



Technical Bulletin

1/20/2014

Updating e-Node Firmware/Transferring e-Node programming

There may be times where it will be necessary to swap out an e-Node to a newer model while preserving existing dealer programmed instructions. These directions indicate the procedure to perform these tasks.

Preliminary Steps

- A. If your new e-Node does not have the latest firmware loaded, it will be necessary to download necessary code for e-Node from the Converging Systems' website.

Note: This code may be downloaded in a compressed zip format. Unzip this file as a "fw" file.

- B. If you do not have the latest Pilot application software (which may be required to access newer features within the above FW file), it will be necessary to download the new Pilot application from Converging Systems' website.

Note: This code may be downloaded in a compressed zip format. Unzip this file as an "exe" file.

Note: software downloads require a valid dealer ID and password. Download code can be found at <http://www.convergingsystems.com/customerportal/1000/downloads.htm>

1. Backing Up existing e-Node

- a. Verify existing e-Node is powered up and connected to the same network switch top which your computer is connected.
- b. Launch the newest Pilot application
- c. Select **View e-Node** tab
- d. Write down IP address of e-Node that you are going to retire from service. You can find this within the Properties (right-side window) within the Pilot application.
- e. Highlight e-Node **File** tab, select "**Save Map file.**" Enter a file name that you will remember and save it such that you can access it later.

2. Install new e-Node and update its firmware (if required)

- a. Power on new e-Node and launch the (new, if provided) Pilot application
- b. Within the Pilot application, go **the View Map** page and select **Discover e-Nodes**. Write down the IP address of the newly discovered e-Node which can be found within the Properties box (right-hand side box of the Pilot application)



- c. Launch a browser (IE, Chrome, etc.) and log into the e-Node's webpage by typing in the address discovered above into your browser window (i.e. <http://192.168.1.239>)
- d. Enter the setup pages by clicking on the Converging Systems' logo and entering the default password of **ADMIN**
- e. Select the **FW Version** category and select **Update** and select **Choose File** and navigate to the location of your existing e-Node unzipped FW file and initiate the upgrade by selecting the **Open** and **Send** buttons
- f. After the browser window says Upgrade successful, perform a factory reboot on the e-Node by pressing the on-board PCB mounted reset switch and holding it until the on-board yellow LED flashes three complete times, then **AND ONLY THEN** release the button. After about 5-8 seconds the on-board yellow LED will start flashing fast and then it will slow down after it receives its network address.
***Note:** This reset switch is located behind the RJ-45 connector which can be accessed by prying off the plastic shroud with your finger nail. There is a small slot at the top of the shroud where you can insert your fingernail.*

3. Upgrade the newly installed e-Node

- a. Re-launch the Pilot application (if you have closed it down)
- b. On the **View e-Node** page, select **Discover e-Nodes**
- c. Highlight the "+" icon in front of the e-Node that you wish to install/modify in order to reveal the **NETWORK** tab
- d. In order to be able to re-program the new e-Node with the existing dealer programming that was contained in the former e-Node, the IP address of the new e-Node must be set to the **same** IP address as the former e-Node's IP address. Typically, e-Nodes are programmed with Static IP addresses (DHCP off) so it is important to enter that former IP address in the new e-Node in order to enable the programming update software to work properly. If the initial e-Node was addressed using DHCP addressing (dynamic) turned on, it is still necessary to match the IP address of the new e-node with the addressing of the former e-Node. In order to do so, however, it is still necessary to perform the following steps in order to set the e-Node to have static addressing.

Within the **NETWORK**, change the IP address of the new e-Node as follows:

1. Change **Static_IP** address by highlighting the existing IP address and enter the desired IP address and hit Enter
 2. Change **Gateway_add** by highlighting the existing IP address and enter the desired Gateway address and hit **Enter** (note: first three octets should be the same as the Static IP address entered above with the last octet set to "1")
 3. Finally, and only after you have performed the above two steps, change **DCHP** to **DISABLE** and select **Restart**
- e. After new e-Node as rebooted, select **File/Load Project** and navigate to the location of your stored e-Node project and upload that project. Hit **Restart** and



when the e-Node reboots it should be functionally equivalent to the previous e-Node but with its new/updated firmware and your previous programming intact.