### Is the threat real?

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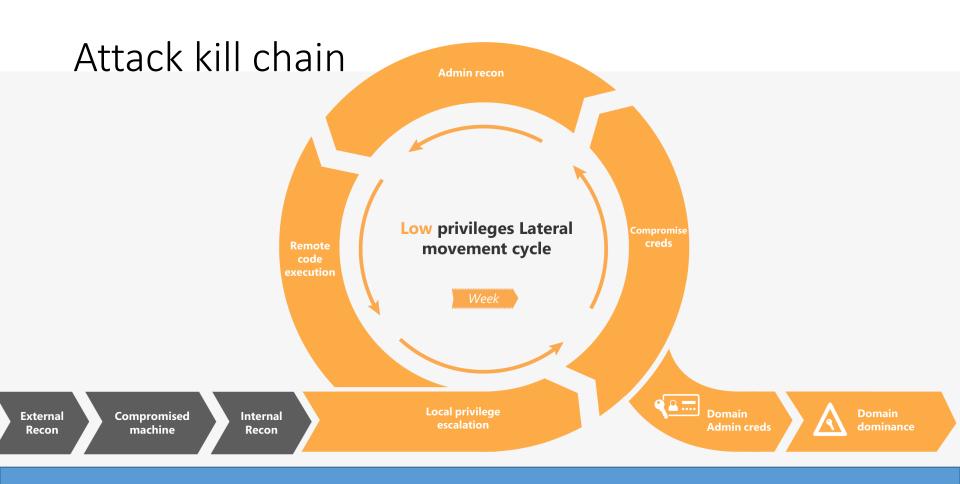


SEC-LABS R&D

# Agenda

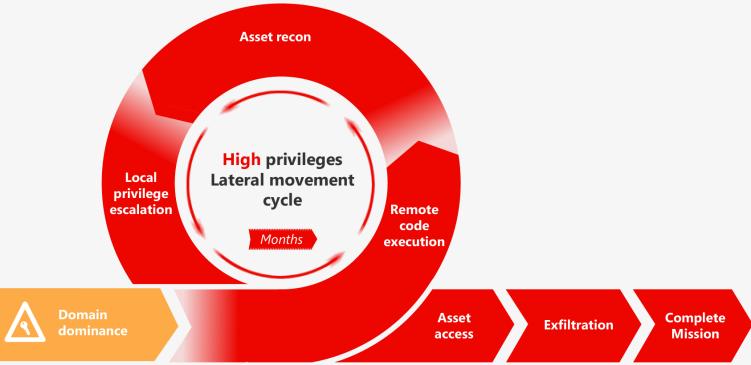
- Anatomy of Attack
- Real Scenario and Demo Hack
  - Focus on Golden Tickets Not new, but still available

Information is Beautiful



### Attack kill chain

eds



### Tools and methods from the past

## When did you last change the PWD of KRBTGT?

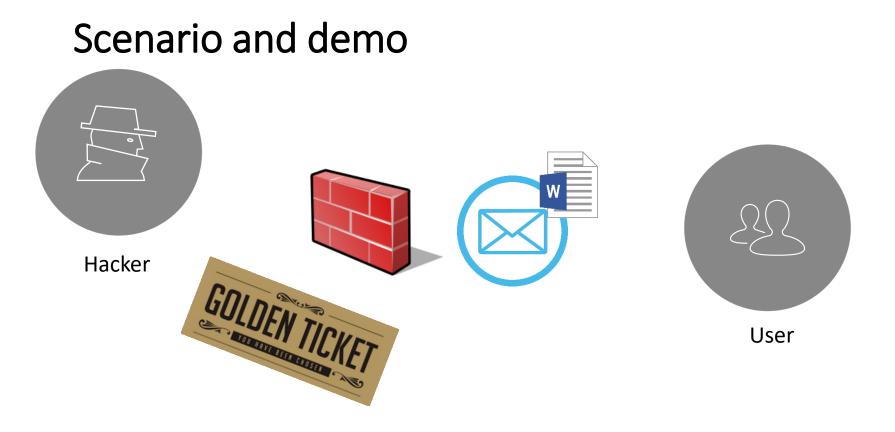
- Getting the KRBTGT hash from NTDS.dit
  - ntdsutil "ac i ntds" "ifm" "create full c:\temp" q q
  - Powershell Invoke-NinjaCopy and many more...
- Use established shell to generate a Golden Ticket Full Domain controll
  - No elevation required when we have the hash
  - Works until someone changes the krbtgt password ;) which will never happen

### Attacking service accounts

Get a ticket without visit the service Export the ticket using mimikatz (doesn't require elevation) Use kerberoast to crack the password which will be the service account password

You have until the password for the service account is changed

If the system account is used instead the account password is 128 characters and won't be cracked (more or less)



## Microsoft Advanced Threat Analytics

An on-premises platform to identify advanced security attacks and insider threats **before** they cause damage



Microsoft Advanced Threat Analytics brings the behavioral analytics concept to IT and the organization's users.

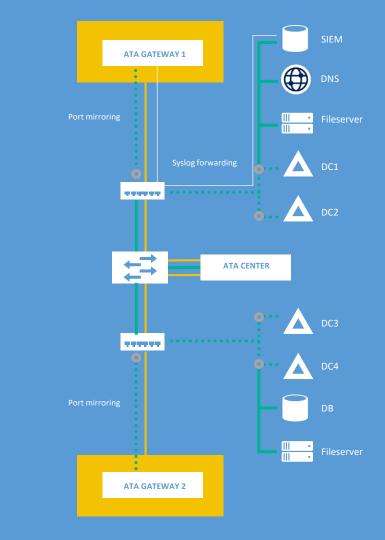


## Topology - Gateway

Captures and analyzes DC network traffic via port mirroring



- Listens to multiple DCs from a single Gateway
- Receives events from SIEM
- Retrieves data about entities from the domain
- Performs resolution of network entities
- Transfers relevant data to the ATA Center



# What do we do?

- Reset the KRBTGT account Password twice
  - And all other passwwords
- Rebuild the domain

## Contact

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