VISUALIZATION

PANORAMA

SEE. BELIEVE.

Panorama delivers quality without compromising performance or budget.
The Panorama image generator is the latest simulation and visualization product in the Presagis portfolio. Panorama has been developed to maximize performance by leveraging field-proven image generation technology.

Quickly installed and easily maintained, Panorama can be integrated into an existing network and ready to use with minimal configuration. Employing the latest graphics processors and leveraging Presagis visualization applications, Panorama uses an optimally integrated architecture to ensure very fast graphics at all times.

Panorama ensures a fast and stable performance by carefully combining software, hardware, OS, and interfaces, and only uses the resources required to operate the image generator at peak efficiency and quality.

PANORAMA PROVIDES OUTSTANDING VISUALS IN ORDER TO GREATLY INCREASE IMMERSION AND BENEFIT TRAINING BY PROVIDING

Incredible image quality with detailed environments, night scenes, ground level textures, and optimized vegetation.

3D oceans with reflections, waves, surf, wakes, and buoyancy.

Support for correlated visual of EO, IR and NVG simulated sensors.

Support for OGC CDB standard

Includes pageable terrain, rotor wash, realistic clouds and shadows to create immersive environments.
**SUPERIOR PERFORMANCE**
- Large area database management with efficient paging and rendering for very large areas of high-resolution content with photo-realistic database support at 60 Hz.
- High-resolution virtual textures to provide a database with high level-of-detail blending and efficient geometry paging.
- Streaming and paging of terrain from an external data repository.
- Out-of-the-box ready, easy to use appliance.

**WGS-84 OR SIMILAR GEODESIC/ROUND-EARTH SUPPORT**
- Out-of-the-box support for traditional database formats such as OGC CDB.
- Geospecific or highly representative geotypical synthetic 3D databases including roads, buildings, and vegetation.
- Compatible with constructive simulations.

**REALISTIC WHOLE EARTH TERRAIN**
- Train in the air, on the ground, or at sea.
- Worldwide terrain database.
- 3D human character simulation.
- 3D ocean simulation with realistic waves, Beaufort sea states and wakes, shoreline effects and bathymetric data support for increased realism.
- Quickly create detailed regions of interest using Terra Vista.
- Realistic 3D vegetation.
- Time of Year and Time of Day.
- Real-life ephemeris (sun, moon, stars).
- Advanced environmental effects including weather, wind, 2D & 3D clouds, precipitation, fog, storm cells, contaminants, and wind layers.
- Special effects include tracers, missile trails, explosions, rotorwash, blowing sand, snow, and smoke.

**LIGHTING THE REAL WORLD**
- Dynamic lighting and time-of-day conditions, light-lobes based star fields, horizon glow, ground fog, and multiple sky models.
- Atmospheric high-quality and illumination models.
- Advanced, dynamic lighting supports dynamic shadows, light points, lobes, and maps.
- Up to 26 light lobes (for supported graphic cards).
- Support for normal, shadow and light maps.
- Dynamic cloud shadows of entities and objects, as well as self-shadowing.

**REAL, PHYSICS-BASED SENSORS**
- Support for simulated OTW, EO cameras, EVS, LLTV, NVG and Infrared sensors.
- Realistic clouds and oceans that present accurate physical and sensor response signatures.
- Energy absorbing atmosphere to support realistic sun lighting and sensors.
- Radar terrain server ready.

**MORE ASSETS**
- A massive library of high-quality assets including thousands of vehicles, aircrafts, weapons, and buildings.
- Assets are articulated and materialized to be sensor-ready.
INDUSTRY-STANDARD

Panorama offers native support of industry-standards such as CIGI Host Interface, DIS and HLA in order to provide seamless connectivity and a robust interface with external simulation host.

PROTOCOLS AND DISPLAYS

- Distributed rendering 64-bit Multi-channel displays.
- Support for multiple synchronized displays
- Realistic view distances and optimized support for multiple Levels of Detail (LOD)
- Advanced rendering with screen space ambient occlusion for game-quality visual results.
- Control of camera position and orientation through external CIGI control
- Synthetic characters, moving entities (vehicles, weapons) and special effects that respond to DIS/HLA external control

Compatible with Presagis products: Creator, Terra Vista, STAGE, Ondulus IR, Ondulus Radar and Ondulus NVG.