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COMBATING RANSOMWARE-AS-A-SERVICE WITH PUBLIC-PRIVATE PARTNERSHIP

RANSOMWARE – A GERMAN PERSPECTIVE

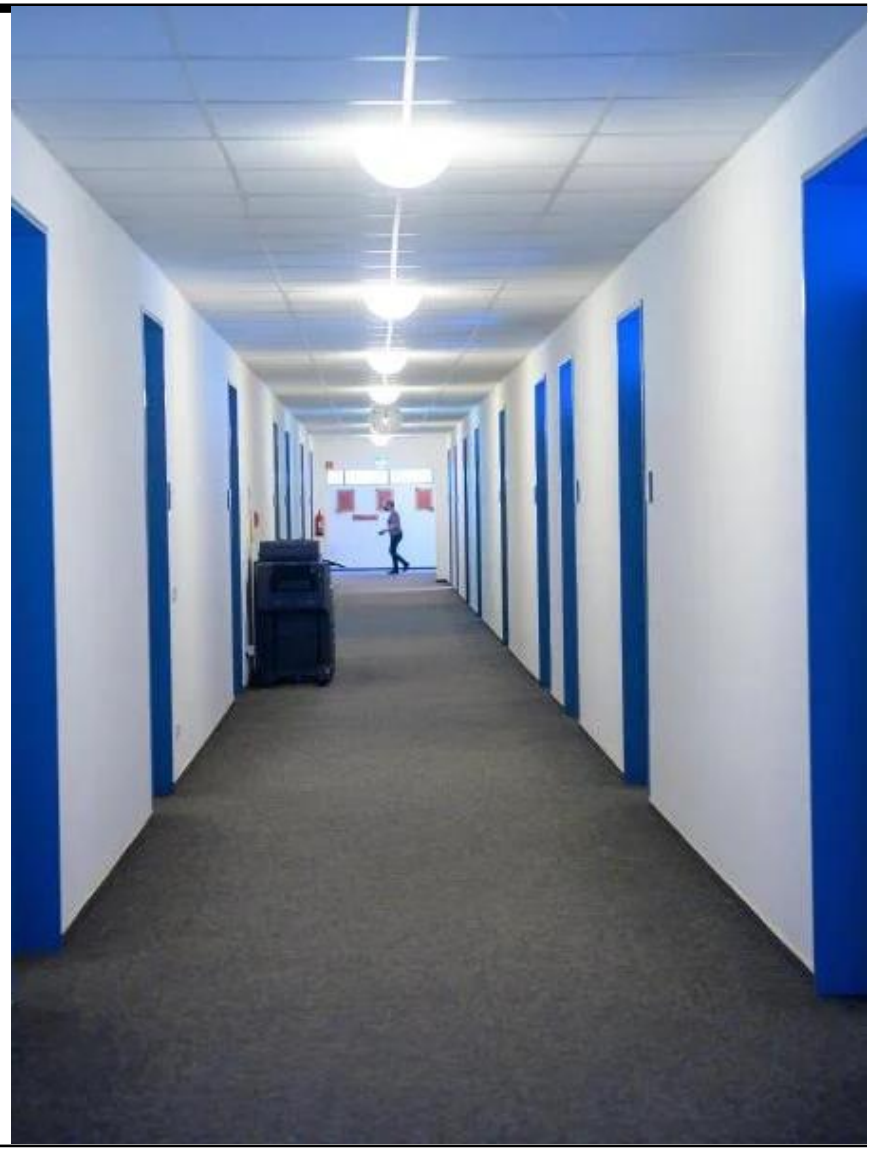
RANSOMWARE THREATENS NOT ONLY DATA BUT ALSO HUMAN LIVES

- September 2020: Ransomware attack on University Hospital Düsseldorf (UKD) (allegedly by “DoppelPaymer“ threat actor)
- IT infrastructure affected massively; not even phone calls possible
- Planned and outpatient treatments and emergency care could not occur at the hospital
- People seeking emergency care were redirected to more distant hospitals for treatment
- A patient in a life-threatening condition was redirected to a more distant hospital in Wuppertal receiving care an hour later and died

Picture: Roland Weihrauch / dpa

…AND SOCIETY

- July 2021: Ransomware attack on Anhalt-Bitterfeld district administration (allegedly by “Pay or Grief“ threat actor)
- Entire IT infrastructure affected: No government services possible for 2 weeks,
  e.g. no car registration possible, no social security or child support benefits paid out
- “Cyber” disaster declared for the first time in Germany
- Assistance from the Bundeswehr, the German armed forces, requested
- Data (e. g. non-public meeting minutes, personal data of local politicians) published on Darknet



Picture: Klaus-Dietmar Gabbert/dpa-Zentralbild/dpa (Foto: dpa)

BUT: ATTACKERS TRY TO AVOID PUBLIC ATTENTION

- Ransomware actors want to avoid public attention, and therefore do (normally) not target critical public infrastructure
- More popular victims are business enterprises and organizations
- Example: Ransomware attack on University Hospital Düsseldorf
  - About 30 servers were found encrypted with a ransom note addressed to the Heinrich Heine University Düsseldorf
  - Police informed the attackers they had hit the ‘wrong’ target and that lives were in danger
  - In return, the ransom demand was withdrawn and decryption keys were provided

Picture: dpa/Jens Büttner

ATTACK TARGET: GERMAN ECONOMY

- Federal Criminal Police Office Germany (BKA): “Cybercriminals are currently increasingly focusing their attacks on the so-called "big game", i.e. large companies and public institutions.
- German economy has never “been attacked as much as today” according to federation of German industries (BDI)
- Virtually every German small medium-sized companies has already been the victim of a cyberattack

Picture: Andrey Popov/stock.adobe.com

223 BILLION EUROS IN DAMAGE CAUSED BY CYBERATTACKS ON GERMAN COMPANIES

- Representative study by the digital association Bitkom in 2020/2021, for which >1.000 companies across all industries were surveyed
- 88 percent of companies in Germany were affected by data theft, espionage or sabotage in 2020 and 2021
- Losses more than quadrupled (+358%) compared to previous years in 2018/2019
- According to the study, ransomware attacks are particularly frequent and dangerous.

THE WINNING FORMULA AGAINST RANSOMWARE: INTERNATIONALLY AND TOGETHER

- Combating ransomware in Germany with 16 independent federal states is impossible without cross-state coordination and bundled investigations
- Investigations should be focused on RaaS providers to achieve sustainability in the fight
- Investigations must be coordinated internationally, as against Emotet

Picture: https://commons.wikimedia.org/wiki/File:Germany_on_the_globe_(Germany_centered).svg

PUBLIC AND PRIVATE SECTOR MUST WORK CLOSELY TOGETHER

- Victim companies must report ransomware attack in order to allow LE investigations
- However, police must include victims' concerns and needs
  - No investigations and forensics at any price
  - Not prolonging negotiations to the disadvantage of the victims in order to make investigations possible
  - Share threat intelligence data with threatened companies, even if this may endanger investigations
  - Think more in terms of prevention than repression, as arrests are difficult and the Hydra only gets another head cut off.

Picture: https://www.vergabe.nrw.de/wirtschaft/public-private-partnership-projekte

OPEN DISCUSSION

- Ransom payments - are they reasonable and appropriate?
- Combating ransomware #1 –
  Fight the RaaS providers or their affiliates?
- Combating ransomware #2 –
  Does a public-private partnership help?

LIST OF SOURCES

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