3D Database and Modelling Service

General Specifications

- Geotypic or geospecific terrain databases with generic textures or orthophotos.
- 3D terrain with varying level of details.

All the 3D terrain databases are created with TerraVista, a very established tool in the industry. This provides us the opportunity to create terrain databases for the most common 3D real-time visual systems, to be integrated easily into your simulator.

Best supported formats are for example the VBS2 format and Open Flight (FLT) which is used by Vega Prime, VR Vantage or many other visual systems based on Open Scene Graph.

Formats

- Different land classes such as forest, sand, gravel, farm land as well as their ground characteristics (which can influence for example the vehicle handling) are integrated.

The new generation of 3D visualisation for your simulator is at your disposal. RUAG Defence will be happy to inspire you.
State of the art 3D models for your real-time visual system

The demand for “Serious Gaming” based visual system databases and photorealistic 3D Content for professional training simulators requires a competent and reliable partner. The department “Simulation and Training” of RUAG Defence will gladly take over this special task for you. RUAG Defence – with its extensive knowledge in simulator construction – is now offering his know-how in creating 3D content and 3D databases as a separate service and integrative solution for your simulator.

3D VISUAL UPGRADE solutions for your training simulator
Realistic high quality 3D real-time visualisation for training simulators has become an important and of significant value in the professional training education. The learning effect for the trainee and the adaptation to their virtual environment can be improved as they will not be distracted by any seemingly unrealistic influences. To integrate serious gaming technology in existing simulators does not necessarily result in the need to replace of the entire visual system. RUAG 3D content models can be cost-effectively integrated in many of the common 3D real-time visual systems such as for example Vega Prime, VBS2, VR Vantage or Open Scene Graph.

3D terrain databases inclusive static 3D content
RUAG Defence creates terrain databases, which covers all of the known terrain types such as mountain areas, hill sides, flat areas, urban or desert areas.

Depending on the training purpose and the training situation, the database can be built either based on an existing terrain or can be designed according to the customer’s requirement.

We have the competence – whatever your requirements are – to create performance optimized real-time databases.

Static 3D content like bridges, tunnels, streets inclusive traffic signs but as well as buildings and vegetation are integrated parts of the terrain databases. Any 3D content contained within the terrain database will be optimized to guarantee a real-time visual system.

General model specifications
All 3D models are low polygon models optimized for any real-time applications.

The number of “Level of Details”, the polygon counts for every LOD and the model details can be individually adapted to your requirements.

Photorealistic textures and established texturing techniques from the gaming industry give the 3D models a distinctive and very detailed look.

Seasonal Textures as for example winter textures for buildings and vegetation are included.

Articulated Parts: The models can be animated in every detail like doors, wheels, gears, turrets etc.

Model states: Every 3D model is delivered in an intact and destroyed state.

Formats: 3D Models can be delivered in many common formats, preconfigured and ready to use as for: Open Flight (FLT), VBS2, 3DS Max, MDL (Microsoft Flight Simulator X and ESP format).

Licensing of the models can be individually adapted depending on the use.