Centurion™ C4 Transfer Guide using Centurion File Transfer Utility

1.0   Background

1.1   A valid configuration is required for the Centurion system. Configuration files are downloaded to the system using the Centurion File Transfer Utility software.

1.2   Configuration files may be uploaded from an existing Centurion system for archiving or copying a controller setup into another system.

1.3   Firmware updates are periodically released by FW Murphy for the Centurion product line. These updates can also be installed by the user using the Centurion File Transfer Utility.

1.4   The files are transferred to the components using a USB connection from a PC to the specified component.

1.5   The software must be installed on the PC. Access the license agreement and installation from the web link below.
https://www.fwmurphy.com/resources-support/software-download

1.6   The USB Drivers for FW Murphy devices must be installed on the PC and these are included with the software installer. The first time the Centurion is connected to your PC, the USB drivers will automatically install and a COM port will be assigned by your PC to the Centurion. For more information on USB driver installation, visit the website link above and download the USB Driver Installation Guide (in yellow) below.
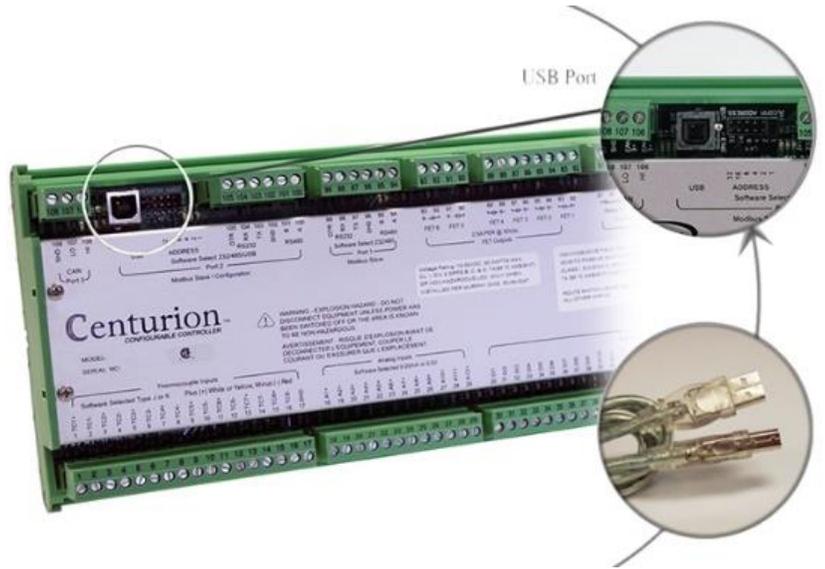
2.0 Downloading & Uploading Configuration to Centurion (C4-1)

2.1 Connect the PC to the Centurion Core mounted inside the panel using a standard Type A to Type B USB cable (commonly used for printers).

2.2 With the USB cable connected between the PC and the Core, cycle power to the Core OFF and back to ON.

2.3 The Core is now ready to receive the download from the PC. The COP LED next to the USB port on the board will be ON steady to indicate the Centurion is in bootloader mode. If the LED is blinking, turn the power off, wait 10 seconds, and turn it back on to retry.
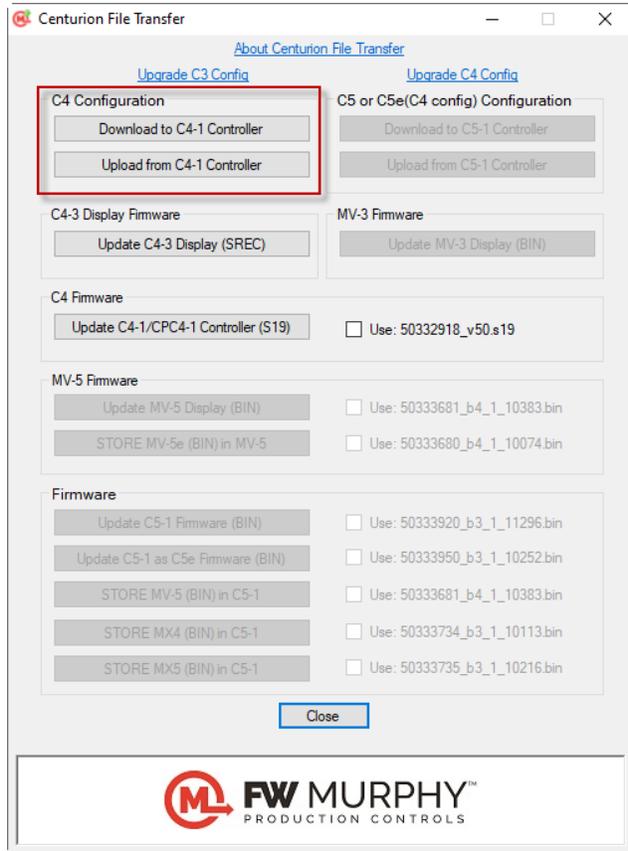
2.4 Launch the File Transfer software by clicking the icon on the desktop.

2.5 Choose the desired configuration transfer option. The transfer software works for both C4 and C5 family of Centurion, however only the C4 options will be enabled.

      2.5.1 Downloading sends the configuration to the controller from the PC.

   2.5.2 Uploading receives the configuration from the controller and allows saving on the PC.

Centurion File Transfer

About Centurion File Transfer

Upgrade C3 Config   Upgrade C4 Config

C4 Configuration
- Download to C4-1 Controller
- Upload from C4-1 Controller

C5 or C5e(C4 config) Configuration
- Download to C5-1 Controller
- Upload from C5-1 Controller

C4-3 Display Firmware
- Update C4-3 Display (SREC)

MV-3 Firmware
- Update MV-3 Display (BIN)

C4 Firmware
- Update C4-1/CPC4-1 Controller (S19)   ☐ Use: 50332918_v50.s19

MV-5 Firmware
- Update MV-5 Display (BIN)   ☐ Use: 50333681_b4_1_10383.bin
- STORE MV-5e (BIN) in MV-5   ☐ Use: 50333680_b4_1_10074.bin

Firmware
- Update C5-1 Firmware (BIN)   ☐ Use: 50333920_b3_1_11296.bin
- Update C5-1 as C5e Firmware (BIN)   ☐ Use: 50333950_b3_1_10252.bin
- STORE MV-5 (BIN) in C5-1   ☐ Use: 50333681_b4_1_10383.bin
- STORE MX4 (BIN) in C5-1   ☐ Use: 50333734_b3_1_10113.bin
- STORE MX5 (BIN) in C5-1   ☐ Use: 50333735_b3_1_10216.bin

Close

FW MURPHY
PRODUCTION CONTROLS

2.6   If Download is selected…

2.6.1   Browse to the XML file that is stored on the PC and double click it. In the
example below, it is stored on the desktop (test.xml in yellow).
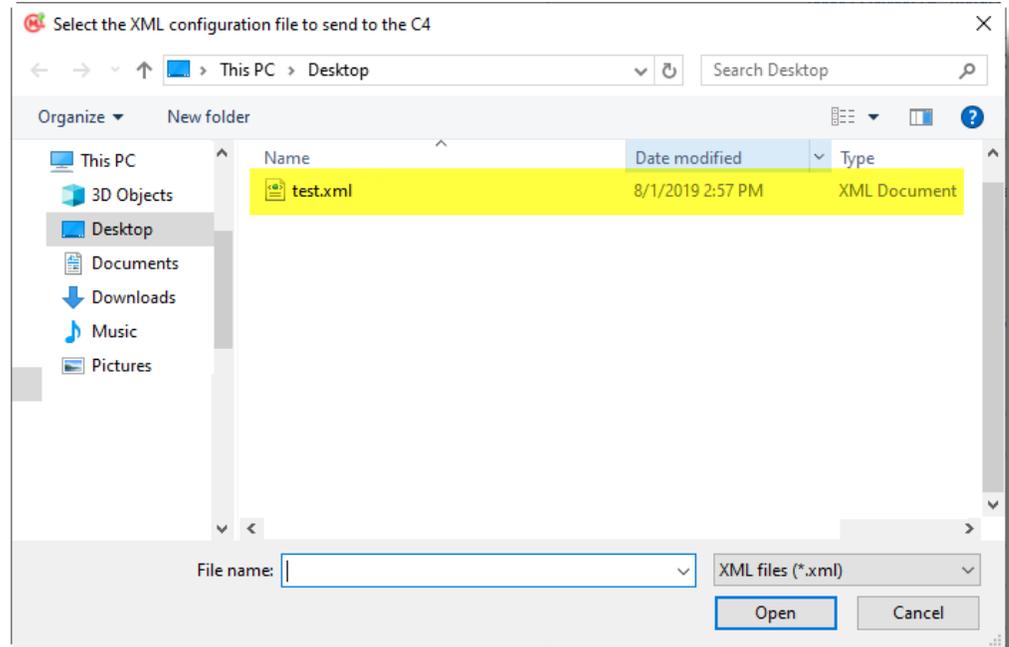

2.7   If Upload is selected or if complete with XML download selection, the Connect window appears. If unsure about these settings, click the SCAN button to scan the PC comm. ports for the correct Port number and baud rate settings*. Click CONNECT to proceed.
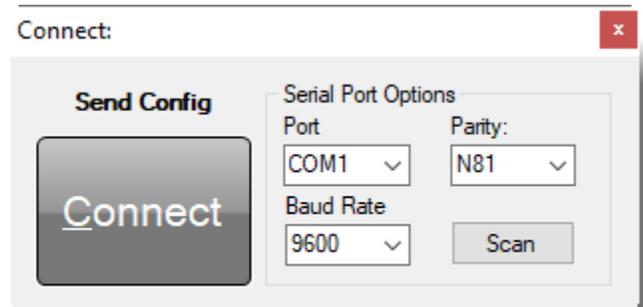

*If the SCAN button fails to detect the port number, pick the COM port assignment determined by the USB to Serial Bridge manually. **Refer to USB Driver Installation section 3 for instructions on determining the correct COM assignment for the PC**.

2.8   The next window will appear to begin the
        transfer process. The firmware version for
        the controller will be shown as well as
        additional information. See instructions
        below for updating firmware to latest
        release if desired.

Connect: 1039-V0007?

Serial Port Options

Sending data to unit (Controller v)

9600   Scan
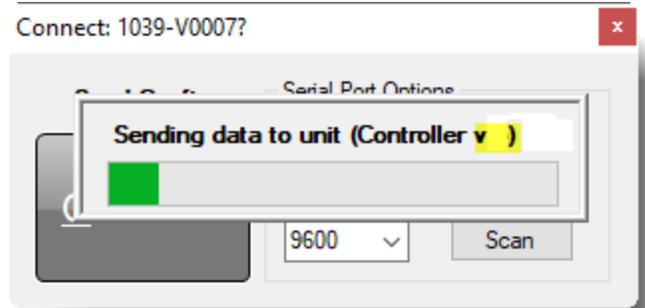
2.9   When the transfer operation is complete, the software will display DONE.
        Click OK to exit the window and complete the process.

Information   ✕

ⓘ   DONE

OK
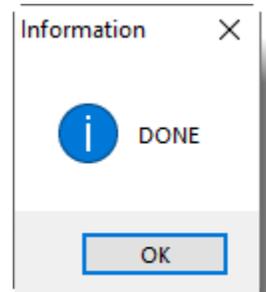
2.10   Remove the USB cable connected between the PC and the Core C4-1, then
        cycle power to the Core C4-1 and display to complete the process. The Centurion
        display will automatically synchronize configurations with the Core C4-1 after power is
        restored.

USB Port

Centurion
CONFIGURABLE CONTROLLER
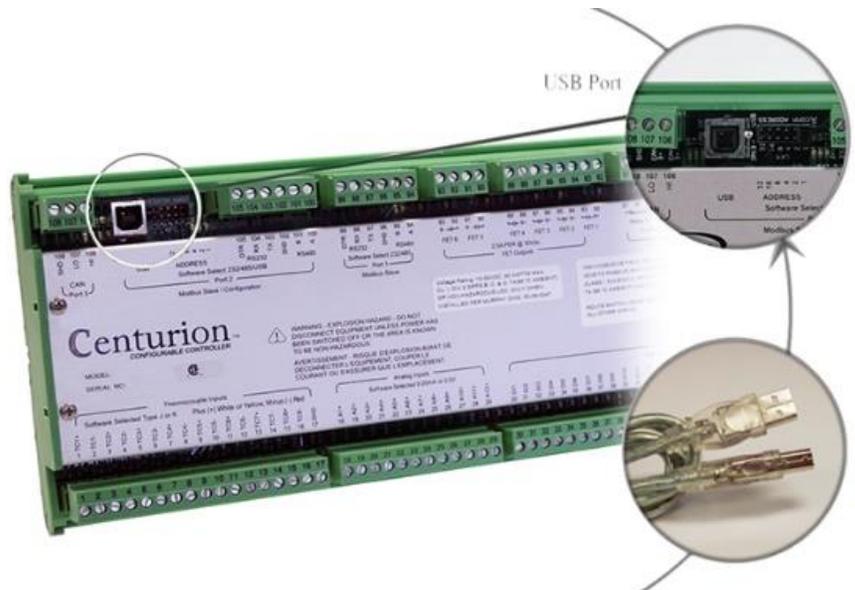
3.0   Updating Centurion Core firmware (C4-1)

3.1   Latest releases for firmware are available online at the Centurion Forum
http://forum.fwmurphy.com.

3.2   NOTE: This step is optional and only required if updated firmware is available for your controller.

3.3   IMPORTANT: Updating the firmware will erase the configuration file. If you wish to preserve the configuration settings, follow the steps above to UPLOAD the configuration and save it to your PC first.

3.4   Connect the PC to the Centurion Core mounted inside the panel using a standard Type A to Type B USB cable.

3.5   Cycle power to the controller OFF and back to ON.

3.6   The Core is now ready to receive the download from the PC. The COP LED next to the USB port on the board will be ON steady to indicate the Centurion is in bootloader mode. If the LED is blinking, turn the power off, wait 10 seconds, and turn it back on to retry.

3.7   Launch the File Transfer Utility software by clicking the icon on the desktop.

3.8   Choose the C4 Firmware Update option. Click on Update C4-1/CPC4-1 Controller Firmware.

     3.8.1   The standard firmware for the Centurion C4-1 is included with the PC tool. If you want to use this version, check the box (see arrow) to load this version of firmware.
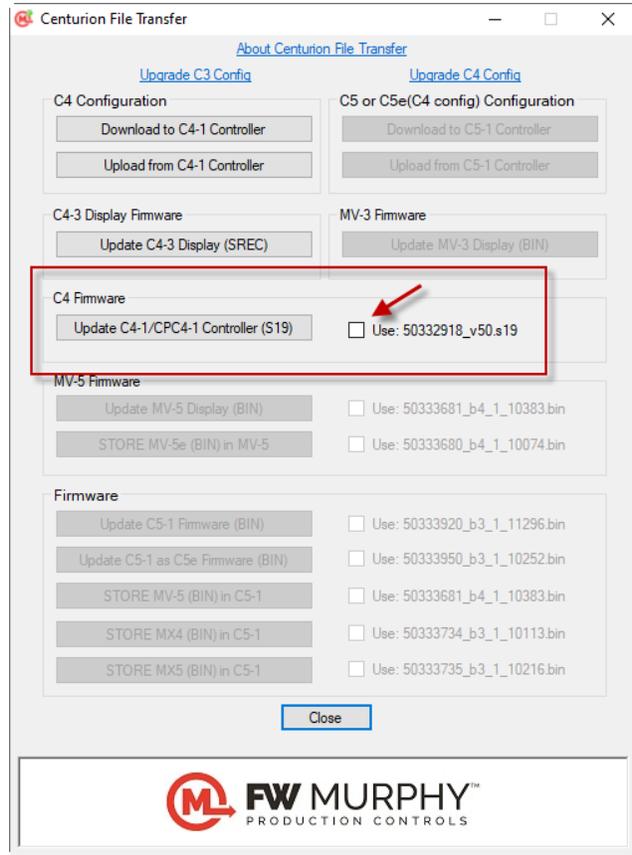
3.9 If you choose to download a specific file to the Centurion, a new window will appear that allows navigation to the location of the Core C4-1 firmware file supplied by FW Murphy. Click OPEN. In the example below, the S19 firmware file is located on the desktop. Double click the S19 file.
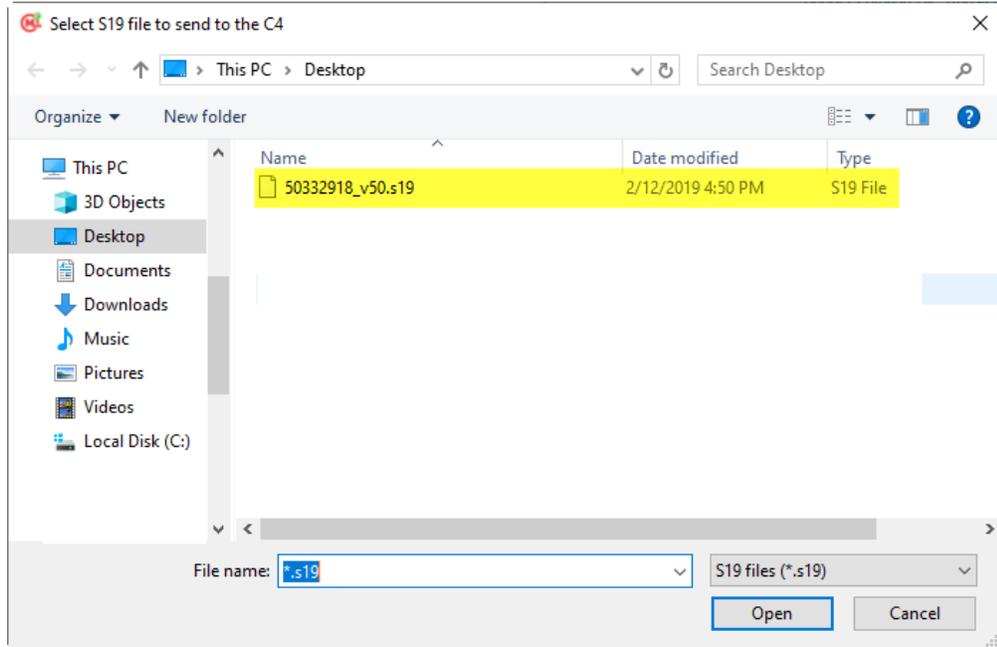
3.10 The Connect window appears. If unsure about these settings, click the SCAN button to scan the PC comm. ports for the correct Port number and baud rate settings*. Click CONNECT to proceed.
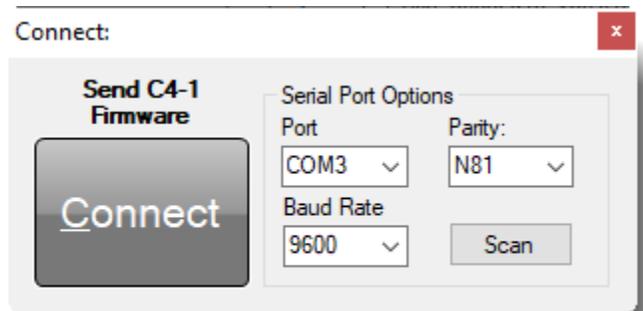
*If the SCAN button fails to detect the port number, pick the COM port assignment determined by the USB to Serial Bridge manually. **Refer to USB Driver Installation section 3 for instructions on determining the correct COM assignment for the PC**.

3.11 The next window will appear to begin the transfer process.
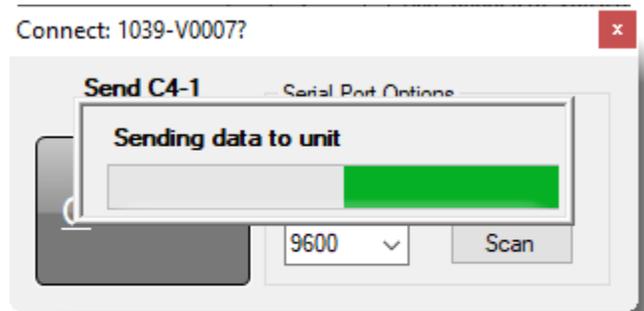
3.12 When the transfer operation is complete, the software will display DONE. Click OK to exit the window and complete the process.
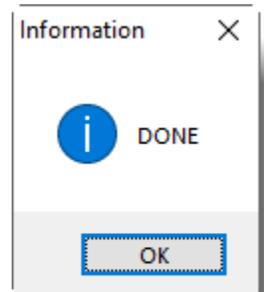
3.13 Remove the USB cable connected between the PC and the Core C4-1, then cycle power to the C4-1 OFF and back to ON to complete the firmware update process.

3.14 IMPORTANT: After installing the firmware and re-downloading the configuration, a factory default command must be performed using the Centurion display. To access this page, login to the display using the Super user password configured for the system. Then use the RIGHT ARROW key to gain access to the SUPERUSER menu. Toggle the "RESTORE FACTORY DEFAULTS" setting to yes. After this is complete, wait 30 seconds, then cycle the power off and back on to the system.

3.14.1 NOTE: If the display is not used, or failed to synchronize properly after the firmware update, a restore factory defaults command can also be performed through Modbus RTU commands by momentarily writing a 12 decimal to register 40001.

3.14.2 NOTE: In rare cases, the serial port settings are not set properly after a firmware update. To correct this, re-save your Configuration (Click File, then select Save), then re-download the Configuration. This forces the serial port settings to restore to the configuration settings.

4.0   Updating M-VIEW Firmware (MV-3-C)

4.1   NOTE: This step is only required if updated firmware is available for the Centurion display model MV-3-C.

4.2   Connect the PC to the display using a standard Type A to Type B USB cable. Remove the USB cap if needed to gain access to the USB port on the back of the display.
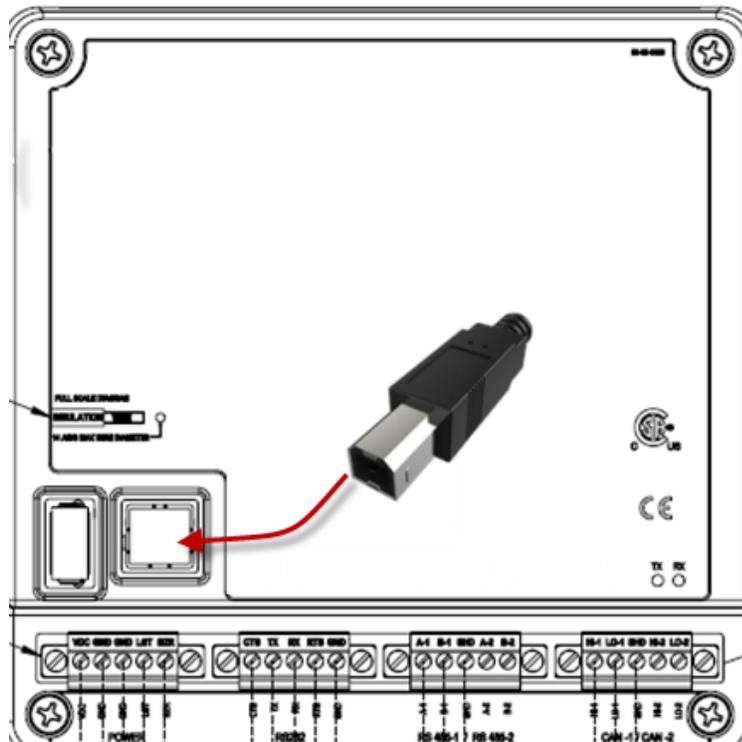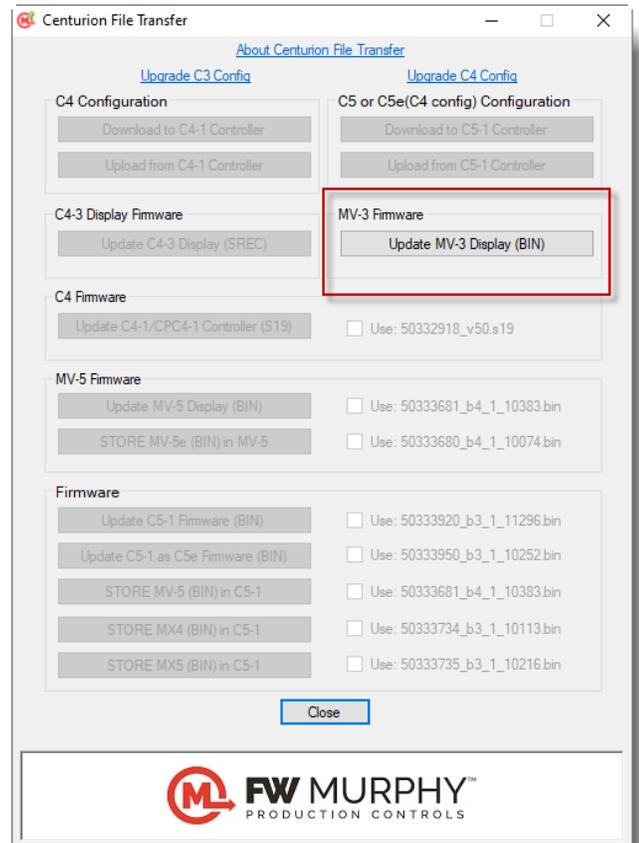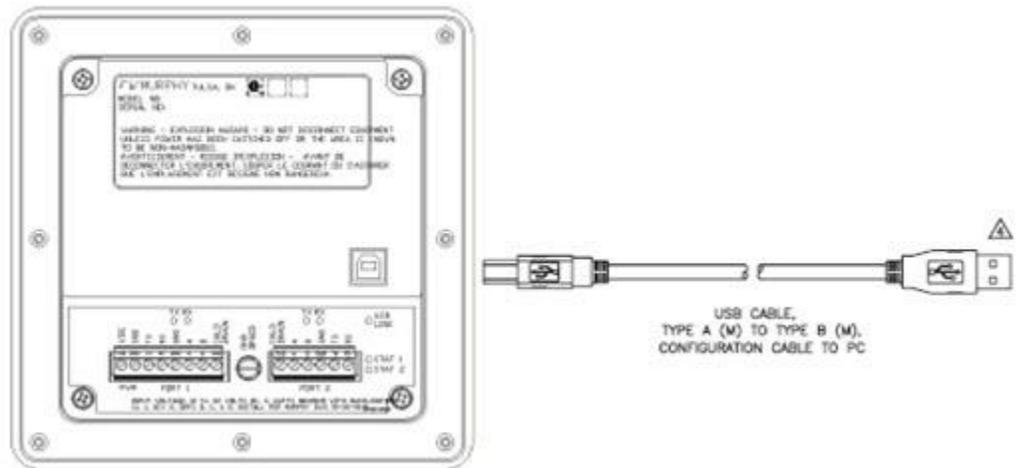

4.3   Turn power off to the display.

4.4 HOLD the ">" and SETUP ENTER keys at the same time and turn power back on to the display. (See in red highlight on right.)

4.5 The Display will show version information and remain in bootloader mode. The RED LED will be blinking.
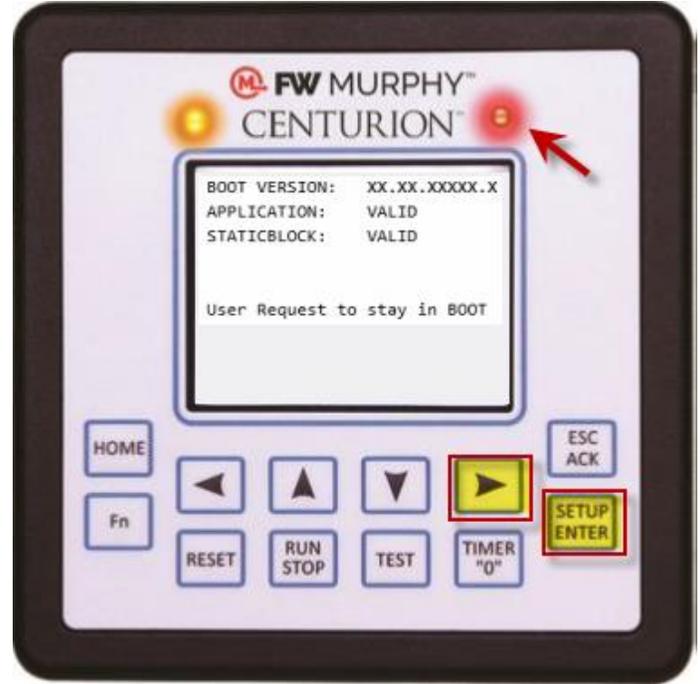
4.6 Choose the MV-3 Firmware Update option. Click on Update MV-3 Display (BIN).

4.7 A new window will appear that allows navigation to the location of the firmware file supplied by FW Murphy. Click OPEN. In the example below, the BIN firmware file is located on the desktop. Double click the BIN file.
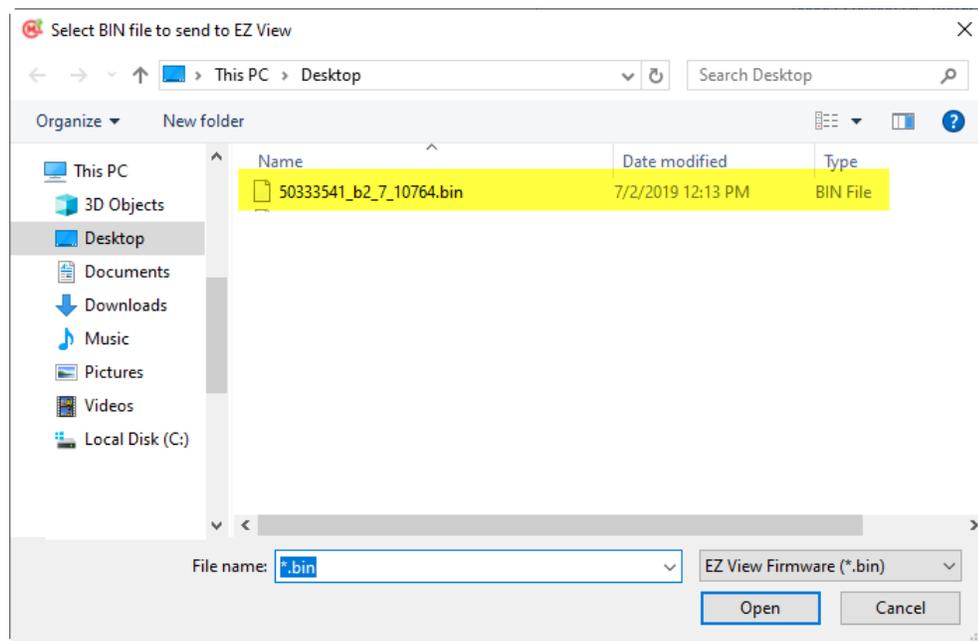
4.8 The next window will appear to begin the transfer process.
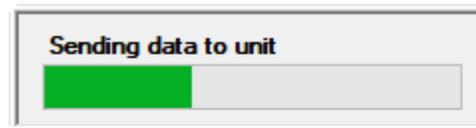
4.9 When the transfer operation is complete, the software will display DONE. Click OK to exit the window and complete the process.
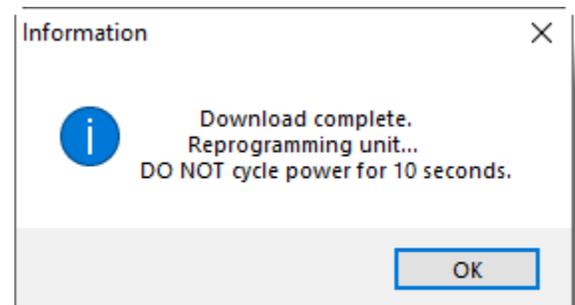
4.10 Remove USB cable from the back of the Display. The display will automatically reboot to complete the process.

5.0 Updating M-VIEW Firmware (C4-3)

5.1 NOTE: This step is only required if updated firmware is available for the Centurion display model C4-3.

5.2 Connect the PC to the Display using a standard Type A to Type B USB cable. Remove the USB cap if needed to gain access to the USB port on the back of the display.

5.3 Turn power off and back on to the Display. The display will show BOOTLOADER STARTED.

5.4 **The remaining steps are identical to the Core firmware download process. Only chose the SREC file types at the Transfer menu step 3.8. Repeat steps 3.9-3.13 to update the Display firmware.**

5.5 Remove USB cable from the back of the Display, and cycle the power to reboot the Display with the new firmware file.
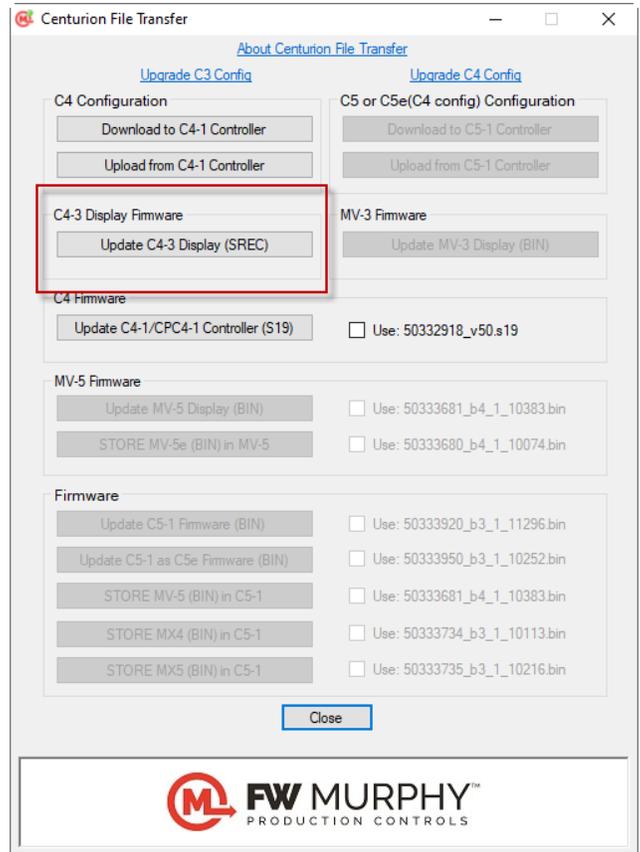
7.0   C3 to C4 Configuration File Conversion

7.1   Launch the File Transfer Utility software by clicking the icon on PC desktop.

7.2   Choose the Upgrade C3 Config option.
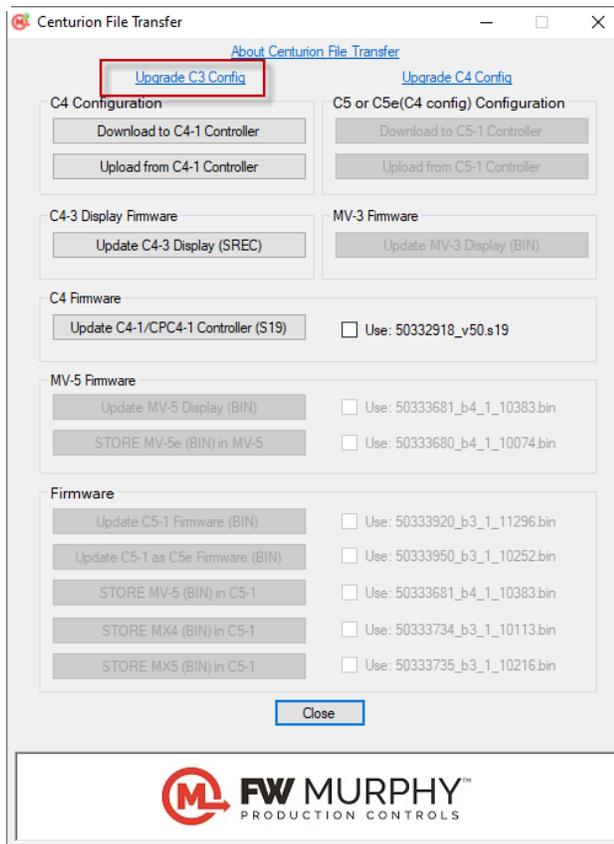
7.3   Clicking the link will bring up a notification screen that tells user what task the software is going to perform. Notification also indicates it is the responsibility of the user to verify all tasks have been accurately converted.
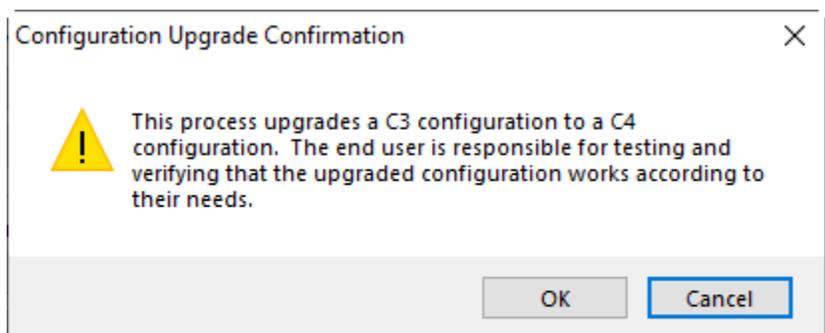
7.4   Clicking OK brings up the Upgrade.
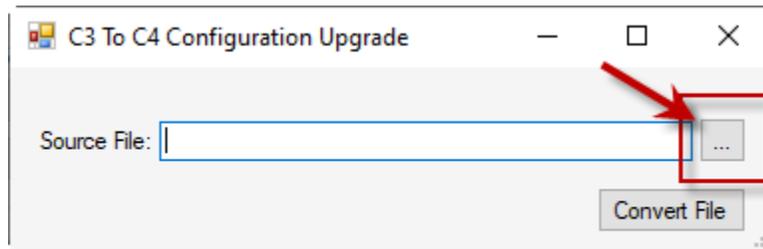
7.5   Clicking the ellipsis button brings up a File Open dialog box where the user can browse for a C3 configuration file. In the example below, the file is on the PC Desktop.
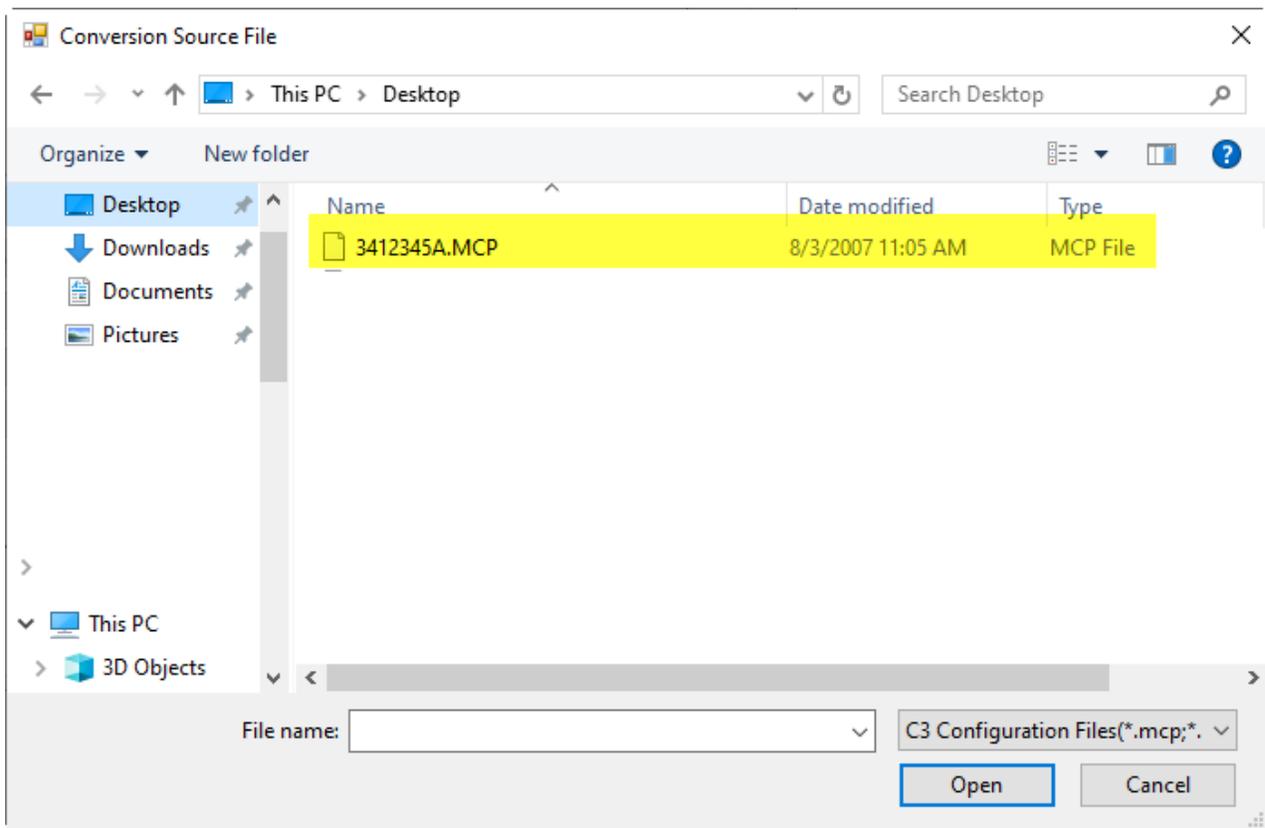
7.6   Double Click or choose Open button on the file the user wants to convert. A pop-up
       dialog box will appear with the name and location of file to be converted.
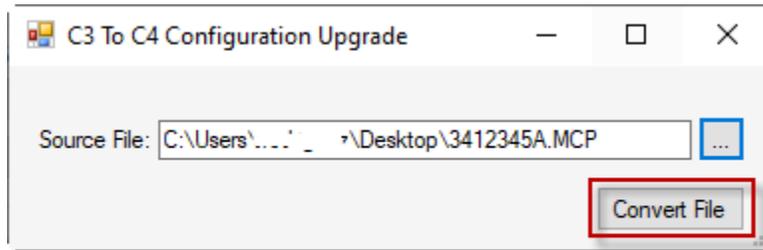
7.7   Click Convert File will complete the conversion. An XML file is created based on the
       MCP file. When conversion is successful, select a new name for the file using the File
       Save dialog box to save the new file. In the example below, it is saved on the PC
       Desktop.
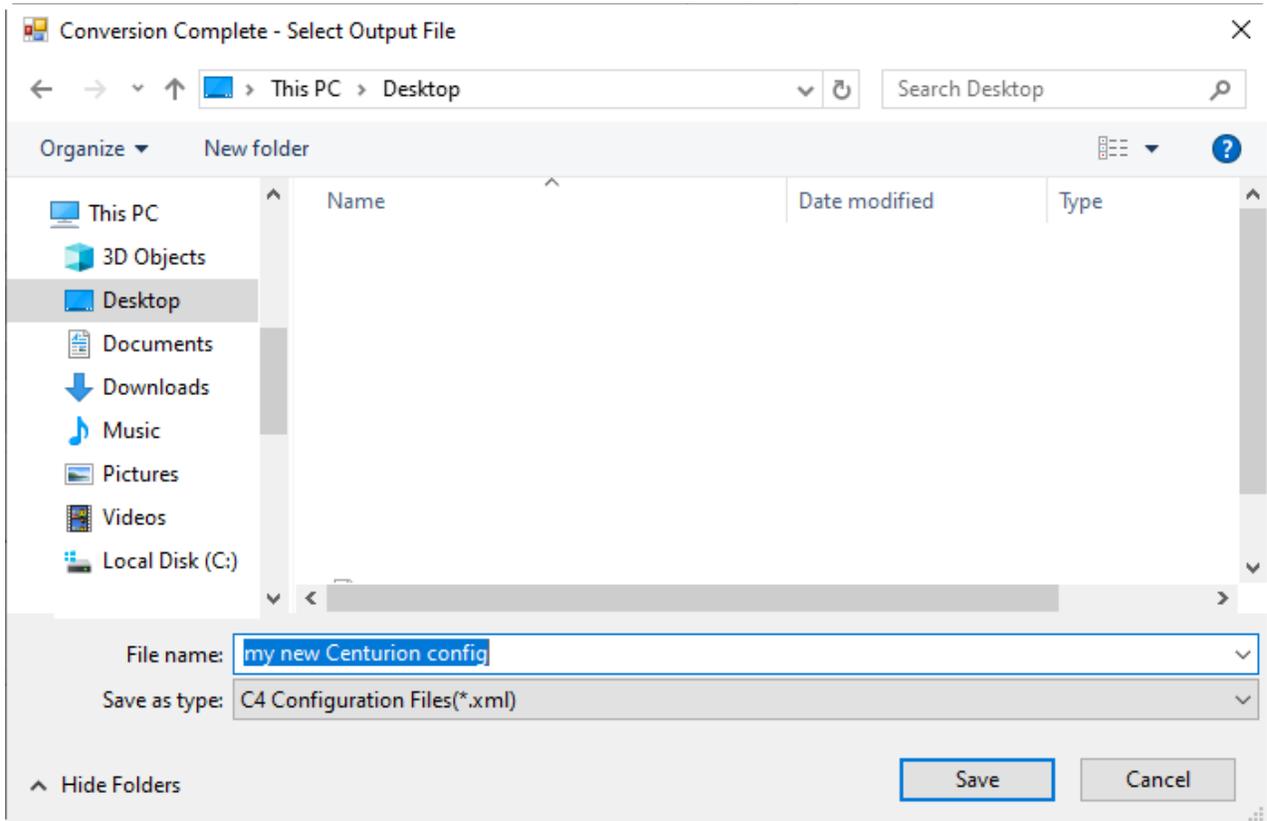
7.8   The user will see a confirmation message indicating file conversion is complete.