

The highlights of Oktal Synthetic Environment's booth 46th International Paris Air Show, June 2005

For the first time, Oktal Synthetic Environment had a booth at the Paris Air Show. It was a good occasion to:

- Welcome official delegations
- Do a demonstration of the new products
- Show the results of ongoing projects
- Communicate on Pitch HLA products

Focus on the official delegations visiting Oktal-SE's booth.

- **Strengthening the partnership with Sweden:**
As FOI is a user of Oktal-SE electromagnetic software, the two Swedish delegations were particularly interested to discover the new evolutions of the SE-Workbench.

- **Meeting with two South Korean delegations:**
Working on infrared simulation program, the South Korean MoD, was happy to get a closer look on future evaluations of the Oktal-SE's products.

- **Norwegian delegation:**
Developing many partnerships with European countries, it was a pleasure for Oktal-SE to welcome the Norwegian delegates on our booth.



Oktal-SE and ONERA (Friday, June, 17th, 2005)

As an ONERA partner, Oktal-SE was invited to take part of a conference about the development of partnerships between ONERA and French SMEs.

News around Pitch products

As the exclusive distributor of Pitch products on the French market, Oktal-SE also presented Pitch new software: Commander, Adapter and Recorder.



Oktal-SE presenting new products at Paris Air Show.

SE-COMP-IR v.3

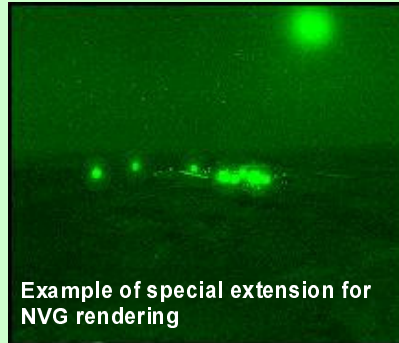
New version of real time optronic 3D scene rendering.

What's new?

SE-COMP-IR v.3 brings a technical rupture using OpenGL pixel shaders enabling direct calculation on graphic cards.

Key advantages:

- Theoretically unlimited dynamic,
- Implicit Dynamic gain control,
- Management of dynamic parts of the scene,
- No more texture sampling,
- Dynamic atmospheric conditions, day time, hour, sensor and IR bandwidth,
- Can take into account more accurately the atmosphere angular dependence bandwidth by bandwidth.



Example of special extension for NVG rendering

LibSE / LibSensorFX

Additional libraries of the SE-Workbench, which enable the creation of a synthetic simulation loop with an IR sensor, including image processing algorithms and motion models.

LibSE : to interface customer own development with Oktal-SE real time or non real time modules both in open or closed loop.

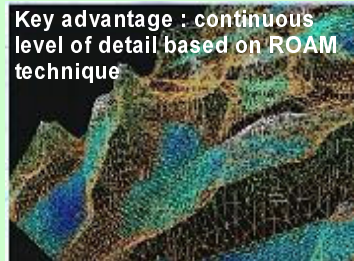
LibSensorFX : to implement customer own sensor model in open or closed loop simulations.

SE- AGETIM v.2

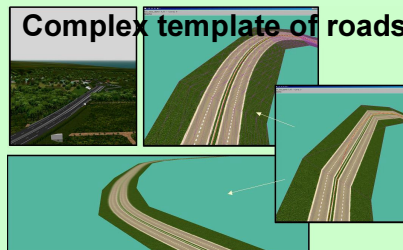
New version of multi-sensors terrain generation – urban, indoor/outdoor.

Main evolutions:

- Simplify the generation process with the continuous levels of detail : one major advantage is the possibility to produce micro relief or micro vegetation for short distance visualization and to mix for long distance visualization.
- Complex “templates” on a geometrical and texturation point of view.



Key advantage : continuous level of detail based on ROAM technique



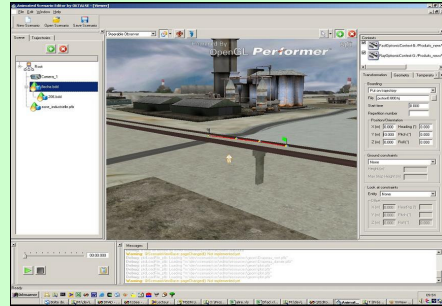
Complex template of roads

SE-SCENARIO

3D interactive scenario generation and validation.

Key advantages :

- Terrain & Scene visualization,
- Objects positioning,
- Sensor positioning,
- Path 3D editing facilities,
- 3D Path smoothing,
- Video tape facilities,
- "Optical representation" of the sensor viewing,
- Basic environment effects,
- Command mode available via an API,
- 3D Field visualization.



Example of trajectory edition in urban environment.

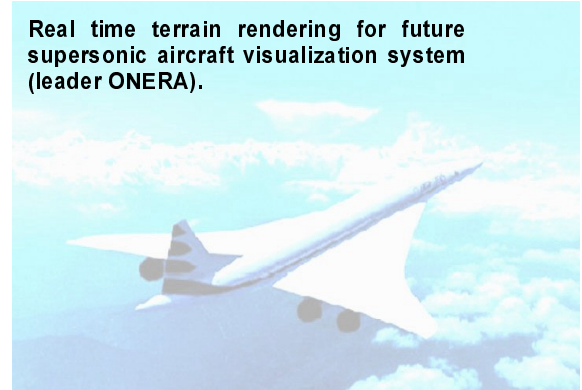
Okta-SE presenting results of ongoing projects.

SIRENA:



European project (FP6) on external EMC simulation for radio electric systems in the close environment of the airport (leader Okta-SE).

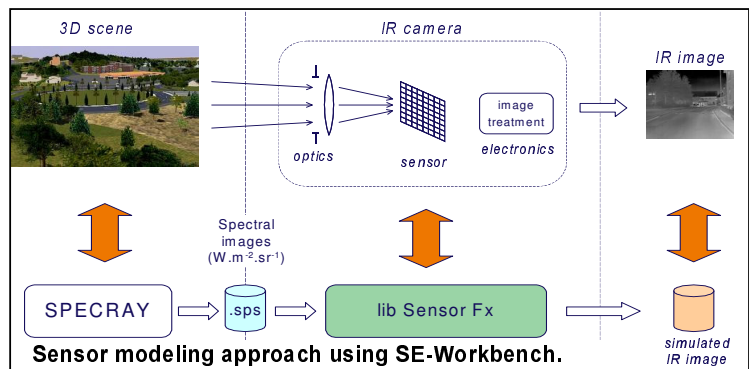
SIMU3DTR:



Real time terrain rendering for future supersonic aircraft visualization system (leader ONERA).

SEE:

European project (FP5) consisting in a study of an optronic sensor system dedicated to infrared enhanced vision both for aircraft and automotive (leader Thalès Avionics).



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