Gaining Privileged Access on Windows Networks

Benjamin Rasper

Kevin Bong

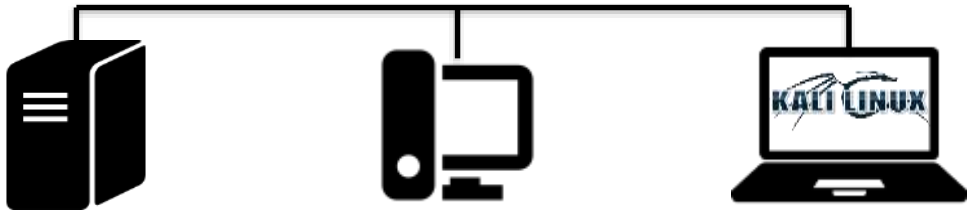
Sikich®

About Sikich Security & Compliance

- **A full-service information security and compliance consulting practice within Sikich**
  - Audits and assessments
  - Penetration testing
  - Forensics
- **Handle anything having to do with security or protecting data, including:**
  - Credit card data (PCI DSS)
  - Patient data (HIPAA/HITECH)
  - Financial Information (FFIEC/GLBA)
  - Service provider reviews (SOC 1/2/3)
  - Federal information security standards (NIST/FISMA)

The Setup

- **Assume we've gained a foothold into an internal network**
  - Perhaps through a VPN, malware command-and-control (C&C) channels, a wireless connection or physical intrusion
- **Assume patches are up to date and anti-virus is running**
- **We'll demonstrate six common ways we gain or elevate domain access**
- **We'll display a recap slide at the end of the presentation and give you time to snap a picture**



Domain Controller

Domain Member Workstation

Pentest Workstation

Sikich®

Time to put on your hoodie and start hacking…

Sikich®

Questions?

Benjamin Rasper
benjamin.rasper@sikich.com
Kevin Bong
kevin.bong@sikich.com
877.403.5227

Sikich®

Recap

- All demos used the **Kali Linux** distribution
- Used **Responder** to spoof Link-Local Multicast Name Resolution (LLMNR) responses, and then **Hashcat** to crack those hashes
- Used **nmap** to find systems running Server Message Block (SMB), and then **enum4linux** to find systems with null SMB sessions and extract accessible data
- Used **Medusa** to perform password spraying
- Used **Metasploit's:**
  - **smb_share_enum** module to find accessible files on file shares
  - **Kiwi** module to extract cached passwords from Local Security Authority Subsystem Service (LSASS)
  - **hashdump** module to extract local password hashes

www.sikich.com

LinkedIn: www.linkedin.com/company/sikich
Facebook: www.facebook.com/sikichllp
Twitter: www.twitter.com/sikichllp
Blog: www.sikich.com/blog