



Akogrimo & standards

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About CCLRC



- Provider of large scientific experimental facilities in the UK
 - e.g. neutron source, space science, hosting new synchrotron (Diamond),
- UK strategy and focus for international scientific collaboration
- 2 main sites:
 - Rutherford Appleton Laboratory
 - Daresbury Laboratory

..... and in ICT

- UK and Ireland W3C Office
- UK partner in ERCIM (Keith Jeffery, director of IT, CCLRC is ERCIM president since January 2005)
- Examples of recent initiatives:
 - Data Curation; e-Publication.
- UK e-science: partner in National Grid Service and National Grid Support, HPCX large computing node, data node
- EU Grids:
 - EGEE, ...
 - also
 - FP5: GRASP
 - FP6: [Trustcom, ELEGI,] CoreGrid, Akogrimo, Xtremos



- Martin Hafner's talk presented the business modelling framework
- This talk is mainly about standards
- Grid services:
 - To be pervasive
 - Anyone, anywhere, any time
 - fixed or mobile
 - personalised knowledge and semantics
 - To allow for:
 - Ad hoc, dynamic and cross-organisational federations and workflows
 - To solve complex scenarios in everyday life
- For network and service operators:
 - To extend their scope by developing new, business services and value added chains.

Akogrimo partners



- Network operators:
 - *Telefonica (lead), Telenor, IT-Aveiro*
- s/w industry:
 - *ATOS, Datamat*
- Tool Provider:
 - *BOC*
- Grid Infrastructure providers:
 - *University of Stuttgart, CCLRC*
- R&D:
 - *Universities of Hohenheim, Zurich and Madrid;*
 - *CRMPA and ICCS/NTUA*
- *Plus 2 new partners for 3rd testbed*

Akogrimo Standardisation Environment



- The Akogrimo standardisation environment (among others)
 - European Telecommunications Standards Institute (ETSI) → *Strategy for Grids standardisation*
 - Global Grid Forum (GGF) → *OGSA, Grid Resource Allocation Agreement Protocol (GRAAP), Grid Economic Services Architecture Group, Telecommunication Community Group (TELCO-CG)*
 - Internet Engineering Task Force (IETF) → *A4C, Policy, Session Initiation*
 - World Wide Web Consortium (W3C) → *XML, WS, OWL*
- Resources
 - *Technical work* in support of standardisation
 - *Dissemination* of potential areas of standardisation
 - *Coordination* of standardisation activities
 - *Representation* on EU Grid collaboration group (GCSG)



An incomplete list of standards used, by organisation

- GGF: OGSA, WS-Agreement,
- OASIS: BPEL, SAML, UDDI, WS-N, WSRF
- *WS- * industry*: WS-Agreement, WS-Policy, WS-Security
- W3C: OWL, SOAP, WSDL
- OMA: MLP, WAP-UAPROF
- IETF: AAA, DIAMETER, COPS, EAP, MIPv6, PANA, PIDF & RPID, RSVP, RTP, SDP, SIP

Standardisation Efforts Planned



■ *Topics*

- *Integration of network services* into a Grid framework
→ GGF+EGA
- *Mobile Grid use case* → GGF+EGA
- *Extending presence to include context* → IETF
- *Interpretation and mapping of context* in a Grid environment
→ tbd
- *Accounting parameters* to support a mobile Grid → IETF
- *OGSA resource usage recording* in a mobile context → GGF+EGA
- *SLAs for mobile Grid services* → GGF+EGA
- Role of ETSI vis a vis GGF+EGA or IETF?
- Further involvement: *Telecommunications CG (Community Group)* (GGF)
- Within the Project:
 - Resources for standardisation not large
 - Prior experience of standardisation not large

- Grid Standards Coordination Group
- Philipp Wieder (NextGrid) and Julian Gallop (Akogrimo) are co-chairs
- Task is to increase the effectiveness of standardization efforts of EU FP6 Grids Projects (benefitting from FP5 experience)
- Started with 12 EU Projects in FP6; further FP6 projects starting imminently
- White paper:
 - Identifies common interests – e.g. several Projects may be able to contribute to a particular standard
- Akogrimo slightly different emphasis because of interest in integration of all network layers

EU GSCG - examples



WS-Agreement or WSLA	NextGrid, OntoGrid, UniGrids, and possibly HPC4U
Workflow for Grids	NextGrid, UniGrids

Some issues



- Respective roles of GGF+EGA, IETF, W3C, ETSI in Grids Standards
 - For those involved with GGF+EGA or W3C, how does ETSI change the picture
- Essential not to increase number of competing standards, but to make better decisions
- For any new Grid specification, need to understand who should manage the process and who should add further value
- Cooperation with EU GSCG (Grids Standards Collaboration Group)
- Clear Akogrimo interest in cross layer issues



Thank you