13 Service Editor

The purpose of the Services Editor is to aid in modifying current services, creating new services, and importing and exporting services from similar types of Warrior systems. To start the Service Editor, go to Warrior Utilities and click on the Edit Logging Service Details.

Warning! We suggest that a backup of the Services.ini file be made before any service editing, so that existing service information may be recovered if mistakes are made while editing. Probably the easiest way to do this is to use the Warrior Backup utility and do a backup.

13.1 Edit logging services Details

FIG: 13.1 Edit Logging Services Details

When the Service Editor window comes up, on the left side of the window are two service lists, labeled Active and Disabled. The active list of services will be displayed when a service is selected from Warrior Acquisition. The disabled list of services are included in the service.ini file but are not displayed in the acquisition service list. Normally there will be no services in the disabled list.

When an active service is selected by clicking on it in the list, all of the service details are displayed in the Service Details panel on the right side of the window. This information includes the default interactive plot for that service, the selected zero point (encoder depth reference for zero offset) for the service, a service title, if a title other than the service name is desired, and a choice whether the service should always use the master copy of the presentation or open the master and use it for editing as a private copy of the presentation in the database. There are also four lists that are labeled Devices, Controls, Sensors, and Tools. Each list contains specific details about the service.
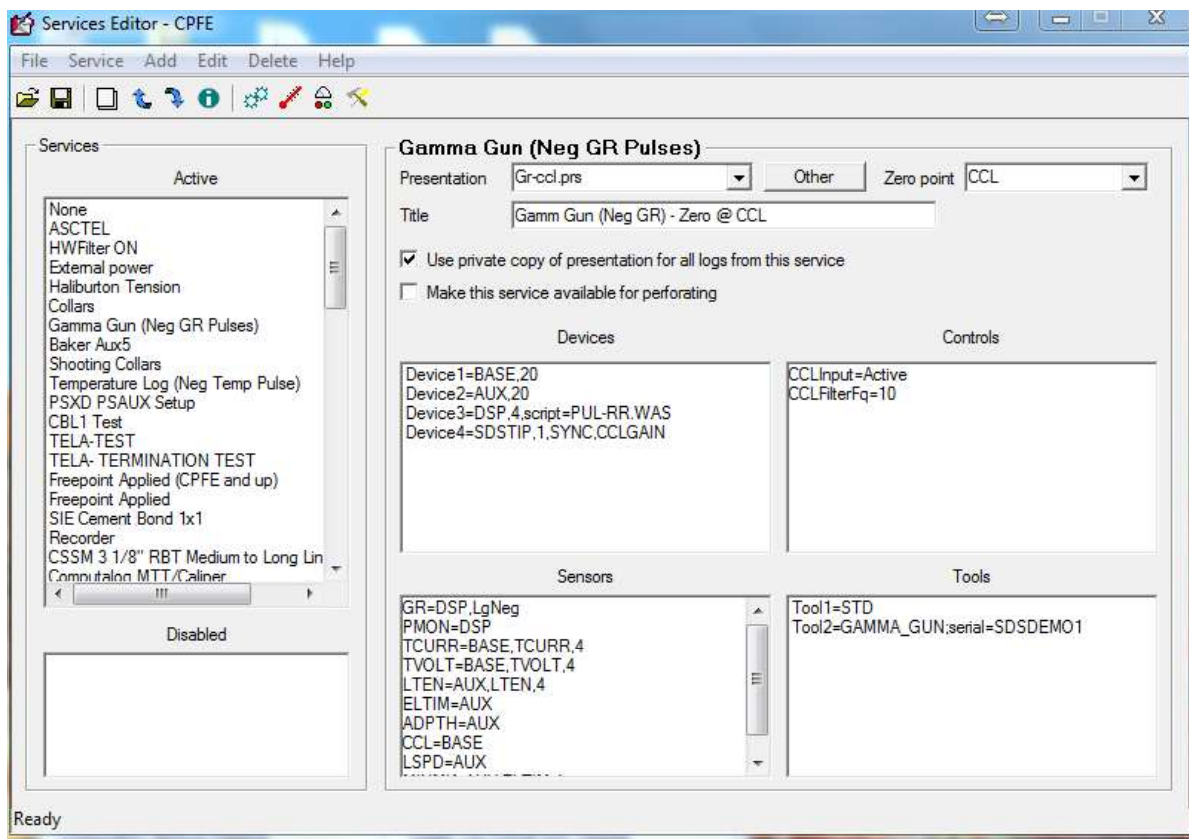
FIG: 13.2 Services Editor

The Tools list contains all of the tool types that are available in the service. If a tool type is not listed in a particular service, than it is not possible to use that tool in that service. Tools may be listed but excluded. (Tools are normally excluded by removing them from the tool string using the tools string editor in Acquisition.) The STD tool type will normally be listed in every service since this includes sensors for depth, tension, line speed, tool voltage and current, etc.

The Devices list contains acquisition devices that the system uses to acquire information. Depending upon the panel type, it may include a BASE, AUX, DSP, SDSTIP, ASCTEL, and others. Each device is set with a default sample rate of the maximum number of samples per foot. Some of the devices also require additional information such as the DSP Script file, the type of ASCII telemetry, and what hardware gain controls that the service will provide.

The Controls list contains settings for hardware devices within the interface panel. This includes items such as filter settings for various signal paths, I2C Initialization codes for setting various initial relays states, and software controlled tool voltage setting for that service.

The Sensor list contains the sensors for the tool types that are available. Each sensor definition must have the device that it uses to acquire its information. The definition also should contain a device channel number or a device channel name. If the device channel name is the same as the sensor, then that name is not required. The definition could also have a sample rate. If the rate is less than the device default sample rate, then the sensor data will be saved at the slower rate. If the rate is greater than the device default rate, then the sensor data will be saved the default rate of the device. If omitted, the sample rate will be at the device default sample rate. The sample rate can only be used if the channel is listed. (Sensor=Device, channel, rate).

13.2 Editing an Existing Service

The Service Editor can be used to modify settings in an existing service. To view the settings for a service, click on the service in the Active service list. The right side of the window will display the service information and settings for that service.

The default presentation for a service can be selected from the Presentation drop down list. The list will include all PRS files that are in the "C:\ProgramData\Warrior\Format" folder. The interactive plot presentation will display outputs from the sensor information at that are included in the presentation.

If the box labeled Use private copy of presentation for all logs from this service is checked, then when the first pass of the service is started in a database, the default presentation is copied into the database as a private presentation. If any changes are made to the log format presentation, then those changes are made in the private copy of the presentation in the database. The changes are not made to the original presentation that is in the "C:\ProgramData\Warrior\Format" folder.

If the box is not checked, then the presentation is not copied into the database. Any changes that are made to the presentation from interactive plot are made to the original presentation file. If at a later date in time the file is viewed using interactive plot, then since the presentation is not part of the database, the current copy of the presentation (if it exists on the system) in the "C:\ProgramData\Warrior\Format" folder is used to display the presentation. If the presentation is not located in the Format folder, then no presentation will be displayed. Interactive Plot options would have to be used to select a presentation format for display.

The Zero Point drop down list has a list of sensors in the service. Any of the sensors or the bottom of the tool string may be selected as the zero point. The zero point of a tool string has zero offset to the encoder depth reading. Scientific Data recommends that the bottom of the tool string be used as the zero point in most logging services. In perforating services, the CCL is set as the encoder depth. In services that are normally run in a time drive mode at a set depth, such as a Noise Log or Freepoint Log, the particular sensor of interest should be set as the zero point to be able to position the sensor as desired.

In acquisition, when a service has been selected, that service name will normally be displayed. By typing in the Title field of the Service Editor, the service displayed may be different than the service name.
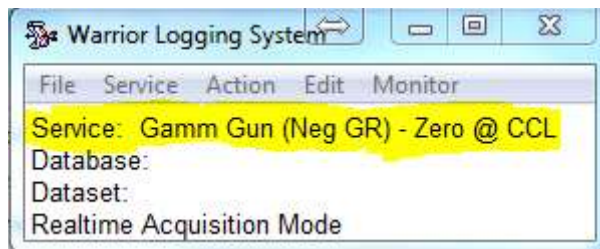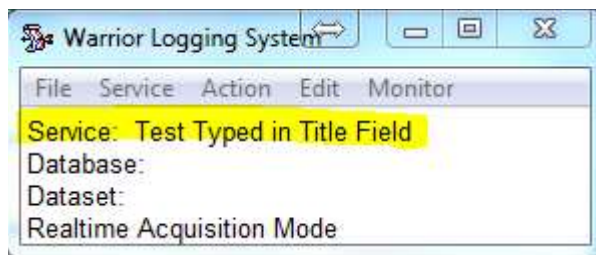

FIG: 13.3 Service

FIG: 13.4 Service different Name

13.3 Adding and Removing Tool Types

Tool types can be added or deleted from a service. To delete a tool type from a service, click on the tool type in the Tools drop down list. Then either push the <Delete> key on the keyboard or on the Services Editor menu bar, click on Delete. A window will come up to confirm that you wish to delete the selected tool type.

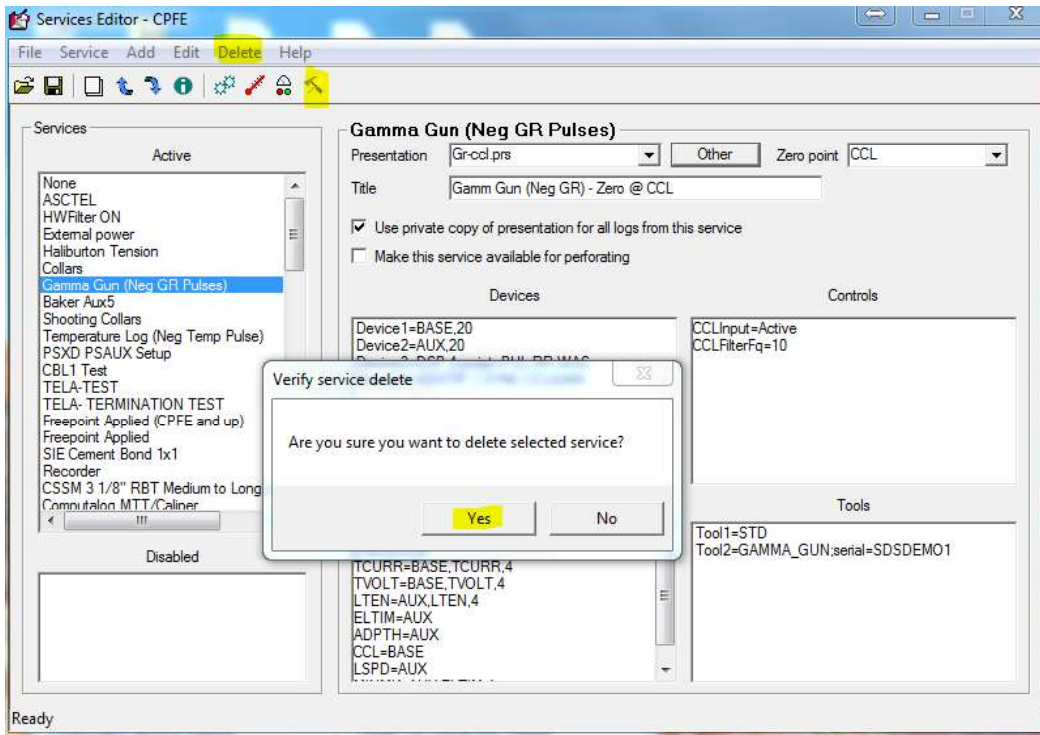**Warning!** Tool names, Model names, and Serial names can contain a maximum of 39 characters and cannot have any spaces.

FIG: 13.5 Tool Delete

It is recommended that the sensors that the tool type produced be deleted in a similar manner at the same time, although if the sensors are left in, the service should still work.

To add a tool type to a service, on the Menu Bar click on Add -> Tool. An Add tool dialog box will come up with the next available tool number. Enter the tool type in the dialog box. Only the tool type needs to be entered, a specific serial number for that tool type is not required at this time (i.e. Tool6=GR not Tool6=GR; Serial=1234). When the service is next used, it will call up the first available serial number of that tool type that it can find. It is necessary for the tool type to exist in the tools.ini file. If the tool type does not exist, then when the service is called up from acquisition, you will get an error message and it will not work.
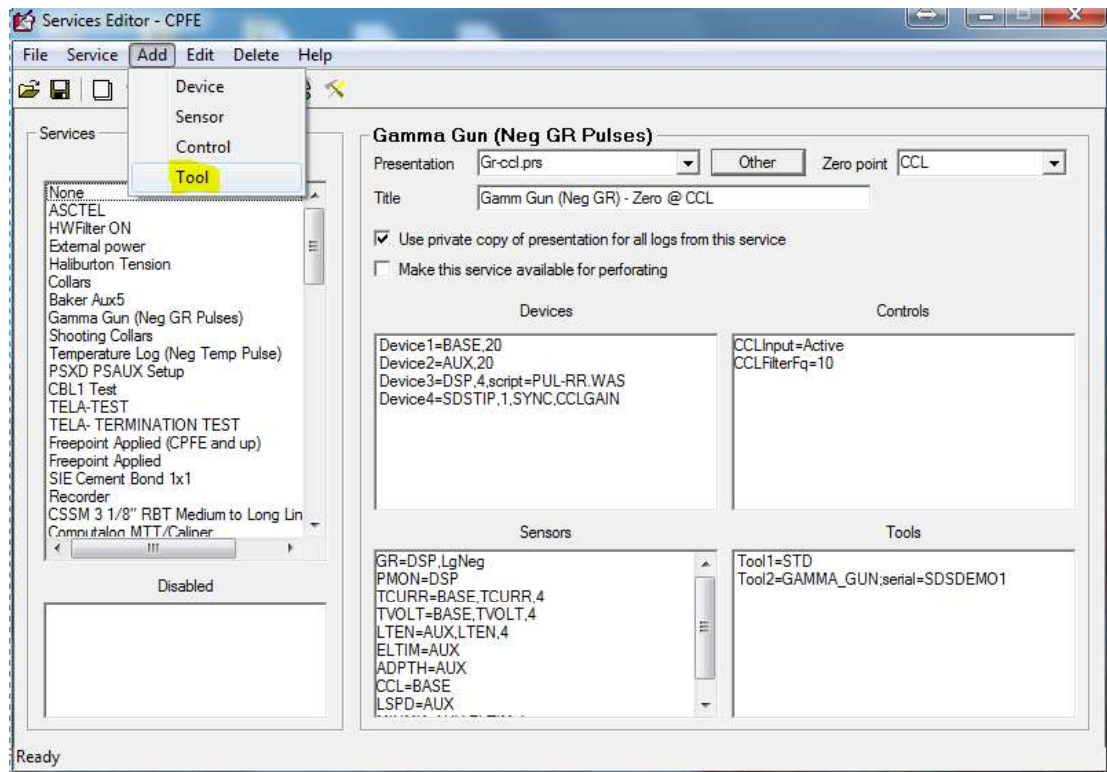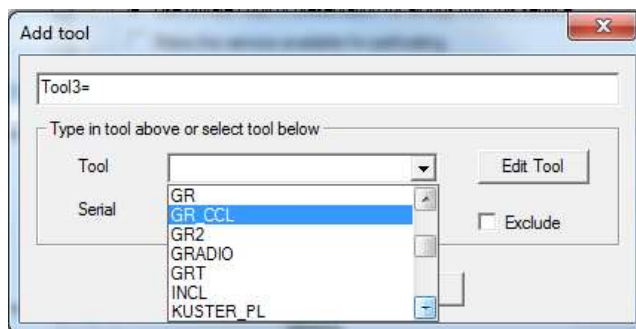
FIG: 13.6 Add Tool

FIG: 13.7 Edit Tool

When a tool is added to a service, sensor(s) will normally have to be added also. The software modules that the tool type uses will have specific sensors, as shown in the Tool Editor. Each of these sensors will have to be added to the service or when the service is called up from acquisition you will get an error message and the service will not work.

To add a sensor to a service, click on **Add -> Sensor** on the Service Editor menu bar. The Add Sensor dialog window will come up. Enter the sensor mnemonic, followed by an equals sign "=", then the Device that the sensor acquires data from, then the channel of that device, and the sample rate for storing the sensor data (Sensor=Device,Channel,Rate). The Device must be listed in the Devices drop down list. The device and channel that a sensor will use is hardware dependent, and in the case of the DSP also script dependent. It is beyond the scope of this document to explain further. For more help contact Scientific Data Systems, Inc.

FIG: 13.8 Add Sensor

FIG: 13.9 Type New sensor

Devices and Controls may be added and removed in a similar manner. Again they are hardware dependent and beyond the scope of this document. For more information contact Scientific Data Systems, Inc.

Any line in the Devices, Controls, Sensors, and Tools list may be edited. To edit a line, click on the desired line, then on the menu bar click **Edit**. Double clicking on a line will also invoke the edit command.

13.4 Add Surface Sensors

ADD Wellhead Pressure Sensor on AUX4

Select Database Utilities

FIG: 13.10 Database Utilities

Select Edit Logging tools Details

FIG: 13.11 EDIT Logging services Details

Select the service to add the new WHP sensor

FIG: 13.12 Select the Service

Add new Sensor

FIG: 13.13 Sensors

Type WHP1 = BASE, 11

FIG: 13.14 Add sensors

Select **OK** and Save the service
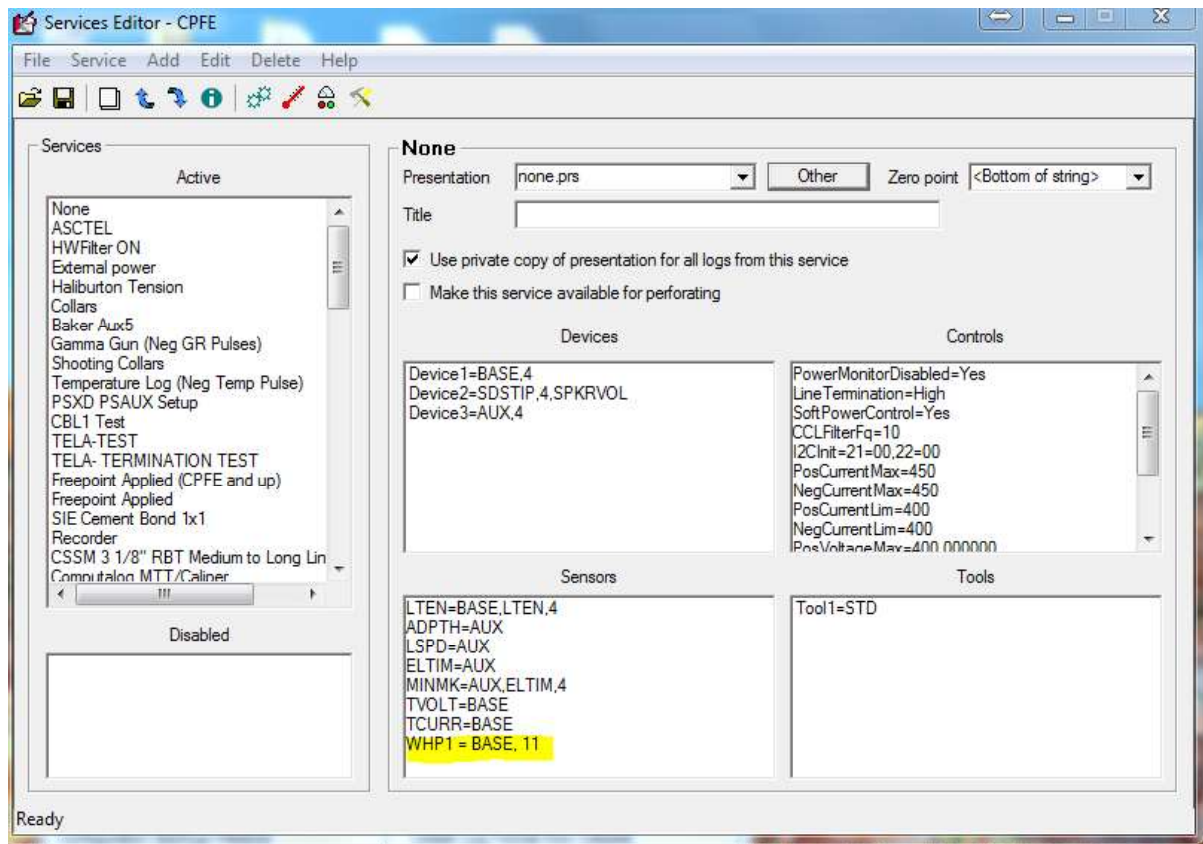

FIG: 13.15 Set sensors

Open the service

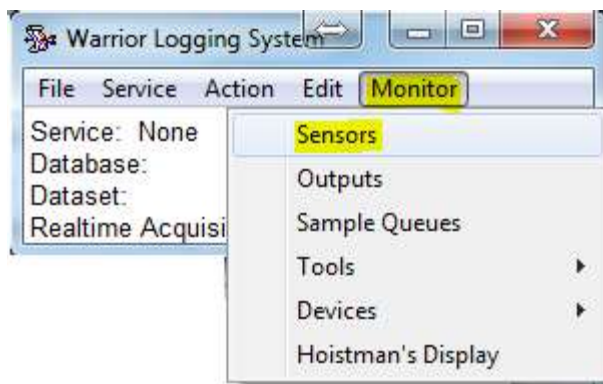FIG: 13.16 Monitor sensors

Select Monitor/Sensors

FIG: 13.17 Sensors Value

Sensor Value in Volts

Select Monitor/Outputs

FIG: 13.18 Output Value

WHP1 (psi.)

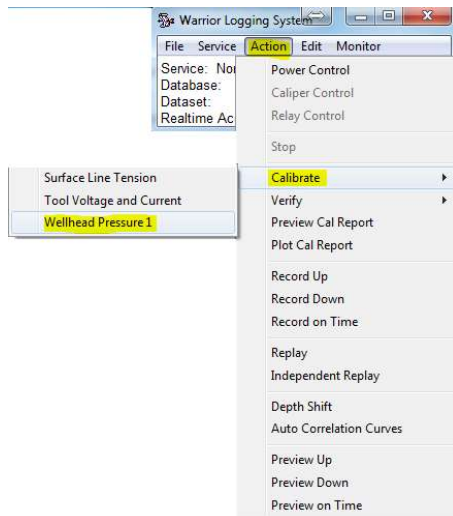Select Action/Calibration Wellhead Pressure 1

FIG: 13.19 Action/Calibrate

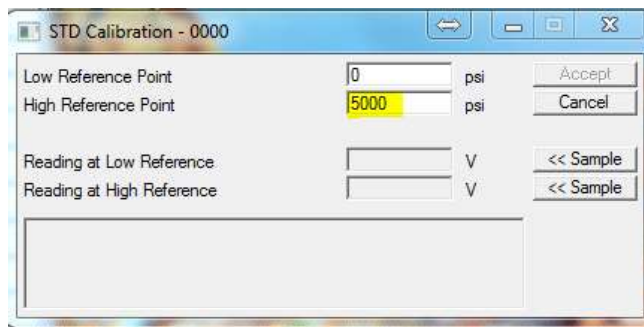Set the low and high value to calibrate the WHP1 Sensor.

FIG: 13.20 Set Calibrations Points

On side DB25 Add 250 Ohms

AUX4 - Auxiliary Inputs	DB25 Pin OUT	USB44	SOFTWARE CHANNEL
4-20 mA	AUX4-2	CC13-2	BASE,15
4-20 mA	AUX4-3	CC13-3	BASE,14
4-20 mA	AUX4-4	CC13-4	BASE,13
4-20 mA	AUX4-5	CC13-5	BASE,12
4-20 mA	AUX4-6	CC13-6	BASE,11
Frequency	AUX4-9	CC13-34	CTR3
Frequency	AUX4-10	CC13-35	CTR2
	AUX4-21	CC1-19	+5V
	AUX4-22	CC1-20	GND

AUX4-23	CC1-21	-15V
AUX4-24	CC1-22	+15V

Add Resistors (250 ohms) to convert the current loop 4-20mA to Voltage 1 -5 volts

DB 25

Pin 24   +15VDC

Pin 6   Signal 4-20 mA

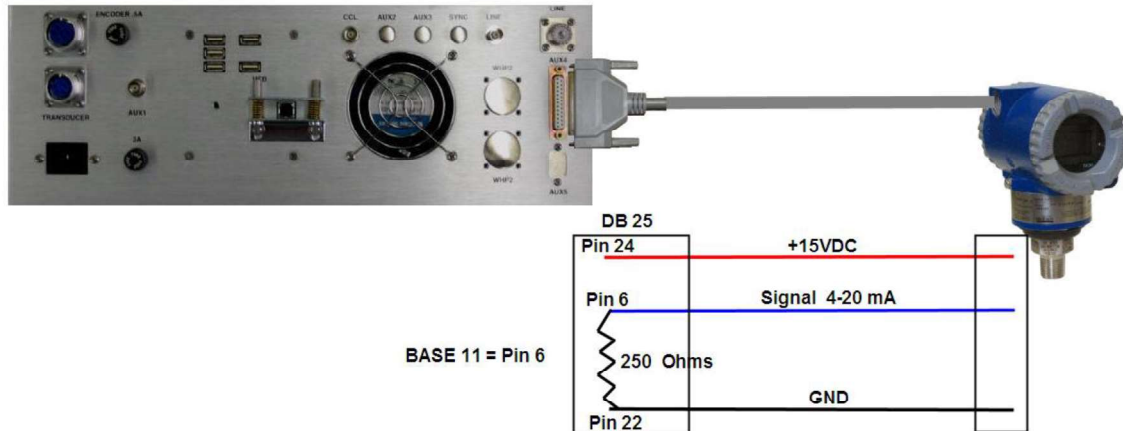BASE 11 = Pin 6   250 Ohms

GND

Pin 22

FIG: 13.21 AUX 4 Hardware Connections

WPH1 and WPH2 Connectors for ASW-Board version 11 or latest

CONNECTORS INPUTS	ANSW	SOFTWARE CHANNEL	SIGNALS
WHP1-A	CC7-11	BASE,9	-(4-20MA) Input Negative
WHP1-B	CC7-10		+(4-20MA) Input Positive
WHP1-C			
WHP1-D	CC7-8		WHP1 +15V Excitation
WHP1-E	CC7-20		Ground
WHP2-A	CC7-14	BASE,10	-(4-20MA) Input Negative
WHP2-B	CC7-13		+(4-20MA) Input Positive
WHP2-C			
WHP2-D	CC7-18		WHP2 +15V Excitation
WHP2-E	CC7-42		Ground

13.5 Modifying the Service List

The Service Editor can be used to modify the appearance of the service list in a variety of ways. Services can be renamed, have where they appear in the list changed, be temporarily disabled so that they do not appear as a selection in **Acquisition**, or can be completely removed from the services.ini file.

To change the name of a Service in the active service list, click on the service. (Only services that are in the active service list can be renamed.) Then on the menu bar, click on **Service -> Rename.** A dialog box will come up with a place to type in the new name for the service. When the **OK** button is pressed, the service name will be changed.
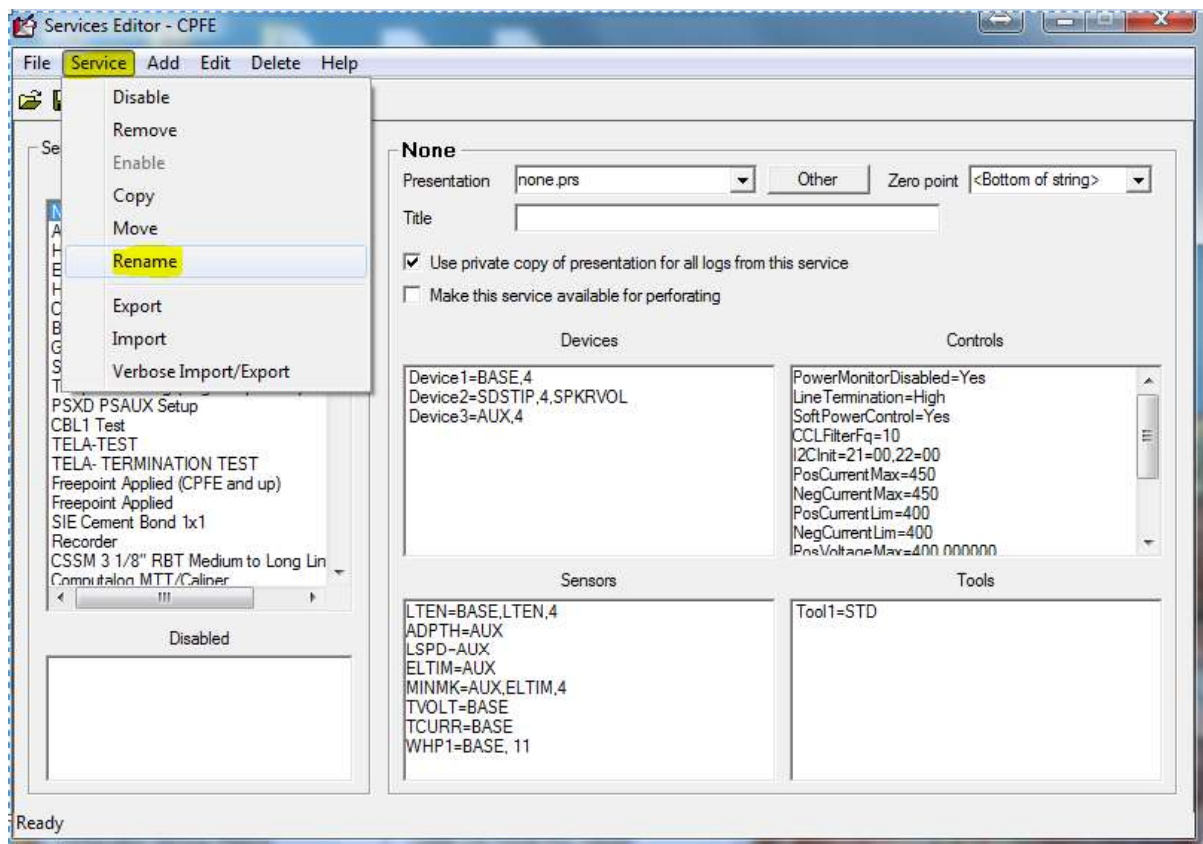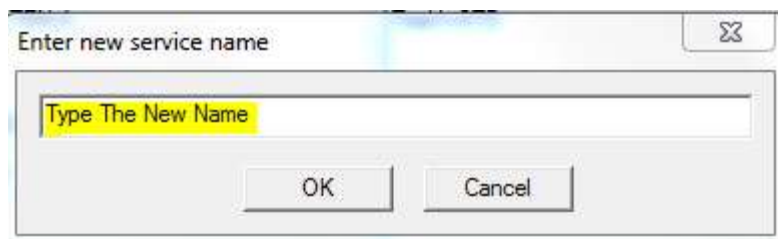

FIG: 13.22 Rename

FIG: 13.23 Enter new Service Name

Moving a service can change the order of the services in the active service list. To move a service, click on the service in the list. Then on the menu bar, click on **Service -> Move.** A dialog box will ask you to choose a location in the current list to move the service to. The service will then be moved to the selected location in the list with other services between the original location and the new location moving up or down in the list as needed.
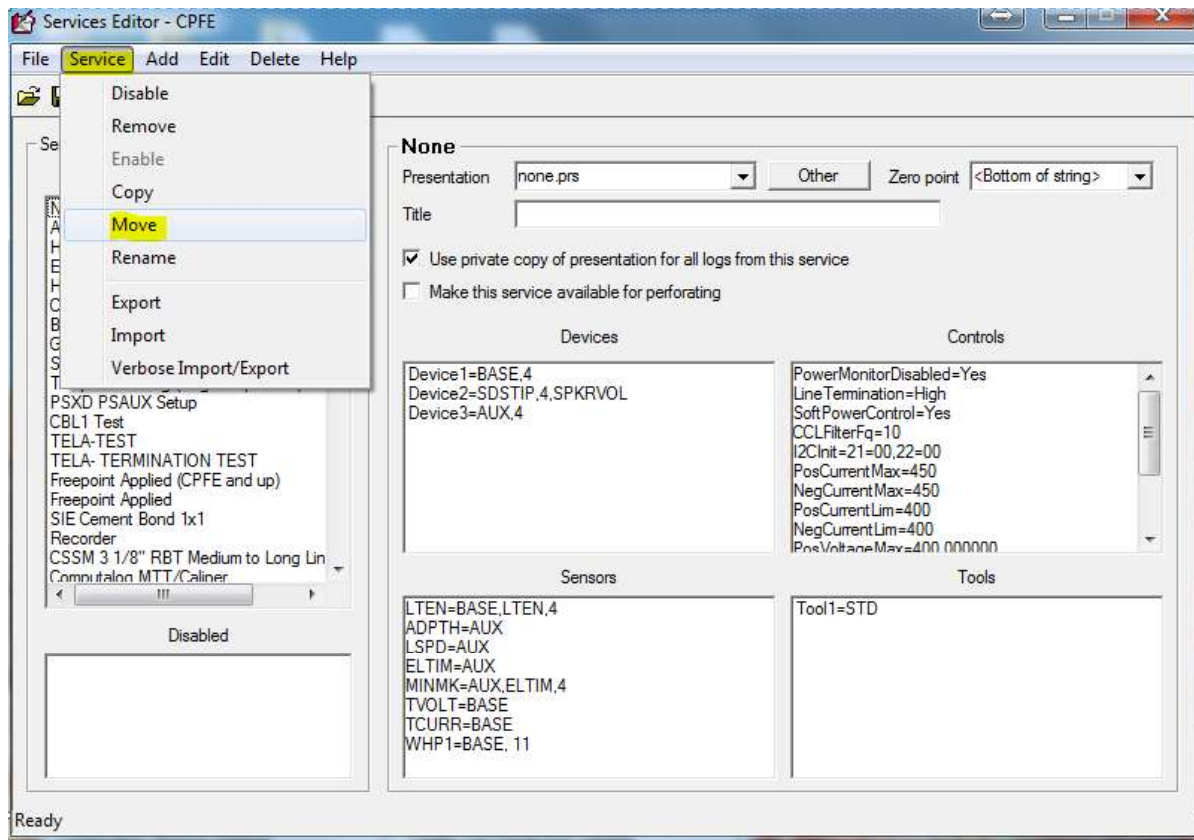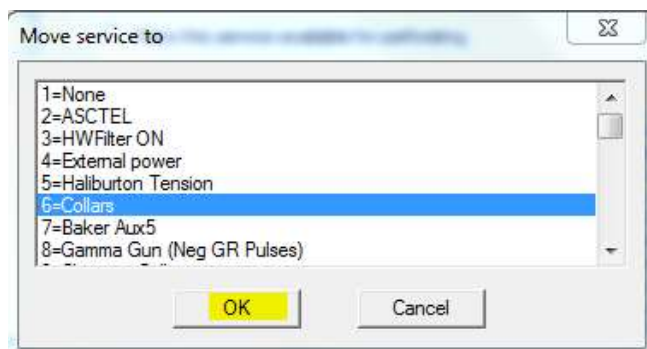

FIG: 13.24 Move Service

FIG: 13.25 Move service to

A service can be disabled so that it does not appear in the Acquisition service selection list. It will remain in the services.ini file so that it can be reactivated or enabled at some later date. To disable a service, click on the service in the Active list. Then on the menu bar, click on **Service -> Disable**. The service will immediately be moved to the disabled list. Any service that is in the Disabled list can be put

back into the Active list. Click on the service in the Disabled list. Then on the menu bar, click on **Service -> Enable**. The service will immediately be moved from the Disabled service list to the bottom of the Active service list.

A service from either the Active service list or the Disabled service list may be removed. Once removed it will no longer be available. When the service has been selected and **Service -> Remove** clicked on from the menu bar, a confirmation window will come up. If you click **No,** the removal process will be terminated. If you click **Yes**, the service will be removed from the list.
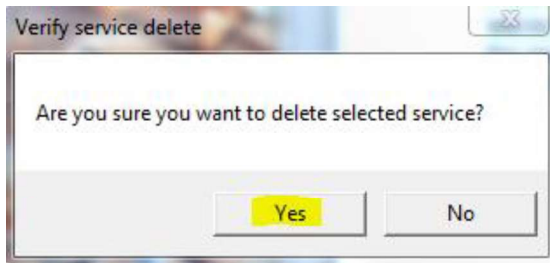

FIG: 13.26 Service Delete

13.6 Adding Services

The two most common ways to add new services are to copy an existing service that you have or to import a service from an exported service list or a different services.ini file. Copying a service is normally used if you have an existing service that works, but you need an additional service that is very similar, such as having a Gamma Ray service that detects positive pulses and needing a Gamma Ray service that detects negative pulses. Importing a service is normally used to add a service that has tool types that the present service list does not support.

13.6.1   Copying a Service

To copy an existing service, click on the service that you wish to copy that is in the active service list. Then on the menu bar, click on **Service -> Copy.** A dialog box will come up requesting you to enter a name for the new service that you are about to create. The name cannot be the same as any name that currently appears in either the existing active or disabled service list. When you click on the **OK** button, the new service will be added to the bottom of the active service list. Be aware that the service information that is displayed on the right side of the Service Editor window is the information for the original service that was selected. If changes are to be made to the new service that was created, you must first click on that service in the active service list.
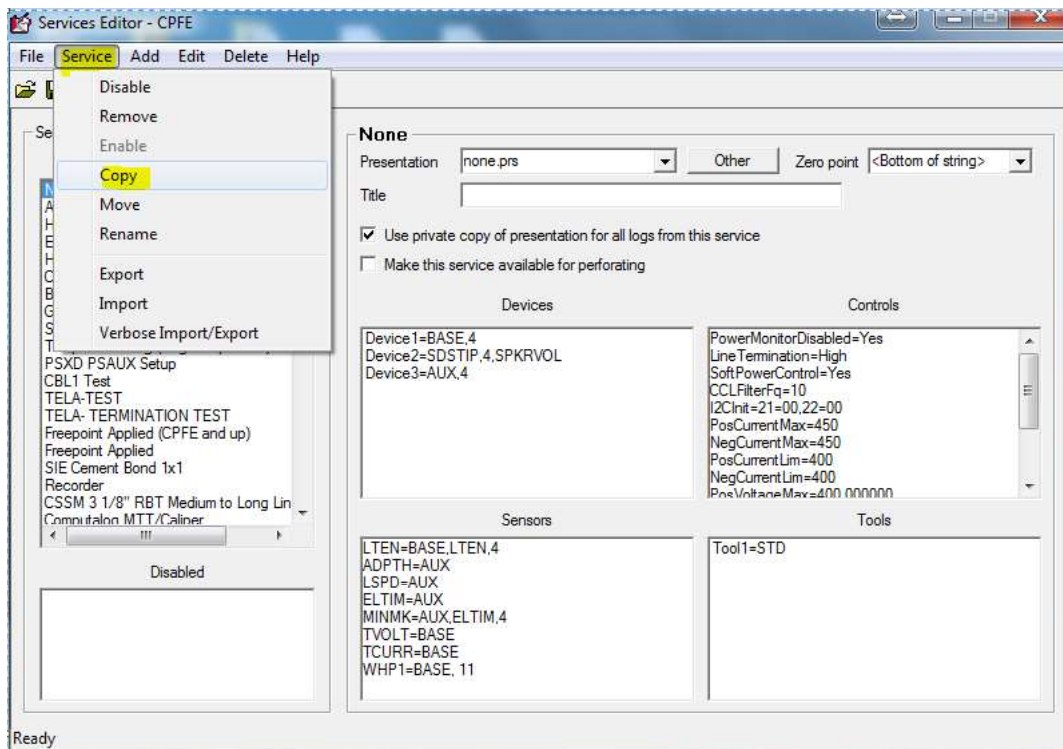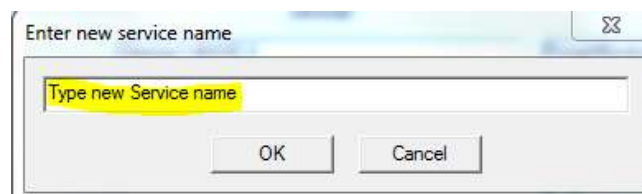
FIG: 13.27 Copy service

FIG: 13.28 Type new Service name

13.7 Importing Services

Services can be imported from a variety of sources. They can come from the Warrior cased hole (CH_80.serv.wbu) service list or from services that have been exported from other warrior systems. With a little effort, they can be imported from service.ini files. Be aware that for an imported service to work, the tool types that the service calls out must exist in the tools.ini file. The Tool Editor can be used for restoring calibrations for tool types to the tools.ini file.
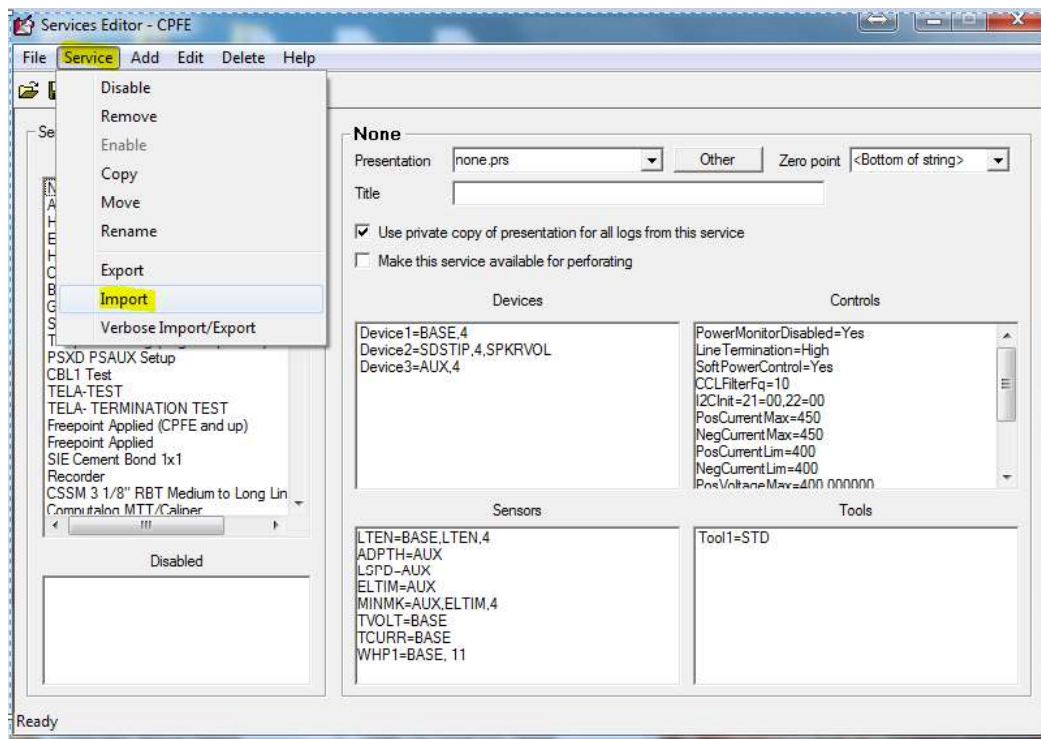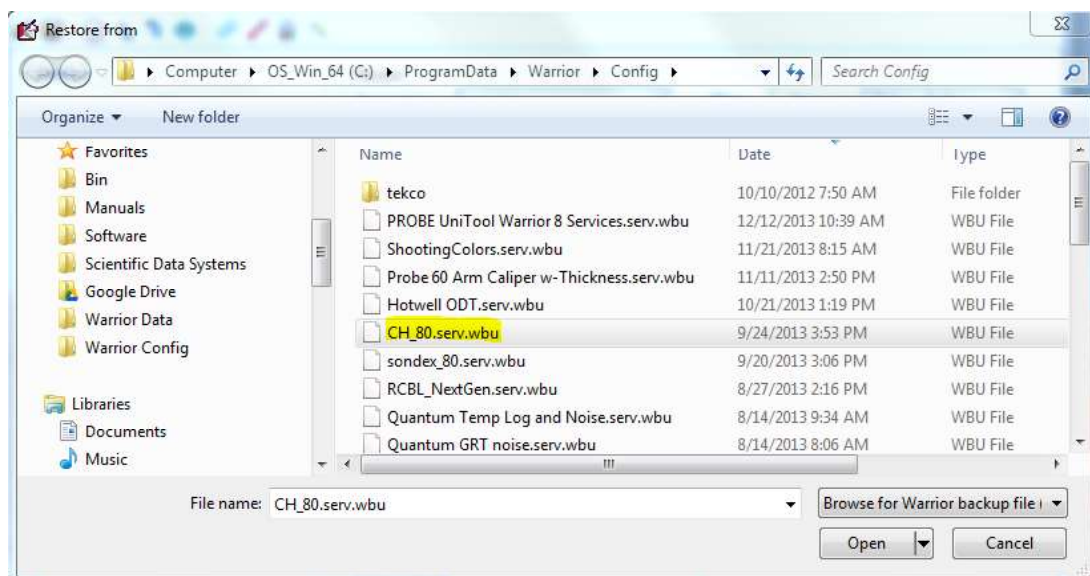
FIG: 13.29 Import service

FIG: 13.30 Select warrior service file

To import a service, on the menu bar, click on **Service -> Import.** A browse window will come up looking for a WSV file in the Warrior\Config folder. If you select the **CH_80.serv.wbu** file, it contains nearly 135 logging services that support most types of cased hole equipment. Click on one or more of the services that are listed. Each of the services chosen will be added to the bottom of the active service list.

Services that have been exported from the service editor are normally saved with the **WBU** extension but have been given a file name at the time they are exported. These files may be read in the same manner. You may have to use the look in drop down list to locate the correct drive (and folder) to read them.
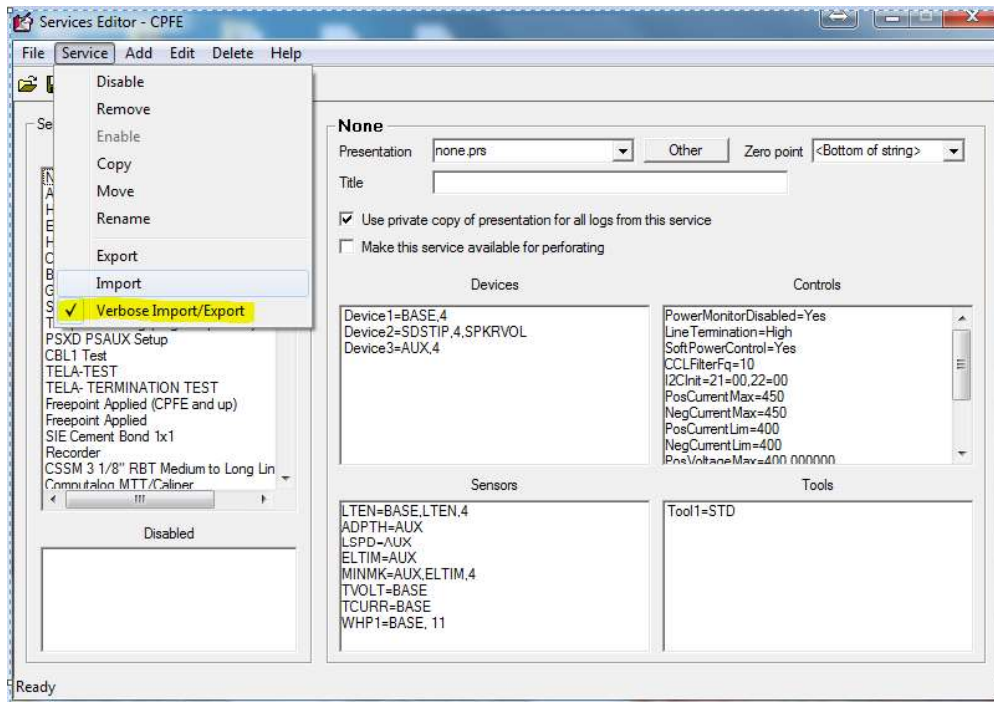
FIG: 13.31 Select Verbose Import/Export

IF YOU ENABLE THIS CHECK BOX AT THE END OF EITHER AN IMPORT OR EXPORT A TEXT STATUS WINDOW WILL POP UP INDICATING WHAT WAS IMPORTED OR EXPORTED AND THE STATUS OF THE PROCEDURE.

13.8 Exporting Service

The purpose of exporting a service or multiple services is so that they can be imported and used on a similar system that uses the same type of devices. To export a service, on the menu bar, click on **Service -> Export**. A list of the existing active services is then brought up. Click on one or more services in the list and each will become highlighted. When the **OK** button is clicked, a **Browse** for Warrior Service File window will come up. Enter a file name in the file name box. When the **Save** button is clicked, the file will be saved in the folder indicated in the Save in: drop down list.
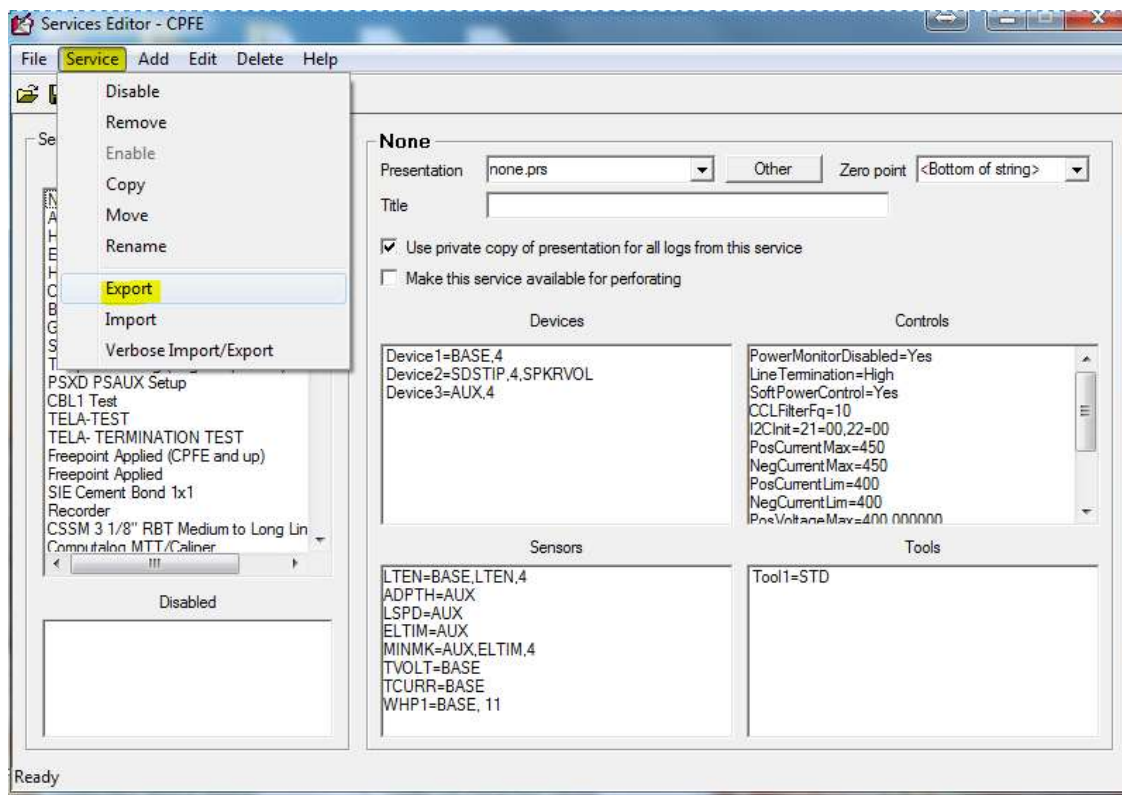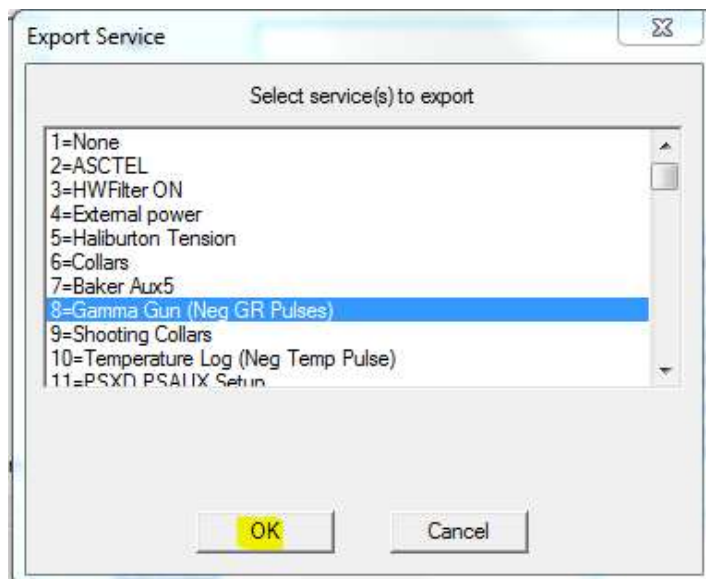
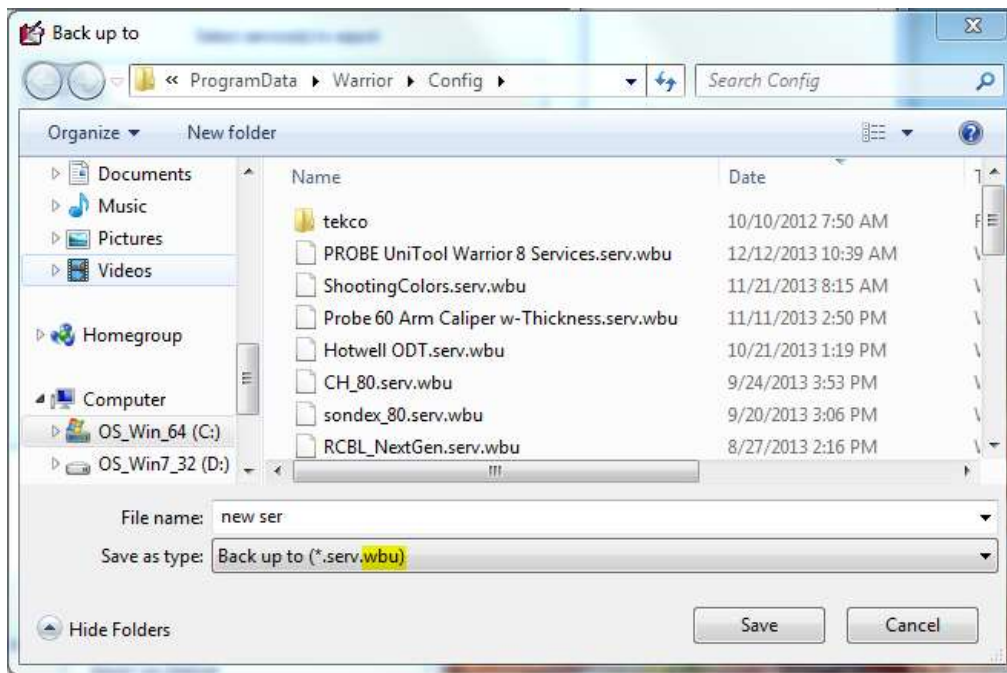FIG: 13.32 Export

FIG: 13.33 Export service

FIG: 13.34 Save new service

This will create a wbu file containing the service(s) and serial numbers of all the services and tools selected.
This file can be brought over to any warrior 8 system and imported.