

 Zawartość zarchiwizowana w dniu 2024-05-27

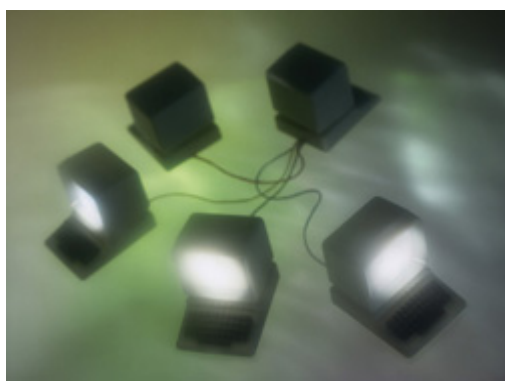
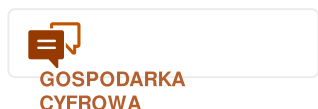


Flow Simulations On-demand Using Grid Computing

Wyniki w skrócie

Simulations of Computational Fluid Dynamics (CFD) on the Grid

A newly developed robust tool, the so-called 'FlowGrid CFD client' is expected to revolutionise the way that CFD simulations are set-up and executed by using geographically and organisationally distributed computing resources.



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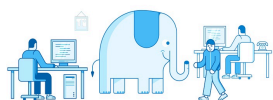
The FLOWGRID project developed suitable tools and infrastructure for establishing a network of GRID-enabled CFD centres from different European countries. One of the developed tools is the FlowGrid CFD client that enables users to set-up, submit, and run a CFD simulation on the Grid. This Windows-based application is a graphical CFD pre- and post-processor with enhanced functionalities for interaction with the FlowGrid.

The FlowGrid client comprises two components, the Arbitrary Polyhedral Unstructured Solver (APUS)-CFD interface and the 'Remote Manager'. The key functions performed involve import of meshes from various formats, specification of boundary conditions and material properties, as well as set-up of solution procedures and controls. Furthermore, the application allows domain partitioning for distribution to the grid and accessing resources to which the jobs are submitted and run.

The application provides the user with increased capabilities for monitoring the solution and optionally interrupting it. Moreover, the user can pull results from the grid, assemble them and perform graphical interrogations. The FlowGrid Client has been extensively tested by industrial users during the evaluation and validation phases of the FlowGrid system.

CFD consultancy firms are sought for license and marketing agreements. Collaborations are also sought with other interested parties including hardware manufacturers, grid specialists, hardware and third party software vendors. For further information click at: <http://www.unizar.es/flowgrid/index.htm>

Znajdź inne artykuły w tej samej dziedzinie zastosowania



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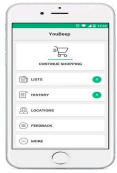
20 Marca 2025



Preserving today's digital data for tomorrow

15 Października 2021





Mobile app revolutionises in-store shopping and checkout experience

14 Kwietnia 2020



Informacje na temat projektu

FLOWGRID

Identyfikator umowy o grant: IST-2001-38433

[Strona internetowa projektu](#) 

Projekt został zamknięty

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