# **EP2 Database Generation System (EP2-DBGS)**



Rockwell Collins' COTS-based Database Generation System provides superior value.

The EP2 Database Generation System (EP2-DBGS) is a turnkey, stand-alone modeling station solution developed specifically for generating and maintaining synthetic environments for rendering with the EP2 real-time system software. EP2-DBGS includes two standard configurations. The Airport Modeling configuration supports simulations for airport operations, operational flight training and basic navigation. The Advanced Environments configuration adds the ability to build custom areas of terrain elevation data, imagery and cultural features for very large gaming areas.

#### **KEY BENEFITS**

- An integrated, turnkey modeling solution, supporting EP®-80 and EP®-8000 image generation systems, that addresses the use of various industry-standard data formats such as DTED, DFAD, Shapefiles, GeoTIFFs, OpenFlight™ models, and textures
- ➤ Rapid database creation and modification in minutes, not hours with an easy-to-use and intuitive user interface
- ➤ Elevation data, terrain texture, vector features and 3D models are created, edited and stored as independent source-data layers to facilitate database management and concurrency
- Integrated 3rd party tools, including Presagis® Creator™, ArcGIS® Run-time Engine, Adobe® Photoshop®, Global Mapper, and Microsoft® Office®

- > SensorTexture™ creation and material attribution support
- Legacy dataset support via data conversion (EP-1000, EPX-5000, EPX-500, EPX-50)
- OpenFlight terrain tile export for correlation with SAFs, hosts, and other companion systems
- Support for both high-density data insets and wide-ranging gaming areas encompassing dozens of geo-cells
- WholeEarth™ dataset provided using 100-meter resolution elevation and 30-meter resolution land use datasets



#### **CONFIGURATIONS**

- ➤ The EP2-DBGS workstation comes equipped with the power to handle terabytes (TBs) of data
  - State-of-the-art COTS PC, including:
    - Windows® 7 Pro dual 8-core processors (2.1 GHz)
    - PCle, 1333 MHz FSB, 48-GB RAM
  - · Premium COTS graphics board
    - AMD Radeon® HD7970 GHz edition;
      3-GB unified video memory
  - Dual OS hard drives (1 TB each; second drive is ghost image)
  - Standard drive option: Two removable data drives and one removable EP2 environment drive
  - · 24-in. LCD monitor, keyboard, optical mouse and DVD writer
  - Additional drive option: Up to 5 additional 3-TB removable disk drives

#### **EP2-DBGS ENABLES:**

- > Editing and viewing of independent layers such as:
  - Atmospheric elements (clouds, visibility, precipitation levels)
  - Terrain elevations and imagery
  - · Vector features, moving models
- Geographic data import and export of industry-standard formats using user-tailored processes that simplify and explain complex data types
- > Correction of data errors and incongruities among all data types
- ➤ Creation, editing and manipulation of source data not just rendered polygons
- Creation of new, correlated vector data from satellite or aerial images
- > Smooth integration with other industry-standard tools
- Correlated terrain tile export for complementary "polygonbased" rendering systems
- Data use in a native round-earth, geodetic environment (WGS84 based)
- ➤ Interactive model and environment validation without the expense of constant image generator access
- Immediately populating large areas from a library of template models

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



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### For more information, contact:

Rockwell Collins 400 Collins Road NE Cedar Rapids, Iowa 52498 +1.800.321.2223 +1.319.295.5100

fax: +1.319.378.1172

email: learnmore@rockwellcollins.com

www.rockwellcollins.com

