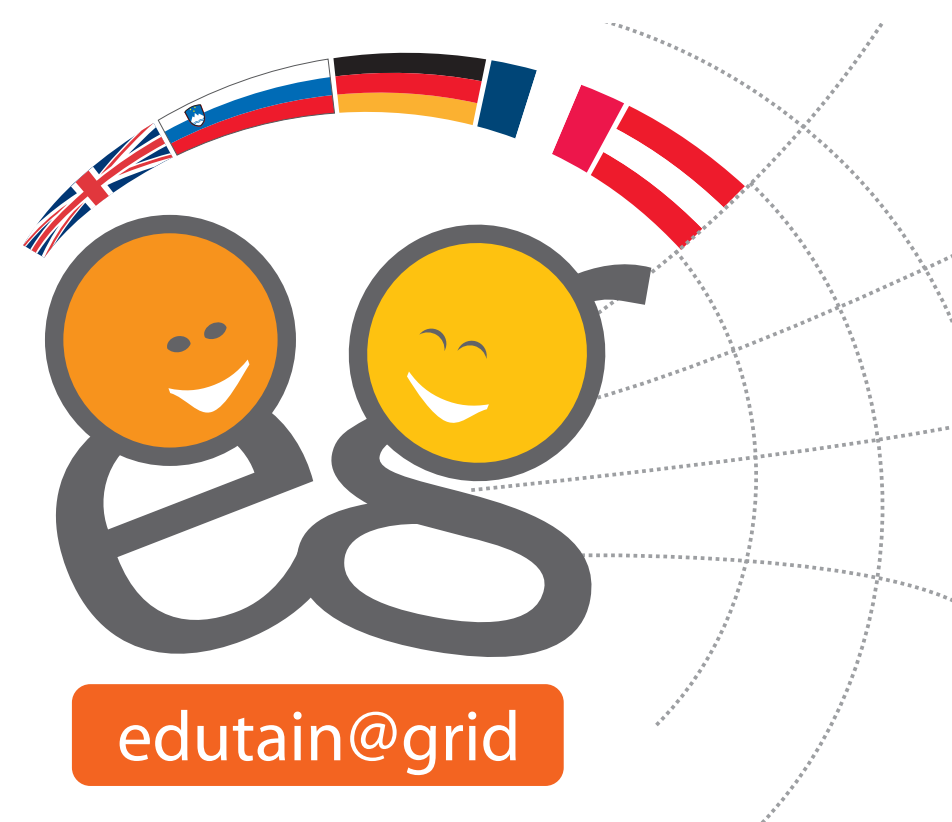


edutain@grid

is an exciting and ground-breaking project which aims to open the benefits of GRID technology to the wider public.

GRID technology enables high-performance computing that until now has typically only been available to academia and large industry. Edutain@grid is developing middleware that will give other application developers access to this powerful technology without the need for Grid infrastructure management. Edutain@grid aims at applications with very high interactivity and responsiveness expectations. Its success will be demonstrated through the development of two pilot applications for massively multi-player interactive gaming and e-learning, which the project defines as examples of Real-Time Online Interactive Applications (ROIA). edutain@grid will establish innovative tools, services and methodologies for efficient development of ROIA to exploit technology that has previously been applied to big science.



PILOT APPLICATION 1 GAMING



Multi-player interactive gaming is currently possible for only for two types of online games: fast action games with a few players (perhaps a maximum of 64) such as first person shooters (FPS), or slower adventure games with several thousand players such as massively multi-player online role-playing games (MMORPGs). **Edutain@grid** aims to allow the development of a massively multi-player first person shooter (MMOFPS) games. The gaming pilot application is based on novel fast-paced action game developed by project partner **Darkworks**.

PILOT APPLICATION 2 E-LEARNING



Existing e-learning applications are typically constrained by a limited bandwidth server environment. This has implications for levels of student interactivity and media richness. This is particularly constraining in e-learning for crisis management, where high levels of communication and interaction are required. **Edutain@grid** aims to enable development of multi-student e-learning applications with high levels of interaction, allowing students to take on crisis management roles in a more realistic manner. The e-learning pilot application is based on training applications developed by project partner **BMT Cordah**, in the field of maritime **Search and Rescue**.

REAL-TIME ONLINE INTERACTIVE APPLICATIONS (ROIAS)

Edutain@grid aims to overcome a number of barriers within existing Grid technologies to provide support for ROIA:

- Support for a large number of concurrent users
- Support for ad-hoc user connections through resource scalability and flexibility
- Recognition that whilst users will interact as a community, they may have different objectives
- Allowance for anonymous user connections
- Provision of a high level of responsiveness from applications
- Development of new business models
- Development of new security models

WHO WILL BENEFIT?

Application developers

- Cost effective GRID-based development
- More powerful applications
- Improved tools for e-learning and other applications
- Opportunity to have increased numbers of participants IT infrastructure hosts, distributors, brokers
- Increased market base and opportunities for sales

End users

- Interaction with increased numbers of participants: more exciting games, more realistic role playing opportunities for e-learning
- Access to more powerful applications

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