

## Exercise 6 : Import/Export Volume Tool

Most medical image formats do not support 3-D directly, since each slice in a study is written to a separate file. The Volume Tool provides a way to create a pseudo format for handling groups of 2-D files as a single 3-D entity. Analyze uses the AVW\_VolumeFile, or volume file (.vol), as a way to organize a list of 2-D files into a 3-D volume. The files must contain images of the same size and data type. This exercise will show you how to use the Volume Tool to create a volume file from a list of 2-D TIFF files.



1. Open the **Import/Export** module (**File > Import/Export**).
2. Open the **Volume Tool** (**Tools > Volume Tool**).
3. In the Volume Tool, click **Wild Cards**.
4. In the window returned (figure 1), click **Directory** and navigate to **\$(BIR)\images\TutorialData\VolumeToolTutorial** - the directory containing the 2-D TIFF data for this exercise.
5. The **Filter** field is set to \* by default so everything in the directory is selected. As this directory only contains TIFF data specific to the data set we wish to load, leave the filter as is.
6. Click **Apply**. The TIFF files will now be copied to the Volume Tool (figure 2).
7. In the Volume Tool, click **Verify** to ensure that all the slices selected are the same size and data type.
8. A dialog box (figure 3) will be returned upon successful verification stating 'Verify Succeeds'; click **Continue**.
9. Click **Save** and save the volume file as **TIFF\_Head.vol** in the **\$(BIR)\images\TutorialData** directory.

*tip* | The volume file saved can now be loaded into Analyze using the Load or Load As modules. Alternatively you can load the volume file directly into the Analyze workspace from the Volume tool by clicking 'Load'.

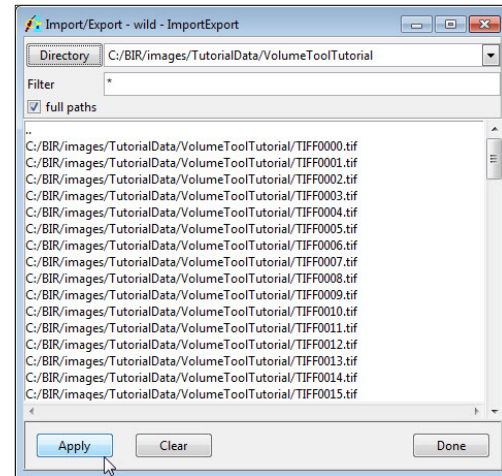


Figure 1

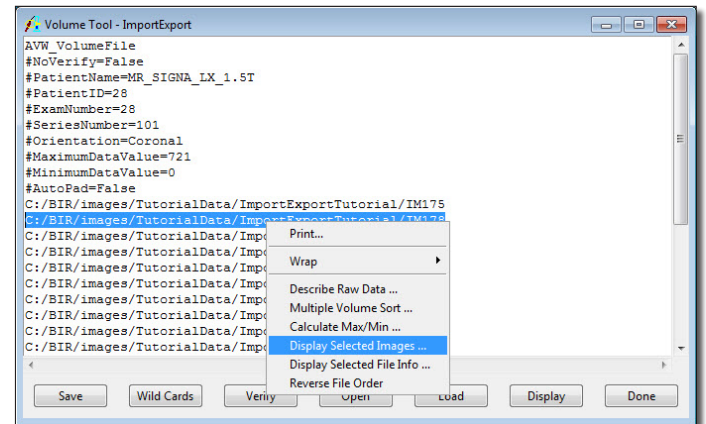


Figure 2

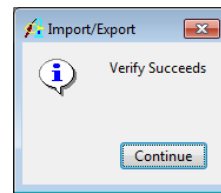


Figure 3

10. Close the Import/Export module before proceeding to the next exercise.