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175 lines (88 loc) · 5.68 KB

T1021.002 - SMB/Windows Admin Shares

Description from ATT&CK

Adversaries may use [Valid Accounts](<https://attack.mitre.org/techniques/T1078>) to interact with a remote network share using Server Message Block (SMB). The adversary may then perform actions as the logged-on user.

SMB is a file, printer, and serial port sharing protocol for Windows machines on the same network or domain. Adversaries may use SMB to interact with file shares, allowing them to move laterally throughout a network. Linux and macOS implementations of SMB typically use Samba.

Windows systems have hidden network shares that are accessible only to administrators and provide the ability for remote file copy and other administrative functions. Example network shares include `C$` , `ADMIN$` , and `IPC$` . Adversaries may use this technique in conjunction with administrator-level [Valid Accounts](#) to remotely access a networked system over SMB,(Citation: Wikipedia Server Message Block) to interact with systems using remote procedure calls (RPCs), (Citation: TechNet RPC) transfer files, and run transferred binaries through remote Execution. Example execution techniques that rely on authenticated sessions over SMB/RPC are [Scheduled Task/Job](#), [Service Execution](#), and [Windows Management Instrumentation](#). Adversaries can also use

NTLM hashes to access administrator shares on systems with [Pass the Hash](#) and certain configuration and patch levels.(Citation: Microsoft Admin Shares)

Atomic Tests

- [Atomic Test #1 - Map admin share](#)
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Atomic Test #1 - Map admin share

Connecting To Remote Shares

Supported Platforms: Windows

auto_generated_guid: 3386975b-367a-4fbb-9d77-4dcf3639ffd3

Inputs:

Name	Description	Type	Default Value
user_name	Username	String	DOMAIN\Administrator
share_name	Examples C\$, IPC\$, Admin\$	String	C\$
password	Password	String	P@ssw0rd1
computer_name	Target Computer Name	String	Target

Attack Commands: Run with **command_prompt** !

```
cmd.exe /c "net use \\#{computer_name}\#{share_name} #{password} /u:#{user_name}"
```



Preview

Code

Blame

Raw



Atomic Test #2 - Map Admin Share PowerShell

Map Admin share utilizing PowerShell

Supported Platforms: Windows

auto_generated_guid: 514e9cd7-9207-4882-98b1-c8f791bae3c5

Inputs:

Name	Description	Type	Default Value
share_name	Examples C\$, IPC\$, Admin\$	String	C\$
map_name	Mapped Drive Letter	String	g
computer_name	Target Computer Name	String	Target

Attack Commands: Run with **powershell** !

```
New-PSDrive -name #{map_name} -psprovider filesystem -root \\#{computer_name}\#{share_name}
```

Atomic Test #3 - Copy and Execute File with PsExec

Copies a file to a remote host and executes it using PsExec. Requires the download of PsExec from <https://docs.microsoft.com/en-us/sysinternals/downloads/psexec>.

Supported Platforms: Windows

auto_generated_guid: 0eb03d41-79e4-4393-8e57-6344856be1cf

Inputs:

Name	Description	Type	Default Value
command_path	File to copy and execute	Path	C:\Windows\System32\cmd.exe

remote_host	Remote computer to receive the copy and execute the file	String	\\localhost
psexec_exe	Path to PsExec	string	C:\PSTools\PsExec.exe

Attack Commands: Run with **command_prompt** ! Elevation Required (e.g. root or admin)

```
{psexec_exe} {remote_host} -accepteula -c {command_path}
```



Dependencies: Run with **powershell** !

Description: PsExec tool from Sysinternals must exist on disk at specified location ({psexec_exe})

Check Prereq Commands:

```
if (Test-Path "{psexec_exe}") { exit 0 } else { exit 1 }
```



Get Prereq Commands:

```
Invoke-WebRequest "https://download.sysinternals.com/files/PSTools.zip" -OutFile "!"  
Expand-Archive $env:TEMP\PsTools.zip $env:TEMP\PsTools -Force  
New-Item -ItemType Directory (Split-Path "{psexec_exe}") -Force | Out-Null  
Copy-Item $env:TEMP\PsTools\PsExec.exe "{psexec_exe}" -Force
```



Atomic Test #4 - Execute command writing output to local Admin Share

Executes a command, writing the output to a local Admin Share. This technique is used by post-exploitation frameworks.

Supported Platforms: Windows

auto_generated_guid: d41aaab5-bdfe-431d-a3d5-c29e9136ff46

Inputs:

Name	Description	Type	Default Value
output_file	Remote computer to receive the copy and execute the file	String	output.txt
command_to_execute	Command to execute for output.	String	hostname

Attack Commands: Run with `command_prompt` ! Elevation Required (e.g. root or admin)

```
cmd.exe /Q /c #{command_to_execute} 1> \\127.0.0.1\ADMIN$\#{output_file} 2>&1
```