The System Utilities Screen

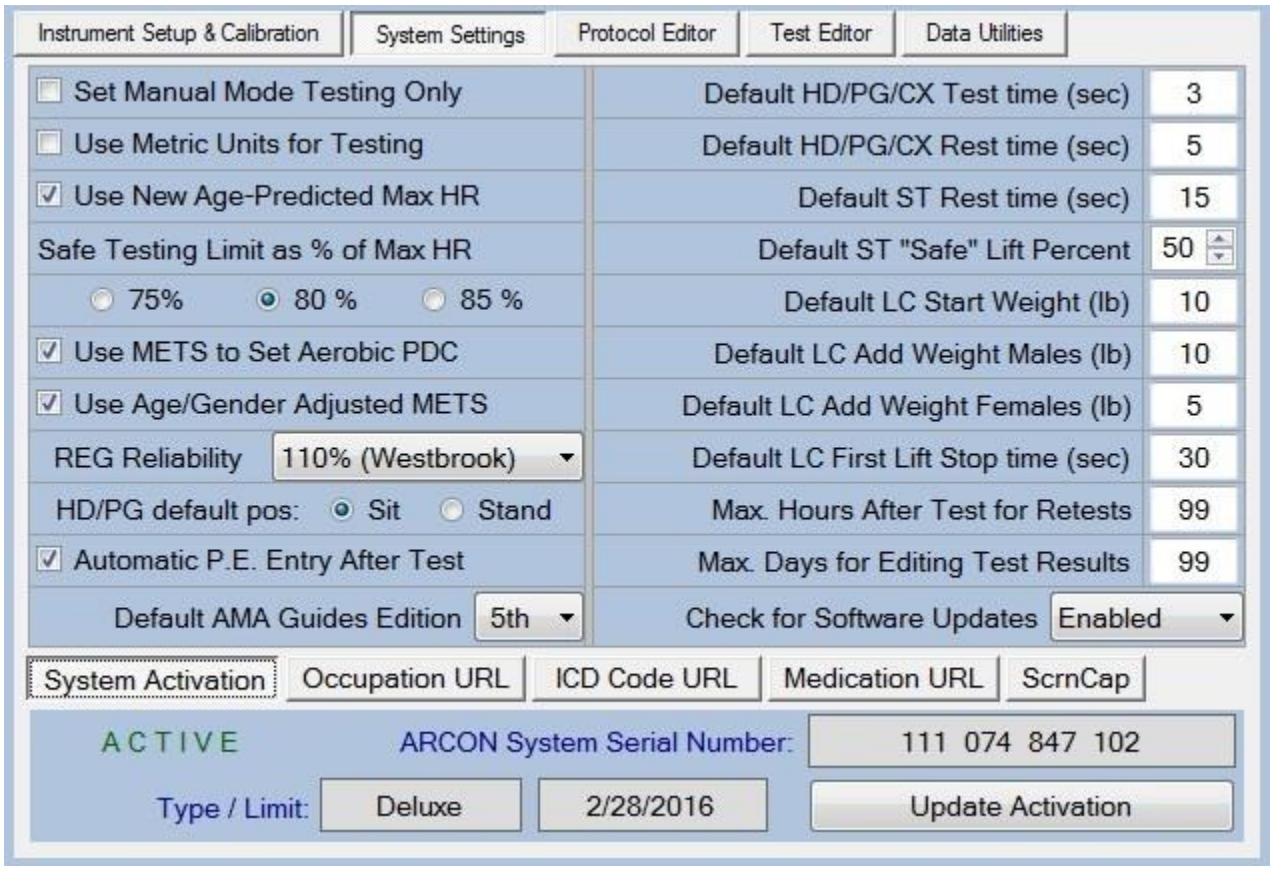
The System Utilities screen is used to perform the following functions:

- Set up and calibrate Testing Instruments (if your system has electronic instruments)
- View and modify various System Settings (optional or customizable features of your FCE system)
- View, modify and create testing Protocols (sequenced collections of functional tests)
- View, modify and create functional Tests (the basic steps of an evaluation)
- View Program Data and Report Template folders, and perform Database Backup and Restore operations.

Click the System Utilities button in the information bar to display the System Utilities screen. Note that the various features (utilities) are selected using "tabs" shown at the top of the screen. Each of the utilities are explained in the following sections of this document.

System Settings

Click on the System Settings tab to view the System Settings Screen as shown below. This screen is used to set or check the value of various testing options used by the ARCON FCE system. The system settings tab is also used to verify or update your System Activation, to set links to reference web sites (Occupation, ICD and Medication URLs), and to set Screen Capture (ScrnCap) options for the program.



Items on The System Settings Tab:

Set Manual Mode Testing Only disables the reading of testing instruments and sets your software to Manual Mode (you type in measurement values for each test). If you change this setting (either set or clear the checkbox), the FCE program will terminate so that you can restart it in the new mode.

Use Metric Units for Testing changes measurement and reporting from English units (Lb. and inches) to Metric units (Kg and centimeters).

Use New Age-Predicted Max HR changes the formula used to predict the Maximal Heart Rate for testing subjects. The commonly used formula for Maximal HR is (220 - age), while the updated formula, published in 2001 in the Journal of the American College of Cardiology is (208 - 0.7 x age). The publication concluded that the common formula underestimates maximal HR in older adults.

Safe Testing Limit as % of Max HR selects a percent of the subject's Age-Predicted Max HR to use as a safety limit during whole body lifting tests. The mid value of 80% is typically the value used.

Use METS to Set Aerobic PDC is an option for Aerobic testing (Step tests or Treadmill test). When this option is selected, the subject's PDC category (Sedentary, Light, Medium, Heavy or Very Heavy) is set by calculating the number of METS (metabolic equivalent - 1 MET is resting energy demand) the subject can maintain over an 8hour work day. When the option is not selected, PDC is set by calculating the number of Kilocalories of energy expenditure the subject can maintain over an 8-hour work day.

Use Age/Gender Adjusted METS works in conjunction with the previous option. When selected, calculation of METS is adjusted for age and gender.

REG Reliability is an option used with the Rapid Exchange Grip (REG) Test. The value selected for this option is used to determine if the results of the REG test are reliable. Values can be 105% or 110% of standard grip strength (based on a study by Westbrook), or 12 pounds (based on a study by Stokes). This topic is discussed in more detail in the Grip Testing section.

HD/PG default position is the default body posture for Grip (HD) and Pinch (PG) strength testing. You can select either Sitting or Standing, depending on your preference. The default posture can be changed at the time a test is performed using an option on the HD and PG test screen.

Automatic P.E. Entry After Test causes the Perceived Exertion entry screen to appear automatically at the end of each test so that you can enter the patient's perceived exertion. De-select this value if you do NOT want this feature.

Default AMA Guides Edition selects the edition of the "AMA Guides to the Evaluation of Permanent Impairment" that is used to report body joint and spine range of motion impairment values. These values are reported for Extremity ROM (EG) and Spine ROM (RM) tests. Available editions include: 6th, 5th, 4th and 3rd (revised). Note: impairment values reported are regional values based on table-lookup from the "Guides". They do not imply the presence of an actual whole body impairment. Such a determination must be made by a trained evaluator.

Default HD/PG/CX Test Time (sec) and Default HD/PG/CX Rest Time (sec) are options used for Grip (HD), Pinch (PG) and Muscle Strength (CX/WF) tests. The default value is 3 seconds for Test Time and 5 seconds for Rest Time (time between trials). You may change these values if you wish to perform these tests in a different manner. Normally you would leave these values unchanged.

Default ST Rest Time (sec) is an option used for whole body Static Strength Testing (ST). The default value is 15 seconds (time between trials) to allow the subject time to recover from the previous trial before starting the next trial. You may change this value if you wish. Longer times provide more recovery, while shorter times speed up the testing process but may lead to subject fatigue and reduced performance. Note: you cannot change the default ST Test Time of 5 seconds. This time was defined in the original research performed by Chaffin and others at the University of Michigan as the time necessary to assess isometric strength.

Default ST "Safe" Lift Percent is another option used for whole body Static Strength Testing (ST). This value is used to calculate a "Safe" lifting recommendation (a suggested value that would result in a very low risk of injury on the job based on a published study by Chaffin, et. al.) from the demonstrated strength value for an ST test. This recommendation only

appears in the ST report, and not on the ST test screen. The default value is 50%, which means that the "Safe" lifting recommendation would be 50% of the demonstrated ST strength. The value can be set between 50% and 75% in increments of 5%. Values in the range of 50%-55% are conservative, 60% to 65% moderate, and 70% to 75% moderately aggressive in terms of possible risk of injury on the job.

Default LC Start Weight is an option used for whole body Dynamic Strength Testing (LC). It is normally the weight of the empty lifting box used for LC tests.

Default LC Add Weight Males and Default LC Add Weight Females are additional options used for the LC test. The original PILE study used 10 pounds as the add weight (weight added after each lifting cycle) for Males, and 5 pounds as the add weight for Females. You may change these values, if desired.

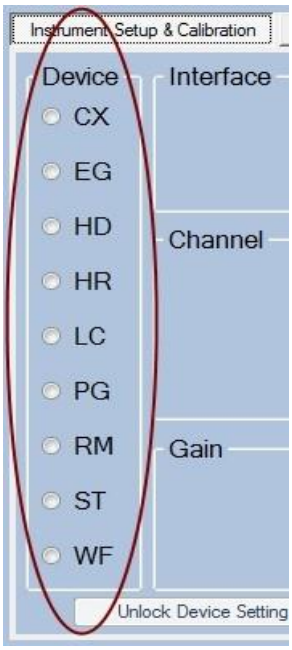
Default LC First Lift Stop Time is an option used by the LC test. The test is automatically stopped if the subject does not perform the first lift of a cycle within this time interval.

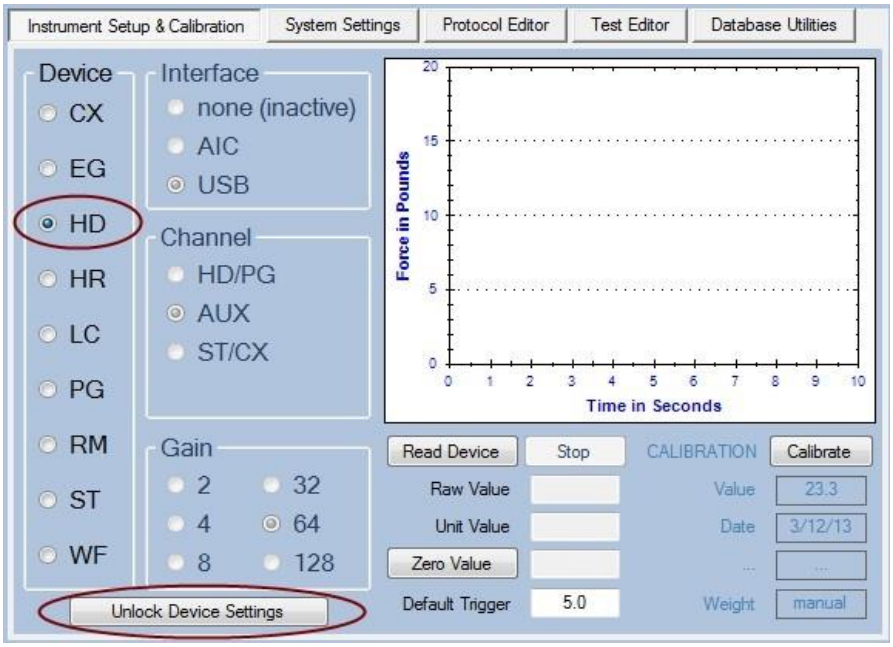
Max Hours After Test for Retests sets the time, in hours, that is allowed for discarding a previous test result and re-testing or re-entering another test result. This limit is used to prevent inadvertent changes to test data after an evaluation has been performed. The normal value for this item is 12 hours, as it is assumed that all data collection for an Evaluation will be completed during a single day of testing. Setting this value to 99 removes the time limit.

Max Days for Editing Test Results sets the time, in days, that is allowed for the evaluator to edit the test results in an evaluation. After that time, results can be viewed but not changed. This limit is used to prevent inadvertent changes to evaluation results after an evaluation has been completed and reported. The normal value for this item is 7 days, as it is assumed that the evaluator will complete all editing and reporting within a week of testing the subject. Setting this value to 99 removes the time limit. Check for Software Updates is an option that can be set to either Enable or Disable automatic checking for

Arcon FCE software updates. Software updates are checked by connecting to the Arcon web site (www.fcesoftware.com). The default value is Enabled, which means that the program will check for updates the first time it is run on any given day. If an update is found, the program will ask your permission to install the update. Updates are never installed without your permission. If you do not wish to have the program check for updates, or if your computer is not regularly connected to the internet, you may disable this option.

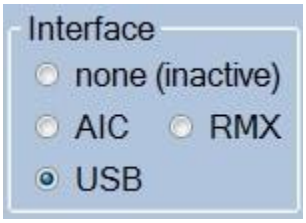
Instrument Setup



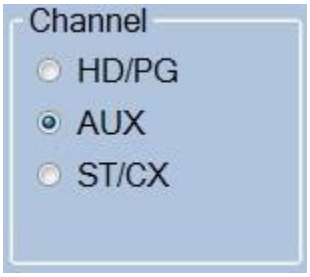


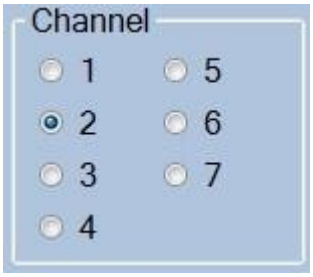
The Instrument Setup & Calibration tab has a column of selector buttons showing each Device or testing instrument (your system may not have every testing instrument). When you click on the selctor for a device, the setup values for that device are shown. We will briefly review these setup values. Warning: Changing setup values for an instrument without understanding what you are doing may render the instrument inoperative. Because of this, the Device Setup screen is normally locked - that is, you can't accidently change any settings. If you wish to make a change, you must first click the

"Unlock Device Settings" button to unlock the screen. If in doubt, please check with Arcon customer service at www.fcesoftware.com

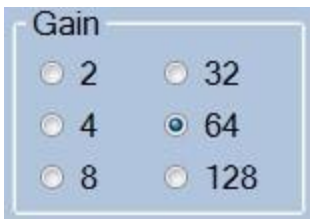


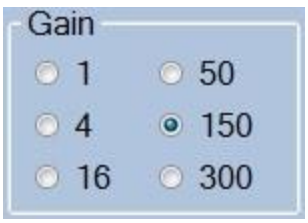
Interface specifies which type of instrument interface your system uses. New systems use the Arcon VerNova
USB Instrument Interface, while older systems use the AIC Box. RMX is used for the digital RMX Spine Range of Motion device only. If you do not have a instrument, the Interface setting should be "none (inactive)". Do not change this value once your instrument is set up and working.



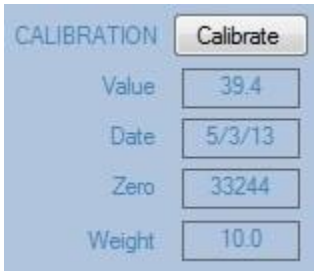


Channel specified the connector on the instrument interface that the device uses (i.e. where the device is "plugged in"). The Channel selections shown above to the left are for the USB Instrument interface, while the selections shown to the right are for the AIC box. The USB interface uses names for channels (normally matching the name of the instrument), while the AIC box uses numbered channels. Channels 1 to 4 are on the front of the box, and channels 5 to 7 are on the back. The AIC front and back panels show instrument names along with the channel numbers. Note: AIC channels are all similar - you can use any channel for any instrument. USB channels are not the same. The HD/PG channel is a high-level input used for the newer Arcon HD (grip) and PG (pinch) devices. The AUX and ST/CX channels are low-level inputs used for all other analog instruments (such as the ST load cell and the LC scale). If your system has an older HD or PG, you would connect that instrument to the AUX channel.

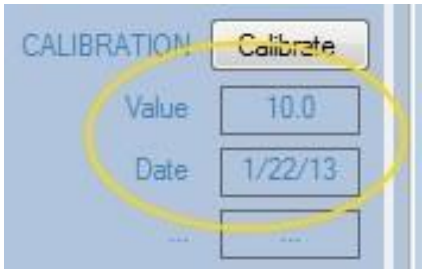




Gain refers to the amplification used in reading the instrument. The gain settings shown above to the left are for the USB instrument interface (AUX and ST/CX channels). Generally a gain setting of 64 is typical for these instruments. The gain settings shown above in the center are for the AIC box. A gain setting of 150 is typical for some of the instruments. The USB HD/PG channel does not use a gain setting, so if that channel is selected there will be no gain settings as shown above to the right.

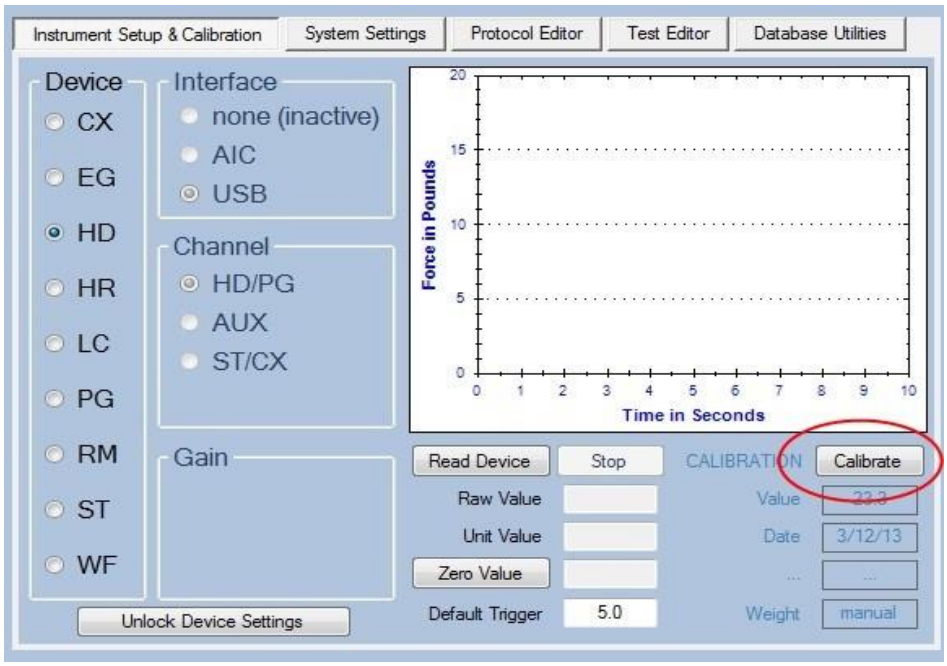


Calibration Information: Value is the current calibration value used for this instrument (analog units per pound). Date is the date of the most recent calibration for this device. Zero is the analog zero value read during the last calibration. Weight is the weight, in pounds, used for the last calibration. To perform a calibration, click on the Calibrate button. This displays a series of instructions to guide you through the calibration process. Each time you perform a calibration, a record is added to the Calibration Log file. This file is available at any time to provide evidence that your system calibration has been maintained.



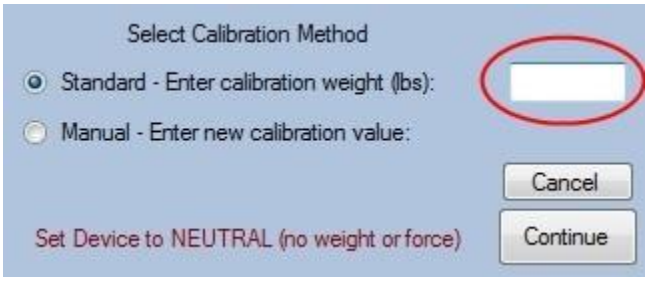
Calibrating the HD Hand Dynamometer

To calibrate the HD Hand Dynamometer, go to Instrument Setup & Calibration on the Utility Screen, select the HD Device and click the Calibrate Button.



The instructions will ask which calibration method to use. The default is "Standard" which uses a known weight to calibrate the device. You may alternately select "Manual" if you wish to enter a calibration value directly (not commonly used). Use the default "Standard" method, and type the weight you will be using for calibration in the text box shown below. The weight can be any amount if it is safe to place on the HD Hand Dynamometer, however we recommended that you use at least 15 pounds. The weight should be a KNOWN weight meaning that it is a certified weight or that you have verified its exact weight on a reliable scale. For example, you could use a barbell weight that has been accurately weighed on a commercial postal or shipping scale. If you do this, mark the exact weight (e.g. 15.1 Lb) with some type of permanent marking for future reference.

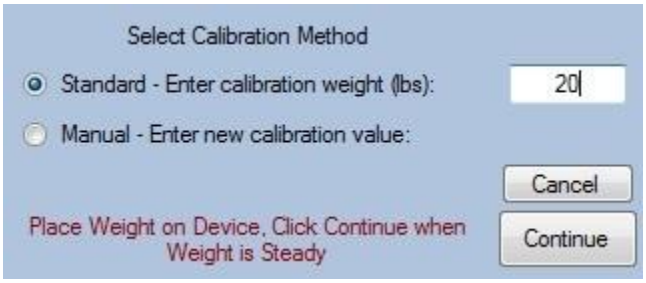
Notice that the instruction state "Set Device to NEUTRAL". Neutral means there is NO external weight or force on the HD Hand Dynamometer. Position the Hand Dynamometer for calibration using one of the two suggested methods shown below.



Method 1: Place the Hand Dynamometer on its back with the two chrome posts pointing up. If the cap that the cable connects to keeps it from resting on its back without falling over then you may have to rest it with the cap off the table as shown.

Method 2: Adjust the grip handle to position 4 (second from the widest). Insert the posts of the Hand Dynamometer into two 2-1/2 pound weights placed on the floor (back of dynamometer is pointing up) as shown. The sole purpose of the weights is to hold the Dynamometer in position for calibration.

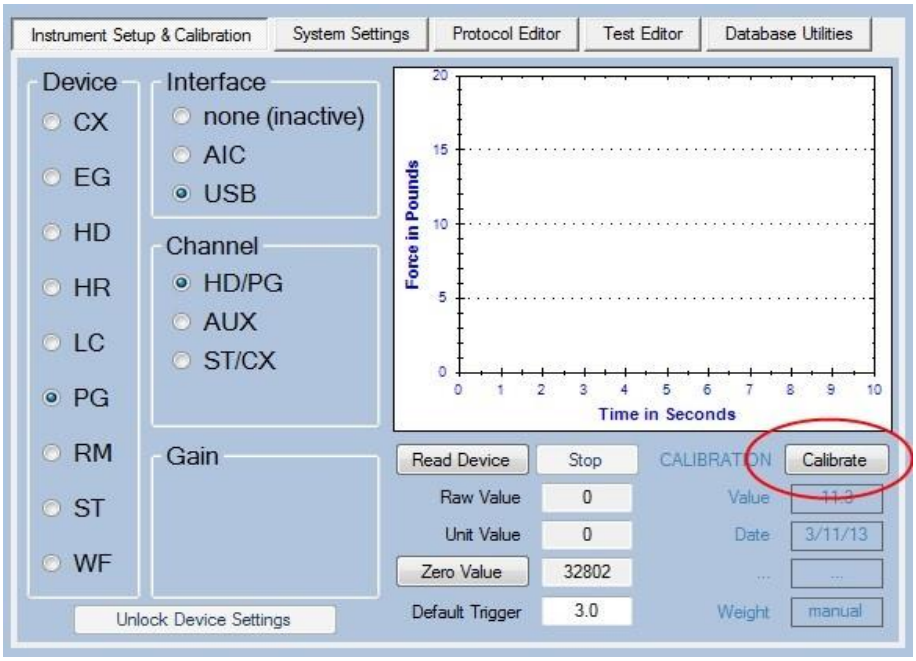
When the dynamometer is correctly positioned, is set to neutral, and you have entered the calibration weight, click the "Continue" button.



After you click the "Continue" Button, the instructions ask you to "Place Weight On Device". You will have to balance the weight as shown below. You may need an extra pair of hands to click the "Continue" button if you are steadying the weight. Below are some examples of different types of weight that can be used.

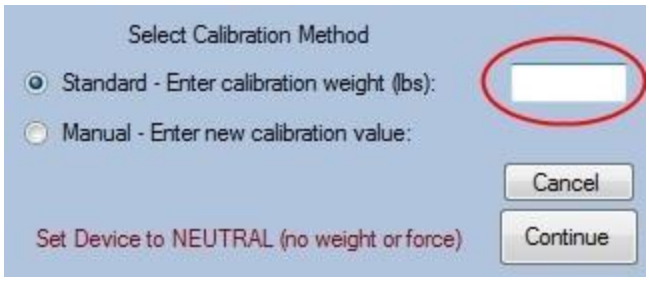
Calibrating the PG Pinch Gauge

To calibrate the PG Pinch Gauge, go to Instrument Setup & Calibration on the Utility Screen, select the PG Device and click the Calibrate Button.



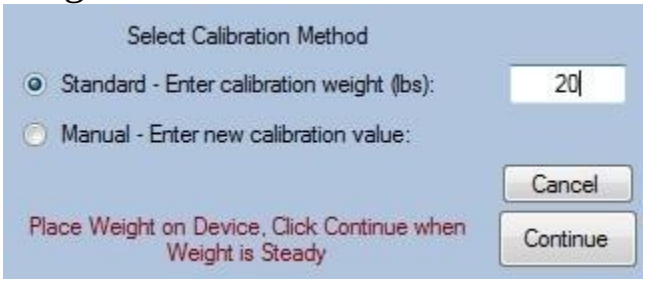
The instructions will ask which calibration method to use. The default is "Standard" which uses a known weight to calibrate the device. You may alternately select "Manual" if you wish to enter a calibration value directly (not commonly used). Use the default "Standard" method, and type the weight you will be using for calibration in the text box shown below. The weight can be any amount if it is safe to place on the HD Hand Dynamometer, however we recommended that you use at least 10-15 pounds. The weight should be a KNOWN weight meaning that it is a certified weight or that you have verified its exact weight on a reliable scale. For example, you could use a barbell weight that has been accurately weighed on a commercial postal or shipping scale. If you do this, mark the exact weight (e.g. 15.1 Lb.) with some type of permanent marking for future reference.

Notice that the instruction state "Set Device to NEUTRAL". Neutral means there is NO external weight or force on the PG Pinch Gauge. Position the Pinch Gauge for calibration using one of the suggested methods shown below.



Place the Pinch Gauge on a flat surface as shown in one of the illustrations, below. Note that you may need to use a pad of paper to support the end of the pinch gauge so that it doesn't move when you press down on the top measurement tab or button.

When the Pinch Gauge is in the neutral position, and you have entered a weight value, click the "Continue" button.



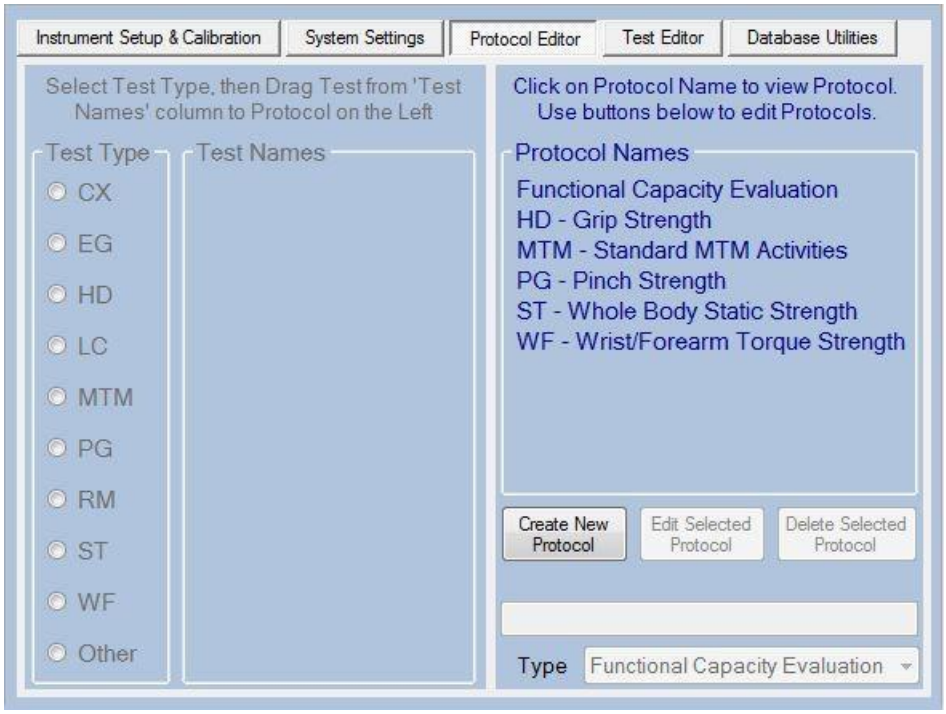
After you click the "Continue" Button, the instructions ask you to "Place Weight on Device". You must balance the weight on the tip of the Pinch Gauge (on the Button if your PG is that model) with the tip of the Pinch Gauge supported by a pad, or the edge of a table as shown. You will need an extra pair of hands to click the OK button. Below are some examples of different types of weight that can be used.

Once the weight is placed on the Pinch Gauge, click the "Continue" Button. The system will perform device calibration, and your new calibration value (and calibration date) will be shown on the instrument setup screen. If your PG device is not working correctly, or if you do not use sufficient weight for calibration, the program will inform you of a calibration problem. Correct the problem and perform calibration again. Each device calibration event is recorded in the system Calibration Log (a Word document named "CalibrationLog.dot" in the Arcon Data folder). You may print a copy of this log at any time to provide evidence that your system calibration has been maintained.

The Protocol Editor

The Protocol Editor allows users to customize evaluation protocols to more effectively meet the needs of their individual clientele. Using the Protocol Editor, users can create, edit, and review Protocols (a pre-selected series of tests that comprise an evaluation).

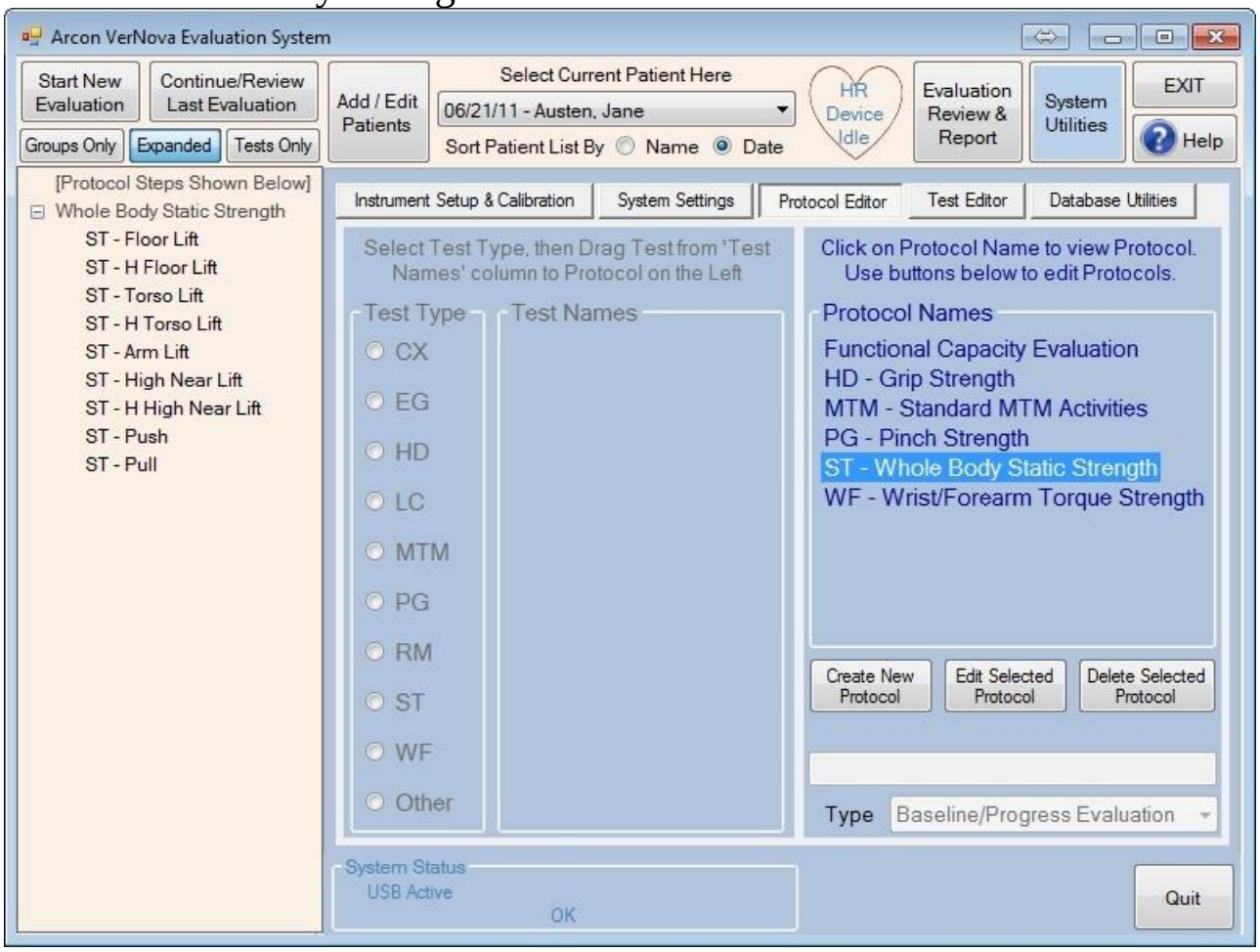
To view or edit the contents of a Protocol, click the Protocol Editor tab on the Utilities screen. The Protocol Editor screen below:



A list of all existing protocols, in alphabetical order, is shown on the right side of the screen (Protocol Names list). If the list extends beyond the size of the screen, a scroll bar will be shown to allow you to scroll through the list to locate a protocol. Your first step would normally be to select an existing protocol by clicking on that protocol name. In our example, we will select the ST - Whole Body Static Strength protocol.

Protocol Record

A Protocol Record contains an ordered list of tests and/or other protocols. When a Protocol is performed as part of an evaluation, these tests and/or protocols will run in the order shown. The example below shows the steps in the ST Whole Body Strength Protocol.

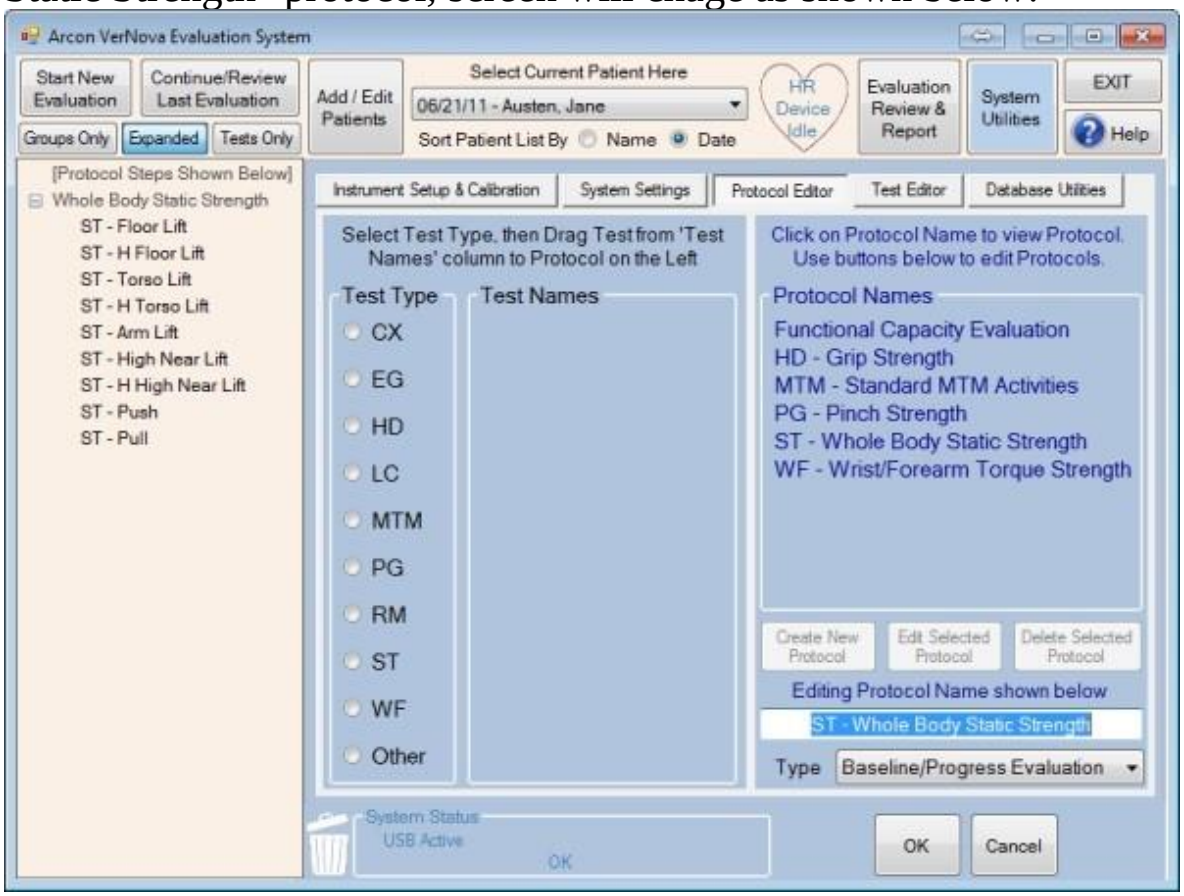


Note that we have expanded our view to include the full program screen. We did this because the Protocol Editor uses the Evaluation Area at the left of the screen to shown the steps in the selected protocol. We can see that there are nine (9) ST type tests or steps in this protocol.

Also, note that the "Type" of this protocol is shown as "Baseline/Progress Evaluation". Each protocol is assigned a default evaluation type, which determines the type of report that is produced from the results of that evaluation. The various evaluation types will be presented in the next section. We can also see that two additional buttons have become active on the right side of the screen. Edit Selected Protocol allows us to edit (change) the contents of this protocol. Delete Selected Protocol allows us to remove this protocol from our system. We strongly recommend that you do not delete any pre-defined protocols on your system. The next section describes the process of editing a protocol

Editing Protocols

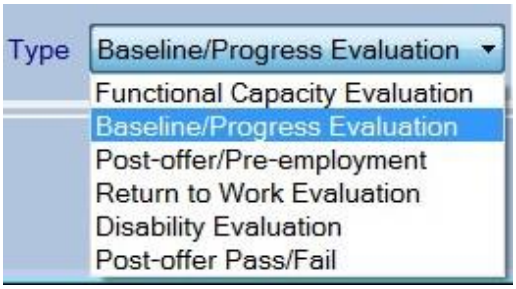
To Edit a Protocol, first select the protocol (click on the protocol name) from the list on the right side of the screen. Then click the "Edit Selected Protocol" button below the list of names. If we do this with the "ST - Whole Body Static Strength" protocol, screen will chage as shown below:



The name of the protocol is placed in the text box in the bottom right of the screen, and the "Type" dropdown control is enabled. Also, the "Test Type" radio buttons in the left part of the screen are also enabled.

You can modify the Protocol Name by changing the text in the name text box. Typically, this is done to correct an error in the name, and not to re-define the protocol as a new set of tests. The latter is more appropriately done using the "Create New Protocol" function described in the next section.

You can modify the "Type" of the protocol by clicking on the Protocol Type drop-down control. The available protocol types are displayed as shown in the image below. Click on the desired type to set the default evaluation type for this protocol.



Functional Capacity Evaluation: Select this type when you want the full Arcon FCE report, which includes the summary cover letter and table of functional abilities. Your protocol should have a variety of tests to evaluate full functional abilities. Don't use this type for very short protocols or protocols of a single test type.

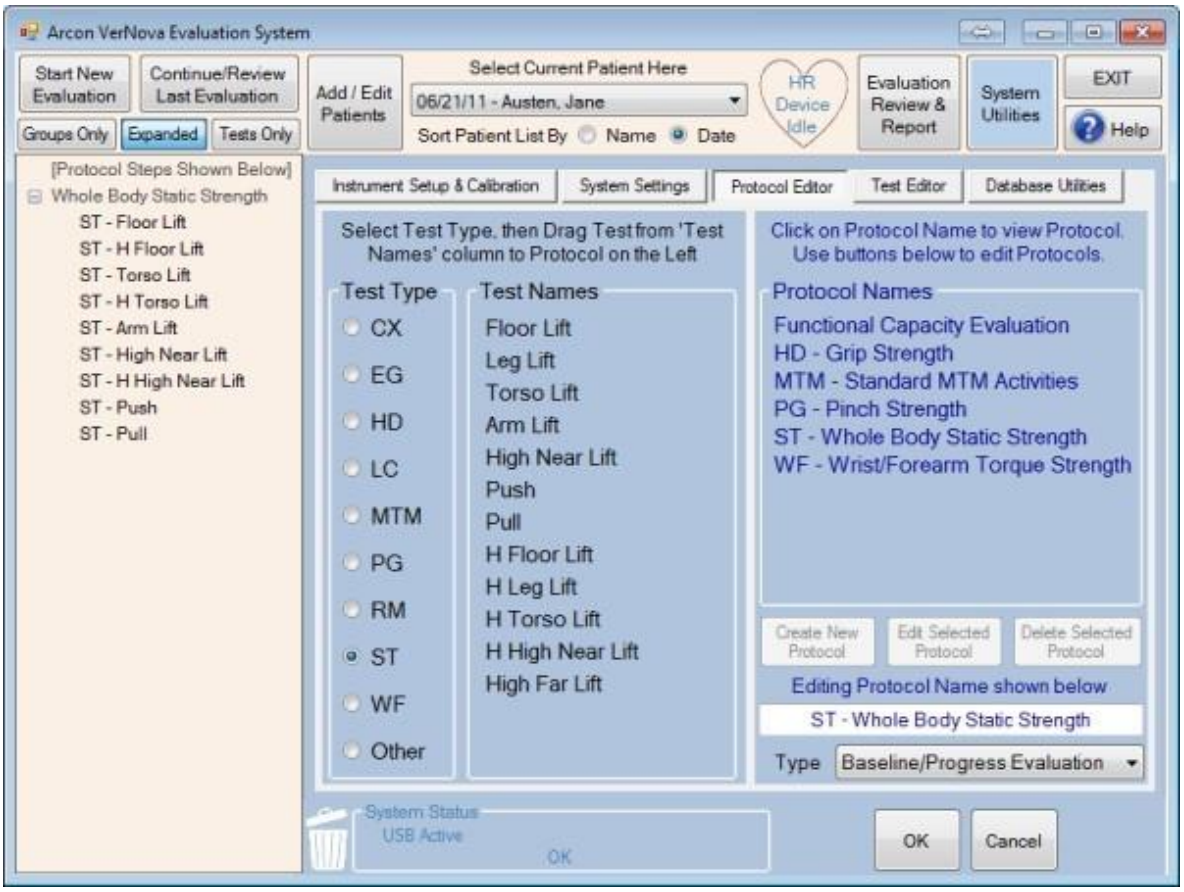
Baseline/Progress Evaluation: Select this type for short protocols or protocols of a single test type (e.g. like the ST Whole Body Strength). The program will produce the "original" Arcon report which merely shows the results of the tests without the summary sections at the front of the report. This type of evaluation is frequently performed to assess a single body region or functional ability, and is often used to monitor progress in a treatment program.

Post-offer/Pre-employment Evaluation: Select this type when you want the Post-Offer Evaluation report, which contains a single summary page comparing demonstrated abilities to essential job demands. Post-offer protocols are typically shorter than full FCE protocols, and are designed to test the essential physical demands of a single job.

Return to Work Evaluation and Disability Evaluation: These types do not yet have a separate report type, and they will produce a full Arcon FCE report. They are intended for future enhancements to the program.

Post-offer Pass/Fail: Select this type when you want the Post-Offer Pass/Fail Evaluation report, which contains a single summary page showing a list of essential job activities and the subject's demonstrated ability for each activity as Pass (able to perform activity), Fail (unable to perform activity) or Marginal (able to perform with observed limitations or safety concerns).

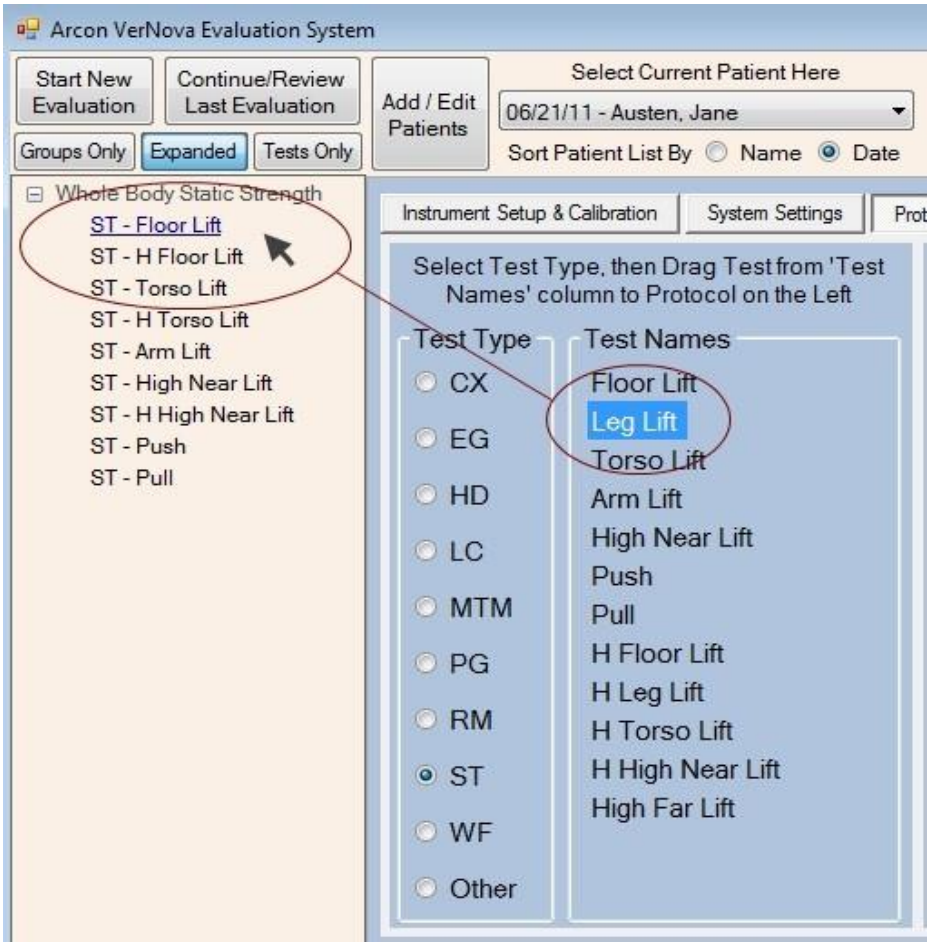
You can select a "Test Type" by clicking one of the radio buttons in the left part of the screen. When you do so, a list of all tests of that type are shown. Clicking on the ST test type would show all the Static Strength tests as illustrated below:

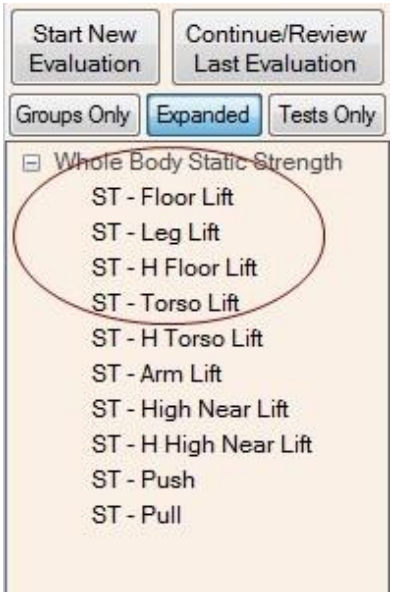


At this point we can proceed to change (edit) the steps of the protocol as shown in the column on the leftmost section of the screen. Protocols can be changed in three ways: we can add steps (tests), remove steps and/or reorder steps. Each of these changes are described below:

To add a step (a test) to the current protocol, place your mouse cursor over the Test Name (in the "Test Names" column), then press and hold the left mouse button to select this test. While continuing to hold the left mouse button, drag the mouse cursor over to the Protocol Steps list and position the cursor to highlight the item in the list after which you wish to add the new test. At this point, release the left mouse button to drop the new item into the list. This action is called a "drag and drop", and you may need to practice it a few times to master the sequence and place your new tests exactly where you want them. In the example below, we drag the "Leg Lift" test into our protocol and drop it on the existing "Floor Lift" test. The larger image shows the mouse cursor

just before the "drop", while the smaller image shows the updated Protocol Steps immediately after the drop.

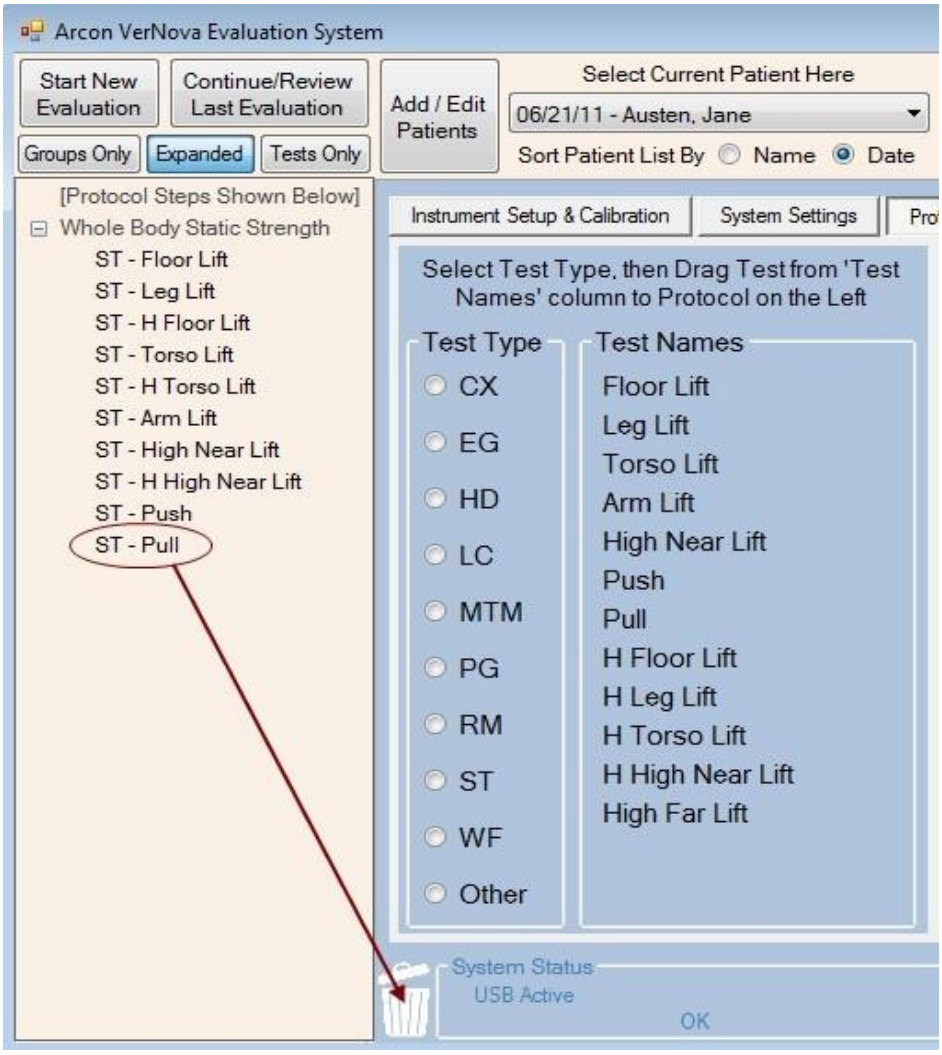




You can add as many individual tests as you wish by dragging and dropping them onto the existing protocol.
You can also select different test types and drag tests of those types into the protocol as well.

Finally, you can even select an existing Protocol from the list of protocol names at the right of the screen, and drag that into the existing protocol. For example, you could add pinch testing to an existing protocol by dragging and dropping the "PG - Pinch Strength" protocol. This is quicker than selecting the PG type and dragging three individual tests.

To remove a step (a test) from the current protocol, place your mouse cursor over that step, then press and hold the left mouse button to select that step. While continuing to hold the left mouse button, drag the mouse cursor down to the "Trash Can" image at the bottom of the screen. When the cursor is over the Trash Can, release the left mouse button to drop the removed item into the Trash Can. In the example below, we remove the "ST - Pull" test from the protocol by dragging and dropping it onto the Trash Can. The first image shows the drag operation, and the second image shows the Protocol Steps after the test has been removed (dropped).


Arcon VerNova Evaluation System
Start New Evaluation
Continue/Review Last Evaluation
Add / Edit Patients
Select Current Patient Here
06/21/11 - Austen, Jane
Groups Only
Expanded
Tests Only
Sort Patient List By
Name
Date
[Protocol Steps Shown Below]
Whole Body Static Strength
ST - Floor Lift
ST - Leg Lift
ST - H Floor Lift
ST - Torso Lift
ST - H Torso Lift
ST - Arm Lift
ST - High Near Lift
ST - H High Near Lift
ST - Push
ST - Pull
Instrument Setup & Calibration
System Settings
Select Test Type, then Drag Test from 'Test Names' column to Protocol on the Left
Test Type
CX
EG
HD
LC
MTM
PG
RM
ST
WF
Other
Test Names
Floor Lift
Leg Lift
Torso Lift
Arm Lift
High Near Lift
Push
Pull
H Floor Lift
H Leg Lift
H Torso Lift
H High Near Lift
High Far Lift
System Status
USB Active
OK


Start New Evaluation
Continue/Review Last Evaluation
Groups Only
Expanded
Tests Only
Whole Body Static Strength
ST - Floor Lift
ST - Leg Lift
ST - H Floor Lift
ST - Torso Lift
ST - H Torso Lift
ST - Arm Lift
ST - High Near Lift
ST - H High Near Lift
ST - Push

You may remove as many steps as you wish using a series of drags.

If you make a mistake, you can recover a step by right-clicking on the Trash Can and selecting "Restore" from the menu.

You can remove an entire "Group" from the Protocol by dragging and dropping the group name. This is quicker than dragging the individual tests.

To reorder steps (tests) in a protocol, place your mouse cursor over the step to be moved, then press and hold the left mouse button to select that step. While continuing to hold the left mouse button, drag the mouse cursor to the position in the protocol after which you wish to move that step. At this point, release the left mouse button to drop the moved item into its new position in the list. You may need to practice dragging and dropping to move tests exactly where you want them.

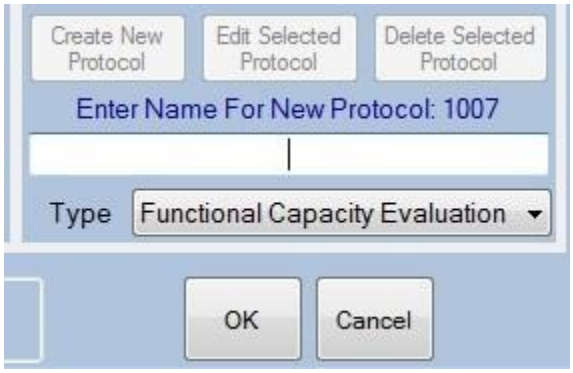
If you drop a test into a group of a different Test Type, the test will be moved immediately after that group.

You can also drag and drop a Group of tests as well as a single test. This is quicker than dragging and dropping individual tests.

When you have completed all changes to the protocol, click the "OK" button in the lower right section of the screen. This will save the updated version of the selected protocol. You may alternately discard all changes to this protocol by clicking the "Cancel" button instead of the "OK" button.

Creating New Protocols

To create a new protocol, click the "Create New Protocol" Button at the bottom right of the screen.



The "Enter Name For New Protocol" step requests that you enter a name for your protocol. Type in the new protocol name (up to 40 characters), and optionally select the protocol Type using the drop-down control. DO NOT click the OK button at this point. You must proceed to add steps (tests) to your protocol first, and only then should you click "OK" to complete the creation of your protocol.

For instructions on adding, removing and reordering steps in a Protocol, please refer to the section Editing Protocols.

When you are finished adding tests (and/or protocols) to your new protocol. Click the OK button at the bottom right of the screen. Your protocol will be saved and you will be able to use it for subsequent evaluations.

The Test Editor

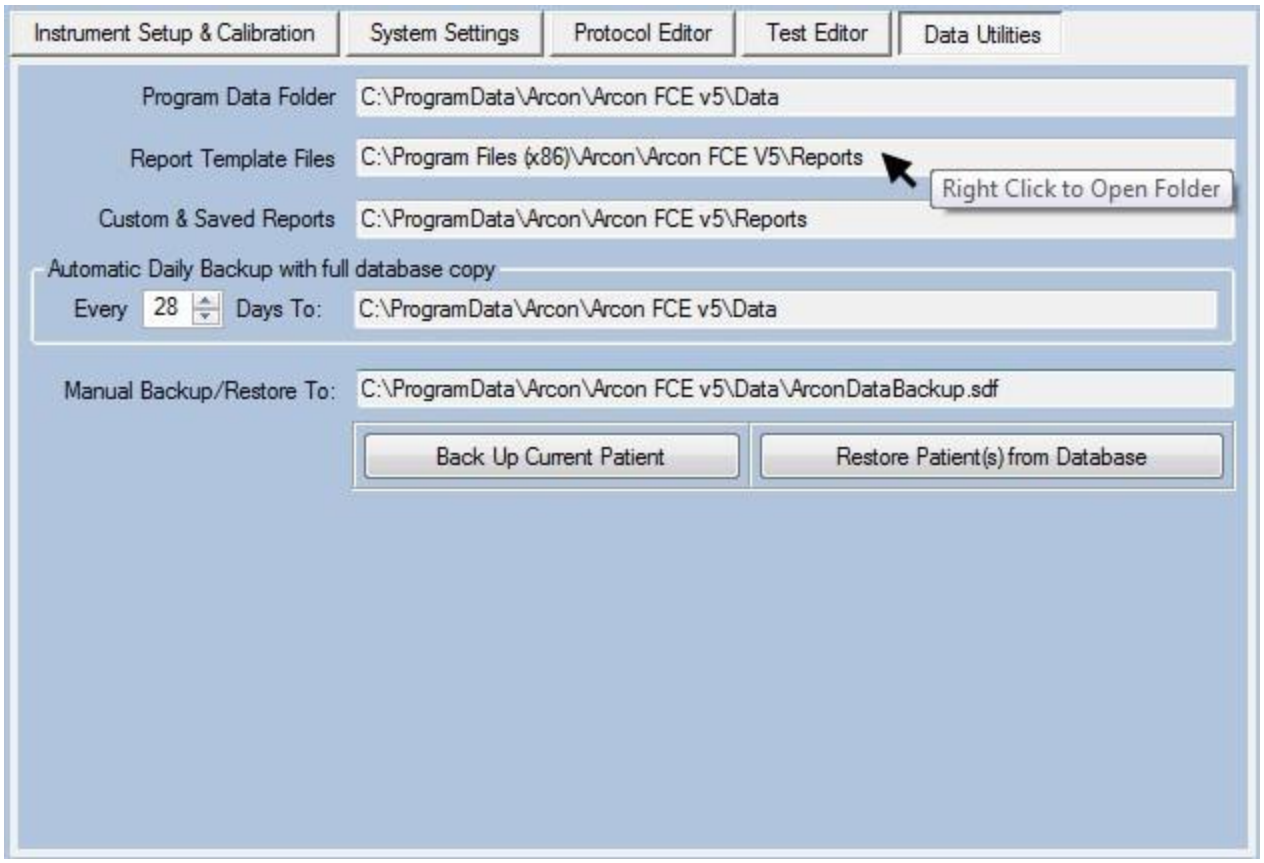
Tests are the lowest level items in an evaluation. Generally, a Test is single evaluation step using one of the Arcon VerNova testing instruments, or allowing manual data entry for an instrument. Editing a test allows you to change the parameters that define the process of performing that test. It is strongly recommended that you not edit standard tests included with the Arcon system. When you edit a standard test, the normative data associated with that test could possibly become invalid due to a change in the test parameters. Another risk of editing a standard test is that all pre-defined protocols using that test will change as well. It is suggested that you create new tests if you wish to modify the way a standard test is performed, then include those new tests in your own custom protocols.

To view or edit the definition of a test, click the Test Editor tab on the Utilities screen. The Test Editor screen is shown below:

The Test Editor has a series of Tabs - one for each type of Test (normally each testing instrument or modality) defined in the Arcon FCE System. In the example above, the HD Test tab has been selected. This tab will show the test definitions for all HD (Grip Strength) tests on your system. Each test type has a number of test parameters (varies by test type) that define the process of performing and reporting the results of that tes

Data Utility

This tab shows the location (file path) of folders used by the ARCON FCE System for Data Files, Report Templates and Database Backup/Restore. Note that you can open (or set, in the case of backup folders) any of those folders by placing your mouse cursor over the folder path, then right-clicking and selecting the option "Open Folder to View Files". A typical use of this feature might be to create templates to customize your Arcon reports. This feature is also used by Arcon Customer Service if you ask us to connect to your computer to diagnose problems with the software.



If you choose to open and view the contents of any of those folders, DO NOT Delete or Rename any files in those folders, as this may cause a loss of data, or cause one or more features of your ARCON FCE System to malfunction. This is especially true for the Program Data Folder where your ARCON FCE database is maintained.

Automatic Daily Backup with full database copy:

The ARCON FCE database is automatically backed up by the program at periodic intervals as shown in the "Automatic Daily Backup" section (e.g. "Every 28 Days"). The path of the backup folder is also shown in that section. By default, this path is the "Program Data Folder", but it is recommended that you select a folder on a different drive - preferably a network drive that is on a different computer. In addition to automatic full backups, the program will back up new Patients and new Evaluations every time you exit the Arcon FCE program. Thus if you exit the program normally, you should always have a backup of your current evaluation data. If automatic backup cannot be

performed to a network drive, then it is recommended that you periodically back up the contents of your "Program Data Folder" and save this backup in a secure location. Loss of your computer, or of the information on your hard drive, could cause irreparable loss of Arcon FCE data unless you maintain a separate backup. Note that if you delete a Patient or an Evaluation, that data is not deleted from the backup database. Therefore if you accidently delete an item, you may be able to recover it from the backup database (until the next scheduled "full" backup). Contact Arcon customer service for assistance in attempting to recover lost data.

The full database backup interval (shown above as 28 days) can be set to any value between 1 and 90. If you set the interval to 0 (zero), this will disable automatic backup. There will be no backup performed for any patient or evaluation data and you will be at risk of losing data if your computer is lost or your hard drive is damaged. Some facilities may use a network drive for the program data folder, and this network drive may be backed up on a regular basis by network administrators. In cases such as this, it is appropriate to set the backup interval to 0. Manual Backup/Restore To:

In addition to automatic backups, the program allows you to perform manual backup and restore of individual Patient data. This feature is useful for exchanging data between Arcon FCE systems - for example, if your organization has multiple FCE systems used by different evaluators, or if you use one computer for performing tests and another computer for preparing reports.

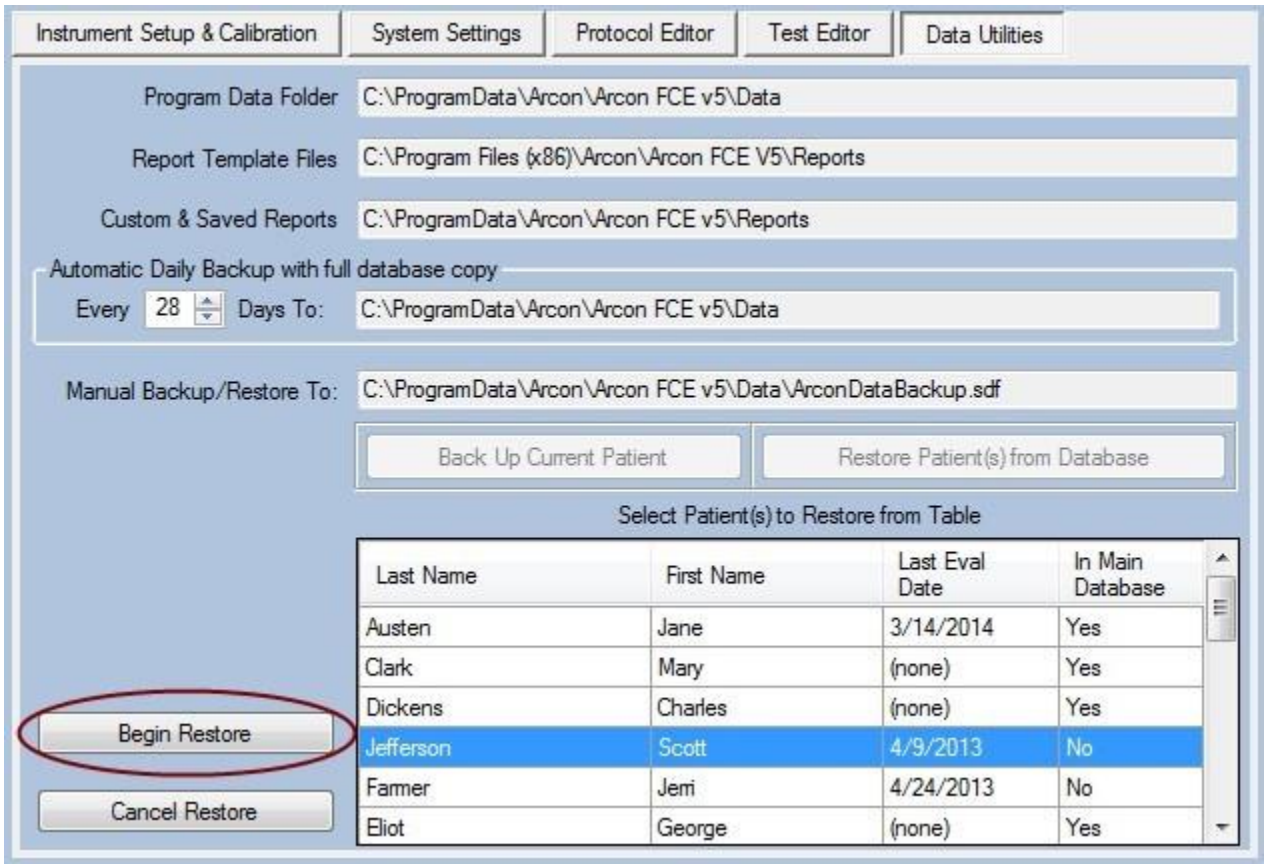
Initially there is no "Manual Backup" database, and the path is shown as "(none)". You can right-click on the path text box and select one of the following two options:

1. Select an existing database (normally from another computer) for backups and restores, or
2. Create a new backup database to use to back up individual Patient data (this option creates a unique database name)

Once you select a database, you can use the "Backup" or "Restore" button as follows. The Back Up Current Patient button will cause all data associated

with the current patient (the one shown at the top of the screen) to be added to the backup database. If you wish to back up more than one patient, select the next patient using the patient drop-down control, then click the Back Up Current Patient button again. You may repeat this as many times as you wish.

The Restore Patient(s) from Database button will display a list of the patients in the backup database and allow you to select one or more of them to be restored to the current (active) database. An example of a backup database patient list is shown below:

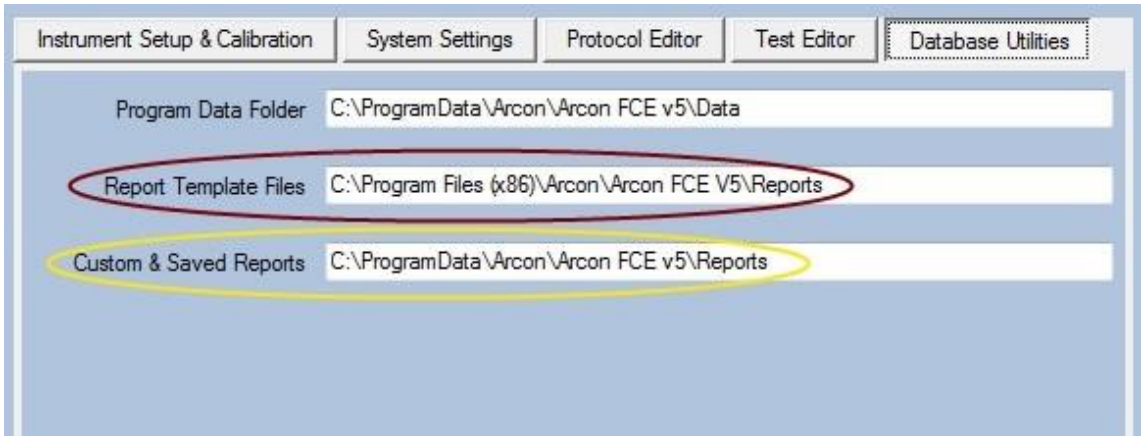


Note that the Patient's name and Last Evaluation Date is shown, as well as an indicator that tells you if that patient is already in the Main (current) database. In our example, we have selected patient Scott Jefferson to be restored. You can select multiple patients by holding down the Ctrl key on the keyboard and clicking on multiple rows of the table. Once you have selected the patient(s) to be restored, click the Begin Restore button to restore the data.

If you do not find an appropriate patient to restore in the list, click the Cancel Restore button to cancel the restore process.

Customizing Reports

ARCON FCE reports are generated in Microsoft Word™ using Word templates and documents located in the Report Templates folder (shown below, circled in Red). Some customers may choose to customize the contents or appearance of sections of their reports by editing the original templates and documents that are installed with the Arcon FCE software. If customized reports are left in the Report Templates folder, they could inadvertently be replaced (and thus lost) during a software update if the original template or document is changed in that update. To prevent this, a special Custom & Saved Reports folder is created when you first install the Arcon FCE software (shown below, circled in Yellow). This folder is initially empty (there are no customized reports in a new install).
When it is desired to customize a report template or document, first copy the original file from the Report Templates folder into the Custom & Saved Reports folder. As a reminder, you can open those folders by placing your mouse cursor over the folder path, then right-clicking and selecting the option "Open Folder to View Files". After copying the file, you may proceed to edit (customize) the instance located in the Custom & Saved Reports folder - this will become your customized report.



When the Arcon FCE program generates a report, it looks first in the Custom folder for each required file. If that file is not found then the instance in Report Templates (the standard version) is used. The contents of the Custom folder are never changed during a software install or update, so customized reports are protected from inadvertent change or replacement. Furthermore, if the customer wishes to return to using standard reports, one only needs to delete the contents of the Custom folder (be sure to keep a backup copy).

Guidelines for Customizing Reports:

A full discussion of report customization is beyond the scope of this help document, as such activity requires both a good knowledge of the features of Microsoft Word, as well as customer specific information relating to the nature of the customized content. The following items of information may prove helpful in getting started on the process of customization:

1. The body of the report is generated by starting with one of the report templates (localevl.dot for the FCE report, local.dot for the Baseline/Progress report and localpoe.dot for the Post offer Evaluation report), then adding specific report sections to the end of that template.
2. Report sections are generated using document files that are named for the type of test being reported. For example, grip strength (HD) tests use hdreport.doc, pinch strength (PG) tests use pgreport.doc and whole body static strength (ST) tests use streport.doc.
3. You can generally change predefined text as you desire, but use care when changing the contents of tables that are used to show test data. Under no circumstances should you add or remove columns in any of those tables, as this would cause your reports to be generated incorrectly.
4. The Arcon system uses both Word bookmarks and Word field codes to place content into the report. Be careful not to delete any of these inadvertently, as doing so will cause that portion of the report content to be missing. Extra care is required for bookmarks, as these are not visible in the default display mode of Word.
   It is recommended that during report customization you modify Word display options to show bookmarks. Bookmarks are used both in the text portion of reports and in the data tables.