

# ENPM685 – Incident Response Exercises, part 2

Version 1.1 – December 28<sup>th</sup> 2021

## Automated Malware Analysis URLs

enpm685-bot.exe - <https://www.hybrid-analysis.com/sample/e699336fb1620edc54621b6f2c7deae8aee01d39cb72809bd1ba6aa7dee2b9c8?environmentId=120>

<https://www.virustotal.com/#/file/e699336fb1620edc54621b6f2c7deae8aee01d39cb72809bd1ba6aa7dee2b9c8/detection>

enpm685-bot-v2.exe - <https://www.hybrid-analysis.com/sample/689b6574eaf549cd97e7d2ac8c2eb4f2c2477acdda7dbcc5a6883f8ae09dff2c?environmentId=120>

What malicious indicators are present?

What network connections are made?

What URLs are accessed?

Malicious URL – [http://swehelp.nu/ Invoice-recipeit/](http://swehelp.nu/Invoice-recipeit/) (Note: former evil URL, do not know the current status. **Do not access from a system you care about!**)

Virustotal info:

<https://www.virustotal.com/gui/url/846e94b2148e66aedcf0dc43544c9ee35414f2b7e7b39a687bab15b11f964809/detection>

The screenshot shows the VirusTotal interface for the URL <http://swehelp.nu/Invoice-recipeit/>. At the top, a circular badge indicates that 6 out of 69 engines detected this URL. Below this, a summary bar shows the URL, status (404), content type (text/html), and last scan date (2018-09-24 07:33:13 UTC, 1 year ago). A table below the summary bar lists the detection results from various engines:

DETECTION	DETAILS	COMMUNITY
BitDefender	Malware	Malicious
Fortinet	Malware	Malware
SCUMWARE.org	Malware	Malicious
CLEAN MX	Suspicious	Suspicious
ADMINUSLabs	Clean	Clean

Domain info: <https://www.virustotal.com/gui/domain/swehelp.nu>

## Relations tab:

URLs ⓘ		
Scanned	Detections	URL
2018-11-19	3 / 70	https://swehelp.nu/
2018-09-24	6 / 69	http://swehelp.nu/invoice-receipt/&data=02f0110ce6284c0d354524ce2b08d5787c482a1562f00709a44fcb936be79246571fc7f0f01636547397542578457&sdata=u8C2iChzYP%20iiiMTDWH8EJYFkJmQBA84nVlplLHrM=&reserved=0
2019-06-23	6 / 70	http://swehelp.nu/invoice-receipt
2019-11-02	2 / 71	http://swehelp.nu/
2018-09-24	6 / 69	http://swehelp.nu/invoice-receipt/
2019-06-14	6 / 70	http://swehelp.nu/invoice-receipt
2020-02-03	4 / 71	http://swehelp.nu/invoice-receipt/0

## Overdue payment.doc info:

<https://www.virustotal.com/gui/file/bfee8973fbd4f354790a29fddf3e2e8af990914811ede9282a36d994e23ba94f/details>

bfee8973fbd4f354790a29fddf3e2e8af990914811ede9282a36d994e23ba94f

37

/ 55

Community Score

37 engines detected this file

bfee8973fbd4f354790a29fddf3e2e8af990914811ede9282a36d994e23ba94f

Overdue payment.doc

doc

macros

obfuscated

run-file

123.00 KB

Size

2019-02-22 20:13:40 UTC

1 year ago

DOC

DETECTION	DETAILS	RELATIONS	BEHAVIOR	COMMUNITY 2
Ad-Aware	VB:Trojan.VBA.Agent.SN	AhnLab-V3	W97M/Downloader	
ALYac	Trojan.Downloader.VBA.gen	Antiy-AVL	Trojan[Downloader]/MSOffice.Agent.gsu	
Arcabit	HEUR.VBA.Trojan.e	Avast	Other:Malware-gen [Trj]	
AVG	Other:Malware-gen [Trj]	Avira (no cloud)	W97M/Agent.3293817	
BitDefender	VB:Trojan.VBA.Agent.SN	CAT-QuickHeal	W97M.Downloader.30488	
ClamAV	Doc.Dropper.Agent-6453070-0	Comodo	Malware@#30h7jyutij0o	
Cyren	W97M/Agent	DrWeb	W97M.DownLoader.2602	
Emsisoft	Trojan-Downloader.Agent (A)	Endgame	Malicious (high Confidence)	








Hybrid-Analysis Overdue payment.doc info: <https://www.hybrid-analysis.com/sample/bfee8973fbd4f354790a29fddf3e2e8af990914811ede9282a36d994e23ba94f?environmentId=100>

Related Sandbox Artifacts	
<b>Associated URLs</b>	<a href="http://artemavtoцентр.ru/Important-Please-Read/">http://artemavtoцентр.ru/Important-Please-Read/</a> <a href="http://www.arcadipace.org/Important-Please-Read/">http://www.arcadipace.org/Important-Please-Read/</a> <a href="http://ardri-lubrication.com/Question/">http://ardri-lubrication.com/Question/</a> <a href="http://www.robortaalessandrini.net/Paid-Invoice/">http://www.robortaalessandrini.net/Paid-Invoice/</a> <a href="http://www.appartamentiflora.com/Past-Due-Invoices/">http://www.appartamentiflora.com/Past-Due-Invoices/</a> <a href="http://lkran.su/Important-Please-Read/">http://lkran.su/Important-Please-Read/</a> <a href="http://catalogcenter-dv.ru/Invoices-Overdue/">http://catalogcenter-dv.ru/Invoices-Overdue/</a> <a href="http://www.addco.it/Important-Please-Read/">http://www.addco.it/Important-Please-Read/</a> <a href="http://paskibasenowe.pl/ACH-form/">http://paskibasenowe.pl/ACH-form/</a> <a href="http://swehelp.nu/Invoice-receipt/">http://swehelp.nu/Invoice-receipt/</a>











## DNS Requests

[Login to Download DNS Requests \(CSV\)](#)

Domain	Address	Registrar	Country
www.joomland.org	217.160.230.169 TTL: 3599	-	 Germany
www.exoticevents.com.pk	-	-	-
www.christian-jansen.nl 	185.182.56.15 TTL: 14399	-	 Netherlands
personaltrainervancouverwashington.com 	50.118.100.49 TTL: 21599	GoDaddy.com, LLC Organization: Kisar Dhillon Enterprises, LLC Name Server: NS27.OXWEBHOSTING.COM Creation Date: Fri, 15 Jan 2016 20:04:55 GMT	 United States
blog.profesal.pl 	195.205.24.101 TTL: 3599	-	 Poland

## Contacted Hosts

[Login to Download Contacted Hosts \(CSV\)](#)

IP Address	Port/Protocol	Associated Process	Details
50.118.100.49  OSINT	80 TCP	powershell.exe PID: 1900	 United States
185.182.56.15  OSINT	80 TCP	powershell.exe PID: 1900	 Netherlands
195.205.24.101  OSINT	80 TCP	powershell.exe PID: 1900	 Poland
217.160.230.169  OSINT	80 TCP	powershell.exe PID: 1900	 Germany

### Extracted Strings

All Details:

All Details:

Download All Memory Strings (8.2KiB)

All Strings (1209)	Interesting (361)	PCAP (9)	VDcmpKpTilpEdN.bas (1)	WINWORD.EXE (1)	WINWORD.EXE:3168 (389)	bfee8973fbd4f354790a29f...	cmd.exe (1)	kHvdSvsA.bas (1)	network.pcap (39)
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powershell.exe (1) powershell.exe:1900 (23) screen\_0.png (37) screen\_5.png (55) screen\_9.png (7) scs2E05.tmp (6) scs2E24.tmp (6)

[illegible]

## YARA

1. Install YARA on your Kali VM – **sudo apt-get install yara**
2. Create a sample YARA rule to detect the enpm685-bot-v2.exe

```
rule enpm685_bot
{
    meta:
        created = "1/1/2020"
        author = "kts"

    strings:
        $enpm685 = "enpm685"

    condition:
        $enpm685
}
```

3. Download enpm685-bot-v2.exe from the course Google Drive share or the Files section in the ENPM685 course in ELMS
4. Run YARA to see if your rule is detected.
  - Format: **yara yara.rule file.to.inspect**
  - Example: **yara enpm685.yara enpm685-bot-v2.exe**
5. You can find additional strings to hex characters to add to reduce false positives with the use of the strings command (ex: **strings enpm685-bot-v2.exe**) and/or reviewing the file with a hex editor to find other possible strings/hex/regex to search for.