

**Credentials Guard, BitLocker, UEFI Secure Boot, UAC, Remote
Credentials Guard, ATA, Shielded VMs, ...**

VS.

(un)safe behavior

HACKER  **Fest2017**

Ing. Ondřej Ševeček | GOPAS a.s.

ondrej@sevecek.com | www.sevecek.com

MCSM:Directory | MVP:Security | CEH | CISA | CISM | CHFI

Buzzwords

- Credential guard
- Secure Boot
- BitLocker
- Remote Credentials Guard
- UAC
- Shielded VMs
- ATA, antimalware, heuristics, ...

Scenario

- Corporate desktop computers and/or notebooks
- With everything
 - users are (not) local administrators
 - UEFI secure boot
 - BitLocker with TPM
 - Credentials Guard
 - UAC
- happily using Domain Admins credentials

Privilege escalation to local Administrators

- Hardware keylogger/spy-camera
- Software keylogger under limited user
- Machine reinstallation
 - connect to domain
 - without connecting to domain

SSO injection

- why would it try hacking the **local** computer with UAC?
- **testing applications** under strong accounts
 - locally
 - remotely
 - Kerberos delegation

SSO hell

- Kerberos protocol transition

Shielded VMs

- are really only **shielded**

Message

- no technology can protect you definitely
- behave safely (**learn** what you do)
 - never use strong accounts against weak computers
 - never give sensitive data to unknown hosters
 - Kerberos authentication
 - Enter-PSSession, mstsc /RestrictedAdmin
 - disable Kerberos delegation on sensitive accounts
 - disable Add computer to domain
 - require safe UAC prompts
 - ...
- incidents always happen
 - **isolate** with separated accounts and responsibilities
 - **isolate** with Windows Firewall

Incidents

- incidents cannot be resolved **if not contained**
 - resetting krbtgt is not enough :-)

Dávejte si pozor!!

Děkuji za pozornost

GOC175 - Security internals
GOC172 - Kerberos
GOC169 - ISO 2700x

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