



Enabling Grids for E-scienceE

The GENIUS portal and the GILDA t-Infrastructure

Roberto Barbera

University of Catania and INFN

EGEE Tutorial

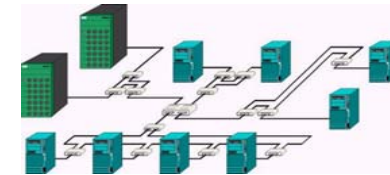
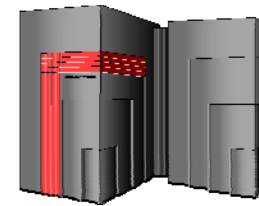
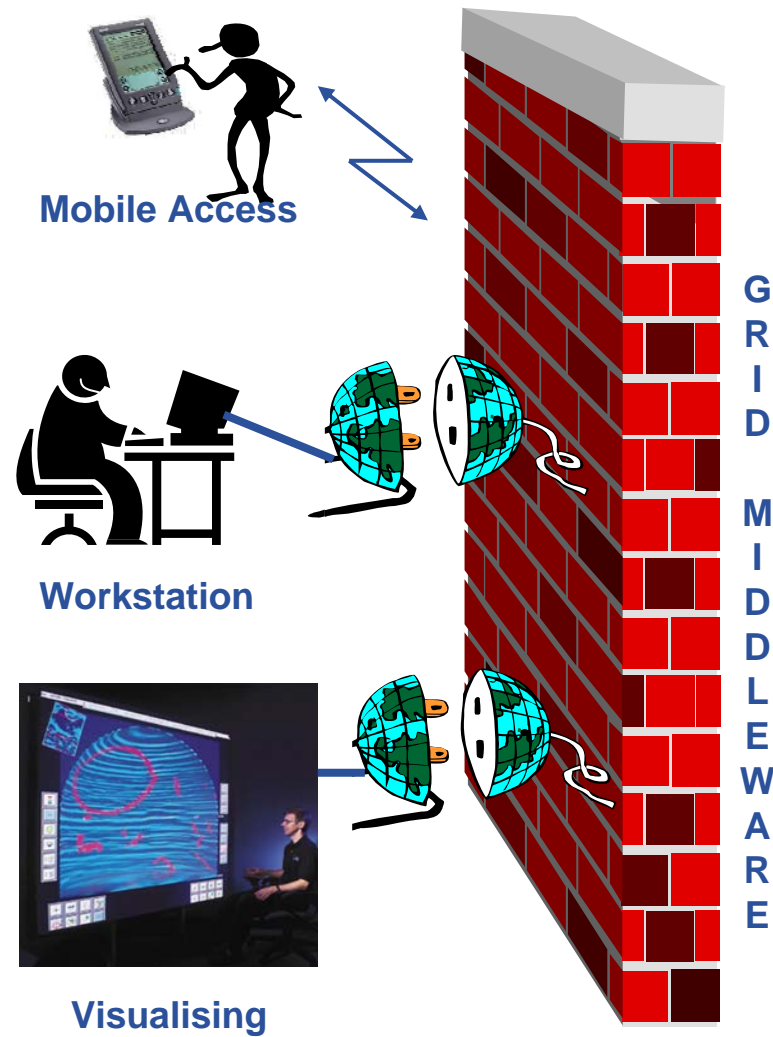
Tokyo, 25-26.08.2005

www.eu-egee.org

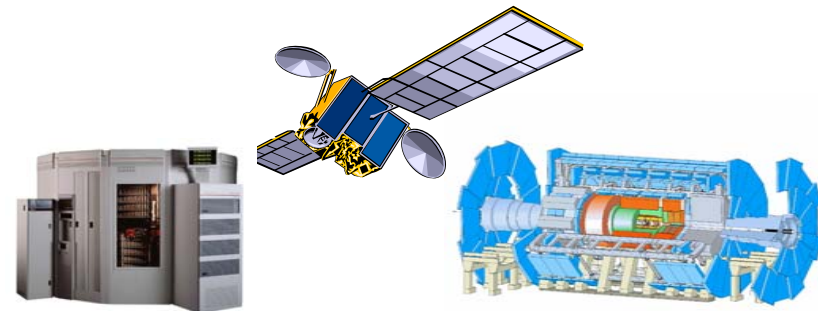


- **Introduction**
- **The GENIUS portal**
- **The GILDA t-Infrastructure**
 - services
 - tools
 - applications
 - tutorial lay-out
- **Summary and conclusions**

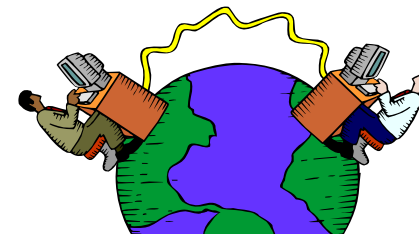
The Grid metaphor



Supercomputer, PC-Cluster

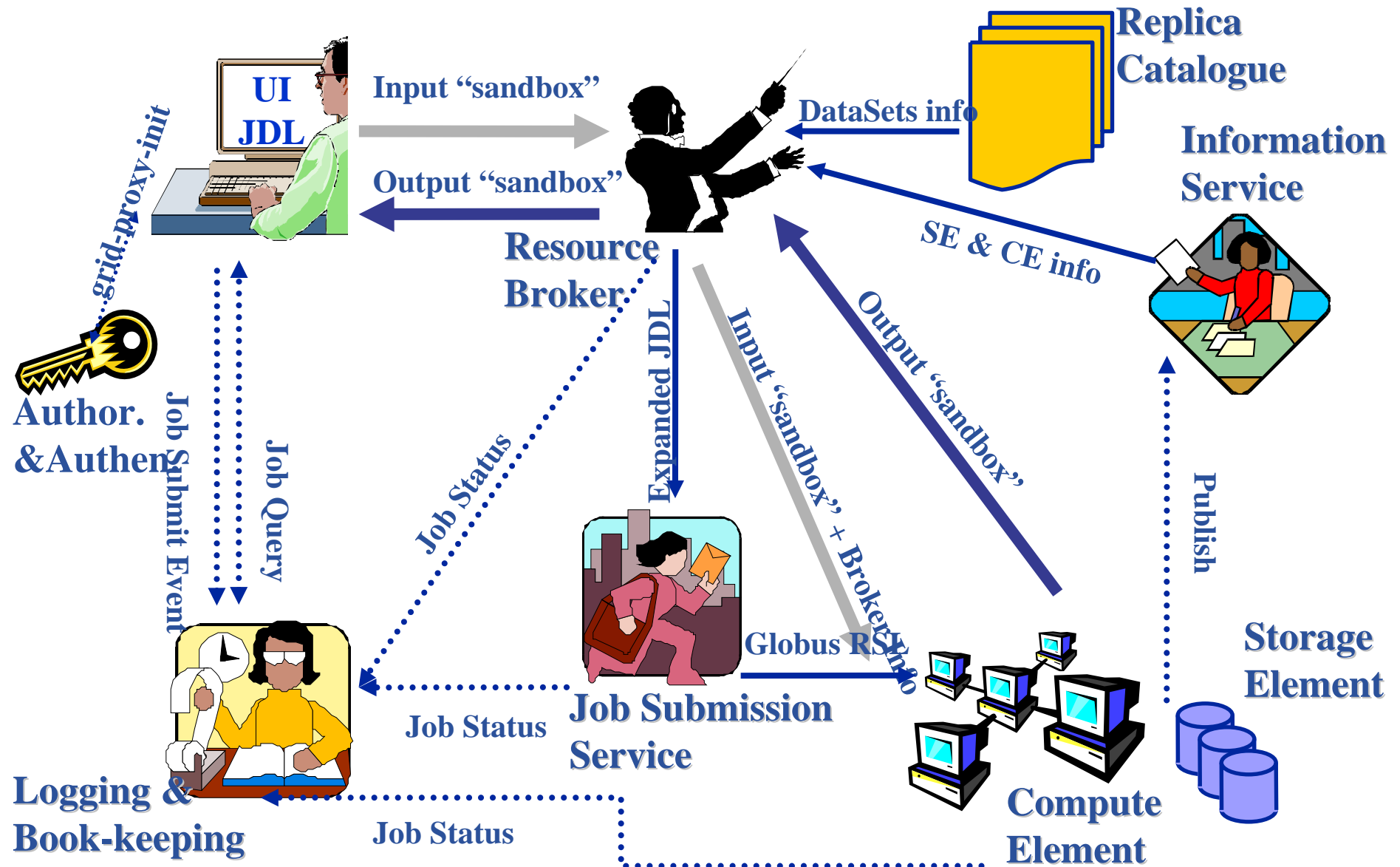


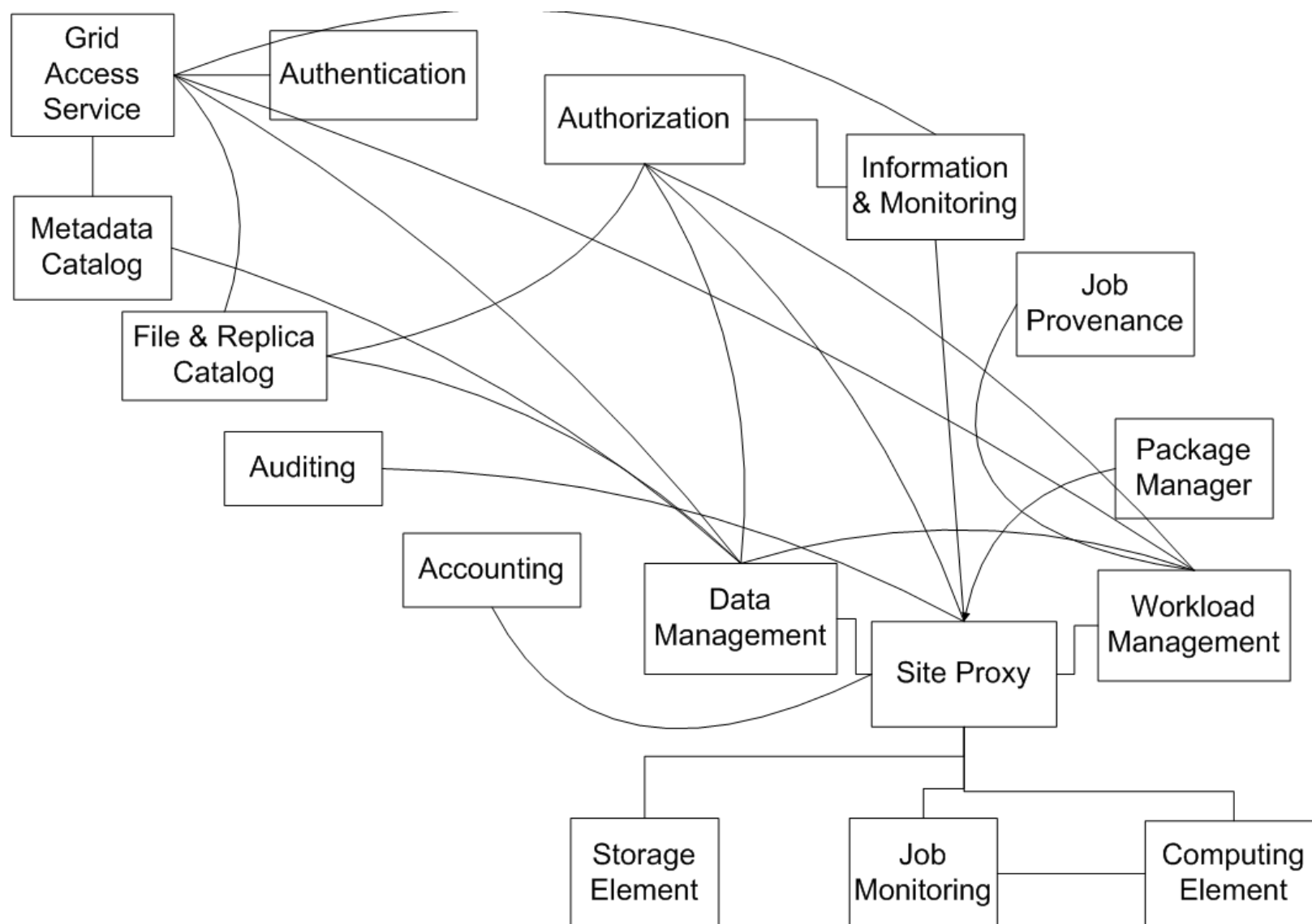
Data-storage, Sensors, Experiments



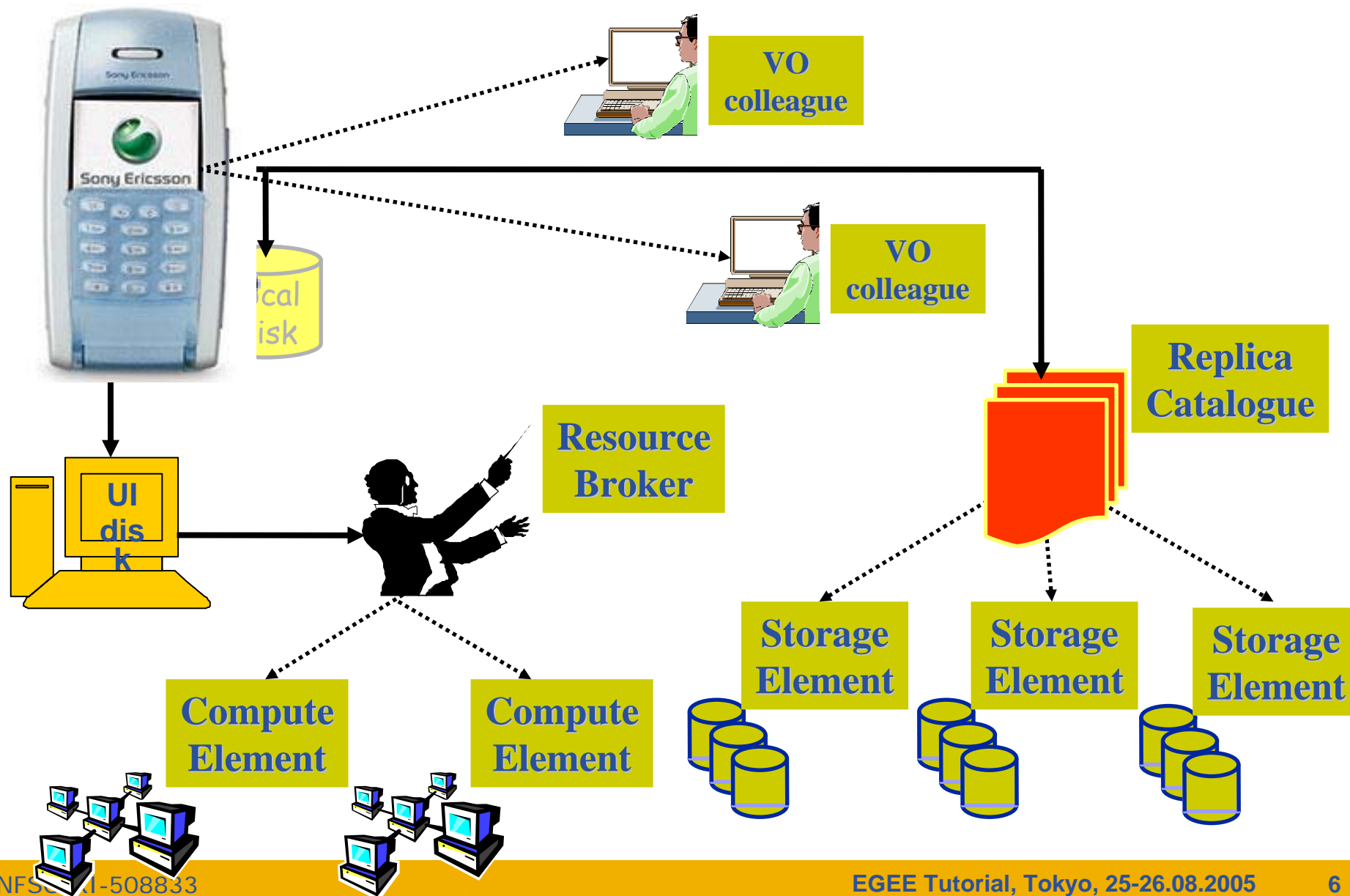
Internet, networks

A typical job workflow





The transparent grid access



The GENIUS hourglass model

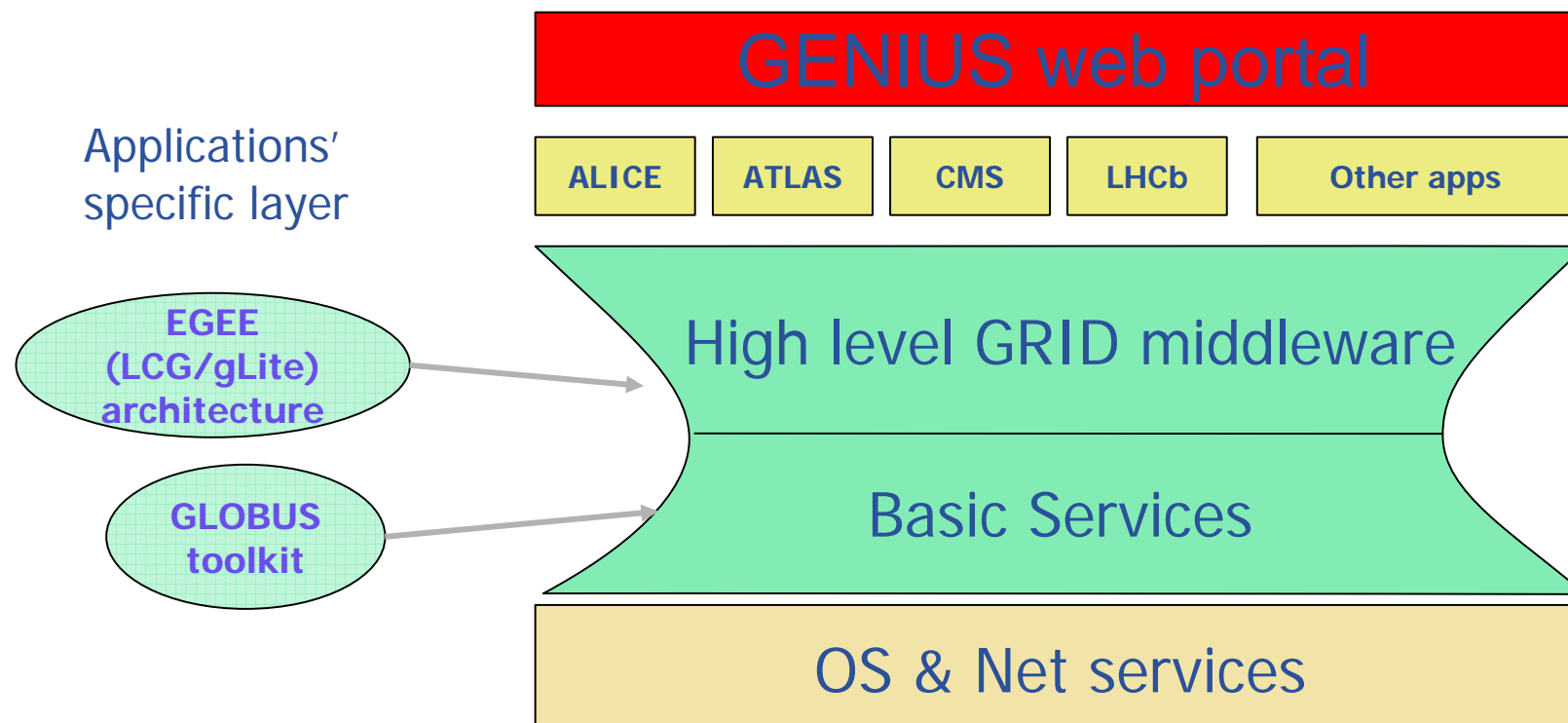


GENIUS®

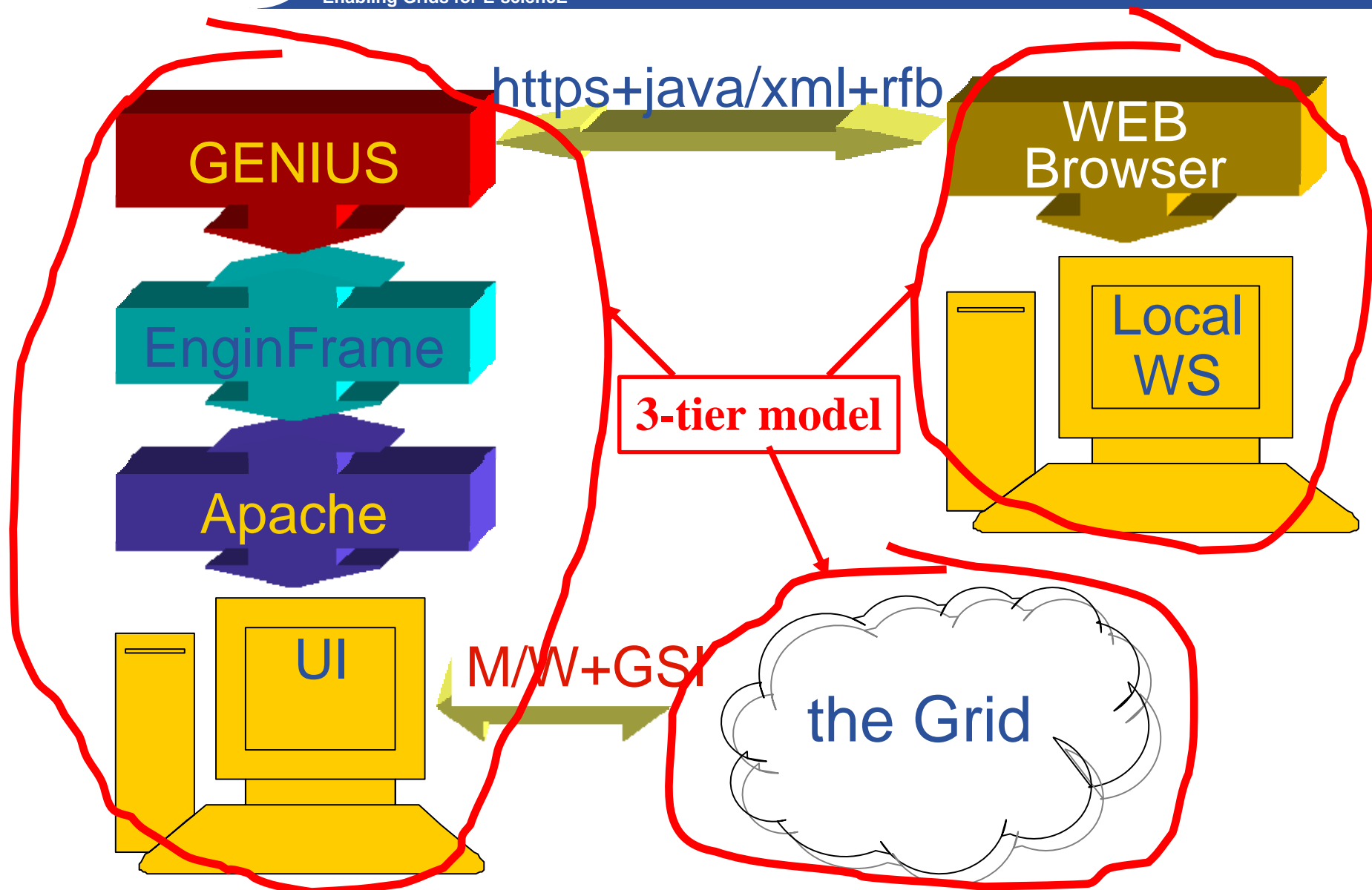
(Grid Enabled web eNvironment for
site Independent User job Submission)

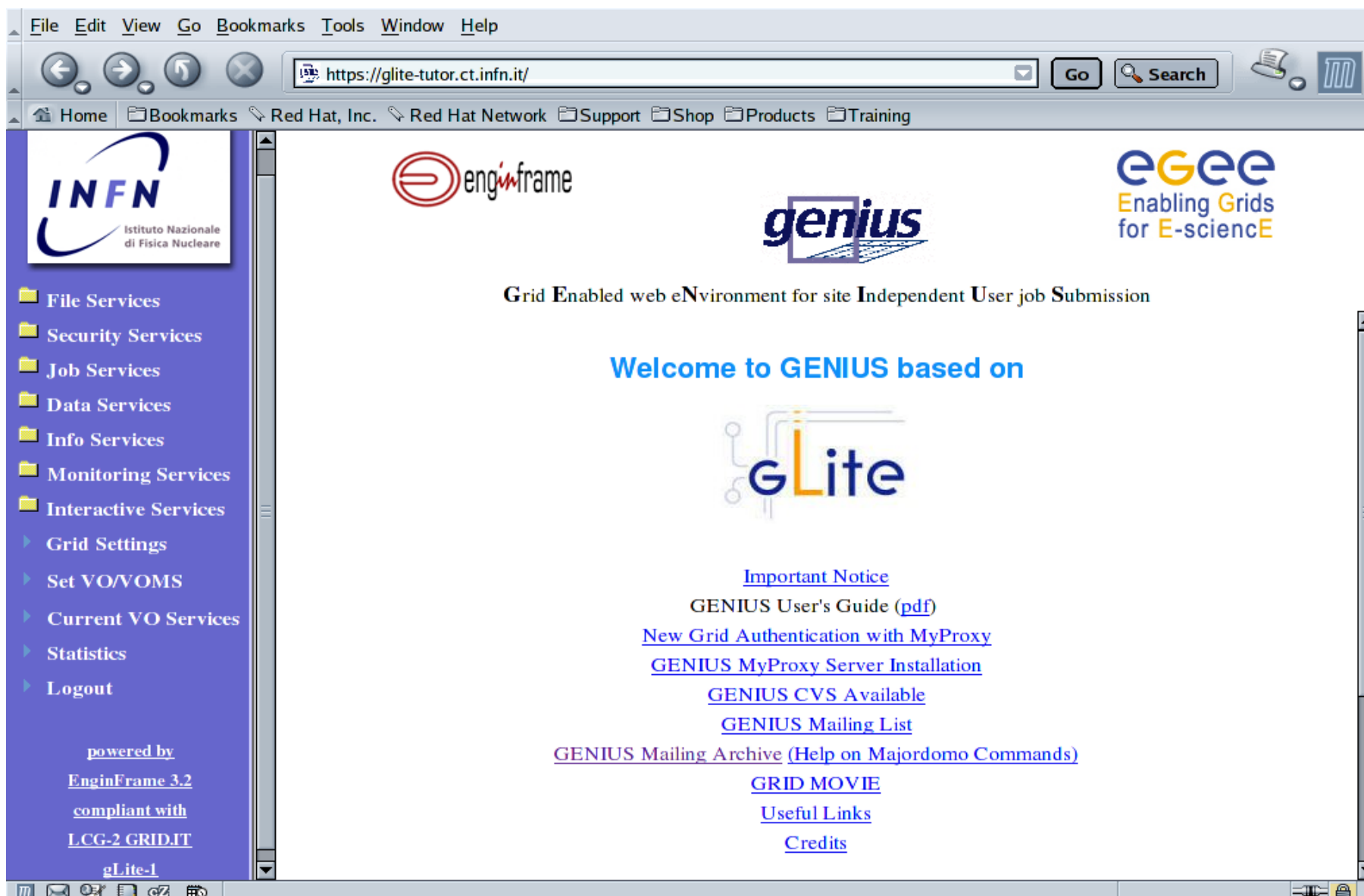
<https://genius.ct.infn.it>

INFN/NICE collaboration



GENIUS: how it works





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Welcome to GENIUS based on

gLite

[Important Notice](#)
[GENIUS User's Guide \(pdf\)](#)
[New Grid Authentication with MyProxy](#)
[GENIUS MyProxy Server Installation](#)
[GENIUS CVS Available](#)
[GENIUS Mailing List](#)
[GENIUS Mailing Archive \(Help on Majordomo Commands\)](#)
[GRID MOVIE](#)
[Useful Links](#)
[Credits](#)

File Services
 Security Services
 Job Services
 Data Services
 Info Services
 Monitoring Services
 Interactive Services
 ▶ Grid Settings
 ▶ Set VO/VOMS
 ▶ Current VO Services
 ▶ Statistics
 ▶ Logout

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eGEE Enabling Grids for E-science in Europe

Grid Enabled web eNvironment for site Independent User job Submission

RB: cnaf_gridit VO: alice RLS: GRIDIT Your Data Logout

File Services

- up
- Create a File
- View a File
- Edit a File
- Rename a File/Directory
- Delete a File/Directory
- Create a Directory
- Upload a TAR ball
- Upload a file
- Show the Environment

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View a File

With this service you may view a file in your home directory.

Select File to View

Remote File Browsing - Mozilla

alice_rc_nbc_production_mss.com	
alice_rc_mss.conf	414
alroot.jdl	1,644
alroot	1,136
authentication.log	294
csound.jdl	807
csound.orc	2,633
csound.sco	2,491
defcity.pov	1,951
demtools.jdl	1,158
dna.pov	4,731
edg_wl_ui_gui_log4j.log	0
edglog.log	1,050
file_09003.txt	14
golden_CO.dem	1,098,752
grand_canyon_AZ.dem	1,160,192

Last modified: Oct 1 2003

Path: /home/barbera


Selected: alroot.jdl

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RB: catania_gridit	VO: alice	RLS: GRIDIT	Your Data	Logout
<pre>##### ##### ## ## ---- Job Description for DEMENTOOLS ---- ## ## ## author: roberto.barbera@ct.infn.it ## ## ##### ##### Type = "Job"; JobType = "Normal"; Executable = "/bin/sh"; MyProxyServer="lxshare0207.cern.ch"; StdOutput = "dementools.out"; StdError = "dementools.err"; InputSandbox = {"start_dementools.sh","mount_sainte_helens_WA.dem","grand_canyon_AZ.dem"}; OutputSandbox = {"dementools.out","dementools.err","mount_sainte_helens_WA.ppm","mount_sainte_helens_WA.wr RetryCount = 7; Arguments = "start_dementools.sh"; Requirements = Member("DEMENTOOLS-1.0",other.GlueHostApplicationSoftwareRunTimeEnvironment) Member("I</pre>				

File Services

- up
- Create a File
- View a File
- Edit a File
- Rename a File/Directory
- Delete a File/Directory
- Create a Directory
- Upload a TAR ball
- Upload a file
- Show the Environment


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Enabling Grids for
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Grid Enabled web eNvironment for site Independent User job Submission

Login to the GRID

Username:

MyProxy Passphrase:

Validity (hours):

Login

File Services

Security Services

Job Services

Data Services

Info Services

Monitoring Services

Interactive Services

Grid Settings

Set VO

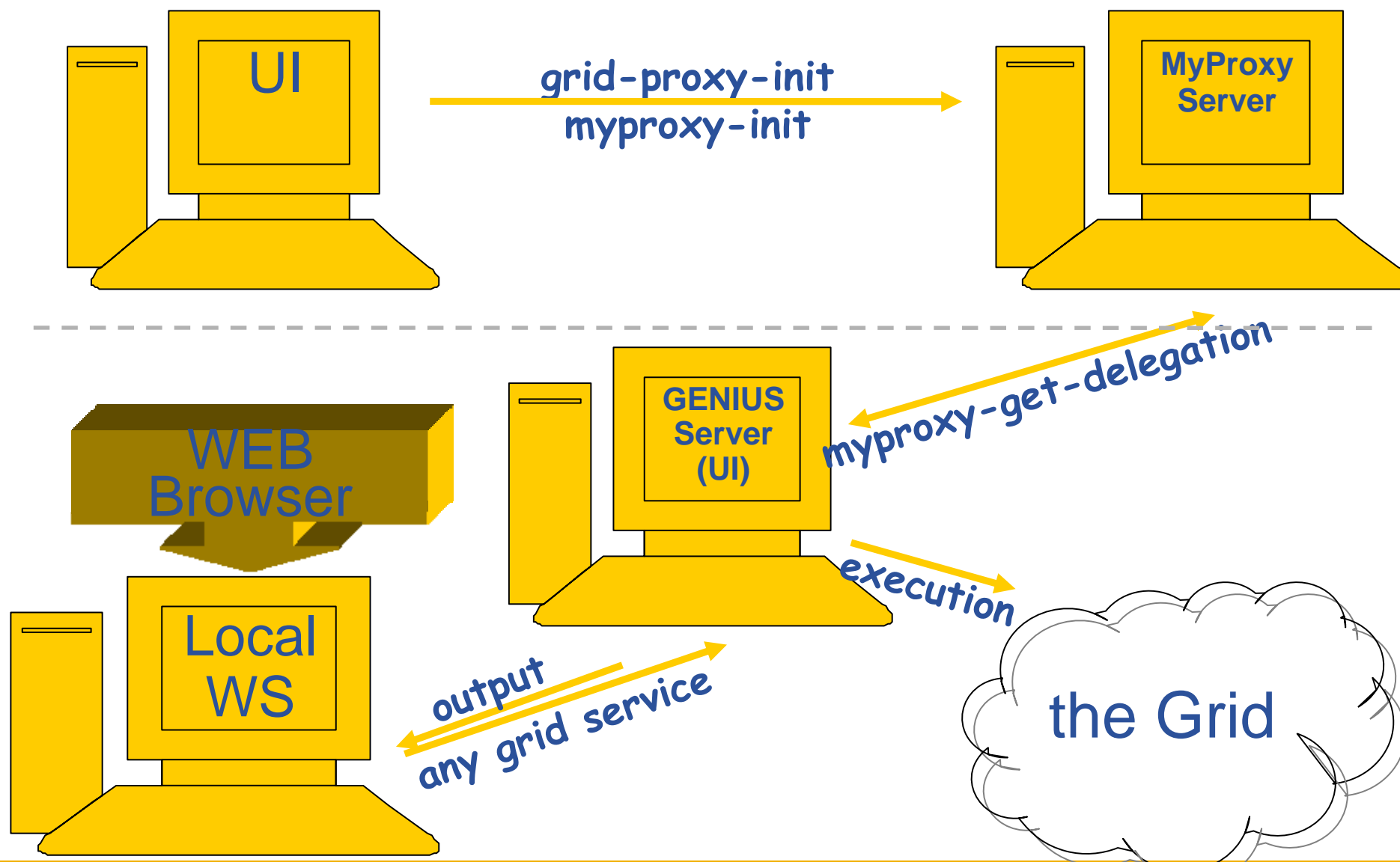
Current VO Services

Statistics

Logout

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Grid authentication with MyProxy





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Grid Enabled web eNvironment for site Independent User job Submission

RB: cnaf_gridit VO: alice RLS: GRIDIT Your Data Logout

Grid Settings

With this service you can select the Resource Broker and the Replica Location Server you want to use.

It is possible also to set the MyProxy Server on which you stored your temporary proxy to get from GRID Authentication.

Resource Broker (RB): CNAF GRIDIT (currently selected)

Replica Location Server (RLS): GRIDIT (currently selected)

MyProxy Server: grid001.ct.infn.it (currently selected)

Update

File Services
 Security Services
 Job Services
 Data Services
 Info Services
 Monitoring Services
 Interactive Services
 Grid Settings
 Set VO
 Current VO Services
 Statistics
 Logout


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- File Services
- Security Services
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- Info Services
- Monitoring Services
- Interactive Services
 - Grid Settings
 - Set VO
 - Current VO Services
 - Statistics
 - Logout

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RB: cnaf_gridit VO: alice RLS: GRIDIT Your Data Logout

Set VO

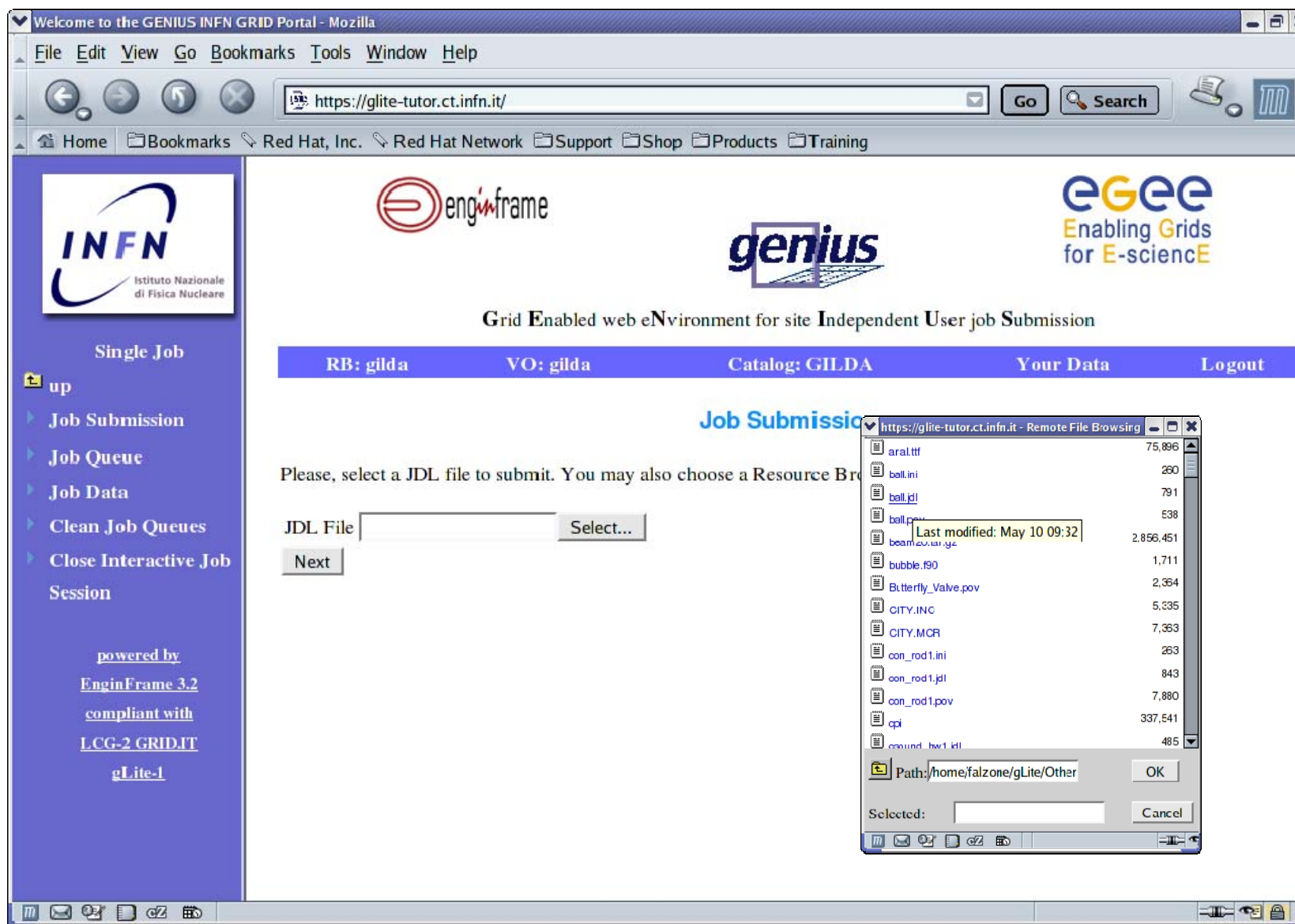
With this service you can select the Virtual Organization you belong to.

Virtual Organization (VO):

Set

- ALICE (currently selected)
- GILDA
- ATLAS
- BABAR
- BIO
- Biomedical
- CMS
- D0
- DIANE
- Dissemination
- Earth Observation
- ITeam
- LHCb
- PANDA
- THEOPHYS
- TUTOR
- VIRGO
- WORLDGRID
- WPSix

Done



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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

Job Submission

Please, select a JDL file to submit. You may also choose a Resource Broker

JDL File Select... Next

Single Job

up

Job Submission

Job Queue

Job Data

Clean Job Queues

Close Interactive Job Session

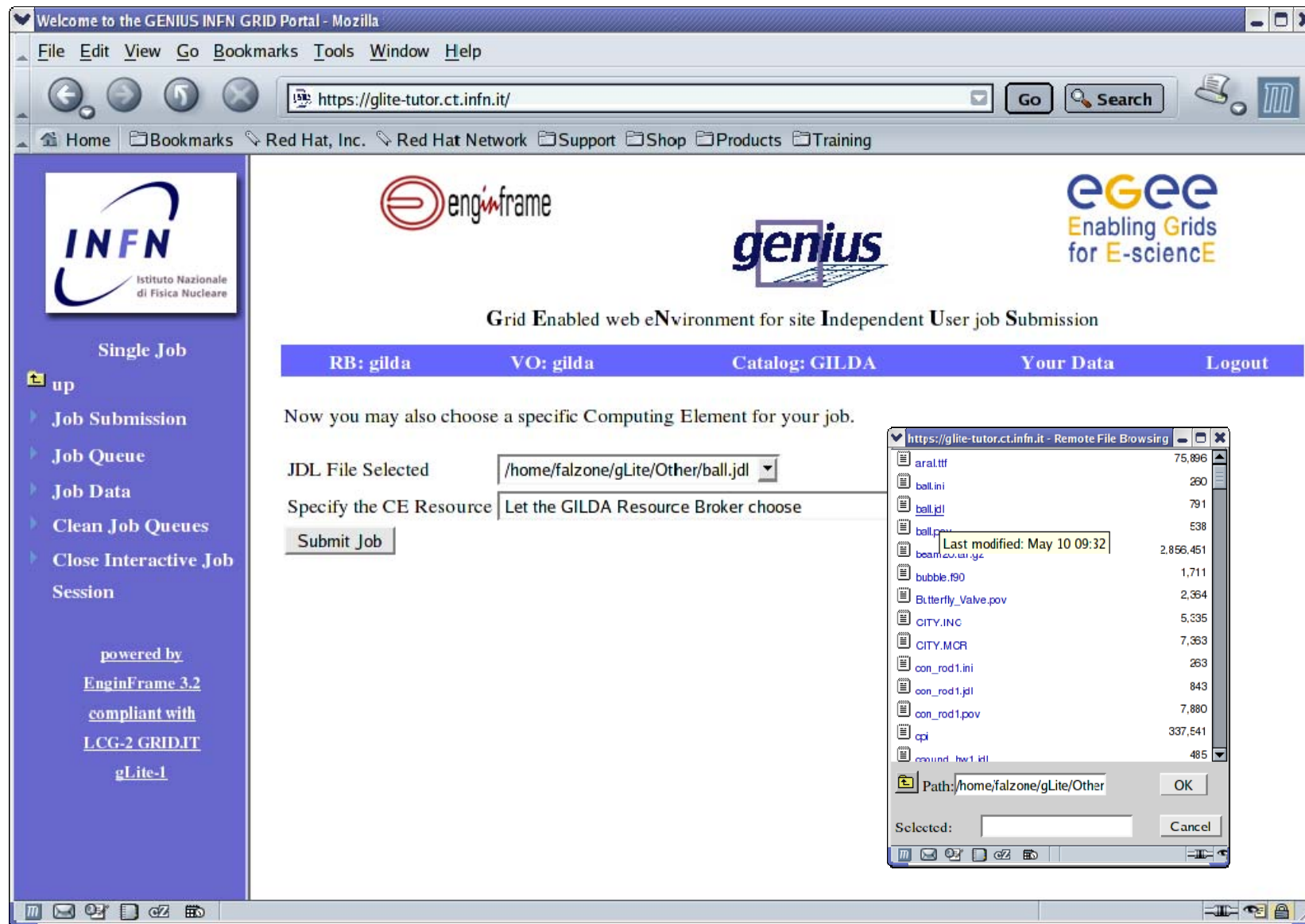
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https://glite-tutor.ct.infn.it - Remote File Browser

aral.ttf	75,896
ball.ini	260
ball.jdl	791
ball.pov	538
beam2001.w.glc	2,856,451
bubble.f90	1,711
Butterfly_Valve.pov	2,364
CITY.INC	5,335
CITY.MCR	7,363
con_rod1.ini	263
con_rod1.jdl	843
con_rod1.pov	7,880
cpu	337,541
ground_hw1.kit	485

Path: /home/falzone/gLite/Other OK

Selected: Cancel



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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

Single Job

up

- Job Submission
- Job Queue
- Job Data
- Clean Job Queues
- Close Interactive Job Session

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Now you may also choose a specific Computing Element for your job.

JDL File Selected

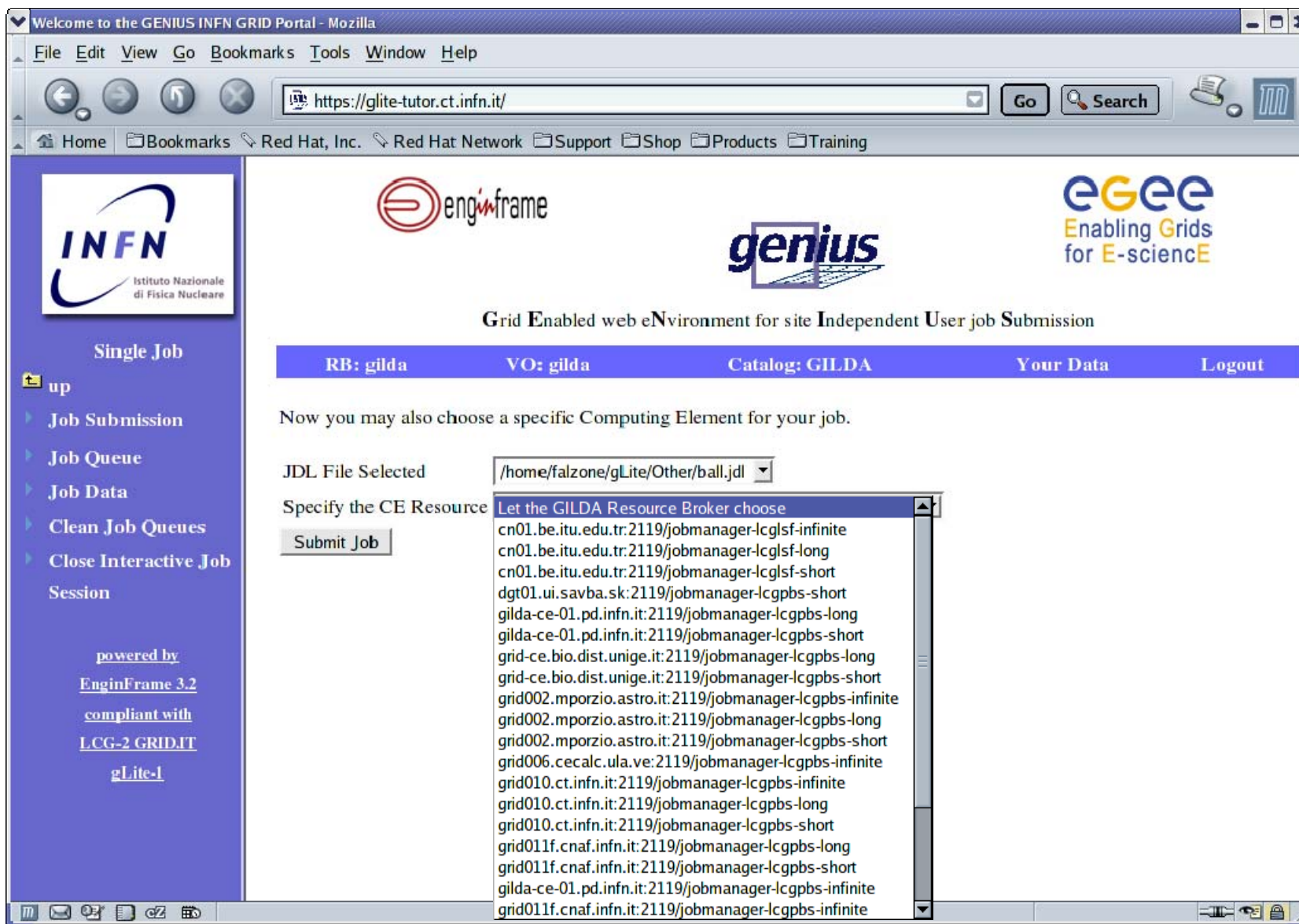
Specify the CE Resource

Remote File Browser

Path: /home/falzone/gLite/Other

Selected:

OK Cancel



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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

Single Job

up

- Job Submission
- Job Queue
- Job Data
- Clean Job Queues
- Close Interactive Job Session

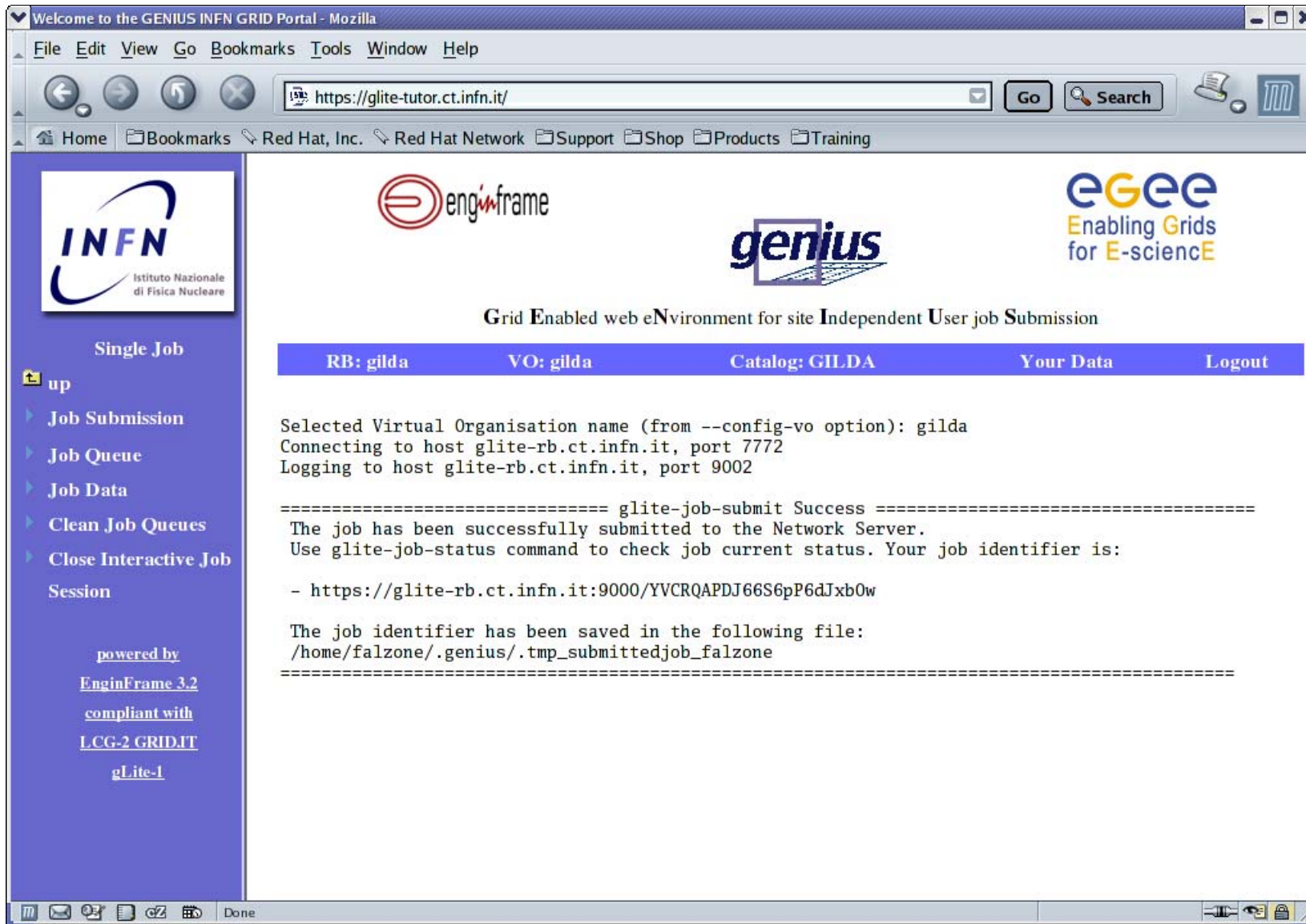
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Now you may also choose a specific Computing Element for your job.

JDL File Selected

Specify the CE Resource

- cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-infinite
- cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-long
- cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-short
- dgt01.ui.savba.sk:2119/jobmanager-lcgpbs-short
- gilda-ce-01.pd.infn.it:2119/jobmanager-lcgpbs-long
- gilda-ce-01.pd.infn.it:2119/jobmanager-lcgpbs-short
- grid-ce.bio.dist.unige.it:2119/jobmanager-lcgpbs-long
- grid-ce.bio.dist.unige.it:2119/jobmanager-lcgpbs-short
- grid002.mporzio.astro.it:2119/jobmanager-lcgpbs-infinite
- grid002.mporzio.astro.it:2119/jobmanager-lcgpbs-long
- grid002.mporzio.astro.it:2119/jobmanager-lcgpbs-short
- grid006.cecalc.ula.ve:2119/jobmanager-lcgpbs-infinite
- grid010.ct.infn.it:2119/jobmanager-lcgpbs-infinite
- grid010.ct.infn.it:2119/jobmanager-lcgpbs-long
- grid010.ct.infn.it:2119/jobmanager-lcgpbs-short
- grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-long
- grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-short
- gilda-ce-01.pd.infn.it:2119/jobmanager-lcgpbs-infinite
- grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-infinite



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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

Single Job

up

Job Submission

Job Queue

Job Data

Clean Job Queues

Close Interactive Job Session

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Selected Virtual Organisation name (from --config-vo option): gilda
Connecting to host glite-rb.ct.infn.it, port 7772
Logging to host glite-rb.ct.infn.it, port 9002

===== glite-job-submit Success =====
The job has been successfully submitted to the Network Server.
Use glite-job-status command to check job current status. Your job identifier is:

- https://glite-rb.ct.infn.it:9000/YVCRQAPDJ66S6pP6dJxb0w


The job identifier has been saved in the following file:
/home/falzone/.genius/.tmp_submittedjob_falzone
=====

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Job Editor

Job Services

- up
- Single Job
- Multi Job
- ▶ List Available Resources
- ▶ Job Editor
- ▶ Job GUI
- ▶ Close Job GUI Session

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Job Name /home/barbera/aliroot.jdl

Job Type

Job Definition 1

Job Definition 2

Job Data

Requirements

Rank

Unknown

Executable /bin/sh
Arguments script-short.sh

☒ Remote

Standard Streams

StdInput
StdOutput aliroot.out
StdError aliroot.err

☐ Remote
☒ Add to Output Sandbox
☒ Add to Output Sandbox

Input Sandbox

grun_3_09_06_hbt.C
 Config_HBT.C
 AliITSDigits2RecPoints.C
 AliITSTrackingV1.C
 AliITSEndClustersV2.C


Output Sandbox

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Single Job

- up
- Job Submission
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- Job Data
- Clean Job Queues
- Close Interactive Job Session

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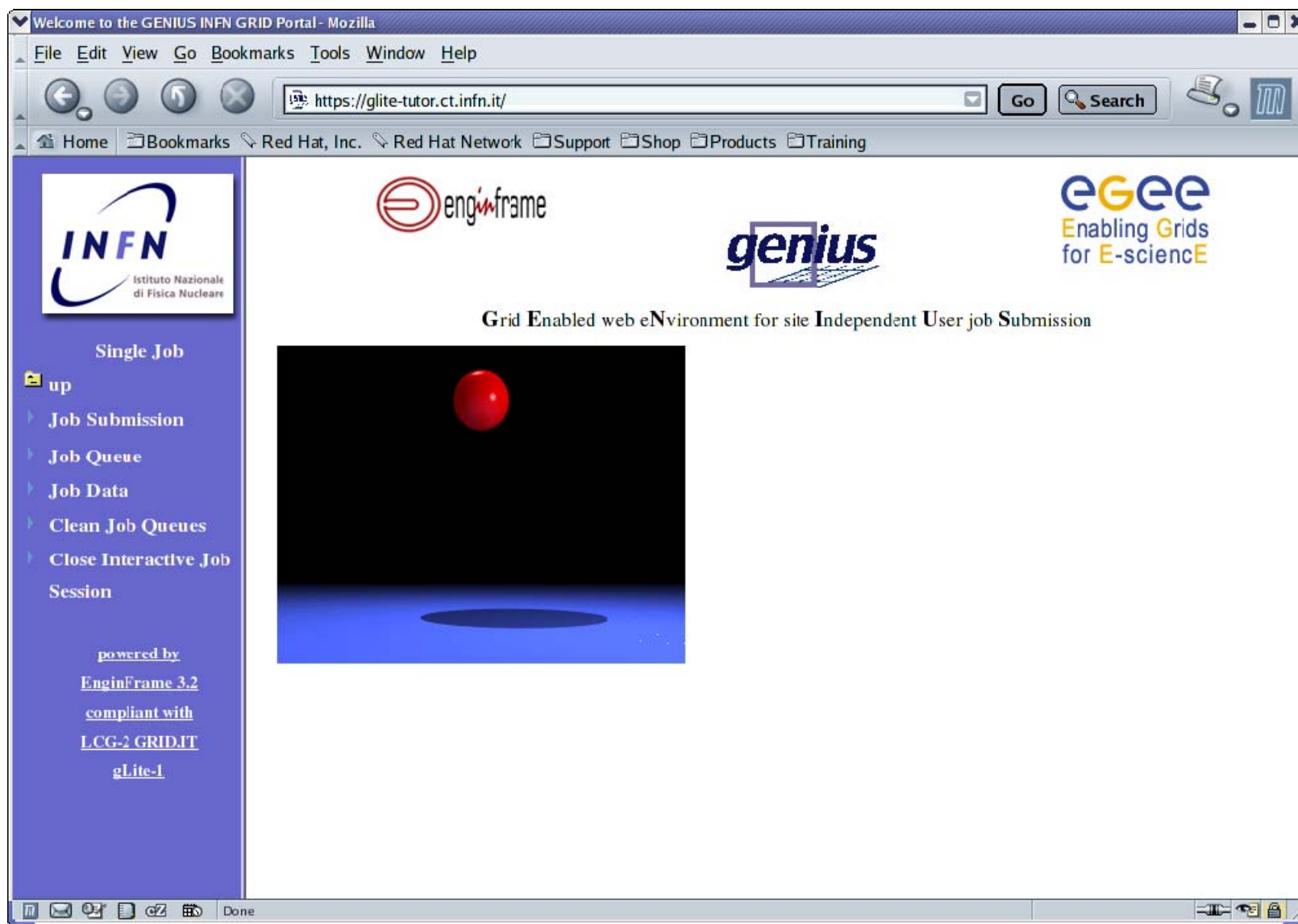
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VO: gilda Catalog: GILDA Your Data Logout

Job Queue

JDL Name	Last Update	Destination	Status	Exit Code	Action
pP6dJxb0w /home/falzone/gLite/Other/ball.jdl	Jun 13 01:39:05 grid011f.cnaif.infn.it:2119/jobmanager-lcgpbs-short	Done	0		Get Output
	2005				
	CEST				

https://glite-tutor.ct.infn.it/inf.grid.xml?_uri=/com.enginframe....&dg_jobid=https://glite-rb.ct.infn.it:9000/YVCRQAPDJ66S6pP6dJxb0w




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Other Job Services

- up
- Job Submission
- Job Queue
- Job Data
- Clean Job Queue

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RB: gilda	VO: gilda	RLS: GILDA	Logout
Destroy	Directory contents - 20040707_120711_93mr3tpgEaXumBp-JdZwvA		
ENVISAT_Product_courtesy_of_European_Space_Agency		0	pds2jpg.err.txt 66
MER_FR_2PNUPA20030504_092534_000000502016_00079_06145_0033.jpg		125,431	pds2jpg.out.txt 634

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RB: gilda VO: gilda

Please, select a JDL file to submit. You may

JDL File Select...

Next

Logout

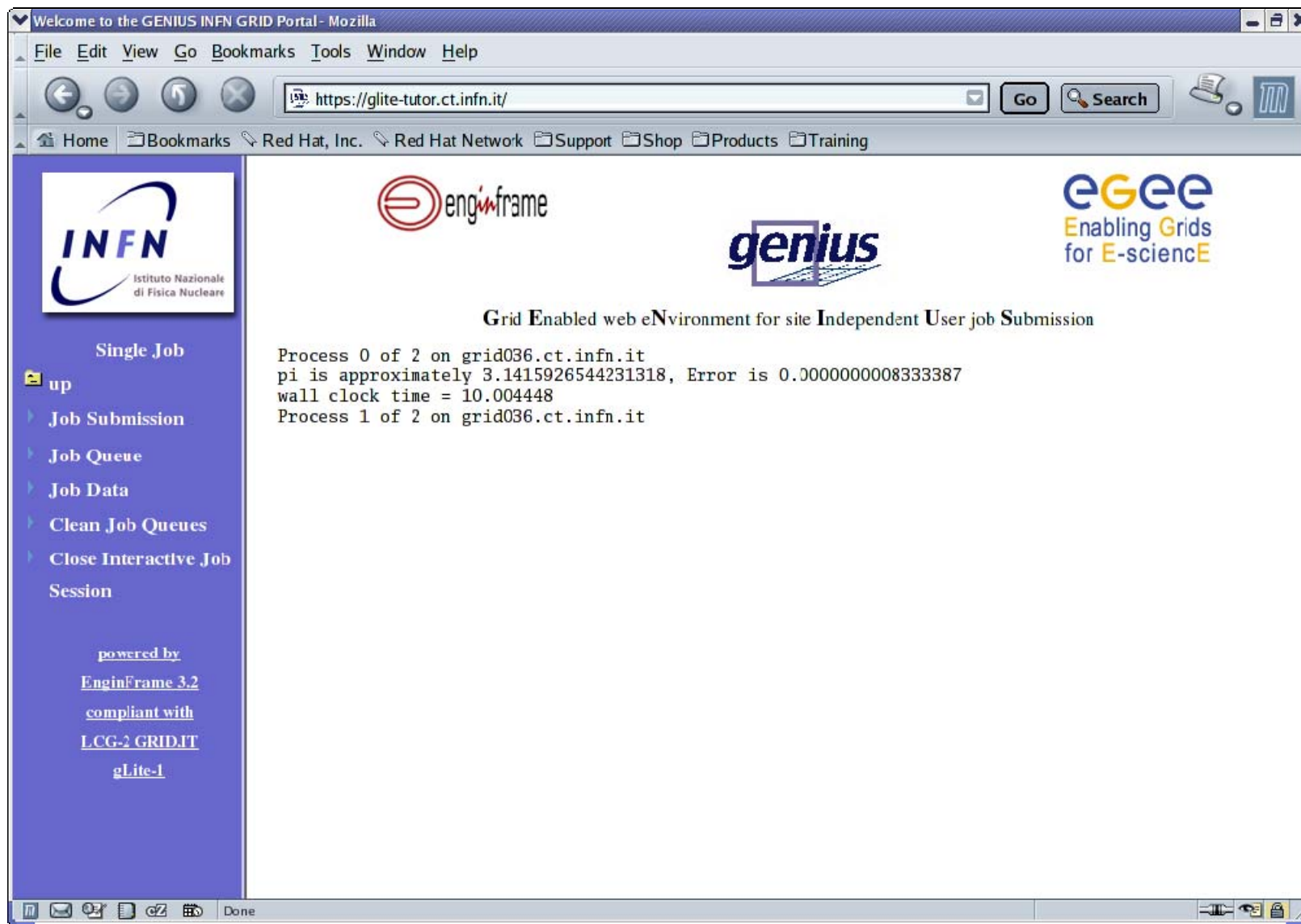
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loop7g3.pov	2,278
loop7h1.pov	2,290
loop7k.pov	2,683
merge.f90	2,742
mills.jdl	749
morrison_CO.dem	1,100,800
mount_sainte_helens_WA.dem	995,328
Mozart_K545.jdl	688
Mozart_K545.orc	1,142
Mozart_K545.sco	21,507
mpi.jdl	534
MPitest.sh	2,288
MPitest.sh.orig	2,026
OFFICES.ORG	3,351

Path: /home/falzone/gLite/Other OK

Selected: mpi.jdl Cancel

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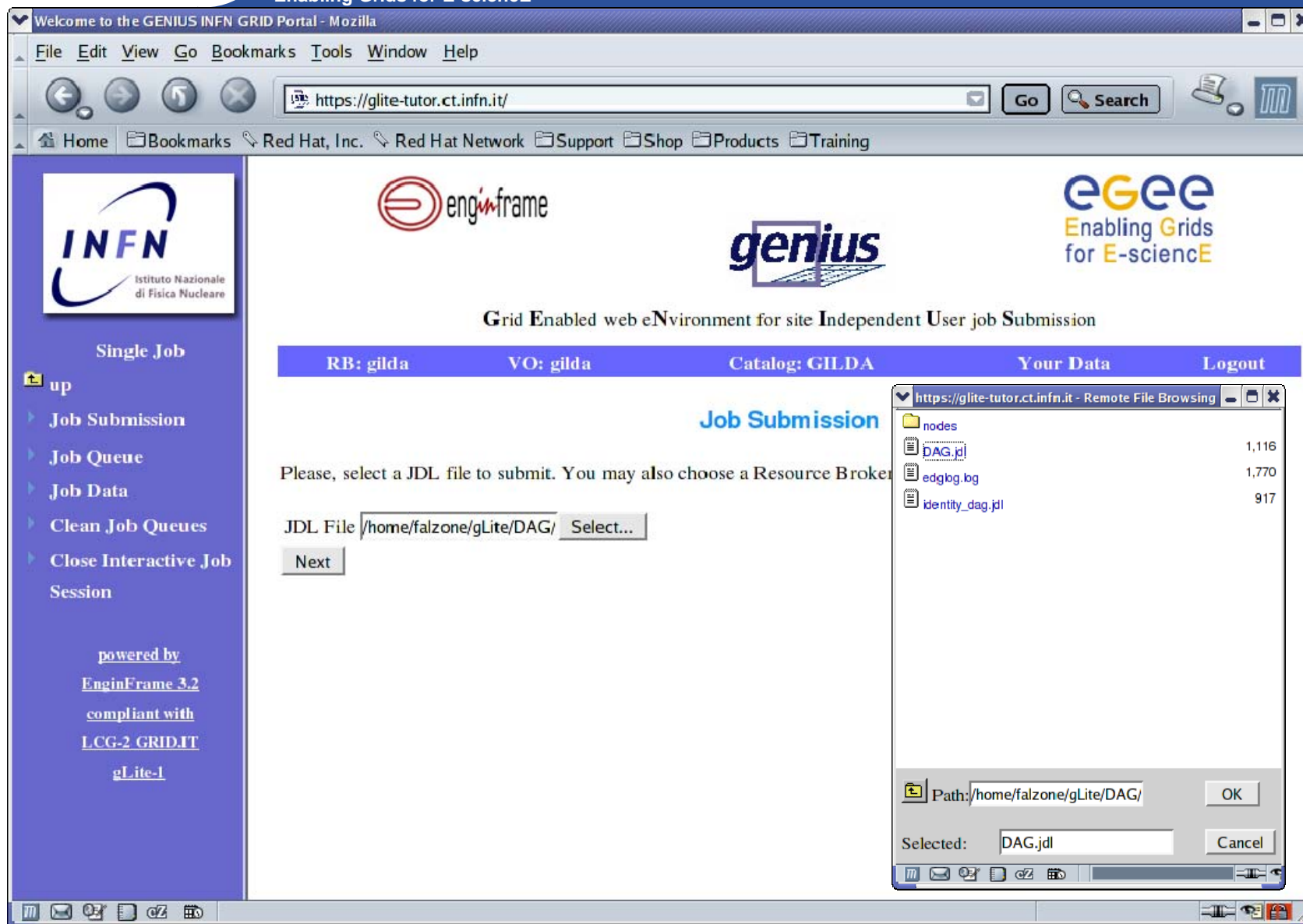
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Process 0 of 2 on grid036.ct.infn.it
pi is approximately 3.1415926544231318, Error is 0.0000000008333387
wall clock time = 10.004448
Process 1 of 2 on grid036.ct.infn.it

Single Job

- up
- Job Submission
- Job Queue
- Job Data
- Clean Job Queues
- Close Interactive Job Session

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Job Submission

Please, select a JDL file to submit. You may also choose a Resource Broker

JDL File

Remote File Browsing

nodes	
DAG.jdl	1,116
edglog.bg	1,770
identity_dag.jdl	917

Path:

Selected:


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Job Queue


#	Job ID	JDL Name	Last Update	Destination
2	Pr4PeivaJeWSIFRC6xpQT3g	/home/falzone/gLite/DAG/identity_ex/DAG.jdl	Jun 13 02:12:49 dagman 2005 CEST	
1	YVCRQAPDj66S6pP6dJxb0w	/home/falzone/gLite/Other/ball.jdl	Jun 13 01:39:05 grid011f.cnaf.infn.it:2119/jobmanag 2005 CEST	

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- Close Interactive Job Session

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:9000/A1UXZWML3FTQIMIZyq-wtRQ	DAG	13	cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-infinite	Done	0
02:12:49					
2005					
Mon Jun					
:9000/BfaDZwd7-U8REqybVUv8nw	DAG	13	cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-infinite	Done	0
02:12:49					
2005					
Mon Jun					
:9000/SiXOsYyAHTqjGbTk7dco8Q	DAG	13	cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-infinite	Done	0
02:12:49					
2005					
Mon Jun					
:9000/ISmCAIQ2i0iOX9Ia2APtg	DAG	13	cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-infinite	Done	0
02:12:49					
2005					


Done

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Single Job

up

- Job Submission
- Job Queue
- Job Data
- Clean Job Queues
- Close Interactive Job Session

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da Catalog: GILDA Your Data Logout

Job Queue


JDL Name	Last Update	Destination	Status	Exit Code	Action
home/falzone/gLite/DAG/identity_ex/DAG.jdl	Jun 13 02:12:49	dagman	Done	0	Get Output
	2005				
	CEST				
home/falzone/gLite/Other/ball.jdl	Jun 13 01:39:05	grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-short	Done	0	Get Output
	2005				
	CEST				

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Single Job

up

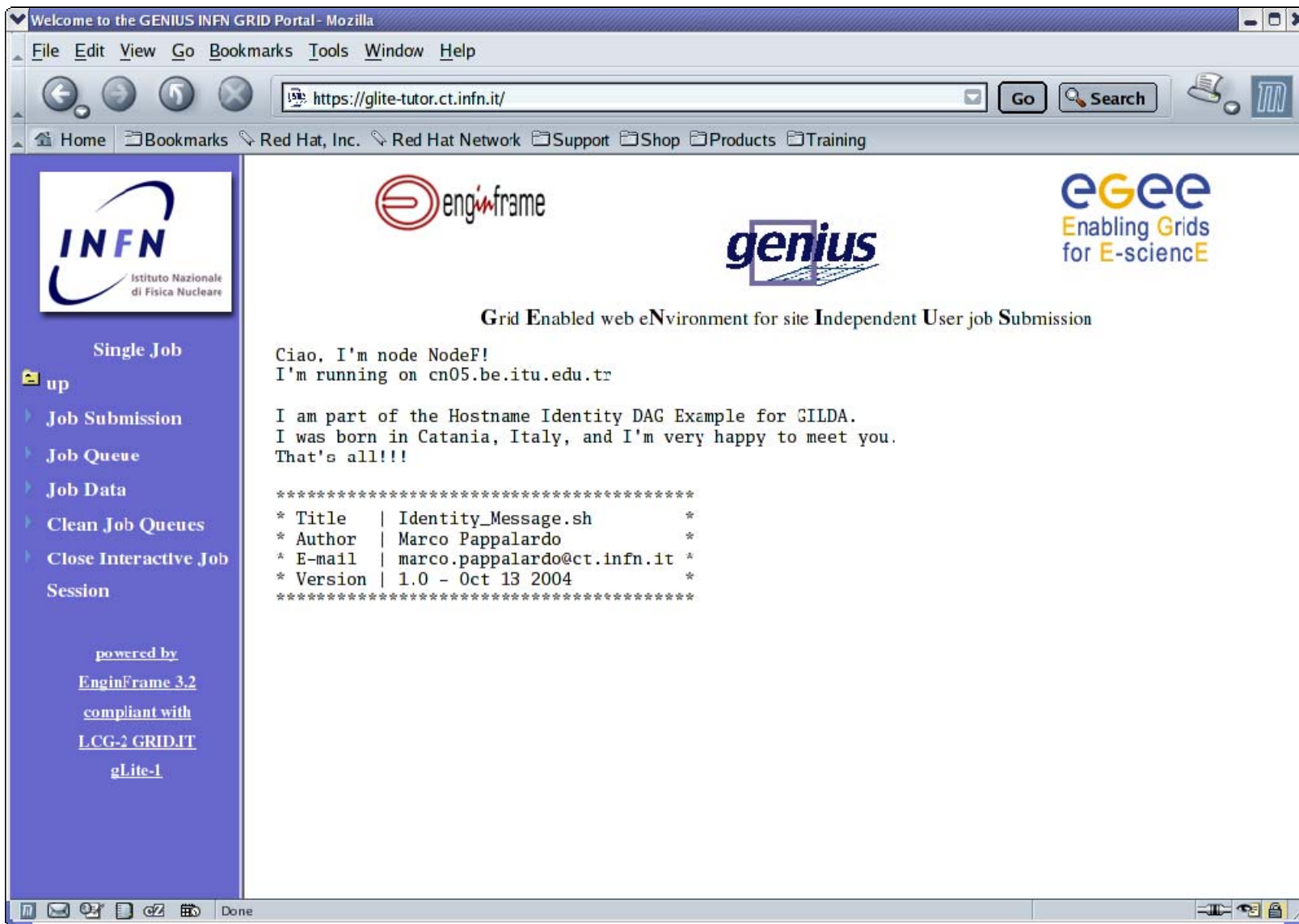
- Job Submission
- Job Queue
- Job Data
- Clean Job Queues
- Close Interactive Job Session

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RB: gilda	VO: gilda	Catalog: GILDA	Your Data	Logout
Destroy Directory contents - 20050613_023316_Pr4PeivaJeWSFRC6xpQT3g				
falzone_2UUwTu-l73tM9txFMd4U6A	4,096	falzone_ksTOgOjlobLM-hk5kX9v6g	4,096	
falzone_6RVUqB5e22en_xSmn0w21Q	4,096	falzone_lSmCAIQ2i0iOX9'ta2APtg	4,096	
falzone_85ltwHmPR_Zix8H2YYjc5A	4,096	falzone_SiXOsYyAHTqjGbTk7dco8Q	4,096	
falzone_AYdx2wMY5PfQM2yq-WrgQ	4,096	falzone_sS-bzZyfXMRkzk3703A7UQ	4,096	
falzone_BfaDZwd7-U8REqybVUv8aw	4,096			



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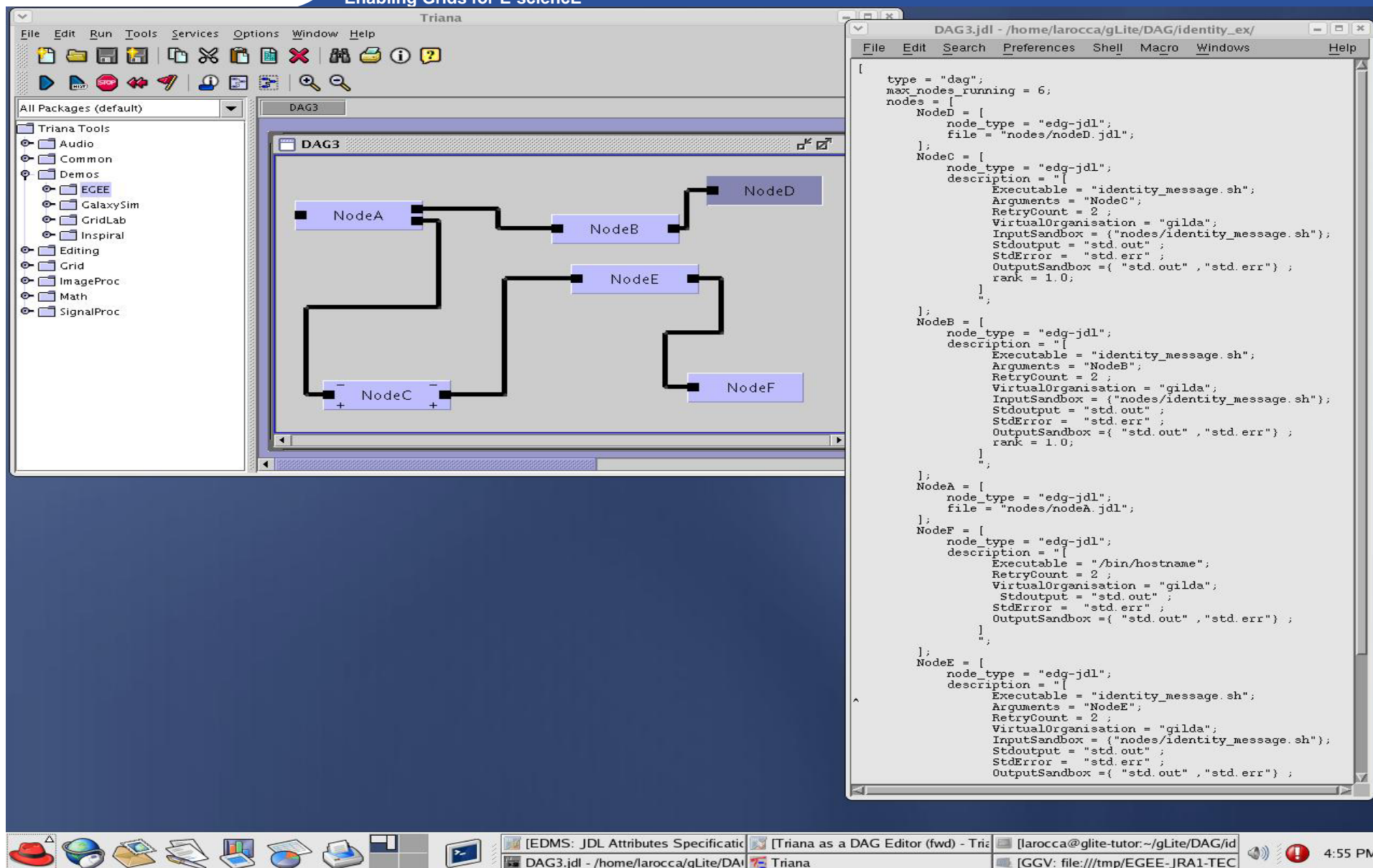
Ciao, I'm node NodeF!
I'm running on cn05.be.itu.edu.tr

I am part of the Hostname Identity DAG Example for GILDA.
I was born in Catania, Italy, and I'm very happy to meet you.
That's all!!!

```
*****
* Title   | Identity_Message.sh      *
* Author  | Marco Pappalardo         *
* E-mail  | marco.pappalardo@ct.infn.it *
* Version | 1.0 - Oct 13 2004        *
*****
```

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The screenshot displays the TRIANA DAG Editor interface. On the left, a sidebar lists various packages including Triana Tools, Audio, Common, Demos, EGEE, GalaxySim, GridLab, Inspiral, Editing, Grid, ImageProc, Math, and SignalProc. The main workspace shows a DAG (Directed Acyclic Graph) with six nodes: NodeA, NodeB, NodeC, NodeD, NodeE, and NodeF. NodeA is connected to NodeB and NodeC. NodeB is connected to NodeD. NodeC is connected to NodeE. NodeE is connected to NodeF. NodeD and NodeF are terminal nodes.

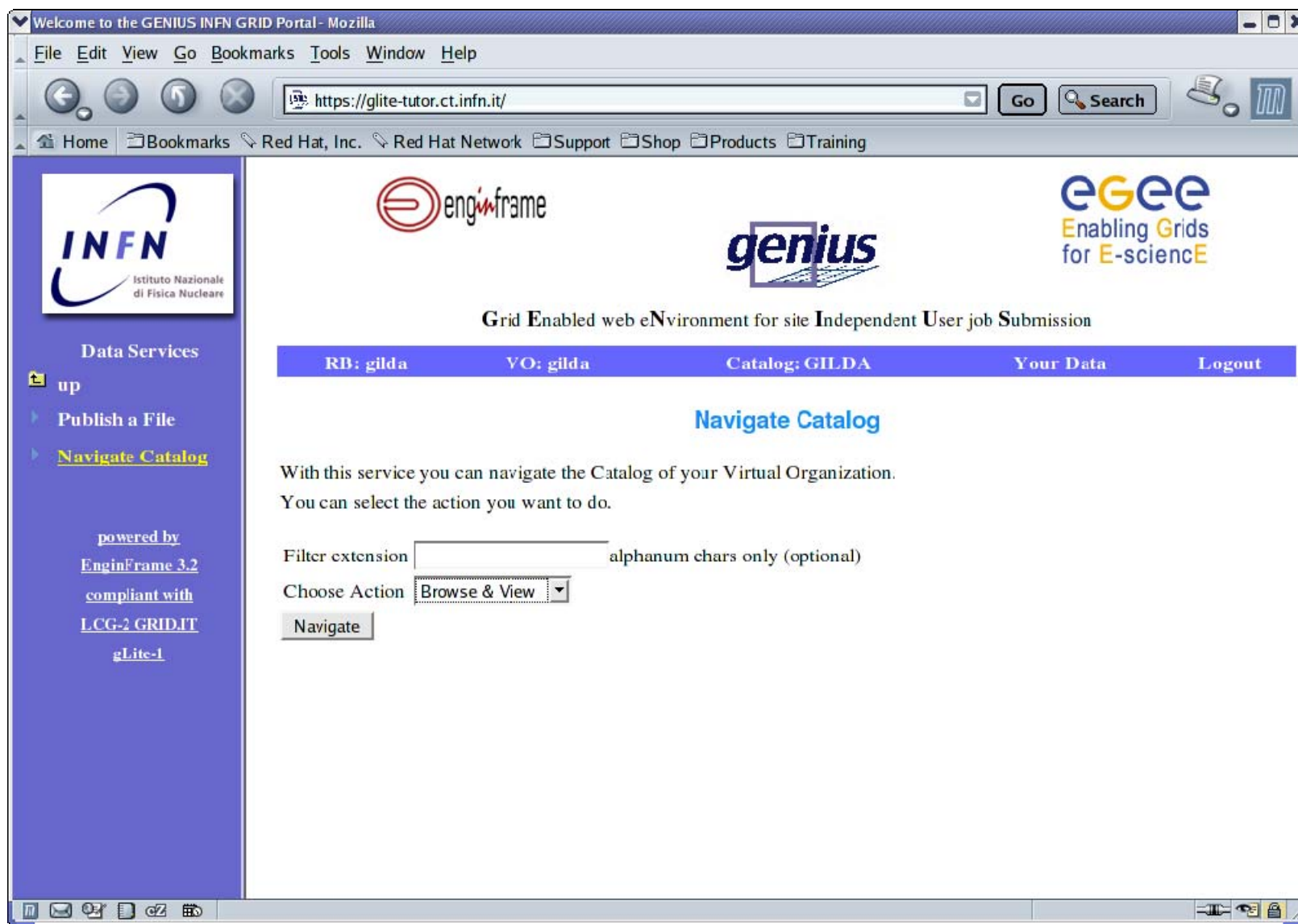
On the right, a text editor window displays the JDL (Job Description Language) code for the DAG. The code defines the DAG type, sets the maximum number of nodes running to 6, and defines the nodes and their connections.

```

type = "dag";
max_nodes_running = 6;
nodes = [
  NodeD = [
    node_type = "edg-jdl";
    file = "nodes/nodeD.jdl";
  ];
  NodeC = [
    node_type = "edg-jdl";
    description = "{
      Executable = "identity_message.sh";
      Arguments = "NodeC";
      RetryCount = 2;
      VirtualOrganisation = "gilda";
      InputSandbox = {"nodes/identity_message.sh"};
      Stdoutput = "std.out";
      StdError = "std.err";
      OutputSandbox = {"std.out", "std.err"};
      rank = 1.0;
    }";
  ];
  NodeB = [
    node_type = "edg-jdl";
    description = "{
      Executable = "identity_message.sh";
      Arguments = "NodeB";
      RetryCount = 2;
      VirtualOrganisation = "gilda";
      InputSandbox = {"nodes/identity_message.sh"};
      Stdoutput = "std.out";
      StdError = "std.err";
      OutputSandbox = {"std.out", "std.err"};
      rank = 1.0;
    }";
  ];
  NodeA = [
    node_type = "edg-jdl";
    file = "nodes/nodeA.jdl";
  ];
  NodeF = [
    node_type = "edg-jdl";
    description = "{
      Executable = "/bin/hostname";
      RetryCount = 2;
      VirtualOrganisation = "gilda";
      Stdoutput = "std.out";
      StdError = "std.err";
      OutputSandbox = {"std.out", "std.err"};
    }";
  ];
  NodeE = [
    node_type = "edg-jdl";
    description = "{
      Executable = "identity_message.sh";
      Arguments = "NodeE";
      RetryCount = 2;
      VirtualOrganisation = "gilda";
      InputSandbox = {"nodes/identity_message.sh"};
      Stdoutput = "std.out";
      StdError = "std.err";
      OutputSandbox = {"std.out", "std.err"};
    }";
  ];
];

```

The bottom status bar shows the current file being edited is DAG3.jdl, the location is /home/larocca/gLite/DAG/identity_ex/, and the time is 4:55 PM.



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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

Navigate Catalog

With this service you can navigate the Catalog of your Virtual Organization.
You can select the action you want to do.

Filter extension alphanum chars only (optional)

Choose Action **Browse & View**

Navigate

Data Services

up

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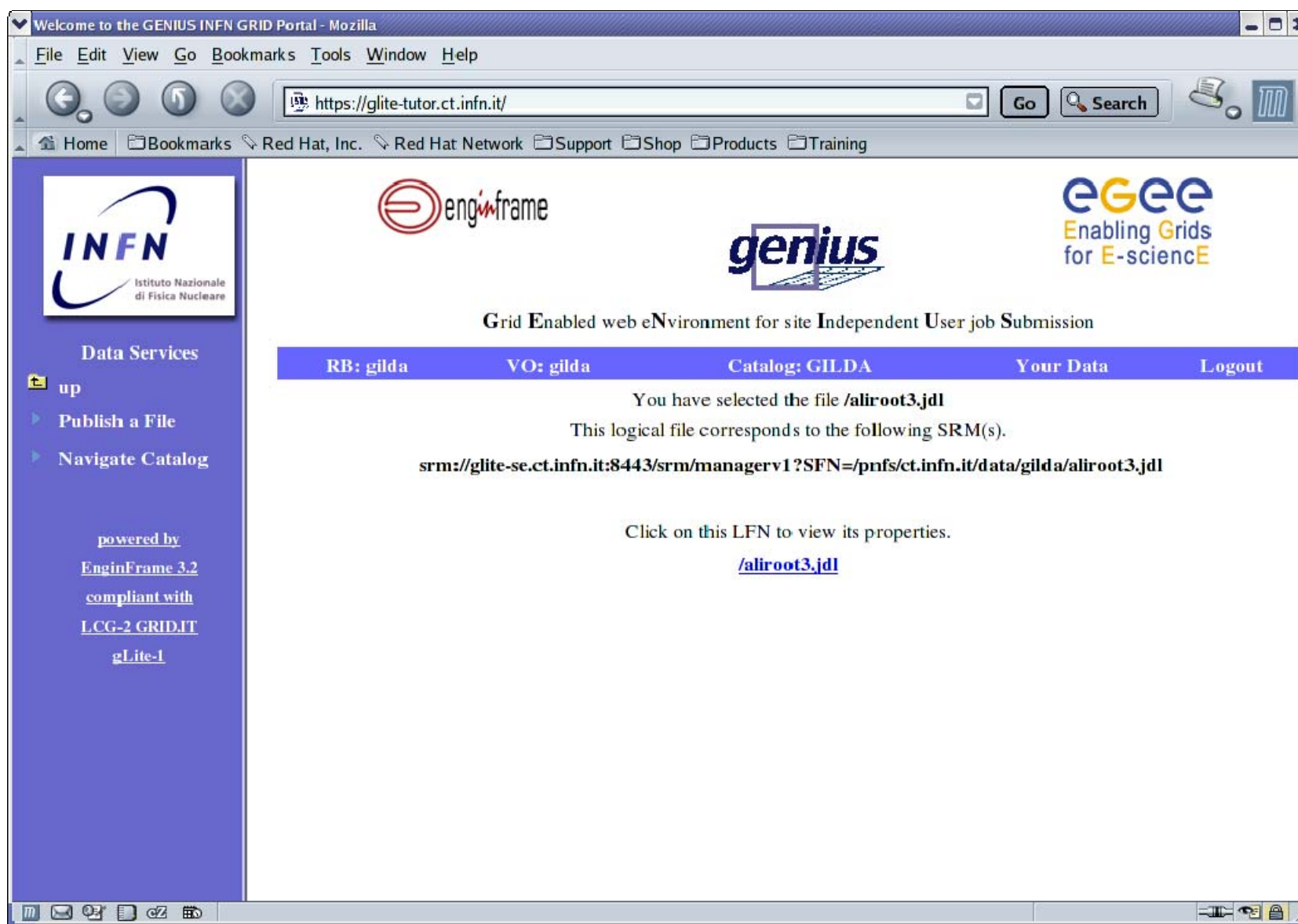


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-pdrwl-gs--r-l-g-----	30	2005-06-01 16:56:27	/testpd03
-pdrwl-gs--r-l-g-----	30	2005-06-04 17:27:26	/t0406-1728
-pdrwl-gs--r-l-g-----	585	2005-06-06 11:11:32	/jdl_test.jdl
-pdrwl-gs--r-l-g-----	1371	2005-06-06 11:14:26	/aliroot.jdl
-pdrwl-gs--r-l-g-----	0	2005-06-06 11:15:33	/vlc
-pdrwl-gs--r-l-g-----	202	2005-06-06 14:14:22	/test2.txt
-pdrwl-gs--r-l-g-----	3126k	2005-06-06 19:13:09	/alien.mpg
-pdrwl-gs--r-l-g-----	30	2005-06-07 20:00:10	/pippo01
-pdrwl-gs--r-l-g-----	422	2005-06-13 01:46:08	/aliroot3.jdl

This Catalog contains 28 selected logical file names



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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

You have selected the file **/aliroot3.jdl**

This logical file corresponds to the following SRM(s).

srm://glite-se.ct.infn.it:8443/srm/managerv1?SFN=/pnfs/ct.infn.it/data/gilda/aliroot3.jdl

Click on this LFN to view its properties.

[/aliroot3.jdl](#)

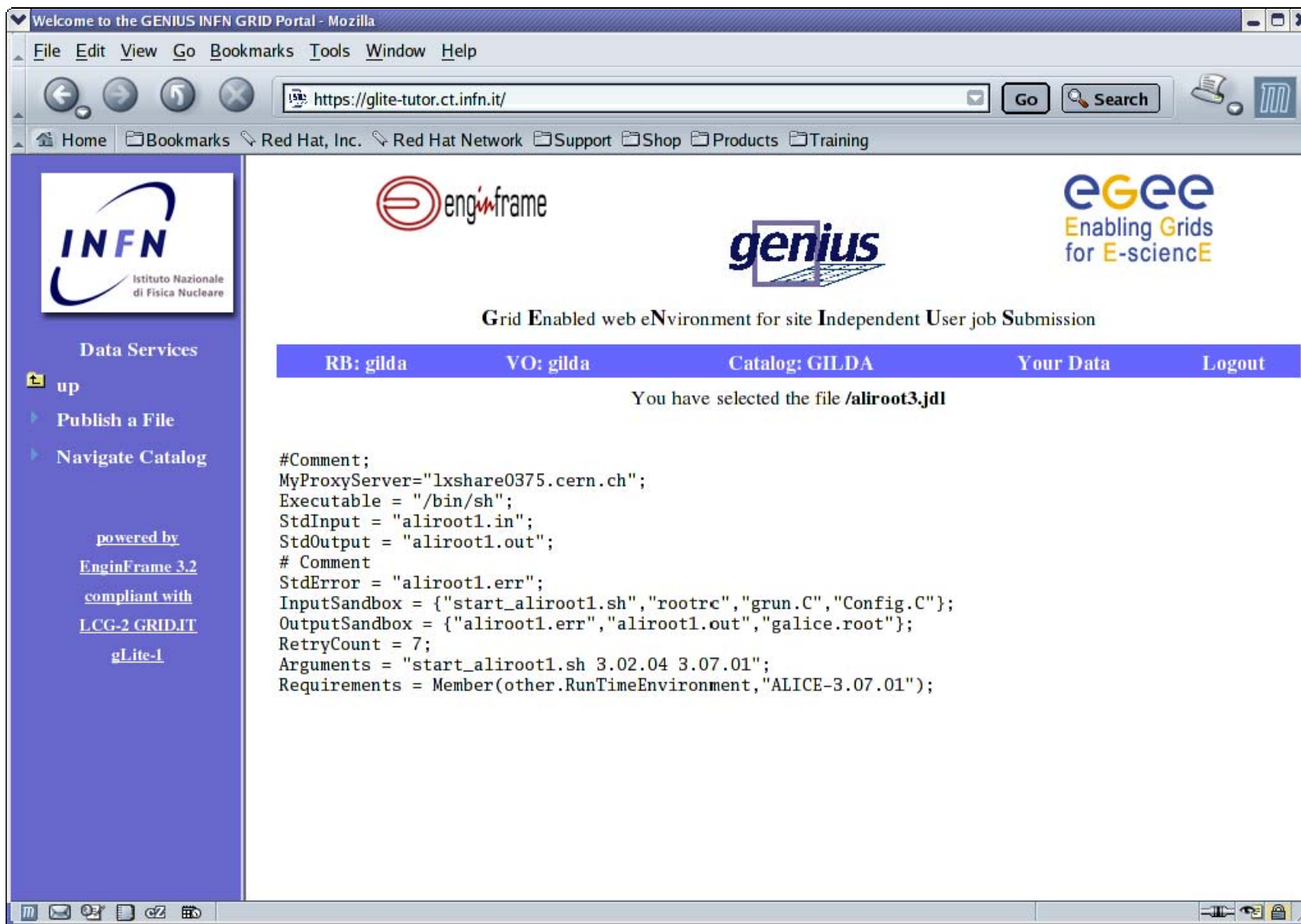
Data Services

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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

You have selected the file **/aliroot3.jdl**

```
#Comment;
MyProxyServer="lxshare0375.cern.ch";
Executable = "/bin/sh";
StdInput = "aliroot1.in";
StdOutput = "aliroot1.out";
# Comment
StdError = "aliroot1.err";
InputSandbox = {"start_aliroot1.sh", "rootc", "grun.C", "Config.C"};
OutputSandbox = {"aliroot1.err", "aliroot1.out", "galice.root"};
RetryCount = 7;
Arguments = "start_aliroot1.sh 3.02.04 3.07.01";
Requirements = Member(other.RunTimeEnvironment, "ALICE-3.07.01");
```

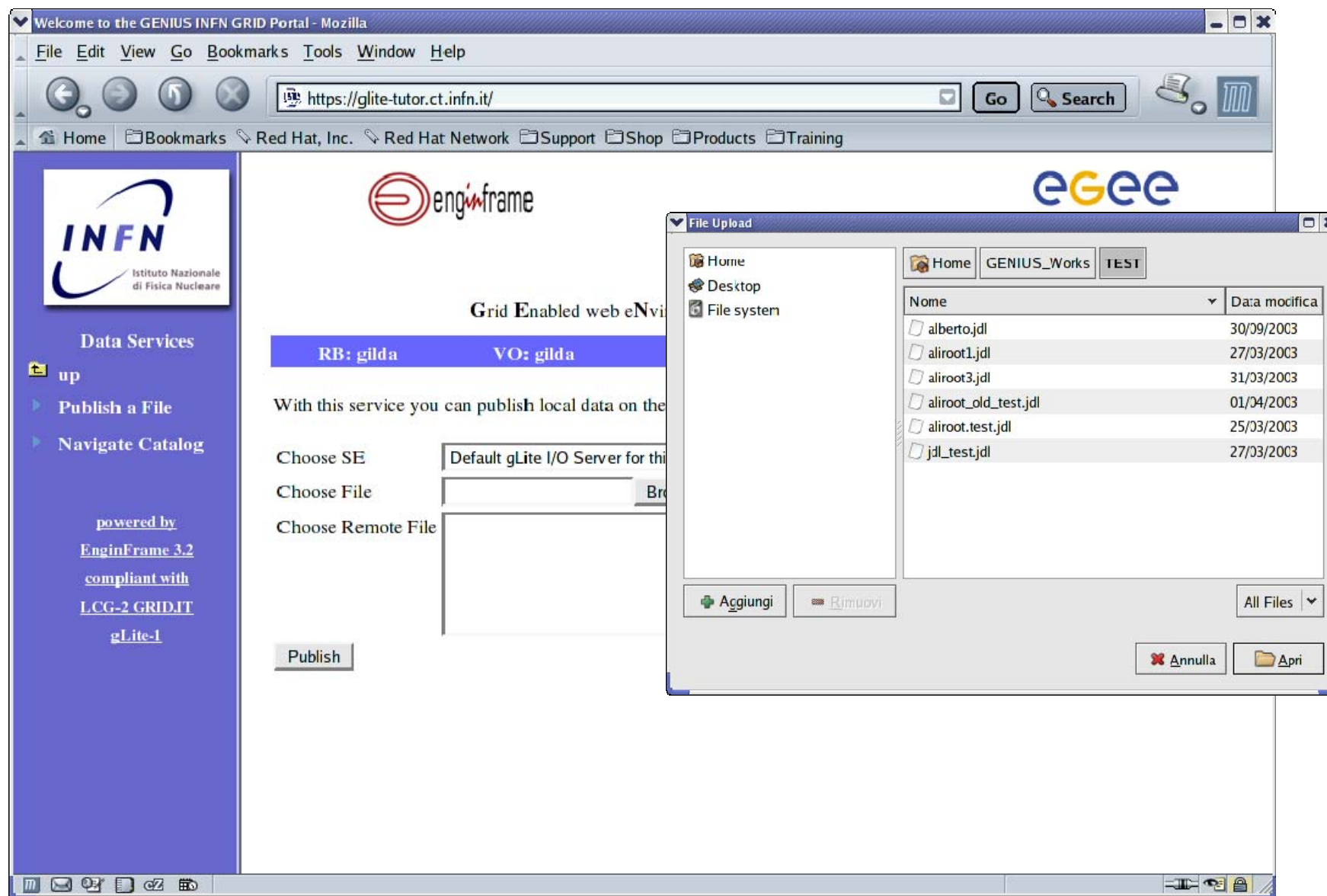
Data Services

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Publish a File

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RB: gilda VO: gilda

With this service you can publish local data on the

Choose SE Default gLite I/O Server for this

Choose File

Choose Remote File

Publish

File Upload

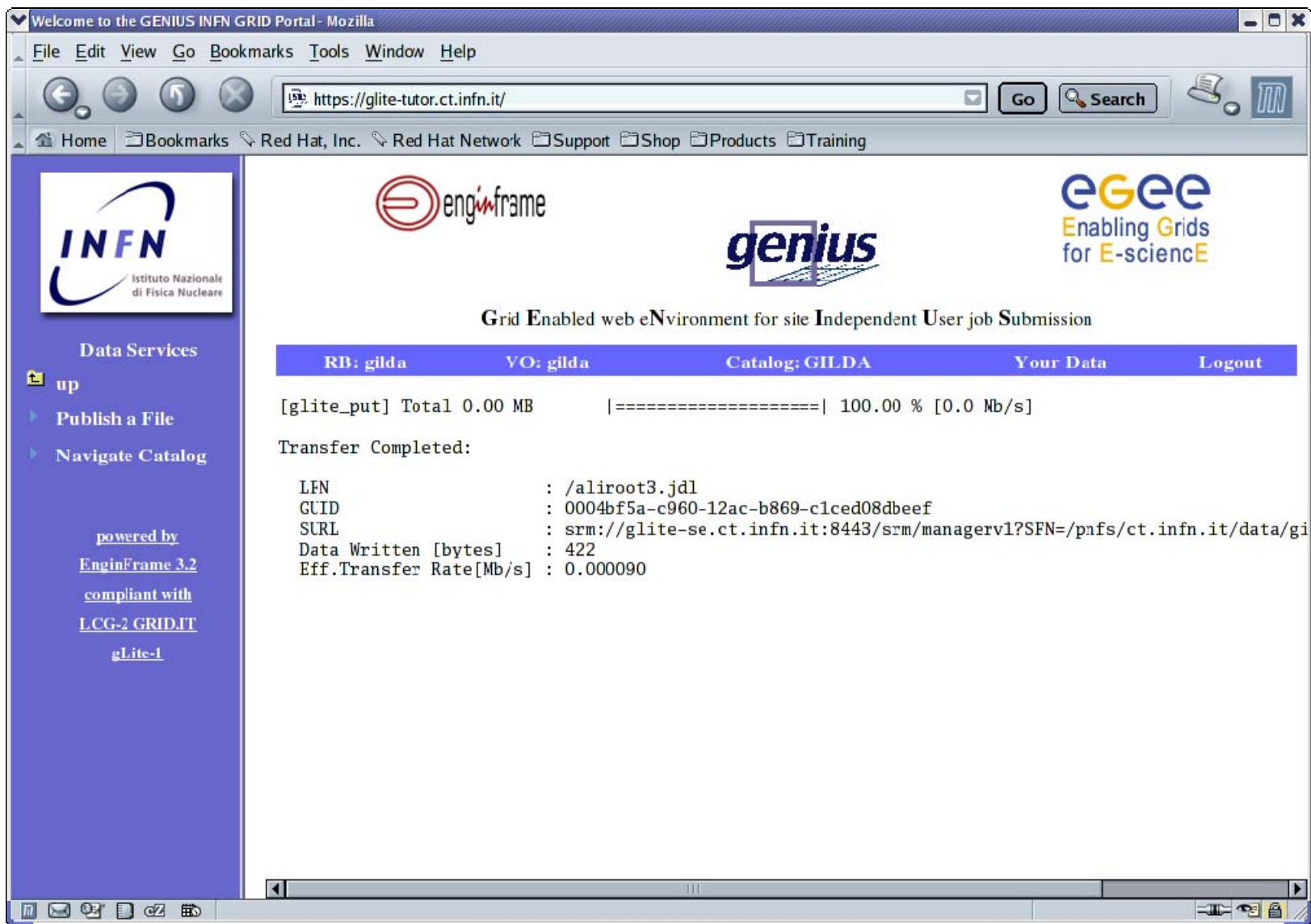
Home GENIUS_Works TEST

Nome	Data modifica
alberto.jdl	30/09/2003
alroot1.jdl	27/03/2003
alroot3.jdl	31/03/2003
alroot_old_test.jdl	01/04/2003
alroot.test.jdl	25/03/2003
jdl_test.jdl	27/03/2003

Aggiungi Rimuovi

All Files

Annula Apri



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RB: gilda	VO: gilda	Catalog: GILDA	Your Data	Logout
-----------	-----------	----------------	-----------	--------

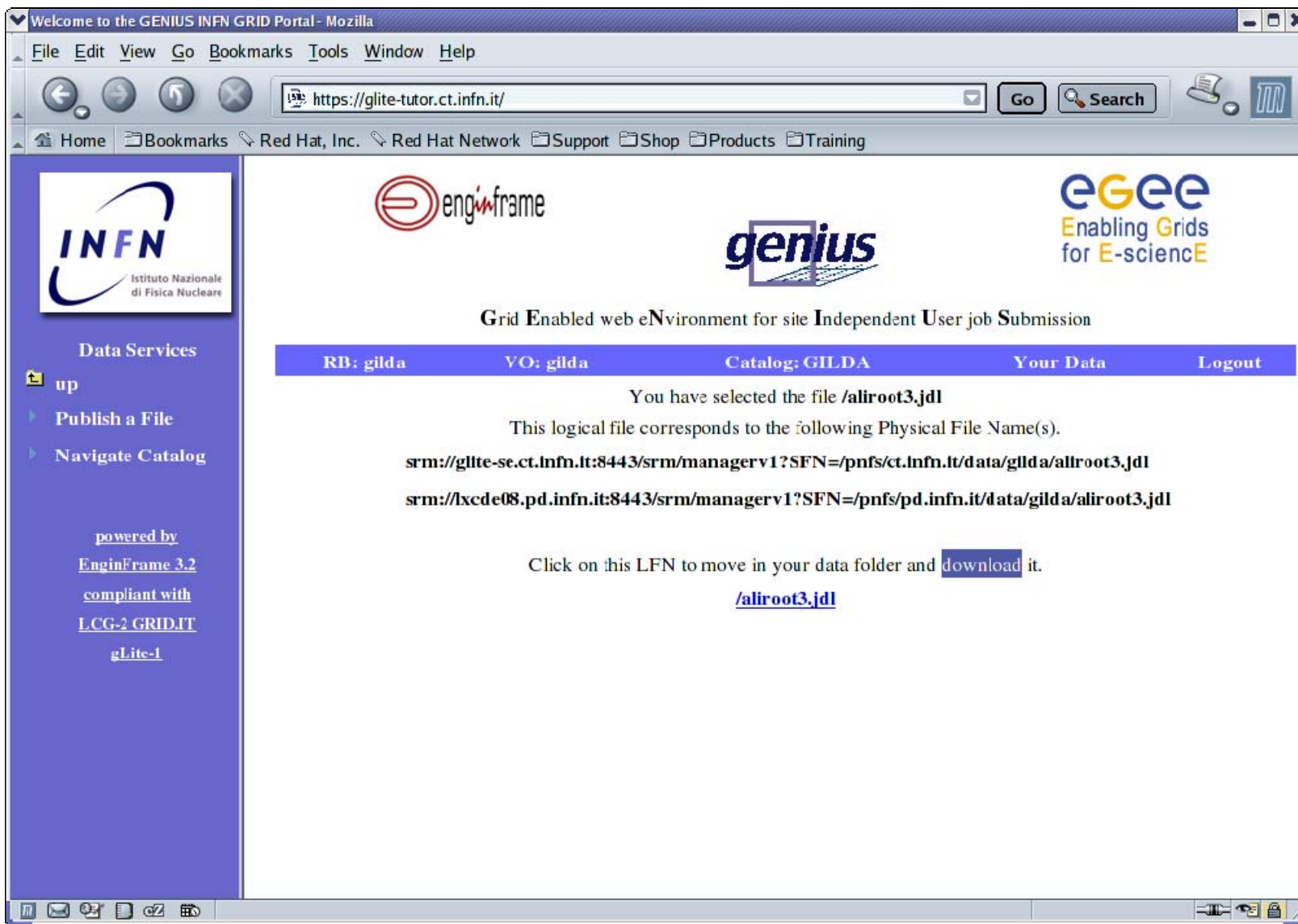
[glite_put] Total 0.00 MB |=====| 100.00 % [0.0 Mb/s]

Transfer Completed:

```

LFN                : /aliproot3.jdl
GUID               : 0004bf5a-c960-12ac-b869-c1ced08dbeef
SURL               : srm://glite-se.ct.infn.it:8443/srm/managerv1?SFN=/pnfs/ct.infn.it/data/gi
Data Written [bytes] : 422
Eff.Transfer Rate[Mb/s] : 0.000090
    
```

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RB: gilda VO: gilda Catalog: GILDA Your Data Logout

You have selected the file **/alroot3.jdl**

This logical file corresponds to the following Physical File Name(s).

srm://glite-se.ct.infn.it:8443/srm/managerv1?SFN=/pnfs/ct.infn.it/data/gilda/allroot3.jdl

srm://xcde08.pd.infn.it:8443/srm/managerv1?SFN=/pnfs/pd.infn.it/data/gilda/alroot3.jdl

Click on this LFN to move in your data folder and **download** it.

[/alroot3.jdl](#)

Data Services

up

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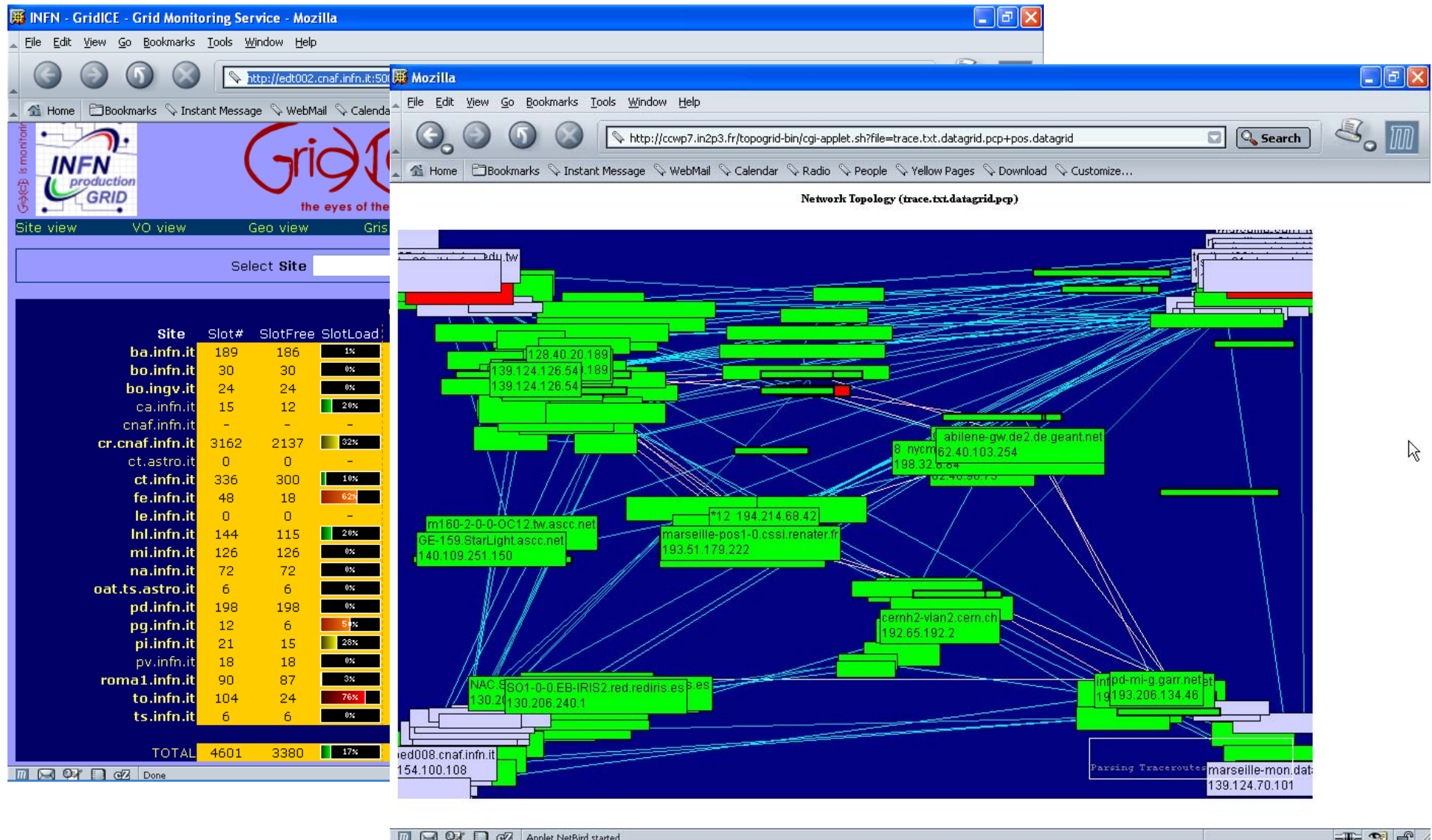
Grid Enabled web eNvironment for site Independent User job Submission

RB: gilda	VO: gilda	Catalog: GILDA	Your Data	Logout
Destroy	Directory contents - 20050613_015721_aliroot3.jdl			
	20050613_015721_aliroot3.jdl			422

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- up
- Publish a File
- Navigate Catalog

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Interactive Services

up

P2P Services

- ▶ Open Desktop
- ▶ Close Desktop
- ▶ Set Desktop Password

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barbera@genius:~

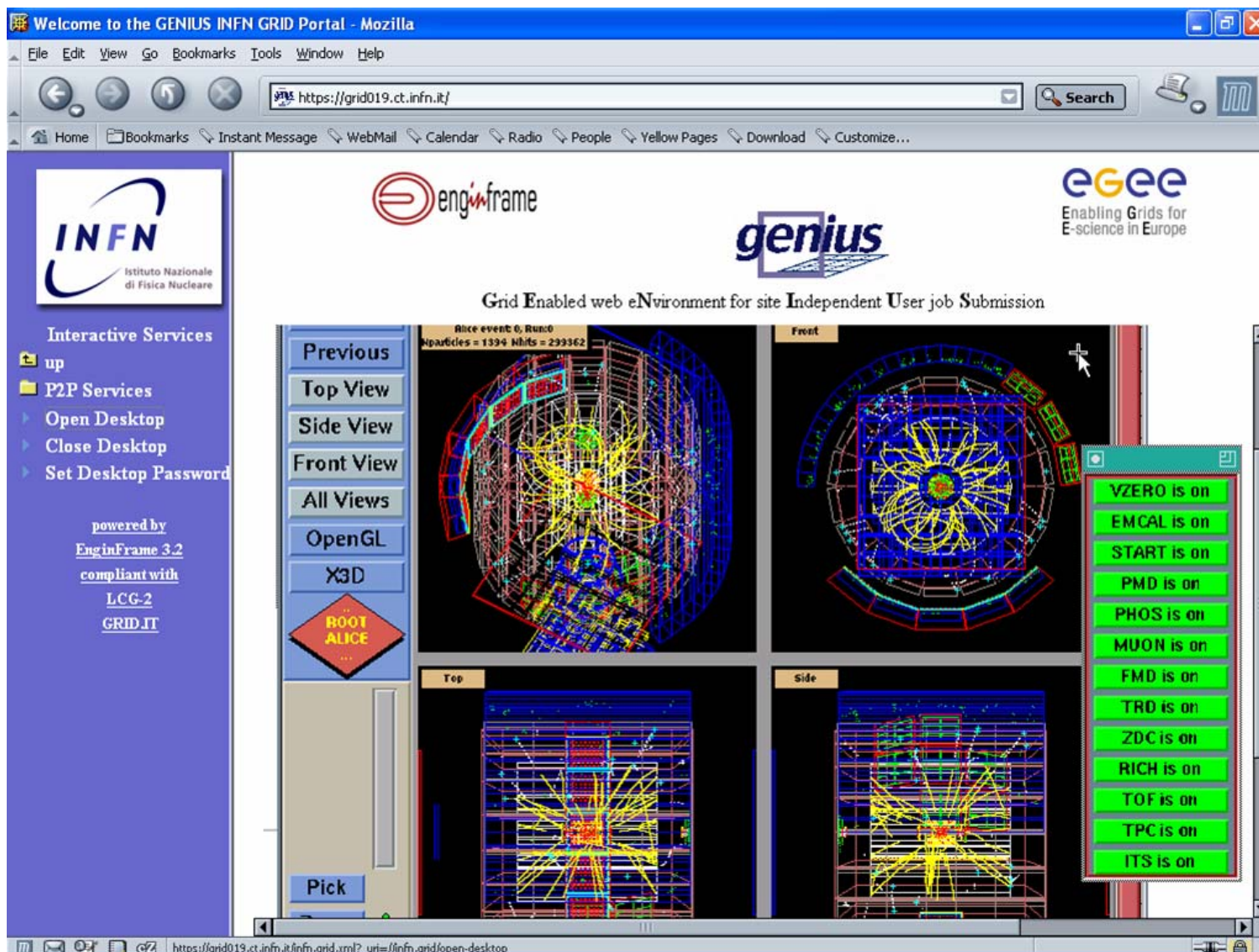
```
csound.orc
csound.sco
defcity.pov
demptools.jdl
dna.pov
edg-1.4
edg_wl_ui_gui_log4j.log
edglog.log
file_09003.txt
generated
golden_CO.dem
grand_canyon_AZ.dem
grun_3_09_06_hbt.C
grun_4_01_00.C
hadrontherapy.jdl
genius:> ned hadrontherapy.jdl
bash: ned: command not found
genius:> nedit hadrontherapy.jdl
bash: nedit: command not found
genius:> nedit
bash: nedit: command not found
genius:> emacs hadrontherapy.jdl
genius:> emacs hadrontherapy.jdl
```

```
test-ist2003-1_02102003_095622
test.jdl
test.sh
test1.txt
test10tris_23012004_172110
test2.txt
emacs@genius.ct.infn.it
```

File Edit Options Buffers Tools Help

```
{type = "Job";
JobType = "Normal";
Executable = "/bin/sh";
MyProxyServer="lxshare0207.cern.ch";
StdOutput = "hadrontherapy.out";
StdError = "hadrontherapy.err";
InputSandbox = {"hadrontherapy.sh","macro.mac"};
OutputSandbox = {"hadrontherapy.err","hadrontherapy.out","picco.dat","disAr
","disEn.dat"};
RetryCount = 7;
Arguments = "hadrontherapy.sh";
Requirements =
Member("GEANT4-6",other.GlueHostApplicationSoftwareRunTimeEnvironment) && d
GlueCEPolicyMaxCPUTime>100 && other.GlueCEStateStatus == "Production" && ot
GlueHostNetworkAdapterOutboundIP ;
#CEId = other.GlueCEUniqueID == "grid012.ct.infn.it:2119/jobmanager-pbs-inf
";
```


GENIUS interactive services (2/2)



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Previous

Top View

Side View

Front View

All Views

OpenGL

X3D

Pick

ALICE event 0, Run 0
Nparticles = 1394 Ntits = 293362

Top

Side

VZERO is on

EM CAL is on

START is on

PMD is on

PHOS is on

MUON is on

FMD is on

TRD is on

ZDC is on

RICH is on

TOF is on

TPC is on





ITS is on

https://grid019.ct.infn.it/inf.grid.xml? uri=/inf.grid/open-desktop

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Internet Explorer 9.46

https://grid003.ct.infn.it/pda/

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Independent User job Submission
Welcome to GENIUS 2.7.0
Click to Enter
NEW [Known Limitations for PDA](#) NEW
[Important Notice](#)
[New Grid Authentication with MyProxy](#)

Internet Explorer 16.56

https://grid003.ct.infn.it/pda/infnpd

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- File Services
- Security Services
- Job Services
- Data Services
- Info Services
- Monitoring Services
- Change RB
- Change VO
- Change RLS
- Browse Statistics
- Logout

Internet Explorer 10.06

https://grid003.ct.infn.it/pda/infnpd

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View a File
With this service you may view a file in your home directory.

File to View:

or Select

File to View:

View

- aliroot.jdl
- alice_rc_hbt_production.conf
- alice_rc_hbt_production_mss.conf
- alice_rc_mss.conf
- aliroot.jdl
- authentication.log
- csound.jdl
- csound.orc

Internet Explorer 10.07

https://grid003.ct.infn.it/pda/infnpd

genius

File: /home/barbera/aliroot.jdl
Type = "Job";
JobType = "Normal";
Executable = "/bin/sh";
MyProxyServer = "lxshare0207.cern.ch";
StdOutput = "aliroot.out";
StdError = "aliroot.err";
InputSandbox = {"script-short.sh";
OutputSandbox = {"aliroot.err";
RetryCount = 7;
Arguments = "script-short.sh";
AliceSoftware = Member("ALICE-3.0");
MaxCPUtime = other.GlueCEPolicyManager;
MaxMemory = other.GlueHostMainMemory;

Internet Explorer 11.32

https://grid003.ct.infn.it/pda/infnpd

genius

Job Submission
Please, select a JDL file to submit.

JDL File:

Next

RB:

- /home/barbera/csound.jdl
- /home/barbera/aliroot.jdl
- /home/barbera/csound.jdl
- /home/barbera/demtools.jdl
- /home/barbera/hostname.jdl
- /home/barbera/hostname1.jdl
- /home/barbera/interactive.jdl
- /home/barbera/povray_defcity.jdl

Internet Explorer 13.19

https://grid003.ct.infn.it/pda/infnpd

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Job Queue

#	Job ID	JDL Name	Last Update	Destination	Status	Exit Code	Action
4	bYqRSTN1oW6xOuWzVkrG	/home/barbera/hostname.jdl	Thu Oct 9 07:52:14 2003	testbed001.cnaf.infn.it:211	Done	0	Get Output

Internet Explorer 11.24

https://grid003.ct.infn.it/pda/infnpd

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Current directory is /

- daniprova
- data.out
- data.out1
- data.out2
- data.out3
- datatest
- datatest1
- edglog.log
- hostname.out

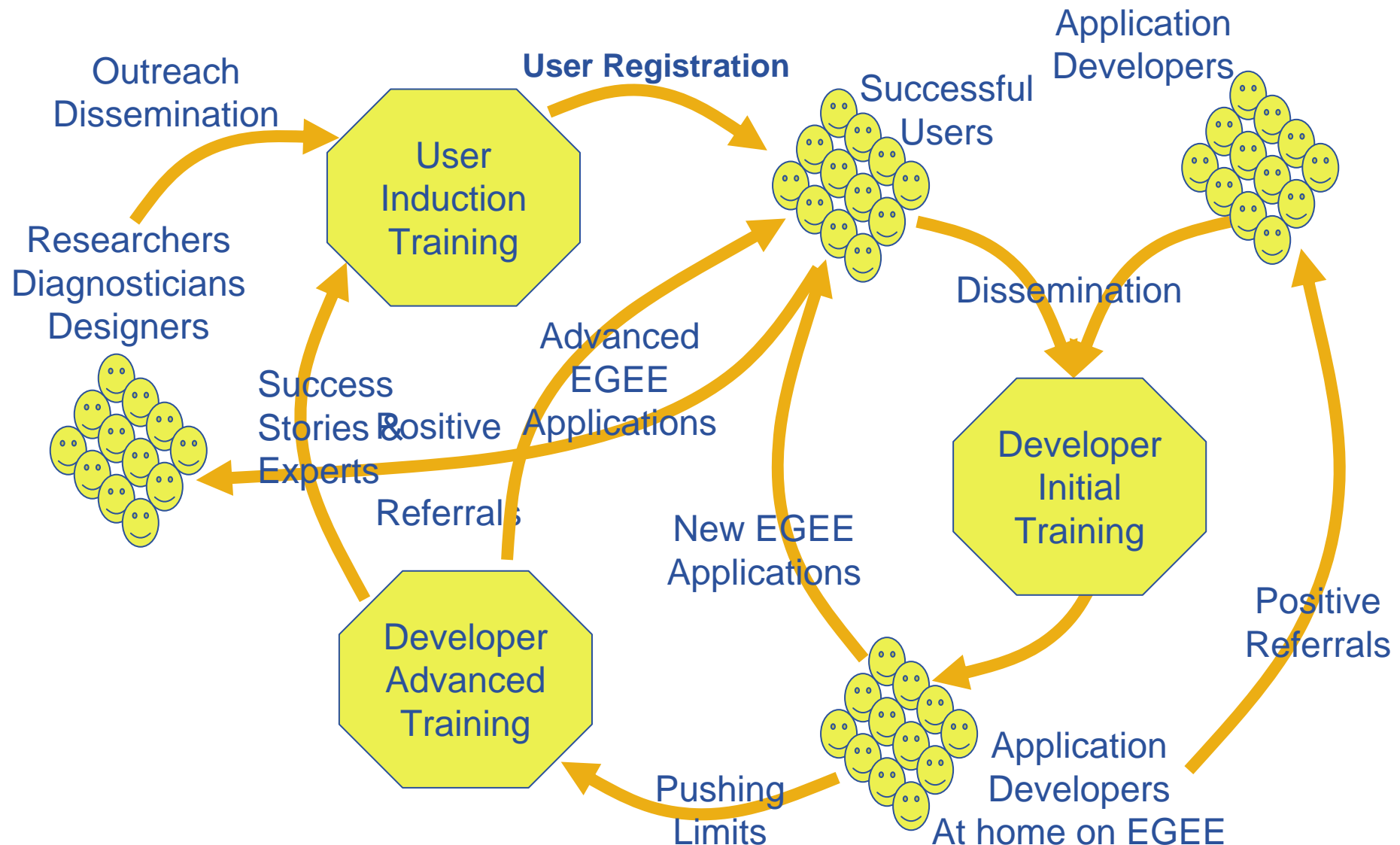
Internet Explorer 17.09

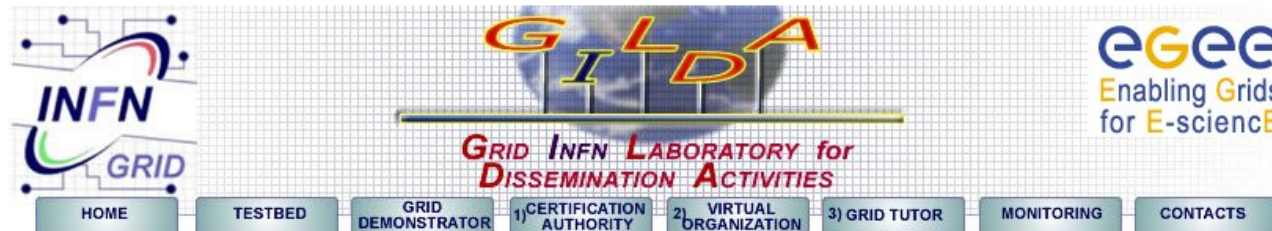
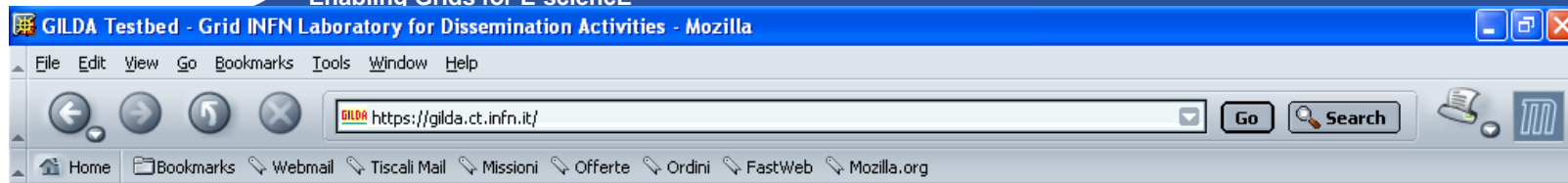
http://edt002.cnaf.infn.it:8081/grid

Site	Computing power	JOB Load
ba.infn.it	3064	0%
bo.infn.it	4797	0%
ct.infn.it	2798	0%
fe.infn.it	21942	0%
lnl.infn.it	2903	0%
mi.infn.it	3972	0%
na.infn.it	n/a	n/a
pd.infn.it	60166	0%
to.infn.it	n/a	n/a
ts.infn.it	n/a	n/a



- Current implementation of GENIUS includes more than 100 services. Among them:
 - grid authentication with MyProxy !
 - several Resource Brokers, VO's and RLS/Catalog available;
 - full support for “interactive” and DAG jobs;
 - web guided job description, submission and monitoring (in collaboration with DATAMAT)
 - Web guided workflow description (in collaboration with GridLab)
 - P2P services available
 - PDA and cell phone versions available
 - Transparently compliant with EGEE-0 LCG2, Grid.it and gLite 1 middlewares/VO's
 - Interfaced to many generic applications






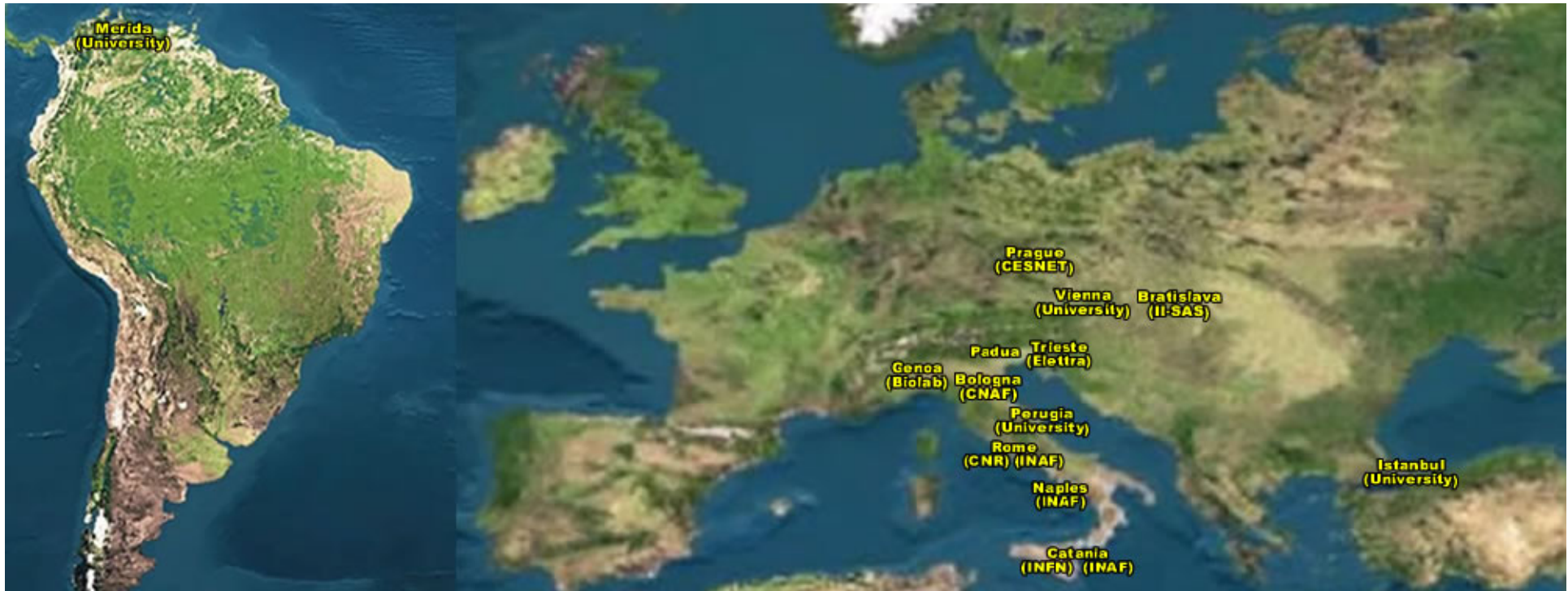
GILDA (G rid I nfn L aboratory for D issemination A ctivities)

is a virtual laboratory to demonstrate/disseminate the strong capabilities of grid computing.

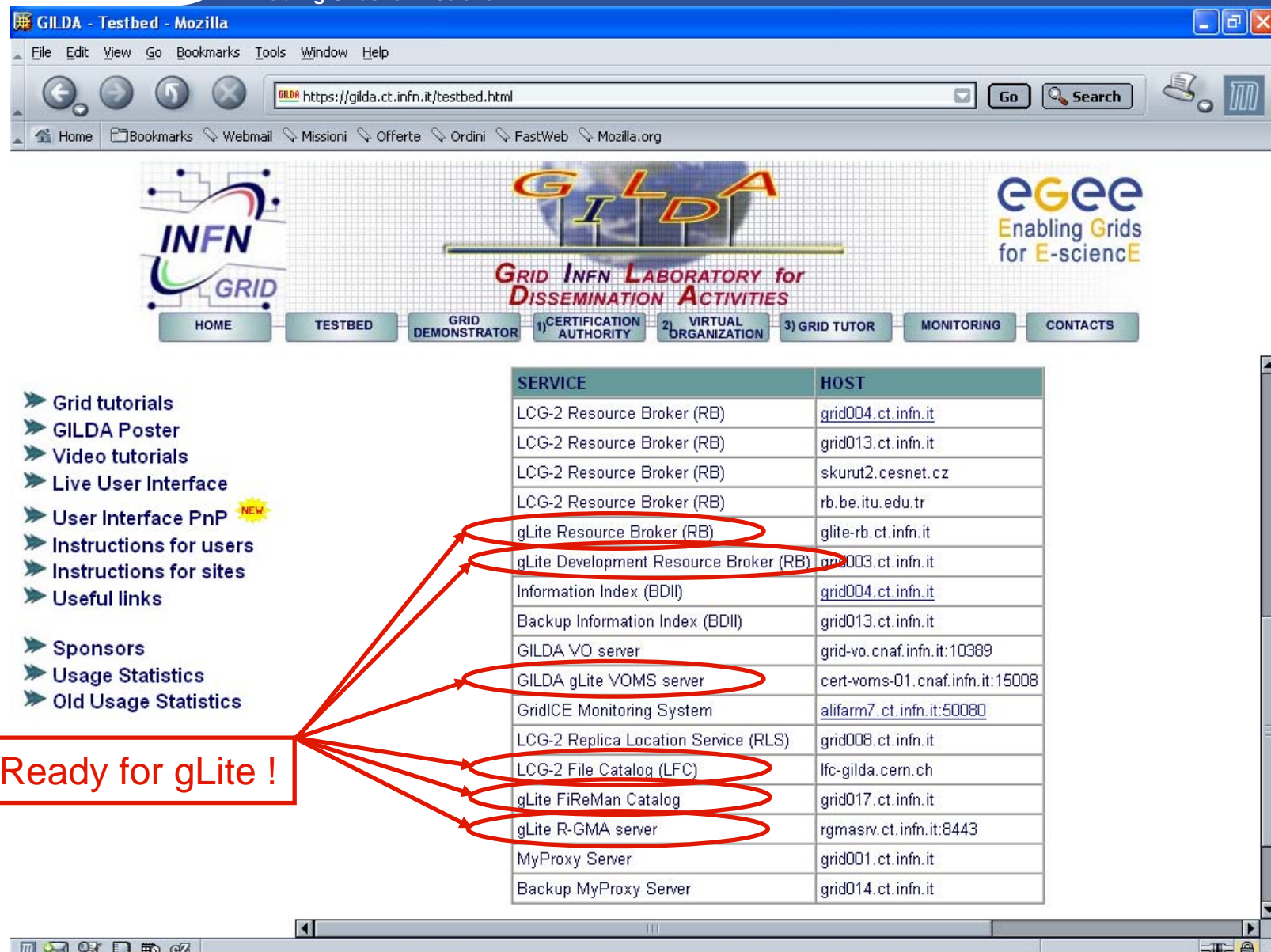
GILDA consists of the following elements:

- Grid tutorials
- GILDA Poster
- Video tutorials
- Live User Interface
- User Interface PnP 
- Instructions for users
- Instructions for sites
- Useful links
- Sponsors
- Usage Statistics
- Old Usage Statistics

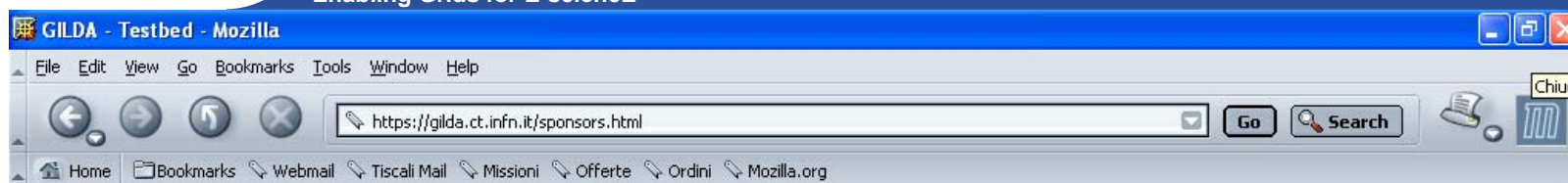
- the GILDA Testbed: a series of sites and services (Resource Broker, Information Index, Data Managers, Monitoring tool, Computing Elements, and Storage Elements) spread all over Italy and the rest of the world on which the latest version of both the INFN Grid middle-ware (fully compatible with LCG middle-ware) and the gLite  middle-ware are installed;
- the Grid Demonstrator: a customized version of the full GENIUS web portal, jointly developed by INFN and NICE, from where **everybody** can submit a pre-defined set of applications to the GILDA Testbed;
- the GILDA Certification Authority: a fully functional Certification Authority which issues 14-days X.509 certificates to everybody wanting to experience grid computing on the GILDA Testbed;
- the GILDA Virtual Organization: a Virtual Organization gathering all people wanting to experience grid computing on the GILDA Testbed; GILDA also runs the Virtual Organization Membership Service (VOMS) developed by INFN;
- the Grid Tutor: based on a full version of the GENIUS web portal, to be used only during grid tutorials;
- the monitoring system: a versatile monitoring system completely based on GridICE, the grid monitoring tool developed by INFN;
- the GILDA mailing list: gilda@infn.it, also archived on the web here.



15 sites in 3 continents !

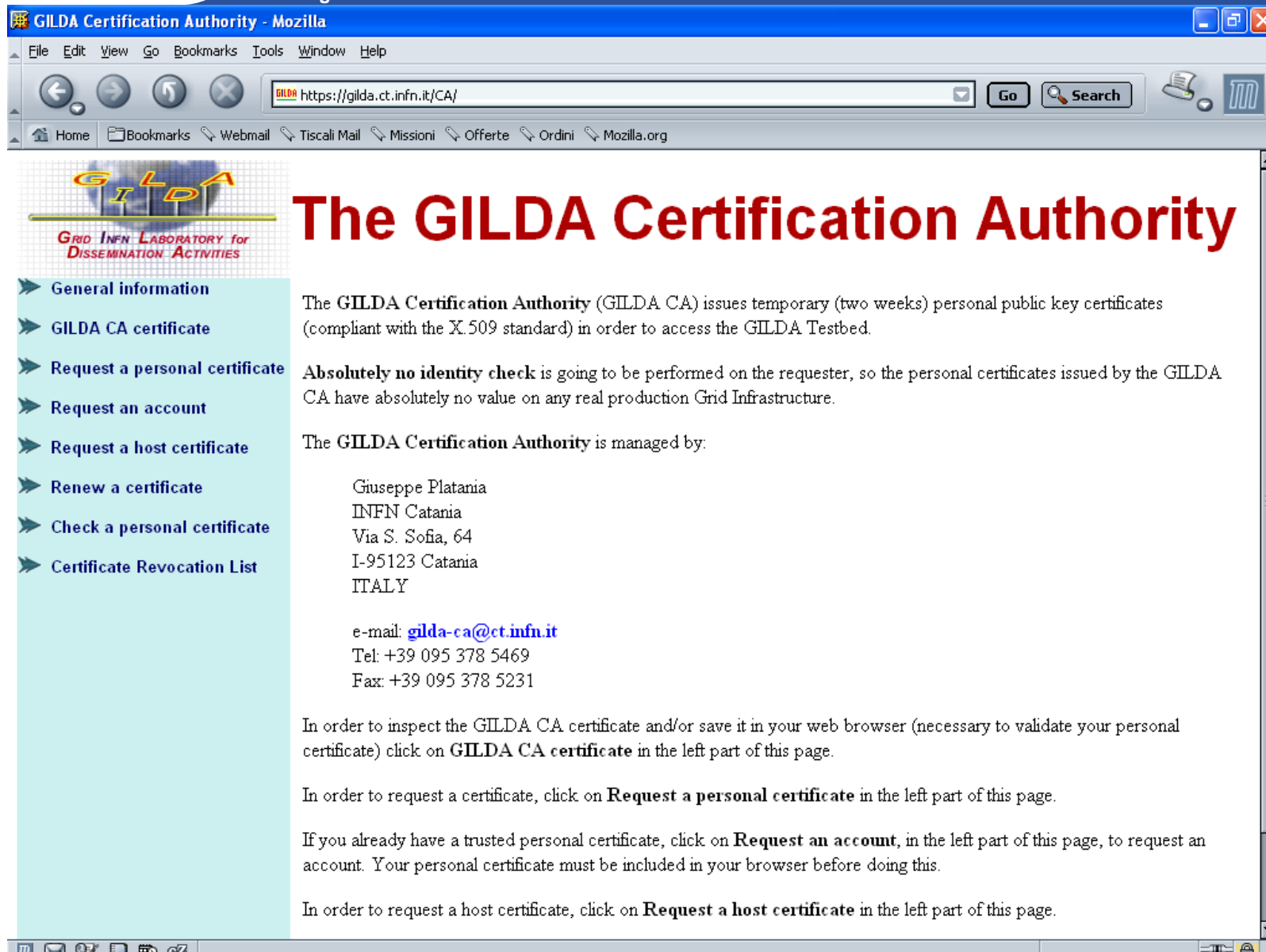


SERVICE	HOST
LCG-2 Resource Broker (RB)	grid004.ct.infn.it
LCG-2 Resource Broker (RB)	grid013.ct.infn.it
LCG-2 Resource Broker (RB)	skurut2.cesnet.cz
LCG-2 Resource Broker (RB)	rb.be.itu.edu.tr
gLite Resource Broker (RB)	glite-rb.ct.infn.it
gLite Development Resource Broker (RB)	grid003.ct.infn.it
Information Index (BDII)	grid004.ct.infn.it
Backup Information Index (BDII)	grid013.ct.infn.it
GILDA VO server	grid-vo.cnaf.infn.it:10389
GILDA gLite VOMS server	cert-voms-01.cnaf.infn.it:15008
GridICE Monitoring System	alifarm7.ct.infn.it:50080
LCG-2 Replica Location Service (RLS)	grid008.ct.infn.it
LCG-2 File Catalog (LFC)	lfc-gilda.cern.ch
gLite FiReMan Catalog	grid017.ct.infn.it
gLite R-GMA server	rgmasrv.ct.infn.it:8443
MyProxy Server	grid001.ct.infn.it
Backup MyProxy Server	grid014.ct.infn.it



GILDA is sponsored by:





The GILDA Certification Authority

The **GILDA Certification Authority** (GILDA CA) issues temporary (two weeks) personal public key certificates (compliant with the X.509 standard) in order to access the GILDA Testbed.

Absolutely no identity check is going to be performed on the requester, so the personal certificates issued by the GILDA CA have absolutely no value on any real production Grid Infrastructure.

The **GILDA Certification Authority** is managed by:

Giuseppe Platania
INFN Catania
Via S. Sofia, 64
I-95123 Catania
ITALY

e-mail: gilda-ca@ct.infn.it
Tel: +39 095 378 5469
Fax: +39 095 378 5231

In order to inspect the GILDA CA certificate and/or save it in your web browser (necessary to validate your personal certificate) click on **GILDA CA certificate** in the left part of this page.

In order to request a certificate, click on **Request a personal certificate** in the left part of this page.

If you already have a trusted personal certificate, click on **Request an account**, in the left part of this page, to request an account. Your personal certificate must be included in your browser before doing this.

In order to request a host certificate, click on **Request a host certificate** in the left part of this page.

Request a GILDA CA personal certificate - Mozilla

File Edit View Go Bookmarks Tools Window Help

https://gilda.ct.infn.it/CA/mgt/restricted/ucert.php Go Search

Home Bookmarks mozilla.org mozillaZine mozdev.org

- Request an account
- Request a host certificate
- Check a personal certificate
- Certificate Revocation List

In order to correctly generate a request it is mandatory to fill **all** fields in the form below. Please, double check the correctness of the e-mail address that you are going to provide since **no verification** will be performed by the server.

The password you are prompted about in the form below is the password of your personal account on the **GENIUS Portal** from where you will access the GILDA Testbed and it is **NOT** the passphrase of your personal certificate.

When the certificate will be signed by the GILDA CA manager you will be notified by e-mail with the instructions to download your GILDA CA personal certificate and access the GILDA Testbed.




Institute/University/Company:	<input type="text"/>
First name and last name:	<input type="text"/>
Account username (max 8 characters; only not-accented letters and digits are allowed, both lowercase and uppercase):	<input type="text"/>
Account password (only not-accented letters and digits are allowed, both lowercase and uppercase):	<input type="password"/>
Confirm account password (only not-accented letters and digits are allowed, both lowercase and uppercase):	<input type="password"/>
E-mail:	<input type="text"/>
KeySize:	2048 (High Grade) <input type="button" value="v"/>

GILDA Testbed - Grid INFN Laboratory for Dissemination Activities - Mozilla


File Edit View Go Bookmarks Tools Window Help

https://gilda.ct.infn.it/ Go Search

Home Bookmarks Webmail Tiscali Mail Missioni Offerte Ordini Mozilla.org

[HOME](#)
[TESTBED](#)
[GRID DEMONSTRATOR](#)
[1\) CERTIFICATION AUTHORITY](#)
[2\) VIRTUAL ORGANIZATION](#)
[3\) GRID TUTOR](#)
[MONITORING](#)
[CONTACTS](#)



[➤ Grid tutorials](#)
[➤ GILDA Poster](#)
[➤ Video tutorials !\[\]\(c79695e35718764031f14b28e543f045_img.jpg\)](#)
[➤ Live User Interface](#)
[➤ User Interface PnP !\[\]\(c55dc7978ae893ddfaaefe3336102a6c_img.jpg\)](#)
[➤ Instructions for users](#)
[➤ Instructions for sites](#)
[➤ Useful links](#)

[➤ Sponsors](#)
[➤ Usage Statistics](#)
[➤ Old Usage Statistics](#)

Registration Form

Nome e cognome / First name and family name:

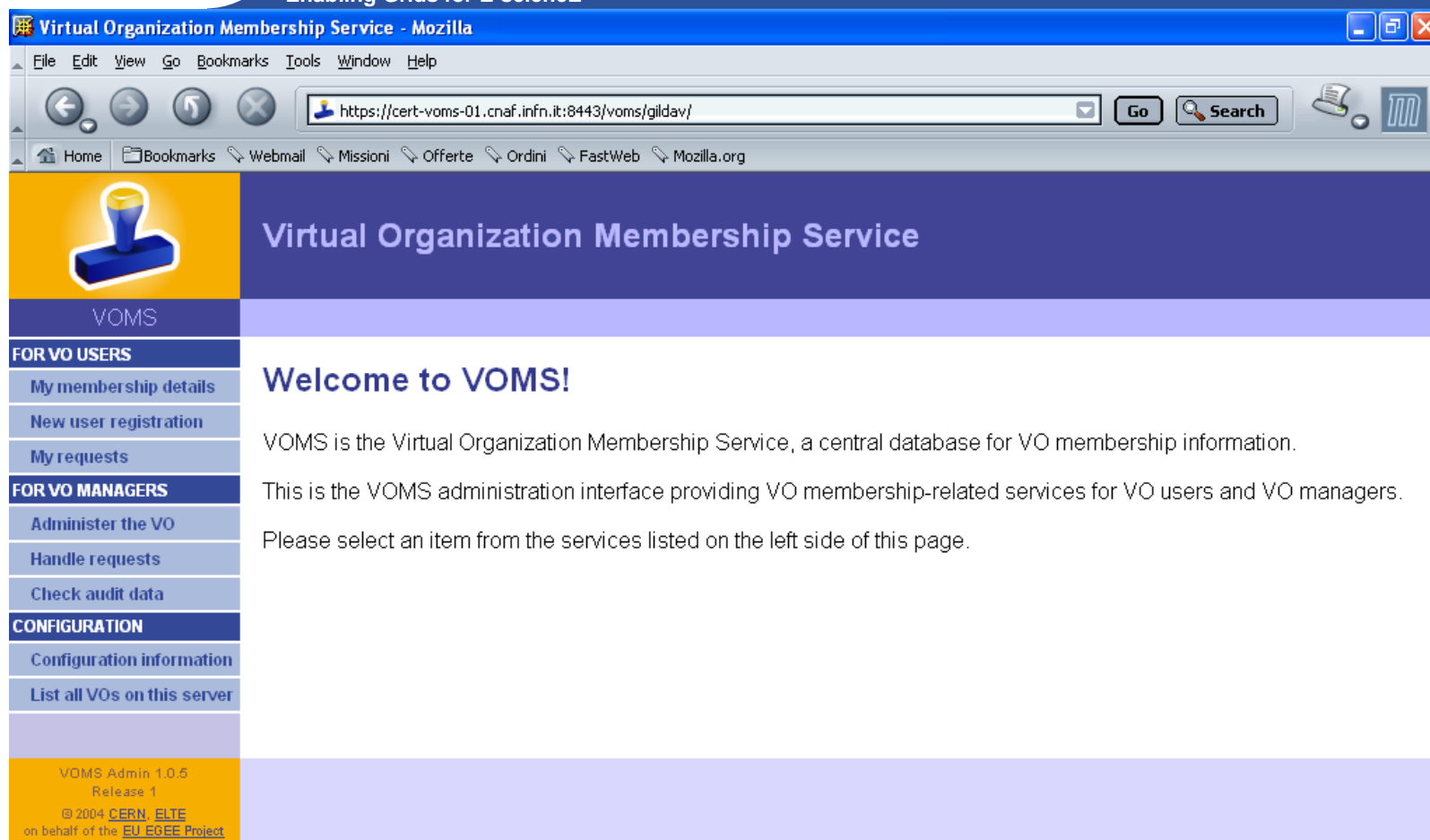
Istituto/Institute:

Telefono/Phone number:

E-mail:

Selezione VO / VO choice:

La sottomissione della domanda implica l'obbligo ad un corretto uso delle risorse messe a disposizione dell'utente.



Virtual Organization Membership Service

VOMS

FOR VO USERS

- My membership details
- New user registration
- My requests

FOR VO MANAGERS

- Administer the VO
- Handle requests
- Check audit data

CONFIGURATION

- Configuration information
- List all VOs on this server

Welcome to VOMS!

VOMS is the Virtual Organization Membership Service, a central database for VO membership information.

This is the VOMS administration interface providing VO membership-related services for VO users and VO managers.

Please select an item from the services listed on the left side of this page.

VOMS Admin 1.0.5
Release 1
© 2004 CERN, ELTE
on behalf of the EU EGEE Project



Enabling Grids for E-science

The GILDA Monitoring System

(<http://alifarm7.ct.infn.it:50080/gridice>)

GILDA - GridICE - Grid Monitoring Service - Mozilla

File Edit View Go Bookmarks Tools Window Help

http://alifarm7.ct.infn.it:50080/gridice/site.php

Home Bookmarks Webmail Tiscali Mail Missioni Offerte Ordini Mozilla.org

GILDA
GRID INFN LABORATORY FOR
DISSEMINATION ACTIVITIES

GridICE
the eyes of the Grid

Site view VO view Job Monitoring Geo view Gris view

Site view::ALL >> Summary

Site	GK#	CE#	RunJob	WaitJob	JobLoad	SlotLoad	Power	WN#	CPU#	CPUload	Available
be.itu.edu.tr	1	3	3	0	100%	100%	-	-	-	-	139.2 Gb
cesnet.cz	1	1	0	0	-	-	-	-	-	-	3 Tb
cnaf.infn.it	1	4	0	1	0%	0%	6K	1	2	0%	13.4 Gb
ct.astro.it	1	4	0	17	0%	0%	4K	1	1	0%	104.5 Gb
ct.infn.it	2	7	0	0	0%	0%	-	-	-	-	1.4 Tb
grid.unipg.it	1	3	0	0	0%	0%	20K	8	10	0%	7.3 Gb
na.astro.it	1	4	0	0	0%	0%	-	-	-	-	213.8 Gb
pd.infn.it	1	4	2	6	20%	0%	8K	2	4	5%	498.6 Gb
ui.savba.sk	1	4	0	0	0%	0%	19K	4	4	0%	68.5 Gb
TOTAL	10	34	5	24	15%	12%	56K	16	21	10%	5.4 Tb

Generated: Fri, 6 May 2005 12:28:49 +0200

GILDA - GridICE - Grid Monitoring Service - Mozilla

File Edit View Go Bookmarks Tools Window Help

http://alifarm7.ct.infn.it:50080/gridice/vo_details.php?voName=gilda&visi

Home Bookmarks Webmail Tiscali Mail Missioni Offerte Ordini Mozilla.org

Site view VO view Job Monitoring Geo view Gris view

VO view::gilda >> Core Services >> Computing Resources

Computing Resources **Storage Resources**

Computing Element ID	Site	Free Slots	Total Slots
cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-infinite	be.itu.edu.tr	0	2
cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-long	be.itu.edu.tr	0	2
cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-short	be.itu.edu.tr	0	2
skurut1.cesnet.cz:2119/jobmanager-lcgpbs-gilda	cesnet.cz	0	0
grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-cert	cnaf.infn.it	2	2
grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-infinite	cnaf.infn.it	2	2
grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-long	cnaf.infn.it	2	2
grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-short	cnaf.infn.it	2	2
gildace.ct.astro.it:2119/jobmanager-lcgpbs-infinite	ct.astro.it	1	1
gildace.ct.astro.it:2119/jobmanager-lcgpbs-long	ct.astro.it	1	1
gildace.ct.astro.it:2119/jobmanager-lcgpbs-short	ct.astro.it	1	1
ce-test.ct.infn.it:2119/jobmanager-lcglsf-infinite	ct.infn.it	8	8
ce-test.ct.infn.it:2119/jobmanager-lcglsf-long	ct.infn.it	8	8
ce-test.ct.infn.it:2119/jobmanager-lcglsf-short	ct.infn.it	8	8
grid010.ct.infn.it:2119/jobmanager-lcgpbs-infinite	ct.infn.it	19	19
grid010.ct.infn.it:2119/jobmanager-lcgpbs-long	ct.infn.it	19	19
grid010.ct.infn.it:2119/jobmanager-lcgpbs-short	ct.infn.it	19	19
ce.grid.unipg.it:2119/jobmanager-lcgpbs-infinite	grid.unipg.it	16	16
ce.grid.unipg.it:2119/jobmanager-lcgpbs-long	grid.unipg.it	16	16
ce.grid.unipg.it:2119/jobmanager-lcgpbs-short	grid.unipg.it	16	16
grid4.na.astro.it:2119/jobmanager-lcgpbs-cert	na.astro.it	7	7
grid4.na.astro.it:2119/jobmanager-lcgpbs-infinite	na.astro.it	7	7
grid4.na.astro.it:2119/jobmanager-lcgpbs-long	na.astro.it	7	7
grid4.na.astro.it:2119/jobmanager-lcgpbs-short	na.astro.it	7	7
gilda-ce-01.pd.infn.it:2119/jobmanager-lcgpbs-infinite	pd.infn.it	2	2

Computing Resources		Storage Resources	
Storage Element ID	Storage Space ID	Site ▼	
cn02.be.itu.edu.tr	gilda:gilda	be.itu.edu.tr	139.22 Gb 32 Mb
testbed005.cnaf.infn.it	gilda:gilda	cnaf.infn.it	13.44 Gb 1.89 Gb
gildase.ct.astro.it	gilda:gilda	ct.astro.it	104.54 Gb 1.92 Gb
grid009.ct.infn.it	gilda:gilda	ct.infn.it	1.38 Tb 638.26 Gb
alifarm12.ct.infn.it	gilda:gilda	ct.infn.it	22.19 Gb 2.68 Gb
se.grid.unipg.it	gilda:gilda	grid.unipg.it	7.33 Gb 1.79 Gb
grid3.na.astro.it	gilda:gilda	na.astro.it	213.79 Gb 3.23 Gb
gilda-se-01.pd.infn.it	gilda:gilda	pd.infn.it	498.59 Gb 727 Mb
dgt02.ui.savba.sk	gilda:gilda	ui.savba.sk	68.54 Gb 145 Mb

Generated: Fri, 6 May 2005 12:49:01 +0200

GridICE Homepage



The Grid Tutor

(<https://grid-tutor.ct.infn.it>, <https://glite-tutor.ct.infn.it>)

Enabling Grids for E-science

Welcome to the GENIUS INFN GRID Portal - Mozilla

File Edit View Go Bookmarks Tools Window Help

https://grid-tutor.ct.infn.it/ Go Search

Home Bookmarks Webmail Tiscali Mail Missioni Offerte Ordini FastWeb Mozilla.org

File Services
Security Services
Job Services
Data Services
Info Services
Monitoring Services
Interactive Services
Grid Settings
Set VO/VOMS
Current VO Services
Statistics
Logout

powered by
[EnginFrame 3.2](#)
compliant with
[LCG-2 GRID.IT](#)
[gLite-1](#)

Grid Enabled web eNvironment for site Independent User job Submission

Welcome to GENIUS

[Important Notice](#)
[GENIUS User's Guide \(pdf\)](#)
[New Grid Authentication with MyProxy](#)
[GENIUS MyProxy Server Installation](#)
[GENIUS CVS Available](#)
[GENIUS Mailing List](#)
[GENIUS Mailing Archive \(Help on Majordomo Commands\)](#)
[GRID MOVIE](#)
[Useful Links](#)
[Credits](#)

This portal is best viewed with Mozilla 1.6.
Netscape (4.79, 4.80, 6 and higher) and Internet Explorer (5 or higher) can also be used.
The use of any other web browsers could induce some visualization mismatches and is not currently suggested.
GENIUS is based on Apache 1.3.31 and OpenSSL 0.9.7d.
Last update: Tue 12 April 2005

Current VO Services
Statistics
Logout

powered by
[EnginFrame 3.2](#)
compliant with
[LCG-2 GRID.IT](#)
[gLite-1](#)

fn.it/ Go Search

Offerte Ordini FastWeb Mozilla.org





The Grid Demonstrator (1/2)

(<https://grid-demo.ct.infn.it>, <https://glite-demo.ct.infn.it>)

Enabling Grids for E-science

Welcome to the GENIUS INFN GRID Portal - Mozilla

File Edit View Go Bookmarks Tools Window Help

https://grid-demo.ct.infn.it/

Home Bookmarks mozilla.org mozillaZine mozdev.org

INFN Istituto Nazionale di Fisica Nucleare

enginframe

genius

eGEE Enabling Grids for E-science in Europe

Grid Enabled web eNvironment for site Independent User job Submission

File Services

Security Services

Info Services

Monitoring Services

VO Services

Login

powered by EnginFrame 3.2 compliant with LCG-2 GRID.IT

Welcome to the **GILDA** Grid Demonstrator powered by **GENIUS**

GILDA Grid Demonstrator User's Guide ([html](#), [pdf](#))

[Credits](#)

This portal is best viewed with Mozilla 1.6. Netscape (4.79, 4.80, 6 and higher) and Internet Explorer (5 or higher) can also be used. The use of any other web browsers could induce some visualization mismatches and is not currently suggested. Last update: **Fri 3 Sep 2004**

Demonstrator Applications

infn.it/

Offerte Ordini FastWeb Mozilla.org

enginframe

genius

eGEE Enabling Grids for E-science

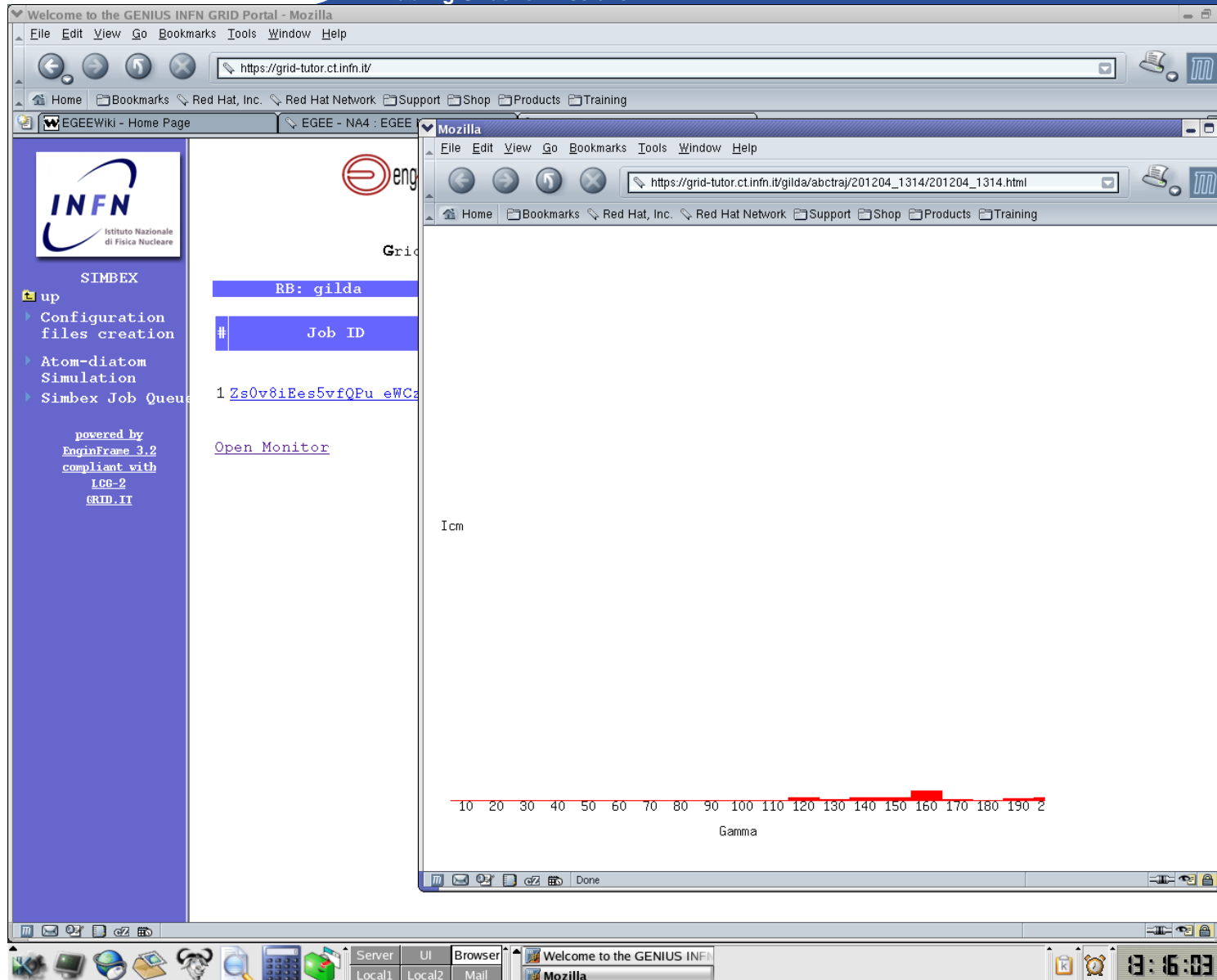
Grid Enabled web eNvironment for site Independent User job Submission

Welcome to the **GILDA** Grid Demonstrator powered by **GENIUS** based on **GLite**

GILDA Grid Demonstrator User's Guide ([html](#), [pdf](#))

[Credits](#)

This portal is best viewed with Mozilla 1.6. Netscape (4.79, 4.80, 6 and higher) and Internet Explorer (5 or higher) can also be used. The use of any other web browsers could induce some visualization mismatches and is not currently suggested. Last update: **Fri 24 May 2005**



Welcome to the GENIUS INFN GRID Portal - Mozilla

File Edit View Go Bookmarks Tools Window Help

https://grid-tutor.ct.infn.it/

Home Bookmarks Red Hat, Inc. Red Hat Network Support Shop Products Training

WEGEEWiki - Home Page EGEE - NA4 : EGEE

INFN Istituto Nazionale di Fisica Nucleare

SIMBEX

- up
- Configuration files creation
- Atom-diatom Simulation
- Simbex Job Queue

powered by EnginFrame 3.2 compliant with LCG-2 GRID.IT

RB: gilda

#	Job ID
1	Zs0v8iEes5vfQPu_eWCz

[Open Monitor](#)

Icm

Gamma

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 2

Done

Server UI Browser Local1 Local2 Mail

Welcome to the GENIUS INFN

Mozilla

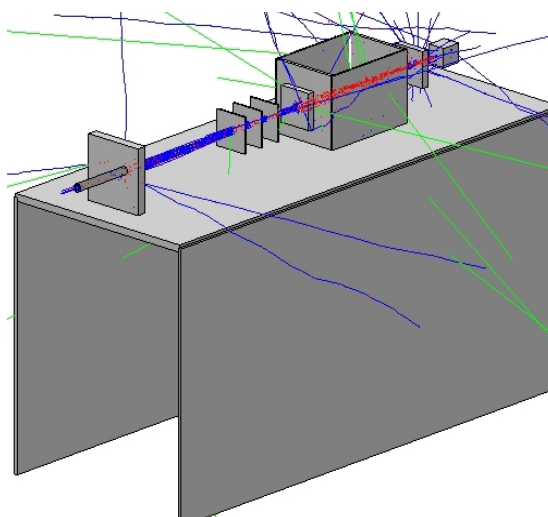
13:16:03

Interactive
MPI jobs !

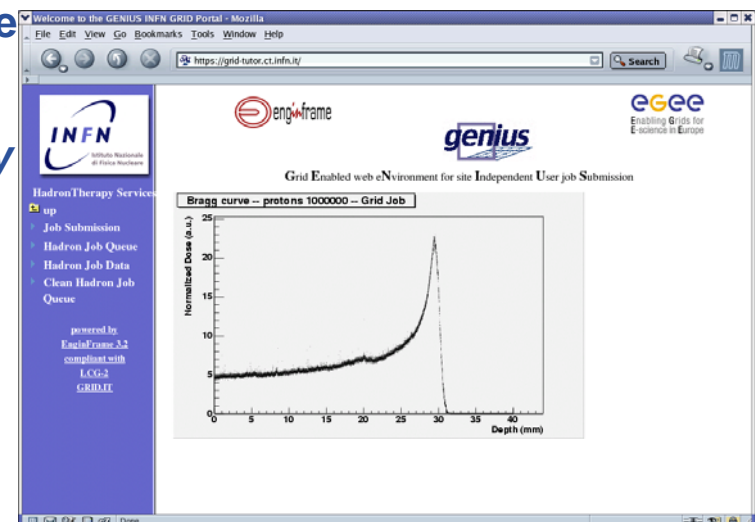
**CATANA beam
line in reality**



**hadronTherapy in
GENIUS**



**CATANA beam line
simulated by
*hadronTherapy***




Welcome to the GENIUS INFN GRID Portal - Mozilla



File Edit View Go Bookmarks Tools Window Help


https://grid-tutor.ct.infn.it/

Home Bookmarks Red Hat, Inc. Red Hat Network Support Shop Products Training



INFN
Istituto Nazionale
di Fisica Nucleare



eGEE
Enabling Grids for
E-science in Europe

Grid Enabled web eNvironment for site Independent User job Submission

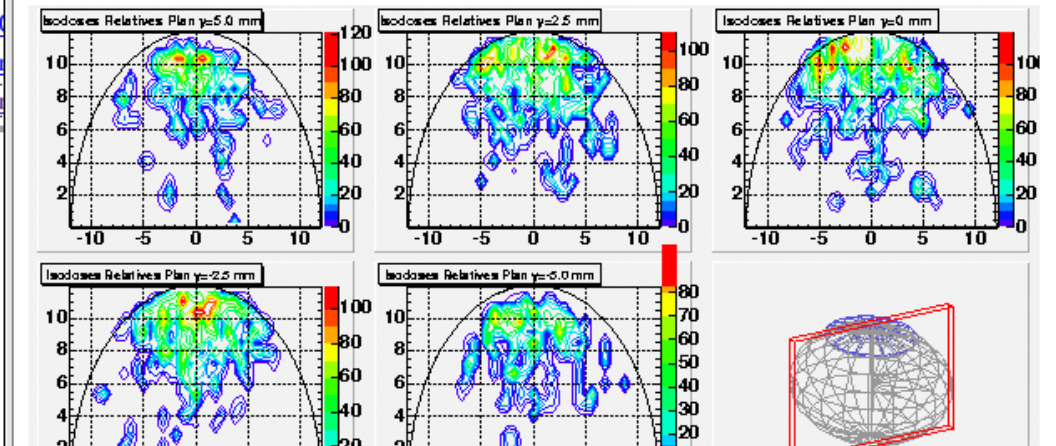
RB: gilda	VO: gilda	RLS: GILDA	Your Data	Logout
Destroy	Directory contents - tmp1100001761583.ef/gate_job_list_20041109_123955			

ResultTOT
giorgio lo
RelDoseT
RelDoseT

powered by
EnginFrame 3.2
compliant with
LCG-2
GRID.IT

RelDoseTree.gif (GIF Image, 606x302 pixels) - Mozilla

https://grid-tutor.ct.infn.it/ef/download/RelDose

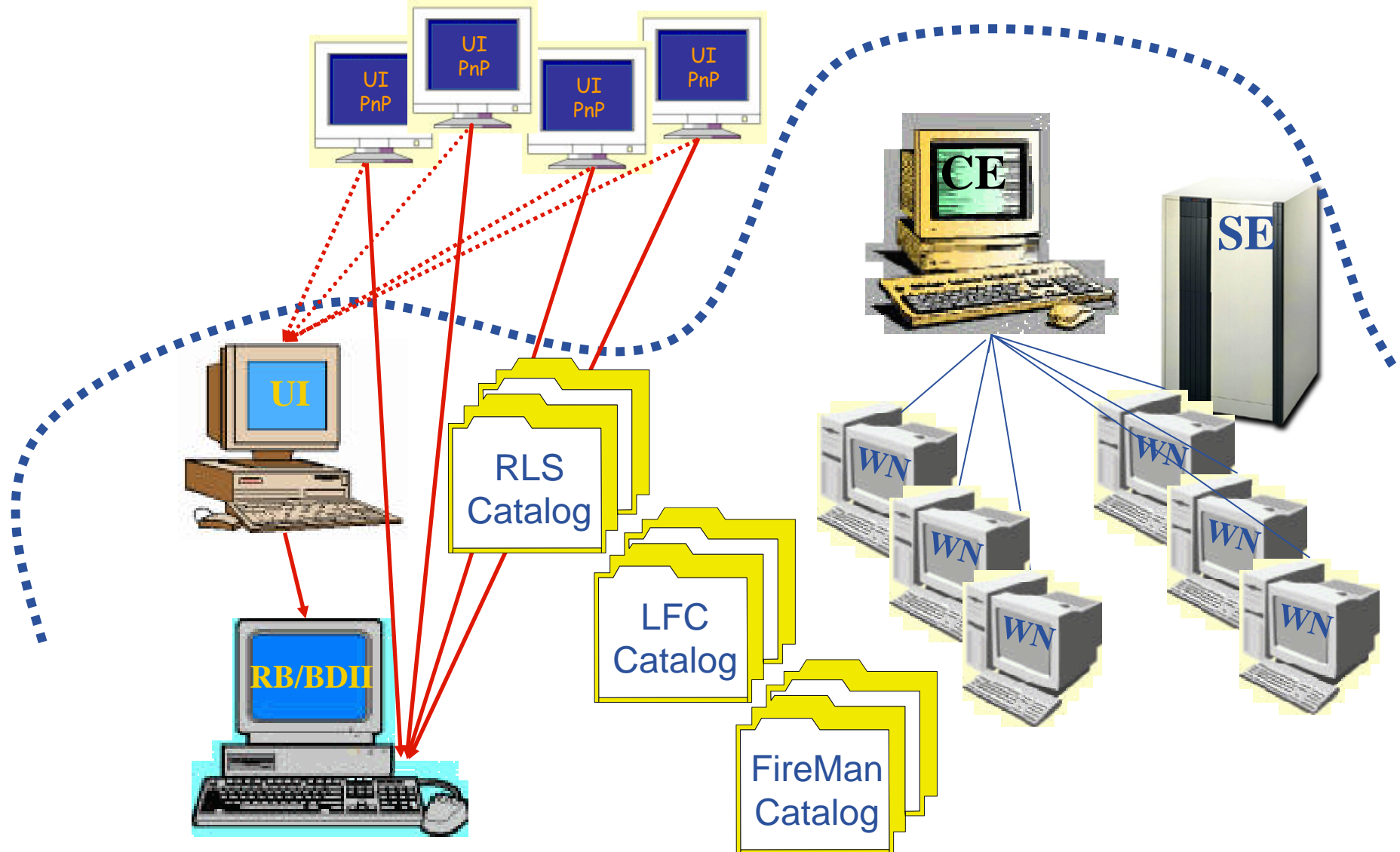


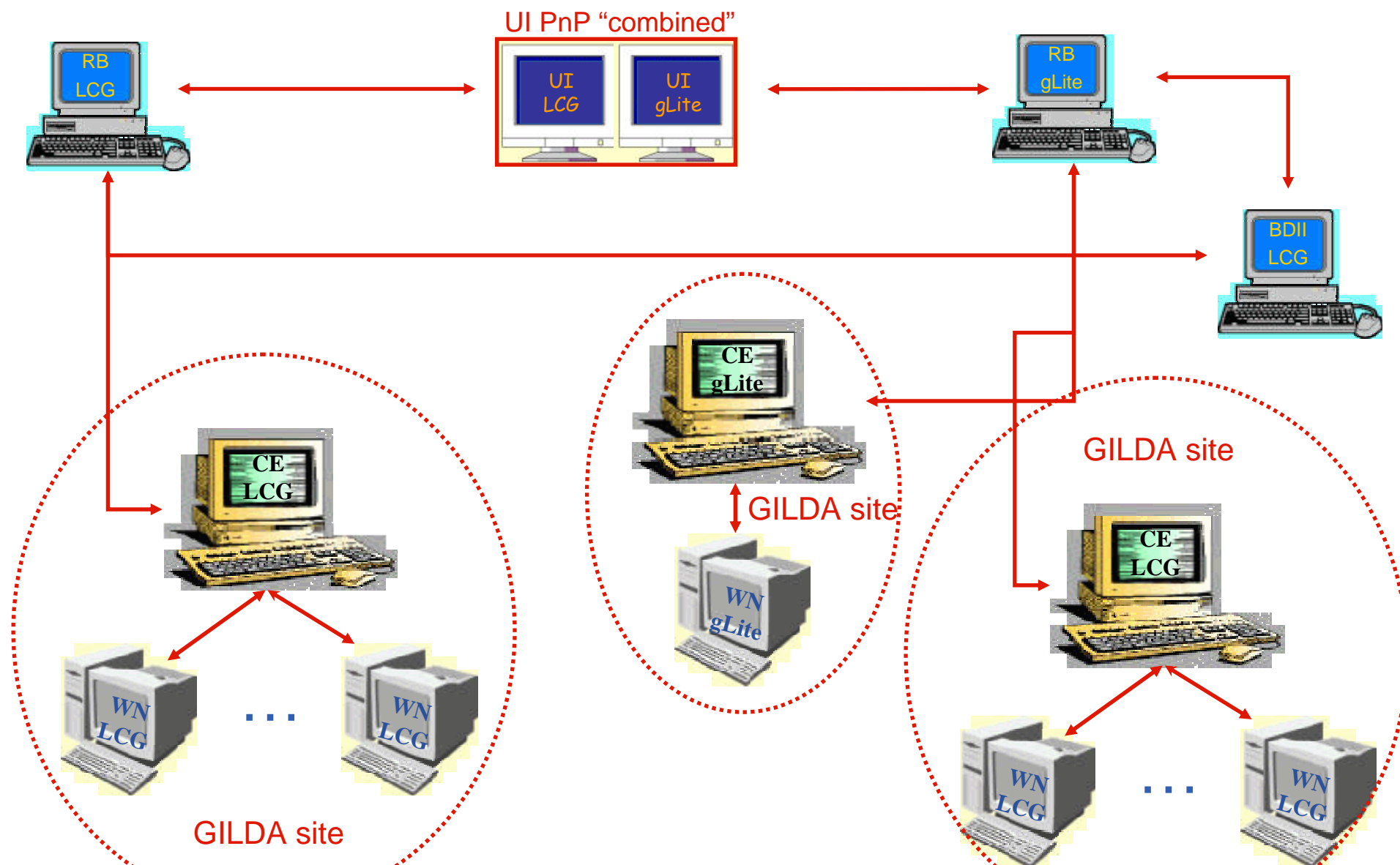
Done

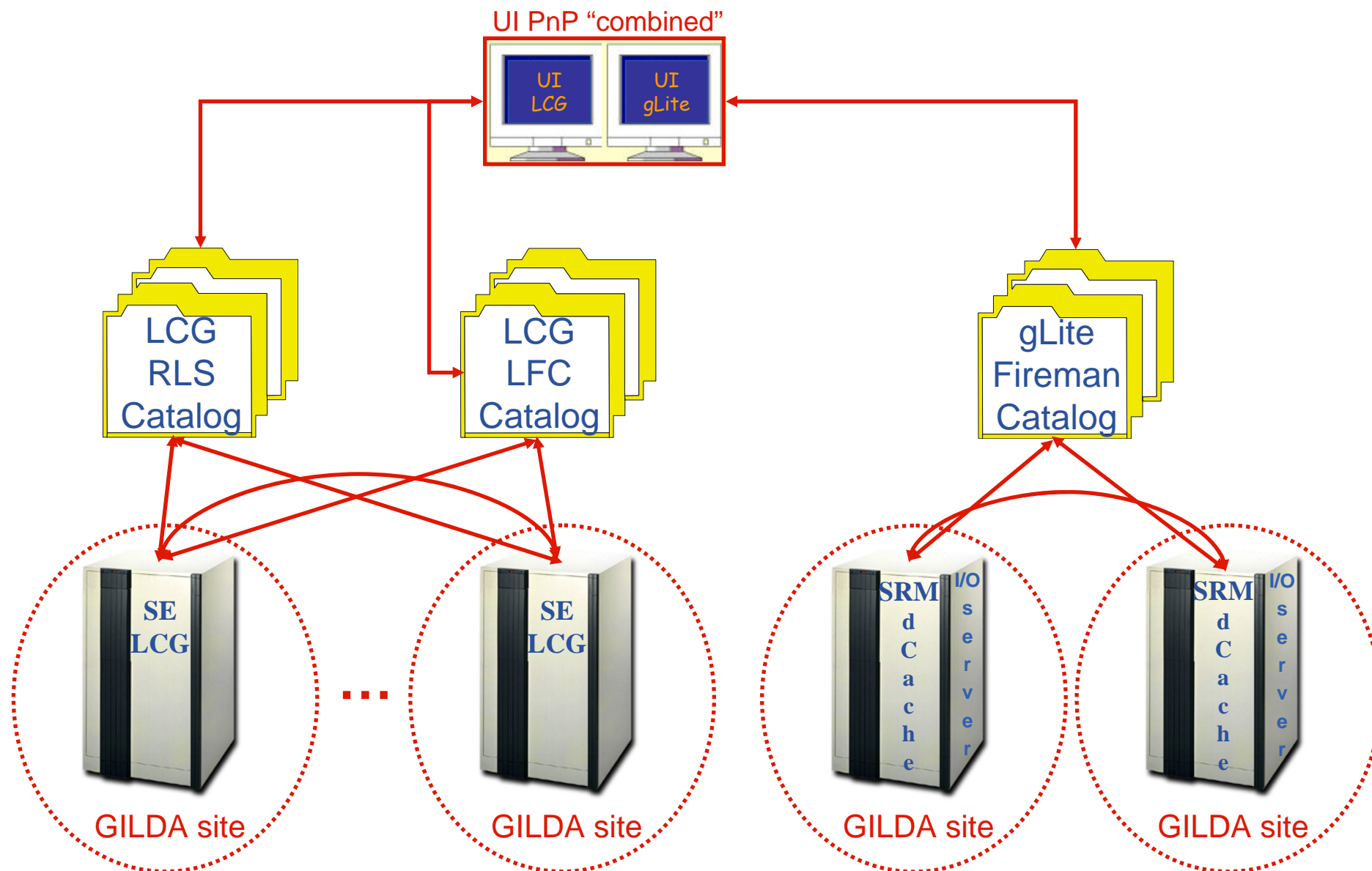


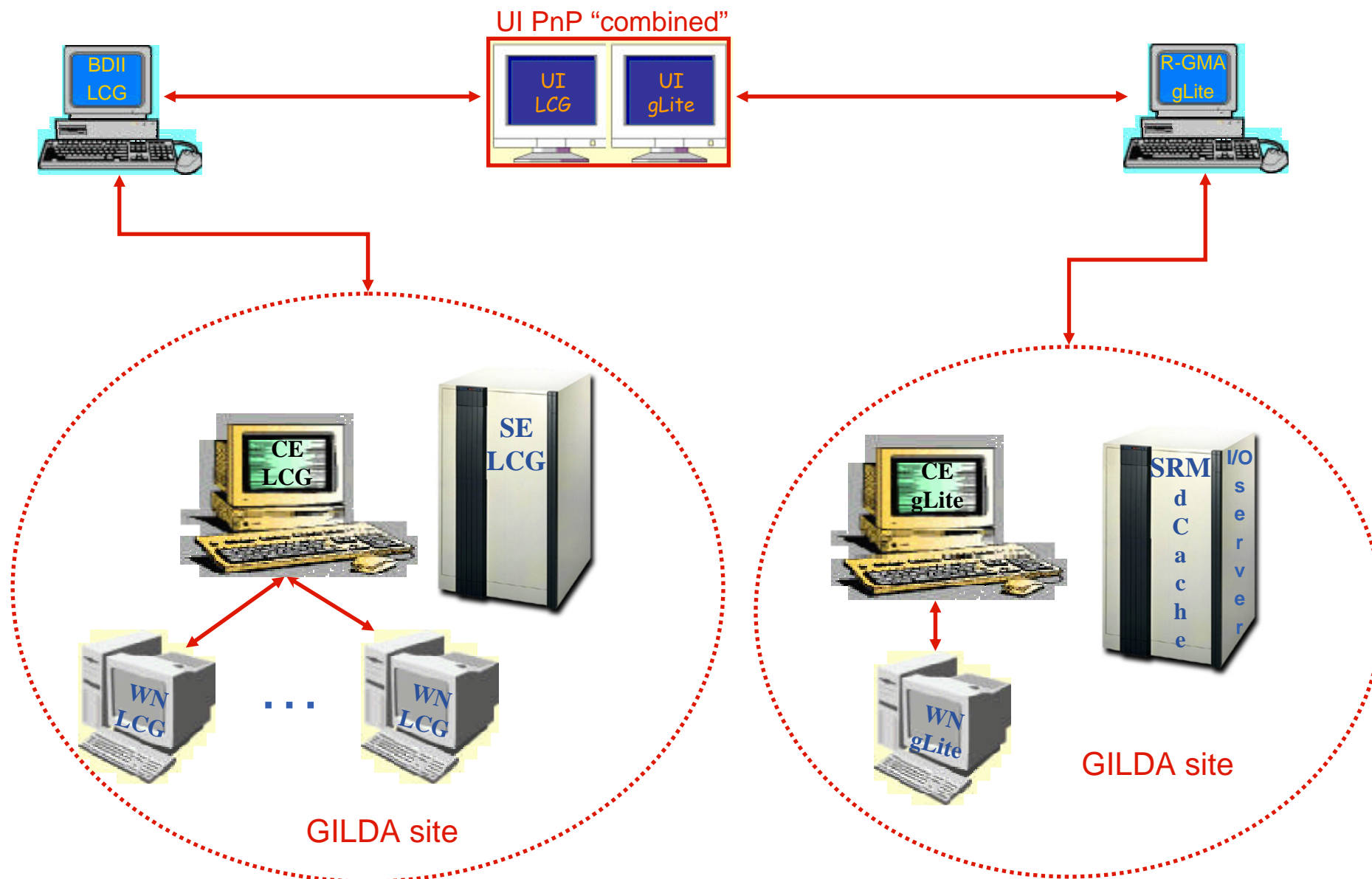
The screenshot shows a Mozilla browser window displaying the GILDA Live UI. The browser's address bar shows the URL <https://gilda.ct.infn.it/UIPnPcomb/>. The page features the eGEE logo and the text "Enabling Grids for E-science". Below this, there is a navigation bar with links: HOME, TESTBED, GRID DEMONSTRATOR, 1) CERTIFICATION AUTHORITY, 2) VIRTUAL ORGANIZATION, 3) GRID TUTOR, MONITORING, and CONTACTS. The main content area is titled "GILDA User Interface Plug & Play" and "GILDA User Interfaces Plug & Play". It includes a list of links on the left: Grid tutorials, GILDA Poster, Video tutorials, Live User Interface, User Interface PnP (marked with a "NEW" star), Instructions for users, Instructions for sites, Useful links, Sponsors, Usage Statistics, and Old Usage Statistics. The central text reads "GILDA USER INTERFACE PLUG & PLAY COMBINED (LCG AND GLITE)". Below this, a paragraph explains that the GILDA User Interface Plug & Play tarball contains all the necessary software to turn a Linux PC into a machine that can access and use the GILDA dissemination grid. The right sidebar contains a vertical menu with links: Introduction, Use, Download, Useful links & info, and Contacts & acknowledgments.

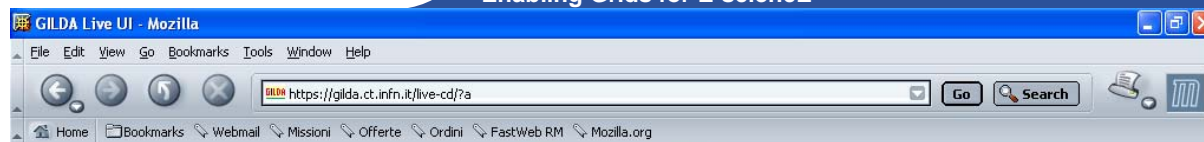
Students User Interfaces











- Grid tutorials
- GILDA Poster
- Video tutorials
- Live User Interface NEW
- User Interface PnP
- Instructions for users
- Instructions for sites
- Useful links

- Sponsors
- Usage Statistics
- Old Usage Statistics



GILDA LIVE USER INTERFACE

The *GILDA Live User Interface* DVD contains all the necessary software and use the [GILDA](#) dissemination grid realized in the context of the [INFN Grid Project](#) and the European [EGEE Project](#).
GILDA Live User Interface is based both on INFN Grid 2.4.0 (fully compatible with LCG 2.4.0) and gLite 1.1 on [Knoppix 3.6](#).

SYSTEM REQUIREMENTS

The Grid middleware installed on the GILDA testbed and, then, on

GILDA Live
User
Interface



GILDA User Interface
gLite 1.1 and LCG 2.4



2004

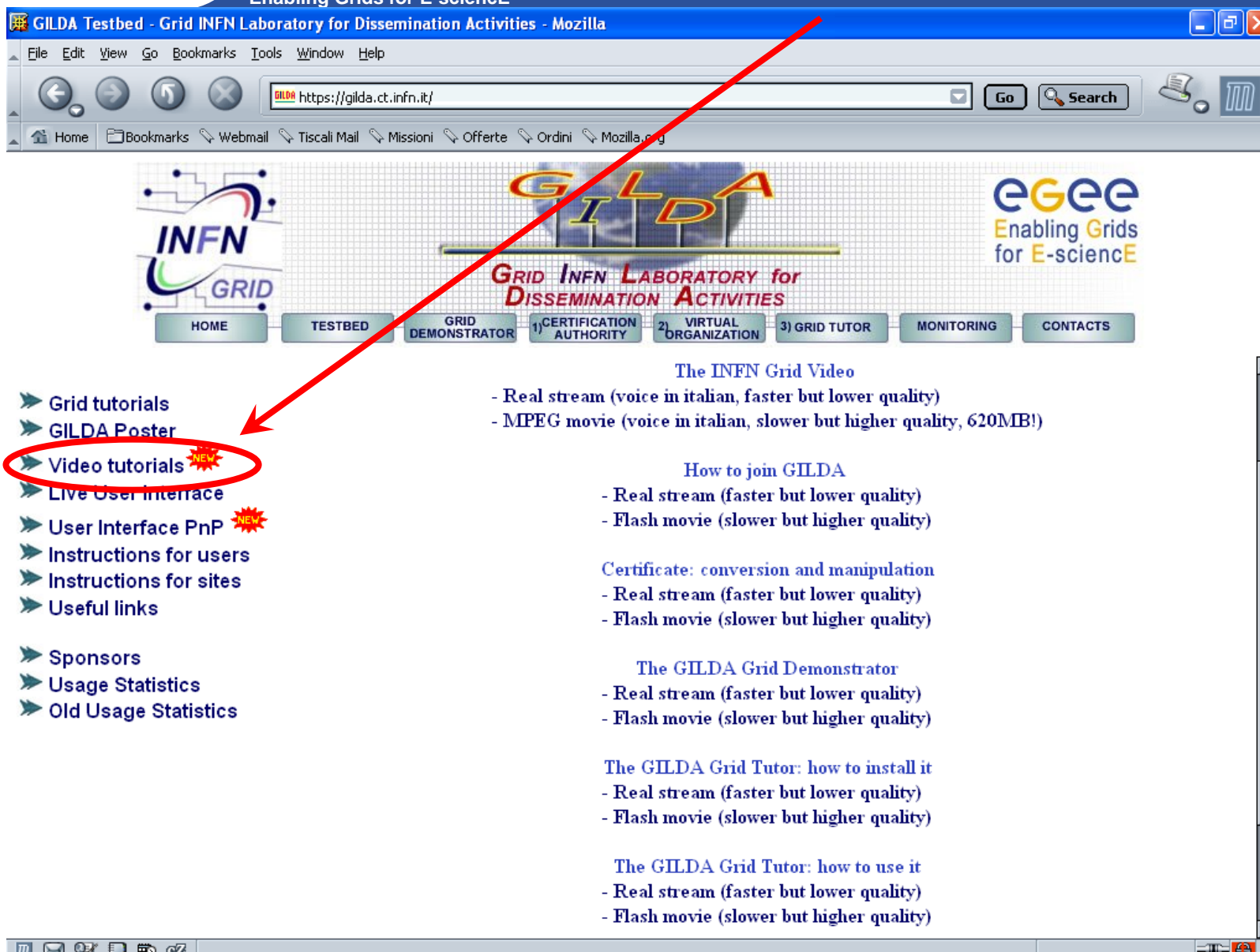
Edinburgh, 7 April 2004, [slides](#), [pictures](#)
 Tunis, 22-23 April 2004, [pictures](#)
 Edinburgh, 26-28 April 2004, [slides](#), [pictures](#)
 CERN, 17-19 May 2004, [pictures](#)
 Catania, 24-25 May 2004, [home page](#), [pictures](#)
 Dubna, 29 June - 2 July 2004, [agenda](#)
 Edinburgh, 6 July 2004, [home page](#)
 Catania, 14-16 July 2004, [home page](#), [pictures](#)
 Vico Equense, 19 July 2004, [slides](#), [pictures](#)
 Vico Equense, 6-10 September 2004, [home page](#)
 Catania, 4-8 October 2004, [home page](#), [agenda](#)
 Vilnius, 5-6 October 2004, [agenda](#)
 London, 6 October 2004
 Madrid, 6-7 October 2004, [agenda](#)
 Heidelberg, 11-14 October 2004
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The GILDA Video Tutorials (<https://gilda.ct.infn.it/video.html>)



Grid tutorials

- Grid tutorials
- GILDA Poster
- Video tutorials** NEW
- Live User Interface
- User Interface PnP NEW
- Instructions for users
- Instructions for sites
- Useful links
- Sponsors
- Usage Statistics
- Old Usage Statistics

The INFN Grid Video

- Real stream (voice in italian, faster but lower quality)
- MPEG movie (voice in italian, slower but higher quality, 620MB!)

How to join GILDA

- Real stream (faster but lower quality)
- Flash movie (slower but higher quality)

Certificate: conversion and manipulation

- Real stream (faster but lower quality)
- Flash movie (slower but higher quality)

The GILDA Grid Demonstrator

- Real stream (faster but lower quality)
- Flash movie (slower but higher quality)

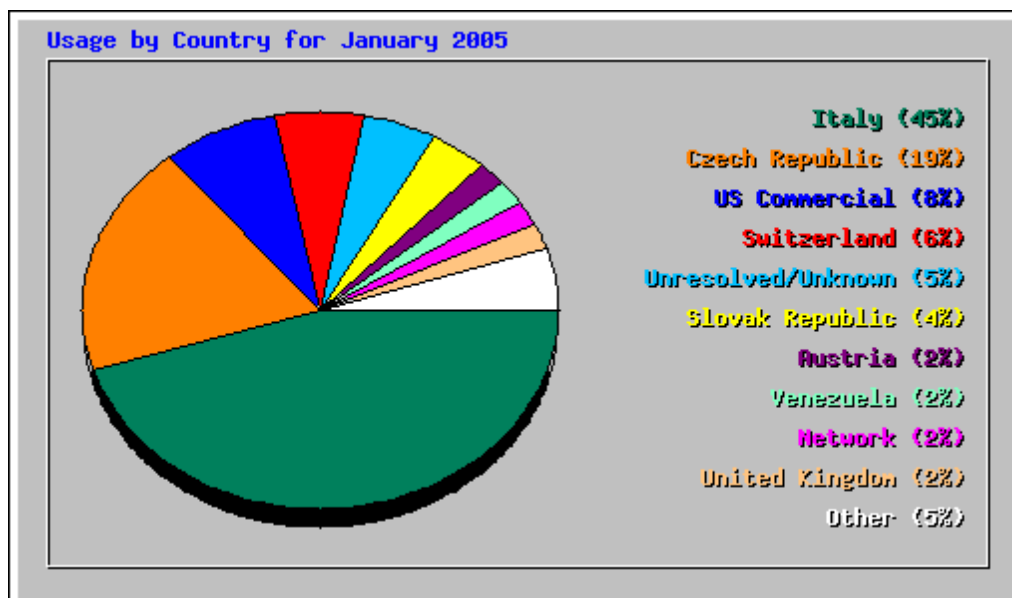
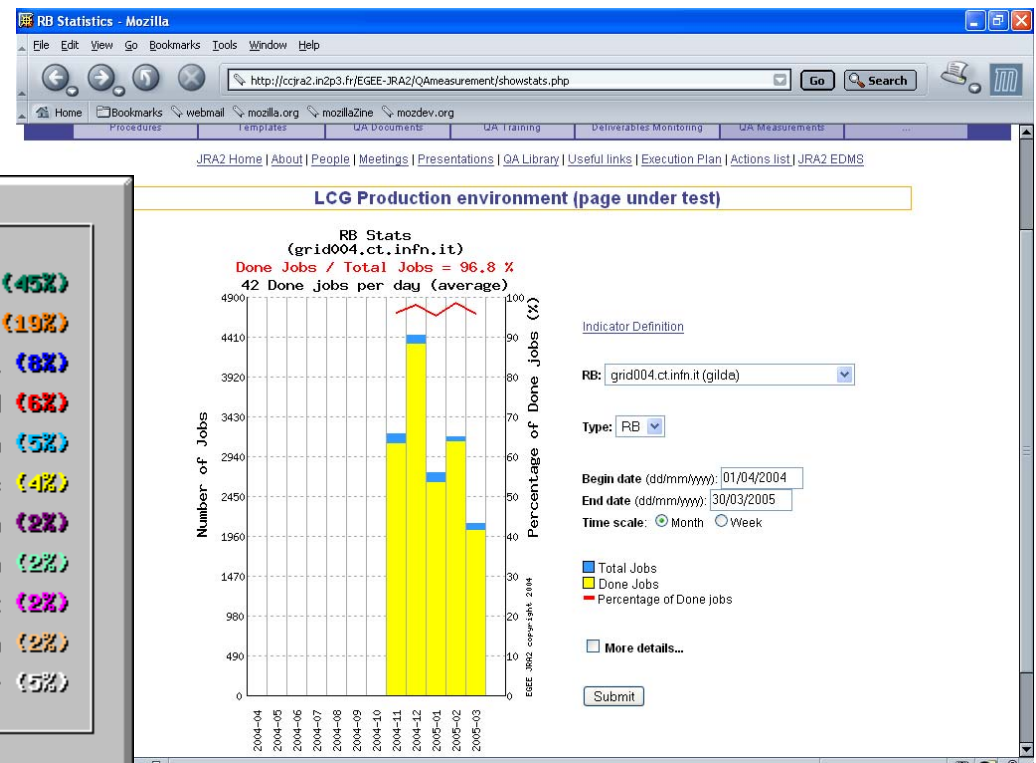
The GILDA Grid Tutor: how to install it

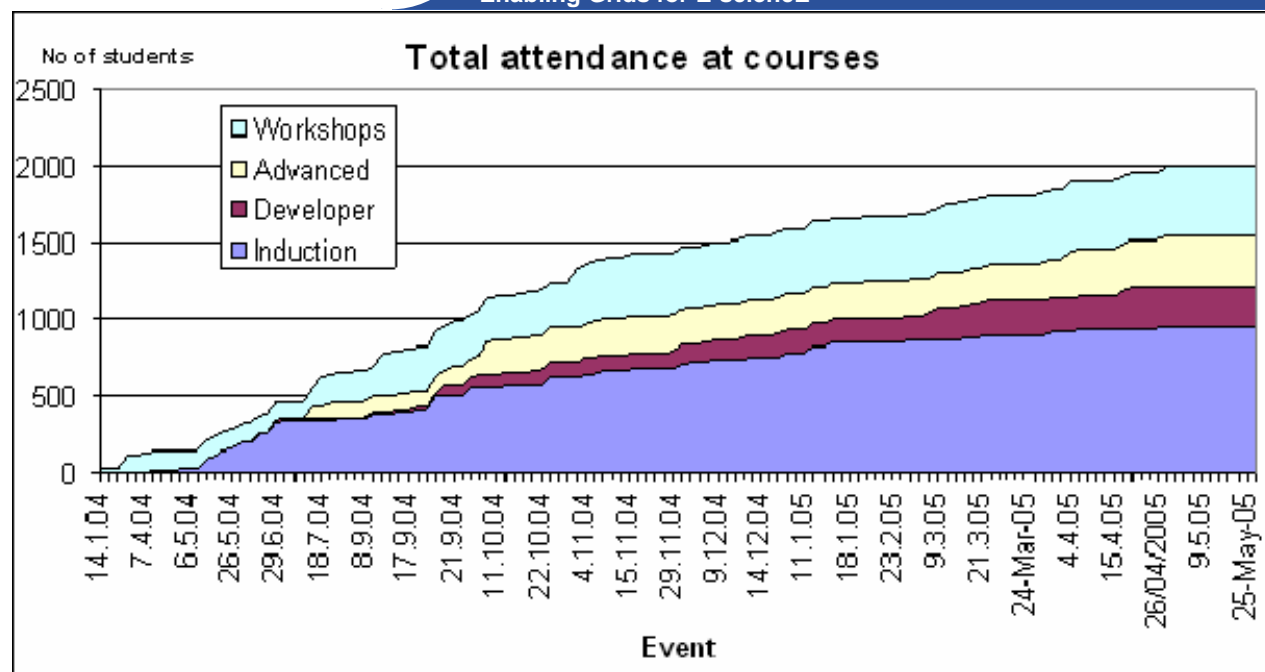
- Real stream (faster but lower quality)
- Flash movie (slower but higher quality)

The GILDA Grid Tutor: how to use it

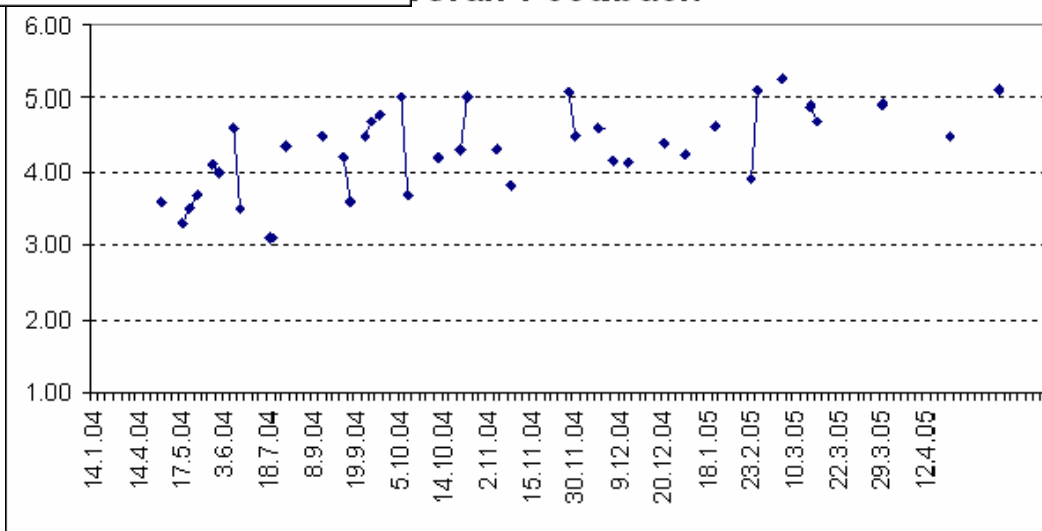
- Real stream (faster but lower quality)
- Flash movie (slower but higher quality)

- 15 sites in 3 continents
- > 2000 certificates issued, 15% renewed at least once
- > 50 tutorials and demos performed in 15 months
- > 50 jobs/day on the average
- Job success rate above 80%
- > 750,000 hits (> 40,000 visits) on (of) the web site from 10's of different countries
- > 0.5 TB of videos and UI's downloaded from the web site





Overall Feedback



- **7 Virtual Organizations supported:**
 - Biomedicine (Biomed)
 - Earth Science Academy (ESR)
 - Earth Science Industry (CGG)
 - Astroparticle Physics (MAGIC)
 - Computational Chemistry (GEMS)
 - Grid Search Engines (GRACE)
 - Astrophysics (PLANCK)
- **Development of complete interfaces with GENIUS for 3 Biomed Applications: GATE, hadronTherapy, and Friction/Arlecione**
- **Development of complete interfaces with GENIUS for 4 Generic Applications: EGEODE (CGG), MAGIC, GEMS, and CODESA-3D (ESR) (successfull demos of EGEODE and GEMS at EGEE review)**
- **Development of complete interfaces with GENIUS for 16 demonstrative applications available on the GILDA Grid Demonstrator (<https://grid-demo.ct.infn.it>)**
- **Development of complete interface with CLI for NEMO**

- **The EGEE middleware:**
 - Is exiting prototyping phase and entering real production phase (LHC first real data are only 2 years away from now!)
 - Implements a full and complete stack of grid services that can be used all together or separately at user's discretion
 - Closely follow the standardization process going in GGF and other for a
- **GILDA is a real virtual laboratory for dissemination of grid computing:**
 - It is a “de facto” standard t-Infrastructure adopted both by EGEE and some forthcoming EU-FP6 projects (EELA, EUCHINAGRID, EUMEDGRID, **ICEAGE**)
 - It is a complete suite of grid elements (test-bed, CA, VO, monitoring system, web portal, **live user interface, user interface plug&play**) and applications fully dedicated to dissemination purposes and pre-orting of new applications to EGEE Infrastructure
 - GILDA runs latest production (stable) version of both the LCG grid middleware but it is also early adopting gLite in order to make the transition to the new middleware smoother and easier