CSIRT

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Brmlab
hackerspace Prague
Lightning talks

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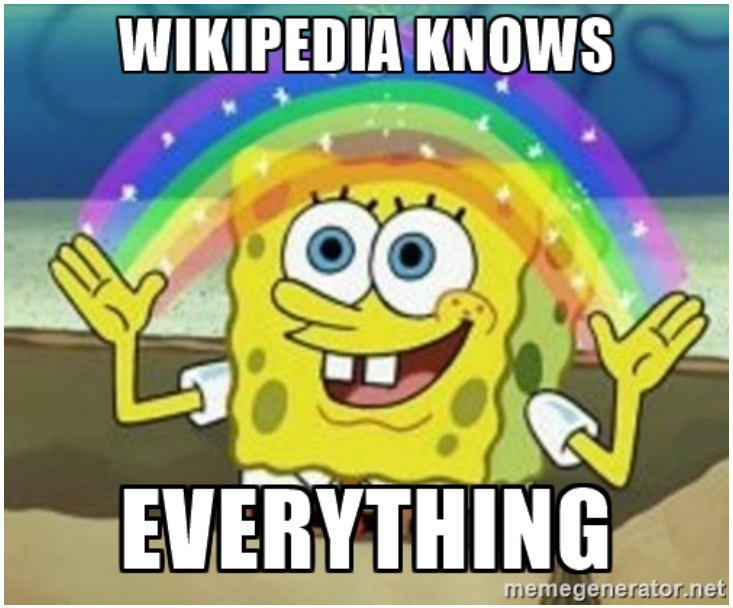
CSIRT in general

WTF is an CSIRT?



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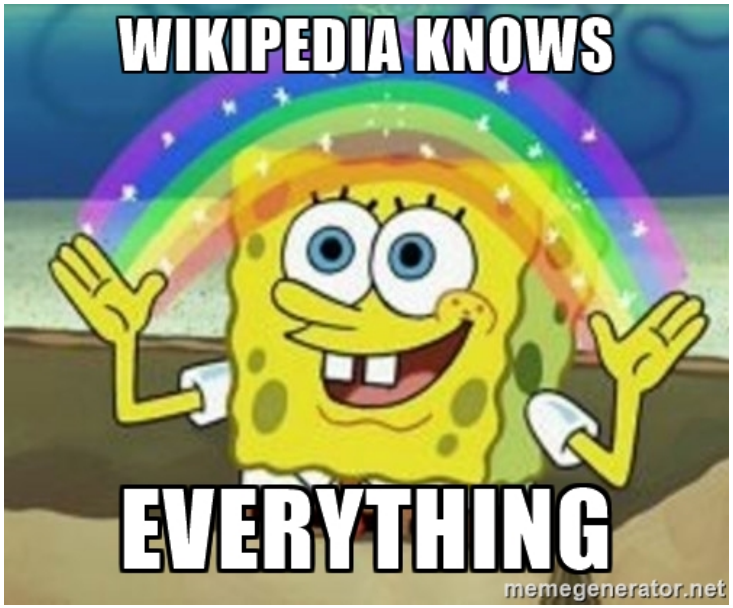
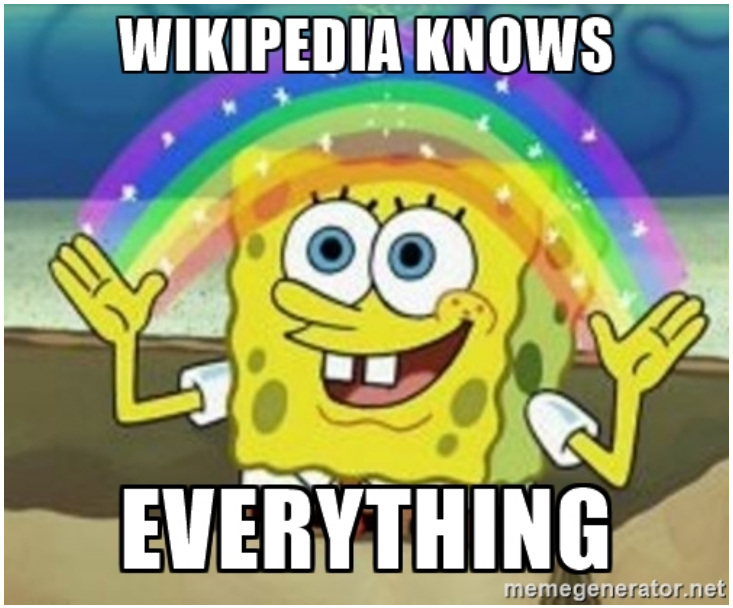


Computer Security

WTF is an CSIRT?



Computer Security Incident Response

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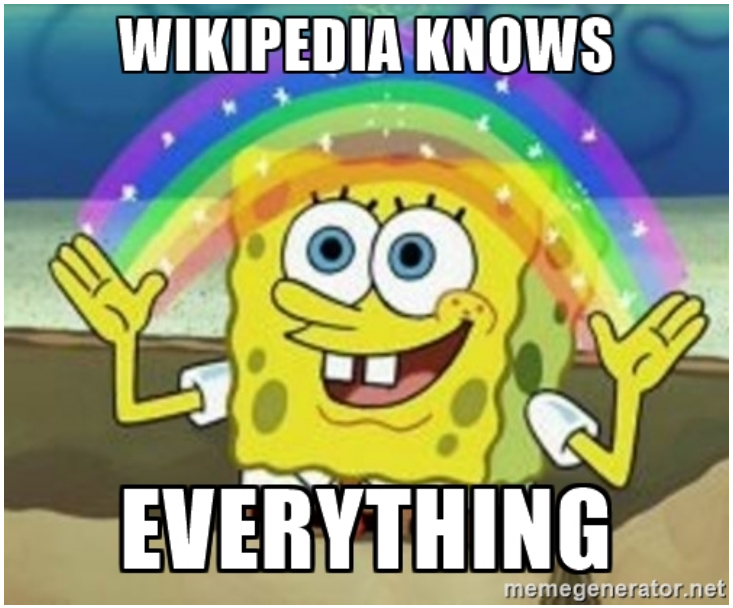

Computer Security Incident Response Team (CSIRT)

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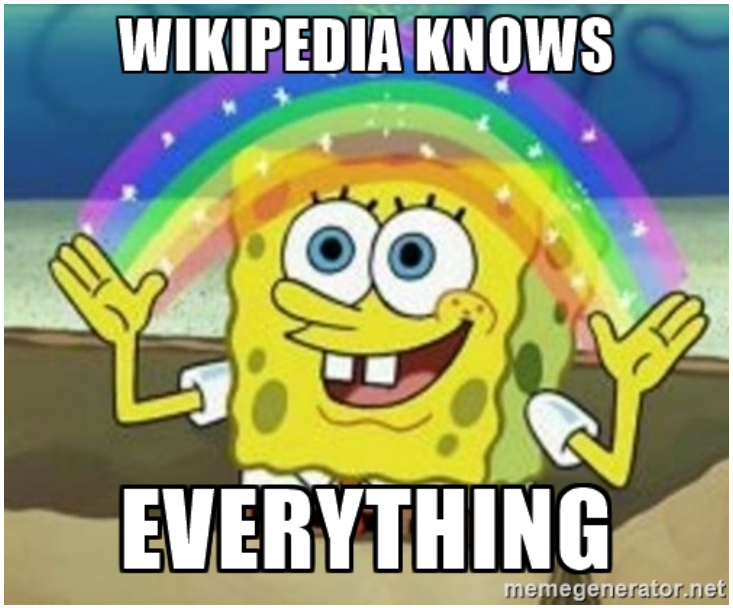

Computer Security Incident Response Team (CSIRT)
Computer Emergency

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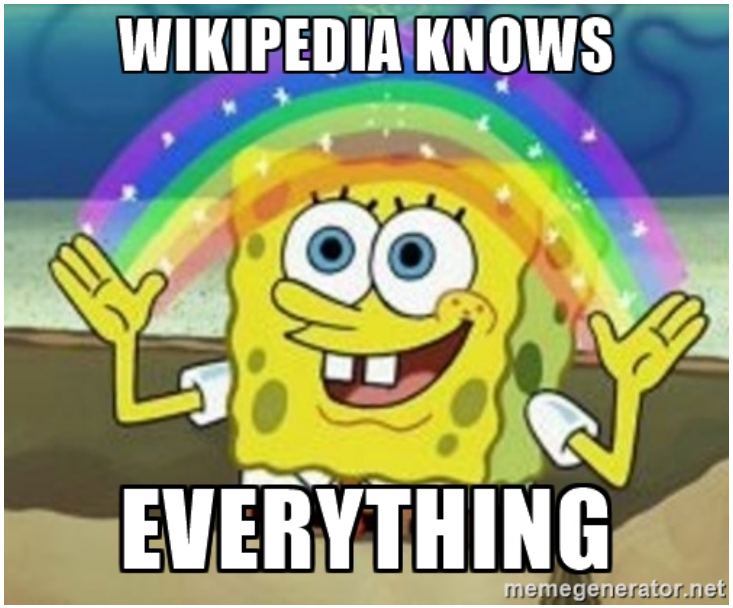

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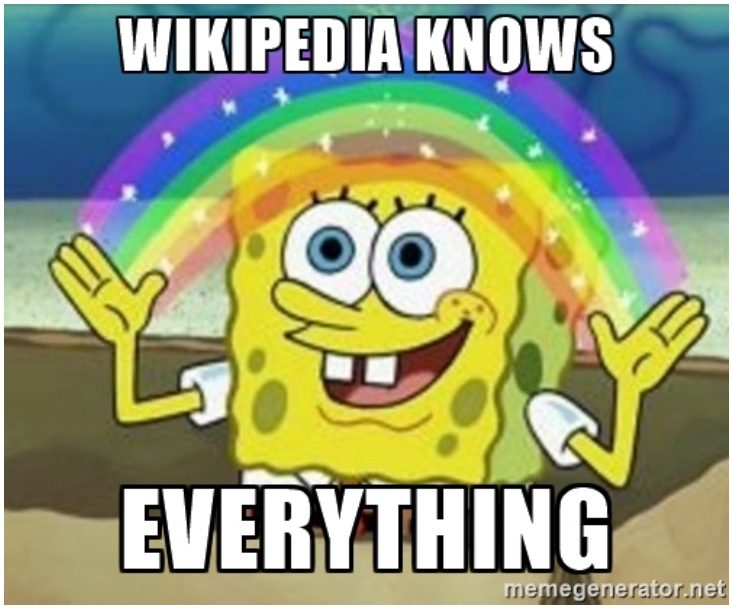

Computer Security Incident Response Team (CSIRT)
Computer Emergency Response Team (CERT)

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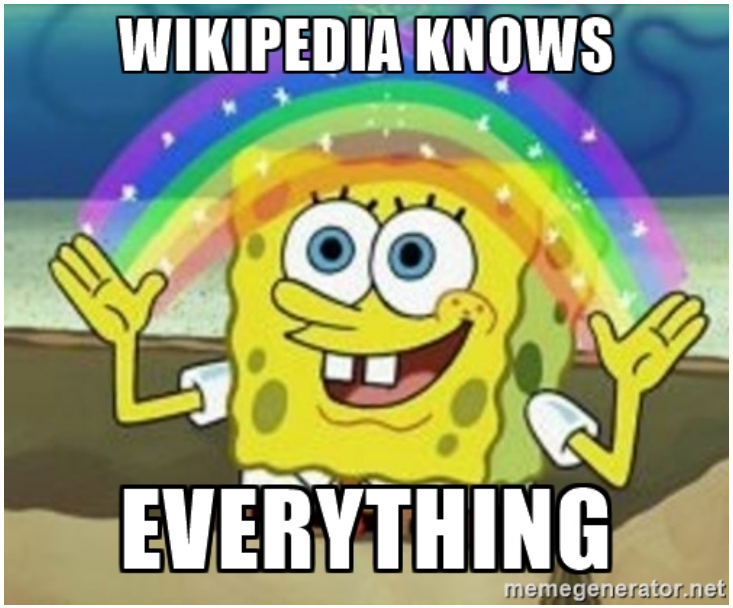

Computer Security Incident Response Team (CSIRT)
Computer Emergency Response Team (CERT)
Hackerspaces and CSIRTs are both organizations that are focused on computer security, so they can benefit from each others.

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CSIRT types

- listed
- accredited
- certified

The Trusted Introducer maintains the European database of CSIRTs.
`www.trusted-introducer.org/directory/teams.html`

Constituency types

vzit ze stranek The Trusted Introducer

CSIRT Service Categories

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- **Reactive** services

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- **Reactive** services
- **Proactive** services

CSIRT Service Categories

- **Reactive** services
- **Proactive** services
- **Security quality management** services

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  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.
- **Proactive** services

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  IT **audit, or training**, identify risks, threats, and system weaknesses

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- Some services may be initiated by **third-party notification** or by viewing **monitoring or IDS logs** and alerts.

Reactive Services

1 Alerts and Warnings

Reactive Services

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

Reactive Services

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3. Vulnerability Handling
   - Vulnerability analysis
   - Vulnerability response
   - Vulnerability response coordination
4. Artifact Handling
   - Artifact analysis
   - Artifact response
   - Artifact response coordination

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Reactive.1 - Alerts and Warnings

Short-term recommendation for dealing with the resulting problem.

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

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Short-term recommendation for dealing with the resulting problem.
The **alert, warning, or advisory** as a reaction to:

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

Reactive.2 - 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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- Incident response coordination

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Reactive.3 - Vulnerability Handling

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- Vulnerability response coordination - N/A

Reactive.4 - Artifact Handling

- Artifact analysis - **review** of an objects found on a system involved in probing or attacking systems/networks. i.e **viruses, trojans, worms, exploit scripts and toolkits**.

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- Artifact response coordination - N/A

Proactive services

Proactive Services

improve the **infrastructure** and **security processes** of the constituency

Proactive Services

1 Announcements

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2 Technology Watch

Proactive Services

1. Announcements
2. Technology Watch
3. Security Audits or Assessments

Proactive Services

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1. Announcements
2. Technology Watch
3. Security Audits or Assessments
4. Configuration and Maintenance of Security Tools, Applications, and Infrastructures
5. Development of Security Tools
6. Intrusion Detection Services
7. Security-Related Information Dissemination

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Proactive.1 - Announcements

- Intrusion alerts

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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.

Proactive.2 - Technology Watch

- 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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- The outcome of this service might be some type of **announcement, guidelines, or recommendations** focused at more medium- to long-term security issues.

Proactive.3 - 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.

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

- Infrastructure review
- Best practice review
- Scanning
- Penetration testing

Proactive.4 - Configuration and Maintenance of Security Tools, Applications, and Infrastructures

Configuration updates and maintenance of security tools and services.

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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.5 - 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.6 - Intrusion Detection Services

review existing IDS logs, analyze and initiate a response

Proactive.7 - Security-Related Information Dissemination

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

Security Quality Management Services

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lessons learned

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from **reactive and proactive services**

Security Quality Management Services

lessons learned
from **reactive and proactive services**
turned into **security quality management process**

Security Quality Management Services

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

Security Quality Management Services

1 Risk analysis

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1. Risk analysis
2. Business Continuity and Disaster Recovery Planning

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4. Awareness Building
5. Education/Training
6. Product Evaluation or Certification

Security Quality Management Services.1 -Risk analysis

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

Security Quality Management Services.2 - 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.3 - Security Consulting

provide advice and guidance..

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- **legislative**

Security Quality Management Services.4 - Awareness Building

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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.5 - Education/Training

seminars, workshops, courses, and **tutorials**

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- 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.6 - Product Evaluation or Certification

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

HowTo create an CSIRT

Need to define:

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- Constituency - to whom services are provided

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HowTo create an CSIRT

Need to define:

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

Volunteers?