

# TN0093E How to downgrade the Firmware of NVE from K6XX to K5XX.

Applies to: NVE/IPC Series  
Level: Public

## Summary

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Once you upgraded the firmware of NVE/IPC device to 6XX (For example, 617) or if your NVE/IPC is already shipped with a firmware version higher than 600, the normal procedure of updating firmware will not work. Due to the different architecture of kernels between 5XX and 6XX, two steps should be required to downgrade the firmware from 6XX to 5XX.

1 Wrap and encrypt the kernel 5xx using the **ProtectTool.exe**.

Note: You cannot use the 'raw' kernel 5xx, once your NVE/IPC is protection model enabled. You have to wrap and encrypt the kernel first to use it.

2. Downgrade the firmware using the **ProtectUpdate** menu of **IPAdmintool** instead of using the Firmware update.

## Detailed Information

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Suppose you have a firmware version 617 in your NVE and you want to downgrade it to kernel 580.

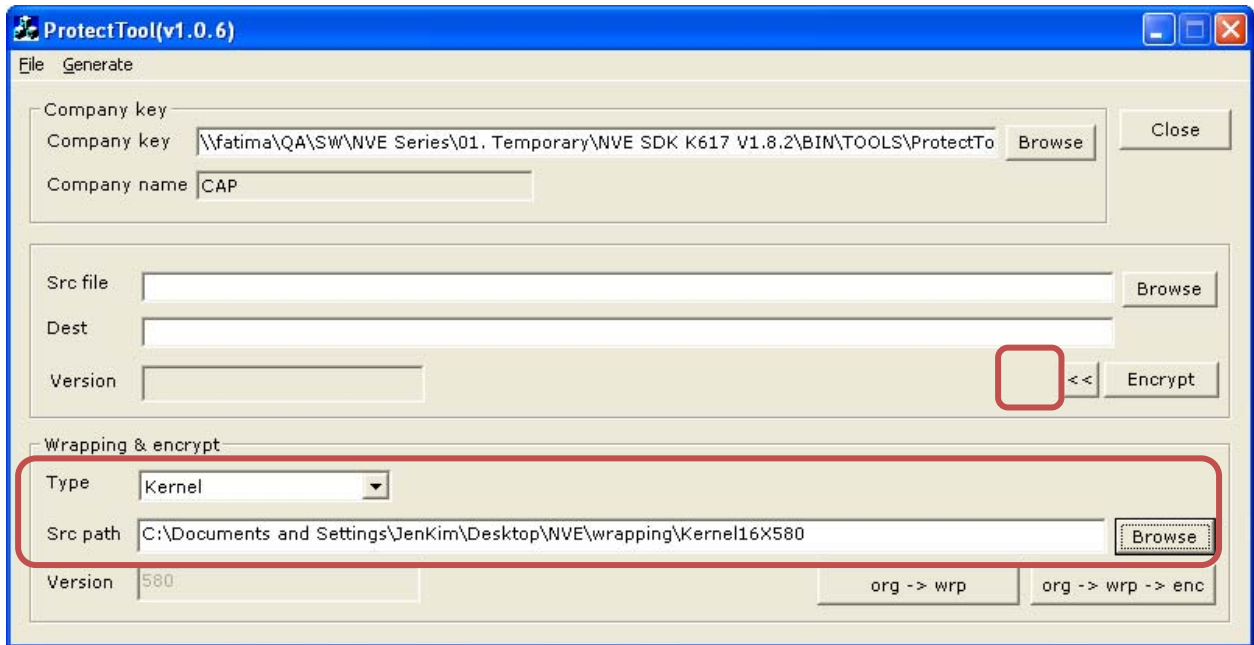
### Step 1: Wrap and encrypt the kernel 580 using the ProtectTool

You need to wrap the 'Kernel 16X580' before using it. You can find the file in the SDK folder as NVE SDK K580 V1.7.3\BIN\LIB\Firmware K580' and copy it to any folder you want.

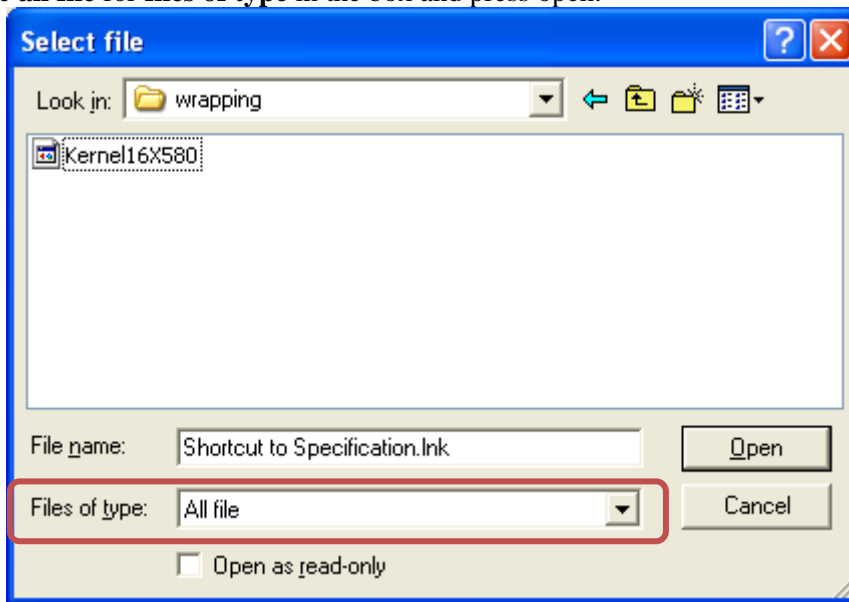
For this process, you have to run 'ProtectTool.exe' in folder 'NVE SDK K617 V1.8.2\BIN\TOOLS\ProtectTool v1.0.6'.

Below are steps to follow:

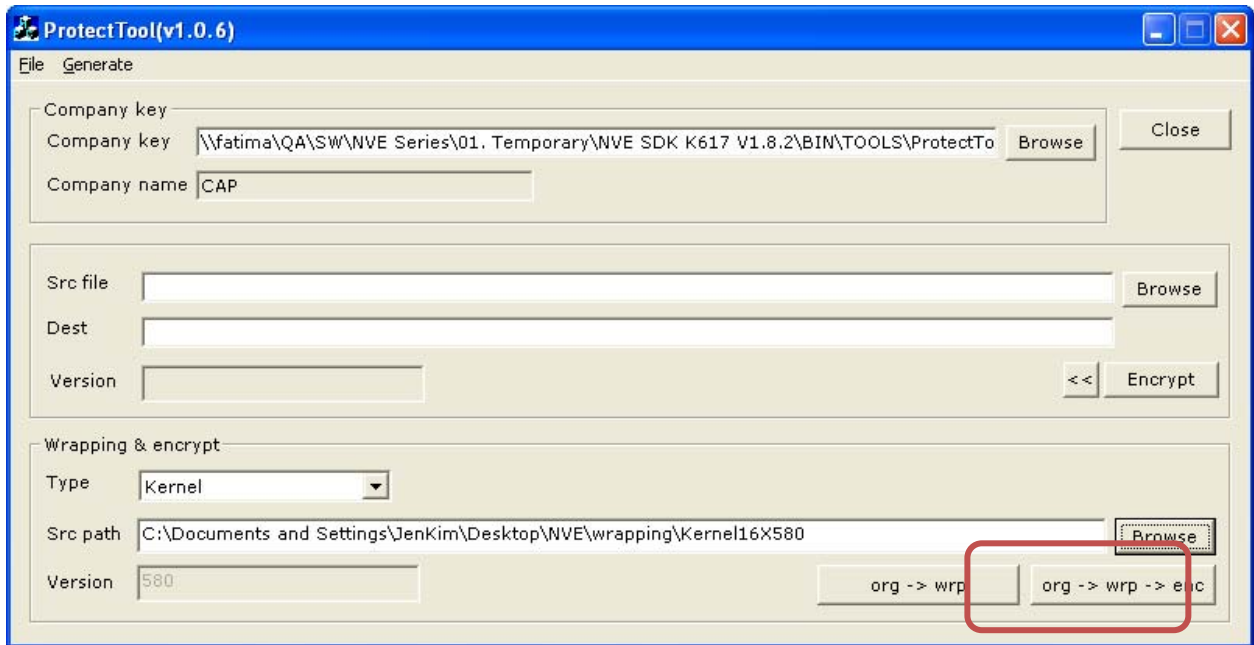
1. Run the ProtectTool.exe
2. If you Press >> button, you can see that the below selection box is extended.
3. Then, select the **Type** as Kernel and find the file 'Kernel16X580' in a folder where you have put the file by using **browse** button.



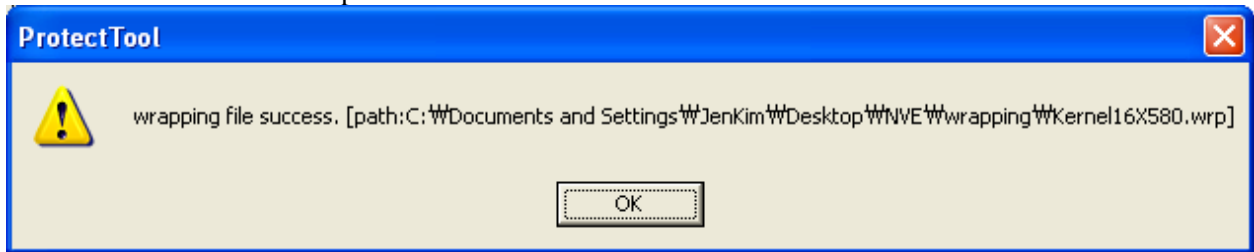
4. Choose the **all file** for **files of type** in the box and press open.



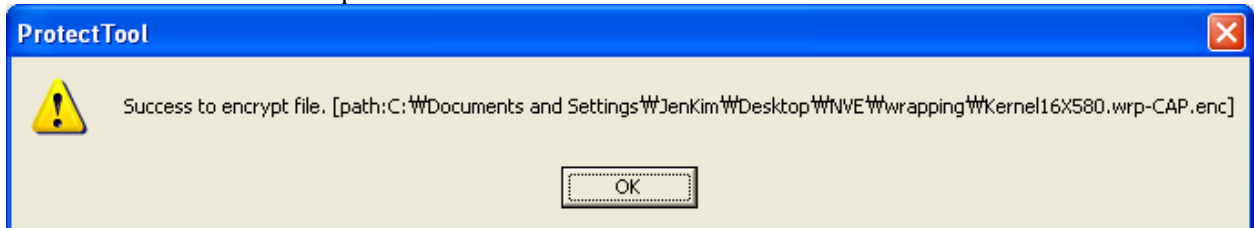
5. Press the 'org-> wrp-> enc' as below.



6. You can see the box and press OK.



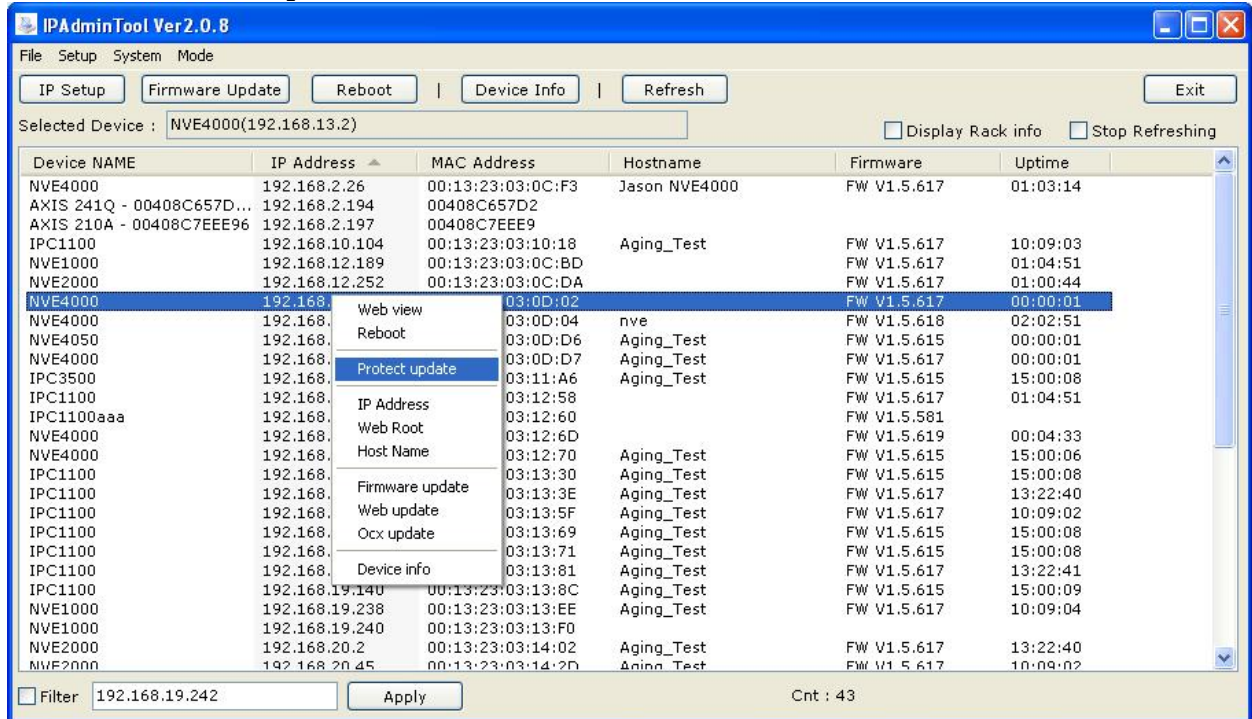
7. You can see the box and press OK.



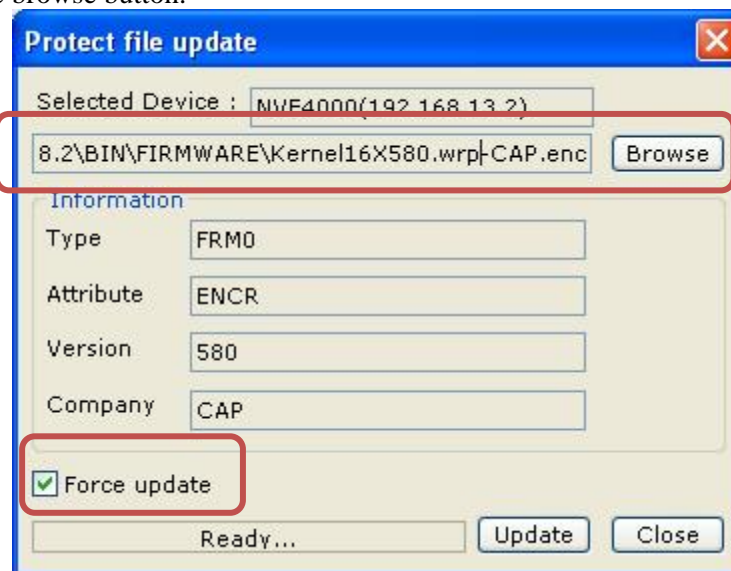
## Step 2: Downgrading by uploading the previous kernel using IPAdminTool

Now that you have the kernel 580 packaged and encrypted to be used with the newest IPAdminTool, only thing you need to is just using it.

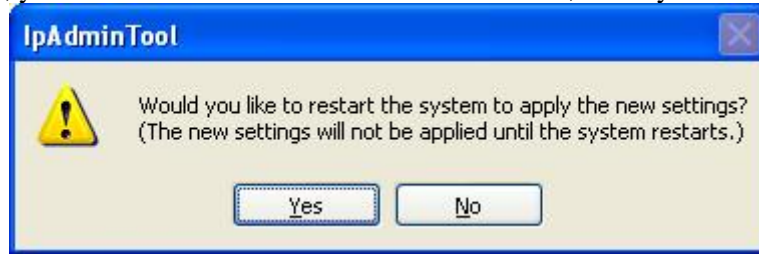
1. Run the **IPAdminTool.exe** and search the NVE you want to downgrade.
2. Select the **Protect update** to run it



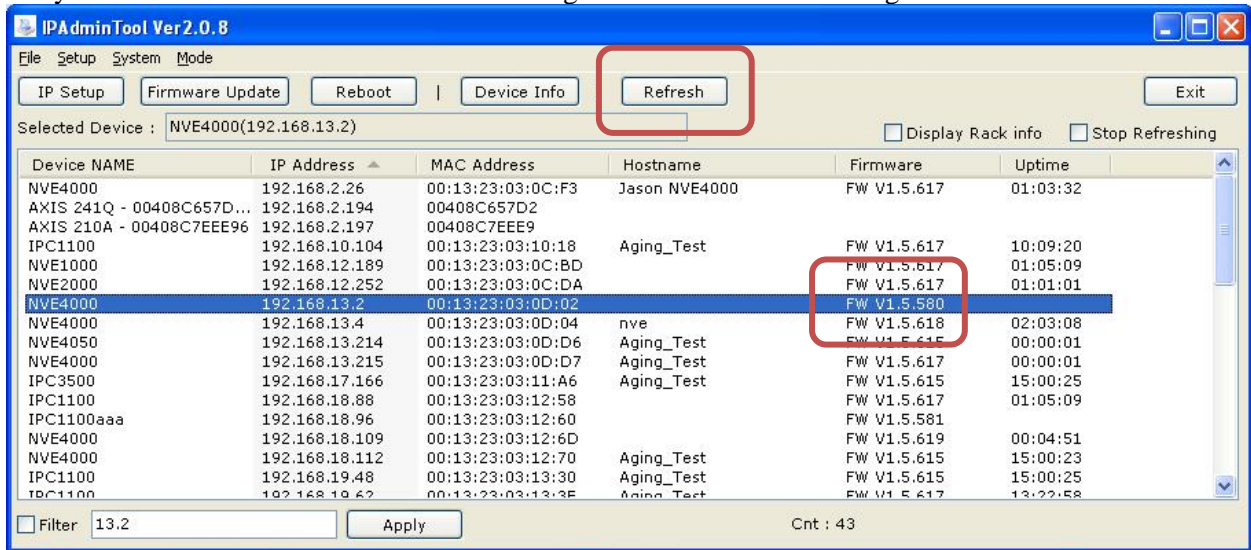
3. Then, you'll see the below window. Then check on the 'Force update' and search the wrapped file by clicking the browse button.



4. If it completes, you would see the window box as below. Then, click 'yes'.



5. Now, you go back to the IPAdminTool.exe and click the 'Refresh' and wait for about 60 sec. Then you will find the Firmware version is downgraded to V.580 as below figure.



# Revision History

Revision	Date	Description
A	2006-02-17	Created.