D6.3 P1 Dissemination and Use Report Version 3.0

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Change Log

Version	Description of Change
v3.0	Initial Draft released to the European Commission (based on internal v3.0)

Table of Contents

1 Introduction and executive summary

The D6.3 Dissemination and Use Report describes the ParaDIME Project progress toward achieving the target dissemination metrics for Period 1. It is intended to complement the high level summary of Dissemination progress provided in the D1.2 Period 1 Project Report (with short status per task) and includes a detailed list of Project-focused dissemination activities, events and publications as well as a complete list of scientific (peer-reviewed) publications for this period of the project.

2 Metrics – Target vs. Achieved

The table below summarizes the target metrics for the project by which dissemination success may be measured on an annual basis as well as over the course of the project. These metrics were determined via discussions within the Consortium as well as a comparison with projects of similar size and scope.

The numbers achieved to date show that despite the slow start-up of Dissemination Activity, there has good progress toward targets for Period 1 in most areas, and particularly in the area of Scientific Publications. The most notable needed area for improvement is the website. Progress for each of the targets is described in detail in the sections to follow.

DISSEMINATION METRICS - TARGET					DISSEMINATION METRICS - ACHIEVED (TO DATE)				
REF	**TASK (DoW)**	**DISSEMINATION TYPE**	**ANNUAL TARGET (TOTAL)**	**ADDITIONAL DETAILS**	**P1**	**P2**	**P3**	**TOTAL to date**	**% Complete TO DATE**
1	T6.4 Partner Dissem	Peer-reviewed Scientific Publications	6 (18)	Based on one publication per Partner per year (+1 additional for Coordinator), Includes Journal, Workshop and Conference Papers and Posters	9			9	50%
2	T6.4 Partner Dissem	Industry-targeted Event Leadership (IAB Meeting) or Participation (Invited Talk, Poster or Booth)	1 (3)	Includes Industrial Advisory Board (IAB) Meetings	1			1	33%
3	T6.4 Partner Dissem	Science / Academia-targeted Event Participation (Invited Talks, Poster or Booth – without proceedings)	2 (6)	NA	2			2	33%
4	T6.6 FET Collab	Project-focused Workshops	2	Over duration of project, in conjunction with other FET Projects	0			0	0%
5	T6.6 FET Collab	Project Collaborations	2	Over duration of project	1			1	50%
6	T6.2 Press	Non-scientific Publications (dissemination of project, project progress, etc.)	2 (6)	Based on one article per Partner (+1) in Partner-related, EC or other dissemination publication over course of project	1			1	17%

REF	TASK (DoW)	DISSEMINATION TYPE	ANNUAL TARGET (TOTAL)	ADDITIONAL DETAILS	P1	P2	P3	TOTAL to date	% Complete TO DATE
7	T6.2 Press	Project Press Releases	2	Over duration of project, based on one PR after project start and one PR near project completion	1			1	50%
8	T6.2 Press	Press-related News International Impacts	6	Over duration of project.	0			0	0%
9	T6.3 Web	Blog Entries	12 (36)	Based on one entry per month	12			12	33%
10	T6.3 Web	Web Page Views	10000	Over duration of project	679			679	7%

3 Scientific Publications (Target 1)

The dissemination area with the strongest impact to date is that of Scientific Publications. The following is the list of nine publications that have been produced as a part of the project through the end of Period 1. They are listed in reverse date order with the most recently published items first. The complete list of project publications (including the most recently accepted publications) is updated and maintained on the ParaDIME Public Website at www.paradime-project.eu/publications.

Period 1 Publications

- Knauth, T., and C. Fetzer, "Fast Virtual Machine Resume for Agile Cloud Services", International Conference on Cloud and Green Computing: IEEE Computer Society, 09/2013.
- Ejaz, S K., D. Behrens, T. Knauth, and C. Fetzer, "Improving Wide-area Replication Performance through Informed Leader Election and Overlay Construction", International Conference on Cloud Computing: IEEE Computer Society, 07/2013. Abstract
- Diestelhorst, S., M. Nowack, M. Spear, and C. Fetzer, "Between All and Nothing - Versatile Aborts in Hardware Transactional Memory", Symposium on Parallelism in Algorithms and Architectures: ACM, 06/2013.
- Fehervari, I., A. Sobe, and W. Elmenreich, "Biologically Sound Neural Networks for Embedded Systems Using OpenCL", NETYS 2013, Marrakech, Morocco, Springer LNCS Vol. 7853 2013, 05/2013.
- Seyedi, A., G. Yalcin, O. S. Unsal, and A. Cristal, "Circuit Design of a Novel Adaptable and Reliable L1 Data Cache", 23rd Great Lakes Symposium on Very Large Scale Integration, Paris, France, ACM, 05/2013.
- Felber, P., D. Harmanci, Y. Hayduk, and A. Sobe, "Concurrent Message Processing using Transactional Memory in the Actor Model", In EURO-TM Workshop on Transactional Memory (WTM, no proceedings), Prague, Czech Republic, 04/2013.
- Diestelhorst, S., "Extensions to the Architecture and Microarchitecture of HTM", In EURO-TM Workshop on Transactional Memory (WTM, no proceedings), Prague, Czech Republic, 04/2013
- Cristal, A., O. Unsal, G. Yalcin, C. Fetzer, J-T. Wamhoff, P. Felber, D. Harmanci, and A. Sobe, "Leveraging Transactional Memory for Energy-Efficient Computing Below Safe Operation Margins", TRANSACT 2013 - 8th ACM SIGPLAN Workshop on Transactional Computing, Houston, Texas, TRANSACT does not have archival proceedings, 03/2013.

- Mallik, A., P. Zuber, T-T. Liu, B. Chava, B. Ballal, P R. Del Bario, R. Baert, K. Croes, J. Ryckaert, M. Badaroglu, et al., "TEASE: A Systematic Analysis Framework for Early Evaluation of FinFET-based Advanced Technology Nodes", Proceedings of the 50th Annual Design Automation Conference, New York, NY, USA, ACM, pp. 24:1–24:6, 2013.

4 Industry and Use (Target 2)

After nearly completing the Requirements Definition process in P1, we solicited initial industry feedback by having members of our Industrial Advisory Board (IAB) attend our Technical Meeting held from 5 – 6 September 2013 in Leuven, Belgium. The meeting participants included 20-plus Principle Investigators, Post-docs and students. During this event, Ian Phillips (ARM), Ibrahim Hur (Intel) and Tim Harris (Oracle) not only provided feedback on the technical design but also on the procedures to further the research and development progress of ParaDIME. The meeting resulted in a lively discussion for which we have listed the key take-away points as well as resulting actions in the table below.

NO.	RISK	SUGGESTION	RESULTING ACTION
1	The post-project exploitation plan is unclear.	The ParaDIME Team should consider the roadmap / timeline beyond the project. It is important to be quantitative in terms of in how many years do we see the results / outputs of ParaDIME being used.	The ParaDIME Team will consider the potential roadmap for the methodologies studied in the project for each of the components of the larger Infrastructure as applicable. This roadmap will be included in the final Report on the evaluation of each component.
2	The cost of implementing energy-efficient computing techniques is too high.	It is critical not to underestimate the importance of the non-functional criteria: quality, productivity, time, etc.	The ParaDIME Team has built a mechanism for trading off quality, speed with reduced energy consumption in the form of energy profiles.
3	The cost of implementing energy-efficient computing techniques is too high (similar to previous).	It is critical not to underestimate the importance of the non-functional criteria: cost, productivity	The ParaDIME Team believes that energy-efficient programming techniques must be introduced early in a programmer's career. Based on project success, TUD (and possibly UniNe) is incorporating / will incorporate these techniques into their curricula. However, the underlying assumption is that these techniques must be simple and must contribute positively to the company bottom line. This is necessary to begin a virtuous cycle.

NO.	RISK	SUGGESTION	RESULTING ACTION
4	It is important to find a way to demonstrate clear improvements to a wide audience.	Find a way to demonstrate improvements over the baseline. Show the demo using a baseline of conventional methods / technologies and compare them to the ParaDIME Approach. If it is not possible to make absolute (apples to apples) comparisons, explain why it is not possible and be prepared to explain the high level reasoning behind a strong "hunch" that the comparison still holds.	The ParaDIME Team has organized work into a series of demonstrators that will allow the project team to showcase the work performed in the project as "apples to apples" when possible and will endeavor to find solutions for comparing, e.g. Shared Memory vs. Message Passing at the Software level.

5 Invited Talks, Workshops and Collaborations (Target 3)

The ParaDIME Project got off to a relatively slow start with respect to invited talks and workshops in the first year. However, at time of writing the ParaDIME Team will participate in the FET ICT-ENERGY Kick-off as well as present at the Tallinn - HiPEAC Computing Systems Week, October 2013. Moreover, we have already submitted proposals for a demo at DATE 2014 as well as several workshops for HiPEAC 2014 in Vienna, Austria.

6 FET Collaborations (Targets 4, 5)

ParaDIME Coordinator BSC was invited to join the successful FP7 Coordination Action proposal, ICT-Energy (Coordinated by University of Perugia). The purpose of the CA is to provide a framework for collaboration for the Coordinating partners of the novel FET-proactive program “MINECC” (Minimizing energy consumption of computing to the limit). The ICT-Energy Project will hold their "kick-off" meeting on 23 October in Heidelberg, Germany.

7 Non-scientific Publications and Press (Targets 6, 7, 8)

In P1, we published our initial project press release later than originally intended. This was largely due to lack of resource availability at the BSC, a problem which we have now solved. The objective of the release was to create awareness for the ParaDIME Project for both the general public as well as interest groups in the Technology and Scientific Sectors. The media contacts were pooled from the various Partners to ensure maximum coverage throughout Europe.

To make up for this late start, the team has submitted an article describing ParaDIME to HiPEAC Info 37 and plans to submit an article focusing on Simulator results in a future newsletter.

8 Public Website (Targets 9, 10)

The following table provides an overview of some of the most important statistics for the ParaDIME Public Website. The table shows the total number of pages that were

served as well as the total number of unique visitors to the website during the reviewing period. Note that unique visitors can only be distinguished by their IP addresses and the amount of time since a previous request by these addresses took place. Due to the limitation of the HTTP protocol, log rotations and other factors, this number should not be taken as absolutely accurate; rather, they should be considered a "best guess". The average time visitors stay is expressed by the average number of pages viewed during their visit to the site.

METRIC	PERIOD 1	P2	P3
Total number of visits	679		
Average duration of visit	3 pages		
Top 5 visiting countries	Spain (35%), Germany (30%), Switzerland (10%), USA (4%) Belgium (3%)		
Top 3 sites visited	/home (37%), /partners (10%), /publications (7%)		

These web traffic indicators clearly demonstrate the need to drive more visitors to the site. At time of writing, the BSC is considering an overhaul of content as well as an increase in blog posts and possibly a twitter feed to rectify the problem.

9 Dissemination Activities (Targets 2-10, Detail)

Items marked in gray indicate confirmed (planned) activities for Period 2.

TEMPLATE A2: LIST OF DISSEMINATION ACTIVITIES										
REF	**PERIOD**	**Type of activity**	**Main leader)**	**Title**	**Date**	**Place / Event**	**Type of audience**	**Addressed countries**	**Size of Audience**	**LINK - to Event agenda and / or presentation**
1	P1.0 (M06 - M12)	Press Release	Renata Gimenez (BSC)	Towards greener and smarter personal computers	03-10-13	http://www.paradime-project.eu/press-center	Civil Society	World	NA	NA
2	P1.0 (M06 - M12)	Workshop Presentation, Poster	Thomas Knauth (TUD)	Consolidating web services for energy-efficiency	14-04-13	7th Eurosys Doctoral Workshop (Prague, Czech Republic)	Scientific Community	World	30	http://research.microsoft.com/en-us/events/eurodw13/
3	P1.0 (M06 - M12)	Workshop Presentation	Thomas Knauth (TUD)	Web service consolidation for energy efficiency	26-04-13	GI Fachgruppentreffen (Brunswick, Germnay)	Scientific Community	Germany	30	http://www.betriebssysteme.org/Aktivitaeten/Treffen/2013-Braunschweig/
4	P2 (M13-24)	Conference (Panel)	Oscar Palomar (BSC)	FP7 FET ParaDIME	07-10-13	HiPEAC Computing Systems Week - Dependability Challenges Session (Tallin, ESTONIA)	Scientific Community, Industry	Europe	20	http://www.hipeac.net/thematic-session/dependability-challenges
5	P2 (M13-24)	FP7 FET Meeting	Santhosh Kumar Rethinagiri (BSC)	ICT Energy	23-10-13	ICT energy kickoff meeting (Heidelberg, Germany)	Scientific Community, Industry	Europe	20	http://www.ict-energy.eu
6	P2 (M13-24)	Workshop	Osman Unsal (BSC)	FP7 FET ParaDIME	14-11-13	Multicore application debugging workshop	Scientific Community, Industry	Europe	40	https://lis.ei.tum.de/mad2013/
7	P2 (M13-24)	Workshop	TBD	FP7 FET ParaDIME	21-01-14	HIPEAC workshop: RAPIDO	Scientific Community, Industry	Europe	40	http://www.hipeac.net/conference/berlin/workshop/hip3es
8	P2 (M13-24)	DATE Booth	TBD	FP7 FET ParaDIME	25-03-14	University Booth Date	Scientific Community, Industry	Europe	500	http://www.date-conference.com/group/exhibition/u-booth