CoreGRID

European research network on foundations, software infrastructures and applications for large-scale, distributed Grid and peer-to-peer technologies
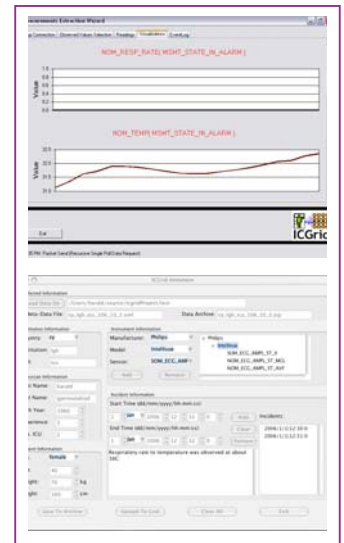
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Grid Application Fact Sheet

ICGrid: Intensive Care Grid

With *ICGrid*, we will demonstrate the applicability of Grid Technology in Healthcare Information Systems, which are among the world's largest, fastest-growing and most information intensive industries. In particular, we show how the Grid might enable the complex task of seamless integration and retrieval of clinically interesting episodes across geographically distributed Intensive Care Units.
ICGrid enables doctors to utilize the EGEE Infrastructure through simple, intuitive user interfaces. The EGEE Infrastructure then enables the complex task of information replication, fault tolerance and sharing.

Watch the demo and you will see:

- ❖ How doctors can acquire the "clinical state" of inpatients at the click of a button.
- ❖ How doctors can master the complex task of integrating, replicating and sharing knowledge over existing Grid Infrastructures using intuitive GUIs.
- ❖ How the Grid can bring significant impact to Healthcare education and research.

More details:

Intensive Care Units (ICUs) at hospitals utilize cutting edge technology in order to acquire the physiological state of inpatients, which are in a life-threatening condition, at an extremely high fidelity. Such measurements can then be utilized for: i) education, ii) early diagnosis and iii) for defining early warning systems that identify when a human life is jeopardy. A problem with the current setting at the new Nicosia General Hospital in Cyprus is that the ICU is limited to the locally acquired measurements. As a result, the number of *Clinically Interesting Episodes* available to doctors is also very limited. ICGrid is based on a hybrid architecture that combines i) a heterogeneous set of monitors that sense the inpatients and ii) Grid technology that enables the storage, processing and information sharing task between Intensive Care Units around Europe.

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ICGrid

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Information Society Technologies   European Commission