

High performance GIS solution

TerraServer on Windows NT and Compaq AlphaServers

Microsoft's TerraServer® GIS application revolutionizes how we look at the world. Microsoft® has collaborated with Digital (now Compaq Computer Corporation), Aerial Images, Inc., Eastman Kodak, and the U.S. Geological Survey to create the world's largest online atlas of high-resolution satellite imagery. For the first time, using 1-meter and 2-meter resolution images, you can accurately locate features and monitor changes in the landscape.

TerraServer highlights

The TerraServer, a terabyte-sized Microsoft SQL Server multimedia database, provides more than a terabyte of 1-meter and 2-meter, high resolution satellite images of the Earth for viewing, downloading, and purchasing on the Internet. The images, supplied by the U.S. Geological Survey and SOVINFORMSPUTNIK, the Russian Space Agency, are commercially distributed by SPIN-2® Marketing (a division of Aerial Images, Inc.)

Windows NT for large servers

The TerraServer project affirms that Microsoft's SQL server and Windows NT™ software can support the server needs of huge applications — whether UNIX® or Windows NT. TerraServer is the world's largest Windows NT database, made possible by AlphaServers™, which offer the broadest range of Windows NT performance — from Intel® through Alpha.

Maximize existing data

GIS customers can take advantage of these unusually high-resolution images to enhance their own spatial applications. By layering the precise TerraServer images onto a traditional GIS system, users get a vector-based representation of an area plus a visual photo-realistic image of the area. Previously, such detail came from aerial photography, a slower, more expensive task.

Remote sensing GIS available

The images of the earth's surface supplied by SPIN-2 from previously classified Russian satellite data and U.S. Geological Survey will introduce thousands of Internet customers to remote sensing (viewing an object from a distance). The Internet view is a preview, like postcards on the Web. For more precision and accurate detail, SPIN-2 sells digitized and orthorectified images with 1-2 meter



Satellite image of the Pentagon, Washington DC.



resolution, a dramatic improvement over traditional 15-30 meter resolution satellite images. Ortho-rectified images are processed to accurately represent the earth's surface, like a map. They aid land planning projects, such as dam and road construction, engineering planning for watersheds, forest and waste management, environmental impact assessment of development projects, and telecommunications planning.

The Compaq advantage

High-resolution images contain large amounts of data. Users typically collect multiple images of a particular area over time to study changes in the land use. As the number of users and the size of an image database grows, it is important to maintain a scalable, responsive computing environment. That's why Digital Windows NT-based Alpha servers and StorageWorks™ products were selected as the foundation for TerraServer. Now that Compaq and Digital are one, the commitment to GIS is even stronger.

“The precision of these satellite images, digitized and ortho-rectified, presents extraordinary value and a worldwide business opportunity. The Compaq servers are crucial to enable responsiveness on the Internet.”

— *Peter Norris, Vice President, SPIN-2 Marketing*

“The continuing collaboration and commitment of Compaq and Microsoft, plus other partners, means we deliver the highest levels of performance, scalability, and reliability for business-critical applications on the Windows NT platform.”

— *Herb Shumway, Vice President, Digital Equipment Corporation.*

“We needed a single server with the processing power and memory capacity to access a terabyte of data or more under high stress, high-volume Internet activity. You can put more memory and CPU power in an Alpha system than any other single CPU on the planet — that's what makes the Compaq story important.”

— *Tom Barclay, TerraServer Director, Microsoft*

Powerful reliable systems

To handle thousands of users accessing a huge database, the TerraServer project needs the reliability and speed of Alpha systems.

Scalable architecture

Compaq storage solutions and Internet servers can easily handle the inevitable and often unpredictable scaling upward in the number of users and size of spatial data sets, without interruption.

First choice for Internet

AlphaServers are the first choice for Internet and intranet applications, because of their high availability and scalable architecture, and also their award-winning Internet, networking, and Windows NT services — available world-wide.

Think Compaq GIS and TerraServer images.

- Scalable, spatial solutions for all industries.
- High-resolution spatial image data.
- Partnering with leaders.

Download and purchase electronic TerraServer images in different sizes from SPIN-2; order high-quality printed enlargements from Kodak.

TerraServer Web site	<i>www.terraserver.com</i>
Compaq	<i>www.compaq.com</i>
Microsoft	<i>www.microsoft.com</i>
SPIN-2 Marketing	<i>www.spin-2.com</i>
Eastman Kodak	<i>www.kodak.com</i>

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