

Avizo®

For Collaborative and Immersive VR

3D Visualization and Analysis Software with Advanced Support for Very High-resolution Displays, VR Systems, Remote and Shared Work Sessions, Visualization Servers.

- Very high-resolution or large scale multi-screen displays
- Easy deployment on any immersive Virtual Reality system
- Visualize very large data sets, even beyond available memory
- Collaborate with remote desktop and VR users in real-time
- High-performance data visualization and processing

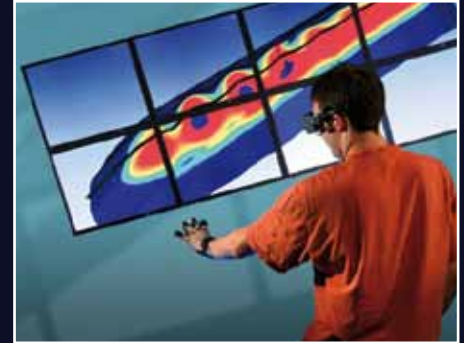


Image: INRIA I3D

Avizo addresses scientists and engineers that demand advanced scalable and remote capabilities for exploring and sharing even very large datasets, in collaborative teamwork, project review, presentations, immersive analysis or training.

Boost your 3D exploration experience with Avizo's capabilities, applied to extensive types of data in materials sciences, geosciences, engineering, and simulation.

> Scalable High-Resolution Displays

Easily deploy custom workstations or multi-CPU/GPU cluster configurations by taking advantage of Open Inventor® ScaleViz technology, efficiently distributing the image rendering process, and displaying your project on very high-resolution display arrays.

> Navigate through Immersive Environments

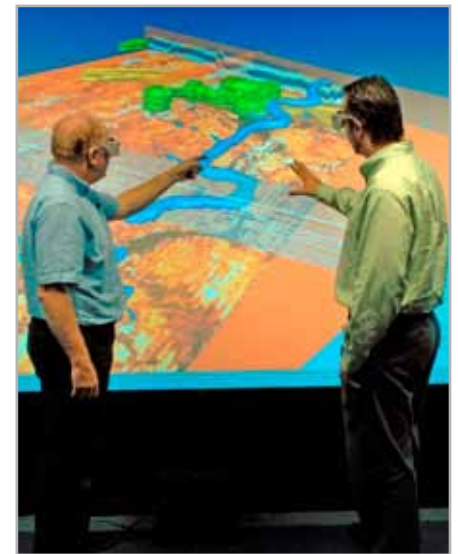
Interactively navigate through your 3D data, using custom screen configurations, stereoscopic display, and tracked VR input devices. Avizo's advanced capabilities enable multi-user exploration sessions, addressing the needs of high-end collaborative projects.

> Perform Real-time Remote Visualization

View and interact with very large data sets from a distant client machine. Avizo's remote visualization engine enables distant users to access and visualize very large data while overcoming graphics limitations of their local desktop/laptop.

> Share Multiple Work Sessions

Synchronize and share your local Avizo work sessions with remote users, using a desktop or a VR system. Alternately become the operator and manipulate your data model, while others act as spectators, sharing your viewpoint or freely examining your model.



FakespacePowerWall™: Courtesy Visual and Spatial Technology centre, University of Birmingham.

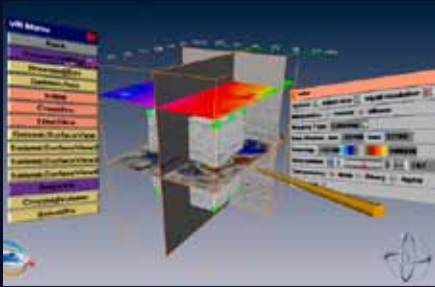


Image: Bibliotheca Alexandrina, International School of Information Science (ISIS)

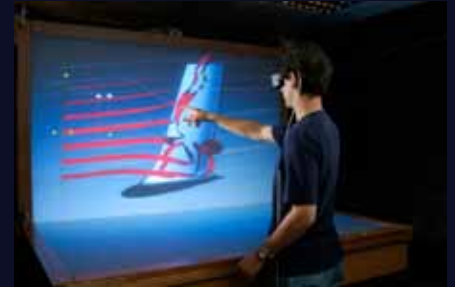


Image: INRIA I3D

Immersive 3D Exploration (XScreen)

- Easy set-up for any display system - from display wall to tiled screens, workbench, CAVE, or planetarium
- High performance multi-threaded multi-pipe parallel rendering and cluster distributed rendering
- Built-in soft-edge blending
- Active or passive stereoscopy
- Head tracking for true immersive viewing
- Extensive support of tracking and input devices
- Immersive interaction: navigation control, 3D menus and controls, VR-ready draggers, slices, cutting planes, probes, transform manipulators, selection, region of interest, etc.
- Immersive control of 2D user interfaces with 3D devices (virtual mouse)
- Custom menus and modules with TCL scripting language
- Tracker emulator and configuration test on desktop

Scalable Performance and Remote Application (XScreen)

- Tile display: display very large images by compositing distributed image calculations
- Tiles compositing: increase frame rate by distributing portions of the full-screen image through a graphic cluster
- Depth compositing: 3D scene graph distribution for performance savings on scenes that contain a large number of polygons
- Remote visualization: combines the 3D distribution, compositing, and image compression to remotely visualize and interact with gigabytes of 3D data

Collaborative Environment (XTeam)

- Synchronized workspace and interactions
- Shared or individual camera view and control settings
- Join, change operator, and viewers during session
- Participants viewpoints shown as avatars
- Mix multiple participants using desktop or VR systems
- Arbitrary server location

Avizo Configurable Solutions

Further enhance Avizo with powerful additional eXtensions:

- XPand enables the creation of custom extensions using the C++ Avizo open framework.
- XLVolume manages and visualizes up to several terabytes of data, increasing the available system memory.
- XSkeleton delivers advanced automatic tools for network reconstruction.
- XReaders provides import capabilities for the most popular CAD formats.