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The EvAAL competition

(Evaluating AAL Systems Through Competitive Benchmarking)

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Motivations

AAL systems involve many activities:

Sensing

- Reasoning
- Interacting
- Acting
- ...and many other

AAL systems are typically large distributed systems

- A large number of devices (sensors, actuators, appliances, domotic devices, etc..)
- A large number of SW components distributed on the devices (context, profile & service management, user interfaces, security ...)

Motivations

Several, different architectures and often incompatible among themselves

Need for a way to compare them ...or at least a way to identify the best features of each one

Motivations

However such a comparison is, at the state of the art, not feasible

Any non-trivial system is just too complex...

...and we even lack suitable benchmarks

The EvAAL Approach

To promote an international competition

- Aimed at the evaluation and comparison of AAL platforms and architectures
- To create an environment in which the interested stakeholders can compare/debate on their ideas on this problem

The Overall Strategy



The EvAAL Strategy

Create consensus around relevant AAL issues

• Byproduct of the participation of competitors & experts in the evaluation committees

Promote the aggregation of research and industry

 Need to compare the approaches and ideas coming from different stakeholders

Stimulate the participation of young researchers and students

• to bring fresh ideas and create new solutions

Allow publication of needs, requirements and issues in AAL

- Consequence of sustaining a yearly competition
- Dissemination of widely accepted scenarios, benchmarks and evaluation criteria

The EvAAL Strategy

In the end, reach consensus for:

Common scenarios

Common benchmarks

Common evaluation methods

commmon platforms

The EvAAL objectives

1. Identify relevant AAL problems, requirements and issues

2. Identify new, original solutions for AAL

3. Experiment with benchmarking and evaluation methods

4. Enable the comparison of different AAL solutions

Facing the full complexity of evaluation of AAL system is currently not feasible

AAL systems just too complex

The EvAAL phases and focus shift:

First phase

• Competition on basic technical challenges

Second phase

• Competition on aggregate of components, services

Split the problem into subproblems

 In the early stage, restricted but yet significant aspects of AAL platforms are compared

Example of core functionalities that can be compared

- Sensing
- Reasoning
- Acting
- Communicating
- Interacting
- Etc.

The call for ideas

- It's a request for ideas on the organization of the next competition
 - Issued before the call for competition
- The applicants to the call for ideas may propose special topics for the competition
- The applicants may be considered for the technical committees

A project of projects

- Provides the location & logistics
- Selects the themes & technical committees

Each subproject

- Focus on a specific technical theme
 - Selected on the base of the applications to the call for ideas
- Has its own technical committee

The Steering board

The Advisory Board

Organization Committee

Special theme technical Committee

Special Theme Technical Committee

...

The Steering board

- Issues the call for ideas
- Selects the ideas (special themes)
- Selects the location
- Nominates the General Chair(s)
- Nominates the technical committees
- Nominates the organization committee
- Nominates the committees chair(s)
- Issues the call for competition
- Raise and manages the competition funds

The Advisory Board

• Supports the SB decisions

• Advises the SB regard the strategic decision making processes

Organization Committee

- Provides logistic support
- Manages the publications
- Advertises the competition
- Organizes the social events
- Manages the event registration

The General Chair(s)

- Is responsible for the success of the competition
- Chairs the organizing committee
- Coordinates the technical committees
- Remains in charge for one year

The special theme committees

- Prepare the call for their theme
- Select the competitors of each special theme competition
- Run the competition of the special theme
 - Prepare the benchmark and the toolkits
 - Are responsible for the competing artifacts evaluation

The EvAAL roadmap

A yearly competition

...with a slow start in the first year

Three main phases:

- Call for ideas
- Call for competition
- The competition



Call for ideas (SB)

Selection of special themes (SB)

Selection of location (SB)

Selection of General Chair (SB)

Formation of technical committees (SB)

Roadmap

Call for competition (all)

Selection of competitors (STC)

Sherparding of competitors (STC)

• benchmarks & their integration with artifacts

The competition takes place

Current status: what is there

The SB is now formed (up to now 5 members)

The call of ideas has been disseminated to selected stakeholders

A special theme competition on **'user localization**' is in progress

• Need for volunteers for the technical committee

The location: ballot among two available living labs

Current status: what is missing

The General Chair(s) and the organizing committee

Volunteers for the organization of other special themes competitions

Fund raising (expecially for the prize to winner(s))

Call for competition

Conclusions

EvAAL is a newborn

Still needs

- Ideas
- Participants
- Supporters
- Volunteers
- Funds
- .



Whoever shares our vision

is warmly invited to contribute

Conclusions

Updated information available in the EvAAL website http://evaal.aaloa.org

