BE DYNAMIC
GO PROCEDURAL

blueberry3D

Procedural terrain solution for fast generation and real-time visualization of vast high resolution 3D databases

Can you imagine a terrain database where details are so rich wherever you go that it actually looks real?

Blueberry3D makes this happen in real-time 60Hz.

With **Blueberry3D** the creation of a high-resolution real-time database is faster and easier than ever - just take existing data and set procedural rules to build large, extremely detailed and realistic environments. From now on there is no reason to limit detail in your databases.

Blueberry3D's unique management of leaf-level detail and landscape coverage makes the dream of moving seamlessly from a high-orbit view down to branches swaying individually in the wind a reality.

Blueberry3D is successfully deployed by several key players in the international simulation industry, both by plugging **Blueberry3D** into other COTS tools or as a middleware component within their own proprietary solutions.
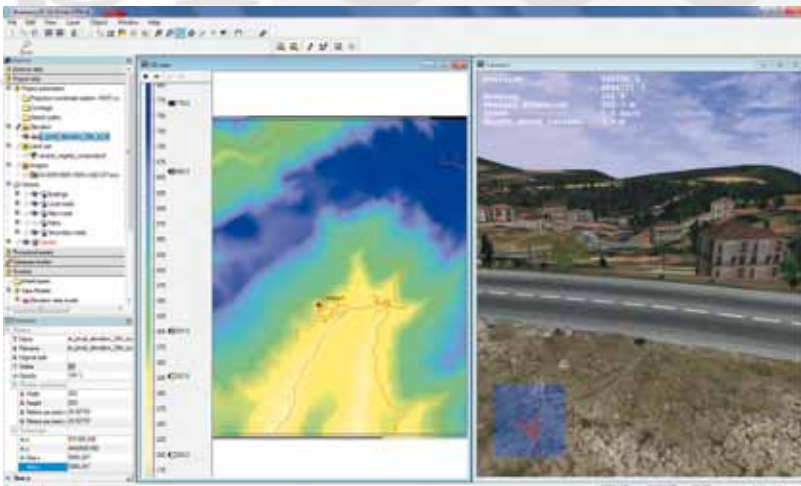
- **Procedural terrain middleware**
- **High resolution ground details**
- **Animated vegetation**
- **Intuitive terrain edition**
- **Compatible with popular IGs**
- **IGs shaders rendering**

Blueberry3D uses advanced fractal mathematics and procedural geometry. The ability to create terrain details only when needed allows incredibly complex and detailed scenes to be built quickly and visualized in no time. Rendering, down to the smallest details of very large landscapes is now possible in real-time!

The natural terrain evolution!

Blueberry3D Terrain Editor

Blueberry3D Terrain Editor allows end-user to manage and edit source data, import OpenFlight database content, and define all the procedural assets.

It gives the ability to rapidly generate large real-time databases by focusing production time on areas of interest, and letting procedural approach populate and manage surroundings

www.blueberry3d.com

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Blueberry3D Products and Packaging

Blueberry3D Terrain Editor

The Terrain Editor offers an intuitive workflow for preparing geo-referenced terrain data, setting procedural geo-specific rules for buildings, roads, vegetation, ground textures and other automated content to rapidly develop a completely immersive synthetic environment.

The Terrain Editor can create extremely large and highly detailed 3D landscapes for your real-time simulation environment.

- Enrich the terrain by seamlessly integrating variables such as erosion, cultivation and density.
- Scatter trees and bushes easily and realistically around rocks, roads, and lakes.
- Automatically generate buildings, hedges, roads, walls, rivers, bridges and many others.

Blueberry3D Packaging

Tlueberry3D Terrain Editor is delivered through Stand Alone licenses. Blueberry3D RT Integration kit and Blueberry3D Tactical terrain SDK are delivered through development licenses and runtime licenses for simulation system deployment to final end-users.

Each product also exists in Basic Version limited as single channel, flat earth and 100 km x 100 km maximum size, offering 60 % pricing discount.

The Terrain Editor also includes a sophisticated fully-featured Viewer for pre-visualisation of databases during development or even as a target IG to play scenarios on any PC.

Blueberry3D RT Integration Kit

The RT Integration Kit includes Blueberry3D Optimizer providing optimizations to show the extreme levels of detail in your terrain at 60Hz.

Thanks to its procedural approach, the Optimizer provides a large set of tunings dynamically applied to procedural content to get the best performances from the targeted hardware. The real-time part of Blueberry3D is fully parallelized and supports multithreading.

For MÄK VR-Vantage XR, OpenSceneGraph and Presagis Vega Prime users, a ready-made dedicated Blueberry3D node integrates published content directly into the scene graph, compatible with machine-specific performance optimization tools. The Blueberry3D RT Integration Kit is also available for Linux Platform.

Blueberry3D Tactical Terrain SDK

The Tactical Terrain SDK aims to provide to CGF based applications, the same level of detail and realism than the one displayed in the IG, in order to enhance consistency. It integrates specific procedural solving rules in order to support CGF back-ends' needs and constraints in terms of terrain queries, number of entities and performances. It can perform thousands LOS or HAT queries at the same time for entities spread all over the visual database. The Tactical Terrain SDK is provided with a VR Forces plug-in sample.

Supports:

Boston Dynamics,
DI-Guy

MÄK,
VR-Vantage XR, VR-Forces

OpenSceneGraph

Presagis,
Vega Prime, IR Scene

Bionatics,
REALnat Premium

Applications:

Military Training Simulation
(tanks, helicopters, jets, vehicles)

Civil Training Simulation
(trucks, trains, trams, planes)

Large city area modeling

Procedural bridge modeling

Rotor down wash in vegetation

OpenFlight model insertion

Narrow field of view, 10km at 1°

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