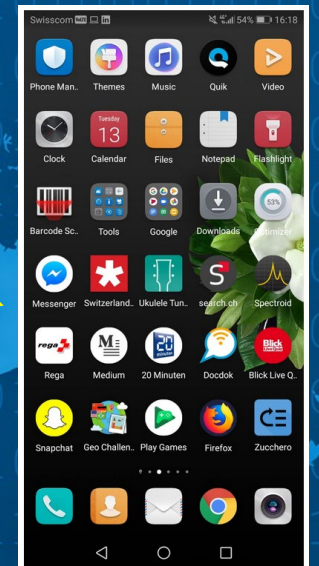
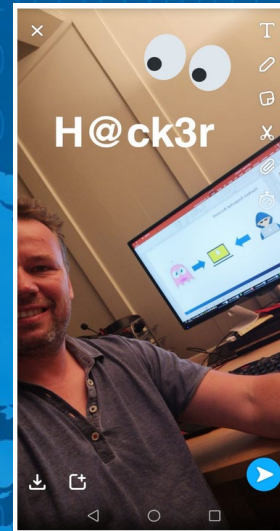
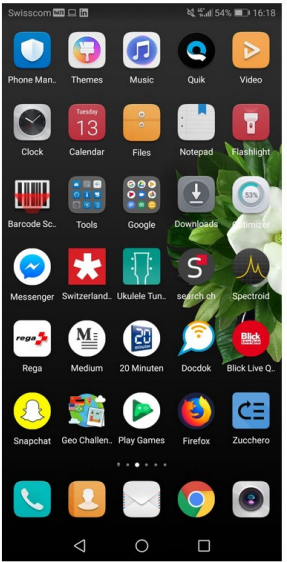
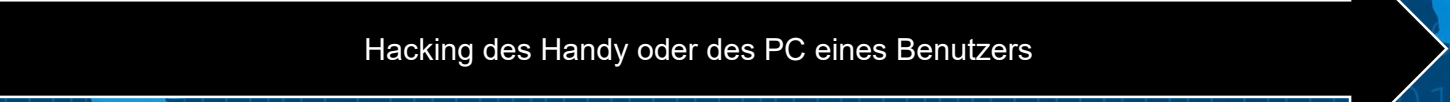
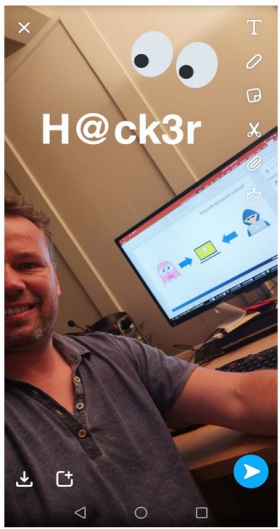


DIREKTE ATTACKEN



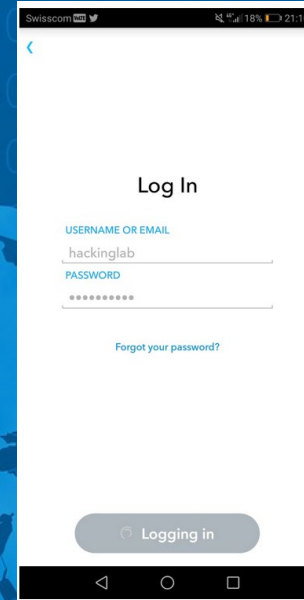






Benutzername
Passwort

Hier ist Dein
Passwort
gespeichert



Default Passwords

<https://github.com/scadastrangelove/SCADAPASS>

G18						
	A	B	C	D	E	F
1	#SCADA StrangeLove Default/Hardcoded Passwords List					
2	#Find more at http://www.scada.sl					
3	#Please contact us at scadastrangelove@gmail.com and @scadasl					

siemens	Simatic S7-300 (pre-2009 versions)	Hardcoded password:, Basisk:Basisk
siemens	Scalance	admin:admin, user:user
siemens	Scalance (x 200, W788-1PRO, W788-2P	Admin:admin, User:user, for FTP access:
siemens	SyncoTM living Web server OZW772 V2	Administrator:Password
siemens	Siemens WinCC 7.x	winccd:winccpass, wincce:winccpass, D
siemens	Ruggedcom RMC30	admin:admin
siemens	RuggedSwitch, RS8000 / RS1600 / RS900	admin

19	BinTec Elmeg	any routers	(##unknown - means not known or any ch	Router	
20	BinTec Elmeg	BinTec R230aw	admin:funkwerk	Router	
21	BinTec Elmeg	bintec W2002T-n,	admin:funkwerk, admin:admin	WLAN Access Point f	
22	Contemporary Control Systems	BASRT-B	admin:admin	80/tcp	Router http
23	Datasensor	UR5i/UR5i SL	root:root	80/tcp	Router http
24	Digi	DC-ME-01T-S	root:dbps		Networki http
25	Digi	Digi Connect SP, Digi Connect Wi-SP, Di	root:dbps	80/tcp	Network I http
26	Digi	Digi Connect ES 4/8 SB with Switch, Digi	root:dbps	80/tcp	Concentra http



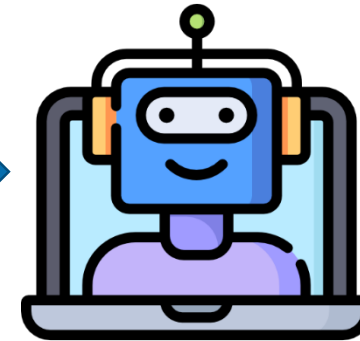
Wie kann sich
der Snapchat
Server schützen?



Ein Hacker Tool versucht
alle Benutzernamen und
Passwortkombinationen



Wörterbuch Attacke

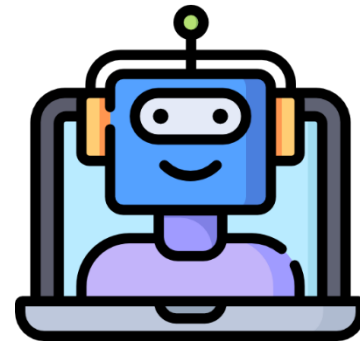


Brute Force Attacke

A-Z, a-z, 0-9, ;.:~_ \$!?



6-10 Zeichen lang



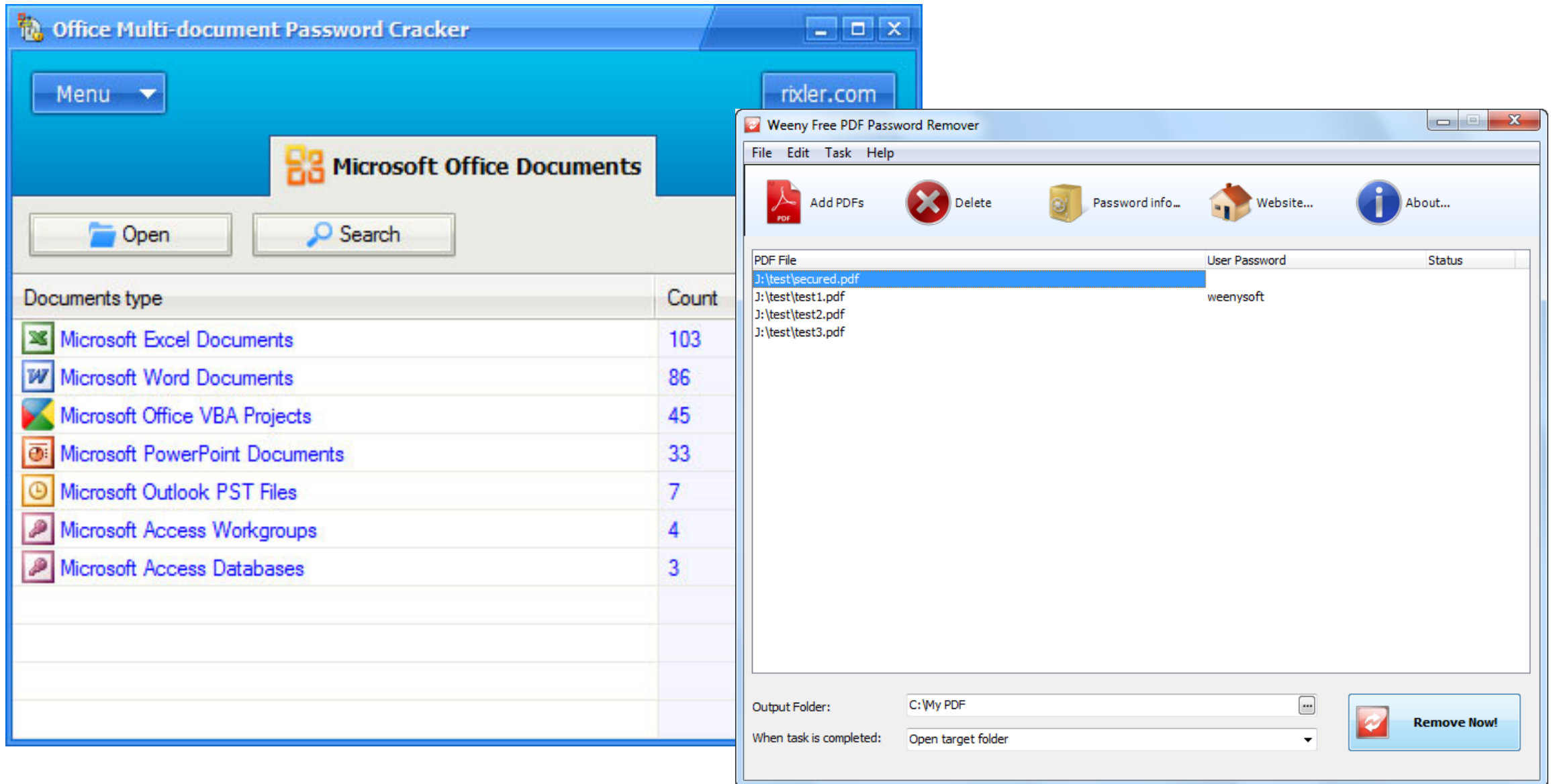
YOU HAVE BEEN
HACKED !

+Dunkan K Bliths

Beispiel: iCloud Angriff am 31. August 2014



Brute Force Angriffe auf Passwort-geschützte Files





Benutzername	Passwort
Amelie	super.duper
Amrei	gugus.blabla
Antonia	I.love.you
Ariane	Zürich.rockt
Charlotte	CoolerTyp
Daniela	JustinB
Emmanuelle	Warum.warum
Flurina	LOListcool
Friederike	SnapMelfYouCan
Jenny-Lee	ManInBlack
Leanne	Tarzan
Lilly	Sorglos
Louisa	Ottawa
Luisa	E12344
Lynn	TomJerry
Mina	Knalltüte
Nancy	CuperReagan
Noëmi	WhyYou
Sara	Katakombe
Sarah	Traumschiff
Silvy	SATW.WTAS
Edith	Summer69

Wie kann sich
der Snapchat
Server schützen?

Ein Hacker findet eine
Sicherheitslücke im Snapchat
Server und kann auf alle
Passwörter zugreifen



Kryptografische Einwegfunktion – Hash Funktion



Summer69



HASH



4790C777E8A4281F9AF8E6AE0680F1E1



Ein Hacker findet eine
Sicherheitslücke im Snapchat
Server und kann auf alle Hashes
zugreifen

Benutzername	Passwort Hash
Amelie	A0337491D534C454B0FFC189A16C5B68
Amrei	46F82E1044FB484CF7B8D6A20940E7E4
Antonia	B3A94D0953B0C235E252184418D7CC9A
Ariane	5F7CDFBB90BAECE317B464DAB7A4C137
Charlotte	FF805A2B2E90AB8611225018D44BF289
Daniela	242EA2AF70D3CCA14F28B22FFDC4D6F0
Emmanuelle	2590B9230225A7B4B073A2F3378D4563
Flurina	8DF09C418A115B5BA31151AE00FB540C
Friederike	438EDEC0D099C59B97E848908653703A
Jenny-Lee	5F8332B873790798969087ED722DB487
Leanne	4DE848360ED53B999421A6024CE41516
Lilly	46F281CB06C1530AE8692D20AF836F8D
Louisa	AEEE33366B173305B90377ED63C1084A
Luisa	408956C5A776196BD0BA578ECC6F9E97
Lynn	933E1F4B9EB0720C27FAE08D41294D5A
Mina	1AD9D64D109BF16108387B52FF1AD0AC
Nancy	D7E0EAA746A35898FDC50986A53A1A14
Noëmi	4B4C8261D3850EAE0F114FB582CE1263
Sara	252020B288D5BEDE8F124102E34AC97E
Sarah	3B43745CCAF1AF61D50F4DDEF59B1BEF
Silvy	DDEACCF090EB084B457395E2CC882EAD
Edith	4790C777E8A4281F9AF8E6AE0680F1E1



https://hashkiller.co.uk/md5-decrypter.aspx

The screenshot shows a web browser window with the URL <https://hashkiller.co.uk/md5-decrypter.aspx>. The page has a dark theme with a background of stars and pumpkins. At the top, there's a navigation bar with links: Home, Forums, Decrypter / Cracker, Database Info, Hash Min Max, WPA Crack, Lists and Competition, Contest, Tools, Hashcat GUI, and Downloads. A banner at the top says "REASONABLE PRICES". Below the navigation bar, there's a section titled "HashKiller.co.uk allows you to input an MD5 hash and search for its decrypted state in our database, basically, it's a MD5 cracker / decryption tool." It also mentions "How many decryptions are in your database?" and "We have a total of just over 829.726 billion unique decrypted MD5 hashes since August 2007." There's a note about inputting MD5 hashes and a warning about the space character being replaced with [space].

Below the main content, there's a status bar that says "Status: We found 1 hashes! [Timer: 300 m/s] Please find them below...". Underneath, there's a table with two columns. The first column is labeled "MD5 Hashes:" and contains the hash "4790C777E8A4281F9AF8E6AE0680F1E1". The second column contains the hash "4790c777e8a4281f9af8e6ae0680f1e1 MD5 : Summer69". Red arrows point to the hash in the first column and the word "Summer69" in the second column.

HashKiller relies on donations so please donate!
BTC: 15qF9WUeFUD63ishxyAMiEgGqTcYzk4j9b
Mine Ethereum for HK:
ETH Wallet: 0x6D5a4E69f127ad3cc7bcbe140a0AF60c75E5D54a

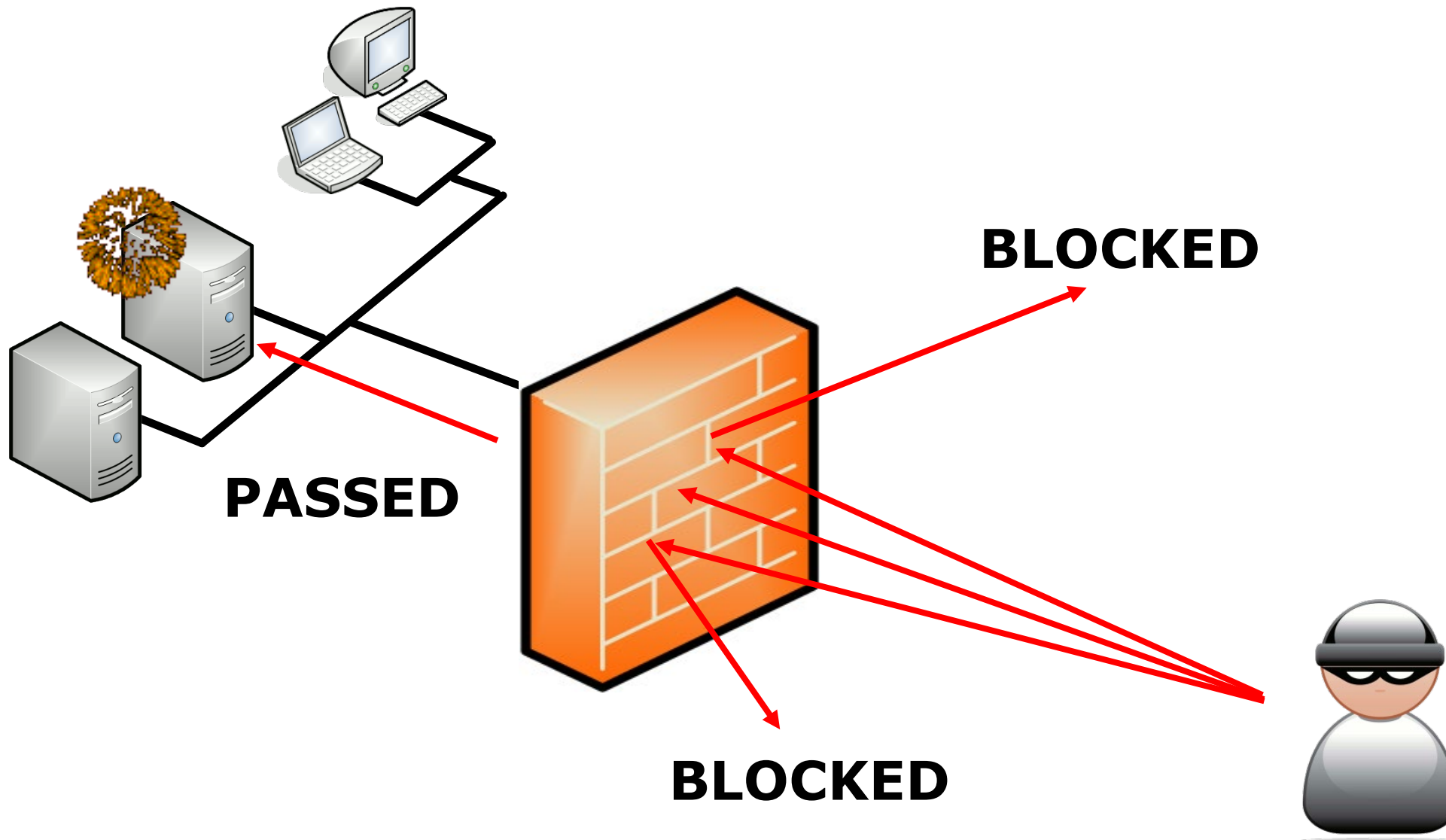
MD5 Hashes:	Decrypted Hashes
4790C777E8A4281F9AF8E6AE0680F1E1	4790c777e8a4281f9af8e6ae0680f1e1 MD5 : Summer69



Ein Hacker findet eine
Sicherheitslücke im Server
und kann Daten auslesen



Hacker 1x1: Server Exploit



Was waren die letzten 5 Folien für Schwachstellen?

Schwachstelle im Monitoring, Überwachung	Forensic Readiness, Fraud Detection
Schwachstelle in der Anwendung	Sichere Programmierung, Schulung Entwickler
Schwachstellen bei eingesetzten Bibliotheken (Libraries)	Patching, Updating von Libraries, Bibliotheken
Schlecht konfigurierte Anwendung (z.B. SSL/TLS)	Hardening (muss man selbst machen)
Schwachstelle des Application Services (Web, DNS, FTP, SSH)	Patching (Hersteller)
Schwachstelle auf TCP/IP (Netzwerk Ebene)	Firewall & Patching OS (Produkt) durch Hersteller

Schwachstellen in Anwendungen: OWASP TOP 10 / 2010

OWASP Top 10 – 2007 (Previous)	OWASP Top 10 – 2010 (New)
A2 – Injection Flaws	A1 – Injection
A1 – Cross Site Scripting (XSS)	A2 – Cross-Site Scripting (XSS)
A7 – Broken Authentication and Session Management	A3 – Broken Authentication and Session Management
A4 – Insecure Direct Object Reference	A4 – Insecure Direct Object References
A5 – Cross Site Request Forgery (CSRF)	A5 – Cross-Site Request Forgery (CSRF)
<was T10 2004 A10 – Insecure Configuration Management>	A6 – Security Misconfiguration (NEW)
A8 – Insecure Cryptographic Storage	A7 – Insecure Cryptographic Storage
A10 – Failure to Restrict URL Access	A8 – Failure to Restrict URL Access
A9 – Insecure Communications	A9 – Insufficient Transport Layer Protection
<not in T10 2007>	A10 – Unvalidated Redirects and Forwards (NEW)
A3 – Malicious File Execution	<dropped from T10 2010>
A6 – Information Leakage and Improper Error Handling	<dropped from T10 2010>

Schwachstellen in Anwendungen: OWASP TOP 10 / 2013

OWASP Top 10 – 2010 (Previous)	OWASP Top 10 – 2013 (New)
A1 – Injection	A1 – Injection
A3 – Broken Authentication and Session Management	A2 – Broken Authentication and Session Management
A2 – Cross-Site Scripting (XSS)	A3 – Cross-Site Scripting (XSS)
A4 – Insecure Direct Object References	A4 – Insecure Direct Object References
A6 – Security Misconfiguration	A5 – Security Misconfiguration
A7 – Insecure Cryptographic Storage – Merged with A9 →	A6 – Sensitive Data Exposure
A8 – Failure to Restrict URL Access – Broadened into →	A7 – Missing Function Level Access Control
A5 – Cross-Site Request Forgery (CSRF)	A8 – Cross-Site Request Forgery (CSRF)
<buried in A6: Security Misconfiguration>	A9 – Using Known Vulnerable Components
A10 – Unvalidated Redirects and Forwards	A10 – Unvalidated Redirects and Forwards
A9 – Insufficient Transport Layer Protection	Merged with 2010-A7 into new 2013-A6

Schwachstellen in Anwendungen: OWASP TOP 10 / 2017

OWASP Top 10 2013	±	OWASP Top 10 2017
A1 – Injection	➔	A1:2017 – Injection
A2 – Broken Authentication and Session Management	➔	A2:2017 – Broken Authentication and Session Management
A3 – Cross-Site Scripting (XSS)	➡	A3:2013 – Sensitive Data Exposure
A4 – Insecure Direct Object References [Merged+A7]	U	A4:2017 – XML External Entity (XXE) [NEW]
A5 – Security Misconfiguration	➡	A5:2017 – Broken Access Control [Merged]
A6 – Sensitive Data Exposure	➡	A6:2017 – Security Misconfiguration
A7 – Missing Function Level Access Contr [Merged+A4]	U	A7:2017 – Cross-Site Scripting (XSS)
A8 – Cross-Site Request Forgery (CSRF)	✗	A8:2017 – Insecure Deserialization [NEW, Community]
A9 – Using Components with Known Vulnerabilities	➔	A9:2017 – Using Components with Known Vulnerabilities
A10 – Unvalidated Redirects and Forwards	✗	A10:2017 – Insufficient Logging & Monitoring [NEW, Comm.]

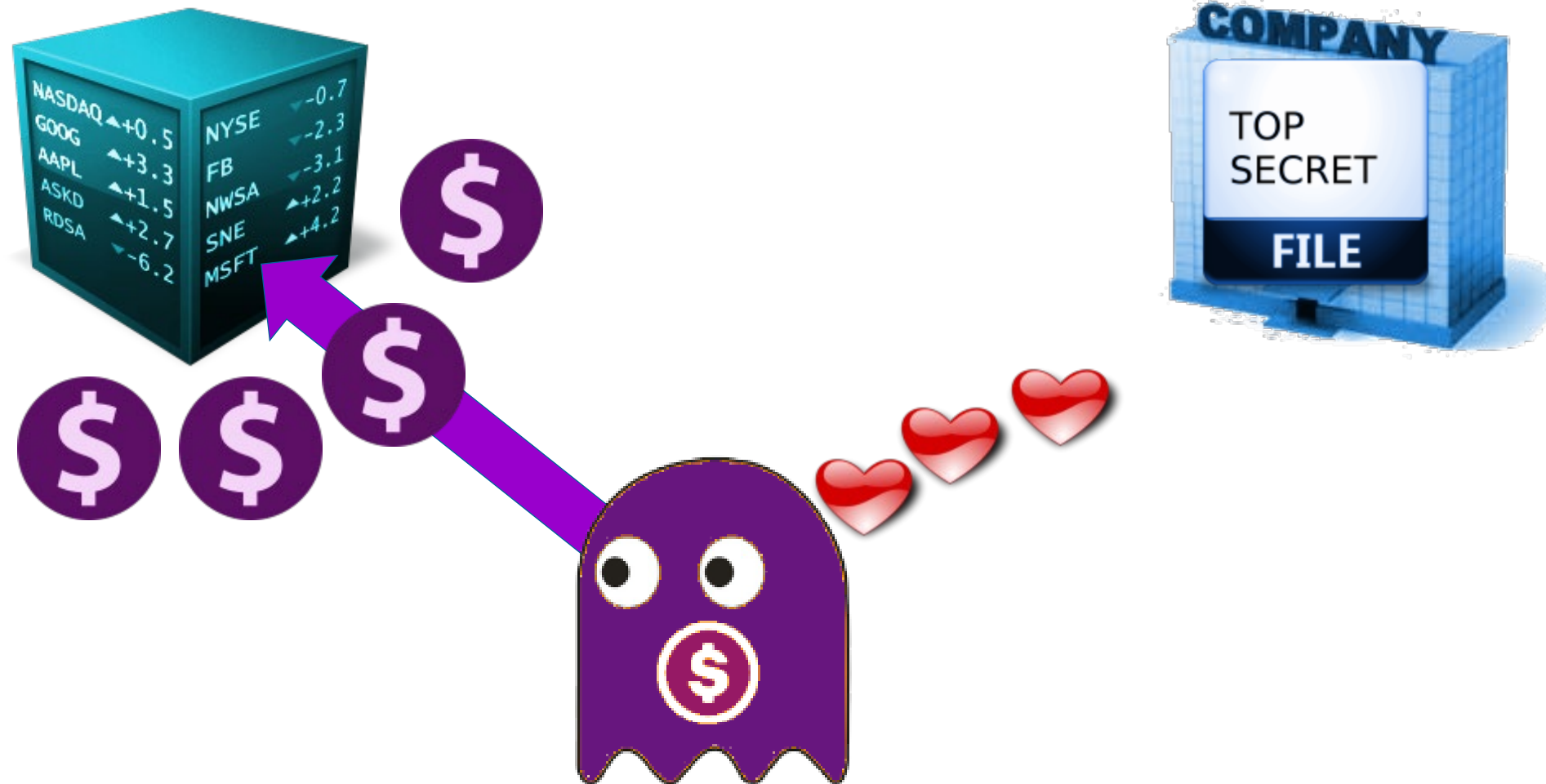
A1 «SQL Injection»

siehe separate Folien (umfassend)

A7 «XSS Cross Site Scripting»

siehe separate Folien (umfassend)

Vertrauliche Daten von kompromittierten Servern



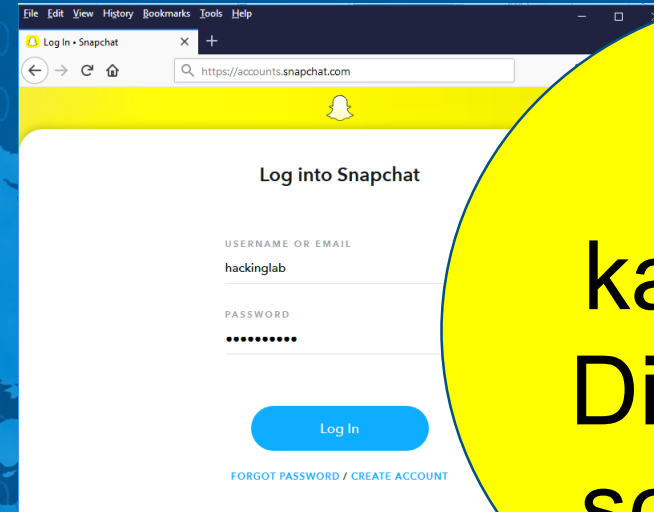
SQL Injection



Phishing Angriff



Benutzername
Passwort



Wie
kannst Du
Dich davor
schützen?

Benutzername
Passwort



Der Hacker erstellt eine
Seite, die genau gleich
aussieht wie das Original



«Phishing»

siehe separate Folien (umfassend)



HSR



HOCHSCHULE FÜR TECHNIK
RAPPERSWIL

FHO Fachhochschule Ostschweiz

