Getting the goods with smbexec

Eric Milam – Brav0hax

Don’t you know who I am?

- Attack & Pen -> Accuvant LABS
- Open Source Projects -> easy-creds, smbexec, Kali Linux

What’s this all about?

What is smbexec?

What does it do?

Why should I care?

- There’s nothing 0 day here! BOO!
- Yes, but automation is awesome!
- You can use this tool immediately
- It will make post-exploitation much easier

What is smbexec?

- Bash script, yes, a bash script…
  - 1 week of work, consuming a years worth of Mountain Dew
- Power of the tool lies in smbclient & winexe
  - smbclient to get/put files
  - winexe to execute

Why write smbexec?

- Standard msf payloads with psexec module kept getting popped by AV
  - Custom exes also popped because AV trigger is on injection (service protection)
  - Damn you trend micro, but thanks for the motivation
- Blog post from Carnal0wnage
  - Upload and execute your payload

What have you done for me lately?

I want my shells and I want them now!

- Creates an obfuscated payload that will bypass most commercial AV
- Creates a Metasploit rc file and launches a Metasploit listener to make things “easy.”

Going Native

What? You can get all this great stuff with winexe and native windows commands?

Move Along - Nothing to see here…

- winexe is similar to sysinternals psexec and the --system flag is awesome
- No “payload” necessary
- Looks like normal Windows traffic to OPSEC.

Master and Commander

Execute commands as SYSTEM, the possibilities are virtually limitless

- Dump hashes from workstations and servers
- Create a Volume shadow copy
- Run other tools (as SYSTEM)
- Check for and disable UAC (If needed) Check systems for DA/EA accounts logged in or running a process
- NEW and IMPROVED with more shells!

smbexec – grab local & dcc hashes

- Dump hashes workstation/servers
- reg.exe save (HKLM SYS,SEC,SAM)
    - SYS+SAM=Local Hashes
    - SYS+SEC=Domain Cached Creds
- creddump converts to hashes in John format for you

smbexec – automated VSC

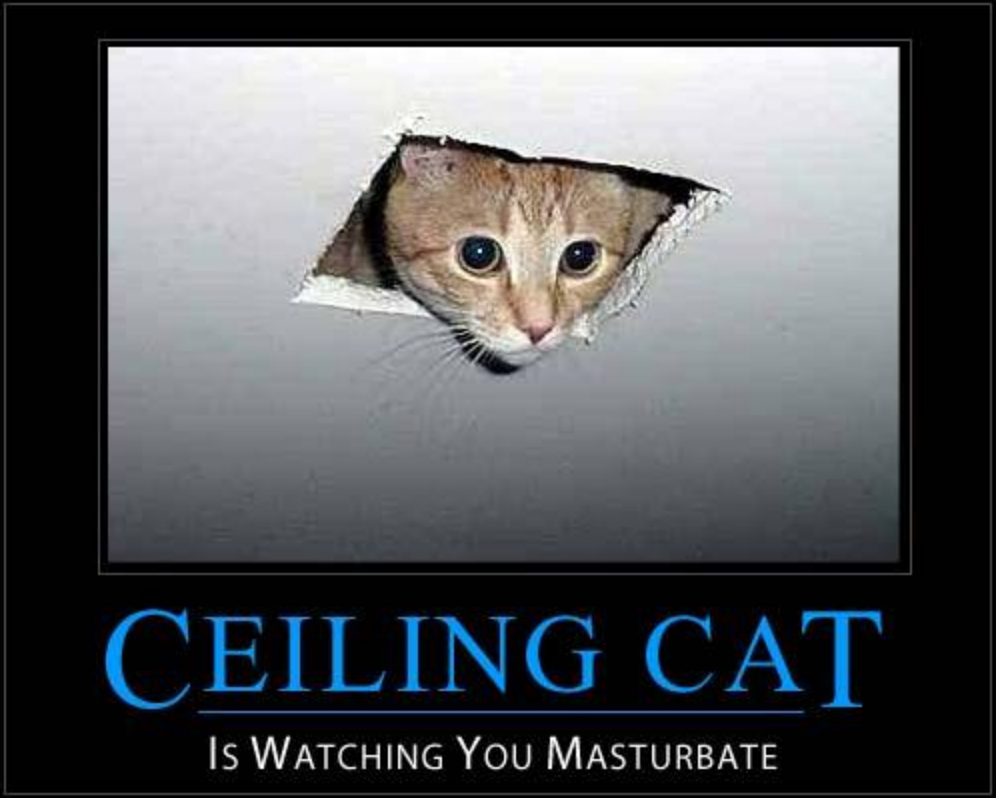
- Creates a Volume shadow copy, grabs the SYS reg key and get the hashes from ntds.dit
- Fully automated to grab all the goods and cleans up after you
- NTDSXtract & libesedb runs automatically if grabbing the NTDS.dit and SYS key is successful
- ntds.output file converted into a list of hashes in John format
- Tab separated cred list created for other functionality

smbexec – clear text passwords

WCE FTW! (p.s. Don’t talk to me about mimikatz)

- Incorporated into smbexec with permission from the owner
- wce.exe and the -w flag
- Runs automagically as part of the hash grab functionality

smbexec hashgrab demo



The caveats…there’s always something

You need a credential with admin rights for the system (local or domain)

- administrator:password can usually get you started in 9 out of 10 corporate networks
- NBNS spoofing
- Of course there’s always MS08-067 ;-)

When they’re blue teaming…

- winexe creates a service, could be stopped or become a red flag
- Sometimes AV doesn't like wce
  - wce included with smbexec has been obfuscated with the approval of the original developer
- Authentication over port 139 or 445 is required
- Locard's exchange principle "Every contact leaves a trace"

Where can I get smbexec?

Sourceforge or GitHub (Brav0Hax)

Metasploit Modules

- Royce Davis (@r3dy__) from pentestgeek.com
  - psexec_command
  - ntds_grab

Impacket

- Built in python based on the work by Royce

smbexec v2.0

- Ruby port (super dope)
- Brandon McCann (@zeknox) and Thomas McCarthy (smilingraccoon) from pentestgeek.com

Credit where it’s due!

- wce.exe Hernan Ochoa http://www.ampliasecurity.com
- smbclient & winexe Hash Passing patch JoMokun, Emilio Escobar, Skip Duckwall
- vanish.sh Original concept Astr0baby stable version edits Vanish3r http://www.securitylabs.in/2011/12/easybypassavandfirewall.html
- www.samba.org
- winexe ahajda http://sourceforge.net/users/ahajda
- Metasploit www.metasploit.com
- Nmap nmap.org
- Creddump Brendan Dolan-Gavitt http://code.google.com/p/creddump/
- NTDSXtract Csaba Barta http://www.ntdsxtract.com/
- libesedb Joachim Metz http://libesedb.googlecode.com/

Questions

- Twitter -> @Brav0Hax
- IRC -> J0hnnyBrav0

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