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# Software Engineering for Services and Applications **Offerings to SME**

# SE4SA

## Cluster on Software Engineering for Services and Applications

- **Aligned**
- **AppHub**
- **ARCADIA**
- **Artist**
- **CloudTeams**
- **CloudWave**
- **DICE**
- **ENTICE**
- **Envisage**
- **HyVar**
- **MODAClouds**
- **MONDO**
- **Prowess**
- **RISCOSS**
- **SeaClouds**
- **S-CASE**
- **Supersede**
- **SWITCH**
- **U-QASAR**

<http://bit.ly/se4saeu>

# Cluster's Mission

- Identify complementarities and synergies as well as possibilities for collaboration/results adoptions between projects
- Identify new challenges and trends to influence the European research agenda;
- Organise common dissemination activities
- Identify effective go-to-market strategies for the outcomes of research projects.

# Cluster's Offering to SMEs

- Research Directions
- Shorter development cycles
- Shorter deployment cycles
- Dev cycle supportive tools
- DevOps support
- Business Continuity support
- Improved Requirements Elicitation
- End-User Feedback and Testing

Software Houses SMEs

SMEs relying on ICTs

# Research Directions

- Cluster's Position Paper
  - Process, Methodologies And Productivity
  - Application Contexts (for CPS and IoT)
  - Design Patterns Development For A Systems Of Systems Approach
  - Quality Guarantees
  - Ubiquitous Requirements Engineering
  - Software Defined Privacy and Security
  - Big Data for Software Engineering
  - Open Source Software Innovation

# MODAClouds

DevOps & Business Continuity

- With MODAClouds MultiCloud DevOps Toolbox you model, develop, deploy, operate, monitor and control cloud applications exploiting the benefits of working with multiple clouds, but being sure that your cloud infrastructure and services will always meet your business requirements.
- MODAClouds results are supported by the multi-cloud alliance that is available to support users of MODAClouds tools in their uptake
- More information is available here <http://multiclouddevops.com>

# DICE

- DICE will deliver innovative development methods and tools to strengthen the competitiveness of small and medium Independent Software Vendors in the market of business-critical Big data applications.
- DICE offers an IDE, a novel UML profile and tools that help software designers reasoning about reliability, correctness and efficiency of Big data applications.
- DICE covers quality assessment, architecture enhancement, continuous testing and agile delivery, relying on principles of the emerging DevOps paradigm.

An initial release of the DICE tools is available at: <http://www.dice->

# SUPERSEDE

Development Cycle Support

Tools for:

- Data Collection (Feedback-gathering tool, QoS and QoE Monitoring integrated service)
- Analytics (BD based Trends&Alerts, Multi-modal feedback analyser)
- Decision-making (Collaborative requirements prioritisation )
- Evolving & Adapting (A release planner, dynamic reconfiguration support)

Individual SUPERSEDE suites's components <https://github.com/supersede-project> (available by Dec 2016)

SUPERSEDE platform bundle – ready to use – in Docker or a virtual machine (Jan 2017)



# CloudTeams

Requirements and User Test

- CloudTeams brings together the software development community and potential end users.
- Allows your software team to connect to third party services with external tools, set up a project, build a prototype and deploy a solution on cloud hosting services.
- The platform is supported by a testing & trust, a software project management and an analytics framework, while it also continuously retrieves feedback and interacts with end-users.
- Reach the right testing community
- Discover how your applications performs
- Compatible with your own services & tools
- Test at any stage of the software development process

<http://www.cloudteams.eu> (open beta available from Nov 2016)

# ARCADIA

DevOps support and  
Shorter Dev and Deploy Cycles

- Providing a software development paradigm along with an orchestrator aiming to support the design, development, deployment and orchestration of reconfigurable-by-design applications.
- Reduction of the gap that exists among software developers and infrastructure administrators
- SMEs to take advantage of reliable and highly efficient distributed applications that may be adopted by service providers
- Design and development of novel orchestration solutions that incorporate Software Defined Networking (SDN) and Network Function Virtualization (NFV) mechanisms.
- <http://arcadia-framework.eu>



Thank You for your Attention

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