



Solution for Driving Simulation



Evariste[®] is a set of products made to quickly build a synthetic environment for driving applications. The originality of this product is to create all the data needed by a driving simulator (including traffic and dynamic vehicle's models), using a simple graphic definition of the network. It is designed to be used by non graphic-designer users. The 3D database is automatically generated.

Evariste[®] is developed and distributed by the **OKTAL**.

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Solution for Driving Simulation

The EVARISTE SET is designed to be used by non road design specialists and non computer graphic-experts.

It allows you to build quickly a **synthetic environment** for driving simulation.

It includes :

• road network design using high level description :

- topologic and analytic levels, you define the road sections (using straight segments, circles and clothoids) and their interconnctions

- logic level, you set transverse profiles along the road axes

- object placing, you can lay road signs, markings, trees, houses ...

• automatisations, and generation of correlated databases :

- 3D representations including automatic texture application and cross-road computation

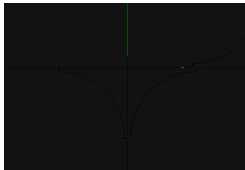
- traffic oriented databases, topologic information to answer navigation queries, analytic and logic information to describe the environment : curve parameters, lane description, object classification, etc.

- automatic generation of fractal terrain sewed on roads cross-roads 3D contours.

Reuse of existing user-defined networks («tile» approach)

All those data can be represented in a simulation oriented synthetic environment format.

2D Decorrelated Description



You define the road network axes in XY and SZ planes, with analytic parameters or retrieved axes sampling.

Construction

The network is created with high level information.
 Possibility of automatic calculation of road sections linking two given points.
 Sub-networks can be reused in new constructions.
 Possibility of road network consistency control (profile compatibilities, analytic parameters, ...).
 You can choose the type of land that will surround the roads (mountainous, hilly or flat).

Profiles

EVARISTE uses profiles to define the number of lanes, the kind of verges and lane separators of each segment of the network. New profiles can be created with EVARISTE PROFIL or Creator™.

3D Objects



EVARISTE RESEAU allows you to add 3D objects in your networks. You can create your road signs with EVARISTE SIGNAUX.

Definition



3D Generation

Databases Generation



EVARISTE RESEAU generates the different correlated databases corresponding to your network definition : 3D and traffic oriented databases.

You control the automatic fractal terrain generator using grid of relief attributes.

The 3D database is optimized in order to be used in a simulator.