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RENAME Association
www.cert.md
www.renam.md
RENAM – Research and Educational Network Association from Moldova.

RENAM network is providing services for scientific and educational organizations, personal members of scientific – educational community of Moldova.

At the moment, more than 80,000 users, working in more than 30 organizations, make use of RENAM facilities. 20,000 workstations, personal computers and 100 servers operate in the net. RENAM has peering agreements with some principal Internet Service providers in Moldova.
Realization of CERT – NATO project “Creation of Infrastructure for CERTs in Belarus, Moldova, Ukraine and their Initial Operation” in R&E networking segment of Moldova.

Specific features of MD CERT organization and functioning:

MD CERT deploying is effectuating in close cooperation with national CERT coordinator – SE “The Centre of Special Telecommunications”;

MD CERT is a part of the creation national structure of Secure Incident Response Centres;
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History

RENAM CERT starts in January 2007
01.12.2006 - installed the hardware 1 server and 1 workstation
01.01.2007 - created a web page on www.cert.md

End of 2007 - installed and configured ticketing system RT.
October 2007 - the first incident from another CERT– from CERT Polska
05.03.2008 - registered first incident from another CERT in RT ticketing system.

01.01.2009 – finalized NATO project “Creation of Infrastructure for CERTs in Belarus, Moldova, Ukraine and their Initial Operation”
02.06.2009 – CLOSER Workshop at Chisinau.
21.06.2010 – sent request to be listed in trusted introducer list
10.09.2010 – finalized cert.md web site redesign
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MD CERT Structure

- Users FAQ
- Monitoring System
- Ticketing System
- Forum
  - CERT Server
  - CERT Statistics
  - Incident Form
Contacts

• Cert-RENAM web page www.cert.md
• Mail for incidents inc@cert.acad.md
• Form for submit: http://cert.acad.md/submit-an-incident
• Trace incident: http://cert.acad.md/trace-incident
Center of internet security expertise
located at the RENAM Network

MD-CERT - CERT is a center of internet security expertise, located at the RENAM, Research and Education National Association from Moldova. We study internet security vulnerabilities, research long-term changes in networked systems, and develop information and training to help you improve security.

MD-CERT is the center of computer incidents analyzing. MD-CERT is officially registered CERT (Computer Security Incident Response Team) center and is engaged in gathering and analyzing the facts of computer incidents (i.e. attempts or the facts of infringements obviously certain for the owner of the information or standard in a network the Internet corrected works with computer resources) concerning the network resources located in territory MD. Any information about computer incidents, reference to useful resources in the field of protection of information technologies, advice, will be closely considered and as far as possible taken under consideration. MD-CERT guarantees confidentiality of all sent information on incidents.

MD-CERT is the noncommercial project and according to this status is not engaged in the activity connected with advertising, promotion of those or other decisions and techniques, an exchange of banners, development of projects on protection, etc.

For increasing security and registration dangerous incidents in the RENAM's network was created CERT (Computer Emergency Response Team). This is group of specialists who should engage in registration these incidents in the network and assist in eliminating the incidents.

Collecting of the information about the incidents should be done by 3 methods:

- Monitoring of the network and fixing of its suspicious parts or actions in the network.
- User will inform by himself about the incident on his part of the network and after this information is processed by CERT officer it will be considered as an incident.
- Information about the incident can be received from another CERT system. Because these systems and teams must exchange information about the incidents.

In the first case the incident is fixing automatically with help of many software programs and hardware equipment, mostly with help of such protocols as ICMP SNMP. There is a much of software for monitoring the system for example (Nagios and NetIQ). These programs are comfortable and well tested, but not always are suitable to all requests of monitoring. Also exists the necessity for CERT officer to add some modules for monitoring system.

Fixation of the incidents via automatic facility of monitoring helps to define existing of the incidents and even avoid the incident automatically. Besides this the automatic system helps to define statistics and consequences of the incidents and make action to avoid it.

The incident also can be examined by CERT officer if the incident is registered and sent to CERT officer via one of this methods:

- Phone
- Fax
- Registered on the site CERT - cert.acad.md, cert.renam.md, www.cert.md
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TicketID: 6313

Created ON: 2010-09-01 10:32:35

Created by: [Name]

LastUpdated: 2010-09-10 09:34:07

Assigned to: Gelex

Assigned at: 2010-09-10 09:34:06

Issue Progress:

Create 2010-09-01 10:32:35
Collecting of the incidents

- Monitoring of the network and fixation of its suspicious parts or actions in the network.

- User will inform by himself about the incident on his part of the network and after this information is processed by CERT officer it will be considered as an incident.

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Collecting of the incidents using **Nagios**

The main problem is organization of dynamic collecting of the IP From RENAM network
### RT at a glance

#### 10 highest priority tickets I own...

<table>
<thead>
<tr>
<th>#</th>
<th>Subject</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>6294</td>
<td>(No subject)</td>
<td>0</td>
</tr>
<tr>
<td>6301</td>
<td>[101465787] Trojan Related File Found on Server (<a href="http://deilaeyeew.ru/bin/saejuogi.bin">http://deilaeyeew.ru/bin/saejuogi.bin</a>)</td>
<td>0</td>
</tr>
<tr>
<td>6302</td>
<td>Assistance requested for additional malware scheme</td>
<td>0</td>
</tr>
<tr>
<td>6309</td>
<td>An Incident occurred: Fraudulent Trojan Site Found on Server (<a href="http://qeoimcnqoiroiwnevqornunoic.com/florencesd884ex48c7wbgf/florence4auq8jjvycp7n5fwf7d7.php">http://qeoimcnqoiroiwnevqornunoic.com/florencesd884ex48c7wbgf/florence4auq8jjvycp7n5fwf7d7.php</a>)</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 10 newest unowned tickets...

<table>
<thead>
<tr>
<th>#</th>
<th>Subject</th>
<th>Queue</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>6316</td>
<td>incident</td>
<td>Incidents</td>
<td>new</td>
</tr>
<tr>
<td>6315</td>
<td>An Incident occurred: [PL-12589] Malware - 195.5.161.68</td>
<td>Incidents</td>
<td>new</td>
</tr>
</tbody>
</table>

#### Quick ticket creation

<table>
<thead>
<tr>
<th>Subject</th>
<th>Queue</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
<td>Galex</td>
</tr>
</tbody>
</table>
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Statistics

CERT Quadrant Statistics

- Previous Month:
  - Number of Incidents
  - Date
  - 0.0 ➤ Administrator Incidents
  - 12.0 ➤ User Incidents

- Incidents per Month:
  - Number of Incidents
  - Date
  - 0.0 ➤ Administrator Incidents
  - 4.0 ➤ User Incidents

- Previous Quarter:
  - Number of Incidents
  - Date
  - 0.0 ➤ Administrator Incidents
  - 23.0 ➤ User Incidents
Main constituency of CERT-MD are Moldavian universities – members of RENAM Association.

The main types of incidents are
- Spam
- Port scanning

In addition CERT-MD registered and helped resolving incidents from CERT’s from other countries – Poland, Spain, USA, etc…

The type of those incidents were:
- Phishing
- Malware Hosting
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Summary

• Incident tracking system
• Incident handle
• Software network monitoring
• Website with web resources
• Statistics
• Established contacts with foreign CERT teams
Team of CERT RENAM is looking for ways to implement more services for RENAM constituency.

There are 2 principal ideas how to improve work of CERT in Moldova:

• Creation of anti DDOS network in Moldova

• Development of CERT infrastructure in the Republic of Moldova
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Development of CERT infrastructure in the Republic of Moldova

One of the main priority aim for CERT-RENAM is spreading security technologies through all RENAM network. The high priority goal is to offer each user in the network to submit incident which will be handled by CERT.

Current CERT infrastructure provides different possibilities for submitting the incident, but all of them have much parameters (IP, logs, …) that user need to introduce. It makes them not user friendly for internet Users.

The solution is to develop an web infrastructure:

• Creation of common INTERNET portal for collecting and handling the incidents

• Web module that we will be able to install at all Institutions for collecting incidents on the web sites.
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Creation of a centralizing system for collecting incidents will offer:

• To localize and prevent the incident at the early step of its spreading

• Track the evolution of the incident from its first appearing in the network

• Configure the monitoring of the dangerous parts of the network

• Make a wide statistics of the incidents as for the whole Republic and for selected organization.
1. Improving the web site www.cert.md to create the informational portal of Informational security.

2. Creating the special web module that can be integrated to different web resources, with special components for collecting, analyzing, monitoring of the incidents and special tools for calculating local statistics.

3. Installing the web module at all large ISP, public and governmental institutions, large educational organizations.

4. Connecting the local web sites with portal using web services.

5. Creating the system of common statistics.
Creation of anti DDOS network in Moldova

Creation a system for fighting against DDOS attacks using existing governmental network infrastructure of the Republic of Moldova. DDOS is a great problem for commercial and governmental INTERNET resources in our days. There doesn't exist any universal algorism for defending against DDOS for one server. The solution of this problem – is creation of unity distributed system for defending against DDOS based on the all servers of the republic. It will make possible to distribute identification of the legacy user threw the servers that are not attacked at this moment, that will guard the attacked server from the intruders attacks and will decrease its loading.
RENAM users and administrators have the main priority in resolving and analysing the incidents.

But all the Internet users from Moldova and from other countries can use the CERT services of RENAM Association for resolving the incidents in their network segments.

RENAM-CERT is open for communication and cooperation with other CERT teams from Moldova and other countries.