Astronomical Grid Computing Research Group BOF

GGF9 – Chicago
6 Oct 2003: 10.00-11.30

Minutes taken by Nicholas Walton draft 15 Oct 2003

Attendance:

Hiroshi Arikawa	NAIST, J	HA
Susanne Balle	HP, USA	SB
Bruce Barkstrom	NAWA LaRC, USA	BB
Kirk Borne	George Mason & NASA/GSFC, USA	KB
Kum Won Cho	KISTI, Korea	KC
Ewa Deelman	ISI/USC, USA	ED
Bill Feiereisen	Los Alamos Nat Lab, USA	BF
Tom Goodale	AEI, Potsdam, D	TG
Thomas Hinki	NASA, USA	TH
Robert Hood	CSC-NASA AMES, USA	RH
Isao Kojima	GTRC/AIST, J	IK
Craig Lee	Aerospace Corp, USA	CL
Satoshi Matsuoka	Tokyo Institute of Technology, J	SM
Reagan Moore	SDSC, San Diego, USA	RM
Peter Quinn	ESO, D	PQ
Giacomo Piccinelli	UCL, UK	GP
Ragu Reddy	PSC, USA	RR
Guy Rixon	IoA, Cambridge, UK	GR
Satoshi Sekiguchi	GTRC/AIST, J	SS
Kazuyuki Shudo	GTRC/AIST, J	KS
Hiroshi Takemiya	GTRC/AIST, J	HT
Ian Taylor	Cardiff, UK	IT
Nicholas Walton	IoA, Cambridge, UK	NW

Copies of presentation materials are located on the gridforge pages at
https://forge.gridforum.org/docman2/ViewCategory.php?group_id=129&category_id=501

1. NW welcomed the attendees and briefly outlined the aims of the BOF

- Introduce the Astronomy community and the 'Virtual Observatory' initiatives
- Detail the international backing for the Astro-RG within the Astronomy community
- Discuss example 'distributed' computing challenges facing the community
- Discuss the proposed draft Astro-RG charter

2. PQ [ppt slides] described the current initiatives within the astronomy community aiming to construct the 'international Virtual Observatory' (VO).

Briefly astronomy is now in an era where the scientific and technical requirements are forcing the construction of systems to handle the discovery, access and manipulation of large multiple heterogeneous data sets. Thus major astronomy projects across the world are now working to construct a global Virtual Observatory to meet this challenge.

The VO requires a focus on interoperability standards. Thus the International Virtual Observatory Alliance has been formed, which includes all national and regional VO projects. The IVOA (see http://www.ivoa.net) is the forum whereby standards in areas such as 'registry', 'metadata', 'data models', can be developed and agreed.

To support the vast computational and IT demands of the VO, the Astronomical community seeks to employ emerging 'grid' technologies, and thus must engage with the GGF to ensure suitable interaction with the standards process.

3. GR [ppt slides] gave a brief presentation of 'grid' involvement issues for the VO. This included a number of possible options that the VO projects were considering as to how they would adopt and or adapt emerging grid standards and products in their system solutions.

In discussion SM noted that a key issue for the proposed Astro-RG would be to make a quantified analysis of the key 'grid technology' issues.

It was also suggested that there may be issues in common with the Earth Sciences Data Grid activities.

4. RM discussed the proposed Astro-RG charter. [doc format]

The astronomical grid computing community would aim to input into the GGF through the Astro-RG, a research group. It was agreed that a research group was appropriate as this would enable the community to identify possible standard development areas that might indicate the formation of specific working groups to bring forward GGF standards.

It was noted that the Astro-RG would collaborate with other relevant GGF research groups, e.g. APPS-RG.

Key activity milestones for the RG were noted

- GGF9: Astro-RG BOF session – discuss and agree draft charter
- GGF10: Berlin - Initial assessment of capabilities required by VO
- GGF11: Initial assessment of VO experiences with testbed data grid deployment
- GGF12: Final draft of the requirements assessment document
- GGF13: Final draft of the experiences assessment document

RM noted that the Astro-RG activities would be divided into a number of areas, assessing the relevance of the appropriate GGF WG as mapped to the relevant IVOA working group activity area.

IVOA Working Group	GGF Group	Astro-RG area lead
Data Model	DFDL	G Rixon
Registry	SMF/RGIS	
Web/Grid Services	OGSA	
Data Access Layer	DAIS	G Rixon
Uniform Content Descriptors	SEM	Roy Williams
(Pipelines)	GCE/WMF	
(Data preservation)	PA	R Moore
(Security)	SEC	
(Authorisation)	Auth-WG	
(Applications)	APPS	K Borne

Further areas might be identified in future.

In discussion the following issues arose:

CL: What was the level of support from the Astronomical VO community.
PQ: This activity had the full support of the IVOA. PQ noted that he is currently Chair of the IVOA.

CL: Need to note the connections between the IVOA and Astro-RG roadmaps.
NW: This would be an early task for the Astro-RG. The roadmap for the IVOA is available at http://www.ivoa.net

CL noted that the proposed research group could profitably focus on a number of areas

- Focused workshop activities – bringing together the IVOA/GGF communities
  - report on practical experience of deploying GGF standards in the context of IVOA demos
- Collaboration with other GGF WGs and RGs
- Documentation describing the results and outcomes of these activities

TH noted that an annual joint workshop organised in collaboration with the APPS-RG might be appropriate.

The issue of overlap and mapping of IVOA and GGF working groups was discussed. A key outcome would be in to align priorities. Thus the Astro-RG roadmap should align with the IVOA roadmap.

The meeting closed at 11.30