Agenda

- Context
- Objectives
- Achievements
- Use cases
- Impact
Cloud computing?
An overwhelming diversity of providers
EASI-CLOUDS objectives

1. Federate/broker services and resources from different Cloud providers
2. Simplify the development and management of cloud-based applications
3. Provide tailored SLA facilities
4. Enable new business models via real-time rating, charging, and revenue sharing

SLA = Service-Level Agreement
The EASI-CLOUDS consortium

Start date: September 2011

End date: March 2015
Achievements

- The EASI-CLOUDS platform, available in 4 editions:

- Added-value services:
  - Cloud development tools
  - Billing as a service
  - Security as a service
Achievements > Platform > SaaS enabler

Novel features:
- Machine-readable SLAs
- SLA negotiation
- Deployment automation
- Runtime SLA management
- Customized billing
Achievements > Platform > Hybrid Cloud

Private IaaS Consumer

Private IaaS

Private

Public

Private IaaS

Cloudwatt
Achievements > Platform > Cloud Brokerage
Achievements > Platform > Cloud Federation
Use Case 1: Cloud-based brain image processing
Use Case 2:
On-demand photo stitching
Use Case 3:
Evaluation of game server performance
Use Case 4: Simple development of new cloud services with billing
Several fast exploitation cases

- **Orga Systems (DE)**
  - New Business Unit Utility established based on results from EASI-CLOUDS and other ITEA projects

- **Gearshift Group (FI)**
  - Consulted a cloud brokerage firm, promising growth

- **SoftwareInLife (KR)**
  - Launched csb.io, a cloud marketplace in Korea

- **Cloud Orbit & Amenesik (FR)**
  - Startups building on the EASI-CLOUDS platform

- **Nexedi (FR)**
  - Customers testing dynamic CDN technology

- **Hexaglobe (FR)**
  - New edge computing feature for video on-demand
Involvement of top management

France
- Michael Rolland, Marketing Director, Cloud Division, Bull
- Alexandre Bouteille, Technical Director - IT Outsourcing

Germany
- Heinfried Cznottka, Director Product & Portfolio Management
- Winfried Materna, CEO of Materna GmbH

Finland
- Kimmo Kasslin, CTO at F-Secure

Egypt
- Tarek Nabhan, Research Director, ITWORX
Societal and educational impact

Cloud technologies are new, industry needs skilled professionals!

- Contribution to employability by academia
  - Several PhDs and MSc graduates recruited by industry
  - Enriched university curricula through courses & code camps

- Improved technical and market awareness within companies
  - Internal presentations and workshops

- Dissemination
  - 70+ publications, 30+ conference presentations
Conclusions

- Innovative results in line with the market:
  - An open platform to manage the lifecycle of cloud services
  - Enables varied business models, including cloud brokerage and federation
  - Solutions for billing, cloud development & security

- Concrete exploitation:
  - Several fast exploitation cases (SMEs)
  - Commitment to exploitation from top management (industry)
  - Relevant non-commercial impact (academia)
Thank you for your attention

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