



資訊處

Office of Information Technology

弱點掃描常見問題修補建議

中華民國113年9月9日 1.2版

編號：

主要原則

- 任何服務與設備，若不需要對外提供服務，建議阻擋所有外部連線，若有需求建議以白名單的方式授權使用
- 個人電腦、筆記型電腦請事先了解安裝那些軟體、服務，並確認系統及軟體均已更新至最新
 - ✓ 個人電腦、筆記型電腦安全設定請參閱本處作業指引
 - ✓ 連結：<https://isms.ccu.edu.tw/p/426-1044-8.php?Lang=zh-tw>
- 物聯網設備(如印表機、無線分享器、網路監視攝影機…等)，請確保軟體均更新至最新，且完成安全性設定
 - ✓ 物聯網設備安全使用請參閱本處作業指引
 - ✓ 連結：<https://isms.ccu.edu.tw/p/426-1044-13.php?Lang=zh-tw>

物聯網設備

➤ 物聯網設備修補常見特殊狀況：

✓ 設備老舊且原廠已不提供維護

- 更換新設備

✓ 沒有經費購買新設備

- 限制連線

✓ 設備本身做不到限制連線設定

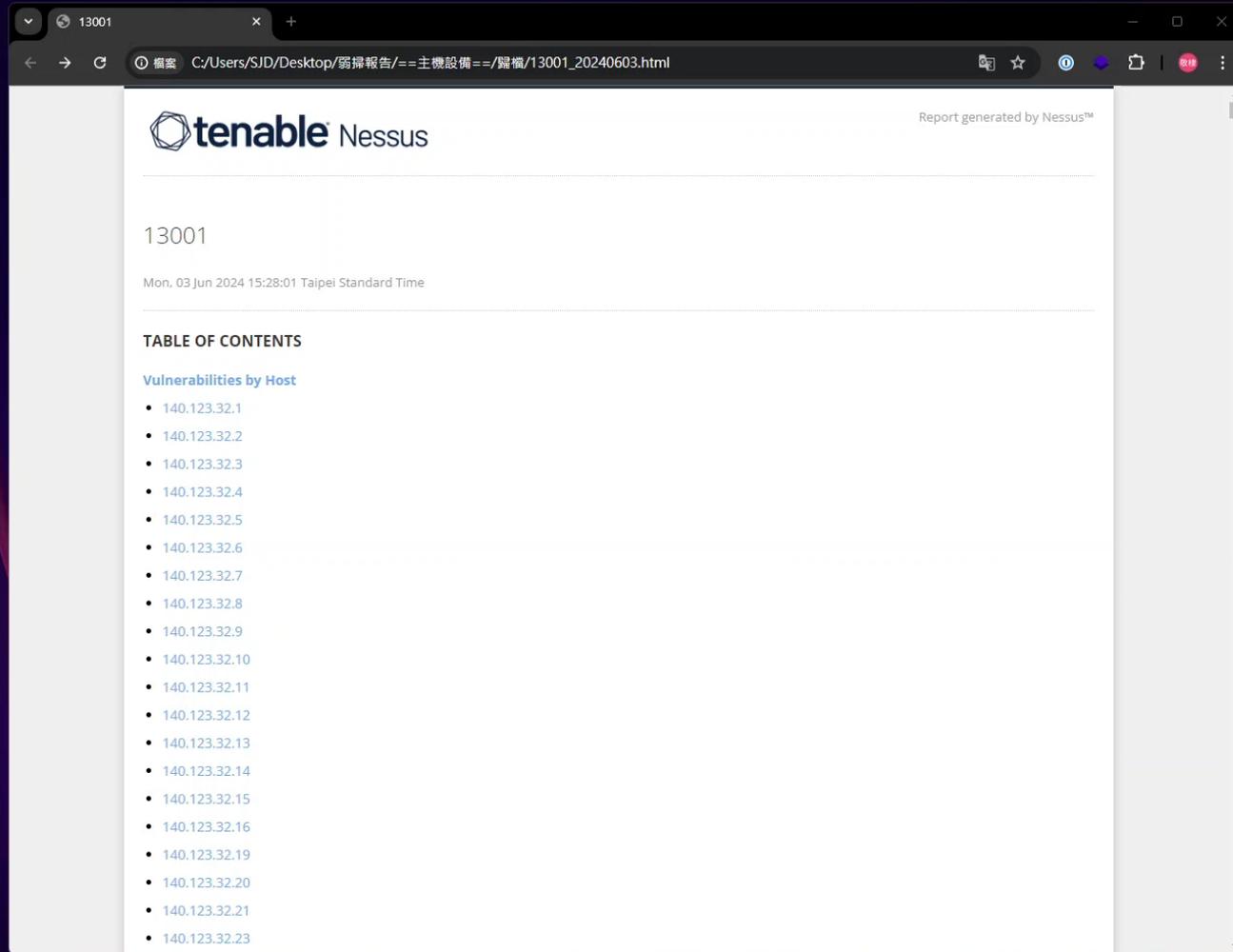
- 使用私人網段
- 單機作業
- 設備下架不使用



資訊處
Office of Information Technology

如何閱讀報告

今年提供html格式，方便閱讀



風險數統計



弱點名稱與說明

Host Information

IP: 140.123. [REDACTED]
OS: Linux Kernel 3.10, Linux Kernel 3.13, Linux Kernel 4.2, Linux Kernel 4.8

Vulnerabilities

94437 - SSL 64-bit Block Size Cipher Suites Supported (SWEET32)

Synopsis

The remote service supports the use of 64-bit block ciphers.

Description

The remote host supports the use of a block cipher with 64-bit blocks in one or more cipher suites. It is, therefore, affected by a vulnerability, known as SWEET32, due to the use of weak 64-bit block ciphers. A man-in-the-middle attacker who has sufficient resources can exploit this vulnerability, via a 'birthday' attack, to detect a collision that leaks the XOR between the fixed secret and a known plaintext, allowing the disclosure of the secret text, such as secure HTTPS cookies, and possibly resulting in the hijacking of an authenticated session.

Proof-of-concepts have shown that attackers can recover authentication cookies from an HTTPS session in as little as 30 hours.

Note that the ability to send a large number of requests over the same TLS connection between the client and server is an important requirement for carrying out this attack. If the number of requests allowed for a single connection were limited, this would mitigate the vulnerability. This plugin requires report paranoia as Nessus has not checked for such a mitigation.

See Also

Synopsis : 弱點的概述
Description : 弱點的詳細說明

Risk Factor
Medium

CVSS v3.0 Base Score
7.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/CH:I/N/A/N)

CVSS v3.0 Temporal Score
6.7 (CVSS:3.0/E:P/R:L/O:RC:C)

外部參考連結與建議修補方式

Nessus has not checked for such a mitigation.

See Also

<https://sweet32.info>
<https://www.openssl.org/blog/blog/2016/08/24/sweet32/>

Solution

Reconfigure the affected application, if possible, to avoid use of all 64-bit block ciphers. Alternatively, place limitations on the number of requests that are allowed to be processed over the same TLS connection to mitigate this vulnerability.

Risk Factor

Medium

CVSS v3.0 Base Score

7.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/CH/I:N/A/N)

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A/N)

CVSS v2.0 Temporal Score

3.9 (CVSS2#E:POC/RL:OF/RC:C)

References

BID	92630
BID	92631
CVE	CVE-2016-2183
CVE	CVE-2016-6329
XREF	CEA-ID:CEA-2019-0547

Plugin Information

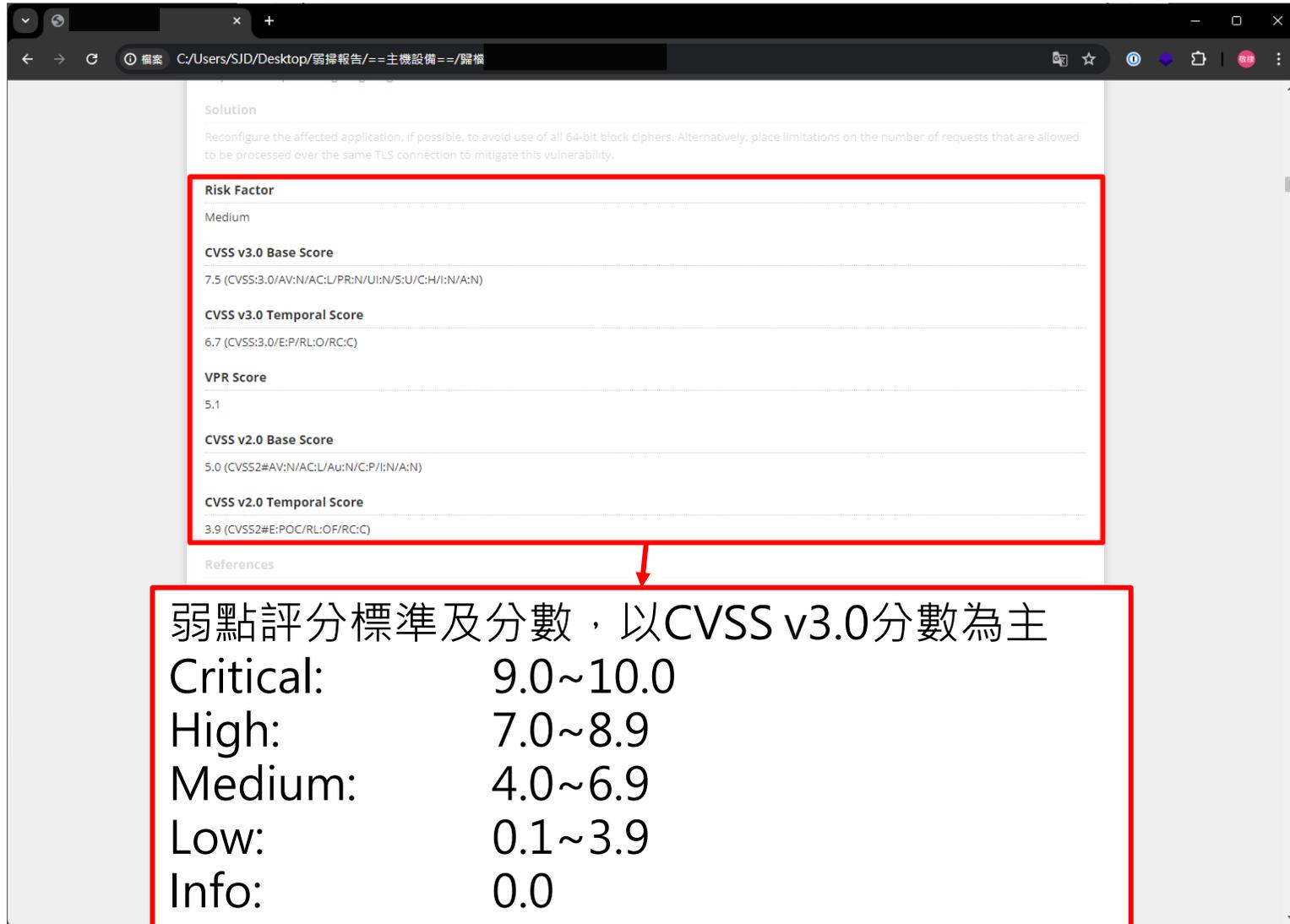
Published: 2016/11/01, Modified: 2022/12/05

Plugin Output

tcp/5068

See Also : 針對該弱點提供相關外部參考連結
Solution : 提供弱點修補建議

評分標準



Solution

Reconfigure the affected application, if possible, to avoid use of all 64-bit block ciphers. Alternatively, place limitations on the number of requests that are allowed to be processed over the same TLS connection to mitigate this vulnerability.

Risk Factor

Medium

CVSS v3.0 Base Score

7.5 (CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N)

CVSS v3.0 Temporal Score

6.7 (CVSS:3.0/E:P/RL:O/RC:C)

VPR Score

5.1

CVSS v2.0 Base Score

5.0 (CVSS2#AV:N/AC:L/Au:N/C:P/I:N/A:N)

CVSS v2.0 Temporal Score

3.9 (CVSS2#E:POC/RL:OF/RC:C)

References

弱點評分標準及分數，以CVSS v3.0分數為主

Critical:	9.0~10.0
High:	7.0~8.9
Medium:	4.0~6.9
Low:	0.1~3.9
Info:	0.0

弱點的發現來源

BID 92631
CVE CVE-2016-2183
CVE CVE-2016-6329
XREF CEA-ID:CEA-2019-0547

Plugin Information
Published: 2016/11/01, Modified: 2022/12/05

Plugin Output
tcp/5068

List of 64-bit weak cipher suites supported by the remote server :
Medium Strength Ciphers (64-bit and < 112-bit key, or 3DES)
Name Code KEX Auth Encryption

DES-CBC3-SHA 0x
High Strength C
Name Code KEX A

IDEA-CBC-SHA 0x
The fields above
(Tenable cipher
(Cipher ID code)
Kex={key exchange}
Auth={authentication}
Encrypt={symmetric encryption method}
MAC={message authentication code}
(export flag)

Plugin Output
tcp/5068

弱點發現來源，用於初步判斷其對應的服務

42873 - SSL Medium Strength Cipher Suites Supported (SWEET32)
51192 - SSL Certificate Cannot Be Trusted
51192 - SSL Certificate Cannot Be Trusted
65821 - SSL RC4 Cipher Suites Supported (Bar Mitzvah)
104743 - TLS Version 1.0 Protocol Detection
157288 - TLS Version 1.1 Deprecated Protocol

常見通訊埠(僅列TCP Port)

port	用途
21	FTP，檔案傳輸協定，用於傳輸檔案使用
22	SSH、SFTP(FTP使用SSH加密驗證，所以也走這個port)
25	SMTP，郵件傳輸協定，通常是mail server會使用
80	WEB SERVER常用，資料傳遞沒有經過SSL加密，HTTP
135	RPC，容易被惡意利用
139	SMB，常用於網路芳鄰共享文件或印表機共享掃描檔案，常見的服務為Samba，容易被惡意利用
443	WEB SERVER常用，資料傳遞有經過SSL加密，HTTPS
445	功能同port 139，容易被惡意利用
1433	MSSQL的預設port
3306	MYSQL的預設port，有些使用者可能會改到port 3307、3308
3389	Microsoft的遠端桌面連線RDP

常見通訊埠(僅列TCP Port)

port	用途
5000	群輝(synology)管理介面預設http port
5001	群輝(synology)管理介面預設https port
5432	PostgreSQL的預設port
7777	健保卡驗證元件
8080	常用於WEB SERVER的proxy port , HTTP
8443	常用於WEB SERVER的proxy port , HTTPS
10443	FortiVPN常用port
14665	帝緯公文系統公文製作元件
17500	DropBox
21112	Apex One的listener , client端憑證名稱為ofcsslagent
39021	中華郵政網路ATM元件
56306	ServiSign多憑證元件 , 可能用於需要自然人憑證、健保卡、銀行金融卡等的系統

報告會看了，但還是不會修...

➤ 打開瀏覽器搜尋弱點名稱，大部分常見狀況都能找到修補教學

The image shows two side-by-side browser windows. The left window displays a vulnerability report for '104743 - TLS Version 1.0 Protocol Detection'. The right window shows a Google search result for the same vulnerability name, with a red box highlighting the search results and a red arrow pointing from the report to the search results.

Host Information

IP: 140.123. [REDACTED]
OS: Microsoft Windows

Vulnerabilities

- 94437 - SSL 64-bit Block Size Cipher Suites Supported (SWEET32)
- 42873 - SSL Medium Strength Cipher Suites Supported (SWEET32)
- 51192 - SSL Certificate Cannot Be Trusted
- 51192 - SSL Certificate Cannot Be Trusted
- 104743 - TLS Version 1.0 Protocol Detection**

Synopsis

The remote service encrypts traffic using an older version of TLS.

Description

The remote service accepts connections encrypted using TLS 1.0. TLS 1.0 has a number of cryptographic problems, but newer versions of TLS like 1.2 and 1.3 are designed against these flaws and should be used instead.

As of March 31, 2020, Endpoints that aren't enabled for TLS 1.2 and higher will no longer function properly.

PCI DSS v3.2 requires that TLS 1.0 be disabled entirely by June 30, 2018, except for POS POI terminals (and other devices) that can be verified as not being susceptible to any known exploits.

See Also

<https://tools.ietf.org/html/draft-ietf-tls-oldversions-deprecate-00>

Solution

Enable support for TLS 1.2 and 1.3, and disable support for TLS 1.0.

Risk Factor

Medium

CVSS v3.0 Base Score

6.5 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:L/A:N)

Google Search Results:

TLS Version 1.0 Protocol Detection

- Learn Microsoft**
<https://learn.microsoft.com/...>
解決TLS 1.0 問題，第2 版
2024年3月19日 — 圖1：OS 版本的安全性通訊協議支援... Windows Server 2019 GS 版本符合 Microsoft SDL 規範，TLS 1.2 僅適用於一組受限的加密套件。 Windows Server 2022 ...
- Tenable**
<https://www.tenable.com/nessus> · 翻譯這個網頁
TLS Version 1.0 Protocol Detection
2017年11月22日 — The remote service encrypts traffic using an older version of TLS. (Nessus Plugin ID 104743)
- Defense.com**
<https://help.defense.com/articles/671...> · 翻譯這個網頁
TLS Version 1.0 Protocol Detection (Windows) Vulnerability
The **TLS Version 1.0 Protocol Detection** Vulnerability when detected with a vulnerability scanner will report it as a CVSS 6.5 (v3).
- Learn Microsoft**
<https://learn.microsoft.com/.../engineering> · 翻譯這個網頁
Solving the TLS 1.0 Problem, 2nd Edition
2023年11月2日 — This document presents guidance on rapidly identifying and removing Transport Layer Security (TLS) protocol version 1.0 dependencies in software
- nchu.edu.tw**
https://www.nchu.edu.tw/_run_name=附件二... PDF
停止對TLS 1.0 與TLS 1.1 傳輸協定之支援。
3、請務等片刻，直到“Grade” 出現英文字，代表檢查完成，再點選“Server” 欄位，顯示之IP，產生結果報告。4、確認結果報告中Protocols 章節之“TLS 1.2” 檢查項目，若 ...
11 頁

Medium

搜尋後還是找不到解決方法…

➤ 個人電腦、筆記型電腦：

- ✓ 請盤點電腦內安裝的軟體，移除不常使用的軟體或服務
- ✓ 若無法解決問題，可以考慮重灌設備，一台重灌後未安裝任何軟體也未進行過任何設定的電腦，基本上不會有任何弱點。

- 提醒windows 10在2025年10月14日終止支援安全性更新，近期單位如有電腦重灌需求建議一律重灌為windows 11

➤ 物聯網設備：

- ✓ 請見P3說明



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尋找弱點來源的服務

常見系統預設通訊埠(僅列TCP Port)

➤ 範圍通常在port 1~1023

port	用途
21	FTP，檔案傳輸協定，用於傳輸檔案使用
22	SSH、SFTP(FTP使用SSH加密驗證，所以也走這個port)
25	SMTP，郵件傳輸協定，通常是mail server會使用
80	WEB SERVER常用，資料傳遞沒有經過SSL加密，HTTP
135	RPC，容易被惡意利用
139	SMB，常用於網路芳鄰共享文件或印表機共享掃描檔案，常見的服務為Samba，容易被惡意利用
443	WEB SERVER常用，資料傳遞有經過SSL加密，HTTPS
445	功能同port 139，容易被惡意利用

從憑證判斷程式或服務

- 發現一項弱點，先看「plugin output」，找到通訊埠為tcp 14665

157288 - TLS Version 1.1 Deprecated Protocol

Synopsis
The remote service encrypts traffic using an older version of TLS.

Description
The remote service accepts connections encrypted using TLS 1.1. TLS 1.1 lacks support for current and recommended cipher suites. Ciphers that support encryption before MAC computation, and authenticated encryption modes such as GCM cannot be used with TLS 1.1

As of March 31, 2020, Endpoints that are not enabled for TLS 1.2 and higher will no longer function properly with major web browsers and major vendors.

See Also
<https://datatracker.ietf.org/doc/html/rfc8996>
<http://www.nessus.org/u7c8ae820d>

Solution
Enable support for TLS 1.2 and/or 1.3, and disable support for TLS 1.1.

Risk Factor
Medium

CVSS v3.0 Base Score
6.5 (CVSS:3.0/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:L/A:N)

CVSS v2.0 Base Score
6.1 (CVSS2#AV:N/AC:H/Au:N/C:I/P:A/N)

References
XREF [CWE:327](#)

Plugin Information
Published: 2022/04/04, Modified: 2024/05/01

Plugin Output
tcp/14665/www

TLSv1.1 is enabled and the server supports at least one cipher.

從憑證判斷程式或服務

- 找到「10863 - SSL Certificate Information」資訊，確認通訊埠一樣為tcp 14665

10863 - SSL Certificate Information

Synopsis
This plugin displays the SSL certificate.

Description
This plugin connects to every SSL-related port and attempts to extract and dump the X.509 certificate.

Solution
n/a

Risk Factor
None

Plugin Information
Published: 2008/05/19, Modified: 2021/02/03

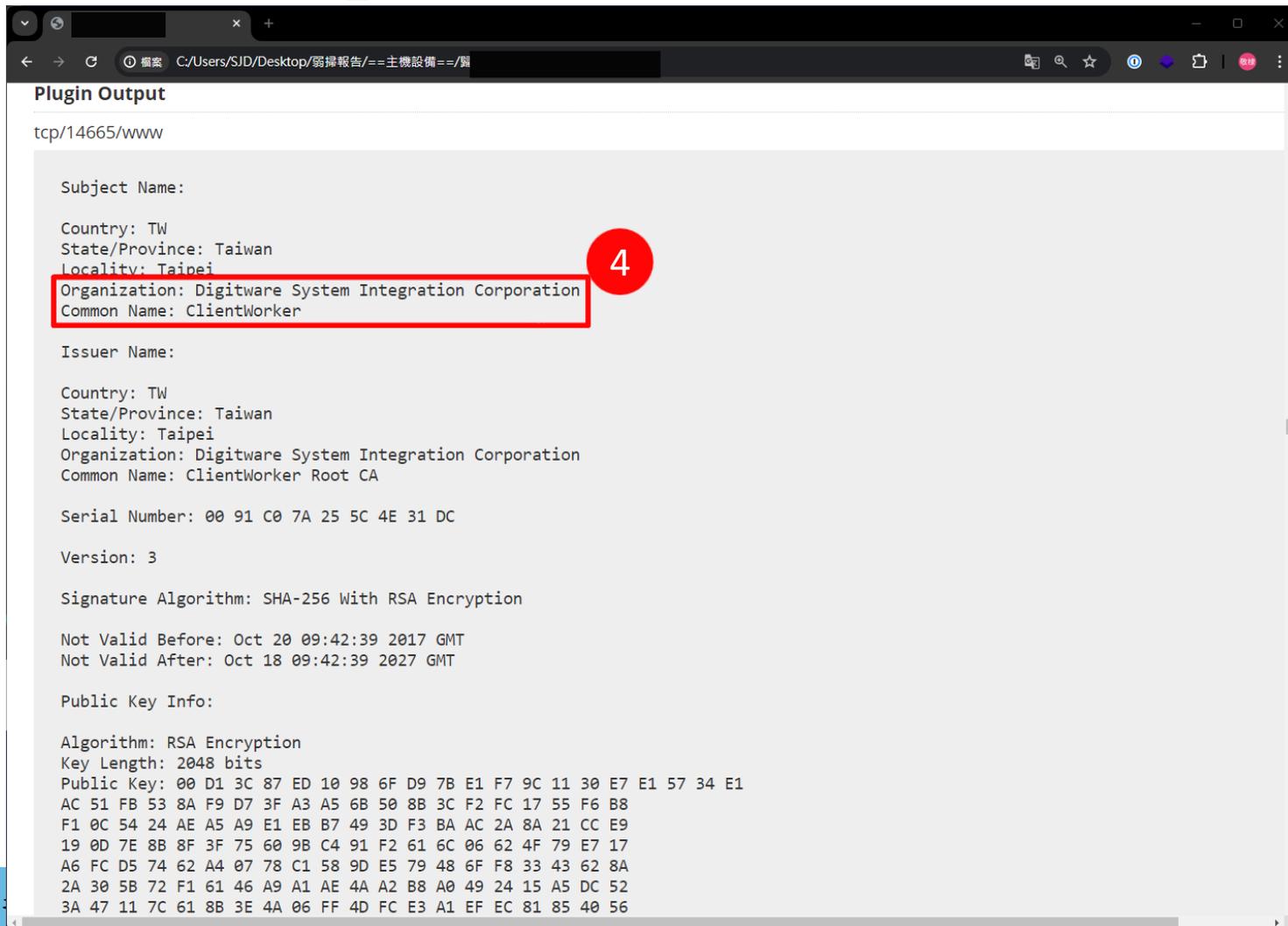
Plugin Output
tcp/14665/www

Plugin Output
tcp/14665/www

Subject Name:
Country: TW
State/Province: Taiwan
Locality: Taipei
Organization: Digitware System Integration Corporation
Common Name: ClientWorker
Issuer Name:

從憑證判斷程式或服務

- 檢視其憑證詳細內容，可以看「Organization」及「Common Name」資訊



```
Plugin Output
tcp/14665/www

Subject Name:

Country: TW
State/Province: Taiwan
Locality: Taipei
Organization: Digitware System Integration Corporation
Common Name: ClientWorker

Issuer Name:

Country: TW
State/Province: Taiwan
Locality: Taipei
Organization: Digitware System Integration Corporation
Common Name: ClientWorker Root CA

Serial Number: 00 91 C0 7A 25 5C 4E 31 DC

Version: 3

Signature Algorithm: SHA-256 With RSA Encryption

Not Valid Before: Oct 20 09:42:39 2017 GMT
Not Valid After: Oct 18 09:42:39 2027 GMT

Public Key Info:

Algorithm: RSA Encryption
Key Length: 2048 bits
Public Key: 00 D1 3C 87 ED 10 98 6F D9 7B E1 F7 9C 11 30 E7 E1 57 34 E1
AC 51 FB 53 8A F9 D7 3F A3 A5 6B 50 8B 3C F2 FC 17 55 F6 B8
F1 0C 54 24 AE A5 A9 E1 EB B7 49 3D F3 BA AC 2A 8A 21 CC E9
19 0D 7E 8B 8F 3F 75 60 9B C4 91 F2 61 6C 06 62 4F 79 E7 17
A6 FC D5 74 62 A4 07 78 C1 58 9D E5 79 48 6F F8 33 43 62 8A
2A 30 5B 72 F1 61 46 A9 A1 AE 4A A2 B8 A0 49 24 15 A5 DC 52
3A 47 11 7C 61 8B 3E 4A 06 FF 4D FC E3 A1 EF EC 81 85 40 56
```

從憑證判斷程式或服務

- ▶ 打開瀏覽器搜尋組織名稱或憑證通用名稱，以本案為例查到帝緯公司，推測可能是帝緯公司提供的服務

The screenshot shows a Google search interface. The search bar (labeled 5) contains the text "Digitware System Integration Corporation". The search results (labeled 6) display the following information for "帝緯系統整合股份有限公司":

- Company Name: 帝緯系統整合股份有限公司
- Website: <https://www.dsic.com.tw>
- Address: 02-2511-1950. 業務專線, 04-2293-7393. ecare@mail.dsic.com.tw. Digitware System Integration Corporation. All Rights Reserved. 網站地圖 | 聯絡資訊 | 業務聯絡單.
- Services: 帝緯簡介, 進階版雲端公文線上簽核系統, 聯絡資訊, 最新消息, 品質政策.

Below the main result, there are additional links for "台灣公司網" and "台中市電腦商業同業公會".

從憑證判斷程式或服務

- 組織加憑證通用名稱查詢，得到疑似是公文系統相關服務，後續針對該服務實施修補措施(更新程式…等)

The screenshot shows a Google search for "帝緯 ClientWorker". The search bar is highlighted with a red box and a red circle containing the number "7". The search results are listed below, with a red box and a red circle containing the number "8" highlighting the first result from 屏東大學 (National Formosa University). The first result is titled "[ClientWorker] - FireFox手動匯入根憑證作法" and includes the URL "https://cd.nptu.edu.tw/app". Other results include 帝緯系統整合股份有限公司 (Dilei System Integration Co., Ltd.) and 國立屏東特殊教育學校 (National Pingtung Special Education School).

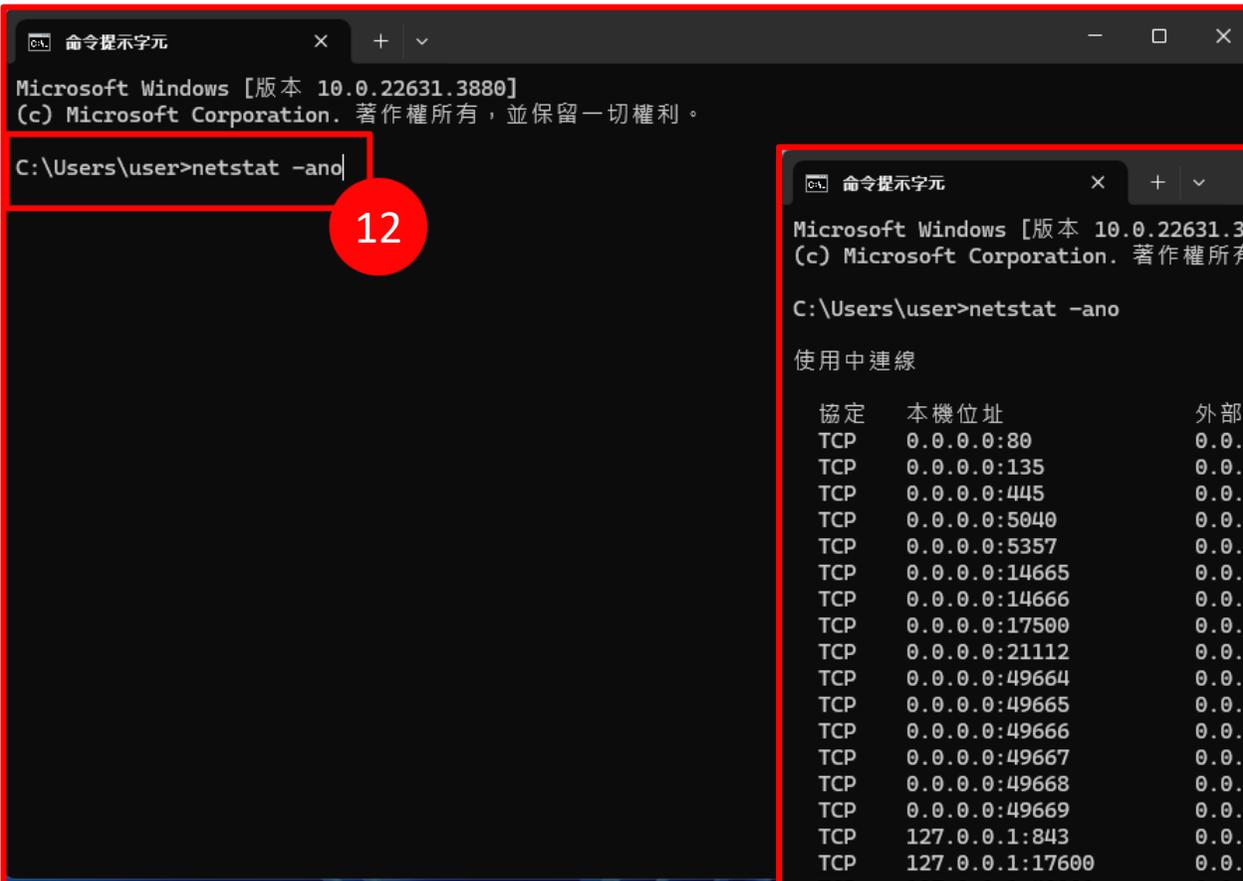
從系統工作程序找服務

➤ 工作列搜尋「cmd」，點擊開啟「命令提示字元」

The image shows a Windows search interface with the search term 'cmd' entered in the taskbar. The search results are displayed in a list under the heading '最佳比對' (Best matches). The first result is '命令提示字元' (Command Prompt) under the category '系統' (System), which is highlighted with a red box and a red circle containing the number '10'. Below this, there is a '搜尋網路' (Search the web) section with various search suggestions. To the right of the search results, there are several action buttons: '開啟' (Open), '以系統管理員身分執行' (Run as administrator), '開啟檔案位置' (Open file location), '釘選到 [開始]' (Pin to Start), and '釘選到工作列' (Pin to taskbar). A red circle with the number '11' is placed over the '開啟' button. The '開啟' button is highlighted with a red box, and a red circle with the number '9' is placed over the search bar in the taskbar. The Command Prompt window is open, showing the text: 'Microsoft Windows [版本 10.0.22631.3880] (c) Microsoft Corporation. 著作權所有，並保留一切權利。 C:\Users\user>'.

netstat指令

➤ 輸入指令「netstat -ano」，按鍵盤「Enter」執行指令



```
Microsoft Windows [版本 10.0.22631.3880]
(c) Microsoft Corporation. 著作權所有，並保留一切權利。

C:\Users\user>netstat -ano
```



```
Microsoft Windows [版本 10.0.22631.3880]
(c) Microsoft Corporation. 著作權所有，並保留一切權利。

C:\Users\user>netstat -ano

使用中連線

協定    本機位址          外部位址          狀態          PID
TCP     0.0.0.0:80        0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:135      0.0.0.0:0        LISTENING     1060
TCP     0.0.0.0:445      0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:5040     0.0.0.0:0        LISTENING     6692
TCP     0.0.0.0:5357     0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:14665    0.0.0.0:0        LISTENING     13592
TCP     0.0.0.0:14666    0.0.0.0:0        LISTENING     13592
TCP     0.0.0.0:17500    0.0.0.0:0        LISTENING     3768
TCP     0.0.0.0:21112    0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:49664    0.0.0.0:0        LISTENING     920
TCP     0.0.0.0:49665    0.0.0.0:0        LISTENING     748
TCP     0.0.0.0:49666    0.0.0.0:0        LISTENING     1848
TCP     0.0.0.0:49667    0.0.0.0:0        LISTENING     2172
TCP     0.0.0.0:49668    0.0.0.0:0        LISTENING     2856
TCP     0.0.0.0:49669    0.0.0.0:0        LISTENING     876
TCP     127.0.0.1:843    0.0.0.0:0        LISTENING     3768
TCP     127.0.0.1:17600  0.0.0.0:0        LISTENING     3768
TCP     127.0.0.1:40000  0.0.0.0:0        LISTENING     5580
TCP     127.0.0.1:40000  127.0.0.1:49875  ESTABLISHED   5580
TCP     127.0.0.1:49786  127.0.0.1:49787  ESTABLISHED   11836
TCP     127.0.0.1:49787  127.0.0.1:49786  ESTABLISHED   11836
TCP     127.0.0.1:49789  127.0.0.1:49790  ESTABLISHED   11836
```

netstat 指令參數說明

➤ netstat + 參數

參數	說明
-a	顯示系統中所有正在活動中與監聽的tcp、udp埠，來源及目的地如果具有域名則會顯示域名
-n	連線的來源及目的不解析域名(只顯示IP)，因為不解析域名，指令執行動作會較快完成
-o	顯示所有活動的進程ID(PID)
-p	查詢指定通訊協定，如tcp、udp、icmp等，使用指令時需要指定通訊協定
-s	顯示通訊協定的統計資訊，可以搭配-p使用，不指定就是全部列出

➤ 使用範例

指令	說明
netstat -an	顯示系統中所有正在活動中與監聽的tcp、udp埠，以IP顯示來源及目的地
netstat -ano	顯示系統中所有正在活動中與監聽的tcp、udp埠，以IP顯示來源及目的地、顯示所有活動的PID
netstat -anop tcp	顯示系統中所有正在活動中與監聽的tcp埠，以IP顯示來源及目的地、顯示所有活動的PID

查找系統進程PID

- 依報告找到TCP 14665的項目
- 找到對應的進程ID(PID)，以本案為例PID為「13592」

```
Microsoft Windows [版本 10.0.22631.3880]
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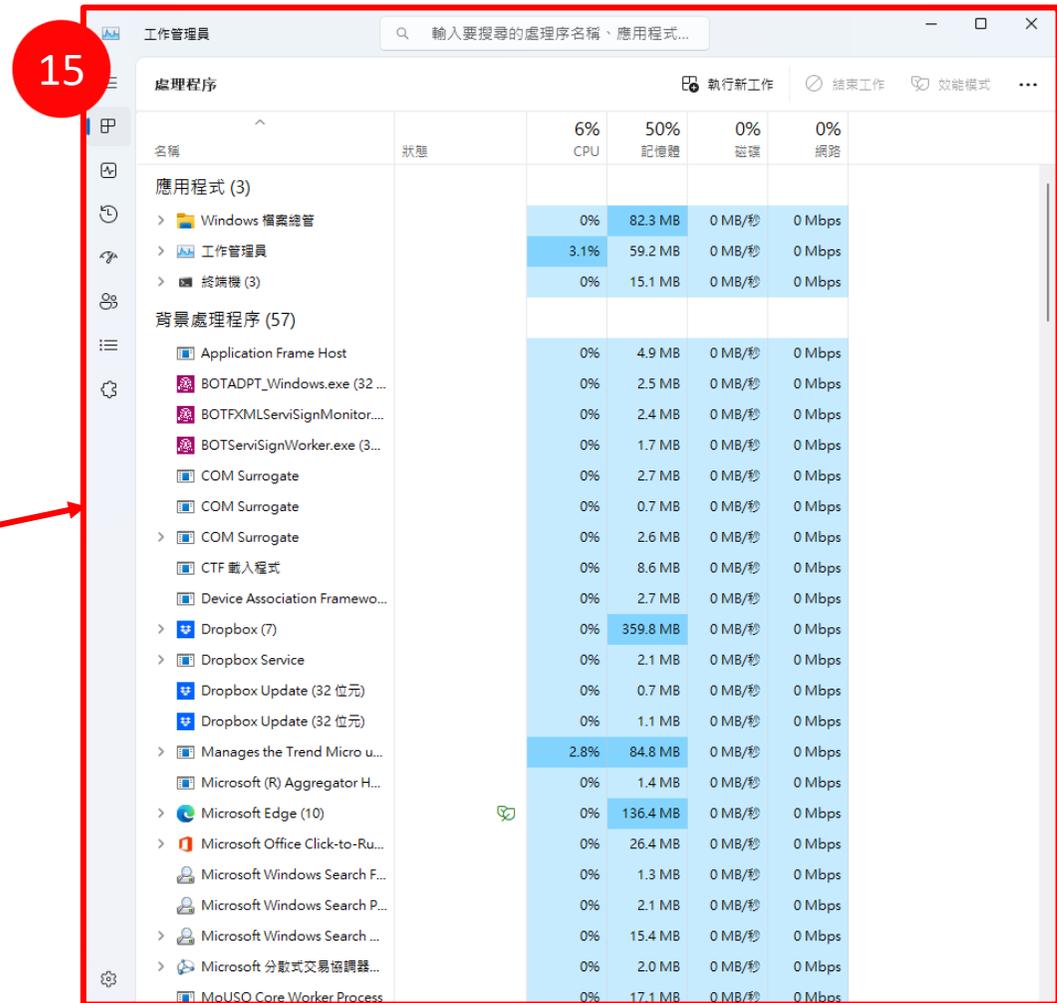
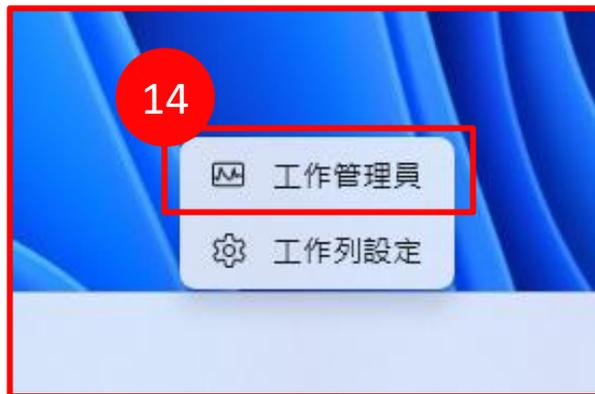
C:\Users\user>netstat -ano

使用中連線

協定    本機位址          外部位址          狀態          PID
TCP     0.0.0.0:80        0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:135      0.0.0.0:0        LISTENING     1060
TCP     0.0.0.0:445      0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:5040     0.0.0.0:0        LISTENING     6692
TCP     0.0.0.0:5357     0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:14665    0.0.0.0:0        LISTENING     13592
TCP     0.0.0.0:14666    0.0.0.0:0        LISTENING     13592
TCP     0.0.0.0:17500    0.0.0.0:0        LISTENING     3768
TCP     0.0.0.0:21112    0.0.0.0:0        LISTENING     4
TCP     0.0.0.0:49664    0.0.0.0:0        LISTENING     920
TCP     0.0.0.0:49665    0.0.0.0:0        LISTENING     748
TCP     0.0.0.0:49666    0.0.0.0:0        LISTENING     1848
TCP     0.0.0.0:49667    0.0.0.0:0        LISTENING     2172
TCP     0.0.0.0:49668    0.0.0.0:0        LISTENING     2856
TCP     0.0.0.0:49669    0.0.0.0:0        LISTENING     876
TCP     127.0.0.1:843    0.0.0.0:0        LISTENING     3768
TCP     127.0.0.1:17600  0.0.0.0:0        LISTENING     3768
TCP     127.0.0.1:40000  0.0.0.0:0        LISTENING     5580
TCP     127.0.0.1:40000  127.0.0.1:49875  ESTABLISHED   5580
TCP     127.0.0.1:49786  127.0.0.1:49787  ESTABLISHED   11836
TCP     127.0.0.1:49787  127.0.0.1:49786  ESTABLISHED   11836
TCP     127.0.0.1:49789  127.0.0.1:49790  ESTABLISHED   11836
```

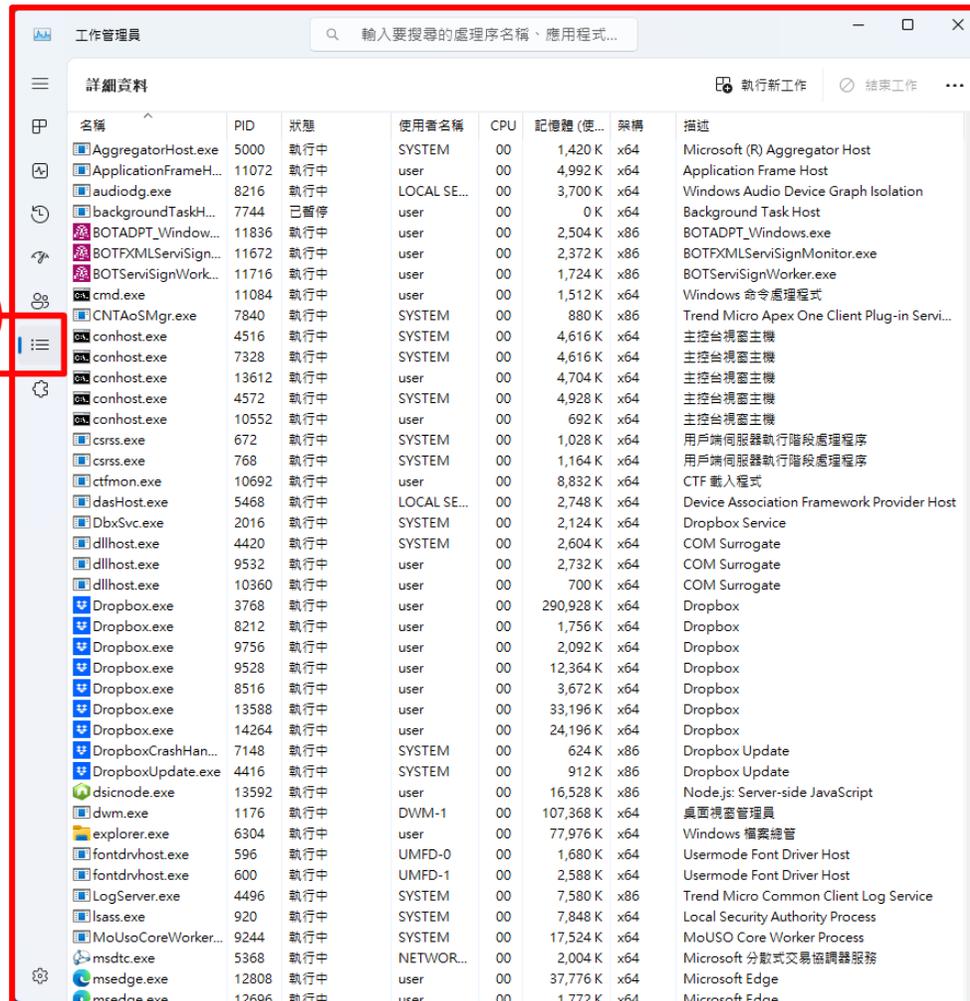
依PID查找對應服務

➤ 工作列空白處「右鍵」，點擊開啟「工作管理員」



依PID查找對應服務

➤ 切換到「詳細資料」頁籤



依PID查找對應服務

➤ 點擊PID欄位，依數字由小到大排序

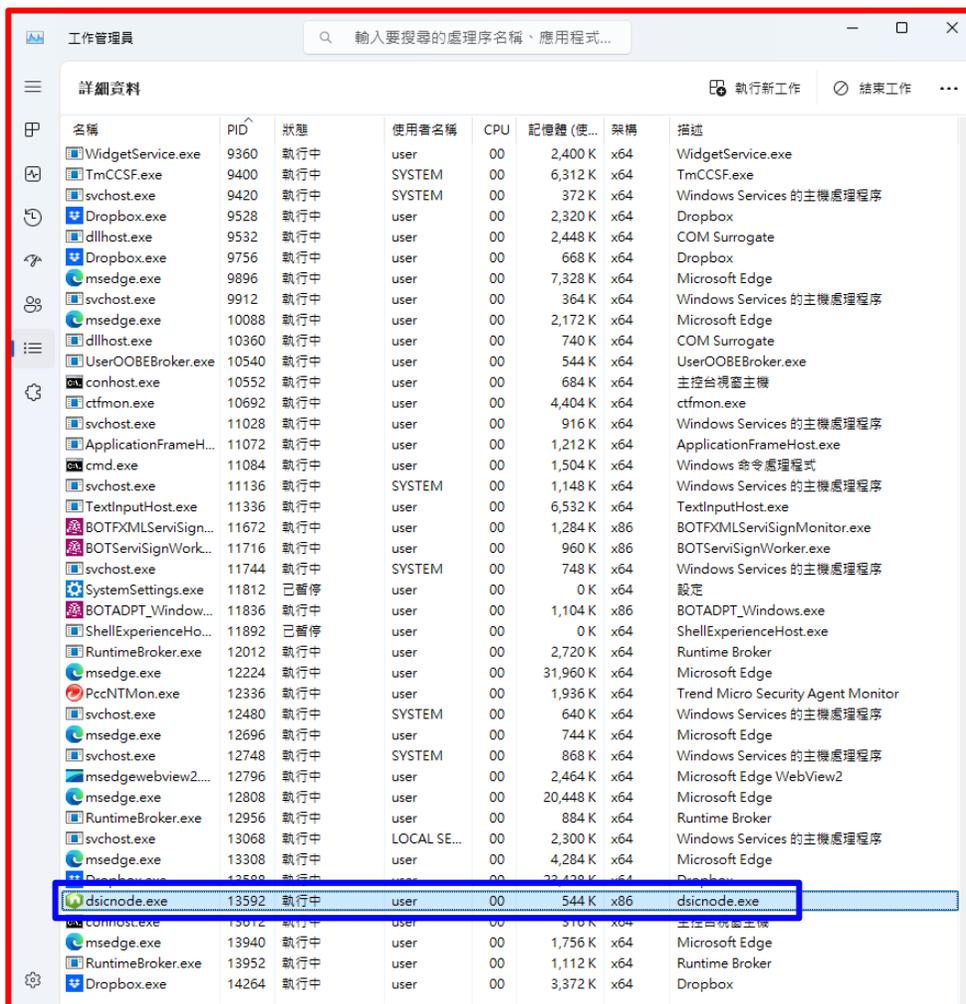
工作管理員 輸入要搜尋的處理程序名稱、應用程式...

詳細資料 執行新工作 結束工作 ...

名稱	PID	狀態	使用者名稱	CPU	記憶體 (使...	架構	描述
系統擷斷	0	執行中	SYSTEM	00	0 K		延遲程序呼叫與擷斷服務常式
系統開置處理程序	4	執行中	SYSTEM	99	8 K		處理器的開置時間百分比
System	4	執行中	SYSTEM	00	20 K		ntoskrnl.exe
Registry	104	執行中	SYSTEM	00	2,168 K	x64	NT Kernel & System
smss.exe	524	執行中	SYSTEM	00	96 K	x64	smss.exe
msedge.exe	560	執行中	user	00	1,552 K	x64	Microsoft Edge
svchost.exe	584	執行中	SYSTEM	00	10,804 K	x64	Windows Services 的主機處理程序
fontdrvhost.exe	596	執行中	UMFD-0	00	280 K	x64	Usermode Font Driver Host
fontdrvhost.exe	600	執行中	UMFD-1	00	1,236 K	x64	Usermode Font Driver Host
csrss.exe	672	執行中	SYSTEM	00	840 K	x64	用戶端伺服器執行階段處理程序
wininit.exe	748	執行中	SYSTEM	00	320 K	x64	wininit.exe
csrss.exe	768	執行中	SYSTEM	00	3,388 K	x64	用戶端伺服器執行階段處理程序
winlogon.exe	852	執行中	SYSTEM	00	388 K	x64	winlogon.exe
services.exe	876	執行中	SYSTEM	00	3,016 K	x64	服務及控制站應用程式
lsass.exe	920	執行中	SYSTEM	00	6,096 K	x64	lsass.exe
svchost.exe	1060	執行中	NETWOR...	00	6,684 K	x64	Windows Services 的主機處理程序
svchost.exe	1108	執行中	SYSTEM	00	1,248 K	x64	Windows Services 的主機處理程序
msedgewebview2...	1136	執行中	user	00	868 K	x64	WebView2: 小工具
dwm.exe	1176	執行中	DWM-1	00	40,776 K	x64	dwm.exe
svchost.exe	1328	執行中	LOCAL SE...	00	332 K	x64	Windows Services 的主機處理程序
svchost.exe	1336	執行中	LOCAL SE...	00	928 K	x64	Windows Services 的主機處理程序
svchost.exe	1440	執行中	LOCAL SE...	00	2,008 K	x64	Windows Services 的主機處理程序
svchost.exe	1472	執行中	SYSTEM	00	508 K	x64	Windows Services 的主機處理程序
svchost.exe	1480	執行中	LOCAL SE...	00	1,156 K	x64	Windows Services 的主機處理程序
svchost.exe	1520	執行中	NETWOR...	00	2,708 K	x64	Windows Services 的主機處理程序
WmiPrvSE.exe	1624	執行中	NETWOR...	00	1,272 K	x64	WMI Provider Host
svchost.exe	1632	執行中	SYSTEM	00	392 K	x64	Windows Services 的主機處理程序
svchost.exe	1652	執行中	LOCAL SE...	00	380 K	x64	Windows Services 的主機處理程序
svchost.exe	1680	執行中	LOCAL SE...	00	1,420 K	x64	Windows Services 的主機處理程序
svchost.exe	1692	執行中	LOCAL SE...	00	372 K	x64	Windows Services 的主機處理程序
svchost.exe	1832	執行中	SYSTEM	00	872 K	x64	Windows Services 的主機處理程序
svchost.exe	1840	執行中	NETWOR...	00	1,532 K	x64	Windows Services 的主機處理程序
svchost.exe	1848	執行中	LOCAL SE...	00	8,720 K	x64	Windows Services 的主機處理程序
svchost.exe	1908	執行中	SYSTEM	00	816 K	x64	Windows Services 的主機處理程序
svchost.exe	1920	執行中	LOCAL SE...	00	1,872 K	x64	Windows Services 的主機處理程序
svchost.exe	1928	執行中	SYSTEM	00	1,264 K	x64	Windows Services 的主機處理程序
svchost.exe	1944	執行中	SYSTEM	00	380 K	x64	Windows Services 的主機處理程序
DbxSvc.exe	2016	執行中	SYSTEM	00	672 K	x64	DbxSvc.exe
svchost.exe	2084	執行中	LOCAL SE...	00	1,124 K	x64	Windows Services 的主機處理程序
SnippingTool.exe	2108	執行中	user	00	11,436 K	x64	SnippingTool.exe
svchost.exe	2156	執行中	SYSTEM	00	420 K	x64	Windows Services 的主機處理程序

依PID查找對應服務

➤ 找到PID為「13592」的執行程序



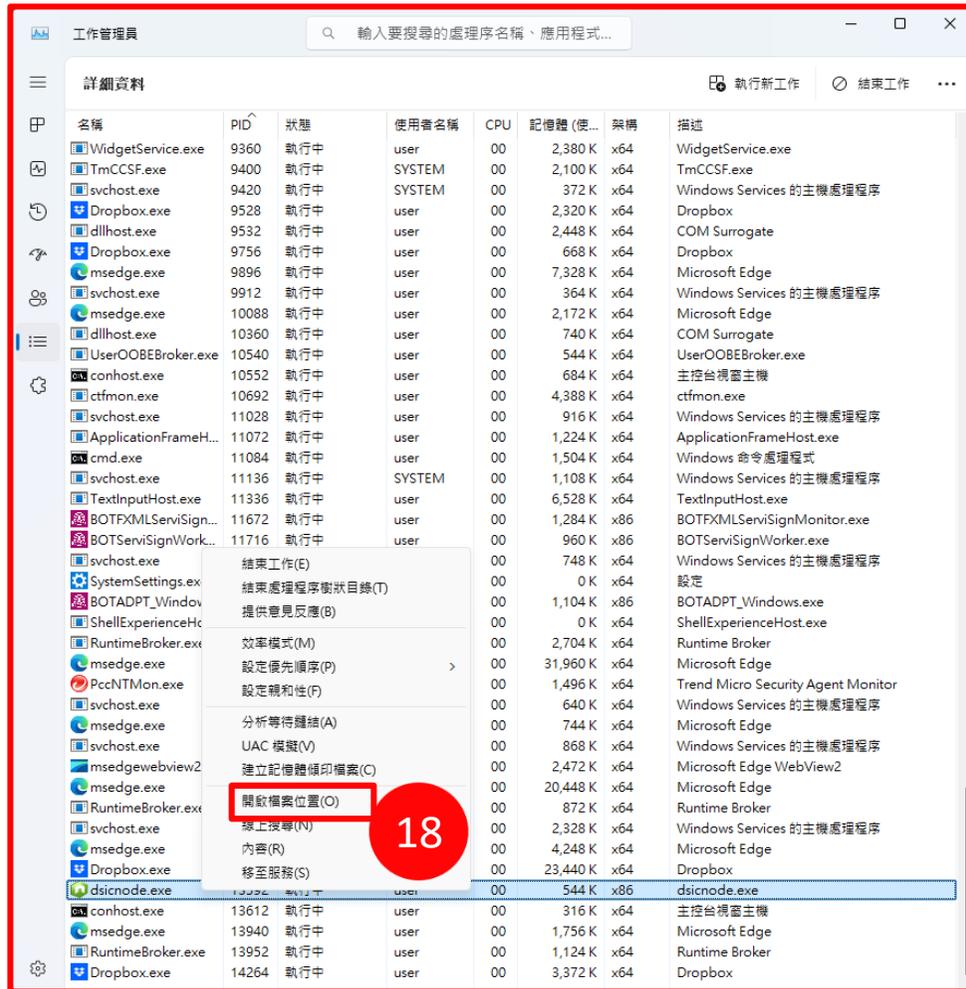
工作管理員

詳細資料

名稱	PID	狀態	使用者名稱	CPU	記憶體(使...)	架構	描述
WidgetService.exe	9360	執行中	user	00	2,400 K	x64	WidgetService.exe
TmCCSF.exe	9400	執行中	SYSTEM	00	6,312 K	x64	TmCCSF.exe
svchost.exe	9420	執行中	SYSTEM	00	372 K	x64	Windows Services 的主機處理程序
Dropbox.exe	9528	執行中	user	00	2,320 K	x64	Dropbox
dllhost.exe	9532	執行中	user	00	2,448 K	x64	COM Surrogate
Dropbox.exe	9756	執行中	user	00	668 K	x64	Dropbox
msedge.exe	9896	執行中	user	00	7,328 K	x64	Microsoft Edge
svchost.exe	9912	執行中	user	00	364 K	x64	Windows Services 的主機處理程序
msedge.exe	10088	執行中	user	00	2,172 K	x64	Microsoft Edge
dllhost.exe	10360	執行中	user	00	740 K	x64	COM Surrogate
UserOOBEBroker.exe	10540	執行中	user	00	544 K	x64	UserOOBEBroker.exe
conhost.exe	10552	執行中	user	00	684 K	x64	主控台視窗主機
ctfmon.exe	10692	執行中	user	00	4,404 K	x64	ctfmon.exe
svchost.exe	11028	執行中	user	00	916 K	x64	Windows Services 的主機處理程序
ApplicationFrameH...	11072	執行中	user	00	1,212 K	x64	ApplicationFrameHost.exe
cmd.exe	11084	執行中	user	00	1,504 K	x64	Windows 命令處理程式
svchost.exe	11136	執行中	SYSTEM	00	1,148 K	x64	Windows Services 的主機處理程序
TextInputHost.exe	11336	執行中	user	00	6,532 K	x64	TextInputHost.exe
BOTFXMLServiSign...	11672	執行中	user	00	1,284 K	x86	BOTFXMLServiSignMonitor.exe
BOTServiSignWork...	11716	執行中	user	00	960 K	x86	BOTServiSignWorker.exe
svchost.exe	11744	執行中	SYSTEM	00	748 K	x64	Windows Services 的主機處理程序
SystemSettings.exe	11812	已暫停	user	00	0 K	x64	設定
BOTADPT_Window...	11836	執行中	user	00	1,104 K	x86	BOTADPT_Windows.exe
ShellExperienceHo...	11892	已暫停	user	00	0 K	x64	ShellExperienceHost.exe
RuntimeBroker.exe	12012	執行中	user	00	2,720 K	x64	Runtime Broker
msedge.exe	12224	執行中	user	00	31,960 K	x64	Microsoft Edge
PccNTMon.exe	12336	執行中	user	00	1,936 K	x64	Trend Micro Security Agent Monitor
svchost.exe	12480	執行中	SYSTEM	00	640 K	x64	Windows Services 的主機處理程序
msedge.exe	12696	執行中	user	00	744 K	x64	Microsoft Edge
svchost.exe	12748	執行中	SYSTEM	00	868 K	x64	Windows Services 的主機處理程序
msedgewebview2...	12796	執行中	user	00	2,464 K	x64	Microsoft Edge WebView2
msedge.exe	12808	執行中	user	00	20,448 K	x64	Microsoft Edge
RuntimeBroker.exe	12956	執行中	user	00	884 K	x64	Runtime Broker
svchost.exe	13068	執行中	LOCAL SE...	00	2,300 K	x64	Windows Services 的主機處理程序
msedge.exe	13308	執行中	user	00	4,284 K	x64	Microsoft Edge
Dropbox.exe	13596	執行中	user	00	32,128 K	x64	Dropbox
dsicnode.exe	13592	執行中	user	00	544 K	x86	dsicnode.exe
conhost.exe	13612	執行中	user	00	316 K	x64	主控台視窗主機
msedge.exe	13940	執行中	user	00	1,756 K	x64	Microsoft Edge
RuntimeBroker.exe	13952	執行中	user	00	1,112 K	x64	Runtime Broker
Dropbox.exe	14264	執行中	user	00	3,372 K	x64	Dropbox

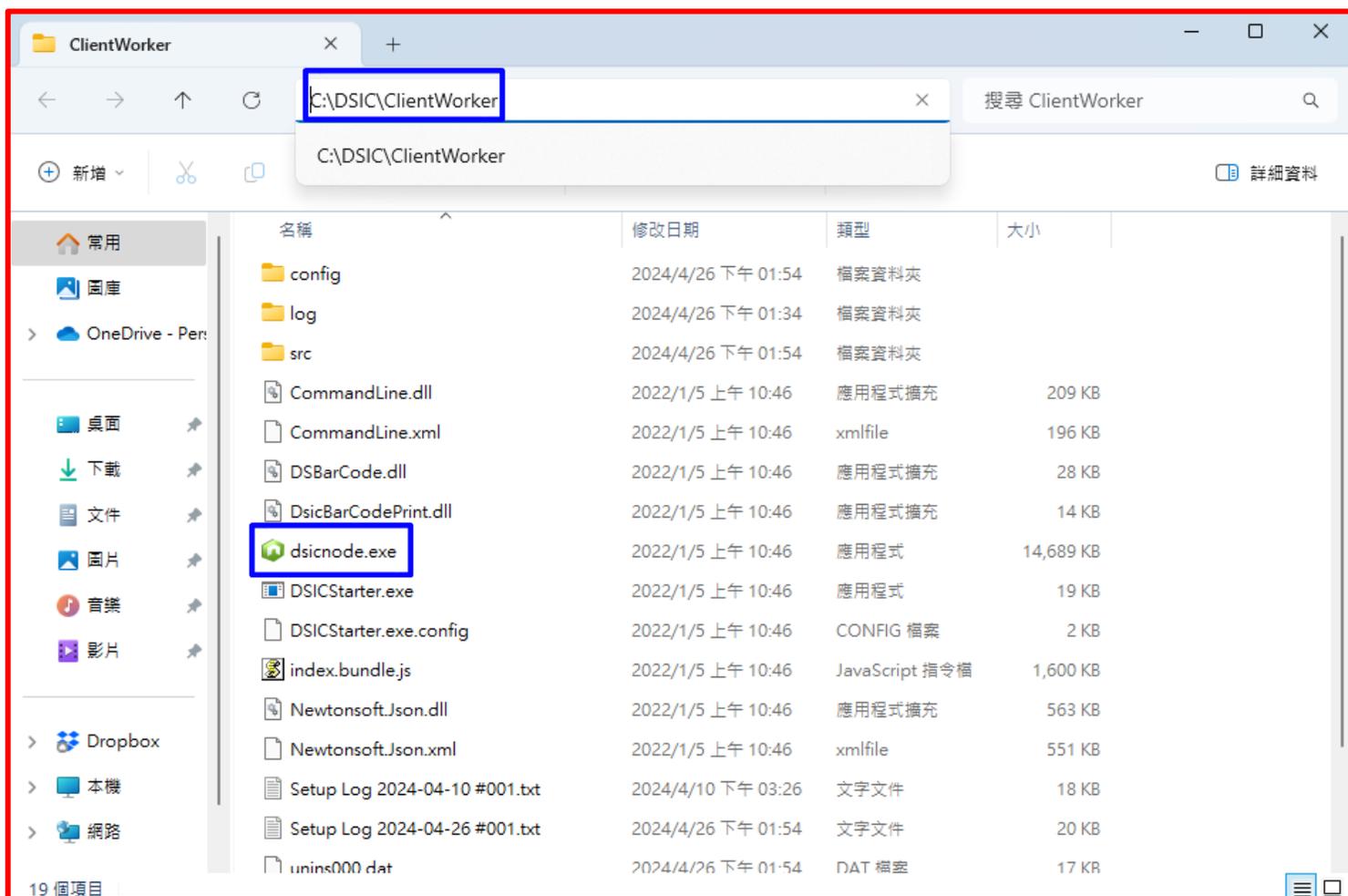
查找服務安裝目錄

➤ 對執行程序點「右鍵」，點選「開啟檔案位置」



查找服務安裝目錄

➤ 開啟該執行程序安裝的位置，可以從目錄路徑或程式名稱判斷服務



已經找到安裝路徑了，還是看不出服務

➤ 把安裝路徑或程式名稱丟到瀏覽器查詢…

The image shows two side-by-side screenshots. The left screenshot is a Windows File Explorer window titled 'ClientWorker'. The address bar shows 'C:\DSIC\ClientWorker' and is highlighted with a blue box. The file list on the right includes folders like 'config', 'log', and 'src', and files like 'CommandLine.dll', 'CommandLine.xml', 'DSBarCode.dll', 'DsicBarCodePrint.dll', 'dsicnode.exe' (highlighted with a blue box), 'DSICStarter.exe', 'DSICStarter.exe.config', 'index.bundle.js', 'Newtonsoft.Json.dll', 'Newtonsoft.Json.xml', 'Setup Log 2024-04-10 #001.txt', 'Setup Log 2024-04-26 #001.txt', and 'unins000.dat'. The right screenshot is a Google search result for 'DSIC'. The search bar contains 'DSIC' and is highlighted with a blue box. The search results show several entries, with the top one being '帝緯系統整合股份有限公司' (Diligent System Integration Co., Ltd.), which is highlighted with a blue box. The company's website is listed as 'https://www.dsic.com.tw'. Below the company name, there is a brief description: '帝緯系統整合股份有限公司 02-2511-1950. 業務專線: 04-2293-7393. ecare@mail.dsic.com.tw. Digitware System Integration Corporation. All Rights Reserved. 網站地圖 | 聯絡資訊 | 業務聯絡單. 進階版雲端公文線上簽核系統. 客服聯絡單. 最新消息. 帝緯簡介.' The search results also include a map of the company's location and a 'Questions & Answers' section.

結論

- 看SSL憑證，初步先判斷弱點出現在哪個服務
- 從系統工作程序再次確認是哪個服務
 - ✓ 如果目標程式當下不是運作中，用這個方法可能會找不到服務
 - ✓ 如果查到PID為4，表示由系統身分在運行該服務，可以從本機防火牆找對應通訊埠的規則再判斷該規則套用的服務

11157 - Trojan Horse Detection

➤ 先看「plugin output」，找到通訊埠為tcp 17500

OS: Microsoft Windows 10 Pro

Vulnerabilities

11157 - Trojan Horse Detection

Synopsis

The remote host might be infected by a Trojan / worm / malware.

Description

An unknown service was found running on this port. Trojan Horses and other malware may sometimes open these ports to allow remote access to the machine.

Ensure that this port is intended to be open and controlled by legitimate software installed by the administrator.

Solution

If a Trojan Horse is found running, it is highly recommended that the operating system be reinstalled to ensure removal.

Risk Factor

Medium

Plugin Information

Published: 2002/11/19, Modified: 2022/04/11

Plugin Output

tcp/17500

Plugin Output

tcp/17500

An unknown service is running on this port. It is sometimes opened by this/these Trojan horse(s): CrazyNet

Unless you know for sure what service is behind it, you should confirm this is intended to be running

*** Don't panic, Nessus only found an open port. It may *** have been dynamically allocated to some service (e.g. RPC)

45590 - Common Platform Enumeration (CPE)

Synopsis

It was possible to enumerate CPE names that matched on the remote system.

Description

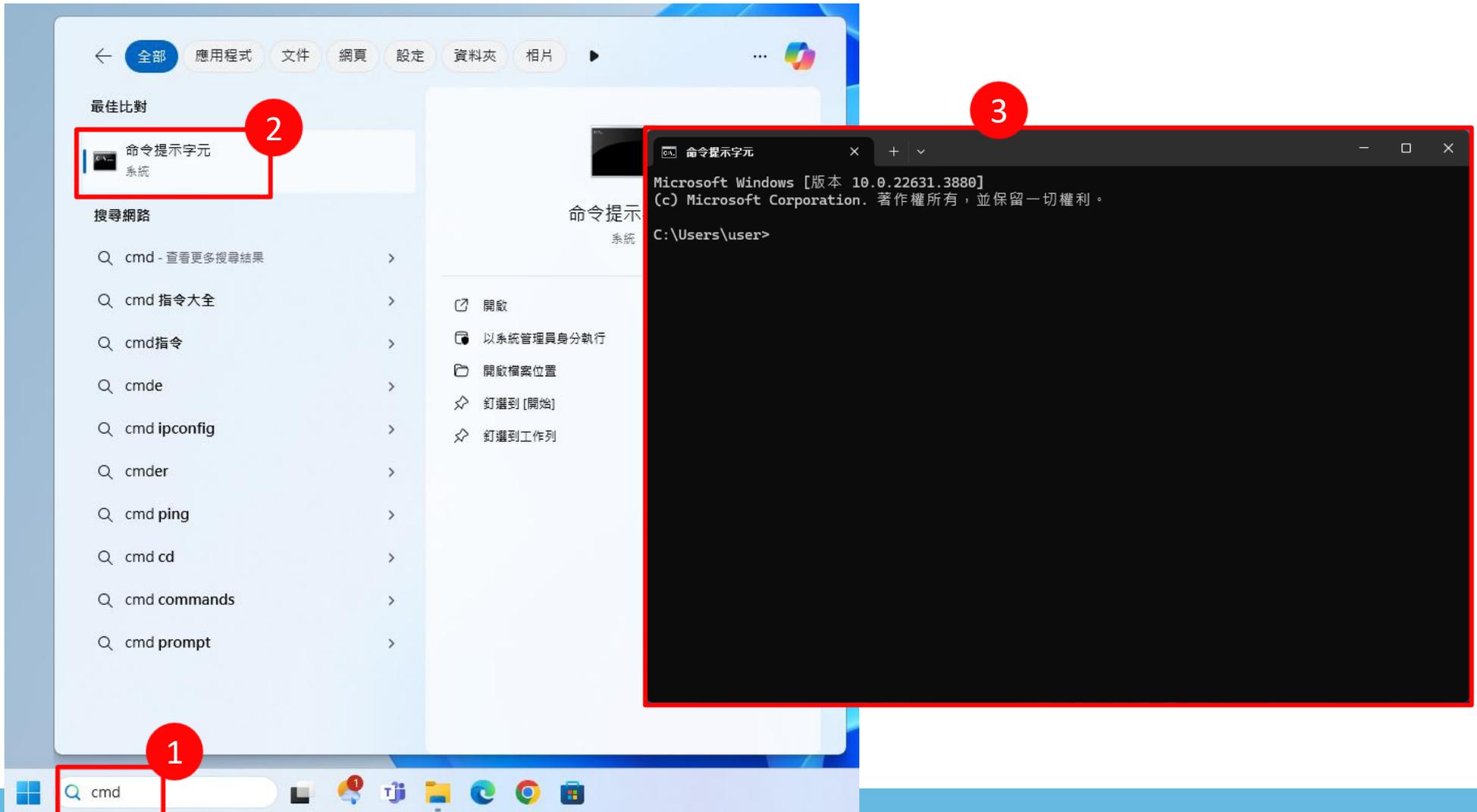
By using information obtained from a Nessus scan, this plugin reports CPE (Common Platform Enumeration) matches for various hardware and software products

11157 – Trojan Horse Detection

- 這一項弱點原因是找不到SSL憑證，弱掃工具判斷可能是惡意植入的程式或服務
- 從系統工作程序找看看

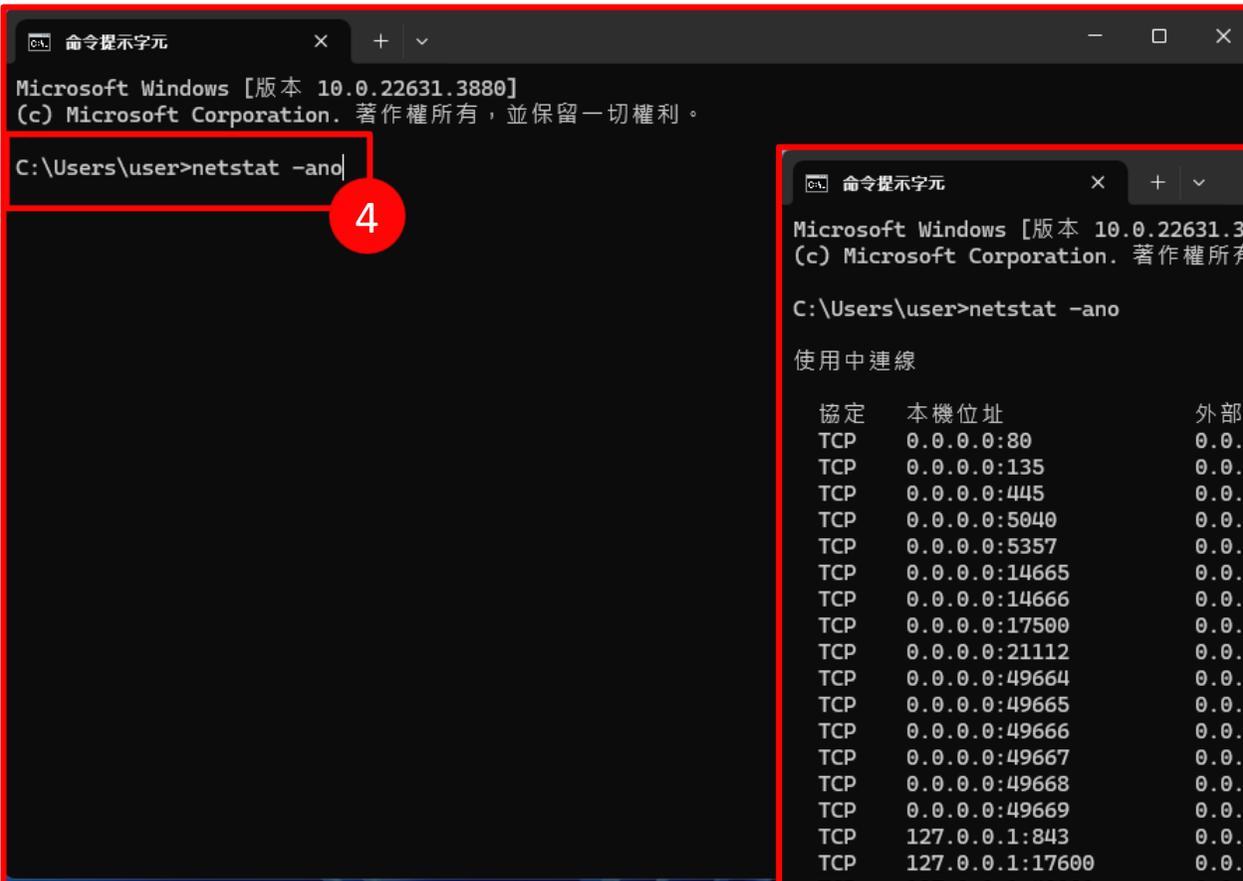
從系統工作程序找服務

➤ 工作列搜尋「cmd」，點擊開啟「命令提示字元」



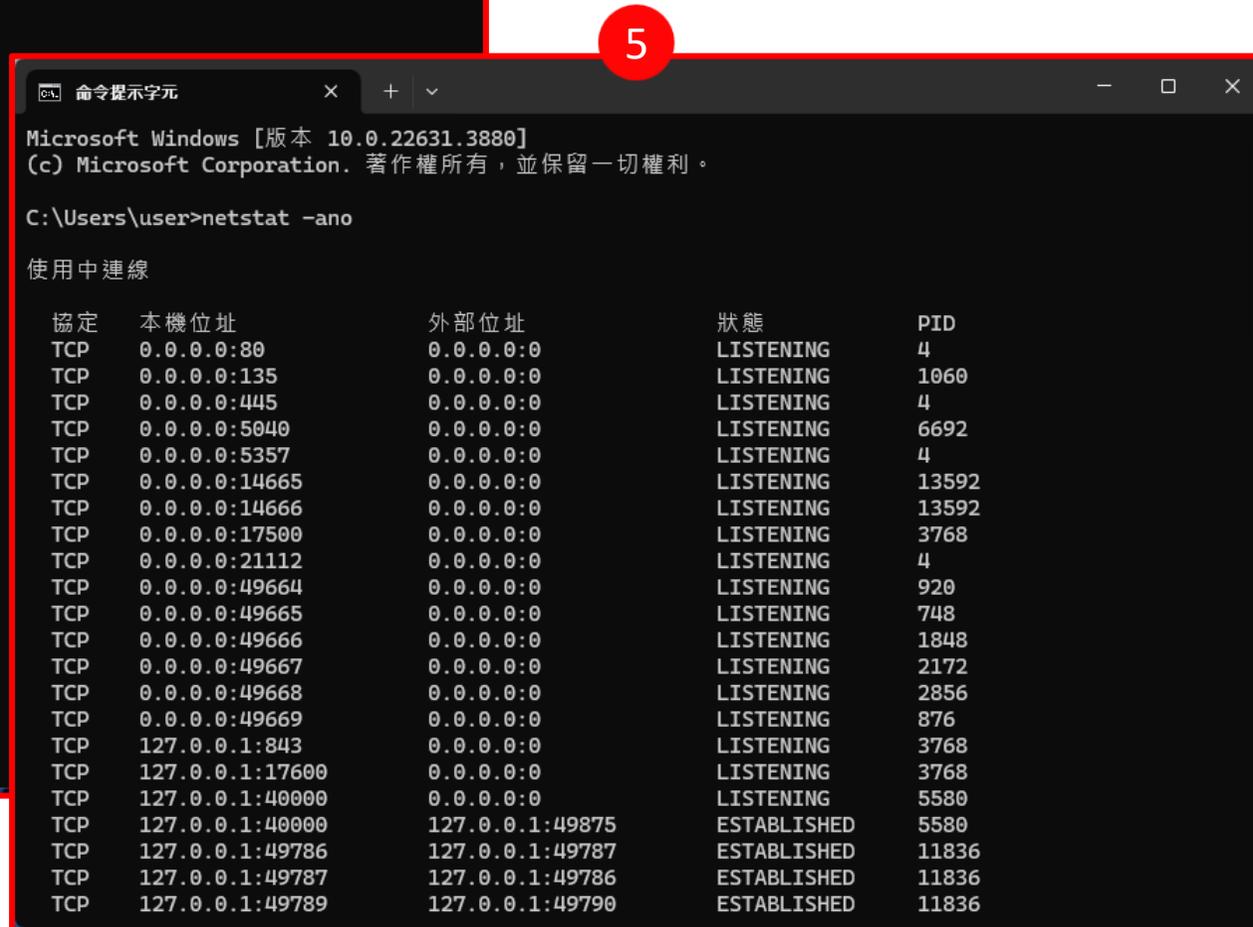
netstat指令

➤ 輸入指令「netstat -ano」，按鍵盤「Enter」執行指令



```
Microsoft Windows [版本 10.0.22631.3880]
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C:\Users\user>netstat -ano
```



```
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C:\Users\user>netstat -ano

使用中連線

協定    本機位址          外部位址          狀態          PID
TCP     0.0.0.0:80         0.0.0.0:0         LISTENING     4
TCP     0.0.0.0:135        0.0.0.0:0         LISTENING     1060
TCP     0.0.0.0:445        0.0.0.0:0         LISTENING     4
TCP     0.0.0.0:5040       0.0.0.0:0         LISTENING     6692
TCP     0.0.0.0:5357       0.0.0.0:0         LISTENING     4
TCP     0.0.0.0:14665      0.0.0.0:0         LISTENING     13592
TCP     0.0.0.0:14666      0.0.0.0:0         LISTENING     13592
TCP     0.0.0.0:17500      0.0.0.0:0         LISTENING     3768
TCP     0.0.0.0:21112      0.0.0.0:0         LISTENING     4
TCP     0.0.0.0:49664      0.0.0.0:0         LISTENING     920
TCP     0.0.0.0:49665      0.0.0.0:0         LISTENING     748
TCP     0.0.0.0:49666      0.0.0.0:0         LISTENING     1848
TCP     0.0.0.0:49667      0.0.0.0:0         LISTENING     2172
TCP     0.0.0.0:49668      0.0.0.0:0         LISTENING     2856
TCP     0.0.0.0:49669      0.0.0.0:0         LISTENING     876
TCP     127.0.0.1:843      0.0.0.0:0         LISTENING     3768
TCP     127.0.0.1:17600    0.0.0.0:0         LISTENING     3768
TCP     127.0.0.1:40000    0.0.0.0:0         LISTENING     5580
TCP     127.0.0.1:40000    127.0.0.1:49875    ESTABLISHED    5580
TCP     127.0.0.1:49786    127.0.0.1:49787    ESTABLISHED    11836
TCP     127.0.0.1:49787    127.0.0.1:49786    ESTABLISHED    11836
TCP     127.0.0.1:49789    127.0.0.1:49790    ESTABLISHED    11836
```

查找系統進程PID

- 依報告找到TCP 17500的項目
- 找到對應的進程ID(PID) ，以本案為例PID為「3768」

```
Microsoft Windows [版本 10.0.22631.3880]
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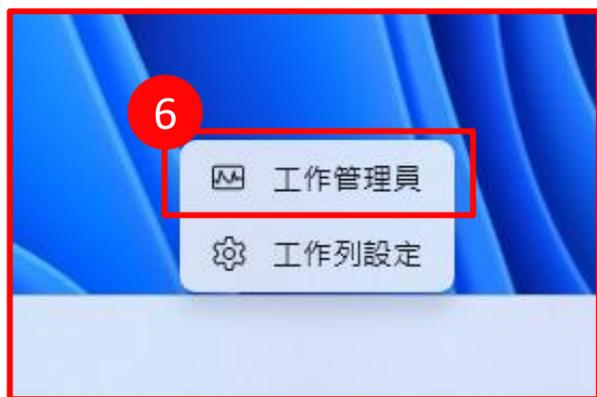
C:\Users\user>netstat -ano

使用中連線

 協定  本機位址          外部位址          狀態          PID
TCP    0.0.0.0:80         0.0.0.0:0         LISTENING     4
TCP    0.0.0.0:135       0.0.0.0:0         LISTENING     1060
TCP    0.0.0.0:445       0.0.0.0:0         LISTENING     4
TCP    0.0.0.0:5040      0.0.0.0:0         LISTENING     6692
TCP    0.0.0.0:5357     0.0.0.0:0         LISTENING     4
TCP    0.0.0.0:14665    0.0.0.0:0         LISTENING     13592
TCP    0.0.0.0:14666    0.0.0.0:0         LISTENING     13592
TCP    0.0.0.0:17500    0.0.0.0:0         LISTENING     3768
TCP    0.0.0.0:21112    0.0.0.0:0         LISTENING     4
TCP    0.0.0.0:49664    0.0.0.0:0         LISTENING     920
TCP    0.0.0.0:49665    0.0.0.0:0         LISTENING     748
TCP    0.0.0.0:49666    0.0.0.0:0         LISTENING     1848
TCP    0.0.0.0:49667    0.0.0.0:0         LISTENING     2172
TCP    0.0.0.0:49668    0.0.0.0:0         LISTENING     2856
TCP    0.0.0.0:49669    0.0.0.0:0         LISTENING     876
TCP    127.0.0.1:843     0.0.0.0:0         LISTENING     3768
TCP    127.0.0.1:17600  0.0.0.0:0         LISTENING     3768
TCP    127.0.0.1:40000  0.0.0.0:0         LISTENING     5580
TCP    127.0.0.1:40000  127.0.0.1:49875   ESTABLISHED   5580
TCP    127.0.0.1:49786  127.0.0.1:49787   ESTABLISHED   11836
TCP    127.0.0.1:49787  127.0.0.1:49786   ESTABLISHED   11836
TCP    127.0.0.1:49789  127.0.0.1:49790   ESTABLISHED   11836
```

依PID查找對應服務

➤ 工作列空白處「右鍵」，點擊開啟「工作管理員」

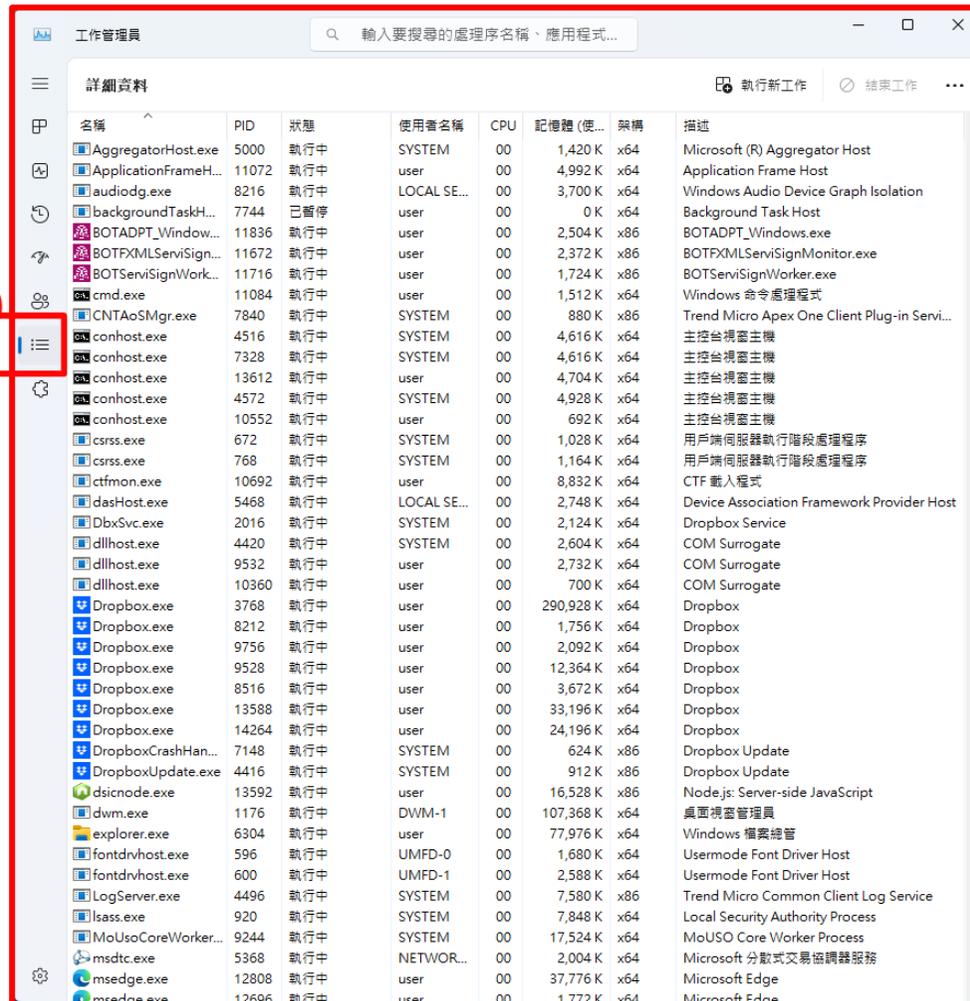


7

名稱	狀態	6% CPU	50% 記憶體	0% 磁碟	0% 網路
應用程式 (3)					
> Windows 檔案總管		0%	82.3 MB	0 MB/秒	0 Mbps
> 工作管理員		3.1%	59.2 MB	0 MB/秒	0 Mbps
> 終端機 (3)		0%	15.1 MB	0 MB/秒	0 Mbps
背景處理程序 (57)					
Application Frame Host		0%	4.9 MB	0 MB/秒	0 Mbps
BOTADPT_Windows.exe (32 ...		0%	2.5 MB	0 MB/秒	0 Mbps
BOTFXMLServiSignMonitor...		0%	2.4 MB	0 MB/秒	0 Mbps
BOTServiSignWorker.exe (3...		0%	1.7 MB	0 MB/秒	0 Mbps
COM Surrogate		0%	2.7 MB	0 MB/秒	0 Mbps
COM Surrogate		0%	0.7 MB	0 MB/秒	0 Mbps
> COM Surrogate		0%	2.6 MB	0 MB/秒	0 Mbps
CTF 載入程式		0%	8.6 MB	0 MB/秒	0 Mbps
Device Association Framewo...		0%	2.7 MB	0 MB/秒	0 Mbps
> Dropbox (7)		0%	359.8 MB	0 MB/秒	0 Mbps
> Dropbox Service		0%	2.1 MB	0 MB/秒	0 Mbps
Dropbox Update (32 位元)		0%	0.7 MB	0 MB/秒	0 Mbps
Dropbox Update (32 位元)		0%	1.1 MB	0 MB/秒	0 Mbps
> Manages the Trend Micro u...		2.8%	84.8 MB	0 MB/秒	0 Mbps
Microsoft (R) Aggregator H...		0%	1.4 MB	0 MB/秒	0 Mbps
> Microsoft Edge (10)		0%	136.4 MB	0 MB/秒	0 Mbps
> Microsoft Office Click-to-Ru...		0%	26.4 MB	0 MB/秒	0 Mbps
Microsoft Windows Search F...		0%	1.3 MB	0 MB/秒	0 Mbps
Microsoft Windows Search P...		0%	2.1 MB	0 MB/秒	0 Mbps
> Microsoft Windows Search ...		0%	15.4 MB	0 MB/秒	0 Mbps
> Microsoft 分散式交易協議器...		0%	2.0 MB	0 MB/秒	0 Mbps
MoUSO.Core.Worker.Process		0%	17.1 MB	0 MB/秒	0 Mbps

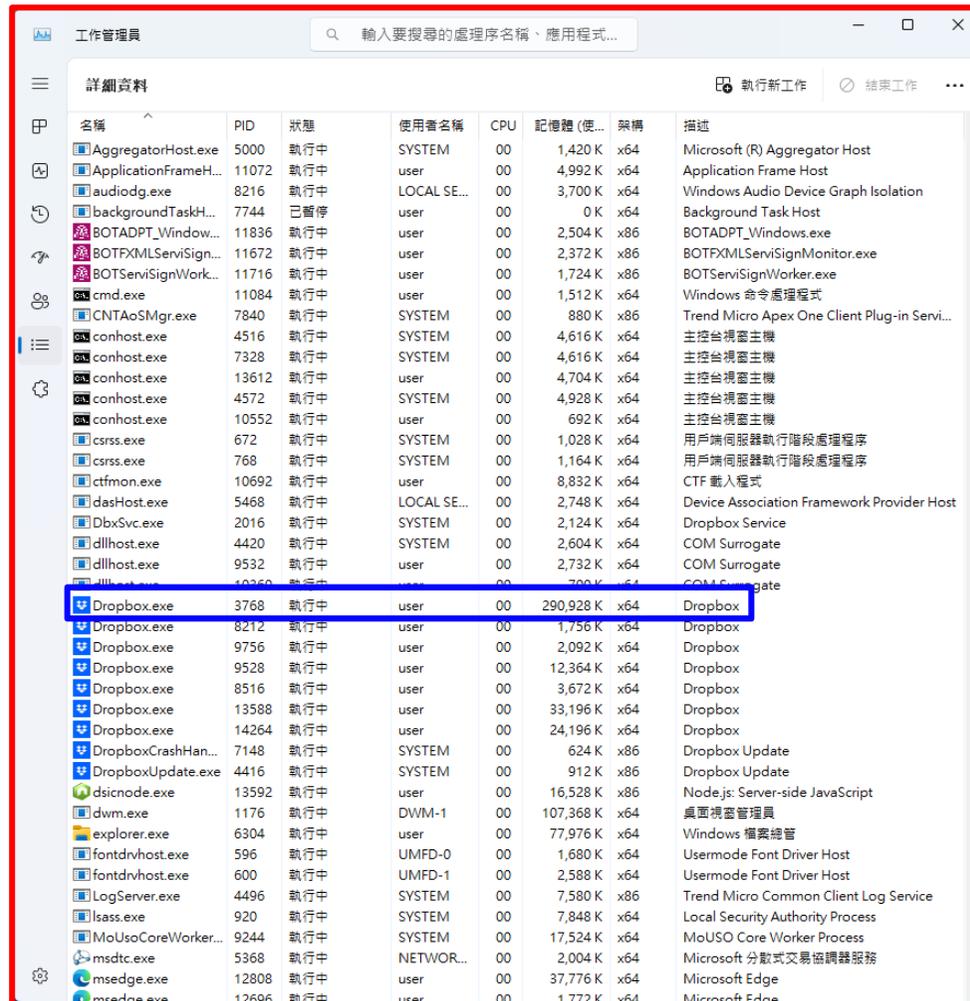
依PID查找對應服務

➤ 切換到「詳細資料」頁籤



依PID查找對應服務

➤ 找到PID為「3768」的執行程序

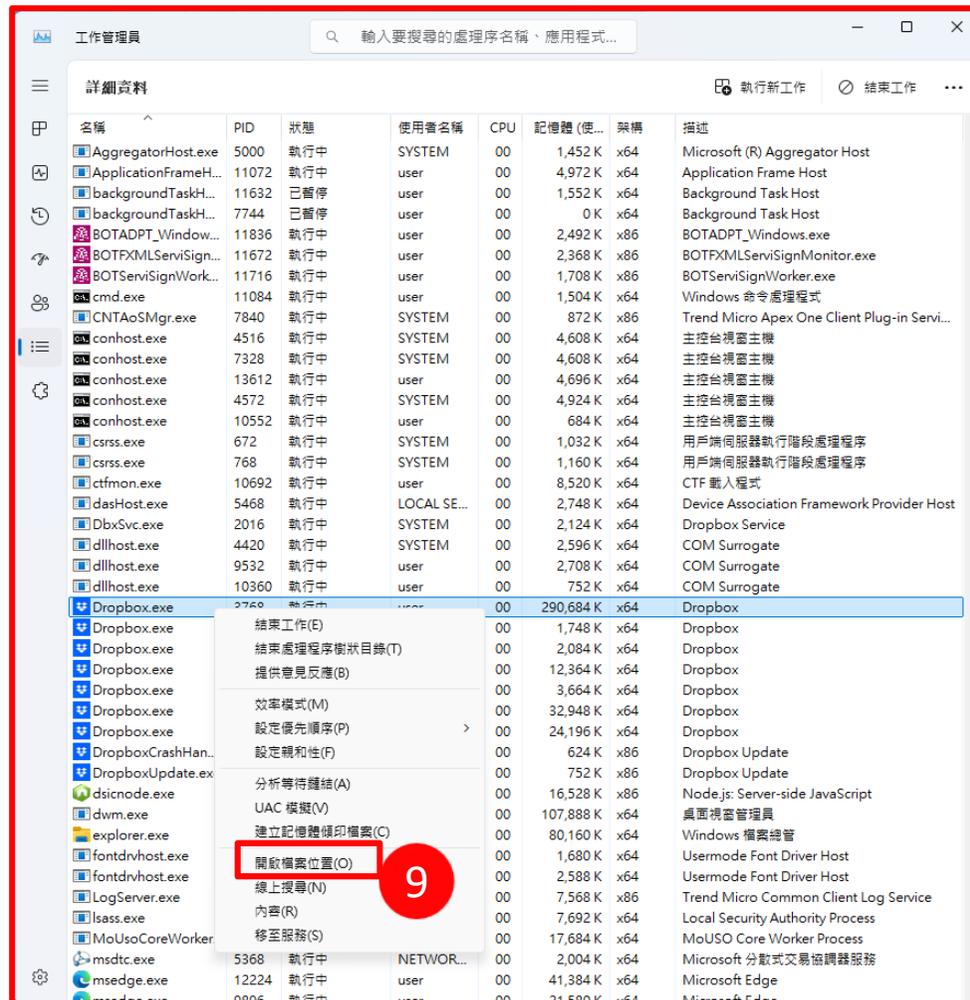


The screenshot shows the Windows Task Manager window with the '詳細資料' (Details) tab selected. The process list is as follows:

名稱	PID	狀態	使用者名稱	CPU	記憶體 (使...)	架構	描述
AggregatorHost.exe	5000	執行中	SYSTEM	00	1,420 K	x64	Microsoft (R) Aggregator Host
ApplicationFrameH...	11072	執行中	user	00	4,992 K	x64	Application Frame Host
audiodg.exe	8216	執行中	LOCAL SE...	00	3,700 K	x64	Windows Audio Device Graph Isolation
backgroundTaskH...	7744	已暫停	user	00	0 K	x64	Background Task Host
BOTADAPT_Window...	11836	執行中	user	00	2,504 K	x86	BOTADAPT_Windows.exe
BOTFXMLServiSign...	11672	執行中	user	00	2,372 K	x86	BOTFXMLServiSignMonitor.exe
BOTServiSignWork...	11716	執行中	user	00	1,724 K	x86	BOTServiSignWorker.exe
cmd.exe	11084	執行中	user	00	1,512 K	x64	Windows 命令處理程式
CNTAoSMgr.exe	7840	執行中	SYSTEM	00	880 K	x86	Trend Micro Apex One Client Plug-in Servi...
conhost.exe	4516	執行中	SYSTEM	00	4,616 K	x64	主控台視窗主機
conhost.exe	7328	執行中	SYSTEM	00	4,616 K	x64	主控台視窗主機
conhost.exe	13612	執行中	user	00	4,704 K	x64	主控台視窗主機
conhost.exe	4572	執行中	SYSTEM	00	4,928 K	x64	主控台視窗主機
conhost.exe	10552	執行中	user	00	692 K	x64	主控台視窗主機
csrss.exe	672	執行中	SYSTEM	00	1,028 K	x64	用戶端伺服器執行階段處理程序
csrss.exe	768	執行中	SYSTEM	00	1,164 K	x64	用戶端伺服器執行階段處理程序
ctfmon.exe	10692	執行中	user	00	8,832 K	x64	CTF 載入程式
dasHost.exe	5468	執行中	LOCAL SE...	00	2,748 K	x64	Device Association Framework Provider Host
DbxSvc.exe	2016	執行中	SYSTEM	00	2,124 K	x64	Dropbox Service
dllhost.exe	4420	執行中	SYSTEM	00	2,604 K	x64	COM Surrogate
dllhost.exe	9532	執行中	user	00	2,732 K	x64	COM Surrogate
dllhost.exe	10260	執行中	user	00	700 K	x64	COM Surrogate
Dropbox.exe	3768	執行中	user	00	290,928 K	x64	Dropbox
Dropbox.exe	8212	執行中	user	00	1,756 K	x64	Dropbox
Dropbox.exe	9756	執行中	user	00	2,092 K	x64	Dropbox
Dropbox.exe	9528	執行中	user	00	12,364 K	x64	Dropbox
Dropbox.exe	8516	執行中	user	00	3,672 K	x64	Dropbox
Dropbox.exe	13588	執行中	user	00	33,196 K	x64	Dropbox
Dropbox.exe	14264	執行中	user	00	24,196 K	x64	Dropbox
DropboxCrashHan...	7148	執行中	SYSTEM	00	624 K	x86	Dropbox Update
DropboxUpdate.exe	4416	執行中	SYSTEM	00	912 K	x86	Dropbox Update
dsicnode.exe	13592	執行中	user	00	16,528 K	x86	Node.js: Server-side JavaScript
dwm.exe	1176	執行中	DWM-1	00	107,368 K	x64	桌面視窗管理員
explorer.exe	6304	執行中	user	00	77,976 K	x64	Windows 檔案總管
fontdrvhost.exe	596	執行中	UMFD-0	00	1,680 K	x64	Usermode Font Driver Host
fontdrvhost.exe	600	執行中	UMFD-1	00	2,588 K	x64	Usermode Font Driver Host
LogServer.exe	4496	執行中	SYSTEM	00	7,580 K	x86	Trend Micro Common Client Log Service
lsass.exe	920	執行中	SYSTEM	00	7,848 K	x64	Local Security Authority Process
MoUsocoreWorker...	9244	執行中	SYSTEM	00	17,524 K	x64	MoUSO Core Worker Process
msdtc.exe	5368	執行中	NETWOR...	00	2,004 K	x64	Microsoft 分散式交易協理服務
msedge.exe	12808	執行中	user	00	37,776 K	x64	Microsoft Edge
msedge.exe	12696	執行中	user	00	1,772 K	x64	Microsoft Edge

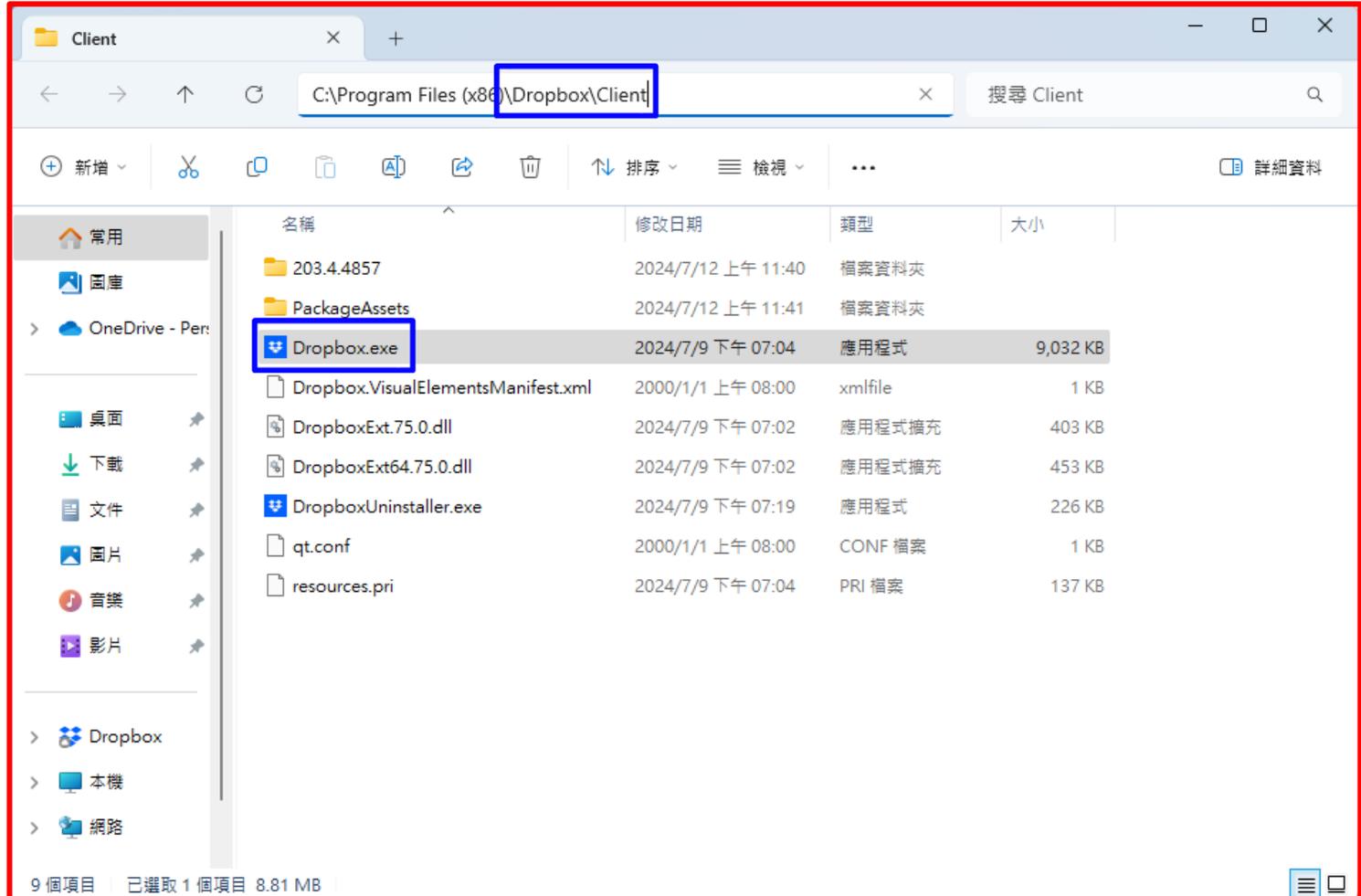
查找服務安裝目錄

➤ 對執行程序點「右鍵」，點選「開啟檔案位置」



查找服務安裝目錄

- 開啟該執行程序安裝的位置，可以從目錄路徑或程式名稱判斷服務
- 判斷port 17500為Dropbox使用，非惡意程式或服務，弱點11157可以列為誤判



補充說明

- 這個方法有可能因為當下程式未啟動執行或程式自動更換連接埠等因素導致後續查找時找不到
- 建議再複測一次確認結果是否仍相同



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常見弱點修補建議

套件、韌體版本不足

- Apache、Tomcat、OpenSSL、MariaDB、Mysql、PHP……等
 - ✓ 153583 - Apache < 2.4.49 Multiple Vulnerabilities
 - ✓ 161948 - Apache 2.4.x < 2.4.54 Multiple Vulnerabilities
 - ✓ 48255 - Apache Tomcat 6.0 < 6.0.28 Multiple Vulnerabilities
 - ✓ 160480 - OpenSSL 1.0.2 < 1.0.2ze Vulnerability
 - ✓ 164027 - MariaDB 10.8.0 < 10.8.4 Multiple Vulnerabilities
 - ✓
 - ✓ 更新相對應的套件至最新

- 物聯網設備韌體
 - ✓ DLink DIR-859 < 1.07B03 Information Disclosure
 - ✓ DLink DIR-859 1.05 & 1.06B01 Multiple Vulnerabilities (RCE)
 - ✓
 - ✓ 更新設備韌體至最新

SSL憑證加密與TLS協定相關

- 94437 - SSL 64-bit Block Size Cipher Suites Supported (SWEET32)
- 42873 - SSL Medium Strength Cipher Suites Supported (SWEET32)
- 104743 - TLS Version 1.0 Protocol Detection
- 157288 - TLS Version 1.1 Deprecated Protocol
- 例：本次ApexOne防毒軟體可能被掃出這幾項弱點
 - ✓ Plugin Output為「tcp/21112/www」

Plugin Output

tcp/21112/www

```
List of 64-bit block cipher suites supported by the remote server :
```

```
Medium Strength Ciphers (> 64-bit and < 112-bit key, or 3DES)
```

```
Name Code KEX Auth Encryption MAC
```

```
-----  
DES-CBC3-SHA 0x00, 0x0A RSA RSA 3DES-CBC(168) SHA1
```

```
The fields above are :
```

```
{Tenable ciphername}  
{Cipher ID code}  
Kex={key exchange}  
Auth={authentication}  
Encrypt={symmetric encryption method}  
MAC={message authentication code}  
{export flag}
```

IIS Crypto

➤ 請下載「IIS Crypto」

➤ 連結：<https://www.nartac.com/Downloads/IISCrypto/IISCrypto.exe>

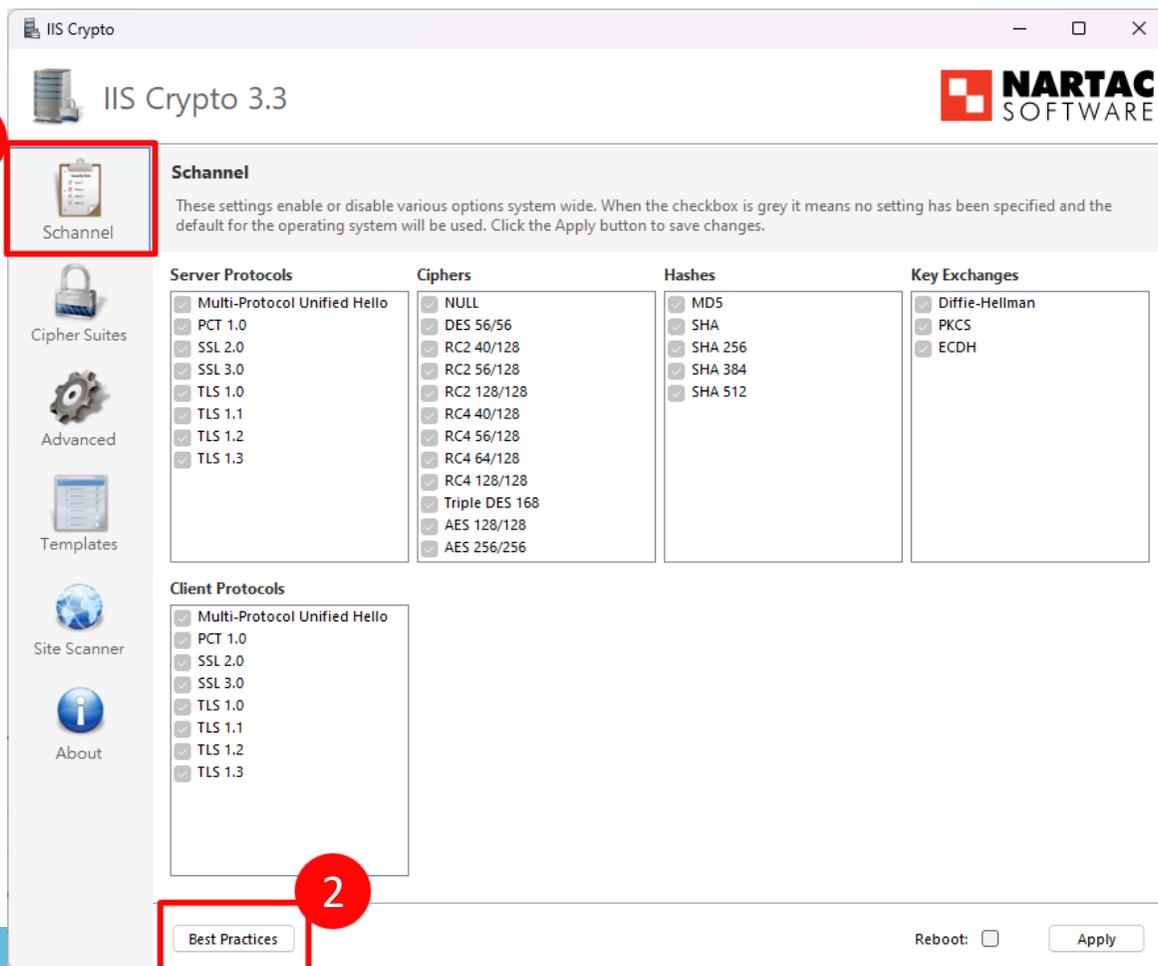
The screenshot shows the Nartac Software website's download page for IIS Crypto. The page includes the Nartac Software logo, navigation links (HOME, PRODUCTS, SUPPORT, ABOUT, BLOG), and a breadcrumb trail (Home / IIS Crypto / Download). The main content area contains a note about system requirements and two download options: IIS Crypto GUI (Version 3.3, 357 KB) and IIS Crypto CLI (Version 3.3, 263 KB). A red box highlights the 'DOWNLOAD' button for the GUI version, and a red arrow points from it to a callout box with the text '點擊「DOWNLOAD」下載程式'. Below the download options, there is a section for 'Version 3.3 Build 17 - Released October 31, 2022' with a list of updates, and a section for 'Version 3.2 Build 16 - Released April 11, 2020'.

點擊「DOWNLOAD」下載程式

IIS Crypto

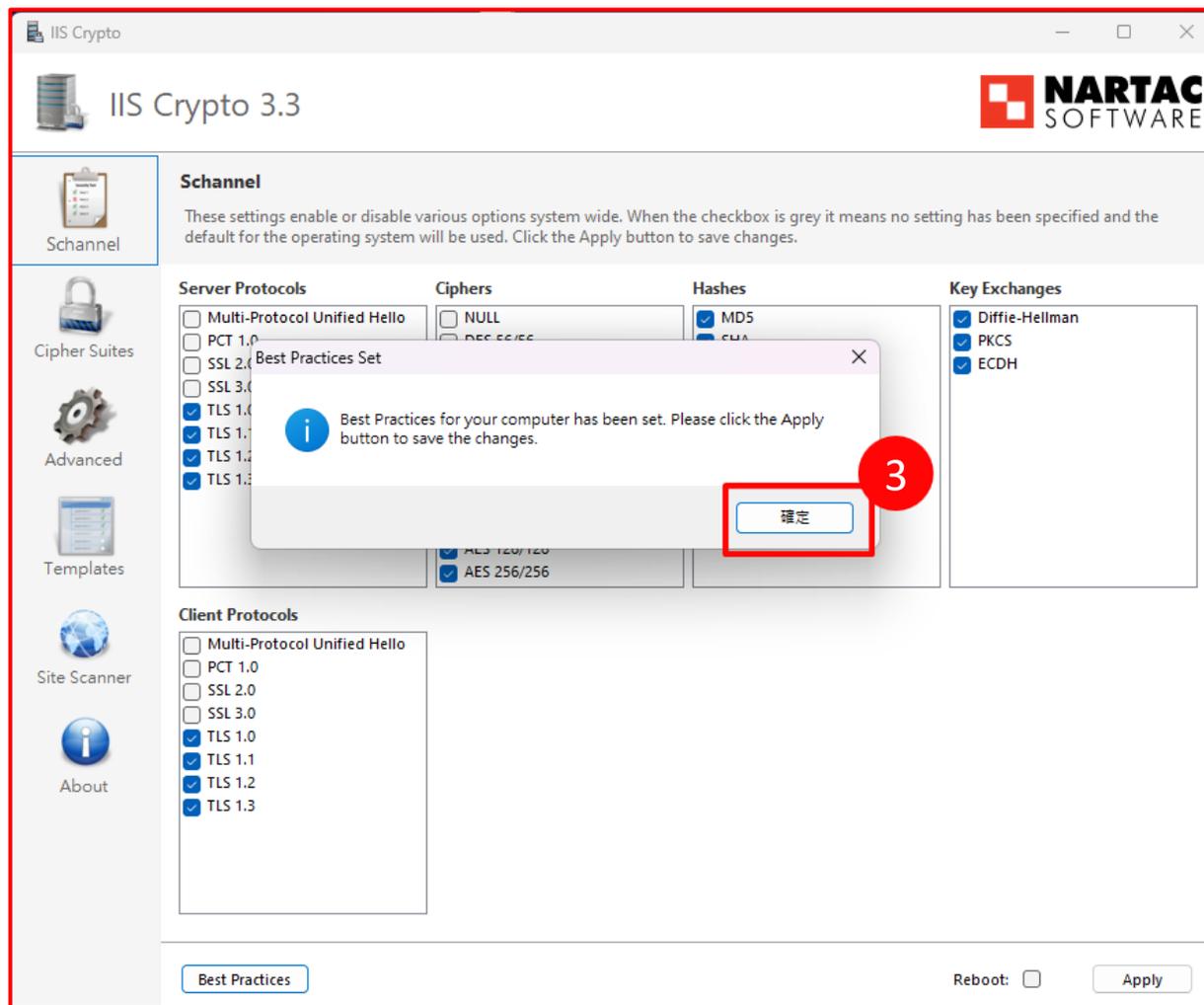
➤ 點擊  打開程式

➤ 在「Schannel」分頁，點選「Best Practices」



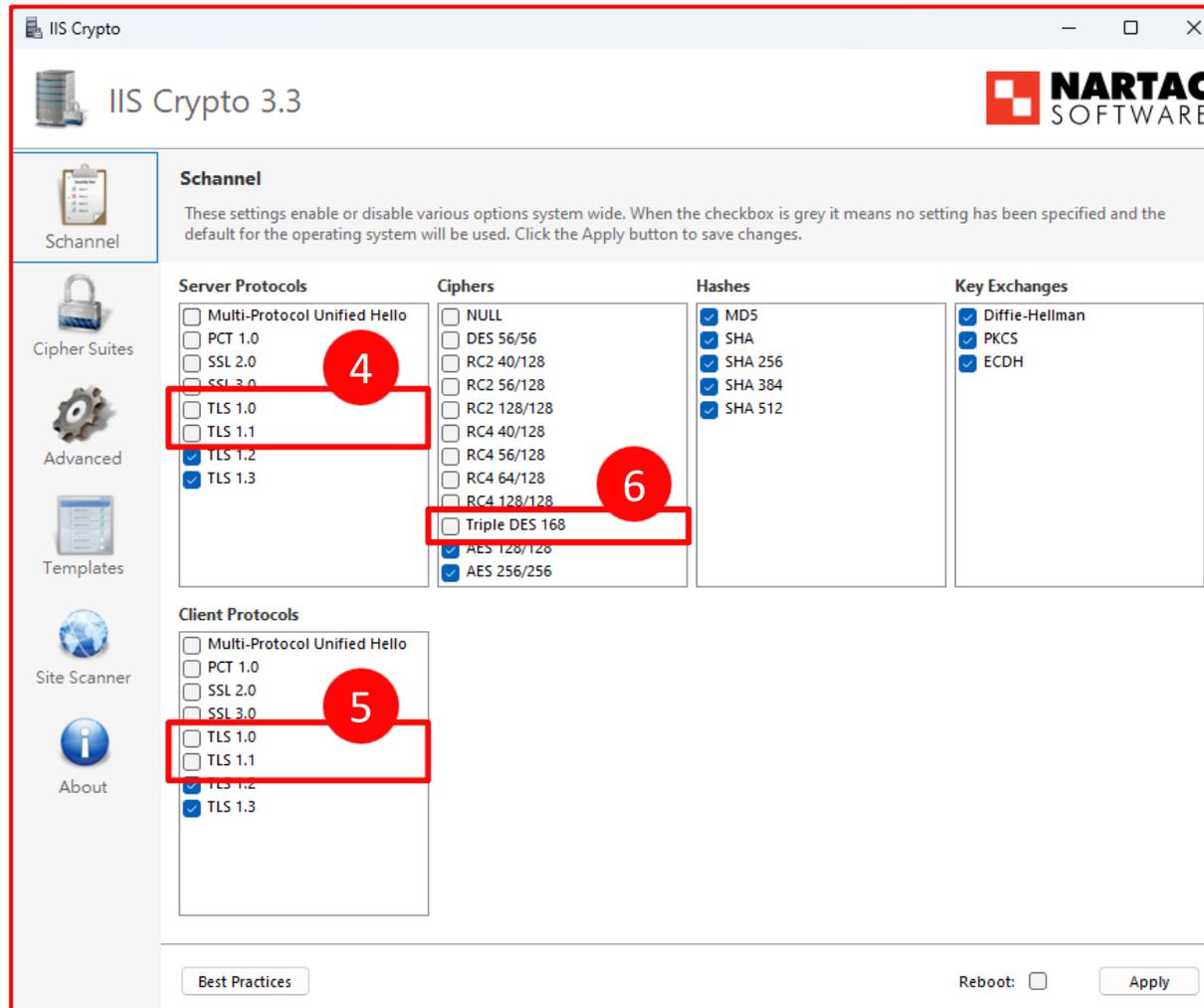
IIS Crypto

➤ 跳出提示告知已完成設定，點擊「確定」



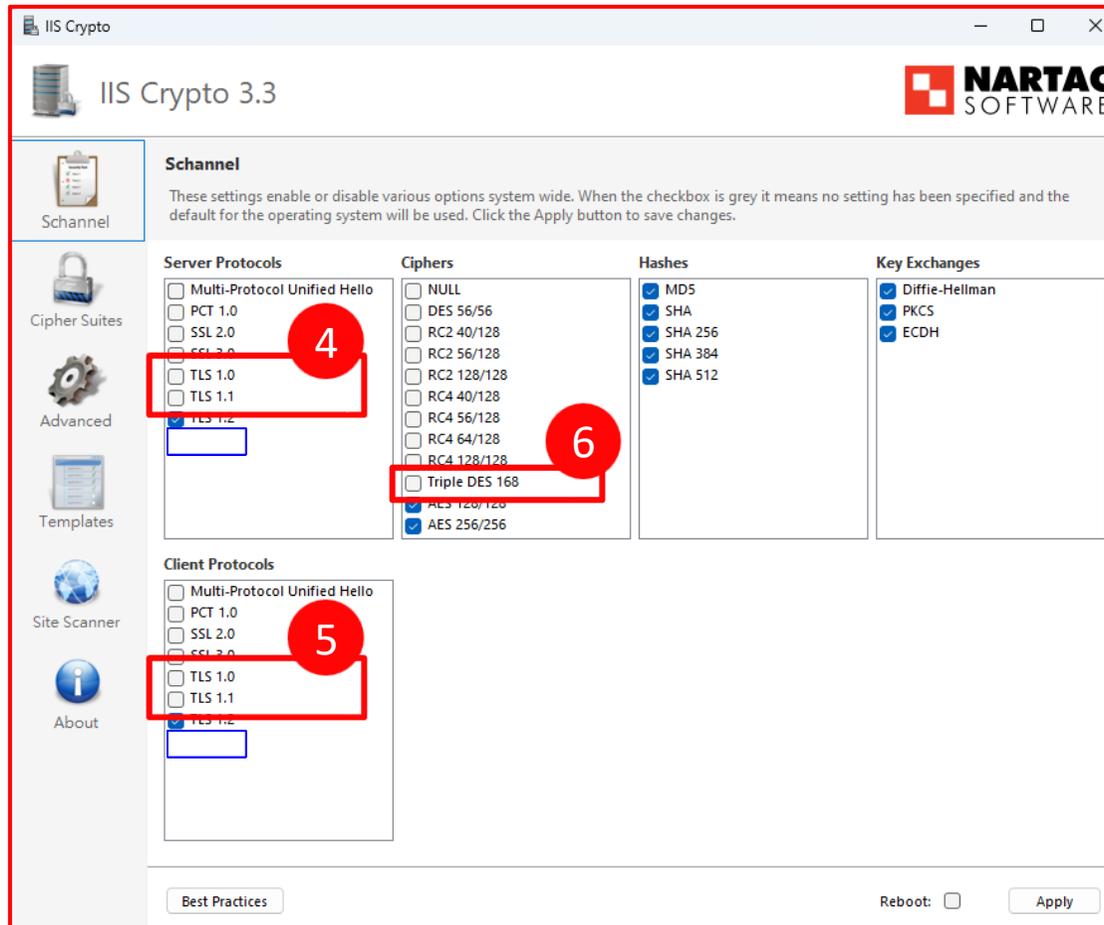
IIS Crypto - win11

➤ 反勾選 TLS 1.0、TLS 1.1 及 Triple DES 168



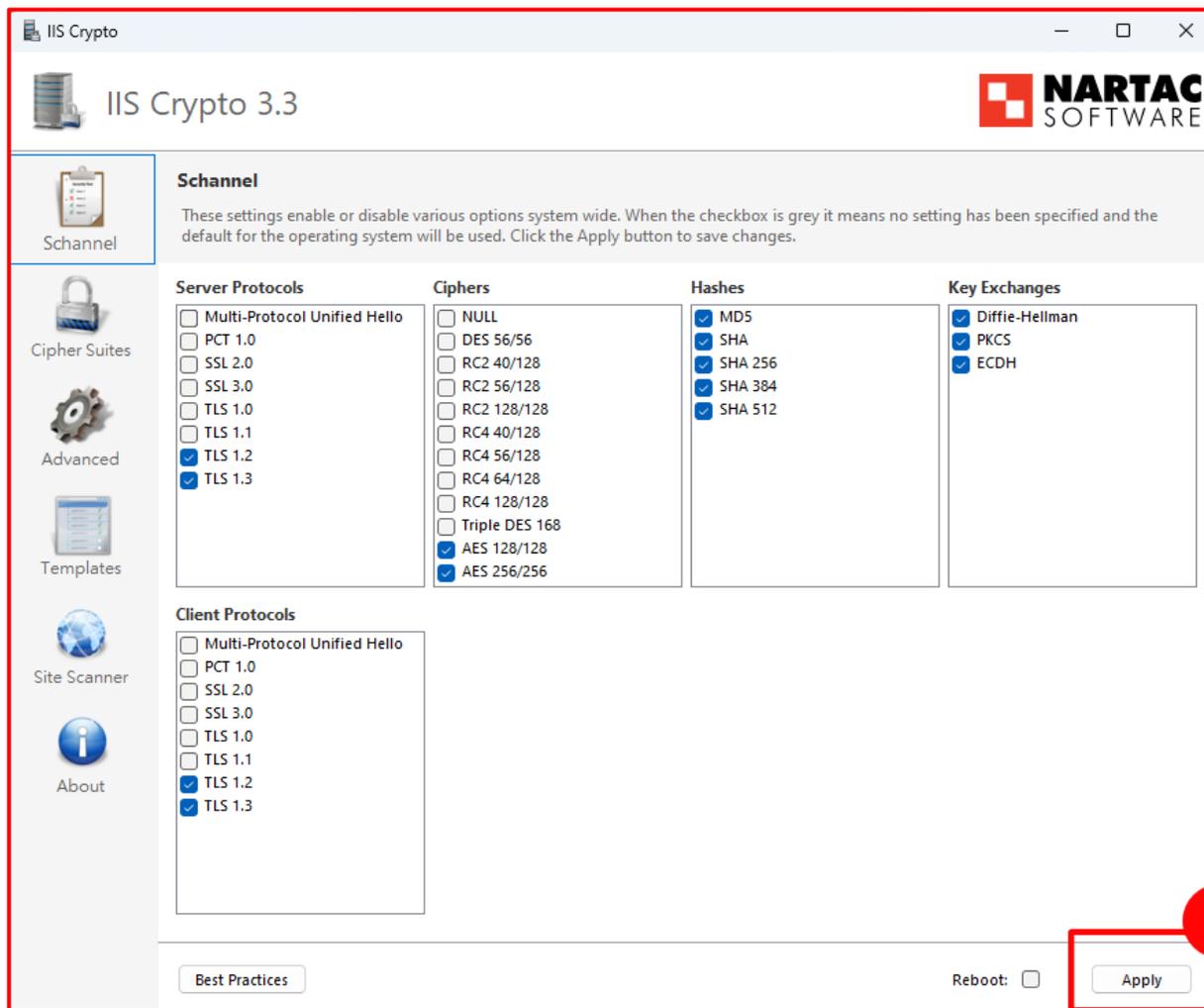
IIS Crypto - win10

- 因作業系統不同，win10可能沒有TLS1.3的選項，但一樣將TLS1.0、TLS1.1及Triple DES 168反勾選



IIS Crypto

➤ 點擊「Apply」保存，並重新啟動電腦讓設定生效



7

同時解決SSL弱加密與低安全性TLS協定

- 可以解決大部分與憑證加密及TLS協定相關的弱點
- 此方法僅適用作業系統為windows或windows server的電腦與主機
- 相關弱點：
 - ✓ 60108 - SSL Certificate Chain Contains Weak RSA Keys
 - ✓ 42873 - SSL Medium Strength Cipher Suites Supported (SWEET32)
 - ✓ 65821 - SSL RC4 Cipher Suites Supported (Bar Mitzvah)
 - ✓ 20007 - SSL Version 2 and 3 Protocol Detection
 - ✓ 26928 - SSL Weak Cipher Suites Supported
 - ✓ 104743 - TLS Version 1.0 Protocol Detection
 - ✓ 157288 - TLS Version 1.1 Protocol Deprecated

特殊狀況

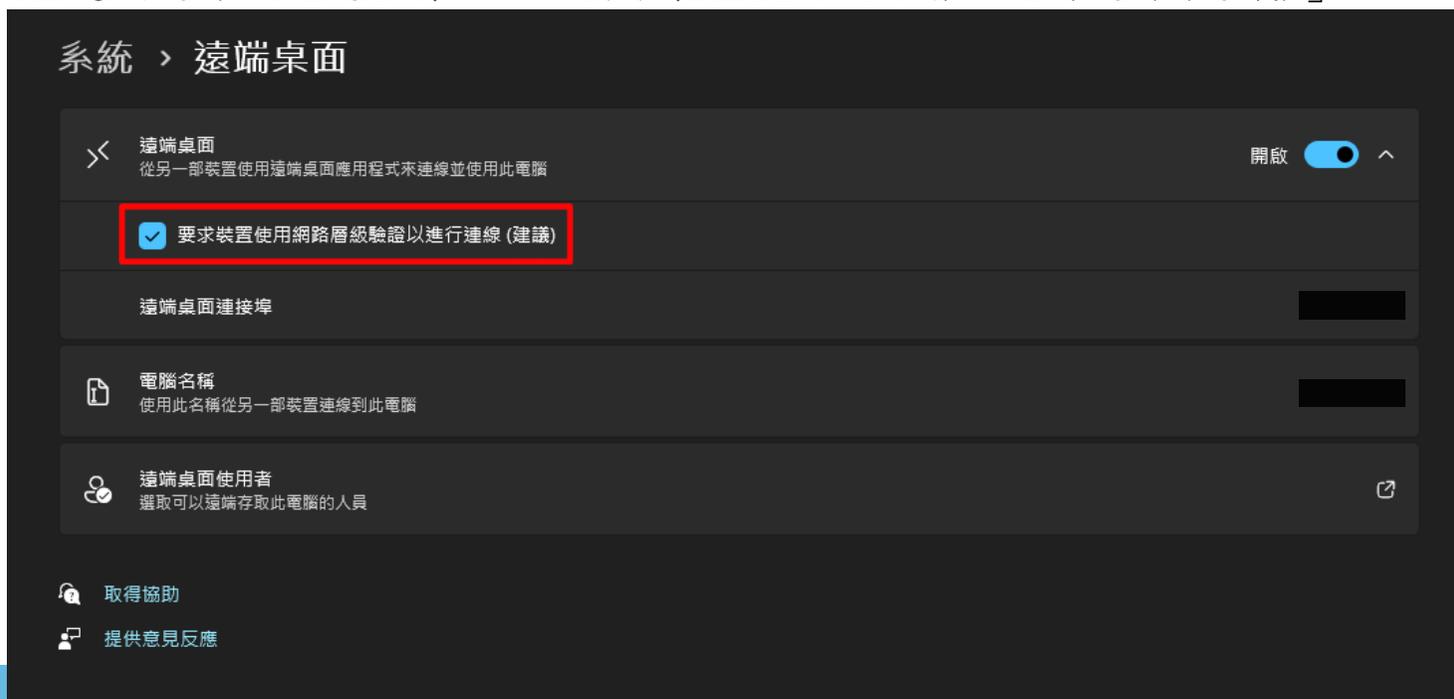
- 以下幾項服務用 IIS Crypto 修改後可能還是會掃到相同弱點(只列出本年度弱掃有發現的項目)
- 這幾項元件類的程式需從程式本身去修正，因非使用者可以自行修補的項目，若為公務必須，建議元件更新至最新；若非公務必須，請自行評估使用

port	用途
7777	健保卡驗證元件
14665	帝緯公文系統公文製作元件
39021	中華郵政網路ATM元件
56306	ServiSign多憑證元件，可能用於需要自然人憑證、健保卡、銀行金融卡等的系統

- 本校帝緯公文系統元件在今年4月底文書組有發出通知請同仁要更新，請先移除舊版元件後，將電腦重新啟動再安裝新版元件

微軟遠端桌面(RDP)相關

- 42873 - Medium Strength Cipher Suites Supported (SWEET32)
- 94437 - SSL 64-bit Block Size Cipher Suites Supported (SWEET32)
- 104743 - TLS Version 1.0 Protocol Detection
- 157288 - TLS Version 1.1 Protocol Deprecated
 - ✓ 以上幾項都可以用IISCrypto處理
- 18405 - Remote Desktop Protocol Server Man-in-the-Middle Weakness
 - ✓ 請檢查遠端連線設定是否有啟用「要求裝置使用網路層級進行連線(建議)」



微軟遠端桌面(RDP)相關

- 遠端連線建議限定特定IP或範圍
- 參閱本處手冊P7~P17
 - ✓ 連結：<https://it.ccu.edu.tw/var/file/9/1009/img/1856/186640335.pdf>

微軟IIS服務

- 106609 – Microsoft Windows IIS Default Index Page
- 88099 – Web Server HTTP Header Information Disclosure
 - ✓ 部分單位弱掃發現有開啟IIS相關功能但都不知道
 - ✓ 請先確認有發現這個弱點的設備是不是作為「網頁伺服器」使用
 - 是，請針對弱點處理，將預設頁面移除(或停用預設站點)、移除Header的伺服器資訊
 - 否，請依操作進行確認與關閉服務，操作以windows11環境做示範，windows10的操作邏輯相同

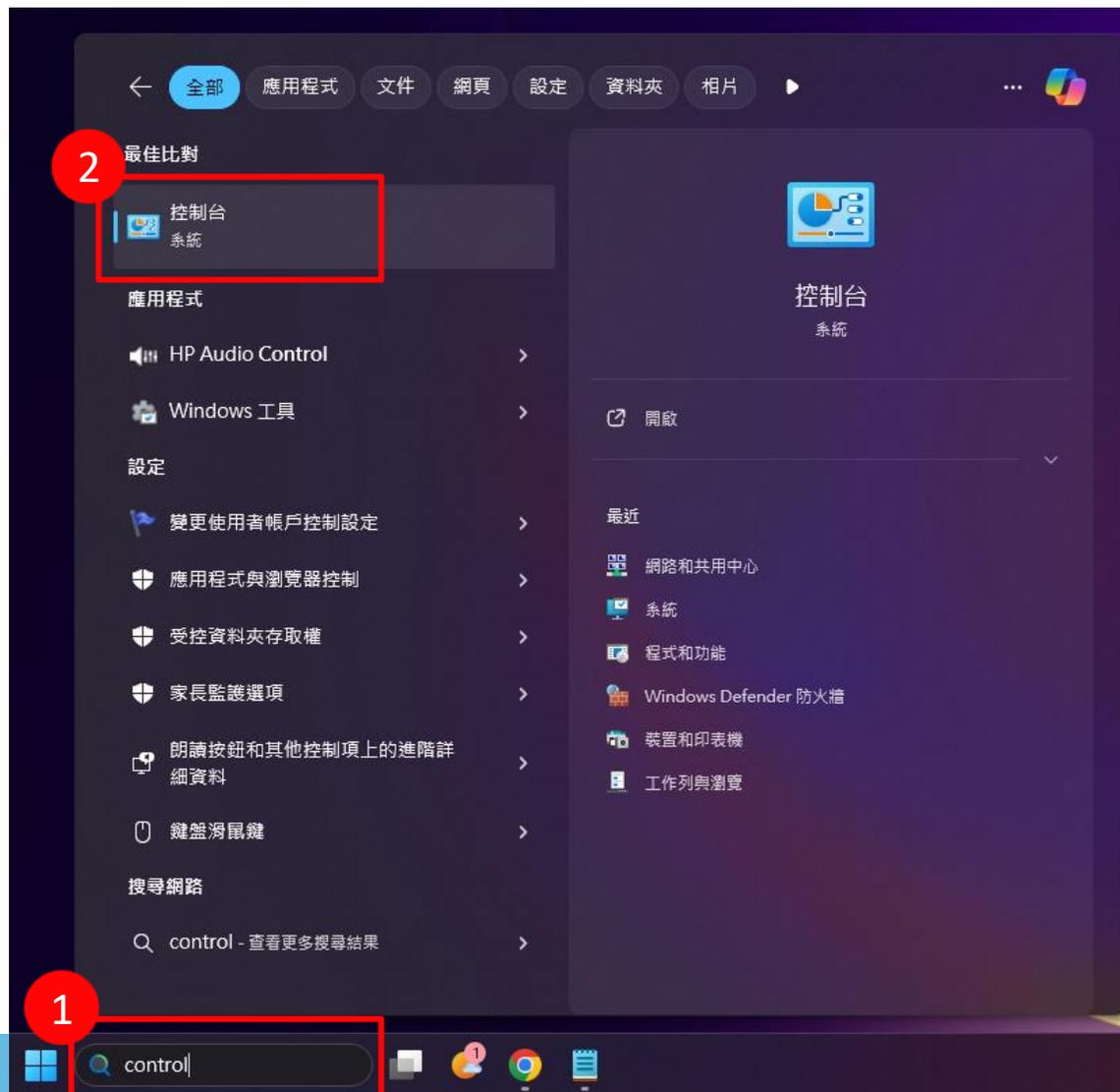
Plugin Output

tcp/80/www

```
Server type : Microsoft IIS
Server version : 10.0
Source : Microsoft-IIS/10.0
```

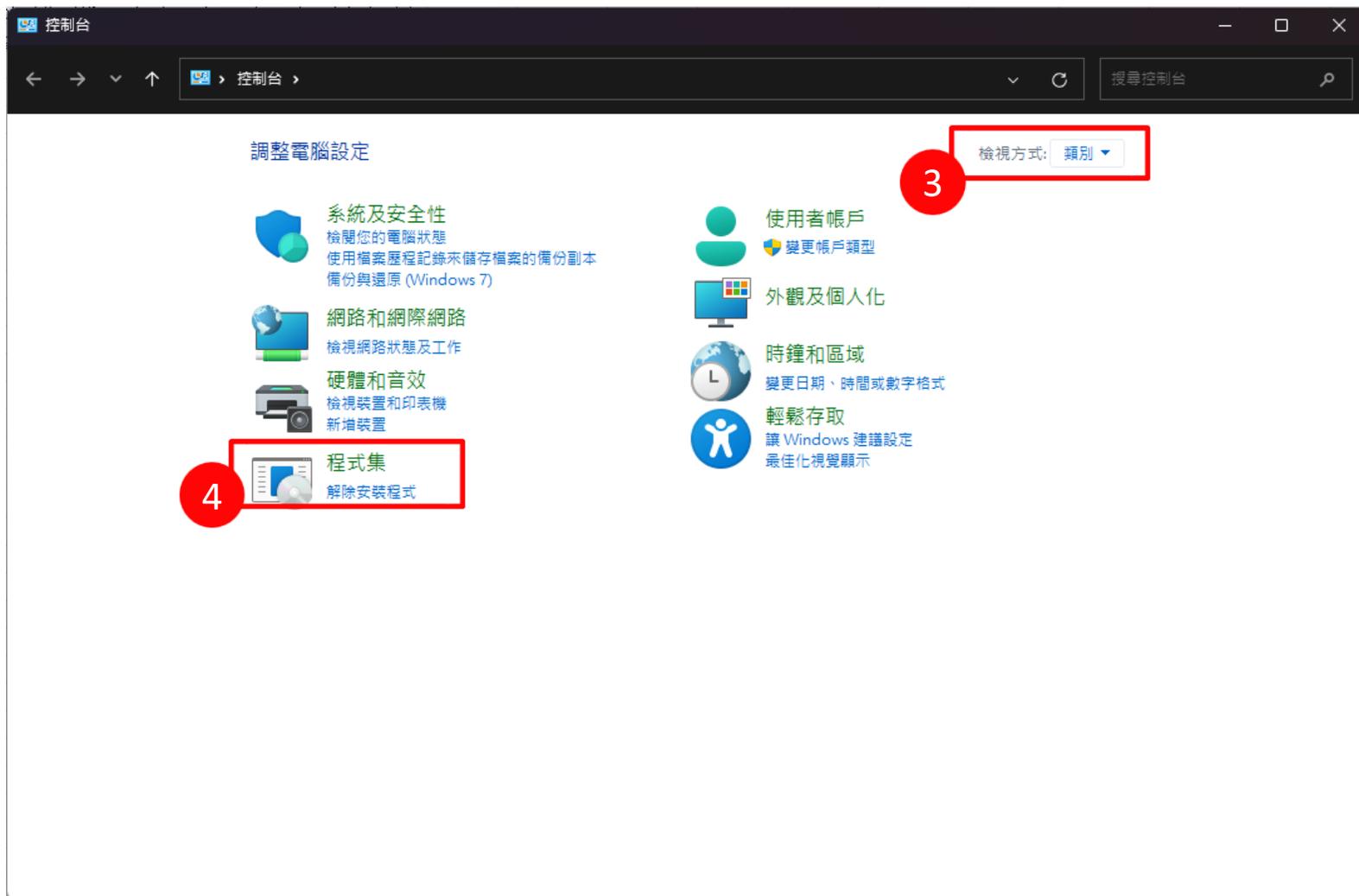
關閉微軟IIS服務

➤ 工作列搜尋欄輸入「control」，點擊「控制台」



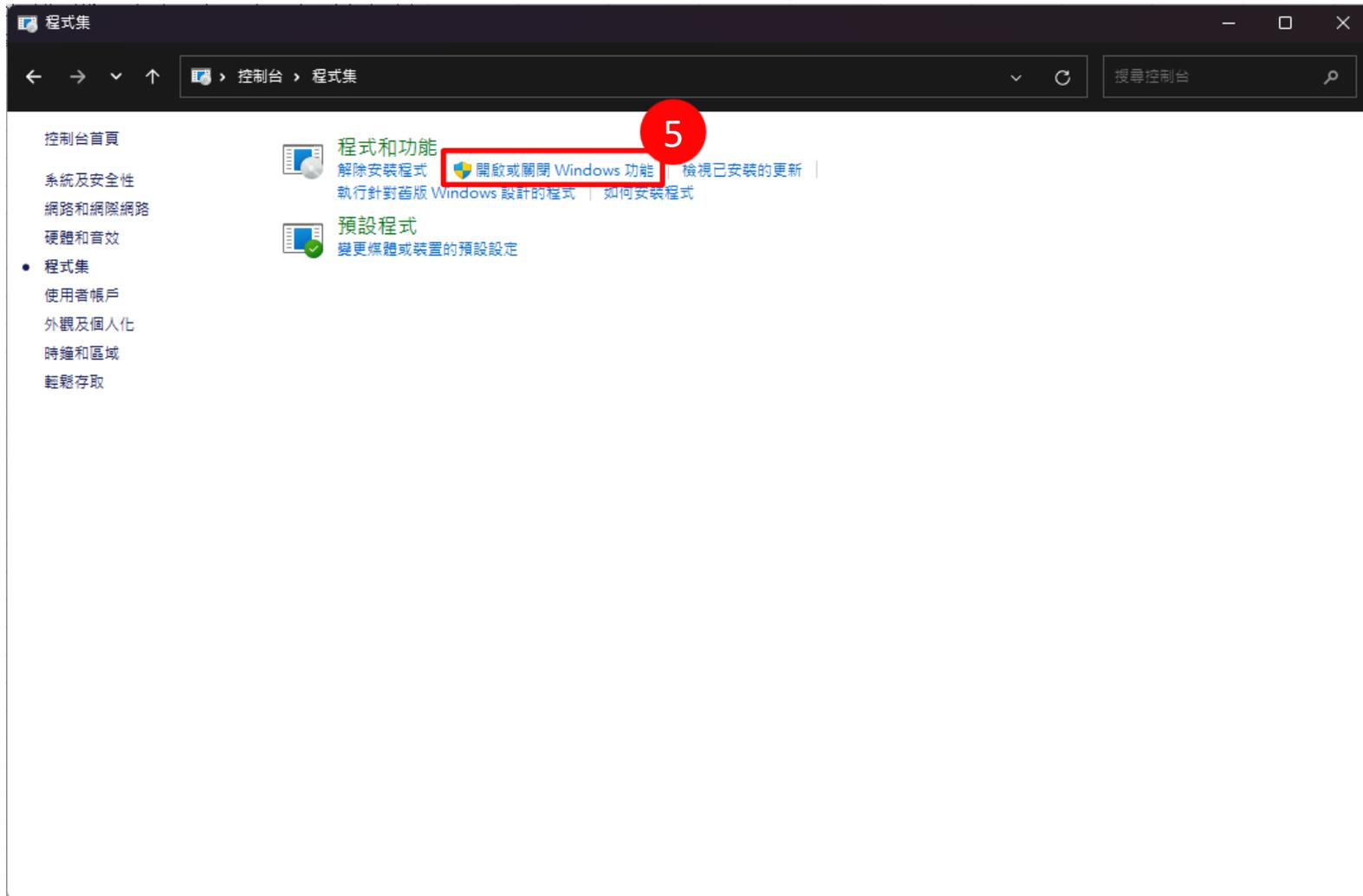
關閉微軟IIS服務

➤ 切換檢視方式為「類別」，點選「程式集」



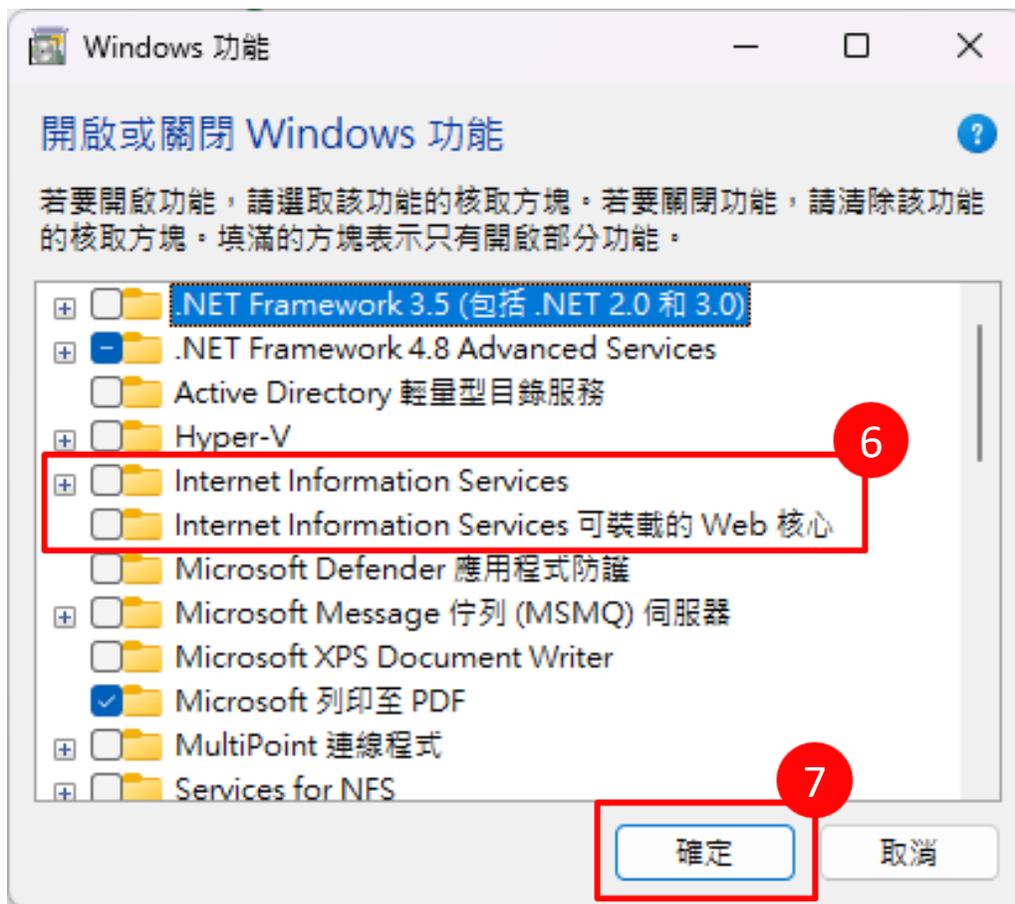
關閉微軟IIS服務

➤ 點選「開啟或關閉windows功能」



關閉微軟IIS服務

- 檢查「Internet Information Services」與「Internet Information Services 可裝載的Web核心」，請確認這兩項為非勾選狀態(與下圖相同)
- 取消勾選後點「確定」，並重新啟動電腦



類似的弱點

- 12085 - Apache Tomcat Default Files
- 106374 - Default nginx HTTP Server Settings
- 112351 - Apache Default Index Page
- 處理邏輯相同，將預設的頁面、預設文件等的伺服器架設時的預設檔案移除

網頁伺服器相關安全性設定 (apache 為例)

➤ 10297 - Web Server Directory Traversal Arbitrary File Access

```
<Directory "網頁根目錄">  
  AllowOverride All  
  Options -Index FollowSymLinks  
  Require all granted  
</Directory>
```

或不加 Index

```
<Directory "網頁根目錄">  
  AllowOverride All  
  Options FollowSymLinks  
  Require all granted  
</Directory>
```

網頁伺服器相關安全性設定 (apache 為例)

- 106232 - Apache ServerTokens Information Disclosure
- 88490 - Web Server Error Page Information Disclosure
- 88099 - Web Server HTTP Header Information Disclosure

```
#Directory ../apache2/security.conf
#錯誤頁面資訊量顯示多寡
ServerTokens Prod 建議 #Apache
ServerTokens Major #Apache/2
ServerTokens Minor #Apache/2.4
ServerTokens Minimal #Apache/2.4.41
ServerTokens OS #Apache/2.4.41 (Unix)
ServerTokens Full #Apache/2.4.41 (Unix) PHP/4.2.2

#錯誤頁面是否顯示以上資訊
ServerSignature Off 建議 #不顯示
ServerSignature On #顯示
```



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可以排除的項目

SSL憑證相關

- 51192 – SSL Certificate Cannot Be Trusted
- 57582 – SSL Self-Signed Certificate
 - ✓ 物聯網設備大部分都會有這兩項，指的是對弱掃工具而言，套用的憑證無法信任
 - ✓ 因為設備憑證通常都是廠商憑證，原則上只要是非對外服務設備就可以排除
 - ✓ 個人電腦部分服務也會有（常見如微軟遠端程式RDP），同理只要是非對外提供服務就可以排除
- 補充：對外服務泛指在**校外**或校內任何**非授權**使用者都可以連到這台設備取得並使用設備提供的功能或服務
 - ✓ 例如：行政、學術單位網站，屬於對外服務的範疇
 - ✓ 例如：單位業務印表機，通常只有單位內成員或特定人士可以使用，屬於非對外服務

SSL憑證相關

➤ 對外服務(常見為網站系統)如果有掃出這兩項弱點

✓ 請確認是否使用**有效的**免費憑證(每3個月要更新一次)

✓ 例如：Let's Encrypt

➤ 對外服務憑證請保持有效且安全

✓ 相關弱點：

- 35291 - SSL Certificate Signed Using Weak Hashing Algorithm
- 31705 - SSL Anonymous Cipher Suites Supported
- 51192 - SSL Certificate Cannot Be Trusted
- 15901 - SSL Certificate Expiry
- 45411 - SSL Certificate with Wrong Hostname
- 57582 - SSL Self-Signed Certificate

更新後排除項目

- 10114 - ICMP Timestamp Request Remote Date Disclosure
- 這一項在2024年5月3日官方更新標準為低風險，列為建議處理

The screenshot displays the Tenable Nessus interface for the plugin 'ICMP Timestamp Request Remote Date' (ID 10114). The severity level is highlighted as 'LOW' in a yellow box. A callout box on the right side of the image shows the text 'LOW' and 'Nessus Plugin ID 10114'. The main content area includes a synopsis, description, and solution. The plugin details section lists the severity as Low, ID as 10114, file name as icmp_timestamp.nasl, version as 1.53, type as remote, family as General, published date as 8/1/1999, and updated date as 5/3/2024. The risk information section shows a VPR, risk factor of Medium, score of 4.2, and CVSS v2.

Field	Value
Severity	Low
ID	10114
File Name	icmp_timestamp.nasl
Version	1.53
Type	remote
Family	General
Published	8/1/1999
Updated	5/3/2024
Supported Sensors	Nessus
Risk Factor	Medium
Score	4.2
CVSS v2	



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感謝閱讀

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