



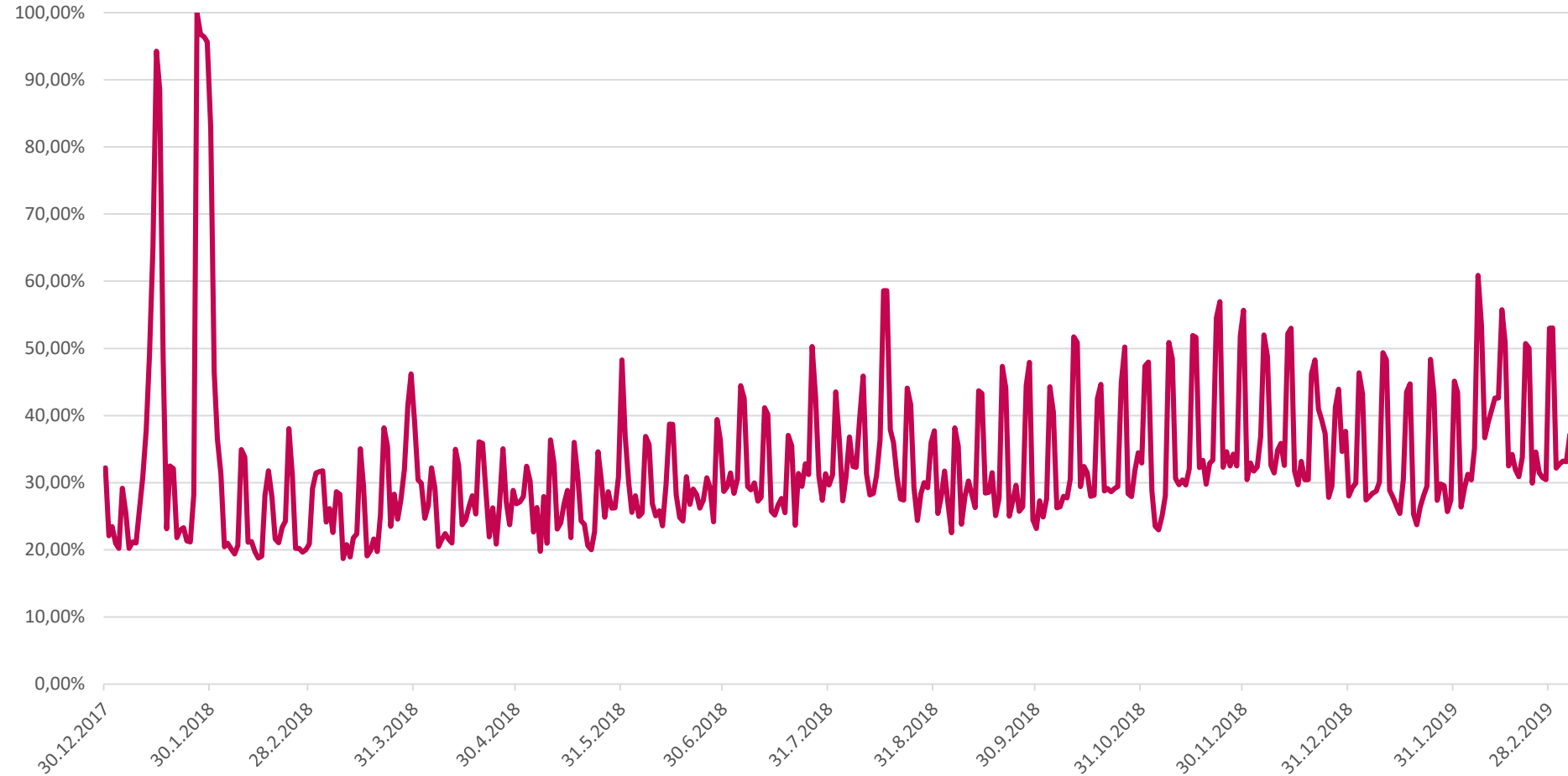
ENJOY SAFER TECHNOLOGY™

ZAUJÍMAVÉ PRÍPADY Z VIRUSLABU

Ondrej Kubovič, ESET Security Awareness Specialist



Globálny trend spamu



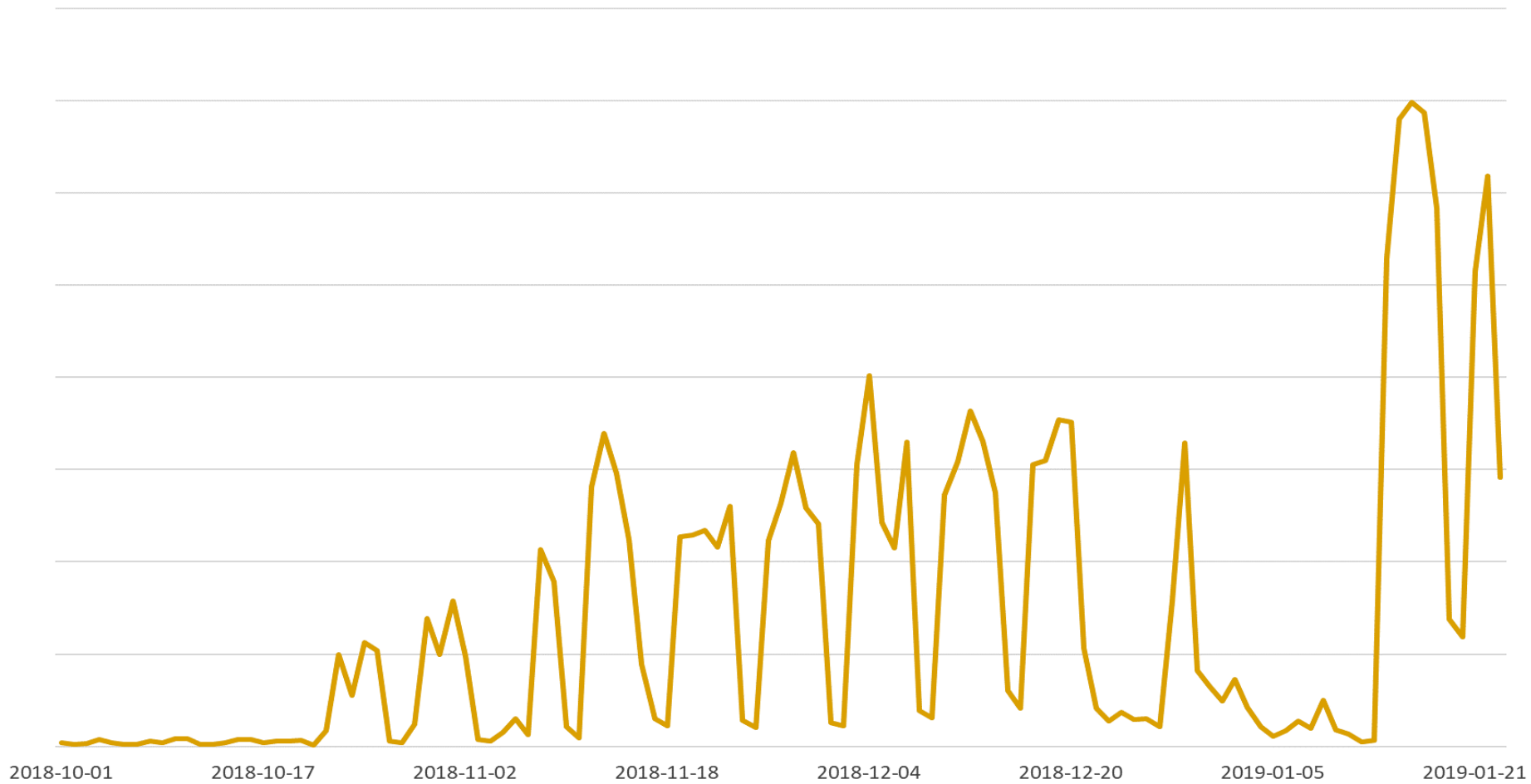
Russia hit by new wave of ransomware spam

Among the increased number of malicious JavaScript email attachments observed in January 2019, ESET researchers have spotted a large wave of ransomware-spreading spam targeting Russian users



Juraj Jánošík 28 Jan 2019 - 02:57PM

Ruská kampaň Nemucod-u



From Кудряшов

Reply Reply All Forward More

Subject подробности заказа **Detaily objednávky**

1/18/2019 7:13 AM

To

Добрый день!

Dobrý deň!

Отправляю подробности заказа. Документ во вложении

Posielam vám detaily o objednávke. Dokument je v prílohe.

Кудряшов Денис

Denis Kudrashev

Менеджер.

Manager

Публичное Акционерное Общество «БИНБАНК»

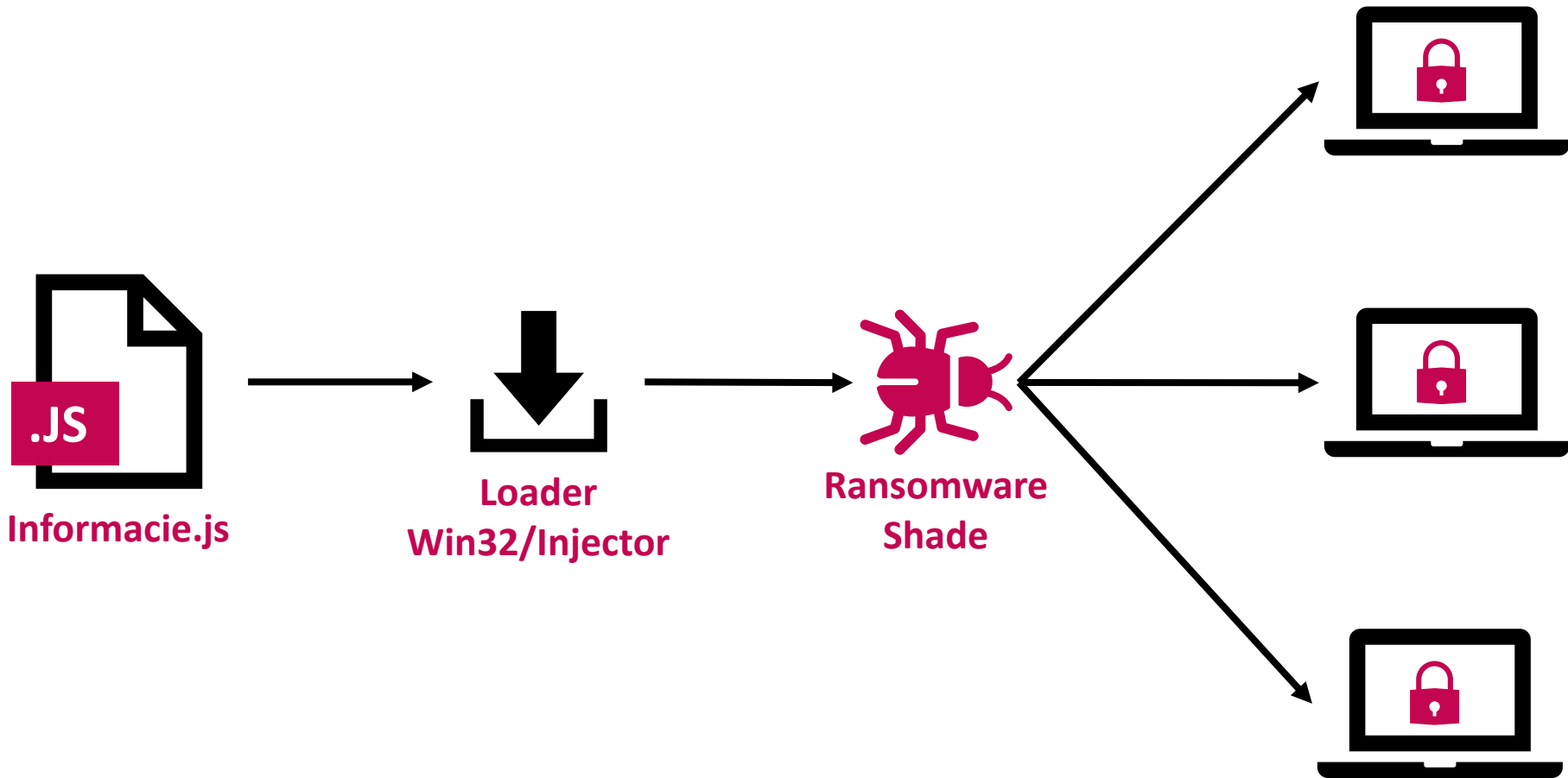
(495) 755-50-75, 8 800 200-50-75

1 attachment: info.zip 3.2 KB

JavaScript súbor "Информация.js" = Informacie.js

Save

Shade ransomware



Ваши файлы были зашифрованы.

Чтобы расшифровать их, Вам необходимо отправить код:

1C75444CDBB110436B9C|0

на электронный адрес pilotpilot088@gmail.com .

Далее вы получите все необходимые инструкции.

Попытки расшифровать самостоятельно не приведут ни к чему, кроме безвозвратной потери информации.

Если вы всё же хотите попытаться, то предварительно сделайте резервные копии файлов, иначе в случае их изменения расшифровка станет невозможной ни при каких условиях.

Если вы не получили ответа по вышеуказанному адресу в течение 48 часов (и только в этом случае!), воспользуйтесь формой обратной связи. Это можно сделать двумя способами:

1) Скачайте и установите Tor Browser по ссылке: <https://www.torproject.org/download/download-easy.html.en>

В адресной строке Tor Browser-а введите адрес:

<http://cryptsen7fo43rr6.onion/>

и нажмите Enter. Загрузится страница с формой обратной связи.

2) В любом браузере перейдите по одному из адресов:

<http://cryptsen7fo43rr6.onion.to/>

<http://cryptsen7fo43rr6.onion.cab/>

All the important files on your computer were encrypted.

To decrypt the files you should send the following code:

1C75444CDBB110436B9C|0

to e-mail address pilotpilot088@gmail.com .

Then you will receive all necessary instructions.

All the attempts of decryption by yourself will result only in irrevocable loss of your data.

If you still want to try to decrypt them by yourself please make a backup at first because

the decryption will become impossible in case of any changes inside the files.

If you did not receive the answer from the afocited email for more than 48 hours (and only in this case!), use the feedback form. You can do it by two ways:

1) Download Tor Browser from here:

<https://www.torproject.org/download/download-easy.html.en>

Install it and type the following address into the address bar:

<http://cryptsen7fo43rr6.onion/>

Press Enter and then the page with feedback form will be loaded.

2) Go to the one of the following addresses in any browser:

<http://cryptsen7fo43rr6.onion.to/>

<http://cryptsen7fo43rr6.onion.cab/>

“Love you” malspam gets a makeover for massive Japan-targeted campaign

ESET researchers have detected a substantial new wave of the “Love you” malspam campaign, updated to target Japan and spread GandCrab 5.1



Juraj Jánošík 30 Jan 2019 - 02:57PM

:D - Mozilla Thunderbird

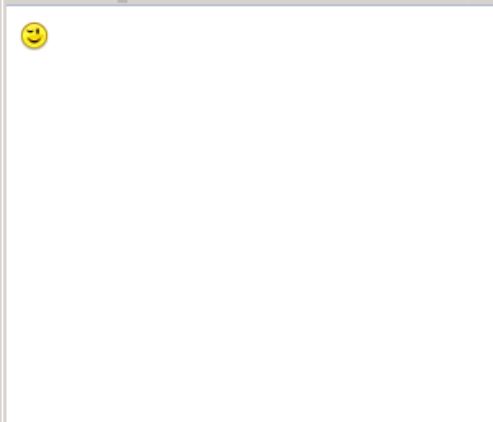
File Edit View Go Message Tools Help

Get Messages Write Chat Address Book

From [redacted] ☆

Subject :D

To [redacted] ☆



1 attachment: PICO-5967725682019-jpg.zip 8.6 KB

Kyary Pamyu Pamyu ;) - Mozilla Thunderbird

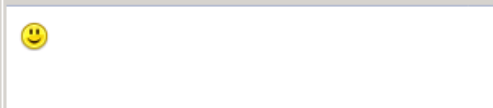
File Edit View Go Message Tools Help

Get Messages Write Chat Address Book

From [redacted] ☆

Subject **Kyary Pamyu Pamyu ;)**

To [redacted] ☆



Yui Aragaki ;) - Mozilla Thunderbird

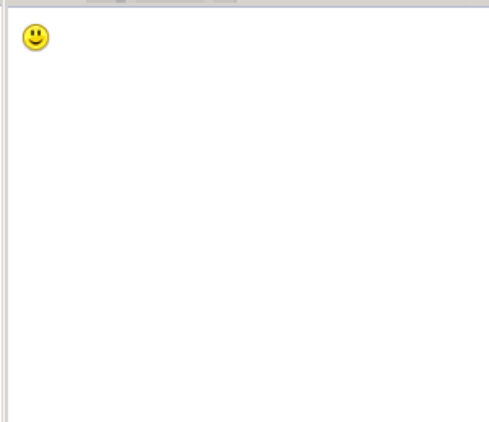
File Edit View Go Message Tools Help

Get Messages Write Chat Address Book

From [redacted] ☆

Subject **Yui Aragaki ;)**

To [redacted] ☆



1 attachment: PICO-5302900242019-jpg.zip 7.9 KB

Kyoko Fukada ;) - Mozilla Thunderbird

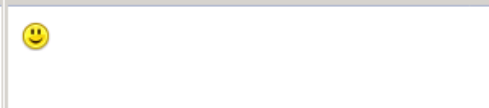
File Edit View Go Message Tools Help

Get Messages Write Chat Address Book

From [redacted] ☆

Subject **Kyoko Fukada ;)**

To [redacted] ☆



Misia ;) - Mozilla Thunderbird

File Edit View Go Message Tools Help

Get Messages Write Chat Address Book Tag

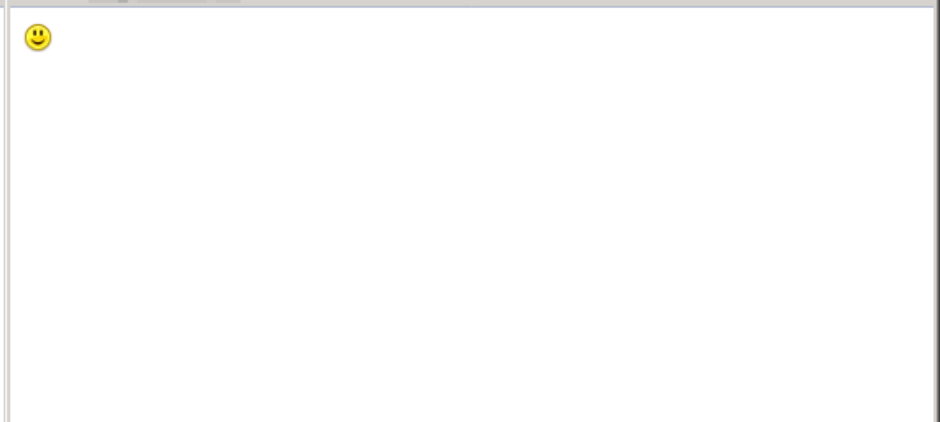
From [redacted] ☆

Subject **Misia ;)**

To [redacted] ☆

Reply Reply All Forward More

8:53 AM



1 attachment: PICO-14310656162019-jpg.zip 7.8 KB

Yuriko Yoshitaka ;) - Mozilla Thunderbird

File Edit View Go Message Tools Help

Get Messages Write Chat Address Book Tag

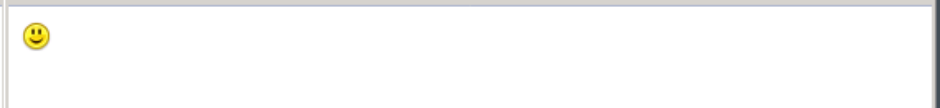
From [redacted] ☆

Subject **Yuriko Yoshitaka ;)**

To [redacted] ☆

Reply Reply All Forward More

1:14 AM



*****UNDER NO CIRCUMSTANCES DO NOT DELETE THIS FILE, UNTIL ALL YOUR DATA IS RECOVERED*****

*****FAILING TO DO SO, WILL RESULT IN YOUR SYSTEM CORRUPTION, IF THERE ARE DECRYPTION ERRORS*****

Attention!

All your files, documents, photos, databases and other important files are encrypted and have the extension: .XSXEWH

The only method of recovering files is to purchase an unique private key. Only we can give you this key and only we can recover your files.

The server with your key is in a closed network TOR. You can get there by the following ways:

| 0. Download Tor browser - <https://www.torproject.org/>

- | 1. Install Tor browser
 - | 2. Open Tor Browser
 - | 3. Open link in TOR browser: <http://gandcrabmfe6mnef.onion/34571e618494ffbb>
 - | 4. Follow the instructions on this page
-

Ransomware GandCrab v5.1

On our page you will see instructions on payment and get the opportunity to decrypt 1 file for free.

ATTENTION!

IN ORDER TO PREVENT DATA DAMAGE:

- * DO NOT MODIFY ENCRYPTED FILES
- * DO NOT CHANGE DATA BELOW

---BEGIN GANDCRAB KEY---

lAQAABonidc2J8EaQjmatZ+R8rFechyrh5A0xwIS6bP01UVIw4RbhB7/Vw6/XSoAUHwa+5scfVrIXVa5BwxIKBt861dzaUPLMyt56Mt8uvNbTiffASFkqdZaHYHJuN45b6XJA0gJzudgMZ6/25Bpi1xBiF5zFvk55f2VLHXR8q20XR57zDOzoUnkMr9mnVLLCuofmoof/4m8ramT8e8YVzR8VO+C8KYT1SEp/5yk557w147f66Mvc/78NiaiMTiIhYeF4qqIMRxB6H1uqKzZlFYIvV2UoSrV4Sj24Wyu/3yDQQpEMCPSJPPySx/NaMwVW1I3JP1u2faQUw4lcp1GWS37HHYDKsAYnq9wxzVwxXABT4oMw1mposDCMUP7/fwcbbj00vQw29sd65pp3jZd1YQKKHG7U5U07rGldfQ76ZwXu85FqGyd7rUhhLUeqwtyzRP7d3J1XTJ4duT8xy/aEGntsQ+kNR1igD3LBZ9ZKXE8NZb

---END GANDCRAB KEY---

Je ransomware naozaj na
ústupe?

Coinhive cryptocurrency miner to call it a day next week



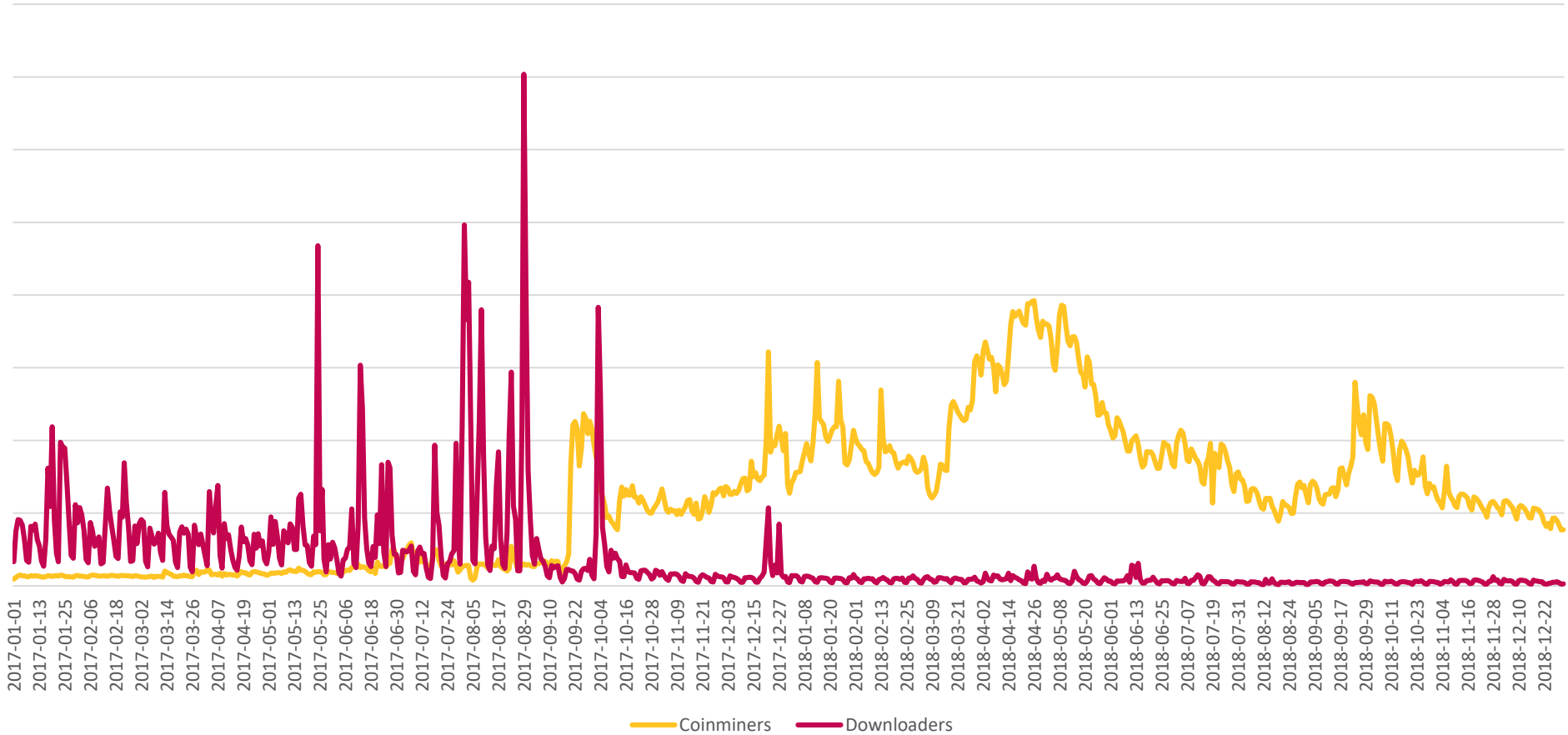
The service became notorious for its use by ne'er-do-wells looking to make a quick buck by hijacking the processing power of victim machines to generate virtual money



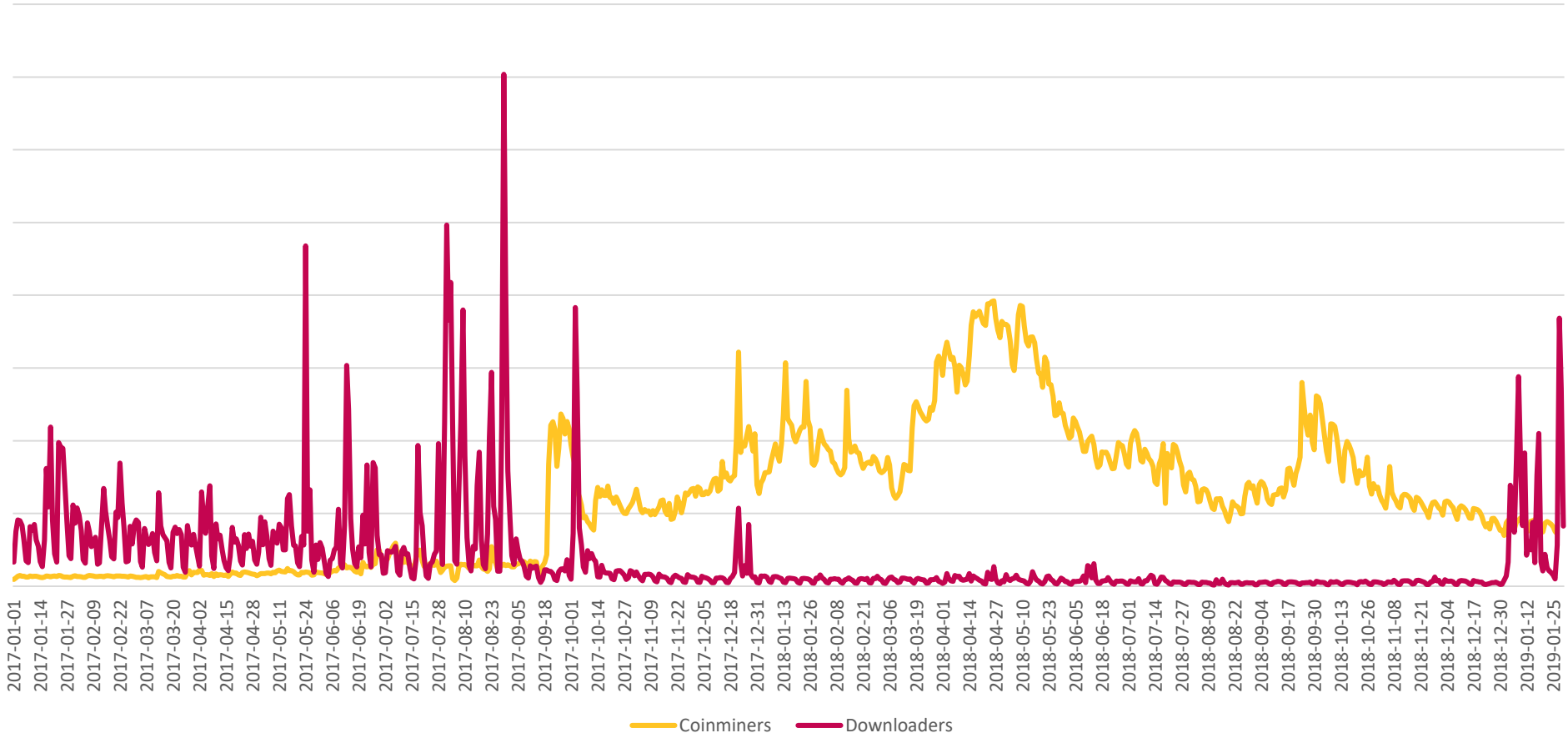
Tomáš Foltýn 28 Feb 2019 - 03:47PM

28. Február 2019

Coinminery vs. Downloadery



Coinminery vs. Downloadery



ESET® DYNAMIC THREAT DEFENSE

Prevent zero-day threats with
powerful cloud-based sandboxing

[CONTACT SALES](#)

110m+
users worldwide

400k+
business customers

200+
countries & territories

13
global R&D centers

ESET Dynamic Threat Defense

provides another layer of security for ESET products like Mail Security and Endpoint products by utilizing a cloud-based sandboxing technology to detect new, never before seen type of threats. Future proof your company IT security with:



Behavior-based Detection



Machine Learning



Zero-day Threats
Detection



Cloud Sandbox

Emotet

100%

Emotet detekcie v roku 2018

Celkovo 7.7 milióna

80%

60%

40%

20%

0%

2018-01-01

2018-02-20

2018-04-11

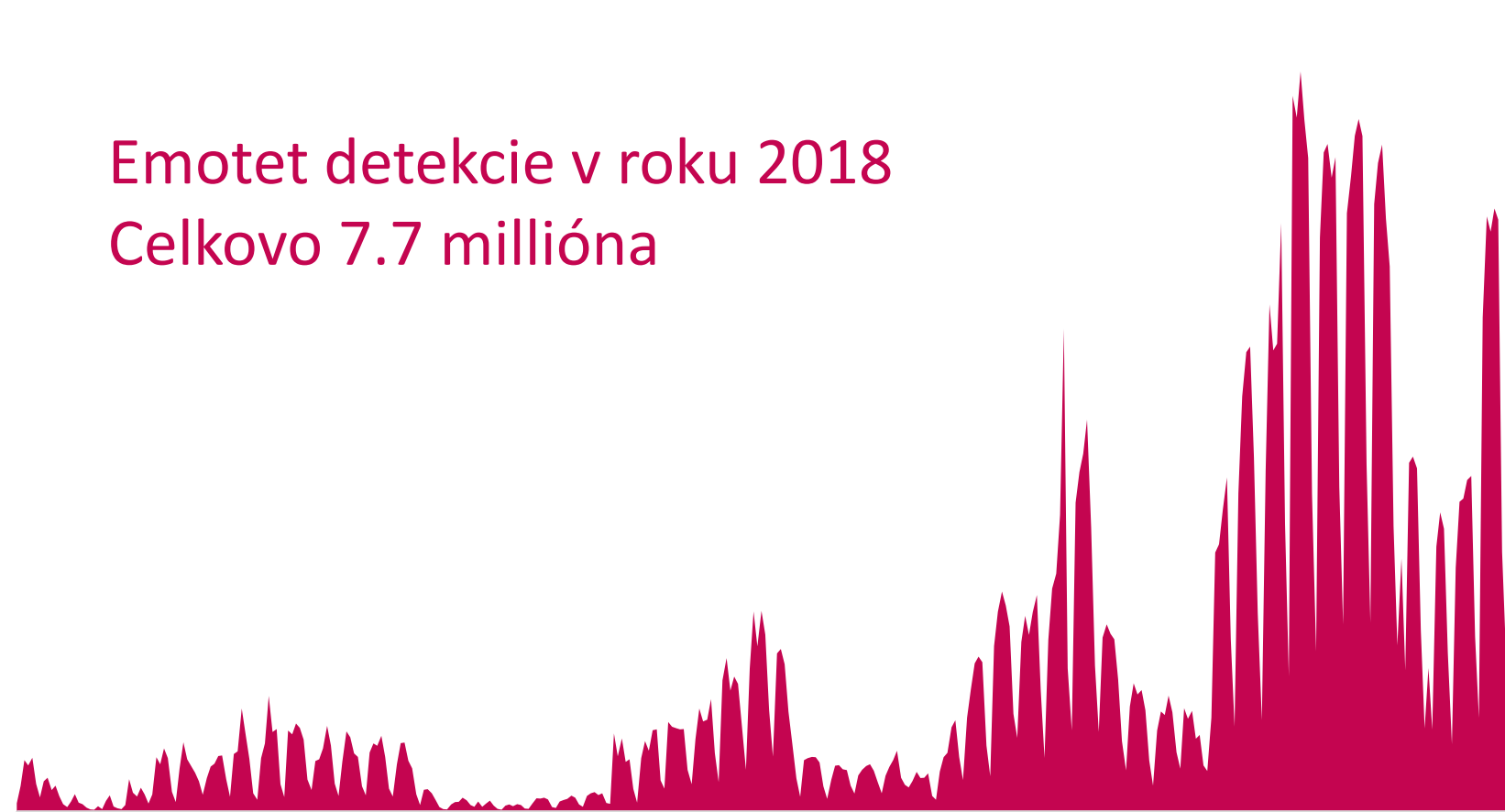
2018-05-31

2018-07-20

2018-09-08

2018-10-28

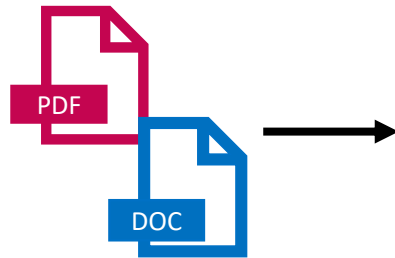
2018-12-17



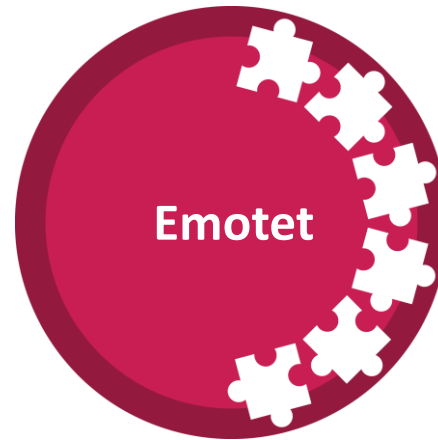
E-mail



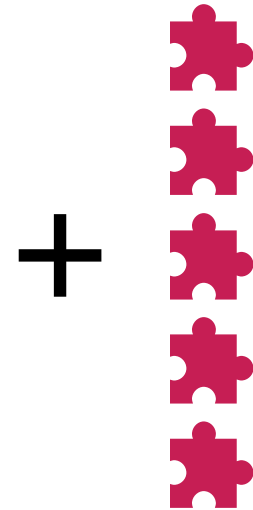
Príloha



Emotet Agent



Modul



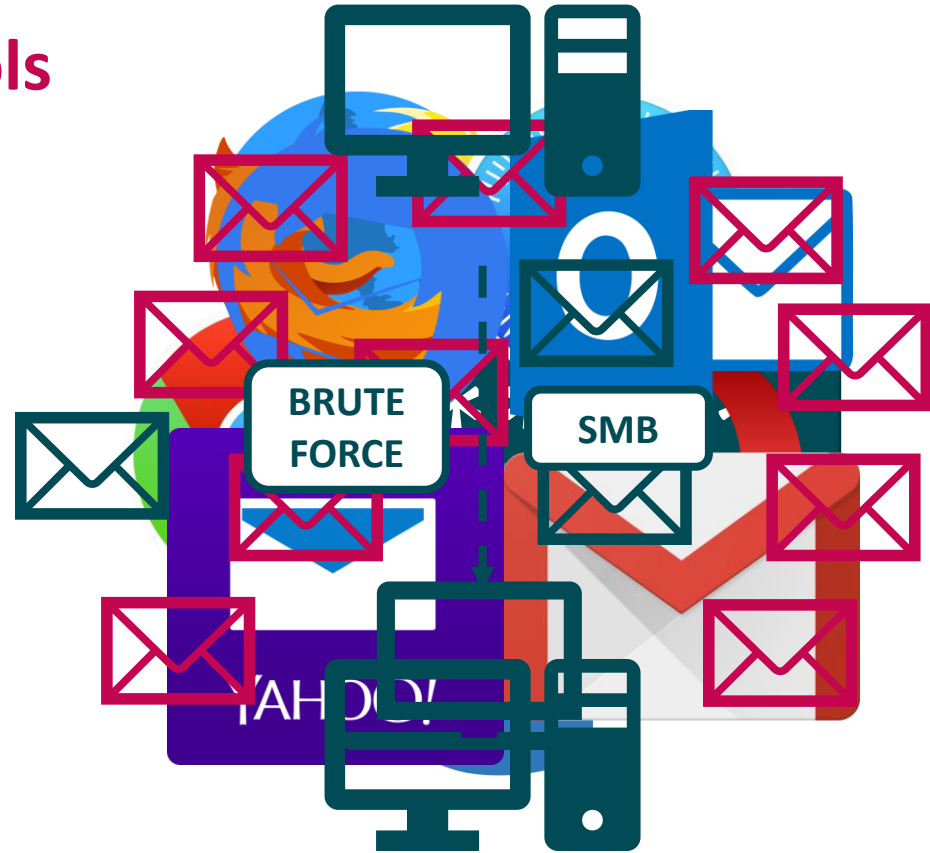
 Password Recovery Tools

 Credential Enumerator

 WebBrowserPassView

 MailPassView alebo
Outlook Scraper

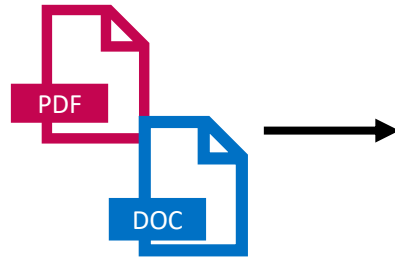
 Spammer



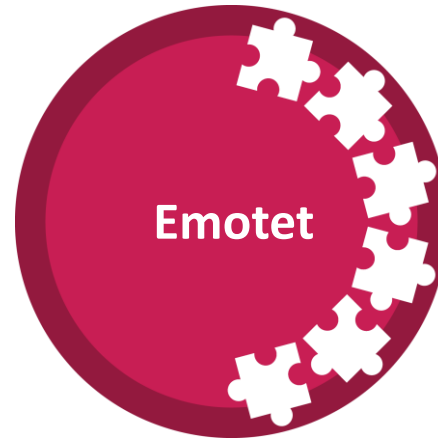
E-mail



Príloha



**Emotet
Agent**



**Banking
Malware**





Gootkit

Nymaim

TrickBot

IcedId

Emotet

ZBot

Ursnif

Qbot

Dridex

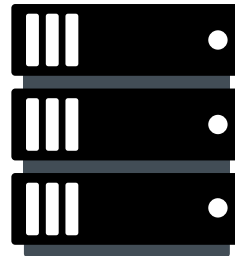
Name	5% CPU	56% Memory	0% Disk	0% Network	1% GPU	GPU Engine
Background processes (89)						
> 64-bit Synaptics Pointing Enhanc...	0%	0.6 MB	0 MB/s	0 Mbps	0%	
Active Protection System	0%	0.1 MB	0 MB/s	0 Mbps	0%	
> Adobe Acrobat Update Service	0%	0.2 MB	0 MB/s	0 Mbps	0%	
Application Frame Host	0%	7.9 MB	0 MB/s	0 Mbps	0%	
> Auto Scroll Start Service	0%	0.3 MB	0 MB/s	0 Mbps	0%	
BACK Monitor Application (32 ...	0.1%	6.6 MB	0 MB/s	0 Mbps	0%	
> Camera Mute Control Service fo...	0%	0.7 MB	0 MB/s	0 Mbps	0%	
COM Surrogate	0%	1.3 MB	0 MB/s	0 Mbps	0%	
Communications Utility launche...	0%	1.4 MB	0 MB/s	0 Mbps	0%	
> Cortana (2)	0%	112.6 MB	0 MB/s	0 Mbps	0%	
CTF Loader	0.4%	1.7 MB	0 MB/s	0 Mbps	0%	
Device Association Framework ...	0%	0 MB	0 MB/s	0 Mbps	0%	
Device Association Framework ...	0%	1.1 MB	0 MB/s	0 Mbps	0%	
> ESET Enterprise Inspector Agent	0%	22.0 MB	0 MB/s	0 Mbps	0%	
ESET Main GUI	0%	4.8 MB	0 MB/s	0 Mbps	0%	
> ESET Management Agent Modu...	0%	11.1 MB	0 MB/s	0 Mbps	0%	
> ESET Service (2)	0%	34.1 MB	0 MB/s	0 Mbps	0%	
f.lux (32 bit)	0%	2.5 MB	0 MB/s	0 Mbps	0%	
> Groove Music	0%	0.1 MB	0 MB/s	0 Mbps	0%	



Victim

Return telemetry data

**Attacker's
C&C**



Task Manager

File Options View

Processes Performance App history Startup Users Details Services

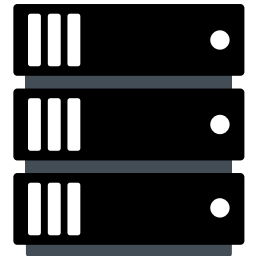
Name	5% CPU	56% Memory	0% Disk	0% Network	1% GPU	GPU Engine
Background processes (89)						
> 64-bit Synaptics Pointing Enhanc...	0%	0.6 MB	0 MB/s	0 Mbps	0%	
> Active Protection System	0%	0.1 MB	0 MB/s	0 Mbps	0%	
> Adobe Acrobat Update Service	0%	0.2 MB	0 MB/s	0 Mbps	0%	
> Application Frame Host	0%	7.9 MB	0 MB/s	0 Mbps	0%	
> Auto Scroll Start Service	0%	0.3 MB	0 MB/s	0 Mbps	0%	

< Fewer details End task

Researcher/
Honeypot



Attacker's
C&C



Retu Quit/Sleep ' Data

Task Manager

File Options View

Processes Performance App history Startup Users Details Services

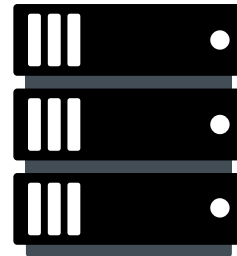
Name	5% CPU	56% Memory	0% Disk	0% Network	1% GPU	GPU Engine
Background processes (89)						
> 64-bit Synaptics Pointing Enhanc...	0%	0.6 MB	0 MB/s	0 Mbps	0%	
Active Protection System	0%	0.1 MB	0 MB/s	0 Mbps	0%	
> Adobe Acrobat Update Service	0%	0.2 MB	0 MB/s	0 Mbps	0%	
Application Frame Host	0%	7.9 MB	0 MB/s	0 Mbps	0%	
> Auto Scroll Start Service	0%	0.3 MB	0 MB/s	0 Mbps	0%	
BACK Monitor Application (32 ...)	0.1%	6.6 MB	0 MB/s	0 Mbps	0%	
> Camera Mute Control Service fo...	0%	0.7 MB	0 MB/s	0 Mbps	0%	
COM Surrogate	0%	1.3 MB	0 MB/s	0 Mbps	0%	

Fewer details End task

Researcher/
Honeypot



Attacker's
C&C



Re Command/ Data
Binary module

A few days later...

Researcher/
Honeypot



Task Manager

File Options View

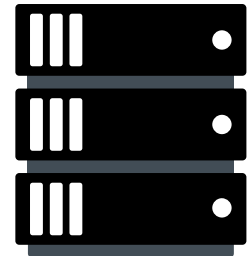
Processes Performance App history Startup Users Details Services

Name	5% CPU	56% Memory	0% Disk	0% Network	1% GPU	GPU Engine
Background processes (89)						
> 64-bit Synaptics Pointing Enhanc...	0%	0.6 MB	0 MB/s	0 Mbps	0%	
Active Protection System	0%	0.1 MB	0 MB/s	0 Mbps	0%	
> Adobe Acrobat Update Service	0%	0.2 MB	0 MB/s	0 Mbps	0%	
Application Frame Host	0%	7.9 MB	0 MB/s	0 Mbps	0%	
> Auto Scroll Start Service	0%	0.3 MB	0 MB/s	0 Mbps	0%	
BACK Monitor Application (32 ...	0.1%	6.6 MB	0 MB/s	0 Mbps	0%	
> Camera Mute Control Service fo...	0%	0.7 MB	0 MB/s	0 Mbps	0%	
COM Surrogate	0%	1.3 MB	0 MB/s	0 Mbps	0%	

Fewer details End task



Attacker's
C&C



Retu Quit/Sleep / Data

Turla

Používá vaša firma
MS Outlook?





Turla: In and out of its unique Outlook backdoor

The latest ESET research offers a rare glimpse into the mechanics of a particularly stealthy and resilient backdoor that the Turla cyberespionage group can fully control via PDF files attached to emails

2009

Compilation timestamp (may be faked) of a basic version of the Outlook backdoor. It could only dump email content.

2013

Improvement: the backdoor could execute commands. They are sent by email in XML format.

2013

Last known version targeting The Bat! email client.

2016

Improvement: the commands are now sent as attachments in specially crafted PDF documents

2018

April

Improvement: the backdoor can execute PowerShell commands by leveraging Empire PSInject.

2018

March

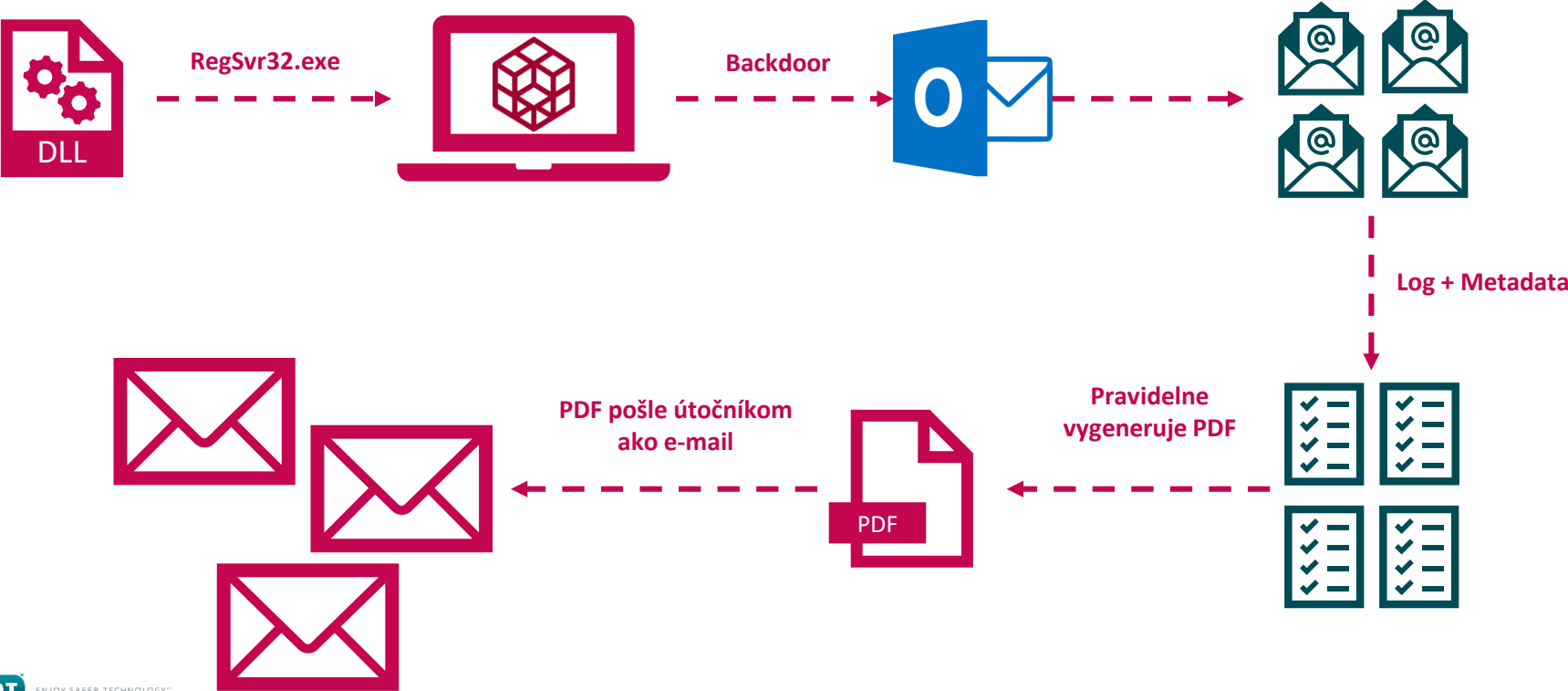
Public announcement of the compromise of the German government.

2017

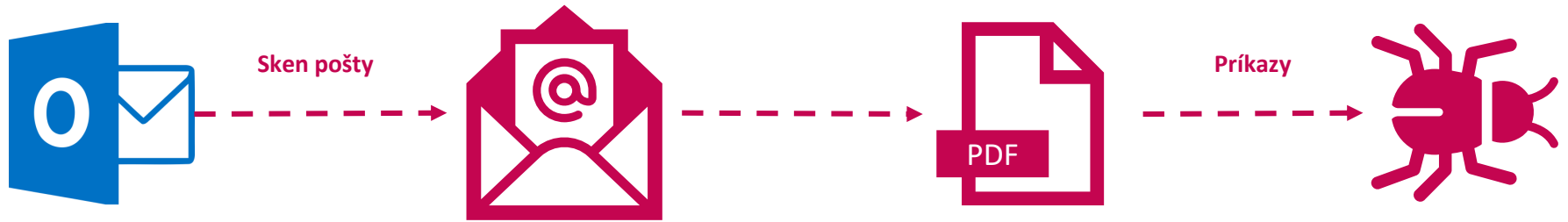
Improvement: the backdoor is able to build PDF documents to exfiltrate data to the attackers.



Exfiltrácia dát



Ovládanie a príkazy





Zač. 2017



Hochschule des Bundes
für öffentliche
Verwaltung

Zverejnené v marci 2018

Marec 2017

stiges Amt

Koniec 2017



Ďalšie ciele



Vlády a ich predstavitelia



Vojenský predstavitelia a zbrojárske firmy



Diplomati

TUR OUT BAC

Analysis
Turla ba

TUR OUT BACI

Analysis o
Turla back

TURLA OUTLOOK BACKDOOR

Analysis of an unusual
Turla backdoor

ESET® ENTERPRISE INSPECTOR

Uncover the unknown in your network with our EDR solution

[CONTACT SALES](#)

110m+
users worldwide

400k+
business customers

200+
countries & territories

13
global R&D centers

ESET Enterprise Inspector

An Endpoint Detection & Response tool designed to exploit ESET's multilayered Endpoint Protection Platform. All layers send relevant data to ESET Enterprise Inspector, which analyzes vast amounts of real time endpoint data. The result is complete prevention, detection and response solutions for quick analysis and remediation of any security issue in the network enabling organizations to take immediate action to:



Detect advanced persistent threats



Stop file less attacks



Block zero-day threats

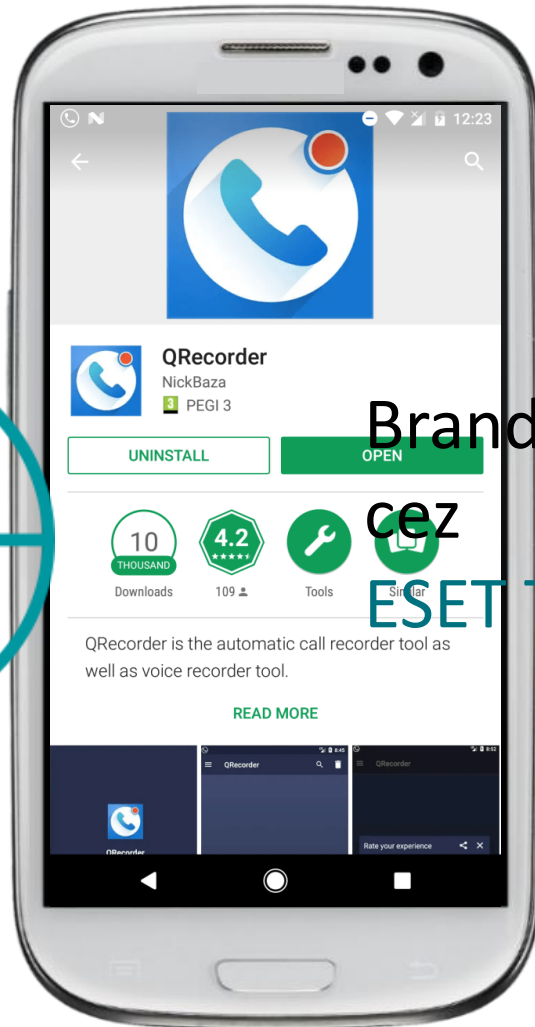


Protect against ransomware



Neutralize state-sponsored attacks

QRecorder



Brand protection servis

CEZ

ESET Threat Intelligence



12:09



QRecorder



Attention

To let the recording widget work on the call screen it's necessary to give a special permission. If you refuse, the widget won't appear on the call screen. You can turn on and turn off the widget in the settings.

CANCEL OK



12:09

Apps that can draw over other apps

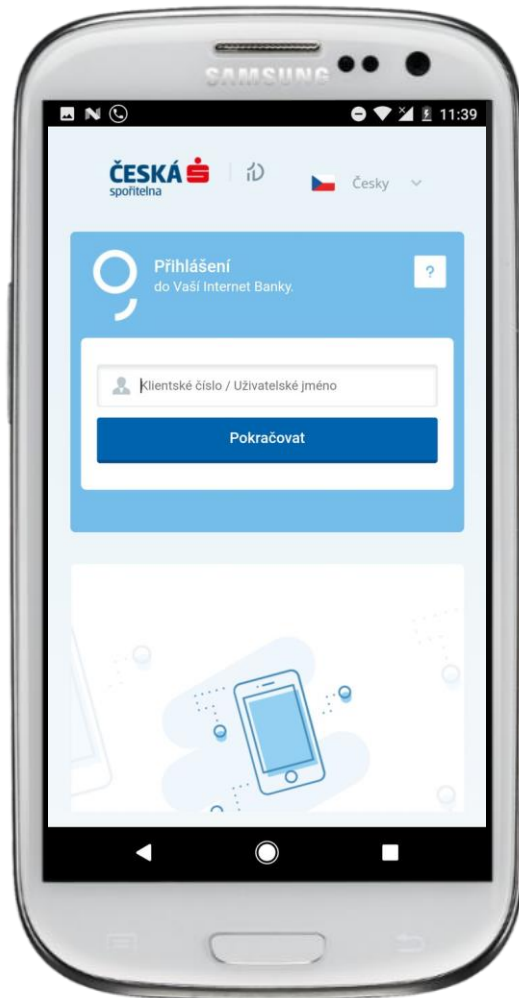
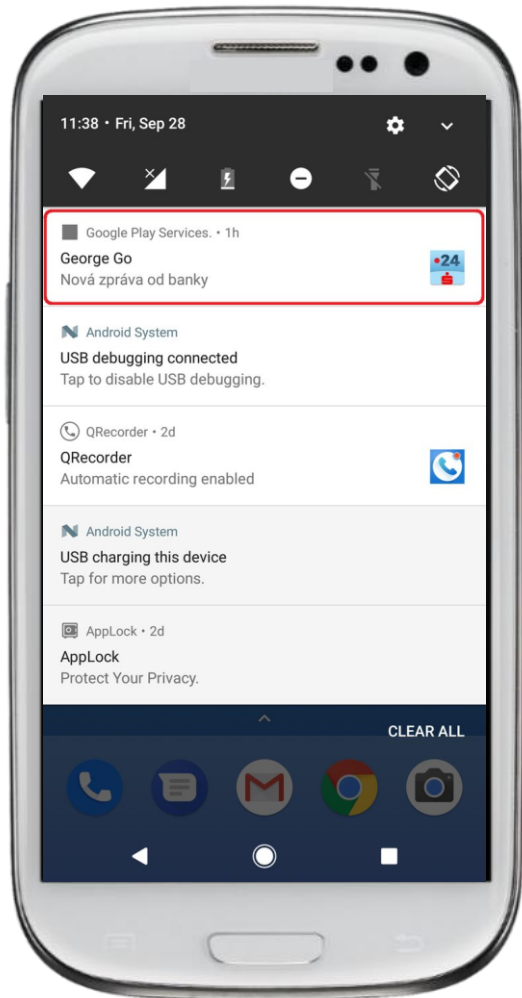


QRecorder

Permit drawing over other apps



This permission allows an app to display on top of other apps you're using and may interfere with your use of the interface in other applications, or change what you think you are seeing in other applications.



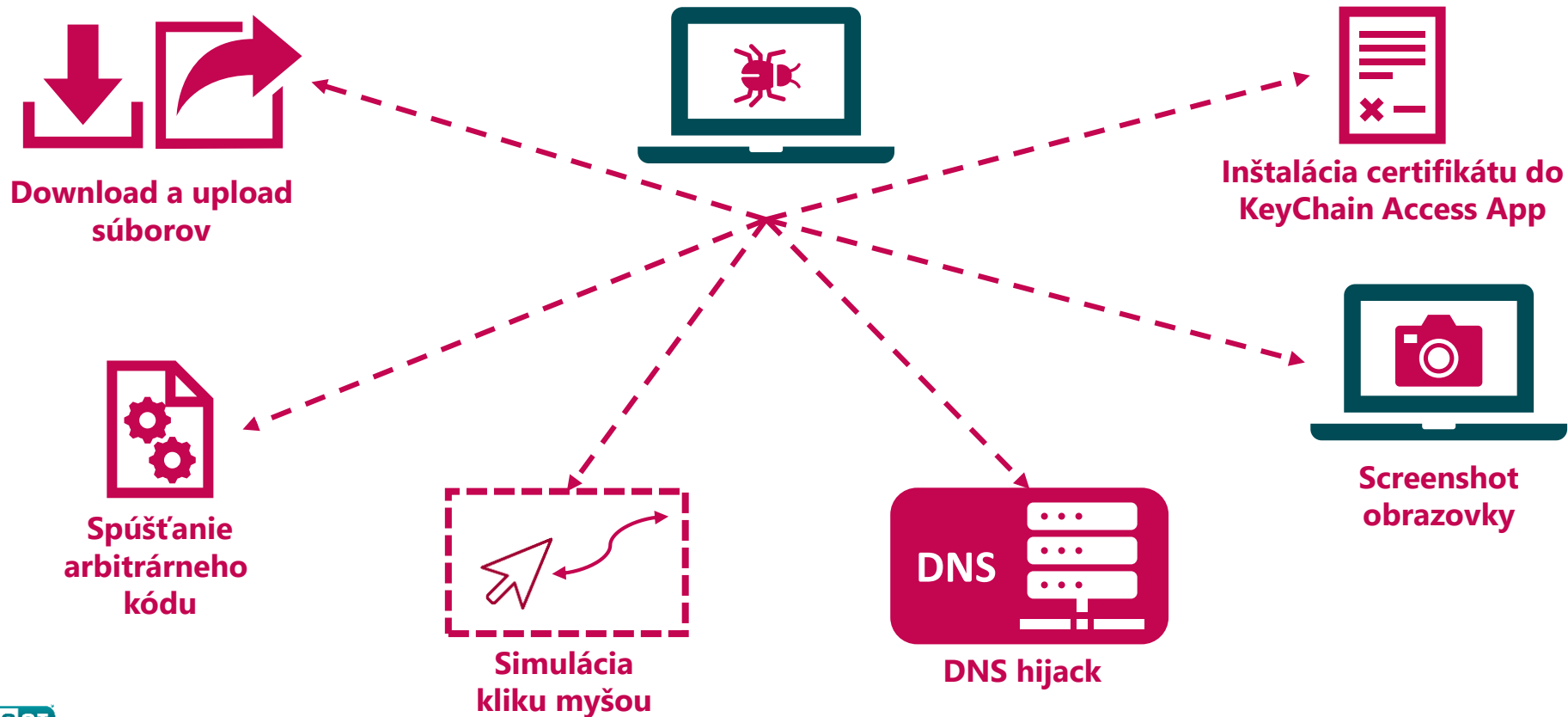
```
= "Air Bank" android:name="gjfid.pziovmiq.eefff.Air" android:taskAffinity="cz.airbank.android" android:theme="@and
L="George Go" android:name="gjfid.pziovmiq.eefff.Csas" android:taskAffinity="cz.csas.georgego" android:theme="@and
L="SERVIS 24" android:name="gjfid.pziovmiq.eefff.Service24" android:taskAffinity="com.cleverlance.csas.servis24" a
L="Muj stav" android:name="gjfid.pziovmiq.eefff.Muj" android:taskAffinity="cz.csas.app.mujstav" android:theme="@and
L="ČSOB SmartBanking" android:name="gjfid.pziovmiq.eefff.Csob" android:taskAffinity="cz.csob.smartbanking" android
L="Equa bank" android:name="gjfid.pziovmiq.eefff.Equ" android:taskAffinity="cz.equabank.mobilebanking" android:ther
L="Equa bank" android:name="gjfid.pziovmiq.eefff.Bsc" android:taskAffinity="com.icomvision.bsc.mobilebank" android:
L="mBank CZ" android:name="gjfid.pziovmiq.eefff.Mban" android:taskAffinity="cz.mbank" android:theme="@android:styl
L="Smart Banka" android:name="gjfid.pziovmiq.eefff.Mone" android:taskAffinity="cz.moneta.smartbanka" android:theme
L="Smart Banking" android:name="gjfid.pziovmiq.eefff.Rbap" android:taskAffinity="cz.rb.app.smartphonebanking" andr
L="Fio banka" android:name="gjfid.pziovmiq.eefff.Ulik" android:taskAffinity="cz.ulikeit.fio" android:theme="@andro
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L="ING-DiBa" android:name="gjfid.pziovmiq.eefff.Inga" android:taskAffinity="at.ing.diba.client.onlinebanking" andr
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L="Banking" android:name="gjfid.pziovmiq.eefff.Volk" android:taskAffinity="at.volksbank.volksbankmobile" android:th
L="Bank Austria" android:name="gjfid.pziovmiq.eefff.Unic" android:taskAffinity="com.bankaustria.android.olb" androi
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```

20:33:36 PIN ENTERED

Česká polícia:
Najmenej 5 obetí
2.000.000 CZK

OSX/DNSChanger.A a.k.a. OSX/MaMi

OSX/DNSChanger.A v1.1.0



OSX/DNSChanger.A v1.1.0



DNS hijack



Inštalácia certifikátu do
KeyChain Access

Možný Man-in-The-Middle útok

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Endpoint
security

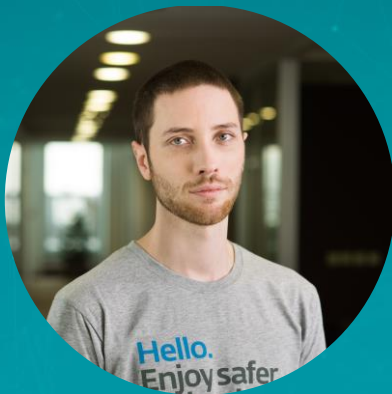


File server
security

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