

JOESandbox Cloud BASIC



**ID:** 289537

**Sample Name:** 903.xls

**Cookbook:**

defaultwindowsofficecookbook.jbs

**Time:** 13:10:41

**Date:** 24/09/2020

**Version:** 30.0.0 Red Diamond

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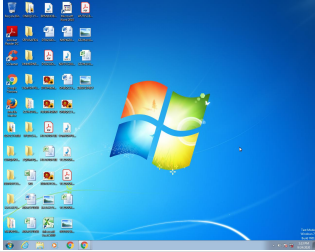
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# Analysis Report 903.xls

## Overview

### General Information

Sample Name:	903.xls
Analysis ID:	289537
MD5:	45d6724e12b540..
SHA1:	ab41e637f4bbdf1..
SHA256:	78dc7b7475fda91..
Most interesting Screenshot:	

### Detection

**MALICIOUS**

**SUSPICIOUS**

**CLEAN**

**UNKNOWN**

**Hidden Macro 4.0**

Score:	21
Range:	0 - 100
Whitelisted:	false
Confidence:	80%

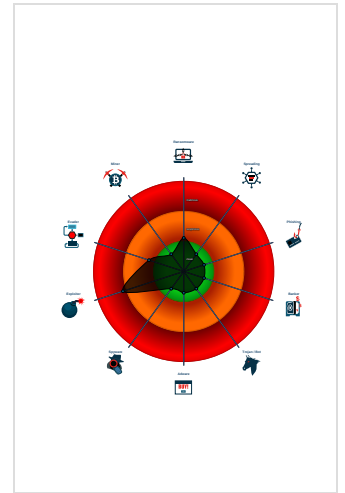
### Signatures

Yara detected password protected x...


Contains capabilities to detect virtua...

Unable to load, office file is protecte...

### Classification



## Startup

- System is w7x64
-  EXCEL.EXE (PID: 2296 cmdline: 'C:\Program Files\Microsoft Office\Office14\EXCEL.EXE' /automation -Embedding MD5: 5FB0A0F93382ECD19F5F499A5CAA59F0)
- cleanup

## Malware Configuration

No configs have been found

## Yara Overview

### Initial Sample

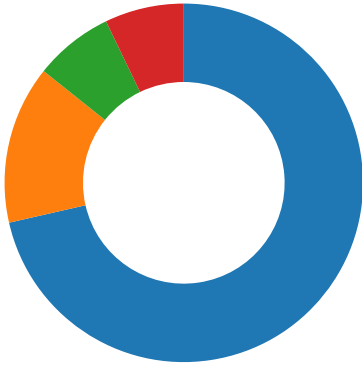
Source	Rule	Description	Author	Strings
903.xls	JoeSecurity_PasswordProtectedXlsWithEmbeddedMacros	Yara detected password protected xls with embedded macros	Joe Security	

## Sigma Overview

No Sigma rule has matched

## Signature Overview

- System Summary
- Hooking and other Techniques for Hiding and Protection
- Malware Analysis System Evasion
- HIPS / PFW / Operating System Protection Evasion



💡 Click to jump to signature section

### HIPS / PFW / Operating System Protection Evasion:


















Yara detected password protected xls with embedded macros

### Mitre Att&ck Matrix

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

### Behavior Graph

- Legend:**
-  Process
  -  Signature
  -  Created File
  -  DNS/IP Info
  -  Is Dropped
  -  Is Windows Process
  -  Number of created Registry Values
  -  Number of created Files
  -  Visual Basic
  -  Delphi
  -  Java
  -  .Net C# or VB.NET
  -  C, C++ or other language
  -  Is malicious
  -  Internet

**Behavior Graph**

ID: 289537  
 Sample: 903.xls  
 Startdate: 24/09/2020  
 Architecture: WINDOWS  
 Score: 21

MALICIOUS



SUSPICIOUS


CLEAN


UNKNOWN


Yara detected password protected xls with embedded macros

started

 EXCEL.EXE 



 3

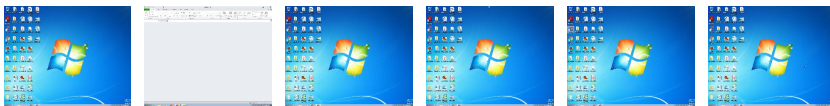
 3

+  
 RESET  
 -

## 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

No Antivirus matches

### 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:	30.0.0 Red Diamond
Analysis ID:	289537
Start date:	24.09.2020
Start time:	13:10:41
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 3m 38s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	903.xls
Cookbook file name:	defaultwindowsofficecookbook.jbs
Analysis system description:	Windows 7 x64 SP1 with Office 2010 SP2 (IE 11, FF52, Chrome 57, Adobe Reader DC 15, Flash 25.0.0.127, Java 8 Update 121, .NET 4.6.2)
Number of analysed new started processes analysed:	2
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>• EGA enabled</li><li>• HDC enabled</li><li>• AMSI enabled</li></ul>
Analysis Mode:	default
Analysis stop reason:	Timeout
Detection:	SUS
Classification:	sus21.expl.winXLS@1/0@0/0
Cookbook Comments:	<ul style="list-style-type: none"><li>• Adjust boot time</li><li>• Enable AMSI</li><li>• Found application associated with file extension: .xls</li><li>• Found Word or Excel or PowerPoint or XPS Viewer</li><li>• Attach to Office via COM</li><li>• Scroll down</li><li>• Close Viewer</li></ul>
Warnings:	Show All <ul style="list-style-type: none"><li>• Exclude process from analysis (whitelisted): dllhost.exe</li></ul>

## 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:	Composite Document File V2 Document, Little Endian, Os: Windows, Version 10.0, Code page: 1252, Author: SJzNXHGtfHdpEI, Last Saved By: test, Name of Creating Application: Microsoft Excel, Create Time/Date: Mon Sep 14 22:28:14 2020, Last Saved Time/Date: Wed Sep 23 17:00:44 2020, Security: 1
Entropy (8bit):	7.825080839475646
TrID:	<ul style="list-style-type: none"> <li>Microsoft Excel sheet (30009/1) 78.94%</li> <li>Generic OLE2 / Multistream Compound File (8008/1) 21.06%</li> </ul>
File name:	903.xls
File size:	273920
MD5:	45d6724e12b54092a46c8b8cf57bb316
SHA1:	ab41e637f4bbdf17beb50f4b67b7293aec162737
SHA256:	78dc7b7475fda91e1d378073404fe0dc0ee3b63054ddfe9a68c4bf79958dcbe6
SHA512:	ce870c88a6aa0acd5c68ad3470d9a09fb4ee5b98af6048475d3094e6a89fcc7ab7713fb008c1a7f9e3b217dfc56568db64c43690010568f76ada527c854166c
SSDEEP:	6144:5wmPf2PmRG0qKX3LIVdOeFL23h9wEDu+zhRet+OkikL9c:6mH6QGeX3pX63h9wau+1K2iK9c
File Content Preview:	.....>..... ..... .....

### File Icon

	
Icon Hash:	e4eea286a4b4bcb4

## Static OLE Info

### General

Document Type:	OLE
Number of OLE Files:	1

### OLE File "903.xls"

Indicators	
Has Summary Info:	True
Application Name:	Microsoft Excel
Encrypted Document:	True
Contains Word Document Stream:	False
Contains Workbook/Book Stream:	True
Contains PowerPoint Document Stream:	False
Contains Visio Document Stream:	False
Contains ObjectPool Stream:	
Flash Objects Count:	
Contains VBA Macros:	False

Summary	
Code Page:	1252
Author:	SJzNXHGtfHdpEI
Last Saved By:	test
Create Time:	2020-09-14 21:28:14
Last Saved Time:	2020-09-23 16:00:44
Creating Application:	Microsoft Excel
Security:	1

Document Summary	
Document Code Page:	1252
Thumbnail Scaling Desired:	False
Company:	
Contains Dirty Links:	False
Shared Document:	False
Changed Hyperlinks:	False
Application Version:	1048576

### Streams

**Stream Path:** `\x5DocumentSummaryInformation`, **File Type:** data, **Stream Size:** 4096

General	
Stream Path:	\x5DocumentSummaryInformation
File Type:	data
Stream Size:	4096
Entropy:	0.311454994264
Base64 Encoded:	False
Data ASCII:	.....+,...0.....P.....X..... .d.....l.....t..... ..... .....Sheet1.....RMB..... .....Worksheets.....
Data Raw:	fe ff 00 00 0a 00 02 00 01 00 00 00 02 d5 cd d5 9c 2e 1b 10 93 97 08 00 2b 2c f9 ae 30 00 00 00 ec 00 00 00 09 00 00 00 01 00 00 00 50 00 00 00 0f 00 00 00 58 00 00 00 17 00 00 00 64 00 00 00 0b 00 00 00 6c 00 00 00 10 00 00 00 74 00 00 00 13 00 00 00 7c 00 00 00 16 00 00 00 84 00 00 00 0d 00 00 00 8c 00 00 00 0c 00 00 00 a7 00 00 00

**Stream Path:** `\x5SummaryInformation`, **File Type:** data, **Stream Size:** 4096

General	
Stream Path:	\x5SummaryInformation
File Type:	data
Stream Size:	4096
Entropy:	0.29983696163
Base64 Encoded:	False
Data ASCII:	.....Oh.....+'...0.....@.....H... .....p.....SJzNXHGtfHdpEI .....test.....Microsoft Excel.@.....+.....@.....f..... .....
Data Raw:	fe ff 00 00 0a 00 02 00 01 00 00 00 e0 85 9f f2 f9 4f 68 10 ab 91 08 00 2b 27 b3 d9 30 00 00 00 a8 00 00 00 07 00 00 00 01 00 00 00 40 00 00 00 04 00 00 00 48 00 00 00 08 00 00 00 60 00 00 00 12 00 00 00 70 00 00 00 0c 00 00 00 88 00 00 00 0d 00 00 00 94 00 00 00 13 00 00 00 a0 00 00 00 02 00 00 00 e4 04 00 00 1e 00 00 00 10 00 00 00

**Stream Path:** `Workbook`, **File Type:** Applesoft BASIC program data, **first line number:** 16, **Stream Size:** 261961

<b>General</b>	
Stream Path:	Workbook
File Type:	Applesoft BASIC program data, first line number 16
Stream Size:	261961
Entropy:	7.94785679197
Base64 Encoded:	True
Data ASCII:	.....Z O...../.....~.....h.....M. c.r.o.s.o.f.t. .E.n.h.a.n.c.e.d. .C.r.y.p.t.o.g.r.a.p.h.i.c. .P. r.o.v.i.d.e.r. .v.1...0.....@...)%:j.. " .....m(.....].G..... s.4,...".....s?.>.....\..p..6.`"...9....
Data Raw:	09 08 10 00 00 06 05 00 5a 4f cd 07 c9 00 02 00 06 08 00 00 2f 00 c8 00 01 00 04 00 02 00 0c 00 00 00 7e 00 00 00 0c 00 00 00 00 00 00 00 01 68 00 00 04 80 00 00 80 00 00 00 01 00 00 00 00 00 00 00 00 00 00 4d 00 69 00 63 00 72 00 6f 00 73 00 6f 00 66 00 74 00 20 00 45 00 6e 00 68 00 61 00 6e 00 63 00 65 00 64 00 20 00 43 00 72 00 79 00 70 00 74 00 6f 00 67 00 72 00 61 00 70 00

## Network Behavior

No network behavior found

## Code Manipulations

## Statistics

## System Behavior

Analysis Process: EXCEL.EXE PID: 2296 Parent PID: 584

### General

Start time:	13:11:37
Start date:	24/09/2020
Path:	C:\Program Files\Microsoft Office\Office14\EXCEL.EXE
Wow64 process (32bit):	false
Commandline:	'C:\Program Files\Microsoft Office\Office14\EXCEL.EXE' /automation -Embedding
Imagebase:	0x13f730000
File size:	27641504 bytes
MD5 hash:	5FB0A0F93382ECD19F5F499A5CAA59F0
Has administrator privileges:	true
Programmed in:	C, C++ or other language
Reputation:	moderate

### File Activities

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
Old File Path	New File Path			Completion	Count	Source Address	Symbol
File Path	Offset		Length	Completion	Count	Source Address	Symbol

### Registry Activities

Key Path					Completion	Count	Source Address	Symbol
Key Path	Name	Type	Data		Completion	Count	Source Address	Symbol
Key Path	Name	Type	Old Data	New Data	Completion	Count	Source Address	Symbol

## Disassembly

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