### **CZ.NIC** and **CSIRT.CZ**

**Incident handling in 2015** 

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#### **National CSIRT**

- Roles derived from Act on Cybersecurity
  - receives notifications of contact information and incidents
  - acts as a contact point for our constituency
  - performs vulnerability assessments
  - provides methodological support, assistance and cooperation in case of cyber incident
- Roles derived from the CSIRT's 'nature'



## Incident handling/response

- No executive powers
- No end users support
- IH within "only" within our constituency
- Incidents are reported to us in cases of:
  - persisting incidents
  - incidents with possible wider implications
  - incidents where the other side does not respond (or responds negatively)
  - cross border incidents (lists of IP addresses belonging to various operators)



## **Incident response in 2015**

- 1160 reported incidents (excluding IDS) (not that big of a rise comparing to 2014)
- 376 phishing incidents
- 242 malware related incidents
- Still 'popular' targeted phishing campaigns
- Rising number of incidents related to SOHO routers

## **Incident handling in 2015**

- 2 new employees trained on IH procedures
- Endless training needed (in technical and operational manner)
- More semi-automated IH



## **Incident Handling in 2015**

- As a result of services integration we get new data from honeypots
- Thanks to that we have detected 22 new malware samples (double check with Virustotal)
- New samples were handed to antivirus companies
- Each month detected from 500-2000 new unique IP addresses (april-october 2015)
- Almost 50 countries were contacted



## **Incident Handling in 2015**

#### Ramnit Botnet

- thanks to coordination from Europol the net of almost 3 million computers was shrinking
- we obtained 222 emails with logs of communication with blackholes
- over 335 thousand of records with 363 unique IP addresses

#### DoS/DdoS again and again

- -Attacks were directed on number of czech ISPs
- solving issues with attacks coming to and from :/ Czech Republic



## **Malicious Domain Manager**

- Service related to website security within .CZ ccTLD
- Open-source application developed in CZ.NIC's research dept.
- Collects information from publicly available sources about malicious URLs
- Creates a ticket about all the URL's which are malicious on the .CZ domain
- Through the app we can contact the domain owner

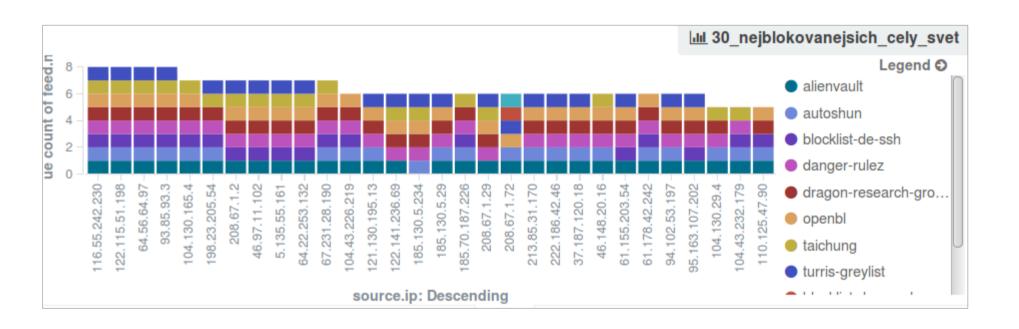


## **Malicious Domain Manager 2015**

- Since 2015....
- 1. Infected domain is opened in isolated browser
- 2.Selects the domains infected website is connecting to
- 3.Analyst manually selects which domains are probably malicious
- 4.Push the selected domains either in greylists or blacklists incorporated in Turris router
- 5.Turris users connection to greylists' domains are logged / connections to blacklists domains are blocked



## **Contribution to greylists on Turris home router**





#### PROKI 2015 – a new start

- Selection of security reports from CZ IP range only
- Possibility to filter through the incidents (by IP)
- Possible to follow security "trends" more closely
- Easier to follow more data sources (from the prospective of relevance)
- Operators will receive complex report for their IP range
- Looking for an good solutions (it will never be ideal)



# **Questions? Comments? Ideas?**

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