

Ideal-ist Success Story

How did Ideal-ist help?

Thanks to IDEAL-IST, we were able to find in a short time a key industrial partner for the consortium, i.e., a SME (TWT GmbH Science & Innovation – <http://www.twt-gmbh.de>) that provided a relevant industrial use case in the HPC domain (transient simulation of computational fluid dynamics). The provided use case contributed to strengthen the project proposal by significantly increasing the range of potential markets in which the technologies developed during the project could be applied and demonstrated.

We launched the partner search on 15/12/2012 and we received 12 applications answering to our partner search: 4 of them, coming from European SMEs, were short-listed in a first phase, and after a short discussion within the consortium, we selected the above mentioned German SME, as best fitting our requests. Answer time ranged from 2 to 31 days, with most of the applications (and the most interesting ones) received within one first week after the partner search launch.

Project Details

Acronym: CHEESE

Project Title: Customization for Hpc and EmbEddedSystEms

Country: Switzerland

Submitted in(call and objective): Call FP7-ICT-2013-10, Objective 2013.3.4 (Advanced computing, embedded and control systems) (under evaluation)

Specific results: Implementation of a unified multi-level customization strategy for embedded and high-performance computing, focusing on three directions: platform customization, application customization, and run-time system customization.

What is the Project about?

CHEESE targets the study, design, and implementation of an innovative strategy for the customization of High-Performance Computing (HPC) and embedded systems, by exploiting the synergies and interdisciplinary know-how of the partners of the consortium in the two computing segments for applying a unified and comprehensive approach to maximize performance and energy efficiency.

To achieve the goal of effective customization, CHEESE focuses on three directions (level of abstractions) in the design/runtime space that promise the highest payoff: platform customization, application customization, and run-time system customization, better known as run-time adaptivity.

To support the targeted platform and application customization, the CHEESE consortium will study and develop a cross-layer design space exploration and optimization methodology that targets embedded as well as high-performance application domains, starting from the highest abstraction layer and thus taking into account software as well as hardware aspects.

A Run-Time Resources Manager and the possibility to provide applications with adaptivity will be investigated, in order to customize the resource assignment depending on the type and number of applications running on



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the system and on specific application requirements.

While current approaches try to solve the customization problem by solely dealing with the three customization directions one at the time, the CHEESE project aims at building a unified and comprehensive framework to address them simultaneously.

The viability of the techniques will be demonstrated by applying the CHEESE approach to four industrial use cases in the HPC, embedded, and combined HCP/embedded domains provided by the three industrial partners of the consortium.

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About IDEAL-IST

<http://www.ideal-ist.eu>

IDEAL-IST is the first and unique quality labelled international ICT partner search network with 16 years experience. The Ideal-ist network consists of 88 partners and National Contact Points (NCPs) from 75 countries in the area of Information and Communications Technologies (ICT). The Consortium members are from EU and Non-EU Countries, including Associated States, Eastern European Partner Countries (EEPC) and Mediterranean Partner Countries (MPC) and Emerging countries like China, Brazil, India and South Africa. Ideal-ist is part funded by the European Commission and supports research organisations and companies worldwide

- ▶ to find partners for their project ideas
- ▶ to join projects and
- ▶ to find services leading them to success in the 7th Framework programme

Furthermore, the main goal is the enhancement of cooperation between the national NCPs within FP7 and an overall improvement of quality across Europe in the dynamically growing area of ICT. This is in line with the international cooperation strategy of the European Commission.

More Information

Get more information on the Ideal-ist partner search and ICT support services

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