Demo Script for Trispectives Professional

Key Message:

Pentium (R) Pro processor accelerates impressively the performance of multimedia authoring software like
Trispectives (TM) Professional, enabling faster creation of and higher quality 3D modeling and special effects.

Supporting Messages:

Pentium Pro saves valuable time for multimedia authors, content creators, translating into a combination of savings in
dollars and enabling of more creative, richer content.

Pentium Pro performance is luring many ISVs traditionally based on competing architectures (like the Macintosh platform)
and Workstation (WS) architectures (like expensive SGI and Unix-based platforms), to port over to the Intel Architecture.

PC WS provides comparable if not better performance to signifcantly more costly high-end Unix WSs.

Pentium Pro will insure compatibility across both content creation and playback systems.

Pentium Pro does not need any special hardware acceleration to deliver high-end performance for content creators.

Demo Setup:

You should've already copied the PPRO_WS2 directory and everything below it to your hard drive (which we'll assume is
c: drive). Under this directory is Trispect.ins directory. You'll find setup.exe here. Run this to install the software.
When asked for a directory to install to, you may edit and specify any path if you don't want the default. You'll need the
following license key entered when asked: 1982 6661 4092 5142. Enter spaces as they appear. After install is finished,
you'll find a Trispect directory where you specified your install. Drag the program executable, trispect.exe, into a program
group in Program Manager if you wish to make an icon for launching Trispectives. At this point you are ready to run
Trispectives. Do not delete any directories or files under Trispect.ins or Trispect directories. You'll need both
directories to run through the following demo and to utilize the full capability of what the software and files on this CD have
to offer.

To roughly monitor how much work the CPU does during various operations in the demo it's highly recommended that you
bring up the Performance Monitor in one corner of your PC screen. Choose Performance Monitor in the Administrative Tools
in your Program Manager to do this. Select "Add to Chart" which will bring up a window, in which

you select "processor time",
then add, and then done. In options, choose "Always On Top" and choose to display a "histogram" chart. Scale down this
performance monitor window so it's tucked away in one corner of your screen. CPU-intensive functions will become self-evident
with this monitor up and running. If you're running on a multi-processor system, all the better. Trispectives is a 32-bit, multi-threaded
application which will take advantage of multiple processors in your system. The Performance Monitor can be setup to display
multiple processor times, in histogram form, to show how much of each processor is being used at any given time. This demo will
scale in performance with a second processor.

Demo should last about 5-8 minutes.

Navigating the Demo
italics - notes to the demo person

*Note: This demo should be fairly easy to learn for even someone using Trispectives for the first time. It needs
to be practiced a couple of times before it becomes natural and quick for your delivery. Running through the following
script will also serve as a good opportunity to learn some of the features of Trispectives . This will allow you
to modify or add to the demo, more appeal and your own creativity, if you desire. If you decide to do this however,
please keep in mind the key message of highlighting the workstation-class performance of the Pentium Pro processor,
and its user benefits. In other words, make sure to choose any modifications to the following demo to support that message.*

*Note: While the demo is CPU-intensive, it is also graphics and memory intensive. Make sure you use the best video
graphics card you can get. Diamond Stealth 64 PCI and ATI Pro Turbo PCI are good examples. Also make sure to have
the latest video drivers for NT that are available. You can usually find these on bulletin boards or WWW sites. 1024x768 pixel
depth resolution and 24-bit color (16 million colors) are recommended. Higher VRAM always helps. Have at least
24 MBytes system RAM for this demo.*

Note: Inserted in various places in the script are references to demo*.bmp files in the trispect.ins\demo directory. These files are snapshots of the demo at various
points of the demo. You can view them using the paintbrush utiliity in Windows Accessories group or by double-clicking on the files in File Manager.

Soundbyte:

We'll be creating a simple office environment. But you will see that we'll be able to create something quite
impressive very quickly given the power of the Pentium Pro processor and some of the amazing features of Trispectives Professional. The creation process itslelf is the most interesting part and the

highlight of the demo.

Actions:

- Open Trispectives.

- Open "An existing Workbook".

- Browse files to find "offquad.tsb". Open it. Click OK.

File should be located in: c:\ppro_ws2\trispect.ins\template

You will see an office, 4 cubicles separated by partitions

- Maximize your Trispectives and Workbook windows for better viewing.

Make sure all your toolbars are visible by going to View/Toolbars in menus and ensuring all toolbars are selected.

- Window-Zoom just the front left cubicle to get better view.

Window zoom is located on one of the toolbars. You can float the mouse over different tools in toolbars
to get a mini-pop-up tab describing the tools' function. There are 7 sets of toolbars when all toolbars have been
selected visible. *Windows zoom appears in the 4th toolbar from top.*

We will put a table and 4 chairs around it in this cubicle. We'll also be adding a light.

- Open the *off_layt.tsc* catalog. Do this by going to Catalogs/Open in menus. DEMO1.BMP

Browse through directories. Off_layt.tsc should be located in: c:\ppro_ws2\trispect.ins\catalogs\3dmodels.

You will see the catalog, a group of entities (like models, textures, shapes, etc.), get added to your catalog book
found on the right side of Trispectives window.

- Drag and drop the Round Table from the off_layt catalog into our cubicle of interest, i.e., front left cubicle. Center it in the
middle of the cubicle. DEMO2.BMP

Using objects from the catalog is a matter of dragging and dropping the objects into the workbook scene or page.

- Drag and drop the Office Chair on the right side of the table. Line up the star-style stands of the table and chair so
that they are aligned, to ensure chair has good position relative to our table. DEMO3.BMP

Leave the chair selected at this point. You can tell chair is selected because it will be yellow in color.

Soundbyte:

We'll now very quickly create multiple chairs around the table, saving us time in having to drag, drop, and position
each chair individually around the table.

Actions:

- Click on the Tri-ball Positioning tool in the tool bar.

Tri-ball is used to rotate (along an axis, plane, or free space) and to replicate objects. A blue ball with 3 handles (in centers of squares) will appear around the selected chair.

- Move mouse to somewhere in the middle of Triball that appeared. Do this until a hand appears.

- Click left mouse button (LMB) to move the Triball. Move the ball so that center of ball (solid yellow dot) sits on top
of the center of the star-style stand of table. DEMO4.BMP

- Move mouse to top of Triball, where there is a handle, until a hand appears. Click LMB to highlight the vertical
axis of the Triball. DEMO5.BMP

*This will become the axis of rotation which we will need to replicate 3 more chairs like the one in our
cubicle.*

- Move mouse within Triball until a hand-with-curved-arrow-on-bottom appears.

- Click right mouse button (RMB), move mouse just a little, and let go of button.

A menu will appear.

- Click "Link Here" in the menu. (DEMO6.BMP) Enter "3" for the number and "90" for angle. Click OK.

This specifies that all 3 chairs will be linked to the original and positioned 90 degrees apart.

- Turn Tri-ball off by clicking Tri-ball tool again in tool bar.

- Deselect chair by clicking anywhere in the scene outside the chair.

Soundbyte:

Now we will add a light to our scene, adding some more realism. Then we'll adjust some of the lights in the scene to
improve lighting in our scene.

Actions:

- Go to Insert/Light in menus.

- Click arrow that appears along with light icon in the center of the table-top.

This will direct light rays to the center of the table.

- Choose "Spot light" in the menu that appears. Click OK.

- Click "yes" to show all lights in scene in pop-up box that appears.

- Right click on the light. (DEMO7.BMP) Choose Light Properties. Choose Light tab in pop-up window.

Right clicking on objects generally allows access to options for the object, in this case light properties.

- Pick light blue color by clicking on appropriate color in color palette.

- Change "Fall Off Angle" to 25. Click OK.

- With light still selected, turn Triball on.

- Move mouse in Triball until four-circular-arrows appear.

This enables free-space rotation of the object selected, in this case the light.

- Rotate light in space until it faces down at the table as well as towards some of the office partitions.

- Turn Triball off.

- Fit Scene by clicking on the Fit Scene tool found in tool bars. DEMO8.BMP

This allows all objects in the scene to fit in the window. You'll see the 4 cylindrical lights in the room, 3 on top,
and 1 on bottom of the room.

- Take the light in the middle top of the room and position it so room gets well lighted. You can do the same for the two
other lights on top of each side of the room.

- Right click on each of the 3 top lights to get options. Turn off shadows.

We've observed that with shadows on we get a very dark scene upon final rendering which we do later in the demo.
But you may experiment with this before actual demo to find what works best for you.

- Window Zoom again the office cubicle of interest so it fills the window. DEMO9.BMP

Soundbyte:

Now we will add a texture to our table again to add even more realism.

Actions:

- Window Zoom to cover just the table in the scene.

- Click on Edit Surfaces & Edges tool in tool bars.

This is the 4th toolbar from top.

- Click on Textures tab in the catalog.

All catalogs loaded for this run of Trispectives can be found in the catalog book. You can switch between catalogs
by clicking on the various tabs available and the little arrows to scroll up and down. You may need to use the arrows
when catalog tabs have scrolled off your visible screen. You can add more catalogs to this book of catalogs via
Catalogs/Open in the menus.

- Drag and drop the Woodfloor texture on top of the table. Do same for the edge of the table. DEMO10.BMP

- Zoom Out a little by selecting the Zoom tool in toolbars. Left click and drag down the zoom tool in the scene to zoom out.

- Deselect Zoom.

Soundbyte:

Now we'll add some 3D text to our scene. How about "Pentium (R) Pro Processor" sitting on top of the table ?

Actions:

- Select the Text catalog.

- Drag and drop 5cm_upright onto center of table-top.

- Type in "Pentium Pro (R) Processor" in the text box that appears. DEMO11.BMP

To get the registered trademark symbol, R with circle around it, press ALT key and type "0174" in the numeric
key pad on keyboard. You'll need Num-Lock on to use this key pad.

- Click outside of text box to proceed.

Text will appear in a long unformatted vertical string in our scene. We'll correct this later.

- Select text. Then select Triball.

Using Triball we'll rotate the text on table so it faces you, so it's readable.

- Float mouse over top handle of Triball until hand appears. Click LMB to highlight vertical axis.

- Move mouse to middle of Triball until hand-with-curved-arrow-on-bottom appears.

- Left click and rotate Triball counter-clockwise until you see a degrees value appear. Let go of mouse button.

Counter-clockwise direction should be the shortest path to face text to you.

- Right click on degrees number. Edit value in box to 90. Click OK. DEMO12.BMP

- Turn off Triball.

- If needed, zoom in so text is better visible.

- Select text to get handles around text. DEMO13.BMP

Handles will allow you to stretch your object in the 3 different directions in 3-D space.

- Stretch one of the horizontal handles until text fits on one line. DEMO14.BMP

Caution: do this slowly as to not overstretch the text.

- If necessary, center text on table by clicking and dragging the text.

- Stretch one of the vertical and one of the depth handles to increase height and add depth to text. DEMO15.BMP

Caution: do this slowly as to not overstretch or oversize the text.

Soundbyte:

Now let's make the scene utterly more realistic by swithing on rendering. We'll add shadows, ray tracing, and
anti-aliasing as part of realistic shading. These are all very CPU-taxing functions. Adding this level of realism is when
we begin to break the current limits of Pentium (R) processor technology and see the benefits Pentium (R) Pro processor
has to offer. While everything we've done so far happened much more quickly here than it would on a Pentium processor,
rendering really makes clear the significant speed advantange over a Pentium processor. *We've seen the Pentium Pro do the
same rendering job in less than 36% of the time it took a 100MHz Pentium to do.* What this means is I can do the same
job in less than half the time, or do a better quality job in the same time.

Actions:

- Zoom-out enough to where we can see our cubicle.

- Right Click anywhere on the grey scene background. Choose Scene Properties. DEMO16.BMP

A options menu will appear.

- Select the Show tab. Deselect lights.

- Select the Rendering tab. Click on Realistic Shading and then Shadows, Ray Tracing, and Anti-aliasing. Click OK.
DEMO17.BMP

Wait a few seconds for the scene to render. An SmartRender % counter near the bottom of window will update

you on how much of the total job is done. It's important to note that the final image is not a still graphic image,
but a fully interactive 3D scene or environment.

Scene will be re-rendered in this mode any time a change in view or scene takes place or until the scene reaches
the realistic rendered state. This mode is not always desirable, for example, during the working stages when an artist
is still creating the art piece, scenes should be updated, rendered as quickly as possible. This means not operating
in realistic rendering mode.

Realistic rendering should only be turned on at the end of the demo, when scene is near completion. However it is
possible to escape the automatic re-render anytime by hitting the ESCAPE key. You may have to keep doing this
because Trispectives will seek to re-render until the scene reaches the state of realistic-rendered, the selected mode.

Soundbyte:

Finally we're going to add some more sizzle to this scene. How about some movement, an animation ? We'll put a
spin on our Pentium Pro text. It will spin on the table. Surprisingly as you'll see this is very simple and quick to do.
The animation however is not an .avi file. What's happening is real-time rendering as the text spins. Because the
Pentium Pro has the muscle to do this blazingly fast, for us users this means we see a smoother real-time animation
than we would on a Pentium processor. For each movement the entire scene must be re-rendered. This means the
ray tracing, the shading, and the anti-aliasing effects on each pixel of the screen must be re-calculated very fast to move
the animation as fast as possible. Textures and lights in our scene only add more complexity and computation
for our rendering jobs.

Actions:

- Select the Animation catalog.

- Drag and drop the "Height Spin" animation onto the text in scene.

The height referes to a spin on the vertical axis of the chosen object.

- Turn on animation tool, so called Timeline toolbar. DEMO18.BMP

This is the last and 5th toolbar from top. The animation tool is the leftmost tool, one with circle in it.

- Hit play, the button next to animation tool.

The animation will play until it reaches the end. You'll see the text spin on the table on the vertical axis.

- Turn off animation to return to doing anything else to the scene. DEMFINAL.BMP

- Optional: You can try adding more animations to the text. Try the Fly In.

If multiple animations are associated with an object, they will all play simultaneously. You can delete all or select animations associated with an object by going to View/SmartMotion Editor in menus. To delete all animations for the object, select the object and hit delete. To delete a specific animation for an object double click on the object to view all the animations associated, select the delete candidate, and hit delete.