CIOBALG RIGENTIAL CONTRACTOR OF THE SECONDANCE AND THE SECONDANCE AND

Enterprise Grids Requirements Research Group

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Session Name, EGR-RG^{14th} Feb, 2006 (GGF16 in Athens)

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Session Agenda



- Summary of GGF15 and what we've done so far.
- Attempts at finding white papers on the web
 - Toshiyuki Nakata
 - Satoshi Itoh
- Future Plans

Summary of GGF15



- Explanation of use case repository
- Discussion how to get the Use-Cases.
 - Copyright turned out to be one issue.
 - Tried to see if existing usecases or white papers might work.



Usecase on GridForge

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Usecase Template

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Template -> https://forge.gridforum.org/projects/egr-rg/document/UseCaseTemplate-r0.2/en/1 ⁶

Will be changed..

http://fs0.das2.cs.vu.nl:9090/twiki-test/bin/view/UseCases/WebHome



GGF Use Case Repository (Prototype)

#	Title	<u>Type</u>	Area	<u>Group</u>	Keywords
1	Circuit Simulation	uc	Applications	GridRPC- WG	GridRPC, API, SCILAB, Matrix
2	<u>DIRAC: Distibuted infrastructure</u> with remote agent Control	uc	Applications	GridRPC- WG	GridRPC, API, Remote Agents, Particle Physics
3	<u>GRID-TLSE</u>	uc	Applications	GridRPC- WG	GridRPC, API, sparse matrix
4	<u>GriPPS - Grid Protein Pattern</u> <u>Scanning</u>	uc	Applications	GridRPC- WG	GridRPC, API, Genomics, protein scanning
5	HSEP	uc	Applications	GridRPC- WG	GridRPC, API, Chemistry, PES
6	KMC - Kinetic Monte Carlo Model	uc	Applications	GridRPC- WG	GridRPC, API, Monte Carlo, Solid State
7	LAMMPS	uc	Applications	GridRPC- WG	GridRPC, API, Molecular Dynamics
8	<u>MNT - Digital Terrain Model</u>	uc	Applications	GridRPC- WG	GridRPC, API, stereo vision, visualization, security
9	RobGrid	uc	Applications	GridRPC- WG	GridRPC, API, robot control



10	Application Migration	uc	Applications	SAGA-RG	API, SAGA, application migration
11	Bulk job submission	uc	Applications	SAGA-RG	SAGA, API, DRMAA, bulk job submission
12	<u>Collaborative Visualization of</u> <u>Atmospherical Data</u>	uc	Applications	SAGA-RG	SAGA, API, Collaborative Visualization
13	<u>Computational steering of a</u> <u>ground water pollution</u> <u>simulation</u>	uc	Applications	SAGA-RG	SAGA, API, Steering
14	<u>CoreGRID integrated toolkit</u>	uc	Applications	SAGA-RG	SAGA, API, CoreGrid, Framework
15	<u>Cyber Infrastructure for Coastal</u> <u>Modeling</u>	uc	Applications	SAGA-RG	SAGA, API, visualization, sensors, climate, environment
16	<u>DiVA: Distributed Visualization</u> <u>Architecture</u>	uc	Applications	SAGA-RG	SAGA, API, scientific visualization, visualization, large data
17	<u>GRID superscalar</u>	uc	Applications	SAGA-RG	SAGA, API, Task, Parallel, Remote
18	<u>Hybrid Monte Carlo/Molecular</u> <u>Dynamics</u>	uc	Applications	SAGA-RG	SAGA, API, Simulation, data processing, data base access



19	Interactive Visualization Services	uc	Applicatio ns	SAGA- RG	SAGA, API, interactive visualization
20	Iterative Image Reconstruction	uc	Applicatio ns	SAGA- RG	SAGA, API, Image Reconstruction
21	<u>RealityGrid: Real Scientific Computing</u> on the Grid	uc	Applicatio ns	SAGA- RG	SAGA, API, Steering
22	<u>SAGA Use Case Template</u>	tmp]	Applicatio ns	SAGA- RG	SAGA, API
23	<u>UCoMS Project</u>	uc	Applicatio ns	SAGA- RG	SAGA, API, Visualization, Tasks, Sensors
24	Visualization Service for the Grid	uc	Applicatio ns	SAGA- RG	SAGA, API, Visualization
25	<u>test use case</u>	uc	Applicatio ns	SAGA- WG	security, application migration
26	OGSA Use Case Collection	uc	Architectu re	OGSA- WG	OGSA



27	<u>Disaster Recovery</u> <u>System</u>	uc	Industry Applicatio ns	EGR-RG	Disaster Recovery, Business Grid Middleware
28	<u>Multiple In-house</u> <u>System</u>	uc	Industry Applicatio ns	EGR-RG	Data Center, Server Consolidation, Total Cost of Ownership (TCO), Business Grid Middleware, In-house System
29	<u>Enterprise Grid</u> <u>Requirements –</u> <u>Research Group</u> <u>Use Case</u>	tmpl	Industry Applicatio ns	EGR-RG	Enterprise Grid Requirements Usecase Scenario
30	<u>Wide Area Load</u> <u>Balancing</u> <u>System</u>	uc	Industry Applicatio ns	EGR-RG	Data Centers' Cooperation, Globally Distributed Application System

And then....



- Asked for Usecases on the web.
- Got two
 - IBM's usecase
 - Datasynapse's usecase.....



Decided to find out on our own.

- Whose home page to look for?
 - Enterprises in the following. Due to time constraints, only Platinum and Gold Organization Members

Platinum Organization Members

- National Institute of Advanced Industrial Science and Technology, Japan (AIST)
- Hewlett-Packard
- IBM
- Intel
- Microsoft Research
- Silicon Graphics, Inc.
- Sun Microsystems

http://www.gridforum.org/Members/ggf_members_members.php

Gold Organization Members

- Computer Associates
- DataSynapse
- EMC
- Fujitsu
- Grid Consortium Japan
- Hitachi Data Systems
- KISTI
- US National Archives and Records Administration (NARA)
- National Computational Science Alliance (NCSA)
- Nortel Networks
- Oracle
- Platform Computing
- Shell Exploration
- Sybase



Criteria for the white papers

- Did not include news releases.
- English white papers / Usecases only.
- Included journal papers.
- Algorithm.
 - Go to the top web page.
 - If a white page section exists => goto that page.
 - If not. > Search the company's webpages for the key word Grid.
- Apologies in advance: There probably are lots of papers that I've not been able to locate. Please tell me.



Problems.

- Copyrights: How can one make a summary without fringing on each company's copyright?
 - For the time being, just include the URL and let the people find out.
 Probably some more info. Eg. No. of pages can be added..
- Some companies ask you to register before you can get to the URLs.
 - I registered, but obviously, I cannot include URLs of those white papers.
 - Discussing with one of the company's egr-rg member.
- Most of the papers are either introductory material, or just describe the results and not the technologies which created the results.



Abstract Candidates

- Source: <u>http</u>:
- Date: March 200X
- Adopter: AAA Corporation (Healthcare)
- System: YY System, ZZZ servers
- Users: Employee
- Application: data analysis
- Benefit: drastically lowered the total cost of ownership and dramatically increased productivity
- Model: eg HPC
- Updated information: (Name of the Contact Person)
- No. of Applications, No. of sites: Size of the Grid
- Webpod (Semantics?)
- Simple Questionnair.
- What are the semantic annotations



- Create Top 500.=>Metrics to find out trends
- Company X Good Usecase for showcases. Success Story Usecases (Best Practices).
- A)How do we get the real inf.?
- How to give an incentive to the vendors?
 - GGF Contest? Publicity,
 - Derive segments etc.
- How to get the initial list.
- Any way to auto
- Checklist
- Got volunteers