



**ID:** 394244  
**Sample Name:** faktura\_fk.exe  
**Cookbook:** default.jbs  
**Time:** 11:00:53  
**Date:** 21/04/2021  
**Version:** 31.0.0 Emerald

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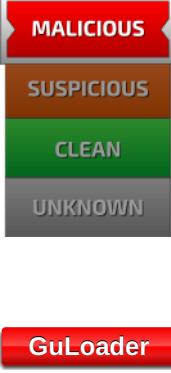
# Analysis Report faktura\_fk.exe

## Overview

### General Information

Sample Name:	faktura_fk.exe
Analysis ID:	394244
MD5:	66fb235f133e2f6...
SHA1:	12f471ad9d4f8ef...
SHA256:	168ca422e4a4dc...
Infos:	   
Most interesting Screenshot:	

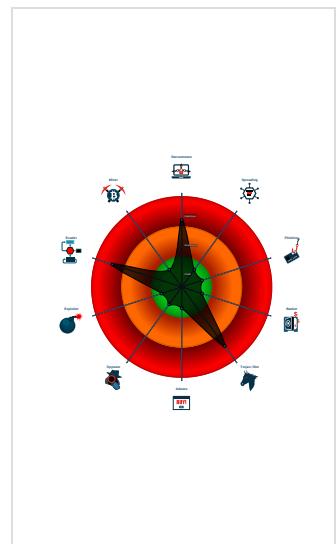
### Detection

 <b>GuLoader</b>
Score: 96
Range: 0 - 100
Whitelisted: false
Confidence: 100%

### Signatures

Found malware configuration
Multi AV Scanner detection for subm...
Potential malicious icon found
Yara detected GuLoader
C2 URLs / IPs found in malware con...
Detected RDTSC dummy instruction...
Found potential dummy code loops (...)
Tries to detect sandboxes and other...
Tries to detect virtualization through...
Yara detected VB6 Downloader Gen...
Abnormal high CPU Usage
PE file contains strange resources
Program does not show much activi...

### Classification



## Startup

- System is w10x64
-  faktura\_fk.exe (PID: 6352 cmdline: 'C:\Users\user\Desktop\faktura\_fk.exe' MD5: 66FB235F133E2F690184675FE27BCC32)
- cleanup

## Malware Configuration

### Threatname: GuLoader

```
{  
  "Payload URL": "https://drive.google.com/uc?export=download&id=107Zrj0oTVUPxo7h5le0qNns20fQkCgBK",  
  "Injection Process": [  
    "RegAsm.exe",  
    "RegSvcs.exe",  
    "MSBuild.exe"  
  ]  
}
```

## Yara Overview

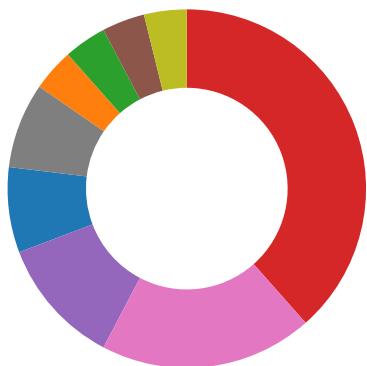
### Memory Dumps

Source	Rule	Description	Author	Strings
00000001.00000002.1276915802.00000000005 10000.00000040.00000001.sdmp	JoeSecurity_GuLoader	Yara detected GuLoader	Joe Security	
Process Memory Space: faktura_fk.exe PID: 6352	JoeSecurity_VB6DownloaderGeneric	Yara detected VB6 Downloader Generic	Joe Security	
Process Memory Space: faktura_fk.exe PID: 6352	JoeSecurity_GuLoader	Yara detected GuLoader	Joe Security	

## Sigma Overview

No Sigma rule has matched

## Signature Overview



- AV Detection
- Compliance
- Networking
- System Summary
- Data Obfuscation
- Hooking and other Techniques for Hiding and Protection
- Malware Analysis System Evasion
- Anti Debugging
- HIPS / PFW / Operating System Protection Evasion

Click to jump to signature section

### AV Detection:



Found malware configuration

Multi AV Scanner detection for submitted file

### Networking:



C2 URLs / IPs found in malware configuration

### System Summary:



Potential malicious icon found

### Data Obfuscation:



Yara detected GuLoader

Yara detected VB6 Downloader Generic

### Malware Analysis System Evasion:



Detected RDTSC dummy instruction sequence (likely for instruction hammering)

Tries to detect sandboxes and other dynamic analysis tools (process name or module or function)

Tries to detect virtualization through RDTSC time measurements

### Anti Debugging:

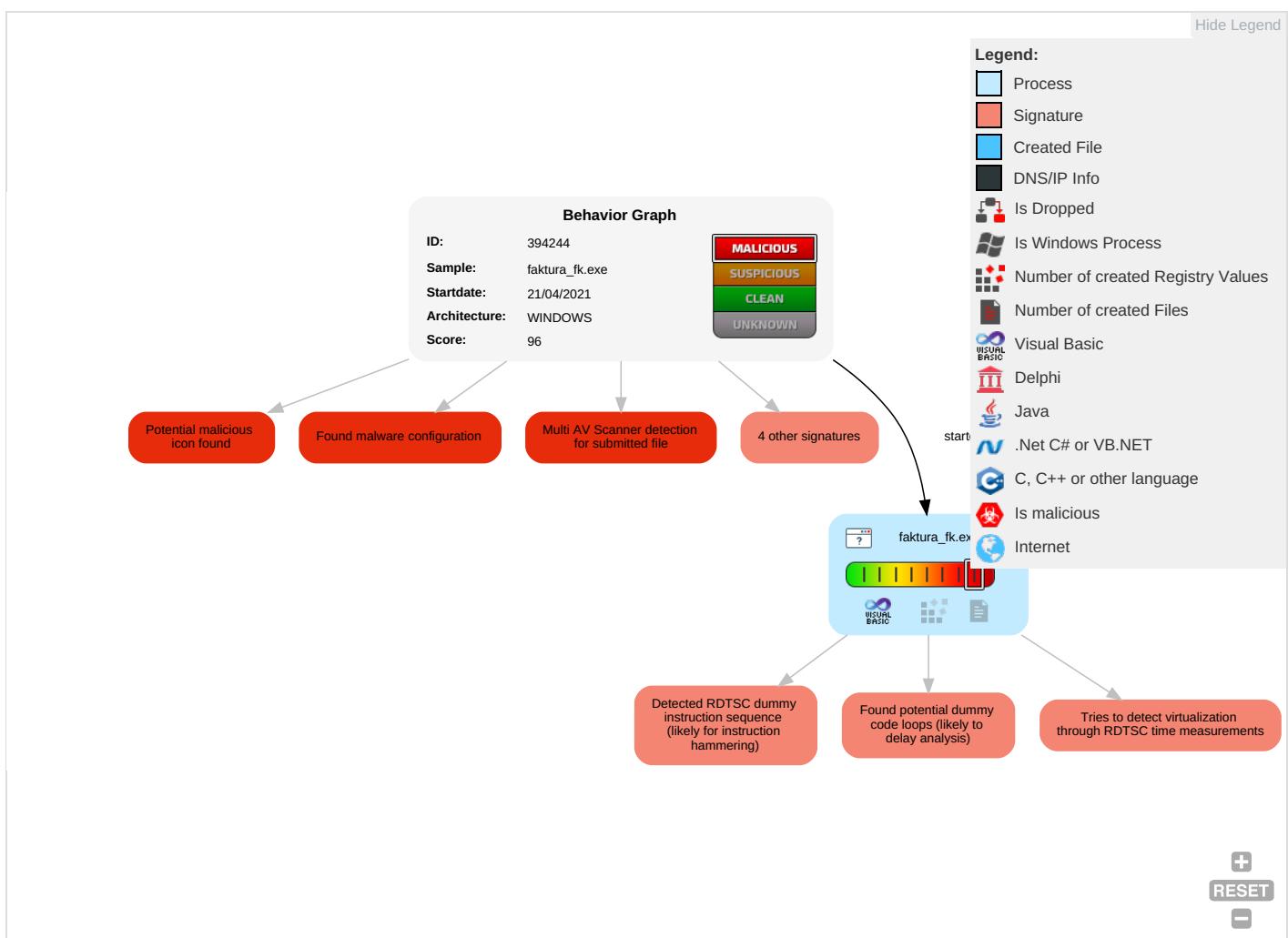


Found potential dummy code loops (likely to delay analysis)

## Mitre Att&ck Matrix

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control	Network Effects	Risk Score
Valid Accounts	Windows Management Instrumentation	Path Interception	Process Injection 1	Virtualization/Sandbox Evasion 1 1	OS Credential Dumping	Security Software Discovery 4 1	Remote Services	Data from Local System	Exfiltration Over Other Network Medium	Application Layer Protocol 1	Eavesdrop on Insecure Network Communication	Risk Score 1
Default Accounts	Scheduled Task/Job	Boot or Logon Initialization Scripts	Boot or Logon Initialization Scripts	Process Injection 1	LSASS Memory	Virtualization/Sandbox Evasion 1 1	Remote Desktop Protocol	Data from Removable Media	Exfiltration Over Bluetooth	Junk Data	Exploit SS7 to Redirect Phone Calls/SMS	Risk Score 2
Domain Accounts	At (Linux)	Logon Script (Windows)	Logon Script (Windows)	Obfuscated Files or Information 1	Security Account Manager	Process Discovery 1	SMB/Windows Admin Shares	Data from Network Shared Drive	Automated Exfiltration	Steganography	Exploit SS7 to Track Device Location	Risk Score 3
Local Accounts	At (Windows)	Logon Script (Mac)	Logon Script (Mac)	Binary Padding	NTDS	System Information Discovery 2 1	Distributed Component Object Model	Input Capture	Scheduled Transfer	Protocol Impersonation	SIM Card Swap	Risk Score 4

## Behavior Graph



## Screenshots

### Thumbnails

This section contains all screenshots as thumbnails, including those not shown in the slideshow.





## Antivirus, Machine Learning and Genetic Malware Detection

### Initial Sample

Source	Detection	Scanner	Label	Link
faktura_fk.exe	18%	Virustotal		<a href="#">Browse</a>
faktura_fk.exe	7%	ReversingLabs	Win32.Worm.Wbvb	

### Dropped Files

No Antivirus matches

## Unpacked PE Files

No Antivirus matches

## Domains

No Antivirus matches

## URLs

No Antivirus matches

## Domains and IPs

### Contacted Domains

No contacted domains info

### Contacted IPs

No contacted IP infos

## General Information

Joe Sandbox Version:	31.0.0 Emerald
Analysis ID:	394244
Start date:	21.04.2021
Start time:	11:00:53
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 12m 44s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	faktura_fk.exe
Cookbook file name:	default.jbs
Analysis system description:	Windows 10 64 bit v1803 with Office Professional Plus 2016, Chrome 85, IE 11, Adobe Reader DC 19, Java 8 Update 211
Number of analysed new started processes analysed:	37
Number of new started drivers analysed:	0
Number of existing processes analysed:	0
Number of existing drivers analysed:	0
Number of injected processes analysed:	0
Technologies:	<ul style="list-style-type: none"><li>• HCA enabled</li><li>• EGA enabled</li><li>• HDC enabled</li><li>• AMSI enabled</li></ul>
Analysis Mode:	default
Analysis stop reason:	Timeout
Detection:	MAL
Classification:	mal96.rans.troj.evad.winEXE@1/0@0/0
EGA Information:	<ul style="list-style-type: none"><li>• Successful, ratio: 100%</li></ul>
HDC Information:	<ul style="list-style-type: none"><li>• Successful, ratio: 76% (good quality ratio 50.6%)</li><li>• Quality average: 35.2%</li><li>• Quality standard deviation: 31%</li></ul>
HCA Information:	Failed
Cookbook Comments:	<ul style="list-style-type: none"><li>• Adjust boot time</li><li>• Enable AMSI</li><li>• Found application associated with file extension: .exe</li></ul>

Warnings:

Show All

- Behavior information exceeds normal sizes, reducing to normal. Report will have missing behavior information.
- Exclude process from analysis (whitelisted): taskhostw.exe, MpCmdRun.exe, RuntimeBroker.exe, backgroundTaskHost.exe, audiogd.exe, BackgroundTransferHost.exe, HxTsr.exe, WMIADAP.exe, MusNotifyIcon.exe, SgrmBroker.exe, conhost.exe, svchost.exe, wuapihost.exe

## Simulations

### Behavior and APIs

No simulations

## Joe Sandbox View / Context

### IPs

No context

### Domains

No context

### ASN

No context

### JA3 Fingerprints

No context

### Dropped Files

No context

## Created / dropped Files

No created / dropped files found

## Static File Info

### General

File type:

PE32 executable (GUI) Intel 80386, for MS Windows

Entropy (8bit):

5.74398491466137

TrID:

- Win32 Executable (generic) a (10002005/4) 99.15%
- Win32 Executable Microsoft Visual Basic (82127/2) 0.81%
- Generic Win/DOS Executable (2004/3) 0.02%
- DOS Executable Generic (2002/1) 0.02%
- Autodesk FLIC Image File (extensions: flic, fli, cel) (7/3) 0.00%

## General

File name:	faktura_fk.exe
File size:	208896
MD5:	66fb235f133e2f690184675fe27bcc32
SHA1:	12f471ad9d4f8ef90cc548d1e0eb498c12ed0230
SHA256:	168ca422e4a4dc429c9fb4a65cd1b3f1f32119475581b3d00c94ff6e4a82f77
SHA512:	1dd20f688ab25131fc8b9c8a2b68d87f468e45ae7b69594e78012353aad2cbde1c3f82f9eeccb605d1787e56c9b726dfc6f4abc2164d1b347d08516824b8aa8c
SSDEEP:	3072:+tYMtBHA4Pid5lQrh5aAf1gaVcjQ0Rkkw7OAEvkcvdzHRe4YJv:UQjPOE1gaVBsDYEBvdLq
File Content Preview:	MZ.....@.....!..L!Th is program cannot be run in DOS mode....\$.....#.B...B ...B..L^...B...`...B..d...B..Rich.B.....PE..L..I.'..... .....0.....@.....

## File Icon

Icon Hash:	20047c7c70f0e004

## Static PE Info

### General

Entrypoint:	0x401d94
Entrypoint Section:	.text
Digitally signed:	false
Imagebase:	0x400000
Subsystem:	windows gui
Image File Characteristics:	LOCAL_SYMS_STRIPPED, 32BIT_MACHINE, EXECUTABLE_IMAGE, LINE_NUMS_STRIPPED, RELOCS_STRIPPED
DLL Characteristics:	
Time Stamp:	0x607FB66C [Wed Apr 21 05:21:48 2021 UTC]
TLS Callbacks:	
CLR (.Net) Version:	
OS Version Major:	4
OS Version Minor:	0
File Version Major:	4
File Version Minor:	0
Subsystem Version Major:	4
Subsystem Version Minor:	0
Import Hash:	e1435fa7344f6ab2e745b6e31d83ea55

## Entrypoint Preview

### Instruction

```
push 00401FF4h
call 00007FD3A8A8A9A5h
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
xor byte ptr [eax], al
add byte ptr [eax], al
inc eax
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [edx-7F47AE6Eh], dh
sar eax, cl
dec esp
call far B1A4h : AFF4E401h
xor al, byte ptr [eax]
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [ecx], al
```

<b>Instruction</b>
add byte ptr [eax], al
add byte ptr [eax], al
add byte ptr [eax+49030A64h], ah
dec esi
inc esp
inc esp
dec ebx
dec esi
dec ecx
dec esi
inc edi
add byte ptr [ecx+00h], al
and byte ptr [eax], cl
inc ecx
add byte ptr [eax], al
add byte ptr [eax], al
add bh, bh
int3
xor dword ptr [eax], eax
push es
pop ecx
jnb 00007FD3A8A8A9B8h
mov dh, 2Bh
pop esp
cli
dec ebx
stosd
mov ebx, 4D7B8DF1h
retf

## Data Directories

Name	Virtual Address	Virtual Size	Is in Section
IMAGE_DIRECTORY_ENTRY_EXPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_IMPORT	0x2fa64	0x28	.text
IMAGE_DIRECTORY_ENTRY_RESOURCE	0x33000	0x958	.rsrc
IMAGE_DIRECTORY_ENTRY_EXCEPTION	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_SECURITY	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_BASERELOC	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_DEBUG	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_COPYRIGHT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_GLOBALPTR	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_TLS	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_LOAD_CONFIG	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_BOUND_IMPORT	0x228	0x20	
IMAGE_DIRECTORY_ENTRY_IAT	0x1000	0x1bc	.text
IMAGE_DIRECTORY_ENTRY_DELAY_IMPORT	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_COM_DESCRIPTOR	0x0	0x0	
IMAGE_DIRECTORY_ENTRY_RESERVED	0x0	0x0	

## Sections

Name	Virtual Address	Virtual Size	Raw Size	Xored PE	ZLIB Complexity	File Type	Entropy	Characteristics
.text	0x1000	0x2f0a8	0x30000	False	0.339920043945	data	5.91772288462	IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_READ
.data	0x31000	0x1228	0x1000	False	0.00634765625	data	0.0	IMAGE_SCN_CNT_INITIALIZED_DA TA, IMAGE_SCN_MEM_WRITE, IMAGE_SCN_MEM_READ
.rsrc	0x33000	0x958	0x1000	False	0.1708984375	data	2.02469330583	IMAGE_SCN_CNT_INITIALIZED_DA TA, IMAGE_SCN_MEM_READ

## Resources

Name	RVA	Size	Type	Language	Country
RT_ICON	0x33828	0x130	data		
RT_ICON	0x33540	0x2e8	data		

Name	RVA	Size	Type	Language	Country
RT_ICON	0x33418	0x128	GLS_BINARY_LSB_FIRST		
RT_GROUP_ICON	0x333e8	0x30	data		
RT_VERSION	0x33150	0x298	data	Chinese	Taiwan

## Imports

DLL	Import
MSVBVM60.DLL	_Clcos, _adj_fptan, __vbaVarMove, __vbaFreeVar, __vbaStrVarMove, __vbaFreeVarList, __vbaEnd, _adj_fdiv_m64, __vbaFreeObjList, _adj_fprem1, __vbaRecAnsToUni, __vbaSetSystemError, __vbaHRESULTCheckObj, _adj_fdiv_m32, __vbaAryDestruct, __vbaObjSet, __vbaOnError, _adj_fdiv_m16i, __vbaObjSetAddref, _adj_fdiv_m16i, __vbaVarTstLt, __vbaFpR8, _CIsin, __vbaChkstk, EVENT_SINK_AddRef, __vbaGenerateBoundsError, __vbaStrCmp, __vbaAryConstruct2, __vbaObjVar, DllFunctionCall, _adj_fptan, __vbaLateIdCall1d, __vbaRedim, __vbaRecUniToAnsi, EVENT_SINK_Release, _CIsqrt, EVENT_SINK_QueryInterface, __vbaExceptHandler, _adj_fprem, _adj_fdiv_m64, __vbaFPEException, _Cilog, __vbaFileOpen, __vbaNew2, _adj_fdiv_m32i, _adj_fdivr_m32i, __vbaStrCopy, __vbaFreeStrList, __vbaDerefAry1, _adj_fdivr_m32, _adj_fdiv_r, __vbaVarTstNe, __vba4Var, __vbaVarAdd, __vbaLateMemCall, __vbaVarDup, __vbaStrToAnsi, __vbaStrComp, _Clatan, __vbaStrMove, __vbaCastObj, _allmul, __vbaLateIdSt, _Citan, _Clexp, __vbaFreeObj, __vbaFreeStr

## Version Infos

Description	Data
Translation	0x0404 0x04b0
InternalName	Knudepunkternes2
FileVersion	1.00
CompanyName	eSafe Solutions
ProductName	eSafe Solutions
ProductVersion	1.00
FileDescription	eSafe Solutions
OriginalFilename	Knudepunkternes2.exe

## Possible Origin

Language of compilation system	Country where language is spoken	Map
Chinese	Taiwan	

## Network Behavior

No network behavior found

## Code Manipulations

## Statistics

## System Behavior

Analysis Process: faktura\_fk.exe PID: 6352 Parent PID: 5716

### General

Start time:

11:01:37

Start date:	21/04/2021
Path:	C:\Users\user\Desktop\fakura_fk.exe
Wow64 process (32bit):	true
Commandline:	'C:\Users\user\Desktop\fakura_fk.exe'
Imagebase:	0x400000
File size:	208896 bytes
MD5 hash:	66FB235F133E2F690184675FE27BCC32
Has elevated privileges:	true
Has administrator privileges:	true
Programmed in:	Visual Basic
Yara matches:	<ul style="list-style-type: none"> <li>Rule: JoeSecurity_GuLoader, Description: Yara detected GuLoader, Source: 00000001.00000002.1276915802.0000000000510000.00000040.00000001.sdmp, Author: Joe Security</li> </ul>
Reputation:	low

### File Activities

File Path	Offset	Length	Completion Count	Source Address	Symbol

### Disassembly

### Code Analysis