# Procedures for Updating Software from PA1.00.003 to Latest Software Version

This guide is designed to assist you in updating your iCOM board and large display to the latest release of iCOM software. This guide should only be used if the board and/or display you are working on **is** iST compatible, iST being the software update utility also called "the service tool". To determine compatibility one must go to the Service menu using the iCOM display and then Network, once there if using the large display check the line S811. If using the small display simply push the down arrow key once and read what the line labeled SW# says. If the version is PAL or PAB 1.00.003 or higher then this guide is the one you need and the iCOM **is** iST compatible, if you see anything older such as PAB or PAL 1.00.000, LBB or LBL 1.071.000, then the iCOM **is not** iST compatible and this **is not** the guide for you. This being said lets continue.

1) The first thing to do is to connect to port P64 of your large control board with a crossover cable and then connect the other end of the cable to your iST PC.
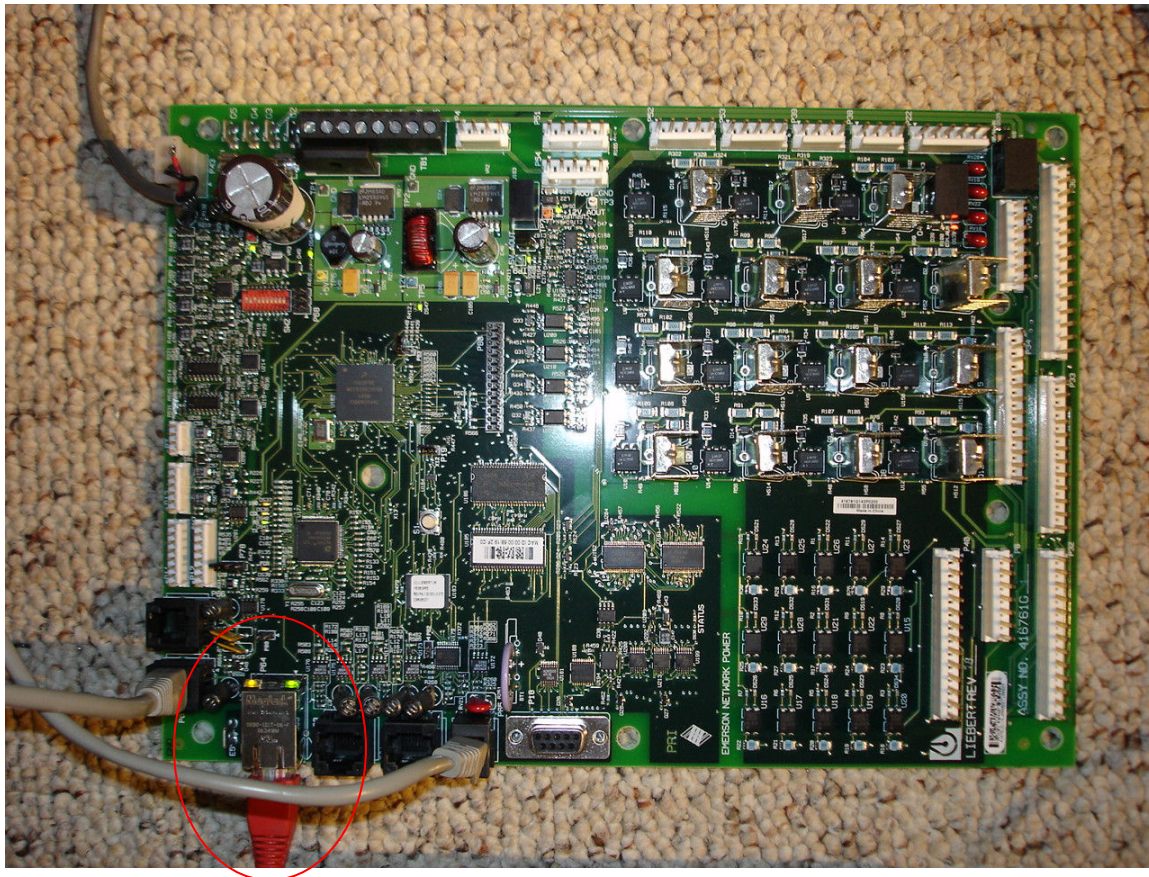
2) It is now time to open iST 1.02 by clicking Start\All Programs\iCOM\iCOM Service Tool, or finding the icon on the desktop that looks like a wrench. Once the iST is open log in.
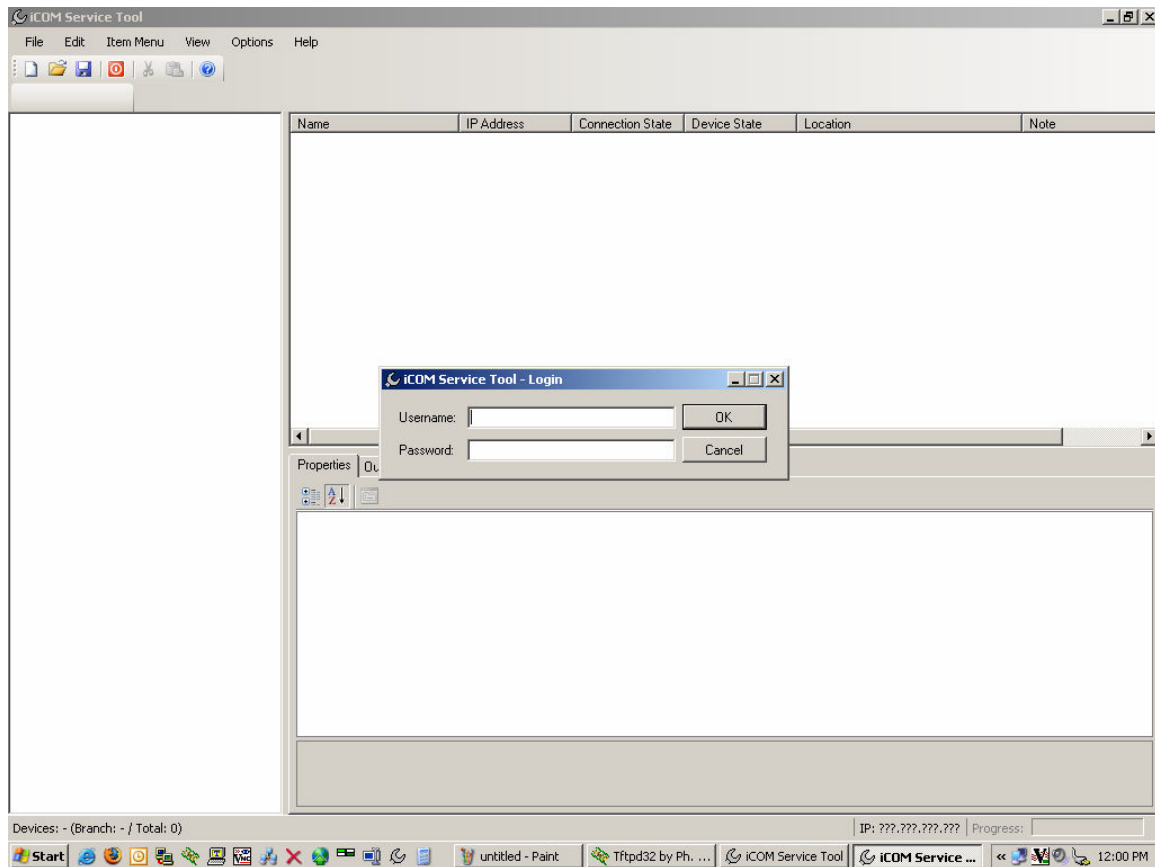
3) After you have logged in find the magnifying glass icon in the iST toolbar and click it. Select Ok to scan the shown IP range for iCOM devices.
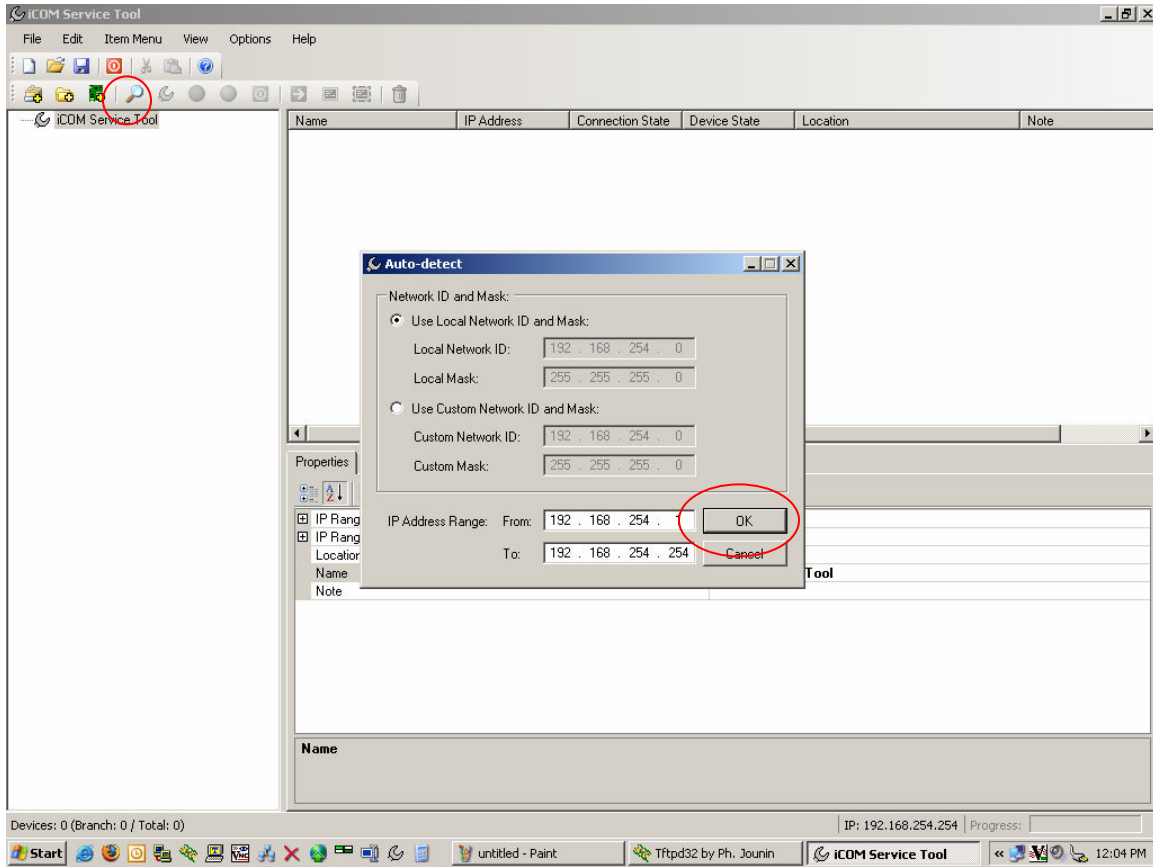
4) After the scan is complete the board will be shown in the left pane of the iST.
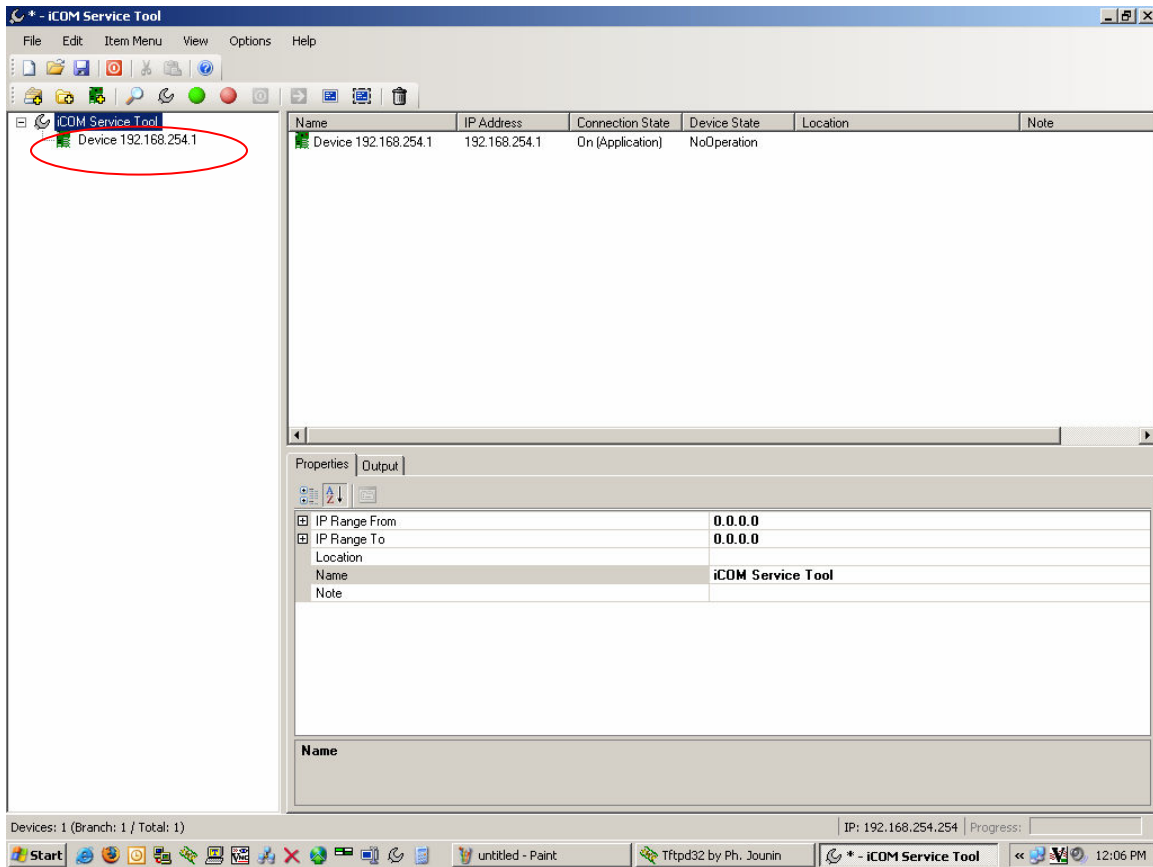
5) Click on the device once and notice that auto XML download and upload buttons are inactive. Scroll down in the upper right pane and find the XML file exchange link and click it.
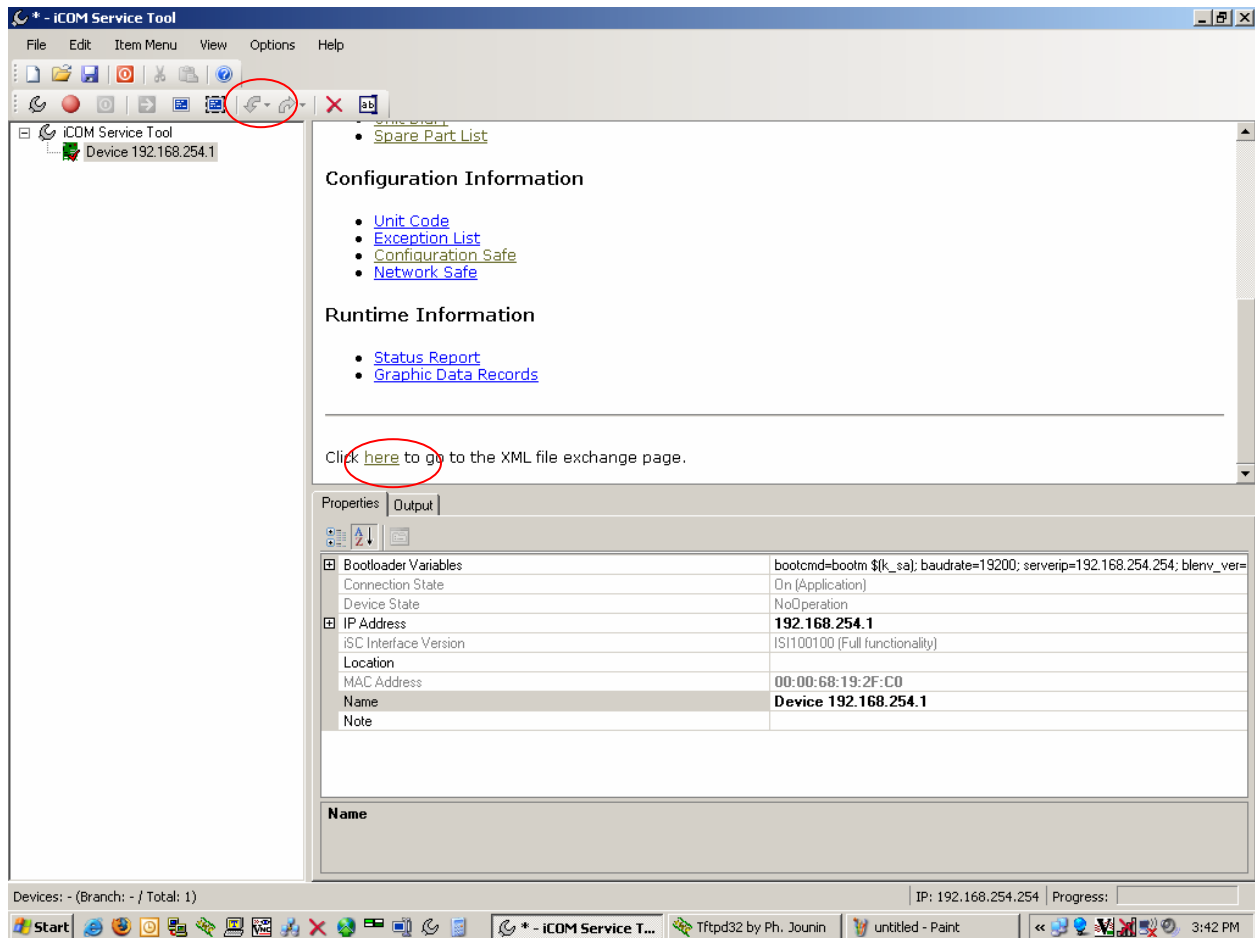
6) Enter your computer's IP address in the box and click the following XML files from the left column:

Unit Summary
Unit Diary
Spare Part List
Unit Code
Configuration Safe
Network Safe

7) Watch TFTP server's log window to see that the files make it to your PC with success. To do this find your TFTP server in Windows taskbar and click it once to bring it forward.
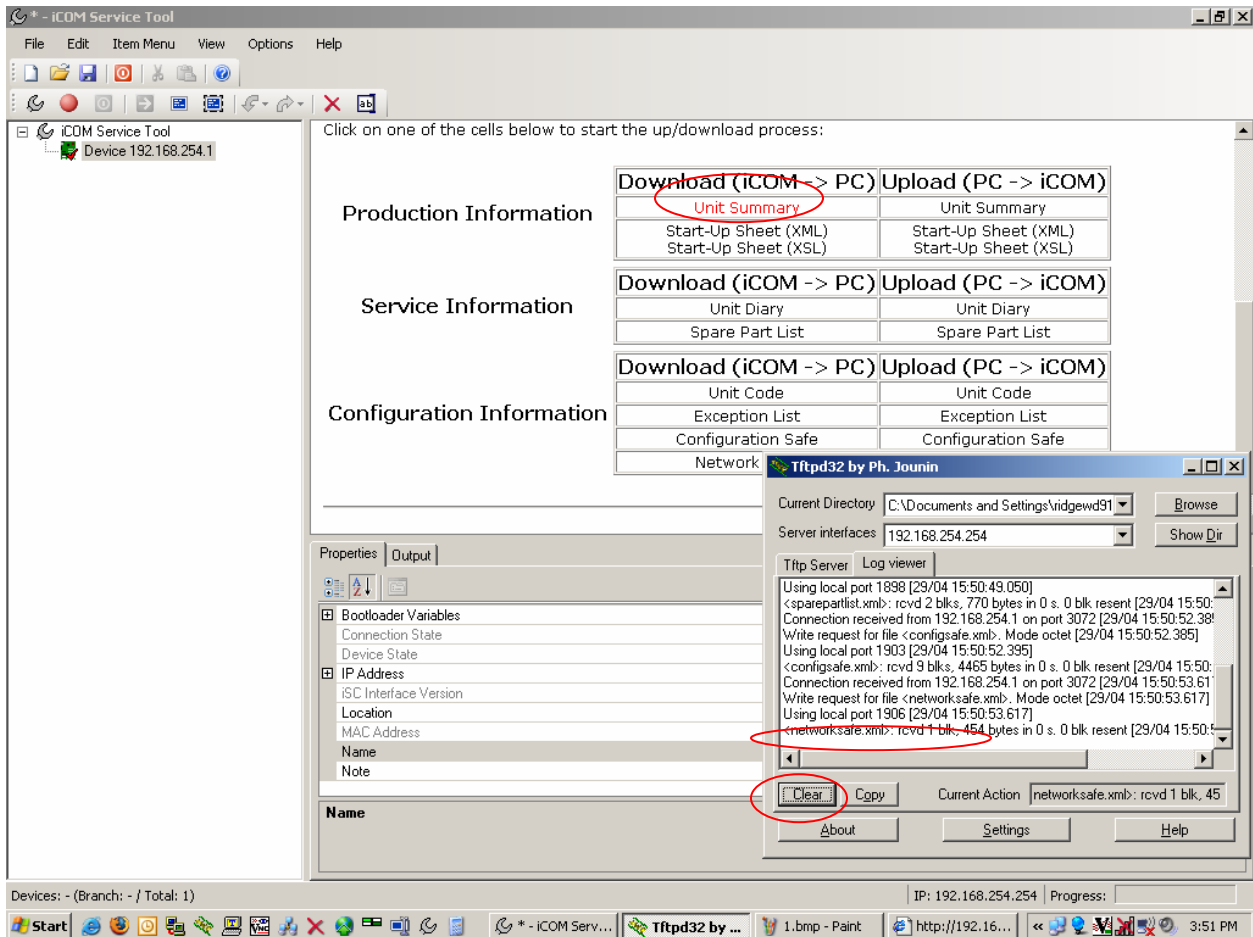
8) Now find the button that looks like a wrench in the iST toolbar and click it.
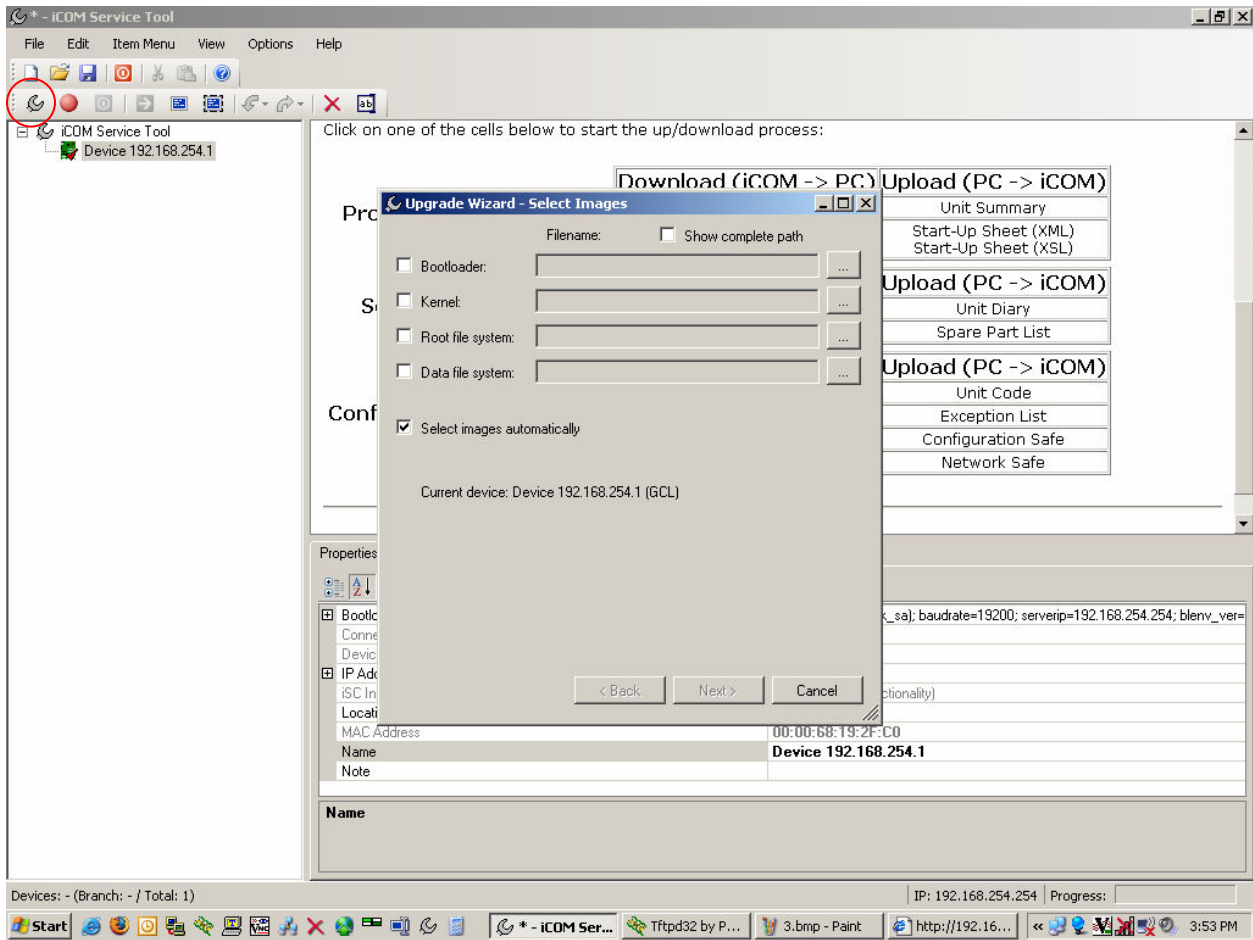
8) Choose the version of Bootloader and Application file you are updating the board to. **CDL** stands for Coldfire Display Large and **GCL** stands for Global Control Large, PAL files go on the board and PAB files go on the display. After selections have been made click "Next>".
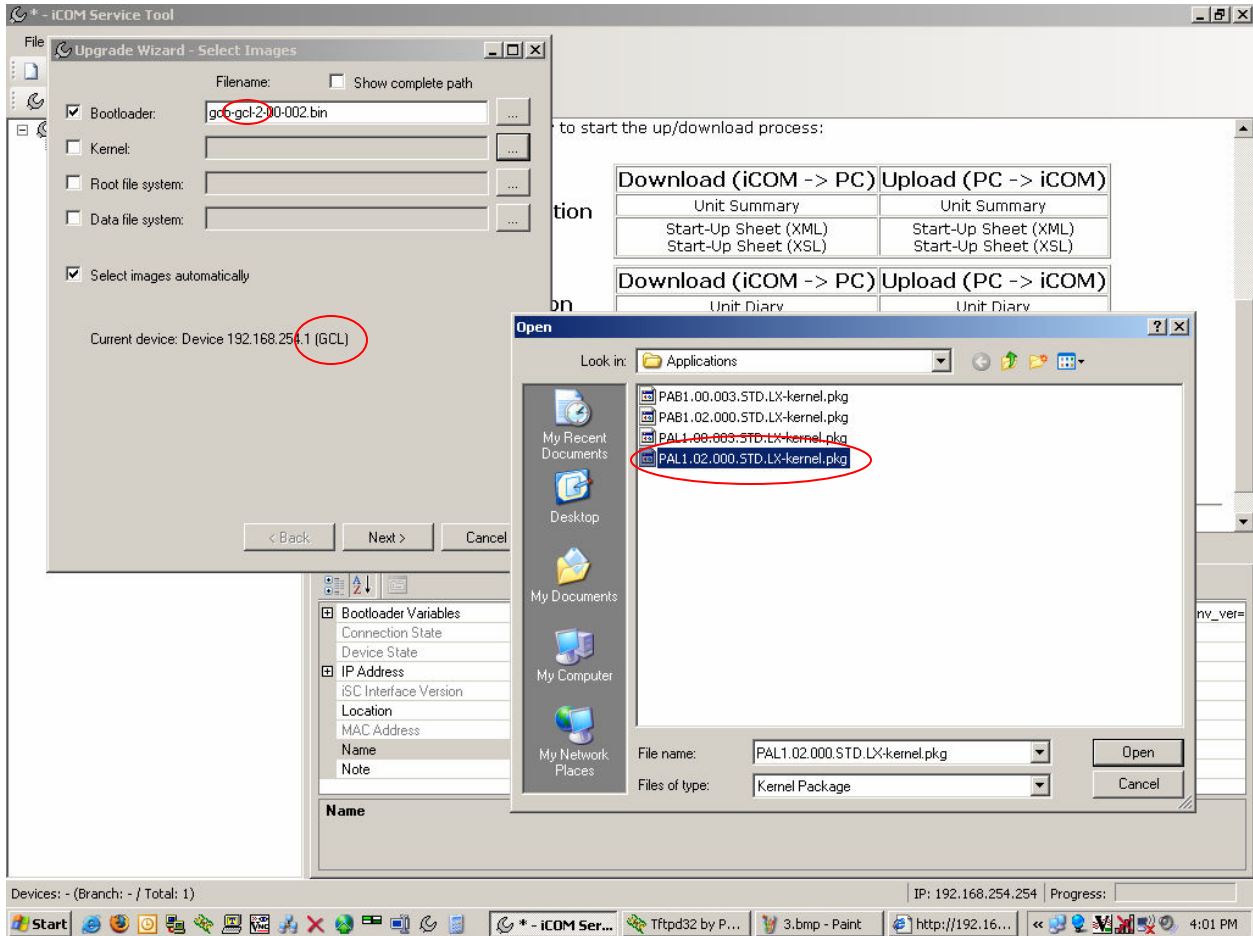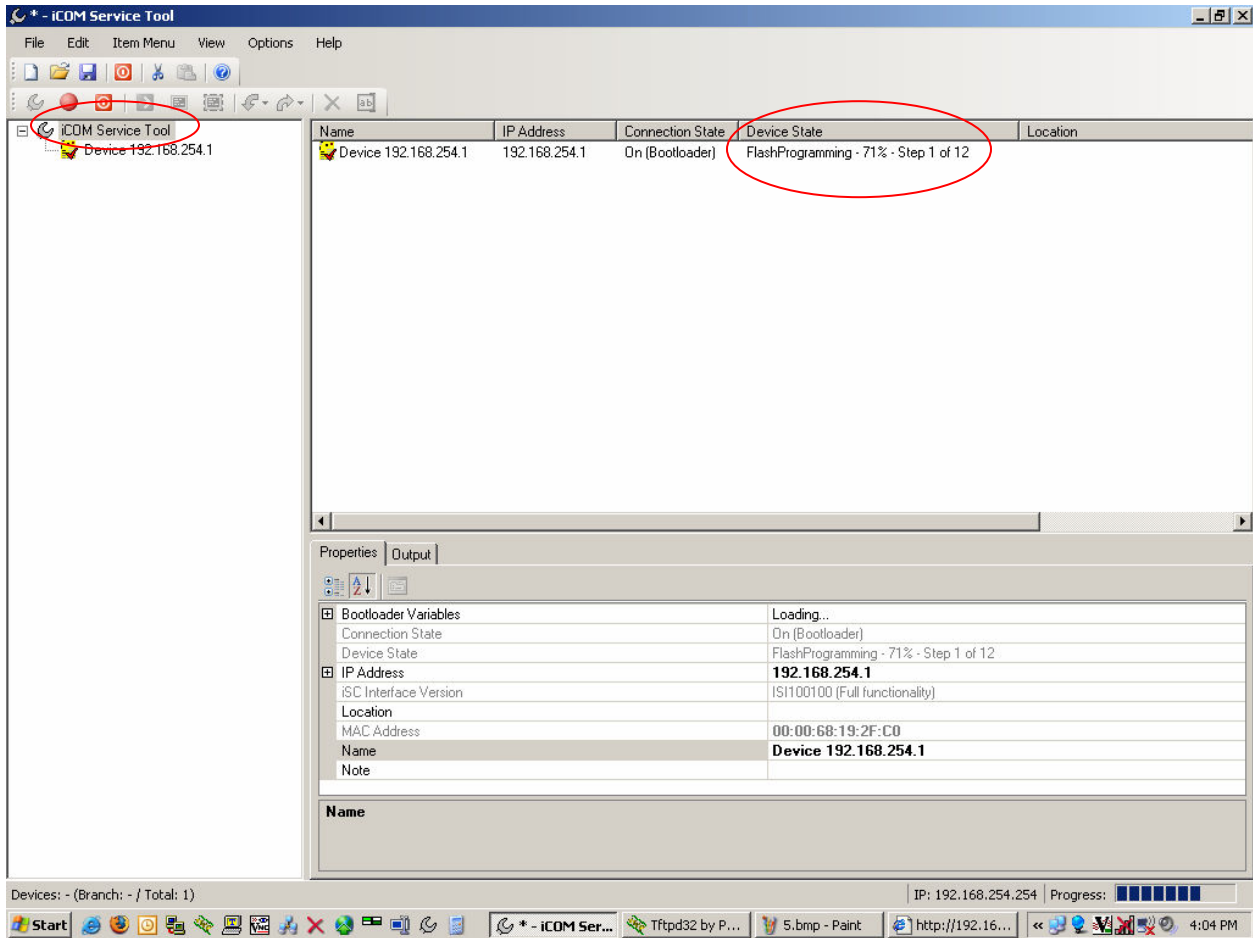
9) Verify that you have the right files selected before you click finish. Clicking finish will put the board in bootloader mode and start the update process.
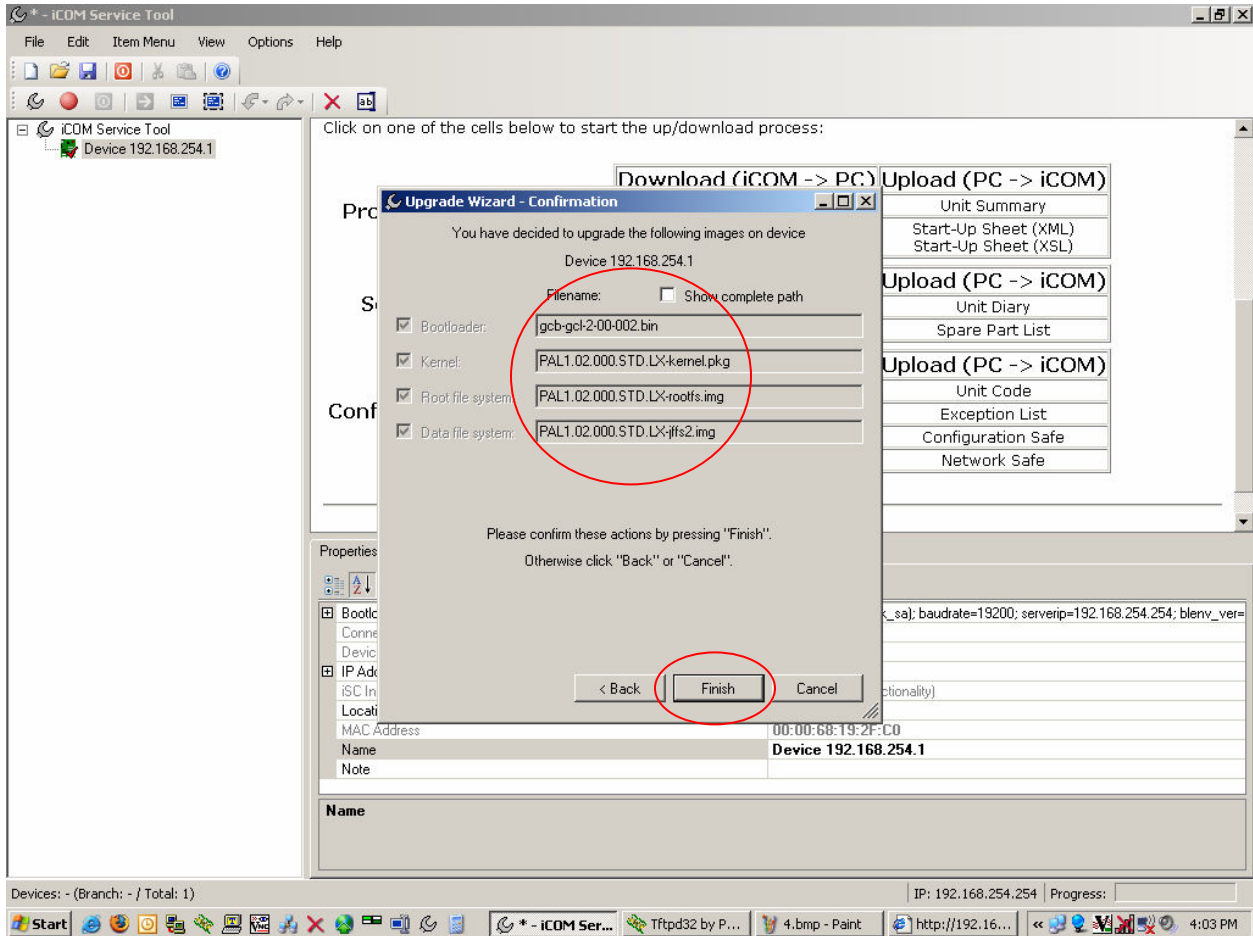
10) Click the top of the tree once in the left pane and then refer to "Device State" in the upper right panel to see the progress or the update, during which time the board icon will be yellow.
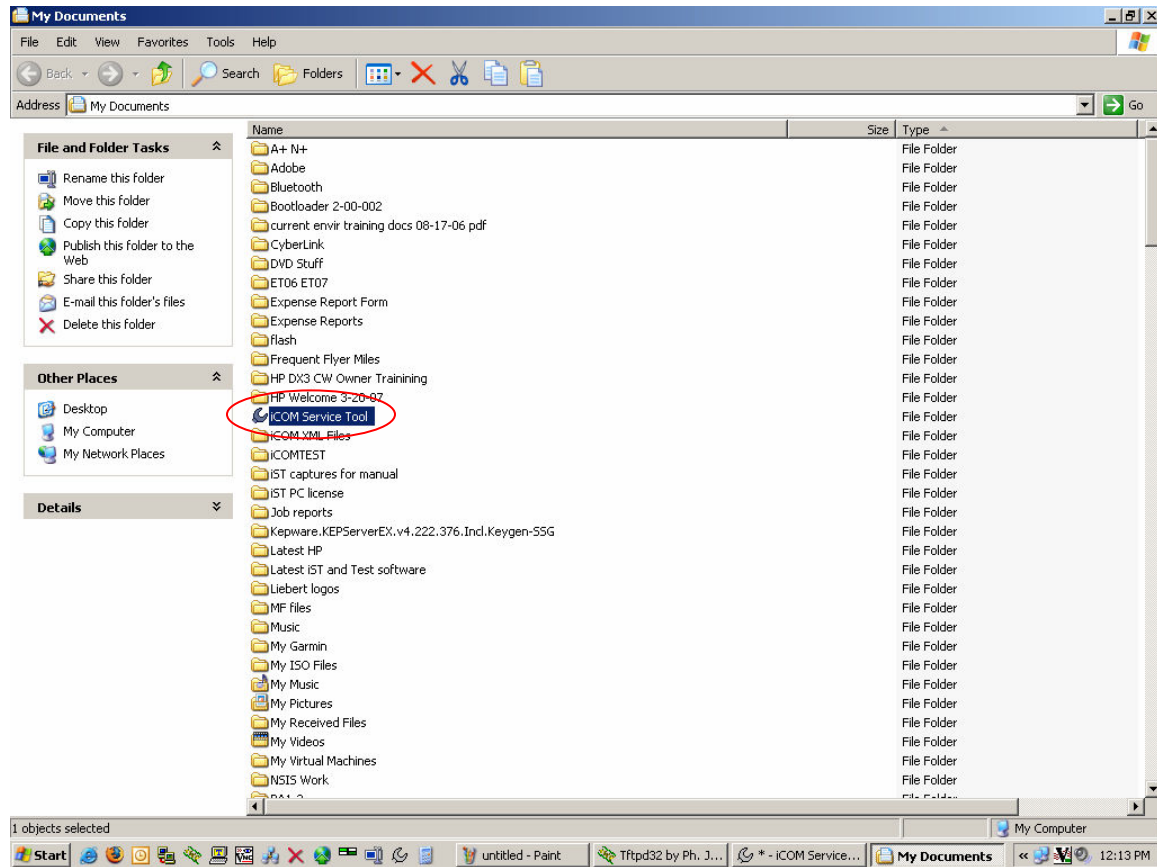
11) The update is complete when Connection State says On (Application) and the icon of the board is green in the left pane.
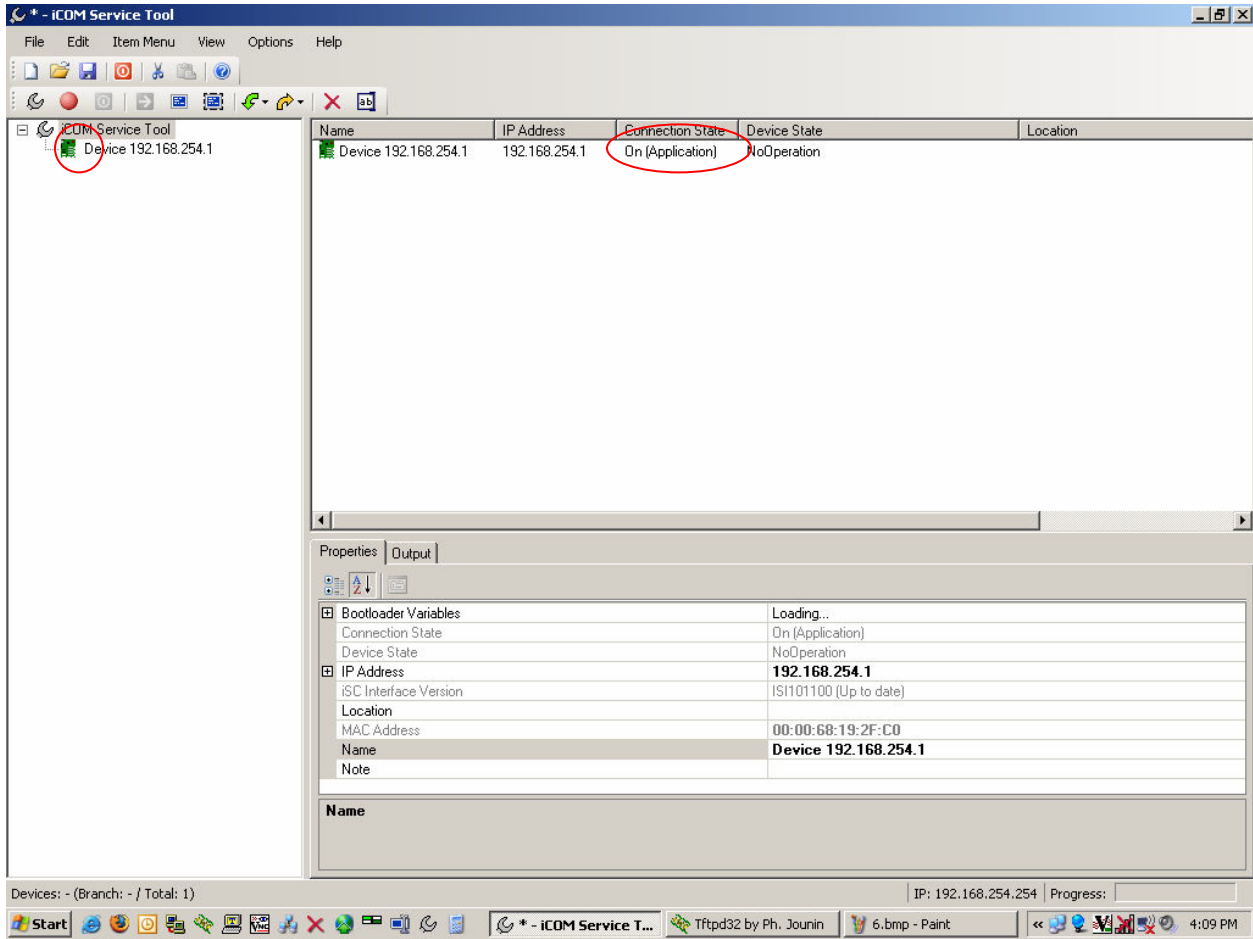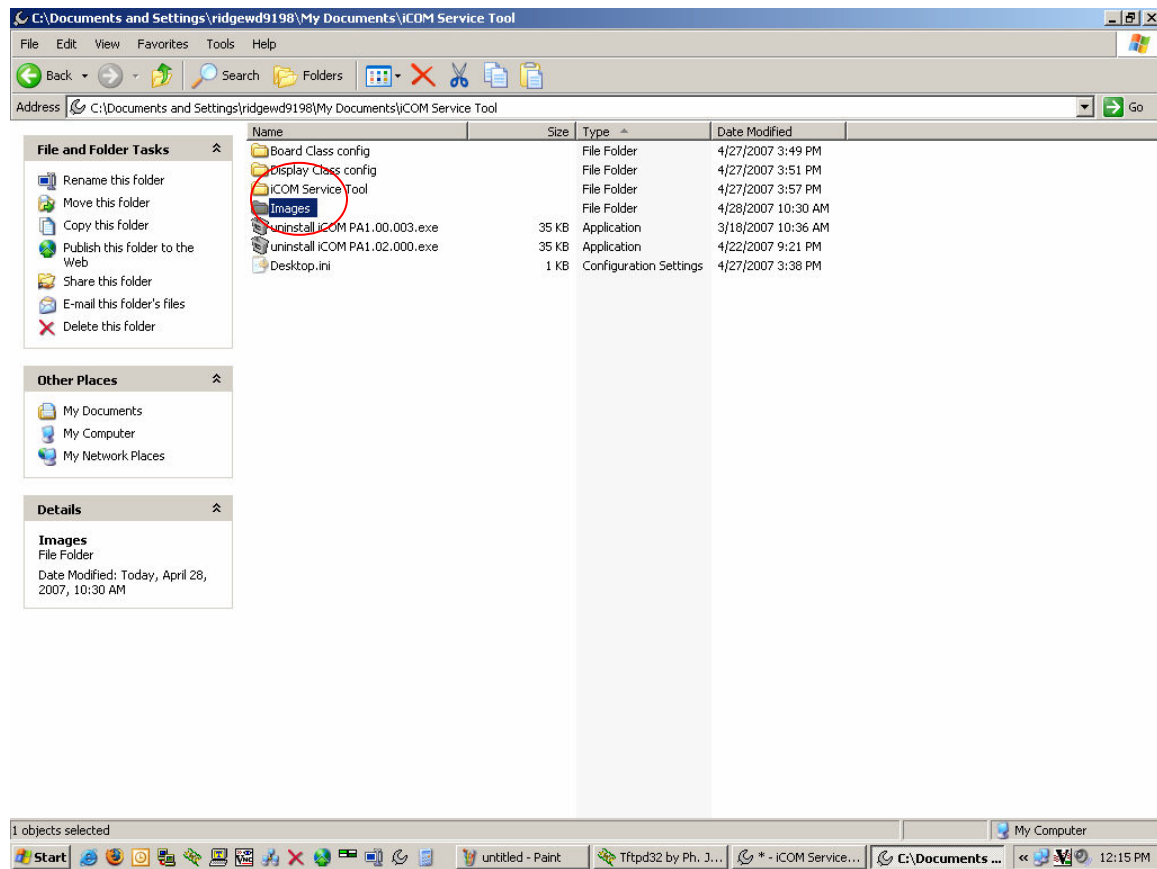
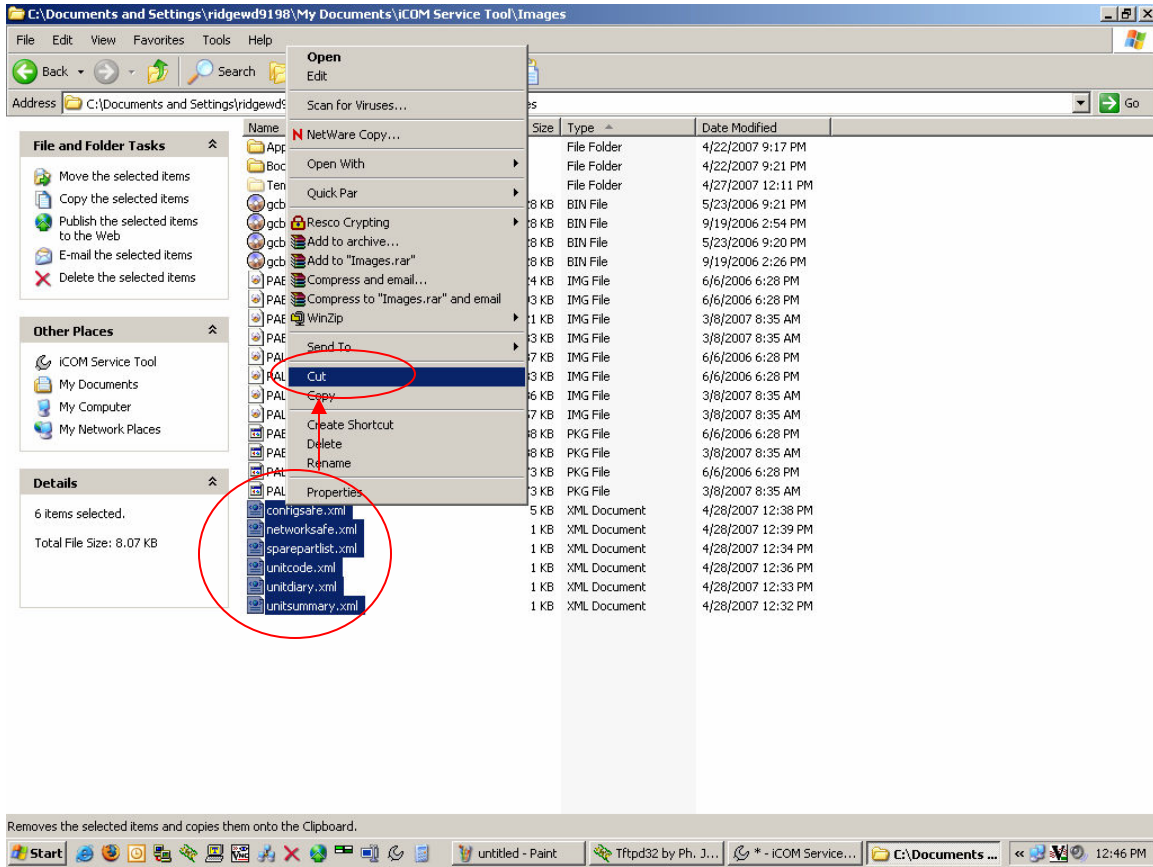12) The next step is to click Start and then the My Documents shortcut.
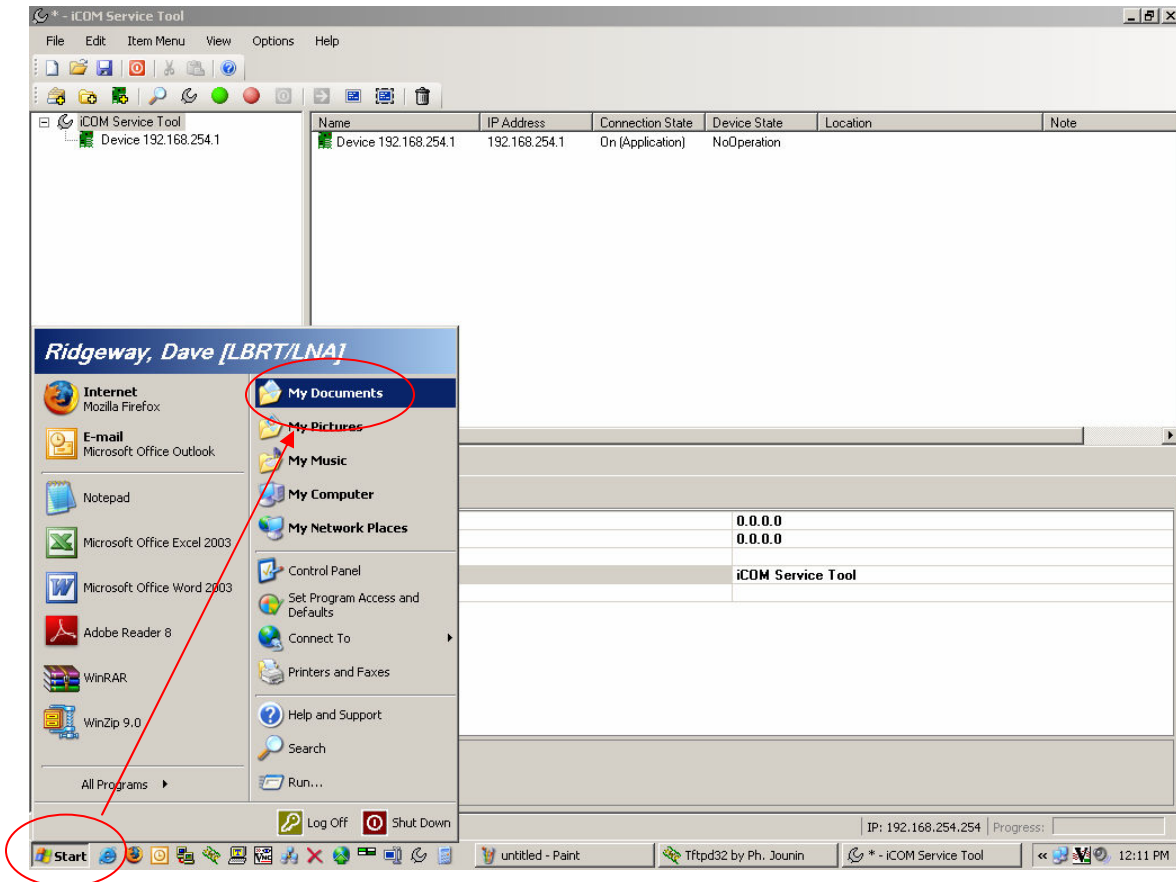
13) Once in My Documents find the folder called iCOM Service Tool and double click it to go inside of it.

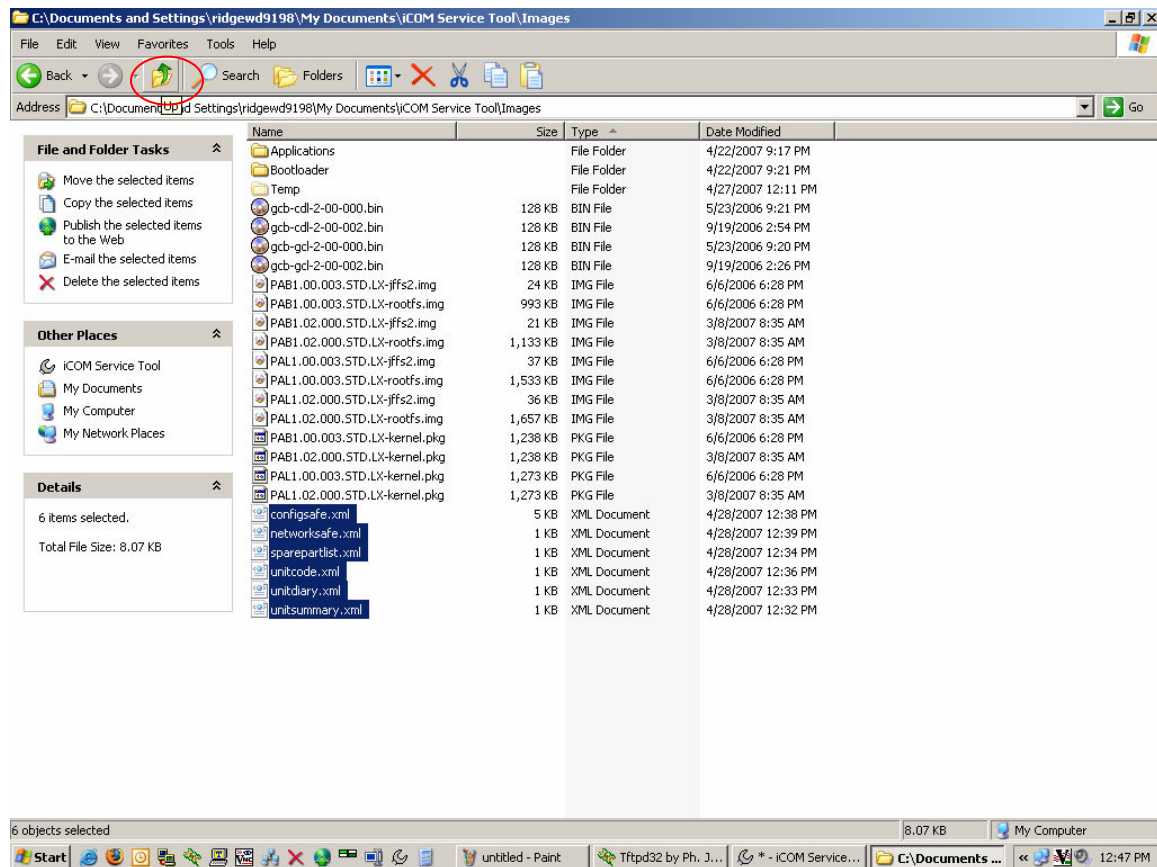14) Now find the folder Images and double click on it to go inside of it.

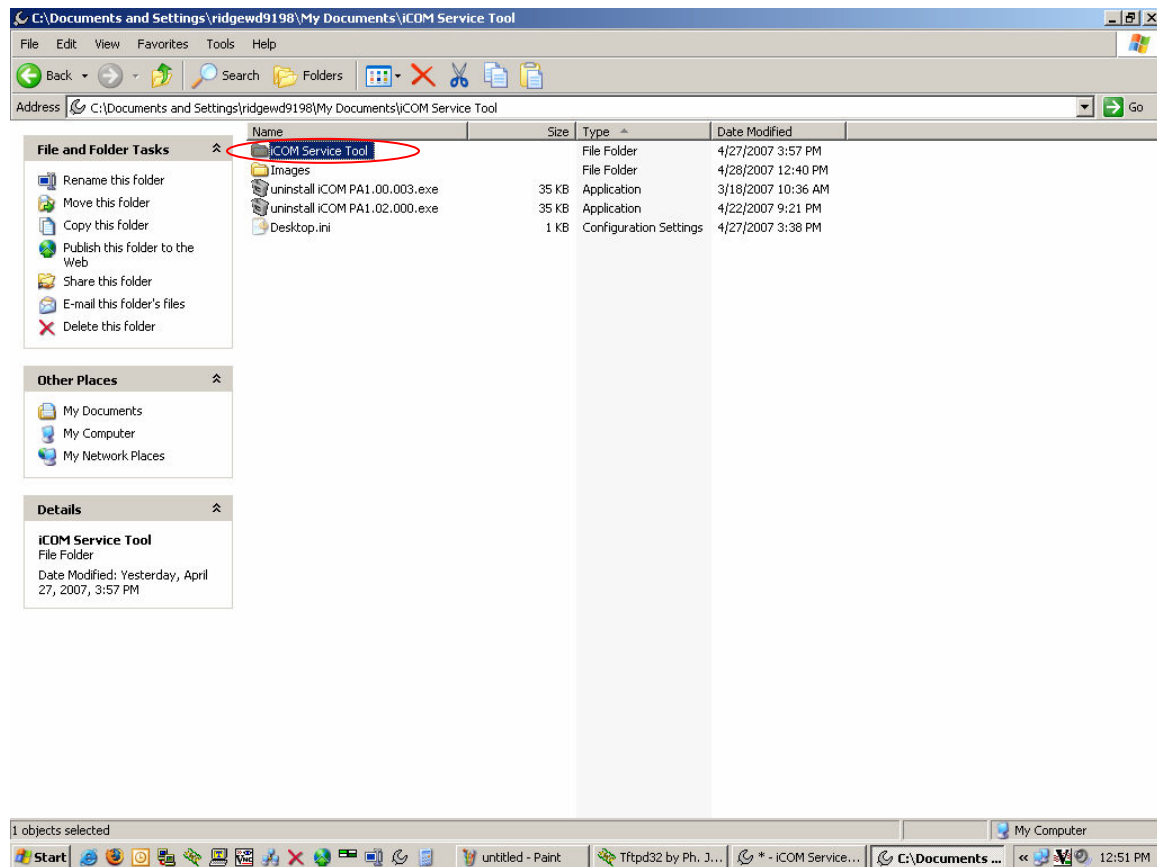15) Select the the XML type files you downloaded in the first steps of this guide and right click on them and choose Cut.
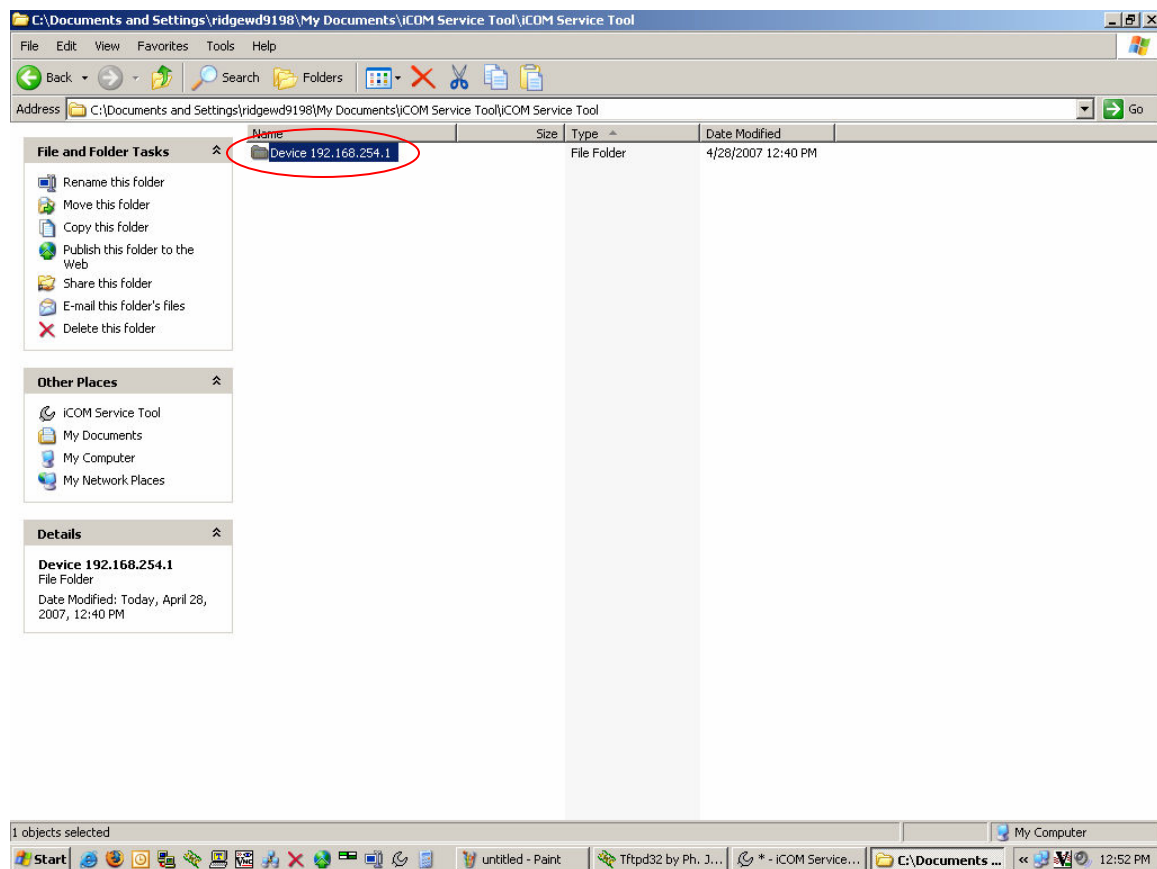
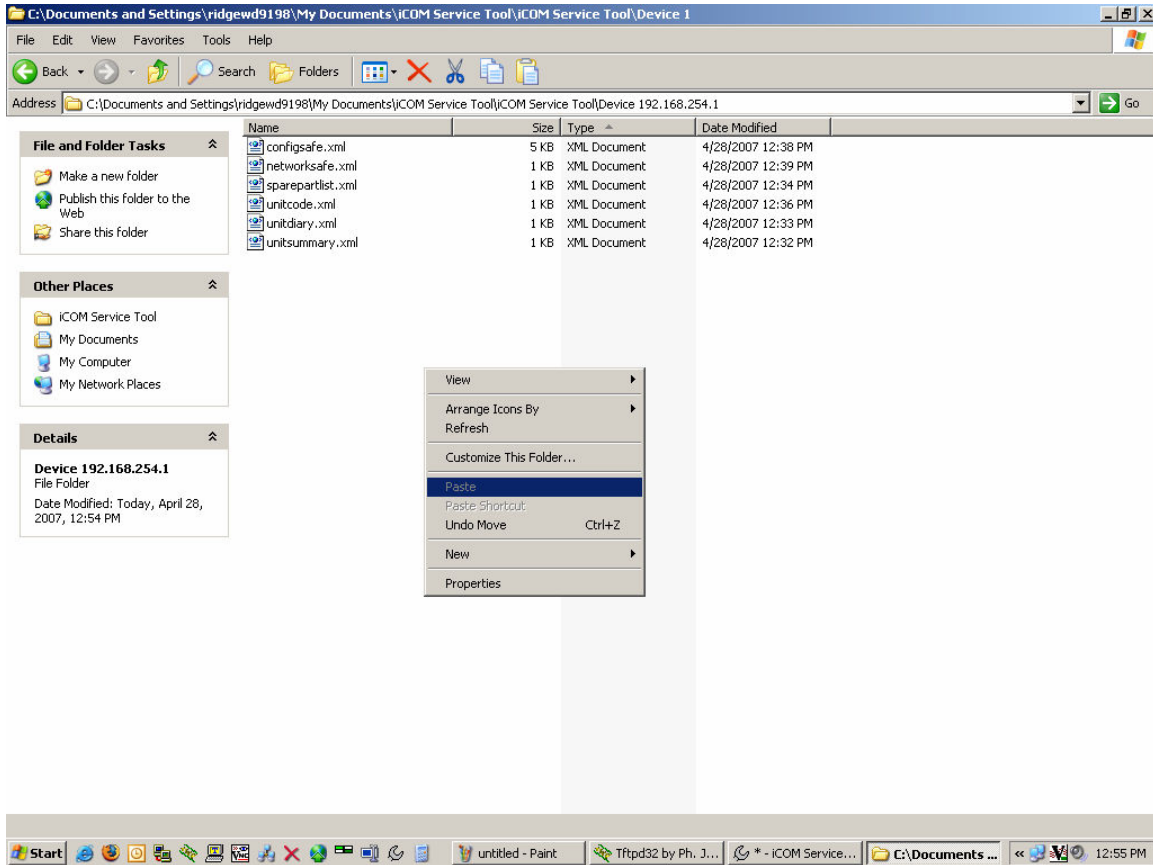16) Next click the up directory button from the toolbar.

17) Find the folder iCOM Service Tool and double click it to go into it.

18) Now double click on the folder that corresponds to the IP address of your board.
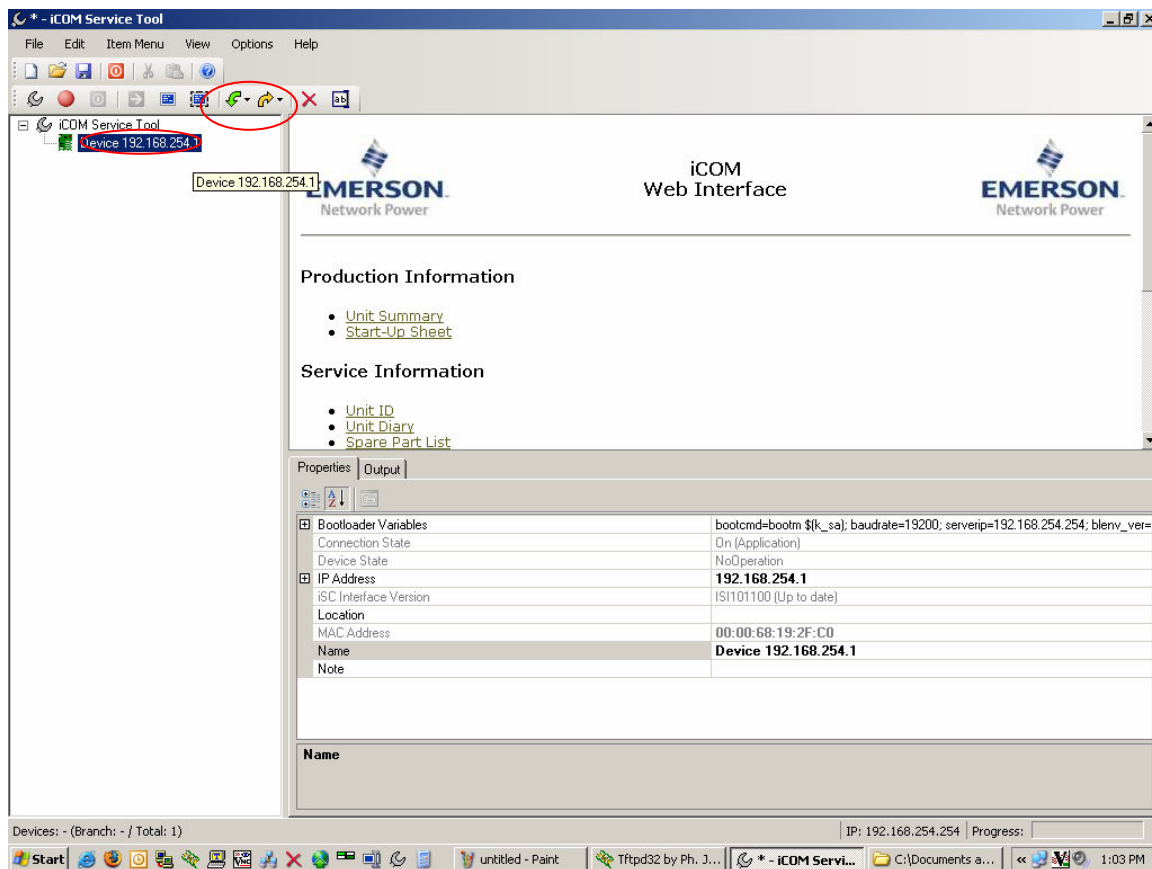
19) Right click anywhere inside the folder and select Paste and close the current window.

20) Go back to the iST by finding it in the Windows taskbar and clicking once to bring it forward if necessary.

21) Click on the board's IP address in the left pane and notice that the iST toolbar now shows two arrow buttons. The button we are going to use is the yellow one.

22) Click on the yellow arrow and select the first file we want to send back to the board which would be Unit Summary.
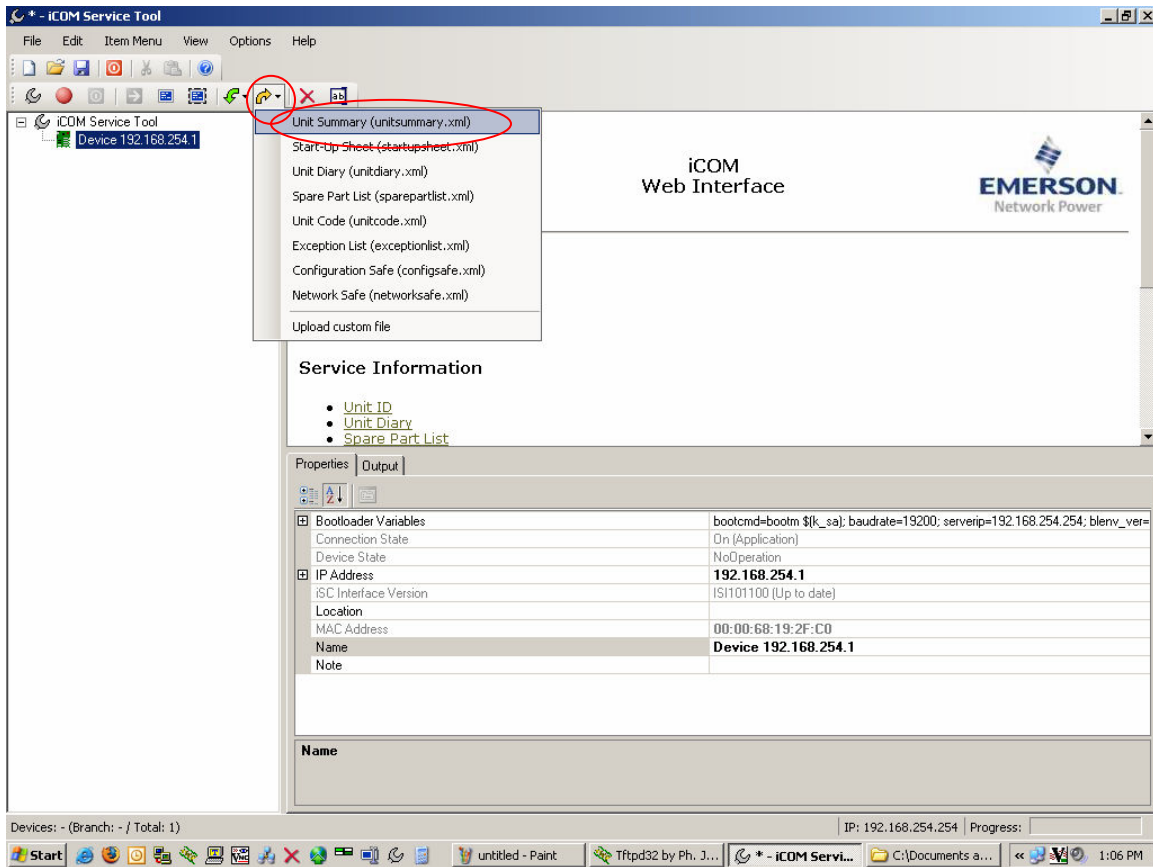
23) Note that while the file is being sent back to the board the icon for the board turns yellow and the green and yellow arrow buttons are inactive.
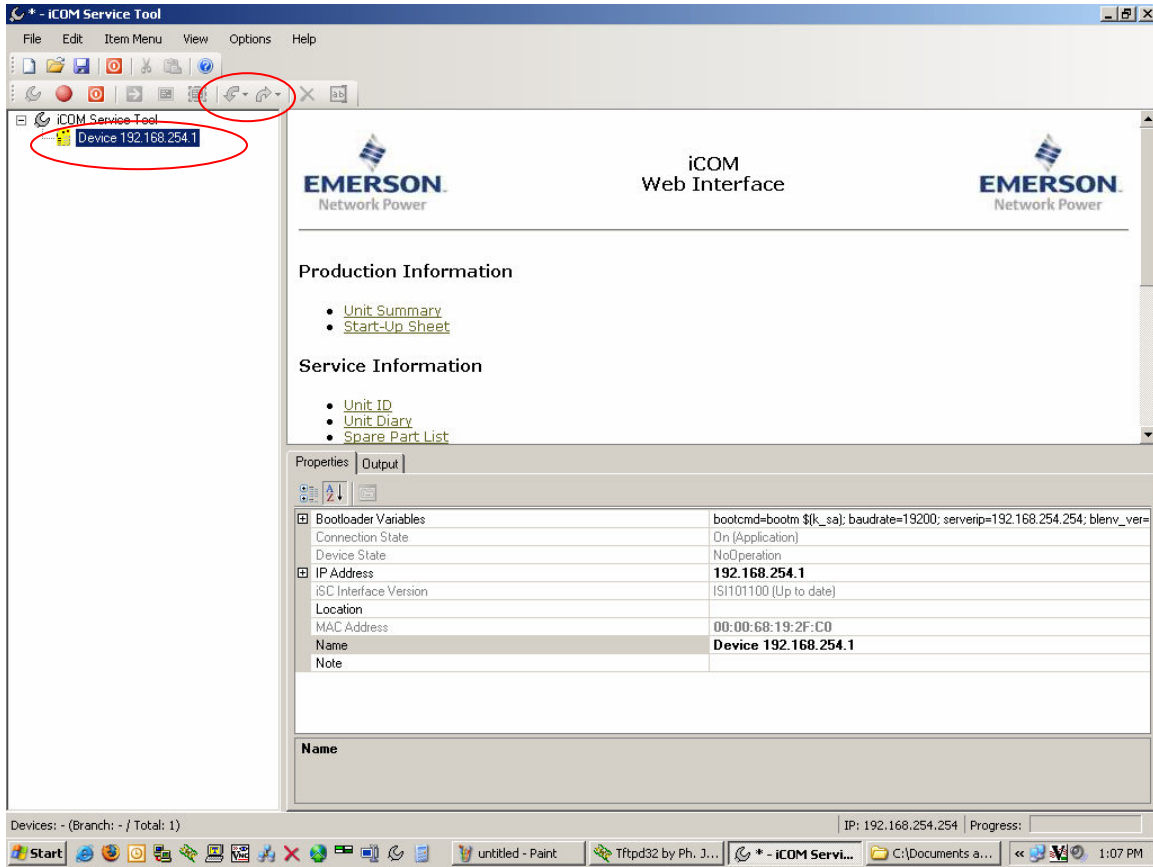
24) After the file is done being transferred, the icon for the board will turn green again and the green and yellow arrows will become active. At this time find TFTP in the taskbar and click on it to bring it forward. Look at the log to make sure the file was sent successfully.
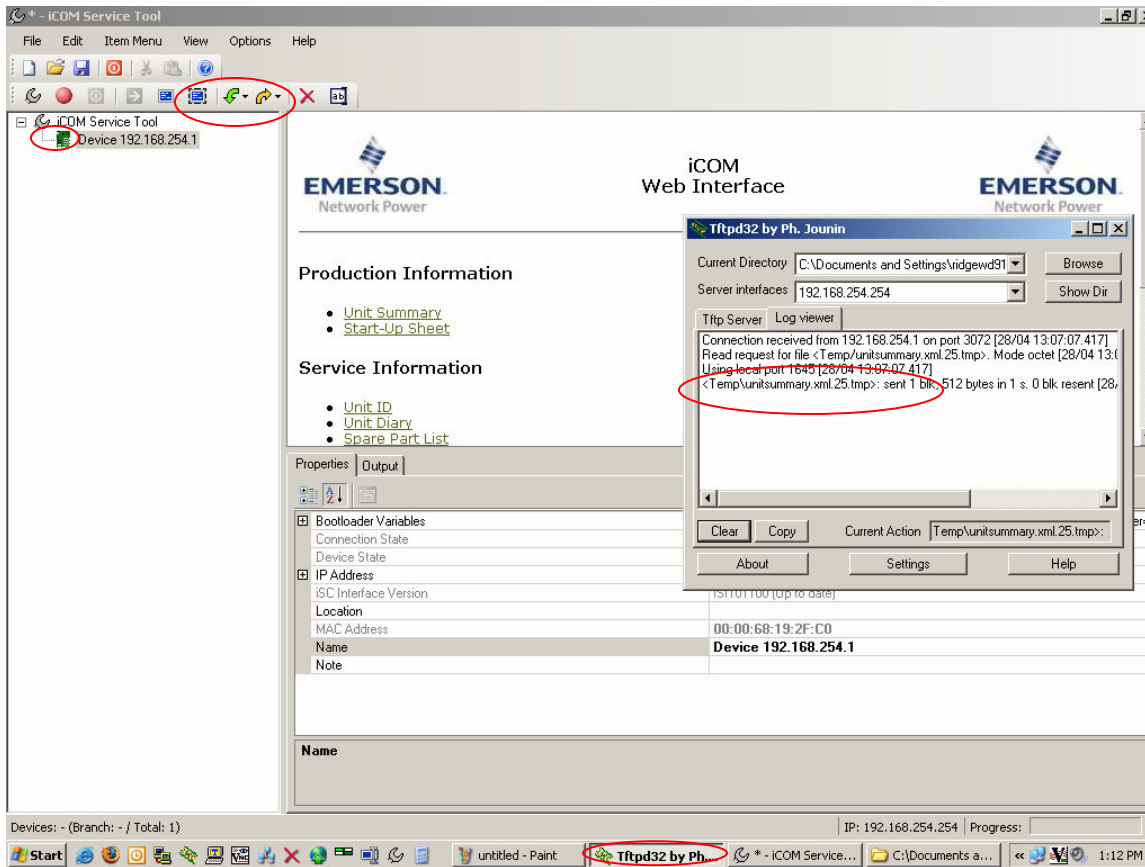

25) Repeat this step for the following files:
Unit Diary
Spare Part List
Unit Code
Configuration Safe
Network Safe

26) Next step is to update the software on your large display. If your unit has the small display option proceed to step 48.

27) Connect the large display to your iST PC with a cross over cable and select the magnifying glass from the iST toolbar. Click Ok to scan the IP range shown for iCOM devices.
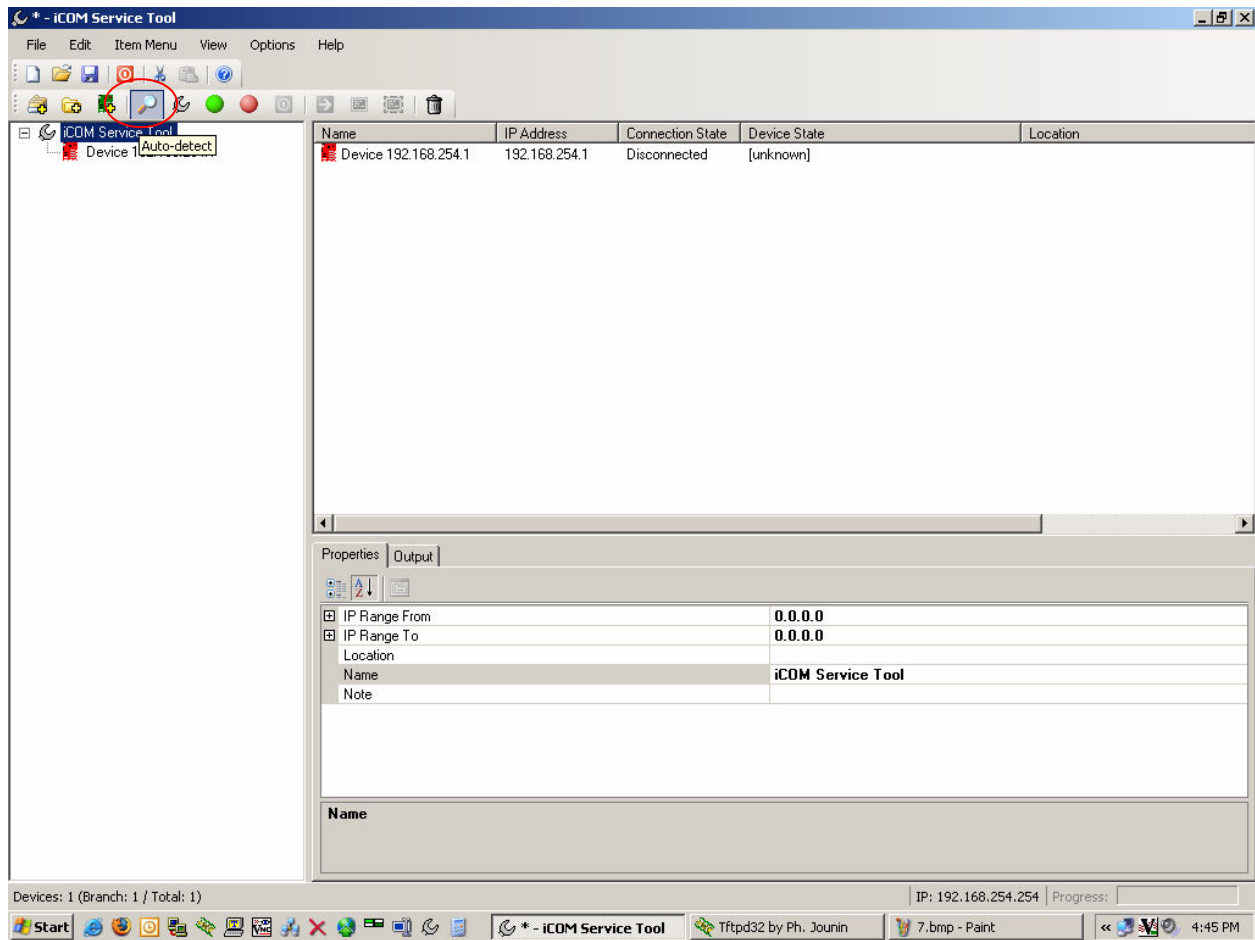
28) The display will appear in the left pane under the disconnected board.
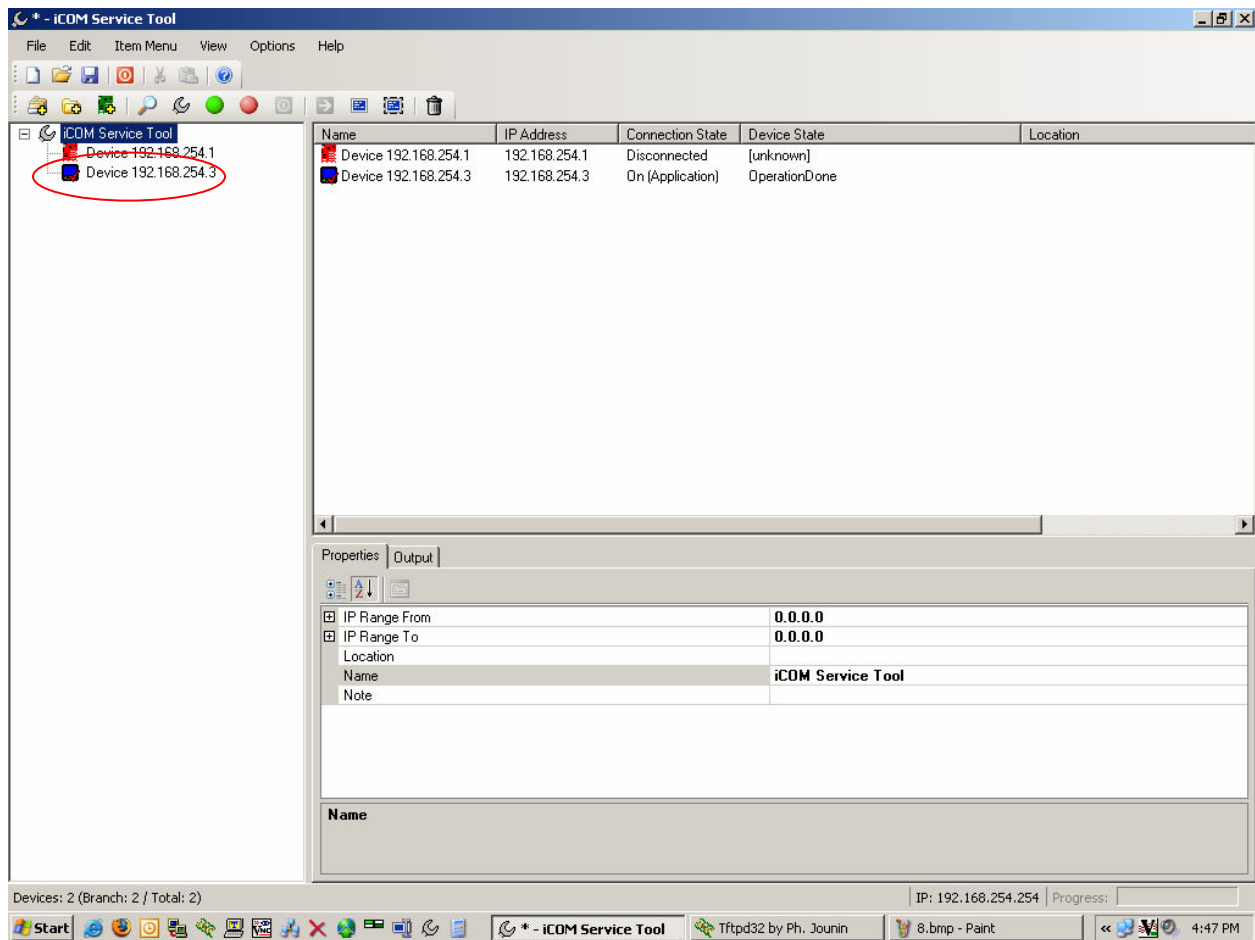
29) Click once on the display in the left pane and then find and click the XML file exchange link in the right.

30) Enter your PC's IP address in the box and click on the XML file links in the left column to download them to your PC. Get all three files and verify they were received properly by looking at TFTP server's log window.

31) Now click on the wrench button in iST's toolbar and select the bootloader and application files you want to use to update the display and click "Next>".
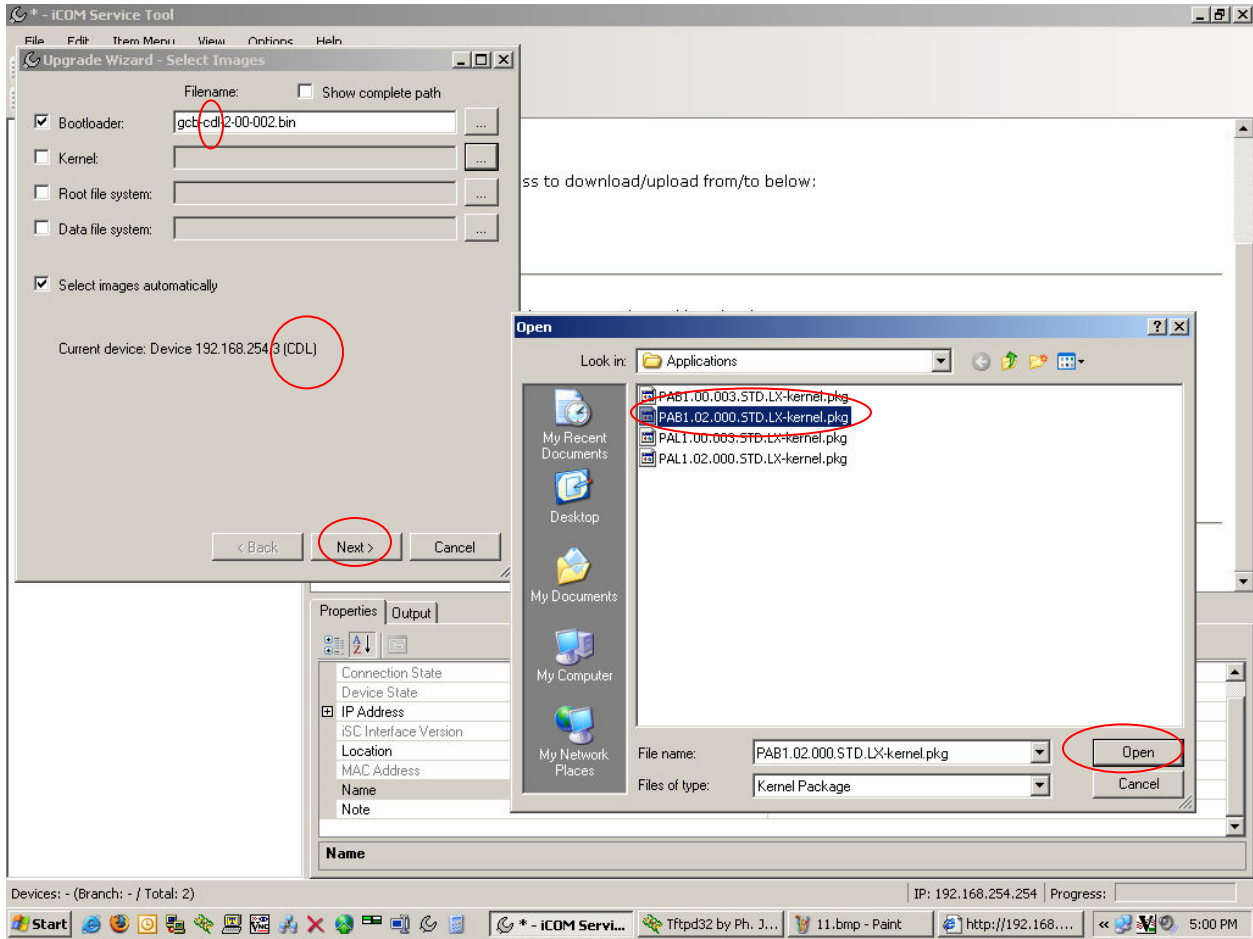
32) Verify the software you are going to use by reading the version names again and click "Finish" to start the update. Remember that CDL denotes software that is intended for the display and GCL is for the board when talking about bootloaders. When talking about application files PAL is for the board and PAB is for the display.
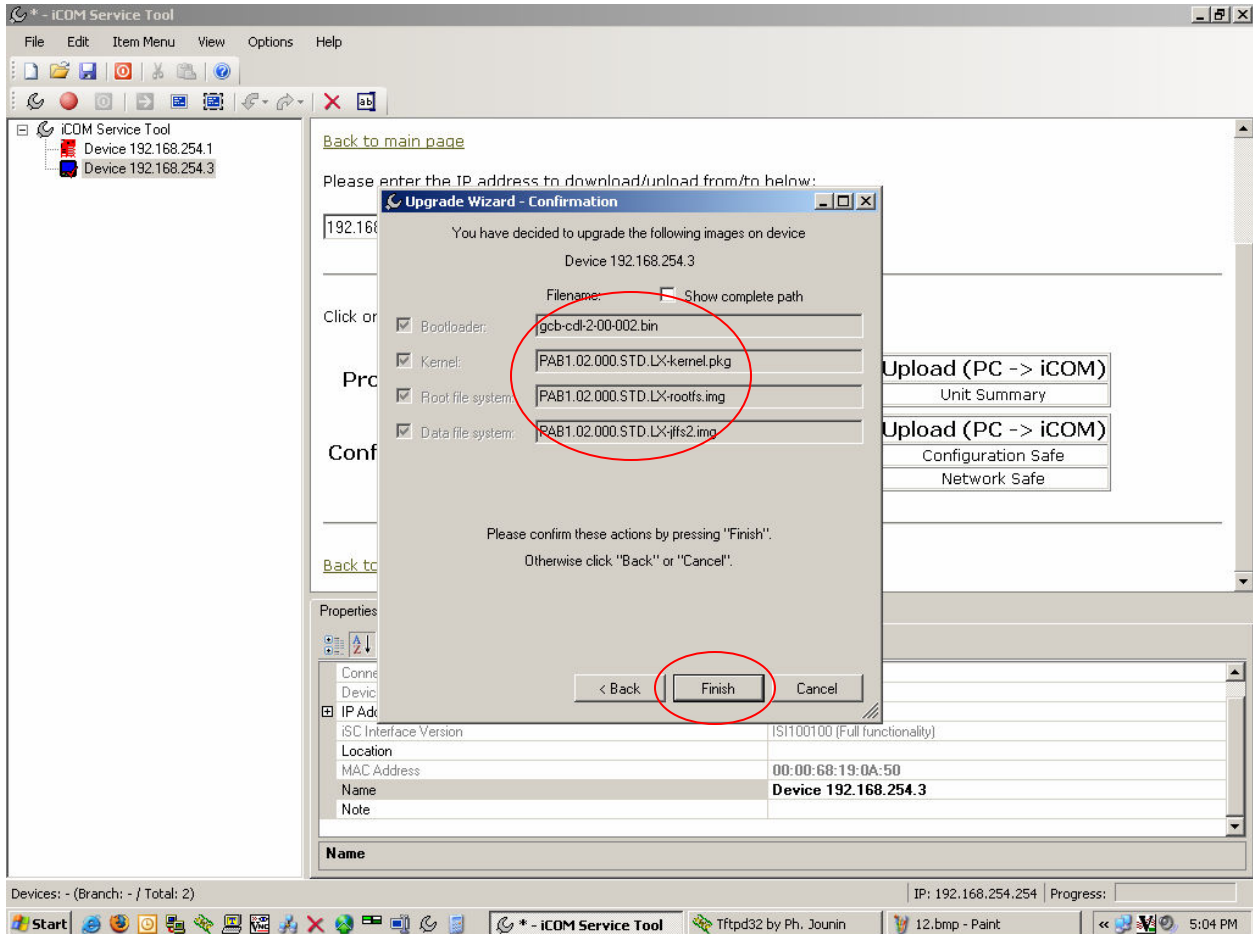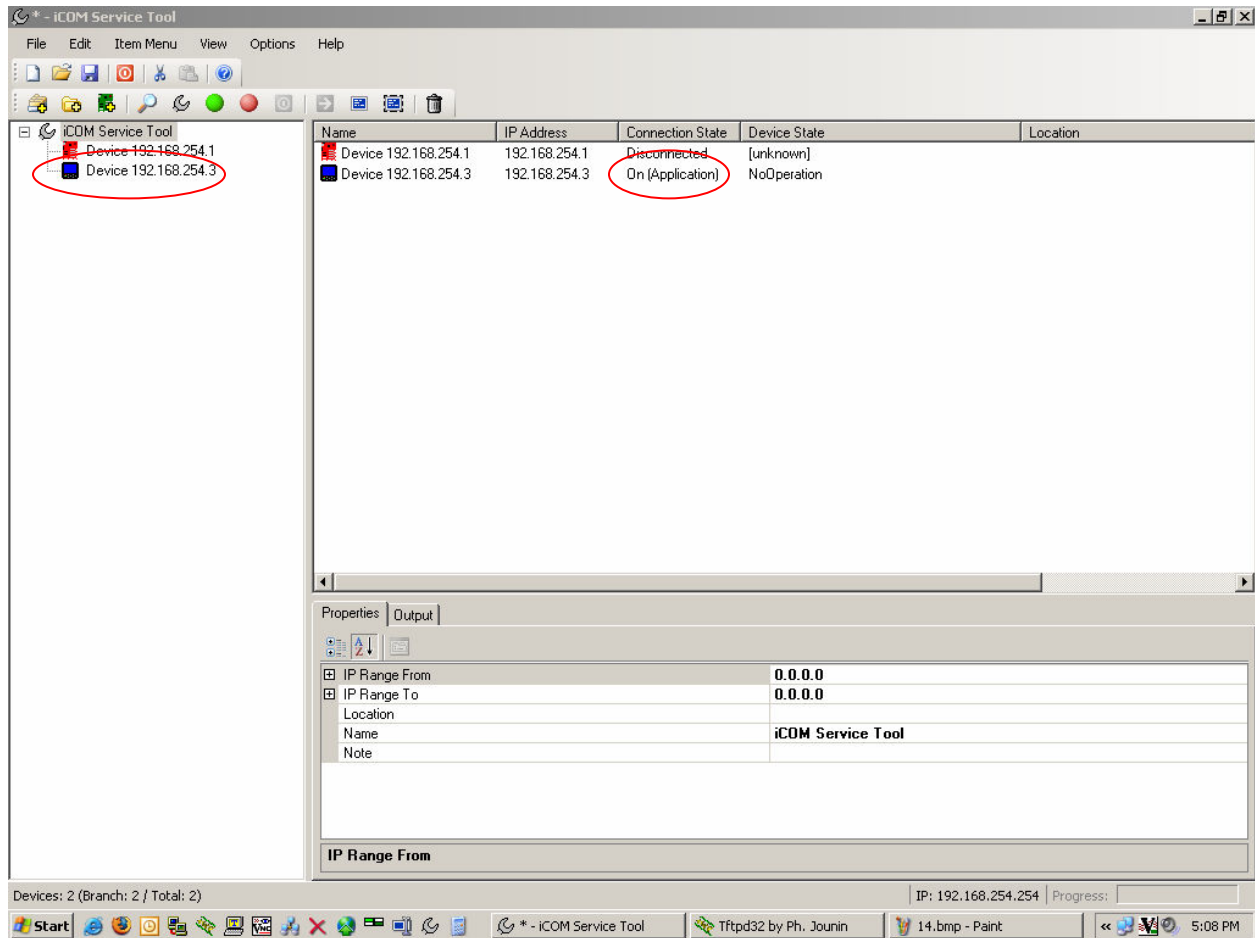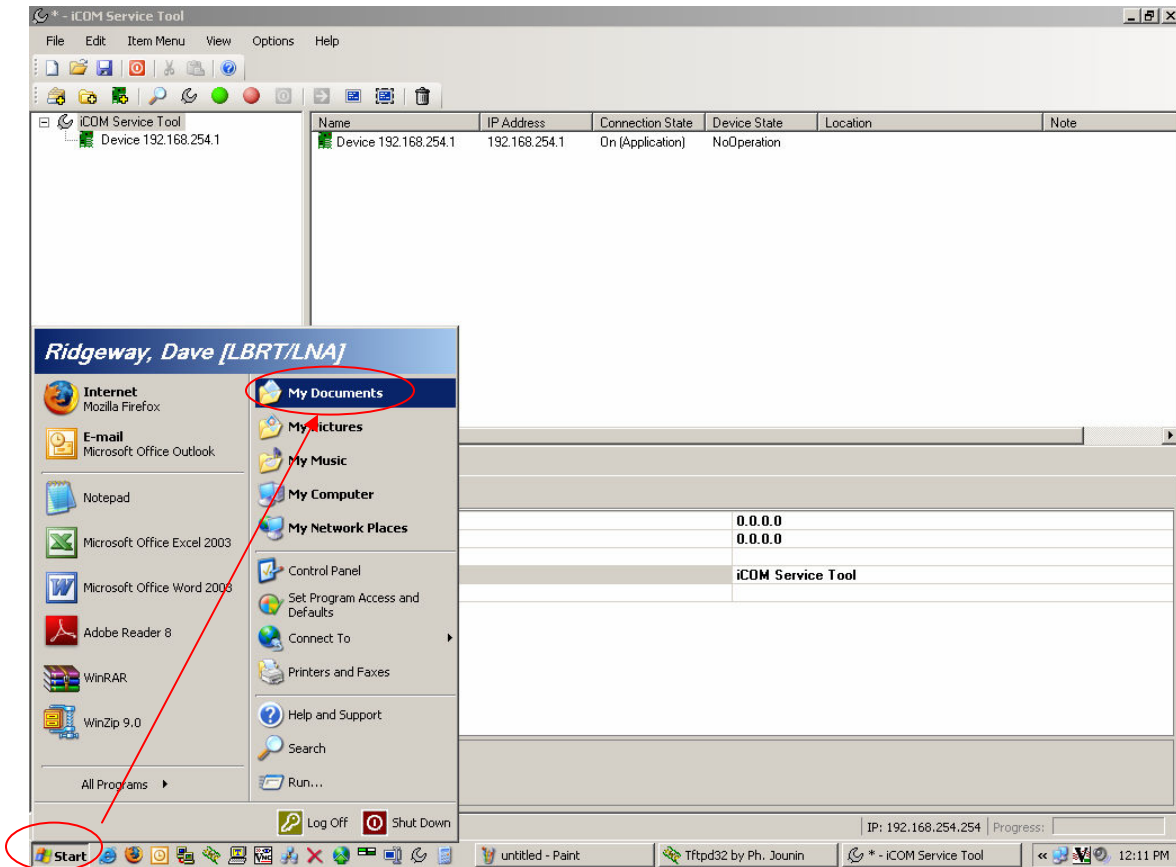
33) Click the top of the tree once in the left panel and then refer to Device State in the upper right panel to see the progress of the update.
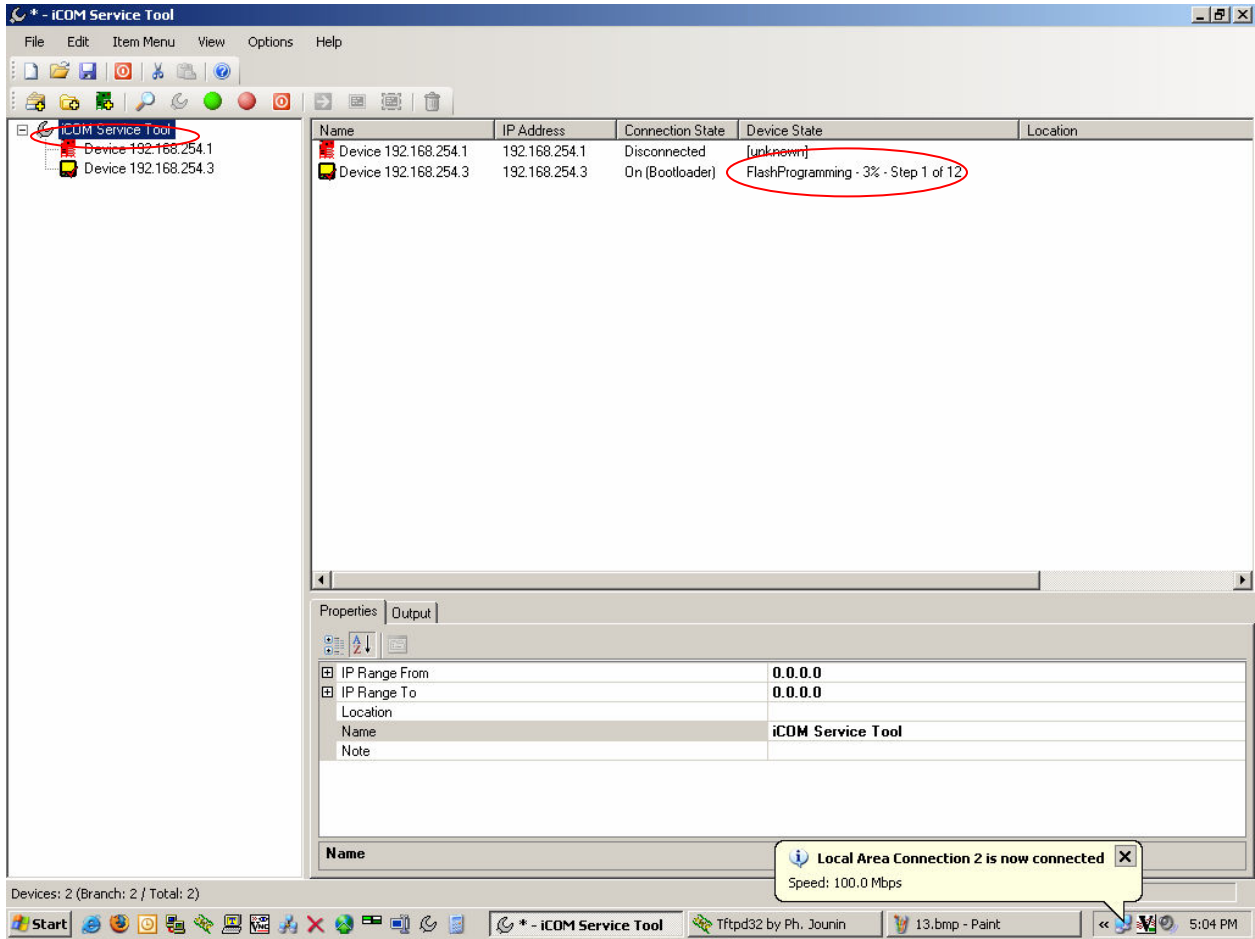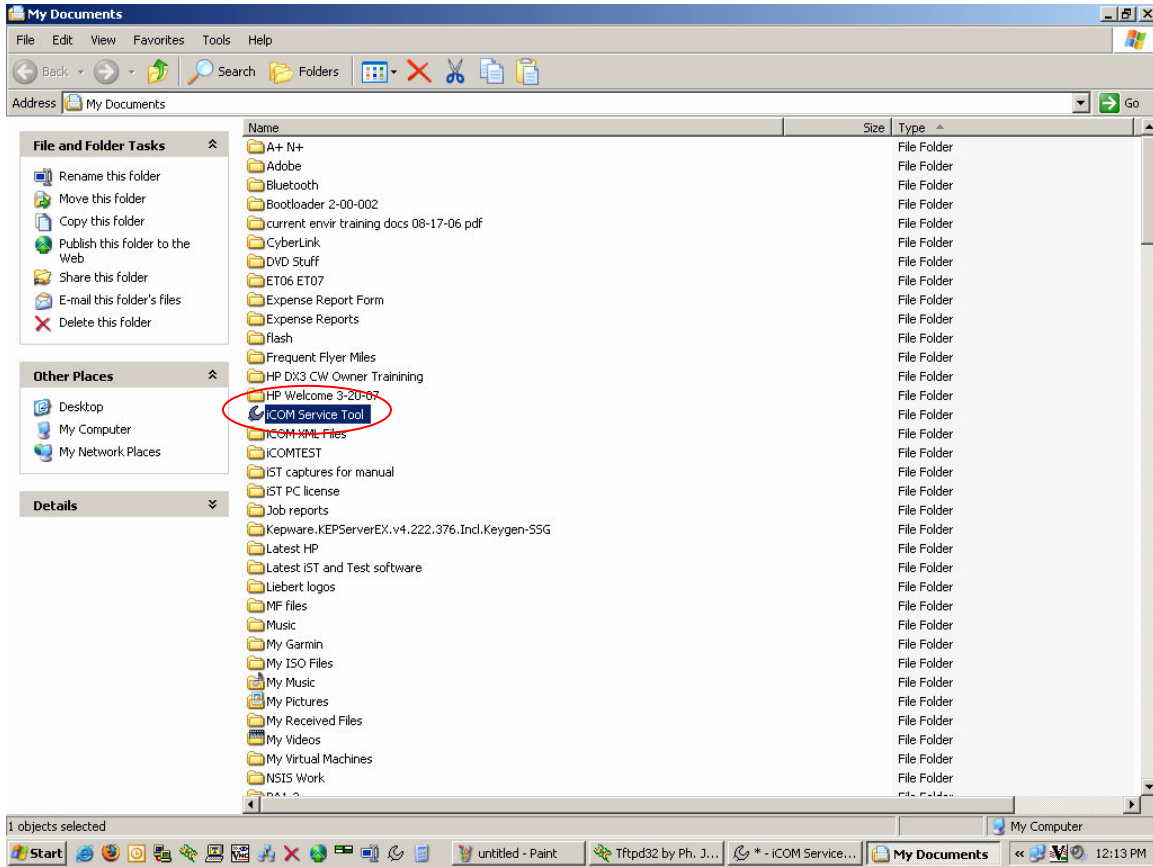
34) The update is complete when the Connection State reads On (Application) and the icon of the display in the left panel is blue again.
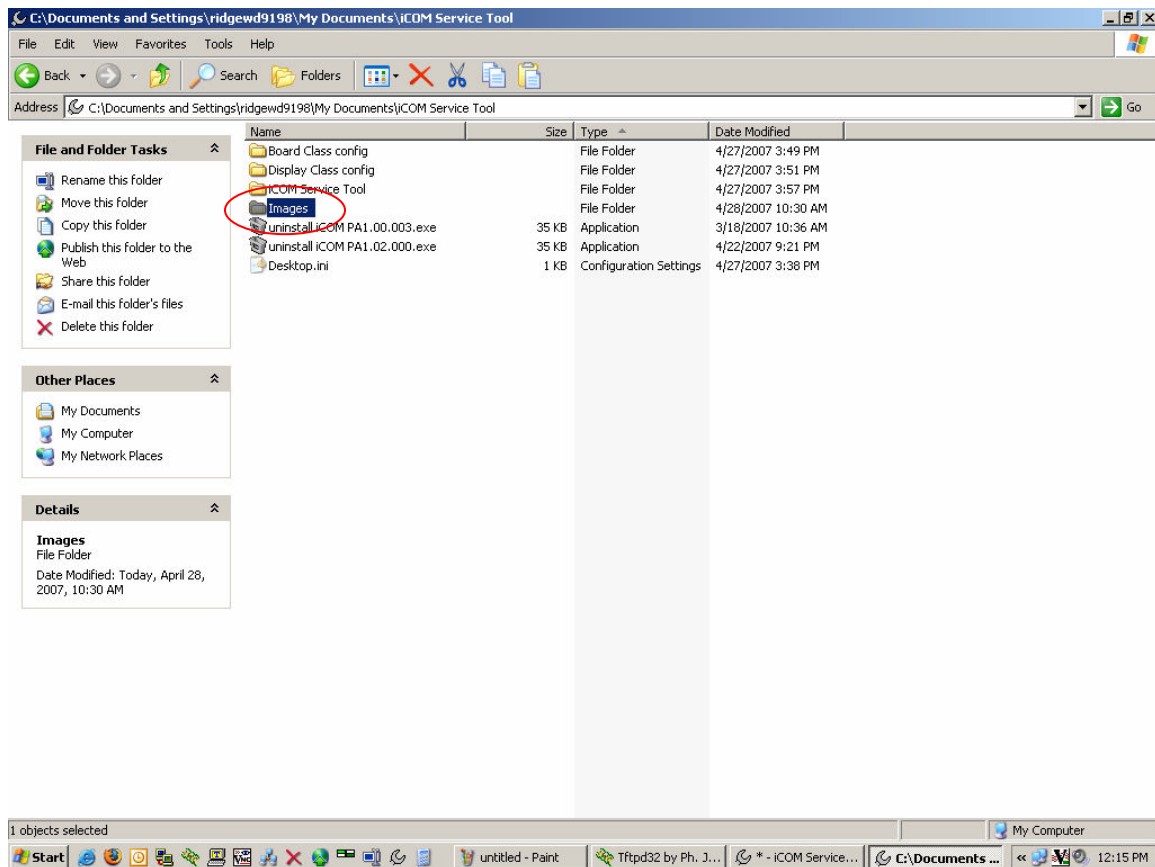
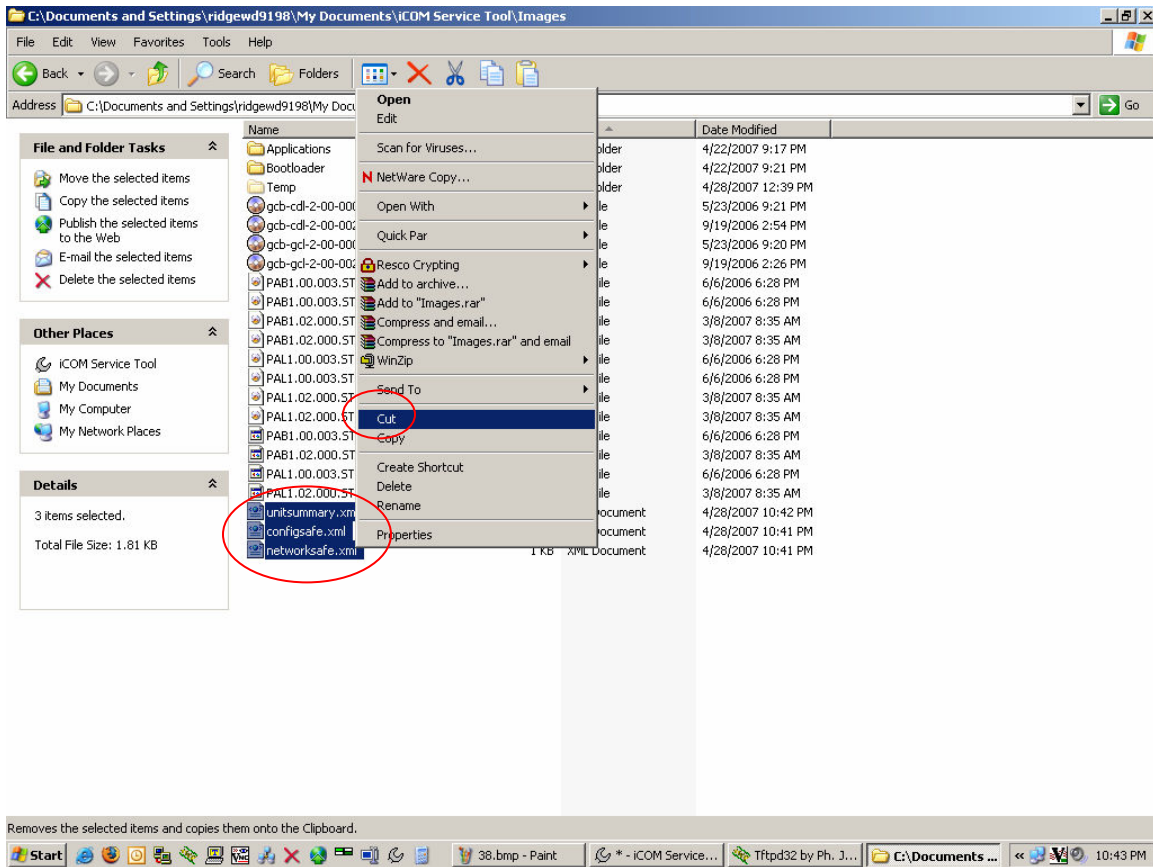35) The next step is to click Start and then the My Documents shortcut.

36) Once in My Documents find the folder called iCOM Service Tool and double click it to go inside of it.
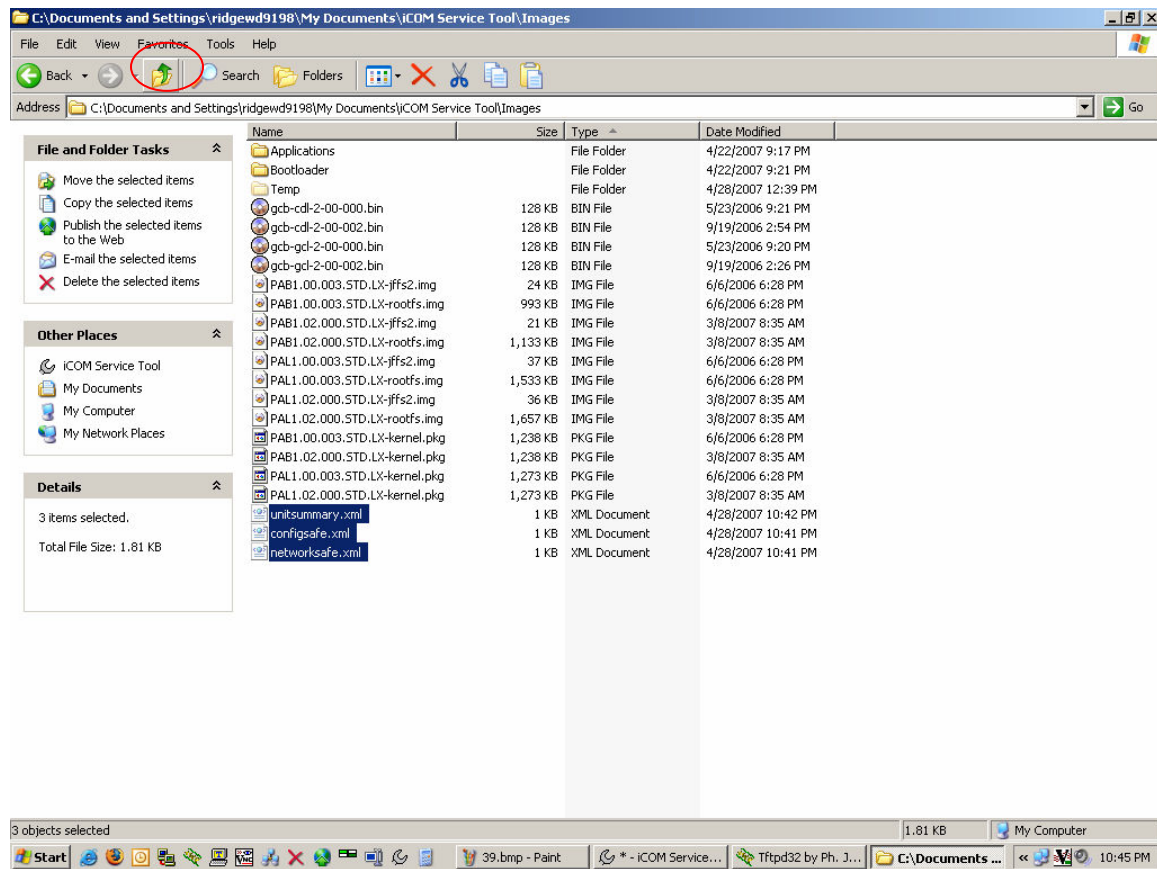
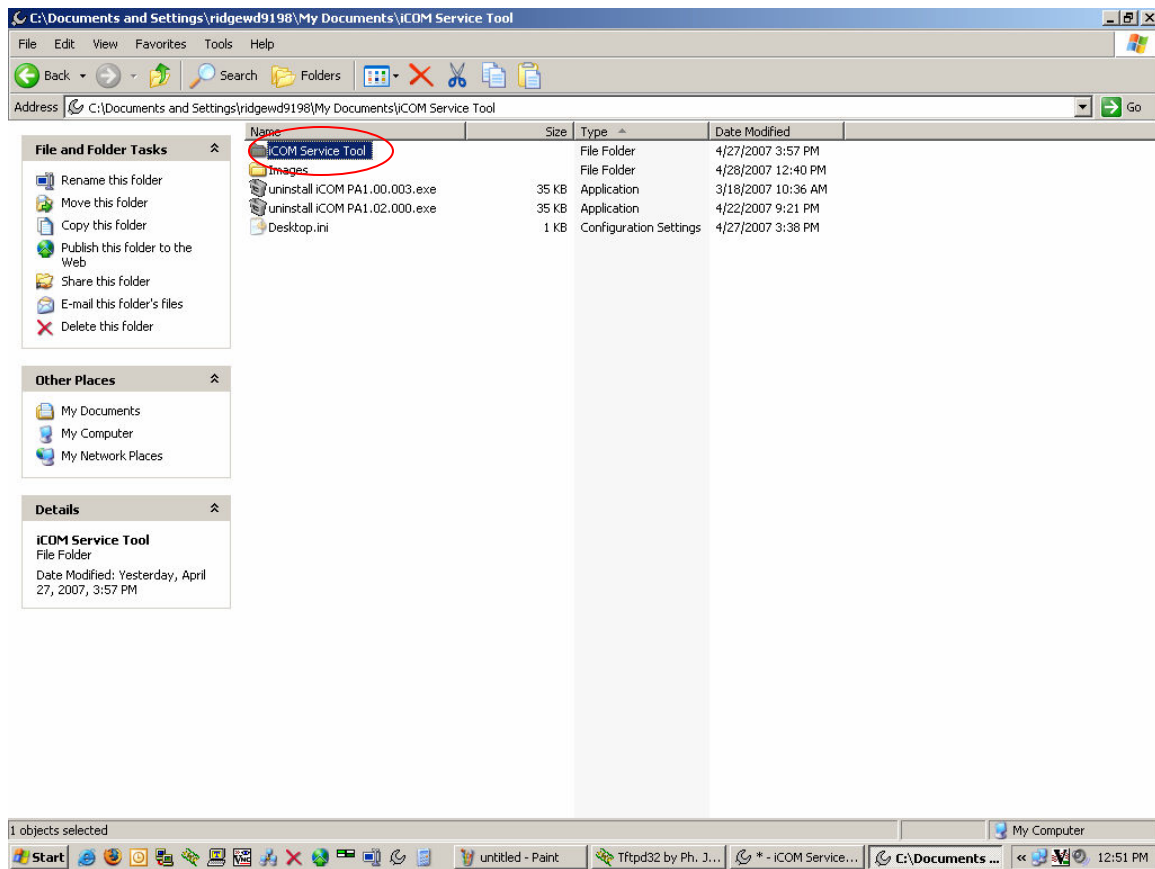37) Now find the folder Images and double click on it to go inside of it.

38) Select the XML type files you downloaded in the first steps of this guide and right click on them and choose Cut.

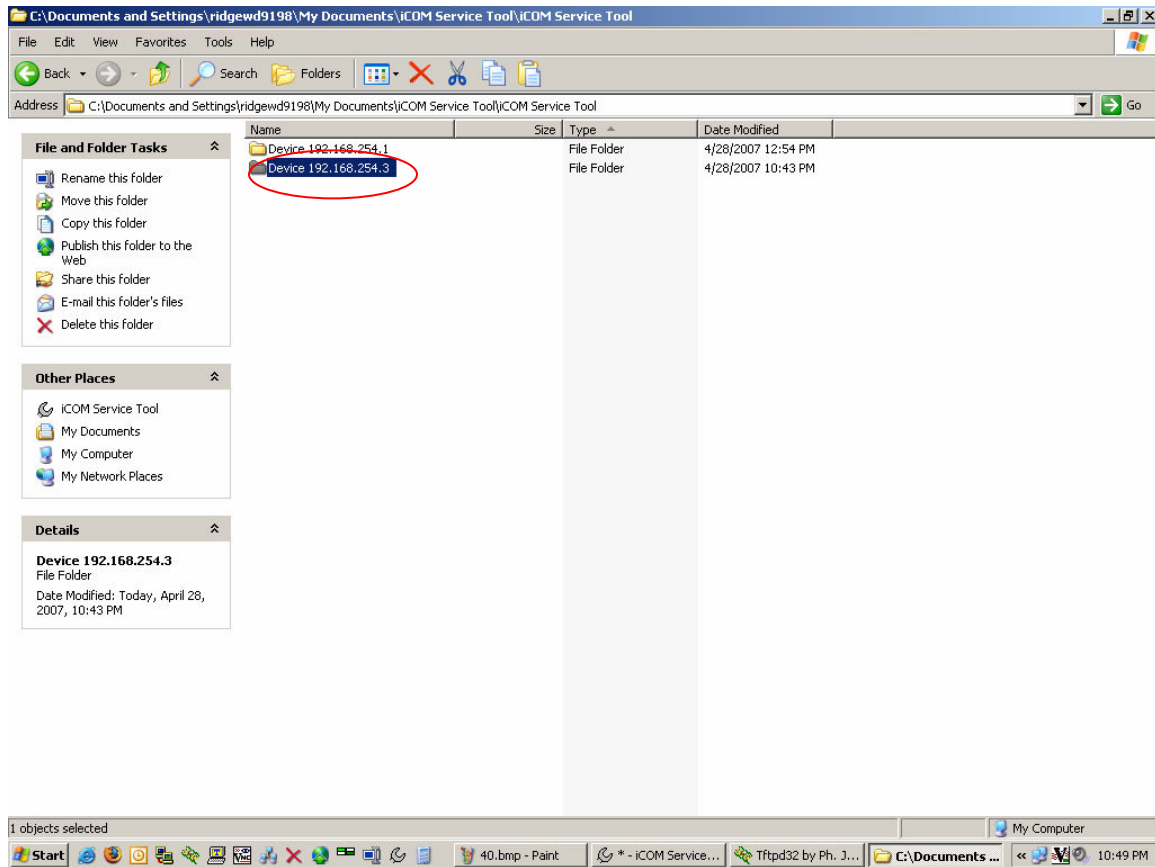39) Next click the up directory button from the toolbar.

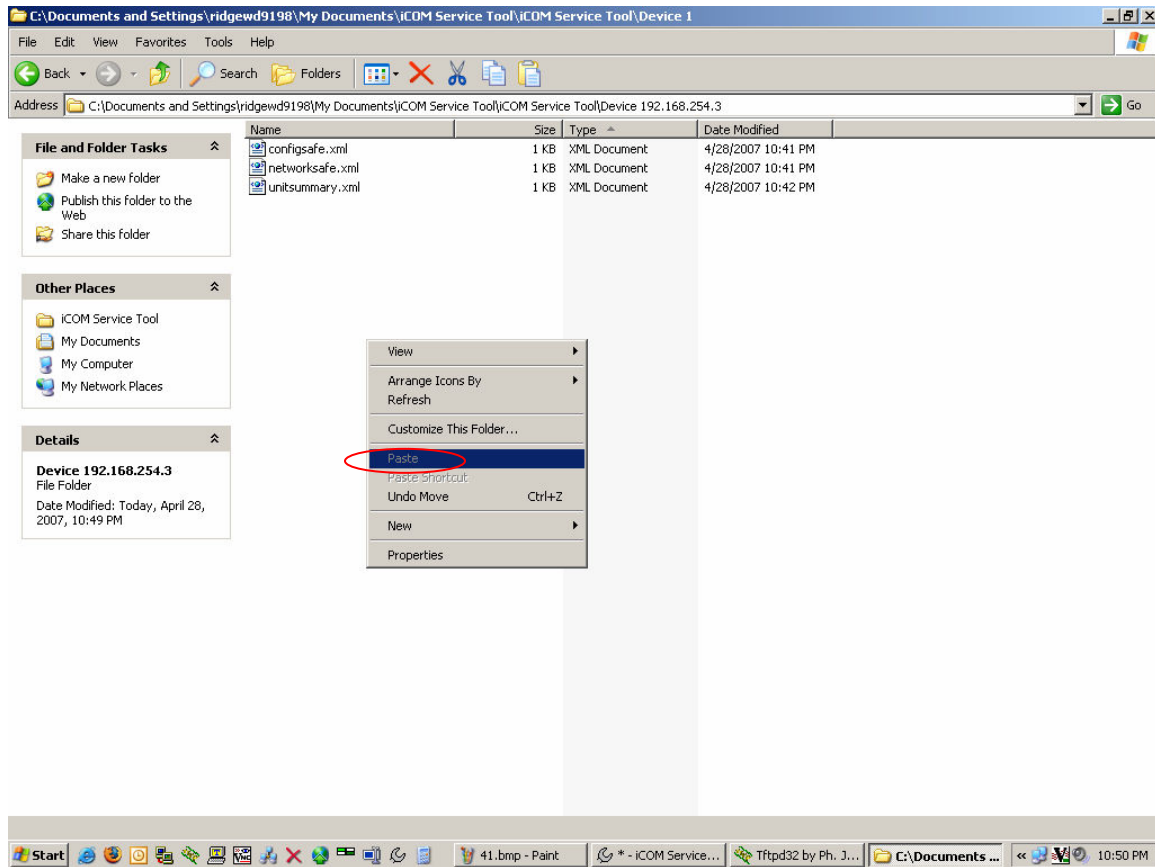40) Find the folder iCOM Service Tool and double click it to go into it.

41) Double click on the folder that corresponds to your devices IP address and go into it.

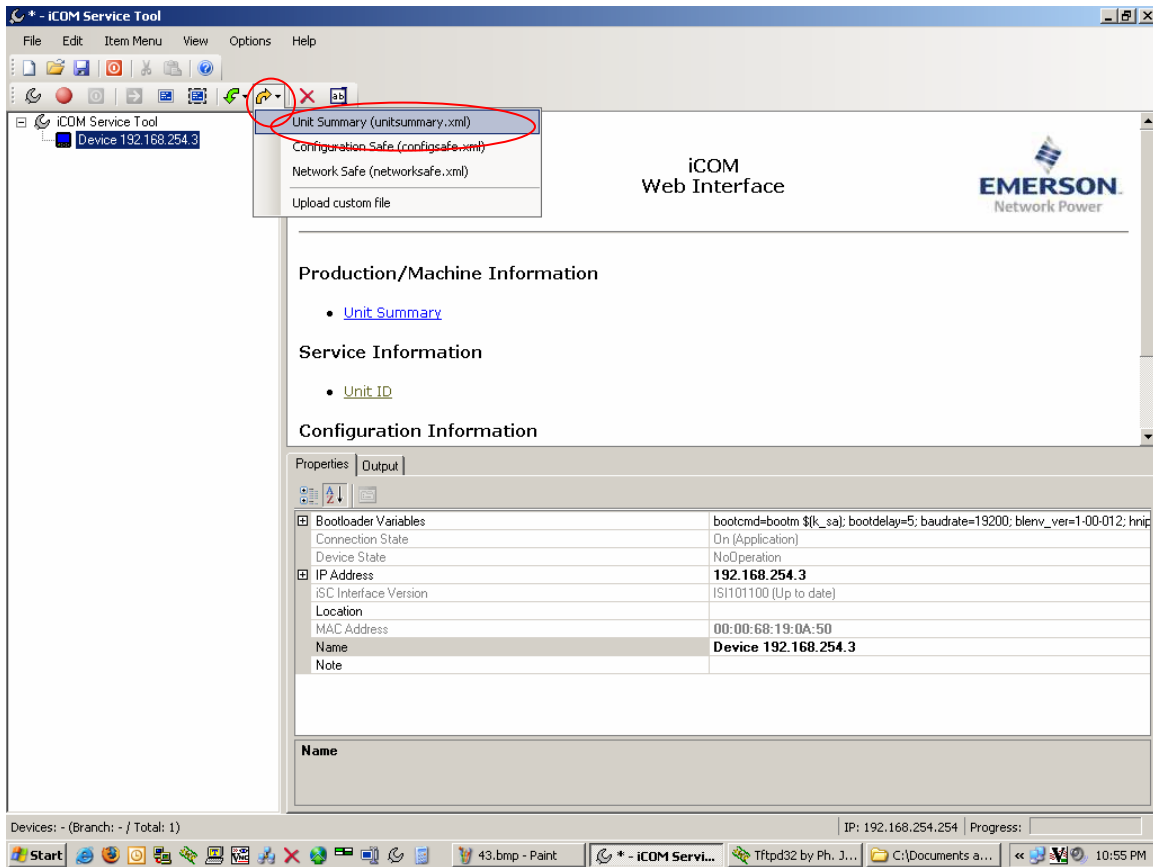42) Paste the XML files here and close this window.

43) Now go back to the iST and select the display in the left pane by clicking on it once.

44) Now click on the yellow arrow button in the iST toolbar and click Unit Summary.

45) Find TFTP server in the taskbar and click on it to bring it to the front and check the log to see that all went well with the file transfer. Repeat these steps for the two remaining XML files.
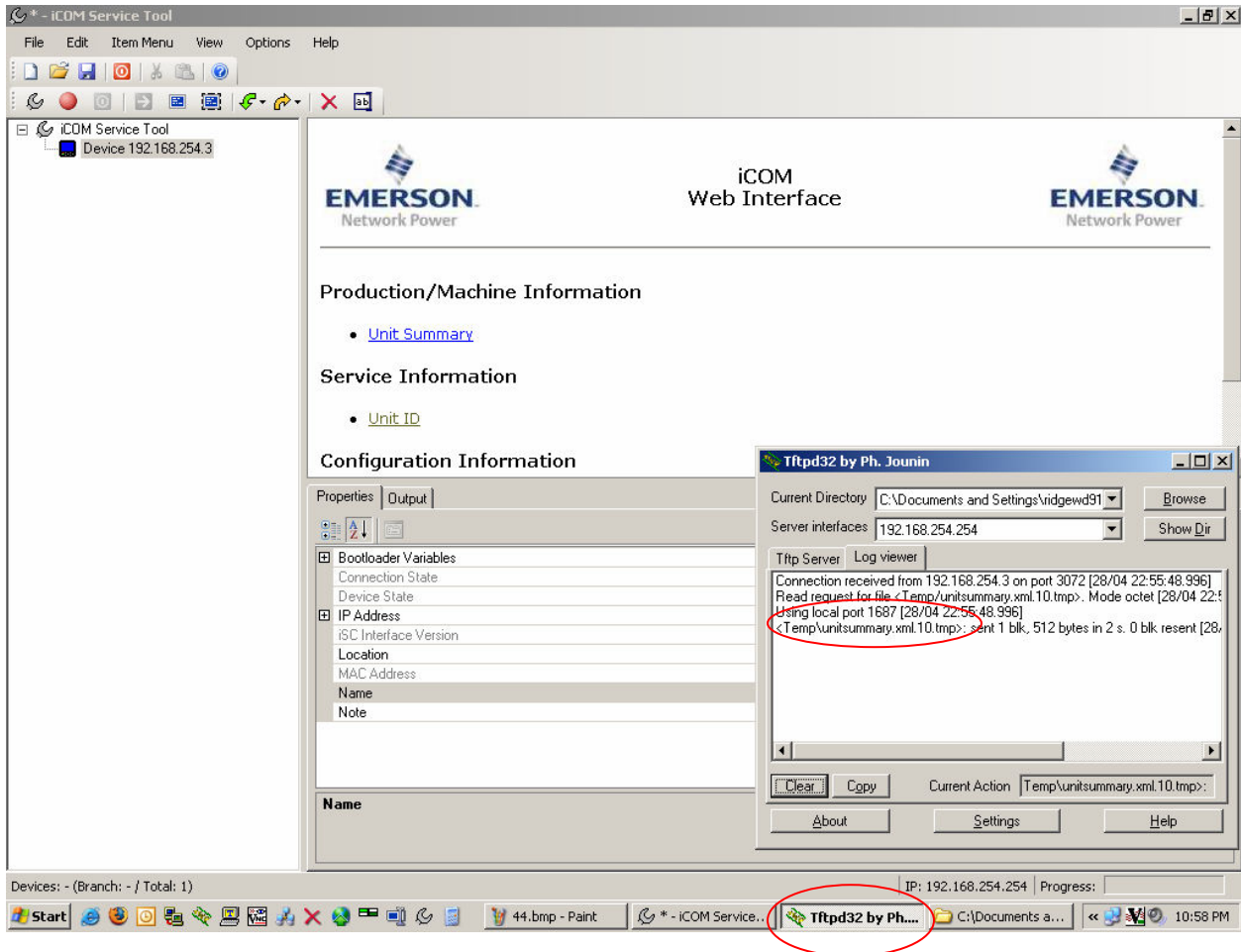
46) Connect the large display to the large board with the cross over cable.

47) It is now time to save the XML files sent to the board and large display. Go to the Advanced menu and then into factory settings and log in at level 3 (221). Go to line A008 and select Load + Execute and then Save + Execute to be sure.

48) Go to the Service Menu and into System/Network Setup. Once there use the right arrow key to go to the network settings for the board. This can be verified by looking for a PAL on line S833. Go to line S831 Configuration Safe and do a Load **first**, and then Save.

49) Go to line S832 Network Safe and do a Load **first,** and then Save.

50) Last go to line S843 page 2 of 2 Bootloader Variable and do a Save + Reboot. While the reboot is happening use the left arrow key to go to the network settings for the large display.

51) Go up to page 1 of 2 and verify you are in the right place by finding a PAB on line S811.

52) Go to line S809 and do a Load **first**, and then Save.

53) Go to line S810 and do a Load **first**, and then Save.

54) Last, go to line S821 on page 2 of 2 and do a Save + Reboot. The display will reboot and the software update is now complete. All XML info has now been saved into the board and display. Once the board and display are rebooted (T/H readings and correct date and time), remove power from the board for about 10 seconds. Reapply power, the unit is ready to unit.

55) Once the board and display are rebooted (T/H readings and correct date and time), remove power from the board for about 10 seconds. Reapply power, the unit is ready to unit.