



A system for data-control workflow execution

Wojciech Kruczkowski, Włodzimierz Funika

AGH-UST and ACC CYFRONET AGH



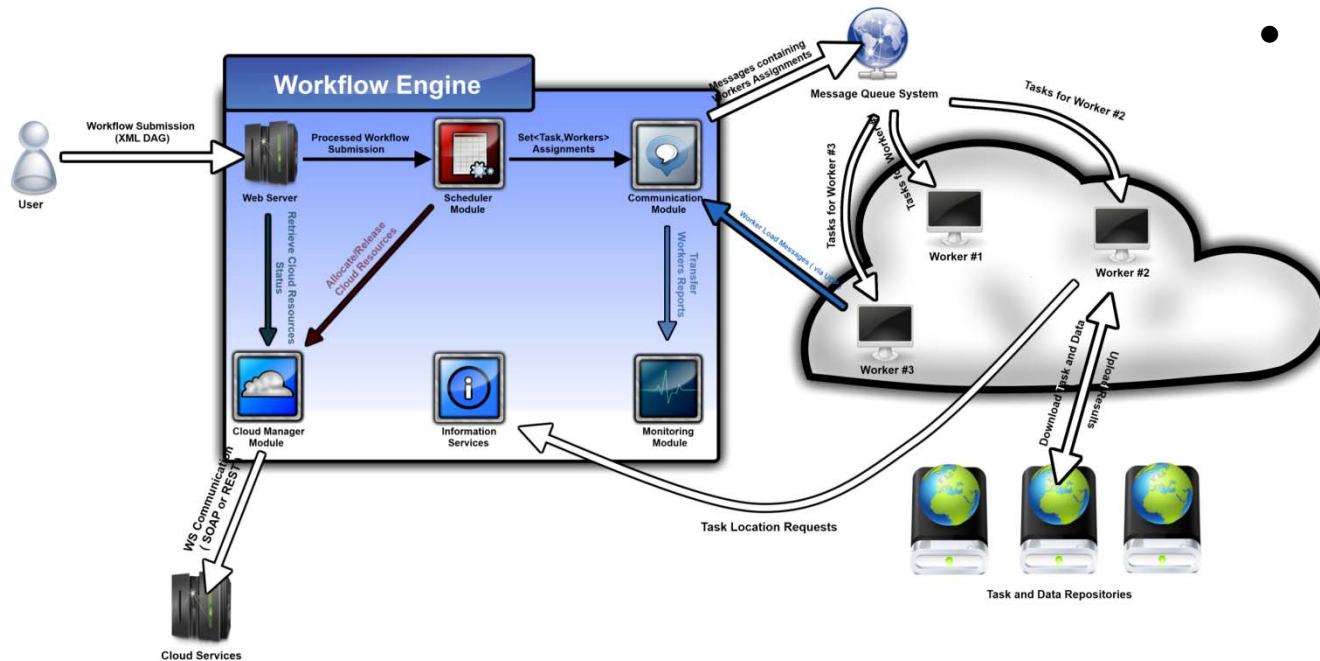
Motivation

- **Key features to be provided:**

- Scalability
- Load Balancing
- Data-Reuse
- Failure Management
- Provenance
- Monitoring
- Results sharing

- Standalone grid and cloud environments will not match the requirements of today's computations
- Tasks have their dependencies - their synchronization is essential for obtaining proper execution results
- Huge amount of data to be transferred
- Network traffic limitations
- Solution: **Workflow Systems!**

System Overview



- Key elements:

- Workflow Engine
- Workers
- Repositories

We would like to invite you to acquaint with our poster which contains a detailed description of our research and proposed solution.