ankura

Living with Ransomware

The New Normal in Cyber Security

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Introduction: Presenters

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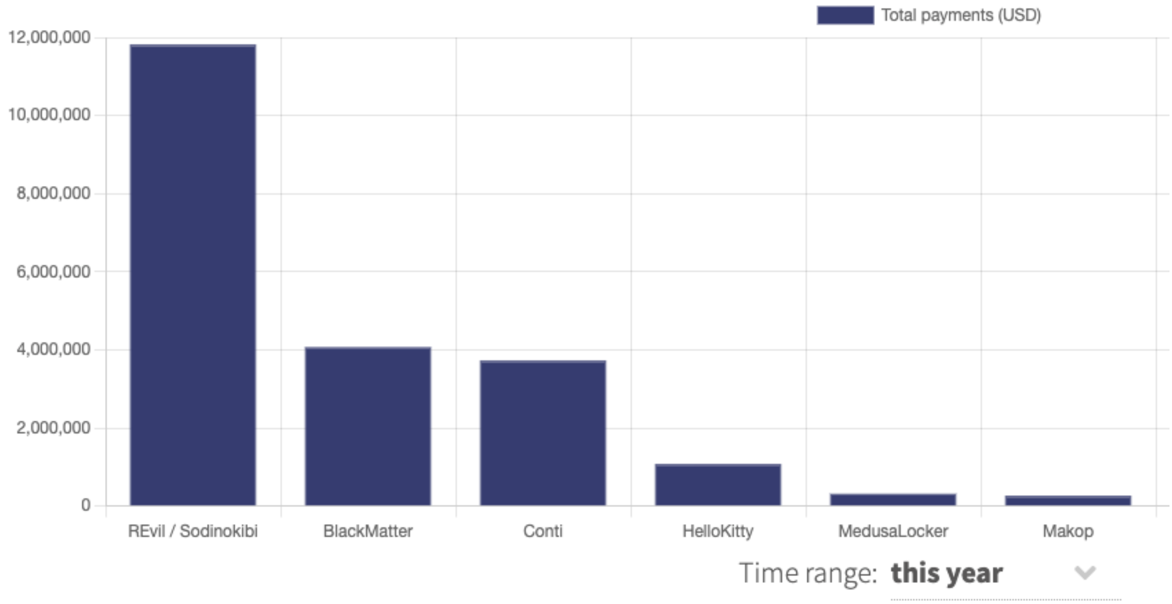
Agenda

- Current Ransomware Threat Landscape
- Ransomware Groups: Motivation and Operation
- Managing Ransomware Attacks
- Interesting Real-world Cases
- Detection
- Forensics Best Practices
- Cyber Insurance Policies
- Communication Strategies
- Resources and further reading

Current Ransomware Threat Landscape

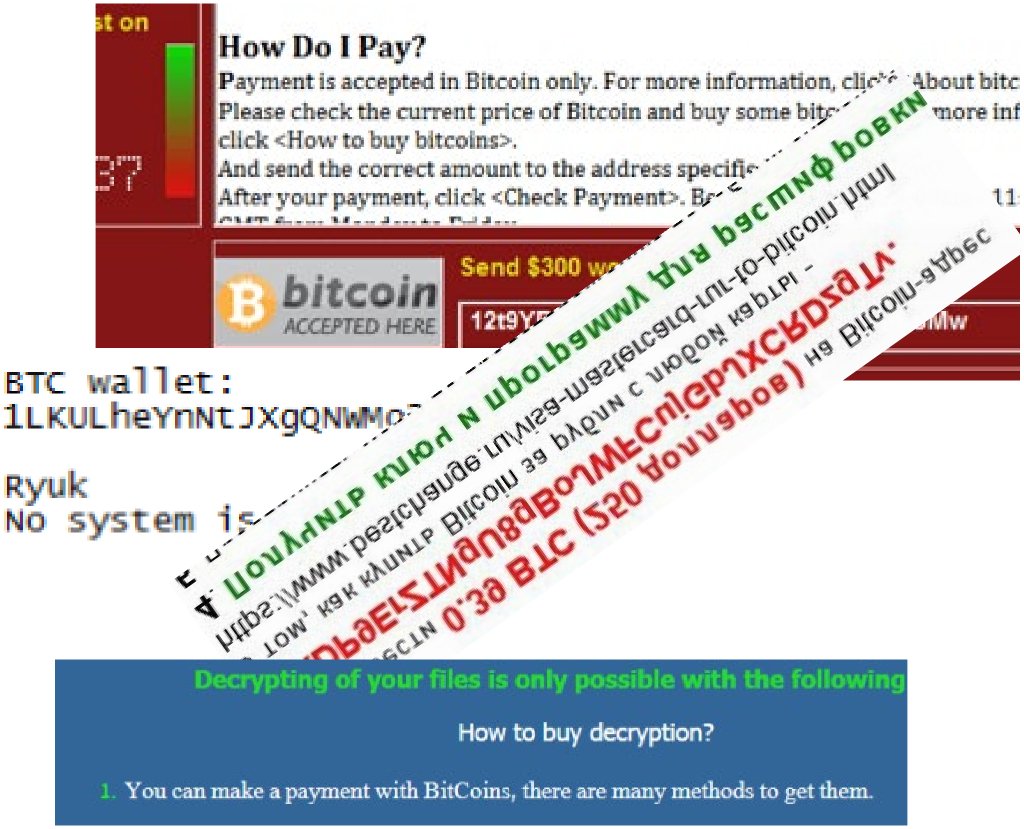
- Many Groups Operating Currently
- Targets:
  - Individuals, Small Businesses and Large Enterprises
  - Healthcare, Supply Chain, Government, Education
- Main Players:
  - REvil
  - Conti
  - Babuk
  - Darkside
- Ransomware Payments



Time range: **this year**

Ransomware Groups: Motivation and Operation

- Motivation:
  - $$$
  - Disruption
  - Testing/Experimentation
- Operation
  - RaaS
  - In-house development
  - Buy finished product



How Do I Pay?

Payment is accepted in Bitcoin only. For more information, clic About bitc
Please check the current price of Bitcoin and buy some bitc more inf
click <How to buy bitcoins>.
And send the correct amount to the address specifi
After your payment, click <Check Payment>. Be 11:

```
BTC wallet:
1LKULheYnNtJXgQNWMo

Ryuk
No system is
```

Decrypting of your files is only possible with the following

How to buy decryption?

1. You can make a payment with BitCoins, there are many methods to get them.

Ransomware attack 'not designed to make money', researchers claim

Managing Ransomware Attacks

BEFORE

DR Plan
IRP
TableTop Exercises
Design Backup Systems
Test Backup Systems
Threat Hunting

DURING

Coordination
Communication
Containment
Response
Technical Analysis
Threat Hunting

AFTER

Restoration
Back to BAU
Root Cause Analysis
Lessons Learnt
Update DR plans
Update IRP
All the points in ‘Before’

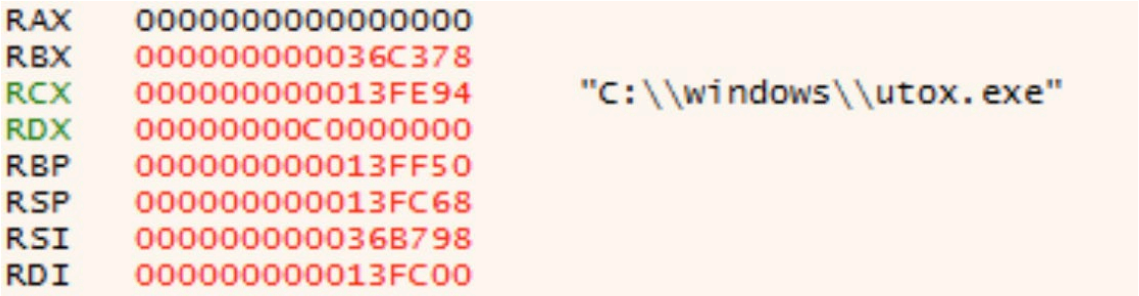
Real-world Cases 2022

- Freight Company
  - Threat Actors exploited the network back in 2020 (RDP)
  - The network was left exposed for a long time
  - Threat Actors installed MegaSync and exfiltrated data
  - Threat Actors used Ransomware in the end to encrypt servers

- Law Firm
  - Threat Actors used ProxyLogon
  - Ransomware was executed
  - Cron jobs were scheduled to spread the infection
  - TAs kept lowering the ransom demand

Detection

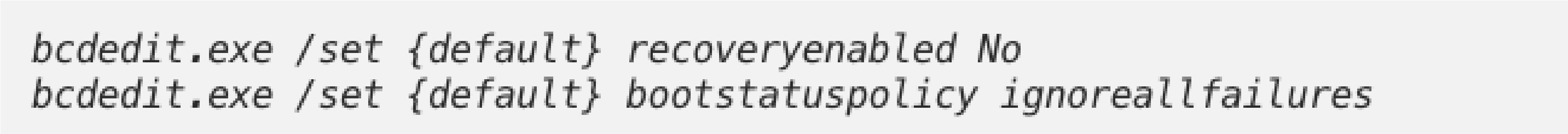
- In-house detection teams
- Threat-intel feeds
- Research publications



```
RAX   0000000000000000
RBX   000000000036C378
RCX   000000000013FE94      "C:\\windows\\utox.exe"
RDX   00000000C0000000
RBP   000000000013FF50
RSP   000000000013FC68
RSI   000000000036B798
RDI   000000000013FC00
```

Apr 19, 2021

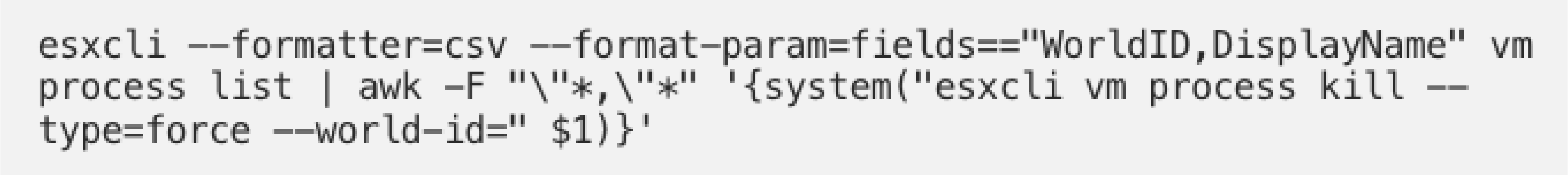
DefendAgainst | MedusaLocker



```
bcdedit.exe /set {default} recoveryenabled No
bcdedit.exe /set {default} bootstatuspolicy ignoreallfailures
```

Dec 23, 2021

DefendAgainst: Ransomware ‘STOP’/DJVU



```
esxcli --formatter=csv --format-param=fields=="WorldID,DisplayName" vm
process list | awk -F "\"*,\"*" '{system("esxcli vm process kill --
type=force --world-id=" $1)}'
```

Forensics Best Practices

- Virtual Machine snapshots – both current and before infection
- Available logs - cloud based and internal systems
- Active Monitoring - Endpoint detection and Response / Threat Hunting
- Engage specialist Incident Response and Forensics early

Cyber Insurance Policies

- Often the first port of call for victim organisations
- Facilitation of response management, legal counsel, engage forensics specialists, regulatory notifications, ransom payment negotiations, etc.
- Cost of Cyber insurance is skyrocketing and appropriate coverage is becoming a challenge.

Communication Strategies

- Critical component of the response - can affect the company brand.
- Many Stakeholders
  - Regulatory notifications and enquiries
  - Media
  - Customers
  - Internal staff
- Single point of contact for external communication.
- Consistent and timely based on available information.
- “Need to know basis” approach, prepare for possible scenarios.
- Legal and PR Approval.

Resources and further reading

https://ransomwhe.re - track ransomware payments
https://ransomwaretracker.abuse.ch/blocklist/ - Blocklist
Ransomware: Understand, Prevent, Recover - Allan Liska
https://www.cyber.gov.au/ransomware/protect-yourself-against-ransomware-attacks
Follow VX Underground on Twitter

Q&A

Thanks!

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