

WORLD BUILDER

DATABASE GENERATION STATION

VISUAL®-XTREME DBGS

The DISI®-Xtreme image generator from Rheinmetall Electronics GmbH corresponds to the current state of the art and, due to its performance design, is capable of realizing in real time the high graphic requirements of a realistic visualization of the required databases, as well as the visualization and control of interactive objects in the required number and quality. The structure of DISI-Xtreme makes it possible to respond specifically to customer requirements and to implement new functions, as well as to adapt or replace existing functions for specific projects.

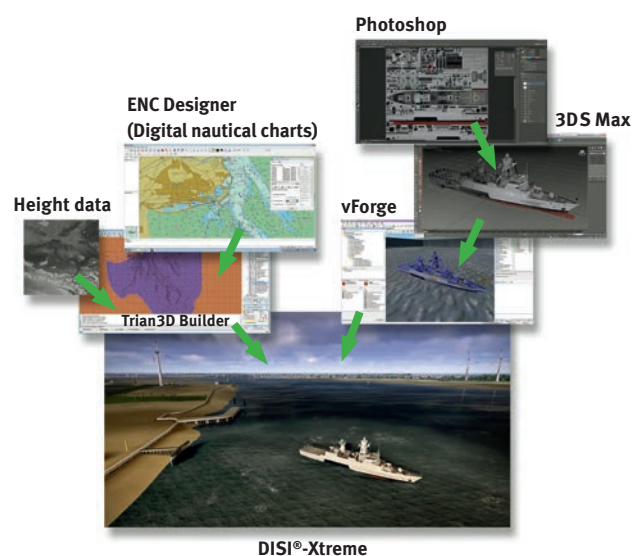
Rheinmetall Electronics GmbH has been developing various simulators and training systems for over 40 years and offers a wide range of products for the civilian and military sectors, as well as for public safety.

FEATURES

As an optional addition to the ship handling simulator, RME offers its customers the ability to use the DBGS-Xtreme database generation station to modify existing sea areas and ship models or create them from scratch.

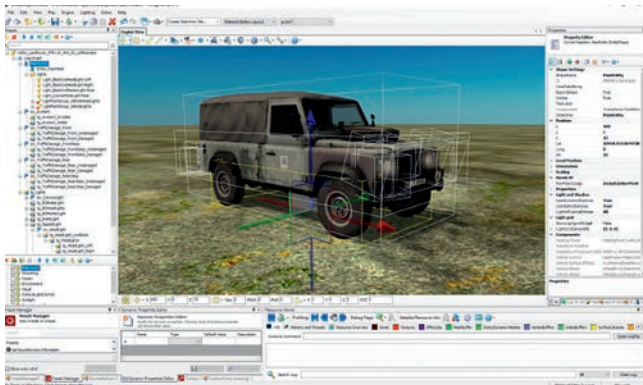
For this purpose, specialized personnel of the customer can be trained and appropriate hardware and software can be

installed on site at the customer. The generation of sea areas is based on the partially automated processing of source data such as ENC (Electronic Nautical Charts), land use data, elevation data, OSM (Open Street Map) data as well as a pool of 3D assets and textures to realize the virtual training environment.



SCOPE OF USE

- **Create new sea areas:** Obtain and prepare source data for terrain generation (e.g. nautical charts, OpenstreetMap data, elevation data, satellite/airborne data), optimize and convert data using RDE's own VCG plugin, further processing and enrichment in Trian3DBuilder, output in streaming format for DISI-Xtreme.
- **Modify existing sea areas:** Refine Trian3DBuilder projects, enrich with new/modified elements (new assets, updated elevation data, satellite/overflight imagery etc.), output in streaming format for DISI-Xtreme.
- **Create new models:** model from templates (blueprints, photos, etc.) in 3D Studio Max, create in Photoshop with textures, output in format depending on use (static or dynamic), enrich model logic in vForge, provide data for use in terrain generation or simulator.
- **Modify existing models:** Adjust/enrich source model, modify textures, adjust model logic in vForge, provide data.



HARDWARE UND SOFTWARE

- **Hardware:** Turn-key system: powerful 64 bit Windows 10 computer, Intel i7 processor, 2GB RAM, current Nvidia graphics card (e.g., RTX 3080. RTX 4070).
- **Software:** For the entire process chain coordinated products: Autodesk 3D Studio Max (provided by the customer), Adobe Photoshop (incl. various plugins, provided by the customer), SevenCs ENC Designer and Optimizer (incl. RME's own VCG plugin), RME Worldbuilder, DISI-Xtreme (incl. Vision Engine, vForge Editor, Service App, DisiModelTester).

