malicious activity that is a sign of possible compromise of the device or devices you access the Internet with.

List of Malicious Domains



potentially malicious
and unknown
domains



collected through
the MKD-CIRT's
Network Security
Monitoring System



the list to block the
specified domains
on Firewall or other
system

<https://mkd-cirt.mk/antibotnet/>

MKD-CIRT Service 7

MISP Threat Sharing Platform

MISP (Malware Information Sharing Platform) is an open-source platform designed to support the sharing of threat intelligence, particularly related to cybersecurity incidents and malware. Enables constituents to share and collaborate on indicators of compromise (IoCs), attack patterns, threat intelligence, and other security-related data.



Sharing and collaboration

MISP enables constituents to share and collaborate on threat intelligence, allowing them to stay up-to-date with the latest threat information.

Customizable data models

The platform provides customizable data models, allowing organizations to define their own data structures for different types of information.

Event management

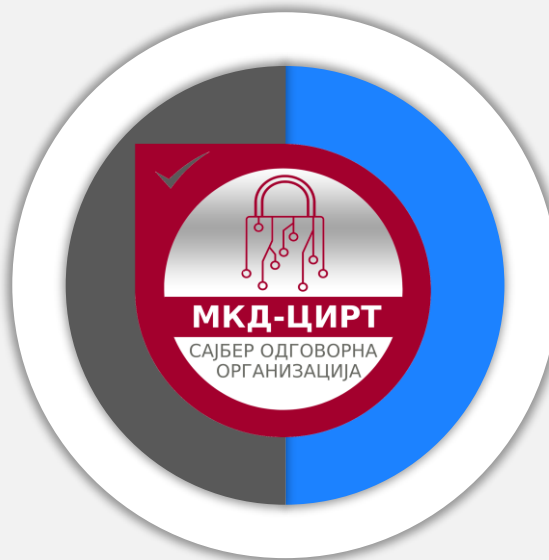
MISP enables users to create, manage, and update events, which are collections of information related to a particular security incident or threat.

MKD-CIRT Service 8

Cyber-Responsible Organization

Self-assessments questionnaire
for certification scheme
'Cyber-Responsible Organization'

MKD-CIRT issues a badge for recognition
Service is available free of charge at
<https://mkd-cirt.mk>



Safe business operations

Secure configurations

Upgrades and patching cadence

Access control

Viruses and malware

Cyber Attacks and Incident Management

MKD-CIRT Service 9

Programs for raising public awareness

Video



and Animations



MKD-CIRT Service 10

Automatic Malware Analysis

AMA

an open-source, community-driven malware analysis platform that provides a dynamic and configurable environment for malware analysis.

01 Analysis Machine

is the virtual machine where the malware is executed and observed. It can be configured with different operating systems, such as Windows or Linux, and different software configurations.

02 Analysis Engine

This component manages the analysis process and communicates with the analysis machine. It monitors the execution of the malware, collects data, and generates reports.

03 Database

Cuckoo stores the analysis results, metadata, and configuration data in a database for later reference..

04 Web Interface

The web interface provides a graphical user interface (GUI) for managing and monitoring the analysis process. It allows users to submit files for analysis, view reports.

<https://ama.mkd-cirt.mk> (accessible only from N.Macedonia)





THANK YOU FOR YOUR ATTENTION!

Sevdali Selmani
sevdali.selmani@aec.mk

National Center For Computer Incident Response **MKD-CIRT**
<https://mkd-cirt.mk> | contact@mkd-cirt.mk