

T1083 - File and Directory Discovery

Description from ATT&CK

Adversaries may enumerate files and directories or may search in specific locations of a host or network share for certain information within a file system. Adversaries may use the information from [File and Directory Discovery](<https://attack.mitre.org/techniques/T1083>) during automated discovery to shape follow-on behaviors, including whether or not the adversary fully infects the target and/or attempts specific actions.

Many command shell utilities can be used to obtain this information. Examples include `dir`, `tree`, `ls`, `find`, and `locate` .(Citation: Windows Commands JPCERT) Custom tools may also be used to gather file and directory information and interact with the [Native API](#). Adversaries may also leverage a [Network Device CLI](#) on network devices to gather file and directory information. (Citation: US-CERT-TA18-106A)

Atomic Tests

- [Atomic Test #1 - File and Directory Discovery \(cmd.exe\)](#)

- [Atomic Test #2 - File and Directory Discovery \(PowerShell\)](#)
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Atomic Test #1 - File and Directory Discovery (cmd.exe)

Find or discover files on the file system. Upon successful execution, this test will output the results of all the data discovery commands to a specified file.

Supported Platforms: Windows

auto_generated_guid: 0e36303b-6762-4500-b003-127743b80ba6

Inputs:

Name	Description	Type	Default Value
output_file	File to output results to	String	%temp%\T1083Test1.txt

Attack Commands: Run with `command_prompt` !

```
dir /s c:\ >> #{output_file}
dir /s "c:\Documents and Settings" >> #{output_file}
dir /s "c:\Program Files\" >> #{output_file}
dir "%systemdrive%\Users\*.*" >> #{output_file}
dir "%userprofile%\AppData\Roaming\Microsoft\Windows\Recent\*.*" >> #{output_file}
dir "%userprofile%\Desktop\*.*" >> #{output_file}
tree /F >> #{output_file}
```

Cleanup Commands:

```
del #{output_file}
```

Atomic Test #2 - File and Directory Discovery (PowerShell)

Find or discover files on the file system. Upon execution, file and folder information will be displayed.

Supported Platforms: Windows

auto_generated_guid: 2158908e-b7ef-4c21-8a83-3ce4dd05a924

Attack Commands: Run with powershell !

```
ls -recurse
get-childitem -recurse
gci -recurse
```

Atomic Test #3 - Nix File and Directory Discovery

Find or discover files on the file system

References:

<http://osxdaily.com/2013/01/29/list-all-files-subdirectory-contents-recursively/>

<https://perishablepress.com/list-files-folders-recursively-terminal/>

Supported Platforms: macOS, Linux

auto_generated_guid: ffc8b249-372a-4b74-adcd-e4c0430842de

Inputs:

Name	Description	Type	Default Value
output_file	Output file used to store the results.	Path	/tmp/T1083.txt

Attack Commands: Run with `sh` !

```
ls -a >> #{output_file}
if [ -d /Library/Preferences/ ]; then ls -la /Library/Preferences/ > #{output_file}
file */* * >> #{output_file}
cat #{output_file} 2>/dev/null
find . -type f
ls -R | grep ":$" | sed -e 's/:$//' -e 's/[^-][^\/]*\\/--/g' -e 's/^/ /' -e 's/-/|',
locate *
which sh
```

Cleanup Commands:

```
rm #{output_file}
```

Atomic Test #4 - Nix File and Directory Discovery 2

Find or discover files on the file system

Supported Platforms: macOS, Linux

auto_generated_guid: 13c5e1ae-605b-46c4-a79f-db28c77ff24e

Inputs:

Name	Description	Type	Default Value
output_file	Output file used to store the results.	Path	/tmp/T1083.txt

Attack Commands: Run with `sh` !

```
cd $HOME && find . -print | sed -e 's;[/]*;/|_|g;s;_|;|g' > #{output_file}
if [ -f /etc/mtab ]; then cat /etc/mtab >> #{output_file}; fi;
find . -type f -iname *.pdf >> #{output_file}
cat #{output_file}
find . -type f -name ".*"
```



```
remove-item #{File_to_output} -ErrorAction SilentlyContinue
```

