

Demo Script for Design Review

Key Message:

PENTIUM (R) PRO processor performance gives Intel Architecture computers workstation class performance and makes it possible to quickly run complex engineering applications. This allows the user to be much more productive and able to design/analyze very large models.

Setup:

You will need the 32-bit version of WinZip to extract this demo. An evaluation copy may be downloaded from <http://www.winzip.com> on the Internet.

Running the Demo:

italics typeface - these are notes to the demo person, i.e., not an action or soundbyte.

Actions:

These first actions should be done before the customer arrives since they take some time. Design Review may then be left on screen or minimized.

- Run DRV.EXE located in \PPRO_WS2\DRV directory in your root directory.
- Select \PPRO_WS2\GYDA directory when it asks for a file to load.
- Select PROJ.DRI, and click OK.
- If the Display Sets windows comes up, just click "yes" to continue.
- If the windows do not fill the screen, click the RIGHT mouse button in the main window to bring up the menu/tool box; then click on the TILE button in the lower right corner of the tool box.

SoundByte:

- Design Review takes designs/drawings/models of many different disciplines: plumbing, architectural, electrical, etc., and combines them into a single 3D model which may be walked through and examined to check the compatibility of all of the sub-components. The model being shown is the actual model used in the construction of an offshore oil drilling rig. This dataset is about 10MB, quite a bit of data.

- Design Review is a very CPU-intensive app, but PENTIUM (R) PRO processor provides the necessary performance for it to be fast enough to be practical for use.
- PCs can handle workstation hungry applications just as well if not better than more expensive competing platforms can, at a much lower cost to the user.
- PENTIUM (R) PRO processor is the engine behind us being able to see 3-D, realistic designs such as the construction site in this example.

Actions:

- In the upper right window, click and drag the point of the "cone" showing the view displayed in the main window. You can show the view in many different parts of the rig this way. Change the compass direction you are looking in by clicking in the direction window, changing where the pointer line points, and clicking again. You can change the elevation in the same manner.
- Change the angle covered by the main view by moving the slider with the number on it. You can focus in on a small object or back up and see the entire rig.

SoundByte:

- Note the speed with which each view is rendered. PENTIUM (R) PRO processor performance makes it possible to quickly look at all of the details of a large model. Lower performance machines could make this a very tedious and time consuming process.

Actions:

- Click on the RIGHT mouse button again to bring up the menu/tool box.
- Click on the movie projector (on the bottom of the tool box) to bring up the dialog box with the

pre-loaded walk-through paths.

- Select "Movie 1" and click OK.

Other walk-through paths that also work are:

- walk down main hall
- movie partial
- new
- steve1
- vickie1

Before running this for a customer, try out different update times (in the window where you select the walk-through paths) to see what shows the best on your machine. Update times force the SW to draw the screen at the specified rate, and also drop some of the model details if the HW cannot keep up with too short of an update time.

SoundByte:

The program will now loop through a walkthrough of an oil refinery.

During the walkthrough, highlight the following features/benefits:

- This is not an animation but a real-time rendering of each frame in the walkthrough. All that is stored is the path through which our viewpoint moves. We then render each frame as we move from point to point. We are NOT simply playing back still images.

Actions:

- Hit Escape to stop the walkthrough. If the view is not completely redrawn after you do this, simply move the "cone" a little bit and it will redraw completely.
- When you want to exit, click on RIGHT mouse button to bring up tool box, click on EXIT to exit application and demo.

Notes:

This demo should be run on a system with an OpenGL accelerator card. Cards we have used in Corporate Demos include the Accelgraphics AG300 and the Intergraph GLZ cards. If you don't have access to one, try using the model in \DRV\EXAMPLE directory instead. It's a model of much lesser complexity than the one found under the \DRV\GYDA directory.