

### Using Raw Data

SmartMan produces raw data points every time an activity is performed. These data points are stored on the local hard drive.

These raw data points are NOT the information that is examined by the Admin Module. You can access the raw data by opening each activity file.

#### **The Admin Module**

The SmartMan Admin Module is designed to give you summary information for large numbers of CPR results.

#### **Overall Performance**

Results data from activities can be submitted to the database and that information can be extracted and supplied. The database only contains summary information for overall performance, **not for the performance of individual compression or ventilation**. This information resides in the individual results file.

To submit results, go to View Previous Results from the main menu, select the Category of interest e.g. Compression Results, select the results file of interest from the list, press the Submit Results button. This needs to be repeated for each results file.

To see the results submitted to the database, use the View Detailed Report button. This shows the summary data submitted to the database that is compliant for the 2010 Guidelines. Press the View Detailed Report button again to close this panel

The Print Report shows this same summary data.

It is important to note that the summary data and results is reliant on an activity being properly completed.

### Understanding the Raw Data

#### **Sub-Skill Data Points**

SmartMan collects real data points and thus every graph in a display directly relates to a real point. These real data points relate to various parameters related to how people perform CPR. The data points are stored on the computer where the skills were performed.

The Admin Module does NOT give you access to each individual data point for each skill, but instead provides summaries of those data points. It will have a complete score for a single compression rather than individual points during that compression. If for research purposes you wish to analyze individual points you can open the raw data files and convert them into a format where they can be analyzed.

#### **The Raw Data**

It is possible to examine each individual compression in succession and each individual ventilation in succession. From your email it appears that this is what you wish to do for the compressions data.

## Where is the Data

Each time a practice or a test is performed, the real data points collected are stored on the hard drive of the machine where it is performed. You can find this data on  
C:\V4EMS\_DATA\records\name of login

In each Login Directory

In each login there are 4 directories:

ALS = This contains all of the results for activities completed on an Advanced Airway Manikin under the Advanced Airway Activity Button on the Actions Menu..

Compressions = This contains all of the results for activities completed on the Compression Button on the Actions Menu..

CPR = This contains all of the results for activities completed on the CPR Button on the Actions Menu.

Vents = This contains all of the results for activities completed on the Ventilations Button on the Actions Menu..

C:\V4EMS\_DATA\V4EMS\_5.3\records\loginname

SmartMan Ventilations = .smv

SmartMan Compressions = .smc

SmartMan CPR = .smcpr

SmartMan ALS = smcpr

Each file contains data points. These are the data points that are recorded for each test. These are in text format and can be directly copied.

## Working with Raw Files

Make a copy of all of the files you want to use.

Then open the copy with any text editor such as Notepad or word.

NOTE: DO NOT SAVE the when you open it. Even if no changes are made, SmartMan will no longer be able to read the file.

## File Format

Each file is in text format and is comma delimited. With the copy of teh file you can simply open it in any text editor.

## Contents of the File

### The File Header

29/2/2012, 9:53, Name = This is the date and time (as set on the local machine) when this file was recorded. It is also the name of the person registered for this login.

Tare1: 56, Tare2: 59 = This is the offset to interpret the digital readings.

50mm: 674,674,674 = This is the raw digital reading for this depth. It was repeated 3 times with the same score each time. Sometimes you will get a slight variation and the average is then used.

30mm: 405,405,405 = This is the raw digital reading for this depth. It was repeated 3 times with the same score each time. Sometimes you will get a slight variation and the average is then used.

Max: 939,939,939 = This is the raw digital reading for the maximum chest depth. It was repeated 3 times with the same score each time. Sometimes you will get a slight variation and the average is then used.

06L: 233,233,233 = This is the raw digital reading for this volume of air. It was repeated 3 times with the same score each time. Sometimes you will get a slight variation and the average is then used.

Mode: CP30.5.3.1.1.a = This is the activity which produced the results, the version number and whether the activity was done with the visual feedback showing or not.

Range: 1024 = This is the maximum digital range available for recording of data points for this activity at this time.

Stats: 5.3.1.1 = This is the version of the software that was used to produce the results.

### **Contents of File: The Performance Data**

Data points will exist under the following headings. Remember that the data points for performance are related to the data points on time as all points are collected in real time. To get an accurate picture of what is happening you must link the times to the points.

The headings of the data will change according to which activity results are recorded. Here are the headings for a compression activity.

Durations:  
Depths:  
All Depths:  
Min Depths:  
All Times:  
Health Array:  
Health Array Index

The headings for a and ALS CPR activity would be as follows

CPR Durations:  
CPR Depths:  
CPR Array:  
All CPR Depths:  
Min CPR Depths  
All Times:  
CPRVArray:  
Breath Depths  
Breath Peaks:  
StartOfPeak:  
EndOfPeak:  
All Vent Depths:  
All Vent Durations:  
Health Array:  
Health Array Index  
alsSyncTimes:  
alsGapTimes:  
alsCompressNo:  
intubation time: