# Sicher im Netz

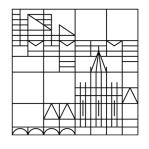
Wie Verschlüsselungstrojaner funktionieren und was wir dagegen tun können



Marcel Waldvogel

mw@uni.kn • 2020-01-17

Universität Konstanz



## → Ransomware

# Hintergrund

Schutz





















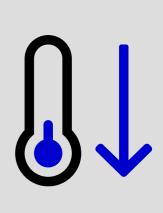














### Payment will be raised on

9/21/2018 15:23:46

Time Left

02:23:58:34

#### Your files will be lost on

9/25/2018 15:23:46

Time Left

06:23:58:34

#### About bitcoin

How to buy bitcoins?

### Contact Us

### Ooops, your files have been encrypted!

English

### What Happened to My Computer?

Your important files are encrypted.

Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

### Can I Recover My Files?

**S**ure. We guarantee that you can recover all your files safely and easily. But you have not so enough time.

You can decrypt some of your files for free. Try now by clicking <Decrypt>.

But if you want to decrypt all your files, you need to pay.

You only have 3 days to submit the payment. After that the price will be doubled.

Also, if you don't pay in 7 days, you won't be able to recover your files forever.

We will have free events for users who are so poor that they couldn't pay in 6 months.

### How Do I Pay?

Payment is accepted in Bitcoin only. For more information, click <About bitcoin>.

Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>.

And send the correct amount to the address specified in this window.

After your payment, click <Check Payment>. Best time to check: 9:00am - 11:00am

OMT 6..... M.... J.... L. P... J...



Send \$300 worth of bitcoin to this address:

13AM4VW2dhxYgXeQepoHkHSQuy6NgaEb94



**Check Payment** 

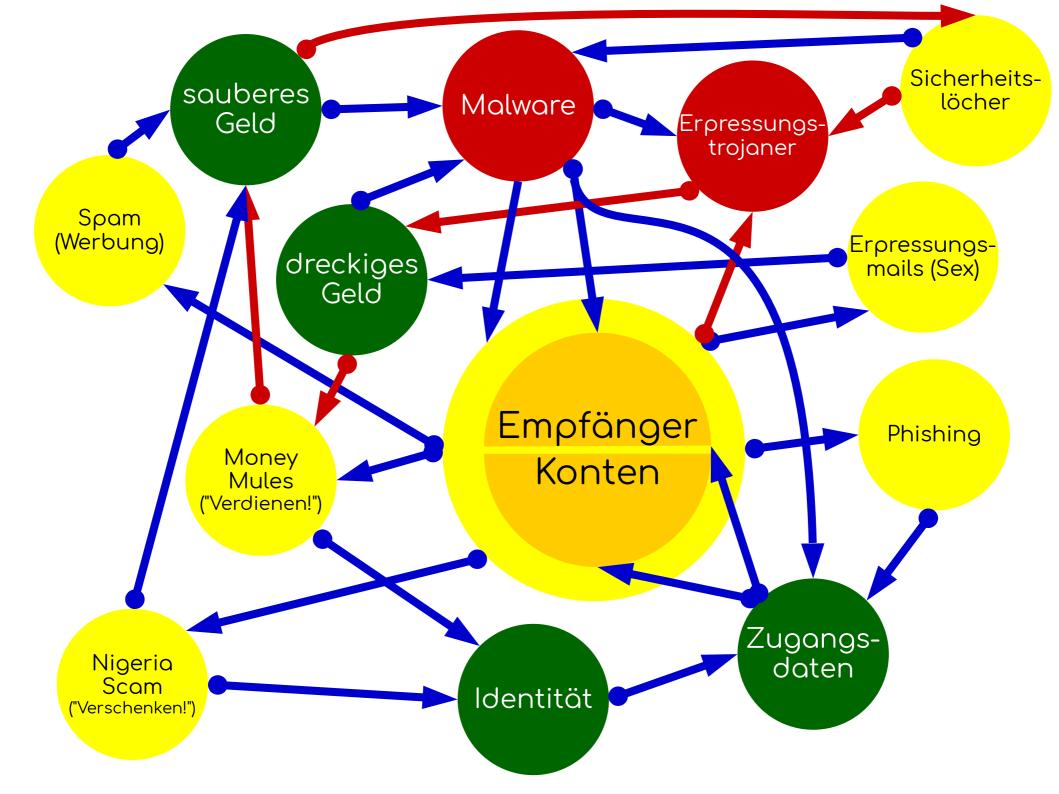
Decrypt

## Ransomware

# → Hintergrund

Schutz

Verbreitung		Virus	Wurm	Trojaner
Schaden		Disk, Stick	Netz	Mensch
Ransomware	verschlüsselt			
Spyware	spioniert			Phishing
Adware	bewirbt			
Scareware	erschreckt			
Dialler	Anruf, SMS			
Kryptominer	generiert			
Zombie	wartet			



# Hintergrund

Software hat Fehler (schnell, bunt, billig, alt; fehlende Standards)

Mensch macht Fehler (Gier, Stress; nicht genügend geschützt)

Systeme sind komplex (Trend zur Kombination)

## Ransomware

# Hintergrund





Ooops, your files have been encrypted!

English

Kriminalität

n I Recove A Financial Company of the State of the State

vergeblich

wirkungslos

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Decrypt

Сору

Check Payment

### Selbst

Alarmglocken→Zweitmeinung bei

- Gier,
- Druck,
- Unüblichem (ZIP mit Passwort, Makros, ...)

## Backup

3 Kopien2 Arten1 anderer Ort

## Zahlen

Erpresser niemals bezahlen Reparatursoftware (mit Glück) Neuinstallation!

### Software

Aktuell Möglichst wenig Browser: Werbeblocker

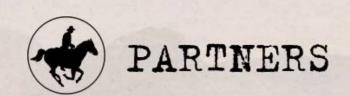
### Passwörter

Jeweils nur 1x verwenden — insbesondere Mailkonten Passwortmanager Zwei-Faktor-Authentisierung

### Vorbereiten

Risiken und Ressourcen kennen Schutzziele und Schulung Notfallpläne



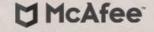


The No More Ransom portal was launched in July 2016 by four Founding Partners:





kaspersky



nomoreransom.org





### ';--have i been pwned?

Check if you have an account that has been compromised in a data breach

email address

pwned?

haveibeenpwned.com

### Passwortcheck













Das zu prüfende Password lautet: Passwort

Passwort anzeigen

Das eingegebene Passwort wird lokal überprüft und nie an den Se

passwortcheck.ch

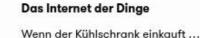
### **iBarry**



### Willkommen bei iBarry.ch

Ich helfe Ihnen, sich vor Schadprogrammen im Internet zu schützen und halte viele Ratschläge zur Prävention bereit. Mit meiner Spürnase decke ich frühzeitig aktuelle Bedrohungen auf und informiere über Schutzmöglichkeiten unter Check und digitale Sicherheit. Damit Sie wissen, mit wem sie es zu tun haben, stellt sich der Verein, der mich ins Leben gerufen hat, unter über uns vor.

#### Aktuelle Kampagne:



Mehr Infos...

ibarry.ch