

CI/CD/CDon't?

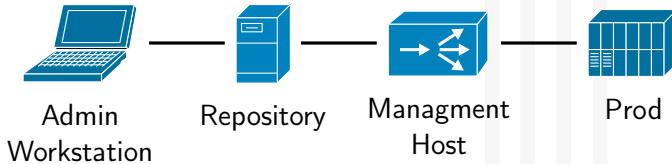
Deliberations on the threat model of continuous delivery systems

Jens Heinrich

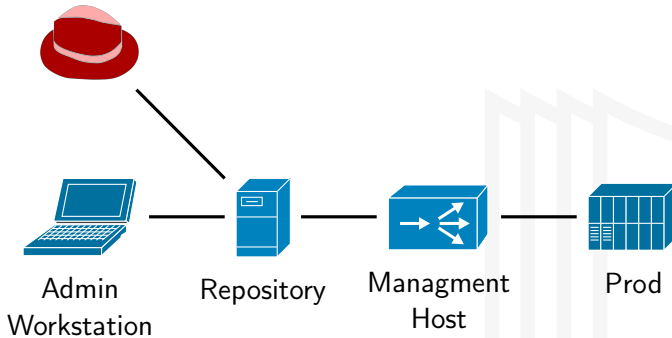
Universitätsbibliothek Johann Christian Senckenberg

2020-03-14/15
CiderSecurityCon

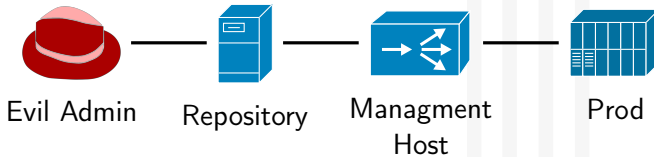
Concept



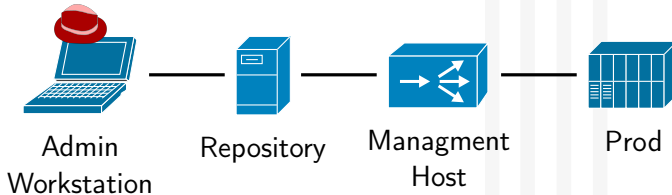
Attackvectors-Impersonation



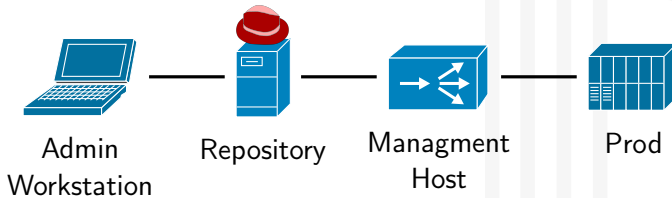
Attackvectors-Evil Admin



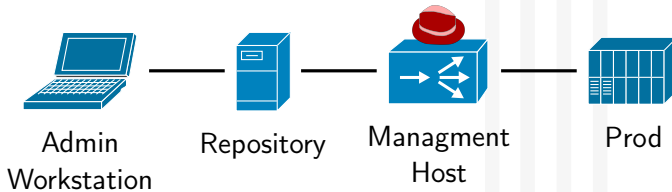
Attackvectors-Compromised Workstation



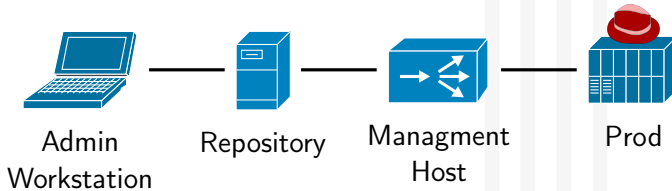
Attackvectors-Compromised Repository



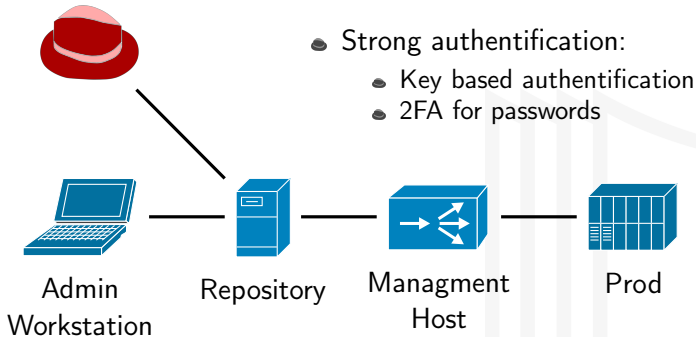
Attackvectors-Compromised Management Host



Attackvectors-Compromised Prod



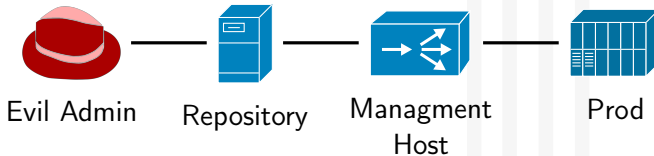
Mitigations-Impersonation



Mitigations-Evil Admin

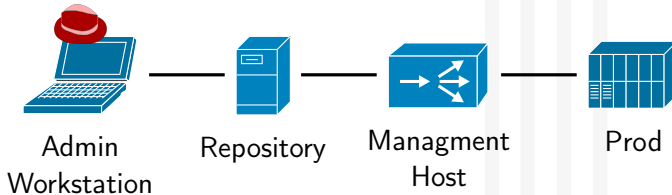
- Privilege Separation:

- 2-man-rule
- enforced tests



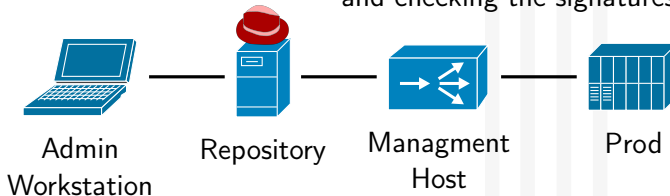
Mitigations-Compromised Workstation

- Hardening measures:
 - using dedicated hardware
 - using hardware security modules



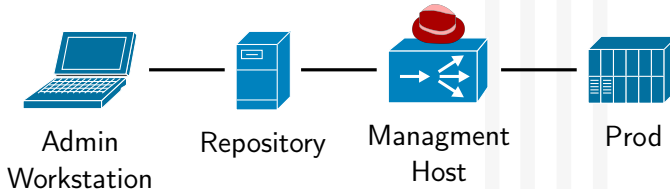
Mitigations-Compromised Repository

- Privilege Separation:
 - enforced offsite/offline backups
- Signing of commits and checking the signatures



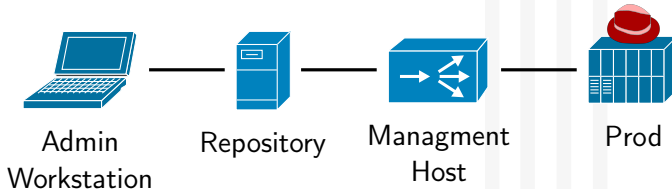
Mitigations-Compromised Management Host

- Privilege Separation:
 - enforced offsite/offline backups
 - splitting the infrastructure in groups
 - regular self checks/deploys



Mitigations-Compromised Prod

- Privilege Separation:
 - enforced offsite/offline backups
- Reproducible builds
 - JUST REDEPLOY AND RESTORE



You may contact me

- via eMail `J.Heinrich@ub.uni-frankfurt.de`



- our GitHub `github.com/ubffm/cicdcdont-lightning`



- personally on the conference