Multidimensional context-aware adaptation of Service Front-ends

Fact Sheet

Project Information

**Serenoa**

Grant agreement ID: 258030

Closed project

**Start date** 1 September 2010  
**End date** 30 September 2013

Funded under  
FP7-ICT

**Overall budget** € 5,106,176

**EU contribution** € 3,273,620

Coordinated by  
TELEFONICA INVESTIGACION Y DESARROLLO SA  
Spain

Project description

Internet of Services, Software & virtualisation

Serenoa is aimed at developing a novel, open platform for enabling the creation of context-sensitive service front-ends (SFEs). A context-sensitive SFE provides a user interface (UI) that exhibits some capability to be aware of the context and to react to changes of this context in a continuous way. As a result such a UI will be adapted to a person's devices, tasks, preferences, and abilities, thus improving people's satisfaction and performance compared to traditional SFEs based on manually designed UIs. Serenoa will perform automatic adaptation of UIs involving the end
user in two major ways: users can intervene in the adaptation (e.g. by controlling, suggesting, accepting/rejecting adaptations, requesting better adaptations) and the system can learn from users (e.g. by observation, by sensing, by machine learning). The final aim is to support humans in a more effective, personalized and consistent way, thus improving the quality of life for European citizens. In this scenario, we envisage Serenoa as the open source reference implementation of a SFE adaptation platform for the 'Future Internet'. The expected outcome of Serenoa is:

- a computational framework for multi-dimensional adaptations
- reference models, languages and a methodology which will enable the rapid prototyping and engineering of context-sensitive SFEs
- an open source adaptation engine covering the whole adaptation lifecycle
- an authoring tool to facilitate the engineering, designing and development processes

During the experimentation and evaluation phases of the project, the Serenoa technology will be instantiated, integrated and parameterized to satisfy the demands imposed by domain-specific scenarios (already identified) of context-aware adaptation of SFEs. Such instantiations (in the form of application prototypes) will serve to assess the soundness of our ideas, their acceptance by end-users as well as their viability from a pure technological point of view.

### Fields of science

- natural sciences > computer and information sciences > internet
- natural sciences > computer and information sciences > artificial intelligence > machine learning

### Programme(s)

FP7-ICT - Specific Programme "Cooperation": Information and communication technologies

### Topic(s)

ICT-2009.1.2 - Internet of Services, Software and Virtualisation

### Call for proposal

FP7-ICT-2009-5

See other projects for this call

### Funding Scheme

CP - Collaborative project (generic)
Coordinator

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Activity type
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EU contribution
€ 608 400

Participants (6)

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EU contribution
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FUNDACION CTIC CENTRO TECNOLOGICO PARA EL DESARROLLO EN ASTURIAS DE LAS TECNOLOGIAS DE LA INFORMACION

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EU contribution

€ 255 589

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EU contribution

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