

Drishti Prayog Configuration

Drishti Prayog suite currently consists of 5 programs –

Launcher – drishtiprayog.exe

Drishti Volume Rendering Application – drishti.exe

Screensaver – drishtiscreensaver.exe

Movie Player – drishtimovie.exe

Slideshow – drishtislide.exe

The launcher application is the toplevel program that is used to launch the other 4 programs based on the project. The launcher load all the projects from the directory provided by the user. Each project is in a separate directory.

All the programs generate statistics which contain information about how many times a project was launched and how long was it active. This information is saved in <project>.stat file for each project in its directory. The <project>.stat file is used to generate two files DrishtiPrayogStats.txt and DrishtiPrayogStats.html for each project. This information is then collated in the top level directory for all projects. Both the files, .txt and .html, contain the same information just in different formats – choose what is suitable for you. The <project>.stat file is a binary file. If the files are absent from a directory these will be generated next time when Drishti Prayog is launched.

There are two configuration files that are accessed when your Drishti Prayog project is launched – one in executable directory for Drishti Prayog which contains global settings and another one for each project. Drishtiprayog.conf is the configuration file in executable directory. Each project directory may contain the other configuration file specific for that project. This configuration file has the same name as directory name with .conf extension.

Tips

When creating Drishti Prayog projects remember that interactivity is the most important thing. High resolution imagery/movies can always be included in the project via information icons for viewers to refer to. Reduce the size of your data set to match the machine capabilities.

Wherever appropriate give the user ability to crop/blend. This encourages user to explore rather than just rotating the data.

Include captions to direct the audience.

drishtiprayog.conf

| | |
|-----------------------------|---|
| executable | Executable file name. |
| data_directory | Default projects directory. |
| screensaver | Screen saver executable. |
| screensaver_delay | Start screen saver after detection of inactivity – time in sec. |
| drishti_icon_size | Icon size (clip/light icons) in the volume rendering application. |
| drishti_icon_spacing | Spacing between icons in the volume rendering application. |
| drishti_keyframe_size | Image size of keyframe in volume rendering application. |
| drishti_inactivity_interval | Quit volume rendering application after detection of inactivity – time in sec. |
| drishtiprayog_quit_delay | Quit Drishti Prayog after holding down NCI logo – useful for touchscreens if keyboard input is not available. |
| title_size | Project title size. |
| text_size | Project text description size. |
| arrow_size | Next/previous arrow sizes for scrolling to different projects. |
| arrow_level | Placement of project arrows. Allowable values between 0.2 and 0.9. Default value is 0.5. |
| play_size | Play button size to launch a project. |
| volume_level | Volume level for sound. |
| menu_style | top/left - Display menu in the volume rendering application at the top or left. Default value is <i>top</i> . |

Example

```
executable : drishti.exe
data_directory : d:\VolumeData\drishtiPrayog
screensaver : drishtiscreensaver.exe
screensaver_delay : 100
drishti_icon_size : 100
drishti_icon_spacing : 100
drishti_keyframe_size : 100
drishti_inactivity_interval : 120
drishtiprayog_quit_delay : 5
title_size : 70
text_size : 30
arrow_size : 200
arrow_level : 0.5
play_size : 350
volume_level : 0.5
menu_style : top
```

project.conf

The various attributes in this configuration are not all needed, in fact the project may not have a configuration file. In this case the title name for the project will be taken as the directory name. Where an attribute is not mentioned, default value will be taken.

| | |
|--------------------|--|
| tag | Projects can be categorized by this value. |
| stereo | true/false – quadbuffer active stereo |
| title_size | Project title size. |
| text_size | Project text description size. |
| label_textbox_size | Initial size of the textbox and videoplayer. |
| label_text_size | Text size of the text in textbox. |
| use_hires_only | true/false – use of still quality rendering even while dragging. Specified for each keyframe in the project. Default value is false. |
| apply_aolight | true/false – display ao light icon. Specified for each keyframe in the project. Default value is true. |

| | |
|----------------------------|--|
| apply_point_light | true/false – display point light icon. Specified for each keyframe in the project. Default value is true. |
| apply_clip | true/false – display clip icon. Specified for each keyframe in the project. Default value is true. |
| apply_screen_shadows | true/false – apply screen based shadowing instead of GI lighting. When true, the ao and point light icons will be hidden. Specified for each keyframe in the project. Default value is true. |
| menu_style | top/left - Display menu in the volume rendering application at the top or left. Default value is <i>top</i> . |
| info_icon_influence_region | left right up down - increase the touch/mouse sensitive region in the vicinity of the information icon. The four numbers left, right, up and down specify how far the region extends in left, right, up and down directions beyond the default value (25 pixels). Used for extending touch/mouse sensitive region to include accompanying information icon text. All the values are in pixels. |
| image | Image file name to display in the background under the title and description. |
| timesteps | Number of timesteps in the data. Applicable only for timeseries (4D) volume. |
| title | Title text |
| description | Description of the project. This attribute should always be the last attribute in the configuration file. |

Following options are applicable only for slideshow program.

| | |
|-----------------------|--|
| slides | File name containing file names for the images in the slide show. This file should list the images in the order they should appear in the slide show. |
| automatic_slideshow | true/false - Start slideshow when the slideshow program starts. Default value is false – i.e. user needs to swipe to transition to next/previous slide. |
| slideshow_interval | interval time in seconds – Time interval before transitioning to the next slide when automatic slideshow is active. |
| quit_slideshow_at_end | true/false – Quit slideshow program at the end of slideshow. Default value is false. |

Example

```
tag : astronomy
stereo : false
title_size : 50
text_size : 20
timesteps : 22
point_light_icon : false
aolight_icon : false
clip_icon : false
apply_screen_shadows : false true
image: dens.png
menu_style : left
info_icon_influence_region : 0 300 0 0
title : Astronomy simulation
description : This simulation presents jets going through an interstellar medium of galaxies. Usually jets are two-sided, but because of geometry and physical symmetry only one side is simulated.
```

screensaver.conf

| | |
|------------------------|---|
| playback_mode | random/sequential Play movies in random or sequential order. |
| touch_text | Text message to display at the top to indicate the users to touch the screen to quit screensaver and switch to main screen. |
| text_size | Project text description size. |
| text_fade | Text message blink interval. |
| movie_move | Move the movie up/down while playing. This will be applied only when displaying both movies and photos together. Time in sec. |
| movie_size | Size of movie in term of fraction of screen width (2 implies half screenwidth, 4 means quarter screenwidth) – applied only when both movies and photos are displayed at together. |
| movies_photos_together | true/false – display movies and photos together. |

| | |
|--------------------------|---|
| photos_on_screen | Number of photos at a time on screen. |
| photo_duration | Average duration of display of photos on screen. Time in sec. |
| photo_duration_variation | Variation is the time of display of photos. Time in sec. |
| photo_size | Average size of photo to display. |
| photo_size_variation | Variation in photo size to display. |

Example

```
playback_mode : random
touch_text : Touch screen to start
text_size : 90
text_fade : 50
movie_move : 120
movie_size : 3
movies_photos_together : false
photos_on_screen : 6
photo_duration : 30
photo_duration_variation : 10
photo_size : 400
photo_size_variation : 300
```