Appea: A framework for the Design and Deployment of Business Applications on the Grid

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Appea provides an environment for **constructing Grid applications** with the use of **distributed computational services** and **data resources**, allowing geographically dispersed users to access and utilize these resources.

Service developers create, deploy and register Grid services and distributed data sources.



Scenario developers write application scenarios which integrate the data sources to deliver business functionality.

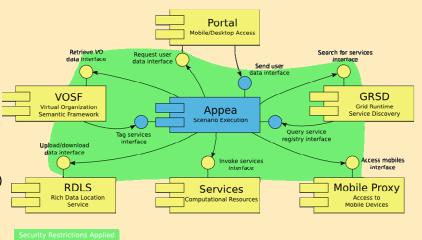


Application users use the predeveloped scenarios to support them in their daily work.

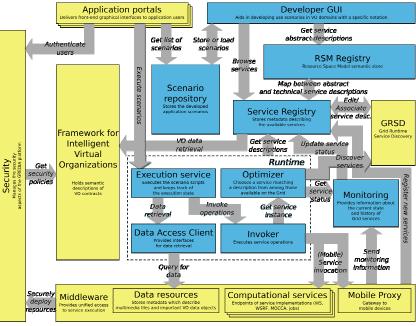
Appea works by executing **Application Scenarios**, which are prepared by scenario developers, using a simple scripting notation. Scenario developers need not worry about the underlying complexity of the Grid environment and service invocation.

In order to extend its functionality and enable user interaction, Appea interfaces with a number of other components in GREDIA:

- Portal service (for communication with end users
- VOSF (enabling queries to Virtual Organization services)
- RDLS (distributed data storage)
- GRSD (runtime service discovery)
- Mobile proxy (interaction with mobile devices)
- Security infrastructure (protection of data and clients)



Interaction between Appea and other GREDIA components



A detailed version of Appea architecture can be seen in the left-hand image.

- Application scenarios are developed using the Developer GUI and saved in the Scenario Repository.
- Mobile clients can select application scenarios for execution using the **Application Portals**, in accordance with the **VO framework**.
- Application scenarios are executed by the **Runtime System**, which is capable of interactively communicating with system clients to receive the necessary input data.
- The Runtime System takes care of selecting the appropriate services and data sources for execution of application scenarios, with help from other GREDIA components.
- •Access to services and data sources is protected by the **Security layer**.

References

lan Foster: The Holy Grail: Industry-Wide System Management Standards at Last? http://www.globus.org/wsrf/convergence.php
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