

# **IP Admin Tool User's Manual**

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# 1. Introduction

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*IPAdminTool* is a utility program for IP products, including encoders and cameras. The following list provides a brief summary for features of this tool.

- Configure IP address, subnet mask, gateway, DNS, and hostname
- Search available IP devices on network
- Display the device information including IP address, MAC address, and firmware version
- Update firmware
- Reboot the device remotely

## 1.1. Starting IPAdminTool

*IPAdminTool* can be run properly in Windows 2000™, Windows XP™ or later Windows®. Before starting the program, make sure that *IPAdminTool.exe* and *IPAdminTool.dll* are located in the same folder. Otherwise, an error message is shown as the following Figure 1.



Figure 1. Warning message for IPAdminTool.dll

### Factory default ID and password

ID – root  
PW – pass

To start *IPAdminTool*,

1. Check if the IP devices are powered on and connected to the network properly.
2. Open the AdminTool folder from the following SDK path:

{SDK root}\BIN\TOOLS\AdminTool\

3. Run *IPAdminTool.exe*.

## 1.2. Menu and button configuration

This section summarizes the feature of the menus and buttons of IPAdminTool.

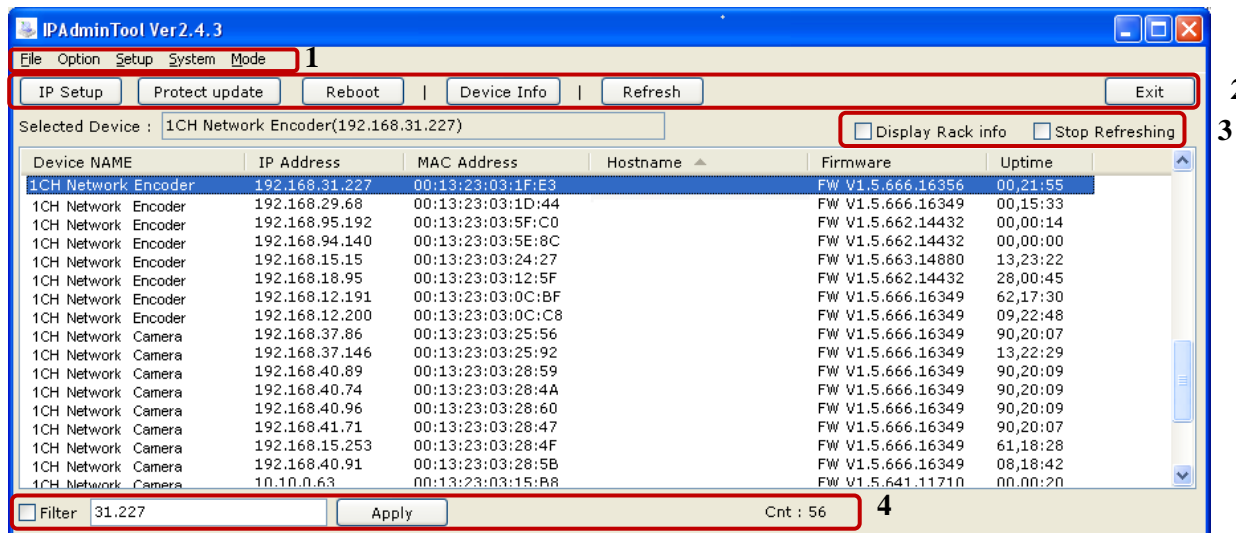


Figure 2. Main page of *IPAdminTool*

### 1. Main menu

#### File

*Refresh* – Refresh the device list and get the latest information

*Exit* – Quit this program

#### Option

*Clear login information* – Clear the login information saved

#### Setup

*IP Address* – Set IP configuration such as IP address, subnet mask, gateway, and DNS

*Host name* – Set a host name for a selected device

#### System

*Add device by entering the IP* – Add an unlisted device by entering its IP address

*Protect update* – Update the firmware

*Device Info* – Display the device information

*Reboot* – Reboot the device

#### Mode

*Single* – Select to update the firmware for single device

*Multi* – Select to update the firmware for multiple devices

### 2. Function button

*IP Setup* – Set the IP configuration. This button works the same as *IP Address* on the *Setup* menu.

*Protect update* – Update the firmware. This button works the same as *Protect update* on the *System* menu.

*Reboot* – Reboot the system. This button works the same as *Reboot* on the *System* menu.

*Exit* – Quit this program. This button works the same as *Exit* on the *File* menu.

### 3. Display setting menu

*Display Rack Info* – Display the Rack ID and Blade ID

*Stop Refreshing* – Manually stop refreshing the device information

### 4. Others

*Filter* – Search only the device with the entered IP address.

*Cnt* – Display the total number of scanned devices



#### Note

The menus displayed in gray cannot be supported. For instruction about customizing the webpage, refer to *TN0092E [NVE] How to Update the customized webpage and the brandfile with Protection Model.doc* in the SDK folder.

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## 2. Scanning Devices

*IPAdminTool* scans IP products immediately when it starts. It re-scans network for keep updating IP products on the list in every 2 seconds. You can perform the scanning manually by pressing the **Refresh** button also. To see the Web Page for a device, right-click the device and select **Web view** from the shortcut menu.

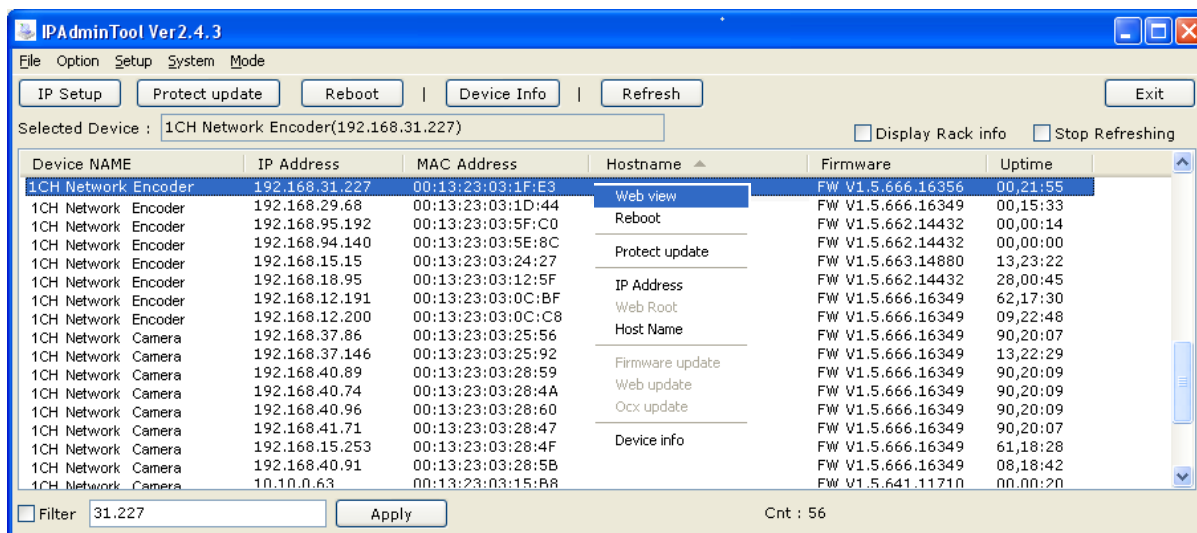


Figure 3. Scanning devices



If you use router or other similar devices, make sure your device support multicast. Otherwise, *IPAdminTool* does not search the devices that are connected to the different class from your client PC. This is because the default subnet mask for devices is 255.255.0.0.



If you want to stop to retrieve devices, check **Stop Refreshing**.

## 2.1. Adding unlisted devices

The *Add Device by entering the IP* option enables you to add unlisted devices by entering the IP address of a device in the following order.

1. Click *System* in the menu bar.
2. Click *Add Device by entering the IP*.
3. If the pop-up window appears, type the IP address of a device and press the *Add* button.

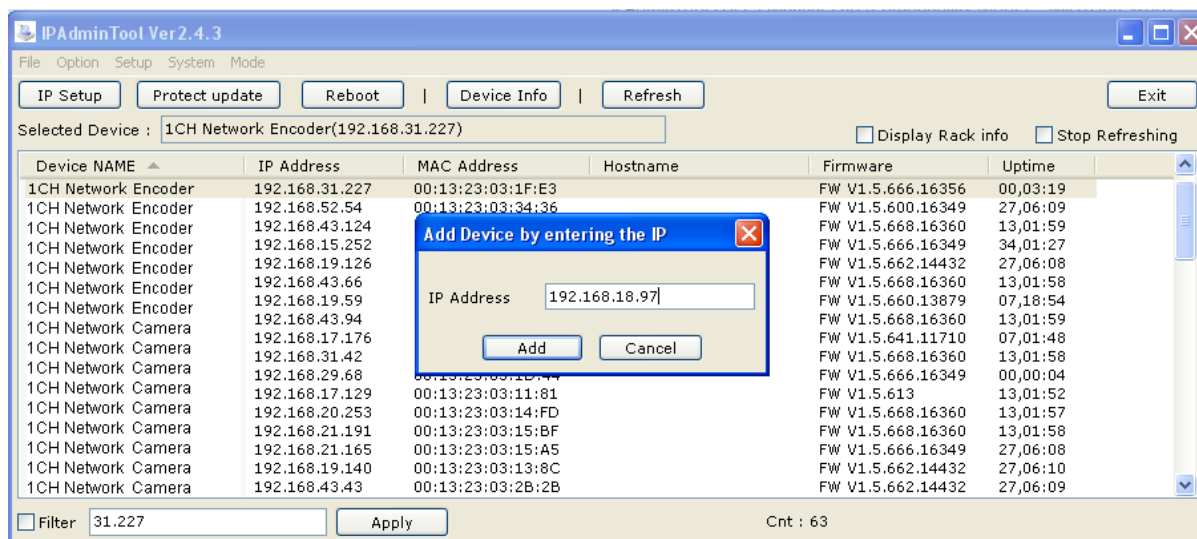


Figure 4. Add a device by entering the IP

4. Check if the IP address is added on the list.

## 2.2. IP filtering

*IPAdminTool* has the IP filtering feature. This feature helps users to search the desired IP address among many devices. To search an IP address, type any part of numbers of the IP address in the text box, and click the **Apply** button or press the Enter button on your keyboard. Then *IPAdminTool* will scan the IP devices that include the typed numbers only.

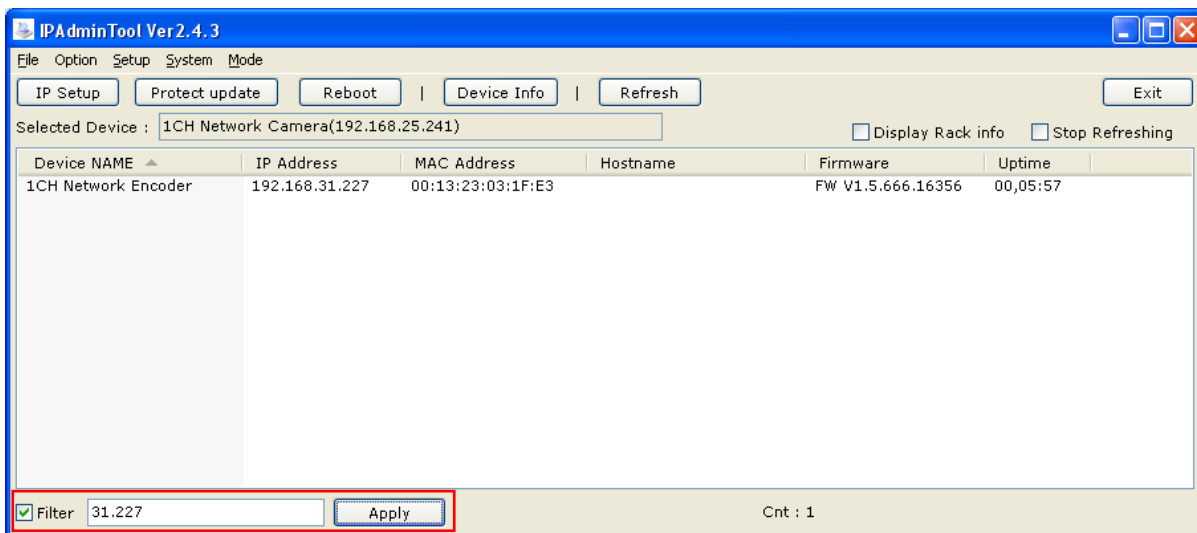


Figure 5. IP Filtering

## 2.3. Displaying device information

To check the device information, select a device and click the *Device Info* button. You can right click on the device and select *Device Info*, or select the *System > Device Info* menu. Then, the device information window appears as below.



Figure 6. Device information window

## 2.4. Displaying rack information

Each of the rack type devices has two IDs. One is the Rack ID which informs the devices' sub-rack, and the other is the Blade ID which shows the blade unit. Select the *Display Rack Info* check box to see the IDs.

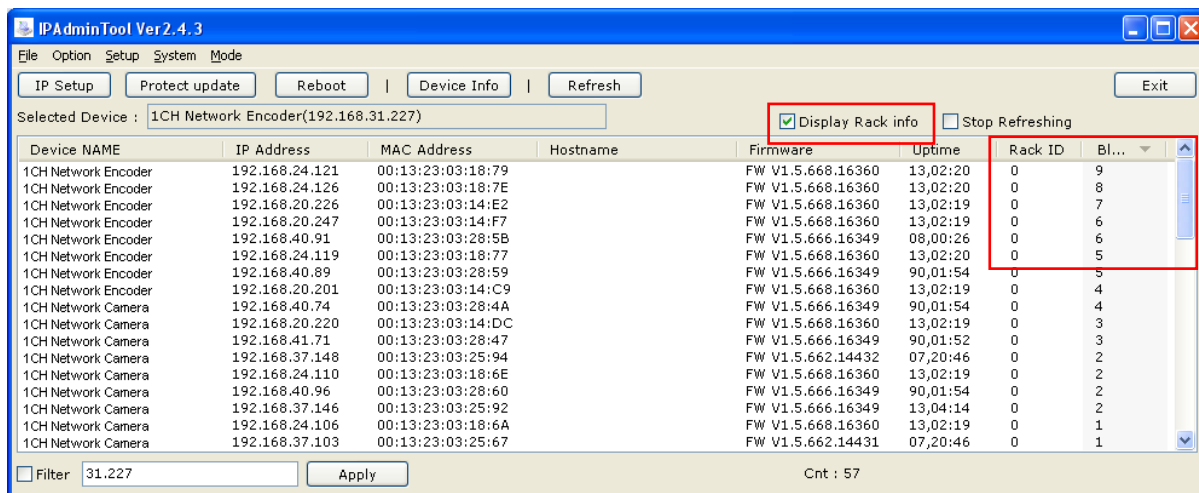


Figure 7. Rack information

## 3. Updating Firmware

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This chapter describes how to update the firmware of your devices (MPEG-4 encoders and IP cameras). There exist 2 types of firmware version for devices, 'non-protected firmware-K5XX' and 'protected firmware-K6XX'. The required steps for each are different according to the current firmware type. Read this chapter carefully and follow the instructions we provide.

Just to be brief about the difference between 2 types of firmware,

- K6XX is a version of 'protected firmware'. The firmware files to be uploaded on the unit are encrypted by the 'company key', which is also called as 'Vender ID'. The purpose of the encryption is to prevent the files from hacking by 3rd party.
- K5XX is a version of 'non-protected firmware' and it doesn't include the encryption process internally.

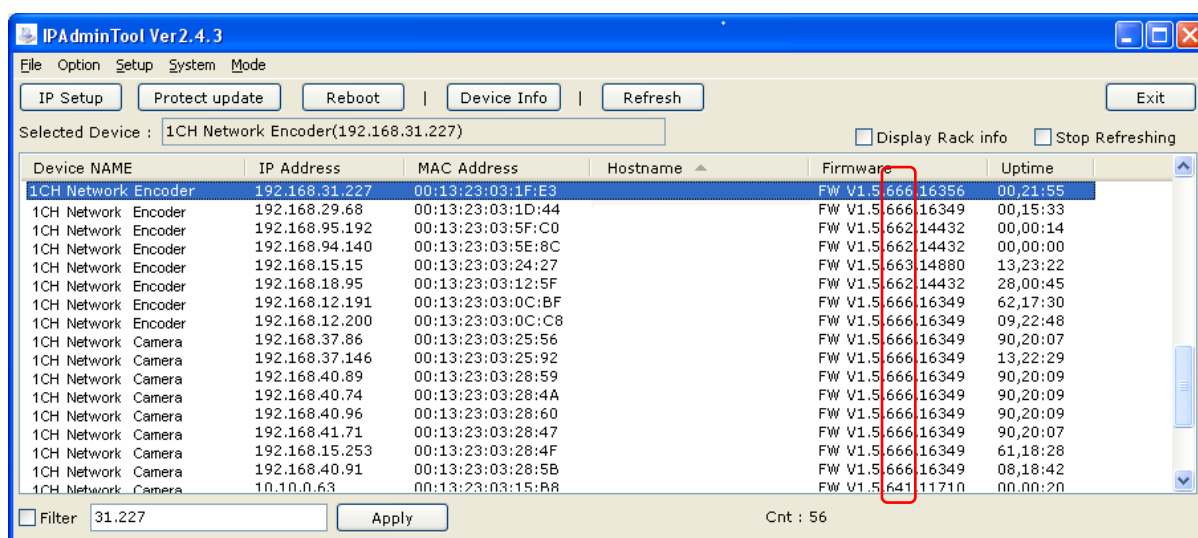
Because of this significant change of firmware type in our development, different way of updating should be applied to the units according to your current firmware.

### 3.1. Checking the current version

Follow the steps below in order to check the current version of firmware.

Before beginning of steps, make sure if the power is being supplied to the unit and connected to the LAN properly.

1. Run *IPAdminTool.exe* in the provided package folder.
2. Then, your devices are scanned automatically on the list as below.



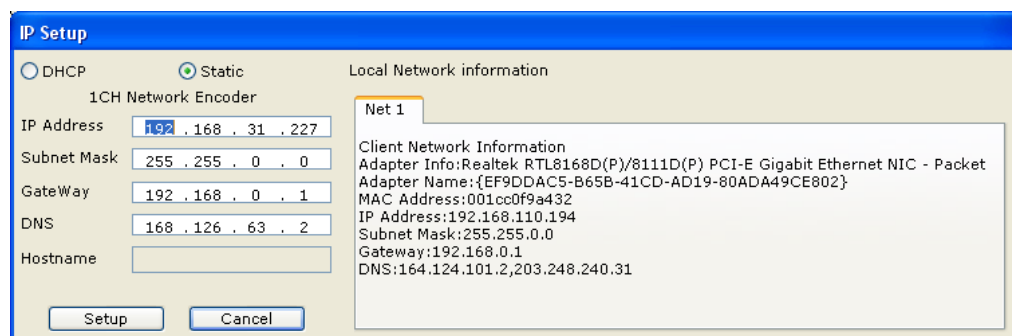
3. Check the version of the firmware. The 3 digits (xxx) followed by FW V1.5 indicate the firmware version.

In case of the example above, the firmware version of the selected device is K666, which included in the firmware group of K6XX.

**If the firmware version of your device is K5XX, go to 3.2. Updating K5XX to K600.**

**If the firmware version of your device is K6XX, go to 3.3. Updating K6XX to the higher.**

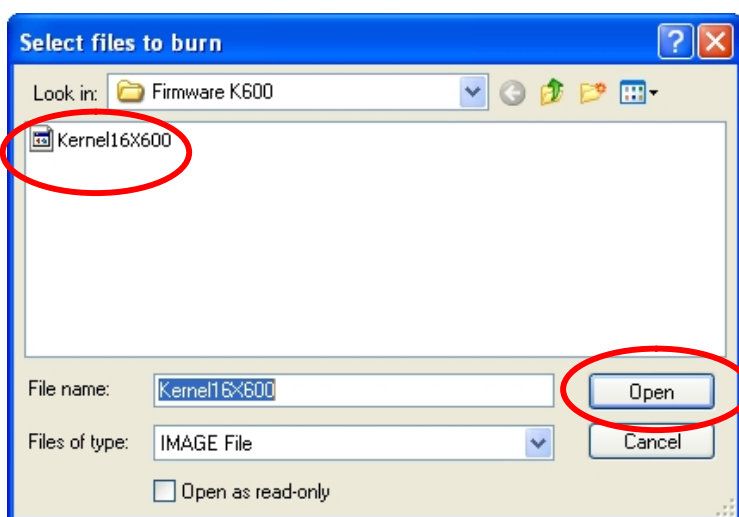
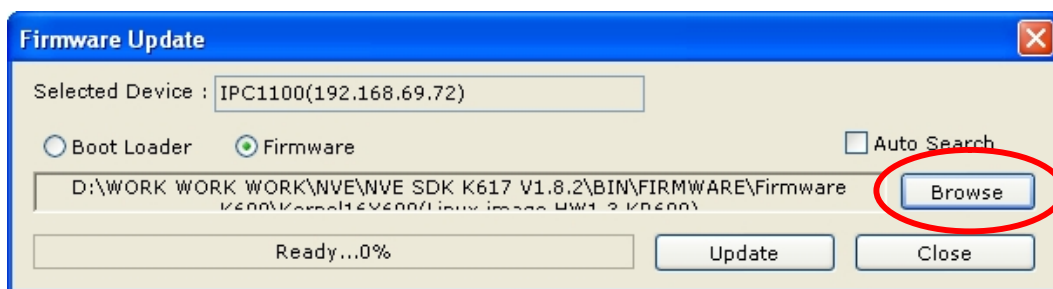
If the firmware version is not shown with *IPAdminTool*, please check the network setting such as subnet mask or default gateway of both your PC and devices. To configure the IP setting of your device, select the device first from the list of *IPAdminTool* and click the **IP Setup** button on the upper menu bar. Then, you can see the dialogue window as below for configuring the IP setting.



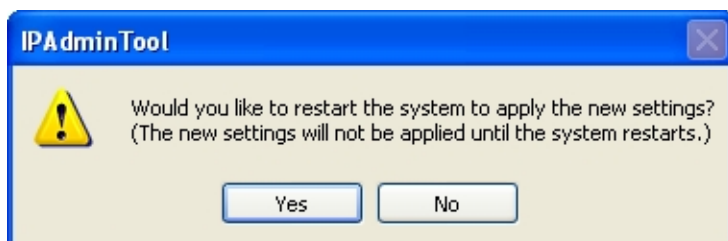
## 3.2. Updating K5XX to K600

If the firmware version of your device is K5XX, you should update the firmware to K600 first before updating to the latest version.

1. Start the *IPAdminTool* and right-click on the selected device.
2. Select the Firmware Update menu from the shortcut menu. (This menu is enabled only if the firmware version of the selected device is K5XX.)
3. Then, the pop-up window appears as below. Click the **Browse** button, and then select the file 'Kernel 16X600' from the package folder and click the **Open** button.



4. Then, click the *Update* button when the pop-up window appears again.
5. The progress bar displays the status of update. If it is completed by 100%, the system asks you if you would like to restart the system. Wait until the dialog box appears and click **Yes** to restart the system.



6. If the system is restarted, start *IPAdminTool* and check if the firmware is updated to K600.
7. To update the firmware to the latest version, go to 4.3. *Updating K6XX to the higher.*



**Note**

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In case of detecting any error messages while updating, refer to *Appendix. Error Messages*.

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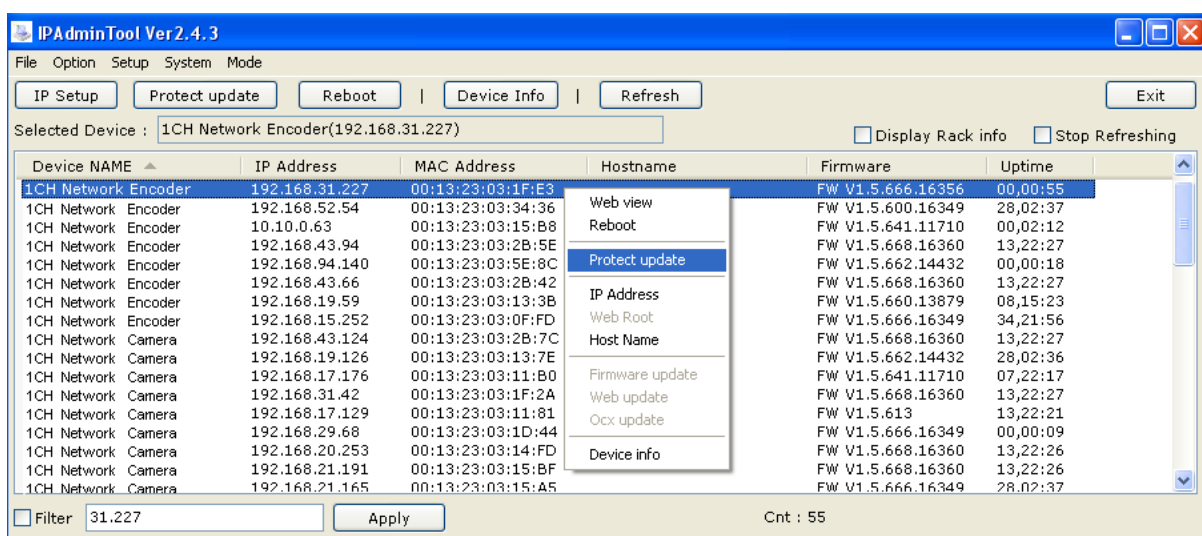
### 3.3. Updating K6XX to the higher

#### 3.3.1. Updating single device

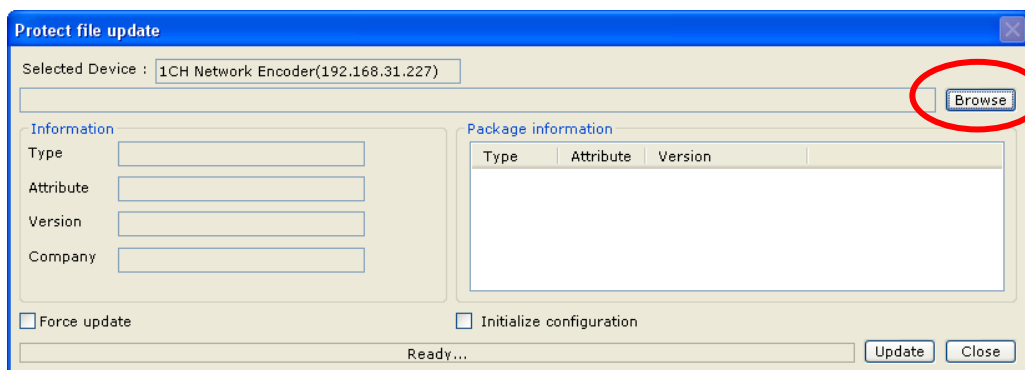


If you want to update multiple devices all at once, refer to 3.3.2. *Updating multiple devices.*

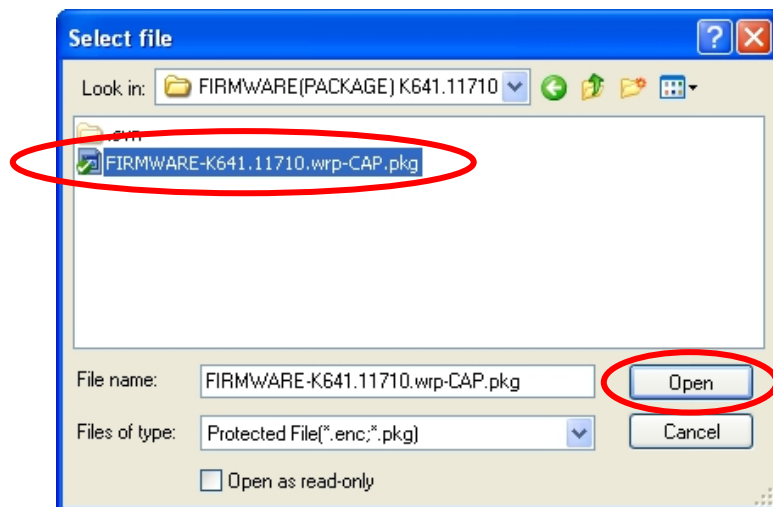
1. Go back to the list page of *IPAdminTool* and click on the device name you want to update.
2. Right-click on the device name and select the Protect Update menu.



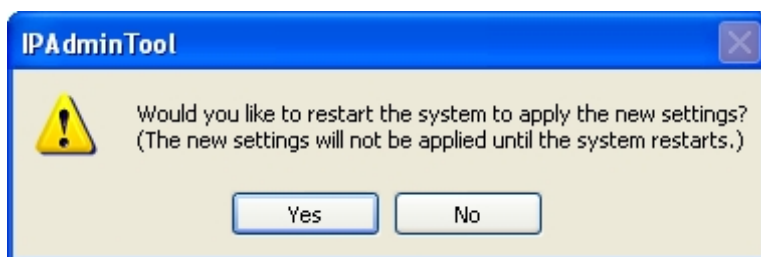
3. If the following pop-up window appears, click the Browse button.



4. Select the firmware file (**(\**.pkg*)**) you want to upload from the package folder and click 'Open' button.



5. Then, the pop-up window appeared on the step 3 is displayed again. Now the version information is shown in the package information section. Click the **Update** button to update the firmware.
6. The progress bar displays the status of update. If it is completed by 100%, the system asks you if you would like to restart the system. Wait until the dialog box appears and click **Yes** to restart the system.



7. If the system is restarted, start *IPAdminTool* and check if the firmware is updated.



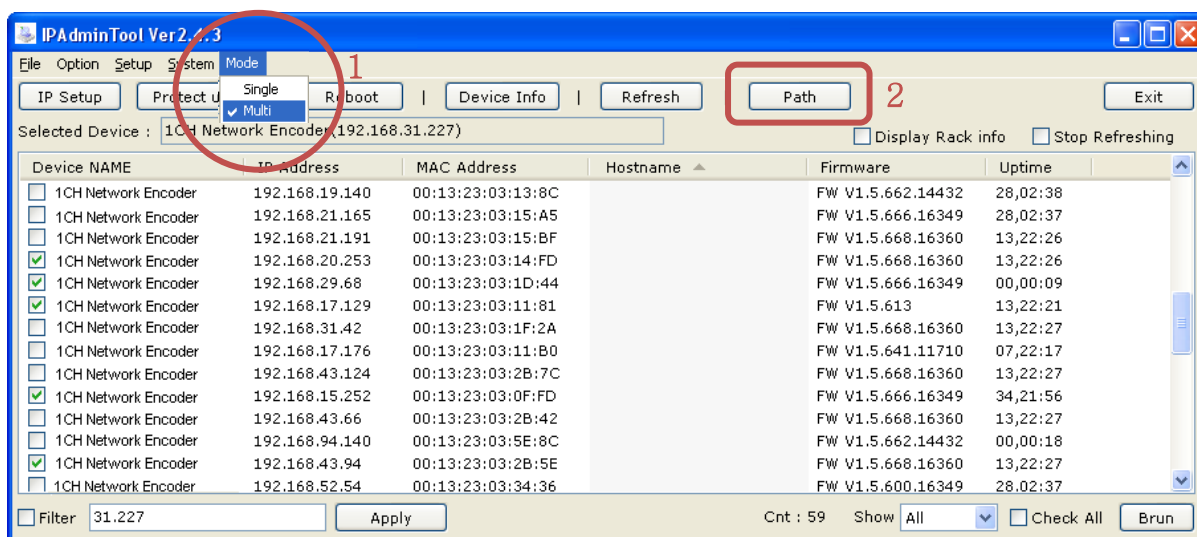
In case of detecting any error messages while updating, refer to *Appendix. Error Messages*.

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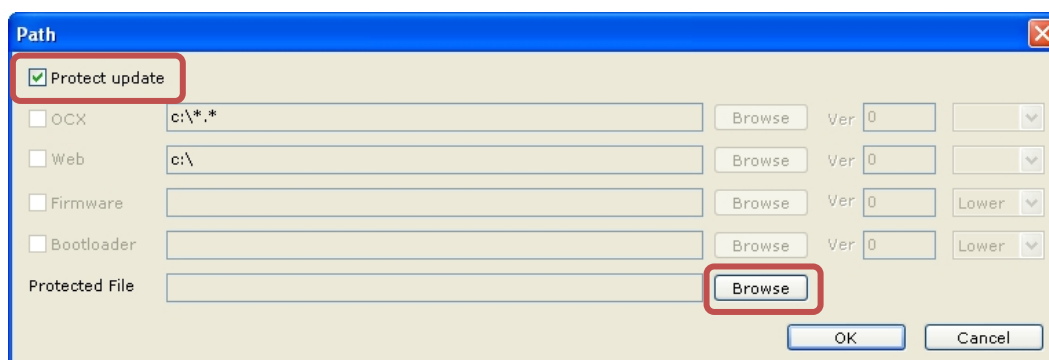
### 3.3.2. Updating multiple devices

*IPAdminTool* supports to update the same firmware for multiple devices at once. Refer to the following steps.

1. Select **Mode** > **Multi** on the menu. Select the devices you want to update and click the Path button.



2. The pop-up window appears as the following. Select the **Protect update** check box, and click the **Browse** button to search the firmware file for updating.

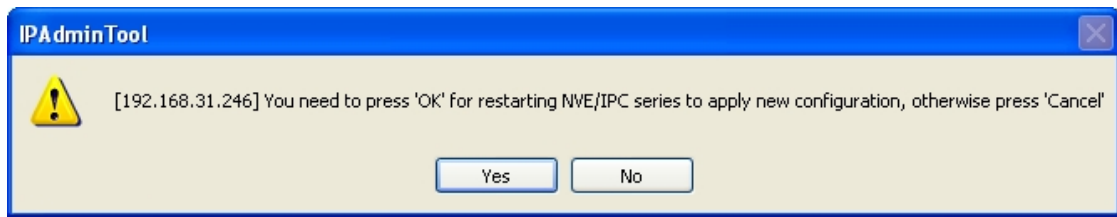


3. Select the file for updating and click the **OK** button.



The **Protect Update** option is supported only when the firmware version of your device is K600 or higher. And the uploading file type should be the **\*.pkg** for the **Protect update**. If you want to upload the OCX, Web, Firmware or Bootloader separately, enable the check box and choose the required file (**\*.enc**) for each of them.

4. On the main page of *IPAdminTool*, click the **Burn** button at the bottom.
5. Then the pop-up window appears to show you the update status. Click the **Start** button at the bottom to display the update status.
6. If the update is completed, the system asks you if you would like to restart the devices. Wait until the dialog box appears and click **Yes** to reboot the devices.



7. If the devices are restarted, start *IPAdminTool* and check if the firmware for all selected devices are updated.

## 4. Other Features of IPAdminTool

### 4.1. Setting IP configuration

Click a device on the list and then press the *IP Setup* button. Then the *IP Setup* dialog box appears as the following figure. Change the IP configuration regarding your network environment.



#### Note

The IP setup option requires the login information. The factory default is ID:root and PW:pass.

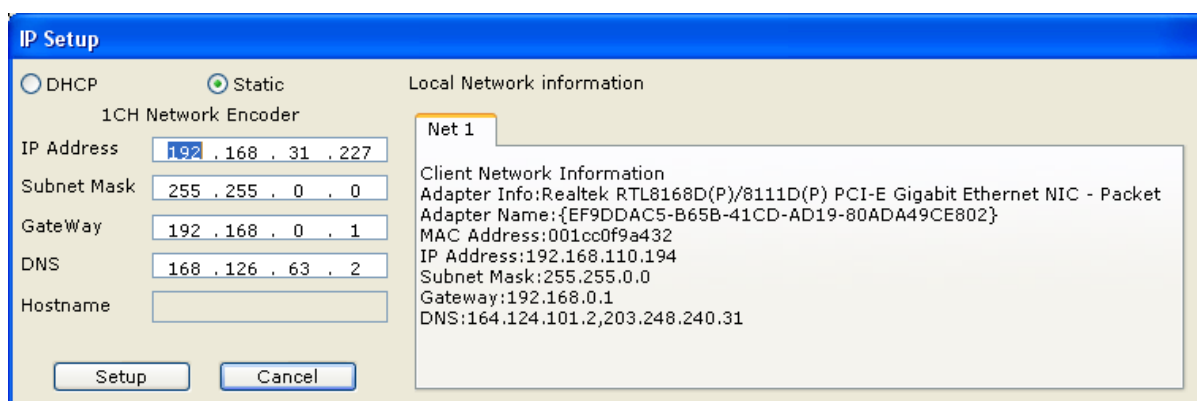


Figure 8. IP set up



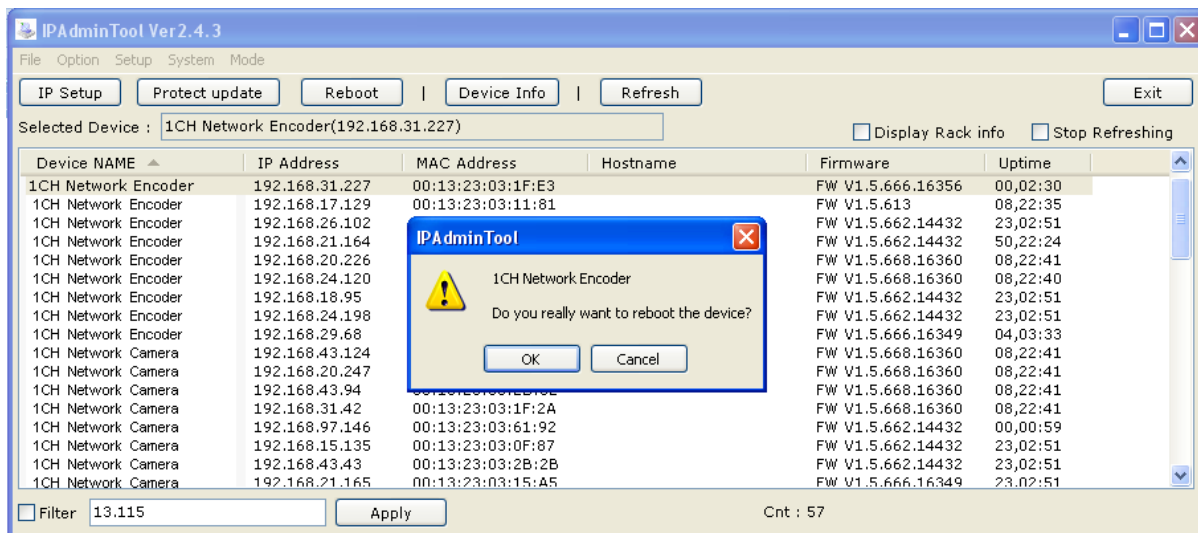
#### Caution

If the client system uses *Virtual Ethernet Adapter* for Virtualization Software such as *VMware*, *IPAdminTool* may show you incorrect information for the IP address.

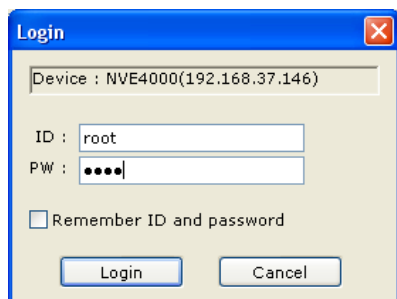
## 4.2. Rebooting devices

You can reboot the devices remotely on *IPAdminTool*. Follow the steps below to reboot the devices listed on *IPAdminTool*.

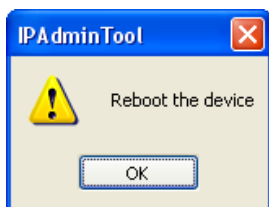
1. Select a device to reboot from the list.
2. Click the **Reboot** button or the Reboot option from the shortcut menu. If the dialog box appears as below, click **OK**.



3. If the login page appears, enter the default login information (IP:root, PW:pass). Then, click the **Login** button.



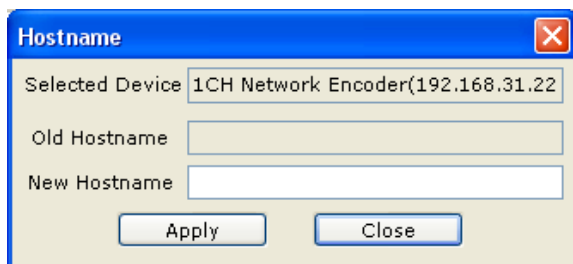
4. Click **OK** if the dialog box appears as below to reboot the device.



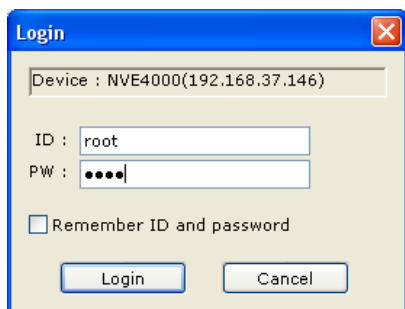
## 4.3. Setting hostname

You can put an alias for a device so that you can distinguish the device from another. To set an alias, follow the steps below.

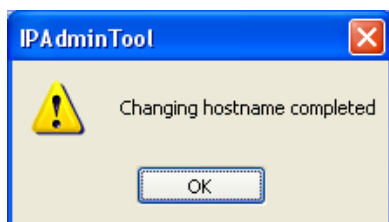
1. Select Setup > Hostname on the menu.
2. If the pop-up menu appears, input the desired hostname and click *Apply*.



3. If the login page appears, enter the default login information (IP:root, PW:pass). Then, click the *Login* button.



4. Click *OK* if the dialog box appears as below.



5. Click the *Refresh* button after you changed hostname.

## Appendix. Error Messages

Refer to the following table for error messages appeared while using *IPAdminTool*

**FW version : K617 ~ K641 or higher**

**Applied to - Encoders and all types of cameras**

Code	Message
-1	Not available to access to the update server process.
-11	The specified file is not found.
-12	Restart the system and try to upload the firmware again.
-13	Failed to read the data from the file.
-14	Disconnected from the device. Check out the network status or the version compatibility between <i>IPAdminTool</i> and the device.
-15	No response from the device. Check out the connection of the device.
-18	Connection timed out
-22	The streaming server is not closed properly.
-23	Timed out while transmitting the data from the client PC.
-29	Unknown packets are received.
-31	Damaged file
-32	The specified file is not for 'protected model'
-33	Unknown file type.
-34	Damaged file
-35	Damaged file
-36	The specified file is unacceptable for the device.
-37	Failed to generate the encryption data.
-38	Failed to change the VID.
-39	The file format is not supported for the device.
-40	The firmware file is not appropriate to the specified device.
-51	Failed to access to the firmware download mode.
-59	The dome firmware file is oversized.
-62	Changing VID is not allowed for the device.
-102	Changing VID is not allowed for the device.
-103	Failed to change a VID.
-147	You have tried to update the firmware without authentication.
-1042	Requires higher level access privileges.
-1043	Incorrect password
-1061	Incorrect ID
-1049	The device doesn't support the log-in system.

**FW version : K5XX****Applied to - encoders and fixed type camera**

<b>Code</b>	<b>Message</b>
-3	Error in running thread
-21	Failed to access the device.
-31	The file is not found.
-32	Error while sending the header file
-33	Error in reading the data
-34	Check the compatibility of the current firmware version and the firmware file you're trying to upload.
-35	No response from the device
-36	Failed to get the response from the device
-37	Failed to get the response from the device

**FW version : K5XX****Applied to – Dome cameras**

<b>Code</b>	<b>Message</b>
-1	Failed to access the device
-14	Check the compatibility of the current firmware version and the firmware file you're trying to upload.
-31	Failed to access to the firmware download mode.
-32	Not available to set the flag.
-39	The dome firmware file is oversized.

## Revision history

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Revision	Date	History
A	2006-08-10	Created.
B	2006-09-05	Updated Firmware Upgrade
C	2006-09-27	Web root & Page Update/Backup
D	2006-11-08	Updated Auto Search Firmware
E	2006-12-26	Updated OCX Update, Customized Web Page, Firmware Update and User File Update
F	2007-01-29	New document format. Reviewed and corrected paragraphs. Added Uploading add-on application.
G	2007-08-07	Added <b>Error! Reference source not found.</b> Revised screenshot and description in according to <i>Kernel16K472</i> .
H	2007-11-14	Added <b>Error! Reference source not found.</b> device with K600 or higher
I	2008-12-01	Added 10. How to update multiple devices
J	2009-3-26	Deleted section 8.9.10.
K	2009-05-13	ID/PW information is added
L	2010-02-18	Renewed the manual structure Changed the firmware update instruction Applied new screen shots for IPAdminTool