A Meta-Workflow System Designed for Solving Complex Scientific Problems using Heterogeneous Tools

Rob Kooper, Luigi Marini, Jim Myers and Peter Bajcsy National Center for Supercomputing Applications (NCSA) University of Illinois at Urbana-Champaign (UIUC)

POC: Peter Bajcsy, email: pbajcsy@ncsa.uiuc.edu

Priority:

- 1. Technical track of the meeting: Web Services Chaining (Brian Wilson)
- 2. Science/application track of the meeting: Water Management (Annette Schloss)

Abstract

This poster addresses the problem of designing a highly interactive scientific metaworkflow system that aims at building complex problem-solving environments. The meta-workflow is viewed as a framework that integrates heterogeneous workflow engines, software tools, data sites, hardware resources, organizational boundaries, and/or research domains. The need for meta-workflow comes from common GIS problems, where a number of on-going observatory and disaster planning efforts have to be supported by cyber-infrastructures being researched and developed at NCSA-UIUC.