

Software Overview

The Simurban software suite enables users to build and simulate actual or conceptual world environments on a desktop PC or laptop using commercially available inputs such as aerial photography, survey data and CAD models. In a Simurban ‘project’, users can view and ‘fly’ anywhere in the simulation in real time, experiencing many interactive scenarios. Scenarios include changing the sun position and lighting, shadow analyses, viewpoint analyses and a range of ‘what-if’ simulations, such as switching views to show 3D model variations. The Simurban software suite consists of the following two separate applications:

- **Environment Editor** – to edit a RealSim project.
- **World Simulator** – to fly through and interact with a RealSim project.

Functionality Comparison

Feature	Functionality	Environment Editor	World Simulator
Project Editor	Edit a RealSim project	Yes	Limited
Surface Editor	Import digital height data, import surface textures, edit the height data and add height points manually.	Yes	No
Scenery Editor	Import and position scenery models (2D, 3D models and sounds).	Yes	No
Model Editor	Preview 3D models and adjust lighting parameters.	Yes	No
Building Editor	Create basic multi-level 3D buildings by defining floor plates and height measurements for each level.	Yes	No
Sound and Wind	Place sounds at any position in the built environment. Set wind direction and speed.	Yes	No
Real-time Simulation	View anything and fly anywhere in real-time within the built environment	Yes	Yes
Animations	Record animations, such as specific views and fixed flight paths	Yes	Yes
Movie Generator	Write an AVI movie file from a pre-recorded flight path.	Yes	Yes
Copy Project	Create copies of the Simurban project (Note: A hardware license key (dongle) is required to run the project)	Yes	Yes
Block Model Builder	Place and manipulate pre defined 3D models or create user defined block models to desired height, size and location. Measure distances between any two points. Apply text based labels to objects / locations.	Yes	Yes
Sun & Shadows	Move sun and generate shadows for any day of the year and any time of the day.	Yes	Yes
Frame Capture	Capture still views from any position and save to disc.	Yes	Yes
Metrics	Obtain position co-ordinates and heights of 3D objects in the Simurban project. Measure distances.	Yes	Yes
Price	Euro ex. VAT	€6000 pa	Pro €3000 Standard €1250

Environment Editor

A complete editing toolset that allows users to add to or edit an existing RealSim projects. A user can import data and change many parameters, including terrain data, surface textures, scenery objects, sun position, wind (force & direction) and sound (position & level). Terrain height data is imported in DXF or ASCII format. 2D billboards are imported in JPG, PNG or BMP format; 3D models in 3DS or WRL format; and sounds in WAV format. Release 4.3 incorporates a Building Editor that allows users to create individual dimensioned floors, in a 2D interface, for multi storey buildings, producing a 3D model of the building. The Environment Editor includes the World Simulator application.

World Simulator

Allows the user to fly through and around a RealSim project and change many simulation parameters, such as sun, shadow, wind and sound simulation. The view from any position can be captured and saved to disk. A movie path can be recorded and replayed. 3D objects can be placed onto layers that are toggled on and off by keyboard shortcuts. Shadows can be generated for any time / day / year. The Block Model Builder allows predefined 3D models to be selected, placed and manipulated in real time; distances to be measured between any two points; and text based labels to be applied to any location or object. The World Simulator - Pro allows the import of any number of projects. The World Simulator - Standard is restricted to a single project.

Professional Services

- The compilation of interactive 3d virtual worlds
- Photomontage, 3d still image renders and 3d animations and fly-thrus
- Visual Impact studies, shadow analysis and noise pollution studies
- Project Management
- Software Training
- Data acquisition and supply

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