

EKI-7700 Series Managed Switch Backup/Upgrade Manager SOP

- Backup Manager
- Upgrade Manager

Revision Date	Revision	Description	Author
March/2018	V1.0	Initial release	ICG AE Eddie.Wei / Raimen Liu

Abstract

- ❖ This SOP explains how to operate *Backup and Upgrade Manager* on Advantech EKI-7700 series industrial managed switch.
- ❖ **Related products:**
EKI-7428, EKI-7706, EKI-7708, EKI-7710, EKI-7712, EKI-7716, EKI-7720.
- ❖ **Requirement:** Advantech managed switch, RJ45 ethernet cable, PC
- ❖ **Appendix:** Upgrade Firmware & Configuration via CLI w/ TFTP

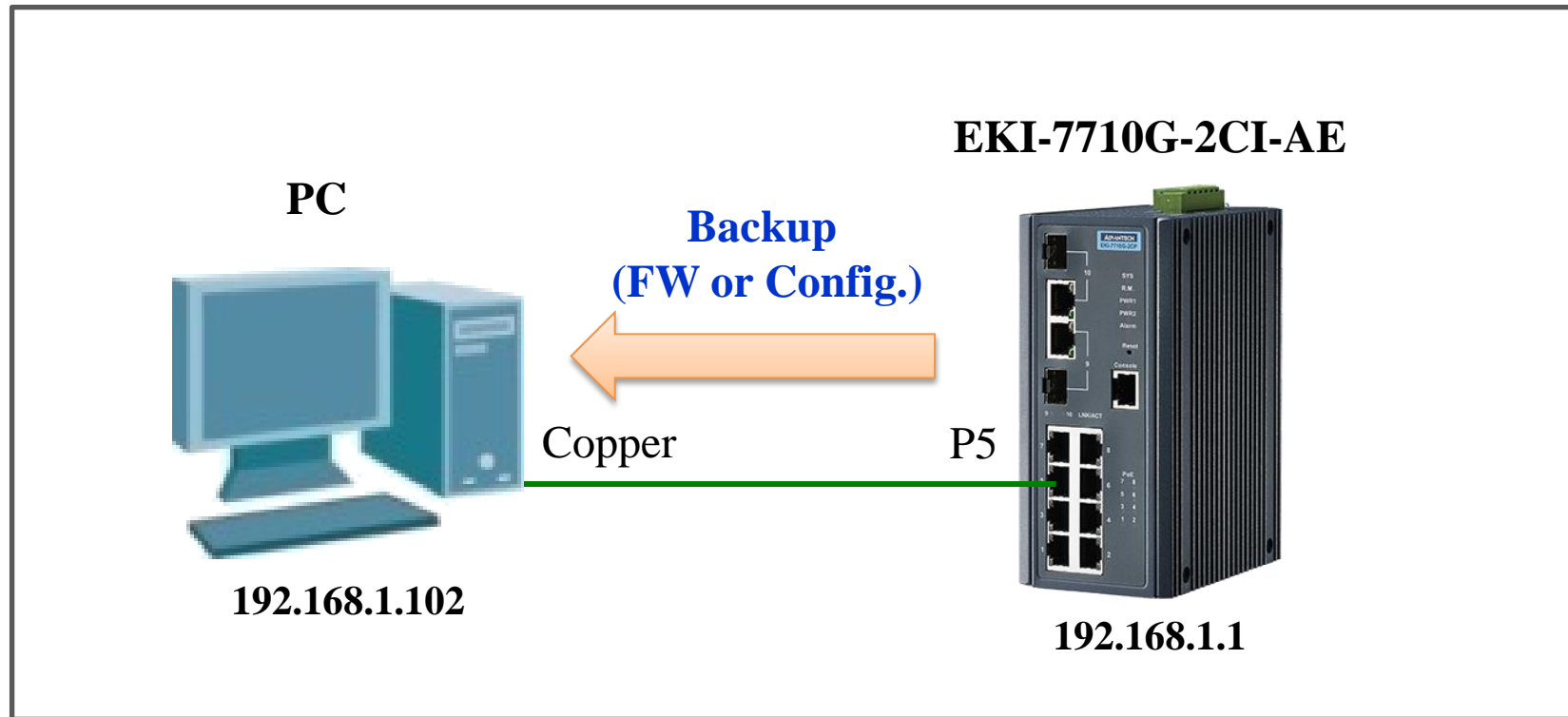


Backup Manager

- Backup via HTTP
- Backup via TFTP

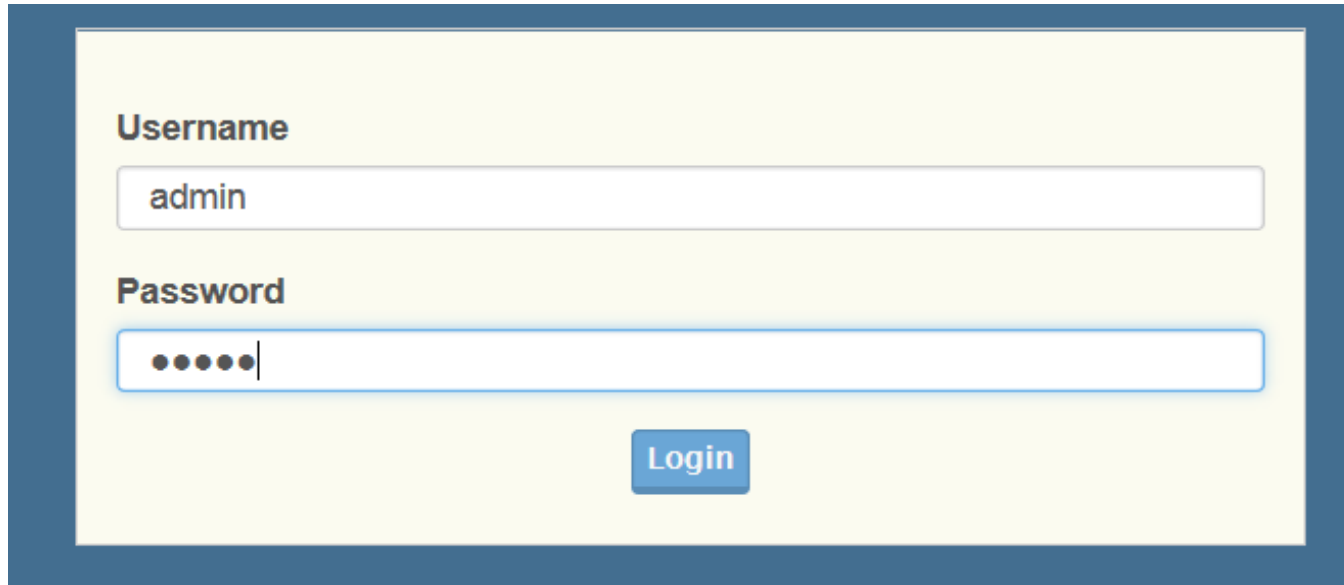
Backup via HTTP

- Purpose: Backup device image (or configuration) via HTTP
- Topology:



Backup via HTTP

- Step 1: Logging the switch with admin/admin as Username/Password by default.



A screenshot of a web-based login interface for a switch. The interface is enclosed in a blue border. It features a light yellow background. The 'Username' label is in bold black text, followed by a text input field containing the text 'admin'. Below this, the 'Password' label is also in bold black text, followed by a password input field with five black dots and a vertical cursor line. A blue 'Login' button is positioned below the password field.

Username

admin

Password

.....|

Login

Backup via HTTP

- Step 2: Under Tools -> Backup Manager
- Choose Backup Method as HTTP
- Choose Backup type as Image

The screenshot displays the Advantech web interface for an EKI-7710G-2CI-AE Intelligent Industrial Switch. The left sidebar contains a navigation menu with the following items: Monitoring, System, L2 Switching, MAC Address Table, Security, QoS, Management, Diagnostics, Tools, IXM, Backup Manager (highlighted with a red box and labeled '1'), Upgrade Manager, and Dual Image. The main content area is titled 'Backup Manager' and shows the 'Backup' configuration page. The 'Backup Method' is set to 'HTTP' (highlighted with a red box and labeled '2'). The 'Backup Type' is set to 'Image' (selected with a radio button). Below this, there are two options for the backup image: 'EKI-7710E-2CI-AE-1-00-78.hex (Active)' and 'EKI-7710E-2CI-AE-1-00-78.hex (Backup)'. The 'Backup' button is highlighted with a red box and labeled '3'. An orange callout box points to the 'Backup Type' section with the text: 'For Backup Type descriptions, please refer to the next slide.'

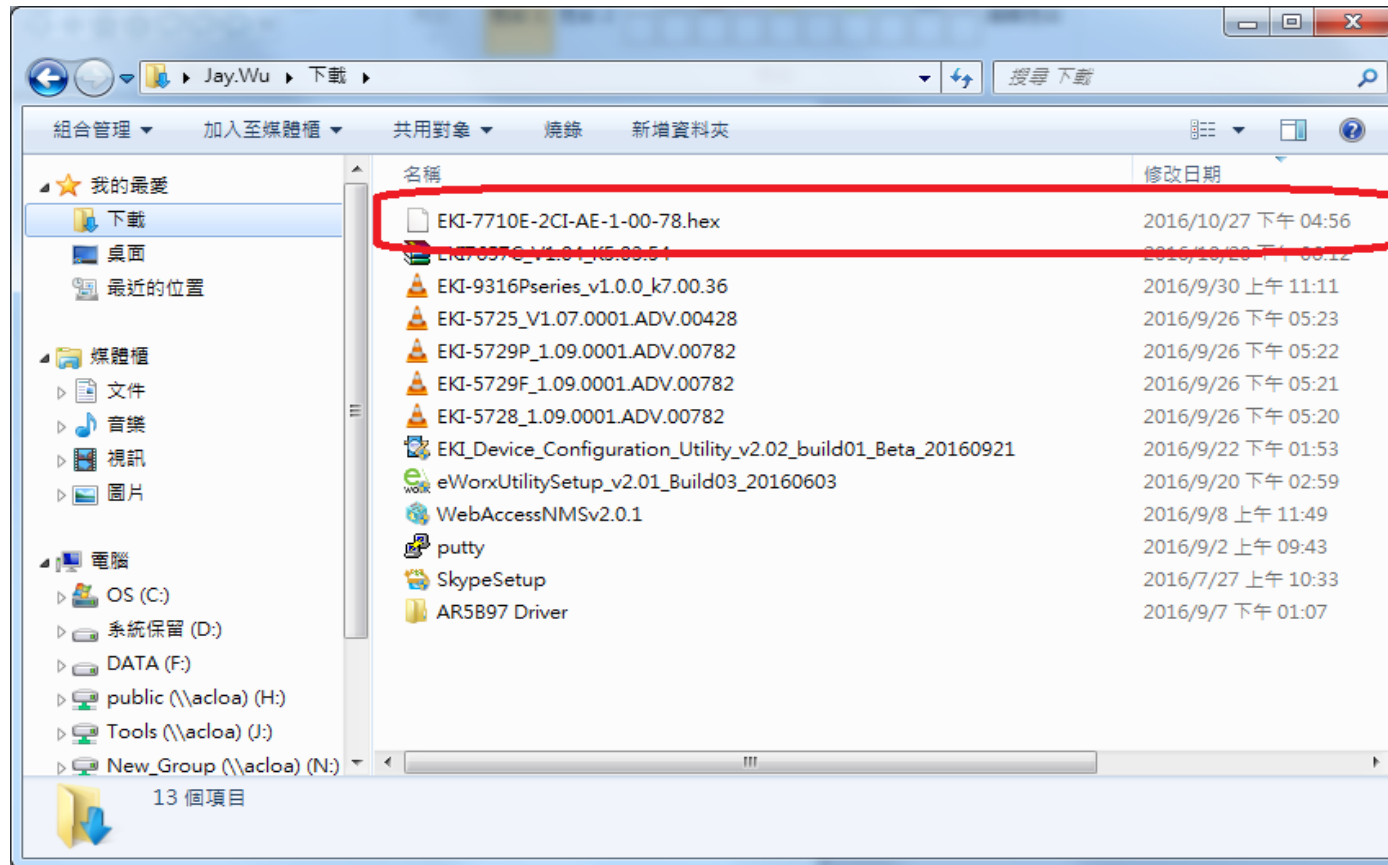
Backup via HTTP

■ Backup Types

Backup type	Description
Image	Backup your firmware and output as a XXX.hex file
Running Configuration	Backup Running configuration file
Startup Configuration	Backup Startup configuration file
Flash Log	Backup Flash Log to file
Buffered Log	Backup Buffered Log to file
Image	Description
XXX.hex (Active)	Backup “Active” firmware
XXX.hex (Backup)	Backup “Backup” firmware

Backup via HTTP

- Result: When the download finished, the file would be in your default *Downloads/* directory.

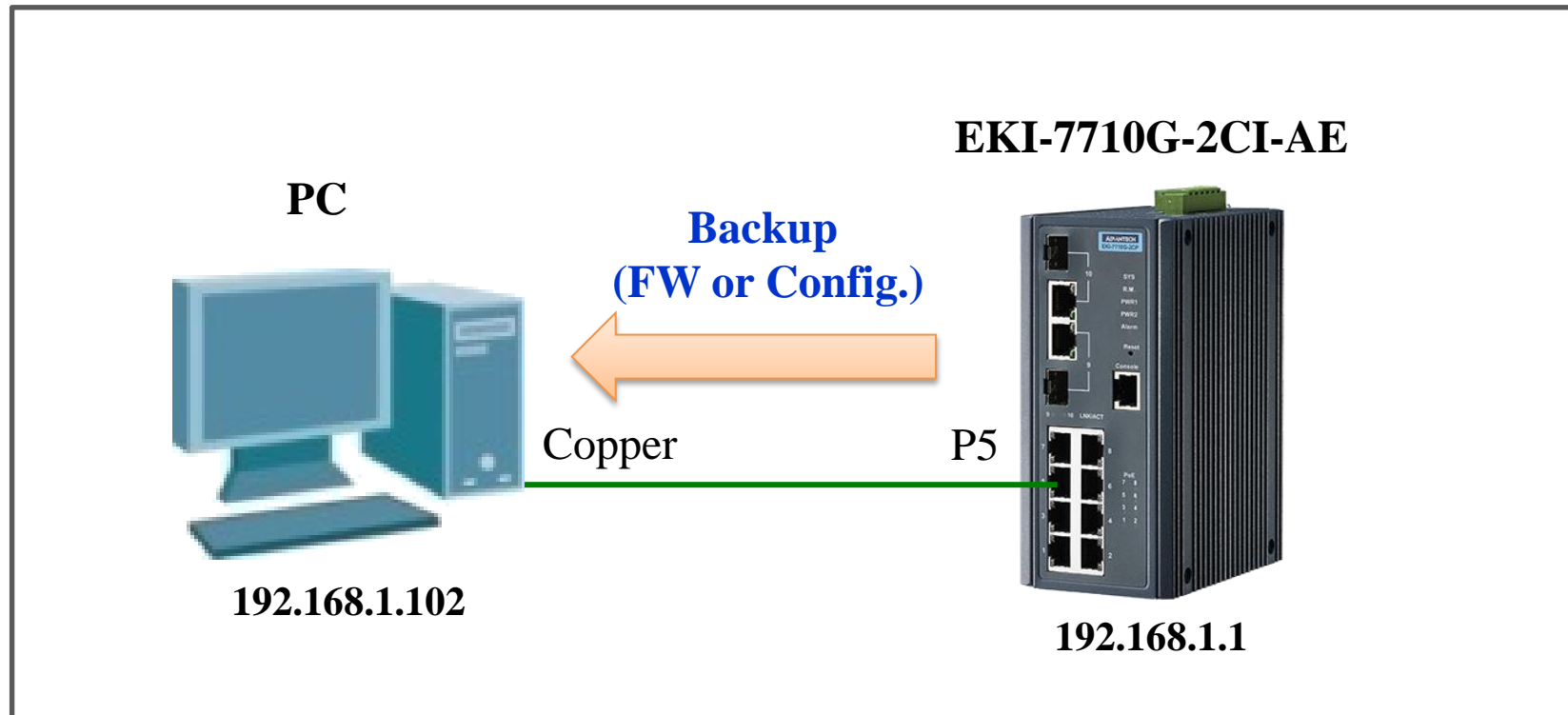


Backup Manager

- Backup via HTTP
- Backup via TFTP

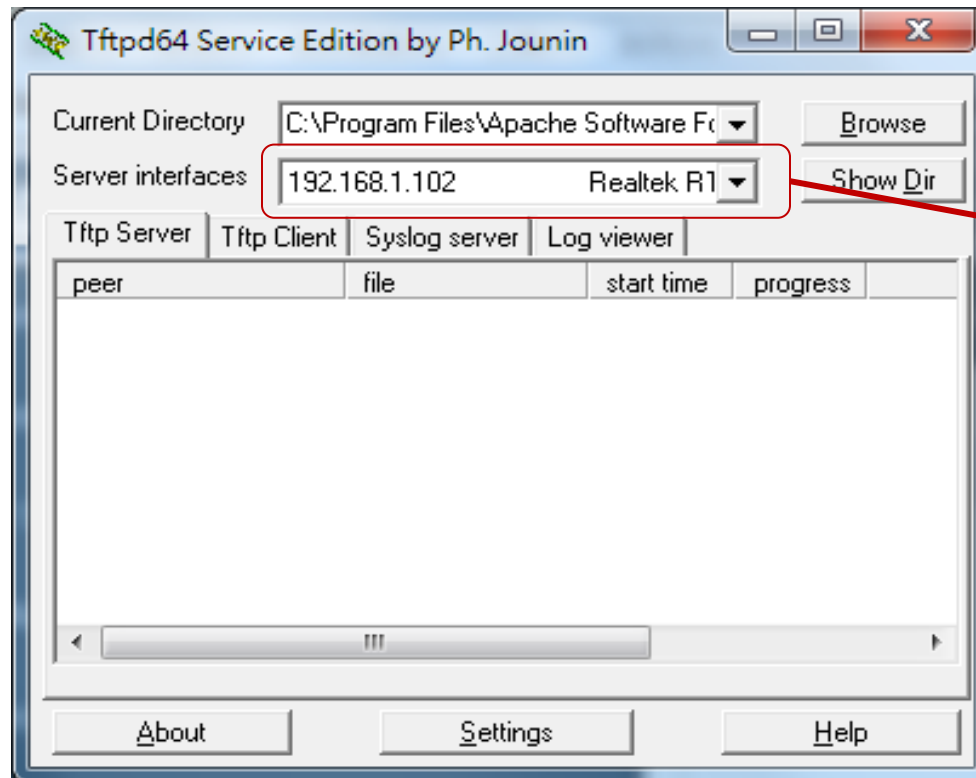
Backup via TFTP

- Purpose: Backup device image (or Configuration) via TFTP
- Resource requirements: Tftpd 64
http://tftpd32.jounin.net/tftpd32_download.html
- Topology:



Backup via TFTP

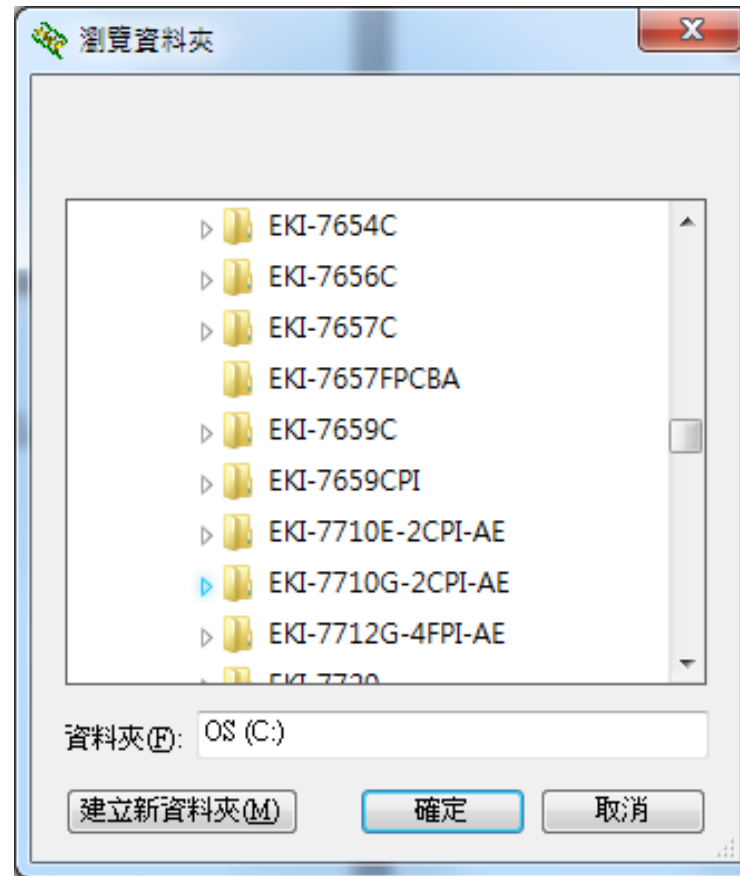
- Step 1: Run TFTP64.EXE program on PC.



TFTP server's IP

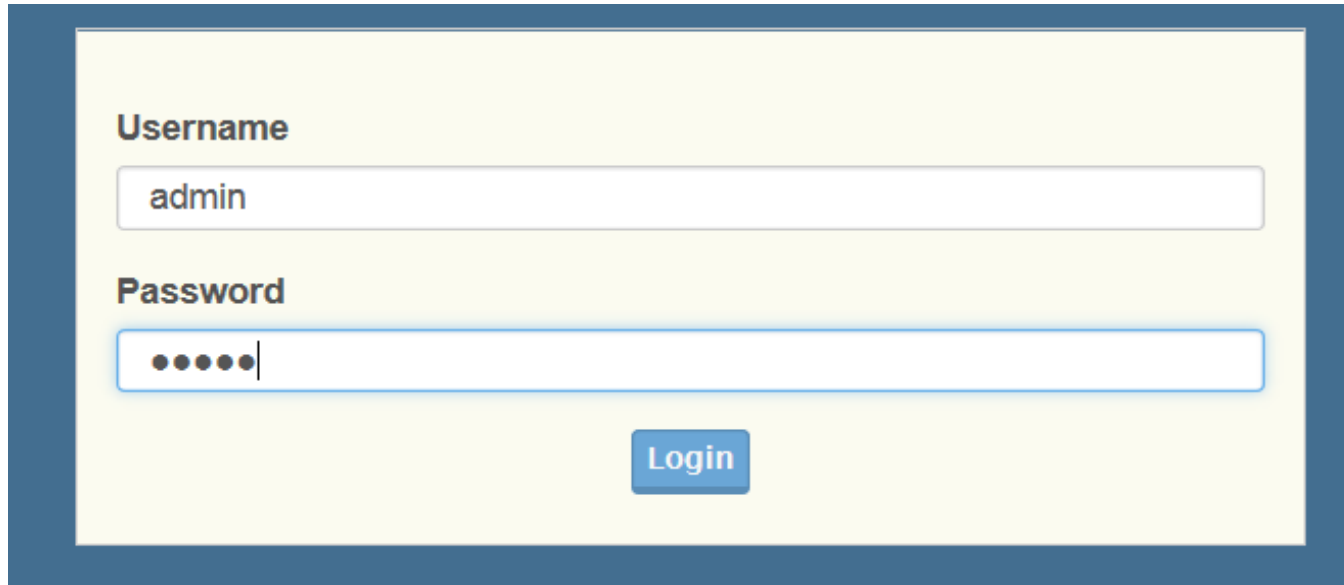
Backup via TFTP

- Step 2: Press “*Browse*” button, and then choose the destination directory you like to save the file.



Backup via TFTP

- Step 3: Logging the switch with admin/admin as Username/Password by default.



A login form with a light yellow background and a blue border. It contains two input fields: 'Username' with the text 'admin' and 'Password' with five dots. A blue 'Login' button is positioned below the password field.

Username

admin

Password

•••••

Login

Backup via TFTP

- Step 4: Under Tools -> Backup Manager
- Choose Backup Method as TFTP
- Input “server IP”: X.X.X.X (Your PC IP, ex: 192.168.1.102)
- Choose Backup type as Image

ADVANTECH EKI-7710G-2CI-AE Intelligent Industrial Switch

Switch / Tools / Backup Manager

Backup

Backup Method: TFTP

Server IP: 192.168.1.102 (IPv4 or IPv6 Address)

Backup Type:

- ☒ Image
- ☐ Running configuration
- ☐ Startup configuration
- ☐ Flash log
- ☐ Buffered log

Image:

- ☒ EKI-7710E-2CI-AE-1-00-78.hex (Active)
- ☐ EKI-7710E-2CI-AE-1-00-78.hex (Backup)

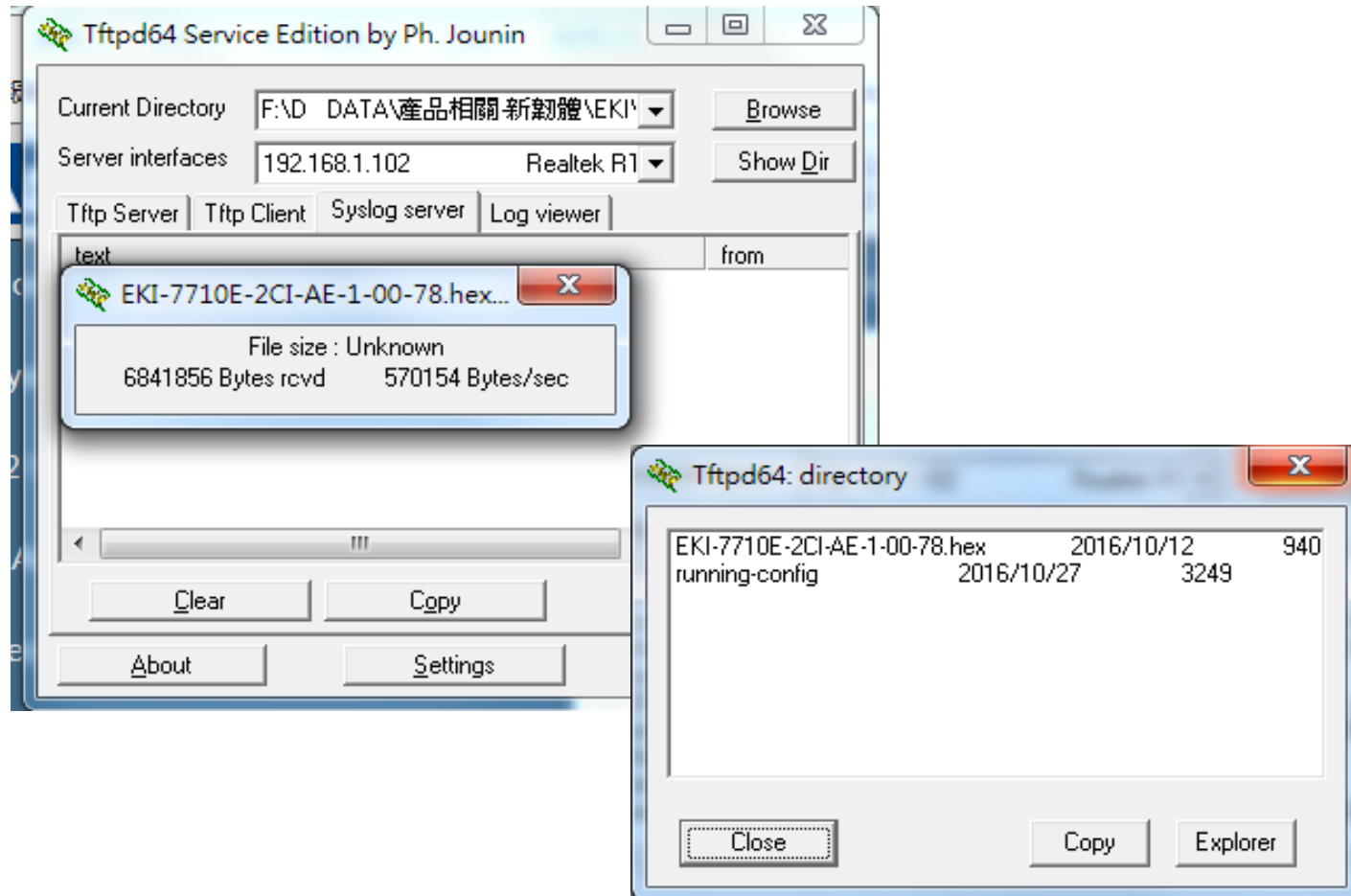
Backup

Noted that PC and Switch IP address must be the same network segment

For *Backup Type* descriptions, please refer to the previous slide.

Backup via TFTP

- Result: When Backup successful, you will see the firmware file is in the directory.

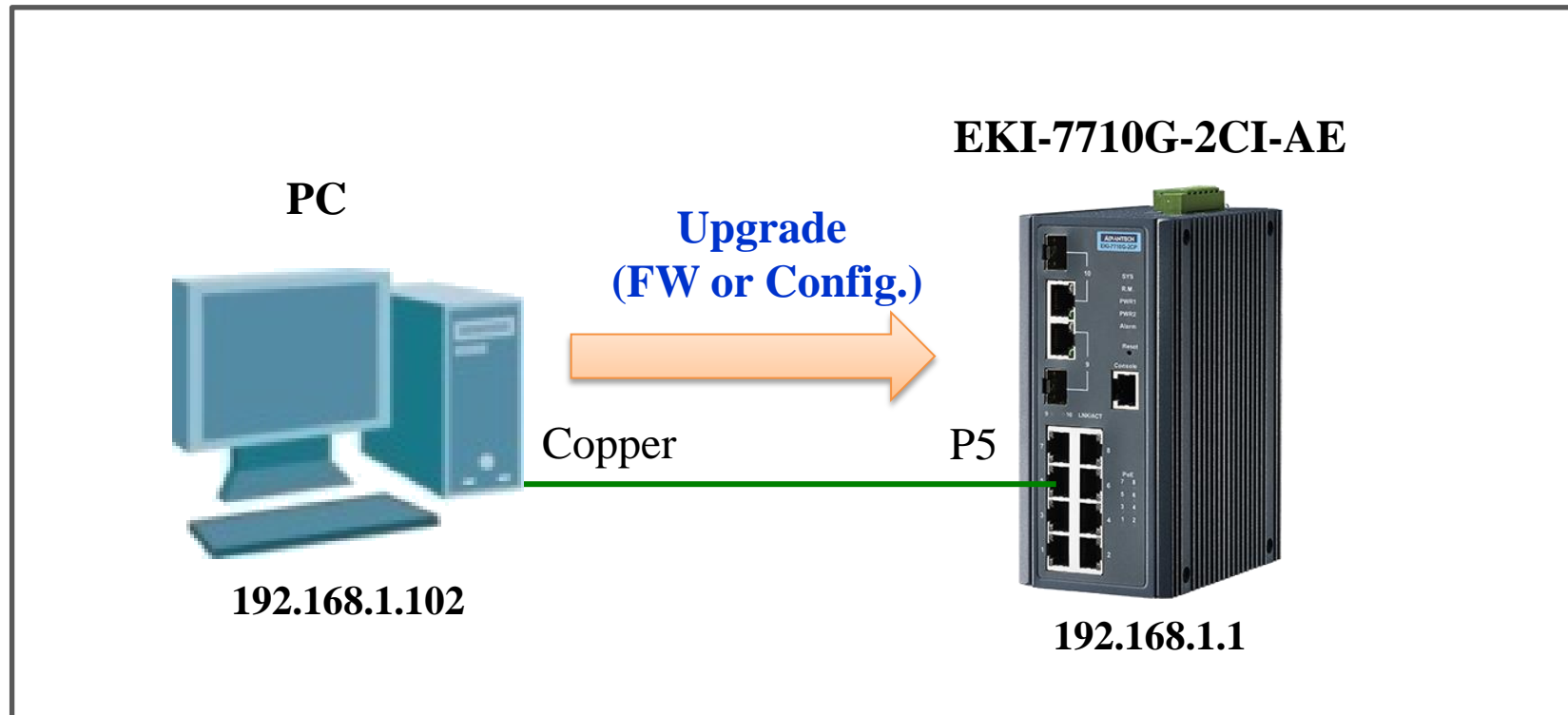


Upgrade Manager

- Upgrade via HTTP
- Upgrade via TFTP

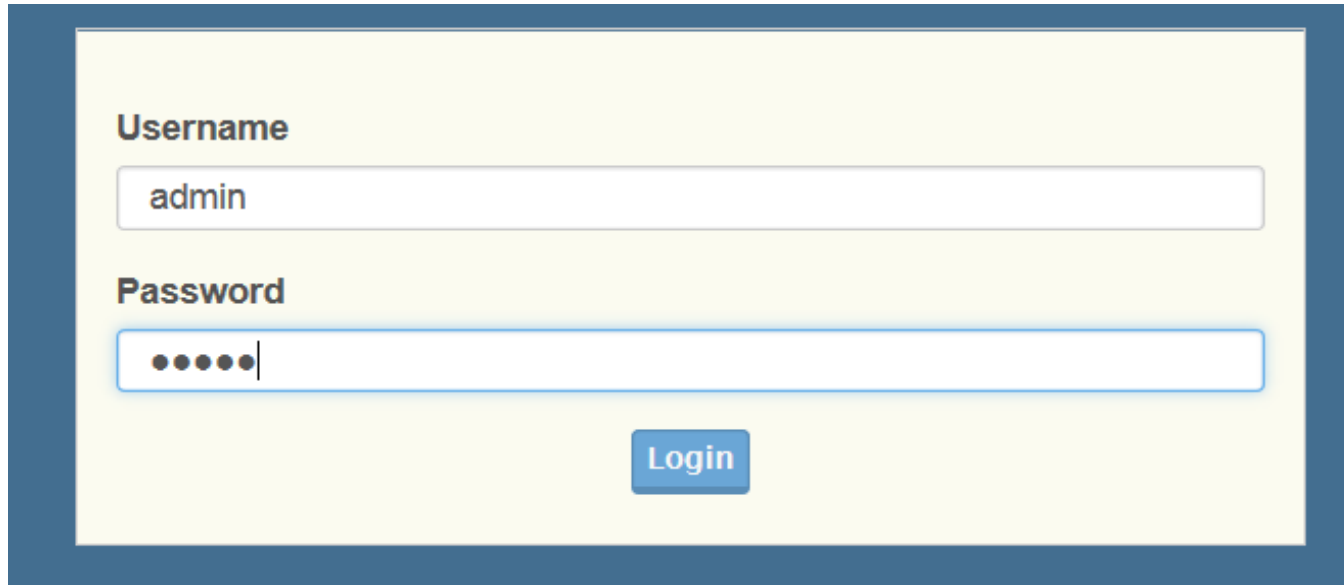
Upgrade via HTTP

- Purpose: Upgrade device image (or configuration) via HTTP
- Resource requirements: Firmware (.hex) file
- Topology:



Upgrade via HTTP

- Step 1: Logging the switch with admin/admin as Username/Password by default.



A screenshot of a web-based login form for a switch. The form is set against a light yellow background with a blue border. It contains two input fields: 'Username' with the text 'admin' and 'Password' with five dots indicating a masked password. A blue 'Login' button is positioned below the password field.

Username

admin

Password

.....

Login

Upgrade via HTTP

- Step 2: Under *Tools -> Upgrade Manager*
- Choose Upgrade Method as HTTP
- Choose Upgrade type as Image

The screenshot displays the Advantech web interface for an EKI-7710G-2CI-AE Intelligent Industrial Switch. The left sidebar contains a navigation menu with the following items: Monitoring, System, L2 Switching, MAC Address Table, Security, QoS, Management, Diagnostics, Tools, IXM, Backup Manager, Upgrade Manager (highlighted with a red box and labeled '1'), Dual Image, and Save Configuration. The main content area is titled 'Switch / Tools / Upgrade Manager' and shows the 'Upgrade' configuration page. The 'Upgrade Method' dropdown menu is highlighted with a red box and labeled '2', showing 'TFTP' and 'HTTP' options. The 'Server IP' field is labeled 'Input IP' with a note '(IPv4 or IPv6 Address)'. The 'File Name' field is labeled 'Input file name'. The 'Upgrade Type' section has three radio button options: 'Image' (selected), 'Startup configuration', and 'Running configuration'. The 'Image' section has three radio button options: 'EKI-7710E-2CI-AE-1-00-78.hex (Active)' (selected), 'EKI-7710E-2CI-AE-1-00-78.hex (Backup)', and 'Auto'. An orange callout box points to the 'Upgrade Type' section with the text: 'For Upgrade Type descriptions, please refer to the next slide.' An 'Upgrade' button is located at the bottom of the form.

Upgrade via HTTP

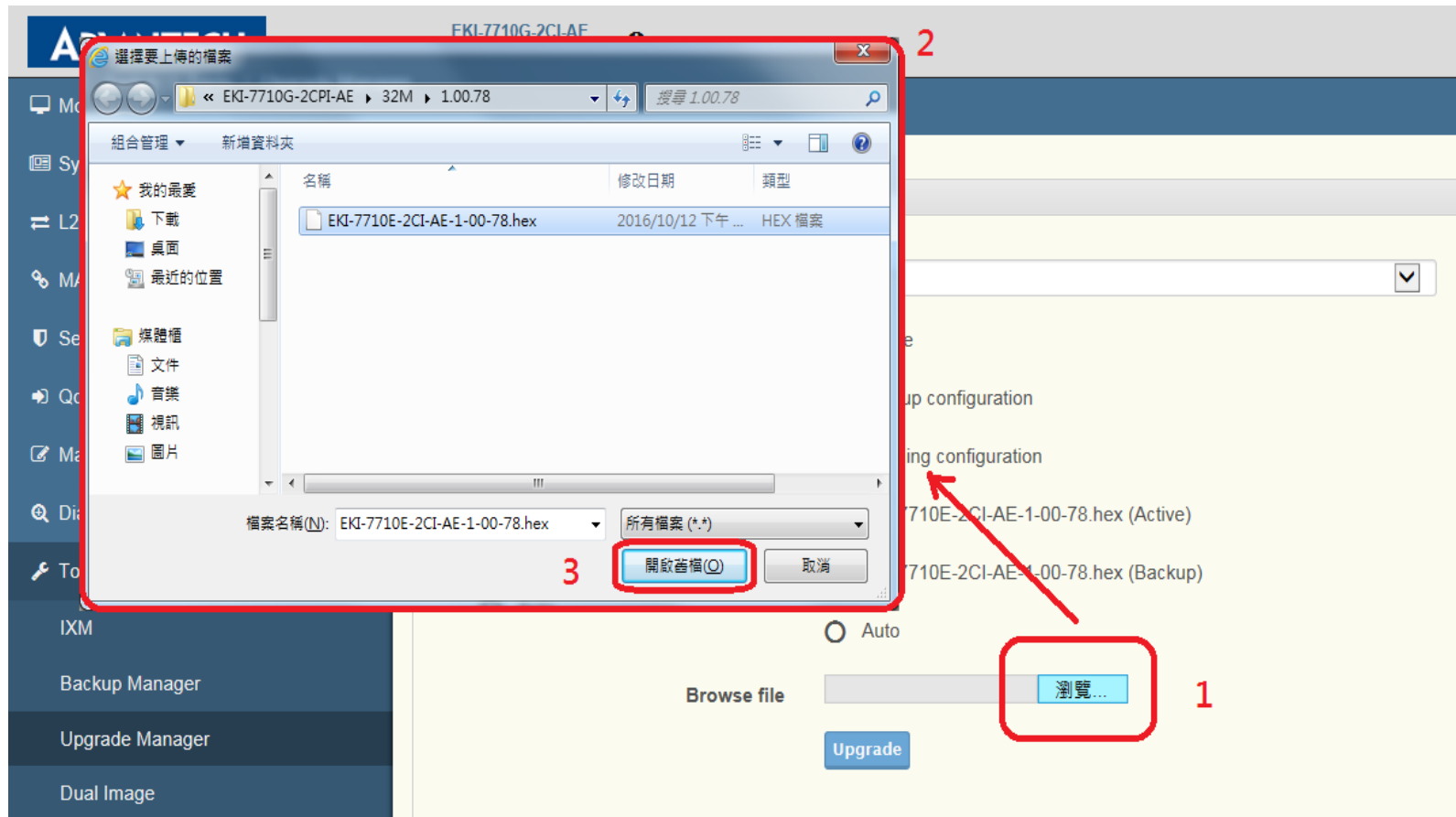
■ Upgrade Types

Upgrade type	Description
Image	Upgrade firmware
Running Configuration	Restore Running configuration file
Startup Configuration	Restore Startup configuration file

Image	Description
XXX.hex (Active)	Upgrade new firmware or configuration file to image0
XXX.hex (Backup)	Upgrade new firmware or configuration file to image1
Auto	Upgrade new firmware or configuration file to Backup image and use the partition to boot

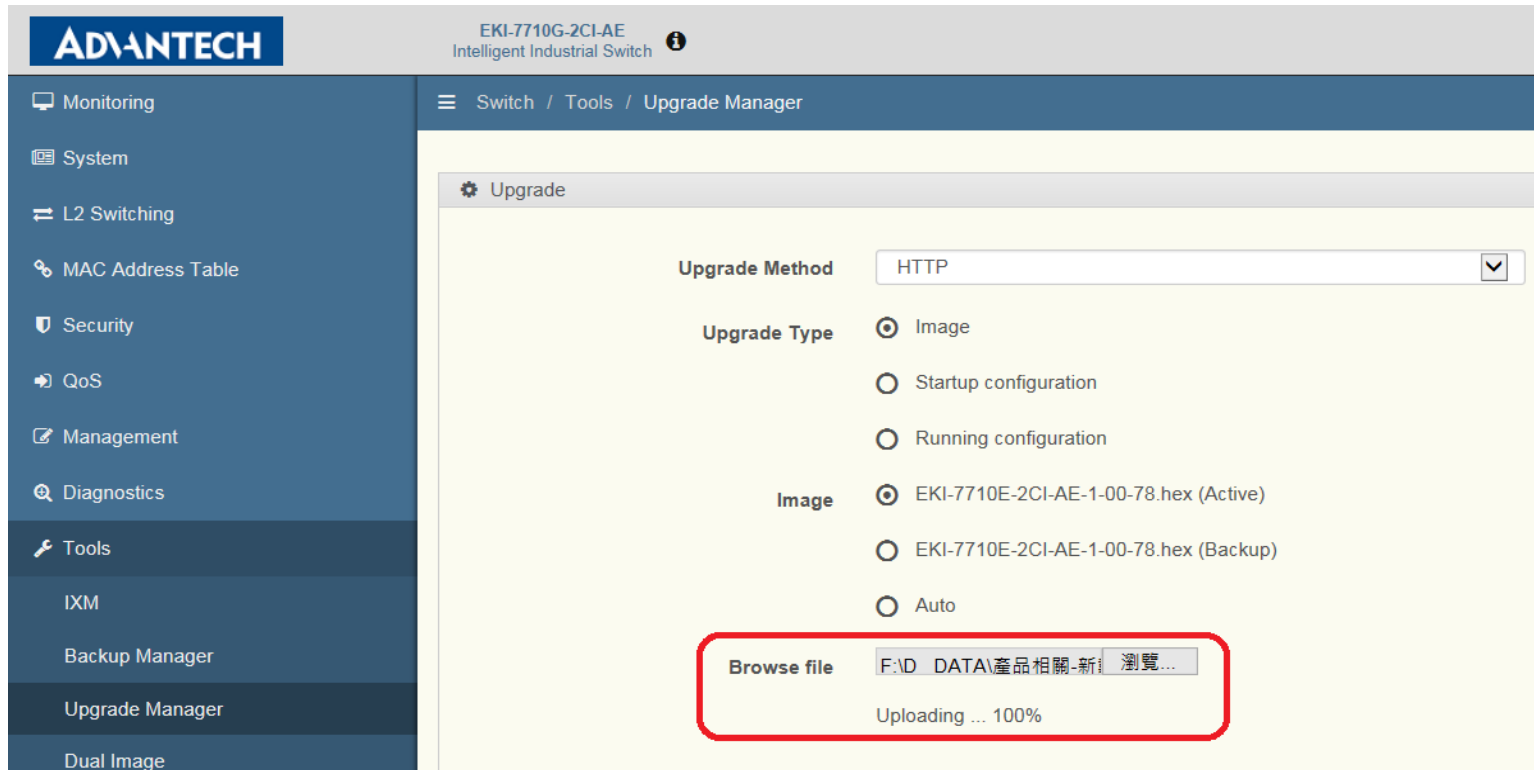
Upgrade via HTTP

- Step 3: Press “Browse” button, and then choose the firmware name (*.hex) you would like to use, Then press “Upgrade” button



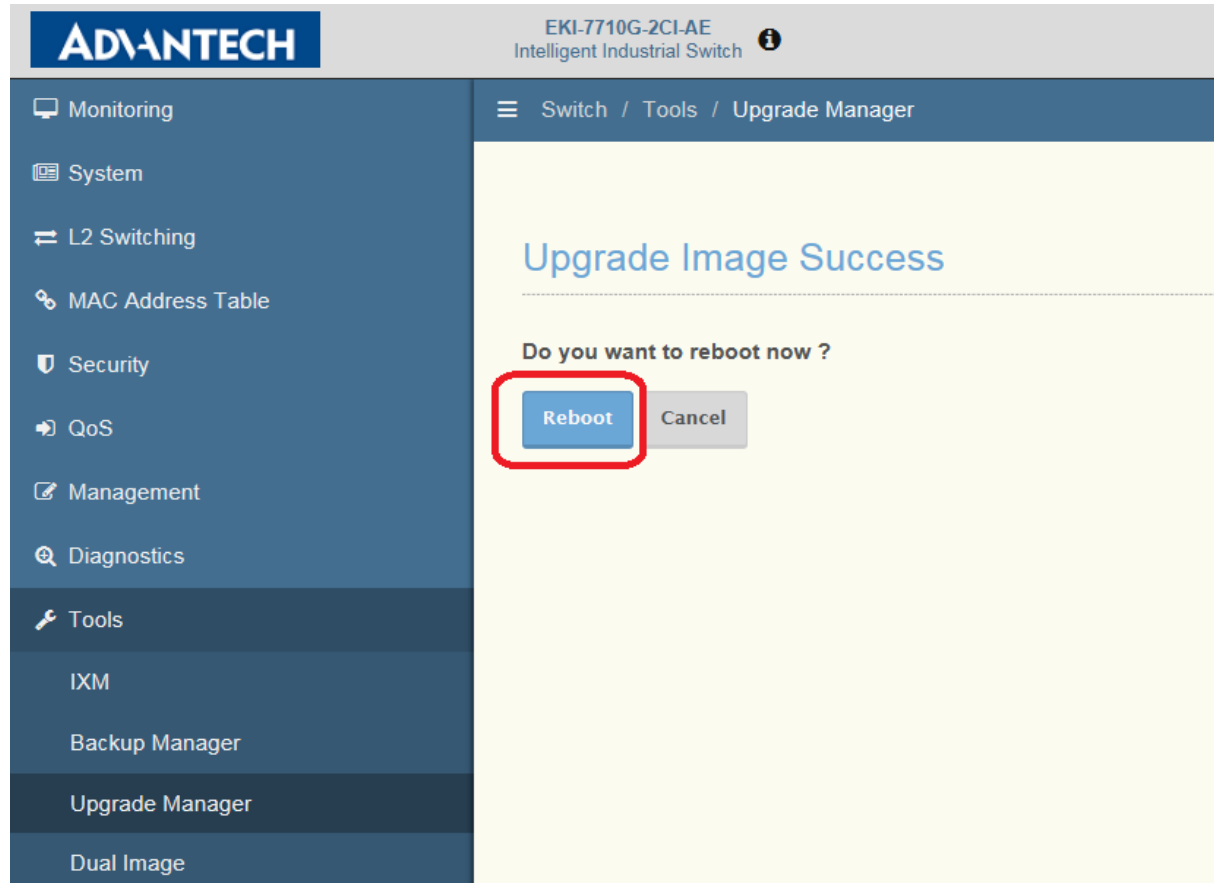
Upgrade via HTTP

- Step 4: Now you will see the upgrade process bar running until 100%



Upgrade via HTTP

- Result: When upgrade successful, the web page will request you press “Reboot” to make new firmware affect.

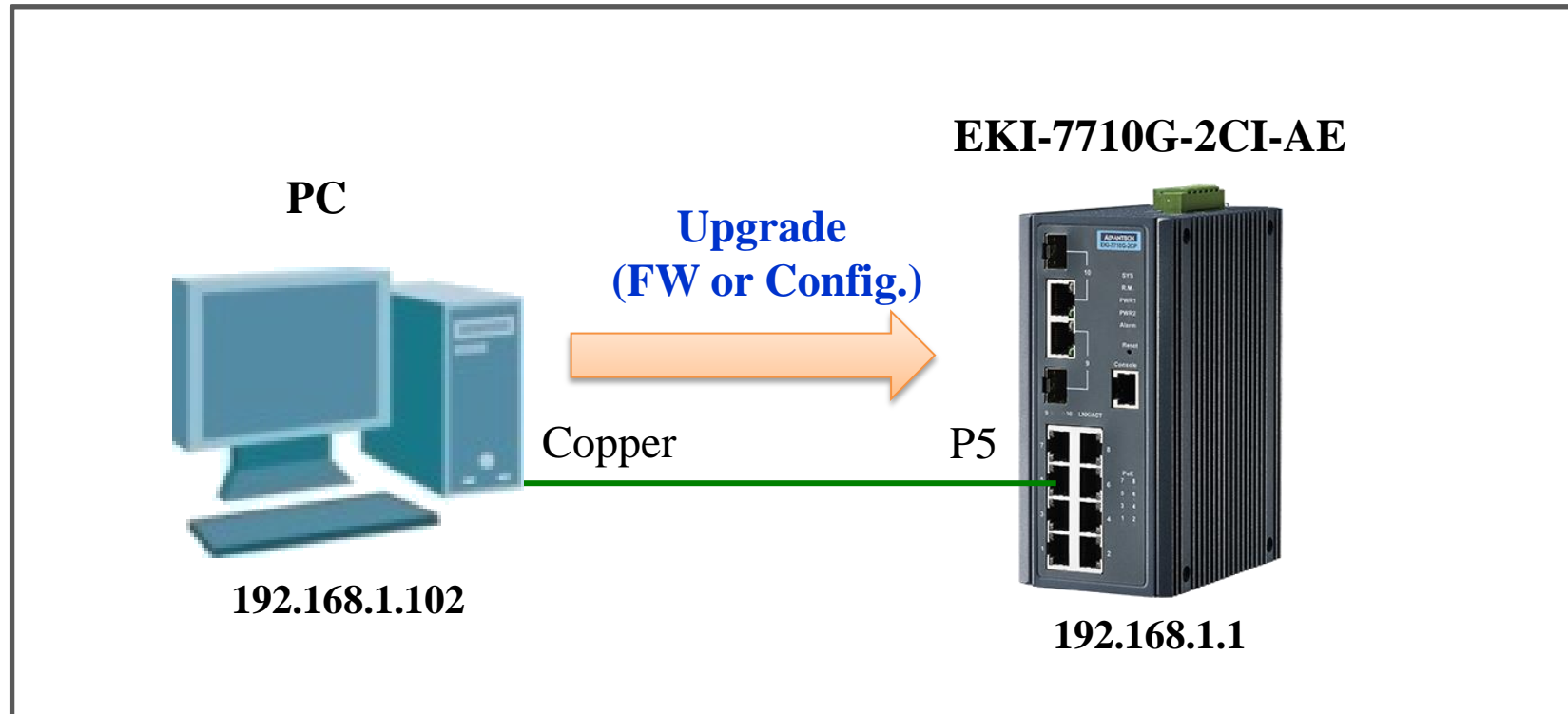


Upgrade Manager

- Upgrade via HTTP
- Upgrade via TFTP

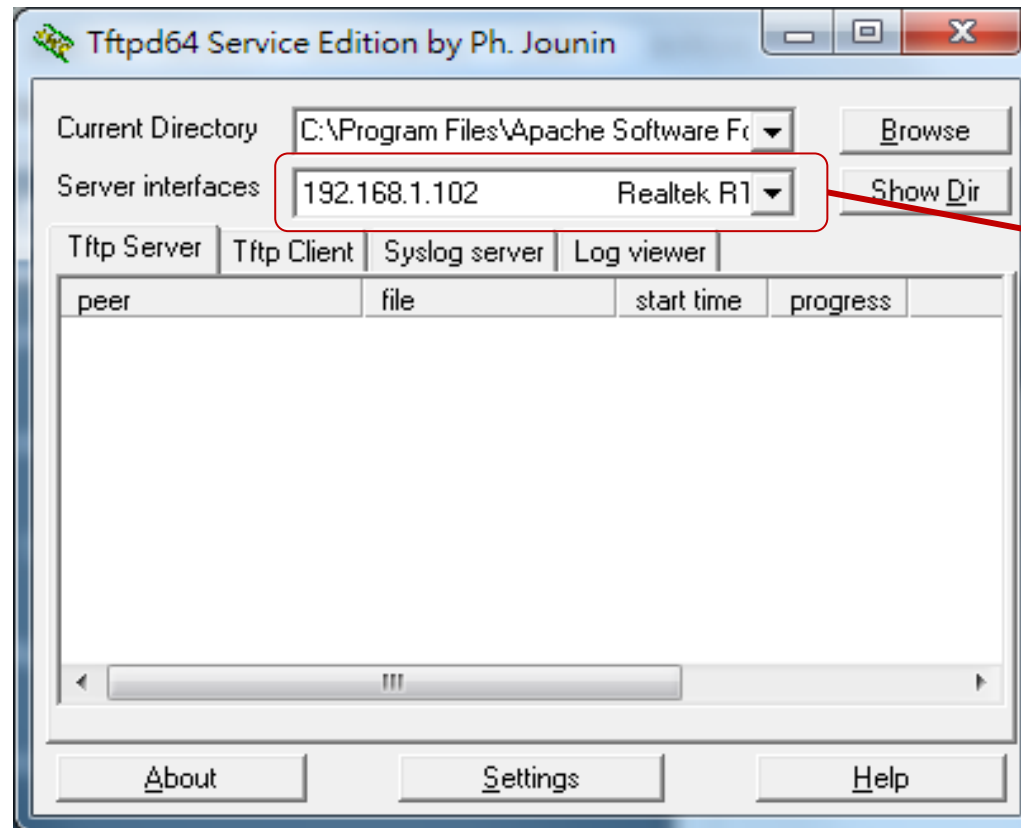
Upgrade via TFTP

- Purpose: Backup device image (or configuration) via TFTP
- Resource requirements: Firmware (.hex) file, and Tftpd 64
http://tftpd32.jounin.net/tftpd32_download.html
- Topology:



Upgrade via TFTP

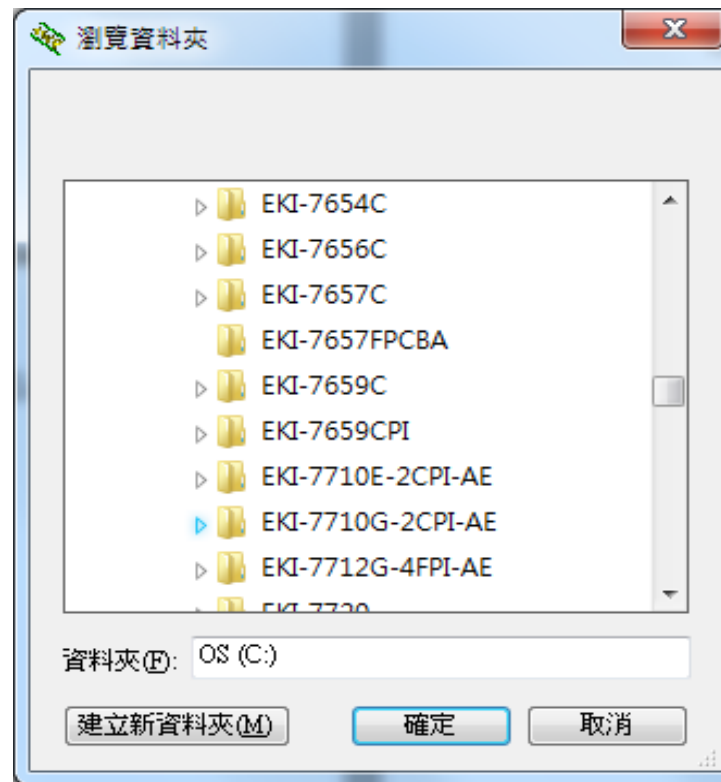
- Step 1: Run TFTP64.EXE program on PC.



TFTP server's IP

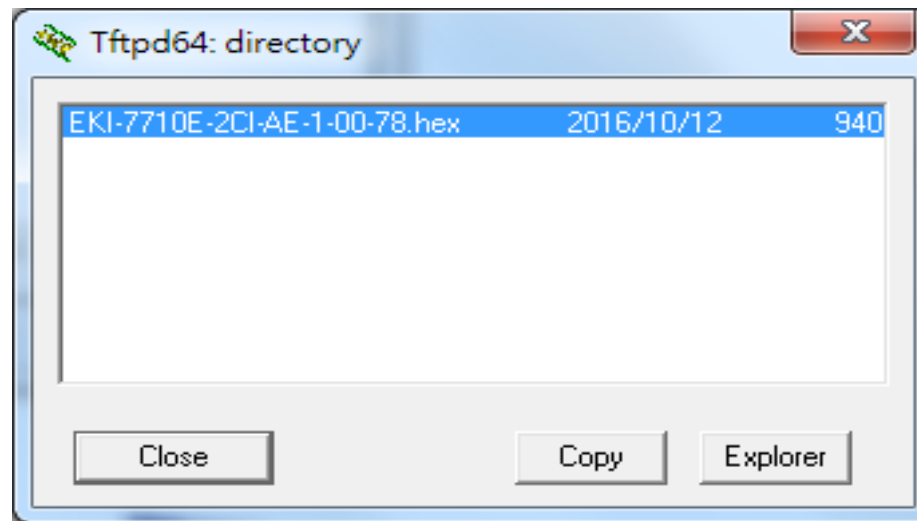
Upgrade via TFTP

- Step 2: Press “*Browse*” button, and then choose the destination directory where you save the file.



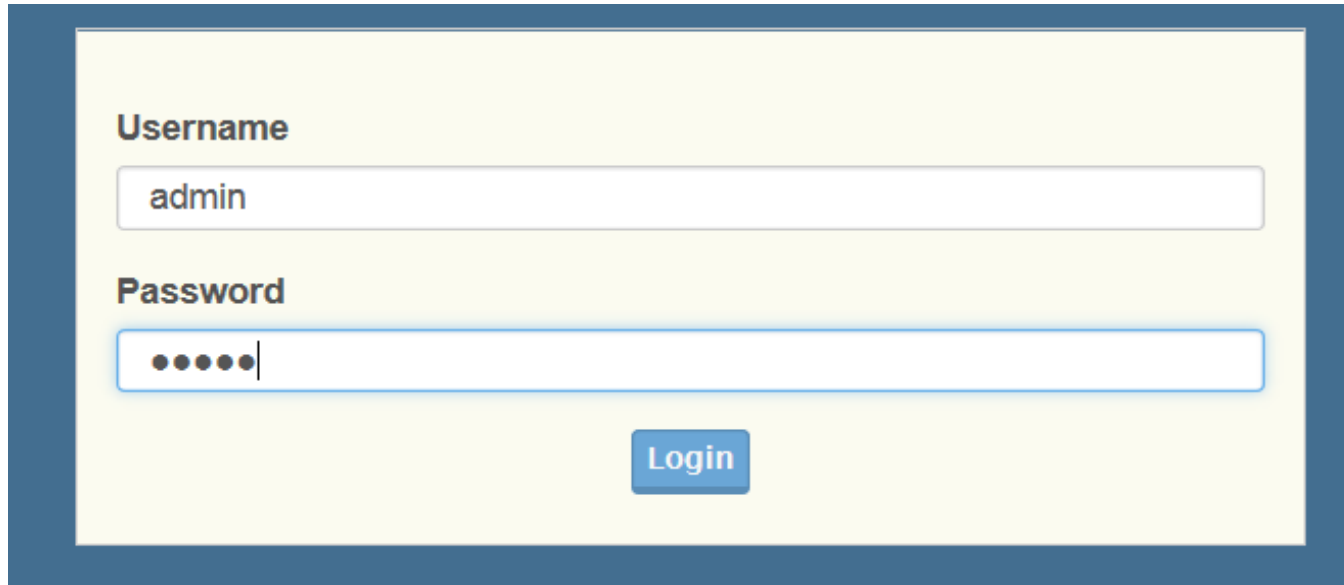
Upgrade via TFTP

- Step 3: Press “*Show Dir*” button, choose the firmware you like to upgrade, then press “*Copy*”, and then press “*Close*” button.



Upgrade via TFTP

- Step 4: Logging the switch with admin/admin as Username/Password by default.



A login form with a light yellow background and a blue border. It contains two input fields: 'Username' with the text 'admin' and 'Password' with five dots. A blue 'Login' button is positioned below the password field.

Username

admin

Password

.....

Login

Upgrade via TFTP

- Step 5: Under *Tools -> Upgrade Manager*
- Choose Upgrade Method as TFTP
- Input “server IP”: X.X.X.X (Your PC IP, ex: 192.168.1.102)
- Input “File Name”: Input firmware name or Press “Ctrl+V” to firmware file name column.

The screenshot displays the Advantech web interface for an EKI-7710E-2C-AE Intelligent Industrial Switch. The left sidebar contains a menu with the following items: Monitoring, System, L2 Switching, MAC Address Table, Security, QoS, Management, Diagnostics, Tools, IXM, Backup Manager, Upgrade Manager (highlighted with a red box and labeled '1.'), Dual Image, and Save Configuration. The main content area is titled 'Switch / Tools / Upgrade Manager' and shows the 'Upgrade' configuration page. The 'Upgrade Method' is set to 'TFTP'. The 'Server IP' field contains '192.168.1.102' (labeled '2.' and with a red box). The 'File Name' field contains 'EKI-7710E-2CI-AE-1-00-78.hex' (labeled '3.' and with a red box). The 'Upgrade Type' section has radio buttons for 'Image' (selected), 'Startup configuration', and 'Running configuration'. The 'Image' section has radio buttons for 'EKI-7710G-2CPI-AE-1-00-87.hex (Backup)', 'EKI-7710G-2CPI-AE-1-00-97.hex (Active)', and 'Auto'. The 'Upgrade' button is highlighted with a red box and labeled '4.'. Two callout boxes provide additional information: one notes that the PC and Switch IP addresses must be on the same network segment, and the other refers to a previous slide for upgrade type descriptions.

1. Upgrade Manager

2. Server IP

3. File Name

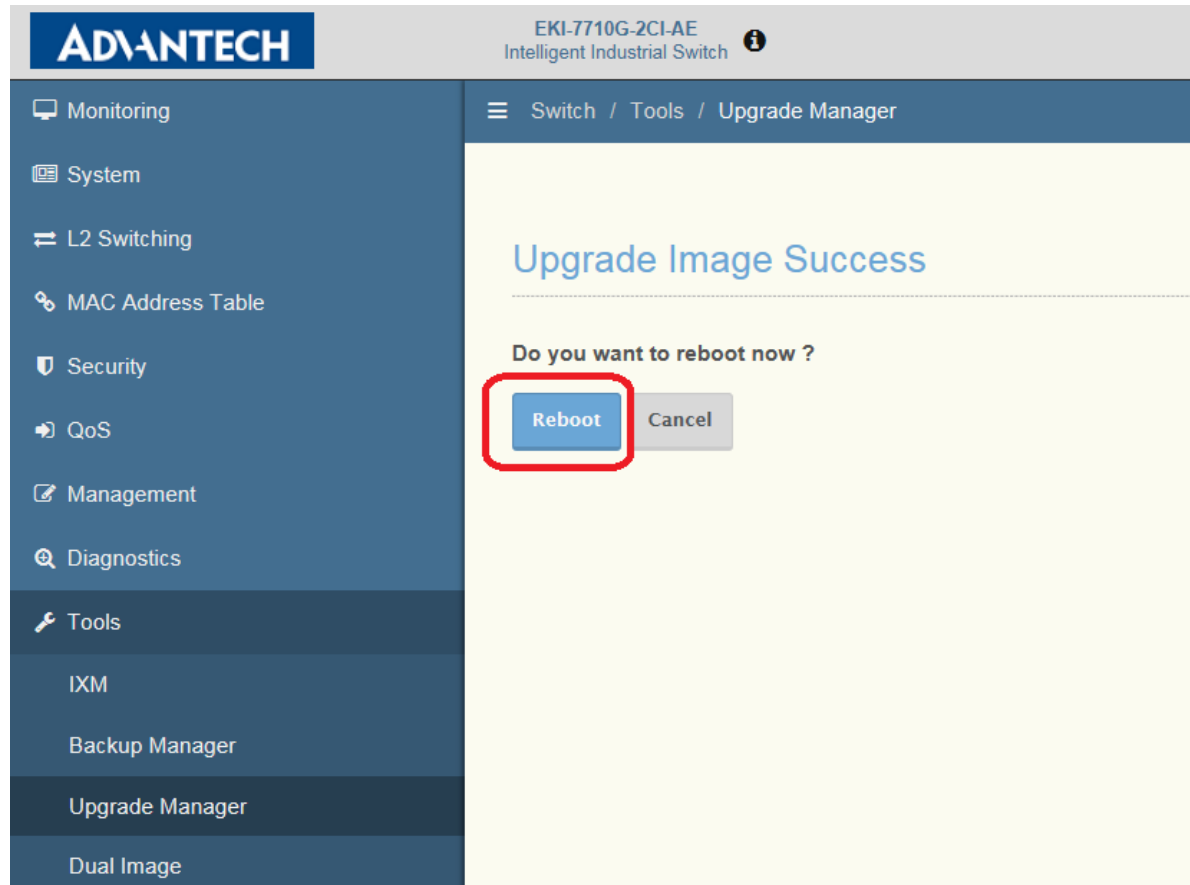
4. Upgrade

Noted that PC and Switch IP address must be the same network segment

For *Upgrade Type* descriptions, please refer to the previous slide.

Upgrade via TFTP

- Result: When upgrade successful, the web page will request you press “*Reboot*” to make new firmware affect.





Enabling an Intelligent Planet

Enabling an Intelligent Planet

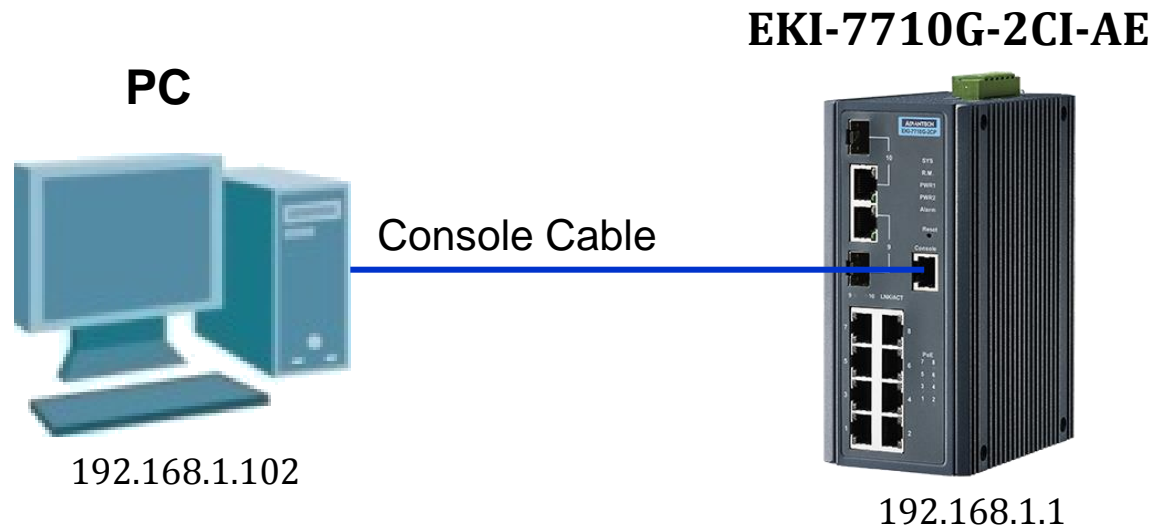
ADVANTECH

Appendix

- Upgrade via CLI w/ TFTP

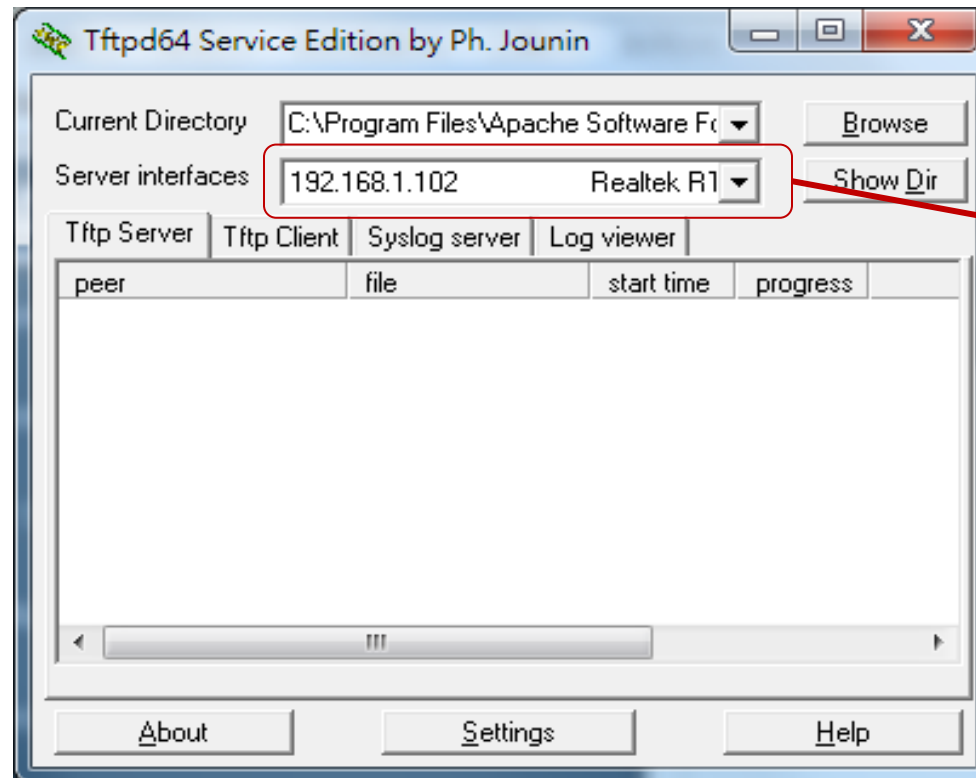
Upgrade via CLI w/ TFTP

- Purpose: Upgrade device image (or configuration) via CLI with TFTP
- Resource requirements: Firmware (.hex) file, Configuration file, Console cable, and Tftpd 64 (http://tftpd32.jounin.net/tftpd32_download.html)
- How to select Advantech managed switch console cable:
http://support.advantech.com/support/KnowledgeBaseSRDetail_New.aspx?SR_ID=1-1IOM96L&Doc_Source=Knowledge+Base
- Topology:



Upgrade via CLI w/ TFTP

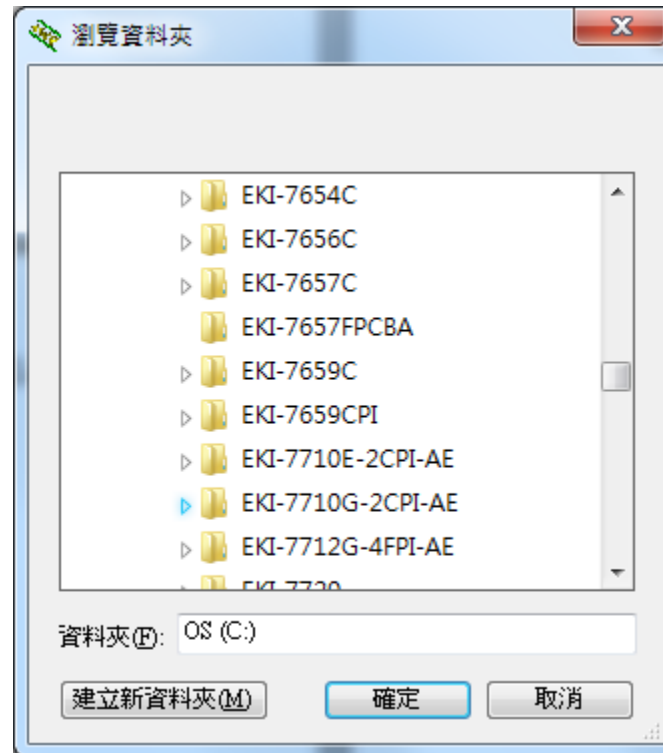
- Step 1: Run TFTP64.EXE program on PC.



TFTP server's IP

Upgrade via CLI w/ TFTP

- Step 2: Press “*Browse*” button, and then choose the destination directory where you save the file.



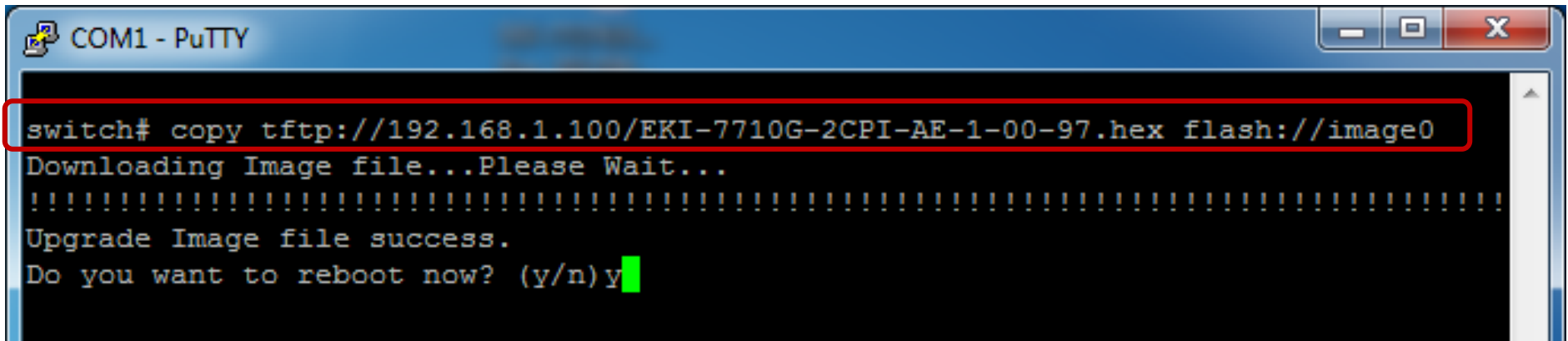
Upgrade via CLI w/ TFTP (*for Firmware*)

- Step 3: Connect PC and the switch with corresponding console cable and enter the CLI. (For entering CLI, please refer to the following SOP: http://support.advantech.com/support/KnowledgeBaseSRDetail_New.aspx?Doc_Source=Knowledge+Base&SR_ID=1-1JVZ1H7)

- Type in the following command:

switch# **copy tftp://192.168.1.100/EKI-7710G-2CPI-AE-1-00-97.hex** flash://image0

Your full file name



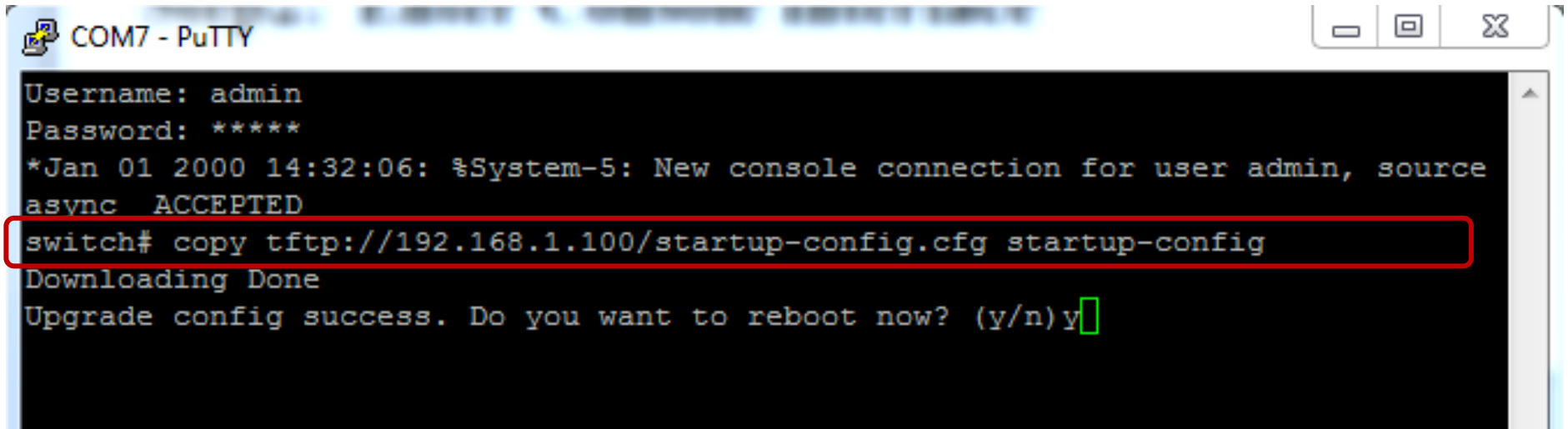
```
COM1 - PuTTY
switch# copy tftp://192.168.1.100/EKI-7710G-2CPI-AE-1-00-97.hex flash://image0
Downloading Image file...Please Wait...
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Upgrade Image file success.
Do you want to reboot now? (y/n)y
```

Upgrade via CLI w/ TFTP (*for Configuration*)

- Step 3: Connect PC and the switch with corresponding console cable and enter the CLI. (For entering CLI, please refer to the following SOP: http://support.advantech.com/support/KnowledgeBaseSRDetail_New.aspx?Doc_Source=Knowledge+Base&SR_ID=1-1JVZ1H7)
- Type in the following command:

switch# **copy tftp://192.168.1.100/startup-config.cfg startup-config**

Your full file name

A screenshot of a PuTTY terminal window titled 'COM7 - PuTTY'. The terminal shows a login sequence with 'Username: admin' and 'Password: *****'. A system message follows: '*Jan 01 2000 14:32:06: %System-5: New console connection for user admin, source async ACCEPTED'. The command 'switch# copy tftp://192.168.1.100/startup-config.cfg startup-config' is entered and highlighted with a red box. The output shows 'Downloading Done' and 'Upgrade config success. Do you want to reboot now? (y/n)y'.