CatalystSE® 6000 DBGS
Geo-Specific Synthetic Environments

Databases So Real - It's Unreal

Everything necessary for database generation for visual simulation is here. CatalystSE is a PC-based, open-architecture, Commercial-off-the-Shelf database solution that is designed to work with Quantum3D image generators. CatalystSE enables customers to develop, modify, and maintain wide-area, high-resolution, geo-specific synthetic environments. It is powerful enough to deliver but flexible enough to allow for each database engineer's needs.

Technologically Sound

CatalystSE is a powerful, scalable server-class system that provides optimal graphics performance. Database engineers can draw on the stored inventory of source data to make the process of installation more efficient, timely, and cost-effective.   And, the system employs a data integrity mechanism that automatically facilitates a data restoration feature.

Available Options

Optional Quantum3D and 3rd party COTS hardware and software products provide CatalystSE 6000 DBGS customers with a cost effective, efficient means to meet additional project requirements for synthetic environment databases. Included among the currently available Quantum3D COTS options are IData™ HMI capabilities, Facets™ Realtime 3D Models, GeoScapeSE Synthetic Environment Databases, and a comprehensive toolset with material library to create, modify, and maintain correlated, material classified, wide-area, geo-specific databases for sensor simulation applications.

The CatalystSE Tool Suite

- **ERDAS IMAGINE™ Advantage** – Processes geo-specific imagery and prepares source data to reference correct scale and contain correct geo-reference data.
- **ESRI ArcView™** – The industry standard desktop GIS and mapping tool for creating and editing geographic data.
- **Terrex® TerraVista™ Pro Builder** – Widely used for creating, modifying and optimizing TerraPage and OpenFlight terrain databases.
- **MultiGen-Paradigm Creator™** – The visual simulation industry's favorite for creating, modifying and optimizing OpenFlight models.
- **Adobe® Photoshop®** – Standard desktop digital imaging tool for creating, modifying, optimizing, and compressing textures.
- **Quantum3D Celerity™** - Database publishing tools that produce 60Hz optimized databases formatted for the Quantum3D IGs.

CatalystSE 6000 DBGS Technical Specifications:

System Enclosure and Power Supply
- 4U Deskside or Rackmount Chassis with Add-in Board

CPU
- Server Class motherboard, 2 x Intel Xeon® X5550 2.66 GHz Quad-core with 8MB L2 cache, 1333 FSB

Graphics Subsystem
- Quadro FX 5800 with 4 GB GDDR3 memory

System Memory
- 24 GB ECC DDR2

Operating System
- Microsoft® Windows® XP Professional

Disk Drive Subsystem
- 8 x 1TB (Unformatted Capacity) SATA-II Removable Disk Drives Configured in 1 x RAID-1 Mirrored Subsystem (2 Drives) and 1 x RAID-5 Subsystem (6 Drives)

Blu-Ray / DVD / CD-ROM
- Blu-Ray R/RW
- CDR/RW DVD-R/RW Recordable Drive

Monitor
- 22" LCD Display

LAN Interface
- Dual Server Class 10/100/1000T integrated Ethernet 802.3 NIC

Audio
- Realtek ALC883 7.1 HD audio

Available PC-I/O
- 2 x SIO, 2 x USB 2.0 (front) 4 x USB 2.0 (rear)

Keyboard, Mouse and Joystick
- Microsoft Standard Keyboard, 3-Button Optical Intellimouse, & Sidewinder USB Joystick

Commercial Office or Lab Environment
- Operating Temperature: 10º to 35º C (50º to 95º F)
- Non-operating Temperature: -40º to 70º C (-40º to 158º F)
- Operating Relative Humidity: 8% to 90% (non-condensing)
- Non-operating Relative Humidity: 5% to 95% (non condensing)

Dimensions - Operating
- Deskside: 7"W x 17.1"H x 25.5"D, Rackmount: 4U

Dimensions - Shipping
- 25.25"W x 33.25"H x 15"D - Weight: 60 lbs., shipping weight: 65 lbs.

Warranty
- 1 year, Return-to-Factory (RTF) standard, including maintenance on third party software where available. Optional multi-year, extended warranty on Quantum3D products; warranty for 3rd Party components as per 3rd Party offerings

Power
- 100 - 240V AC, 50-60 Hz, Single Phase, Power Factor Corrected, with ~8.0 A load typical
- US 115 VAC 15A Service Recommended

Hard Drive
- USB 1 TB

UPS
- External APC SMART UPS, 1000 VA / 640W

Certifications
- CE, FCC Class A, ETL/UL

Media
- Windows XP Professional Operating System CD-ROM, Quantum3D Mantis and DBGS Software CDs, OEM Delivery Media for 3rd Party Products
- Optional GeoscapeSE Synthetic Environments
- Optional Facets Real-time 3D Models
- Optional IData Real-time Visual Computing Framework

Included Documentation
- CatalystSE 6000 DBGS User Manual
- Mantis User Manual
- Third-Party Software OEM Documentation

Training
- Quantum3D Factory Training on DBGS Usage: Operations and Maintenance Standard, Customer Site Training and/or Additional Training on Database Optimization Optional