Creating a parameter file for VE-Xplorer

In VE-Xplorer directory, open vrxpr.param.

The parameter file is divided into blocks. The first line indicates how many blocks are to be loaded. In the sample parameter file, the first line indicates that 7 blocks will be loaded. **This integer must be included and must be accurate.** The 7 blocks in the sample parameter file are currently the only types of blocks that may be defined. No block is required and they may be inserted in any order. The user chooses which blocks to include based on the desired VE-Xplorer display.

Block type 0, which sets world DCS settings to tweak the display in the virtual environment, is optional. If included, it must contain the following lines:
--Scale values (must be greater than 0 to be visible)
--Translation values (in feet)
--Rotation values (in degrees, Z-X-Y format)

Block type 1, which contains scalarbar settings to tweak the display in the virtual environment, is optional. If included, it must contain the following lines:
--scalarBar Position (of lower left corner, in feet, relative to the performer coord frame)
-- scalarBar Z-Rotation (in degrees: used to control orientation of the scalarBar)
-- scalarBar Height and Width (in feet)

Block type 5, which contains PIV data, is optional. This block is currently being developed and may change. If included, it must contain the following lines:
--Name of image file
--xyz location of lower left corner
--Ambient background noise (0 = off, 1 = on)
--Retriggerable, prevents sound from being retriggered in the program (0 = off, 1 = on)
--Volume (range is 0 [soft] to 1 [loud])
--Cutoff (range is 0-1)
--Sound position x (OpenGL coordinates 0 is center)
--Sound position y (OpenGL coordinates 0 is center)
--Sound position z (OpenGL coordinates 0 is center)
--Sound file name
--Sound name alias (give a unique name of alphanumeric characters)
--Orientation: 0 = X-plane, 1 = Y-plane, 2 = Z-plane

Block type 8, which contains vtk datasets such as unstructured grids or polydata such as surfaces or particle tracks, is optional. If included, it must contain the following lines:
--DCS scale values
--DCS translation values (in feet)
--DCS rotation values (degrees, Z-X-Y format)
--vtkDataSet name
--Precomputed data slice directory. Insert JUNK or other undefined directory name if not applicable
--Precomputed surface directory. Insert JUNK or other undefined directory name if not applicable

Block type 9, which contains the geometry file, is optional. It can only contain files that can be

visualized with perfly (e.g., *.stl, *.iv, *.pfb, *.obj). If included, it must contain the following lines:
--Transparency toggle (1 makes the geometry transparent when visualizations are active)
-- *.stl color flag (and 3 color values if flag = 1). This line applies only to *.stl files, but must be present for all files.
--Scale values for geometry file
--Translation values for geometry file
--Rotation values for geometry file
--Geometry file name

Block type 10, which is the transient data loader, is optional. If included, it must contain the following lines:
--Number of directories containing vtk data to follow
--Data dcs scale values
--Data dcs translation values (in feet)
--Data dcs rotation values (degrees, Z-X-Y format)
--Directory of vtk files **[This and the following line should be repeated the number of times indicated in the first line of this block. Each set of 2 lines ties data to a button on the GUI.]**
--Button ID: 0 = 3D_mesh, 1 = x-planes, 2 = y-planes, 3 = z-planes, 4 = particle cloud
--Transient geometry data directory **[This line must be included. If there is no transient geometry data directory, insert "JUNK" or other undefined directory name.]**
--Transient geometry dcs scale values
--Transient geometry dcs translation values
--Transient geometry dcs rotation values
--Transient geometry transparency setting, *.stl color flag (and 3 color values if flag = 1)
--Duration of the transient sequence in seconds

Block type 11, which contains the sound file, is optional. You must have Sound API working (OpenAL is recommended) to use this block. If included, it must contain the following lines:

The final 3 lines are mandatory in pre-8/20/04 versions of VE-Suite. In versions from 8/20/04 and later, these lines are hard-coded into the GUI and do not need to be included:
--Warped contour scale value
--Navigation step file (increase to go faster)
--Streamline diameter (if set to 0, the diameter will be auto-scaled by VE-Xplorer. If greater than 0, it represents the actual diameter in feet.)

VE-Xplorer/Conductor