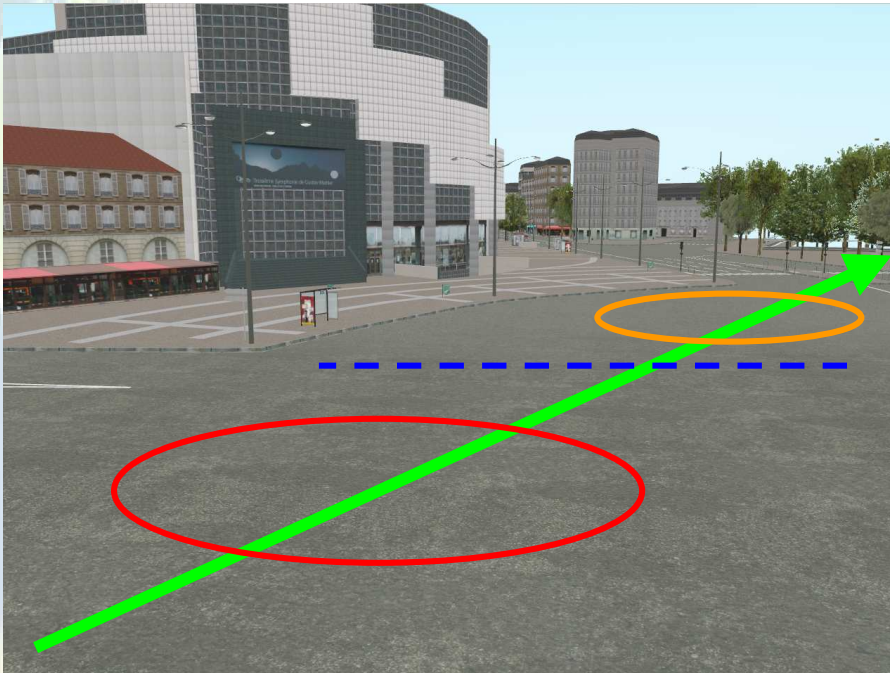


Detail texture implementation for Real-Time rendering performances improvement

A major improvement for real-time rendering

The software from OKTAL-SE now implements “detail texture” methods to enhance the level of realism of complex 3D terrain database and improve the rendering performances. The mechanism of “detail texture” consists in the definition of level of details at the picture level and not only at the polygon level.

The “detail textures” in action



In the near field (**red circle**), the texture includes a lot of details in order to enhance the realism of the scene. In that case, the pavement is very detailed. Along the line of sight (**green line**) the user is able to define a commutation distance (**blue line**) that corresponds to the transition to a lower resolution texture (**orange circle**).

The user is able to define the relevant parameters for the commutation and for the resolution of the high and low resolutions textures. It is up to the user to harmonize the color aspect to have a smooth transition between the textures.

Enhanced and more efficient rendering



Illustration of the use of the detail textures in the environment of the “place de la Bastille” in Paris, as you can never see it in the real life... without any cars ! The details texture enables to enhance a lot the realism of the rendering in the near field and save rendering time in the far field.