



## **MEMORANDUM OF UNDERSTANDING**

### **BETWEEN**

**ER-flow**

**AND**

**XSEDE MoSGrid**

The purpose of this Memorandum of Understanding (MoU) is to define a framework of collaboration between “Building an European Research Community through Interoperable Workflows and Data” (ER-flow), a European Project supported by the FP7 Capacities Programme under contract No. 312579, coordinated by the Centre for Parallel Computing, Faculty of Science and Technology, University of Westminster, School of Informatics, 115 New Cavendish Street, London W1W 6UW, and the Center for Research Computing, Notre Dame University (ND), an “Extreme Science and Engineering Discovery Environment” (XSEDE) centre in the US (hereafter also referred to as “the Party”). Hereafter ER-flow and ND referred to as “the Parties”.

The Parties recognise, by this MoU, the opening of a wider and longer-term cooperation in activities which will bring visible benefits.

The Parties are desirous of entering into this Memorandum of Understanding to declare their respective intentions and to establish a basis of cooperation and collaboration between the Parties upon the terms as contained herein. This MoU is a counterpart to a MoU to be established in the future between ER-flow and XSEDE MoSGrid. They are intended to support one another in contributing to the same overall outcomes.

### **AREAS OF COOPERATION**

The main goals of the activities developed in the context of this MoU are:

1. Port the MoSGrid science gateway to the XSEDE research infrastructure.
2. Promote and disseminate the scientific gateway and contribute to disseminate the ER-flow results.
3. Promote and disseminate the workflow technology and workflow interoperability

### Commitments of ER-flow:

- ⤴ Coordinate the collaboration between the Parties.
- ⤴ Give training on the gateway framework, workflow technology and workflow interoperability.
- ⤴ Inform XSEDE MoSGrid about all the technical reports, guides, manuals, tutorials that may be interesting for this collaboration.
- ⤴ Provide the equivalent of 2 person month's support for developing the XSEDE MoSGrid science gateway.
- ⤴ Support connecting the XSEDE MoSGrid gateway to the SHIWA Workflow Repository and investigate how to publish applications developed for XSEDE MoSGrid as workflows in the repository.
- ⤴ Promote XSEDE MoSGrid as an associated partner on the ER-flow web page and at events organized by ER-flow.
- ⤴ Disseminate the collaboration and promote the science gateway developed by the Party as success story or testimonial.
- ⤴ Enable the Party to participate at the ER-flow project meetings.

### Commitments of XSEDE MoSGrid:

- ⤴ Port the MoSGrid science gateway based on WS-PGRADE/gUSE to the US XSEDE research infrastructure.
- ⤴ Disseminate and promote the gateway for the target community as well as internationally.
- ⤴ The Party intends to set up the science gateway as a production service for its user community.
- ⤴ The user community will not be related to any area under ethical compromise or biosecurity such as military research or bioethical studies.
- ⤴ Participate at least in one of the annual science gateway workshops (IWSG, SGIW).
- ⤴ Register for the SHIWA User Forum.
- ⤴ Joint testing with selected workflows.

### **WORK DESCRIPTION**

The following work will be carried out by the parties;

- ⤴ Get, install and configure VM server and enable access for a limited number of collaborators.
- ⤴ Add information about collaboration on respective websites.
- ⤴ Create XSEDE MoSGrid project in XSEDE accounting, invite a limited number of collaborators and let them create accounts.
- ⤴ Install and configure the gUSE/WS-PGRADE portal.
- ⤴ Install and configure MoSGrid extensions.
- ⤴ Assess XSEDE AAI and adapt portal to it.
- ⤴ Assess data management possibilities and adapt portal to it.
- ⤴ Port one workflow to XSEDE MoSGrid and extensively test it.

- ⤴ Evaluate and improve solution.
- ⤴ Port at least five additional workflows.
- ⤴ Explore the usage of the SHIWA Workflow Repository to publish the MoSGrid XSEDE applications as workflows in order to make them available for the whole Community.
- ⤴ Investigate the reuse of applications/workflows that are currently available in the SHIWA Workflow Repository for researchers and workflow developers.
- ⤴ Encourage the MoSGrid XSEDE researchers to upload workflows to the SHIWA Workflow Repository to enable publishing and sharing workflows.
- ⤴ Write scientific paper about experiences.
- ⤴ Write Final report.

## **FINANCIAL ARRANGEMENTS**

This Memorandum of Understanding will not give rise to any financial obligation between the Parties. The Party and ER-flow will bear its own cost and expenses in relation to this Memorandum of Understanding.

## **COMMUNICATION**

The Parties shall keep each other informed on all their respective activities and on their progress and shall consult regularly in areas offering potential for cooperation. Each of the parties shall designate a "point of contact" that shall be responsible for monitoring the implementation of this MoU and for taking measures to assist in the further development.

## **EFFECT AND DURATION**

This Memorandum of Understanding will come into effect on the date of signing and will remain in effect for a period of 3 years. This Memorandum of Understanding may be extended for a further period as may be agreed in writing by the Parties.

Signed in duplicate by, for and on behalf of ER-Flow on .....

Prof. Dr Gabor Terstyanszky,  
ER-Flow Project Coordinator

Signed in duplicate by, for and on behalf of XSEDE MoSGrid on .....

Prof. Dr. Sandra Gesing  
XSEDE MoSGrid Principal Investigator