



Enabling Grids for E-science

New Tools For The Community- GridWay + Google Maps web interface

C. Martín, A. Lorca (UCM)

Introduction to gLite & RESPECT Tools at EGEE'09
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www.eu-egee.org



- 4th Edition – <http://code.google.com/soc/>
- 3-month projects to develop & learn free open source code
- 1,000 Students around the world – 150 mentoring orgs.
- **10 accepted projects within the Globus Alliance**
- **2 accepted projects for GridWay**



Carlos Martín Sánchez

[<carlos.martin.sanchez@gmail.com>](mailto:carlos.martin.sanchez@gmail.com)

Graduate Student, Computer Science

**Universidad Complutense
de Madrid (UCM), Spain**



Universidad
Complutense
Madrid



- **To help users, administrators, project leaders**
 - Control of hosts, jobs and users from a given instance
 - Not using command line interface
 - Fast check of experiment status
- **Enables Geolocalization**
 - Host, job and user monitoring
 - Filtering account statistics and execution history information
 - Real time (update minutely)
- **Provides a snapshot of the grid-health**
 - Different icons depending on % of free slots
 - Understand geopolitical issues, limitations
 - Identify problematic resources

Summary

Hosts

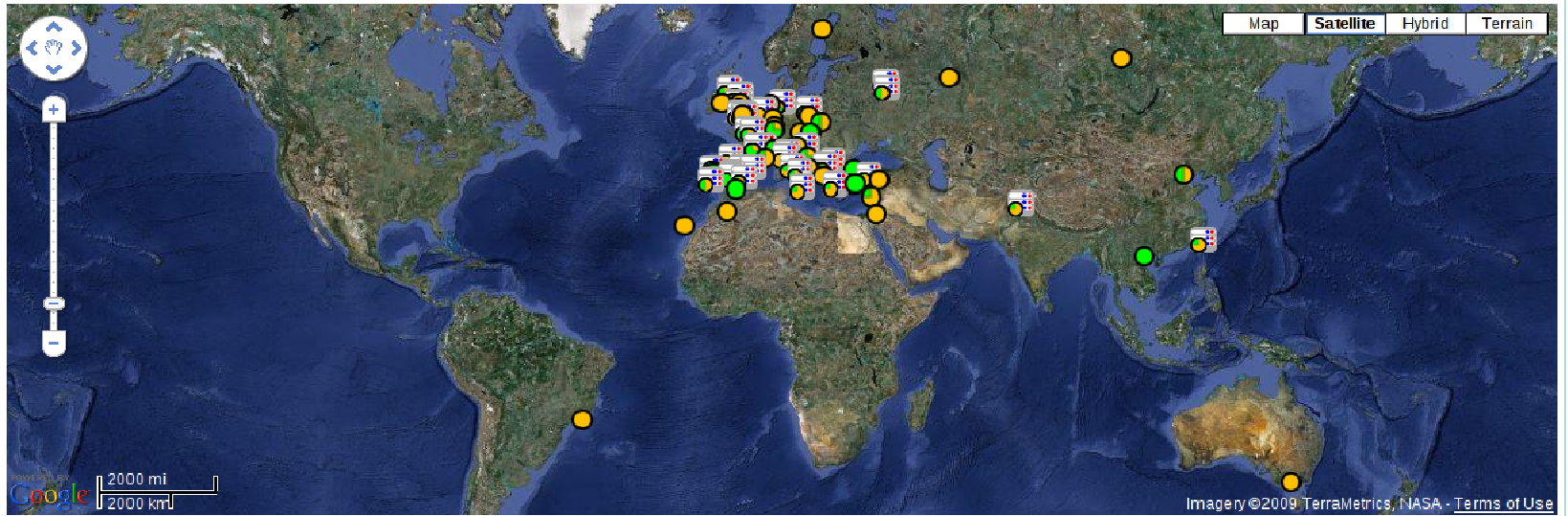
Jobs

Users

History

Options

About



● Host ● Group of hosts ● Host with errors

Showing hosts in Gridway system.

▼ Filters

Host User Job ID Virtual organization

Hosts Queues

ID	Prio.	Name	OS			CPU		Memory (MB)		Disk (MB)		Running jobs		Nodes		LRMS	
			Name	Version	Arch.	MHZ	% Free	Free	Total	Free	Total	Jobs	Used	Free	Total	Name	Type
0	1	hydrus.dac	-	-	-	0	0	0	0	0	0	0	0	0	0	-	-
1	1	aquila.dac	-	-	-	0	0	0	0	0	0	0	0	0	0	-	-
2	1	aristoteles	-	-	-	0	0	0	0	0	0	0	0	0	0	-	-
3	1	ce01.macc	Linux	2.6.9-78.0	x86	2333	600	2639	3951	18014	21643	0	0	22	146	PBS	pbs
4	1	test01.ege	Linux	2.6.20-1.30	x86	1595	96	5	765	7635	10822	0	0	340	340	SGE	sgc
5	1	ce06.pic.es	ScientificSL	Beryllium	i686	2500	0	16000	16000	0	0	0	0	599	1296	jobmanag	torque
6	1	ce01.tic.cie	ScientificSL	SL	i686	3200	0	1024	1024	0	0	0	0	148	220	jobmanag	pbs
7	1	ce05.pic.es	ScientificSL	Boron	i686	2500	0	16000	16000	0	0	0	0	38	736	jobmanag	torque
8	1	aridce01.ific	-	-	i686	0	0	0	0	0	0	0	0	130	729	jobmanag	torque

Number of hosts: 155.

GridWay activity map

- Summary
- Hosts
- Jobs**
- Users
- History
- Options
- About

jID	Name	User	Host	Job state	Exit code
12	0~worker	alorca	ce01-tic.cien	done	0
13	1~worker	alorca	ce01-tic.cien	done	0
14	2~worker	alorca	ce01-tic.cien	done	0
15	3~worker	alorca	ce01-tic.cien	done	0
16	4~worker	alorca	ce01-tic.cien	done	0
17	5~worker	alorca	ce01-tic.cien	done	0
18	6~worker	alorca	ce01-tic.cien	done	0
19	7~worker	alorca	ce01-tic.cien	done	0
20	8~worker	alorca	ce01-tic.cien	done	0

Showing jobs in Gridway system.

- Group of jobs
- Executing
- Pending
- Hold
- Done
- Fail

▼ Filters

Host: User: Job ID:

jID	Name	User	uID	Array ID	Task ID	Host	Priority	Deadline	Type	NP	Job state	EM state	Restarter	Client waiting	Resched	Start time	Exit time	Exec time	XFP time	Exit code
12	0~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:25	14:45:11	0:01:45	0:00:00	0
13	1~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:17	0:01:46	0:00:00	0
14	2~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:16	0:01:45	0:00:00	0
15	3~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:17	0:01:46	0:00:00	0
16	4~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:19	0:01:48	0:00:00	0
17	5~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:19	0:01:48	0:00:00	0
18	6~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:17	0:01:46	0:00:00	0
19	7~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:13	0:01:42	0:00:00	0
20	8~worker	alorca	0	-	-	ce01-tic.c	0	0:00:00	single	1	done	----	0	0	0	14:43:26	14:45:16	0:01:45	0:00:00	0

Number of jobs: 10.

Summary
Hosts
Jobs
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ID	Name	Jobs wait	Max. time	Max. CPU time	Access
1	gmedium64	1	1440	720	atlas_ops...
2	gshort64	0	120	60	
3	glong64	123	4320	2880	

Map
Satellite
Hybrid
Terrain

Showing hosts in Gridway system containing at least one queue with virtual organization atlas (queues th... ed in each host).

▼ Filters

Host: User: Job ID: Virtual organization:

ID	Prio.	Name	OS			CPU		Memory (MB)		Disk (MB)		Running jobs		Nodes		LRMS	
			Name	Version	Arch.	MHZ	% Free	Free	Total	Free	Total	Jobs	Used	Free	Total	Name	Type
5	1	ce06.pic.es	ScientificS	Beryllium	i686	2500	0	16000	16000	0	0	0	0	568	1288	jobmanag	torque
9	1	ce07.pic.es	ScientificS	Beryllium	i686	2500	0	16000	16000	0	0	0	0	568	1296	jobmanag	torque
12	1	ce01.ific.uv	ScientificS	4	i686	3200	0	2048	2048	0	0	0	0	23	142	jobmanag	pbs
14	1	lcg2ce.ific.	ScientificS	SL	i686	1200	0	1024	1024	0	0	0	0	117	118	jobmanag	pbs
15	1	ce08.pic.es	ScientificS	Boron	i686	2500	0	16000	16000	0	0	0	0	0	0	jobmanag	torque
20	1	trekker.nik	CentOS	Final	i686	2500	0	3072	3072	0	0	0	0	0	1052	jobmanag	pbs
21	1	svr021.gla.	-	-	i686	0	0	0	0	0	0	0	0	1736	0	-	-
24	1	svr026.gla.	-	-	i686	0	0	0	0	0	0	0	0	1713	0	-	-
27	1	oridba2.ba	Scientific L	SLC	i686	3200	0	2000	2000	0	0	0	0	172	646	jobmanag	pbs

Number of hosts: 37.

➤ **Extra features include**

- Click and go (from table to map and viceversa)
- Options tab for choosing what and how often to make queries
- Accounting, job history (all GridWay monitoring commands)

➤ **Project**

- Still in beta phase
- Dev web page: <http://dev.gridway.org/projects/gridway-gmaps>
- SVN repository: <http://svn.gridway.org/gridway/gwmaps>
- Third-party extension of GridWay Ecosystem

➤ **Based on Tomcat and Google Web Toolkit**

- Scalability limited to hundred of items.
- Does not require new GridWay installation

It's demo time:

<http://demo.gridway.org>

**¡Muchísimas
Gracias!
Questions?**