**Project no. FP6-034442**

# GridCOMP

**Grid programming with COMPonents : an advanced component platform for an effective invisible grid**

**STREP Project**

**Advanced Grid Technologies, Systems and Services**

D.COL.03 – Collaboration report

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**Summary**

This document presents a collaboration report for the workpackage 7. The WP7 is divided in 5 tasks. Task 2 on Joint Dissemination and task 5 on Indicators and Impact assessment have been suspended during the first year of GridCOMP. The collaborative tasks still active are:

- Task 1: Exploitation of synergies/technical concertation

- Task 3: Co-ordination of standardisation efforts

- Task 4: Technical Inventory and Information Service

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# 1 Introduction

GridCOMP participated to the EC concertation meetings and workshops organised by the Commission and had several opportunities to foster close collaboration with other EU-projects such as EchoGRID, BRIDGE and the CoreGRID Network of Excellence. Workpackage 7 on Collaboration was initially divided into 5 tasks. Since task 2 on Joint Dissemination and task 5 on Indicators and Impact assessment were suspended during the first year of the project, three collaborative tasks remains.
The collaborative tasks still active are:

- Task 1: Exploitation of synergies/technical concertation

- Task 3: Co-ordination of standardisation efforts

- Task 4: Technical Inventory and Information Service

This deliverable provides a description of the collaboration activities achieved by the GridCOMP project. For each of the three collaborations tasks, these activities are listed in the next section.

# 2 Liaison and cooperation tasks

GridCOMP project participated to the EC concertation meetings and workshops. Many Grid project representatives were gathered and had the opportunity to interact with each other.
At the moment, GridCOMP is in contact with projects such as XTREEMOS, 3S, BRIDGE, BEinGRID, NESSI-Grid, Qualipso. GridCOMP also have close collaborations with the CoreGRID NoE and EchoGRID SSA projects. Moreover, GridCOMP actively collaborates within the ETSI standardization body to promote the GCM as a grid standard.

## 2.1 Task 1: Exploitation of synergies/technical concertation

The goal of this task is to exchange information and exploit synergies among the work developed by the projects funded under FP6 relevant to the Grid activity. GridCOMP consortium participated in many collaboration activities with several EU-funded projects.

In June and July 2007, INRIA had contacts with NESSI-Grid to reference the GCM in the Strategic Research Agenda (SRA) deliverable. Moreover, Marco Danelutto from UNIPI provided GridCOMP contributions to the SRA of NESSI-Grid at the end of September 2007 and this contribution was taken into account in the NESSI-Grid SRA. GridCOMP will contribute to the new iteration of the consultation process organized by NESSI-Grid for the third version of the SRA.

In September 2007 GridCOMP also contributed to the EGEE'07 Achievements booklet which was published in October 2007. The GridCOMP project is presented on page 15 of the booklet. On 26-27 September 2007, the GridCOMP administrative coordinator attended the EC Concertation meeting in Brussels and had the opportunity to network with many other EU-projects.

On 24 October 2007, GridCOMP sent its contribution to NESSI TG1 for the White Paper on Architectural Descriptions of Grid Projects http://www.soi-nwg.org/doku.php?id=tg1:paper, and in November 2007, the project inputs to the New Section on Scientific and Technological Challenges were also provided to NESSI TG1 for the same document.

On Wednesday 31 October 2007, GridCOMP participated to a joint meeting with the EchoGRID and Bridge projects during the Grids@WORK week. A presentation of GridCOMP was given. The presentation was followed by a discussion comparing Proactive/GCM and other middleware (EGEE gLite, GRIA, CNGrid GOS and CROWNE) to analyze their pros and cons in running e-science and industrial applications. Cooperation with EchoGRID and Bridge projects was very successful and thus paved the way for further collaboration activities with these projects.

On 6 December 2007, the scientific coordinator gave a presentation and a demo on GCM standardization during the 4th e-Infrastructure EC concertation meeting at ETSI in Sophia Antipolis.

In addition, Denis Caromel contributed to the Consultation on Future Research Priorities on Software & Services in the Service and Software Engineering topics. Through this contribution he provided an input to the definition of the work programme for 2009 and 2010. He presented this contribution during the EC Software and Services Priorities workshop on 4 March 2008.

In February 2008, GridCOMP contributed to the White paper defining common long-term views for key areas of Software & Services, launched by the 3S EU-funded project on the ECSS website. Different partners submitted contribution among the following relevant challenges:

- o Challenge 1 Software Service Lifecycle
- o Challenge 2 Dynamic Discovery, Matching and Composition of Services
- o Challenge 5 Autonomic Computing
- o Challenge 8 Negotiation and Service-Level Agreements
- o Challenge 9 Distributed Problem Solving

Further to these activities, many GridCOMP partners attended the OGF 23 event and participated in the OGF-Europe & CoreGRID sessions in Barcelona. On 4-5 June 2008, INRIA, University of Pisa, ISTI/CNR and University of Westminster presented demos prepared in collaboration with the CoreGRID NoE project. These demos showed the implementation within GridCOMP of some of the CoreGRID definitions like the GCM programming model.

Following the recommendation of the Commission to develop cooperation with the XTreemOS Integrated Project, it has been agreed with XtreemOS to present the GCM and its reference implementation developed in GridCOMP during their next general meeting in October 2008. The purpose of this presentation is to discuss and plan for potential support of the GCM within XtreemOS.

Additionally, GridCOMP submitted an application for a joint exhibition stand in order to participate in the ICT 2008 event in Lyon, France on 25-27 November 2008. We proposed to hold a joint exhibition stand showcasing project demos with the EchoGRID and BRIDGE

EU-funded projects in the International Village. We plan to present information and demo on both GridCOMP and the GCM.

To prepare further activities in the next months, we started to organize a technical concertation meeting with the participation of EC-funded projects from INFSO/D3 Unit (Software & Service Architectures and Infrastructures) and INFSO/F3 Unit (GÉANT & e-Infrastructure). About fifteen projects have been invited for this meeting to be held on 23 October 2008 at Sophia Antipolis. The key objective of this meeting is to stimulate cooperation and knowledge exchange between all members of EU projects related to Components, Services, and Utilities for Grid and large scale IT systems. This meeting shall give strong visibility to participating projects, and also help to achieve dissemination and concertation objectives. The tentative agenda is available at http://gridcomp.ercim.org/content/view/37/16/. Moreover, GridCOMP will organise its final dissemination event, a GridCOMP conference on 22 October 2008 in Sophia Antipolis at the INRIA premises. This conference open to the Grid community will present the latest achievements of the consortium as well as showcase the GridCOMP prototypes. Several industrials will also be invited to give a presentation on their experience using GCM at this conference.

## 2.2  Task 3: Co-ordination of standardisation efforts

The goal of this task is to have a joint strategy and activities in order to increase impact of the standardization efforts. Therefore, GridCOMP is involved in the FP6 working group on standardisation activities since our first year project.

The team at INRIA is registered to the Grid Standards Coordination Group (GSCG) mailing list. In addition, the project coordinator attended to the standardization session organized by the GSCG working group during the FP6 Projects Concertation Event on 27 September 2007.

Also, a one page document describing the standardization efforts and the process followed by GridCOMP to standardize the GCM has been written. This document has been disseminated on the SSAI website and during the 4th Grids@WORK event in October/November 2007 to other EU projects.

INRIA is involved in the ETSI Technical Committee on grid. Other European funded projects are involved in this committee. INRIA have participated in all regular TC Grid meetings organized by ETSI. Therefore, we are aware on other standardization initiatives from some EU projects and we also share our efforts in this standardization body.

## 2.3  Task 4: Technical Inventory and Information Service

In order to favour dissemination and communication of the GridCOMP development results we made them publicly available:

From the beginning of GridCOMP, the prototype implementation of the GCM is available in the ProActive repository. Thus, each partner or anybody else can easily access the last developments of ProActive/GCM implementation. In addition, INRIA have installed a

collaborative tool allowing users to easily report bugs or make a request for features. It is available at https://galpage-exp.inria.fr:8181/jira.

Other partners have also published their developments. For the public WP5 developments, GridSystems uses the INRIA GForge for their two use cases, like for the ProActive/GCM implementation. For WP4, University of Westminster has set up a wiki containing the last version of the GIDE, documentation and tutorials. The version available for download is regularly updated to include the latest developments. The non functional features of the component framework are available for download as well. A download webpage on the GridCOMP website contains information to get access to these repositories.

As planned during the previous year of the project, the ProActive/GCM middleware providing the reference implementation of the GCM has been referenced in the Gridipedia public repository managed by the BEinGRID EU- funded project.

# 3 Conclusion

The GridCOMP project has actively collaborated with other EU funded projects. We have participated in several joint meetings and consultation processes in order to disseminate and share our results. In addition, the GridCOMP standardization efforts allow us to clearly show the outcomes of our project, and finally, the use of public repositories for our developments achieves collaboration with other projects.
GridCOMP will pursue its collaboration activities for the last six months of the project.

The technical concertation meeting and the GridCOMP conference being organized in October 2008 will definitely highlight the collaboration between GridCOMP and other projects, and achieve the dissemination of the GridCOMP results.