Emulation Tech Note 10
Remote Testing on XDS560V2 STM
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Introduction

This technical note is a guide to connecting XDS560v2 STM JTAG emulator remotely via USB. It provides a step by step procedure of setting up both the computers to accomplish this encumber.

Procedure

1. All the computers that are used to run remotely must be connected on to a single network.
2. In this technical note, we will label the computer to which the xds560v2 stm emulator is connected as the server and the computer which is used to test the emulator as the client.
3. Install spectrum digital emulation drivers on the server computer and client computer if it is not installed. If CCS 4.2 or later is already installed, spectrum digital emulation drivers are automatically installed on your system. If not, spectrum digital emulation drivers can be installed in two ways:
   a. If you have a CCS 4.2 or later installation disk, you can find spectrum digital emulation drivers located at CD_DIR\install_images\emulation\sd_emupack_setup_4.2.1.1.exe or later.
   b. Download the latest emulation drivers from http://support.spectrumdigital.com/ccs40/
4. On the server computer, share the uscif folder to all the computers on the network. The uscif directory will be under INSTALL_DIR\ccsv4\common\uscif. Figure 1 demonstrates how to share the uscif folder on the server computer.
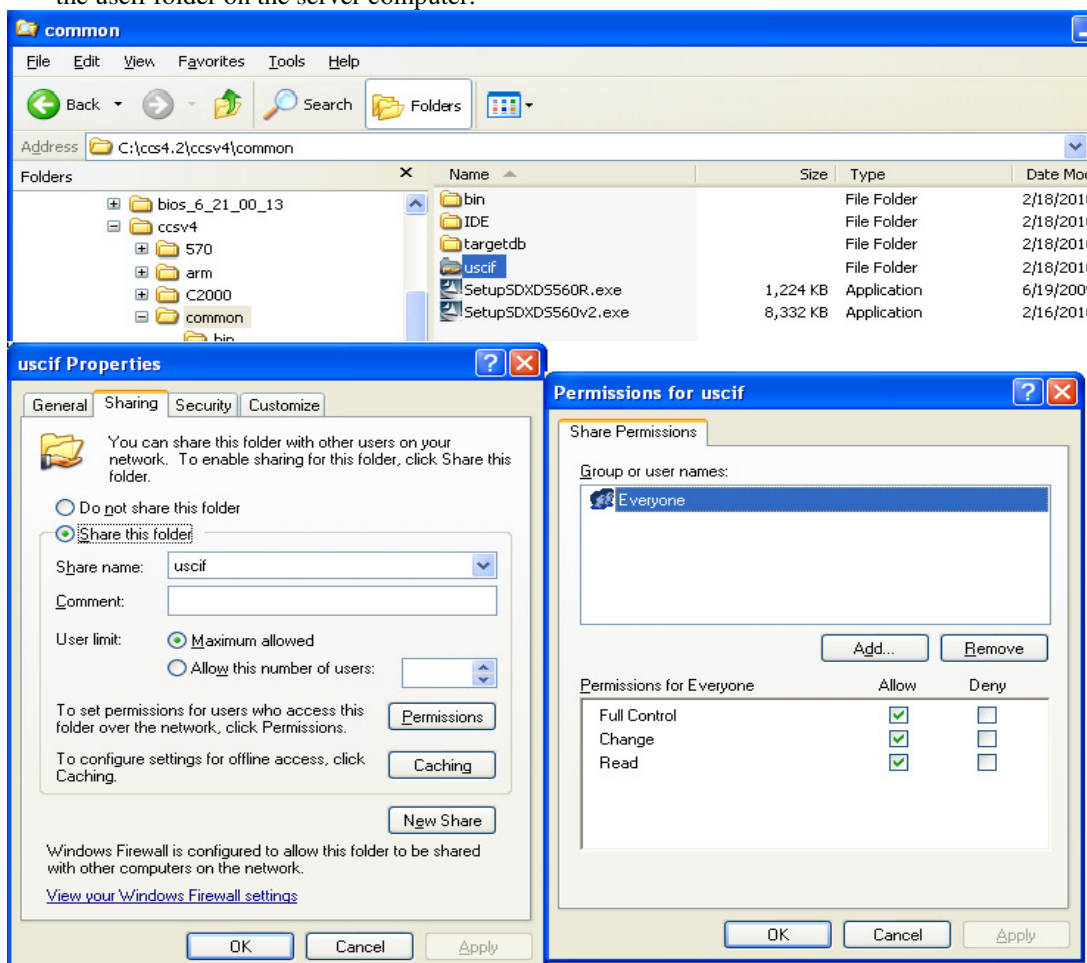

FIGURE 1: Sharing uscif folder on Server Computer.

5. Edit sd560v2opts.cfg file to modify the sd560v2u_server shutdown timeout.

a. Launch Sd560v2Config utility located under INSTALL_DIR\ccsv4\common\uscif folder.
b. Kill server application if already running from USB tab on the Sd560v2Config utility as shown in figure 2 below.
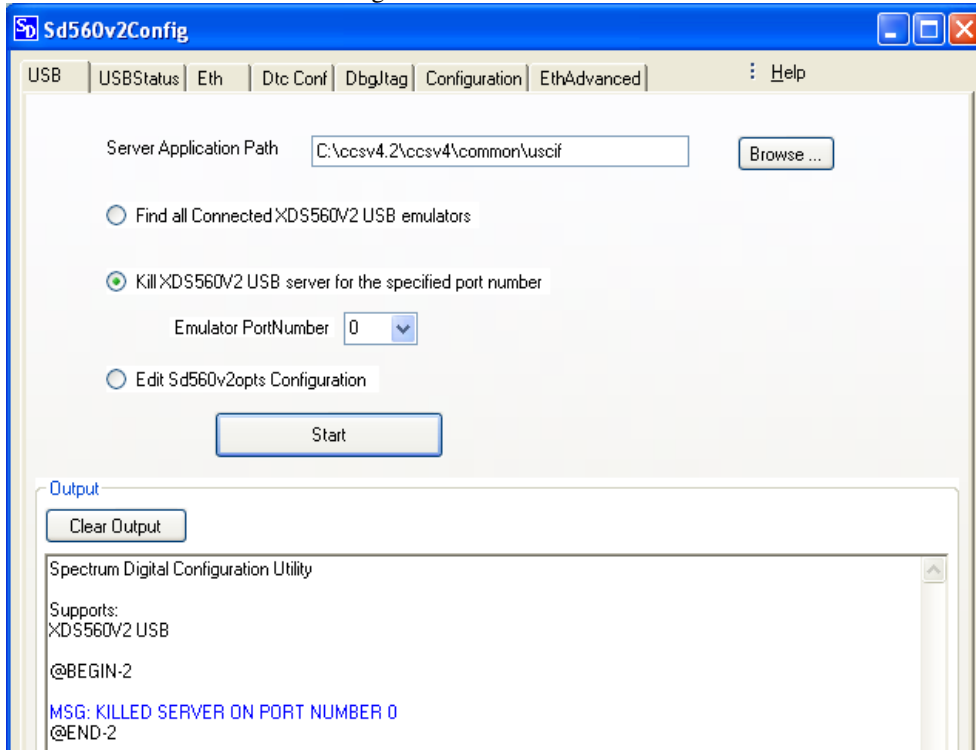

FIGURE 2: Sd560v2Config Utility to kill server.

c. Open sd560v2opts.cfg file from USB tab on the Sd560v2Config utility and comment the line EmuShutDownTimeoutMinutes=15 as shown in figure 3 below.
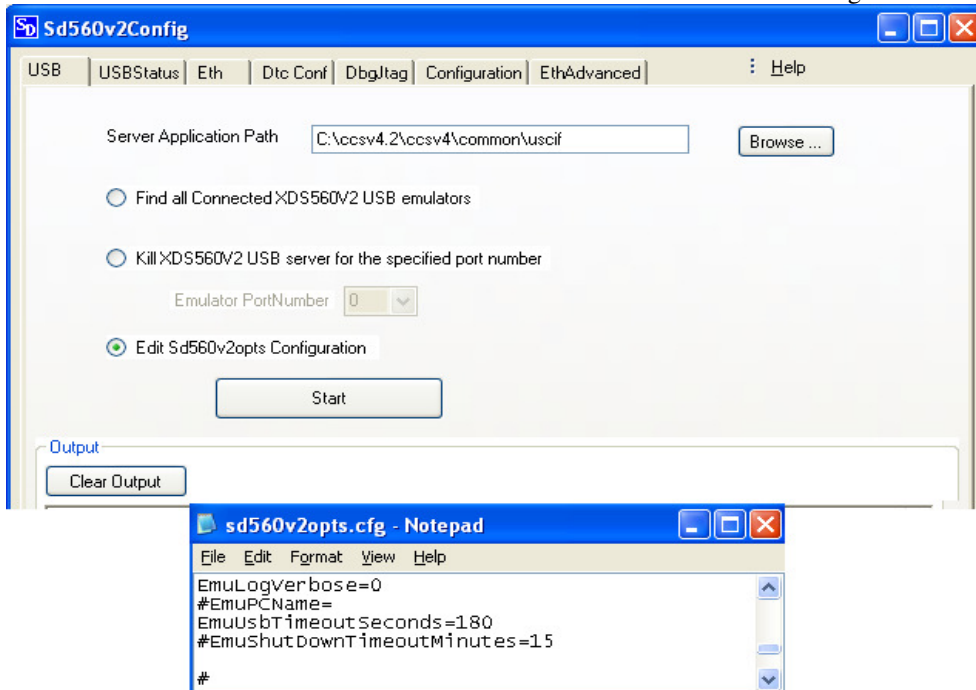

FIGURE 3: Sd560v2Config Utility to edit opts file.

6. Start sd560v2u_server application on the server computer. The sd560v2u_server application can be started from Sd560v2Config utility with the steps as mentioned below:
   a. Launch Sd560v2Config utility located under INSTALL_DIR\ccsv4\common\uscif folder.
   b. Select find all Connected XDS560V2 USB emulators on the USB tab. Click on Start.
   c. A pop up box appears as shown in figure 4 below appears to start the server. Specify the port number the emulator is connected to and start the server.
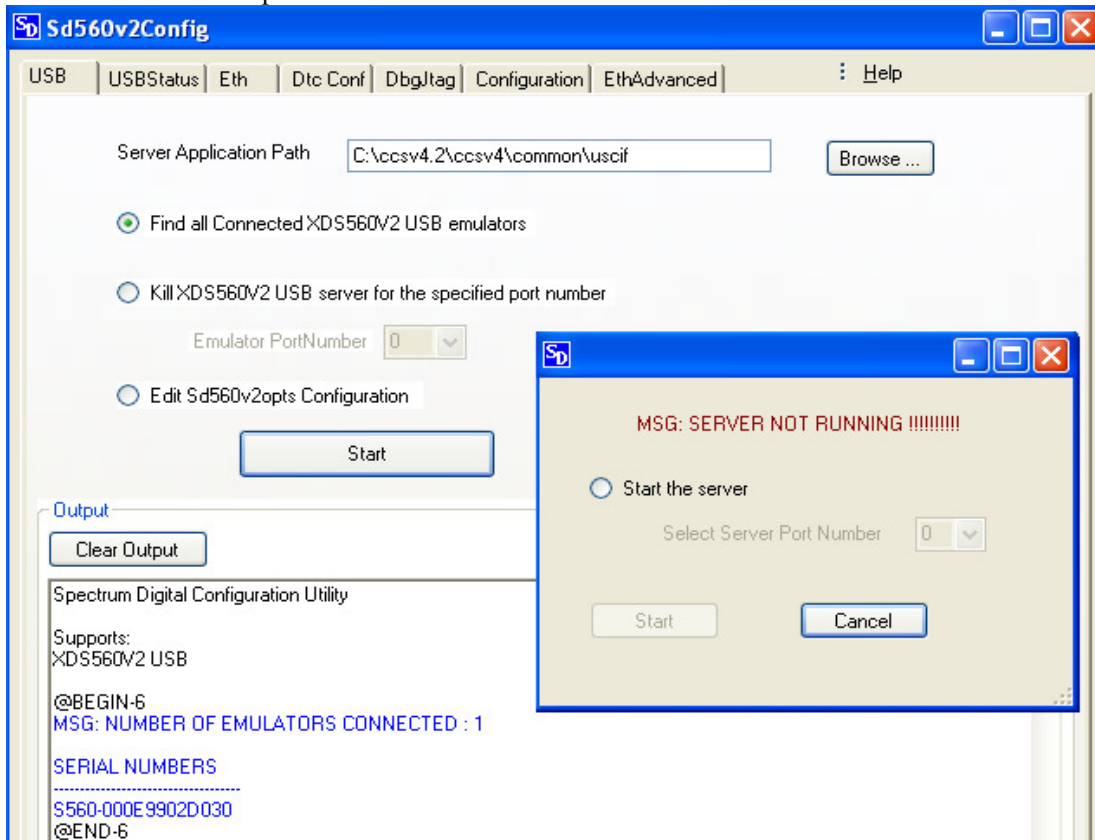

FIGURE 4: Sd560v2Config Utility to start server.

7. Find the server PCs full computer name. On the server computer, click on Start->All Programs->Control Panel->System->Computer Name Tab to find out the server PC's full name as shown in figure 5 below.
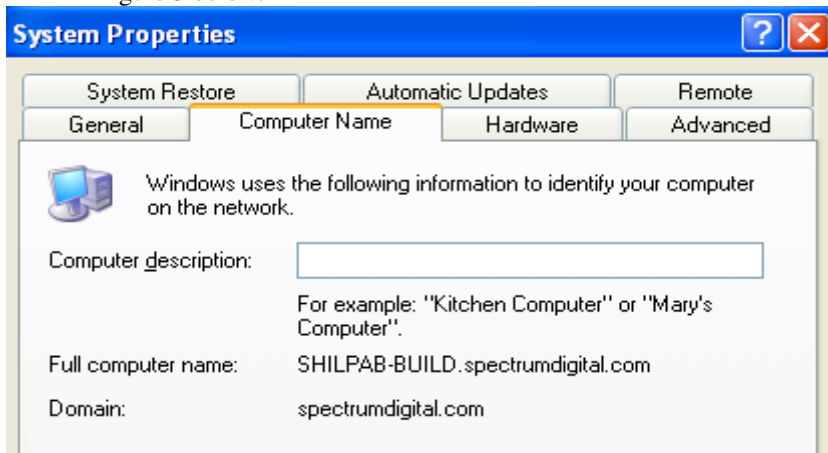

FIGURE 5: Server PC's computer Name.

8. On the client computer, open sd560v2opts.cfg file from USB tab on the Sd560v2Config utility and alter EmuPCName option to include server PC's full computer name as shown in figure 6 below
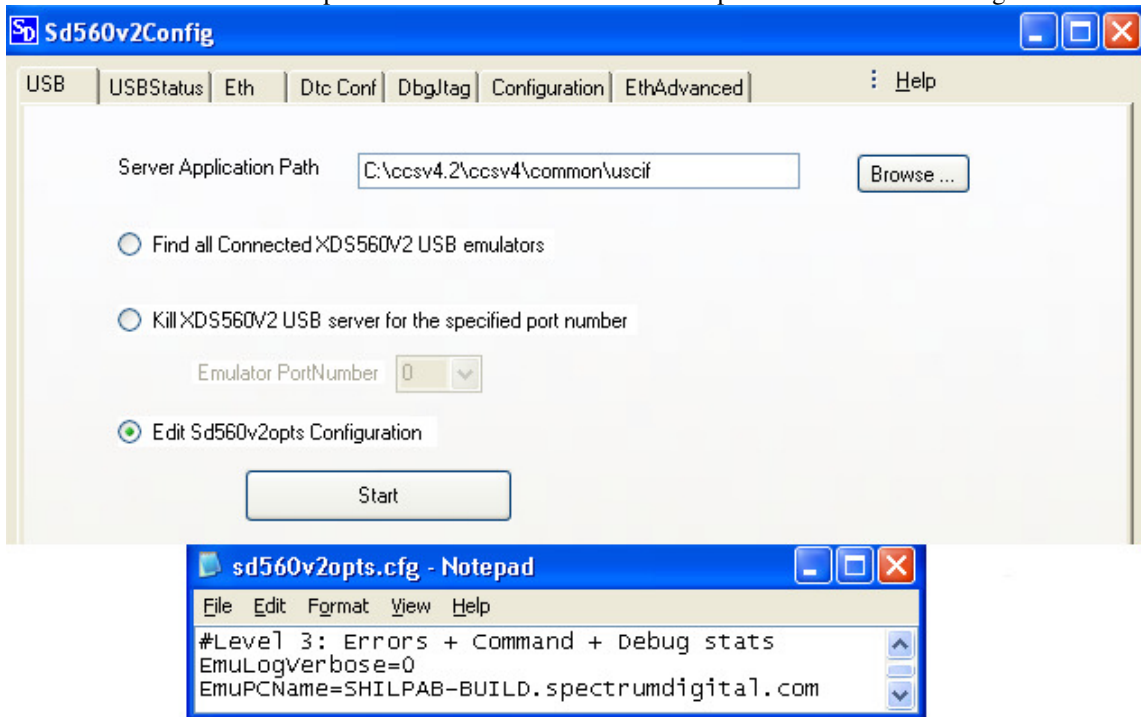

FIGURE 6: Client PC's Sd560v2Config utility to modify PC Name.

9. On the client computer, from the Sd560v2Config utility's USB tab modify the Server Application Path to point to the server computer's uscif directory as shown in figure 7 below.
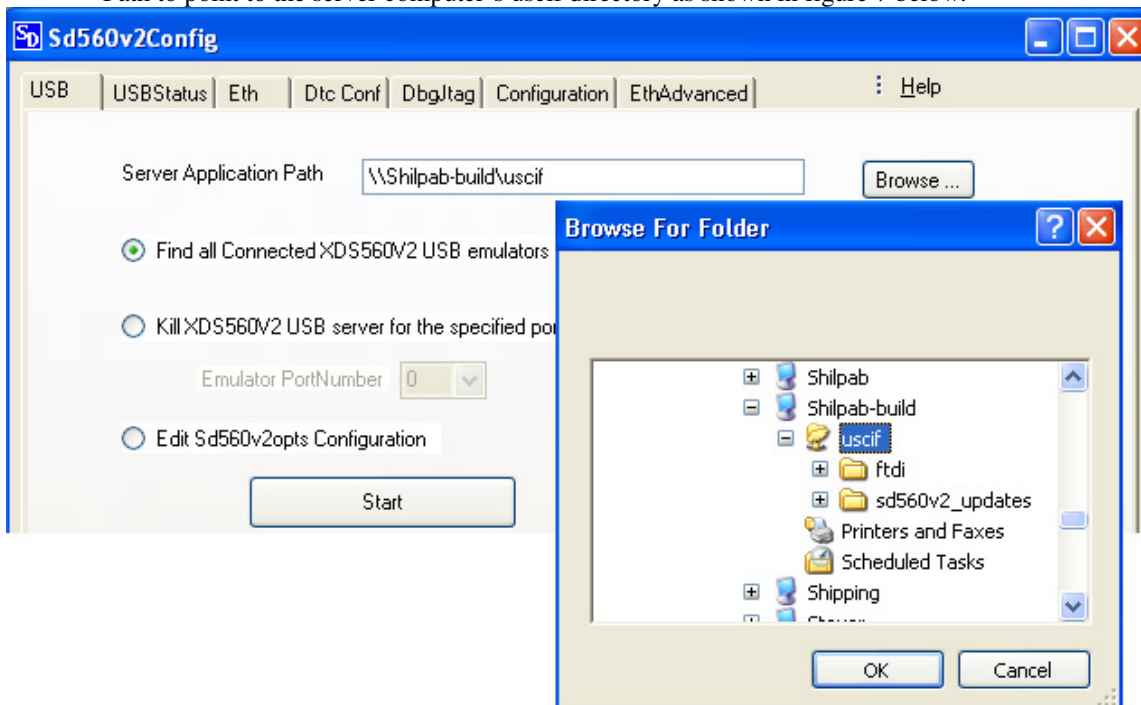

FIGURE 7: Client PC's Sd560v2Config utility to modify Server Application path.

10. Some quick tests that can be run from client computer's Sd560v2Config utility on the emulator are listed below:

a. From the Sd560v2Config utility's USB tab, you can find the serial number of the device connected from by selecting the option Find all Connected XDS560V2 USB emulators and clicking on the Start button.
b. From the Sd560v2Config utility's USBStatus tab, you can run a simple loopback test which tests if the USB link is good by selecting the USB TestLoopBack option and clicking on the Start button.
c. From the Sd560v2Config utility's dtc_conf tab, you can verify if you can read dtc configuration variables via USB.
d. If the emulator is connected to a target board, you can run a simple scan test from Sd560v2Config utility's Emulator Scan Test tab via USB.