

## Monster Ransomware: Indicators of compromise

**Attackers deploying wide range of password-harvesting tools.**

**Actor:**

Hyadina

**Target Sectors:**

All

**Actor Aliases:**

N/A

**Attack Motivation:**

Ransomware

**Target Geographies:**

All

### Overview

Attacks involving the emergent Monster ransomware have continued into November 2022. In recent attacks investigated by Symantec, the attackers made heavy use of dual-use tools, including multiple network-scanning and credential-dumping tools.

One hallmark of recent attacks has been the installation of a password protected self-extracting archive (file name: mim.exe) containing the Mimikatz credential-dumping tool and a large number of password-harvesting tools developed by NirSoft.

Monster first appeared in March 2022 and operates as a ransomware-as-a-service. The payload's functionality was recently [documented by BlackBerry](#).

### Tools Used:

**AnyDesk:** A legitimate [remote desktop](#) application. It and similar tools are often used by attackers to obtain remote access to computers on a network.

**BulletsPassView:** Password recovery tool that retrieves passwords stored behind the bullets in the standard password text-box in Windows and Internet Explorer. [Developed by NirSoft](#).

**ChromePass:** Password recovery tool for the Google Chrome browser. [Developed by NirSoft](#).

**DialupPass:** Password recovery tool that reveals all passwords stored in dial-up entries of Windows. [Developed by NirSoft](#).

**IEPassView:** Password recovery tool for the Internet Explorer browser. [Developed by NirSoft](#).

**KPortScan 3.0:** Publicly available port scanning tool.

**MailPassView:** Password recovery tool for multiple email clients. [Developed by NirSoft](#)

**Mimikatz:** Publicly available [credential dumping tool](#).

**NetScan:** SoftPerfect Network Scanner (netscan.exe), [a publicly available tool](#) used for discovery of host names and network services.

**NetRouteView:** Network Route Utility for Windows. [Developed by NirSoft](#).

**NetworkPasswordRecovery:** Password recovery tool for network share passwords stored by Windows. [Developed by NirSoft](#)

OperaPassView: Password recovery tool for the Opera browser. [Developed by NirSoft.](#)

PasswordFox: Password recovery tool for the Firefox browser. [Developed by NirSoft.](#)

Process Hacker: Publicly available [administration tool.](#)

ProtectedStoragePassView: Password recovery tool for passwords stored inside Windows Protected Storage. [Developed by NirSoft.](#)

PstPassword: Password recovery tool for Microsoft Outlook .pst files. [Developed by NirSoft.](#)

RemoteDesktopPassView: Password recovery tool for Microsoft Remote Desktop Connection. [Developed by NirSoft.](#)

RouterPassView: Password recovery tool for router configuration files. [Developed by NirSoft.](#)

SniffPass: Password recovery tool that captures passwords passing through a network adapter. [Developed by NirSoft.](#)

VNCPassView: Password recovery tool for passwords stored by VNC. [Developed by NirSoft.](#)

WebBrowserPassView: Password recovery tool for the Internet Explorer, Firefox, Chrome, and Opera browsers. [Developed by NirSoft.](#)

WirelessKeyView: Password recovery tool for all WEP/WPA wireless keys stored on a computer. [Developed by NirSoft.](#)

## Indicators of Compromise

SOC analysts should review this alert and hunt on their network for associated indicators of compromise (IOCs). Their presence may indicate a ransomware attack in preparation. If an IOC is malicious and the file available to us, Symantec Endpoint products will detect and block that file. If you discover any other unknown or unavailable files while hunting, you can [submit them to Symantec for analysis.](#)

Symantec products will detect and alert against the behaviors and techniques detailed in this alert. For guidance on how to search for IOCs using Symantec's EDR, read [this guide](#) for the Cloud solution or [this guide](#) for the On-Prem solution.

### SHA256 file hashes:

52b8e94a73231d197f492b5e6cb88d42ff393c667e93f92d9b4219e19ceb2bed - AnyDesk

b556d90b30f217d5ef20ebe3f15cce6382c4199e900b5ad2262a751909da1b34 - BrowserPassView

e71cda5e7c018f18aefcdfbce171cfeee7b8d556e5036d8b8f0864efc5f2156b - BulletsPassView

c4304f7bb6ef66c0676c6b94d25d3f15404883baa773e94f325d8126908e1677 - ChromePass

598555a7e053c7456ee8a06a892309386e69d473c73284de9bbc0ba73b17e70a - DialupPass

dbe98193aced7285a01c18b7da8e4540fb4e5b0625debcfbabcab7ea90f5685d - IEPassView

22a44425290a7c566fc1cdb2e1bf0e60a3920e540b2307716c26b2559220d7b7 - KPortScan 3.0 port scanning tool

080c6108c3bd0f8a43d5647db36dc434032842339f0ba38ad1ff62f72999c4e5 - KPortScan 3.0 port scanning tool

16c6af4ae2d8ca8e7a3f2051b913fa1cb7e1fbd0110b0736614a1e02bbbceaf - MailPassView

31eb1de7e840a342fd468e558e5ab627bcb4c542a8fe01aec4d5ba01d539a0fc - Mimikatz

df1f007f8a0a7bd2921fda692aac5a98257abab4b6d04eeab331dc90511a1108 - Monster ransomware

390aefbba503ba2f1c5eb52a5b3675d32063a7df7c867f5420b140acceddd677 - Monster ransomware

86965d6a0076d71b4c841cacd72b9199732b9b50c1104875d57e727b4971a788 - Monster ransomware  
c08b6f2f62fec4b765a156e03a6fe06f4142fd0341c98be9810e14d4f75979bf - Monster ransomware  
c867d85196b0663f6a3568893be8e0d8489b9e5b71a93293e2d204e7b31dfe6a - Monster ransomware  
91041b616969e1526ee6dce23f8d18afdd353786ac6afa0b6611903263ee6f63 - NetRouteView  
6a87226ed5cca8e072507d6c24289c57757dd96177f329a00b00e40427a1d473 - NetworkPasswordRecovery  
8e4b218bdbd8e098fff749fe5e5bbf00275d21f398b34216a573224e192094b8 - OperaPassView  
7fee96ae0ed1972a80abbd4529dc81ec033083857455bbf3c803c4f47e1ac31c - PasswordFox  
6bc073fbbd99be360298d37cf9e037825a44ad7284e3f7eb26b022aead8ffedc - Process Hacker  
bd2c2cf0631d881ed382817afcce2b093f4e412ffb170a719e2762f250abfea4 - Process Hacker  
64788b6f74875aed53ca80669b06f407e132d7be49586925dbb3dcde56cbca9c - ProtectedStoragePassView  
5e85446910e732111ca9ac90f9ed8b1dee13c3314d2c5117dcf672994ce73bd6 - PstPassword  
205818e10c13d2e51b4c0196ca30111276ca1107fc8e25a0992fe67879eab964 - RemoteDesktopPassView  
ae474417854ac1b6190e15cc514728433a26cc815fdc6d12150ef55e92d643ea - RouterPassView  
930d287d45df81e40b64a40b8cd166d7300d4ad2ce873ae340352cca2e797c18 - Archive of Mimikatz and NirSoft Tools  
c92580318be4effdb37aa67145748826f6a9e285bc2426410dc280e61e3c7620 - SniffPass  
66c488c1c9916603fc6d7ec00470d30e6f5e3597ad9f8e5ce96a8af7566f6d89 - SoftPerfect Network Scanner  
816d7616238958dfe0bb811a063eb3102efd82eff14408f5cab4cb5258bfd019 - VNCPassView  
48b77c1efbc3197128391a35d0e1ed0b5cc3a05b96dd12c98ac73ffc6a886fc8 - WirelessKeyView

**File names:**

anydesk-4.2.2.exe  
bulletspassview64.exe  
chromepass.exe  
csbswuee.exe  
dialupass.exe  
encrypter.exe  
foonaloj.exe  
iepv.exe  
kportscan 3.0.exe  
kportscan3.exe  
lsass.exe  
mailpv.exe  
mim.exe  
mimik.exe  
nasp.exe

netpass64.exe  
netrouteview.exe  
operapassview.exe  
passwordfox64.exe  
processhacker.exe  
pspv.exe  
pstpassword.exe  
rdpv.exe  
routerpassview.exe  
sniffpass64.exe  
txfknwmb.exe  
vncpassview.exe  
webbrowserpassview.exe  
wirelesskeyview64.exe

#### **Ransomware execution commands & associated process lineage(s):**

encrypter.exe /v+

^

encrypter.exe <- CSIDL\_SYSTEM\cmd.exe <- CSIDL\_WINDOWS\explorer.exe

encrypter.exe <- CSIDL\_SYSTEM\cmd.exe <- CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\winlogon.exe

encrypter.exe <- CSIDL\_SYSTEM\cmd.exe <- CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\userinit.exe <- CSIDL\_SYSTEM\winlogon.exe <- CSIDL\_SYSTEM\smss.exe <- CSIDL\_SYSTEM\smss.exe

"CSIDL\_COMMON\_APPDATA\installed updates.\{d450a8a1-9568-45c7-9c0e-b4f9fb4537bd}\csbswuee.exe" "/v+"

^

csbswuee.exe <- CSIDL\_PROFILE\downloads\encrypter.exe <- CSIDL\_SYSTEM\cmd.exe <- CSIDL\_WINDOWS\explorer.exe

"CSIDL\_COMMON\_APPDATA\installed updates.\{d450a8a1-9568-45c7-9c0e-b4f9fb4537bd}\foonaloj.exe" "/v+"

^

foonaloj.exe <- CSIDL\_PROFILE\music\encrypter.exe <- CSIDL\_SYSTEM\cmd.exe <- CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\userinit.exe <- CSIDL\_SYSTEM\winlogon.exe <- CSIDL\_SYSTEM\smss.exe <- CSIDL\_SYSTEM\smss.exe

"CSIDL\_COMMON\_APPDATA\installed updates.\{d450a8a1-9568-45c7-9c0e-b4f9fb4537bd}\txfknwmb.exe" "/v+"

^

txfknwmb.exe <- CSIDL\_PROFILE\downloads\encrypter.exe <- CSIDL\_SYSTEM\cmd.exe <-  
CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\winlogon.exe

**NetScan commands & associated process lineage(s):**

"CSIDL\_PROFILE\downloads\nasp.exe"

"CSIDL\_PROFILE\music\nasp.exe"

^

nasp.exe <- CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\userinit.exe <- CSIDL\_SYSTEM\winlogon.exe <-  
CSIDL\_SYSTEM\smss.exe <- CSIDL\_SYSTEM\smss.exe

**KPortScan commands & associated process lineage(s):**

"CSIDL\_PROFILE\downloads\kportscan 3.0.exe"

^

kportscan 3.0.exe <- CSIDL\_WINDOWS\explorer.exe

"CSIDL\_PROFILE\downloads\kportscan 3.0\kportscan3.exe"

^

kportscan3.exe <- CSIDL\_WINDOWS\explorer.exe

**AnyDesk commands & associated process lineage(s):**

"CSIDL\_PROFILE\downloads\anydesk-4.2.2.exe" --local-service

^

anydesk-4.2.2.exe <- CSIDL\_PROFILE\downloads\anydesk-4.2.2.exe <- CSIDL\_WINDOWS\explorer.exe

**Process Hacker commands & associated process lineage(s):**

"CSIDL\_PROFILE\downloads\x64\processhacker.exe"

^

processhacker.exe <- CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\winlogon.exe

**Self-Extracting Archive containing Mimikatz and Nirsoft Tools - commands & associated process lineage(s):**

"CSIDL\_PROFILE\music\mim.exe"

^

mim.exe <- CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\userinit.exe <- CSIDL\_SYSTEM\winlogon.exe <-  
CSIDL\_SYSTEM\smss.exe <- CSIDL\_SYSTEM\smss.exe

**Nirsoft Tools - commands & associated process lineage(s):**

.\Pass\BulletsPassView64.exe

.\Pass\ChromePass.exe  
.\Pass\Dialupass.exe  
.\Pass\NetRouteView.exe  
.\Pass\OperaPassView.exe  
.\Pass>PasswordFox64.exe  
.\Pass\PstPassword.exe  
.\Pass\RouterPassView.exe  
.\Pass\SniffPass64.exe  
.\Pass\VNCPassView.exe  
.\Pass\WebBrowserPassView.exe  
.\Pass\SniffPass64.exe  
.\Pass\VNCPassView.exe  
.\Pass\WebBrowserPassView.exe  
.\Pass\WirelessKeyView64.exe  
.\Pass\iepv.exe  
.\Pass\mailpv.exe  
.\Pass\mspass.exe  
.\Pass\netpass64.exe  
.\Pass\pspv.exe  
.\Pass\rdpv.exe

^

CSIDL\_SYSTEM\cmd.exe <- CSIDL\_WINDOWS\explorer.exe <- CSIDL\_SYSTEM\userinit.exe <-  
CSIDL\_SYSTEM\winlogon.exe <- CSIDL\_SYSTEM\smss.exe <- CSIDL\_SYSTEM\smss.exe

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