EuroVO-AIDA WP8/JRA3

Assessment of emerging technologies

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WP objectives

- Assess the potential usage of emerging technologies of interest to the VObs in technical areas where EuroVO-AIDA partners are interested

- Assess new technologies, test them with prototype deployments, and plan how to utilise them within Euro-VO.

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Schedule and Milestones

- Two one-year cycles, beginning May 2008
- Milestones common to the three JRAs:
  - Euro-VO Technology Forums, gathering the three JRAs for work planning and technology exchange
  - IVOA Interoperability meetings
- EuroVO-AIDA milestone: WPMT meeting, ESAC, 20-21 November 2008

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Deliverables

D8.1. April 2009

Intermediate report on Assessment of new technologies and associated prototypes

D8.2. April 2010

Final report on Assessment of new technologies and associated prototypes

Additional 'performance indicators'

- Detailed work programme for Cycle 1 & Cycle 2 (end of kick-off phase, end of Cycle 1) – taking into account the final results of VO-TECH and the current status of IVOA standards

- Impact on IVOA standards (WP6 report)

Three activities

- Web 2.0 for data centres (CNRS)
- Semantics and ontologies (INAF & CNRS)
- Data Mining (UEDIN)

Activities: Web 2.0 (1)

- ## New activity

  Assessment of technology and of the human cost associated to quality management (moderation, user-account management, etc)

- ## Test of techniques (Ajax, Flex, RSS)

- ## Good discussion at the Cambridge Technology Forum – lots of interest for the possibility to post annotations

Activities: Web 2.0

- Specification :
  - Two types of annotations
    - Comments
    - Requests for update of the databases
  - Attachment to a data (VizieR catalogue or object in a catalogue; object in SIMBAD)
  - Administration of the annotations
  - User acounts

Activities: Semantics/ontologies (1)

- Follow-up of VO-TECH
- **Ontologies**: Work on instances and linking the ontology with data sources:

  – Ontology structure altered to keep as much knowledge as possible within the ontology while matching best the data on objects present in databases or registries.

  – Development of an automated instance creator with consistency checking started

  – Ontology is OWL2 compliant

Activities: Semantics/ontologies (2)

- **Semantics**: Work on mapping of vocabularies

  Alternative subject description from registries added to the ontology to enhance results when searching for resources in registries

- Participation to IVOA WGs

Activities: Data Mining

- Follow-up of VO-TECH

- Continue assessment and implementation of existing packages (astronomy & general) in the VO context. Assess and prototype technical infrastructure needed for deployment (standards & protocols, grid infrastructure)

- Detailed programme after the final VO-TECH WP6 report