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MUSA Project

Start date: 1st Jan 2015
Duration: 36 months.
Coordinator: E. Rios, Tecnalia (Spain).
Objectives

➢ The MUSA Framework is the future main result of MUSA project – embed security in the lifecycle of multi-cloud apps for self protection.

*Multi-cloud application:* distributed application over heterogeneous cloud resources. Its components are deployed in different cloud service providers and work in an integrated way and transparently for the end-user.

➢ Multi-cloud applications have to deal with the security of the individual components & overall application security including the communications and the data flow between the components.
Step 1. Design and develop multi-cloud application components

MUSA IDE

- Design
  - A
  - B
  - C
  - D
  - QoS & QoSec
  - Composed SLA
  - Cloud service modelling

MUSA Decision support tool

- Cloud service categorization

Step 2. Select cloud service combination

MUSA Deployer

- A
- B
- C
- D

Step 3. Provision and deployment configuration

Step 4. Deploy multi-cloud application components

Step 5. Ensure security at runtime

DevOps team

Step 0. Continuous cloud service categorization

MUSA Security assurance platform (SaaS)

Monitoring, enforcement and notification services

DevOps approach

Application operation team

Development

- Embedded agents to ensure security at runtime

Amazon

Google App Engine

Private Cloud

Azure

Application development team