

Accounting and Monitoring

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- **Sistema de Información**
 - BDII
 - R-GMA
- **Monitoring**
 - GSTAT
 - SAM
 - SAM Admin
 - Easy SAM
 - GridICE
 - Gridview
 - Freedom of Choice for Resources (FCR)
 - Real Time Monitor (RTM)
- **Accounting**
 - APEL
 - Portal de Accounting de EGEE/WLCG
 - CPU Normalization
 - Portal de Accounting de Almacenamiento

Sistemas de Información disponibles en EGEE:

- **BDII**
- **R-GMA**

Los dos están disponibles en gLite 3.0

- **Basado en LDAP**
- **Utiliza GIP (Generic Information Provider)**
- **Hay un montón de nombres diferentes:**
 - MDS
 - GRIS
 - Extended GRIS
 - GIIS
 - Site BDII
 - Top BDII
 -
- **Sin Seguridad**
 - Todo el mundo puede consultar los datos
- **Principal Sistema de Información de LCG**

- **GRIS:**

```
Idapsearch -x -H ldap://ce2.egee.cesga.es:2135 -b mds-vo-name=local,o=grid
```

- **Extended GRIS:**

```
Idapsearch -x -H ldap://egeemon01.ifca.es:2136 -b mds-vo-name=local,o=grid
```

- **Site BDII:**

```
Idapsearch -x -H ldap://mon.egee.cesga.es:2170 -b mds-vo-name=cesga-  
egee,o=grid
```

- **Top BDII:**

```
Idapsearch -LLL -x -H ldap://egee-bdii.cnaf.infn.it:2170 -b "mds-vo-  
name=local,o=grid"
```

- **Lista de CEs:**


```
Idapsearch -LLL -x -H ldap://egee-bdii.cnaf.infn.it:2170 -b "mds-vo-  
name=local,o=grid" "(objectClass=GlueCE)" dn
```

- **Lista de Contactos:**

```
Idapsearch -LLL -x -H ldap://egee-bdii.cnaf.infn.it:2170 -b "mds-vo-  
name=local,o=grid" "(objectClass=GlueSite)" GlueSiteName  
GlueSiteSysAdminContact
```

LDAP Browser/Editor v2.8.2 - [ldap://mon.egee.cesga.es:2170/mds-vo-name=cesga-egee,o=grid]

File Edit View LDIF Help



- mds-vo-name=cesga-egee,o=grid
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-ops
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-cesga
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-lhcb
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-dteam
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-swetest
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-biomed
 - GlueVOViewLocalID=biomed
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-compchem
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-fusion
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-alice
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-atlas
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-cms
 - GlueCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-imath
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-ops
 - GlueCESEBindSEUniqueID=se2.egee.cesga.es
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-cesga
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-lhcb
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-dteam
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-swetest
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-biomed
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-compchem
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-fusion
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-alice
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-atlas
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-cms
 - GlueCESEBindGroupCEUniqueID=ce2.egee.cesga.es:2119Vjobmanager-lcgpbs-imath
 - GlueClusterUniqueID=ce2.egee.cesga.es
 - GlueSubClusterUniqueID=ce2.egee.cesga.es
 - GlueSiteUniqueID=CESGA-EGEE**
 - GlueServiceUniqueID=mon.egee.cesga.es:2136
 - GlueServiceUniqueID=test01.egee.cesga.es:7772
 - GlueSEUniqueID=se2.egee.cesga.es

Attribute	Value
GlueSiteUniqueID	CESGA-EGEE
GlueSiteUserSupportContact	mailto:egee-admin@cesga.es
GlueSiteOtherInfo	TIER-2
GlueSiteOtherInfo	pic.es
GlueSiteLongitude	-8.553147
GlueSiteLocation	Santiago de Compostela, Spain
GlueSchemaVersionMinor	2
GlueSiteWeb	http://www.egee.cesga.es
objectClass	GlueTop
objectClass	GlueSite
objectClass	GlueKey
objectClass	GlueSchemaVersion
GlueSchemaVersionMajor	1
GlueSiteSecurityContact	mailto:egee-admin@cesga.es
GlueSiteSponsor	none
GlueSiteSysAdminContact	mailto:egee-admin@cesga.es
GlueForeignKey	GlueSiteUniqueID=CESGA-EGEE
GlueSiteName	CESGA-EGEE
GlueSiteLatitude	42.875558
GlueSiteDescription	LCG Site

Ready. A

- **R-GMA = Relational Grid Monitoring Architecture**
- **Cumple con el estándar GMA definido por el GGF**
- **Sintaxis muy similar a SQL**
- **Arquitectura:**

- Productor/Consumidor
- Esquema
- Registro

- **Productor secundario**

- Flexible Archiver

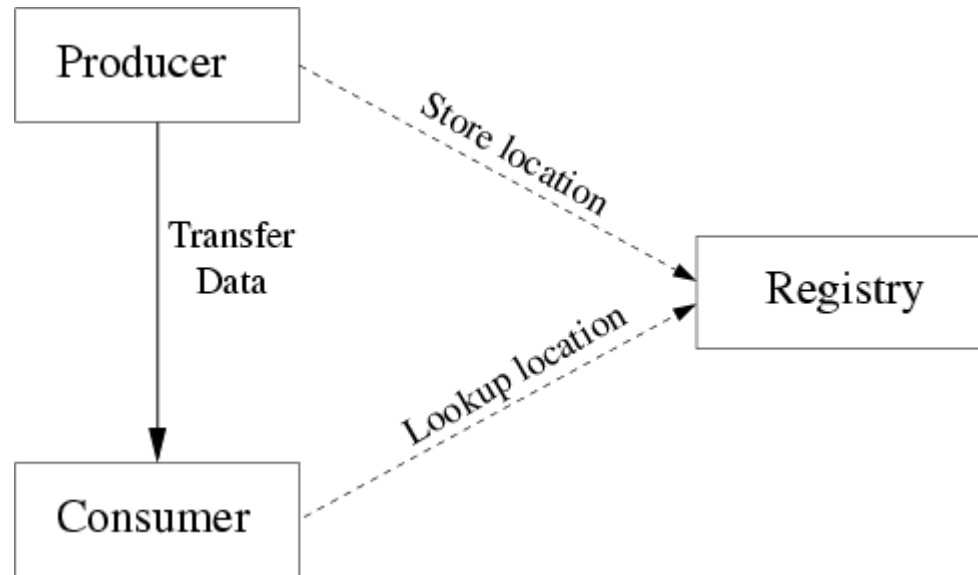
- **Seguridad**

- Conexiones seguras: Se requiere un certificado grid (de máquina o de usuario) para consultar los datos

- **Problemas de Fiabilidad** ☹️

- **Inicialmente era el principal Sistema de Información de gLite**

- <http://www.r-gma.org/>



- rgma
- rgma-client-check
- rgma-server-check

Consulta SQL →

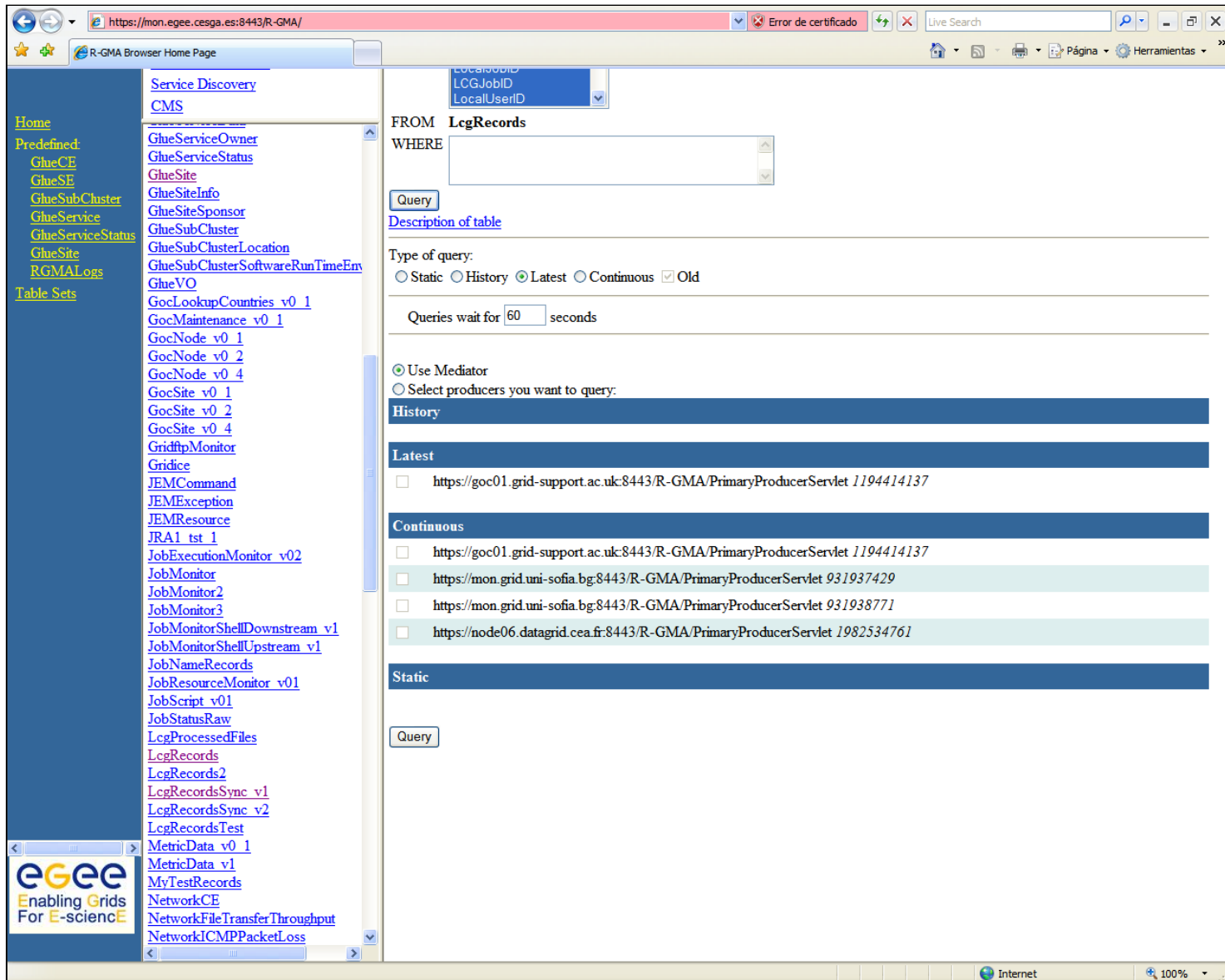
```
prey@ui:~
| StopTime          | VARCHAR(30) | No | Yes |
| StartTimeUTC     | VARCHAR(30) | No | Yes |
| StopTimeUTC      | VARCHAR(30) | No | Yes |
| StartTimeEpoch  | INTEGER     | No | Yes |
| StopTimeEpoch   | INTEGER     | No | Yes |
| ExecutingCE      | VARCHAR(255)| No | Yes |
| MemoryReal       | INTEGER     | No | Yes |
| MemoryVirtual    | INTEGER     | No | Yes |
| SpecInt2000      | INTEGER     | No | Yes |
| SpecFloat2000    | INTEGER     | No | Yes |
| EventDate        | DATE        | No | No  |
| EventTime        | TIME        | No | No  |
| MeasurementDate  | DATE        | No | No  |
| MeasurementTime  | TIME        | No | No  |
```

```
rgma> select ExecutingSite, MeasurementDate, count(*), min(EventDate), max(EventDate) from
LcgRecords where MeasurementDate>='2007-09-19' AND (ExecutingCE LIKE '%es' OR ExecutingCE
LIKE '%es:%' OR ExecutingCE LIKE '%pt' OR ExecutingCE LIKE '%pt:%' or ExecutingCE LIKE '%
esac.esa.int' OR ExecutingCE LIKE '%esac.esa.int:%') group by 2,1
```

Resultado →

ExecutingSite	MeasurementDate	count(*)	min(EventDate)	max(EventDate)
CESGA-EGEE	2007-09-19	401	2007-09-18	2007-09-19
CIEMAT-LCG2	2007-09-19	1910	2007-09-18	2007-09-19
ClusterUL	2007-09-19	154	2007-09-18	2007-09-19
CNB-LCG2	2007-09-19	284	2007-09-18	2007-09-19
DI-UMinho	2007-09-19	9268	2007-05-08	2007-09-19
ESA-ESAC	2007-09-19	110	2007-09-18	2007-09-19
IFIC-LCG2	2007-09-19	533	2007-09-17	2007-09-19
LIP-Coimbra	2007-09-19	542	2007-09-18	2007-09-18
LIP-Lisbon	2007-09-19	255	2007-09-17	2007-09-18
pic	2007-09-19	4883	2007-09-17	2007-09-19
UAM-LCG2	2007-09-19	513	2007-09-17	2007-09-18
UPorto	2007-09-19	174	2007-09-18	2007-09-19
UPV-GRyCAP	2007-09-19	62	2007-09-18	2007-09-19
USC-LCG2	2007-09-19	109	2007-09-18	2007-09-19

```
14 rows
rgma>
```

The screenshot shows a web browser window with the URL `https://mon.egee.cesga.es:8443/R-GMA/`. The page title is "R-GMA Browser Home Page". On the left, there is a navigation menu with sections: "Home", "Predefined:" (listing various services like GlueCE, GlueSE, etc.), and "Table Sets" (listing various monitoring and status tables). The main content area is titled "Service Discovery" and "CMS". It shows a query configuration for the table "LcgRecords".

The query configuration includes:

- FROM: **LcgRecords**
- WHERE: (empty field)
- Query button
- Description of table
- Type of query:
 - Static
 - History
 - Latest
 - Continuous
 - Old
- Queries wait for seconds
- Use Mediator
- Select producers you want to query:

Below these options, there are three sections: "History", "Latest", and "Continuous", each with a list of URLs and checkboxes. The "Static" section is currently empty.

At the bottom of the page, there is a "Query" button and a status bar showing "Internet" and "100%" zoom.

- ¿Qué es “Monitoring”?
“Job Monitoring is concerned with the instantaneous job status on the grid, e.g., total number of jobs currently running per V.O.”
- ¿Qué es “Accounting”?
“Accounting concerns information about completed jobs on the grid, e.g., the total amount of CPU used per VO per month”
- **Cuales son las diferencias entre “Monitoring” y “Accounting”?**
 - El objetivo del “Monitoring” es tener una vista del estado actual del grid con un retraso mínimo. Pequeños errores numéricos, aproximaciones o estimaciones estadísticas no son un gran problema para el “Monitoring”. La pérdida de alguna información tampoco es un problema.
 - El objetivo del “Accounting” es tener una vista exacta del uso de los recursos y servicios en el grid hasta ese momento. El “Accounting” no debe perder ningún dato o registro. El tema principal es tener una vista histórica por lo que es aceptable un retraso en la información. Sin embargo ésta debe ser lo más exacta posible.

- **GSTAT**
- **SAM**
- **SAM Admin**
- **Easy SAM**
- **GridICE**
- **Gridview**
- **Freedom of Choice (FCR)**
- **Real Time Monitor (RTM)**
- **Servicios de Monitoring en SWE**
- **Monitorización local de un cluster**

GSTAT

<http://goc.grid.sinica.edu.tw/gstat/>

Chequea la Información del BDII cada 30 min.

- Number of entries
- Old entries
 - Indica que el BDII no fue actualizado correctamente (10 min)
- Query response time
 - Indica la carga del servidor y de la red (desde Taiwan)
 - Un tiempo de respuesta lento puede ser perjudicial para servicios basados en el BDII

The screenshot shows the GStat web interface for IFCA-LCG2. The page title is "GStat: IFCA-LCG2 12:10:53 09/19/07 GMT - @wgc01 - Mozilla Firefox". The browser address bar shows "http://gstat.gridops.org/gstat/IFCA-LCG2/".

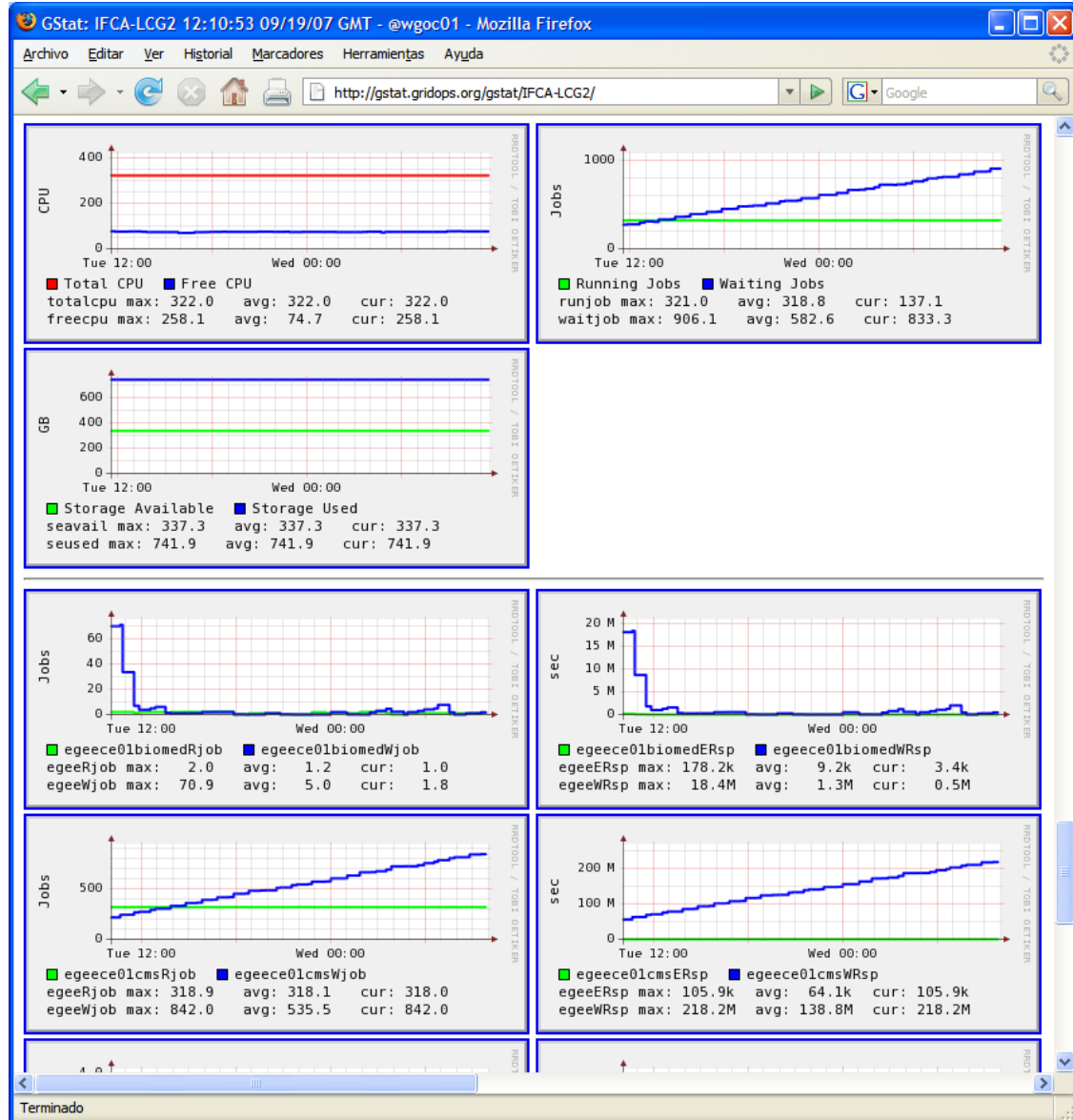
The main content area displays the following information:

- IFCA-LCG2 Status: NOTE** (with "ok", "GO", and "graphs" buttons)
- GOCDB Configuration information:**
 - status: Certified, type: Production
 - giis url: ldap://egeeii01.ifca.es:2170/mds-vo-name=IFCA-LCG2,o=grid
 - To test site GIIS:: ldapsearch -x -H ldap://egeeii01.ifca.es:2170 -b mds-vo-name=IFCA-LCG2,o=grid
- BDII Node Check: ok** (with "alert_history" link)
- Summary statistics:
 - bdii query response time (ms): 2181
 - bdii entries found: 256
 - old bdii entries found: 0
- BDII Node Check: ok** (with "alert_history" link)
- Table of response times and entry counts:

Category	Value
egeeii01BT response (ms): ok	2181.26
egeeii01BE entries: ok	256.00
egeeii01BO old_entries: ok	0.00
- Two line graphs:
 - BDII Entries:** Shows a steady increase in entries over time, with a legend for egeeii01BE (green) and egeeii01BO (black). Statistics: egeeii01BE max: 259.8, avg: 257.7, cur: 256.2; egeeii01BO max: 0.0, avg: 0.0, cur: 0.0.
 - BDII Response (ms):** Shows response time fluctuations, with a legend for egeeii01BT (green). Statistics: egeeii01BT max: 2.6k, avg: 2.3k, cur: 2.2k.
- CERN SE Check note** (with "alert_history" link):


```
egeeii01.ifca.es: could not be queried
check for missing attributes in bdii:
  GlueSEUniqueID: lxn1183.cern.ch
  GlueSEName: CERN-PROD:disk
  GlueSARoot: ops:ops
```
- Test command: `test: ldapsearch -xLLL -l 15 -h bdiihostname -p 2170 -b 'GlueSEUniqueID=lxn1183.cern.ch,mds-vo-name=CERN-PROD,mds-vo-name=IFCA-LCG2,o=grid'`
- Footer: "Transfiriendo datos desde gstat.gridops.org"

- CPUs Totales/Libres
- Trabajos en Ejecución/Espera
- Almacenamiento Disponible/Usado
- Trabajos por VO



Estadísticas Globales

- # Sitios
- # CPUs
- Almacenamiento

GStat: 12:09:18 09/19/07 GMT - @wgoc01 - Mozilla Firefox

http://gstat.gridops.org/gstat/index.html

Site	Country	OS	Kernel	GLITE-3	GLITE-2	GLITE-1	GLITE-0	GLITE-3	GLITE-2	GLITE-1	GLITE-0	seAvail TB	seUsed TB	maxCPU	avgCPU	
c.uk		ok	ok	ok	ok	GLITE-3	0	2	Scientific Linux 3.0.7	816	712	108	0	10.78	1.88	82
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.7	1740	1474	180	2	0	1953.12	17
		ok	warn	error	ok	GLITE-3	0	0	Scientific Linux 3.0.5	22	22	0	11			15
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.4	106	0	65	58	14.59	2.79	10
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.7	0	0	0	0	66.14	16.05	54
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.5	18	6	12	842	7.49	1.82	24
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.5	16	0	16	88	7.19	3.00	16
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.5	142	115	26	4	22.15	2.97	14
		ok	ok	error	ok	GLITE-3	0	0	Scientific Linux 3.0.5	72	3	69	51	0.04	3.04	74
		ok	ok	ok	ok	GLITE-3	0	0	ScientificSL 4.4	348	269	79	5	19.23	22.77	38
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux CERN 3.0.8	10	0	10	192	0.21	2.11	10
e		ok	ok	ok	ok	GLITE-3	0	0	ScientificSL 4.4	180	64	59	0	1.11	0.35	18
		ok	note	ok	ok	GLITE-3	0	2	Scientific Linux 3.0.8	40	24	16	1	18.70	3.56	62
		ok	ok	ok	ok	GLITE-3	1	0	Scientific Linux 4.5	27	27	0	1	9.54	0	72
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux CERN 3.0.8	6	6	0	0	0.01	0.00	6
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux CERN 3.0.6	6	2	4	6	0.44	0.00	6
		ok	ok	ok	ok	GLITE-3	0	2	ScientificCERNSLC 4.4	40	36	30	8	0.29	0.02	40
			error	error	na									20	16	er
			error	error	na									158	156	er
		ok	ok	ok	ok				na					1442.22	645.34	0
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.7	16	16	0	0	0.05	0.01	18
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux CERN 3.0.8	0	0	0	0	0.06	0.00	18
		ok	ok	ok	ok	GLITE-3	0	1	Scientific Linux 3.0.5	456	253	203	60	1.61	3.65	45
		ok	note	ok	ok	GLITE-3	1	0	SUSE LINUX 10	194	64	78	0	3.50	0.00	19
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.5	220	14	204	325	0.10	7.97	22
		ok	ok	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.8	234	2	9	8	0.26	0.03	30
		ok	note	ok	ok	GLITE-3	0	2	Scientific Linux 3.0.8	89	81	1	0	0.49	0.14	89
		ok	ok	ok	ok	GLITE-3	0	0	CentOS 4.5	104	38	66	58	33.07	10.88	10
		ok	info	ok	ok	GLITE-3	0	0	Scientific Linux 3.0.8	1	0	1	25	0.01	0.00	1
		sites	countries	totalCPU	freeCPU	runJob	waitJob	seAvail TB	seUsed TB	maxCPU	avgCPU					
Total		243	50	35697	18244	11475	54684	16761.35	14111.93	58646	46341					

Terminado

Servicios

- RB
- GridIce
- LFC
- DLI
- Myproxy
- FTS
- ...

GStat: 12:10:42 09/19/07 GMT - @wgoc01 - Mozilla Firefox

Archivo Editar Ver Historial Marcadores Herramientas Ayuda

http://gstat.gridops.org/gstat/service.html

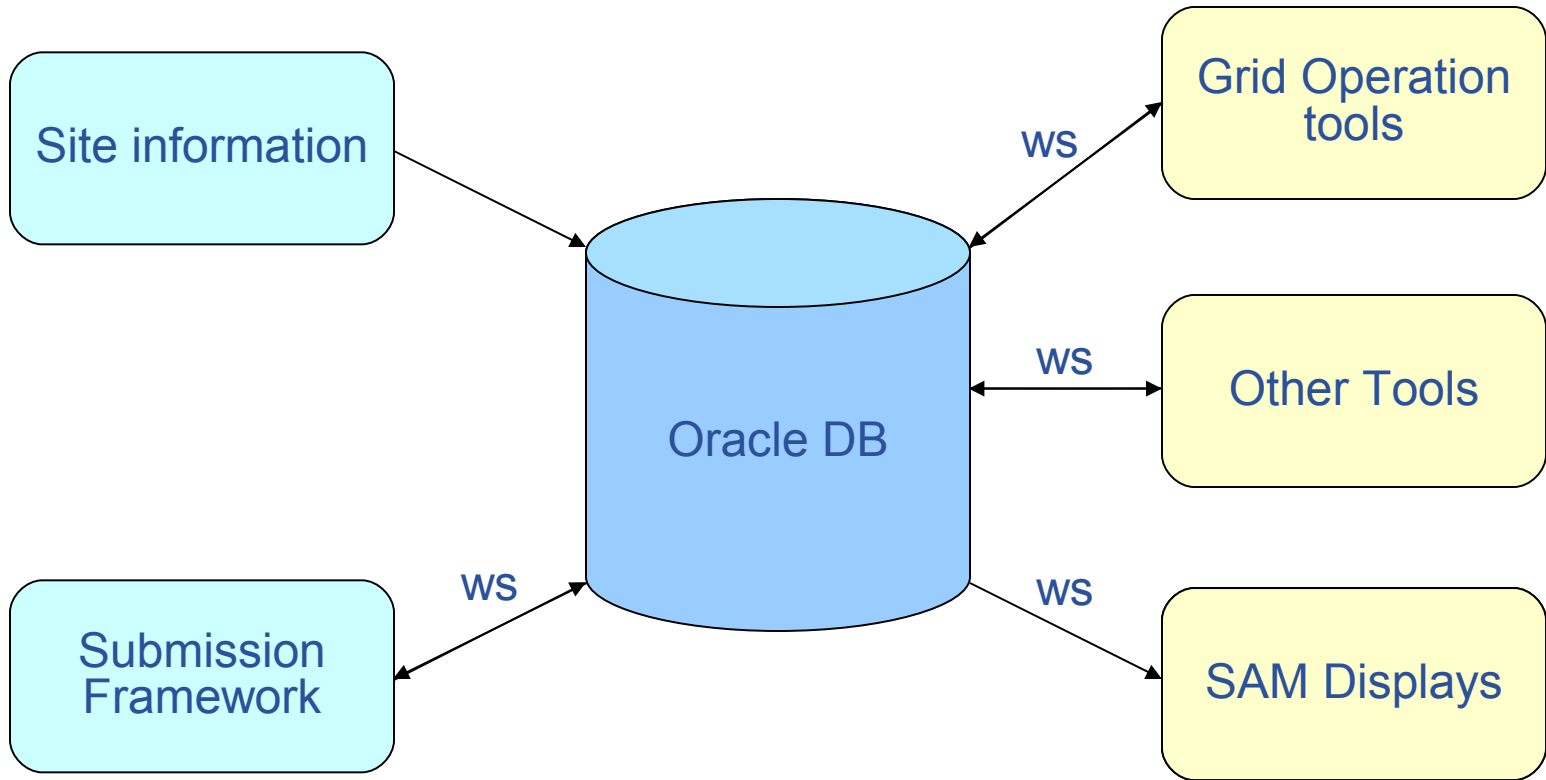
UKI-SOUTHGRID-BHAM-PPS	epbf007.ph.bham.ac.uk:7512	LCG
UNI-FREIBURG	px.bfg.uni-freiburg.de:7512	LCG
VU-MIF-LCG2	grid3.mif.vu.lt:7512	LCG
WEIZMANN-LCG2	wipp-rb.weizmann.ac.il:7512	LCG
wuppertalprod	grid-rb.physik.uni-wuppertal.de:7512	LCG
ResourceBroker		
AEGIS01-PHY-SCL	rb.phy.bg.ac.yu:7772	['aegis', 'atlas', 'cms', 'esr', 'see', 'seegrid', 'dteam', 'ops', 'sgdemo', 'scier']
BEgrid-Ugent	gridrb.atlantis.ugent.be:7772	['ops', 'dteam', 'cms', 'becms', 'betest', 'biomath', 'beapps', 'elis', 'intec']
BEgrid-ULB-VUB	laranja.iihe.ac.be:7772	['betest', 'becms', 'beapps', 'cms', 'dteam', 'ops', 'hone']
BEIJING-LCG2	lcg005.ihep.ac.cn:7772	['argo', 'atlas', 'bes', 'biomed', 'cms', 'dteam', 'euchina', 'ops']
BIFI	rb-egee.bifi.unizar.es:7772	['fusion', 'ops', 'dteam', 'swetest', 'atlas', 'lhcb']
BUDAPEST	grid109.kfki.hu:7772	['alice', 'atlas', 'cms', 'dteam', 'geant4', 'hungrid', 'lhcb', 'ops', 'voce']
BUDAPEST	grid151.kfki.hu:7772	['alice', 'atlas', 'cms', 'dteam', 'geant4', 'hungrid', 'lhcb', 'ops', 'voce']
CERN-PROD	rb104.cern.ch:7772	['unosat', 'ops', 'dteam', 'sixt', 'gear', 'geant4', 'compass']
CERN-PROD	rb105.cern.ch:7772	['alice', 'ops', 'dteam']
CERN-PROD	rb106.cern.ch:7772	['atlas', 'ops', 'dteam', 'gear']
CERN-PROD	rb107.cern.ch:7772	['cms', 'ops', 'dteam']
CERN-PROD	rb113.cern.ch:7772	['ops', 'dteam']
CERN-PROD	rb114.cern.ch:7772	['ops', 'dteam', 'lhcb']
CERN-PROD	rb115.cern.ch:7772	['ops', 'dteam']
CERN-PROD	rb119.cern.ch:7772	['cms', 'ops', 'dteam']
CERN-PROD	rb120.cern.ch:7772	['alice', 'ops', 'dteam']
CERN-PROD	rb121.cern.ch:7772	['atlas', 'ops', 'dteam']
CERN-PROD	rb122.cern.ch:7772	['cms', 'ops', 'dteam']
CERN-PROD	rb123.cern.ch:7772	['ops', 'dteam', 'lhcb']
CERN-PROD	rb124.cern.ch:7772	['cms', 'unosat', 'ops', 'dteam', 'sixt', 'gear', 'geant4', 'compass']
CERN-PROD	rb127.cern.ch:7772	['ops', 'dteam']
CERN-PROD	rb128.cern.ch:7772	['ops', 'dteam']

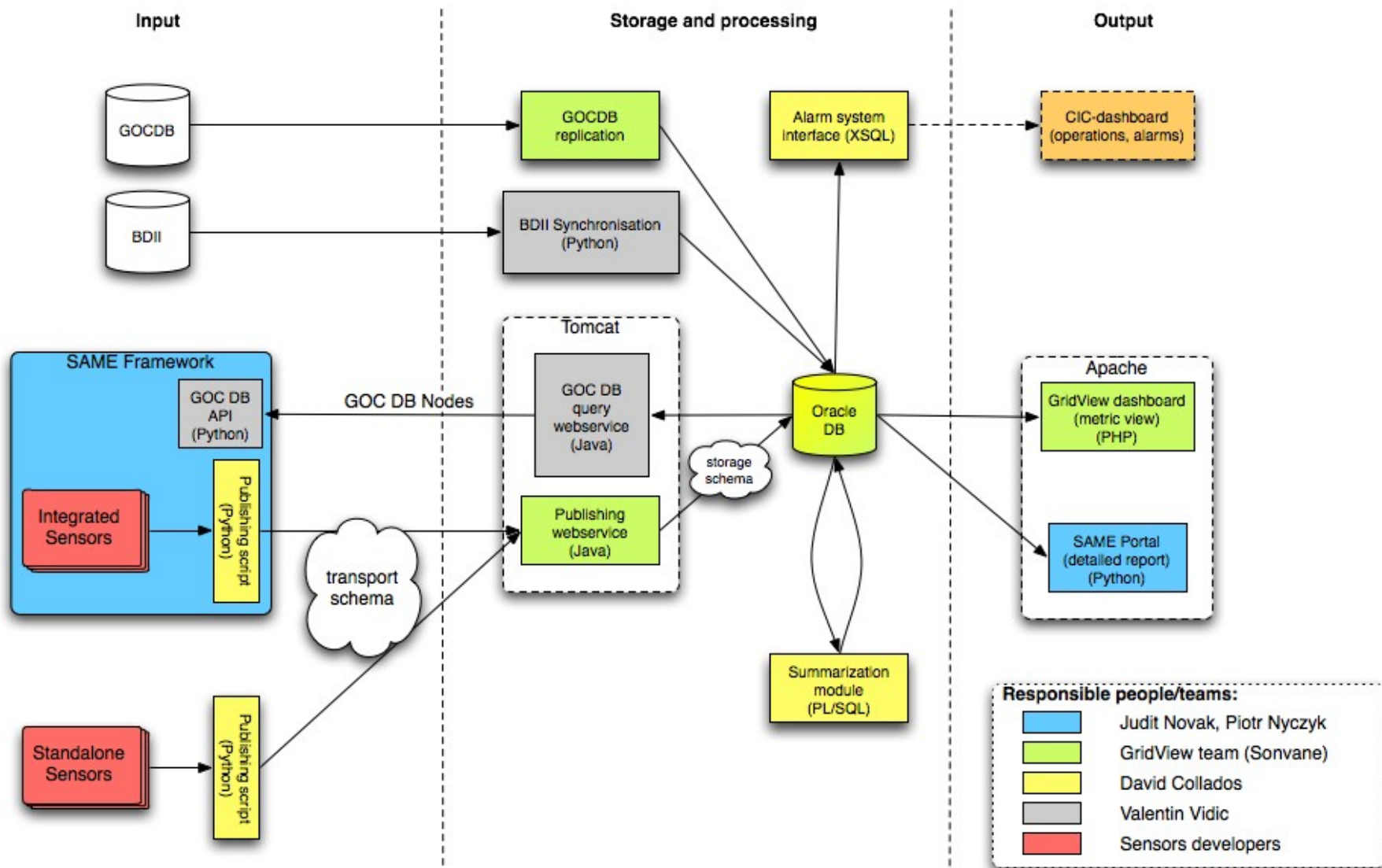
Terminado

SAM

- EGEE: <https://lcg-sam.cern.ch:8443/sam/sam.py>
- Int.eu.grid: <https://sam.cyfronet.pl/i2g-sam/sam.py>

- **SAM = Service Availability Monitoring**
- **Es una extensión de SFT**
- **Plataforma para monitorizar todos los servicios de WLCG/EGEE y no solo los CE: BDII, SE, RB, LFC, FTS, SRM, etc.**
- **La mayoría de los sensores se ejecutan remotamente (desde la máquina central)**
- **La disponibilidad (y funcionalidad) de los servicios se comprueba enviando tests a cada sitio monitorizado**
- **No es necesario instalar nada en cada una de las máquinas testeadas**
- **Es necesario tener un certificado de Usuario para acceder al Portal**
- **Inicialmente los tests se envían cada hora**





- **CE, gCE:**
 - Envío de trabajos, certificados de CA, versión del middleware, replica management, acceso al software de los experimentos, ...
- **SE, SRM:**
 - Almacenar un archivo desde el UI (*lcg-cr*), bajarse un fichero al UI (*lcg-cp*), borrar un fichero (*lcg-del*).
- **LFC:**
 - Listado de directorios (*lfc-ls*), añadir un fichero a */grid/<VO>*
- **FTS:**
 - Comprobar si FTS publica correctamente en el BDII, ...
- **RB:**
 - Envío de trabajos a través de todos los RBs importantes, tiempo en encontrar un CE de destino para un trabajo.

Execution time: 20-Sep-2007 10:21:12

Generating JDL file:

```

Executable = "/bin/sh";
Arguments = "-c 'tar xzf testjob.tgz ; export SAME_WORK='pwd'/work ; bin/same-exec -c same.conf --nodetest testjob ce2.egee.cesga.es -- CE-1190283561 lxdpml";
StdOutput = "testjob.out";
StdError = "testjob.out";
InputSandbox = {"testjob.tgz", "same.conf"};
OutputSandbox = {"testjob.out", "testjob-results.tgz"};
Requirements = other.GlueCEInfoHostName == "ce2.egee.cesga.es";
RetryCount = 0;
ShallowRetryCount = 3;
    
```

Submitting a job

No
1
2
3
4
5
6
7
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9
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11
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13
14
15
16
17
18
19
20

```

+ edg-job-submit --vo ops -o testjob.jid testjob.jdl
**** Warning: UI_JDL_UNKNOWN ****
The following unknown attribute(s) have been found in the JDL file:
- ShallowRetryCount
They will be passed through but ignored by the NS
Selected Virtual Organisation name (from --vo option): ops
**** Error: API_NATIVE_ERROR ****
Error while calling the "NSClient::multi" native api
AuthenticationException: Failed to establish security context...
**** Error: API_NATIVE_ERROR ****
Error while calling the "NSClient::multi" native api
AuthenticationException: Failed to establish security context...
**** Error: API_NATIVE_ERROR ****
Error while calling the "NSClient::multi" native api
AuthenticationException: Failed to establish security context...
**** Error: UI_NO_NS_CONTACT ****
Unable to contact any Network Server
+ set +x
    
```

Job submission failed! Check the Resource Broker

Contact: SAM Support Mailing List ([<sam-support@cern.ch>](mailto:sam-support@cern.ch))
 Last modified: Sep 07 2007, 14:58

Listo

Listo

Listo

Internet

100%

SAM Admin

<https://cic.gridops.org/samadmin/>

- **SAMAP es una herramienta web de monitoring para enviar test de SAM “a demanda”**
- **Utiliza la parte cliente de SAM para enviar los trabajos, comprobar su estado y publicar los resultados.**
- **SAMAP puede ser util para:**
 - Administradores de sitios que quieren conocer si sus sitios “sin certificar” están listos para ser certificados en EGEE.
 - Administradores que quieren enviar manualmente test de SAM (via SAMAP) y que no quieren esperar hasta que el siguiente test de SAM sea enviado para ver si el último error está resuelto o no.
 - La gente del CIC que quieren enviar manualmente test de SAM a un sitio en concreto que parece estar mal, porque:
 - Quieren comprobar si hay algún problema con el envío regular de SAM.
 - Quieren ver los resultados de más test, pero no quieren esperar a los test enviados por SAM cada cierto tiempo.
- **Es necesario tener un certificado de Usuario para acceder al Portal**

https://cic.gridops.org/samadmin/ - Windows Internet Explorer

https://cic.gridops.org/samadmin/ Error de certificado Google

Archivo Edición Ver Favoritos Herramientas Ayuda

https://cic.gridops.org/samadmin/ Página Herramientas

SAM Admin's Page

Data source: EGEE Production

View mode: All available sites

Group sites by regions

Show regions:

- AsiaPacific
- CentralEurope
- CERN
- France
- GermanySwitzerland
- Italy
- NorthernEurope
- Russia

Node type: CE

Preferred WMS: := please select :=

Apply filter!

Available actions:

- Submit SAM jobs
- Publish available SAM jobs results
- Refresh SAM jobs status
- Cancel SAM jobs
- Show SAM jobs logging info
- Submit regular SAM jobs (cron tasks)

'Pablo Rey Mayo' has permission granted for the following sites:

Selection	Site Name	Node name	Current status	Last submission
<input type="checkbox"/>	CESGA-EGEE	ce2_egee_cesga.es	n/a	2007-09-19 15:48:58 UTC

+ ← - Rows displayed: 1

- } certified sites in GOC DB
- } new sites, not yet certified in GOC DB

Currently running at: IN2P3-DEVEL (ver. 3.2.2)
 Your DN: /DC=es/DC=irisgrid/O=cesga/CN=Pablo-Rey
 SAMAP wiki page: http://goc.grid.sinica.edu.tw/gocwiki/SAM_Admin_Page_developments
 Support: [Rafal Lichwala](#) - [PSNC](#)

Listo Internet 100%

Easy SAM

<https://lxb0714.cern.ch/easysam/>

LazySAM portal for the Certification Testbed - Windows Internet Explorer

https://t1b0714.cern.ch/easysam/perl/easysam.cgi

Archivo Edición Ver Favoritos Herramientas Ayuda

LazySAM portal for the Certification Testbed

SAM portal

Region: All region VO: DTeam LB CE SRM MyProxy BDII gRB

Type: Production Status: Certified BLAH SE LFC VOMS sBDII

DPM RB FTS RGMA gCE

SiteView MiniURL

You are identified as: /DC=es/DC=irisgrid/O=cesga/CN=Pablo-Rey [Submit tests](#)

Choose your destination:

- cesga-sa3
- cy-02-cygrid-cert
- egee-see-cert
- pic-sa3
- sa3-tb-cnaf

Choose your test:

Submit

Welcome to the LazySAM portal

The Easy SAM Portal is a simple, dumb perl based application which allows you to connect to SAM database and display the content of it. Inspired by EasyJet web pages, which ensures that you won't be completely depressed even if Monday morning's tests are all failing...

Features

- Colorful interface.
- Overview tables allow immediate impression about the status of the site.
- Easy access to test results.
- Additional information available (submitter, deleted tests are not displayed).
- Tables are wrapped, no need for horizontal scrolling.
- Test definitions repeated during vertical scroll, so you will always see which test result belongs to which test.
- You can send/use the minurl referring to the page instead of long nasty cgi strings.
- You can ask the Easy SAM Portal's admin to put your ads to the side.
- 2 in 1 ! Submit your tests from the portal and check their results in the same place!

Documentation

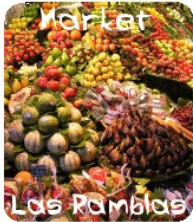
For some docs in the future you can have a look to :

<https://uimon.cern.ch/twiki/bin/view/LCG/TheEasySAMPortal>

Cant forget...



Barcelona



Las Ramblas

Contact: EasySAM Working Group -) e-mail: Gergely.Debreczeni@cern.ch

Portal last modified: 2006, dec, 12

2006-2007 EasySam (c)

Internet 100%

GridICE

- EGEE: <http://gridice2.cnaf.infn.it:50080/gridice/>
- SWE: <http://www2.egee.cesga.es/gridice/>
- Int.eu.grid:
 - Producción: <http://www.i2g.cesga.es/gridice/>
 - Desarrollo: <http://www2.i2g.cesga.es/gridice/>

- **Está basado en NAGIOS**
- **Recogida de bajo nivel***: **LEMON** (anteriormente FMON) para recoger las métricas relativas a cada máquina.
- **Servicio de publicación***: en un nodo recolector visible desde internet (normalmente el SE ó el MON) hay un servicio que publica la información recogida por el servidor LEMON a un **EXtended GRIS** (escucha en el puerto 2136)
- **Descubrimiento y recogida de alto nivel**: por encima hay un servicio que **descubre** nuevos recursos a partir del BDII. Esta información es almacenada en una **RDBMS** (*postgresql*) para **poder ser mostrada y analizada**.

*necesario solamente para publicar la información extendida

SouthWesternEurope Federation - GridICE - Grid Monitoring Service - Mozilla Firefox

http://www2.egee.cesga.es/gridice/site/site.php

GridICE the eyes of the Grid

Geo view Site view VO view Help About

GridICE >> Site::ALL

General **Gris** Host Job Charts Network XML

Overview Computing Management Downtime

Computing Resources Storage Resources

Site	Region	GK#	Q#	RunJob	WaitJob	JobLoad	Power	WN#	CPU#	CPUload	Available	Total	%	MH#	
BIFI	SWE	1	6	0	0	8%	0	12	24	0%	63.6 GB	103.5 GB	3%	16	
CESGA-EGEE	SWE	1	12	46	0	1%	0	18	90	4%	-	-	-	23	
CIEMAT-LCG2	SWE	1	2	0	0	-	0	0	0	-	-	-	-	62	
CNB-LCG2	SWE	1	6	5	0	25%	0	8	16	25%	10.9 GB	67.7 GB	84%	11	
ClusterUL	SWE	1	4	0	0	0%	0	9	9	6%	-	-	-	3	
DI-UMinho	SWE	1	4	1	0	0%	0	3	6	15%	-	-	-	2	
ESA-ESAC	SWE	1	3	0	0	5%	0	10	20	1%	-	-	-	2	
IFCA-LCG2	SWE	1	335	265	0	-	0	0	0	-	45.4 TB	-	-	101	
IFIC-LCG2	SWE	2	20	124	867	100%	0	75	73	85%	1.9 PB	2.8 PB	33%	10	
LIP-Coimbra	SWE	1	6	75	0	-	0	0	0	-	-	-	-	3	
LIP-Lisbon	SWE	1	10	11	2	-	0	0	0	-	8.4 TB	11.1 TB	24%	32	
UAM-LCG2	SWE	1	3	45	0	-	-	-	-	-	1.4 PB	2 PB	31%	3	
UB-LCG2	SWE	1	3	0	0	0%	0	49	126	0%	54.1 GB	55.8 GB	3%	2	
UPV-GRYCAP	SWE	1	6	5	0	25%	0	10	20	20%	38.9 GB	68.7 GB	3%	3	
UPorto	SWE	3	9	41	0	-	-	-	-	-	-	-	-	-	
USC-LCG2	SWE	1	5	0	0	0%	0	113	268	0%	60.4 GB	64 GB	6%	4	
ifae	SWE	1	6	12	1476	94%	0	4	16	87%	6.9 TB	11.5 TB	0%	3	
pic	SWE	4	17	138	168	-	0	0	0	-	-	-	-	16	
TOTAL: 18	3	1	24	457	768	2513	27%	0	311	668	26%	3.3 PB	4.8 PB	34%	296

Generated: Thu, 20 Sep 2007 08:22:15 +0200

GridICE Homepage

Terminado

SouthWesternEurope Federation - GridICE - Grid Monitoring Service - Mozilla Firefox

http://www2.egee.cesga.es/gridice/host/host_summary.php?siteName=CESGA-EGEE

GridICE the eyes of the Grid

Geo view Site view VO view Help About

GridICE >> Site::ALL >> Site::CESGA-EGEE

CE SE **Gris** Host Job Charts XML

View 1 View 2 View 3

Hostname	Site	Role	Procs	Load15Min	CPU Usage	RAM Free	RAM Usage	Virtual Free	Virtual Usage	Last Check
mon.egee.cesga.es	CESGA-EGEE	BD-GC-RG	✓	0.07	4%	0	✗	0	✗	0h3m11s
ce2.egee.cesga.es	CESGA-EGEE	CE	✓	2.5	87%	39 MB	95%	1 GB	0%	0h3m11s
test01.egee.cesga.es	CESGA-EGEE	RB	✓	0.13	9%	16 MB	98%	511 MB	0%	0h3m11s
se2.egee.cesga.es	CESGA-EGEE	SE	✓	0	2%	0	✗	0	✗	0h3m11s
cisn2.cesga.es	CESGA-EGEE	WN	✓	0	1%	77 MB	85%	1 GB	0%	0h3m11s
cisn3.cesga.es	CESGA-EGEE	WN	✓	1.44	100%	16 MB	97%	1 GB	0%	0h3m11s
cisn4.cesga.es	CESGA-EGEE	WN	✓	0.73	0%	151 MB	70%	1 GB	0%	0h3m11s
cisn5.cesga.es	CESGA-EGEE	WN	✓	0	0%	109 MB	78%	1 GB	0%	0h3m11s
cisn6.cesga.es	CESGA-EGEE	WN	✓	0.53	0%	163 MB	67%	1 GB	0%	0h3m11s
cisn7.cesga.es	CESGA-EGEE	WN	✓	1.8	47%	280 MB	4%	0	✗	0h3m11s
wn001.egee.cesga.es	CESGA-EGEE	WN	✓	3.28	77%	0	✗	0	✗	0h3m11s
wn002.egee.cesga.es	CESGA-EGEE	WN	✓	3.3	75%	0	✗	0	✗	0h3m11s
wn003.egee.cesga.es	CESGA-EGEE	WN	✓	4.33	100%	0	✗	0	✗	0h3m11s
wn004.egee.cesga.es	CESGA-EGEE	WN	✓	3.59	54%	0	✗	0	✗	0h3m11s
wn006.egee.cesga.es	CESGA-EGEE	WN	✓	2.1	88%	0	✗	0	✗	20h52m28s
wn007.egee.cesga.es	CESGA-EGEE	WN	✓	2.32	25%	0	✗	0	✗	0h3m11s
wn008.egee.cesga.es	CESGA-EGEE	WN	✓	3.81	77%	0	✗	0	✗	0h3m11s
wn009.egee.cesga.es	CESGA-EGEE	WN	✓	1.64	14%	0	✗	0	✗	0h3m11s
wn010.egee.cesga.es	CESGA-EGEE	WN	✓	3.25	88%	0	✗	0	✗	0h3m11s
wn011.egee.cesga.es	CESGA-EGEE	WN	✓	2.91	88%	0	✗	0	✗	0h3m11s
wn012.egee.cesga.es	CESGA-EGEE	WN	✓	2.3	21%	0	✗	0	✗	0h3m11s
wn013.egee.cesga.es	CESGA-EGEE	WN	✓	2.22	25%	0	✗	0	✗	0h3m11s
wn014.egee.cesga.es	CESGA-EGEE	WN	✓	2	25%	0	✗	0	✗	0h3m11s

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GridICE Homepage

Terminado

SouthWesternEurope Federation - GridICE - Grid Monitoring Service - Mozilla Firefox

http://www2.egee.cesga.es/gridice/host/host_details.php?hostName=grid006.lca.uc.pt&hostId=581&siteName=LIP-Coimbra

GridICE >> Site::ALL >> Site::LIP-Coimbra >> Host::grid006.lca.uc.pt

[XML](#)

Processes	Role	Proc Name	Status	Inst#	First	Last	CPU1Max	CPUAll	Mem1Max	MemAvg	Time1Max	TimeAll
ce-access-node	edg-gatekeeper		S	1	28-14:15	28-14:15	0	0	0	0	0-00:00	0-00:00
ce-access-node	fmon-agent		S	1	28-14:16	28-14:16	0	0	0	0	0-00:00	0-00:00
ce-access-node	globus-mds		S	2	12-19:40	12-19:40	0	0	0	0	0-00:03	0-00:03
ce-access-node	gridice_acclog		S	1	0-06:24	0-06:24	0	0	0	0	0-00:00	0-00:00
ce-access-node	gridice_messlog		S	1	28-14:16	28-14:16	0	0	12	12	0-03:20	0-03:20
ce-access-node	gsiftp		S	1	28-13:48	28-13:48	0	0	0	0	0-00:00	0-00:00
ce-access-node	lcg-bdii-fwd		RM	0	0-00:00	0-00:00	0	0	0	0	0-00:00	0-00:00
ce-access-node	lcg-bdii-slapd		RM	0	0-00:00	0-00:00	0	0	0	0	0-00:00	0-00:00
ce-access-node	lcg-bdii-update		RM	0	0-00:00	0-00:00	0	0	0	0	0-00:00	0-00:00
ce-access-node	maui		RM	0	0-00:00	0-00:00	0	0	0	0	0-00:00	0-00:00
ce-access-node	pbs-server		RM	0	0-00:00	0-00:00	0	0	0	0	0-00:00	0-00:00

File System Info	Name	Root	Type	Size	AvSpace	ReadOnly	ExtentName	ReadRate	WriteRate	InodeTotal	InodeFree
	/	/	ext3	9.84 GB	7.19 GB	f	/dev/hda2	0	0	1.3M	1.2M
	/tmp	/tmp	ext3	21.43 GB	21.35 GB	f	/dev/hda4	0	0	2.9M	2.9M
	/boot	/boot	ext3	493 MB	478 MB	f	/dev/hda1	0	0	130.6K	130.5K

Network Adapter Data	Name	TXrate	FXrate	IP Address	MTU	Outbound IP	Inbound IP
	eth0	10108	26056	192.168.1.6	1500	f	t

CPU Vendor	GenuineIntel	Virtual Used	-
CPU Model	Intel(R) Pentium(R) 4 CPU 2.20GHz	Proc Total	241
CPU Version	-	Proc Sleeping	131
CPU Clock Speed	2194	Proc Runnable	2
CPU Load1Min	1.92	Proc Zombie	8
CPU Load5Min	1.7	Proc Stopped	0
CPU Load15Min	1.5	Proc Uninterruptible Sleep	
CPU User	48	Total Socket Number	278
CPU Nice	0	TCP Socket Number	117
CPU System	14	UDP Socket Number	10
CPU Idle	38	RAW Socket Number	0
RAM Size	0	BogoMips	4390
RAM Available	0	SMP Size	1
RAM Used	0	OS Name	
RAM Cached	0	OS Release	
RAM Shared	0	OS Version	

Terminado

SouthWesternEurope Federation - GridICE - Grid Monitoring Service - Mozilla Firefox

Archivo Editar Ver Historial Marcadores Herramientas Ayuda

http://www2.egee.cesga.es/gridice/job/details.php?start=September%2017,%202007&end=September%2020,%202007&s

GridICE the eyes of the Grid

Geo view Site view VO view Help About

GridICE >> Site::ALL >> Site::CESGA-EGEE

CE SE **Gris** Host Job Charts XML

Site: VO: Global ID: Exec-host:

From: Status: LocalID: Local-user:

To: Jobs x page: (max 200)

70 Entries in 4 Pages
1 | 2 | 3 | 4 | Next | Last

#	LocalID	VO	Site	Status	Creation	Start	WallTime	CPU/Wall	Exit	RAM	VM	RB
1	195353	biomed	CESGA-EGEE	R	2007-09-20 06:28	00:00:02	01:48:33	0.86	-	231.32 MB	550.05 MB	lcg00124.grid.sinica.edu.tw
2	195344	biomed	CESGA-EGEE	R	2007-09-20 06:10	00:00:01	02:07:16	0.87	-	231.32 MB	550.28 MB	lcg00124.grid.sinica.edu.tw
3	195343	biomed	CESGA-EGEE	R	2007-09-20 06:07	00:00:01	02:10:00	0.89	-	231.52 MB	563.52 MB	lcg00124.grid.sinica.edu.tw
4	195341	biomed	CESGA-EGEE	R	2007-09-20 06:02	00:00:01	02:15:00	0.88	-	231.33 MB	560.43 MB	lcg00124.grid.sinica.edu.tw
5	195338	biomed	CESGA-EGEE	R	2007-09-20 05:56	00:00:01	02:21:07	0.87	-	231.46 MB	560.7 MB	lcg00124.grid.sinica.edu.tw
6	195336	biomed	CESGA-EGEE	R	2007-09-20 05:49	00:00:02	00:32:29	0.93	-	159.82 MB	364.41 MB	lcg00124.grid.sinica.edu.tw
7	195333	biomed	CESGA-EGEE	R	2007-09-20 05:48	00:00:01	00:32:44	0.94	-	159.86 MB	363.57 MB	lcg00124.grid.sinica.edu.tw
8	195334	biomed	CESGA-EGEE	R	2007-09-20 05:48	00:00:01	00:32:43	0.93	-	159.68 MB	364.5 MB	lcg00124.grid.sinica.edu.tw
9	195332	biomed	CESGA-EGEE	R	2007-09-20 05:47	00:00:02	00:32:56	0.93	-	159.81 MB	364.52 MB	lcg00124.grid.sinica.edu.tw
10	195331	biomed	CESGA-EGEE	R	2007-09-20 05:36	00:00:01	00:35:22	0.93	-	159.67 MB	364.49 MB	lcg00124.grid.sinica.edu.tw
11	195288	compchem	CESGA-EGEE	R	2007-09-20 02:25	00:00:01	05:51:15	1	-	689.02 MB	795.07 MB	-
12	195286	compchem	CESGA-EGEE	R	2007-09-20 02:16	00:00:01	06:00:14	1	-	691.52 MB	784.92 MB	-
13	195285	compchem	CESGA-EGEE	R	2007-09-20 02:12	00:00:02	06:04:05	1	-	689.68 MB	784.86 MB	-
14	195229	compchem	CESGA-EGEE	R	2007-09-19 23:21	00:00:01	08:55:03	1	-	703.88 MB	795.08 MB	-
15	195227	compchem	CESGA-EGEE	R	2007-09-19 23:17	00:00:01	08:58:50	1	-	690.16 MB	795.07 MB	-
16	195226	compchem	CESGA-EGEE	R	2007-09-19 23:17	00:00:01	08:58:42	1	-	688.06 MB	795.1 MB	-
17	195222	compchem	CESGA-EGEE	R	2007-09-19 23:11	00:00:01	09:05:09	1	-	688.01 MB	795.07 MB	-
18	195218	compchem	CESGA-EGEE	R	2007-09-19 22:45	00:00:01	09:30:21	1	-	684.07 MB	784.93 MB	-
19	195217	compchem	CESGA-EGEE	R	2007-09-19 22:40	00:00:01	09:35:39	1	-	691.66 MB	795.1 MB	-
20	195215	compchem	CESGA-EGEE	R	2007-09-19 22:37	00:00:02	09:38:26	1	-	689.73 MB	795.1 MB	-

Terminado

- **Gridview**
 - Nos permite ver estadísticas sobre transferencia de datos, trabajos en ejecución y disponibilidad de servicios (basado en SAM)
 - <http://gridview.cern.ch/>
- **Freedom of Choice for Resources (FCR)**
 - Permite ver a las VOs cuales son los mejores sitios en base a los test de SAM y seleccionar los que quiere para enviar trabajos.
 - Producción: <https://lcg-fcr.cern.ch:8443/fcr/fcr.cgi>
 - PPS: <https://lcg-fcr-pps.cern.ch:8443/fcr-pps/fcr.cgi>
- **Real Time Monitoring (RTM):**
 - Diversas herramientas que permiten ver el funcionamiento del grid en tiempo real
 - <http://gridportal.hep.ph.ic.ac.uk/rtm/>

- **Mapas de Monitoring:**
 - Permite ver geográficamente el estado de cada sitio en nuestra federación (SWE) teniendo en cuenta dos test diferentes: GSTAT y SAM
- **Alertas de Monitoring por correo:**
 - Teniendo en cuenta el estado de cada tests se envía una notificación cuando hay un cambio de estado.
- **GridICE**
- **<http://www.egee.cesga.es/EGEE-SA1-SWE/monitoring/>**

- **Ganglia**
- **Nagios**

Ganglia: CESGA-GRID Gr Ganglia: Cluster Report - Mozilla Firefox

Archivo Editar Ver Historial Archivos Marcadores Herramientas Ayuda

http://www2.egee.cesga.es/ganglia/?c=CESGA-EGEE&m=&r=hour&s=descending&hc=4

CESGA-GRID Grid

CPU's Total: 136
Hosts up: 53
Hosts down: 0

Avg Load (15, 5, 1m): 27%, 27%, 29%

Localtime: 2007-09-20 10:03

CESGA-EGEE (physical view)

CPU's Total: 94
Hosts up: 18
Hosts down: 1

Avg Load (15, 5, 1m): 33%, 33%, 34%

Localtime: 2007-09-20 10:03

CESGA-SERVERS (physical view)

CPU's Total: 3
Hosts up: 3
Hosts down: 0

Avg Load (15, 5, 1m): 24%, 24%, 30%

Localtime: 2007-09-20 10:03

CESGA-I2G (physical view)

CPU's Total: 15

Terminado

CPU's Total: 102
Hosts up: 19
Hosts down: 0

Avg Load (15, 5, 1m): **34%, 33%, 33%**

Localtime: **2007-09-20 10:05**

Cluster Load Percentages

CESGA-EGEE Load last hour

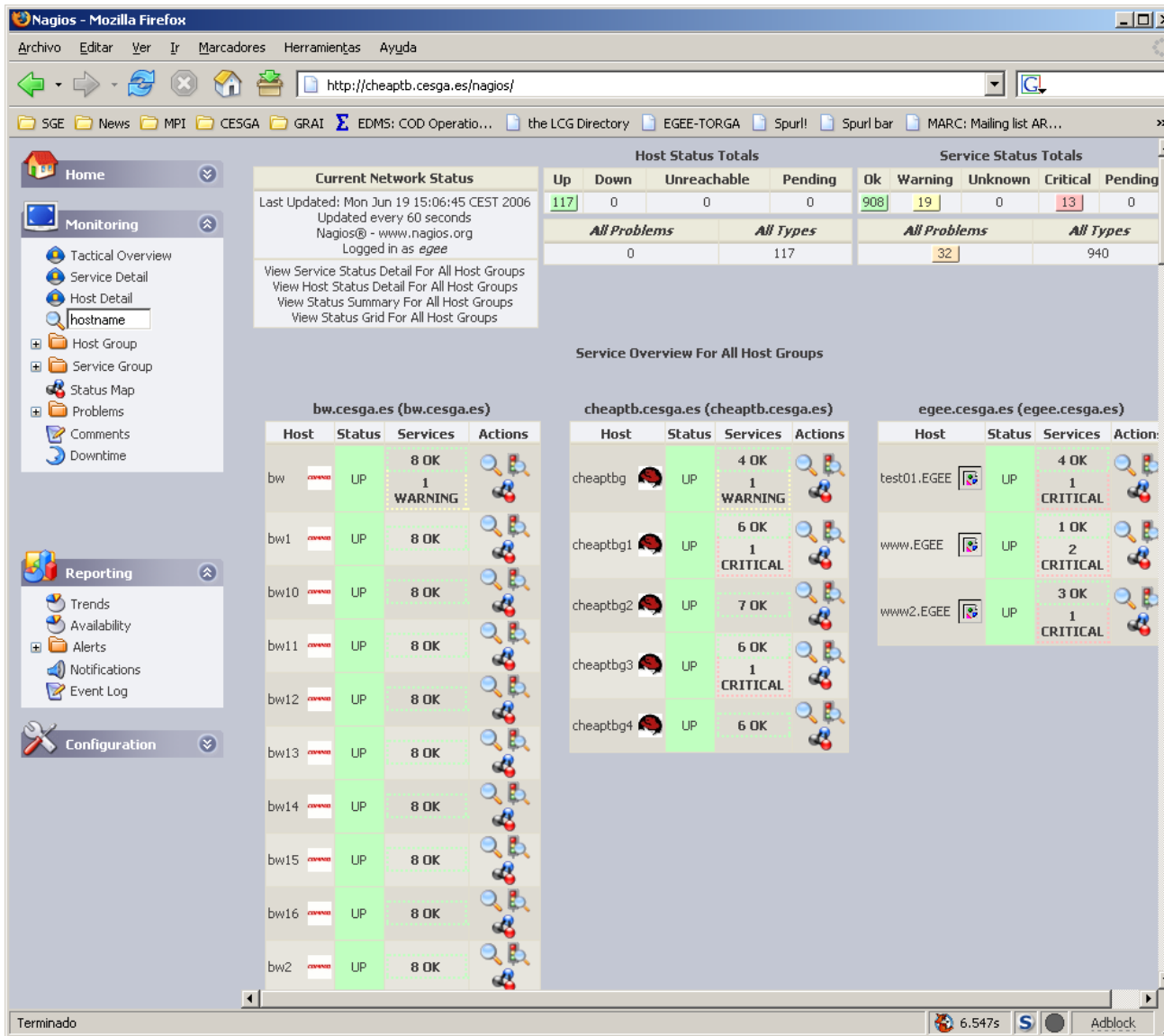
CESGA-EGEE CPU last hour

CESGA-EGEE Memory last hour

CESGA-EGEE Network last hour

Show Hosts: yes no | CESGA-EGEE load_one last hour sorted descending | Columns 4

<p>ce2.egee.cesga.es</p> <p>Load_one Last hour (now 2.01)</p>	<p>wn003.egee.cesga.es</p> <p>Load_one Last hour (now 4.00)</p>	<p>wn002.egee.cesga.es</p> <p>Load_one Last hour (now 3.01)</p>	<p>wn004.egee.cesga.es</p> <p>Load_one Last hour (now 3.87)</p>
<p>wn008.egee.cesga.es</p> <p>Load_one Last hour (now 3.00)</p>	<p>wn011.egee.cesga.es</p> <p>Load_one Last hour (now 2.96)</p>	<p>wn001.egee.cesga.es</p> <p>Load_one Last hour (now 2.93)</p>	<p>wn007.egee.cesga.es</p> <p>Load_one Last hour (now 2.15)</p>
<p>wn012.egee.cesga.es</p> <p>Load_one Last hour (now 2.12)</p>	<p>wn014.egee.cesga.es</p> <p>Load_one Last hour (now 2.00)</p>	<p>wn010.egee.cesga.es</p> <p>Load_one Last hour (now 2.00)</p>	<p>wn009.egee.cesga.es</p> <p>Load_one Last hour (now 2.00)</p>
<p>wn013.egee.cesga.es</p>	<p>test01.egee.cesga.es</p>	<p>mon.egee.cesga.es</p>	<p>wms01.egee.cesga.es</p>



Nagios - Mozilla Firefox
 Archivo Editar Ver Ir Marcadores Herramientas Ayuda
 http://cheaptb.cesga.es/nagios/

SGE News MPI CESGA GRAI EDM5: COD Operatio... the LCG Directory EGEE-TORGA Spurl! Spurl bar MARC: Mailing list AR...

Home Monitoring Tactical Overview Service Detail Host Detail hostname Host Group Service Group Status Map Problems Comments Downtime Reporting Trends Availability Alerts Notifications Event Log Configuration

Host Status Totals

Up	Down	Unreachable	Pending
117	0	0	0
All Problems		All Types	
0		117	

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
908	19	0	13	0
All Problems		All Types		
32		940		

Current Network Status
 Last Updated: Mon Jun 19 15:06:45 CEST 2006
 Updated every 60 seconds
 Nagios@ - www.nagios.org
 Logged in as egee

View Service Status Detail For All Host Groups
 View Host Status Detail For All Host Groups
 View Status Summary For All Host Groups
 View Status Grid For All Host Groups

Service Overview For All Host Groups

bw.cesga.es (bw.cesga.es)

Host	Status	Services	Actions
bw	UP	8 OK 1 WARNING	
bw1	UP	8 OK	
bw10	UP	8 OK	
bw11	UP	8 OK	
bw12	UP	8 OK	
bw13	UP	8 OK	
bw14	UP	8 OK	
bw15	UP	8 OK	
bw16	UP	8 OK	
bw2	UP	8 OK	

cheaptb.cesga.es (cheaptb.cesga.es)

Host	Status	Services	Actions
cheaptbg	UP	4 OK 1 WARNING	
cheaptbg1	UP	6 OK 1 CRITICAL	
cheaptbg2	UP	7 OK	
cheaptbg3	UP	6 OK 1 CRITICAL	
cheaptbg4	UP	6 OK	

egee.cesga.es (egee.cesga.es)

Host	Status	Services	Action:
test01.EGEE	UP	4 OK 1 CRITICAL	
www.EGEE	UP	1 OK 2 CRITICAL	
www2.EGEE	UP	3 OK 1 CRITICAL	

Terminado 6.547s S Adblock

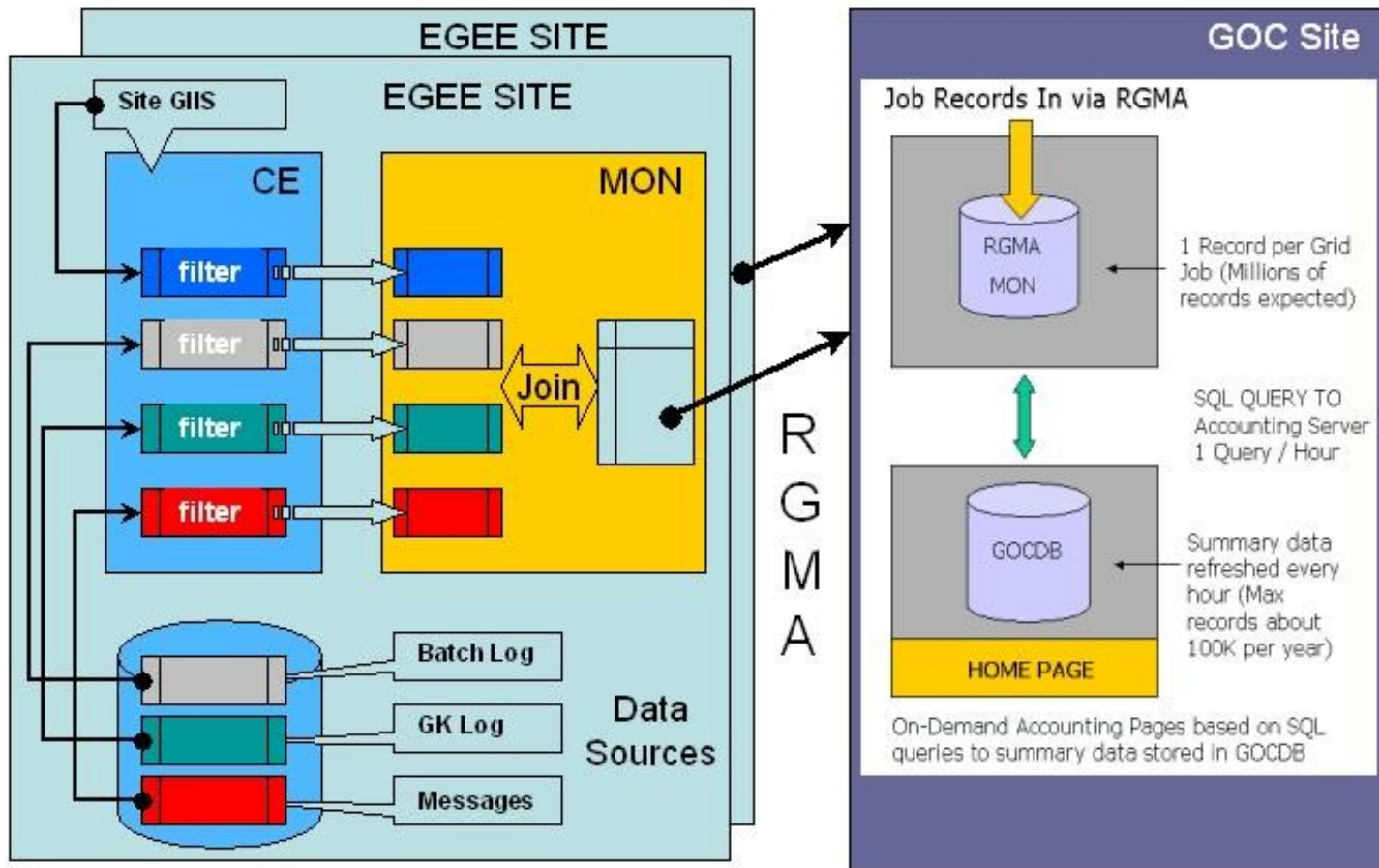
ACCOUNTING

EGEE-II MSA1.9 Deliverable “OPERATIONAL ACCOUNTING PORTAL”:

https://edms.cern.ch/file/726137/3/EGEE-II-MSA1_9-726137-v-2_0.pdf

- **Accounting DESPUES del evento (APEL)**
 - Se obtienen los datos después de que acaba el trabajo
 - Los datos contienen la información completa del consumo de recursos
 - Adecuado para servicios de pago a posteriori
 - Ejemplo: teléfono, electricidad, gas, ...
- **Accounting en tiempo real (DGAS, SGAS)**
 - Determinación incremental del valor de los recursos mientras el trabajo se está ejecutando
 - Reducción progresiva del saldo
 - Puede forzar cuotas de usuario
 - Adecuado para servicios de pre-pago
 - Ejemplo: tarjeta pre-pago de telefonía

- Obtiene la información de accounting de los trabajos en cada sitio
- Envía dicha información a un repositorio central (R-GMA)
- Agrupación de datos



- Basada en el esquema propuesto por el Global Grid Forum's Usage Record Working Group

Field	Type	Null	Key	Default	Extra
RecordIdentity	varchar(255)		PRI		
ExecutingSite	varchar(50)	YES		NULL	
LocalJobID	varchar(50)	YES		NULL	
LCGJobID	varchar(255)	YES		NULL	
LocalUserID	varchar(50)	YES		NULL	
LCGUserID	varchar(255)	YES		NULL	
LCGUserVO	varchar(255)	YES		NULL	
ElapsedTime	varchar(30)	YES		NULL	
BaseCpuTime	varchar(30)	YES		NULL	
ElapsedTimeSeconds	int(11)	YES		NULL	
BaseCpuTimeSeconds	int(11)	YES		NULL	
StartTime	varchar(30)	YES		NULL	
StopTime	varchar(30)	YES		NULL	
StartTimeUTC	varchar(30)	YES		NULL	
StopTimeUTC	varchar(30)	YES		NULL	
StartTimeEpoch	int(11)	YES		NULL	
StopTimeEpoch	int(11)	YES		NULL	
ExecutingCE	varchar(255)	YES		NULL	
MemoryReal	int(11)	YES		NULL	
MemoryVirtual	int(11)	YES		NULL	
SpecInt2000	int(11)	YES		NULL	
SpecFloat2000	int(11)	YES		NULL	
EventDate	date			0000-00-00	
EventTime	time			00:00:00	
MeasurementDate	date			0000-00-00	
MeasurementTime	time			00:00:00	

```
RecordIdentity: 2007-07-11 15:34:12 https://abc-wms.ab.ac:9000/pKxyQT_PwRffmLHeB3LVZA abc-ce.ab.ac:2119/blah-
pbs-xyz 1.abc-ce.ab.ac
ExecutingSite : abc
  LocalJobID : 1.abc-ce.ab.ac
    LCGJobID : https://ctb-conf-wms.ab.ac:9000/pKxyQT_PwRffmLHeB3LVZA
  LocalUserID : xyz001
    LCGUserID : *APELV.0.2*iXNptjXinNNwvcN1Zq8Cc+Xd5rWj94Cub1BOSQGff/Pvf+bnWXxp3RzaofMhg6WG
LQI1d7zPCOP8evIW2I68U1+XFntPc+kNADeNhqkxV1SNj3SQ0nC35PhrA8Eshiie19+RelCD7n1KAaN9ZAdbVBpxNU/zdGZwGU3FGj1VYs8=
  LCGUserVO : /xyz/production/Role=admin;
  ElapsedTime : P8S
  BaseCpuTime : P2S
ElapsedTimeSeconds: 8
BaseCpuTimeSeconds: 2
  StartTime : 2007-07-11T15:34:07Z
  StopTime : 2007-07-11T15:34:14Z
  StartTimeUTC : 2007-07-11T15:34:07Z
  StopTimeUTC : 2007-07-11T15:34:14Z
StartTimeEpoch : 1184168047
StopTimeEpoch : 1184168054
ExecutingCE : abc-ce.ab.ac:2119/blah-pbs-dteam
  MemoryReal: 36820
  MemoryVirtual: 113216
  SpecInt2000: 1700
  SpecFloat2000: 1714
  EventDate : 2007-07-11
  EventTime : 17:34:14
MeasurementDate : 2007-07-11
MeasurementTime : 18:35:09
```

- Esta tabla nos permitirá posteriormente saber si los sitios están publicando correctamente los datos o no
- Información agrupada por mes y año

Field	Type	Null	Key	Default	Extra
RecordIdentity	varchar(255)		PRI		
ExecutingSite	varchar(50)	YES		NULL	
Njobs	int(11)	YES		NULL	
Ndays	int(11)	YES		NULL	
RecordStart	date			0000-00-00	
RecordEnd	date			0000-00-00	
MeasurementDate	date			0000-00-00	
MeasurementTime	time			00:00:00	

```

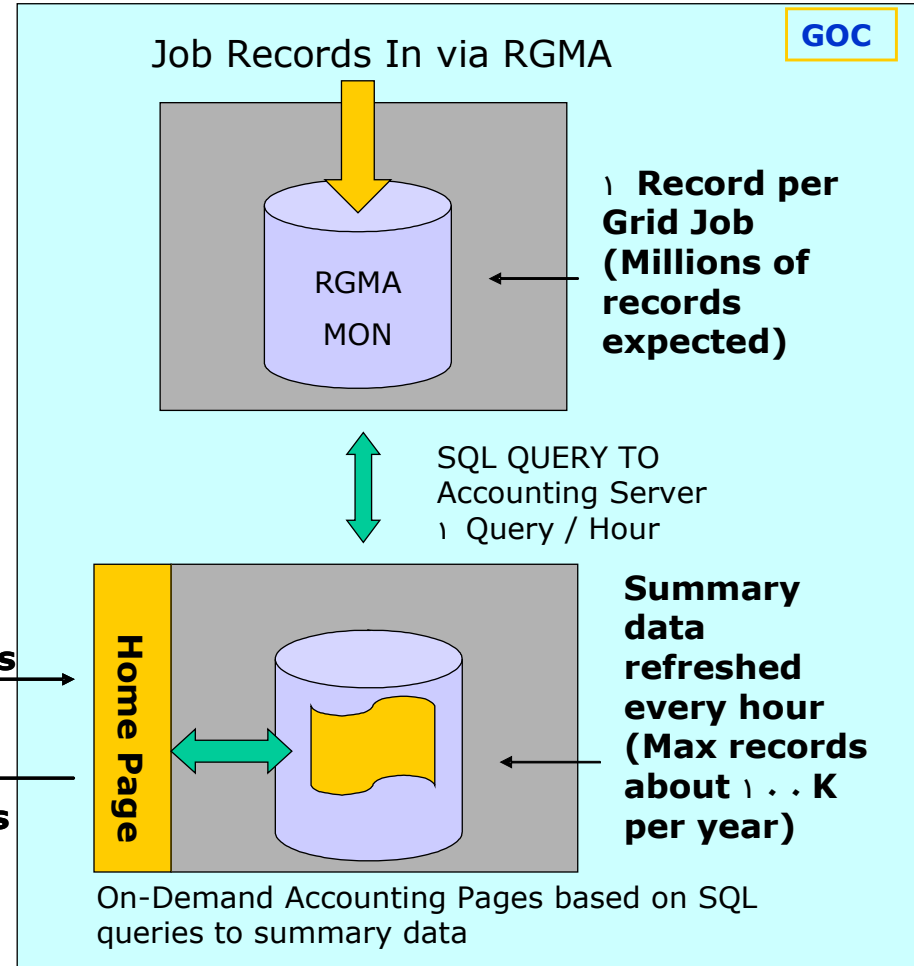
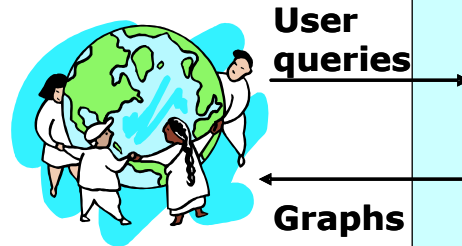
RecordIdentity: SITENAME-2006-9
ExecutingSite: SITENAME
Njobs: 496
Ndays: 22
RecordStart: 2006-09-01
RecordEnd: 2006-09-30
MeasurementDate: 2007-09-20
MeasurementTime: 02:51:18
    
```

Los datos son agrupados por:

- Sitio
- VO
- Mes
- Año

En estos momentos:

- LcgRecords: 62.706.975 registros
- SumCPU: 36.070 registros



```

+-----+-----+-----+-----+-----+-----+
| Field           | Type           | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ExecutingSite  | varchar(50)    |      | PRI |          |       |
| LCGUserVO      | varchar(255)   |      | PRI |          |       |
| Njobs          | int(11)        | YES  |     | NULL    |       |
| SumCPU         | decimal(10,0) | YES  |     | NULL    |       |
| NormSumCPU     | decimal(10,0) | YES  |     | NULL    |       |
| SumWCT         | decimal(10,0) | YES  |     | NULL    |       |
| NormSumWCT     | decimal(10,0) | YES  |     | NULL    |       |
| Month          | int(11)        |      | PRI | 0        |       |
| Year           | int(11)        |      | PRI | 0        |       |
| RecordStart    | date           | YES  |     | NULL    |       |
| RecordEnd      | date           | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+

```

```

ExecutingSite: SITENAME
LCGUserVO: VONAME
Njobs: 11706
SumCPU: 168
NormSumCPU: 64
SumWCT: 609
NormSumWCT: 232
Month: 9
Year: 2006
RecordStart: 2006-09-01
RecordEnd: 2006-09-30

```

Portal de Accounting de EGEE/WLCG

http://www3.egee.cesga.es/gridsite/accounting/CESGA/egee_view.php

- EGEE View
- VO MANAGER View
- VO MEMBER View
- SITE ADMIN View
- USER View

Hierarchical Tree

- Tier1
- Tier2
- Countries
- EGEE
 - Production
 - PPS
 - OSG
 - UNREGISTERED
 - VO_Discipline
 - VO_Metrics

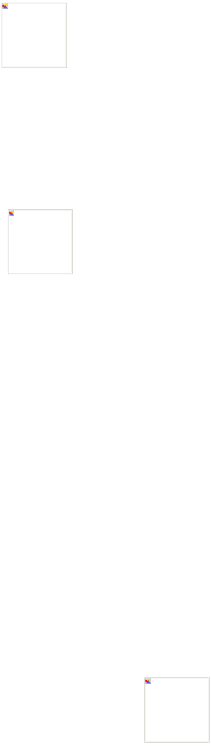
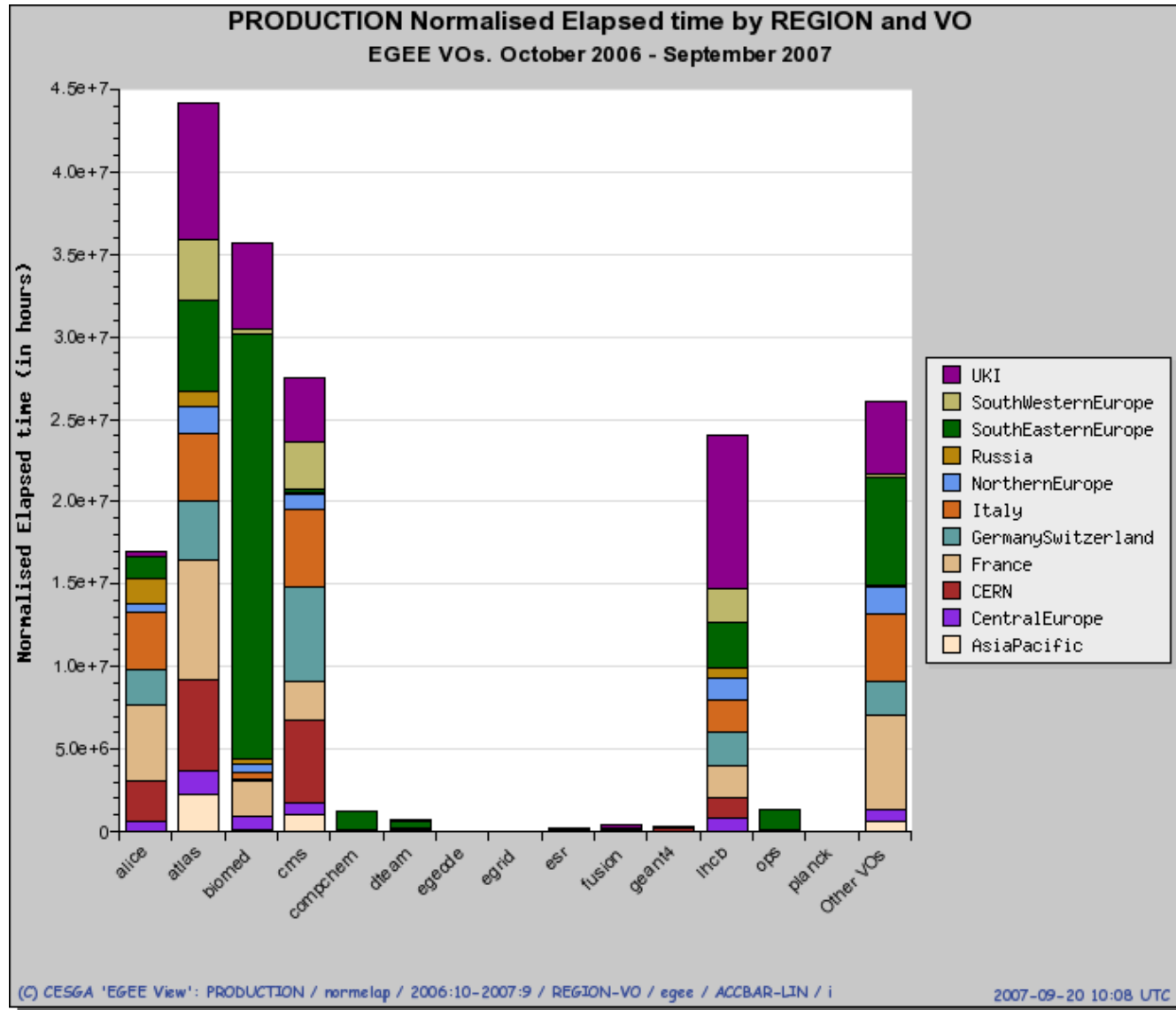
Data to graph:	<input type="text" value="Norm. Sum CPU"/> Normalised CPU time to a reference value of 1000 SpecInt2000		
Period:	Start year: <input type="text" value="2006"/>	Start month: <input type="text" value="6"/>	End year: <input type="text" value="2007"/> End month: <input type="text" value="5"/>
Groupings:	Show data for: <input type="text" value="REGION"/>		as a function of: <input type="text" value="VO"/>
VO Groups:	<input type="radio"/> LHC <input checked="" type="radio"/> Official EGEE <input type="radio"/> ALL <input type="radio"/> Custom		
Chart:	Type: <input type="text" value="ACCUM BAR"/>	Scale: <input type="text" value="LINEAR"/>	
dteam VO:	<input type="checkbox"/> Exclude dteam and ops VOs jobs information		

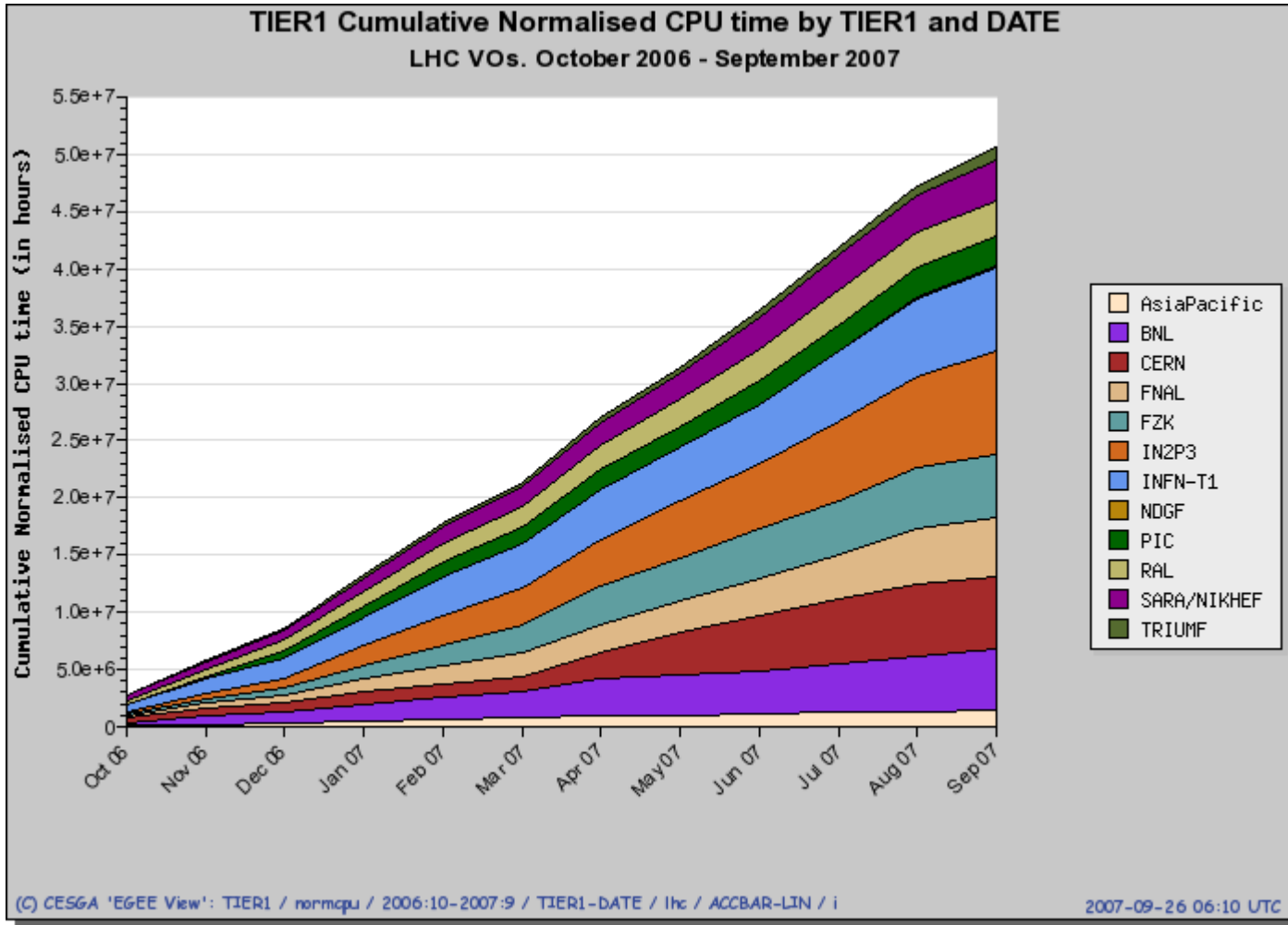
- **Número de trabajos**
- **Tiempo de CPU normalizado**
- **Tiempo de CPU**
- **Tiempo de espera normalizado**
- **Tiempo de espera**
- **Eficiencia global**

- **Gráficos acumulados**
- **Diagramas de Gantt**

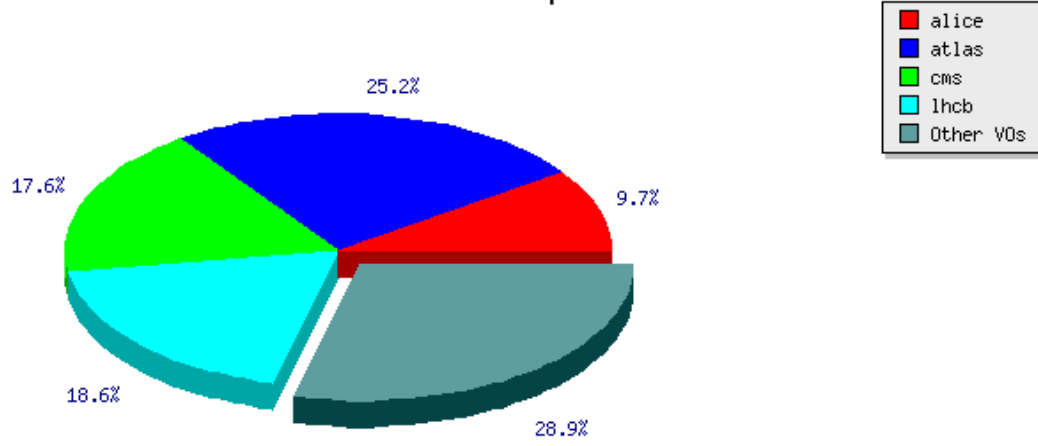
- ¿Como comparar valores de CPU para diferentes nodos?
- Cada sitio publica un **GlueHostBenchmarkSI00**
- **Sitios homogeneos:**
 - No hay problema
 - Desafortunadamente este es el caso menos común
- **Sitios heterogeneos:**
 - Establecer los factores de PBS *\$cputmult* y *\$wallmult* para cada nodo
 - Usar el CPU Normalization Standalone Test para obtener el *SpecInt2000*
- **Problemas:**
 - Normalmente los sitios no se preocupan de publicar el *SpecInt2000* correcto o bien no establecen los factores de PBS apropiadamente
 - El *SpecInt2000* se ha quedado desfasado. Ahora hay el *SpecInt2006*
 - El HEPIX está buscando una forma adecuada de resolver este problema
- **Formula:**

$$\text{Normalised_Cpu_Time} = \frac{\text{GlueHostBenchmarkSI00}}{\text{SI2000_Reference}} * \text{Base_Cpu_Time}$$



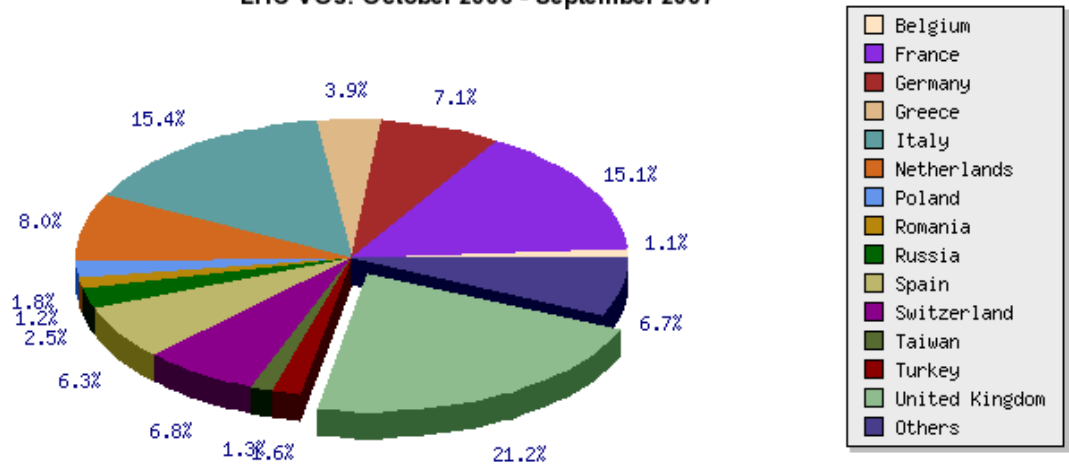


COUNTRY Total CPU time used per VO
LHC VOs. October 2006 - September 2007



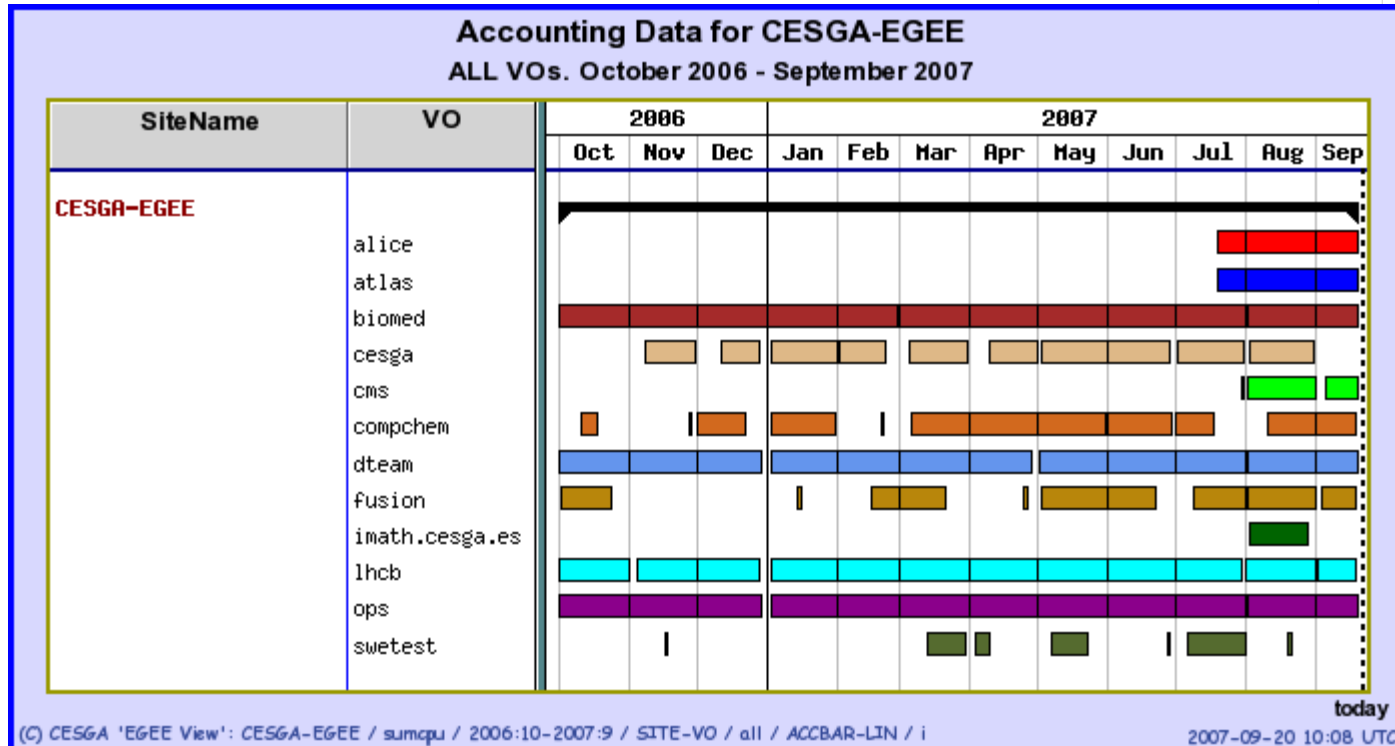
(C) CESGA 'EGEE View': COUNTRY / sumcpu / 2006:10-2007:9 / COUNTRY-VO

COUNTRY Total CPU time used per COUNTRY
LHC VOs. October 2006 - September 2007



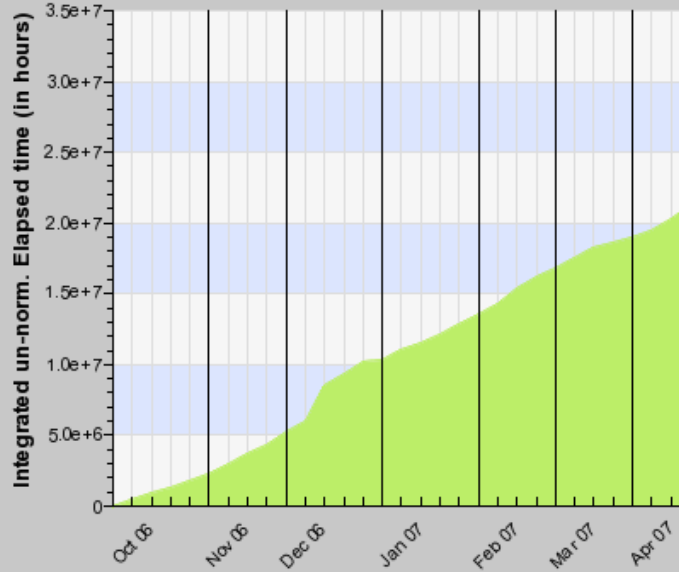
(C) CESGA 'EGEE View': COUNTRY / sumcpu / 2006:10-2007:9 / COUNTRY-VO / lh / ACCBAR-LIN / i

2007-09-20 10:08 UTC



Integrated un-normalised Elapsed time consumed by ATLAS

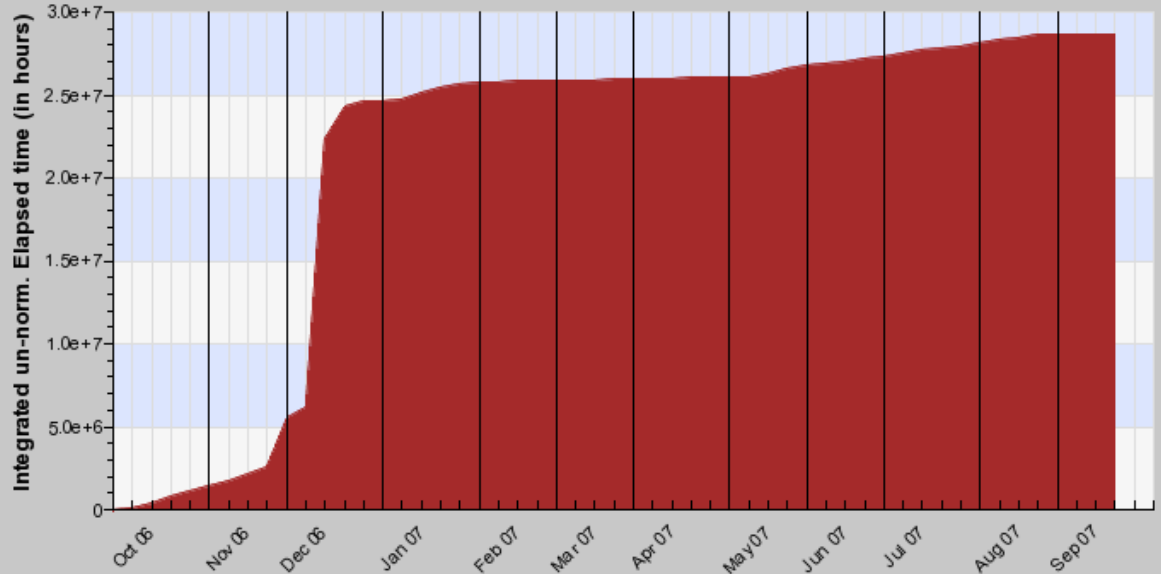
October 2006 - September 2007



(C) CESGA 'EGEE View': integelap / 2006:10-2007:9 / atlas

Integrated un-normalised Elapsed time consumed by BIOMED

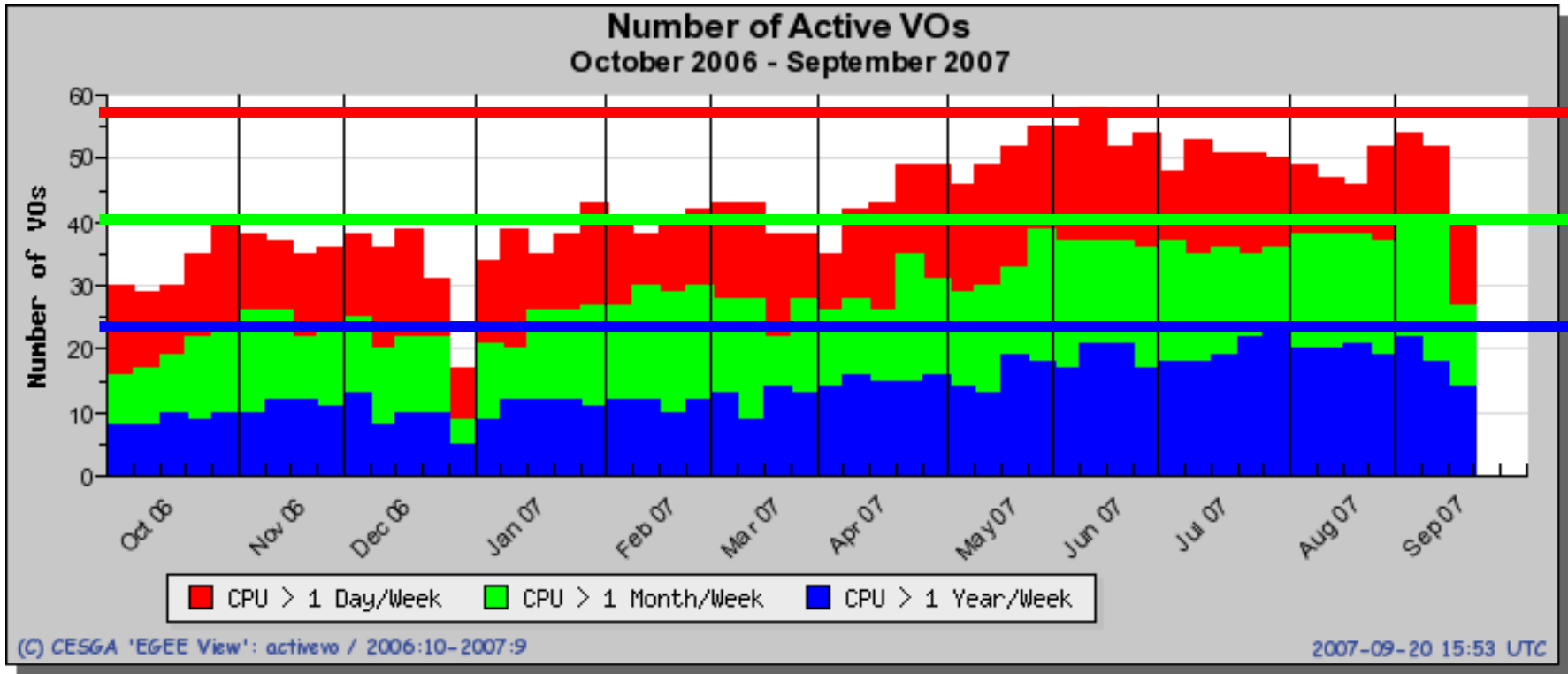
October 2006 - September 2007



(C) CESGA 'EGEE View': integelap / 2006:10-2007:9 / biomed

2007-09-20 10:08 UTC

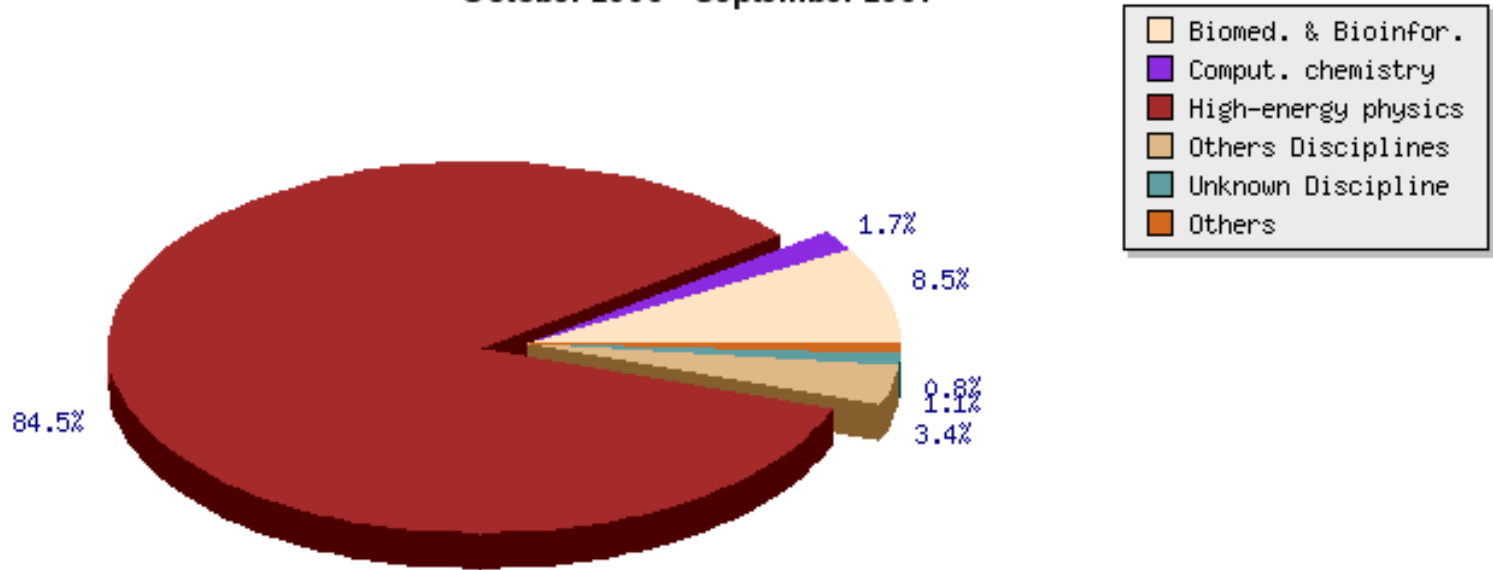




< 40/119

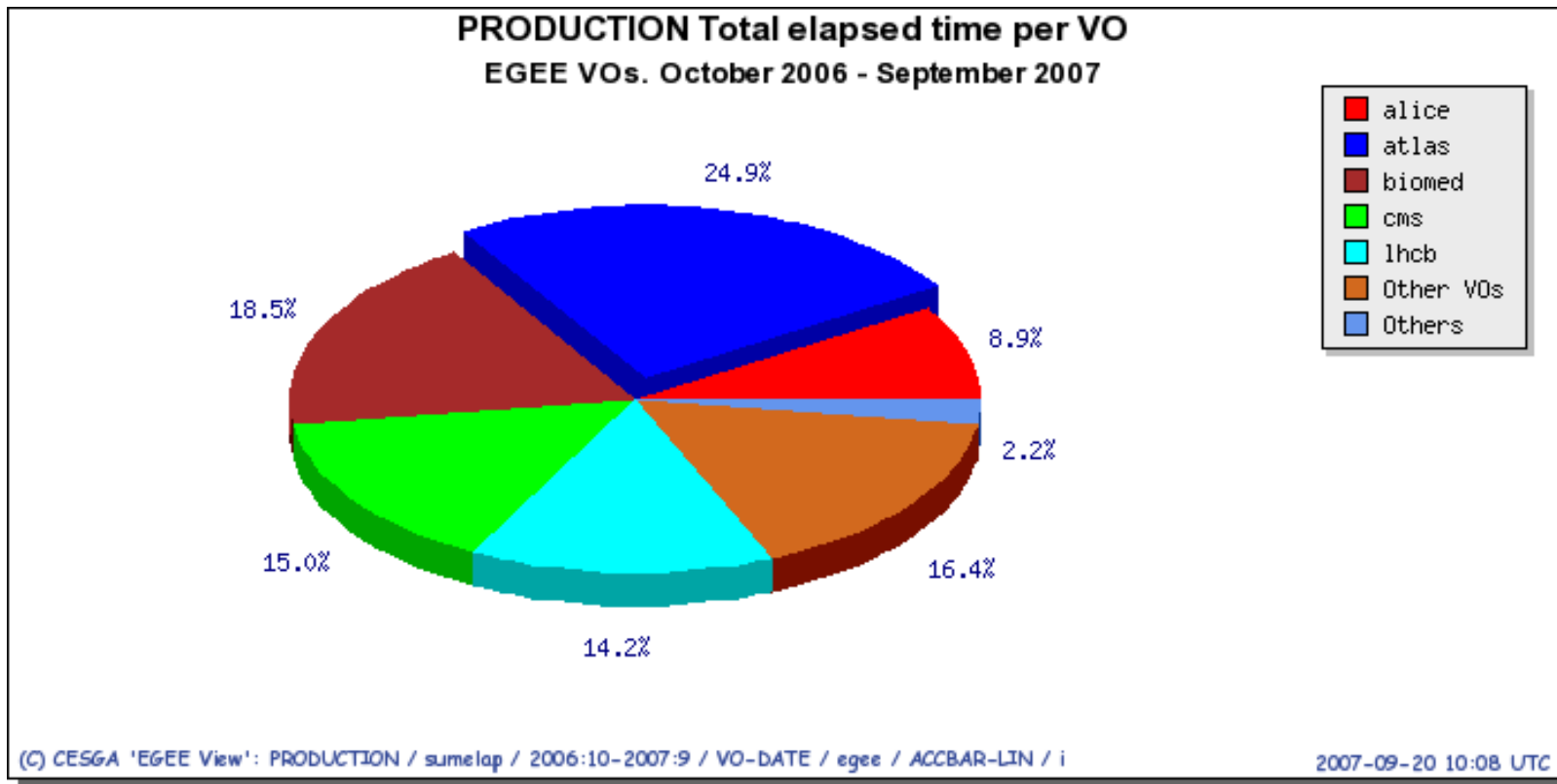
VO_DISCIPLINE Total CPU time used per DISCIPLINE

October 2006 - September 2007



(C) CESGA 'EGEE View': VO_DISCIPLINE / sumcpu / 2006:10-2007:9 / DISCIPLINE-DATE / ACCBAR-LIN

2007-09-20 10:08 UTC



81.5% (5 VO)

- **Accounting por Usuario:**
 - Cada usuario podrá ver la información de accounting correspondiente a sus trabajos.
 - Se podrá ver quienes son y cuanto consumieron los usuarios más activos por sitio o VO.
- **Accounting por VO Groups y Roles:**
 - Será posible ver la información de accounting correspondiente a cada grupo y/o rol asociado a cada VO.
- **Accounting de trabajos locales**

Portal de Accounting de Almacenamiento

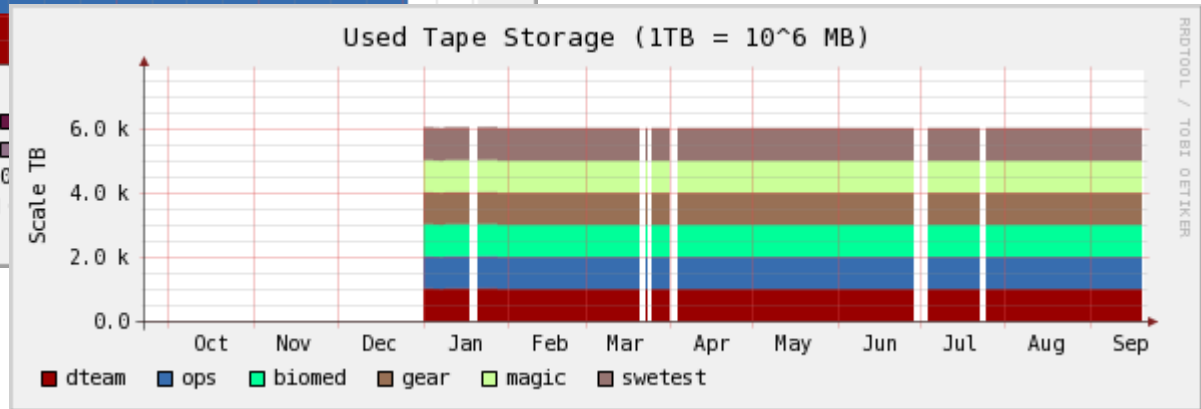
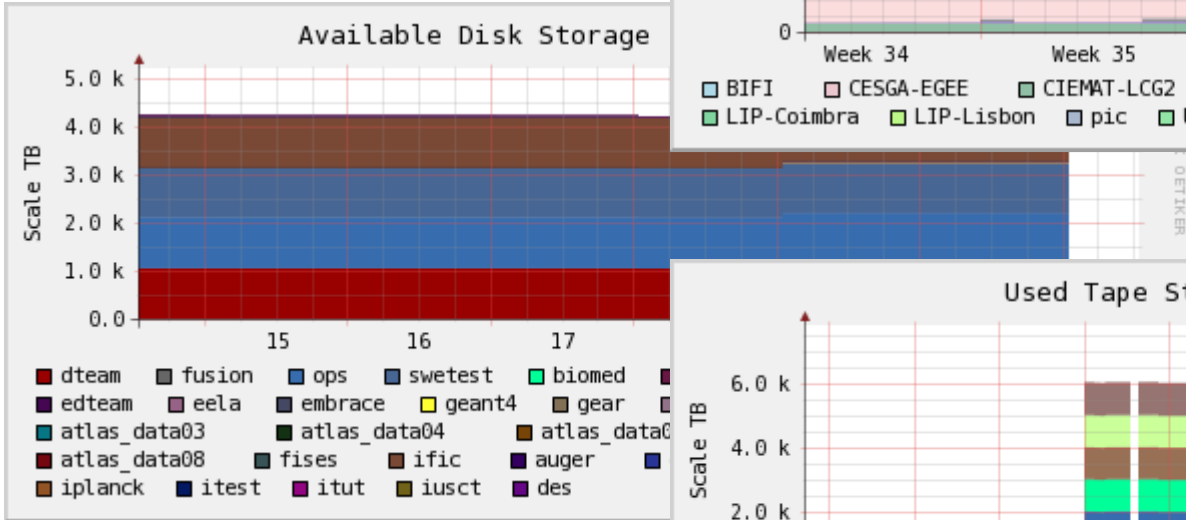
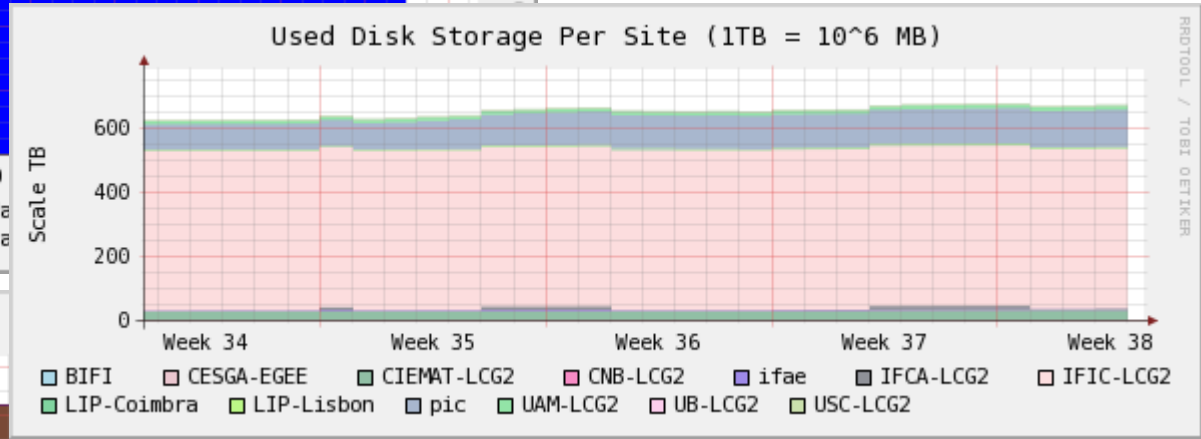
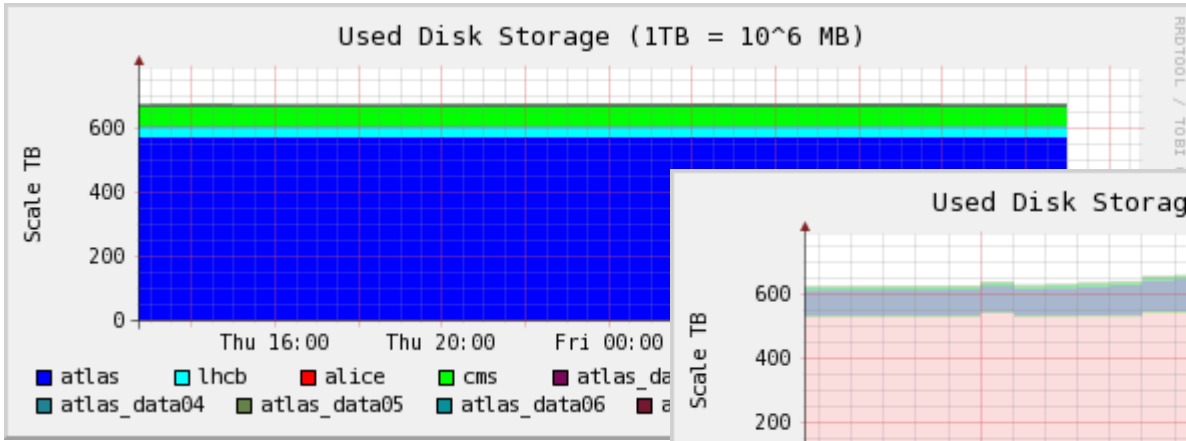
<http://goc02.grid-support.ac.uk/storage-accounting/view.php?queryType=storage>

- La información de almacenamiento se publica en los atributos ***GlueSAStateAvailableSpace*** y ***GlueSAStateUsedSpace***
- Esta información se captura desde un Top BDII y insertada en una base de datos (MySQL)
- Se recoge la información para todas las VOs soportadas por todos los sitios de EGEE
- Se distingue entre almacenamiento en disco y en cinta
- Este portal está en una fase inicial de desarrollo

Column name	Type	Primary key
RecordIdentity	VARCHAR(255)	Yes
ResourceIdentity	VARCHAR(255)	No
Grid	VARCHAR(50)	No
ExecutingSite	VARCHAR(50)	No
VO	VARCHAR(50)	No
SpaceUsed	INTEGER	No
SpaceAvailable	INTEGER	No
Total	INTEGER	No
Unit	VARCHAR(50)	No
SEArchitecture	VARCHAR(50)	No
Type	VARCHAR(50)	No
SrmType	VARCHAR(50)	No
EventDate	DATE	No
EventTime	TIME	No
MeasurementDate	DATE	No
MeasurementTime	TIME	No

```

RecordIdentity : ABC dcache.ab.ac xyz
2007-07-12 11:30:03
ResourceIdentity : dcache.ab.ac
      Grid : EGEE
ExecutingSite : ABC
      VO : xyz
      SpaceUsed : 32745970
SpaceAvailable : 13456930
      Total : 46202900
      Unit : MB
SEArchitecture : multitask
      Type : permanent
      SrmType : dcache
      EventDate : 2007-07-12
      EventTime : 11:30:03
MeasurementDate : 2007-07-12
MeasurementTime : 11:30:03
    
```






EGEE-II SA1 SWE Services > Accounting - Mozilla Firefox

Archivo Editar Ver Historial Marcadores Herramientas Ayuda

http://www.egee.cesga.es/EGEE-SA1-SWE/accounting/

Home > EGEE-II SA1 SWE Services > Accounting

EGEE-II SA1 SWE Accounting Facilities



Accounting Statistics

Accounting plots and reports of the SWE sites

[Accounting Statistics](#)

Contact

EGEE-SA1-SWE ROC Contact:
egee.swe.roc.contact@pic.es
Operational Days/Hours: Mo-Fri
 from 9:00 till 17:00




Guides

Useful guides for accounting tools

[Guides](#)

EGEE SA1 SWE

- [Previous Web Site](#)




FAQ

Frequently Asked Questions

[FAQ](#)

EGEE sites


- [EGEE Public Site](#)
- [EGEE Technical Site](#)
- [EGEE Training Site](#)
- [qLite Site](#)
- [Previous EGEE Site](#)



CPU Normal.

What criterion to use for producing normalized CPU times?


[CPU Normalization](#)



Links

Links to useful information

[Links](#)



EGEE RAP

EGEE Regional Accounting Portal (EGEE-RAP)

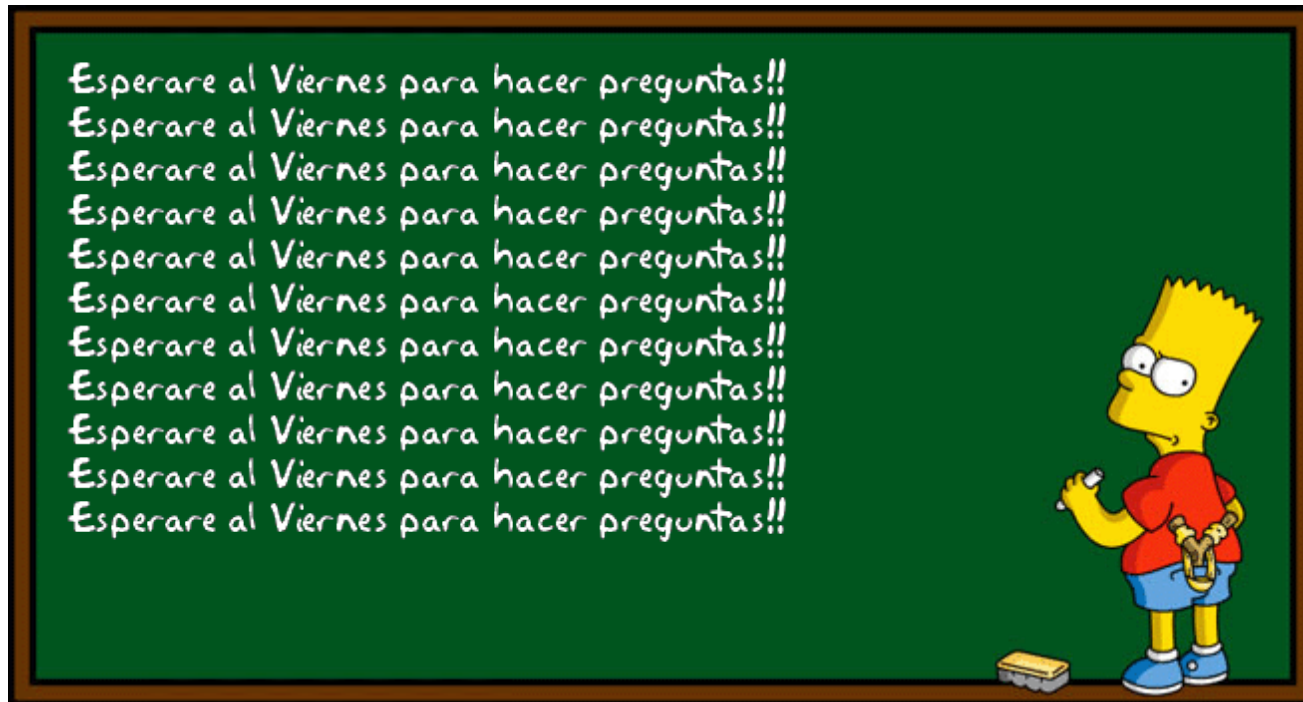
[EGEE-RAP](#)

EGEE-SA1-SWE Partners: 

EGEE-II is a project funded by the European Union under contract number INFISO-RI-031688
 Created by [CESGA](#)

Terminado

GRACIAS POR SU ATENCIÓN!! PREGUNTAS??



prey@cesga.es