Study Period: Data Management & Interchange Metadata for the Cloud Computing

Ad 1.1.1 Introduction

Reasons of request for the study proposal:

1. Cloud approach is a subject of a great interest of business domains (Telecommunication, etc) as well as public domains (Government, Health, etc) that perceive potential huge benefits from operating in the Cloud environment.
2. Focus on Interoperability (Interchange) aspects on the data and services level (in general resources level) is crucial as it refers to one of the primary opportunities of operating in the Cloud concerned with involvement of different partners in the purpose of the Cloud service delivery. Resources can be hosted by different partners, that work in federation and need to use each other resources.
3. There are already several standards candidates in ISO/IEC JTC1 SC32 purposed for interoperability and interchange and it is a need to check to what extend they already support a cloud case.

Technical content

The study period deliverables will include:

1. requirements from the exemplary domains of interest for the interoperability in the Cloud related to services (PL, other volunteers for support the issue from different domains?)
2. metadata models to support interoperability of Cloud components and interfaces so as to provide seamless Cloud operations (CA)
3. exemplary use cases and scenarios to validate the proposed models (PL, other volunteers for support the issue from different domains?)
4. gap analysis between a present state of the standards (standard proposals) and required state (CA+KR+PL? other volunteers? With expertise of WG2)
5. metadata & data exchange framework between cloud computing service providers (KR)

Planned activities

  o Identifying standard issues and defining the role of SC 32/WG 2
  o Incorporation of use cases and models
  o Discussion on standard items
- Apr. 2012 – May 2012
  o Refining the standard items and additional discussions with SC 32/WG 2 and relevant standard groups
- Jun. 2012 (The 2012 Plenary Meeting and WG 2 Meeting)
  o Discussion on the standard items refined
  o Submission of NWIP

Ad 1.2.1 The scope

The Study Period specifies the dimensions for potential standards updates in order to capture the possible gaps related to Cloud Computing specificity. It provides a set of use cases and scenarios from the industry domains that purpose is to facilitate identifying possible gaps. It defines terms, provides general principles and metamodels as well as proposes a framework for metadata & data exchange with respect to Cloud Computing paradigm.