

# The EGI-DRIHM collaboration: how the european Grid and Cloud infrastructures can support Hydro-Meteorology Research

## Description of content and intended audience- the outcome you expect to achieve.

In the poster the architecture of the DRIHM science gateway (with the screenshot of the most important portlets), and the different components of the distributed computing infrastructure used in the project will be presented.

Furthermore, a box will present in details the considered HMR simulation chains, while another will present the “gridification” process of the HMR models.

As regards the outcome, the first goal is to present the experience and the results achieved by the DRIHM project so far. The second goal is to try to get more resources for the drihm.eu VO.

## Relevant URL (if any)

<http://www.drihm.eu/>

## Preferred Day if any (Demos - Mon, Tue, Wed)

Tue or Wed

## Printable summary: this is the only section of the abstract that will be published in the Book of Abstracts.

Hydro-meteorological forecasts rely on the execution of complex, computationally intensive, simulation models. A full simulation - from rainfall to impact on urban areas - requires the execution of several models organized through workflows, whose accuracy is strongly dependent on an extensive set of configuration parameters.

The DRIHM project aims at setting the stage for a new way of doing Hydro-Meteorological Research (HMR). In particular, the goal is the

development of a science gateway that allows users, from scientists to environmental agencies and citizen scientists, to access and combine data and forecasting models using integrated services, user-friendly interfaces and resources from European - and in perspective worldwide - infrastructures.

Within this framework the EGI-DRIHM collaboration focuses on the integration of the HMR model selected in the project on the Grid and Clouds resources made available within the drihm.eu virtual organization. In this contribution we present such experience.

The main focus is on the process of adapting HMR models for the deployment on an enabling Grid infrastructure that supports dynamic model chains.

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