



# VOM SPAM ZUM TEST

Malware-Analyse bei der AV-TEST GmbH

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- **Unabhängig**
- **Herkunft**
- **Umfassend**

WARUM?

# Wissen aus einer Hand!

**> 100.000 URLs**  
**> 1.000.000 Mails**  
**> 1.700.000 Dateien**  
**pro Tag**

WIEVIEL?

1.700.000

**AVTEST**  
multi scan

WIEVIEL?

**220.000**

**neue Malware-Samples**

**pro Tag**

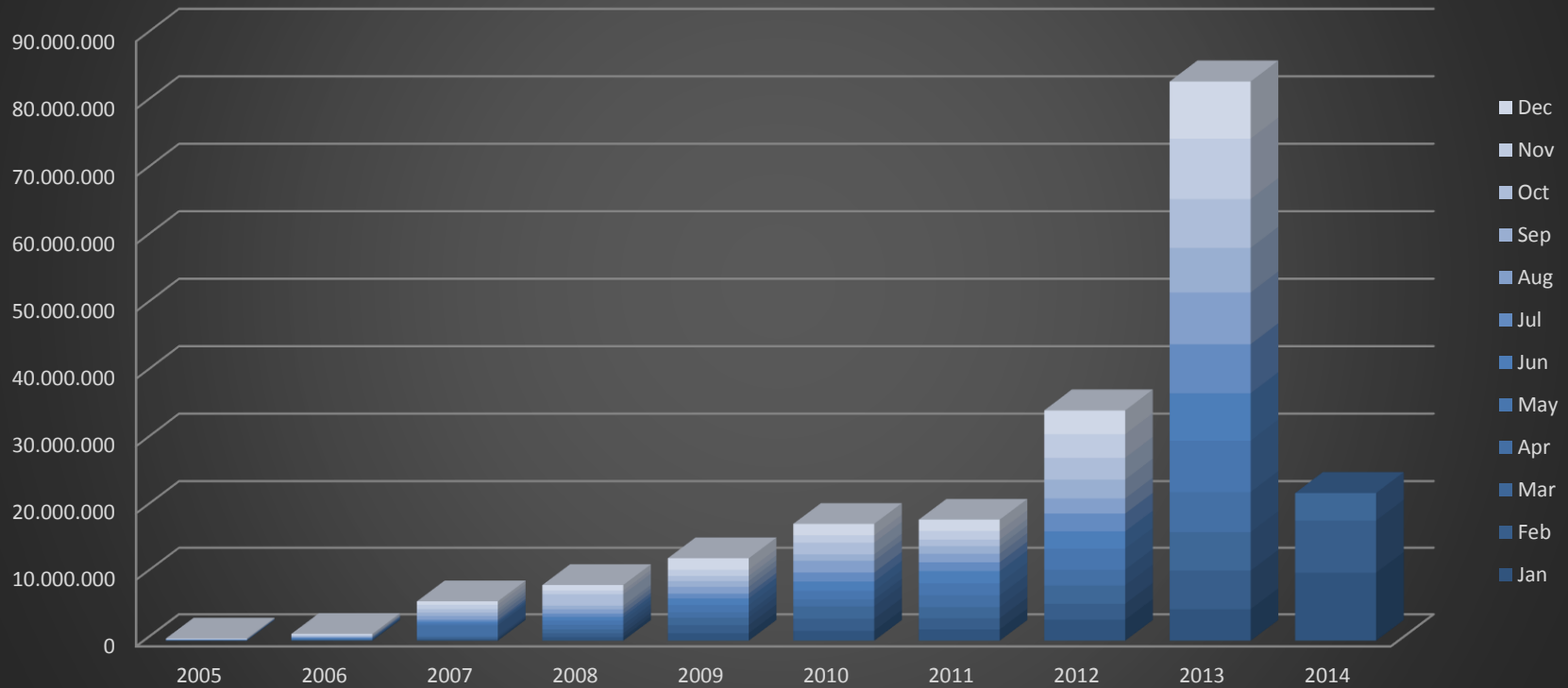
WIEVIEL?

**> 9.000**



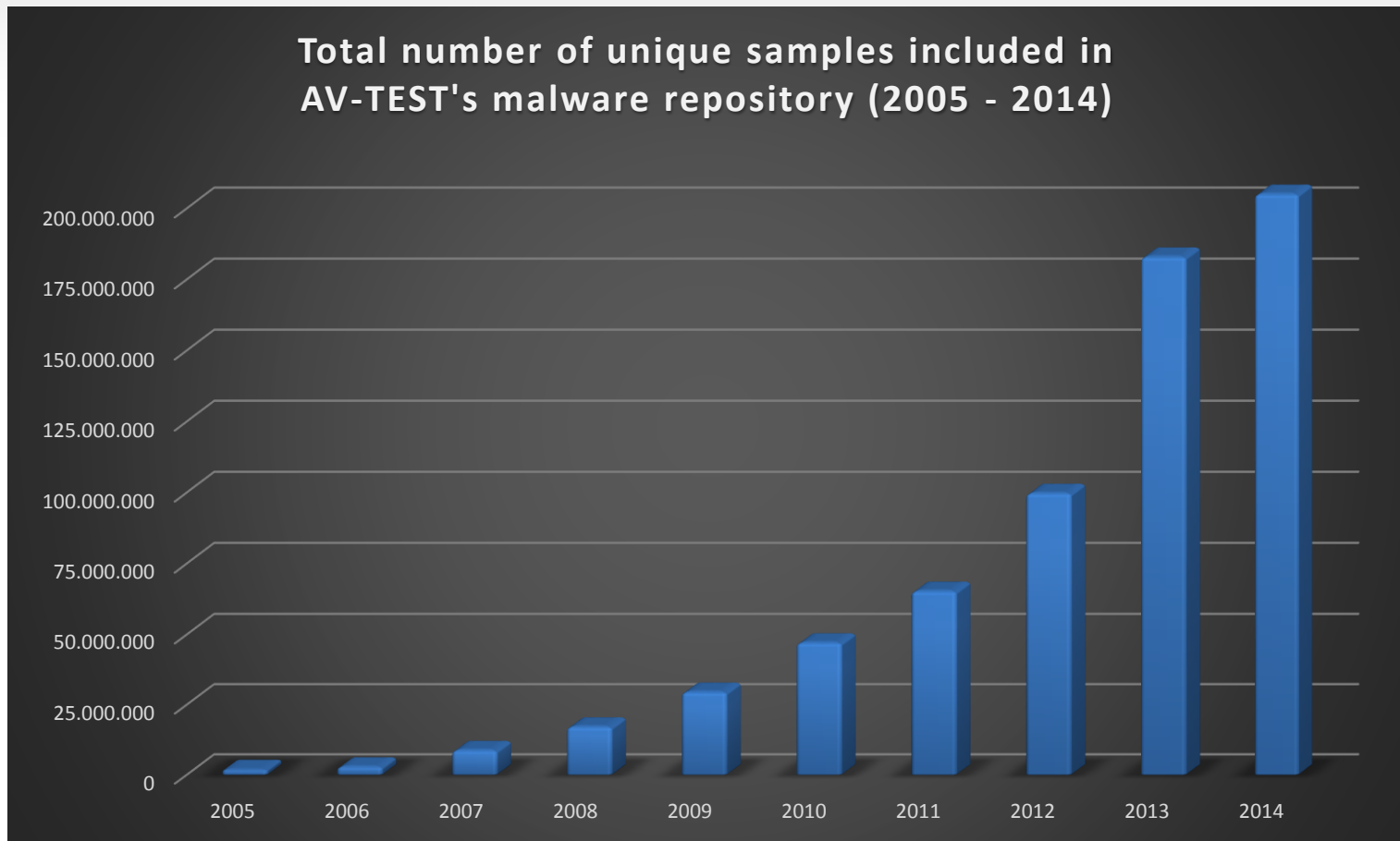
WIEVIEL?

### New unique samples added to AV-TEST's malware repository (2005-2013)



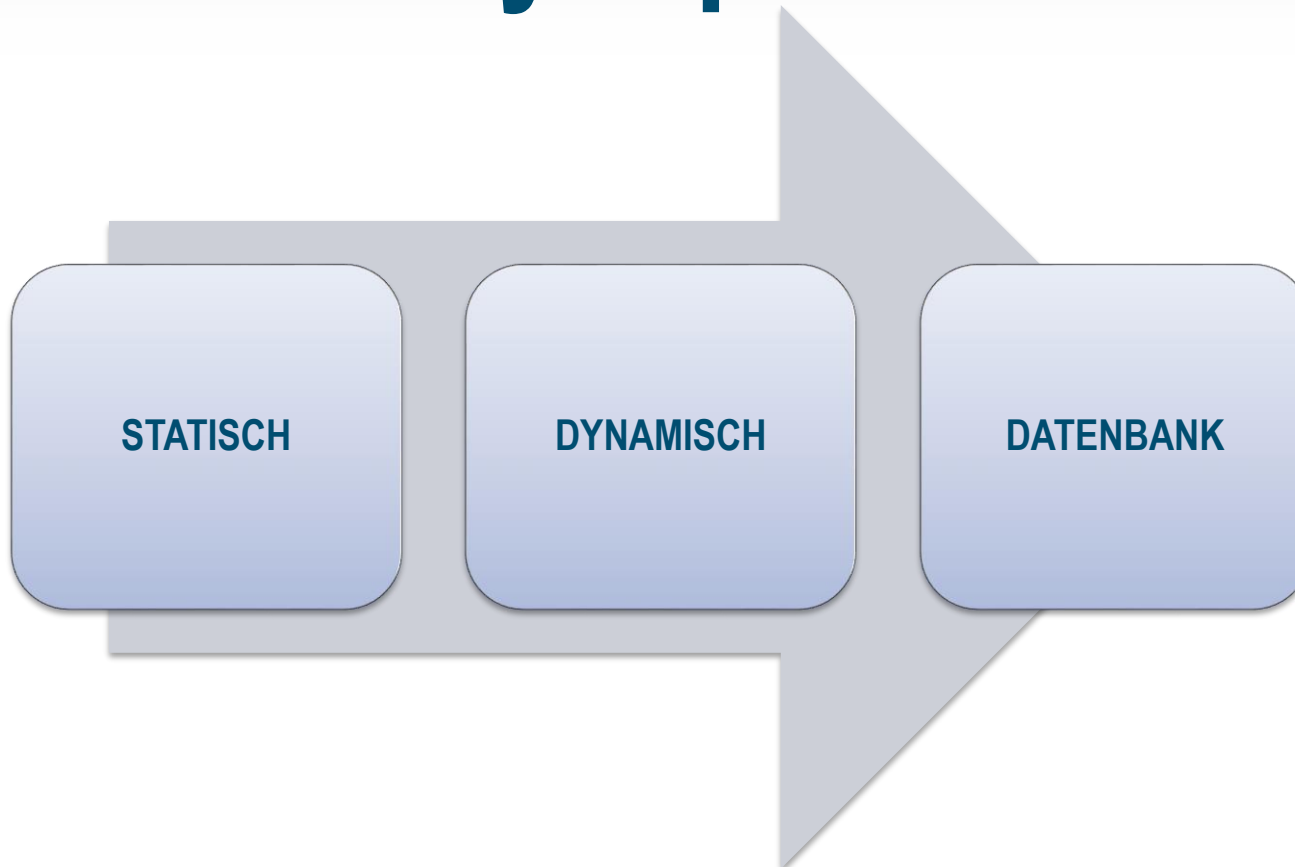


WIEVIEL?



WAS?

# Analyseprozess



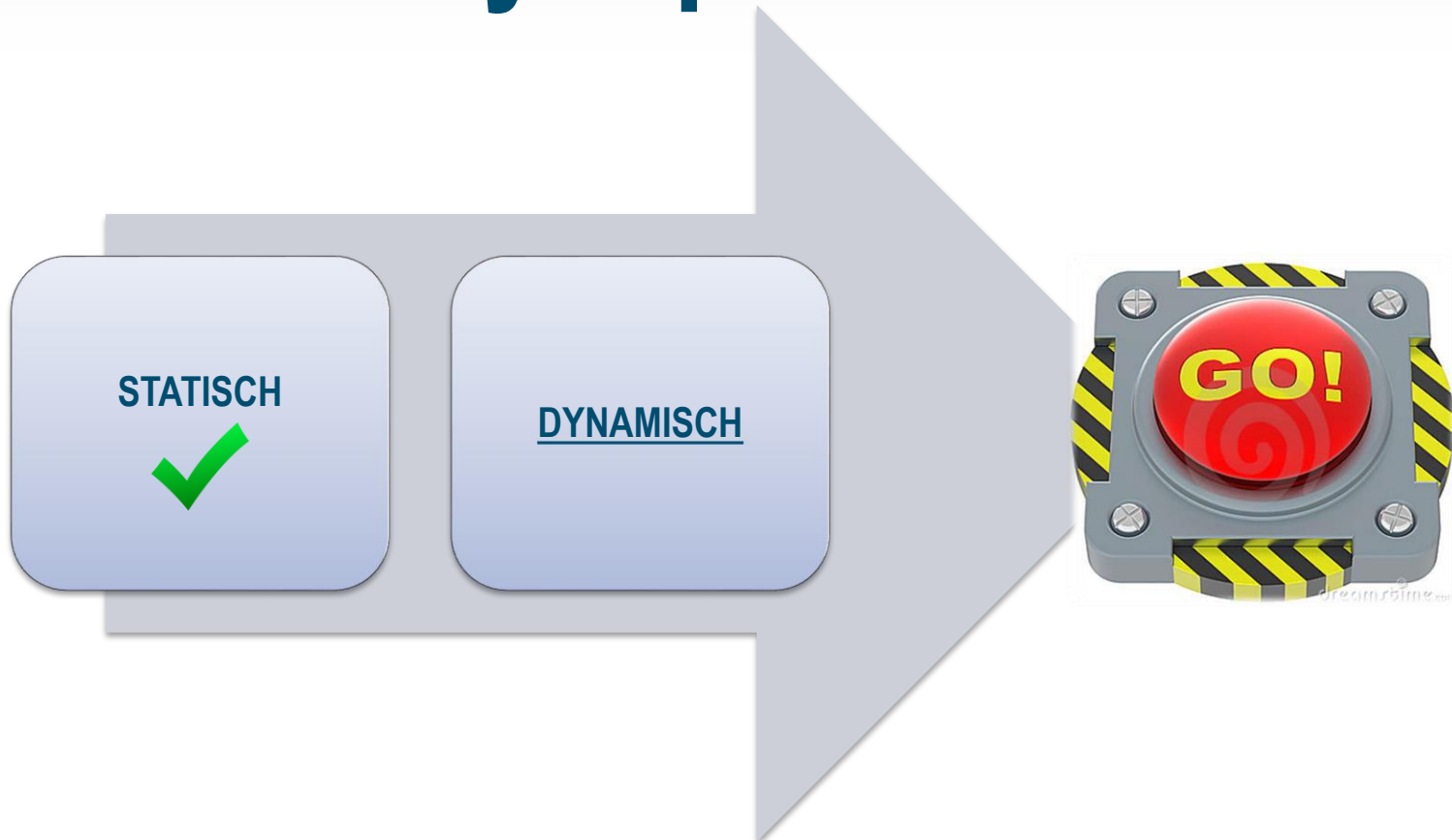
# Analyseprozess

STATISCH

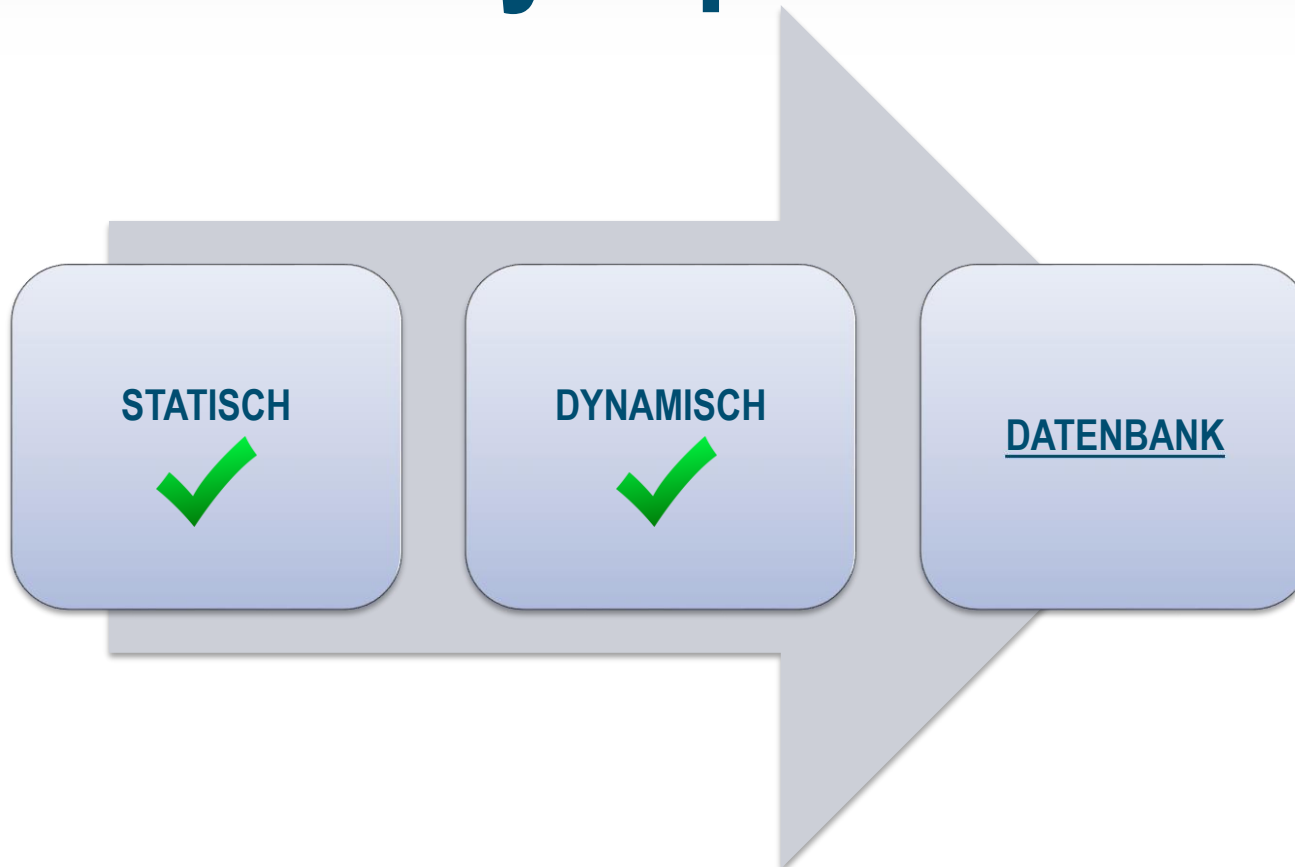
- Fingerprinting (Hash)
- Pattern matching
- Initialer Scan
- Metadaten:
  - Packer Detection
  - PE-Characteristics
  - Import/Exports
  - Signature scan
  - Strings
- Ähnlichkeits-Hash

WAS?

# Analyseprozess



# Analyseprozess



WIE?

Sapas - AV-TEST - The Independent IT-Security Institute

8080/sapas-web/index.jsf

Classify > ClassifyGrid > SampleView

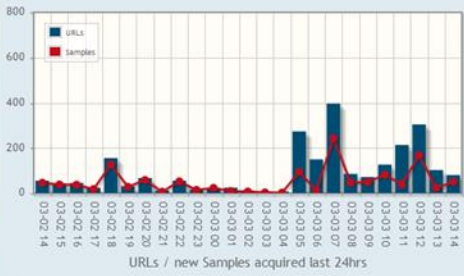
### Statistics

Type	WAITING	READY	RUNNING	FAILED	DONE
VTEST	0	0	46	61	1289934
EXIF	0	0	0	291	1289750
PE	0	0	0	53	1289988
PE_INFO	0	0	0	87	1289954
PE_DUMP	0	0	0	2282	1288481
SOLAR	329472	0	13	50275	910281
CLASSIFY	378486	0	0	1139	910416

Tasks (lastRefresh: 14:28:53 UTC)

Last	MALWARE	JUNK	GOODWARE	UNDEFINED
DAY	683 (75 %)	54 (5 %)	171 (18 %)	1 (0 %)
WEEK	5890 (55 %)	2835 (26 %)	1811 (17 %)	8 (0 %)
MONTH	15849 (41 %)	12733 (33 %)	9847 (25 %)	15 (0 %)
QUARTER	34357 (28 %)	61101 (50 %)	25418 (20 %)	940 (0 %)
YEAR	209811 (27 %)	415123 (55 %)	126158 (16 %)	1900 (0 %)

### Classifiers



URLs / new Samples acquired last 24hrs



Classifiers acquired last 24hrs

### Latest Samples (initial sorting and filtering of \* columns can take some time)

# url-prefilters (use % and !)

# name-prefilters (use % and !)

# sha256-prefilters

# pedfash-prefilters

# vtest-prefilters (use % and !)

WebdustPE  MALWARE

WebdustMail  JUNK

GOODWARE

Sample Date min 14-02-14 13:48 max 14-03-04 14:28 **Load** max 300  Zip selected **Select All** **Deselect All** **Reset Site**

*Path URL	*Incident Name	Sample Date	Sha256	Size	Sample notPe*	PEDfash	*Vtest	*Class.	*Conf.
http://.../1393561140/setup_21	setup_21_15530380.exe	14-03-03 11:19	859c3db5	518072	view	e5bb38b53	0 %		
http://.../n/exes/2.3.80.2.au	mwsauto.exe	14-03-03 11:16	6863534	75456	view*	31d651d4a8	40 %		
http://.../88/down/802/se2611-10	se2611-105-1-45188.exe	14-03-03 11:14	18eaffbc	91760	view	6d6d11b41a	40 %	GOODWARE	95,78 %
http://.../backup/UserRese	UserReset_infoclear.exe	14-03-03 11:12	633ca6ef	205376	view	958b056a1b	24 %	JUNK	0,00 %
http://.../down/1244/%E5%9	在线图片381-101-700.exe	14-03-03 11:10	2a0a405	92786	view	06237579d9	40 %	GOODWARE	95,78 %
http://.../hx/pskin(0.0.909.1	pskin(0.0.909.1-0.0.911.2)_360.exe	14-03-03 11:09	75cb3c6b	7221880	view	04c5e8dd6d	0 %		
mail://.../2f5985	vr.jpg	14-03-03 11:08	f103d5f0	37560	view*		0 %		
http://.../300/SE2814-10	SE2814-105-1-34835.exe	14-03-03 11:07	7402a4f4	65643	view	22f827f4f8	24 %	GOODWARE	52,79 %
http://.../mediaview/exe/MediaV	MediaViewV1alpha3360Installer.exe	14-03-03 11:03	00cf41f0	647925	view	e4a6a1f886	68 %	MALWARE	80,42 %
http://.../radio/player.exe	player.exe	14-03-03 11:03	5cd07f5f	1904640	view	f432b8e84d	4 %	JUNK	0,00 %
http://.../99/hezi/dnfbox	dnfbox.exe	14-03-03 11:03	c3d74df1	4186045	view	70769c8202	92 %	JUNK	0,00 %
http://.../exe/MediaV	MediaViewV1alpha2428Installer.exe	14-03-03 11:02	2be85a3	647888	view	13981be94e	68 %	MALWARE	80,42 %
http://.../newB/ç0*Điιç0*K1	ç0*Điιç0*K1x01_48_103.exe	14-03-03 11:01	331abab	1274656	view	7a76751433	4 %	GOODWARE	95,78 %
http://.../mediaview/exe/MediaV	MediaViewV1alpha2298Installer.exe	14-03-03 11:00	37b9b93	647893	view	439c7df5db	64 %	MALWARE	80,42 %
http://.../v0_silent/qsyssetup	qsyssetupsilentad_1024.exe	14-03-03 11:00	d31ca248	1864047	view	0f1c82943c7	28 %	MALWARE	80,42 %
http://.../yrekzs.exe	yrekzs.exe	14-03-03 11:00	fb496bcd	688810	view	2e756d272b	12 %	MALWARE	99,11 %
http://.../kplay.exe?_upd=setu	setup_28054250.exe	14-03-03 10:59	51352e8	98121	view	17ef94cb49	0 %	MALWARE	80,42 %
http://.../n/3.0.30	Anti-Malware.exe	14-03-03 10:58	9a9eb34	647911	view	94b92e5382	72 %	MALWARE	80,42 %
http://.../mediaview/exe/MediaV	MediaViewV1alpha3097Installer.exe	14-03-03 10:58	1c2ff75a	647901	view	847dfef615	64 %	MALWARE	80,42 %
http://.../installer	ZeNx2014-01-11_downloader-6NIC6wLV.exe	14-03-03 10:58	4cd03d3	237016	view	87aff945e8	32 %		
http://.../n/3.0.30	Anti-Malware.exe	14-03-03 10:57	bad9092	293608	view	6f39f410c8e	28 %		
http://.../exe/MediaV	MediaViewV1alpha1166Installer.exe	14-03-03 10:56	a3539fb1	647889	view	25da2bc52b	64 %	MALWARE	80,42 %
http://.../kplay.exe?_upd=setu	setup_28010849.exe	14-03-03 10:55	0a2a28ef	96127	view	3f5ff96276b	0 %	GOODWARE	88,26 %
http://.../down/324/vip%C2%A	vip	14-03-03 10:49	c85aa9f7	75312	view	8c47625988	28 %		
http://.../88/down/123/vip-101-2	vip-101-204-207477.exe	14-03-03 10:49	b4fdafeb	66675	view	6cf7abc2c7	28 %		
http://.../com/n/3.0.3	Smilebox.exe	14-03-03 10:49	eadd23e	293608	view	6ae9de5eed	28 %		
http://.../n/3.0.3	Camtasia.exe	14-03-03 10:49	e60826cc	295328	view	e3a7990761	28 %		
http://.../wn/246/%E5%8D	午夜小电影ef6-101-205-196942.exe	14-03-03 10:49	0fad81d0	64623	view	acc6e379ea	24 %	GOODWARE	52,79 %
http://.../335/AV1417-1	AV1417-105-202-13251.exe	14-03-03 10:49	e54b97ef	62000	view	5ec6f05a81c	32 %	GOODWARE	52,79 %
http://.../n/26777%C2%	267	14-03-03 10:49	aad96e6	66160	view	1290f7cc21d	28 %	GOODWARE	52,79 %

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WIE?

Sample - 80f2ad148237030893761763e08cf2487dcb810087f2e0016a7630e054b7ad32			
Youngest Path Acquired	14-03-03 15:10		
Youngest Path URI	mail://[redacted] 25896cbb0c527925043e51a7b6453a48		
Youngest Path Type	MAIL		
Youngest Incident Acquired	14-03-03 15:10		
Youngest Incident Name	2356869543.scr		
Youngest Incident Extension	scr		
Sample Acquired	14-03-03 15:10		
Sample Size	142336	016a7630e054b7ad32	
Sample MD5	4c91679bf60114f0f4015ae187fff599	25	
Sample SHA1	f5512bc45c06cee9c3f3e2d48e7ea3bf4bebad18		
avg	-	bitdefender	-
ca_av	-	clamav	-
esetnod32	Win32/Kryptik.BWFP trojan (variant)	fortinet	-
f_prot	W32/Trojan5.IYX	ikarus	Trojan-Spy.Zbot
k7computing	-	kaspersky	Trojan-Downloader.Win32.Agent.hebc
mcafee	Artemis!4C91679BF601 (trojan)	microsoft	-
norman	Heur.I	panda	-
quickheal	-	rising	-
sophos	Troj/Agent-AGFL	sunbelt	-
symantec	-	trendmicro	-
vba32	-	virusbuster	-
<b>PE32 executable (GUI) Intel 80386, for MS Windows</b>			



```

PEDump - 80f2ad148237030893761763e08cf2487dcb810087f2e0016a7630e054b7ad32
HashSha256      cb70f2bbde2d1c80a41686f4759f238aad0578ee2a549e8a893db51a78f209d3
Dump of file :  S:\SAMPLES\80\F2\80F2AD148237030893761763E08CF2487DCB810087F2E0016A7630E054B7AD32
FileSize       : 0x00000000000022C00
PEDumpVersion  : 0.2.7.63

<DOSHEADER
DOSHeader Magic      0x5A4D 'MZ'
DOSHeader size (para) 0x0004
DOSHeader checks     0x0000
DOSHeader STUBSize   0x00A8
DOSHEADER>

<File Header
Machine:             0x014C (I386)
Number of Sections: 0x0004
TimeDateStamp:      0x47274513
PointerToSymbolTable: 0x00000000
NumberOfSymbols:    0x00000000
SizeOfOptionalHeader: 0x00E0
Characteristics:    0x0123
    IF_RELOCS_STRIPPED
    IF_EXECUTABLE_IMAGE
    IF_LARGE_ADDRESS_AWARE
    IF_32BIT_MACHINE
File Header>

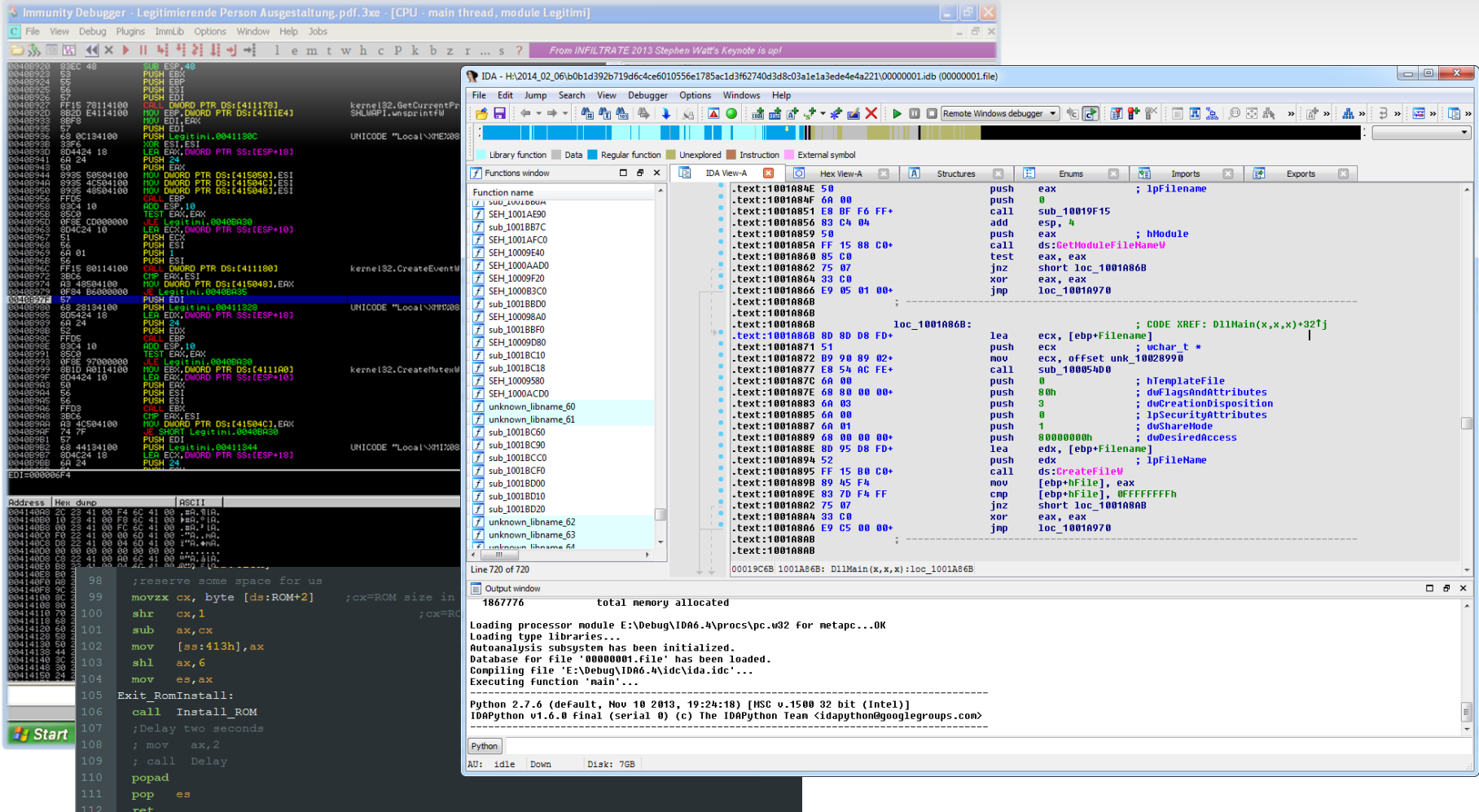
<Optional Header
Magic                0x010B
linker version        9.00
size of code          0x00018C00
size of initialized data 0x0000CC00
size of uninitialized data 0x00000000
entrypoint RVA        0x00015AF6
base of code          0x00001000
base of data          0x0001A000
image base            0x00400000
section alignment    0x00001000
file alignment        0x00000200
required OS version   5.00
image version         7.01
subsystem version     5.00
Win32 Version         0x00000000
size of image         0x00028000
size of headers       0x00000400
checksum              0x0002B58C
    
```

File Modification	14-03-03 15:15:00	
File Access	14-03-03 15:15:00	
File Creation	14-03-03 15:15:00	
File Type	Win32 EXE	
MIME Type	application/octet-stream	
Line	Name	Value
10	Machine Type	Intel 386 or later, and compatibles
11	Time Stamp	2007:10:30 14:52:03+00:00
12	PE Type	PE32
13	Linker Version	9.0
14	Code Size	101376
15	Initialized Data Size	52224
16	Uninitialized Data Size	0
17	Entry Point	0x15af6
18	OS Version	5.0
19	Image Version	7.1
20	Subsystem Version	5.0
21	Subsystem	Windows GUI
Line	Name	Value





WIE?



The screenshot displays two windows from a malware analysis session. The top window is Immunity Debugger, showing assembly code for a function named 'Exit\_RomInstall'. The code includes instructions like 'call Install\_ROM', 'Delay two seconds', and 'ret'. The bottom window is IDA Pro, showing the disassembly of a function named 'sub\_1001A86B'. The disassembly includes instructions such as 'push eax', 'call sub\_10019F15', 'add esp, 4', and 'jmp loc\_1001A970'. The output window at the bottom shows the total memory allocated as 1867776 bytes.



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# Vielen Dank für Ihre Aufmerksamkeit!