



## General Info

File name:	IObit Driver Booster Pro 9.exe
Full analysis:	<a href="https://app.any.run/tasks/f0a50f39-6273-44ed-add1-a24bfb862163">https://app.any.run/tasks/f0a50f39-6273-44ed-add1-a24bfb862163</a>
Verdict:	Malicious activity
Threats:	RedLine
RedLine Stealer is a malicious program that collects users' confidential data from browsers, systems, and installed software. It also infects operating systems with other malware.	
Analysis date:	August 22, 2022 at 15:14:00
OS:	Windows 7 Professional Service Pack 1 (build: 7601, 32 bit)
Tags:	trojan rat redline
Indicators:	
MIME:	application/x-dosexec
File info:	PE32 executable (console) Intel 80386 (stripped to external PDB), for MS Windows
MD5:	A1D235F9DF5E4F7797ABE0CCEE91B6AC
SHA1:	884254EA51E126DA4E3A2BCAD9E2C288E8ECE8D7
SHA256:	FAA3E926D4B9981B4B21A9C5A2CD61DD573B8EEE6938A9519DBDFCABB32073C2
SSDEEP:	24576:zpy3s93HOkRbN8HMYKYmZ/JZtSdMX9dKiopn8zCfs31H:zhHxX8bR5fSIH

### Software environment set and analysis options

## Launch configuration

Task duration:	120 seconds	Heavy Evasion option:	off	Network geolocation:	off
Additional time used:	none	MITM proxy:	off	Privacy:	Public submission
Fakenet option:	off	Route via Tor:	off	Autoconfirmation of UAC:	off
Network:	on				

### Software preset

Internet Explorer 11.0.9600.19596 KB4534251

Adobe Acrobat Reader DC (20.013.20064)

Adobe Flash Player 32 ActiveX (32.0.0.453)

Adobe Flash Player 32 NPAPI (32.0.0.453)

Adobe Flash Player 32 PPAPI (32.0.0.453)

Adobe Refresh Manager (1.8.0)

CCleaner (5.74)

FileZilla Client 3.51.0 (3.51.0)

Google Chrome (86.0.4240.198)

Google Update Helper (1.3.36.31)

Java 8 Update 271 (8.0.2710.9)

Java Auto Updater (2.8.271.9)

Microsoft .NET Framework 4.5.2 (4.5.51209)

Microsoft Office Access MUI (English) 2010 (14.0.6029.1000)

Microsoft Office Access MUI (French) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (German) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (Italian) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (Japanese) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (Korean) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (Russian) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (Spanish) 2010 (14.0.4763.1000)

Microsoft Office Access MUI (Turkish) 2010 (14.0.4763.1013)

Microsoft Office Access Setup Metadata MUI (English) 2010 (14.0.6029.1000)

Microsoft Office Excel MUI (English) 2010 (14.0.6029.1000)

Microsoft Office Excel MUI (French) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (German) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (Italian) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (Japanese) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (Korean) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (Russian) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (Spanish) 2010 (14.0.4763.1000)

Microsoft Office Excel MUI (Turkish) 2010 (14.0.4763.1013)

Microsoft Office Groove MUI (French) 2010 (14.0.4763.1000)

Microsoft Office Groove MUI (German) 2010 (14.0.4763.1000)

Microsoft Office Groove MUI (Italian) 2010 (14.0.4763.1000)

Microsoft Office Groove MUI (Japanese) 2010 (14.0.4763.1000)

### Hotfixes

Client LanguagePack Package

Client Refresh LanguagePack Package

CodecPack Basic Package

Foundation Package

IE Hyphenation Parent Package English

IE Spelling Parent Package English

IE Troubleshooters Package

InternetExplorer Optional Package

InternetExplorer Package TopLevel

KB2479943

KB2491683

KB2506212

KB2506928

KB2532531

KB2533552

KB2533623

KB2534111

KB2545698

KB2547666

KB2552343

KB2560656

KB2564958

KB2574819

KB2579686

KB2585542

KB2604115

KB2620704

KB2621440

KB2631813

KB2639308

KB2640148

KB2653956

KB2654428

KB2656356

KB2660075

KB2667402

KB2676562

KB2685811

Microsoft Office Groove MUI (Korean) 2010 (14.0.4763.1000)	KB2685813
Microsoft Office Groove MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB2685939
Microsoft Office Groove MUI (Russian) 2010 (14.0.4763.1000)	KB2690533
Microsoft Office Groove MUI (Spanish) 2010 (14.0.4763.1000)	KB2698365
Microsoft Office Groove MUI (Turkish) 2010 (14.0.4763.1013)	KB2705219
Microsoft Office IME (Japanese) 2010 (14.0.4763.1000)	KB2719857
Microsoft Office IME (Korean) 2010 (14.0.4763.1000)	KB2726535
Microsoft Office InfoPath MUI (French) 2010 (14.0.4763.1000)	KB2727528
Microsoft Office InfoPath MUI (German) 2010 (14.0.4763.1000)	KB2729094
Microsoft Office InfoPath MUI (Italian) 2010 (14.0.4763.1000)	KB2729452
Microsoft Office InfoPath MUI (Japanese) 2010 (14.0.4763.1000)	KB2731771
Microsoft Office InfoPath MUI (Korean) 2010 (14.0.4763.1000)	KB2732059
Microsoft Office InfoPath MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB2736422
Microsoft Office InfoPath MUI (Russian) 2010 (14.0.4763.1000)	KB2742599
Microsoft Office InfoPath MUI (Spanish) 2010 (14.0.4763.1000)	KB2750841
Microsoft Office InfoPath MUI (Turkish) 2010 (14.0.4763.1013)	KB2758857
Microsoft Office Language Pack 2010 - French/Français (14.0.4763.1000)	KB2761217
Microsoft Office Language Pack 2010 - German/Deutsch (14.0.4763.1000)	KB2770660
Microsoft Office Language Pack 2010 - Italian/Italiano (14.0.4763.1000)	KB2773072
Microsoft Office Language Pack 2010 - Japanese/日本語 (14.0.4763.1000)	KB2786081
Microsoft Office Language Pack 2010 - Korean/한국어 (14.0.4763.1000)	KB2789645
Microsoft Office Language Pack 2010 - Portuguese/Português (Brasil) (14.0.4763.1000)	KB2799926
Microsoft Office Language Pack 2010 - Russian/русский (14.0.4763.1000)	KB2800095
Microsoft Office Language Pack 2010 - Spanish/Español (14.0.4763.1000)	KB2807986
Microsoft Office Language Pack 2010 - Turkish/Türkçe (14.0.4763.1013)	KB2808679
Microsoft Office O MUI (French) 2010 (14.0.4763.1000)	KB2813347
Microsoft Office O MUI (German) 2010 (14.0.4763.1000)	KB2813430
Microsoft Office O MUI (Italian) 2010 (14.0.4763.1000)	KB2820331
Microsoft Office O MUI (Japanese) 2010 (14.0.4763.1000)	KB2834140
Microsoft Office O MUI (Korean) 2010 (14.0.4763.1000)	KB2836942
Microsoft Office O MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB2836943
Microsoft Office O MUI (Russian) 2010 (14.0.4763.1000)	KB2840631
Microsoft Office O MUI (Spanish) 2010 (14.0.4763.1000)	KB2843630
Microsoft Office O MUI (Turkish) 2010 (14.0.4763.1013)	KB2847927
Microsoft Office OneNote MUI (English) 2010 (14.0.6029.1000)	KB2852386
Microsoft Office OneNote MUI (French) 2010 (14.0.4763.1000)	KB2853952
Microsoft Office OneNote MUI (German) 2010 (14.0.4763.1000)	KB2857650
Microsoft Office OneNote MUI (Italian) 2010 (14.0.4763.1000)	KB2861698
Microsoft Office OneNote MUI (Japanese) 2010 (14.0.4763.1000)	KB2862152
Microsoft Office OneNote MUI (Korean) 2010 (14.0.4763.1000)	KB2862330
Microsoft Office OneNote MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB2862335
Microsoft Office OneNote MUI (Russian) 2010 (14.0.4763.1000)	KB2864202
Microsoft Office OneNote MUI (Spanish) 2010 (14.0.4763.1000)	KB2868038
Microsoft Office OneNote MUI (Turkish) 2010 (14.0.4763.1013)	KB2871997
Microsoft Office Outlook MUI (English) 2010 (14.0.6029.1000)	KB2872035
Microsoft Office Outlook MUI (French) 2010 (14.0.4763.1000)	KB2884256
Microsoft Office Outlook MUI (German) 2010 (14.0.4763.1000)	KB2891804
Microsoft Office Outlook MUI (Italian) 2010 (14.0.4763.1000)	KB2893294
Microsoft Office Outlook MUI (Japanese) 2010 (14.0.4763.1000)	KB2893519
Microsoft Office Outlook MUI (Korean) 2010 (14.0.4763.1000)	KB2894844
Microsoft Office Outlook MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB2900986
Microsoft Office Outlook MUI (Russian) 2010 (14.0.4763.1000)	KB2908783
Microsoft Office Outlook MUI (Spanish) 2010 (14.0.4763.1000)	KB2911501
Microsoft Office Outlook MUI (Turkish) 2010 (14.0.4763.1013)	KB2912390
Microsoft Office PowerPoint MUI (English) 2010 (14.0.6029.1000)	KB2918077
Microsoft Office PowerPoint MUI (French) 2010 (14.0.4763.1000)	KB2919469
Microsoft Office PowerPoint MUI (German) 2010 (14.0.4763.1000)	KB2923545
Microsoft Office PowerPoint MUI (Italian) 2010 (14.0.4763.1000)	KB2931356
Microsoft Office PowerPoint MUI (Japanese) 2010 (14.0.4763.1000)	KB2937610
Microsoft Office PowerPoint MUI (Korean) 2010 (14.0.4763.1000)	KB2943357
Microsoft Office PowerPoint MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB2952664
Microsoft Office PowerPoint MUI (Russian) 2010 (14.0.4763.1000)	KB2968294
Microsoft Office PowerPoint MUI (Spanish) 2010 (14.0.4763.1000)	KB2970228
Microsoft Office PowerPoint MUI (Turkish) 2010 (14.0.4763.1013)	KB2972100
Microsoft Office Professional 2010 (14.0.6029.1000)	KB2972211
Microsoft Office Proof (Arabic) 2010 (14.0.4763.1000)	KB2973112
Microsoft Office Proof (Basque) 2010 (14.0.4763.1000)	KB2973201
Microsoft Office Proof (Catalan) 2010 (14.0.4763.1000)	KB2977292
Microsoft Office Proof (Dutch) 2010 (14.0.4763.1000)	KB2978120
Microsoft Office Proof (English) 2010 (14.0.6029.1000)	KB2978742
Microsoft Office Proof (French) 2010 (14.0.6029.1000)	KB2984972

Microsoft Office Proof (Galician) 2010 (14.0.4763.1000)	KB2984976
Microsoft Office Proof (German) 2010 (14.0.4763.1000)	KB2984976 SP1
Microsoft Office Proof (Italian) 2010 (14.0.4763.1000)	KB2985461
Microsoft Office Proof (Japanese) 2010 (14.0.4763.1000)	KB2991963
Microsoft Office Proof (Korean) 2010 (14.0.4763.1000)	KB2992611
Microsoft Office Proof (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB2999226
Microsoft Office Proof (Russian) 2010 (14.0.4763.1000)	KB3004375
Microsoft Office Proof (Spanish) 2010 (14.0.6029.1000)	KB3006121
Microsoft Office Proof (Turkish) 2010 (14.0.4763.1013)	KB3006137
Microsoft Office Proof (Ukrainian) 2010 (14.0.4763.1000)	KB3010788
Microsoft Office Proofing (English) 2010 (14.0.6029.1000)	KB3011780
Microsoft Office Proofing (French) 2010 (14.0.4763.1000)	KB3013531
Microsoft Office Proofing (German) 2010 (14.0.4763.1000)	KB3019978
Microsoft Office Proofing (Italian) 2010 (14.0.4763.1000)	KB3020370
Microsoft Office Proofing (Japanese) 2010 (14.0.4763.1000)	KB3020388
Microsoft Office Proofing (Korean) 2010 (14.0.4763.1000)	KB3021674
Microsoft Office Proofing (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB3021917
Microsoft Office Proofing (Russian) 2010 (14.0.4763.1000)	KB3022777
Microsoft Office Proofing (Spanish) 2010 (14.0.4763.1000)	KB3023215
Microsoft Office Proofing (Turkish) 2010 (14.0.4763.1013)	KB3030377
Microsoft Office Publisher MUI (English) 2010 (14.0.6029.1000)	KB3031432
Microsoft Office Publisher MUI (French) 2010 (14.0.4763.1000)	KB3035126
Microsoft Office Publisher MUI (German) 2010 (14.0.4763.1000)	KB3037574
Microsoft Office Publisher MUI (Italian) 2010 (14.0.4763.1000)	KB3042058
Microsoft Office Publisher MUI (Japanese) 2010 (14.0.4763.1000)	KB3045685
Microsoft Office Publisher MUI (Korean) 2010 (14.0.4763.1000)	KB3046017
Microsoft Office Publisher MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB3046269
Microsoft Office Publisher MUI (Russian) 2010 (14.0.4763.1000)	KB3054476
Microsoft Office Publisher MUI (Spanish) 2010 (14.0.4763.1000)	KB3055642
Microsoft Office Publisher MUI (Turkish) 2010 (14.0.4763.1013)	KB3059317
Microsoft Office SharePoint Designer MUI (French) 2010 (14.0.4763.1000)	KB3060716
Microsoft Office SharePoint Designer MUI (German) 2010 (14.0.4763.1000)	KB3061518
Microsoft Office SharePoint Designer MUI (Italian) 2010 (14.0.4763.1000)	KB3067903
Microsoft Office SharePoint Designer MUI (Japanese) 2010 (14.0.4763.1000)	KB3068708
Microsoft Office SharePoint Designer MUI (Korean) 2010 (14.0.4763.1000)	KB3071756
Microsoft Office SharePoint Designer MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB3072305
Microsoft Office SharePoint Designer MUI (Russian) 2010 (14.0.4763.1000)	KB3074543
Microsoft Office SharePoint Designer MUI (Spanish) 2010 (14.0.4763.1000)	KB3075226
Microsoft Office SharePoint Designer MUI (Turkish) 2010 (14.0.4763.1013)	KB3078667
Microsoft Office Shared MUI (English) 2010 (14.0.6029.1000)	KB3080149
Microsoft Office Shared MUI (French) 2010 (14.0.4763.1000)	KB3086255
Microsoft Office Shared MUI (German) 2010 (14.0.4763.1000)	KB3092601
Microsoft Office Shared MUI (Italian) 2010 (14.0.4763.1000)	KB3093513
Microsoft Office Shared MUI (Japanese) 2010 (14.0.4763.1000)	KB3097989
Microsoft Office Shared MUI (Korean) 2010 (14.0.4763.1000)	KB3101722
Microsoft Office Shared MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB3102429
Microsoft Office Shared MUI (Russian) 2010 (14.0.4763.1000)	KB3102810
Microsoft Office Shared MUI (Spanish) 2010 (14.0.4763.1000)	KB3107998
Microsoft Office Shared MUI (Turkish) 2010 (14.0.4763.1013)	KB3108371
Microsoft Office Shared Setup Metadata MUI (English) 2010 (14.0.6029.1000)	KB3108664
Microsoft Office Single Image 2010 (14.0.6029.1000)	KB3109103
Microsoft Office Word MUI (English) 2010 (14.0.6029.1000)	KB3109560
Microsoft Office Word MUI (French) 2010 (14.0.4763.1000)	KB3110329
Microsoft Office Word MUI (German) 2010 (14.0.4763.1000)	KB3115858
Microsoft Office Word MUI (Italian) 2010 (14.0.4763.1000)	KB3118401
Microsoft Office Word MUI (Japanese) 2010 (14.0.4763.1000)	KB3122648
Microsoft Office Word MUI (Korean) 2010 (14.0.4763.1000)	KB3123479
Microsoft Office Word MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB3126587
Microsoft Office Word MUI (Russian) 2010 (14.0.4763.1000)	KB3127220
Microsoft Office Word MUI (Spanish) 2010 (14.0.4763.1000)	KB3133977
Microsoft Office Word MUI (Turkish) 2010 (14.0.4763.1013)	KB3137061
Microsoft Office X MUI (French) 2010 (14.0.4763.1000)	KB3138378
Microsoft Office X MUI (German) 2010 (14.0.4763.1000)	KB3138612
Microsoft Office X MUI (Italian) 2010 (14.0.4763.1000)	KB3138910
Microsoft Office X MUI (Japanese) 2010 (14.0.4763.1000)	KB3139398
Microsoft Office X MUI (Korean) 2010 (14.0.4763.1000)	KB3139914
Microsoft Office X MUI (Portuguese (Brazil)) 2010 (14.0.4763.1000)	KB3140245
Microsoft Office X MUI (Russian) 2010 (14.0.4763.1000)	KB3147071
Microsoft Office X MUI (Spanish) 2010 (14.0.4763.1000)	KB3150220
Microsoft Office X MUI (Turkish) 2010 (14.0.4763.1013)	KB3150513
Microsoft Visual C++ 2008 Redistributable - x86 9.0.30729.6161 (9.0.30729.6161)	KB3155178

Microsoft Visual C++ 2010 x86 Redistributable - 10.0.40219 (10.0.40219)	KB3156016
Microsoft Visual C++ 2013 Redistributable (x86) - 12.0.30501 (12.0.30501.0)	KB3159398
Microsoft Visual C++ 2013 x86 Additional Runtime - 12.0.21005 (12.0.21005)	KB3161102
Microsoft Visual C++ 2013 x86 Minimum Runtime - 12.0.21005 (12.0.21005)	KB3161949
Microsoft Visual C++ 2015-2019 Redistributable (x86) - 14.21.27702 (14.21.27702.2)	KB3170735
Microsoft Visual C++ 2019 X86 Additional Runtime - 14.21.27702 (14.21.27702)	KB3172605
Microsoft Visual C++ 2019 X86 Minimum Runtime - 14.21.27702 (14.21.27702)	KB3179573
Mozilla Firefox 83.0 (x86 en-US) (83.0)	KB3184143
Mozilla Maintenance Service (83.0.0.7621)	KB3185319
Notepad++ (32-bit x86) (7.9.1)	KB4019990
Opera 12.15 (12.15.1748)	KB4040980
QGA (2.14.33)	KB4474419
Skype version 8.29 (8.29)	KB4490628
VLC media player (3.0.11)	KB4524752
WinRAR 5.91 (32-bit) (5.91.0)	KB4532945
	KB4536952
	KB4567409
	KB958488
	KB976902
	KB982018
	LocalPack AU Package
	LocalPack CA Package
	LocalPack GB Package
	LocalPack US Package
	LocalPack ZA Package
	Package 21 for KB2984976
	Package 38 for KB2984976
	Package 45 for KB2984976
	Package 59 for KB2984976
	Package 7 for KB2984976
	Package 76 for KB2984976
	PlatformUpdate Win7 SRV08R2 Package TopLevel
	ProfessionalEdition
	RDP BlueIP Package TopLevel
	RDP WinIP Package TopLevel
	RollupFix
	UltimateEdition
	WUClient SelfUpdate ActiveX
	WUClient SelfUpdate Aux TopLevel
	WUClient SelfUpdate Core TopLevel
	WinMan WinIP Package TopLevel

Behavior activities

MALICIOUS	SUSPICIOUS	INFO
<b>REDLINE detected by memory dumps</b> IObit Driver Booster Pro 9.exe (PID: 3216) AppLaunch.exe (PID: 179328)	<b>Reads the computer name</b> AppLaunch.exe (PID: 179328)	<b>Reads settings of System Certificates</b> AppLaunch.exe (PID: 179328)
<b>Steals credentials from Web Browsers</b> AppLaunch.exe (PID: 179328)	<b>Checks supported languages</b> IObit Driver Booster Pro 9.exe (PID: 3216) AppLaunch.exe (PID: 179328)	
<b>REDLINE was detected</b> AppLaunch.exe (PID: 179328)	<b>Reads Environment values</b> AppLaunch.exe (PID: 179328)	
<b>Connects to CnC server</b> AppLaunch.exe (PID: 179328)	<b>Executable content was dropped or overwritten</b> AppLaunch.exe (PID: 179328)	
<b>Actions looks like stealing of personal data</b> AppLaunch.exe (PID: 179328)	<b>Drops a file with a compile date too recent</b> AppLaunch.exe (PID: 179328)	
<b>Drops executable file immediately after starts</b> AppLaunch.exe (PID: 179328)	<b>Searches for installed software</b> AppLaunch.exe (PID: 179328)	

Static information

TRiD

.exe		Win32 Executable MS Visual C++ (generic) (67.3)
.dll		Win32 Dynamic Link Library (generic) (14.1)
.exe		Win32 Executable (generic) (9.7)
.exe		Generic Win/DOS Executable (4.3)
.exe		DOS Executable Generic (4.3)

EXIF

EXE	
Subsystem:	Windows command line
SubsystemVersion:	4
ImageVersion:	1
OSVersion:	4

EntryPoint:0x14a0

UninitializedDataSize:4096

InitializedDataSize:1185280

CodeSize:751616

LinkerVersion:2.3

PEType:PE32

TimeStamp:2022:08:22 11:06:56+02:00

MachineType:Intel 386 or later, and compatibles

Summary

Architecture:IMAGE\_FILE\_MACHINE\_I386

Subsystem:IMAGE\_SUBSYSTEM\_WINDOWS\_CUI

Compilation Date:22-Aug-2022 09:06:56

TLS Callbacks:2 callback(s) detected.

DOS Header

Magic number:MZ

Bytes on last page of file:0x0090

Pages in file:0x0003

Relocations:0x0000

Size of header:0x0004

Min extra paragraphs:0x0000

Max extra paragraphs:0xFFFF

Initial SS value:0x0000

Initial SP value:0x00B8

Checksum:0x0000

Initial IP value:0x0000

Initial CS value:0x0000

Overlay number:0x0000

OEM identifier:0x0000

OEM information:0x0000

Address of NE header:0x00000080

PE Headers

Signature:PE

Machine:IMAGE\_FILE\_MACHINE\_I386

Number of sections:8

Time date stamp:22-Aug-2022 09:06:56

Pointer to Symbol Table:0x00000000

Number of symbols:0

Size of Optional Header:0x00E0

Characteristics:IMAGE\_FILE\_32BIT\_MACHINE  
IMAGE\_FILE\_DEBUG\_STRIPPED  
IMAGE\_FILE\_EXECUTABLE\_IMAGE  
IMAGE\_FILE\_LINE\_NUMS\_STRIPPED  
IMAGE\_FILE\_LOCAL\_SYMS\_STRIPPED  
IMAGE\_FILE\_RELOCS\_STRIPPED

Sections

Name	Virtual Address	Virtual Size	Raw Size	Charateristics	Entropy
.text	0x00001000	0x000B77D4	0x000B7800	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_1BYTES, IMAGE_SCN_ALIGN_2048BYTES, IMAGE_SCN_ALIGN_256BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_8BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_CODE, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_MEM_READ	6.30086
.data	0x000B9000	0x0001DBBC	0x0001DC00	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_2048BYTES, IMAGE_SCN_ALIGN_2BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_512BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_8BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE	7.10217
.rdata	0x000D7000	0x0000F1A0	0x0000F200	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_2048BYTES, IMAGE_SCN_ALIGN_2BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_512BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_8BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ	5.69512
.eh_frame\x9c\xbe\x03	0x000E7000	0x0003BE9C	0x0003C000	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_1BYTES, IMAGE_SCN_ALIGN_256BYTES, IMAGE_SCN_ALIGN_2BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_512BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_8BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ	4.7945
.bss	0x00123000	0x00000F00	0x00000000	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_2048BYTES, IMAGE_SCN_ALIGN_2BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_512BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_8BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_UNINITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE	0
.idata	0x00124000	0x00000BD0	0x00000C00	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_1BYTES, IMAGE_SCN_ALIGN_256BYTES, IMAGE_SCN_ALIGN_2BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_512BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_8BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE	5.11496
.CRT	0x00125000	0x00000034	0x00000200	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_1BYTES, IMAGE_SCN_ALIGN_256BYTES, IMAGE_SCN_ALIGN_2BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_512BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE	0.273546
.tls	0x00126000	0x00000008	0x00000200	IMAGE_SCN_ALIGN_1024BYTES, IMAGE_SCN_ALIGN_16BYTES, IMAGE_SCN_ALIGN_1BYTES, IMAGE_SCN_ALIGN_256BYTES, IMAGE_SCN_ALIGN_2BYTES, IMAGE_SCN_ALIGN_32BYTES, IMAGE_SCN_ALIGN_4096BYTES, IMAGE_SCN_ALIGN_4BYTES, IMAGE_SCN_ALIGN_512BYTES, IMAGE_SCN_ALIGN_64BYTES, IMAGE_SCN_ALIGN_8192BYTES, IMAGE_SCN_ALIGN_MASK, IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ, IMAGE_SCN_MEM_WRITE	0

Imports

KERNEL32.dll
msvcrt.dll

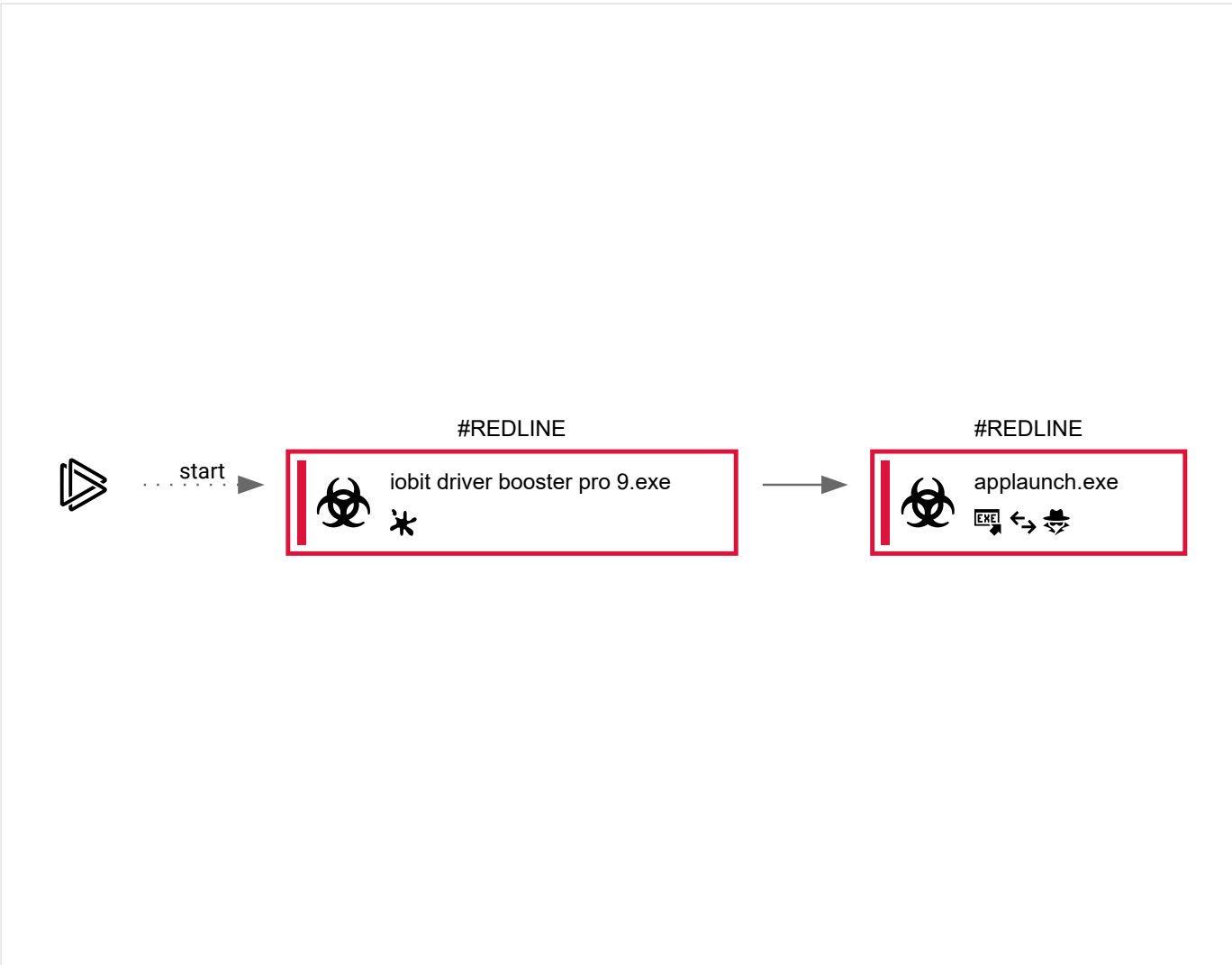
Video and screenshots



Processes

Total processes	Monitored processes	Malicious processes	Suspicious processes
38	2	2	0

Behavior graph



Specs description

Program did not start	Low-level access to the HDD	Process was added to the startup	Debug information is available
Probably Tor was used	Behavior similar to spam	Task has injected processes	Executable file was dropped
Known threat	RAM overrun	Network attacks were detected	Integrity level elevation
Connects to the network	CPU overrun	Process starts the services	System was rebooted
Task contains several apps running	Application downloaded the executable file	Actions similar to stealing personal data	Task has apps ended with an error
File is detected by antivirus software	Inspected object has suspicious PE structure	Behavior similar to exploiting the vulnerability	Task contains an error or was rebooted
The process has the malware config			

Process information

PID	CMD	Path	Indicators	Parent process
3216	"C:\Users\admin\AppData\Local\Temp\IObit Driver Booster Pro 9.exe"	C:\Users\admin\AppData\Local\Temp\IObit Driver Booster Pro 9.exe		Explorer.EXE
Information				
User: admin		Integrity Level: MEDIUM		
179328	"C:\Windows\Microsoft.NET\Framework\v4.0.30319\Applaunch.exe"	C:\Windows\Microsoft.NET\Framework\v4.0.30319\Applaunch.exe		IObit Driver Booster Pro 9.exe

Information			
User:	admin	Company:	Microsoft Corporation
Integrity Level:	MEDIUM	Description:	Microsoft .NET ClickOnce Launch Utility
Exit code:	0	Version:	4.0.30319.34209 built by: FX452RTMGDR

Registry activity

Total events	Read events	Write events	Delete events
6 013	5 979	34	0

Modification events

(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASAPI32
Operation:	write	Name:	EnableFileTracing
Value:	0		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASAPI32
Operation:	write	Name:	EnableConsoleTracing
Value:	0		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASAPI32
Operation:	write	Name:	FileTracingMask
Value:			
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASAPI32
Operation:	write	Name:	ConsoleTracingMask
Value:			
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASAPI32
Operation:	write	Name:	MaxFileSize
Value:	1048576		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASAPI32
Operation:	write	Name:	FileDirectory
Value:	%windir%\tracing		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASMANCS
Operation:	write	Name:	EnableFileTracing
Value:	0		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASMANCS
Operation:	write	Name:	EnableConsoleTracing
Value:	0		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASMANCS
Operation:	write	Name:	FileTracingMask
Value:			
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASMANCS
Operation:	write	Name:	ConsoleTracingMask
Value:			
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASMANCS
Operation:	write	Name:	MaxFileSize
Value:	1048576		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Tracing\AppLaunch_RASMANCS
Operation:	write	Name:	FileDirectory
Value:	%windir%\tracing		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_CLASSES_ROOT\Local Settings\MuiCache\16C\52C64B7E
Operation:	write	Name:	LanguageList
Value:	en-US		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Internet Settings\ZoneMap
Operation:	write	Name:	ProxyBypass
Value:	1		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Internet Settings\ZoneMap
Operation:	write	Name:	IntranetName
Value:	1		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Internet Settings\ZoneMap
Operation:			



Operation:	write	Name:	UNCAsIntranet
Value:	1		
(PID) Process:	(179328) AppLaunch.exe	Key:	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Internet Settings\ZoneMap
Operation:	write	Name:	AutoDetect
Value:	0		

## Files activity

Executable files	Suspicious files	Text files	Unknown types
1	3	0	1

### Dropped files

PID	Process	Filename	Type
179328	AppLaunch.exe	C:\Users\admin\AppData\LocalLow\Microsoft\CryptnetUrlCache\Content\77EC63BDA74BD0D0E0426DC8F8008506 MD5: 589C442FC7A0C70DCA927115A700D41E      SHA256: 2E5CB72E9EB43BAAF6C6BFCC573AAC92F49A8064C483F9D378A9E8E781A526A	compressed
179328	AppLaunch.exe	C:\Users\admin\AppData\LocalLow\Microsoft\CryptnetUrlCache\MetaData\77EC63BDA74BD0D0E0426DC8F8008506 MD5: 29545FD5B289429BD0659946E24EEA60      SHA256: 727AD40A0DBDBED4257832CE4B76A7D904ADF791743FC92A6F8233E2D4326DD2	binary
179328	AppLaunch.exe	C:\Users\admin\AppData\Local\Temp\Cab3EDC.tmp MD5: 589C442FC7A0C70DCA927115A700D41E      SHA256: 2E5CB72E9EB43BAAF6C6BFCC573AAC92F49A8064C483F9D378A9E8E781A526A	compressed
179328	AppLaunch.exe	C:\Users\admin\AppData\Local\Temp\start.exe MD5: 47B29465BB5FCBBD899F1D98AF193F06      SHA256: A54AC89930406913A3B0B3B8E3EF738135A9B7FA54B01578F870E26EE9F99EFB	executable
179328	AppLaunch.exe	C:\Users\admin\AppData\Local\Temp\Tar3EDD.tmp MD5: 7EE994C83F2744D702CBA18693ED1758      SHA256: 5DB917AB6DC8A42A43617850DFBE2C7F26A7F810B229B349E9DD2A2D615671D2	cat

## Network activity

HTTP(S) requests	TCP/UDP connections	DNS requests	Threats
1	3	2	5

### HTTP requests

PID	Process	Method	HTTP Code	IP	URL	CN	Type	Size	Reputation
179328	AppLaunch.exe	GET	200	209.197.3.8:80	http://ctldl.windowsupdate.com/msdownload/update/v3/stati c/trustedr/en/authrootstl.cab?a0465310332df734	US	compressed	60.2 Kb	whitelisted

### Connections

PID	Process	IP	Domain	ASN	CN	Reputation
179328	AppLaunch.exe	62.204.41.141:24758	—	Datagate Network Solutions Ltd.	GB	malicious
179328	AppLaunch.exe	176.9.247.226:443	dl.uploadgram.me	Hetzner Online GmbH	DE	unknown
179328	AppLaunch.exe	209.197.3.8:80	ctldl.windowsupdate.com	Highwinds Network Group, Inc.	US	suspicious

### DNS requests

Domain	IP	Reputation
dl.uploadgram.me	176.9.247.226	unknown
ctldl.windowsupdate.com	209.197.3.8	whitelisted

### Threats

Found threats are available for the paid subscriptions

## Debug output strings

No debug info

