SPCSS

Státní pokladna
Centrum sdílených služeb

Poskytovatel služeb datových center

a služeb kybernetické bezpečnosti

pro státní správu

Validace detekce a Aktivní obrana v cloudu

SPCSS – Ondřej Nekovář, Jan Pohl

e-government 20:10, Mikulov

06. - 07. 09. 2022

Státní pokladna Centrum sdílených služeb s. p.

SPCSS

Intro

Stage 1/4

Intro

About Us

- **Ondřej Nekovář**
- **Jan Pohl**

Státní pokladna Centrum sdílených služeb, s. p.

Intro

Our topics

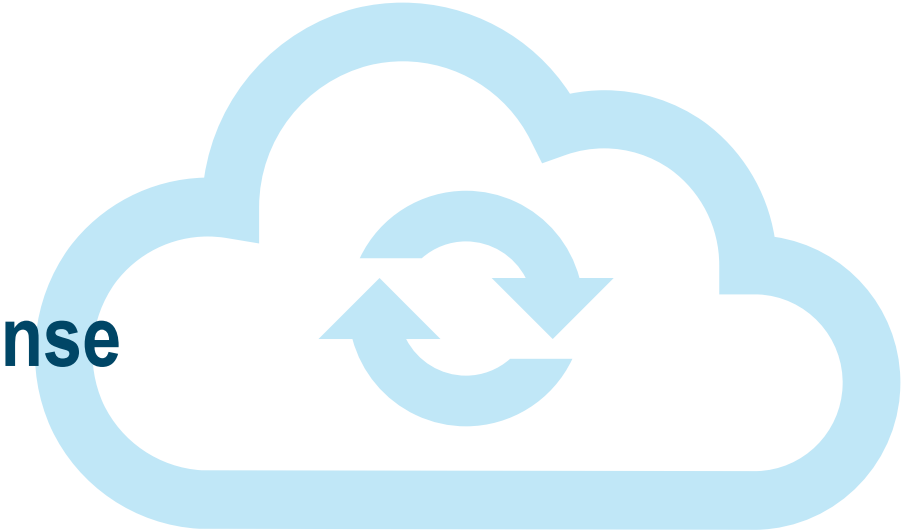
- **DC, Cloud, Hybrid-cloud bezpečnost**

- **Aktivní kybernetická obrana**

Intro

Our business

- SOC
- Threat-intel
- Incident response
- Vulnerability
- Threat hunting
- Adversary emulation
- Active defense
- Identity
- Integration
- Risk
- Awareness (internal, external)
- Policy



Intro

Our projects

- **Deception platform**
- **Threat-intel platform**
- **Incident response platform**
- **Passwordless**
- **SOCCRATES**

Intro

Our projects

- **Příprava na provozování státní části eGC**
- **Realizace SOC2® - BÚ3 (Azure, AzS), BÚ4**
- **Assessment pro IS BÚ4 k přechodu do státní části eGC**

Intro

We did

- **FAKO**
- **MISP training**
- **Odborné prezentace**
- **Průvodce řízením aktiv a rizik dle vyhlášky o kybernetické bezpečnosti**
- **Metodika AR předmětu veřejné zakázky**
- **Metodika zabezpečení kubernetes**

Kontext

Stage 2/4

Intro

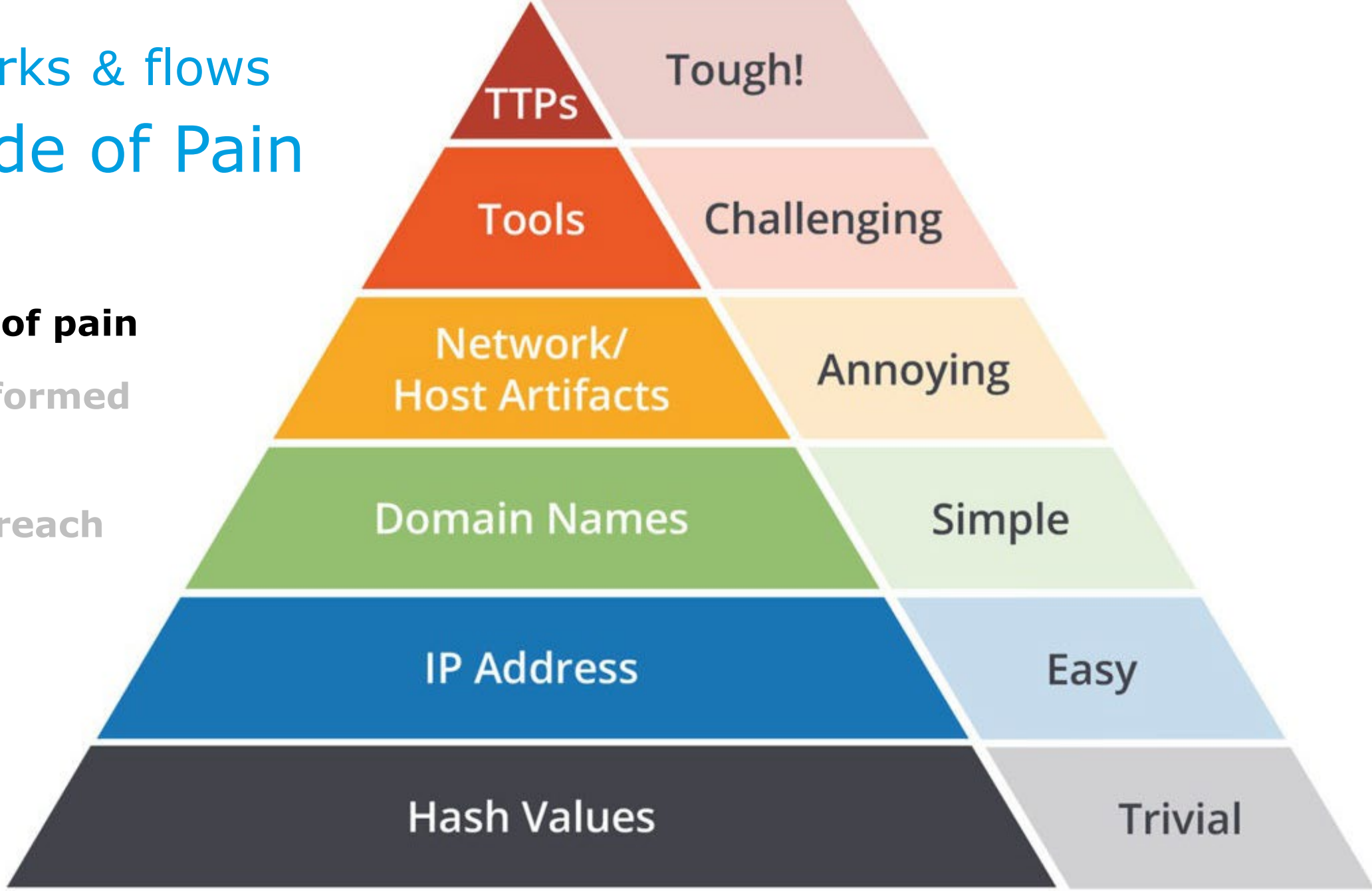
Statistiky environment

- **83 sledovaných technologií**
- **∞ množství formátů**
- **∞ dat a logů**

Frameworks & flows

Pyramide of Pain

- **Pyramide of pain**
- **Threat Informed Defense**
- **Assume breach**
- **ADS**
- **DEM**



Source: David J. Bianco, personal blog

Frameworks & flows

Threat Informed Defense

- Pyramide of pain
- **Threat Informed Defense**
- The Assume Breach Paradigm
- Detection Engineering Methodology
- Alerting & Detection Strategy

Frameworks & flows

The Assume Breach Paradigm

- Pyramide of pain
- Threat Informed Defense
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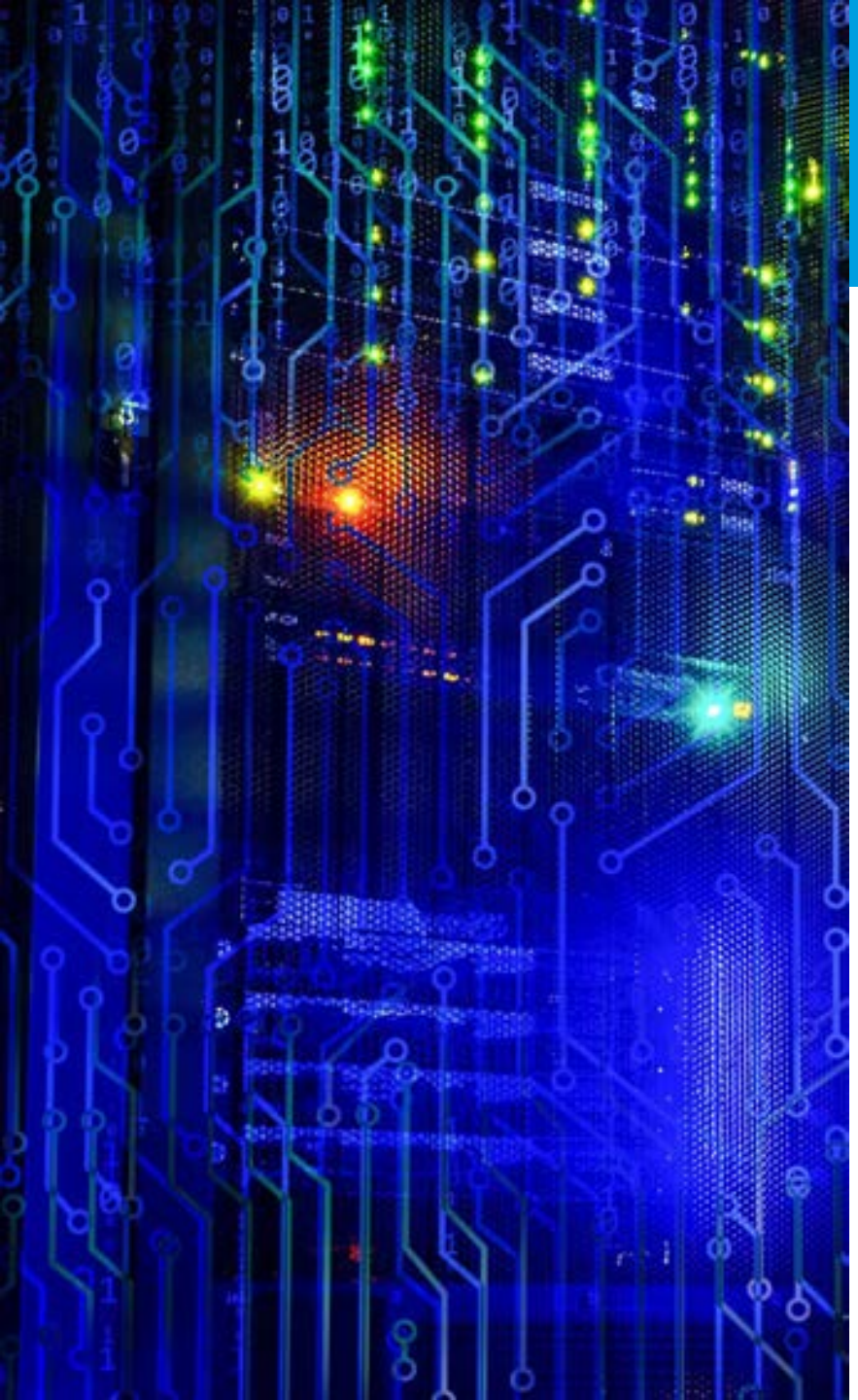

Frameworks & flows

DEM

- Pyramide of pain
- Threat Informed Defense
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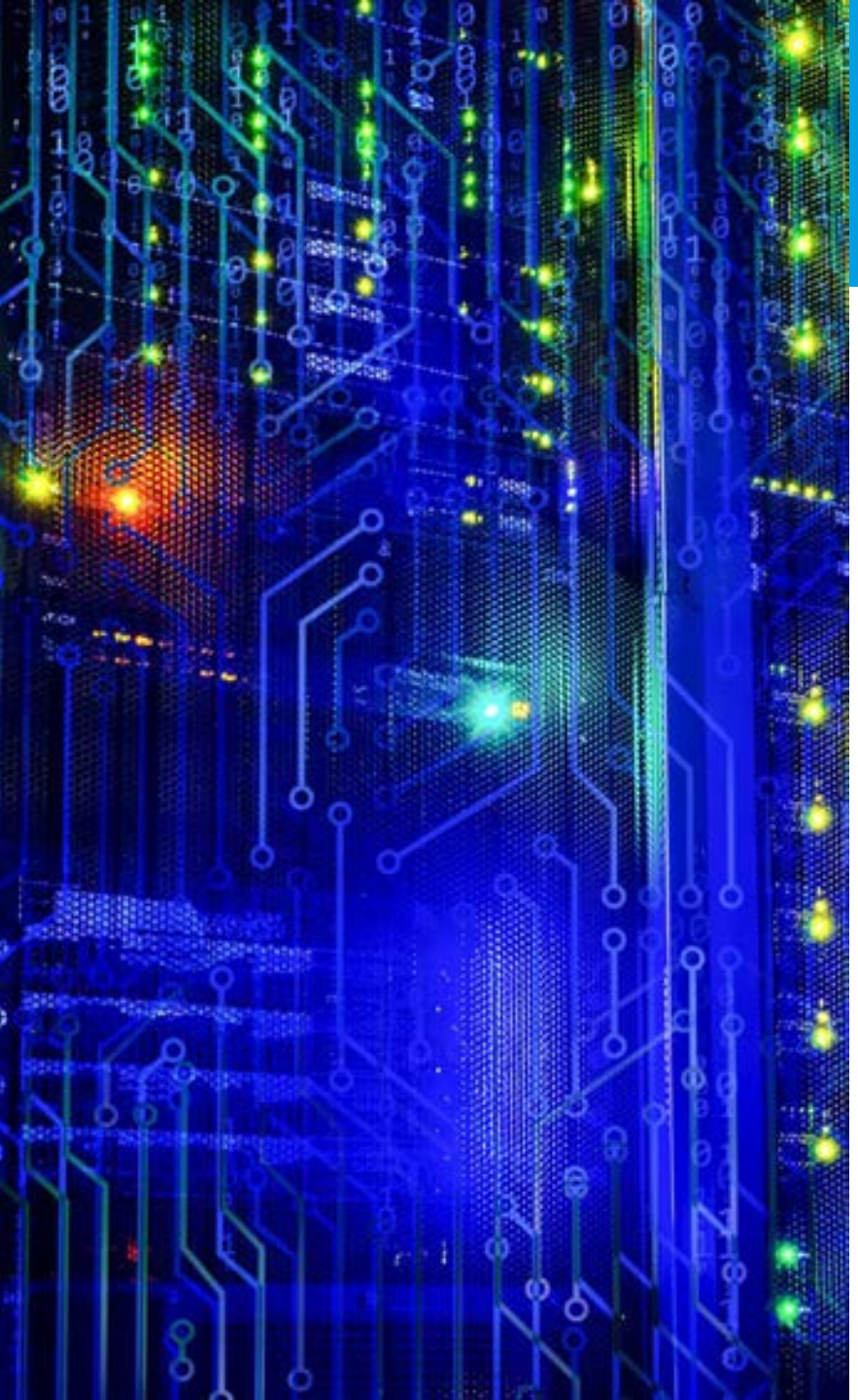
- **Detection Engineering Methodology**
- Alerting & Detection Strategy



Frameworks & flows

DEM

- **Detection Engineering Methodology**
  - **Select Target Technique**
  - **Research Underlying Technology**
  - **Proof of Concept Malware Sample(s)**
  - **Identify Data Sources**
  - **Build the Detection**

Frameworks & flows

ADS

- Pyramide of pain
- Threat Informed Defense
- The Assume Breach Paradigm
- Detection Engineering Methodology
- **Alerting & Detection Strategy**

Frameworks & flows

ADS

- **Alerting & Detection Strategy**
  - **Goal**
  - **Categorization**
  - **Strategy Abstract**
  - **Technical Context**
  - **Blind Spots and Assumptions**
  - **False positives**
  - **Validation**
  - **Priority**
  - **Response**

Validation

Stage 3/4

Validation

How to validate?

- **Signature AV vs SIEM**
- **Hard to understand build in rules**
- **Need use it between multiple tools**
- **False positives?**

Validation

Adversary emulation

- **Emulate Adversary to know how works**
- **Emulate Adversary to stop them**
- **Emulate Adversary to prepare**
- **AND, AND . . .**

- **Emulate Adversary to VALIDATE**

Adversary Emulation

High level

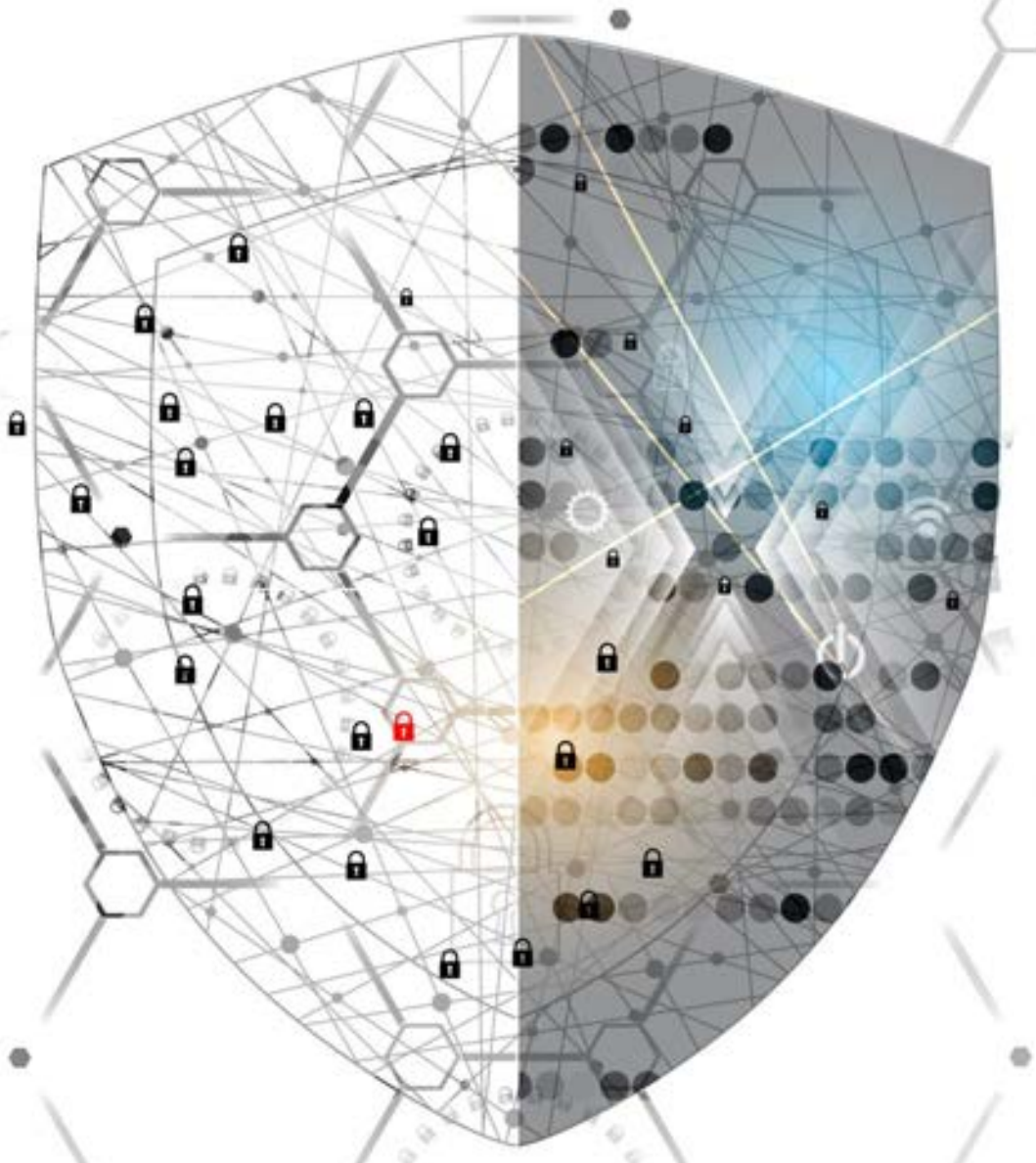
- Vulnerability management
- Penetration testing
- Adversary emulation

Adversary Emulation
Tools of Trade

- **Engage, D3fend, Att&ck Navigator/Workbench**
- **Vectr**
- **CALDERA, C2, Cobalt Strike**

Red Teaming
The prostředí

- **Hybrid znamená lateral**
- **Hybrid znamená out of reach**
- **Hybrid znamená cizí**



EoF

Stage 4/4

EoF

Open sources

- **Mitre.org (Att&ck, CAR, Shield, Caldera)**
- **OSINT framework**

- **CIRCL (MISP, AIL, CyCAT . . .)**
- **HelpSystems (CobaltStrike)**

EoF

Open sources

- https://github.com/mitre
- https://github.com/DCG420
- https://github.com/SecurityRiskAdvisors/VECTR
- https://blog.palantir.com/alerting-and-detection-strategy-framework-52dc33722df2
- https://specterops.io/

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Community

Defcon Group 420 Czech republic

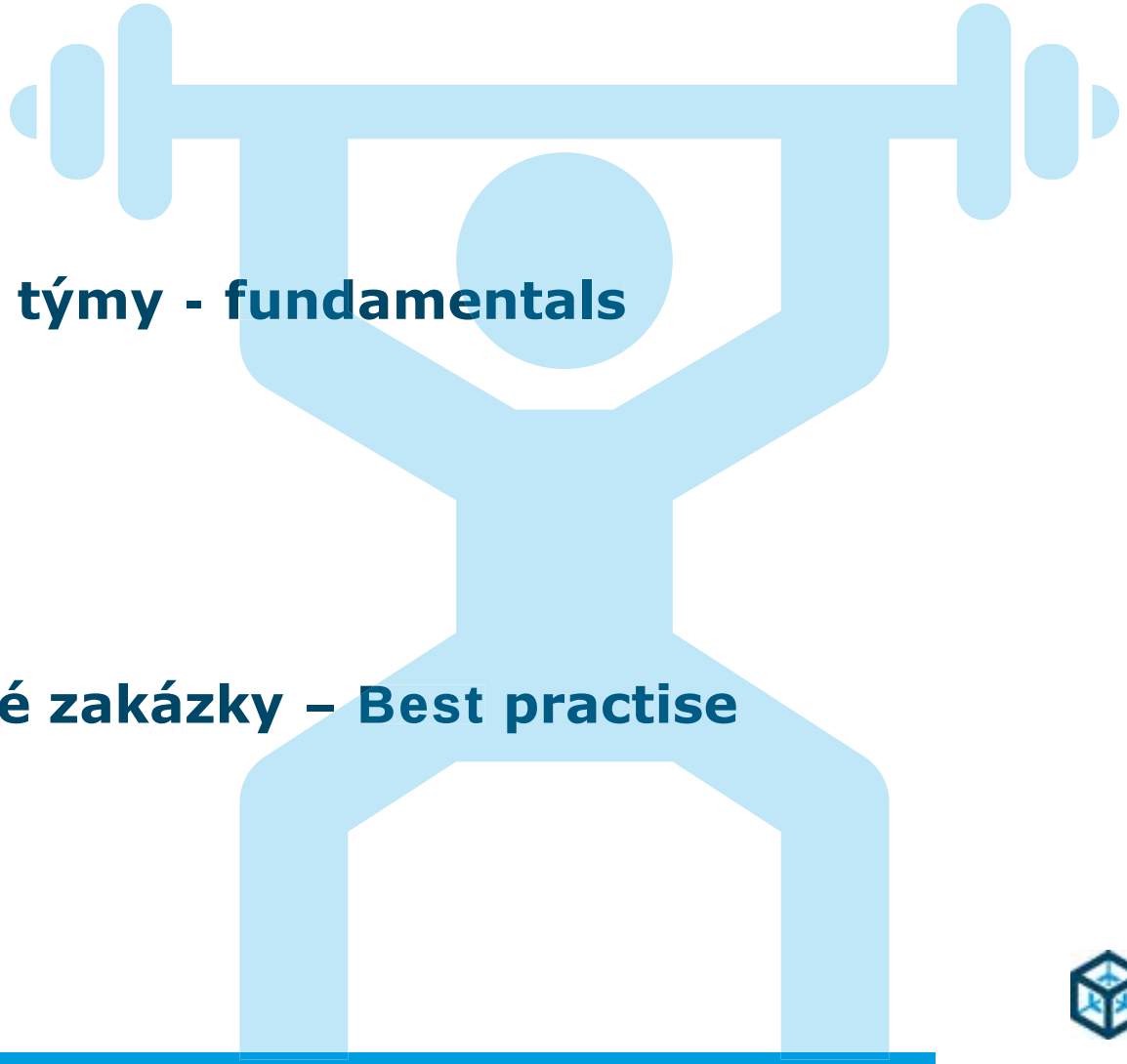
- www.DCG420.org

MeetUps

- DCG420.eventbrite.com

EoF

Our Training



NÚKIB CyberCon 2022

Workshop

- **Adversary emulation pro malé týmy - fundamentals**
- 13.9.2022

Přednáška

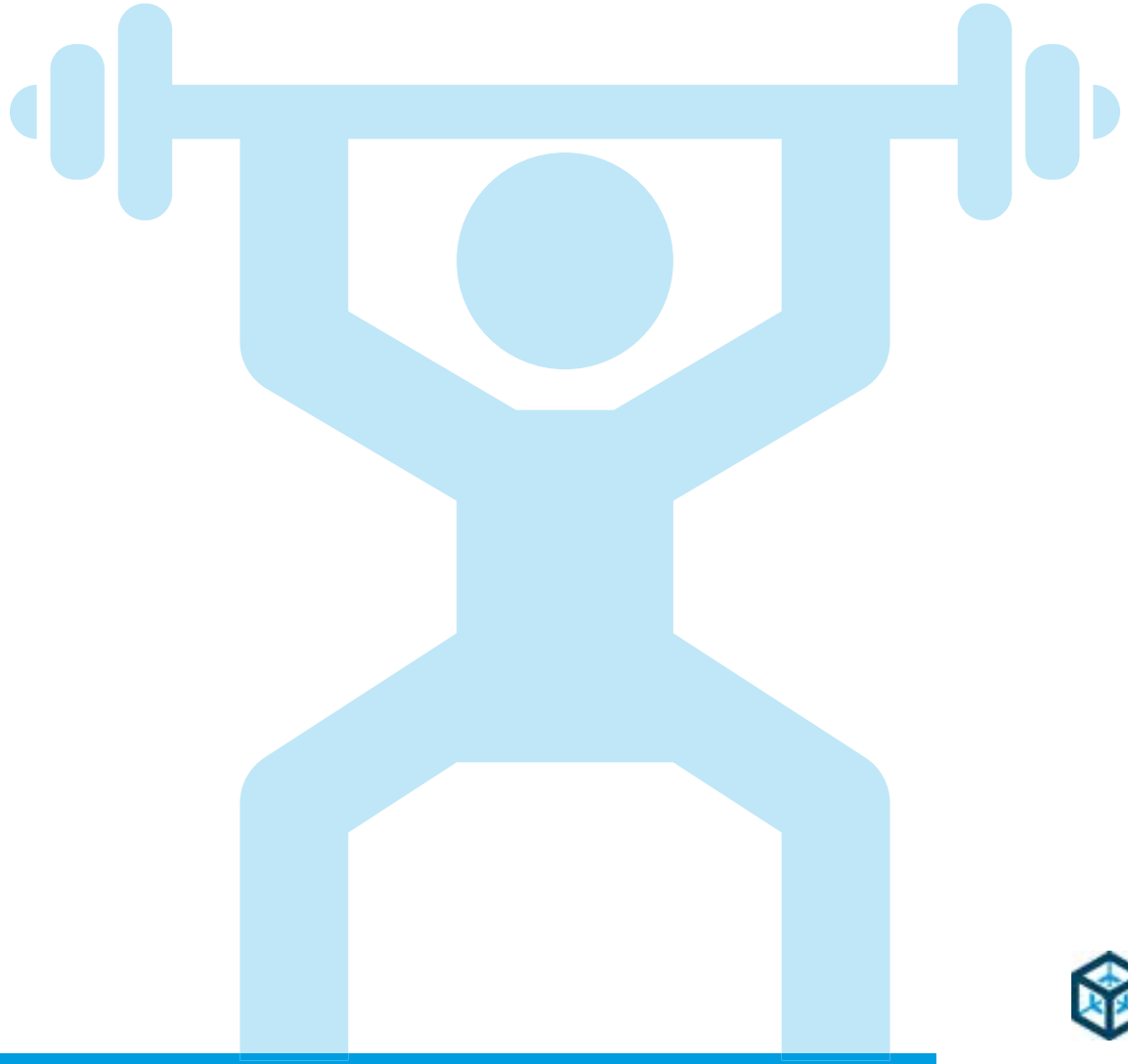
- **Analýza rizik předmětu veřejné zakázky – Best practise**
- 14.9.2022

EoF

Our Training

MISP Training 2023

- 5. ročník - MISP, AIL, CyCAT
- **New: workflows, corellation**
- Zdarma – On-site/On-line
- Jaro 2023, anglicky



Registrace

- www.spcss.cz/misp

EoF

Our Conference

Fórum aktivní kybernetické obrany 2023

- 3. ročník
- Jaro 2023, česky

Registrace

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Keep in touch

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- **E-mail csirt@spcss.cz**
- **Twitter @csirtspcss**

Děkujeme za pozornost

Q & A