

COLLABORATIVE ENVIRONMENT FOR GRID-BASED FLOOD PREDICTION

Ladislav HLUCHÝ, Ondrej HABALA, Viet TRAN, Emil GATIAL
Martin MALIŠKA, Branislav ŠIMO, Peter SLÍŽIK

*Institute of Informatics
Slovak Academy of Sciences
Dúbravská cesta 9
845 07 Bratislava, Slovakia
e-mail: {Emil.Gatial, Martin.Maliska, hluchy.ui,
Ondrej.Habala, viet.ui}@savba.sk*

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Abstract. This paper presents the design, architecture and main implementation features of the flood prediction application of the Task 1.2 of the EU IST CROSS-GRID¹ project. The paper begins with the description of the virtual organization of hydrometeorological experts, users, data providers and customers supported by the application. Then the architecture of the application is described, followed by used simulation models and modules of the collaborative environment. The paper ends with vision of future development of the application.

Keywords: Collaborative Grid Environment, Grid computing, Workflow, Data management, Portal, Flood prediction, Simulation

1 INTRODUCTION

Over the past few years, floods have caused considerable damages throughout Europe. They have affected most of the European population and they resulted in heavy material losses. The need for better flood protection has become imminent.

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