



**COMPUTER SECURITY  
INCIDENT RESPONSE  
TEAM**

**RU-CERT**

**10 years of experience in incident response  
in Russian Federation**

# About

- 1998. Start as RIPN (Russian Institute of Public Networks) project 1998 as CSIRT of RBNET (NREN)
- FIRST, TI member
- 2011. RU-CERT - non-commercial organization that plays a role of a national level CSIRT team of Russian Federation
- Hours of work - 10:00-18:00 every day, except weekends and national holidays
- Responsibility domain – whole Russian address space
- Funding model - sponsorship

# OPERATIONAL DETAILS

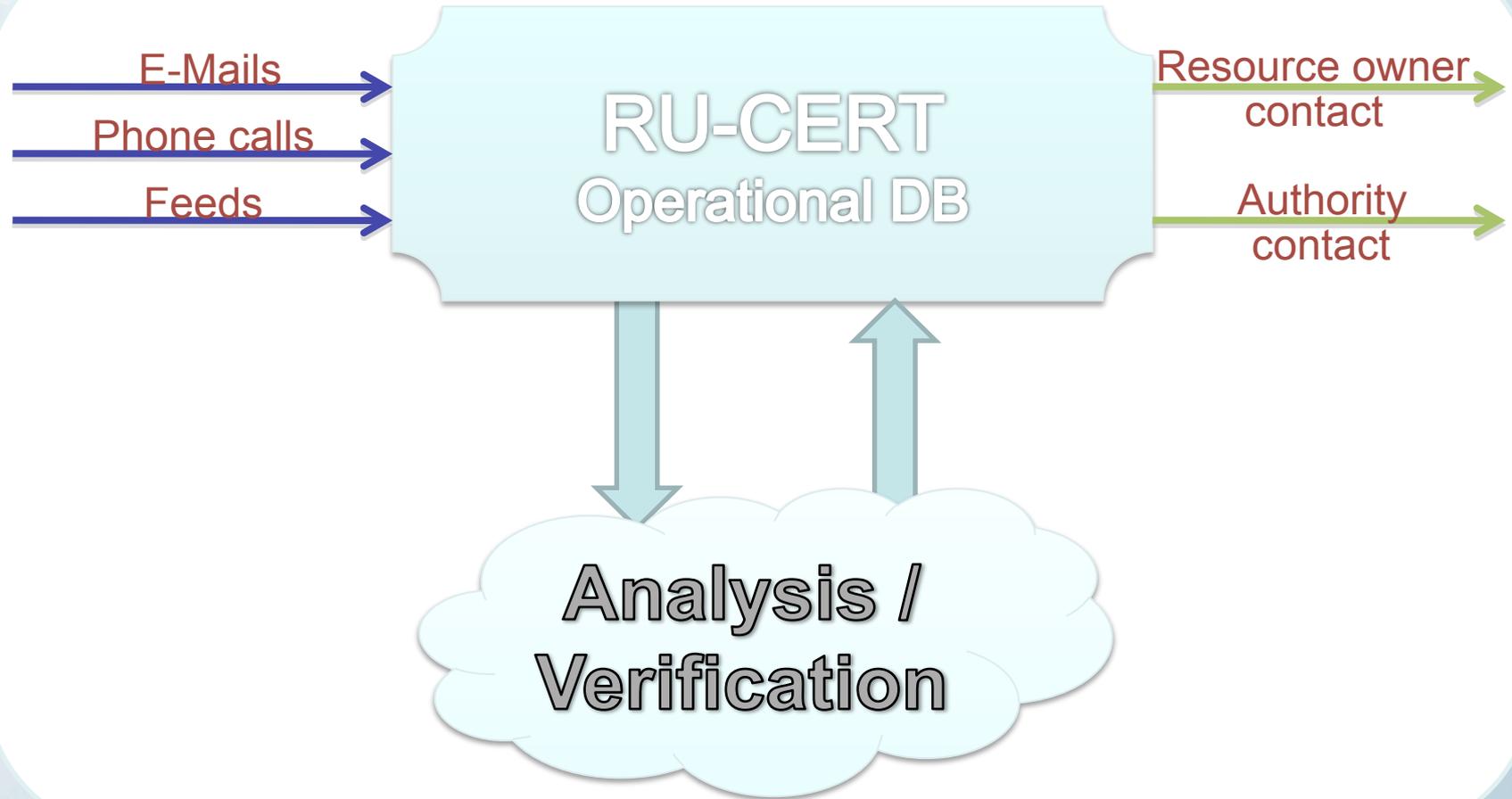
## Environment - reality

- No authority over ISPs, domain registrars, etc.
- No IP resources under control

## Mode of operation

1. Gathering (getting) all the information about malicious Russian resources and network activity related to Russian address space
2. Information analysis and verification
3. Attempting to solve the problem

# Mode of operation (continued)



# Another operational mode

- Dispatching urgent requests to Russian LEA

## Requests direction

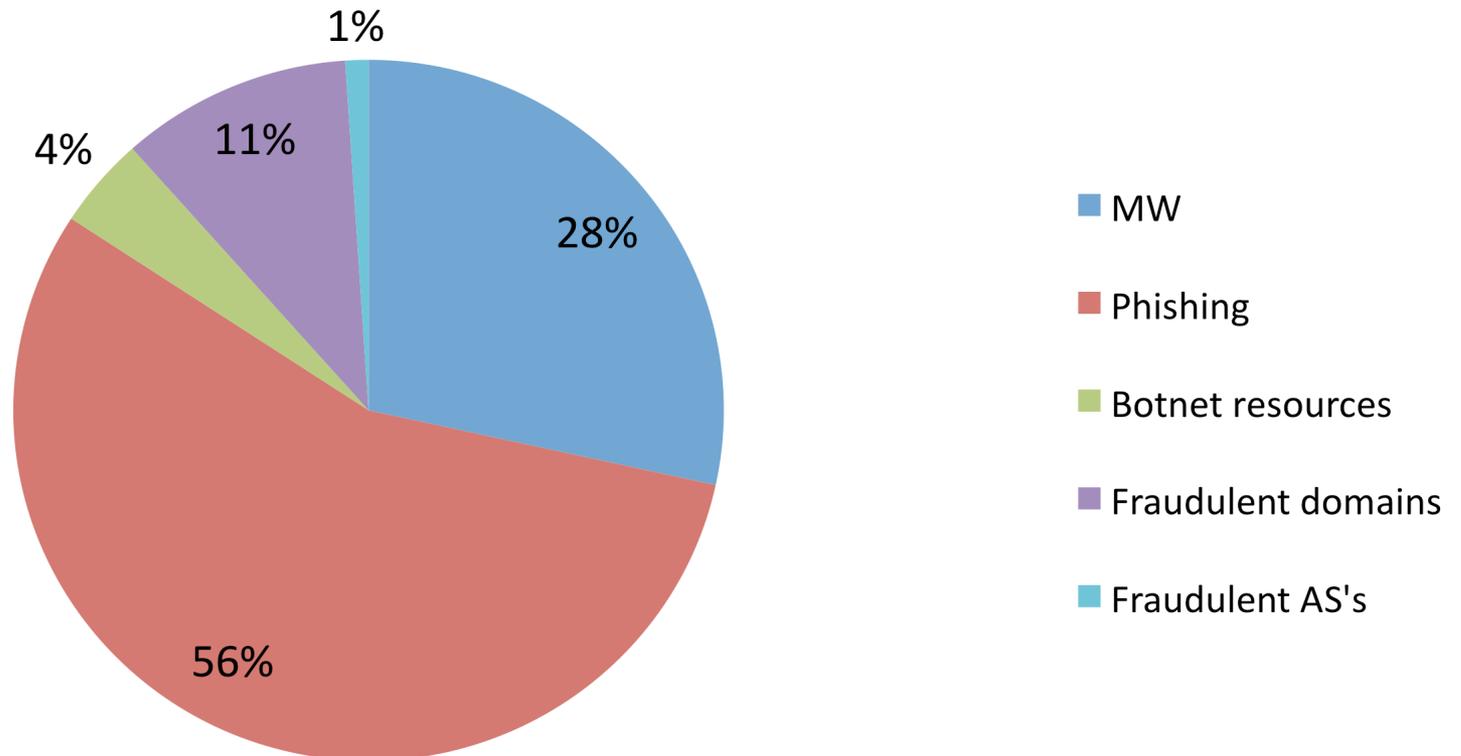
1. Foreign countries -> Russia 95%
2. Russia -> Foreign countries 1%
3. Russia -> Russia 4%

# INPUT details

## Incidents processed

All kinds of «typical» incidents, except SPAM cases

### Most common complaint types



# Feed sources

- Arbor Networks
- Shadowserver
- Abuse.ch bundle
- Malwaredomainlist
- CleanMX
- Phishtank
- Malc0de
- Team Cymru
- Some other' s (3-4, incl. temporary)

## Feed data volume (average/ per day)

Type	New	Unique	Summary
Phishing	62	176	199
MW	250	508	523
C&C	4	31	32

## Top list of e-mails input (5 months)

	MW	Phishing	Attacks
mycert@mycert.org. my	126		105
auscert@auscert.org. au	219	6	
ftsteam@paypal.com	14	189	
cert@cert.br	100	68	
csirt@bradesco.com. br	70	34	
@markmonitor.com	76	19	
@brandprotect.com	32	83	

## CC/TO balance statistic

	RU-CERT in TO field	RU-CERT in CC field
mycert@mycert.org.my	110	121
auscert@auscert.org.au	17	208
ftsteam@paypal.com	4	198
cert@cert.br	168	
csirt@bradesco.com.br	104	24
@markmonitor.com	67	14
@brandprotect.com	92	23
cais@cais.rnp.br		65
afcc@rsa.com	57	

# Information processing

**Security event** – any information related to computer security case

**Incident** – SE, that RU-CERT reacts to in some way



Will **SE** be transformed into **Incident** or not significantly depends on results of verification:

## **Phishing**

- 95-98% of all requests are really phishing resources
- ~80% of phishing resources are located on compromised servers
- Second level domains used for phishing sites – lately occurs very seldom
- Most cases - non-Russian banks and payment systems

**Malware** 70-75% can be verified (MHR, etc)

**Attacks** Unverified

**C&C** 10-15% can be verified

## Contact details

- 1.Resource owners – more than 600 contacts in RU-CERT database
- 2.LEA' s – 3-4 cases/per month
- 3.CCTLD (Coordination Center of Russian TLD zone) (domains in .ru/.pф zones)

## Monitoring model



# Incident processing software

**INCIDENT #2108011860**   

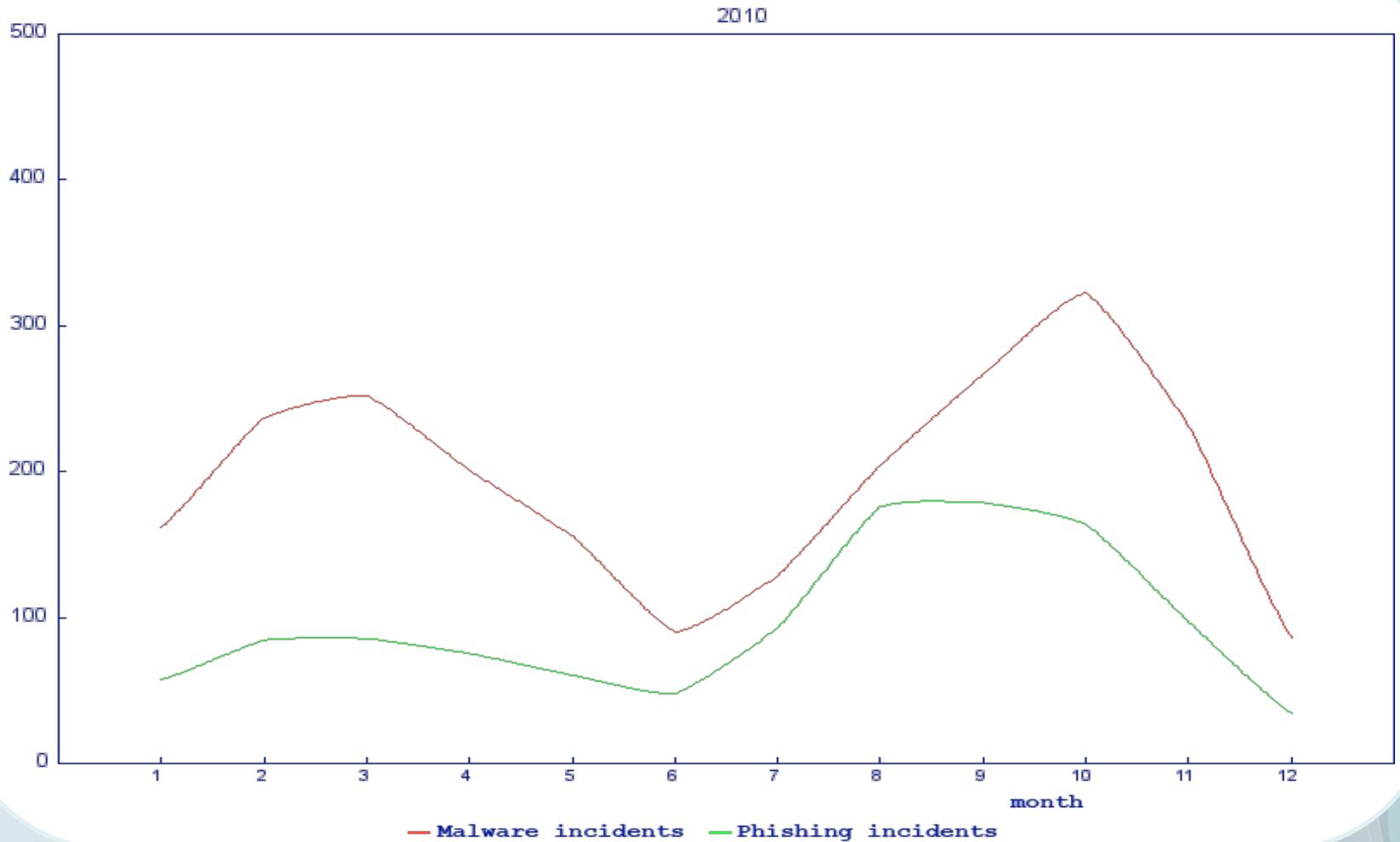
Type	malware
Created	2011-04-29 11:57:03  lich
Changed	2011-05-04 18:40:01
Status	<b>measures taken</b> ▼
Flags	<input checked="" type="checkbox"/> Autoprocessing <input type="checkbox"/> Postprocessing required
<b>COMMENTS</b> 	
-	
<b>CONTACTS</b>   	
<input type="checkbox"/> abuse@redcom.ru	
<b>Add</b> <b>Delete</b>	

**SOURCES**

<input type="checkbox"/>	 <a href="http://212.19.3.130">212.19.3.130</a> (AS8749, RU,  )	<a href="http://www.micro-chip.ru/catalog/images/Novo_sistema_Recadastro.exe">http://www.micro-chip.ru/catalog/images/Novo_sistema_Recadastro.exe</a>		
<b>Add</b> <b>Delete</b> <b>Separate</b>				
  				
<b>HISTORY (+)</b>				
<input checked="" type="radio"/> All <input type="radio"/> Operators <input type="radio"/> Auto				
<b>2011-05-04 18:40:01</b>	URL closed. Condition: measures taken.			
<b>2011-04-29 11:58:09</b>	Outgoing incident mail #2108011860			
<b>2011-04-29 11:57:03</b>	Incident #2108011860 created by			lich

# INCIDENT PROCESSING STATS

Summary (mw/phishing) 2010



# Destination geographic distribution

City	MW	Phishing
Moscow	3054 (47.07%)	191 (12%)
St. Petersburg	609 (9.38%)	22 (1.4%)

## Difficulties (technical)

- Incorrect information in RIPE database
- Small net objects often not listed in database
- AS' s ownership often can' t be discovered without ISP support (VPN)

## Effectiveness

Not easy to estimate – but performance index is positive because of:

- We have a lot of established contacts with ISPs/domain registrars
- Better chance to find out correct contacts (5-6 calls chain is normal)
- Requests coming from a Russian organization are usually treated in a more friendly manner

# Questions



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<http://www.cert.ru/>