

# Secure Network architect

29 mrt

- \* New Kali Template
- \* Wifi adapter

Network Separation and Zones/Classification

BoK Security Engineer

# White Heads

31 mrt

Kamil:

Cyber Offensive  
High Tech Campus  
White Box security assessment  
Cert: OSCP, OSWE, OSWP and OSEP

Stan vander Vleuten  
Cyber consultant  
Web, mobile, Desktop, Embedded  
eWPTX

White Box Source Code  
General overview of the app  
Test Protocol per item:  

- Identify Hot pot
- Validate Hypothesis
- or other way

Web application and Infra

Burp Suite

From Zero To Hero  
Juice Shop  
Backend: Node - JS  
Frontend: Angular

Obtain foot  
Read Local

# Container Sec

31 mrt

Note: Hacking is illegal

Containers VS VM

- Container uses same kernel as the kernel
- Containers are portable
- Container can run multiple software on one OS

SELinux

- Limiting File access
- Restrict syscall
- Isolate UID, PID, hostname

Container security: What can go wrong?

- Containers can break out
- Docker runs on root privilege
- Back Doors
- Unpatched containers
- Config mistake

Docker Daemon Attack Surface

Mitigation

- Use Trusted Base Images
- Update the container
- Use secure config
- Perform security scans (Dock Bench for security)
- Have tight controls

Principle of Least Privilege

- Do NOT run as root if you don't need it
- Limit the amount of user/processes
- Don't give extra permission

# HUTTEN Meeting

Nick Boven

STYN VELD PAUS

\* Security is HIGH Topic RN

Update Security Policy

\* Segmentation will start in June

Two Buildings Same Setup

Azure is No Go

ONLY IT Social Engineering

Digital NDA

Time on a day 6 Hours a day

Wifi and Lan are welcome

Spare Laptops can be used

Discus 2 Hours

Wifi Intercept is ok

Get Laptop of their to access AD

SSID is Hidden

Intune Device Reserved for US

Last week of April (24 of April) to start

Location: Hutten: Service

Port exclude: Cameras, Alarms

Cameras: no Cracking PASS or any other sec

# Network Intrusion Detection and Prevention

5 Apr

NIDS 2023

Tools:

Snort

Suricata

IDS

NIDS Pattern matching

HIDS Anomaly detection

PFSense + Suricata

Already Did Snort in Sem 3

# IT monitoring

6 APR

## Traditional monitoring (operational)

### What needs to be logged

- Event
  - Software Dev
  - Users
  - System manager
- Logging Data
  - Performance
  - Usability
  - Confidentiality

### What to Take care of?

- Amount of Logging and Logs
- Log File Truncation
- Cyclic Log Files
- Time Sync
- Access to Logging
- Log Level

### Where to Log

- Disk Based
- Network Based

### How will be logged

- Poll
  - Monitoring System connects
  - E.g. Service as HTTPS, POP3, SSH
- Push
  - Host push data
  - E.g. Service CPU, memory
- Hybrid
  - Combination of Poll and Push

### Simple Network Management Protocol (SNMP)

- OLD
- NOT Safe

### Nagios: monitoring

Nagios XI is non-free

Nagios open source version

### Prometheus

# IT Security monitoring

6 APR

IT monitoring VS security monitoring  
Availability VS Confidentiality, integrity, compliance  
SLA Req VS Sec Policy Req  
Traditional old system VS New Tech and Process

SIEM for SOC

- Detect Report
- Collecting Report
- Correlation Report
- Report Incident
- Manage Incident
- Quality assurance

NSM: What data are relevant

- A lot of things

# PASSWORD CRACKING

PASSWORD LENGTH:

Brute Force strength

Have i been pwned?: 21 Times

Threats To Passwords

- Default Pass
- Brute Force
- Shoulder Surfing
- Key Loggers
- Dumpster Diving
- Leaked Pass
- etc....

Hydra

- Use Burp

OWASP ZAP

ITS Free unlike Burp

Application Pentest

Sniffing

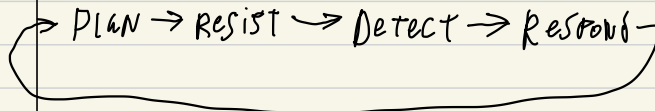
Social Engineering



# Security Incident Management

13 Feb

Incident management



Phases in sec handling

Prep

Identify

Containment

Eradication

Recovery

Lessons Learned

Prepare and Prevent

- Alert Reception

- Ongoing alert

- Customer's report

- Triage

- Response

- Technical response

- Management response

- Review

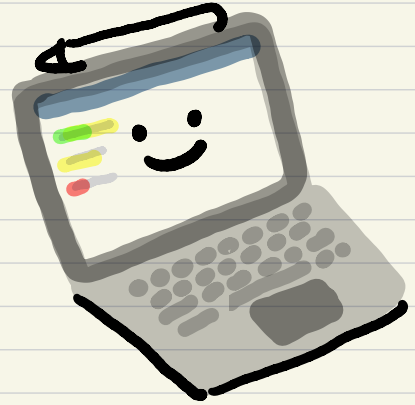
MSSP

# Authentification Workshop

19 Apr

What is AUTH: To Prove you are you OR Prove something is true  
RBAC: Role Based access

Shared Secret  
Pass  
PIN  
Symmetric Keys  
API Key



Biometric Auth

MULTI Factor AUTHENTICATION (MFA)



## DigiID infrastructure

1. Choose between ID or a passport check
2. SMS authentication
3. Wait for confirmation (3 days)
4. Choose your own PIN (5 digits)
5. MFA/2FA upon every login?
6. You can login your account
7. Put in your code
8. "You are logged in"!



# CVE

# Sys Defence

20TH April

Application Hardening  
operation Hardening  
Server Hardening  
Database Hardening  
Network Hardening

CVE  
Dictionary  
Standard  
Linking Pin  
The Number

CVE is not:  
a VVVVV Negate

# OT Security

21 April

IT is for the industry  
Probably for IOT

VDL got Hacked

SANS

Arnaud Soullie : Senior Cyber

Software :

PLC

ECU Structure

ICS Simulation Platform

IGSS

Machine expert

Simulation RII

Revolution pig

BruCON exo

# ADVANCED PASS CRACK

21 APRIL

Why are we using password

- Usability & Deployability

SMITH ATTACK

Does your password matter?

HACKER USE AFTER PASS COMPLEX RULES

- Known characteristics of password
- Guess
- Password stuffing
- Use context information

Ethical Consideration

- Use Breached passwords
- Validate researches on hashes