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MY FIRSTHAND EXPERIENCE WITH RANSOMWARE

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#RSAC

Agenda



- Ransomware
- Common Ransomware Attack Vectors
- Some of recent Ransomware attacks
- Discussion on my first-hand experience with Ransomware
- Short-term and Long-term effects
- Potential solutions for prevention and cure
- Looking back
- Summary

Ransomware



- A type of malware that prevents user from accessing their system by locking the system's screen or files unless ransom is paid
- Motivation for creating Ransomware
- Entities creating Ransomware
- Ransomware targets
- Ransomware-As-A-Service



Common Ransomware Attack Vectors



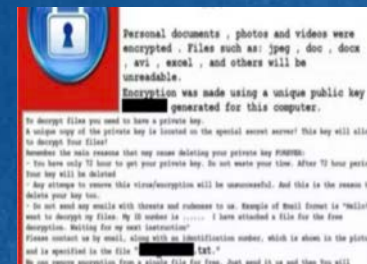
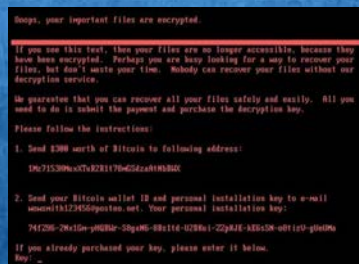
- Email attachments and URLs
- Online ads
- Unsecure websites
- Downloads
- Instant Messages
- Cloud based collaboration tools



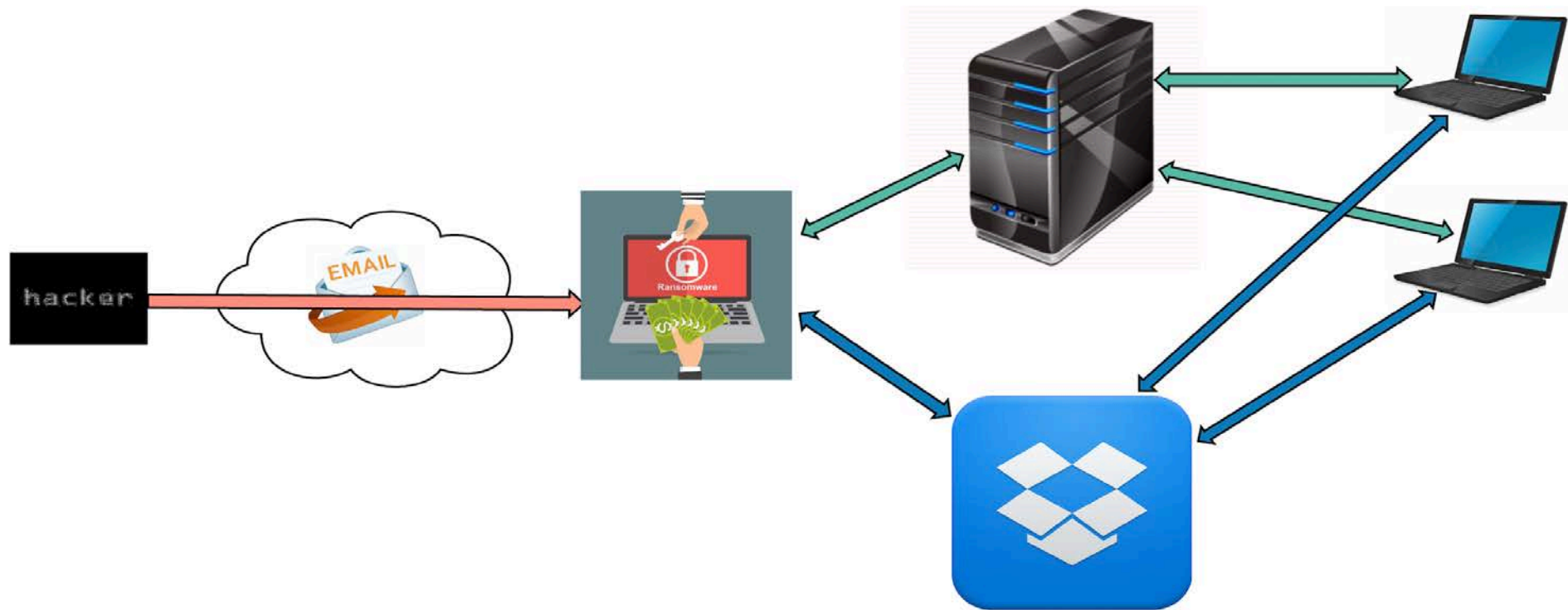
Some of recent Ransomware attacks



- WannaCry
- NotPetya
- BadRabbit
- Locky
- Cerber
- CrySis



Discussion on my first-hand experience with Ransomware



Short-term and Long-term effects



- PANIC



- Argument



- Plan



- Control



Short-term and Long-term effects (cont'd)



- Lessons learned



- Investment in Security



- Investment in Employee and Training



- Table tops



Potential solutions for prevention and cure



- “Prevention is better than Cure”
- Prevention
 - Patching, Backups, Disable macros, MS Office viewer, User awareness, User access/privilege limitation, Network Segmentation, Prevention apps, etc.
- Cure
 - Do not Panic, Training, Task force, Train and practice, Contain, Recover, Lessons learned, Train again, etc.

Looking back



- Once in a life time (hopefully)
- Should have been better prepared
- Training
- Task force
- Security Solutions

Summary



- Ransomware are common
- Training and awareness
- Be prepared
- Get everyone involved