Seamless adaptive multi-cloud management of service-based applications

EC-FP7-ICT-610531 project [oct13, mar16]

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Motivations

- How to deploy and manage, in an efficient and adaptive way, (complex) applications over multiple heterogeneous cloud platforms?

- PaaS market still «young», technologically dominated by few big providers

- Lack of standardisation

  → interoperability issues
  → «lock-in» issues
SeaClouds objectives

«Agility after deployment»:
enable seamless adaptive multi-cloud management of complex applications, by supporting distribution, monitoring and migration of application modules over multiple heterogeneous (PaaS) clouds

+ Compatibility with emerging OASIS standards (CAMP and TOSCA in particular)
SeaClouds architecture

- TOSCA compliant
- CAMP compliant

Diagram showing SeaClouds architecture with modules such as Planner, Controller, and APIs like Discovery API, Monitoring API, and Multi-Cloud Deployment API.
Workpackages

- WP1 – Project Management and Dissemination
- WP2 – Requirements analysis, overall architecture and standardization
- WP3 – SeaClouds Design-modelling and adaptation
- WP4 – SeaClouds run-time environment
- WP5 – Integration, infrastructure delivery and GUI
- WP6 – Case Studies implementation and Validation
- WP7 – Business Requirements & Exploitation and Collaboration

Telemedicine
Cloud gaming
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