

Solutions Brochure

sgi™

SGI™ Digital Planetarium



*The planetarium experience
will never be the same.*

SGI Digital Planetarium: A True Breakthrough in Planetarium Technology

SGI Digital Planetarium is a turnkey display system that creates an immersive, realistic, interactive environment for viewing the universe. Museums and planetariums can use the Digital Planetarium to fly visitors through a science-based three-dimensional model of the entire Milky Way. No other computer graphics system can display this model—a dazzling experience that will bring audiences back again and again. And the Digital Planetarium can be scaled to virtually any budget or space requirement.

Choose the Digital

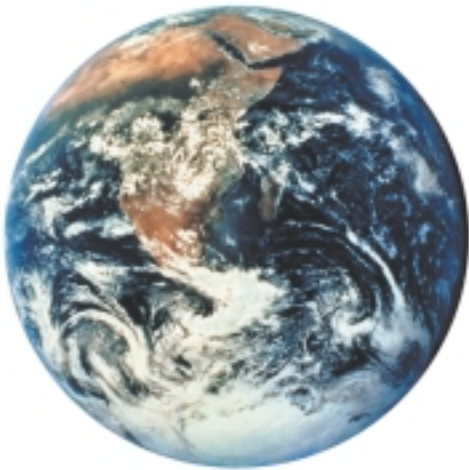
For Domed Theaters

SGI Digital Planetarium can be incorporated into existing domed facilities or new domed facilities of any diameter. Multiple edge-blended projectors create seamless hemispherical views.

The Digital Planetarium's high-resolution 3D graphics technology displays millions of stars, planets, nebulae, and galaxies.



Compelling reasons for choosing an interactive, real-time, digital display system:



The space flight can be controlled by a live presenter.

The Digital Planetarium's visualization supercomputers generate each presentation instantly, in real time, from high-resolution digital data. To display the Milky Way's billions of uncharted stars in real time, the Digital Planetarium generates stars that are statistically correct in number, size, color, and luminosity. For each showing, the system can generate up to one billion stars—compared with the 9,000-star limit of mechanical systems.

The next decade will bring massive amounts of data from space explorations. SGI Digital Planetarium solutions will help you to incorporate real science data into your presentations and bring them to life, capturing the imagination of your audiences and adding insight and inspiration to an educational experience.

Planetariums can offer a variety of attractions.

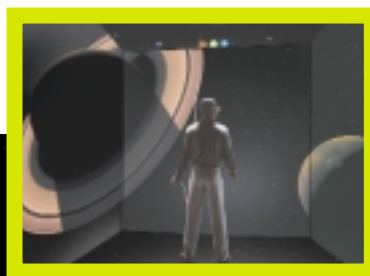
Because SGI Digital Planetarium is a programmable, interactive, real-time system, museums and planetariums are no longer tied to inflexible, repetitive presentations. This gives users the flexibility to create multiple shows, each presenting a different intergalactic discovery.

Prerendered movies can be stored on disk and built seamlessly into interactive presentations. For example, a narrator can insert a prerecorded presentation of the Big Bang theory into a tour of the Orion galaxy. Video clips of current space exploration events can be inserted in real time.

Planetarium display that works

For Immersive Theaters

A Digital Planetarium curved screen or Cave Automated Virtual Environment (CAVE) can be easily installed in existing venues to provide an immersive experience.



Digital images do not deteriorate with use.

Digital images cannot fade, and they cannot be scratched or marked. Digital presentations are stored on computer disks, where they are easily archived, copied, or modified with no loss of quality. In addition, they can be conveniently exchanged with other digital theaters.

Do you need computer expertise?

Anyone can operate SGI Digital Planetarium. Technical training or assistance is provided by SGI Professional Services and partner consultants with many years of experience in the design and operation of theaters and immersive displays. Content experts assist with the development of presentations and shows. Other professionals work with architects, designers, and engineers to create a theater design that is optically and acoustically excellent.

Excellent return on investment.

The Digital Planetarium is an outstanding investment. It delivers a unique, intense experience that can be changed and updated to draw visitors back. Through a consortium of Digital Planetarium system operators, you can exchange the shows you develop for others your audiences haven't seen.

Digital Planetarium technology enables you to reach out to your audiences with shows on any subject. Museums, for example, can offer presentations on dinosaurs, ancient Egypt, the rain forest, or the world of living cells. You can also present live high-definition TV coverage of sports events, shuttle launches, or live news. There are no limits to the ways you can attract and fascinate audiences.

See a Demonstration of the Visual Power of the Digital Planetarium

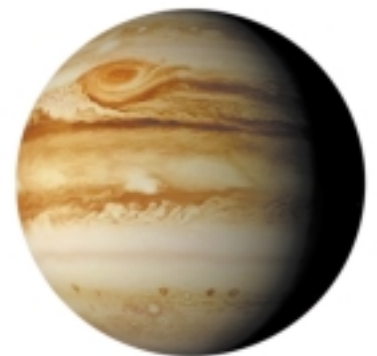
Let us show you how the Digital Planetarium will change the way audiences are educated and entertained. Contact your nearest sales office or www.sgi.com/global/americas.html.


The Digital Planetarium solution consists of an SGI™ Onyx2® system with the InfiniteReality3™ architecture, the world's most powerful graphics computer; the Digital Planetarium database, developed with the latest astronomical catalogs from NASA, JPL, and the Hubble telescope; and industry-leading sound and projection technology. From design to installation and worldwide support, you work with just one company: SGI.

best with your facility.

For Flat Screens or Walls

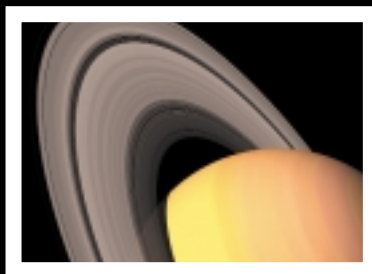
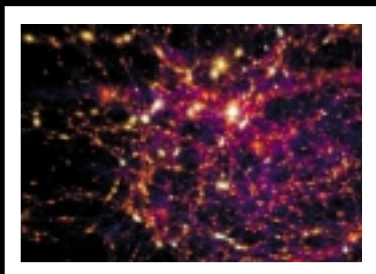
SGI can deliver the Digital Planetarium experience to individual screens in conference rooms or on large, flat projection screens for immersive viewing. These systems are also suitable for travelling exhibits.





For the First Time, Fly Your Visitors through a Dazzling Three-Dimensional Universe

Nothing can equal the experience of a Digital Planetarium space flight. The exhilarating sensation of movement takes your breath away as you leave the earth, accelerate through the solar system, and fly through the far reaches of the galaxy. The illusion of motion through three-dimensional space is overpowering. The constellations change shape as you fly by and through them, past familiar stars and nebulae, to the edge of the galaxy and beyond, where you stop to look at the Magellanic Clouds and turn back to see the Milky Way. Until the Digital Planetarium, no planetarium experience has ever inspired this sense of awe.





Corporate Office
1600 Amphitheatre Pkwy.
Mountain View, CA 94043
[650] 960-1980
www.sgi.com

North America [1800] 800-7441
Latin America [1650] 933-4637
Europe [44] 118.925.75.00
Japan [81] 3.5488.1811
Asia Pacific [65] 771.0290

© 2000 Silicon Graphics, Inc. All rights reserved. Specifications subject to change without notice. Silicon Graphics, Onyx, Onyx2, and InfiniteReality are registered trademarks, and SGI, InfiniteReality3, and the SGI logo are trademarks, of Silicon Graphics, Inc. All other trademarks mentioned herein are the property of their respective owners.

Image credits: Earth, above Africa and Moon from Galileo Spacecraft courtesy of NASA, supplied by Corbis Corporation. All other images: © 2000 American Museum of Natural History, Observable universe and Andromeda, M51, M33, and forty small galaxies images courtesy of National Center for Supercomputing Applications—University of Illinois. M32 image also courtesy of Brent Tully, David Malin, Jerry Lodriguss, and Carter Emmart. Orion nebula image courtesy of San Diego Supercomputer Center—UCSD. Saturn image and Saturn and Mars image courtesy of Aechelon Technologies. Milky Way and galaxy with grid images courtesy of Digital Galaxy Project. Showing graphics image, North facade and dome interior photos courtesy of Denis Finnin.