**Cloud-TM**

Specific Targeted Research Project (STReP)

Contract no. 257784

# D5.9: 3rd Collaboration Report.

**Date of preparation:** 31 July 2013
**Start date of project:** 1 June 2010
**Duration:** 38 Months

# Contributors

Maria Couceiro, INESC-ID
Diego Didona, INESC-ID
Paolo Romano, INESC-ID

This document reports on the collaboration activities conducted during the third year of the project with relevant EU-funded projects.

Most of the collaborations established during this reporting period have involved FP7 projects under the Work Programme Objective "Internet of Services, Software and Virtualization". Beyond this, also during this year, participants of the Cloud-TM project have been closely involved in collaborative efforts with the COST Action IC1001 Euro-TM, a network addressing inter-disciplinary aspects of research in the area of Transactional Memory.

Representatives of the Cloud-TM project have participated in 3 workshops organized by, or co-organized with, EU projects active in the area of Cloud computing:

- Paolo Romano, *SLA Management in Elastic Transactional Data Grids* , Internet of Services Collaboration Meeting, 16 Oct. 2012, Bruxelles

- Paolo Romano, *SLA Enforcing in Transactional Cloud Data Stores: the Cloud-TM Approach*, Workshop on Cloud Computing SLAs in FP7 - Exploitation of Research Results - Bruxelles, May 27 2013

- Diego Didona, *QoS Management in Elastic Transactional Data Grids*, eChallenges Conference 2012, Lisbon, October 2012

and they will participate in a 4th workshop at the end of September 2013:

- Paolo Romano, *The Cloud-TM Project*, Workshop on Coherence and scalability in the cloud, collocated with IEEE Symposium on Reliable Distributed Systems (SRDS) 2013, Project "CumuloNimbo".

These *fora* have been/will be exploited to disseminate Cloud-TM project's results, track progresses and developments of other ICT projects in Call 5-8, as well as to identify collaboration opportunities for joint publications and projects' proposals.

The main areas of collaboration have been:

- QoS specification, negotiation and monitoring

- Storage and data management platforms for the cloud

- Dependability in Cloud computing environments

Two concrete result of theses collaborations have been the joint publication, co-authored with representatives of a number recent/ongoing EU projects, of a joint technical report on exploitation of research results in the area of SLA-management:

- *Cloud Computing Service Level Agreements - Exploitation of Research Results*, European Commission, Directorate General, Content and Technology, Unit E3, Software and Services, Cloud, Editor Dimosthenis Kyriazis

and the preparation of a joint EU project's proposal with representatives of the Optimis Project that was submitted in Call 11 of the ICT FP7 program (and that was not grante funding).

Concerning collaboration with the COST Action Euro-TM (IC1001), various members of the CINI and INESC-ID's teams have given talks in workshops organized by Euro-TM, namely:

[Pr1] Nuno Diegues and Paolo Romano
*Input Acceptance of Time-Warping Transactional Memory*,
5th Workshop on the Theory of Transactional Memory (WTTM 2013)
October 14, 2013, Jerusalem, Israel - in conjunction with DISC 2013

[Pr2] Nuno Diegues and Paolo Romano,
*Enhancing Permissiveness in Transactional Memory via Time-Warping*
Euro-TM Workshop on Transactional Memory (WTM 2013)
Prague, Czech Republic, April 14, 2013

[Pr3] Ricardo Filipe and Joao Barreto,
*The hardships of TLSTM, the first Transactional Memory with Thread Level Speculation algorithm*
Euro-TM Workshop on Transactional Memory (WTM 2013)
Prague, Czech Republic, April 14, 2013

[Pr4] Joao Paiva, Pedro Ruivo, Paolo Romano and Luis Rodrigues
*Scalable self-tuning data placement for distributed transactional memory systems*,
Euro-TM Workshop on Transactional Memory (WTM 2013)
Prague, Czech Republic, April 14, 2013

[Pr5] Maria Couceiro, Pedro Ruivo, Paolo Romano and Luis Rodrigues
*Self-Tuning Replication in Distributed Transactional Memories*,
Euro-TM Workshop on Transactional Memory (WTM 2013)
Prague, Czech Republic, April 14, 2013

[Pr6] Diego Didona, Pascal Felber, Derin Harmanci, Paolo Romano and Joerg Schenker
*Combining on-line exploration and model driven performance forecasting to self-tune the parallelism level in Distributed Transactional Memory systems*,
Euro-TM Workshop on Transactional Memory (WTM 2013)
Prague, Czech Republic, April 14, 2013