

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.Weii / 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**

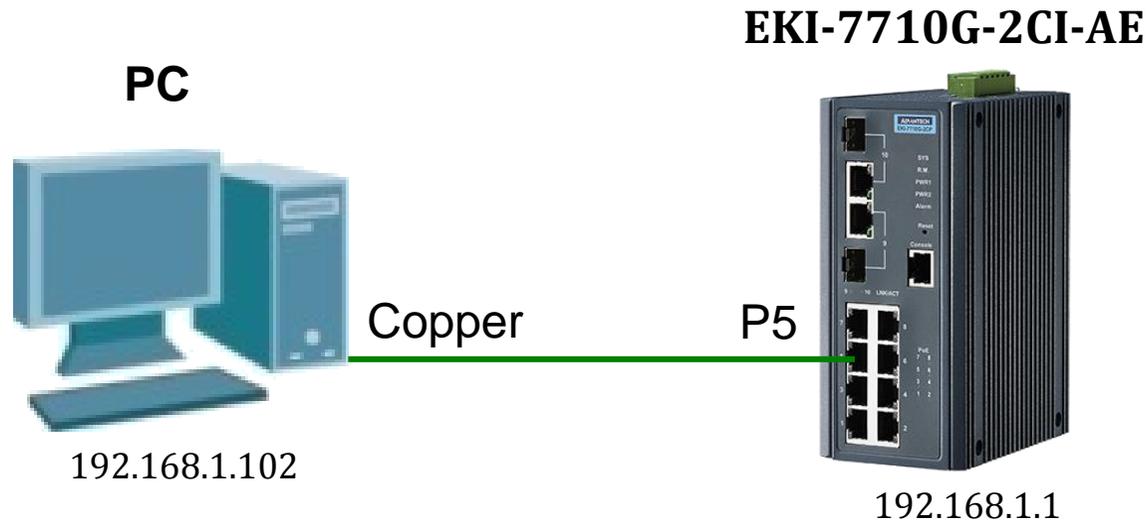


Backup Manager

- Backup via HTTP
- Backup via TFTP

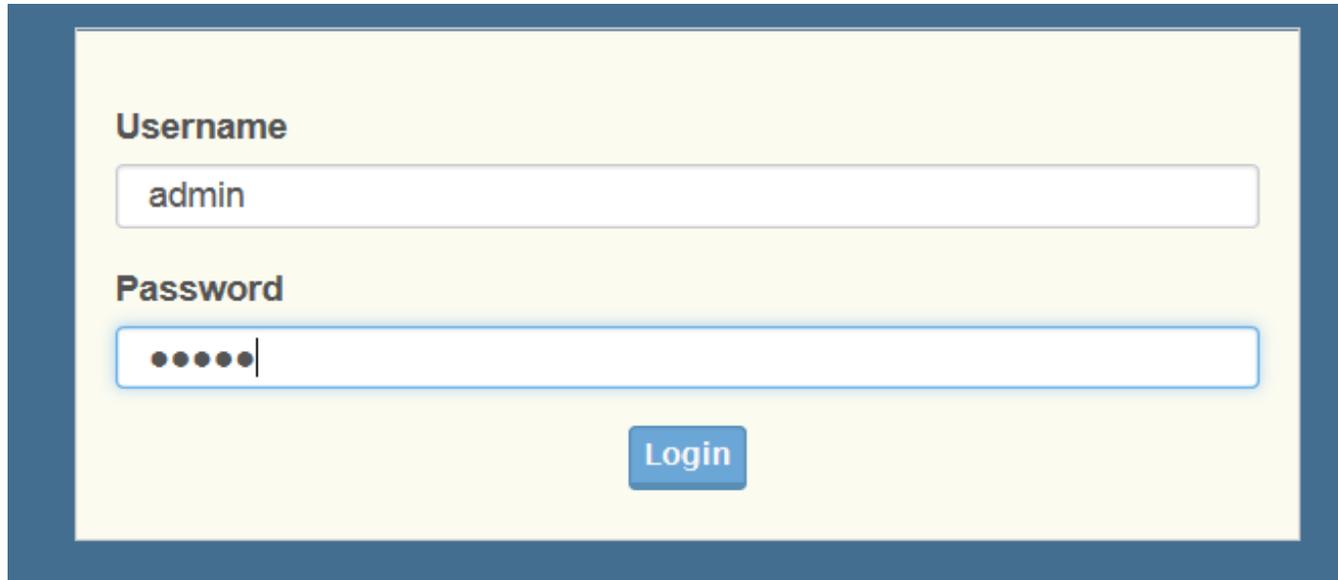
Backup via HTTP

- Purpose: Backup device image via HTTP
- Topology:



Backup via HTTP

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



A screenshot of a login form for a switch. The form is enclosed in a blue border and has a light yellow background. It contains two input fields: one for the username, which is pre-filled with 'admin', and one for the password, which is masked with five dots. Below the password field is a blue 'Login' button.

Username

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 shows the navigation menu with 'Backup Manager' highlighted under the 'Tools' section, marked with a red '1'. The main content area is titled 'Backup' and shows the configuration options for the backup process. The 'Backup Method' is set to 'HTTP', highlighted with a red '2' and a red box. The 'Backup Type' is set to 'Image', also highlighted with a red '2'. The 'Image' section shows two options: 'EKI-7710E-2CI-AE-1-00-78.hex (Active)' and 'EKI-7710E-2CI-AE-1-00-78.hex (Backup)', with a red '3' and a red box around the 'Backup' button. An orange callout box points to the 'Backup Type' options with the text: 'For Backup Type descriptions, please refer to the next slide.'

Backup via HTTP

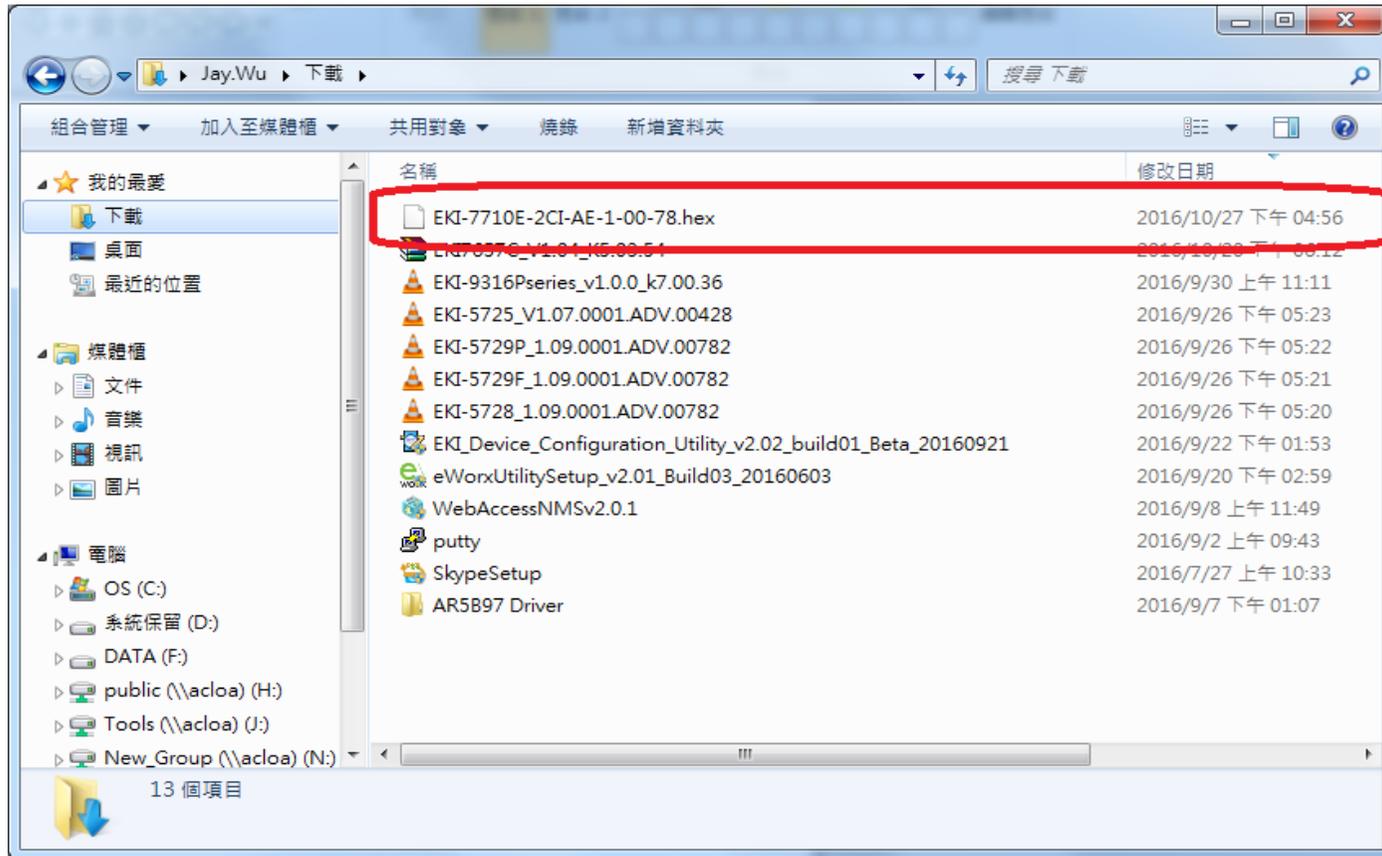
■ Backup Types

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.

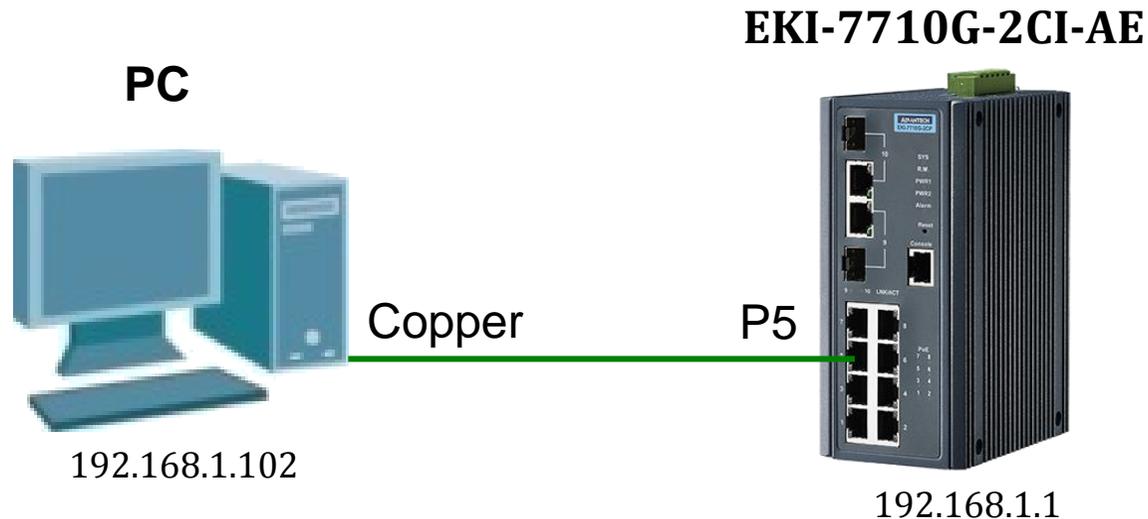


Backup Manager

- Backup via HTTP
- Backup via TFTP

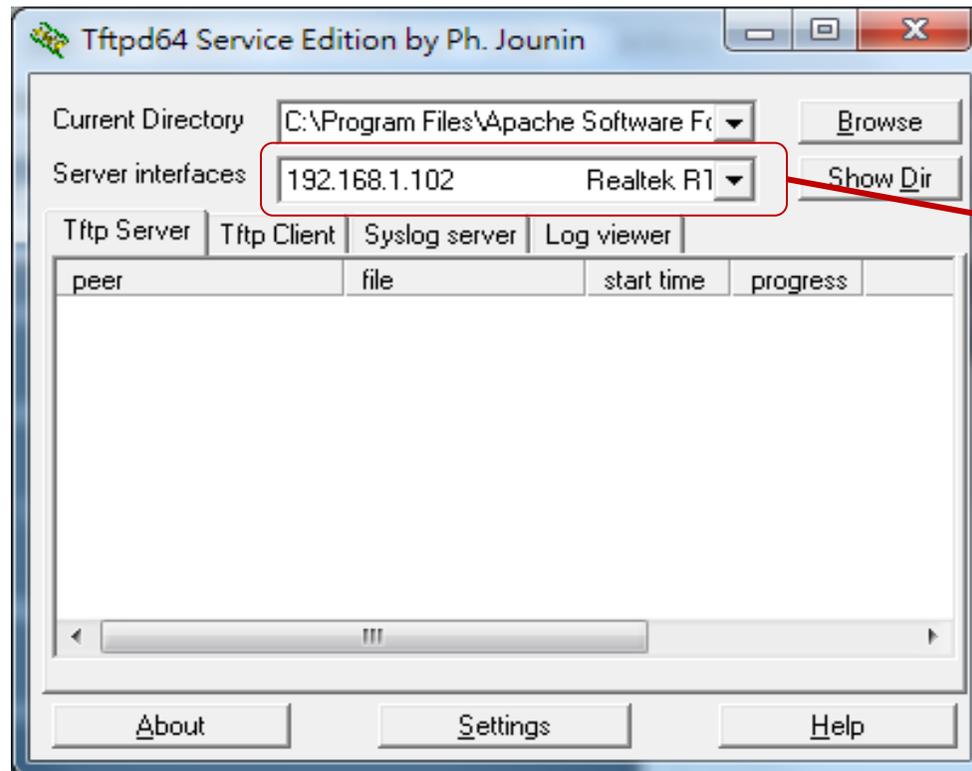
Backup via TFTP

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



Backup via TFTP

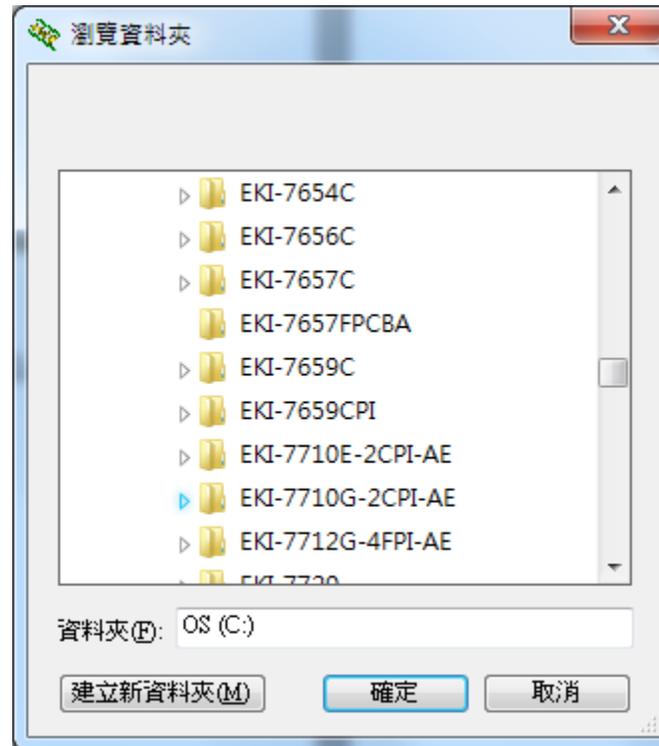
- Step 1: Run TFTP64.EXE program on PC.



TFTP server's IP

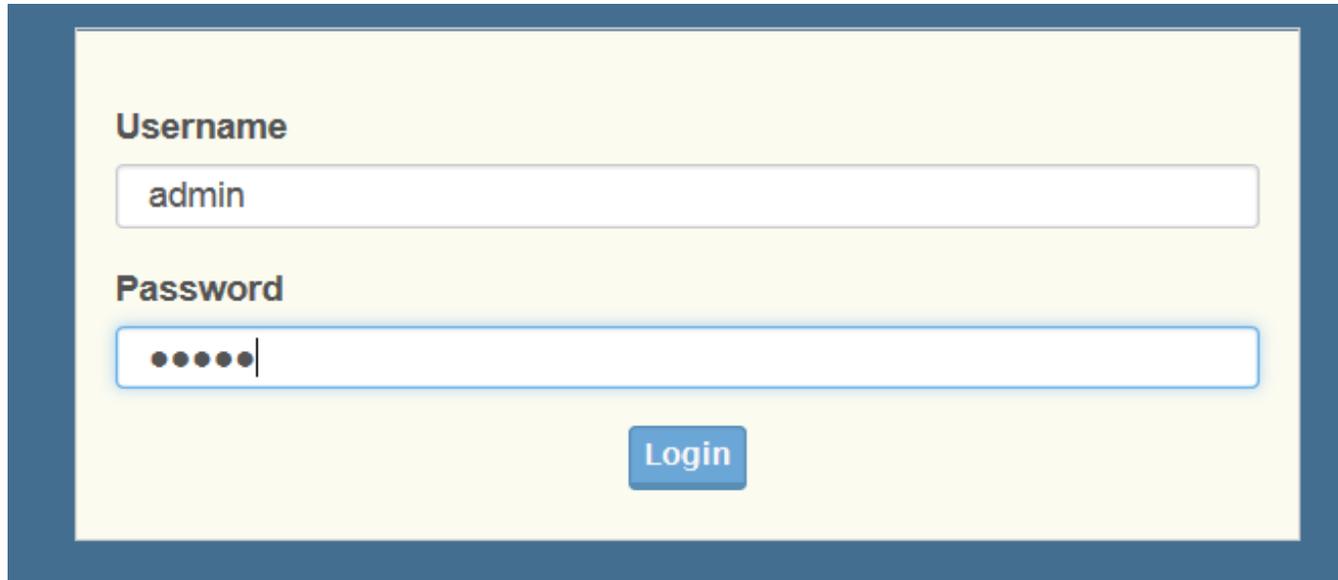
Backup via TFTP

- 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 screenshot of a login form for a switch. The form is enclosed in a blue border and has a light yellow background. It contains two input fields: one for the username, which is pre-filled with 'admin', and one for the password, which is masked with five dots. Below the password field is a blue 'Login' button.

Username

Password

Login

Backup via TFTP

- Step 4: Under *Tools* -> *Backup Manager*
- Choose Backup Method as TFTP
- 4-3. Input “server IP”: X.X.X.X (Your PC IP, ex: 192.168.1.102)
- Choose Backup type as Image

The screenshot shows the Advantech web interface for an EKI-7710G-2CI-AE Intelligent Industrial Switch. The left sidebar contains a menu with 'Tools' selected, and 'Backup Manager' highlighted with a red box and a red '1'. The main content area is titled 'Backup Manager' and shows the following configuration options:

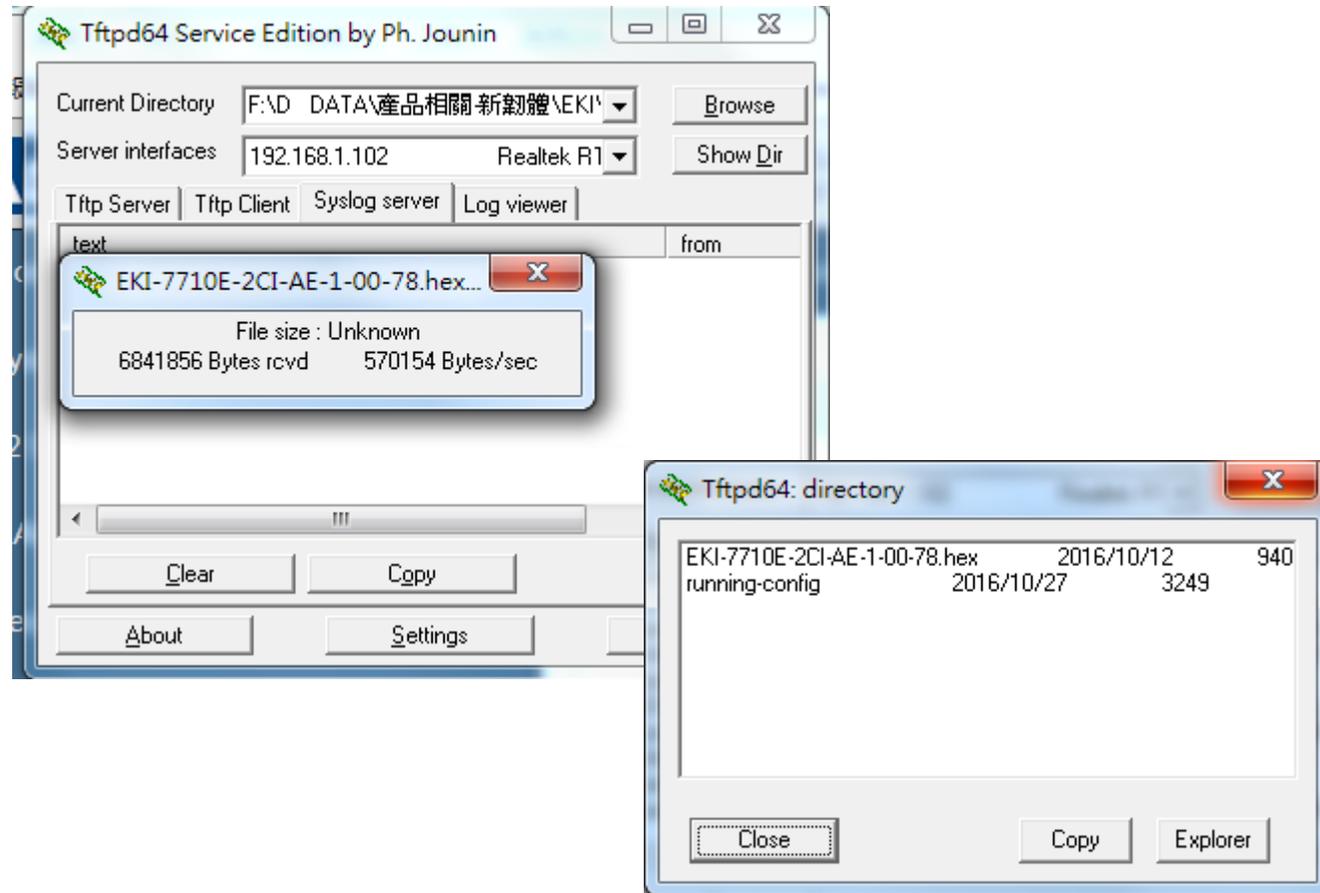
- Backup Method:** TFTP (selected in a dropdown menu)
- Server IP:** 192.168.1.102 (highlighted with a red box and a red '2'). A note below the field reads '(IPv4 or IPv6 Address)'.
- Backup Type:** Image (selected with a radio button). Other options include Running configuration, Startup configuration, Flash log, and Buffered log.
- Image:** EKI-7710E-2CI-AE-1-00-78.hex (Active) and EKI-7710E-2CI-AE-1-00-78.hex (Backup). A red box and a red '3' highlight the 'Backup' button.

Two callout boxes provide additional information:

- A callout box at the top right states: "Noted that PC and Switch IP address must the same network segment".
- A callout box at the bottom right states: "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.

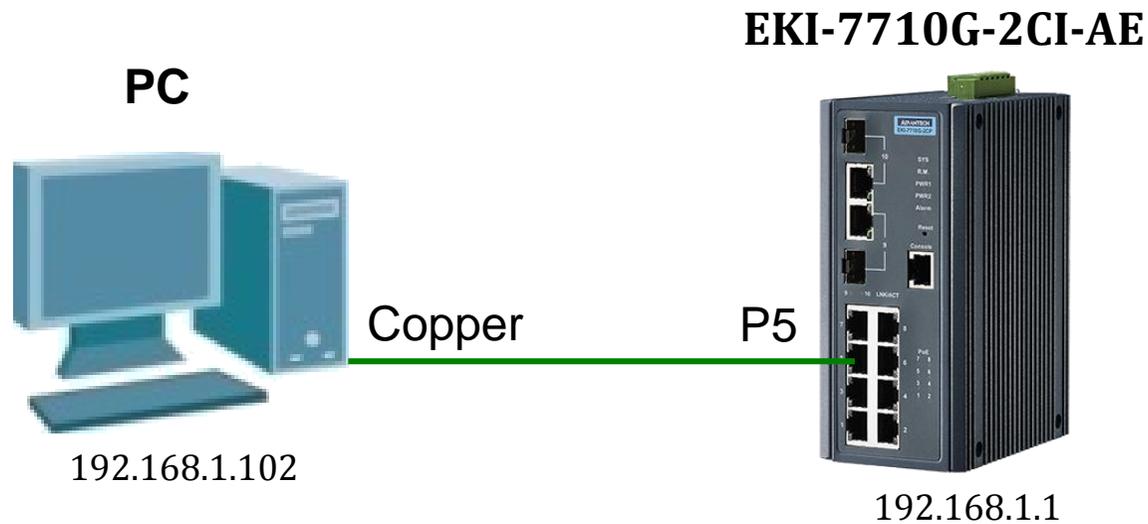


Upgrade Manager

- Upgrade via HTTP
- Upgrade via TFTP

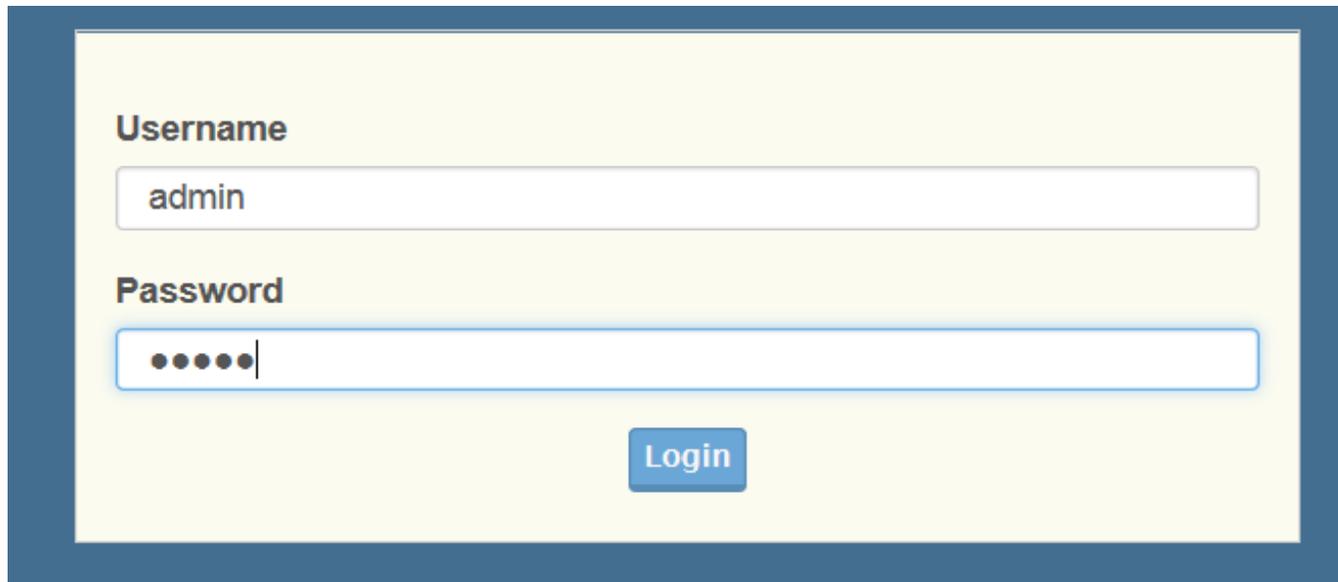
Upgrade via HTTP

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



Upgrade via HTTP

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



Username

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 shows the navigation menu with 'Tools' selected and 'Upgrade Manager' highlighted with a red box and a red '1'. The main content area is titled 'Upgrade Manager' and contains the following configuration fields:

- Upgrade Method:** A dropdown menu with 'TFTP' selected and highlighted with a red box and a red '2'. 'HTTP' is also visible as an option.
- Server IP:** A text input field labeled 'Input IP' with '(IPv4 or IPv6 Address)' to its right.
- File Name:** A text input field labeled 'Input file name'.
- Upgrade Type:** Radio buttons for 'Image' (selected), 'Startup configuration', and 'Running configuration'.
- Image:** Radio buttons for 'EKI-7710E-2CI-AE-1-00-78.hex (Active)', '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."

Upgrade via HTTP

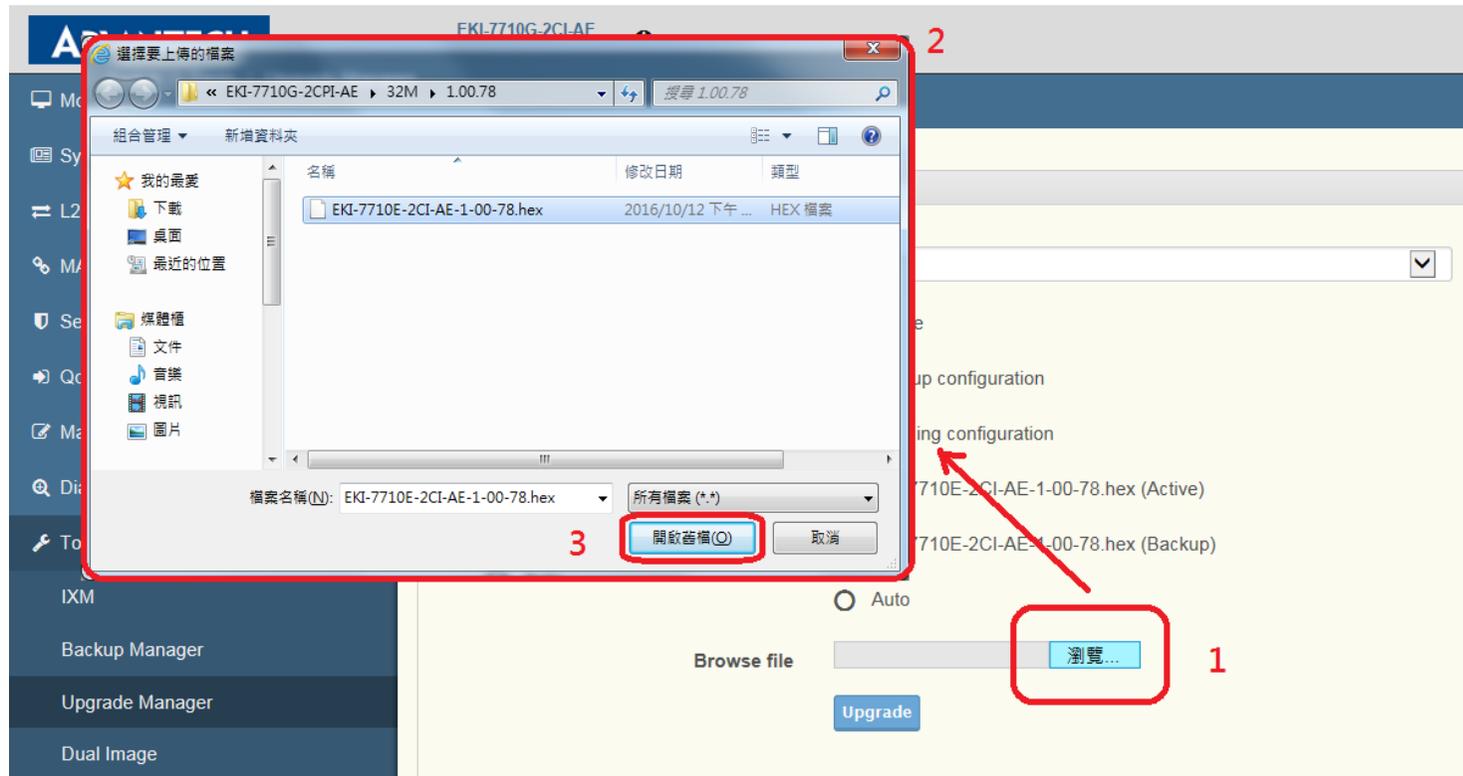
■ Upgrade Types

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



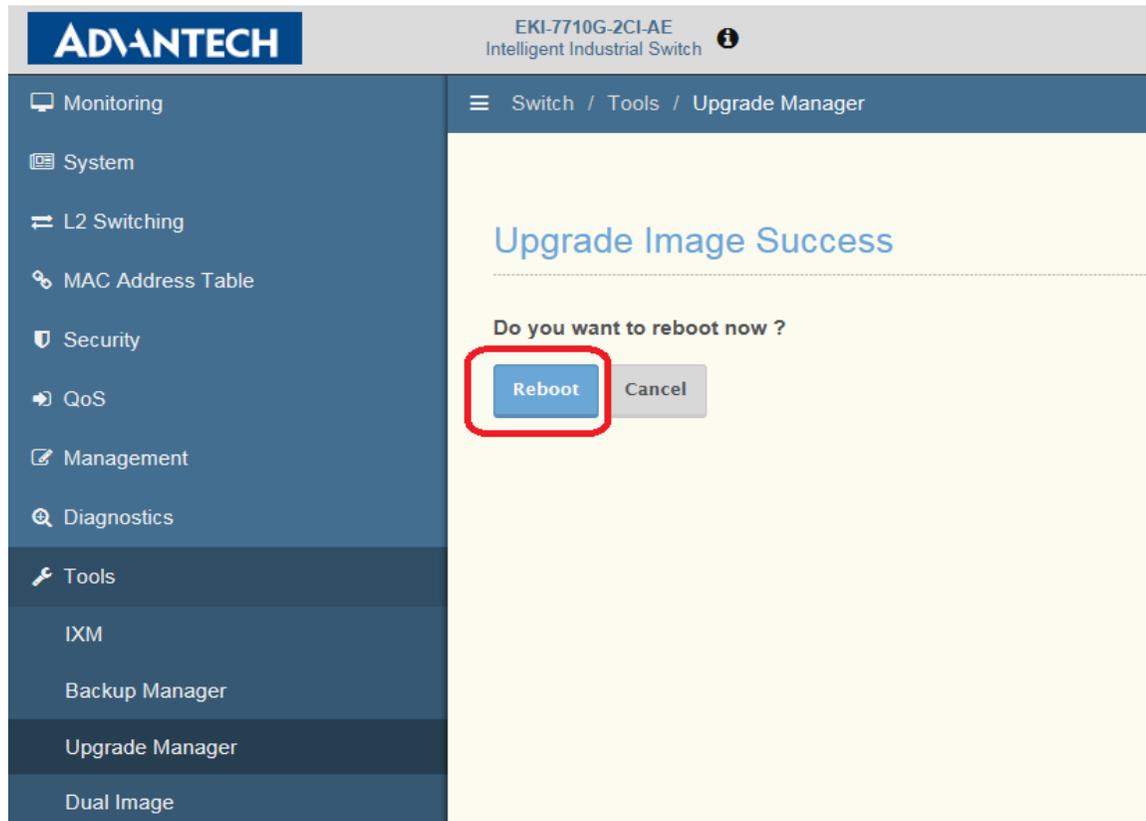
Upgrade via HTTP

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

The screenshot shows the Advantech web interface for the EKI-7710G-2CI-AE Intelligent Industrial Switch. The left sidebar contains navigation options: Monitoring, System, L2 Switching, MAC Address Table, Security, QoS, Management, Diagnostics, Tools, IXM, Backup Manager, Upgrade Manager, and Dual Image. The main content area is titled 'Upgrade Manager' and shows the 'Upgrade' configuration page. The 'Upgrade Method' is set to 'HTTP'. The 'Upgrade Type' is set to 'Image'. The 'Image' is set to 'EKI-7710E-2CI-AE-1-00-78.hex (Active)'. The 'Browse file' button is highlighted with a red box, and the file path 'F:\D DATA\產品相關-新' is visible. The progress bar shows 'Uploading ... 100%'.

Upgrade via HTTP

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

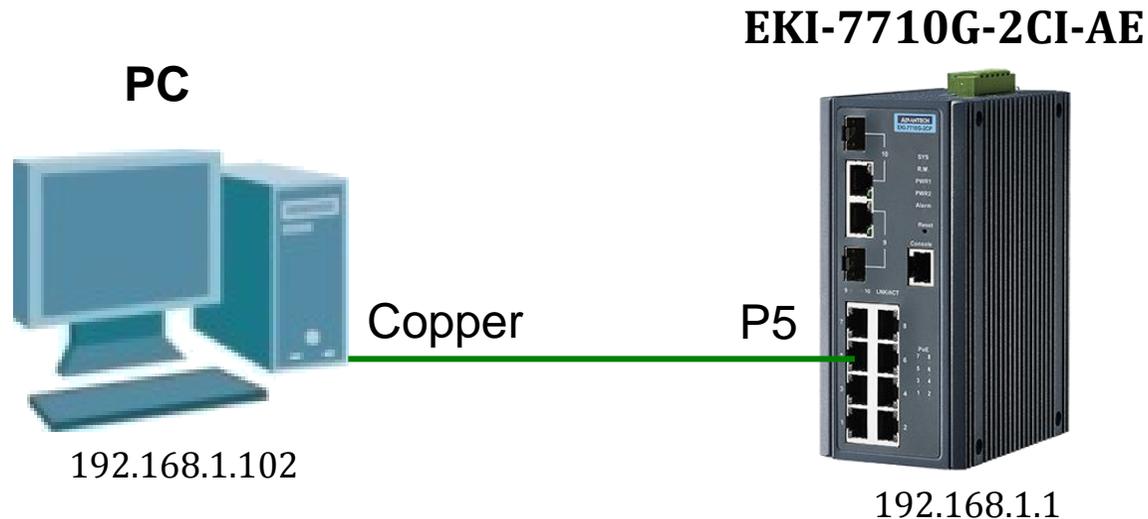


Upgrade Manager

- Upgrade via HTTP
- Upgrade via TFTP

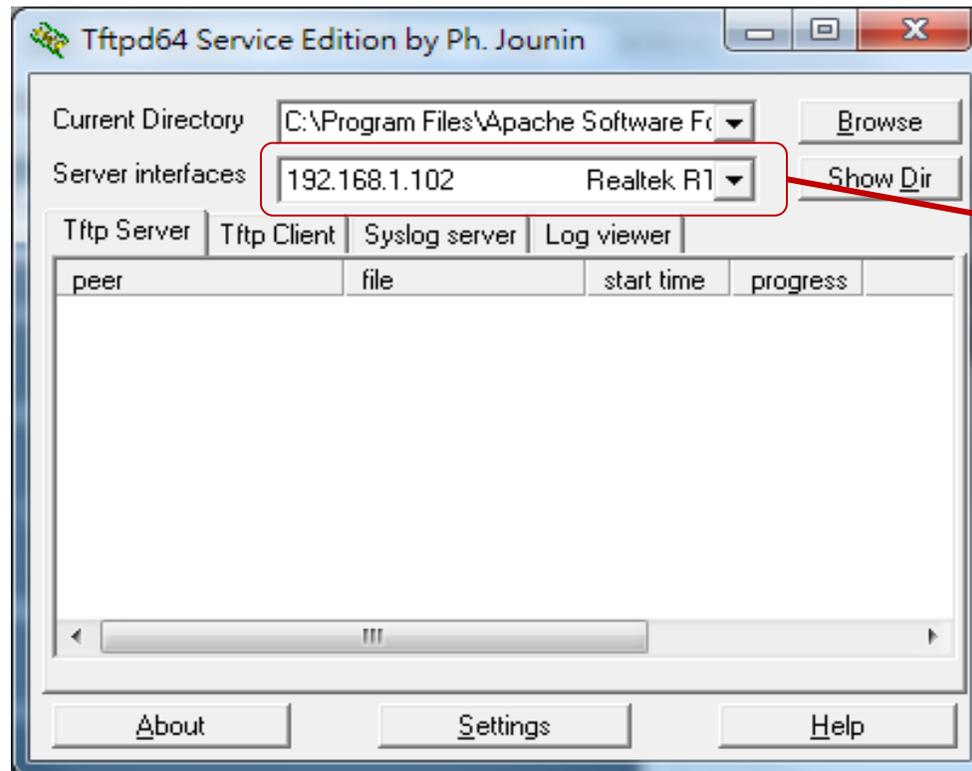
Upgrade via TFTP

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



Upgrade via TFTP

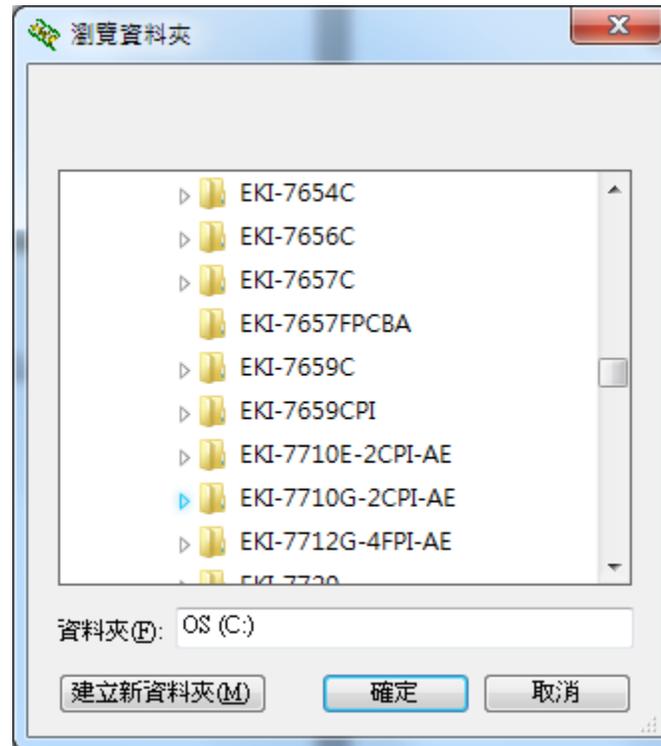
- Step 1: Run TFTP64.EXE program on PC.



TFTP server's IP

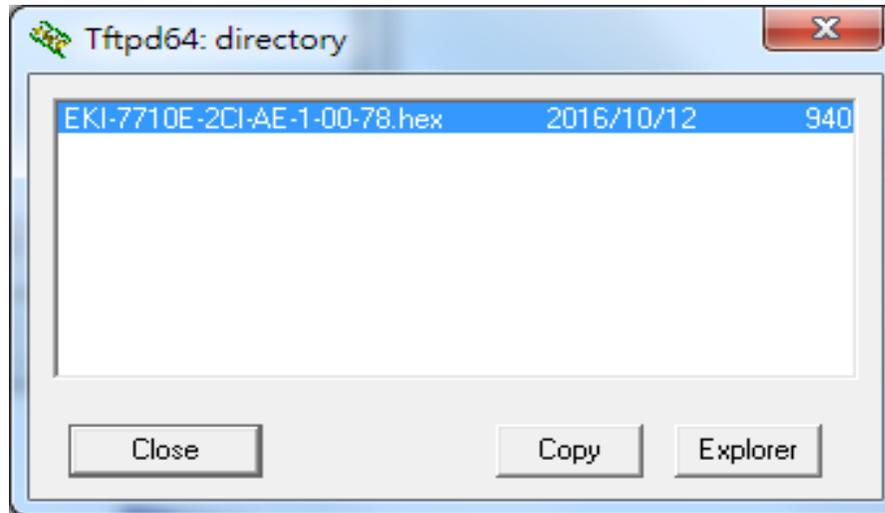
Upgrade via TFTP

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



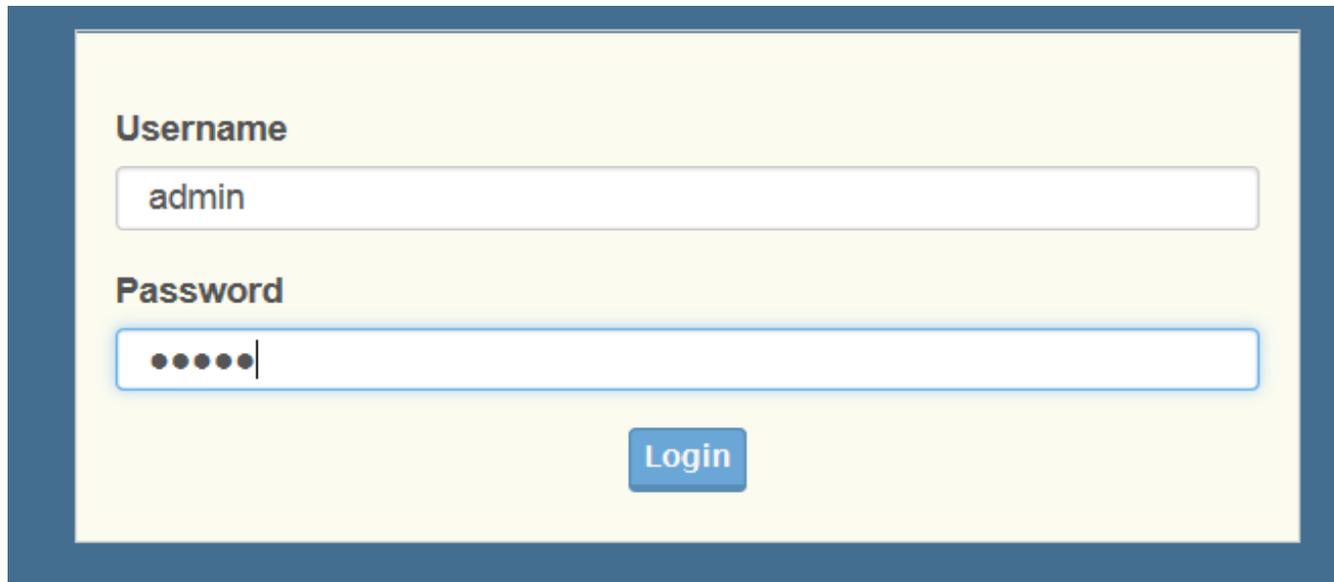
Upgrade via TFTP

- 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 screenshot of a login form for a switch. The form is enclosed in a blue border and has a light yellow background. 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

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.

1. Upgrade Manager

2. Server IP: 192.168.1.102 (IPv4 or IPv6 Address)

3. File Name: EKI-7710E-2CI-AE-1-00-78.hex

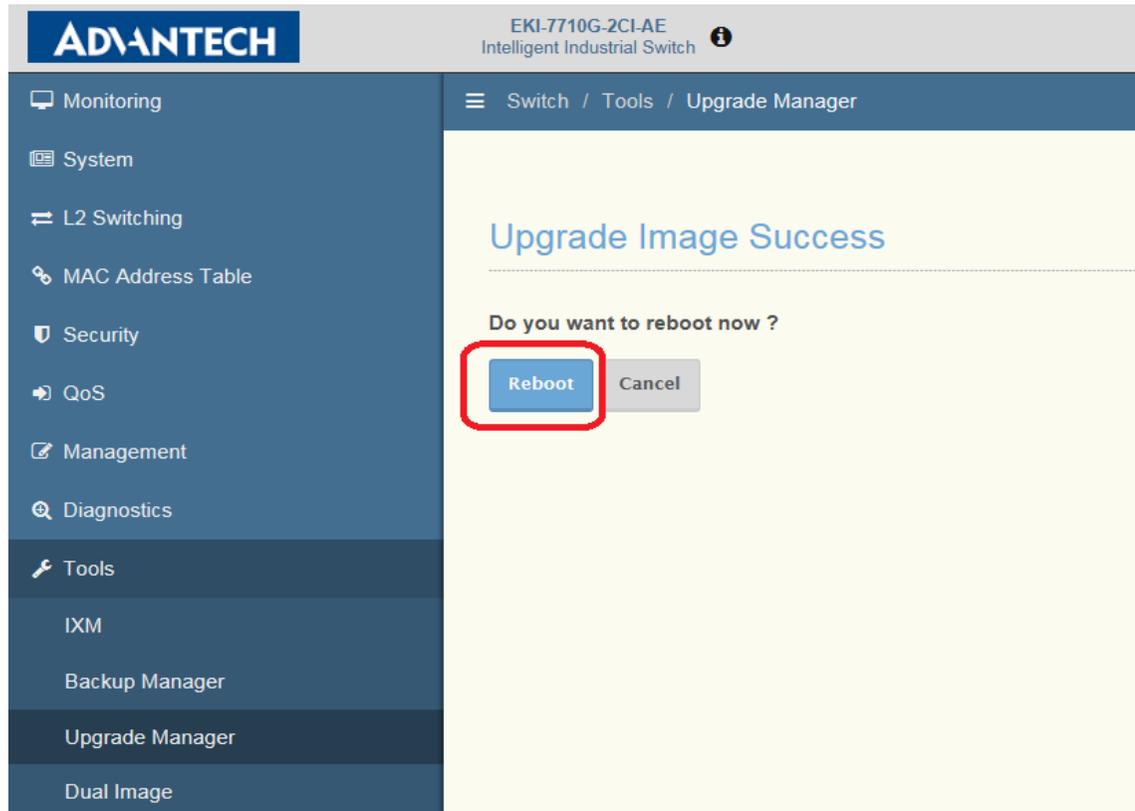
4. Upgrade

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

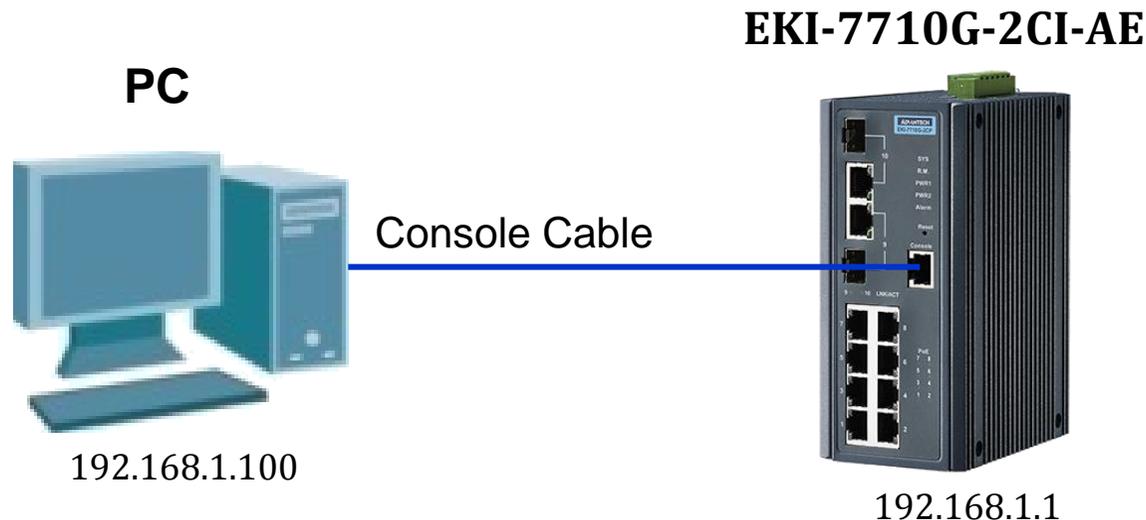
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Appendix

- Upgrade via CLI w/ TFTP

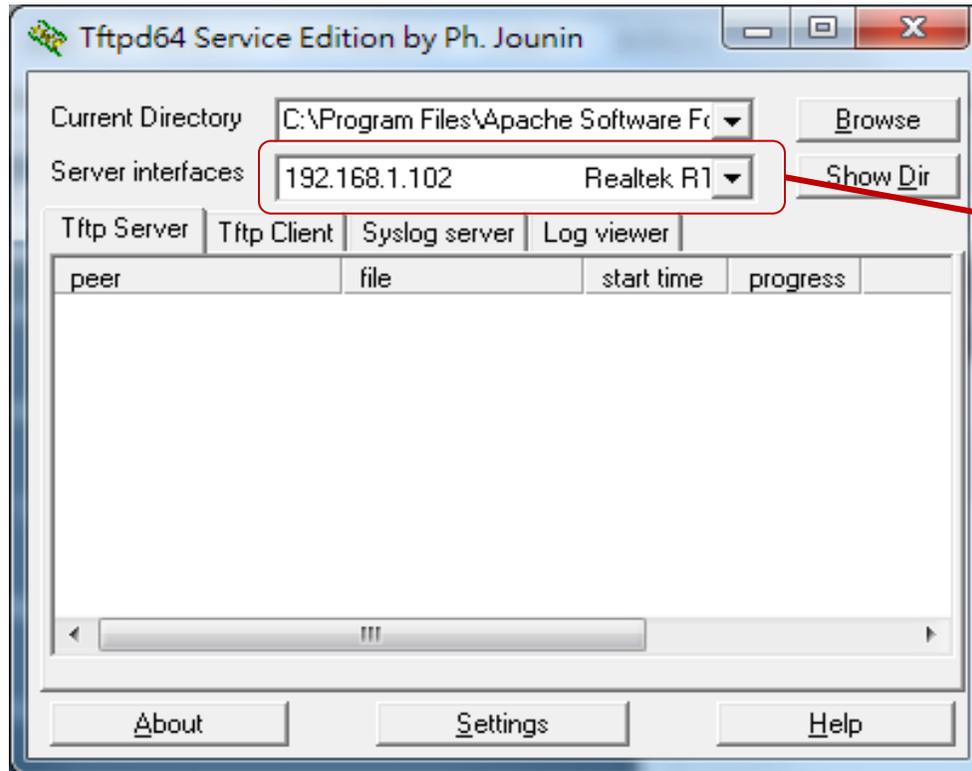
Upgrade via CLI w/ TFTP

- Purpose: Backup device image 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

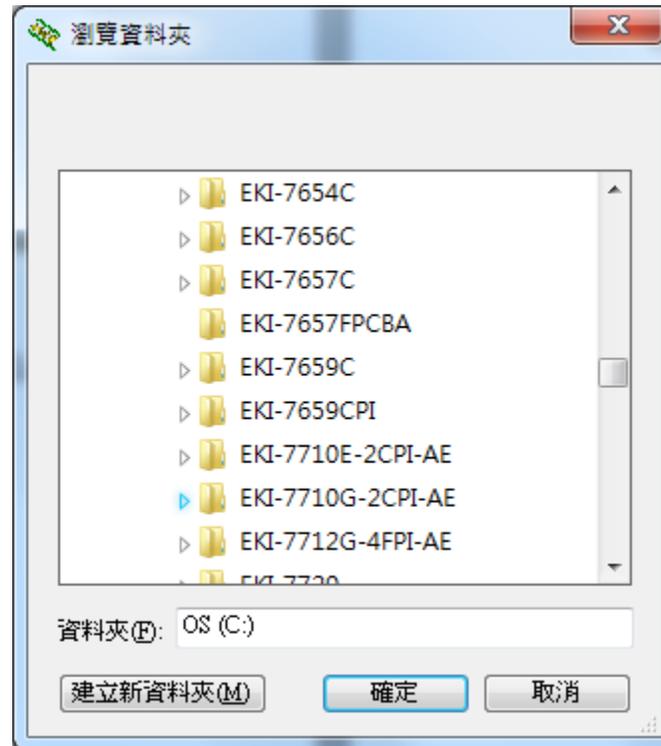
- Step 1: Run TFTP64.EXE program on PC.



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.

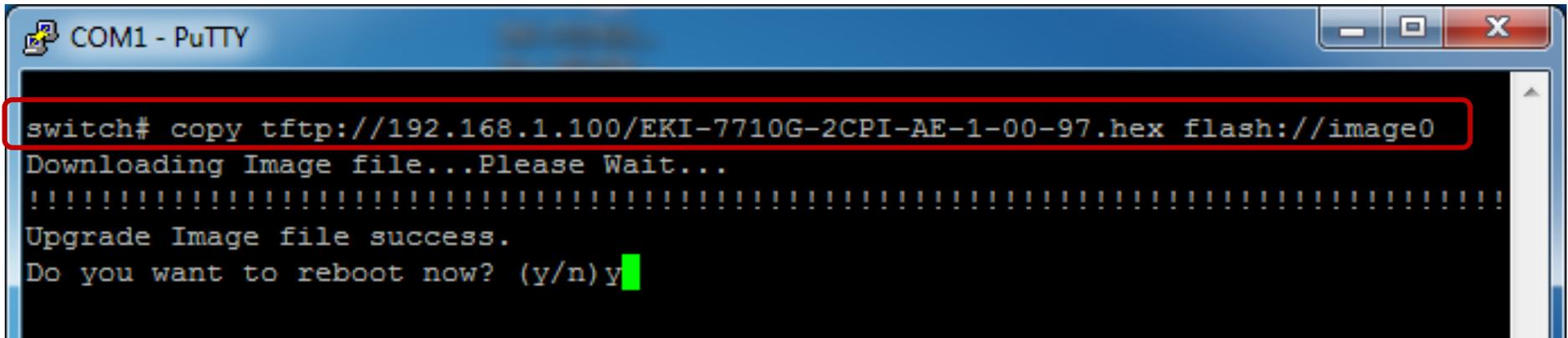


Upgrade via CLI w/ TFTP (*for Firmware*)

- Step 3: Connect PC and the switch with corresponding console cable and enter the CLI. (For entering CLI, please refer to the following SOP:)
- 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



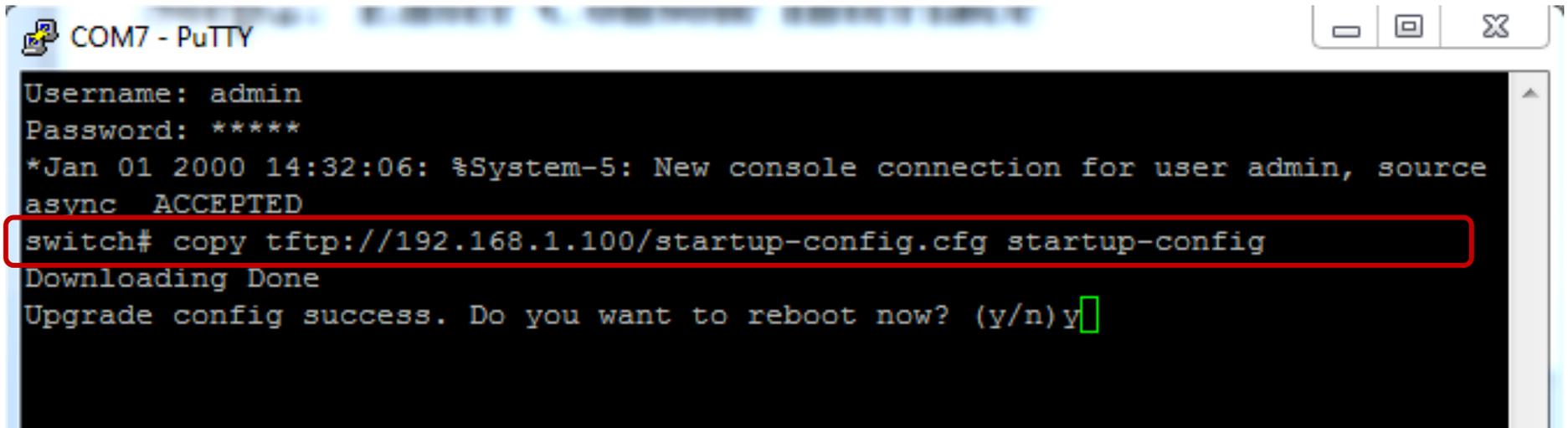
```
COM1 - PuTTY  
switch# copy tftp://192.168.1.100/EKI-7710G-2CPI-AE-1-00-97.hex flash://image0  
Downloading Image file...Please Wait...  
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!  
Upgrade Image file success.  
Do you 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:)
- Type in the following command:

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

Your full file name



```
COM7 - PuTTY
Username: admin
Password: *****
*Jan 01 2000 14:32:06: %System-5: New console connection for user admin, source
async ACCEPTED
switch# copy tftp://192.168.1.100/startup-config.cfg startup-config
Downloading Done
Upgrade config success. Do you want to reboot now? (y/n)y
```