GlobalGridForum

Leading the pervasive adoption of grid computing
for research and industry

GGF-14 Closing Plenary

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Agenda

- General Overview

- Standards Council Highlights

- Community Council Highlights

- Use Case Access effort

- Area/Group Highlights
  - Telco-CG – Mullan, Travostino, Falcon
  - SAGA – Tom Goodale
  - Infrastructure – Cees de Laat
  - Data – Dave Martin

- Wrap-up

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Standards Highlights

David Snelling
Acting Vice Chair Standards

GGF Liaisons

- Forum level <u>one-to-one</u> liaisons
  - **EGA** – John Tollefsrud,   **SNIA** – Dave Martin
  - **W3C** – Dave De Roure,   **IETF** – Cees De Laat
  - **OASIS** – Dave Snelling, **WS-I** – Olle Mulmo
  - **DMTF** – Tom Roney

- WG/RG level liaisons
  - Many

- Forum level <u>round table style</u> collaboration
  - **SCRM-WG** – Jay Unger and Mark Carlson

An Encouraging Consensus from a BoF

- The WSRF/Notification and WS-Transfer/Eventing issue has been exercising the OGSA team.

- We had a well attended BoF this week valiantly led by Steven Newhouse.
  - Combatants included Argonne, Microsoft, University of Virginia, Sun, OMII, Imperial College, Fujitsu, University of Manchester, IBM, Intel, ...

- Broadside to Broadside for about 20 minutes
  - Excellent shots on all sides.

- To cut a long story short ....

BoF Consensus

- ## Consensus 1:
  - There is some current disagreement.

- ## Consensus 2:
  - We don't know what the final solution will be.

- ## Consensus 3:
  - There will be convergence some day.

- ## Consensus 4:
  - Understanding the technical issues faced reaching that convergence are very interesting and GGF should investigate them.

An Approach from the BoF

- Develop a single profile that extends the WSRF Base Profile 1.0.
  - Include Transfer and Eventing equivalent mechanisms.
  - The application level semantics would be equivalent.
    - How high do we need to go to get this equivalence?
    - How much do we need to restrict the technologies?

- Document editor volunteers from:
  - Microsoft, IBM, Fujitsu, and OMII

- But we need a two chairs
  - Contact Hiro or me if you're interested.

Quote from and OGSA Skeptic

"I've been a OGSA skeptic for about three years now.

But what I saw this week, particularly the Roadmap and Profile, have changed my mind.

I am really impressed - well done GGF!"

Community Highlights

Geoffrey Fox
Acting Community Vice Chair
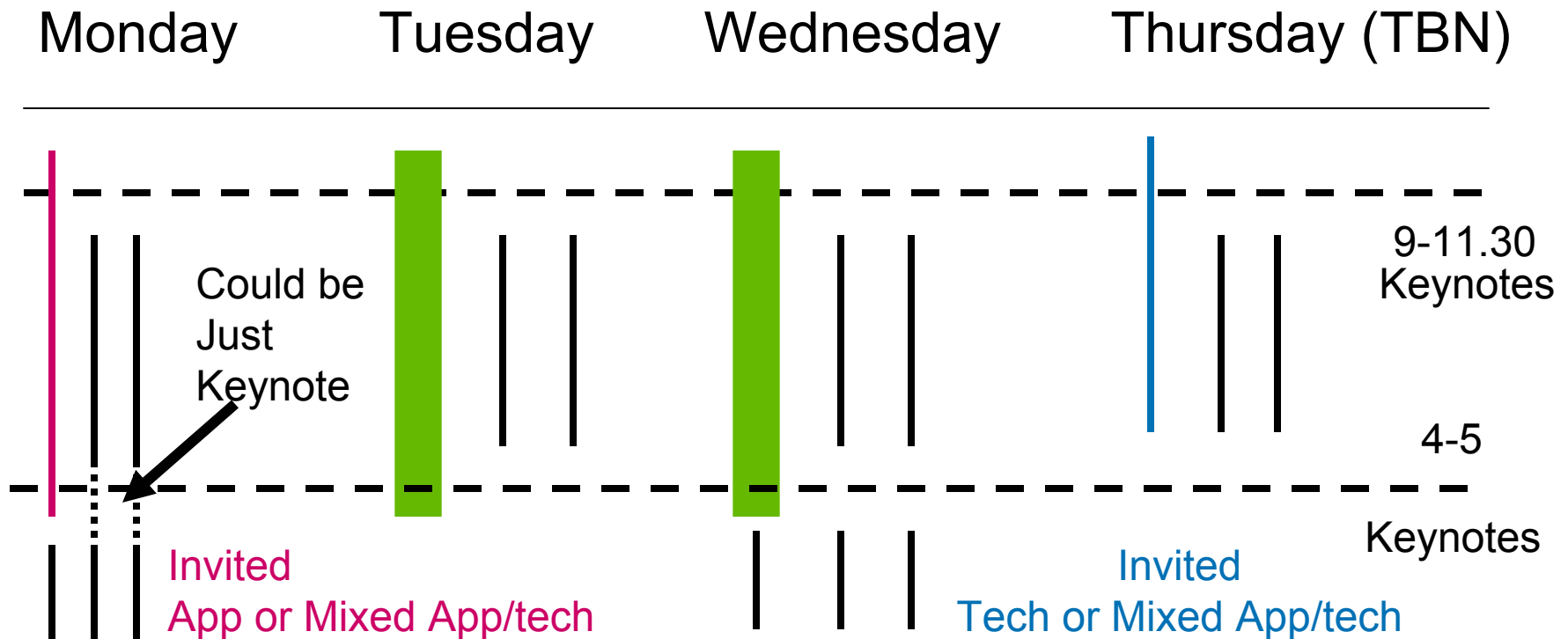
GGF14 Community Track Highlights

- **New Grid Communities** (Network Centric Operations, Space, Library and Information Provision (CENDI), caBIG Project, Agents, Digitized artifact Cultural Grid)

- **Education Grids** (QuarkNet, K-12 Laboratories, Tribal Colleges, Africa)

- **Community Tutorial/Workshops/Practice** (Gridwise tutorial, Globus Toolkit v.4 experiences, Improving interaction between GGF and Grid Projects, Grid applications: from Early Adopters to Mainstream Users, Science Gateways, Trusted Grids, WSDM)

- **RG Workshops** (Healthcare and Privacy: Is GGF Doing Enough to meet the needs of the Healthcare Industry?, Grid Applications workshop above, Telco, GCE reborn via Science Gateways)

Next Steps

- We will build web pages based on GGF14

- We will put out a call for communities, tutorials and workshops

  - Can couple to separate coupled meeting

- We will plan and put together the proposed Grid technology and applications best practice tracks

- We are soliciting comments on all aspects of our activities

- All workshop proposals should include marketing suggestions

GGF15 Plans

- Black lines include workshops, tutorials, unsolicited sessions
  - The topics at GGF14 could be expanded

- Green Lines are specialized enterprise sessions

Monday	Tuesday	Wednesday	Thursday (TBN)

Could be
Just
Keynote

9-11.30
Keynotes

4-5

Invited
App or Mixed App/tech

Keynotes

Invited
Tech or Mixed App/tech

Use Case Access Effort Goals

- Make GGF Use Cases Easier to Find and Digest
  - Use Cases represent a significant part of GGF's intellectual value. We need to maximize their value by making them as easy to access as possible.

- Collect lots of ideas
  - Sort out which ones to do first: crawl, walk, run

- Create a minimum of extra work

- EGR-WG will be directly involved
  - Their goal is collect enterprise requirements and use cases and will collect many others

Concepts and Ideas (1/2)

- Page of links with attribute matrix?
  - Sort matrix by clicking on column heading

- Use a wiki?
  - Group chairs/officers have authority to write use cases on the wiki
  - Link to document with list of keywords?

- Search engine capability for use cases?
  - Add a keyword search engine to the wiki

- Keep track of hits on each use case
  - Top 10 Use Cases -- Overall
  - Top 10 Use Cases in each area, e.g., scheduling, workflow, etc.

- Have a column for institution/authors of use cases
  - Similar to Top 500 List
  - Give recognition to people that produce these things

Concepts and Ideas (2/2)

- Allow user to build matrix of their own choosing?
  - Specify columns to be displayed
  - MyUseCases?

- Database of Use Cases?
  - SQL queries against attributes?

- Data mining of use cases

- "Meta-use-cases" that span multiple simpler use cases

- Use the major classes of use cases to impose structure on the collection

Group Highlights

Telco Community Group

NETWORK TYPES

	PURE IP	FIXED (CIRCUIT SWITCHED)	MOBILE & FIXED
TELCO ROLES			
ENABLER TO GRID PROVIDERS	A	D	G
USER OF GRID INTERNALLY	B	E	H
PROVIDER OF MANAGED GRID SERVICES	C	F	I

- 1st Official meeting in Chicago
- Will develop a Glossary white paper for Telco roles
- Will work next on Customer survey, Use Cases & Roadmap
- Resulting in recommendations to GGF groups, SDOs, Outreach

Join us on telco-cg@ggf.org

Simple API for Grid Applications Research Group (SAGA-RG)

- ## Officers: Tom Goodale (CCT), TBD
- ## Goals
  - High level application developers, e.g. physicists, chemists, biologists, wish to make use of the possibilities offered by the grids, but are often frustrated by the plethora of available technologies, the complex APIs (where available) and the rapid evolution.
  - They wish to concentrate on their science and have little time or interest in learning about Grid technologies and the best way to make use of them.
  - The SAGA group is developing a high-level API which abstracts the underlying middleware and allows such developers to grid-enable their applications easily, allowing them to make use of the distributed resources available to them without such a steep learning curve.
  - The SAGA API aims to be as easy and natural to use as possible, and available in a range of languages, such as Fortran, C, C++, Java, etc.

SAGA-RG: Accomplishments at GGF-14

- Heard about an initial C++ trial implementation (Vrije University, Amsterdam) of the strawman API.

- Finished final parts of strawman API to prepare to turn it into the SAGA API.

- Discussed plans on how to get more feedback for the final API.

- Discussed timescales and goals to be achieved before submitting proposed recommendation.

SAGA-RG: Future Plans

- Actively engage more groups to get more feedback on API
  - OGSA
  - Application groups both within and outside of GGF
- Ask steering group to turn us into a working group.
- Have API ready to submit as proposed recommendation by GGF15
  - Won't submit until we have more feedback, but want to have document of sufficient quality.
- Produce more sample implementations, in more languages (C, Fortran, Perl, Java, …) to showcase at GGF15 and in as many different forums as possible.
- Expect to have fully functional implementations within a year.

Data Area Highlights

- Data Access and Integration Services (DAIS)
  - Functionality Stable, Focused on Infrastructure Mapping

- Grid File Systems (GFS-WG)
  - Resource Namespace Service (RNS) Document Ready for Submission
  - Architecture Workbook Submitted to GGF Editor
  - Work Moving to OGSA Naming and GFS Will Do Profiles

- Grid Storage Management (GSM)
  - Stable Specs, Lots of Implementation Work
  - Planning Sept F2F at Jefferson Lab

- Information Dissemination (INFOD)
  - Many Updates to Use Cases and Specifications, Frequent Focused Meetings (F2F in May and June)

Data Highlights (2)

- OGSA-Data
  - Working on Use Cases, Storage Management and Transaction Management Section
  - F2F in May

- GridFTP
  - v2 Specification Finished
  - Need to Show Implementations of v1
- Byte-IO
  - Working on Use Cases
  - F2F in May
- Data Format Description Language
  - Test cases and Schema
  - Getting Experience with Implementations and Updating Specs

- Excellent Interactions Between Groups

Infrastructure Area

Two groups had meetings:

- Network Measurement WG (NM-wg)
    - Productive full day meeting on definition of schema's
    - V1 schema's already used by several major NREN's
- Grid High Performance Networking (GHPN-rg)
    - Two meetings this morning
    - Has two doc's published
- Network Measurement WG (NM-wg) did not meet.
- Finished/merged/dormand/extinct/bof's etc.
    - IPv6-wg -> dormant, reactivate when IPv6 issues appear
    - DT-rg -> merged with GHPN-rg
- BOF on Sensor grid's -> charter development ongoing
- BOF on GRIDVPN -> charter development ongoing

Wrap-up

Thank You!

See you at GGF-15 in Boston