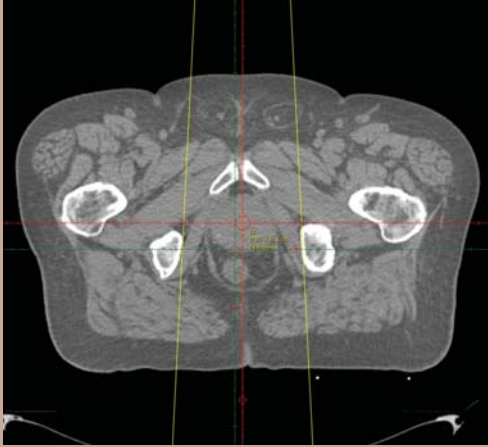


Panther Virtual Simulation System

Quick Localization and Treatment Area Targeting



"We have been using Panther VSIM for several years now with our Toshiba CT. The software is one of the best, especially in its contouring features. Panther helps us to define GTV, CTV and OAR easily and helps us finish work faster."

Mary Anne E. Marasigan, MMP
Davao Regional Hospital

Panther VSIM is designed to provide all the tools needed to take you through the entire virtual simulation workflow in a way that makes sense and saves time. Customizable views and multiple language support ensures every user will feel right at home when introduced to the system. This product will also fit into any center because we offer vendor neutral support of all CT and LINAC machines through DICOM 3.0 communication.

Key Features:

- CT and LINAC vendor neutral solution
- DICOM Import/Export of Images & Structures
- Multiple language support and customizable views
- Intuitive CT window leveling and templates
- Image interpolation for enhanced viewing clarity
- Seamless integration with Panther TPS for dose calculation
- Replaces conventional X-Ray radiographic and fluoroscopic simulation with superior 3D views

Localization:

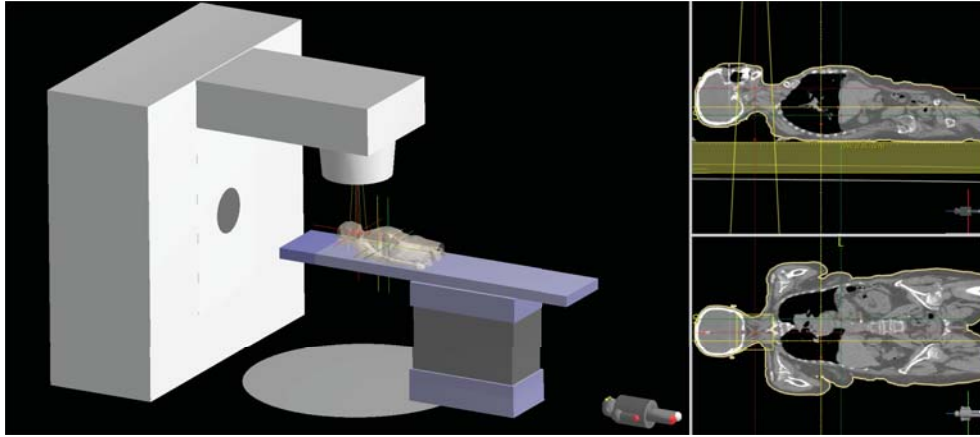
- Automatic, semi-automatic, and manual contouring
- Symmetric and asymmetric 3D margining
- Contouring in sagittal and coronal reconstructed views
- Image fusion and multi-modality (CT, MR, PET, US)
- Patient position/orientation corrections

Reference Points:

- Beam isocenters
- Virtual (fiducial) markers
- Laser coordinates: Gammex, LAP Laser, A2J Healthcare
- Dose reference points

Beam Setup:

- BEV: Simulate gantry, collimator, jaws, MLC and table movement. Design field shapes based on ROI or structures
- REV: Real-time high resolution 3D rendering of the patient anatomy and the treatment machine/beam geometry.



Key Features

Image Acquisition and Display

- Accepts CT images from any DICOM 3.0 image source
- Ability to recall patients stored on any network station
- All active windows have independent control
- Window leveling templates for rapid changes and consistent image display
- Customizable layouts and defaults display settings
- Multiple 3D image set support

Visualization and Print

- Export to Lasers Action: The decided isocenter is transferred on the patient body
 - Export interface
 - Isocenter position marked on the patient surface
 - Field Edges, Blocks, MLC etc.
- The treatment area and patient anatomy can be visualized in three dimensions from any point in the treatment room
- Direction of view can be dynamically moved in real time for full visualization of machine and patient
- Anatomical features can be turned on and off easily
- Full Zoom and Pan in each window
- Panther 3D hardcopy produces full color or black and white output on paper or film
- Panther supports all printers supported by Windows NT
- Turn on and off each contour display
- Full couch, collimator and gantry rotation supported

Contouring Tools

- Support up to 60 volumes
- Auto-segmentation of multiple volumes at once
- Advanced automatic and manual contouring tools
- Paintball tool for natural and quick editing
- Scale, Move, Deform, Copy and Interpolate contours
- Unlimited Undo & Redo contouring actions
- Create new volumes with Asymmetric margins and Boolean operators
- Multiple 3D image set support

Image Fusion & Multiple Modality

- Support for CT, MRI, PET and US image series
- Register up to five different image series of any supported image series type
- Automatic Image Fusion by maximizing Mutual Information
- Manual Image Fusion support
- Verify with Checkerboard, Aperture and Transparency tools

Image Processing and Modeling

- Rapid auto contouring including multiple organ
- Manual contouring and editing
- Easy to add margins on all volumes
- Entry of calculation points for reference
- Entry of fiducial points or isocenter marking to register patient anatomy