

Information Security & Cybersecurity

Prepared by: PalCyberSec Team



TABLE OF CONTENTS

01

Assets & Identities

Information Security
& Cybersecurity

02

Authentication &
Authorization

03

Vulnerability – Risk –
Threat-Exploit

04

01

Assets & Identities

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Assets & Identities



Asset

Resource that has a value
Data/Info/Laptop



Identity

Something you're
identified with
Name/ID/characteristic

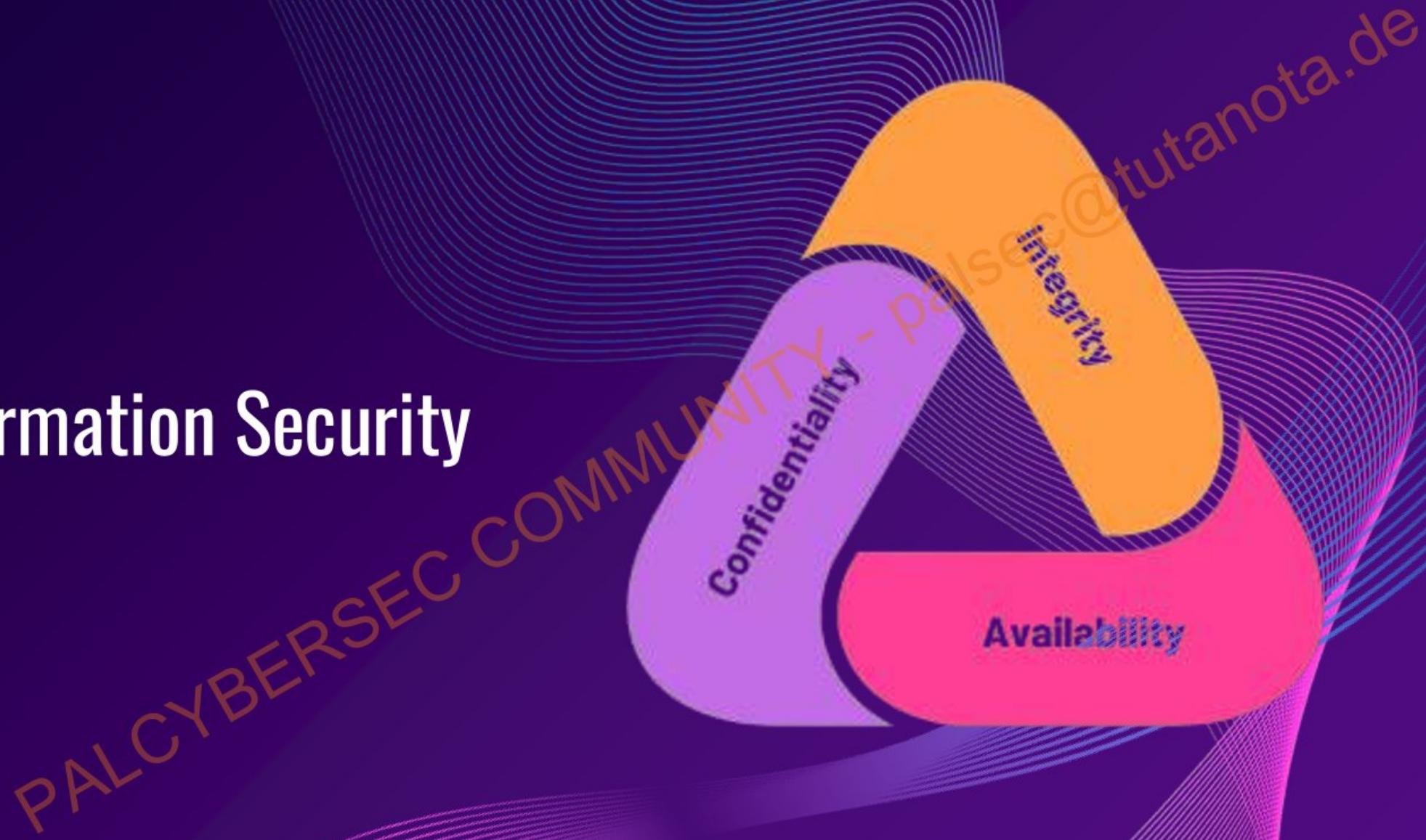
PALCYBERSEC COMMUNITY palsec@tutanota.de

02

Information Security & Cybersecurity

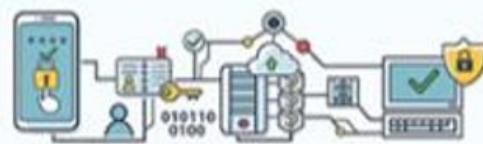
PALCYBERSEC COMMUNITY - palsec@tutanota.de

Information Security



5 Pillars of Security Assurance





CYBER SECURITY



Application



Information



Network



Operational



Encryption



Access control



End-user education



Disaster recovery

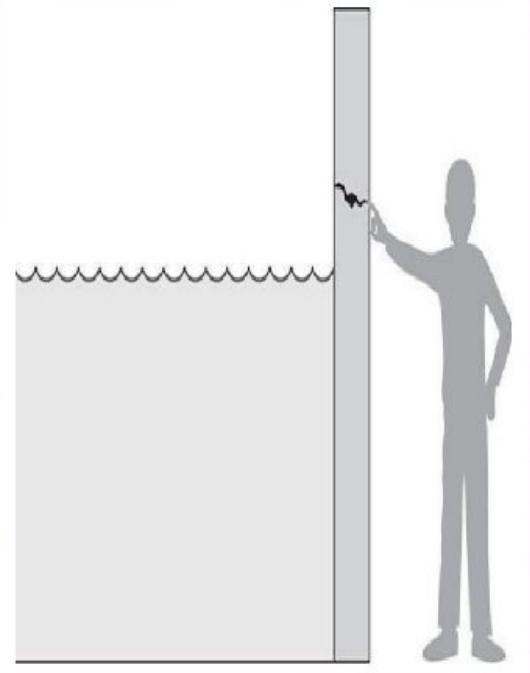
03

Vulnerability – Risk – Threat-Exploit

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Vulnerability – Risk – Threat-Exploit

Vulnerability	Weakness in the system that may cause harm
Risk	The potential danger or harm arising from unauthorized access, use, disclosure, disruption, modification, or destruction of digital information
Threat	A threat is a set of circumstances that could cause harm
Exploit	Take advantage of a flaw/vulnerability



04

Authentication & Authorization

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Identification – Authentication - Authorization

Identification	The act of asserting who a person is.
Authentication	<p>The act of proving that asserted identity: that the person is who she says she is.</p> <p>Authentication is based on something you know, are, or have</p>
Authorization	The process of validation & giving the user permission to access a specific resource or function

TABLE OF CONTENTS

05

Importance of
Cybersecurity

Challenges Of Cyber
Security

06

07

Branches

University VS. Market

08

PALCYBERSEC COMMUNITY
cybersec@tutanota.de

05

Importance of Cyber Security

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Importance of Cyber Security

- Organizations collect, process and store unprecedented amounts of data.
- That data can be sensitive information.
- Need to protect against loss, modification or unauthorized access.
- Attacks and techniques are evolving daily basis.

06

Challenges of Cyber Security

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Challenges of Cyber Security

- Attacks and techniques are evolving daily basis.
- We are moving towards digital life
- Business considerations
- High Cost
- Usability

07

Branches

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Importance of Cyber Security

- Network security
- Application Security
- Mobile Security
- Malware Analysis
- Risk Audit/Management
- Digital Forensics.
- Penetration Testing
- Network security analyst
- Security analyst
- OS security
- Encryption/Decryption Expert

08

University VS. Market

PALCYBERSEC COMMUNITY - palsec@tutanota.de

University VS. Market

- Life isn't fair at all.
- Business rules.
- The target is always “money”.
- You need to obey.
- most forget their goals.

TABLE OF CONTENTS

09

Wrong Concepts

10

Hacking

11

Motive

Ethical Hacking/PT

12

PALCYBERSEC COMMUNITY

palsec@tutanota.de

09

Wrong Concepts

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Wrong Concepts

- Hackers usually attack politicians
- Why should I worry
- I will never be a target for hackers
- They are looking for documents or money
- I use Linux, I will not get hacked

10

Hacking

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Hacking

- Finding Vulnerabilities in systems
 - Exploiting the vulnerabilities
 - Unauthorized access, data leakage .. etc

11 Motive

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Motive



12

Ethical Hacking/PT

PALCYBERSEC COMMUNITY - palsec@tutanota.de

Ethical Hacking/PT

- Ethical Hacker is still a hacker
- Works to find Vulnerabilities and to help organizations
- Can be sued in some cases (no permissions)
- Penetration Tester is a professional Expert
- Has a contract & a Permission
- Has to professionally report not only the bugs/Vulns. But also his work steps, progress, and methodology



THANKS

PALCYBERSEC COMMUNITY - palsec@tutanota.de