

Press Release

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Heterogeneous and Distributed Services for the Future Computing

The future computing continuum is composed by a highly heterogeneous interconnection of platforms and devices offering a wide diversity of capabilities. Current software engineering approaches tend to provide dedicated support for managing and exploiting only parts of the continuum.

Now a team of experts from the fields of service engineering, distributed systems and resource constrained systems as well as from the fields of complex event processing and integration/communication with resource constrained devices are working on the exploitation of the full range of diversity and specificity of the future computing continuum.

HEADS is a research project co-funded by the European Commission, under the Seventh Framework Programme. The idea of the project is to leverage model-driven software engineering and generative programming techniques to provide a new integrated software engineering approach which allow advanced exploitation of the full range of diversity and specificity of the future computing continuum. The main scope is to develop an open-source Integrated Development Environment (IDE) supporting the collaboration between platform experts (having a deep knowledge of a reduced set of platforms) and service developers (needing to deal with a large set of platforms to develop added-value services).

The results and developments of the project will be validated through the operation of two important real industrial use cases: one in the domain of security monitoring based on a monitoring and sensor platform and the other in the domain of media services based on a distributed media system, namely [NewsAsset](#).

The project brings together two research partners ([SINTEF](#)-Norway and [INRIA](#)-France), two technology partners ([Software AG](#)-Germany and [M2Mzone](#)-Ireland) along with two use-case partners ([ATC](#)-Greece and [Tellu AS](#)-Norway).

If the proposed HEADS IDE works, it will benefit services developers by allowing them to easily exploit a set of heterogeneous platform (mobile devices, sensors, smart objects, etc.) in the design of their cloud based services. The HEADS IDE will also benefit platform experts which can capitalize their knowledge of a specific platform as a reusable plug-in for the HEADS IDE. Depending on the platforms and commercial objectives the HEADS plug-ins can be developed with different licensing models ranging from open-source to fully proprietary.

Detailed information on **HEADS** is available at: <http://heads-project.eu/>