General Purpose System for Simulation with Social Network Service Portal

The Problem

Researchers wishing to share simulation models are unable to do so unless they have access to the same computing environment. Even when access to computational facilities can be arranged, there are often bureaucratic barriers to be overcome delaying research.

The Solution

The solution is a general system for simulation, which leverages social media providing a means to submit models, receive progress reports and simulation output. This facilitates collaboration from external researchers and makes it easy to interact with the system with only a mobile phone.

Model FaceBook Dropbox Google drive Database on the net User Local Disk Simulation System Progress of a Simulation FaceBook message FaceBook group post Twitter Mail Simulation Results Timeseries data Graphs FaceBook group post Twitter Mail Dropbox Google drive Local disk FaceBook group Evernote

System diagram showing, 1. model submission, simulation system facilitating three functions; 2. automatic simulation on HPC system, 3. simulation status monitoring, and 4. simulation result delivery. 1., 3. and 4. are compatible with a variety of SNS services as shown. Inset shows progress report on mobile phone.

Applications

- Collaborative Simulation
- Deployed for Multilevel Modelling of Physiological Systems

Benefits

- Ubiquitous high performance simulation
- Sharing of simulation models and results
- Seamless integration with SNS
- Simulation job monitoring and output

Keywords

PHML, ubiquitous computing, simulation, HPC, SNS, mobile phone, model, collaborative research

Opportunity

Licensing

Patent Status

This technology is Granted as JP5822414 and CNZL201380036791.7 and has entered the National Phase as EP13817448.7, US14/402,932 and HK15104657.9

For more information

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