

Introduction

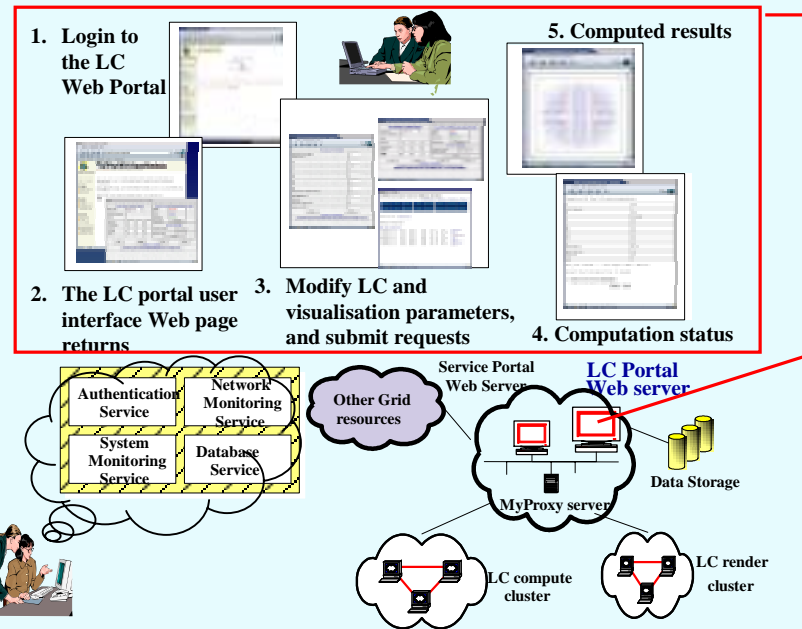
Today, in order to run a computer application using several multi-processor machines, users are exposed to many unnecessary technical details. The Liquid Crystal (LC) Web Portal:

- Shields users from these technical details,
- Enables users to utilize Grid resources in an efficient, secure and transparent manner, and
- Serves as an example of e-Science Grid applications.

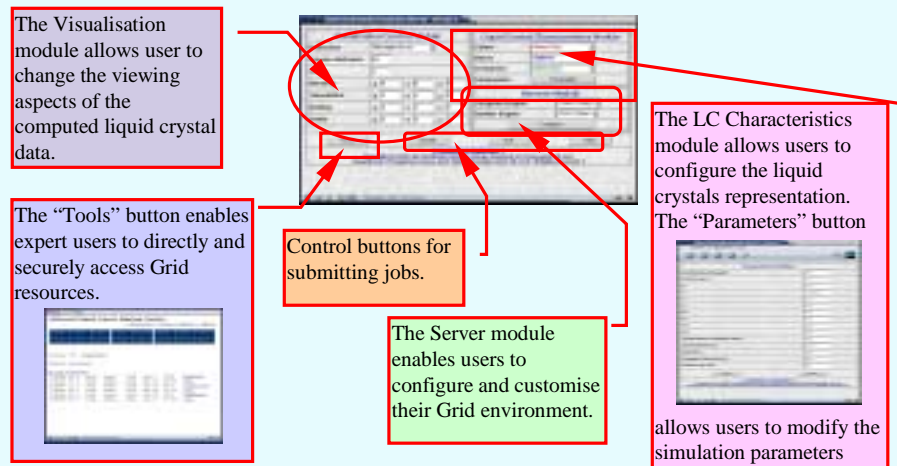
Why is the Liquid Crystal Web Portal important?

- Provides a simple means to conduct liquid crystals modelling research in a Grid environment,
- Secure and seamless access to the liquid crystal simulations,
- Visualisation of the computed liquid crystal data through a Web browser,
- Dynamic interaction allows the users to manipulate simulation and visualization.
- Built on top of commodity Internet technologies.

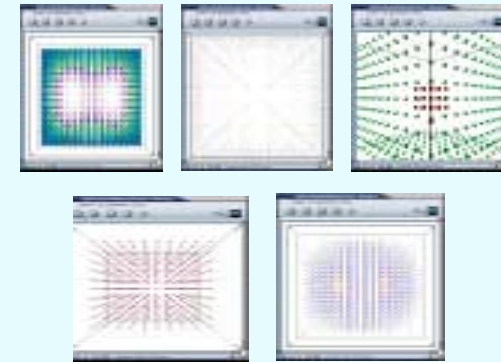
How does Liquid Crystal Web Portal work?



Liquid Crystal Web Portal User Interface



Some Results



Summary and Future Works

The LC Web Portal:

- Hides the complexity distributed computing environment,
- Allows end users to concentrate on the computational problem at hand,
- Serves as a template for other scientific applications.
- Future works includes extending the functionality of the portal to support remote collaboration, applications steering, and monitoring.

Further Information

- The DSG Portal homepage, homer.csm.port.ac.uk/dsgPortal