



Cloning A Custom Configuration

Before starting, please confirm you are running *Raven M4x software version 4.0.4.4* or higher. The cloning feature described in this tech note will not work with prior versions of the software. To check what version is running on your system, select the **“Help”** menu at the top of the M4x software screen and then the **“About”** tab. This will reveal the version of software you are running. If it is not version 4.0.4.4 or higher, contact Raven Technical Support to obtain a copy of the latest software.

To clone a custom configuration you will need to perform the following steps:

Please note: the Blade you want to clone must have the same hardware as the blade on which the restore file was made. If your Blade has three of the 4-wire modules installed, the Blade you want to clone must have three like modules, not more or fewer modules.

1. Have the restore file you made for the M4x Blade accessible in a local directory on your computer.
2. Make another copy of this restore system file with a different file name so that you can make changes without changing the original file.
3. You will need to make a note of the MAC address for the Blade you want to clone. To view the MAC address, connect the Blade to software and in the **“System Components”** tree, double-click on the line labeled **“Blade”** on the right-hand side. A smaller, yellow window will appear. Copy the MAC address from the box that says **“Blade Hardware UID”** (Figure 1). When finished, close out the software.

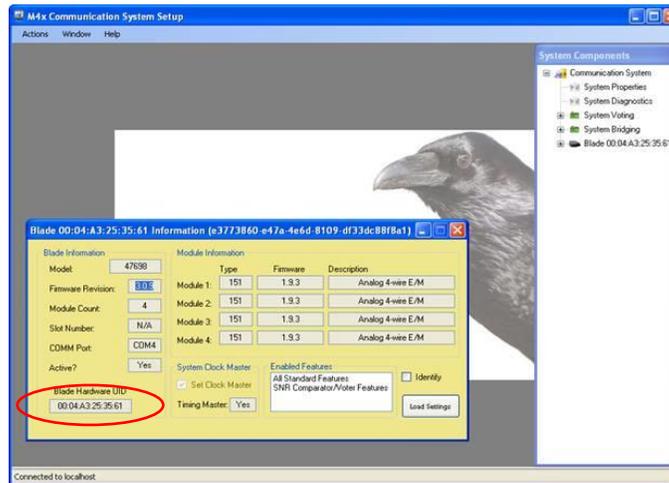


Figure 1

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- Open the renamed copy of the restore file in WordPad or similar text editor. At the top of the restore file you will see the MAC address for the Blade that the file was originally created (Figure 2). Make a note of this MAC for future reference.

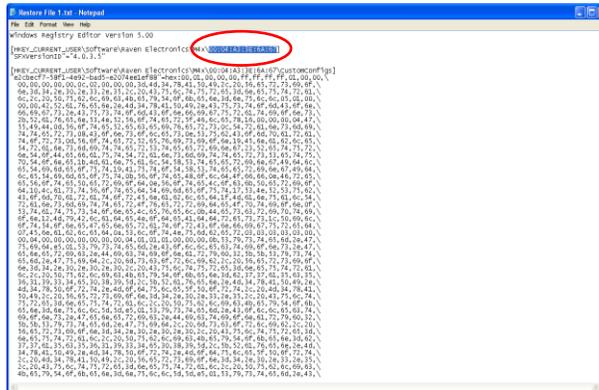


Figure 2

- Next, click on the "Edit" menu in the text editor you opened and select "Replace". When the replace screen comes up enter the MAC address highlighted in blue (figure 2) above in the "Find what" box (Figure 3). Next enter the MAC address you noted or copied in step 3 above in to the "Replace with" field in Figure 3. Now select "Replace All". When done, close the file, and save when prompted.

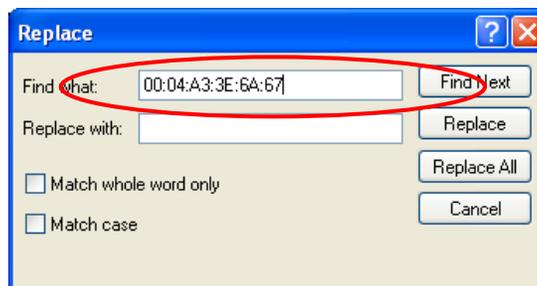


Figure 3

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6. Before continuing, clear the M4x registry of your computer as well as erase the flash memory of the Blade you are cloning.
 - a. Power on the Blade and connect it to your computer via USB.
 - b. Start the software but do not issue the **“Connect to Software”** command. Select the **“Actions”** menu and then select **“Database Save/Restore.”** Select **“Delete/Remove”** and follow the prompts (figure 4). Do not connect the Blade yet.
 - c. Next, clear the flash memory of the Blade by powering off the blade and removing the lid. In the back right of the Blade you will see a 3-pin header. Directly to the left of this header will be the word **“Warning”** screened on the PC Board. Short the center and left pins together. The left pin will say **“Erase Config”** next to it and the center pin will say **“Normal”** next to it.
 - d. You will now need to power the blade back on. You should see the lights flash on the front panel for 5-10 seconds. When the flashing starts, remove the short. When the LED’s stay solid and no longer flash, the process is complete.

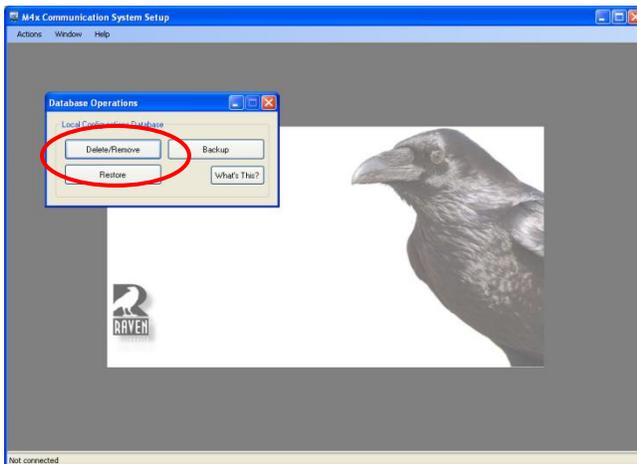


Figure 4

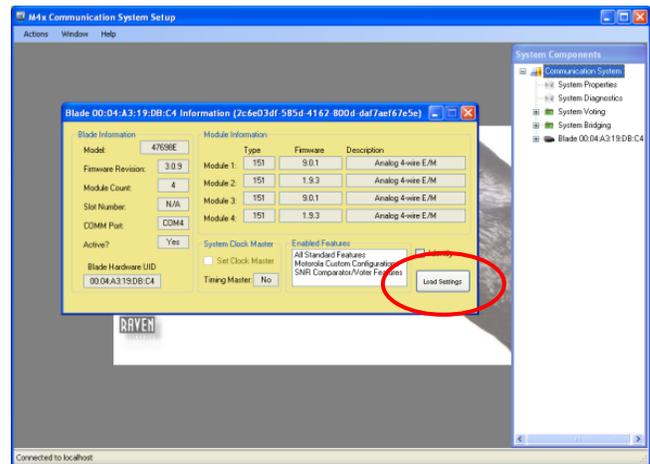


Figure 5

- e. Power cycle the Blade and connect to the software. When the software is connected, click **“Blade”** in the System Components tree followed by the MAC address of the Blade. A yellow box will open on the desktop as shown in figure 5. In the lower right of this box click on **“Load Settings”**. Read the warning and then click **“Yes”**. When the Explorer window opens, find the restore file that was changed earlier in the above process with the new MAC address.
- f. Double click the file or select it and click **“Open”** in the dialog box. You will be prompted to **“Restart”** and select **“Yes”** to do so.
- g. Cloning is now complete. You should see an identical vote group as well as all port settings replicated.