



# Student Research Assistant

Beginning: Immediately

## Background

The EU project 4CaaS (http://www.4caast.eu/) aims to create an advanced PaaS Cloud platform, which supports the optimized and elastic hosting of composite, scalable and multi-tier applications. Nowadays applications are composed out of multiple reusable services consisting of newly developed services as well as legacy applications made available as services. Cloud computing is essentially changing the way services are built, provided, and consumed. The main research field and involvement of the IAAS in 4CaaS is provisioning of proven technologies as Cloud-aware building blocks within the PaaS platform. For this purpose, we focus on extending a BPEL engine and an Enterprise Service Bus solution with Cloud awareness. These components have been established and proven in the area of Service-Oriented Architectures.

## Duration

6 to 9 months with option to further extension.

## Tasks

- Prototypical implementation of Cloud concepts
- Integration of existing prototypical implementations
- Literature research and technical documentation
- Support of management and organization of project internal dissemination and communication activities

## Required previous knowledge and experiences

- English (fluent in written and spoken form)
- Java programming skills and expertise
- Cloud Computing concepts
  - Multi-tenancy
  - Scalability
- Service-Oriented Architecture
- Business Process Management
  - WS-BPEL, Web Services, SOAP, WSDL, etc.
- Enterprise Service Bus (Apache ServiceMix) [desirable]
  - Java Business Integration Specification (JBI)
  - Enterprise Integration
- Open Source WS-BPEL Engine (OW2 Orchestra) [desirable]

## Contact

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