GRIFINOR: a new platform for 3D geo-visualization

This contribution will present a new Geographical Exploration System, called GRIFINOR, developed at the Center for 3DGI at Aalborg University. Like other GESs (Nasa World Wind, Google Earth...) it provides a three-dimensional, interactive representation of the Earth, through the Internet. The presentation will focus on the original aspects of this open source GES, and on its potential applications. GRIFINOR is not currently thought of as an end user product, but more as a platform for applications. It uses TIN as a data structure, which can be used for analytical applications and geometrical modeling, building the foundations for a true 3D GIS. The programming language used (Java) also gives GRIFINOR many interesting features. Another main originality of GRIFINOR is its peer-to-peer decentralized structure, that allows to share and visualize data over the network without passing though a central server. Attendants to this presentation will have the opportunity to see the beta version of GRIFINOR, working over the Internet. More information is available on www.grifinor.net.
This offers a great potential for the communication between the model-map and future applications.

Another main difference with other GESs is that GRIFINOR is a decentralized system. The design is such that both client and server components are tightly coupled. This means that a GRIFINOR instance can behave as both client and server, which allows to build a peer-to-peer network. Any users with a GRIFINOR instance on their computers can use it to visualize their own data, and share their model map over the Internet, without passing through a central server.

This system provides a platform for applications in many different fields, including urban planning and development, management for local communities, tourism, gaming, environmental management ...

The source code is available under the LGPL license. GRIFINOR is at the moment functional on a client-server mode. Attendants to this presentation will have the opportunity to see the beta version of GRIFINOR, working over the Internet. More information is available on www.grifinor.net.

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Session classification : Session 14 Development

Track classification : --not yet classified--

Type : Conference