

Schäden durch Cyberkriminalität in Deutschland



Im Jahr 2014 verursachte Kriminalität im Internet in Deutschland Kosten in Höhe von ungefähr 39,4 Millionen Euro. Die Dunkelziffer sollte hierbei weitaus höher sein. Quelle: Bundeskriminalamt

Von außen erreichbare Dienste sind am häufigsten betroffen.

OWASP Web Application TOP 10 Vulnerabilities (2013)	
A1	Injection
A2	Broken Authentication and Session Management
A3	Cross-Site Scripting (XSS)
A4	Insecure Direct Object Reference
A5	Security Misconfiguration
A6	Sensitive Data Exposure
A7	Missing Function Level Access Control
A8	Cross-Site Request Forgery (CSRF)
A9	Using Components with Known Vulnerabilities
A10	Unvalidated Redirects and Forwards

Im IoT Umfeld entsteht Schaden ebenfalls in der Regel durch direktes oder indirektes Ausnutzen von Schwachstellen

OWASP Internet of Things TOP 10 Vulnerabilities (2014)	
1	Insecure Web Interface
2	Insufficient Authentication/Authorization
3	Insecure Network Services
4	Lack of Transport Encryption
5	Privacy Concerns
6	Insecure Cloud Interface
7	Insecure Mobile Interface
8	Insufficient Security Configurability
9	Insecure Software/Firmware
10	Poor Physical Security

Umsetzungsempfehlungen nach OWASP

- Parameterize Queries**
 - OWASP Secure Coding Practices
- Encode Data**
 - OWASP Java Encoder/MS .Net AntiXSS Library/OWASP ESAPI
- Validate All Inputs**
 - OWASP JSON Sanitizer/Apache Commons Validator
- Implement Appropriate Access Controls**
 - OWASP PHPBRAC/Apache Shiro Authorization features
- Establish Identity and Authentication Controls**
 - OWASP Cheatsheets (Authentication, PW Storage, Session Mgmt)
- Protect Data and Privacy**
 - OWASP SSL Audit for Tester/Google KeyCzar
- Implement Logging, Error Handling and Intrusion Detection**
 - OWASP App Sensor
- Leverage Security Features of Frameworks and Security Libraries**
 - Spring Security / Apache Shiro
- Include Security-Specific Requirements**
 - OWASP Application Security Verification Standard
- Design and Architect Security In**
 - OpenSAMM/Application Security Verification Standard

https://www.owasp.org/index.php/OWASP_Proactive_Controls

Secure Development Lifecycle

