Grid enabled access to rich m**edia** content

GREDIA

Grid technology has achieved significant advances in the past few years with a plethora of prestigious organisations contributing to middleware that opens the horizons for new exploitation opportunities. However, this potential exploitation has not yet been seen to materialise in emerging applications.

The use of Grid technology is still confined mainly within scientific applications, developed by scientific organisations, being experts in Grid principles.

The majority of IT application developing organisations is still afraid to delve into the use of Grid technologies, as these still sound new and remote to them. GREDIA will address this problem with the provision of a Grid application development platform, which will enable the integration of secure Grid middleware for managing the mobile services and allowing mobile devices to participate in a protected data Grid as service providers, in a peer-to-peer manner.

Objectives:

- To develop a reliable Grid aplication development platform with high-level support for the design, implementation and operational deployment of secure Grid business applications.

- To maintain a novel generic Grid middleware required for servicing business applications accessing distributed rich media content.

- To support mobile services being built to allow mobile devices to participate in the Grid Virtual Organisation in a seamless way.

- To ensure the protection of data and transaction at all levels through a dedicated security framework.

- To validate the platform by producing two pilot Grid applications to address real life scenarios servicing the domains of media and banking.

GREDIA will provide:

- Innovative search and retrieval mechanisms for fast access of annotated numerical and multi media content distributed over the Grid, based on P2P overlay networks technology.

- A new notation for Grid application developers allowing for easy definition of Grid application's static and dynamic aspects, hiding of the complexity of semantic service matchmaking.

- Ontological services supporting interoperability in and across Virtual Organisations, building a semantic abstraction layer over available resources in the Grid.

- Implementation of information services that rapidly catalogue content on mobile devices and design of Agents that seek data caching and replication services based on QoS criteria.

- Protection of data and transactions through a secure framework for authentication of entities, confidentiality and integrity to accesses from remote resources.

GREDIA will be evaluated by producing two Grid pilot applications, addressing real life scenarios servicing the areas of media and banking:

- A media and journalism application which will allow journalists and photographers to make their work available to a trusted network of peers at the moment it is produced, either from desktop or mobile devices.

- A banking application which will enable the exchange of private information between banking organisations and their potential customers for the assessment of their creditability and the risk associated with granting a specific loan according to the Basel II regulations.

EasyLoan

Regulation

Credit Risk Department

Secure

Financial Management

Gredia
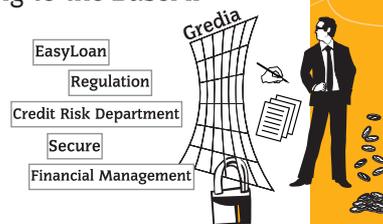
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