## **CSIRT**

Pavel Růžička <ruza@ruza.eu>

Brmlab hackerspace Prague Lightning talks

June 2016





CSIRT in general

Need to define:



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#### Need to define:

Constituency - to whom services are provided



#### Need to define:

- Constituency to whom services are provided
- Services and teams what CSIRT offers and who does that



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- Constituency to whom services are provided
- Services and teams what CSIRT offers and who does that
- Contacts email, ML, GnuPG, etc.



# **CSIRT Service Categories**



**CSIRT Service Categories** 

Reactive



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Reactive

2 Proactive



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3 Security quality management



# **CSIRT Service Categories**

- Reactive
  - Reactive services triggered by an event or request, such as a report of a compromised host, widespread malicious code, SW vulnerability, or something identified by an IDS or logging system.
- 2 Proactive

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 Reactive services - triggered by an event or request, such as a report of a compromised host, widespread malicious code, SW vulnerability, or something identified by an IDS or logging system.

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- 3 Security quality management
  - Security quality services IT audit, or training, identify risks, threats, and system weaknesses





## Reactive Services

 respond to requests for assistance, reports of incidents from the CSIRT constituency



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- any threats or attacks against CSIRT systems.
- Some services may be initiated by third-party notification or by viewing monitoring or IDS logs and alerts.



## Reactive Services

Alerts and Warnings



- Alerts and Warnings
- Incident Handling
  - Incident analysis
  - Incident response on site
  - Incident response support
  - Incident response coordination



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  - Artifact Handling
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Short-term recommendation for dealing with the resulting problem.

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The alert, warning, or advisory as a reaction to:

- intruder attack
- security vulnerability
- intrusion alert
- computer virus
- hoax



Reactive Services - Incident Handling

### ? The only CSIRT prerequisite

Providing an incident handling service is the only prerequisite to being considered a CSIRT. That means **responding to requests and reports**, and **analyzing incidents and events**.



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Proactive services

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- Incident response coordination N/A



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### Proactive services



#### **Proactive Services**

improve the infrastructure and security processes of the constituency



#### **Proactive Services**

Announcements



- Announcements
- Technology Watch



- Announcements
- Technology Watch
- Security Audits or Assessments



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- Configuration and Maintenance of Security Tools, Applications, and Infrastructures



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- Development of Security Tools
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- Configuration and Maintenance of Security Tools, Applications, and Infrastructures

- Development of Security
  Tools
- Intrusion Detection Services
- Security-Related Information Dissemination



#### Proactive Services - Announcements

Intrusion alerts



3 - - -

Security Quality Management Services

Proactive services

#### Proactive Services - Announcements

- Intrusion alerts
- vulnerability warnings



#### **Proactive Services - Announcements**

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- security advisories.



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Such announcements inform constituents about new developments with **medium- to long-term** impact, such as newly found vulnerabilities or intruder tools.



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 This service involves reading security mailing lists, web sites, news and journal articles in the fields of science, technology, politics, and government. CSIRT monitors new technical developments, intruder activities, and related trends to help identify FUTURE THREATS.



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- can be OPTIONALY expanded to include legal and legislative rulings, social or political threats, and emerging technologies.
- The outcome of this service might be some type of announcement, quidelines, or recommendations focused at more medium- to long-term security issues.



#### Proactive Services - Security Audits or Assessments



## Proactive Services - Security Audits or Assessments

Review and analysis of an organization's security infrastructure, security practices, based on the requirements defined by the organization or industry standards.

Infrastructure review



## Proactive Services - Security Audits or Assessments

- Infrastructure review
- Best practice review



## Proactive Services - Security Audits or Assessments

- Infrastructure review
- Best practice review
- Scanning



## Proactive Services - Security Audits or Assessments

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- Best practice review
- Scanning
- Penetration testing



# Proactive Services - Configuration and Maintenance of Security Tools, Applications, and Infrastructures

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- IDS, network scanning or monitoring systems, filters, wrappers, firewalls, VPNs, or authentication mechanisms
- configure and maintain servers, desktops, laptops, personal digital assistants (PDAs), and other wireless devices according to security guidelines.



## Proactive Services - Development of Security Tools

**developing** security **patches**, secured SW **distributions**, **tools** or **scripts** that extend existing security tools, network scanners, scripts, or automated patch distribution mechanisms.



#### Proactive Services - Intrusion Detection Services

review existing IDS logs, analyze and initiate a response



## Proactive Services - Security-Related Information Dissemination

provides comprehensive and **easy-to-find collection of useful information** that aids in improving security.





Risk analysis



- Risk analysis
- **Business Continuity and** Disaster Recovery Planning



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Awareness Building



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- Business Continuity and Disaster Recovery Planning
- Security Consulting

- Awareness Building
- Education/Training



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- Awareness Building
- Education/Training
- Product Evaluation or Certification



lessons learned from reactive and proactive services turned into security quality management process can improve the long-term security efforts in an organization.



## Security Quality Management Services -Risk analysis

Conduct or assist with **risk analysis** for new systems and business processes.



## Security Quality Management Services -Business Continuity and Disaster Recovery Planning

involved in **business continuity** and **disaster recovery planning** for events related to threats and attacks.



# Security Quality Management Services - Security Consulting

provide advice and guidance..



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best security practices to implement for business operations.



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- developing organizational security policies.



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### Security Quality Management Services - Awareness Building

Proactive services

 developing articles, posters, newsletters, web, etc that explain security best practices and provide advice.



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- developing articles, posters, newsletters, web, etc that explain security best practices and provide advice.
- may also include meetings and seminars to keep constituents up to date.



### Security Quality Management Services - Education/Training



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#### seminars, workshops, courses, and tutorials topics:

incident reporting guidelines



### Security Quality Management Services - Education/Training

- incident reporting guidelines
- appropriate response methods



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- incident response tools



### Security Quality Management Services - Education/Training

Proactive services

- incident reporting guidelines
- appropriate response methods
- incident response tools
- incident prevention methods



### Security Quality Management Services - Education/Training

Proactive services

- incident reporting guidelines
- appropriate response methods
- incident response tools
- incident prevention methods
- other info to protect, detect, report, and respond to computer security incidents.



### Security Quality Management Services - Product Evaluation or Certification

Product evaluations on tools, applications, or other services to ensure the security of the products



Volunteers?

### Volunteers?

