



# N-Partner



VMware 环境如何设定 N-Probe/External Receiver

V012

2020/03/10



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# 1. 前置准备

1.1 请准备一台 Server，建议规格如下：

- ✓ CPU建议E3-1231 v3 (8M高速缓存，3.40 GHz)以上。
- ✓ 内存64GB以上。
- ✓ 硬盘空间1TB以上，请依实际需求决定。
- ✓ 安装VMware ESXi 5.5以上版本(ESXi 5.5 ~ 6.7 版)。

1.2 N-Probe运行时，若要达到最佳效能，至少需要16G内存空间。

1.3 请准备一台 Windows 计算机，安装 VMware vSphere Client，用于管理 VMware Server。

1.4 请准备 N-Reporter 系统，接收 N-Probe/External Receiver 送来的 Flow / Syslog 数据。

## 2. 下载 N-Probe/External Receiver VMware image

VMware 版本的 N-Probe/External Receiver Image 下载地址如下

压缩文件(注)

<https://www.npartnertech.com/download/vm/N-Probe.zip>

注:压缩文件内含有 OVA 文件及其校验文件 (MD5 验证码)。

### 3. 安装流程

#### 3.1 vSphere Client

(1) 登入 VMware ESXi

开启[VMware vSphere Client]->输入 VMware IP address、User name、Password->按[Login]

VMware vSphere Client

vmware

VMware vSphere™  
Client

All vSphere features introduced in vSphere 5.5 and beyond are available only through the vSphere Web Client. The traditional vSphere Client will continue to operate, supporting the same feature set as vSphere 5.0.

To directly manage a single host, enter the IP address or host name.  
To manage multiple hosts, enter the IP address or name of a vCenter Server.

IP address / Name: 192.168.2.45

User name: root

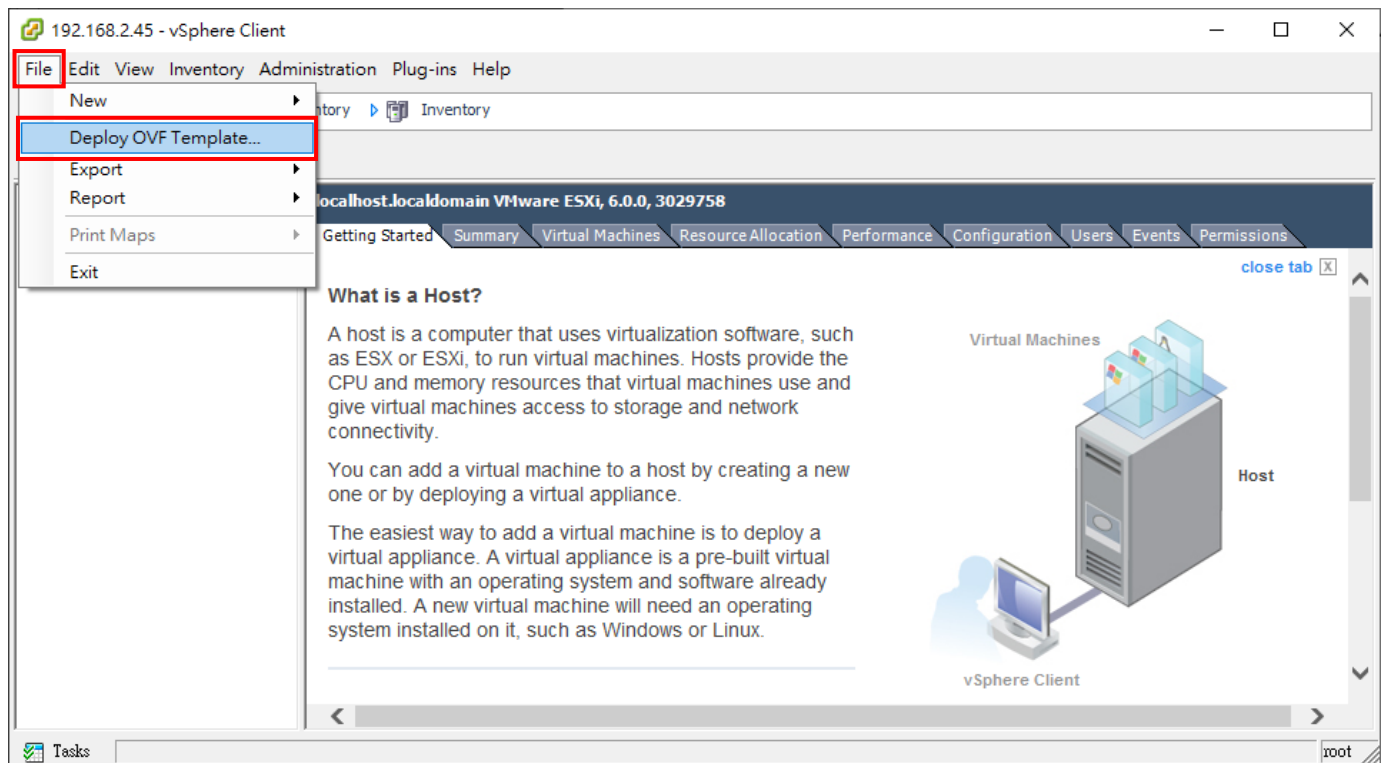
Password: \*\*\*\*\*

Use Windows session credentials

Login Close

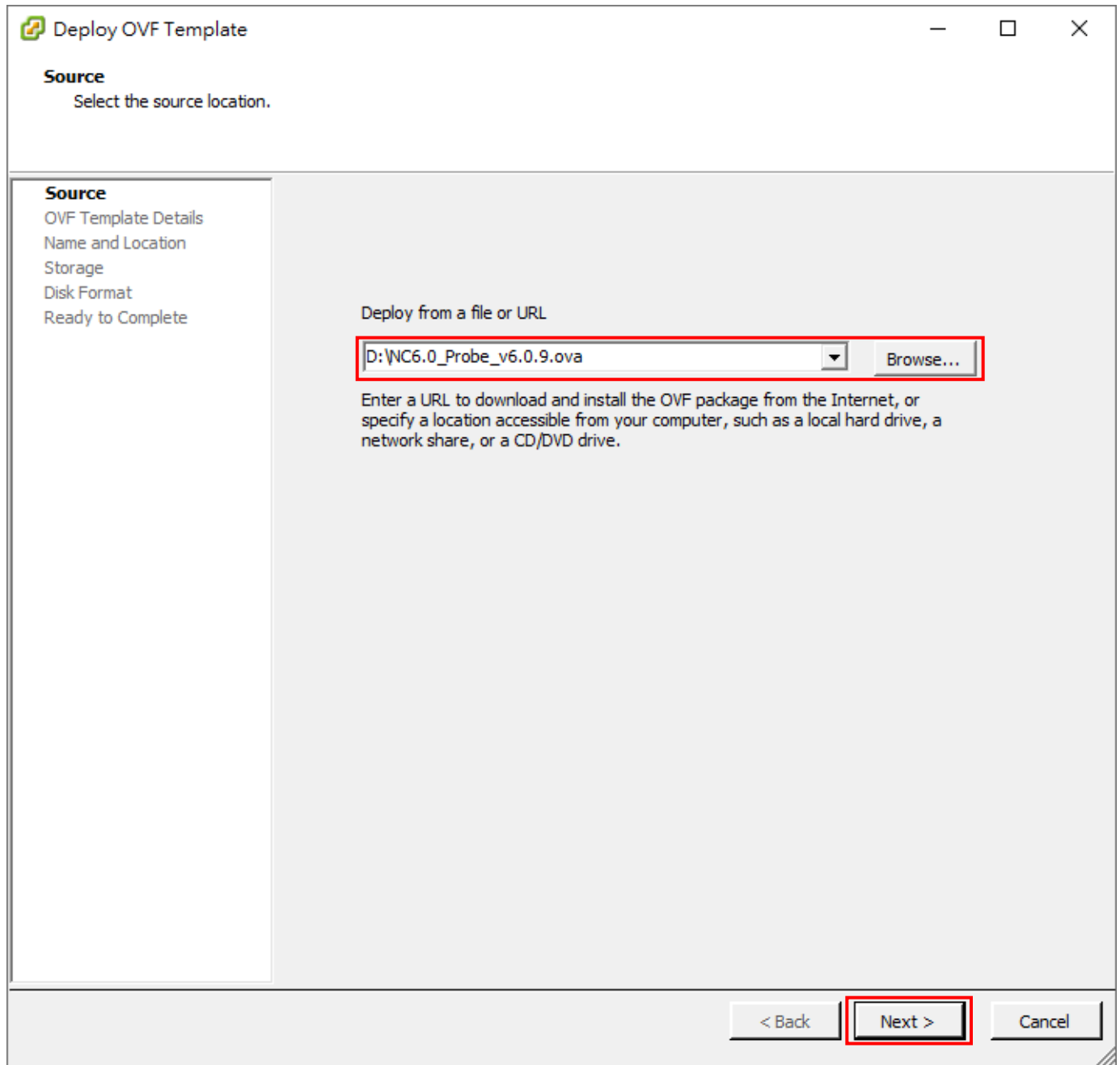
## (2) 部署 N-Probe/External Receiver

点击左上角[File]-&gt;[Deploy OVF Template...]



(3) 来源

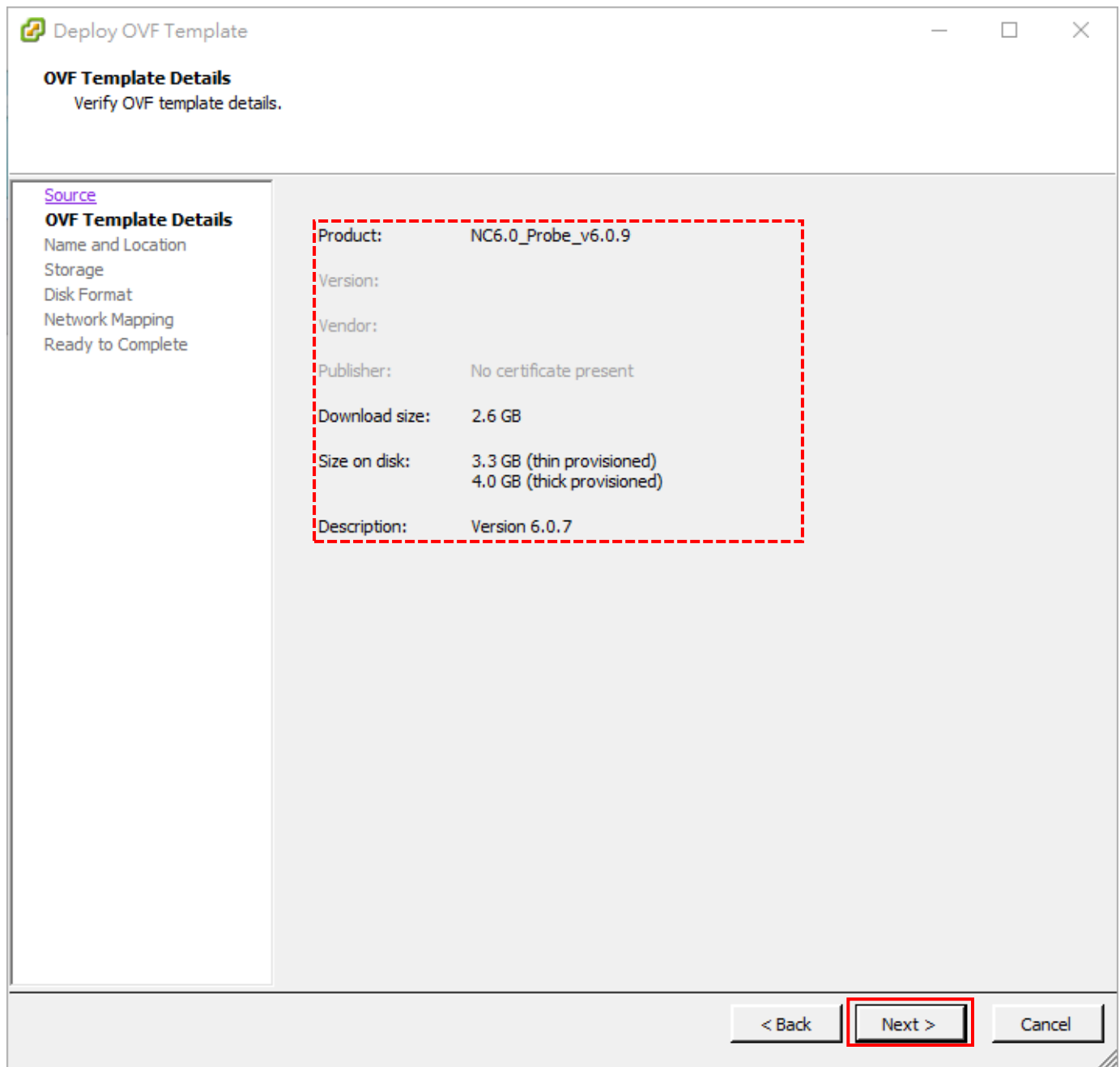
按[Browse]选择[N-Probe/External Receiver OVA]文件->按[Next]





## (4) OVF 模板详细数据

确认导入[N-Probe/External Receiver]信息 -&gt;按[Next]



(5) 名称和位置

输入 N-Probe/External Receiver 虚拟机名称 ->按[Next]

Deploy OVF Template

**Name and Location**  
Specify a name and location for the deployed template

Source  
OVF Template Details  
**Name and Location**  
Storage  
Disk Format  
Network Mapping  
Ready to Complete

Name:  
N-Probe  
The name can contain up to 80 characters and it must be unique within the inventory folder.

< Back   Next >   Cancel

## (6) 储存区

选择 [datastore] -&gt;按[Next]

**Storage**  
Where do you want to store the virtual machine files?

[Source](#)  
[OVF Template Details](#)  
[Name and Location](#)

**Storage**  
Disk Format  
Network Mapping  
Ready to Complete

Select a destination storage for the virtual machine files:

Name	Drive Type	Capacity	Provisioned	Free	Type	Thin Pro
datastore1 (6)	Non-SSD	5.45 TB	8.28 TB	166.03 GB	VMFS5	Supporte
datastore2	Non-SSD	5.46 TB	5.28 TB	597.84 GB	VMFS5	Supporte

Disable Storage DRS for this virtual machine

Select a datastore:

Name	Drive Type	Capacity	Provisioned	Free	Type	Thin Provi
------	------------	----------	-------------	------	------	------------

Compatibility:

< Back   **Next >**   Cancel

(7) 磁盘格式

选择[Thick Provision Lazy Zeroed(完整布建消极式归零)] ->按[Next]。

注:Thick Provision Lazy Zeroed(完整布建消极式归零)会给足硬盘完整大小

Deploy OVF Template

**Disk Format**  
In which format do you want to store the virtual disks?

Source  
OVF Template Details  
Name and Location  
Storage  
**Disk Format**  
Network Mapping  
Ready to Complete

Datastore: datastore2

Available space (GB): 597.8

Thick Provision Lazy Zeroed  
 Thick Provision Eager Zeroed  
 Thin Provision

< Back   **Next >**   Cancel

## (8) 网络对应

选择 [Network Mapping] -&gt;按[Next]

The screenshot shows the 'Deploy OVF Template' wizard window. The title bar reads 'Deploy OVF Template'. The main heading is 'Network Mapping' with the subtitle 'What networks should the deployed template use?'. On the left, a sidebar contains navigation links: 'Source', 'OVF Template Details', 'Name and Location', 'Storage', 'Disk Format', and 'Network Mapping' (which is bolded and followed by 'Ready to Complete'). The main area is titled 'Map the networks used in this OVF template to networks in your inventory'. It features a table with two columns: 'Source Networks' and 'Destination Networks'. A single row is visible, mapping 'VM Network' to 'VM Network'. Below the table is a 'Description:' field containing the text 'The VM Network network'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red box.

Source Networks	Destination Networks
VM Network	VM Network

Description:  
The VM Network network

< Back   **Next >**   Cancel

(9) 即将完成

确认导入信息是否正确，勾选[Power on after deployment(部署后开启电源)] ->按[Finish]开始部署虚拟机

**Deploy OVF Template**

**Ready to Complete**  
Are these the options you want to use?

Source  
[OVF Template Details](#)  
[Name and Location](#)  
[Storage](#)  
[Disk Format](#)  
[Network Mapping](#)  
**Ready to Complete**

When you click Finish, the deployment task will be started.

Deployment settings:

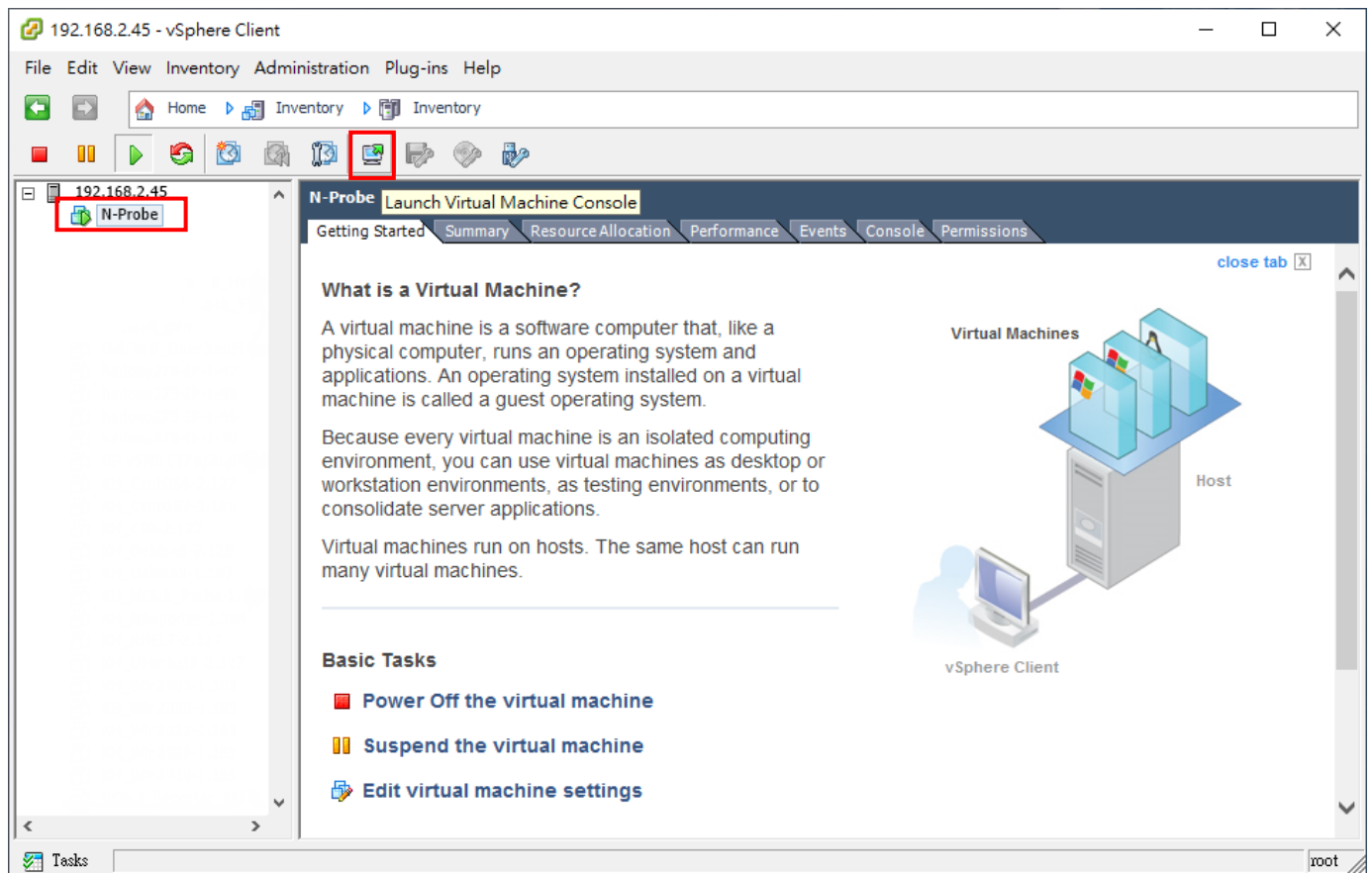
OVF file:	D:\NC6.0_Probe_v6.0.9.ova
Download size:	2.6 GB
Size on disk:	4.0 GB
Name:	N-Probe
Host/Cluster:	localhost
Datastore:	datastore2
Disk provisioning:	Thick Provision Lazy Zeroed
Network Mapping:	"VM Network" to "VM Network"

Power on after deployment

< Back   **Finish**   Cancel

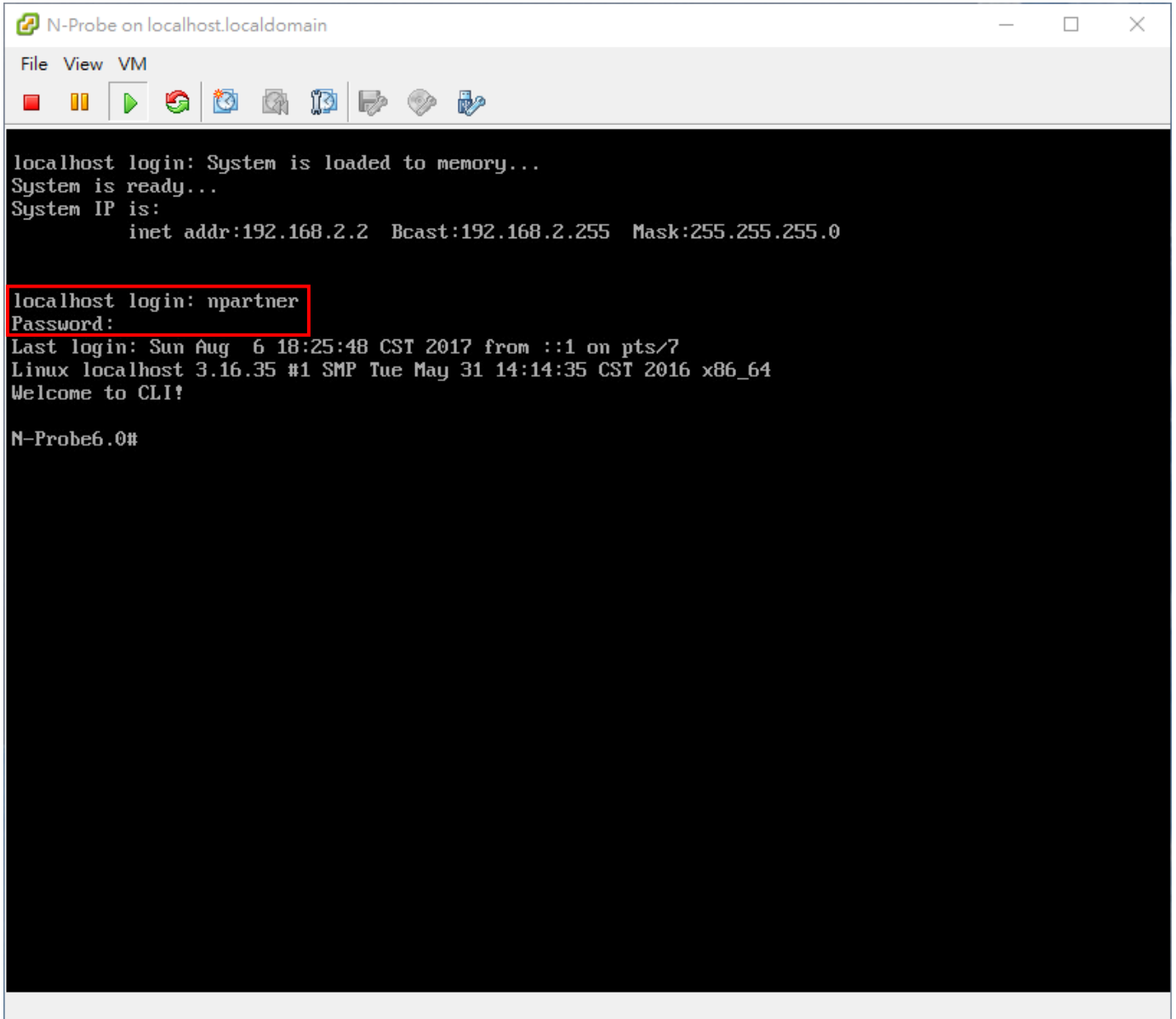
## (10) 开启控制台

导入完成后点选[N-Probe/External Receiver 虚拟机] ->按[Launch Virtual Machine Console(启动虚拟机控制台)]



## (11) 登入 N-Probe/External Receiver

默认 CLI 登入账号密码: npartner/npartner



```
N-Probe on localhost.localdomain
File View VM
localhost login: System is loaded to memory...
System is ready...
System IP is:
    inet addr:192.168.2.2 Bcast:192.168.2.255 Mask:255.255.255.0

localhost login: npartner
Password:
Last login: Sun Aug  6 18:25:48 CST 2017 from ::1 on pts/7
Linux localhost 3.16.35 #1 SMP Tue May 31 14:14:35 CST 2016 x86_64
Welcome to CLI!

N-Probe6.0#
```

(12) 查看 N-Probe/External Receiver 设定



N-Probe# `show configure`

```
N-Probe6.0# show configure
##### Current configuration #####
hostname N-Probe6.0
interface eth0 192.168.2.2 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####
```

(13) 变更 N-Probe/External Receiver IP address

N-Probe# `configure terminal`

注: IP 设定方式: `interface eth0<N-Probe_IP><subnet_mask> gw <gateway_IP>`

N-Probe(config)# `interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253`

N-Probe(config)# `exit`

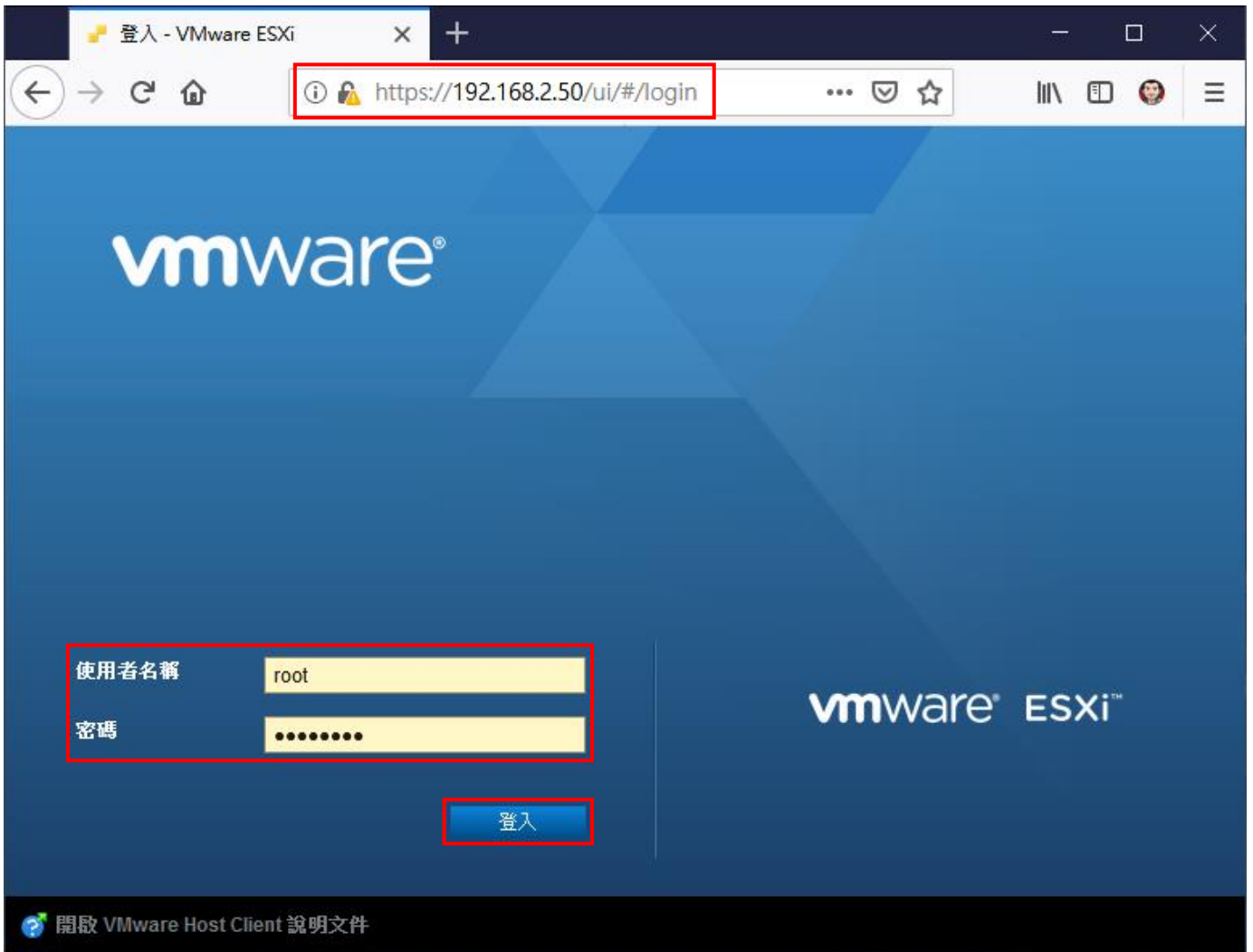
N-Probe# `show configure`

```
N-Probe6.0# configure terminal
N-Probe6.0(config)# interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
N-Probe6.0(config)# exit
N-Probe6.0# show configure
##### Current configuration #####
hostname N-Probe6.0
interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####
```

### 3.1 vSphere Web Client

(1) 登入 VMware ESXi

开启[浏览器]->URL 输入 <https://<VMware IP>> ->输入用户名和密码 ->按[登入]



## (2)部署虚拟机

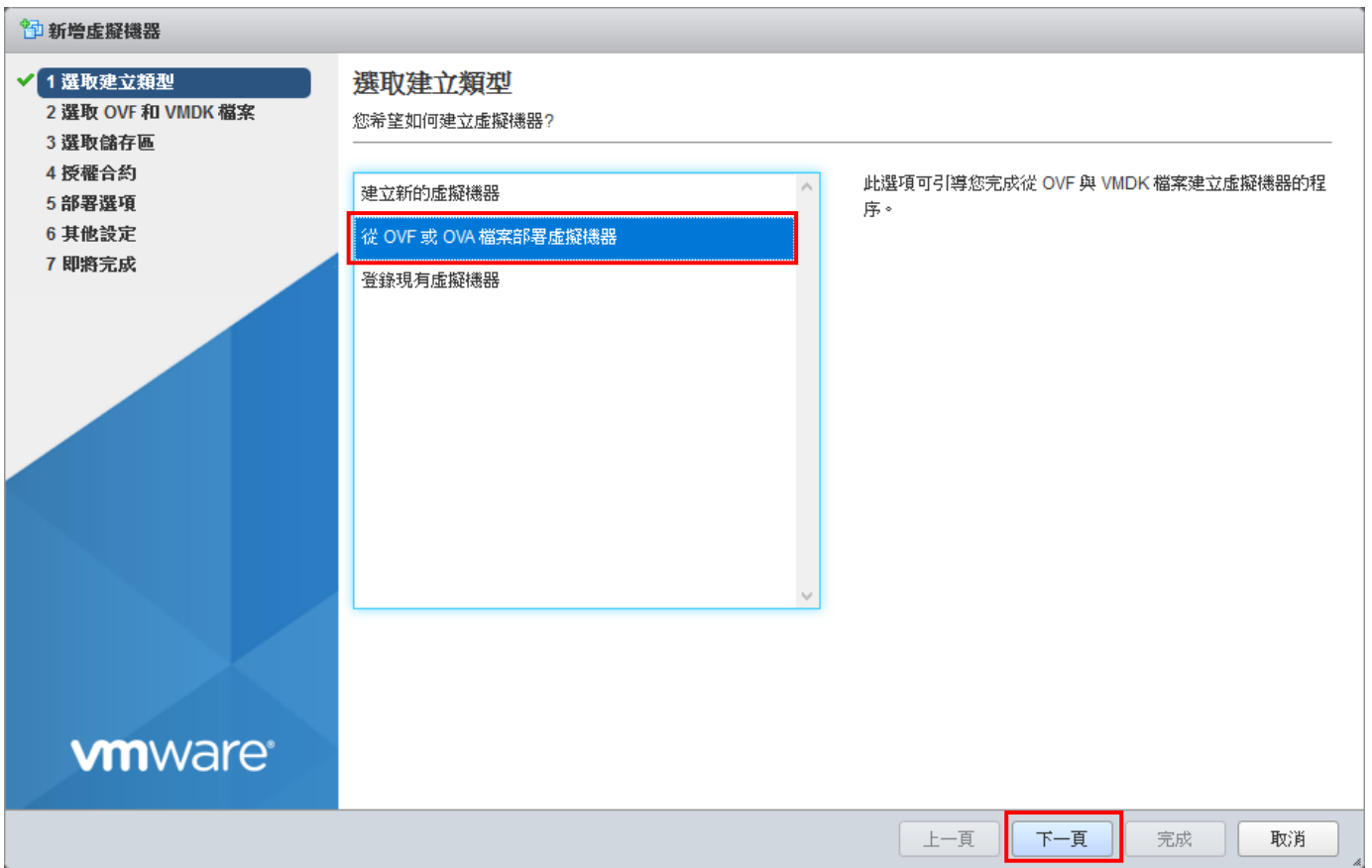
点击[建立/登录虚拟机]

The screenshot displays the VMware ESXi management console. The browser address bar shows `https://192.168.2.50/ui/#/host`. The interface is in Chinese. On the left sidebar, the 'Virtual Machines' (虛擬機器) section is expanded, showing 17 items. The main content area displays the host 'localhost.localdomain' with various actions: 'Obtain vCenter Server', 'Build/Register Virtual Machine' (highlighted with a red box), 'Power Off', 'Power On', 'Reconfigure', and 'Actions'. Below the host name, there is a 'Build or Register Virtual Machine' button. The host details include: Version: 6.5.0 (Build 4887370), Status: Normal (not connected to any vCenter Server), and Uptime: 70.1 days since last update. Resource usage is shown with progress bars: CPU (13.1 GHz available, 6% used), Memory (231.74 GB available, 9% used), and Storage (19.41 TB available, 11% used). A hardware table is also visible at the bottom.

硬體	
製造商	Supermicro
型號	Super Server
CPU	4 CPUs x Intel(R) Xeon(R) CPU E5-1620 v4 @ 3.50GHz
記憶體	255.89 GB
虛擬 Flash	0 B 已使用, 0 B 容量

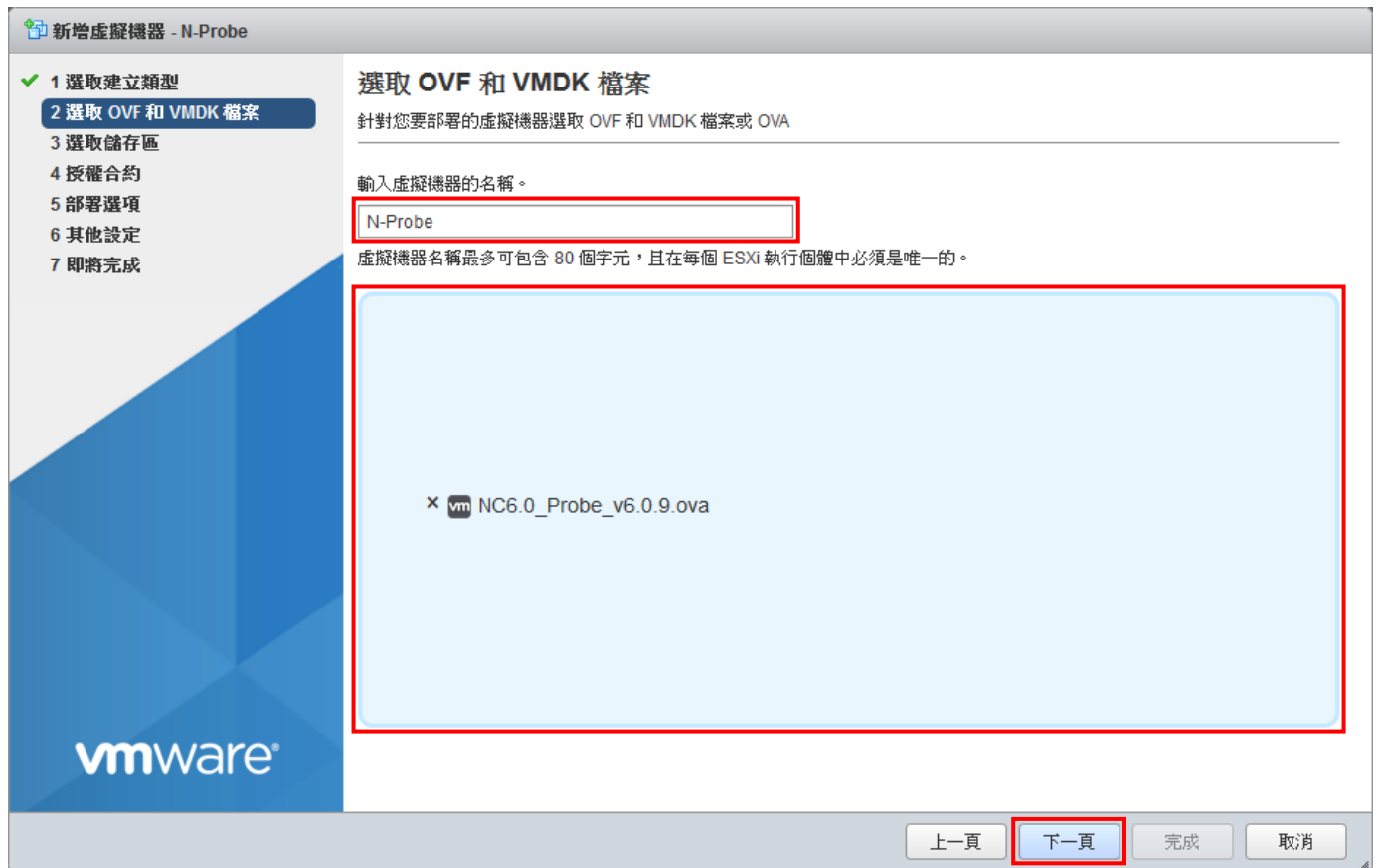
(3) 选取建立类型

选择[从 OVF 或 OVA 文件部署虚拟机] ->按 [下一页]



(4) 选取 OVF 和 VMDK 文件

输入 N-Probe/External Receiver **虚拟机名称** -> 选取或拖放[N-Probe/External Receiver OVA]文件 -> 按[下一页]



(5) 选取储存区

选择 [存放空间] ->按 [下一页]

新增虛擬機器 - N-Probe

- 1 選取建立類型
- 2 選取 OVF 和 VMDK 檔案
- 3 選取儲存區
- 4 授權合約
- 5 部署選項
- 6 其他設定
- 7 即將完成

### 選取儲存區

選取要在其中儲存組態和磁碟檔案的資料存放區。

下列資料存放區可從您選取的目的地資源存取。請為虛擬機器組態檔和所有虛擬磁碟選取目的地資料存放區。

名稱	容量	可用	類型	精簡佈建	存取
ESXi_2.50 datastore1	21.82 TB	19.41 TB	VMFS5	受支援	單一

1 項目

vmware

前一頁 下一頁 完成 取消

(6)部署选项

选择 [对应的网络] ->磁盘布建(Disk provisioning)点选 [完整(Thick)] ->按 [下一页]。

注: 完整(Thick)会给足硬盘完整大小。

新增虛擬機器 - N-Partner

- ✓ 1 選取建立類型
- ✓ 2 選取 OVF 和 VMDK 檔案
- ✓ 3 選取儲存區
- ✓ 4 部署選項
- 5 即將完成

### 部署選項

選擇部署選項

網路對應	VM Network	VM Network
磁碟佈建	<input type="radio"/> 精簡	<input checked="" type="radio"/> 完整

vmware

上一頁 下一頁 完成 取消

(9) 即將完成

确认导入信息是否正确，按[完成]。开始部署虚拟机


新增虛擬機器 - N-Probe

- ✓ 1 選取建立類型
- ✓ 2 選取 OVF 和 VMDK 檔案
- ✓ 3 選取儲存區
- ✓ 4 部署選項
- ✓ 5 即將完成

### 即將完成

請檢閱設定選擇後再完成精靈

產品	NC6.0_Probe_v6.0.9
虛擬機器名稱	N-Probe
磁碟	NC6.0_Probe_v6.0.9-disk1.vmdk
資料存放區	ESXi_2.50 datastore1
佈建類型	完整
網路對應	VM Network: VM Network
容體作業系統名稱	未知

 部署虛擬機器時請勿重新整理瀏覽器。

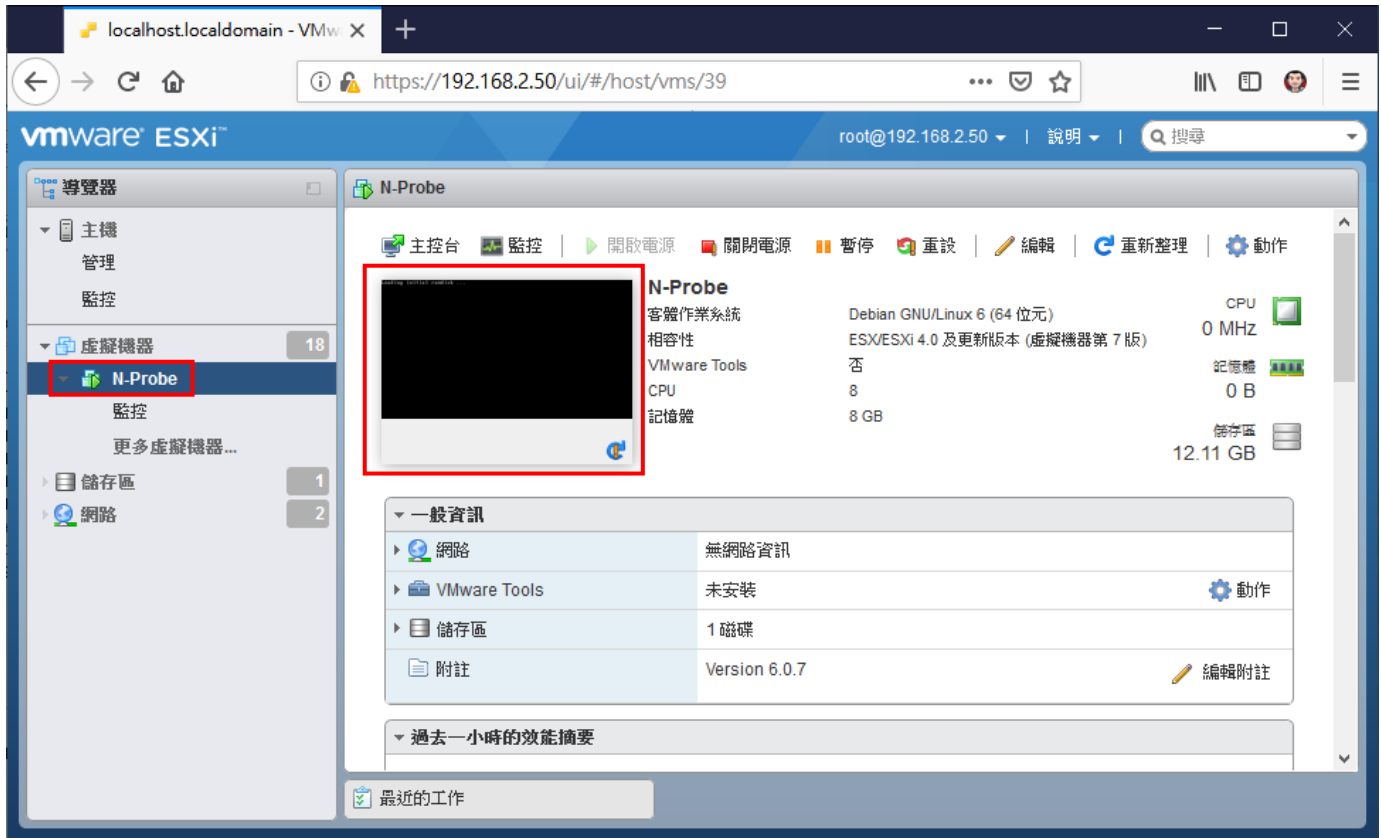
vmware

前一頁 下一頁 **完成** 取消

(10)开启控制台

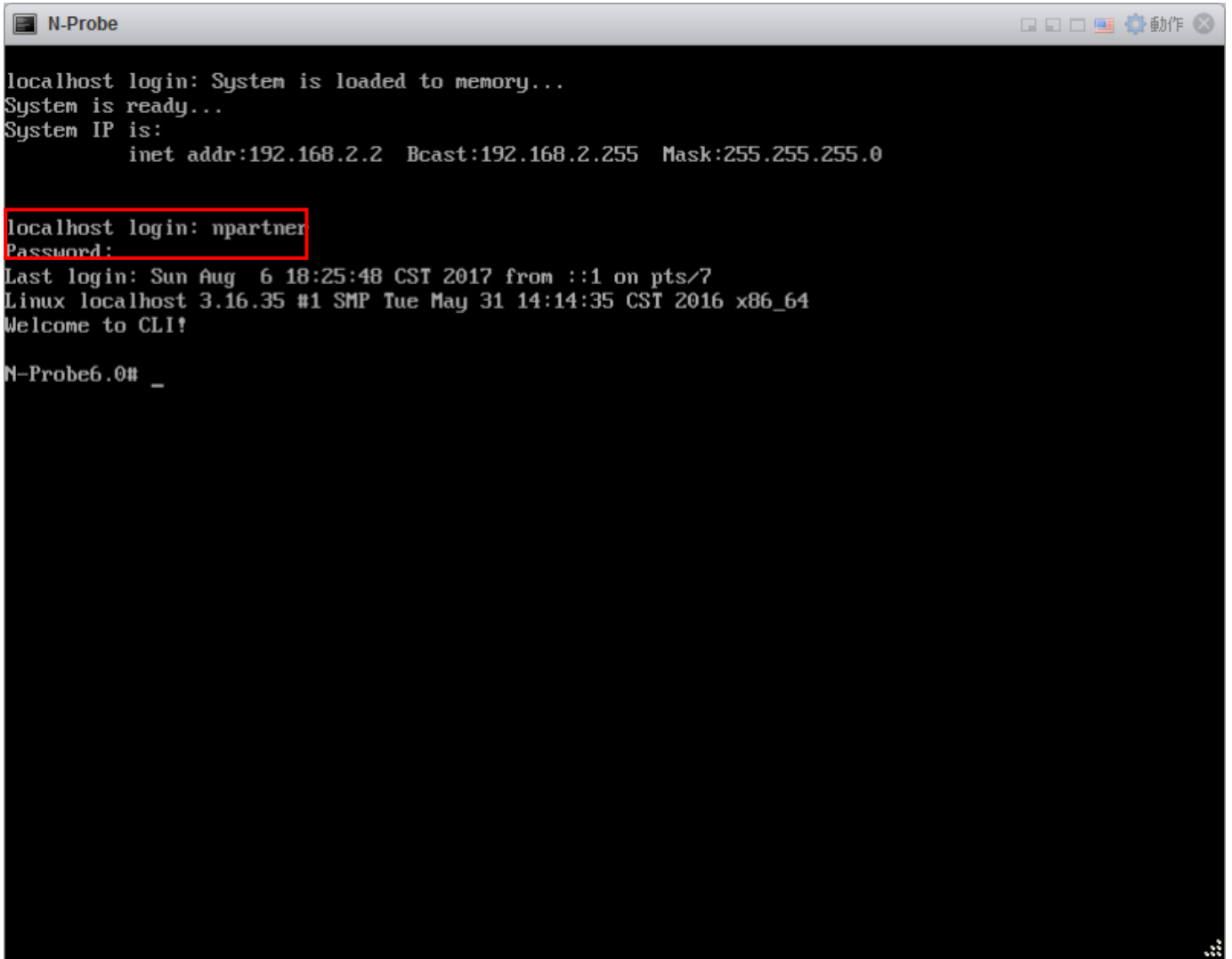


导入完成后，点选[N-Probe/External Receiver 虚拟机] ->[单击以开启此虚拟机的浏览器控制台]



(11) 登入 N-Probe/External Receiver

默认 CLI 登入账号密码: npartner/npartner

A screenshot of a terminal window titled "N-Probe". The terminal shows the system boot sequence: "localhost login: System is loaded to memory...", "System is ready...", and "System IP is: inet addr:192.168.2.2 Bcast:192.168.2.255 Mask:255.255.255.0". The user "npartner" is logged in, with the password field masked. The terminal displays the last login time and system information, followed by the prompt "N-Probe6.0# \_".

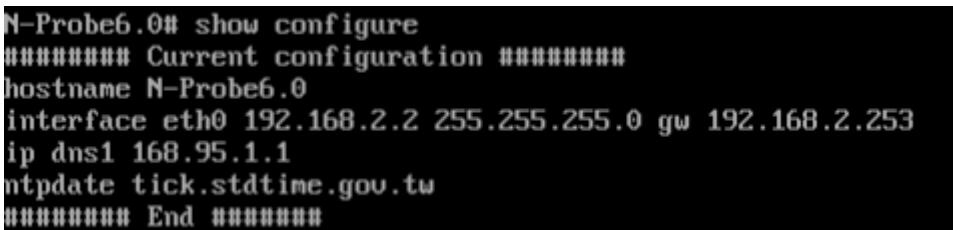
```
N-Probe
localhost login: System is loaded to memory...
System is ready...
System IP is:
    inet addr:192.168.2.2  Bcast:192.168.2.255  Mask:255.255.255.0

localhost login: npartner
Password:
Last login: Sun Aug  6 18:25:48 CST 2017 from ::1 on pts/7
Linux localhost 3.16.35 #1 SMP Tue May 31 14:14:35 CST 2016 x86_64
Welcome to CLI!

N-Probe6.0# _
```

(12)查看 N-Probe/External Receiver 设定

N-Probe# `show configure`

A screenshot of a terminal window showing the output of the "show configure" command. The output displays the current configuration for the N-Probe6.0 device, including hostname, interface settings, and DNS configuration.

```
N-Probe6.0# show configure
##### Current configuration #####
hostname N-Probe6.0
interface eth0 192.168.2.2 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####
```

(13)变更 N-Probe/External Receiver IP address

N-Probe#configure terminal

注: IP 设定方式: interface eth0 <NProbe\_IP><subnet\_mask> gw <gateway\_IP>

N-Probe(config)#interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253

N-Probe(config)#exit

N-Probe#show configure

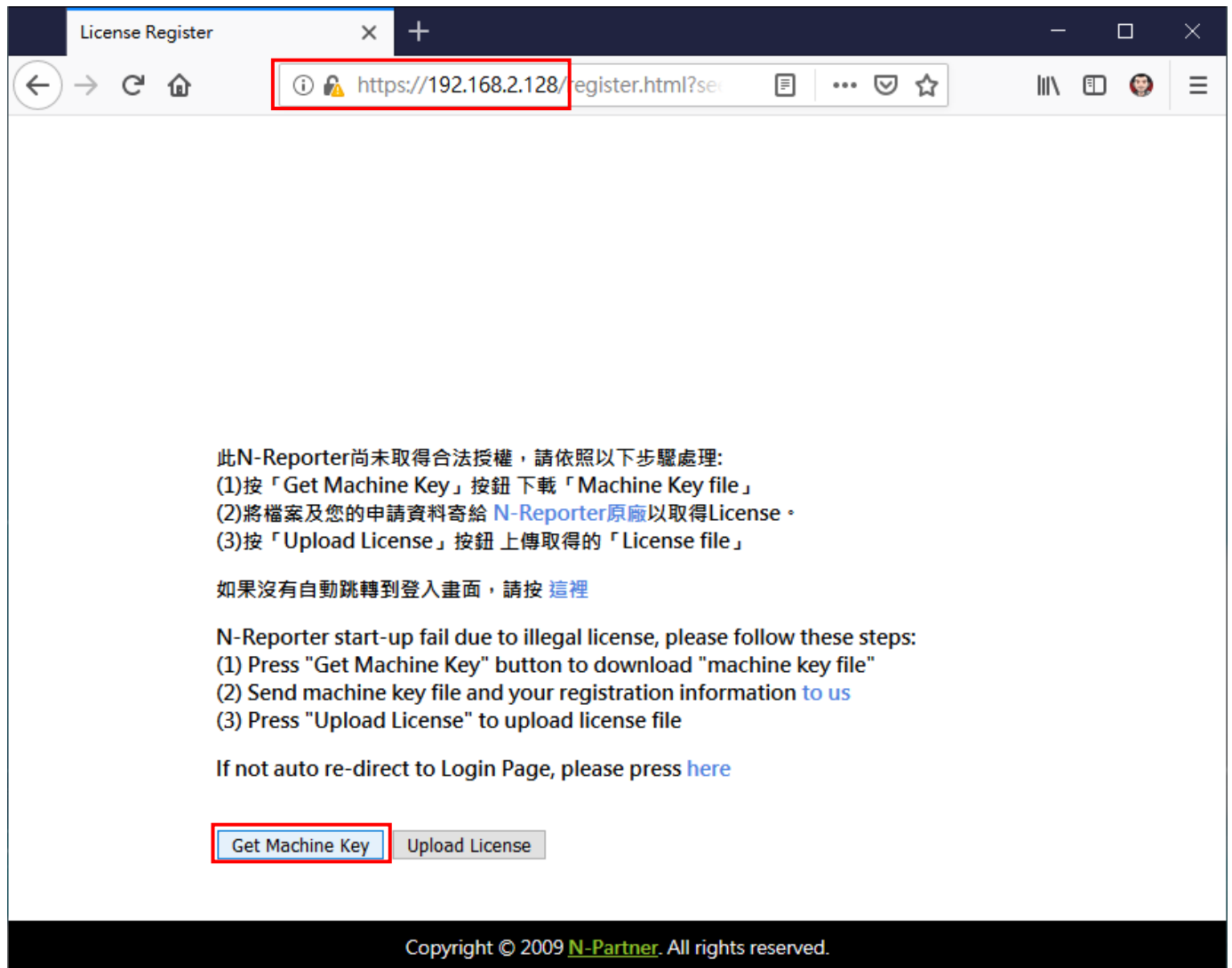
```
N-Probe6.0# configure terminal
N-Probe6.0(config)# interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
N-Probe6.0(config)# exit
N-Probe6.0# show configure
##### Current configuration #####
hostname N-Probe6.0
interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####
```

## 4. 更新流程

### 4.1 License upload

(1) 下载 machine.dat 文件

开启 [浏览器] ->URL 输入 <https://<N-Probe/External ReceiverIP>> -> 连上 N-Probe/External Receiver License 页面，按[Get Machine Key]



License Register

https://192.168.2.128/register.html?se

此N-Reporter尚未取得合法授權，請依照以下步驟處理：  
(1) 按「Get Machine Key」按鈕 下載「Machine Key file」  
(2) 將檔案及您的申請資料寄給 [N-Reporter原廠](#)以取得License。  
(3) 按「Upload License」按鈕 上傳取得的「License file」

如果沒有自動跳轉到登入畫面，請按 [這裡](#)

N-Reporter start-up fail due to illegal license, please follow these steps:  
(1) Press "Get Machine Key" button to download "machine key file"  
(2) Send machine key file and your registration information [to us](#)  
(3) Press "Upload License" to upload license file

If not auto re-direct to Login Page, please press [here](#)

Get Machine Key Upload License

Copyright © 2009 [N-Partner](#). All rights reserved.

(2) 下载 machine.dat 。将 machine.dat 寄给 [se@npartnertech.com](mailto:se@npartnertech.com)



(3) 请依底下图示的邮件格式撰写

**邮件格式**

主旨: N-Probe License 测试申请

邮件内容:

公司名称:

申请人:

电子邮件:

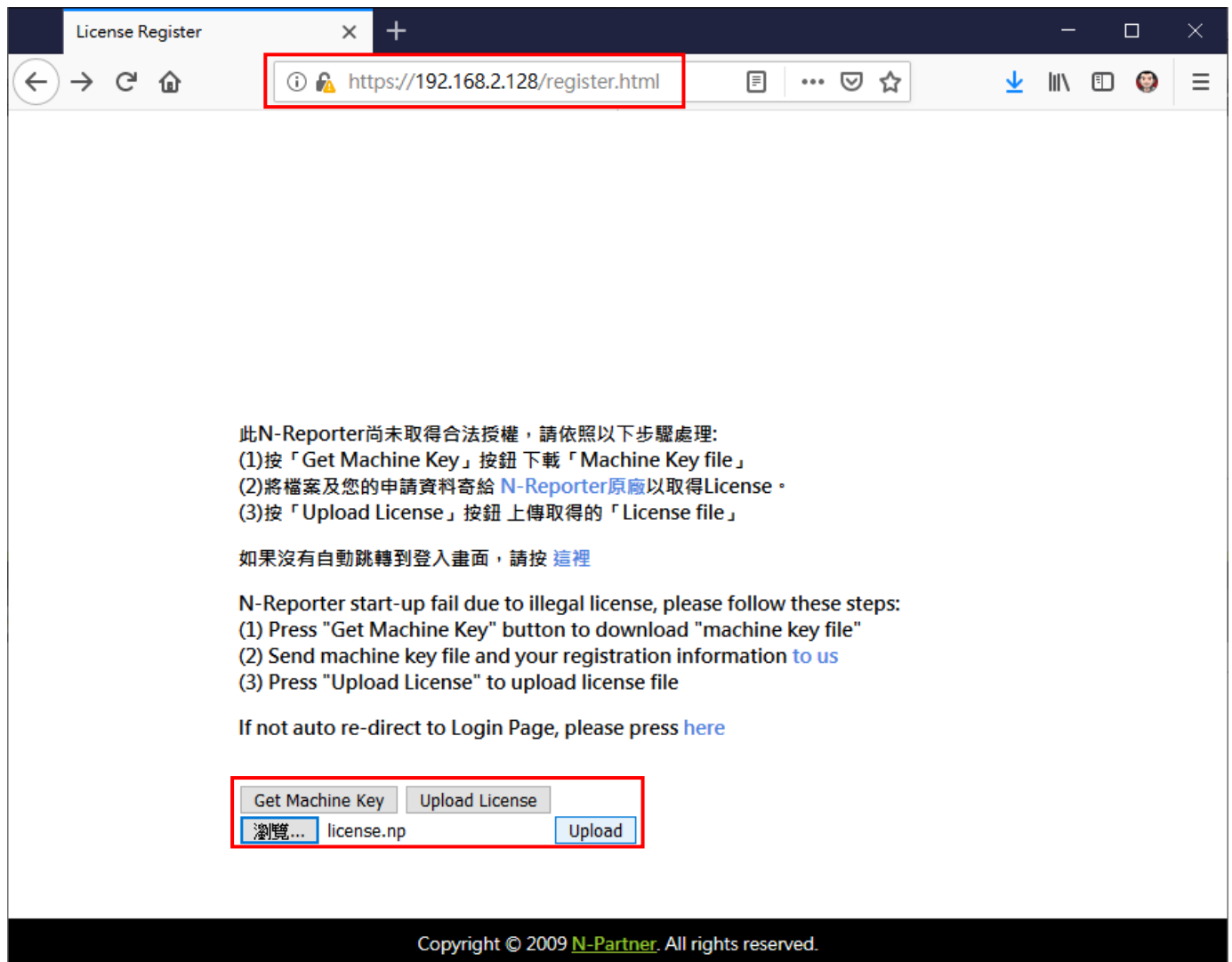
联系人电话:

服务的经销商或SI 厂商: (可空白)

备注:

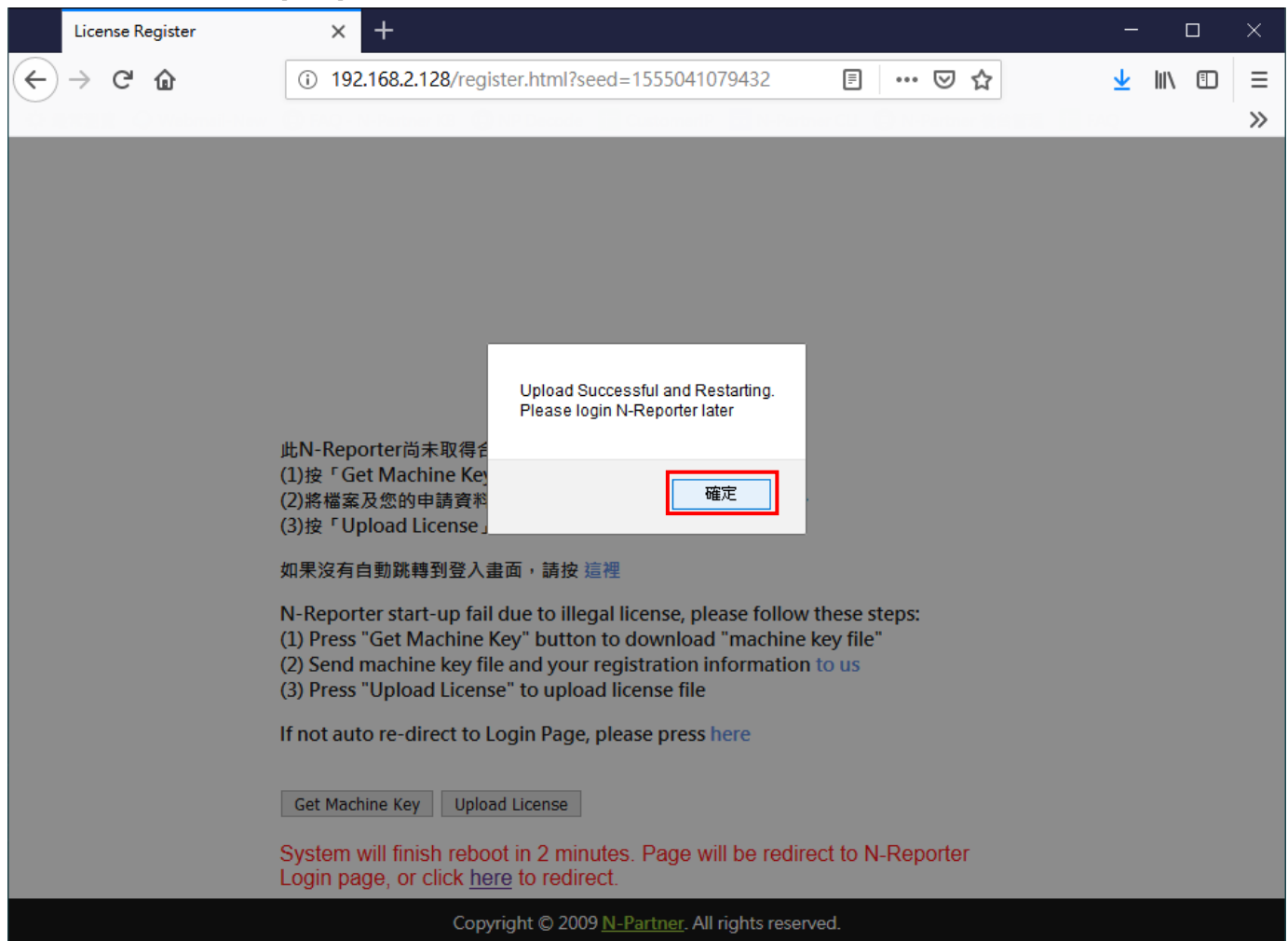
(4)上传 License 文件

取得 license.np 文件后, 开启 [浏览器] -> URL 输入 <https://<N-Probe/External ReceiverIP>/register.html> ->连上 N-Probe/External Receiver License 页面, 按[Upload License] ->[浏览] 选取[license.np]文件 ->按[Upload]



## (5)重新启动

系统会自动重新启动。按[确定]



The screenshot shows a web browser window titled "License Register" with the address bar displaying "192.168.2.128/register.html?seed=1555041079432". A modal dialog box is centered on the screen with the text: "Upload Successful and Restarting. Please login N-Reporter later". Below the dialog, the page content is partially visible, including instructions in Chinese and English. The "確定" button in the dialog is highlighted with a red rectangle.

Upload Successful and Restarting.  
Please login N-Reporter later

此N-Reporter尚未取得合  
(1)按「Get Machine Key  
(2)將檔案及您的申請資料  
(3)按「Upload License」

如果沒有自動跳轉到登入畫面，請按 [這裡](#)

N-Reporter start-up fail due to illegal license, please follow these steps:  
(1) Press "Get Machine Key" button to download "machine key file"  
(2) Send machine key file and your registration information [to us](#)  
(3) Press "Upload License" to upload license file

If not auto re-direct to Login Page, please press [here](#)

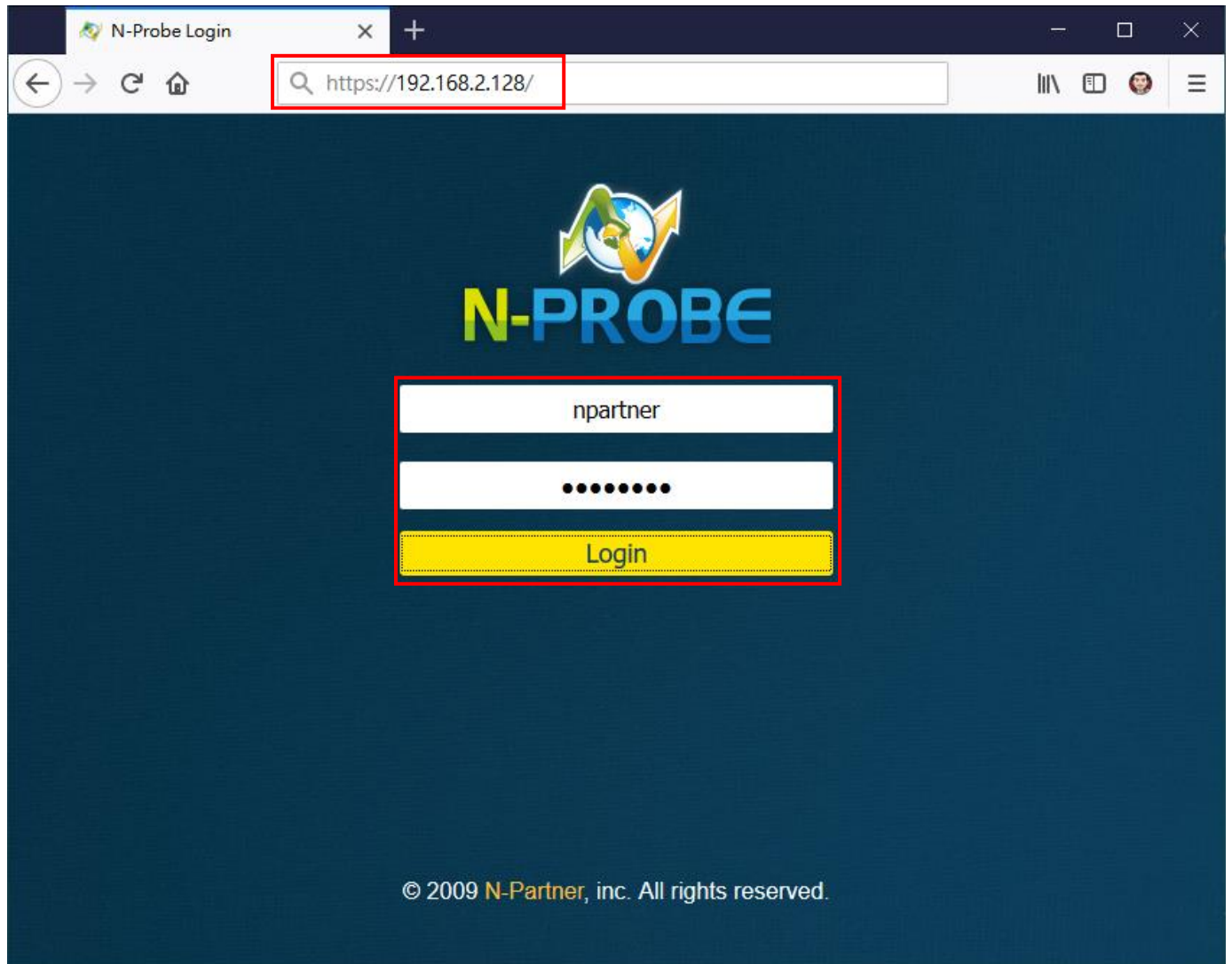
[Get Machine Key](#) [Upload License](#)

System will finish reboot in 2 minutes. Page will be redirect to N-Reporter Login page, or click [here](#) to redirect.

Copyright © 2009 [N-Partner](#). All rights reserved.

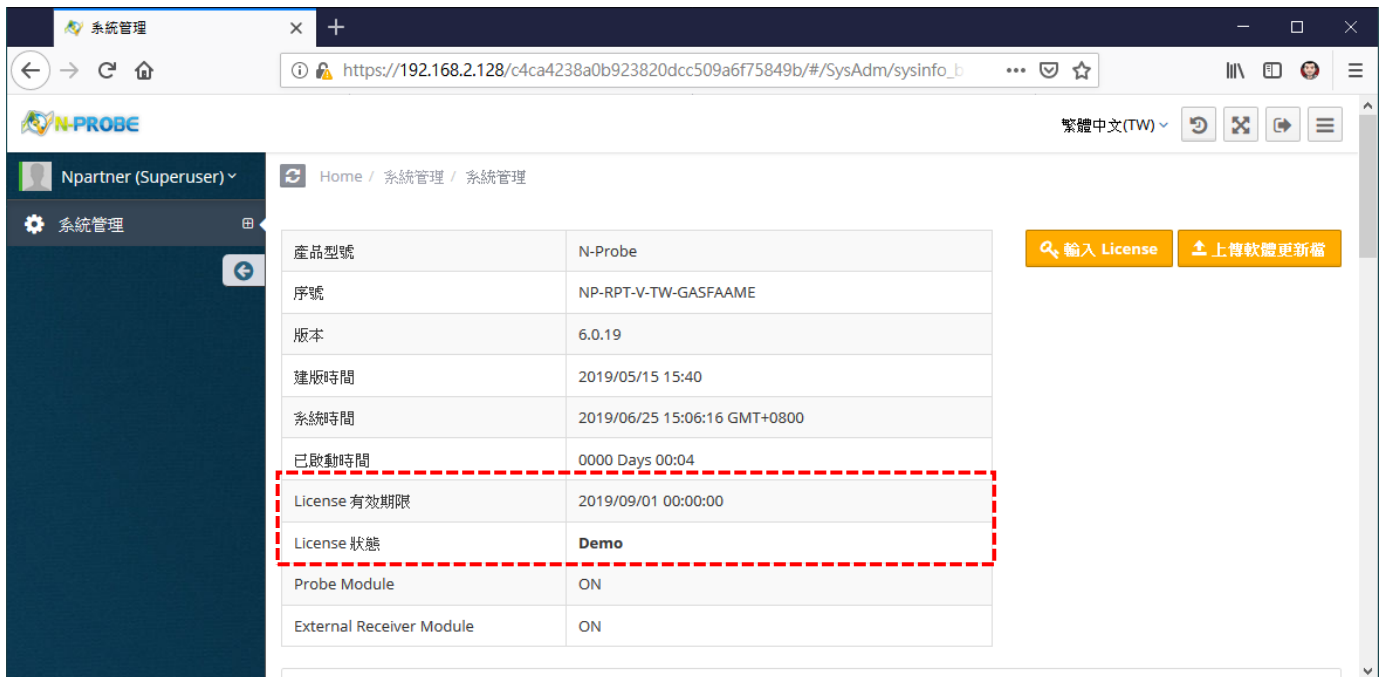
(6) 登入 N-Probe

重新启动后, 开启[浏览器]-> URL 输入<https://<N-Probe/External ReceiverIP>> 登入页面。默认登入账号密码:npartner/npartner->按下 [Login]





## (7) 确认 License 状态



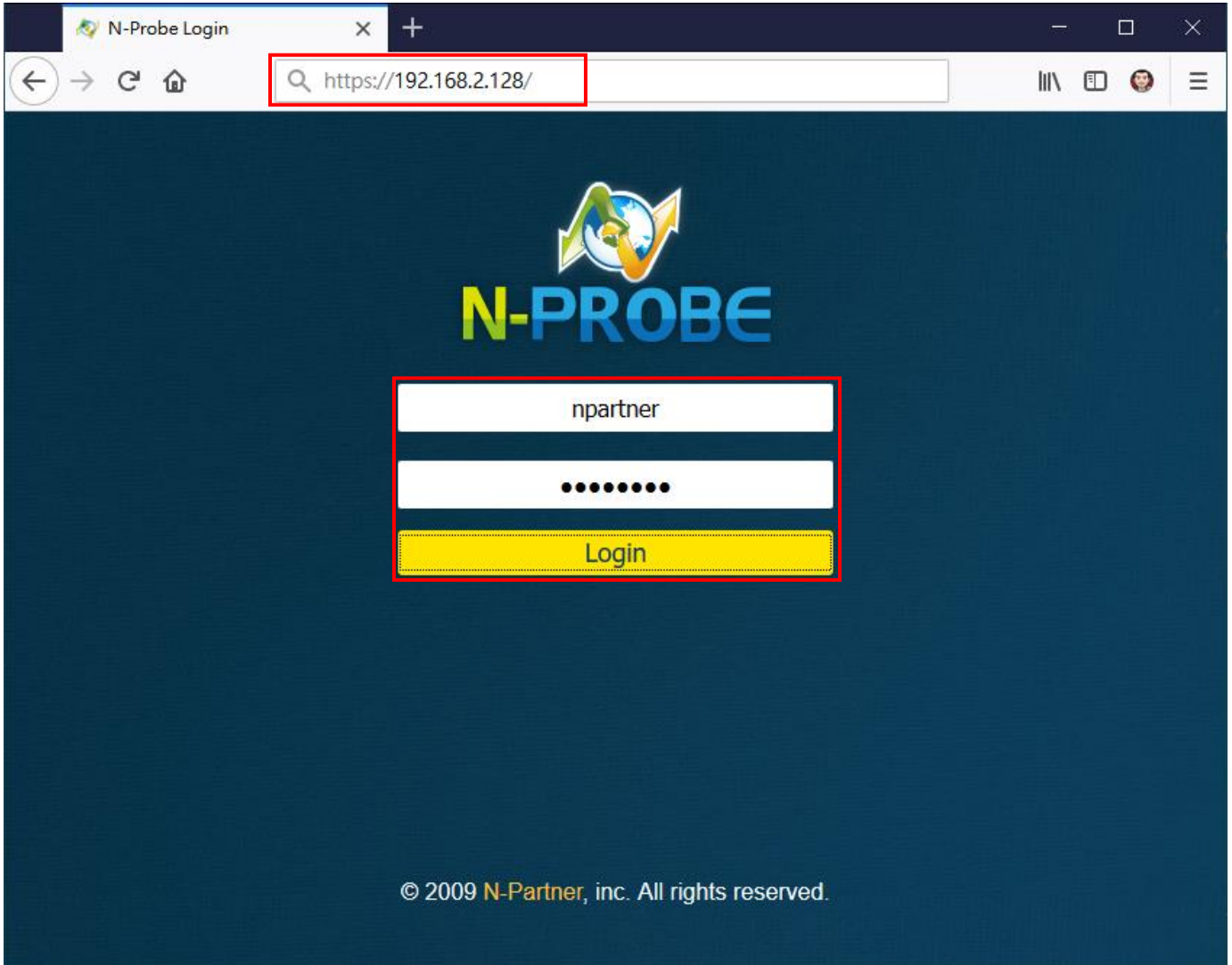
The screenshot displays the N-PROBE system management interface. The browser address bar shows the URL: [https://192.168.2.128/c4ca4238a0b923820dcc509a6f75849b/#/SysAdm/sysinfo\\_b](https://192.168.2.128/c4ca4238a0b923820dcc509a6f75849b/#/SysAdm/sysinfo_b). The user is logged in as 'Npartner (Superuser)'. The interface includes a sidebar with '系統管理' (System Management) and a main content area with a breadcrumb 'Home / 系統管理 / 系統管理'. A table lists system information, with the 'License 有效期限' and 'License 狀態' rows highlighted by a red dashed box. Two buttons are visible: '輸入 License' (Input License) and '上傳軟體更新檔' (Upload Software Update File).

產品型號	N-Probe
序號	NP-RPT-V-TW-GASFAAME
版本	6.0.19
建版時間	2019/05/15 15:40
系統時間	2019/06/25 15:06:16 GMT+0800
已啟動時間	0000 Days 00:04
License 有效期限	2019/09/01 00:00:00
License 狀態	<b>Demo</b>
Probe Module	ON
External Receiver Module	ON

## 4.2 Firmware upgrade

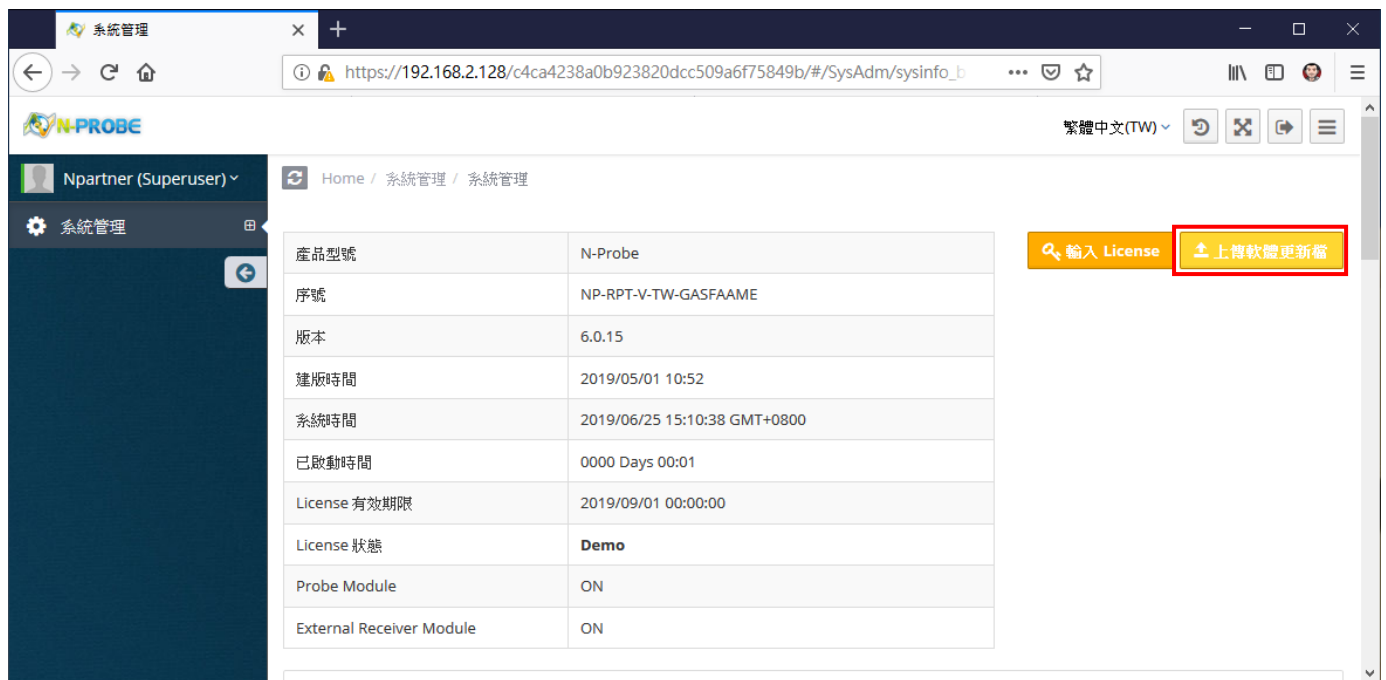
(1) 登入 N-Probe/External Receiver

开启[浏览器] -> URL 输入 <https://<N-Probe/External ReceiverIP>> 登入页面。默认登入账号密码:npartner/npartner->按下 [Login]



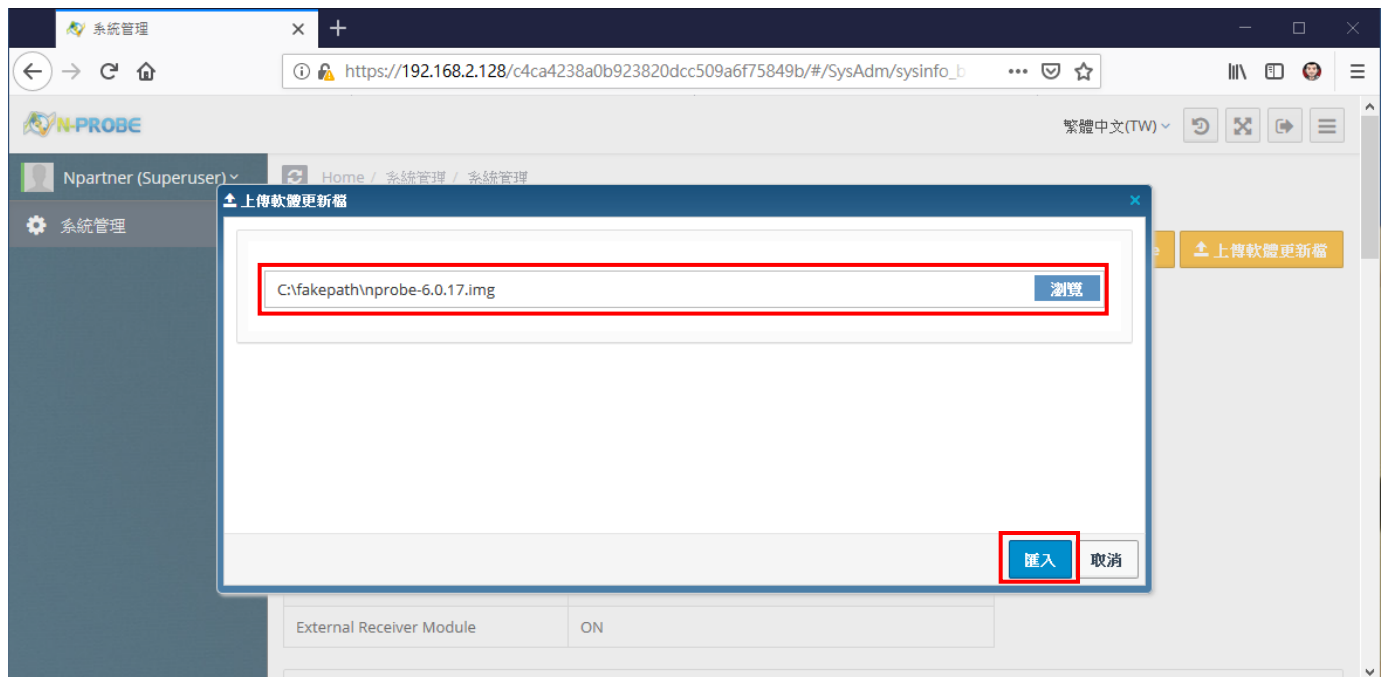
## (2) 上传软件更新文件

按 [上传软件更新文件]



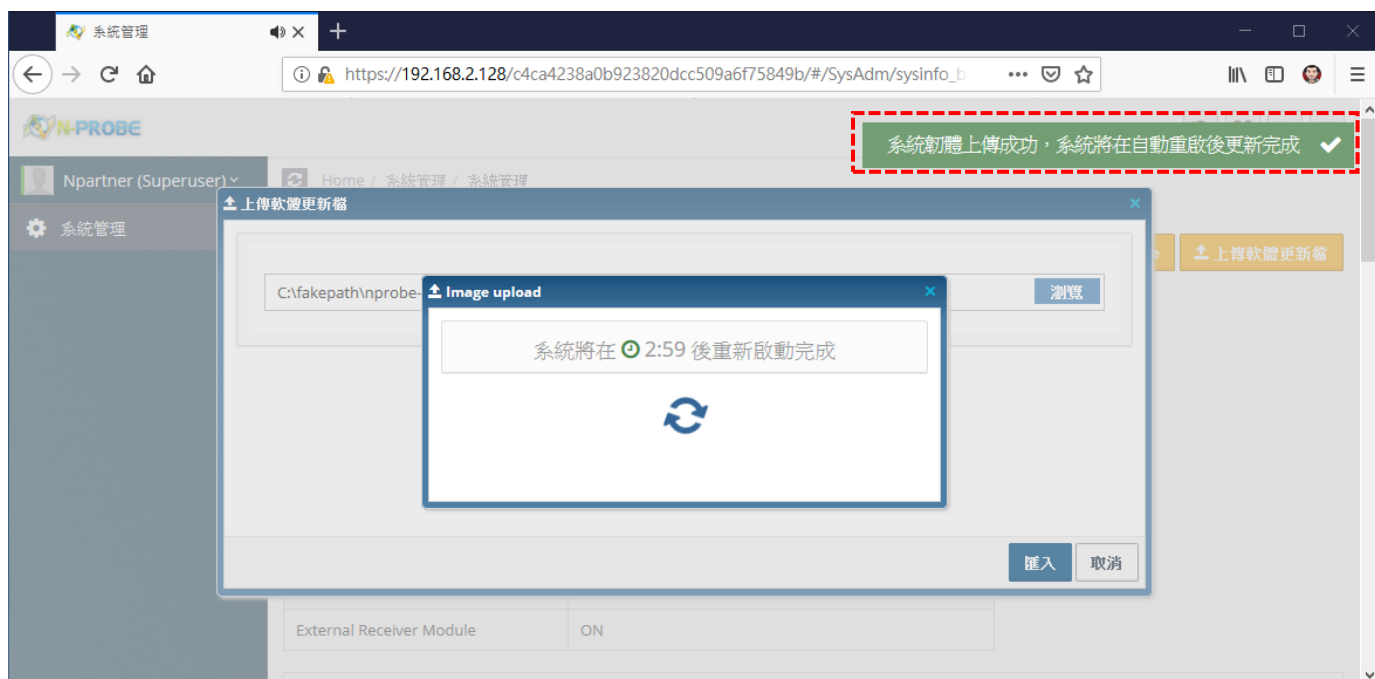
## (3) 导入软件更新文件

按 [浏览] ->选[Firmware image]文件 ->按 [导入]



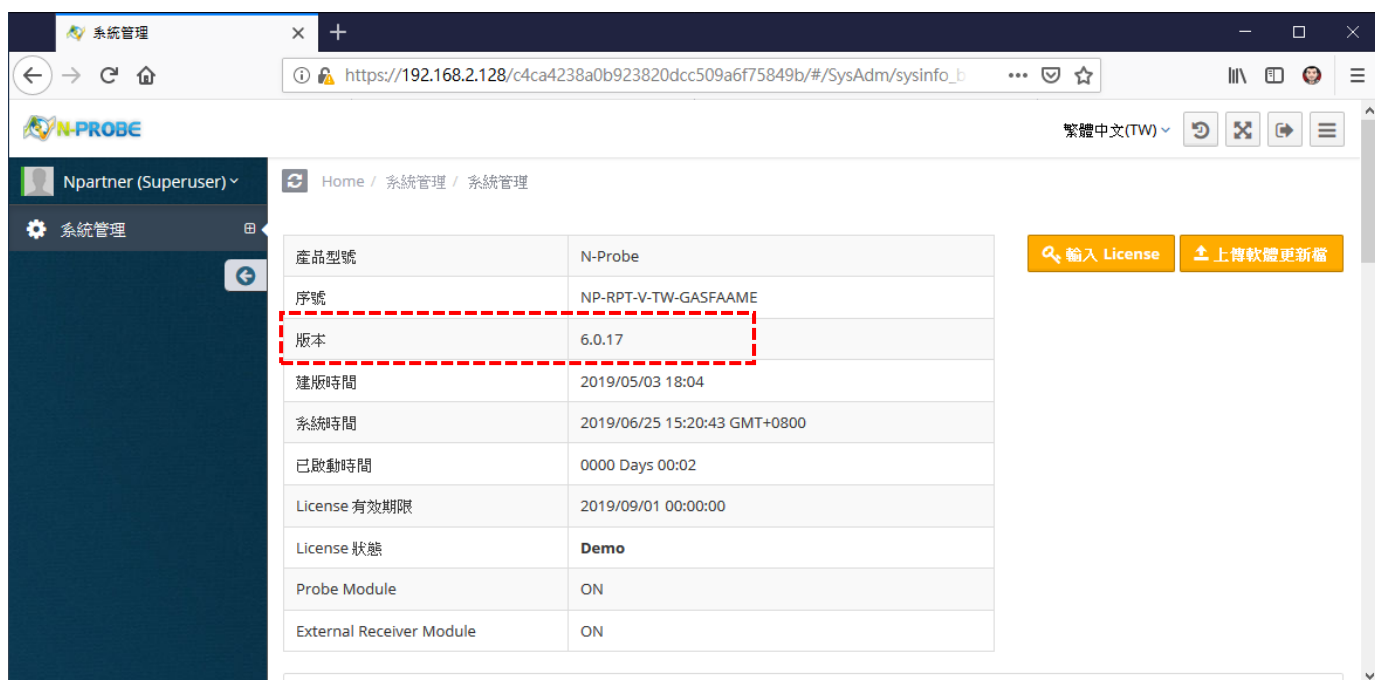
#### (4)系统重启

确认系统更新文件上传成功信息，系统会自动重启



#### (5)确认版本

重新启动后，开启 [浏览器]-> URL 输入 <https://<N-Probe/External ReceiverIP>> 登入页面。默认登入账号密码: `npartner/npartner`，确认软件版本



## 5. N-Probe 设定

### 5.1 N-Probe

通过终端机仿真软件(例如：Putty、SecureCRT、XShell 等)以 SSH 联机到 N-Reporter/N-Cloud 命令行接口(CLI)(默认的 CLI 登入账号密码：npartner / npartner)

(1)查看配置信息

N-Probe# `show configure`

```
N-Probe6.0# show configure
##### Current configuration #####
flow-sampling 1
hostname N-Probe6.0
interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####
```

(2) 进入设定模式

N-Probe#`configure terminal`

(3)设定 Flow 流量输出到 N-Reporter 接收 IP 与 Port

N-Probe(config)#`flow-export 192.168.2.77 9001`

(4) 设定 Flow sampling rate

N-Probe(config)#`flow-sampling 1`

(5) 启用 IPv6 Flow traffic 监听封包

N-Probe(config)#`flow-ipv6 on`

(6) 启动 Probe 功能并开启一个接口。N 个 interface，设定 probe interface N

N-Probe(config)#`probe interface 1`

(7) 离开 configure terminal

N-Probe(config)#`exit`

```
N-Probe6.0# configure terminal
N-Probe6.0(config)# flow-export 192.168.2.77 9001
N-Probe6.0(config)# flow-sampling 1
N-Probe6.0(config)# flow-ipv6 on
N-Probe6.0(config)# probe interface 1
N-Probe6.0(config)# exit
```

(8) 确认是否有设定成功

N-Probe# `show configure`

```
N-Probe6.0# show configure
##### Current configuration #####
flow-export 192.168.2.77 9001
flow-sampling 1
flow-ipv6 on
hostname N-Probe6.0
interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
probe interface 1
##### End #####
```

## 5.2 VMware ESXi

### 5.2.1 vSphere Client

(1) 登入 VMware ESXi

开启[VMware vSphere Client] -> 输入 VMware IP address、User name、Password -> 按[Login]

VMware vSphere Client

vmware

VMware vSphere™  
Client

All vSphere features introduced in vSphere 5.5 and beyond are available only through the vSphere Web Client. The traditional vSphere Client will continue to operate, supporting the same feature set as vSphere 5.0.

To directly manage a single host, enter the IP address or host name.  
To manage multiple hosts, enter the IP address or name of a vCenter Server.

IP address / Name: 192.168.2.45

User name: root

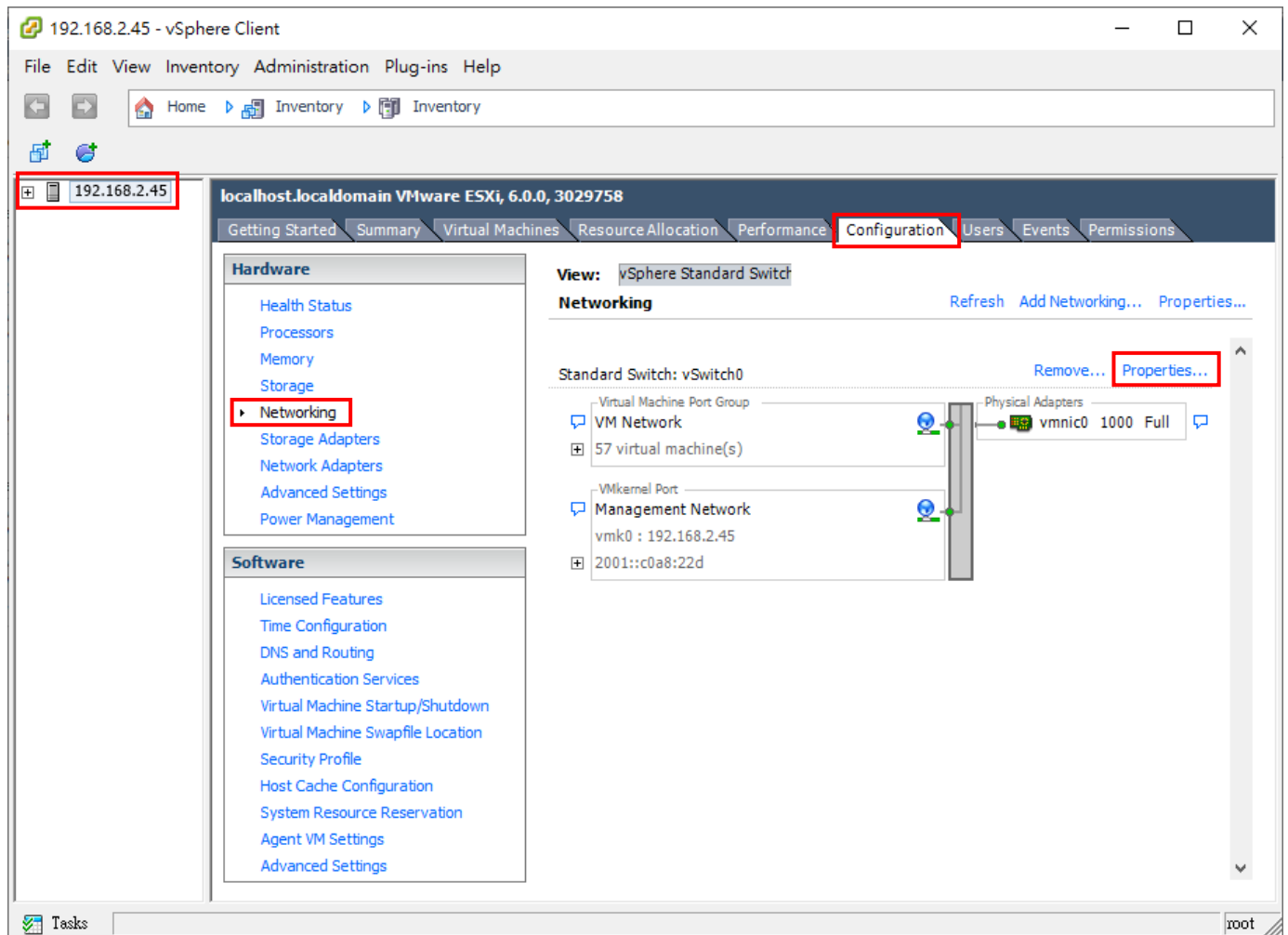
Password: \*\*\*\*\*

Use Windows session credentials

Login Close

## (2) 开启虚拟交换机

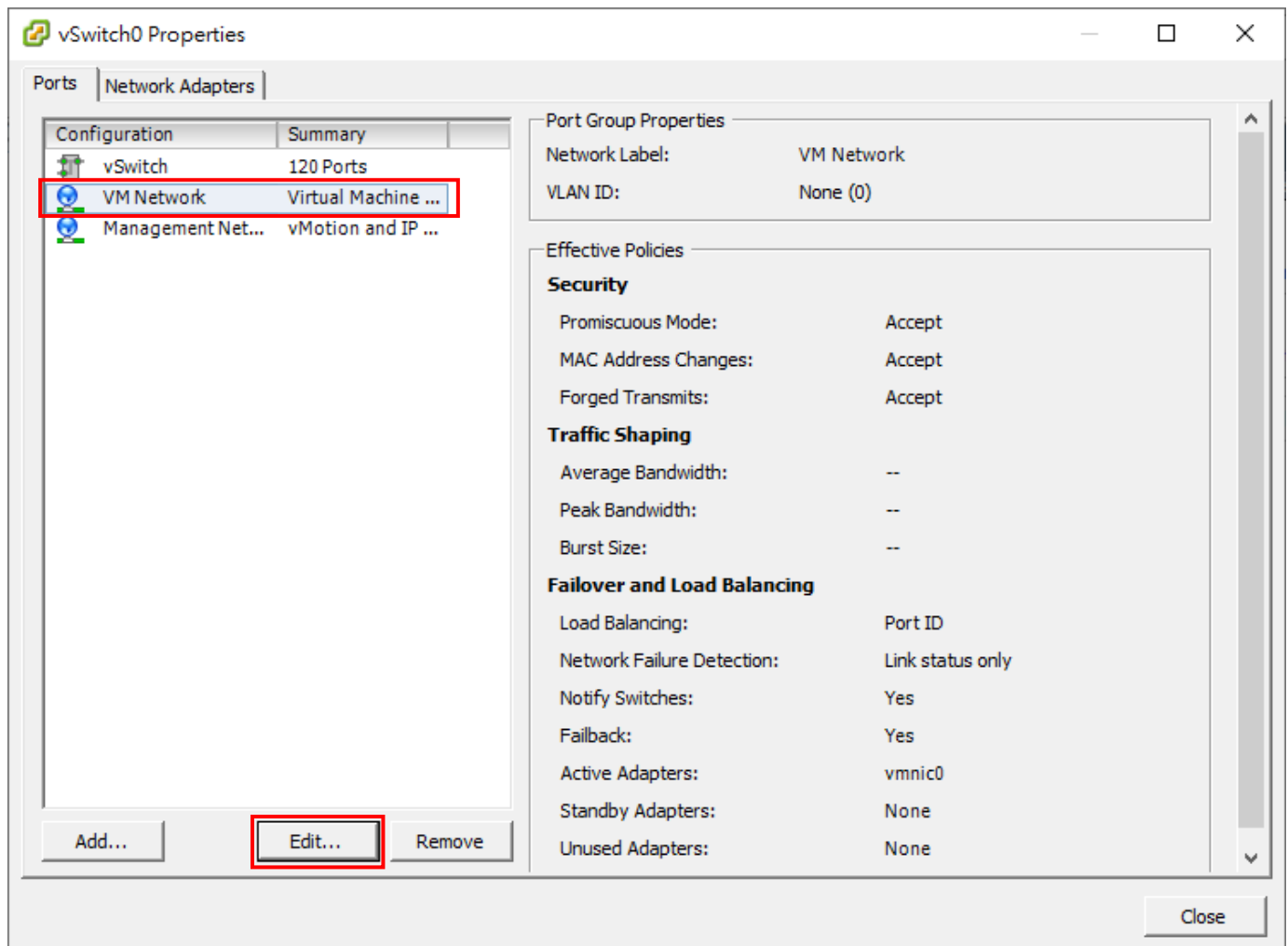
点选[VMware ESXihost] ->[Configuration]页面 ->[Networking]项目 ->vSwitch: [Properties]





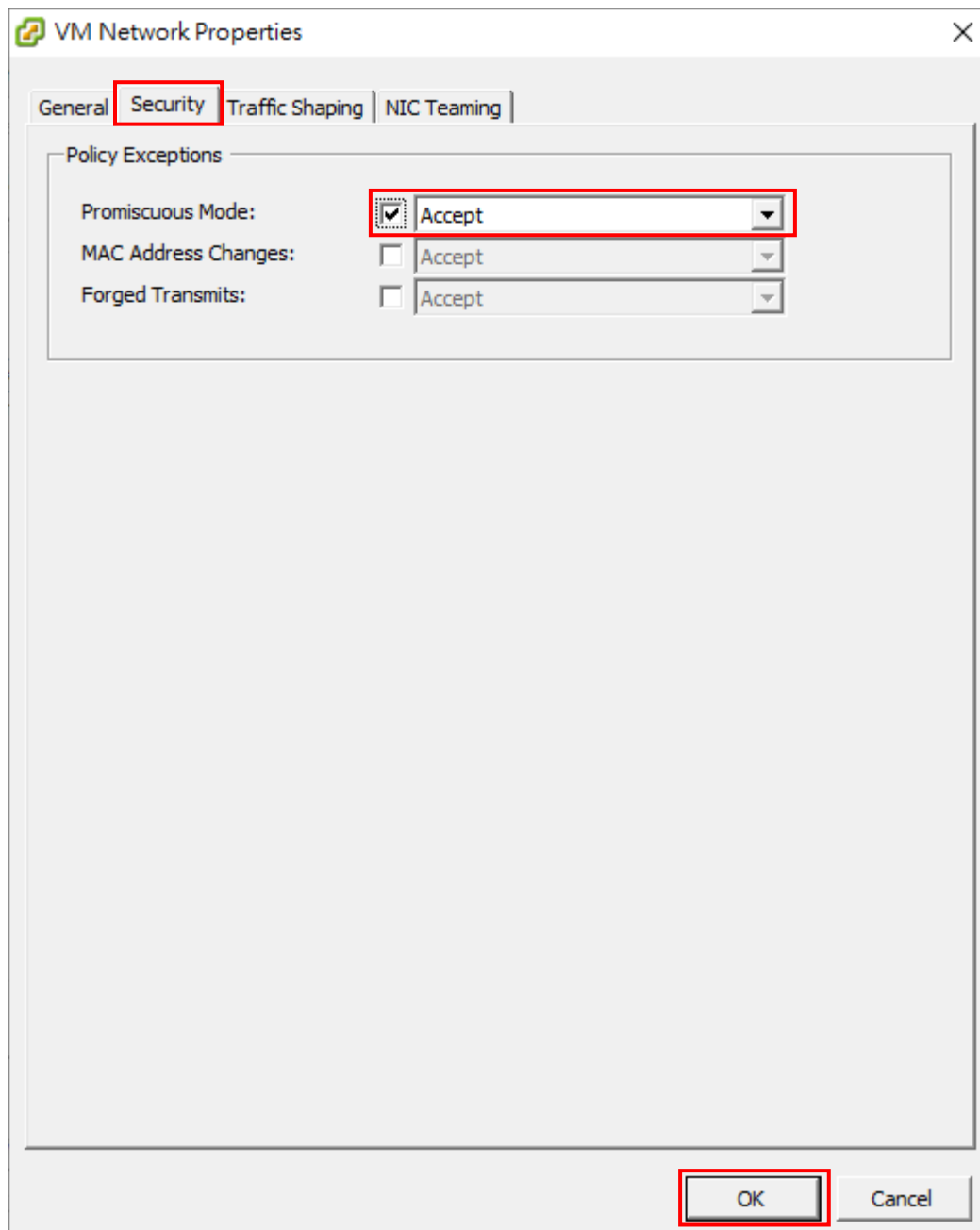
## (3)编辑网络设定

选择[VM Network]-&gt;按[Edit]



(4)启用混杂模式

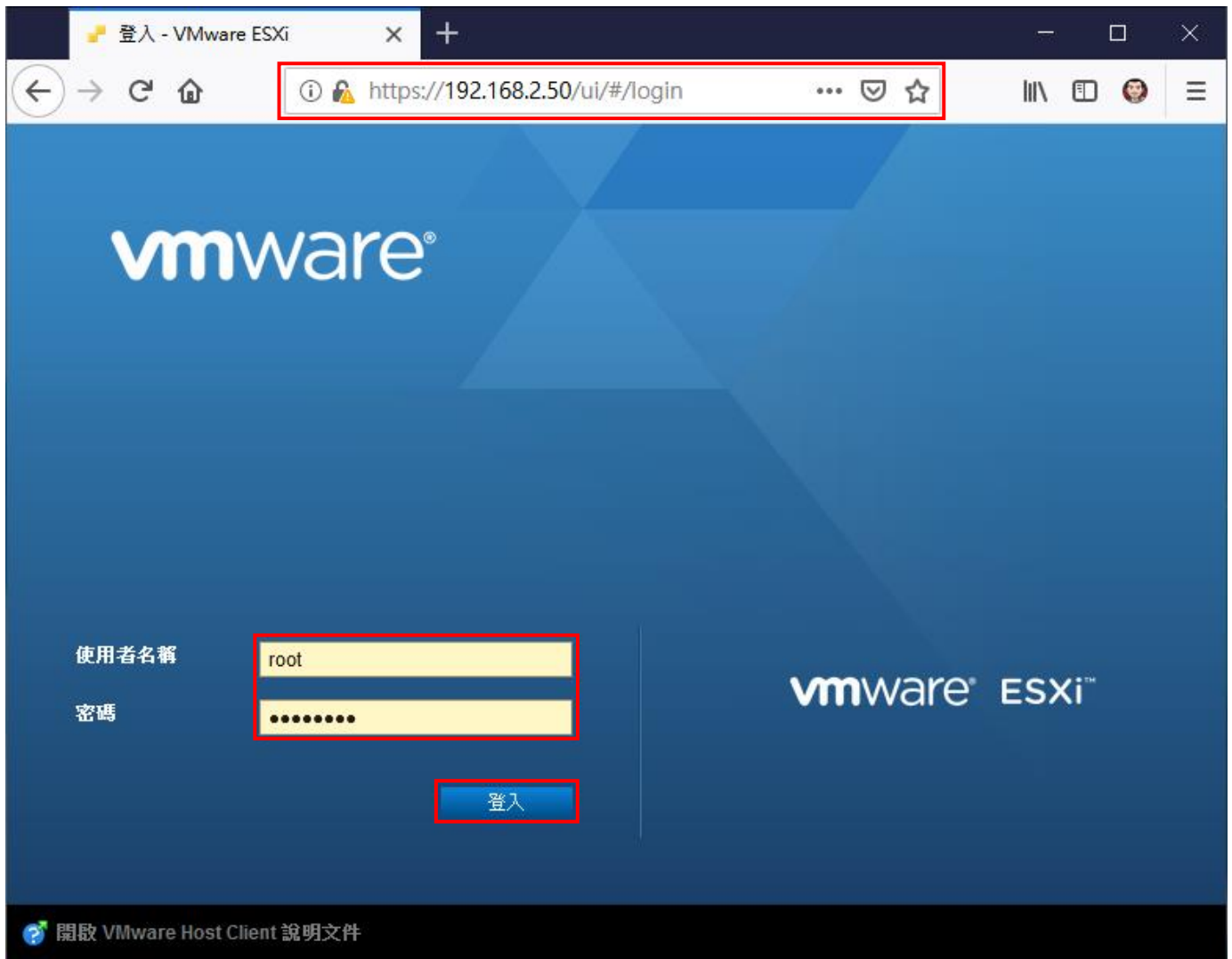
点选[Security]页面 ->勾选[Promiscuous Mode:]选择[Accept] ->按[OK]



## 5.2.2 vSphere Web Client

### (1) 登入 VMware ESXi

开启 [浏览器]->URL 输入 <https://<VMware IP>> ->输入用户名称和密码 ->按 [登入]



## (2)编辑网络设定

点选 [网络] ->[端口群组] 页面 ->选择[VM Network] ->点选 [编辑设定]

The screenshot shows the VMware ESXi web interface for editing network settings. The left sidebar has '網路' (Network) selected. The main content area shows a table of port groups. The 'VM Network' row is selected, and its details are shown below.

名稱	作用...	編輯此連接埠群組	型	vSwitch	虛擬...
VM Network	13	0	標準連接埠群組	vSwitch0	17
Management Net...	1	0	標準連接埠群組	vSwitch0	不適用

**VM Network**

可存取: 是  
虛擬機器: 17  
虛擬交換器: vSwitch0  
VLAN 識別碼: 0  
作用中的連接埠: 13

## (3) 启用混杂模式

展开 [安全性] -> 点选混杂模式: [接受]->按 [储存]

編輯連接埠群組 - VM Network

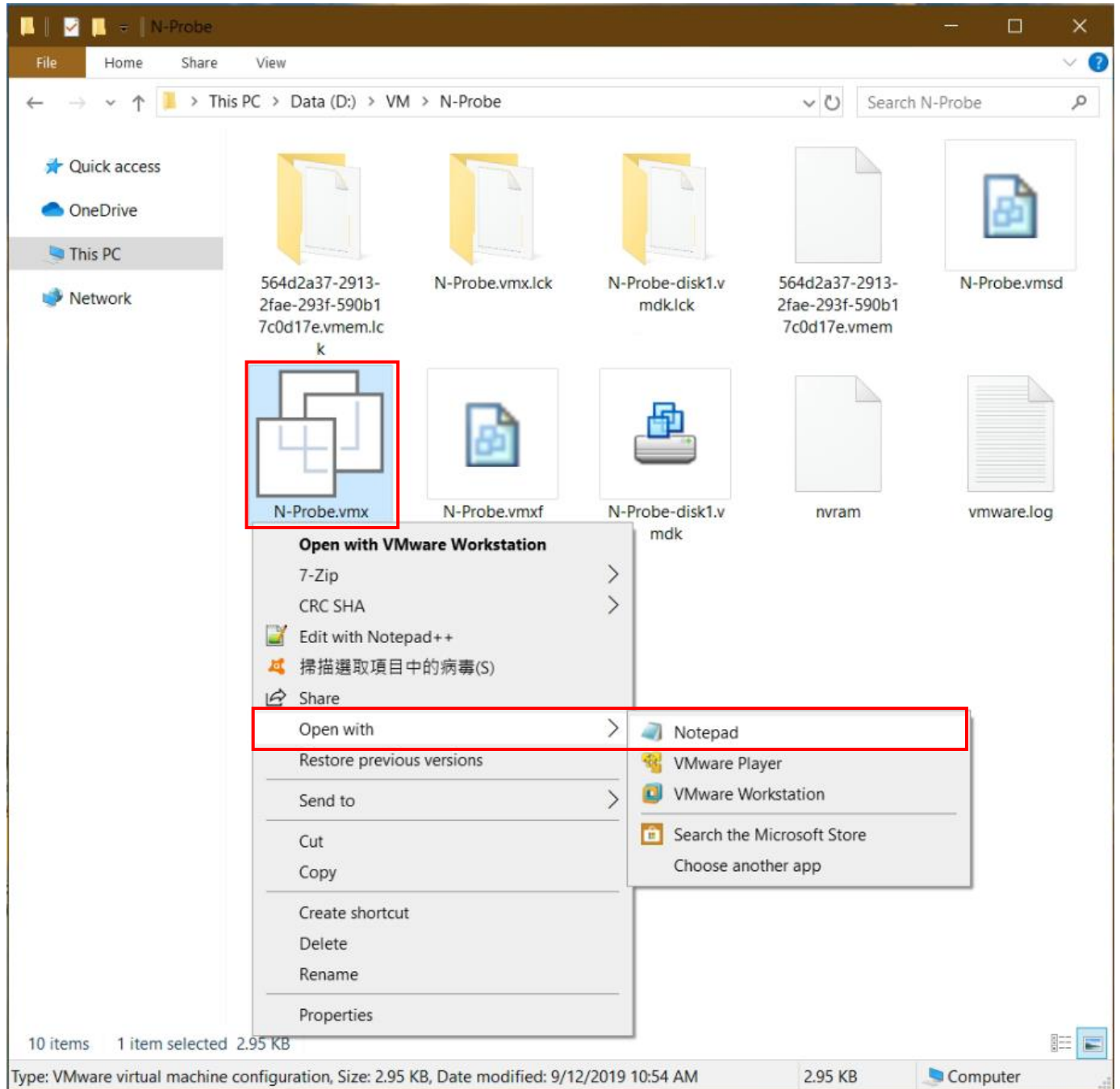
名稱	VM Network
VLAN 識別碼	0
虛擬交換器	vSwitch0
▼ 安全性	
混合模式	<input checked="" type="radio"/> 接受 <input type="radio"/> 拒絕 <input type="radio"/> 從 vSwitch 繼承
MAC 位址變更	<input type="radio"/> 接受 <input type="radio"/> 拒絕 <input checked="" type="radio"/> 從 vSwitch 繼承
偽造的傳輸	<input type="radio"/> 接受 <input type="radio"/> 拒絕 <input checked="" type="radio"/> 從 vSwitch 繼承
▶ NIC 整併	按一下以展開
▶ 流量控管	按一下以展開

儲存 取消

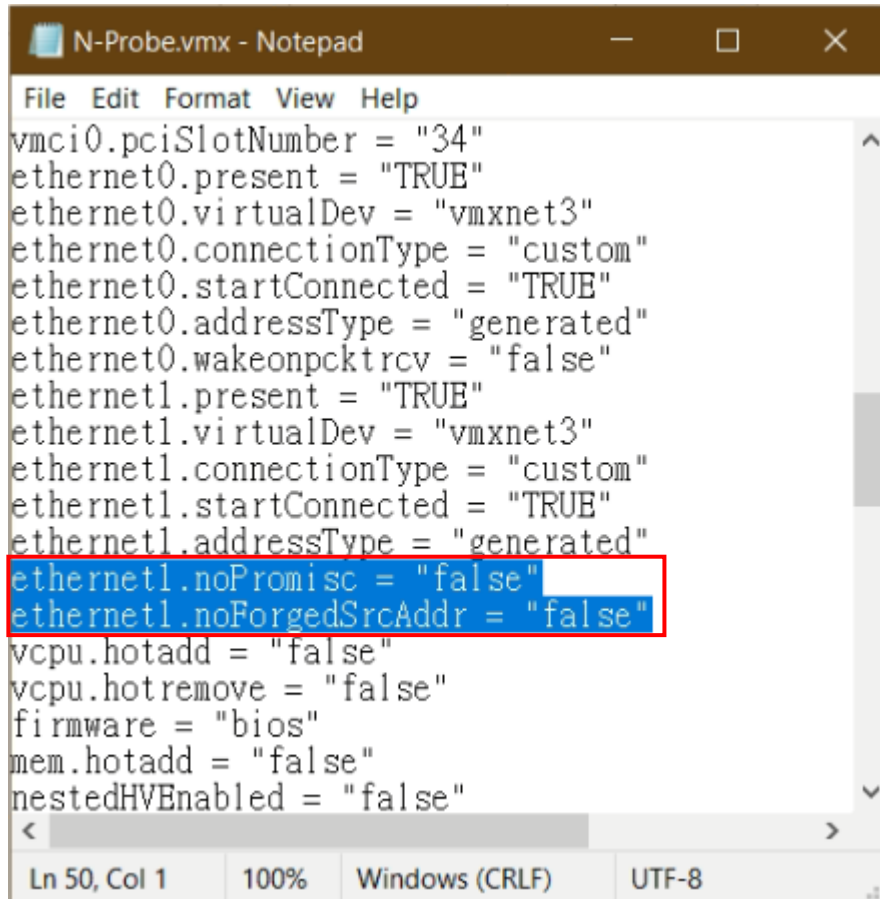
## 5.3 VMware Workstation

(1)编辑 N-Probe.vmx 文件

在[N-Probe.vmx]文件上，按鼠标右键 ->开启方式选择用[Notepad(记事本)]



(2) 新增 `ethernet1.noPromisc = "false"`和 `ethernet1.noForgedSrcAddr = "false"` ->保存离开

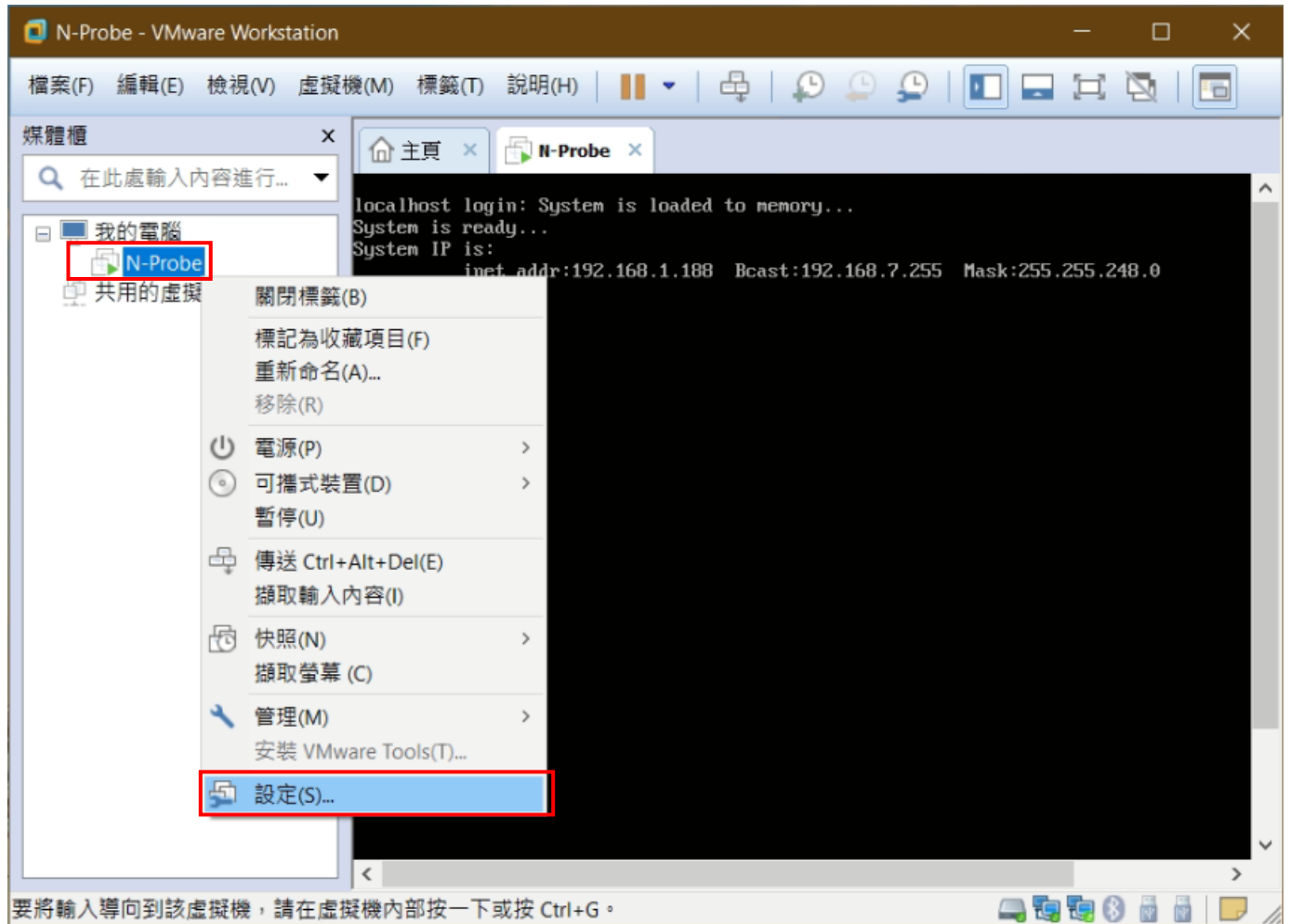


```
File Edit Format View Help
vmci0.pciSlotNumber = "34"
ethernet0.present = "TRUE"
ethernet0.virtualDev = "vmxnet3"
ethernet0.connectionType = "custom"
ethernet0.startConnected = "TRUE"
ethernet0.addressType = "generated"
ethernet0.wakeonpcktrcv = "false"
ethernet1.present = "TRUE"
ethernet1.virtualDev = "vmxnet3"
ethernet1.connectionType = "custom"
ethernet1.startConnected = "TRUE"
ethernet1.addressType = "generated"
ethernet1.noPromisc = "false"
ethernet1.noForgedSrcAddr = "false"
vcpu.hotadd = "false"
vcpu.hotremove = "false"
firmware = "bios"
mem.hotadd = "false"
nestedHVEEnabled = "false"
< >
```

Ln 50, Col 1    100%    Windows (CRLF)    UTF-8

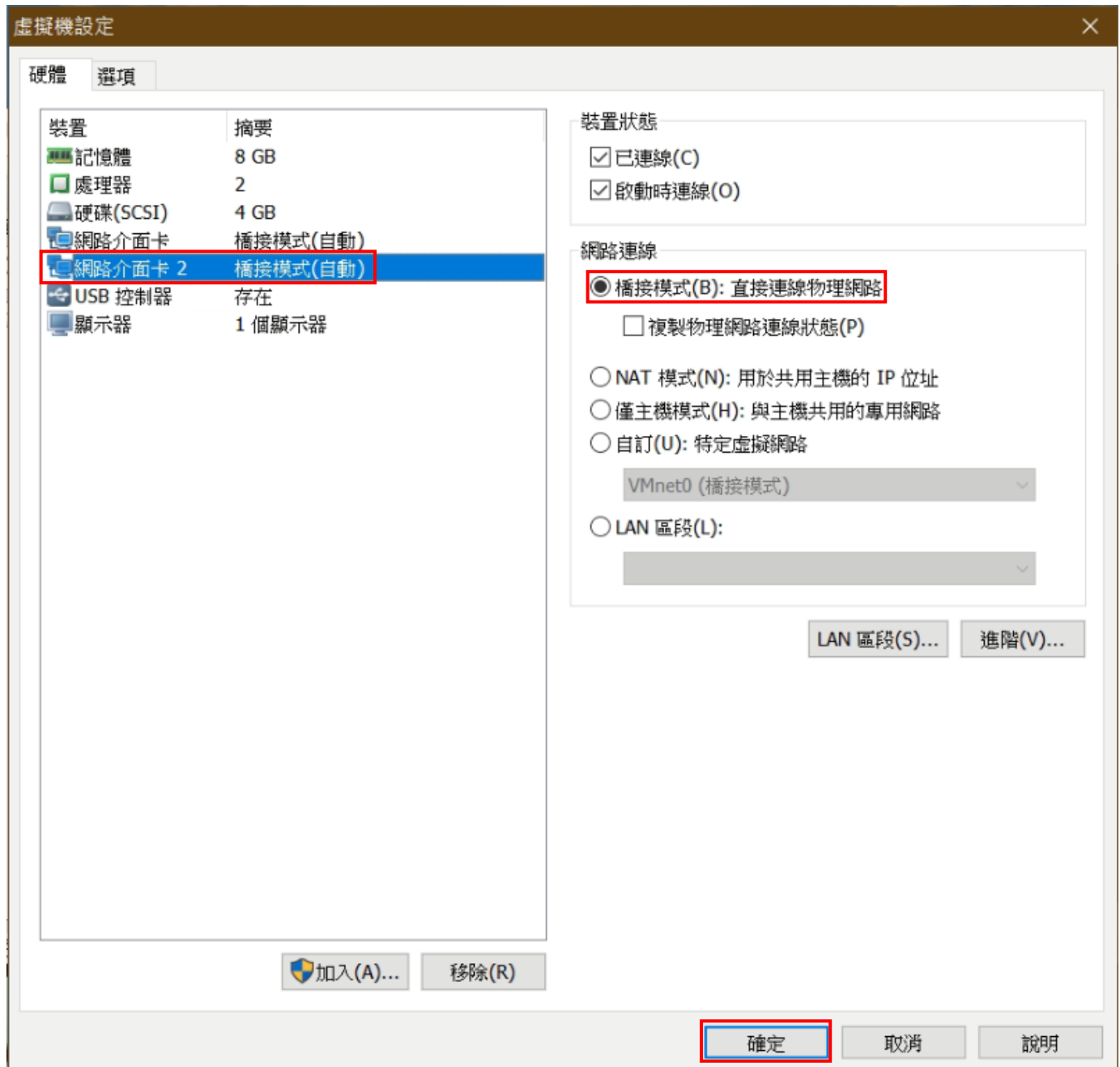
(3) 設定 N-Probe 網路適配器橋接模式

在[N-Probe]上按鼠標右鍵 ->點選 [設定]





(4) 將 [网络适配器 2(ethernet1)]设定[桥接模式] ->按下 [确定]

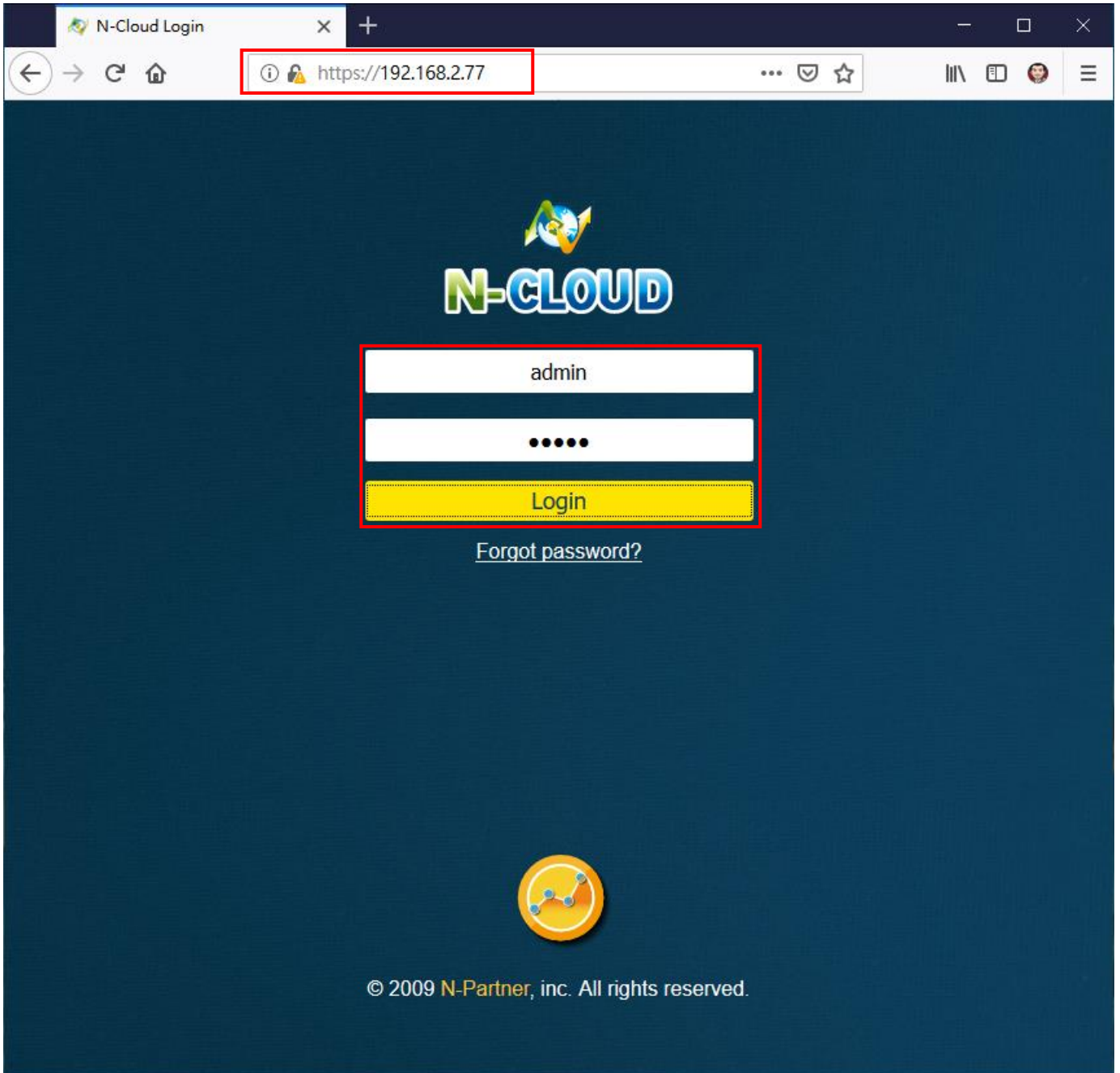


## 5.4N-Cloud/N-Reporter

(1)登入 VMware ESXi

开启[浏览器]-> URL 输入 <https://<N-Reporter IP>> ->输入前台账号和密码 ->按 [登入]

(默认的 Web 前台登入账号密码: admin / admin , 预设的 Web 后台登入账号密码: superuser / admin)



## (2)新增 N-Probe 设备

點選 [设备管理] / [设备树形图] -> [未知设备] 项目查找 N-Probe ip address 设备 -> 點選 [编辑]

The screenshot shows the N-Cloud interface for device management. The left sidebar has '設備管理' (Device Management) highlighted. The main content area shows a table of devices under the 'Global (124)' category, with a sub-section for '未知設備 (4)' (Unknown Devices). The table lists devices with their IP addresses and names. The device with IP 192.168.2.128 is highlighted in yellow, and its '編輯' (Edit) button is also highlighted.

操作	所屬領域	IP	設備名稱	設備種類	資料格式	Model	狀態	介面	硬體	建立時間	瀏覽
	Global (124)										
	未知設備 (4)										
	台南分公司	10.0.0.235	10.0.0.235	Flow							
編輯	台中分公司	192.168.2.128	192.168.2.128	Flow							
	台中分公司	192.168.2.64	192.168.2.64	Flow							
	台中分公司	192.168.3.1	192.168.3.1	Flow							

### (3) 設定 N-Probe 設備的數據格式

輸入名稱和 IP -> 勾選設備種類: [Flow] -> 輸入取樣率: 1 -> 點選接收狀態: [啟用] -> 按下 [確定]

設備資訊編輯

設備基本設定

名稱  
NProbe-192.168.2.128

IP  
192.168.2.128

設備種類  
 Syslog  Flow  SNMP

Flow/SNMP 相關設定

設備敘述  
[Text Field]

SNMP IP  
[Text Field]

Read Community  
[Text Field]

Write Community  
[Text Field]

Version  
V2C

SNMP 測試  
[Button]

自訂 OID 樣版  
請選擇自訂 oid 樣版

取樣率  
1

設備進階設定

所屬領域  
Global

設備進階設定

所屬領域  
Global

設備 Icon  
icon-security

Login Account  
[Text Field]

Login Password  
[Text Field]

接收狀態  
 啟用  停用

暫無資料告警  
 啟用 Syslog/Flow 暫無資料告警

確定 取消

## 6. External Receiver 设定

### 6.1 External Receiver

通过终端机仿真软件(例如：Putty、SecureCRT、XShell 等)以 SSH 联机到 N-Reporter/N-Cloud 命令行接口(CLI)(默认的 CLI 登入账号密码：npartner / npartner)

(1) 查看配置文件

N-Probe# `show configure`

```
N-Probe6.0# show config
##### Current configuration #####
flow-sampling 1
hostname N-Probe6.0
interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####
```

(2) 进入设定模式

N-Probe# `configure terminal`

(3) 设定 Syslog 和 Flow 流量输出到 N-Reporter 接收 IP

N-Probe(config)# `collector 192.168.2.77`

(4) 离开 configure terminal

N-Probe(config)# `exit`

(5) 确认是否有设定成功

N-Probe# `show configure`

```
N-Probe6.0# configure terminal
N-Probe6.0(config)# collector 192.168.2.77
N-Probe6.0(config)# exit
N-Probe6.0# show configure
##### Current configuration #####
collector 192.168.2.77
flow-sampling 1
hostname N-Probe6.0
interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####
```

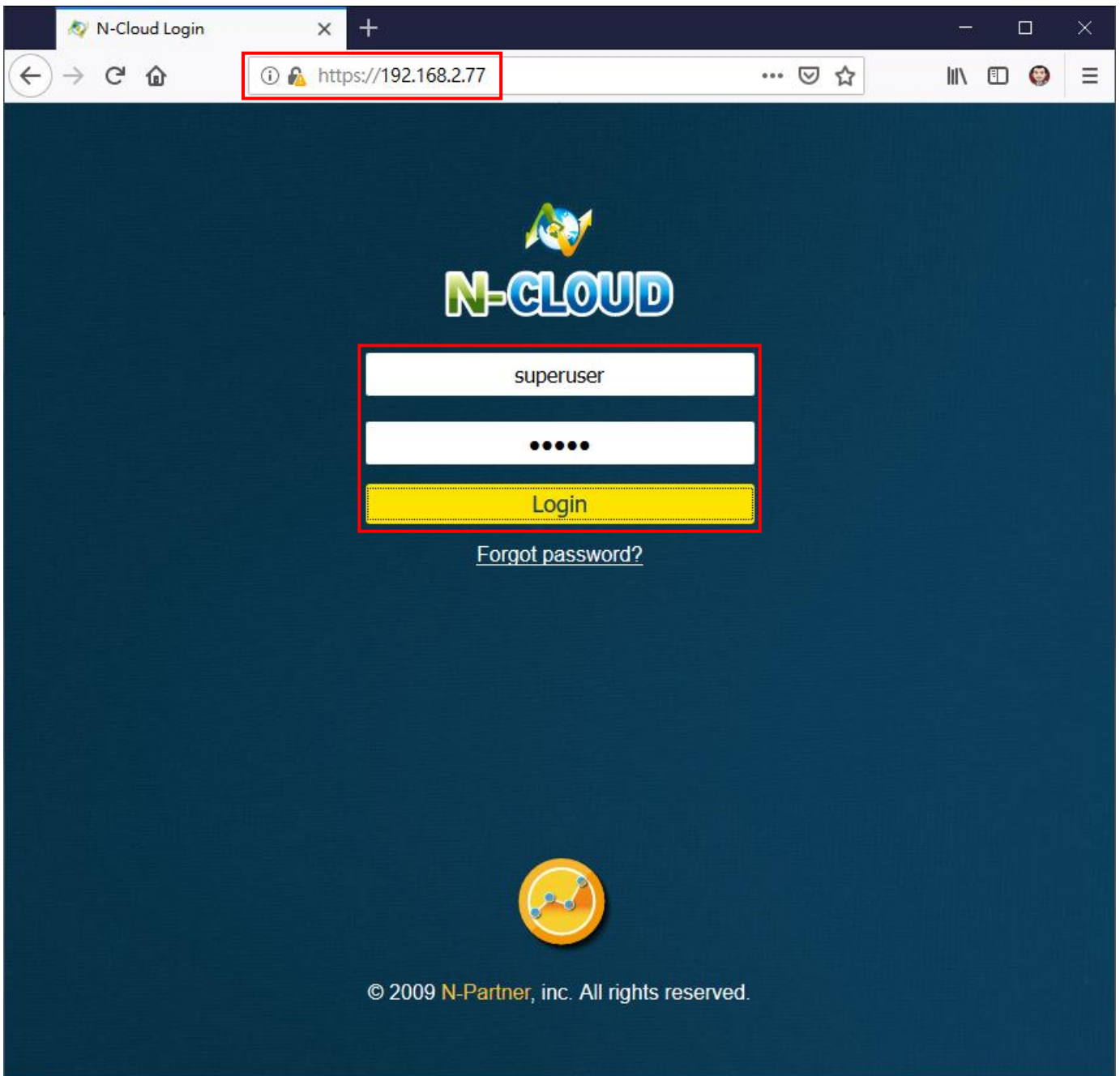
## 6.2N-Cloud/N-Reporter

### 6.2.1 N-Cloud/N-Reporter Domain

(1)登入 N-Reporter/N-Cloud 后台

开启 [浏览器]->URL 输入 <https://<N-Reporter/N-Cloud IP>>->输入后台账号密码按 [登入]

(默认的 Web 前台登入账号密码: admin / admin , 预设的 Web 后台登入账号密码: superuser / admin)



## (2) 编辑领域

点选 [系统管理] -> [领域管理] ->选择 [领域](范例领域名: N-Partner) ->按下 [编辑]

The screenshot displays the N-Cloud web interface. The left sidebar contains a navigation menu with '系統管理' (System Management) and '領域管理' (Domain Management) highlighted in red. The main content area shows the '領域管理' (Domain Management) page. At the top, there is a search bar and a status dropdown set to '全部' (All). Below this is a table listing domains. The table has columns for '操作' (Action), 'ID', '領域名稱' (Domain Name), '分流網段' (Routing Segment), '使用者列表' (User List), 'Primary Receiver', 'Backup Receiver', and 'Syslog 設備' (Syslog Device). The row for 'N-Partner' (ID 1006) is highlighted in yellow, and its edit icon is also highlighted with a red box. A '編輯' (Edit) tooltip is visible over the edit icon.

操作	ID	領域名稱	分流網段	使用者列表	Primary Receiver	Backup Receiver	Syslog 設備
	0	Global		admin, npartner...	R1		
	1001	台南分公司	10.0.0.0/16	tainan	R1		Fortinet F
	1002	高雄分公司	192.168.1.221,10.163.16.0		R1		Fortinet F
	1004	桃園分公司		henryyu	R1		Fortinet F
	1005	台北分公司		sti	R1		Fortinet F
	1006	N-Partner	192.168.2.1-192.168.2.254	kh.lin	R1		Fortinet F
	1013	台中分公司	192.168.2.1-192.168.5.254	sherman_d	R1		Fortinet F

(3) 輸入 External Receiver

點選 [其他資訊] 頁面->在 External Receiver 字段輸入 External Receiver IP address ->按 [確定]

領域管理

基本資訊 其他資訊

**External Receiver**

192.168.2.128

公司名稱

啟動時間

2018/09/19

到期時間

2068/09/19

狀態

啟用  到期  暫停使用

備註

確定 取消



## (4)儲存完成

The screenshot shows the N-Cloud web interface. A green notification box at the top right indicates '儲存完成' (Save Complete). The main content area displays the '領域管理' (Domain Management) page. A table lists domain configurations with columns for ID, Domain Name, IP Range, User List, Primary Receiver, Backup Receiver, and Syslog Device.

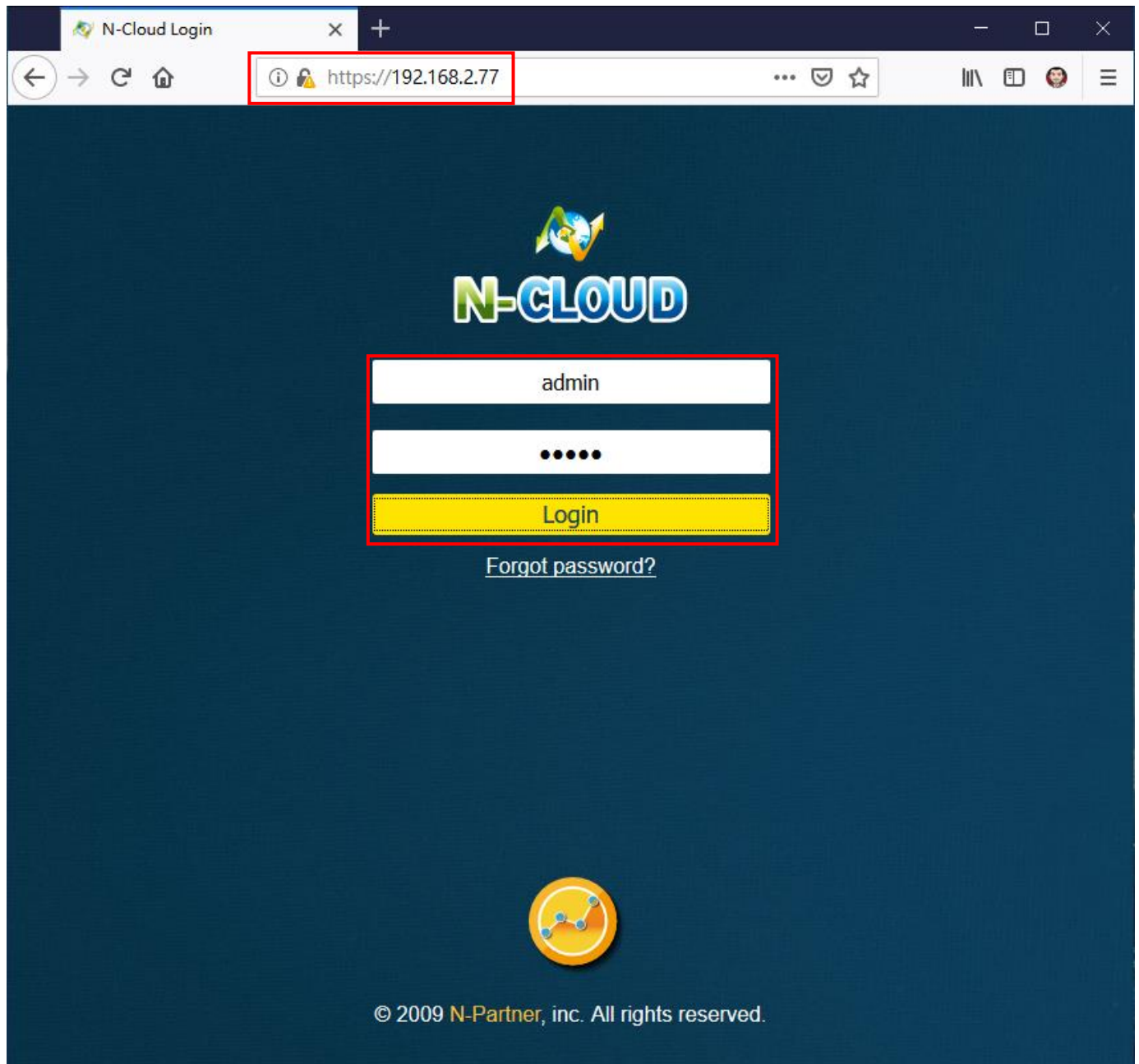
操作	ID	領域名稱	分流網段	使用者列表	Primary Receiver	Backup Receiver	Syslog 設備
	0	Global		admin, npartner...	R1		
	1001	台南分公司	10.0.0.0/16	tainan	R1		Fortinet F
	1002	高雄分公司	192.168.1.221,10.163.16.0		R1		Fortinet F
	1004	桃園分公司		henryyu	R1		Fortinet F
	1005	台北分公司		sti	R1		Fortinet F
	1006	N-Partner	192.168.2.1-192.168.2.254	kh.lin	R1		Fortinet F
	1013	台中分公司	192.168.2.1-192.168.5.254	sherman_d	R1		Fortinet F

## 6.2.2N-Cloud/N-Reporter Device

(1) 登入 N-Reporter/N-Cloud 前台

开启 [浏览器]-> URL 输入 <https://<N-Reporter/N-Cloud IP>> -> 输入前台账号密码按 [登入]

(默认的 Web 前台登入账号密码: admin / admin , 预设的 Web 后台登入账号密码: superuser / admin)



## (2)新增领域设备

选择[设备管理] -> [设备树形图] -> [未知设备] 查询领域(范例领域名: N-Partner)->点选 [编辑]

The screenshot shows the N-Cloud web interface for device management. The left sidebar contains a menu with '設備管理' (Device Management) and '設備樹形圖' (Device Tree View) highlighted. The main content area is titled '設備樹形圖' and shows a tree view of devices. Under the 'Global (123)' node, there is a sub-node '未知設備 (1)' (Unknown Device (1)). To the right, a table lists the details of the selected device:

操作	所屬領域	IP	設備名稱	設備種類	資料格式	Model	狀態	介面	硬碼	建立時間	瀏覽
	N-Partner	192.168.2.127	192.168.2.127	Syslog							

(3) 設定領域設備的數據格式

輸入 **名稱** 和 **IP** -> 勾選設備種類: [Syslog] -> 選擇數據格式: [Windows] 和編碼方式: [UTF-8] -> 選擇所屬領域: (范例: N-Partner) -> 點選接收狀態: [啟用] -> 按下 [確定]

設備資訊編輯

設備基本設定

名稱  
Windows-192.168.2.127

IP  
192.168.2.127

設備種類  
 Syslog  Flow  SNMP

Syslog 相關設定

資料格式  
Windows

Facility  
-----

編碼方式  
UTF-8

設備進階設定

所屬領域  
N-Partner

設備 Icon  
icon-host

Login Account

Login Password

接收狀態  
 啟用  停用

暫無資料告警  
 啟用 Syslog/Flow 暫無資料告警

確定 取消

## 7. Trouble Shooting

### 7.1 Kernel upgrade

(1) using maintenance mode

check SATADOM Disk

# parted -l

```
root@localhost:~# parted -l
Model: ATA SATADOM-SH 3SE (scsi)
Disk /dev/sda: 4012MB
Sector size (logical/physical): 512B/512B
Partition Table: gpt
Disk Flags:

Number  Start   End     Size    File system  Name      Flags
  1      1049kB  2937MB  2936MB  ext4         primary  boot, esp
  2      2937MB  3474MB  537MB   ext4
  3      3474MB  4011MB  537MB   ext4         DOM2BAK
```

(2) check sda1 mountpoint

# lsblk

```
root@localhost:~# lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
sda   8:0    0 3.8G  0 disk
? ?? sda1   8:1    0 2.8G  0 part
? ?? sda2   8:2    0 512M  0 part /home/syslog/cli/config
? ?? sda3   8:3    0 512M  0 part
```

(3) /dev/sda1 mount /mnt folder

# mount /dev/sda1 /mnt

# lsblk

```
root@localhost:~# mount /dev/sda1 /mnt
root@localhost:~# lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
sda   8:0    0 3.8G  0 disk
? ?? sda1   8:1    0 2.8G  0 part /mnt
? ?? sda2   8:2    0 512M  0 part /home/syslog/cli/config
? ?? sda3   8:3    0 512M  0 part
```

(4) change mnt directory

```
# cd /mnt
```

download latest N-Probe kernel

```
/mnt# rz
```

```
root@localhost:/# cd /mnt
root@localhost:/mnt# rz
rz waiting to receive.
Starting zmodem transfer. Press Ctrl+C to cancel.
Transferring initrd.img-3.16.35_lite_20190606154029...
 100% 381462 KB 3288 KB/sec 00:01:56 0 Errors
Transferring initrd.img-3.16.35_resetpwd_0...
 100% 374317 KB 3312 KB/sec 00:01:53 0 Errors
```

(5) make symbolic link & force between file

```
/mnt# ln -sf initrd.img-3.16.35_lite_20190606154029 initrd.img-3.16.35
```

MD5 checksum

```
/mnt# md5sum initrd.img-3.16.35
```

```
root@localhost:/mnt# ln -sf initrd.img-3.16.35_lite_20190606154029 initrd.img-3.16.35
root@localhost:/mnt# md5sum initrd.img-3.16.35
1aed7f21cbc100f76c29b1ffb1954ab3 initrd.img-3.16.35
```

(6) make symbolic link & force between file, forget password use **initrd.img-3.16.35\_resetpwd\_0** kernel

```
/mnt# ln -sf initrd.img-3.16.35_resetpwd_0 initrd.img-3.16.35_resetpwd
```

MD5 checksum

```
/mnt# md5sum initrd.img-3.16.35_resetpwd
```

```
root@localhost:/mnt# ln -sf initrd.img-3.16.35_resetpwd_0 initrd.img-3.16.35_resetpwd
root@localhost:/mnt# md5sum initrd.img-3.16.35_resetpwd
2bbce3654c545f7dab340efff55f5139 initrd.img-3.16.35_resetpwd
```

(7) check symbolic link between file

```
/mnt# ls -l
```

```
root@localhost:/mnt# ls -l
total 761492
drwxr-xr-x 5 root root 4096 Jun 26 13:54 grub
lrwxrwxrwx 1 root root 38 Jun 26 14:05 initrd.img-3.16.35 -> initrd.img-3.16.35_lite_20190606154029
-rw-r--r-- 1 root root 390617592 Jun 13 09:24 initrd.img-3.16.35_lite_20190606154029
lrwxrwxrwx 1 root root 29 Jun 26 14:06 initrd.img-3.16.35_resetpwd -> initrd.img-3.16.35_resetpwd_0
-rw-r--r-- 1 root root 383301085 Oct 30 2018 initrd.img-3.16.35_resetpwd_0
drwx----- 2 root root 16384 Jun 1 2016 lost+found
-rw-r--r-- 1 root root 2665286 Jun 1 2016 System.map-3.16.35
-rw-r--r-- 1 root root 3149952 Jun 1 2016 vmlinuz-3.16.35
```

(8) change grub directory

```
/mnt#cd grub
```

```
/mnt/grub#ls -l
```

```
root@localhost:/mnt# cd grub
root@localhost:/mnt/grub# ls -l
total 28
drwxr-xr-x 2 root root 4096 Jun  1  2016 fonts
-rw-r--r-- 1 root root  720 Oct 20  2017 grub.cfg
-rw-r--r-- 1 root root 1024 Jun  1  2016 grubenv
drwxr-xr-x 2 root root 12288 Jun  1  2016 i386-pc
drwxr-xr-x 2 root root 4096 Jun  1  2016 locale
```

(9) change grub.cfg to grub.cfg.bak name

```
/mnt/grub# mv grub.cfggrub.cfg.bak
```

download latest N-Probe kernel

```
/mnt/grub# rz
```

```
root@localhost:/mnt/grub# mv grub.cfg grub.cfg.bak
root@localhost:/mnt/grub# rz
rz waiting to receive.
Starting zmodem transfer. Press Ctrl+C to cancel.
Transferring grub.cfg.tar.gz...
 100%   559 bytes  559 bytes/sec 00:00:01      0 Errors
```

(10) uncompress grub.cfg.tar.gz

```
/mnt/grub# tar zxvf grub.cfg.tar.gz
```

```
root@localhost:/mnt/grub# tar zxvf grub.cfg.tar.gz
grub.cfg
```

(11) check grub.cfg configure

/mnt/grub# cat grub.cfg

```
root@localhost:/mnt/grub# cat grub.cfg
# This grub.cfg file was created by Lance http://www.pendrivelinux.com
# Suggested Entries and the suggestor, if available, will also be noted.

function load_video {
    insmod vbe
    insmod vga
    insmod video_bochs
    insmod video_cirrus
}

set timeout=5
set default=0

serial --speed=9600 --unit=0 --word=8 --parity=no --stop=1
terminal_input console serial
terminal_output console serial

menuentry "Booting from ISO" {
    load_video
    insmod gzio
    insmod part_msdos
    insmod ext2
    search --no-floppy --label DOM1 --set root
    linux /vmlinuz-3.16.35 ro quiet console=tty9 console=ttyS0,9600n8
    echo 'Loading initial ramdisk ...'
    initrd /initrd.img-3.16.35
}

menuentry "Booting from ISO-RESET-PWD" {
    load_video
    insmod gzio
    insmod part_msdos
    insmod ext2
    search --no-floppy --label DOM1 --set root
    linux /vmlinuz-3.16.35 ro quiet console=tty9 console=ttyS0,9600n8
    echo 'Loading initial ramdisk ...'
    initrd /initrd.img-3.16.35_resetpwd
}
```



(12) grub.cfg file content

```
# This grub.cfg file was created by Lance http://www.pendrivelinux.com
# Suggested Entries and the suggestor, if available, will also be noted.

function load_video {
insmodvbe
insmodvga
insmodvideo_bochs
insmodvideo_cirrus
}

set timeout=5
set default=0

serial --speed=9600 --unit=0 --word=8 --parity=no --stop=1
terminal_input console serial
terminal_output console serial

menuentry "Booting from ISO" {

load_video
insmodgzio
insmodpart_msdos
insmod ext2
    search --no-floppy --label DOM1 --set root
linux /vmlinuz-3.16.35 ro quiet console=tty9 console=ttyS0,9600n8
    echo 'Loading initial ramdisk ...'
initrd /initrd.img-3.16.35
}

menuentry "Booting from ISO-RESET-PWD" {
load_video
insmodgzio
insmodpart_msdos
insmod ext2
    search --no-floppy --label DOM1 --set root
linux /vmlinuz-3.16.35 ro quiet console=tty9 console=ttyS0,9600n8
    echo 'Loading initial ramdisk ...'
initrd /initrd.img-3.16.35_resetpwd
}
```

(13) `umount /mnt`

# `umount /mnt`

# `lsblk`

```
root@localhost:~# umount /mnt
root@localhost:~# lsblk
NAME      MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda         8:0    0  3.8G  0 disk
├─ sda1     8:1    0   2.8G  0 part
├─ sda2     8:2    0   512M  0 part /home/syslog/cli/config
└─ sda3     8:3    0   512M  0 part
```

(14) Reboot N-Probe/External Receiver

# `reboot`

(15) using CLI mode

N-Probe# `showversion`

```
N-Probe6.0# show version
Software version : 6.0.17 (20190503-1804)
NP Kernel version : 20190606154029
Serial number : NP-RPT-V-TW-GASFAAME
```

## 7.2 Reset password

(1) using CLI mode

N-Probe# `reboot`

**N-Probe6.0# `reboot`**

(2) 开机选项选择[Booting from ISO-RESET-PWD]

```

GNU GRUB  version 2.02~beta2-22+deb8u1

  Booting from ISO
*Booting from ISO-RESET-PWD

Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the commands
before booting or 'c' for a command-line.

```

(3) Check configure no password command

N-Probe# `show configure`

```

N-Probe6.0# show configure
##### Current configuration #####
flow-sampling 1
hostname N-Probe6.0
interface eth0 192.168.2.128 255.255.255.0 gw 192.168.2.253
ip dns1 168.95.1.1
ntpdate tick.stdtime.gov.tw
##### End #####

```

(4) Reboot to normal mode

N-Probe# `reboot`

**N-Probe6.0# `reboot`**



## 连络信息

TEL: +886-4-23752865

FAX: +886-4-23757458

技术问题请洽：

Email: [support@npartnertech.com](mailto:support@npartnertech.com)

Skype: [support@npartnertech.com](https://www.skype.com/en/contacts/voice/support@npartnertech.com)

业务相关请洽：

Email: [sales@npartnertech.com](mailto:sales@npartnertech.com)