



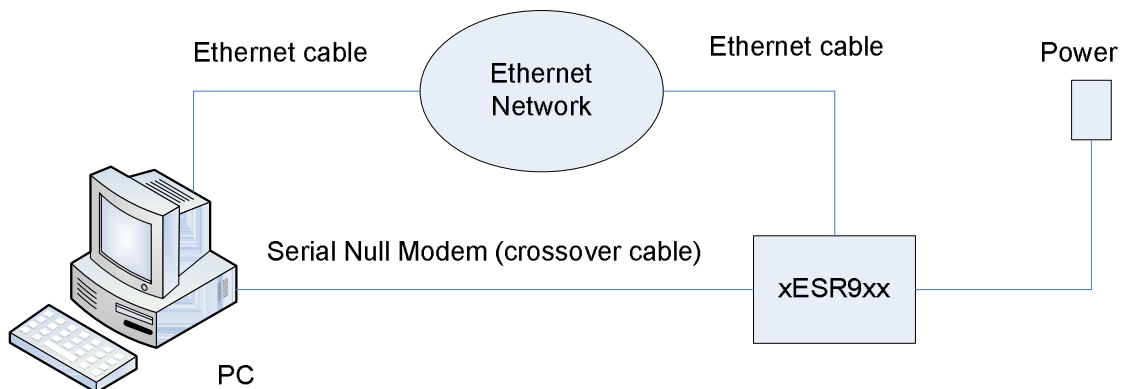
xESR9xx
Field Upgrade Procedure

V1.1

Field Upgrade for xESR9xx

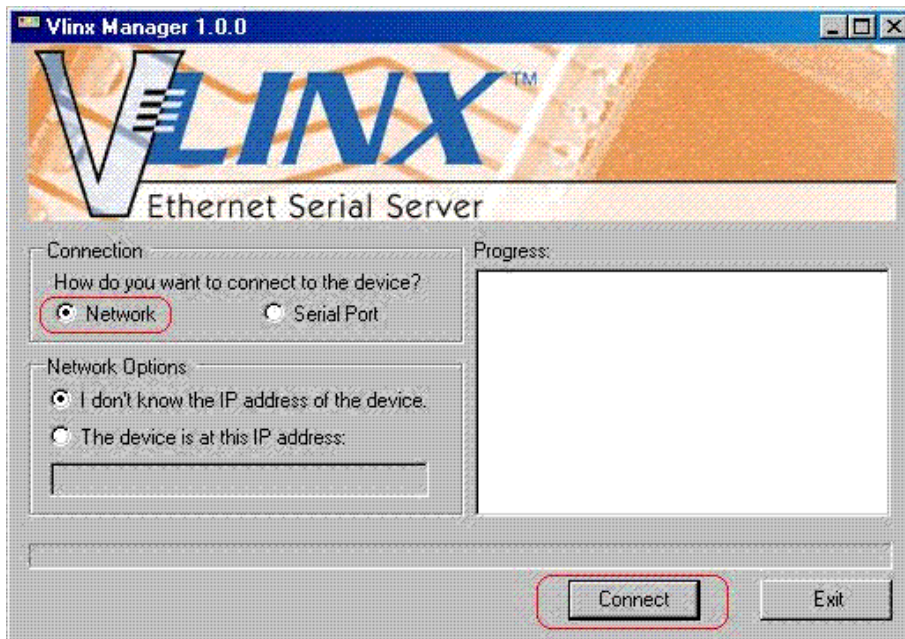
Steps

1. Download the following from B&B Electronics' website.
 - a. Vlinx Manager (if you do not have the latest).
 - b. xESR9xx firmware files (*.sfb & *.sfi). *Note: Save these files to a temporary location.*
2. Install the Vlinx Manger (if necessary).
 - a. Remove the previous version of Vlinx Manger via the `Add or Remove Programs` option from the Control Panel (i.e. Start -> Settings -> Control Panel).
 - b. Run installer to install the **new** Vlinx Manager.
3. Now you are ready to install the **new** firmware using the Vlinx Manger. Setup the device as pictured below. Bring up the Vlinx Manager.

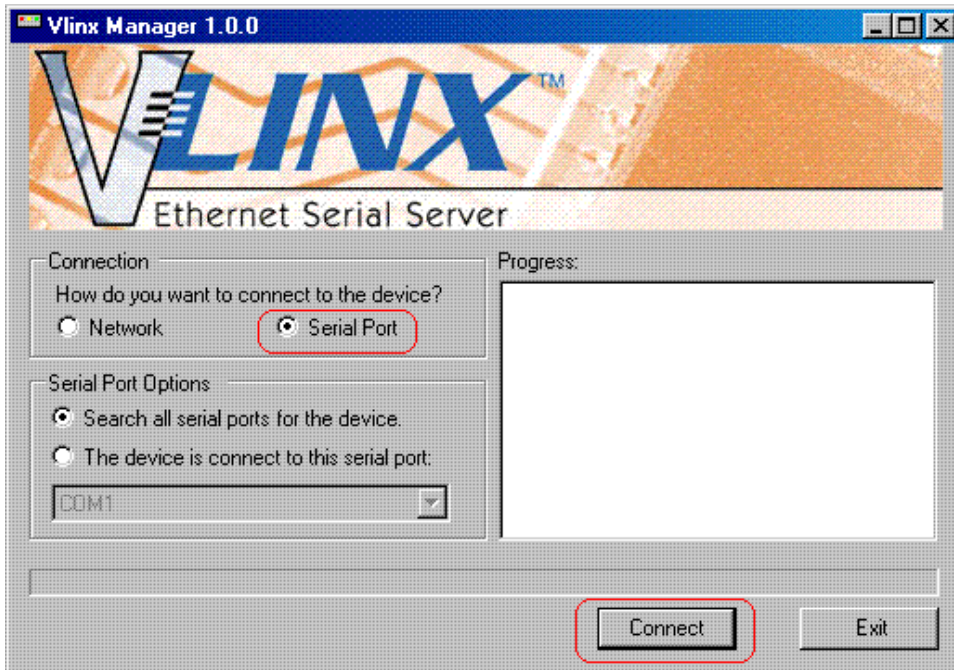


NOTE: To upgrade to the new firmware, you can either use Serial or Ethernet connection. Also, please note that the firmware upgrade process via VCOM connection is not supported. If you are using xESR9x2, both the ports need to be in a NON-VCOM mode.

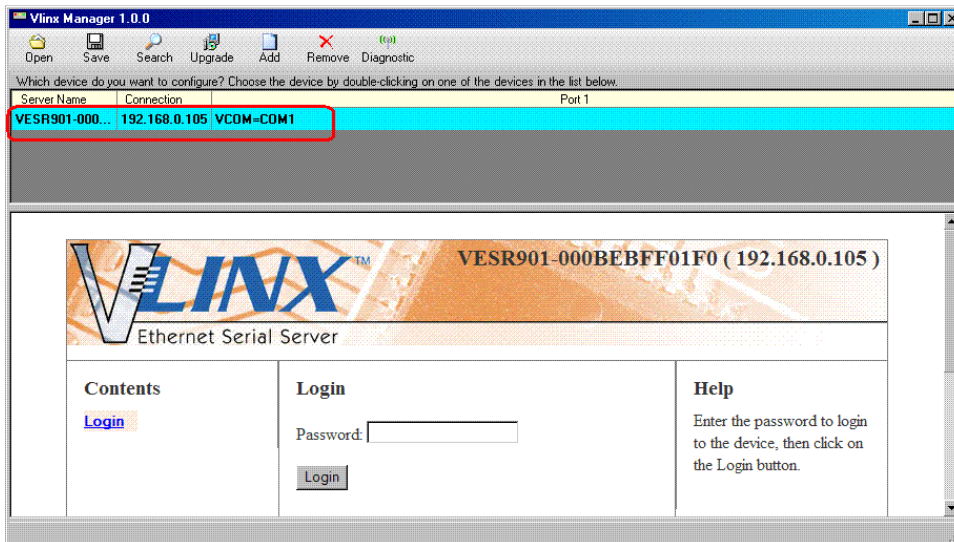
4. *NOTE: If you are using serial connection, please go to Step #5. Select `Network` option in the Vlinx Manager if you are using the Ethernet connection. Click `Connect` to locate the device.*



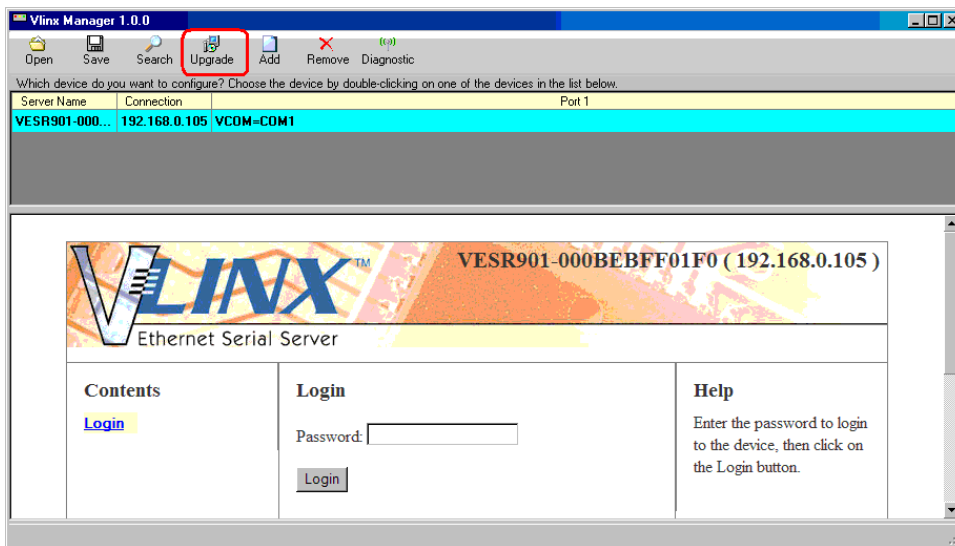
5. *NOTE: If you are using Ethernet connection and have performed Step #4, please go to Step #6. Select `Serial Port` option in the Vlinx Manager if you are using the Serial connection and follow these steps:*
- a. Press and hold the reset button on the device for more than 2 seconds to put the device in the Console mode which will be indicated by:
 - i. (xESR9x1) Serial LED #1 Off and Ready LED On (solid).
 - ii. (xESR9x2) Serial LED #1 Off, serial LED #2 On (solid) and Ready LED Off.
 - b. Release the reset button.
 - c. The Ready LED will blink (5 times/sec) for ~5 seconds and the device will reboot.
 - d. When the device will power up, it will be in Console mode which will be indicated by:
 - i. (xESR9x1) Serial LED #1 solid and Ready LED Off.
 - ii. (xESR9x2) Serial LED #1 solid, Serial LED #2 Off and Ready LED Off.
 - e. Please verify that your serial port settings on the PC are as follows: 9600-8-N-1, no flow control.
 - f. Click `Connect` on the Vlinx Manger to locate the device.



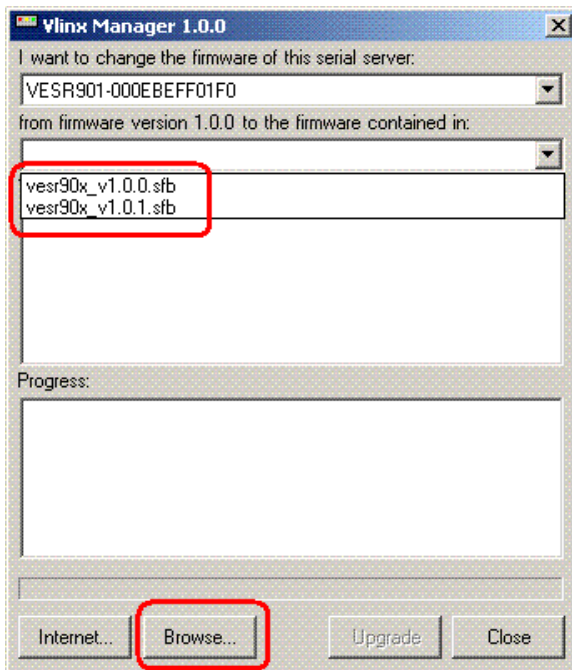
6. After your device is located, Vlinx Manager window will pop up. Double click on the light-blue line that has your device listed to make sure that you are talking to your device. *NOTE: There might be a case where more than one device comes up on the search.*



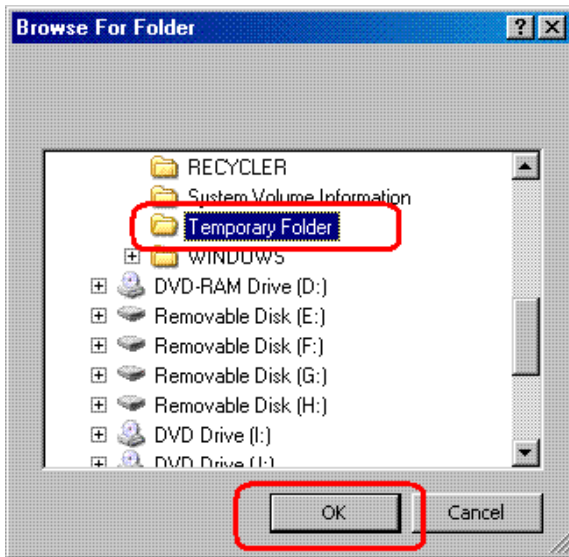
7. Click on the `Upgrade` GUI.



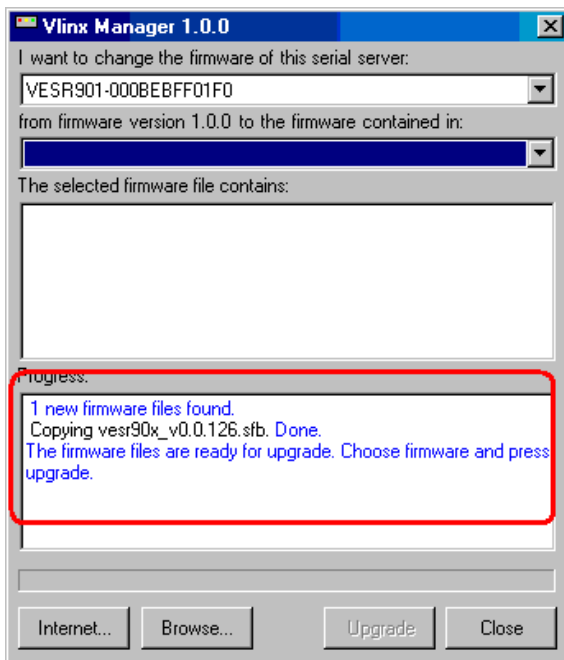
8. Upgrade dialog box will pop up. *NOTE: From the second pull-down menu, please make sure that the firmware you have downloaded from B&B Electronics' website is not already listed. If it is listed, please go to step # 11. Click on the `Browse` GUI.*



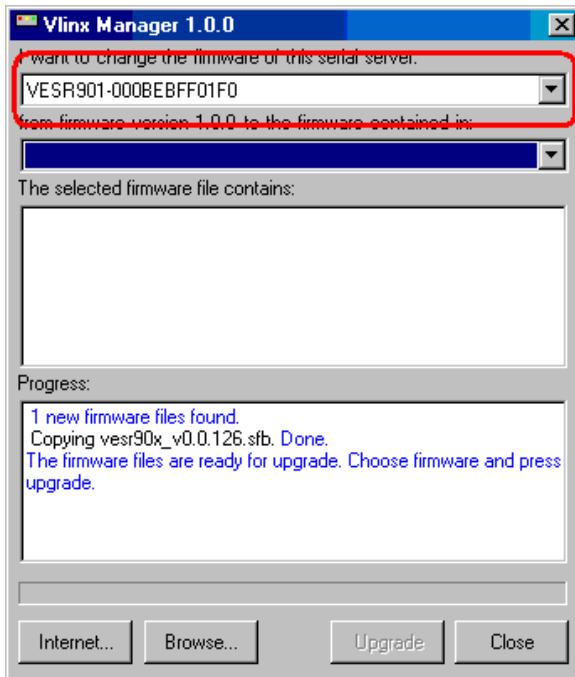
9. Browse to the location of your temporary folder where you have saved the new firmware files (*.sfb and *.sfi). Click `OK`.



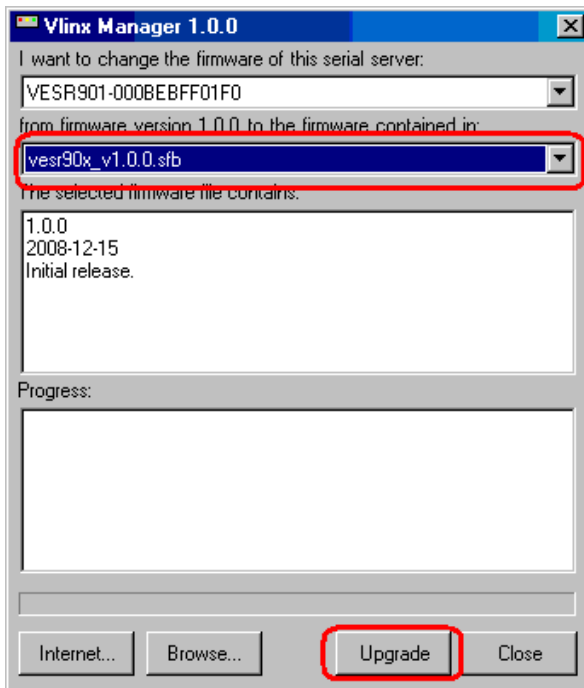
10. Upgrade dialog box will display that a new firmware has been found.



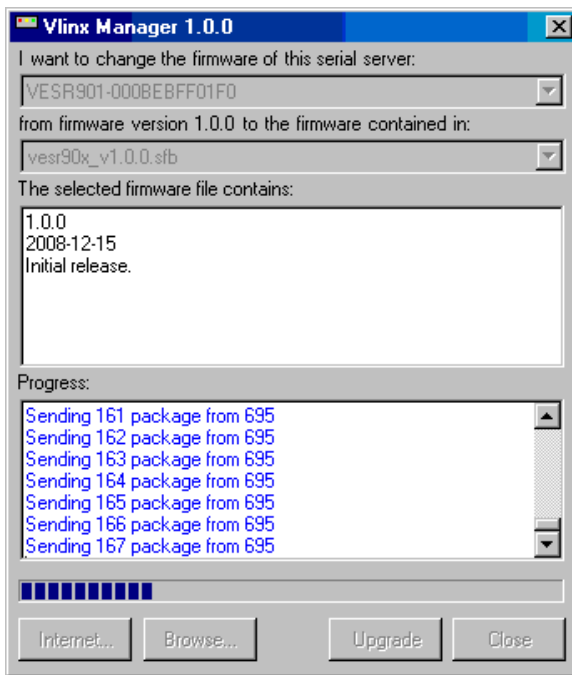
11. Please verify that your device is selected from the first pull-down menu.



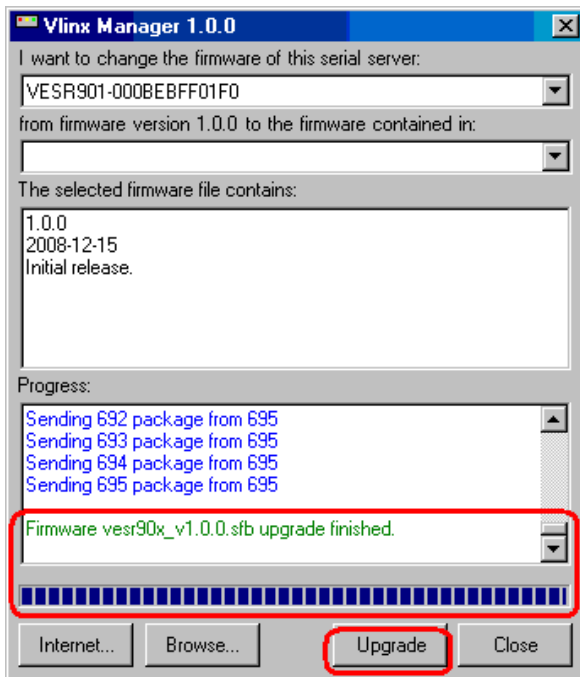
12. Select the newly added firmware from the second pull-down menu and click `Upgrade`.



13. You will see that the progress bar is increasing which is an indication that the firmware is being transferred from your PC to the device.



14. Once the firmware upgrade process is done, you will see the following message. You can close the Upgrade dialog box by clicking on `Close`.



15. At this point, you will see that the Ready LED on the device has turned solid which is an indication that the firmware is being written to the device's flash memory. **If the power is lost to the device during this process, the device will go back to the recovery firmware (i.e. V0.0.99) and you would have to repeat the above steps to upgrade to the new firmware.**
16. Once the device has finished writing the firmware to its flash memory, the Ready LED will start blinking (5 times/sec) for 5 seconds and then the device will reboot.
17. After the device powers up, please verify that the Ready LED is blinking once per second indicating normal operational mode.
18. From the Vlinx Manager, reconnect to your device and select your device from the list. Please verify that your device has the new firmware by looking at the firmware revision number in the Vlinx Manager. *NOTE: This number should be identical to the number listed in *.sfi file which you downloaded from B&B Electronics' website.*

