

# GILDA: a t-Infrastructure for Dissemination and Training

*Roberto Barbera*

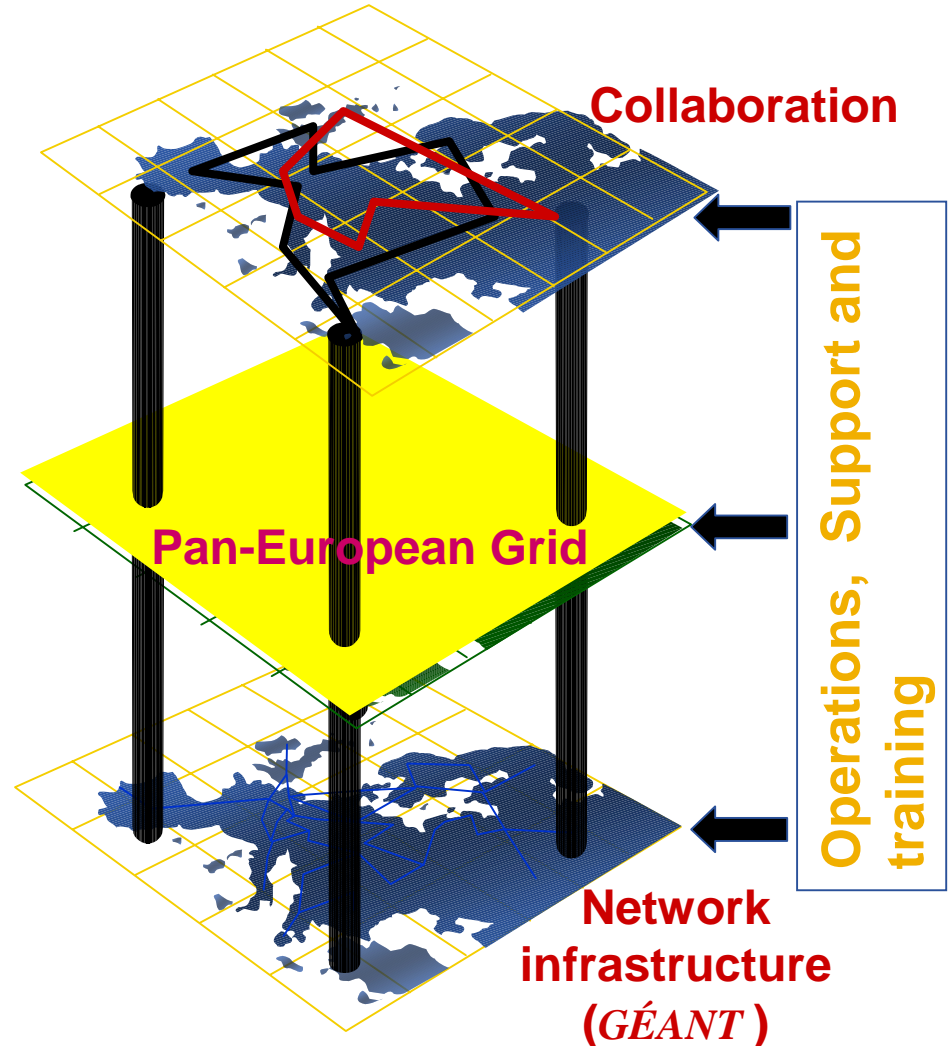
*University of Catania and INFN*

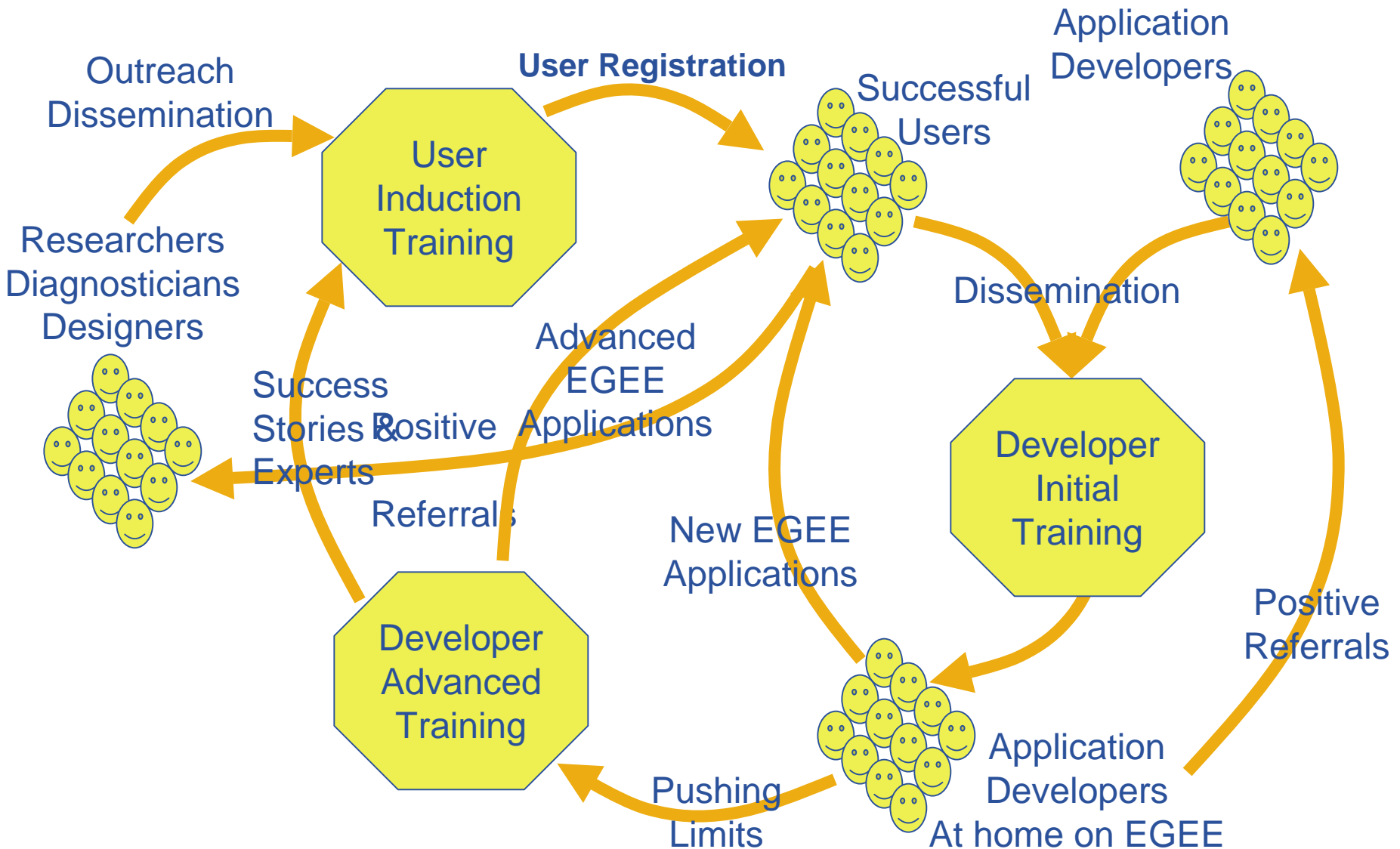
*GARR\_05, Pisa, 11.05.2005*

- **Introduction**
- **The GILDA t-Infrastructure**
  - services
  - tools
  - applications
- **Summary and conclusions**

Build a large-scale production grid service to:

- Underpin European science and technology
- Link with and build on national, regional and international initiatives
- Foster international cooperation both in the creation and the use of the e-infrastructure







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

- 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

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

GILDA consists of the following elements:

- [the GILDA Testbed](#): a series of sites and services (Resource Broker, Information Index, Replica Location Server, Monitoring tool, Computing Elements, and Storage Elements) spread all over Italy and the rest of the world on which the latest version of the [INFN Grid](#) middle-ware (fully compatible with [LCG](#) middle-ware) is 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,
- [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](mailto:gilda@infn.it), also archived on the web [here](#).

GILDA is an activity of the Italian Istituto Nazionale di Fisica Nucleare (INFN) carried on





15 sites in 3 continents !  
all of them GEANT sites

Enabling Grids for E-science

**Grid services**

This is a table of the general Grid Services available on GILDA.

SERVICE	HOST
LCG-2 Resource Broker (RB)	<a href="http://grid004.ct.infn.it">grid004.ct.infn.it</a>
LCG-2 Resource Broker (RB)	<a href="http://grid013.ct.infn.it">grid013.ct.infn.it</a>
LCG-2 Resource Broker (RB)	<a href="http://skurut2.cesnet.cz">skurut2.cesnet.cz</a>
gLite Resource Broker (RB)	<a href="http://glite-rb.ct.infn.it">glite-rb.ct.infn.it</a>
gLite Development Resource Broker (RB)	<a href="http://grid003.ct.infn.it">grid003.ct.infn.it</a>
Information Index (BDII)	<a href="http://grid013.ct.infn.it">grid013.ct.infn.it</a>
Backup Information Index (BDII)	<a href="http://grid004.ct.infn.it">grid004.ct.infn.it</a>
GILDA VO server	<a href="http://grid-vo.cnaf.infn.it:10389">grid-vo.cnaf.infn.it:10389</a>
GridICE Monitoring System	<a href="http://alfarm7.ct.infn.it:50060">alfarm7.ct.infn.it:50060</a>
LCG-2 Replica Location Service (RLS)	<a href="http://grid008.ct.infn.it">grid008.ct.infn.it</a>
gLite FiReMan Catalog	<a href="http://grid017.ct.infn.it">grid017.ct.infn.it</a>
MyProxy Server	<a href="http://grid001.ct.infn.it">grid001.ct.infn.it</a>
Backup MyProxy Server	<a href="http://grid014.ct.infn.it">grid014.ct.infn.it</a>

**Ports Used**

- 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

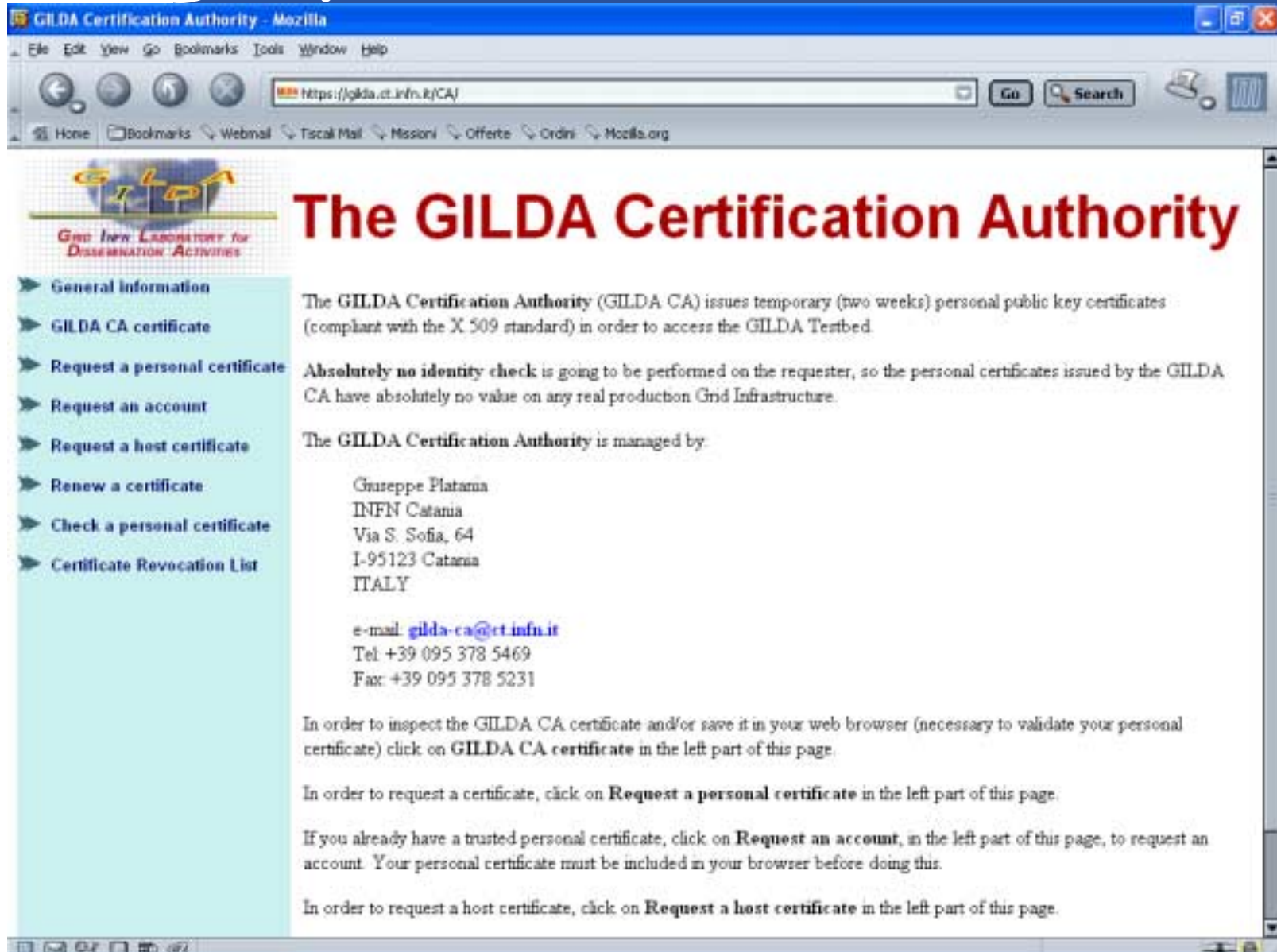
**Ready for gLite !**



GILDA is sponsored by:







**GILDA**  
Grid Infra Laboratory for  
Dissemination Activities

## The GILDA Certification Authority

- General information
- GILDA CA certificate
- Request a personal certificate
- Request an account
- Request a host certificate
- Renew a certificate
- Check a personal certificate
- Certificate Revocation List

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

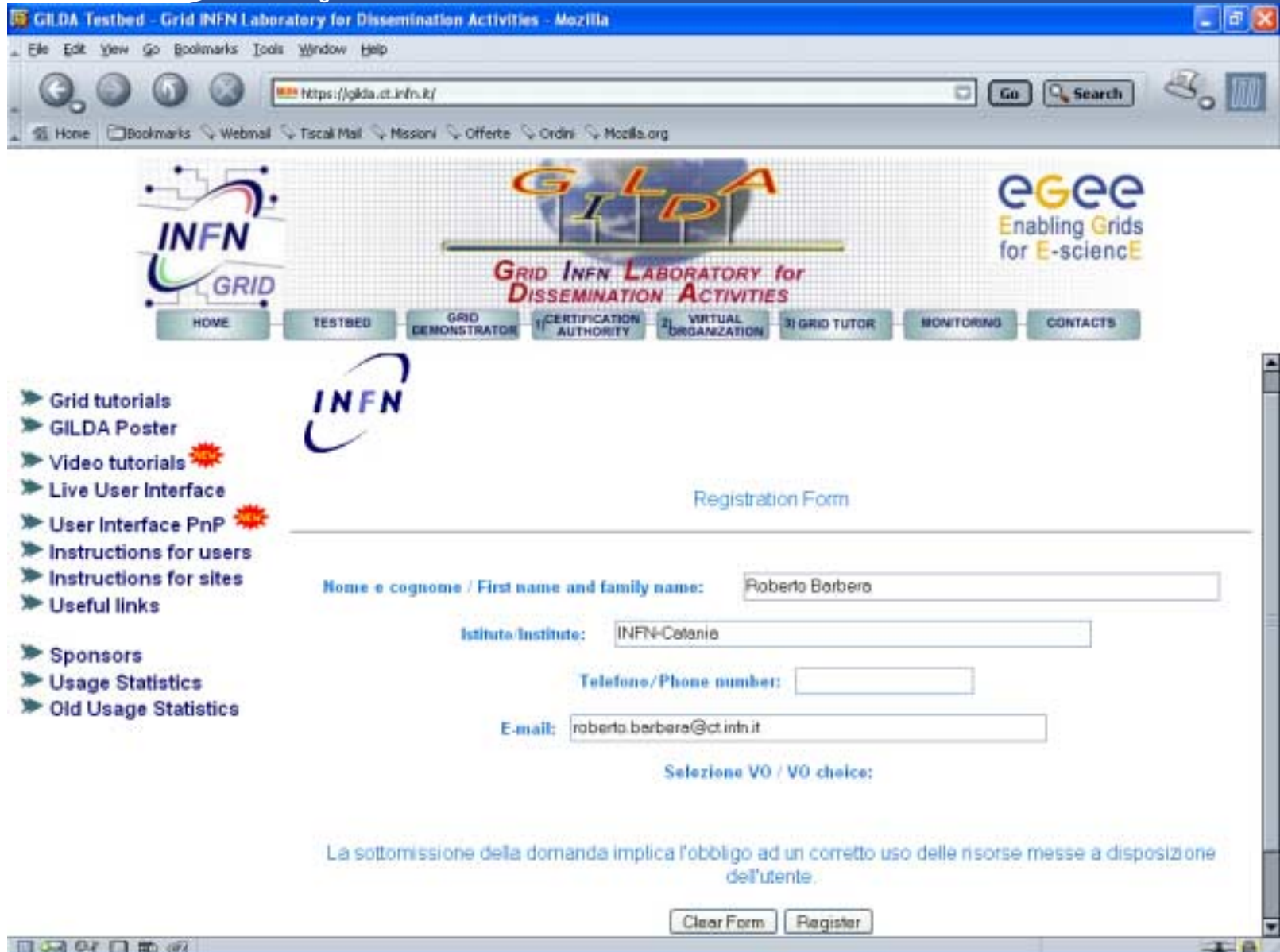
e-mail [gilda-ca@ct.infn.it](mailto:gilda-ca@ct.infn.it)  
Tel +39 095 378 5469  
Fax +39 095 378 5231

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.



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

INFN GRID

GILDA

eGee Enabling Grids for E-science

GRID INFN LABORATORY for DISSEMINATION ACTIVITIES

HOME TESTBED GRID DEMONSTRATOR CERTIFICATION AUTHORITY VIRTUAL ORGANIZATION 3D GRID TUTOR MONITORING CONTACTS

INFN

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.

Clear Form Register

- Grid tutorials
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- Old Usage Statistics



GLDA - GridICE - Grid Monitoring Service - Mozilla

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

GridICE  
The eyes of the Grid

Site view: ALL >> Summary

Computing Resources

Site	gce	gee	busjob	waitjob	jobload	slotload	power	wrate	cpu%t	cpu%load	available
be.itu.edu.tr	1	3	0	0	100%	100%	---	---	---	---	139.2 Gb
cesnet.cz	1	1	0	0	---	---	---	---	---	---	3 Tb
cnaf.infn.it	1	4	0	1	---	---	6K	1	0	---	13.4 Gb
ct.astro.it	1	4	0	17	---	---	4K	1	1	---	104.5 Gb
ct.infn.it	2	7	0	0	---	---	---	---	---	---	1.4 Tb
grid.unipg.it	1	3	0	0	---	---	20K	8	10	---	7.3 Gb
na.astro.it	1	4	0	0	---	---	---	---	---	---	213.8 Gb
pd.infn.it	1	4	2	6	---	---	8K	2	4	---	498.6 Gb
u.savba.sk	1	4	0	0	---	---	19K	4	4	---	68.5 Gb
<b>TOTAL</b>	<b>10</b>	<b>34</b>	<b>0</b>	<b>24</b>	<b>---</b>	<b>---</b>	<b>56K</b>	<b>16</b>	<b>21</b>	<b>---</b>	<b>5.4 Tb</b>

Generated: Fri, 6 May 2005 12:38:49 +0200

GLDA - GridICE - Grid Monitoring Service - Mozilla

http://alifarm7.ct.infn.it:50080/gridice/vs/vo\_details.php?volume=gilda=vol0

Site view VO view Job Monitoring Geo view Gns view

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

Computing Resources

Computing Element ID	Site	Free Slots	Total Slots
cn01.be.itu.edu.tr:2119/jobmanager-icglsf-infinite	be.itu.edu.tr	0	0
cn01.be.itu.edu.tr:2119/jobmanager-icglsf-long	be.itu.edu.tr	0	0
cn01.be.itu.edu.tr:2119/jobmanager-icglsf-short	be.itu.edu.tr	0	0
skunut1.cesnet.cz:2119/jobmanager-icgpbs-gilda	cesnet.cz	0	0
gnd011f.cnaf.infn.it:2119/jobmanager-icgpbs-cert	cnaf.infn.it	2	2
gnd011f.cnaf.infn.it:2119/jobmanager-icgpbs-infinite	cnaf.infn.it	2	2
gnd011f.cnaf.infn.it:2119/jobmanager-icgpbs-long	cnaf.infn.it	2	2
gnd011f.cnaf.infn.it:2119/jobmanager-icgpbs-short	cnaf.infn.it	2	2
gidace.ct.astro.it:2119/jobmanager-icgpbs-infinite	ct.astro.it	1	1
gidace.ct.astro.it:2119/jobmanager-icgpbs-long	ct.astro.it	1	1
gidace.ct.astro.it:2119/jobmanager-icgpbs-short	ct.astro.it	1	1
ce-test.ct.infn.it:2119/jobmanager-icglsf-infinite	ct.infn.it	8	8
ce-test.ct.infn.it:2119/jobmanager-icglsf-long	ct.infn.it	8	8
ce-test.ct.infn.it:2119/jobmanager-icglsf-short	ct.infn.it	8	8
gnd010.ct.infn.it:2119/jobmanager-icgpbs-infinite	ct.infn.it	19	19
gnd010.ct.infn.it:2119/jobmanager-icgpbs-long	ct.infn.it	19	19
gnd010.ct.infn.it:2119/jobmanager-icgpbs-short	ct.infn.it	19	19
ce.grid.unipg.it:2119/jobmanager-icgpbs-infinite	grid.unipg.it	16	16
ce.grid.unipg.it:2119/jobmanager-icgpbs-long	grid.unipg.it	16	16
ce.grid.unipg.it:2119/jobmanager-icgpbs-short	grid.unipg.it	16	16
gnd4.na.astro.it:2119/jobmanager-icgpbs-cert	na.astro.it	7	7
gnd4.na.astro.it:2119/jobmanager-icgpbs-infinite	na.astro.it	7	7
gnd4.na.astro.it:2119/jobmanager-icgpbs-long	na.astro.it	7	7
gnd4.na.astro.it:2119/jobmanager-icgpbs-short	na.astro.it	7	7
gilda-ce-01.pd.infn.it:2119/jobmanager-icgpbs-infinite	pd.infn.it	2	2

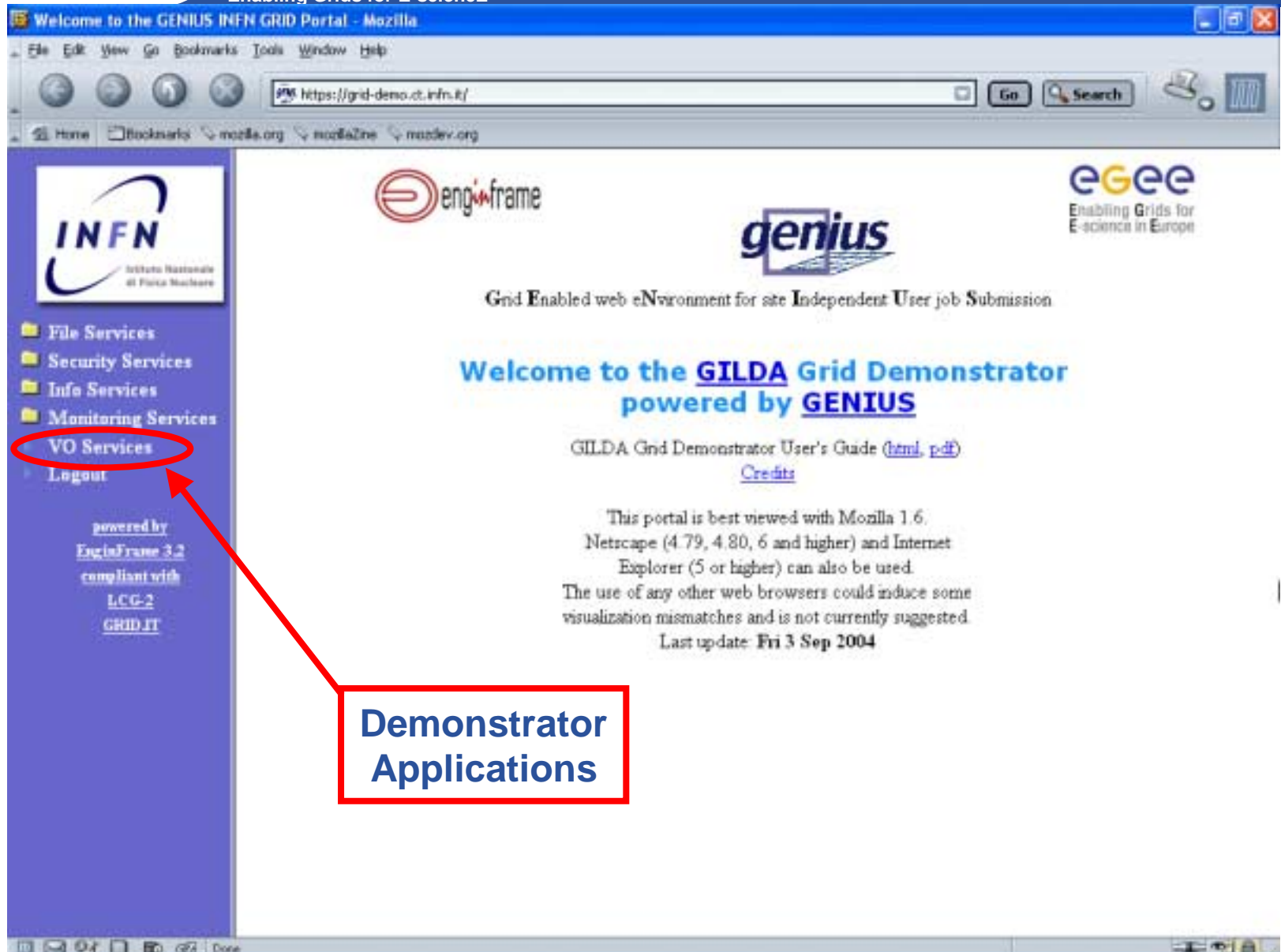
Storage Resources

Storage Element ID	Storage Space ID	Site	Free Space	Total Space
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
gidace.ct.astro.it	gilda:gilda	ct.astro.it	104.54 Gb	1.92 Gb
gnd009.ct.infn.it	gilda:gilda	ct.infn.it	1.38 Tb	838.26 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
gnd3.na.astro.it	gilda:gilda	na.astro.it	213.79 Gb	3.23 Gb
gilda-ce-01.pd.infn.it	gilda:gilda	pd.infn.it	498.59 Gb	727 Mb
dgt02.u.savba.sk	gilda:gilda	u.savba.sk	68.54 Gb	145 Mb

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

GridICE Homepage

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 mozillaDev.org

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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

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

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

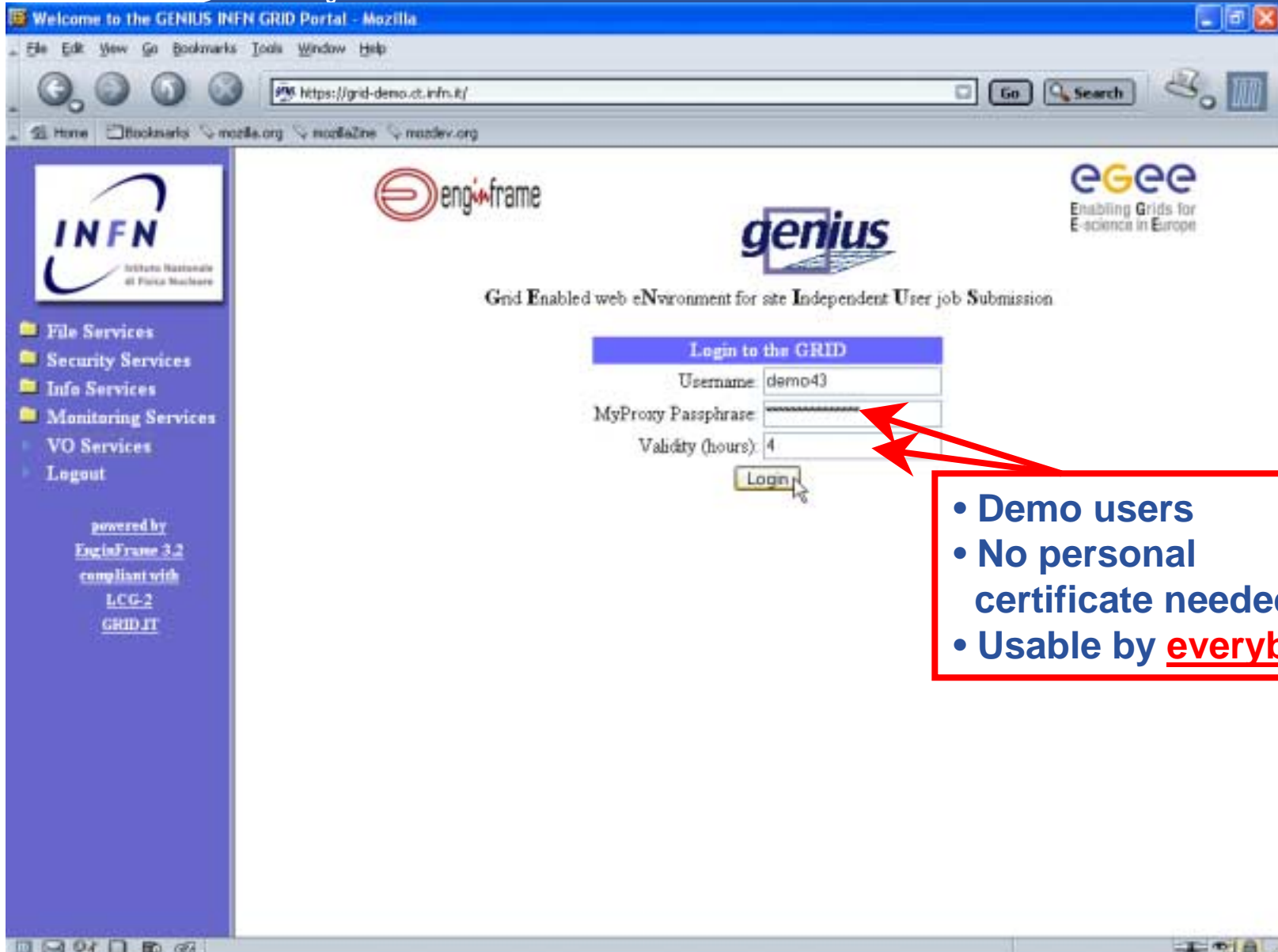
This portal is best viewed with Mozilla 1.6.  
Netscape (4.79, 4.80, 6 and higher) and Internet Explorer (5 or higher) can also be used.  
The use of any other web browsers could induce some visualization mismatches and is not currently suggested.  
Last update: **Fri 3 Sep 2004**

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

File Services  
Security Services  
Info Services  
Monitoring Services  
**VO Services**  
Logout

**Demonstrator Applications**





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 mozilla.org

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enginframe

**genius**

eGEE  
Enabling Grids for E-science in Europe

Grid Enabled web eNvironment for site Independent User job Submission

**Login to the GRID**

Username: demo43

MyProxy Passphrase: [REDACTED]

Validity (hours): 4

Login

- Demo users
- No personal certificate needed
- Usable by **everybody!**


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

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 mozilla2ne mozilla2ne



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di Fisica Nucleare







eGEE  
Enabling Grids for  
E-science in Europe

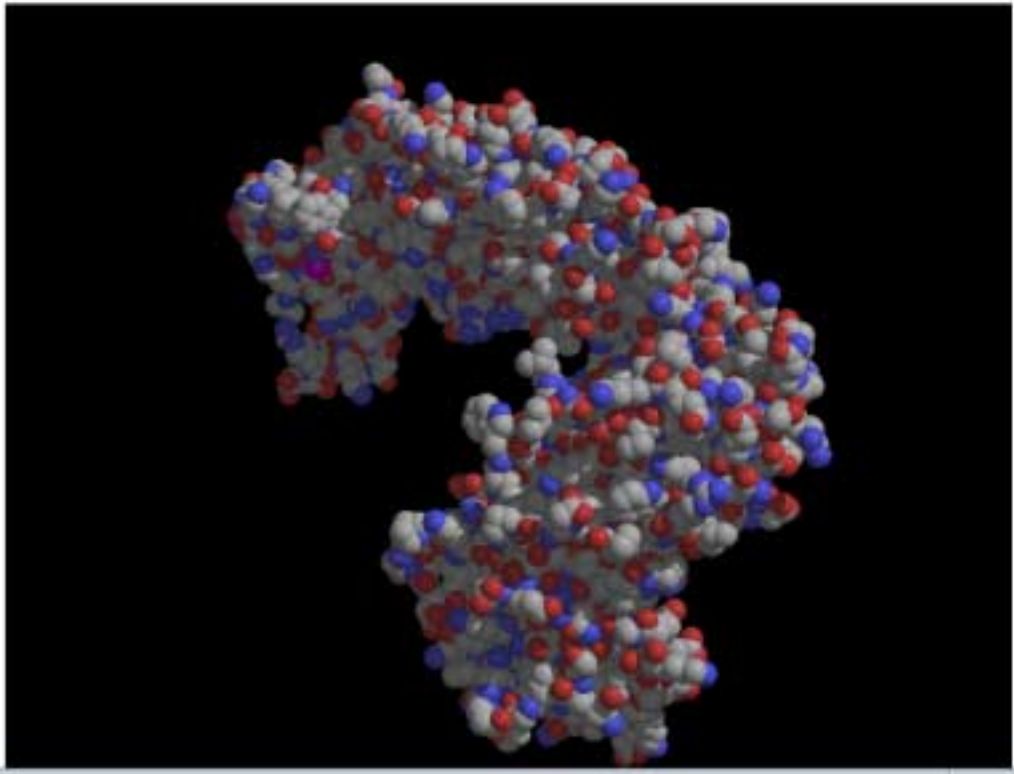
Grid Enabled web eNvironment for site Independent User job Submission

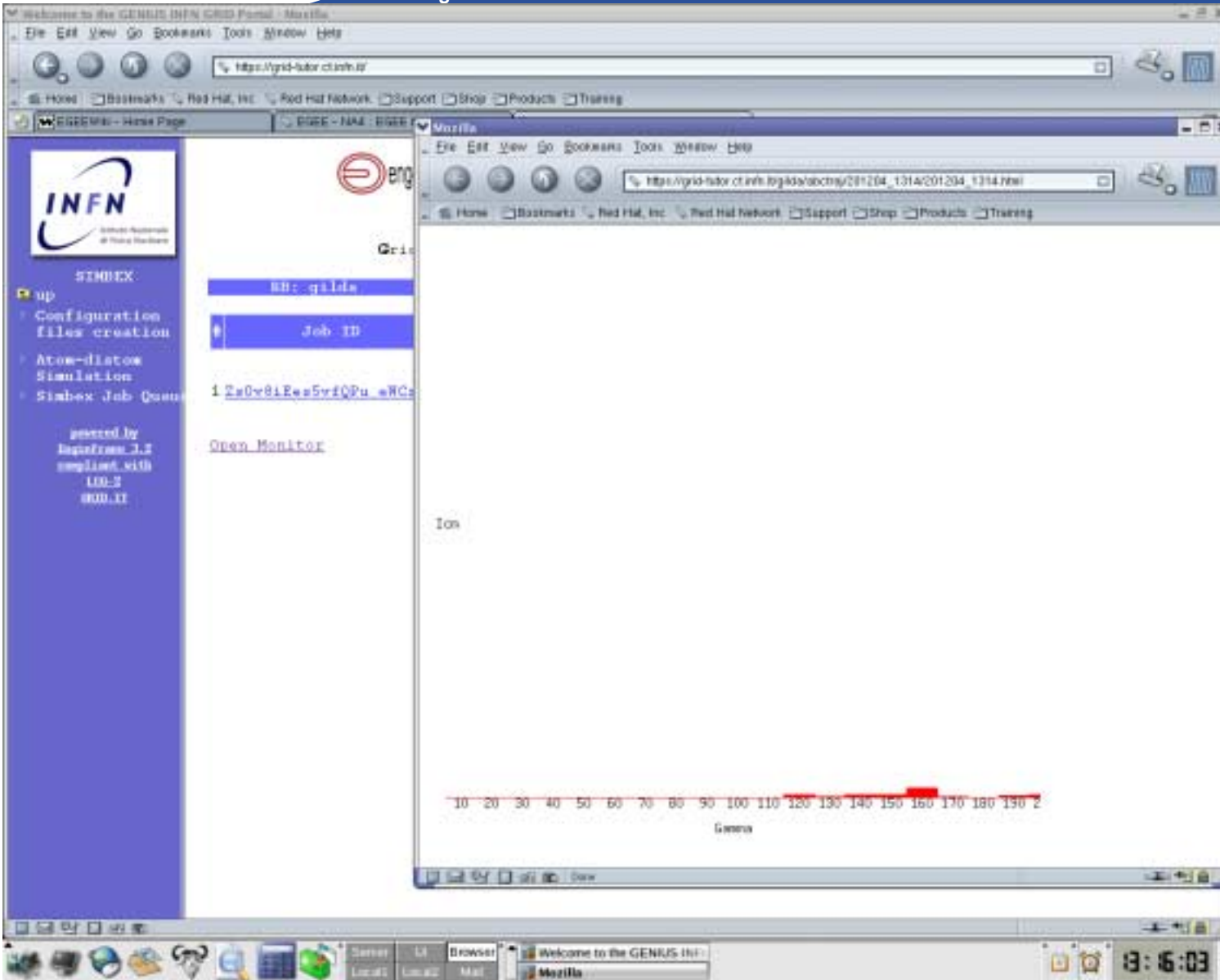
Raster-3D

up

- Generate a Raster Image
- Show Raster Queue
- Raster Job Data
- Clean Raster Queue

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[EnginFrame 3.2](#)  
compliant with  
[LCG-2](#)  
[GRID.IT](#)





Interactive  
MPI jobs !


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



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Enabling Grids for  
E-science in Europe

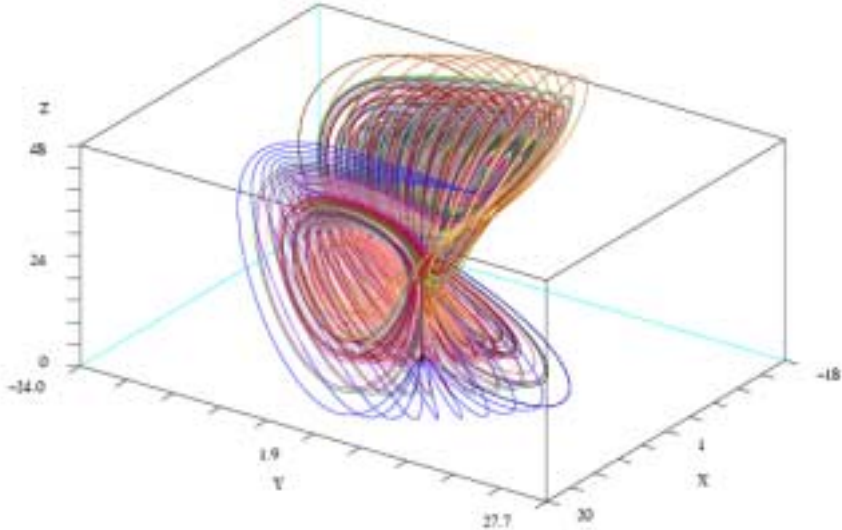
Grid Enabled web eNvironment for site Independent User job Submission

**SCILAB**

up

- > Select Scilab macro
- > Show Scilab Queue
- > Scilab Job Data
- > Clean Scilab Queue

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compliant with  
[LCG-2](#)  
[GRID IT](#)



A 3D plot showing a complex, multi-lobed surface within a 3D coordinate system. The axes are labeled X, Y, and Z. The Z-axis ranges from 0 to 48. The X-axis ranges from -14.0 to 30. The Y-axis ranges from 1.9 to 27.7. The surface is rendered with a grid and is colored with a gradient from blue to red.



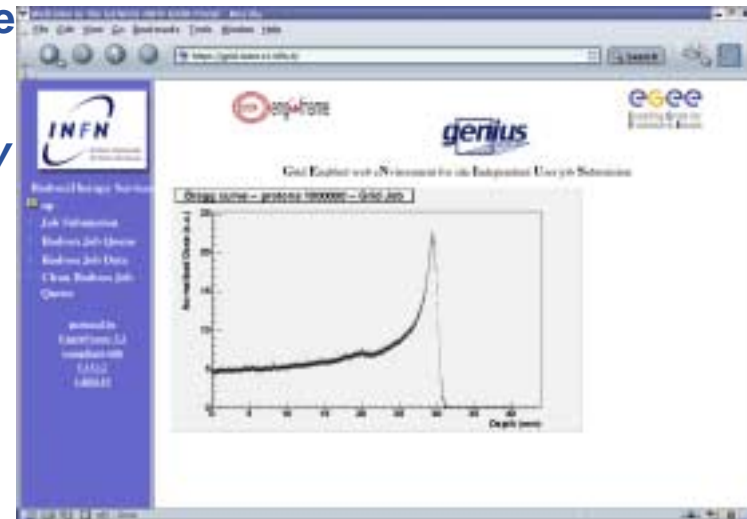
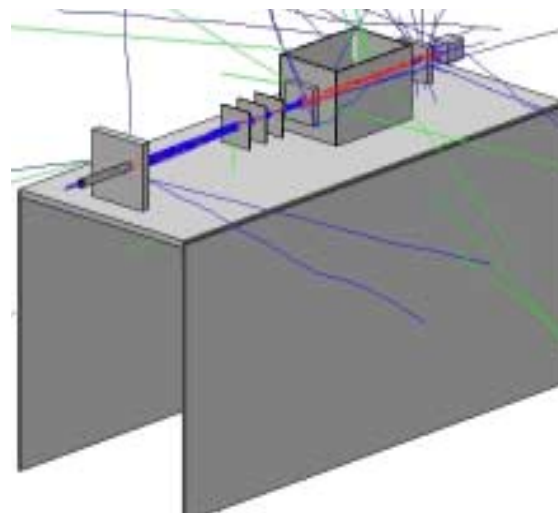
CATANA beam line in reality



hadronTherapy in GENIUS



CATANA beam line simulated by hadronTherapy



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/

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

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**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			

[ResultTO](#)

[giorgio\\_10](#)

[RelDoseT](#)

[RelDoseT](#)

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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

Enabling Grids for E-science

The image shows the TRIANA DAG Editor interface. On the left, a tree view shows the project structure including 'EGEE', 'Cairo/Sin', 'CircLas', 'Inspiral', 'Editing', 'Cnid', 'IntegralProc', 'Hub', and 'SignalProc'. The main workspace displays a Directed Acyclic Graph (DAG) with six nodes: NodeA, NodeB, NodeC, NodeD, NodeE, and NodeF. NodeA is the root, branching into NodeB and NodeC. NodeB branches into NodeD and NodeE. NodeC branches into NodeE and NodeF. NodeE is a central node receiving input from both NodeB and NodeC.

On the right, a text editor window shows the DAG3.jdl code for this workflow:

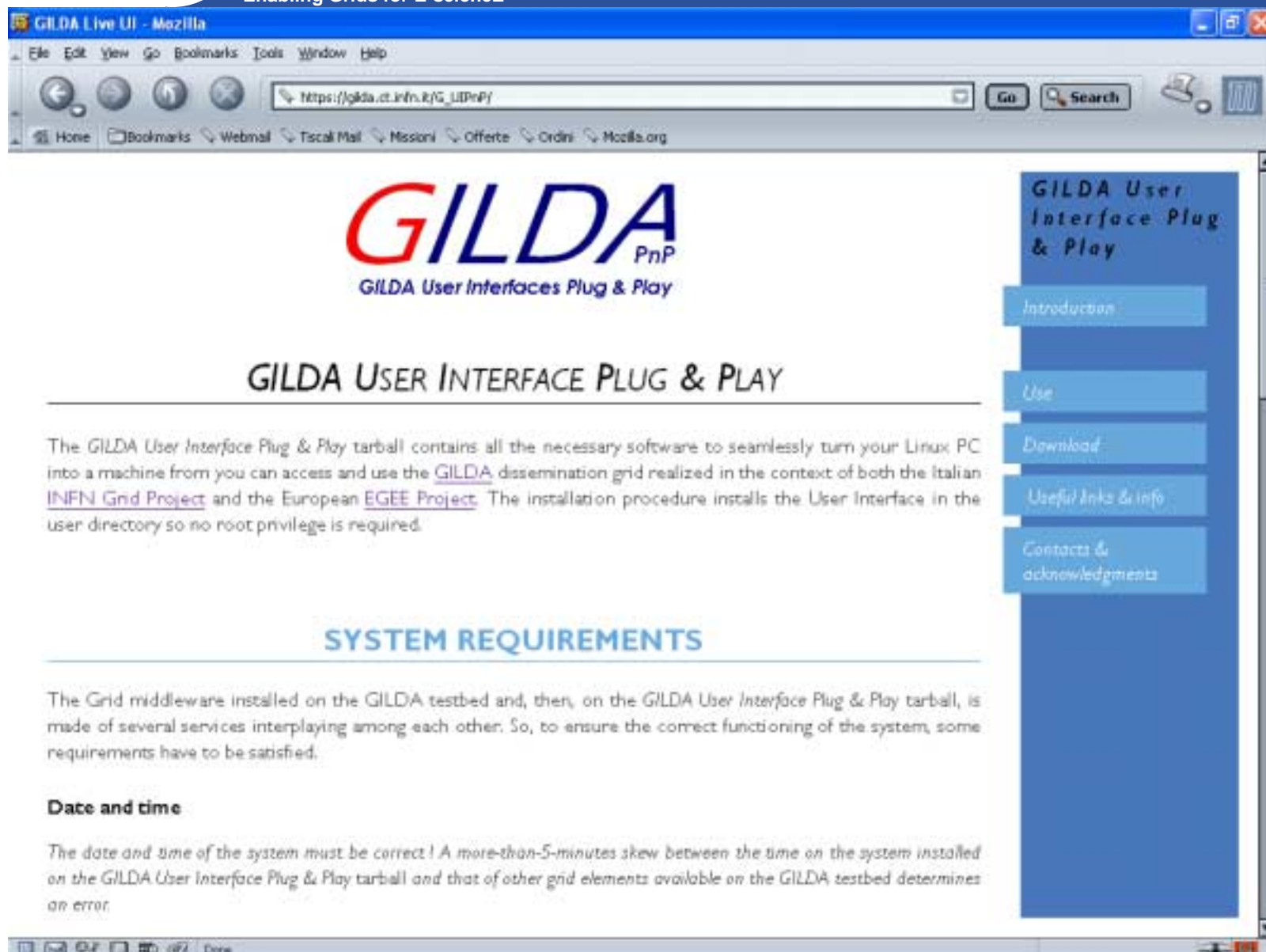
```

DAG3.jdl - /home/lorocca/Lite/DAG/identity_w
File Edit Search Preferences Shell Macro Windows Help

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 = 'NodeD';
    RetryCount = 2;
    VirtualOrganization = 'gilda';
    InputSanitiser = ('nodes/identity_message.sh');
    StdOutput = 'std.out';
    StdError = 'std.err';
    OutputSanitiser = ('std.out' . 'std.err') ;
    rank = 1.8;
  };
  NodeB = {
    node_type = 'edg-jdl';
    description = "
    Executable = 'identity_message.sh';
    Arguments = 'NodeD';
    RetryCount = 2;
    VirtualOrganization = 'gilda';
    InputSanitiser = ('nodes/identity_message.sh');
    StdOutput = 'std.out';
    StdError = 'std.err';
    OutputSanitiser = ('std.out' . 'std.err') ;
    rank = 1.8;
  };
  NodeA = {
    node_type = 'edg-jdl';
    file = 'nodes/nodeA.jdl';
  };
  NodeF = {
    node_type = 'edg-jdl';
    description = "
    Executable = '/bin/hostname';
    RetryCount = 2;
    VirtualOrganization = 'gilda';
    StdOutput = 'std.out';
    StdError = 'std.err';
    OutputSanitiser = ('std.out' . 'std.err') ;
  };
  NodeE = {
    node_type = 'edg-jdl';
    description = "
    Executable = 'identity_message.sh';
    Arguments = 'NodeE';
    RetryCount = 2;
    VirtualOrganization = 'gilda';
    InputSanitiser = ('nodes/identity_message.sh');
    StdOutput = 'std.out';
    StdError = 'std.err';
    OutputSanitiser = ('std.out' . 'std.err') ;
  };
];

```

The bottom of the screenshot shows the system tray with various icons and taskbar entries, including 'EGEE', 'DAG3.jdl', and 'TRIANA'.



The screenshot shows a Mozilla browser window displaying the GILDA User Interface Plug & Play website. The browser's address bar shows the URL [https://gilda.ct.infn.it/G\\_UIPnP/](https://gilda.ct.infn.it/G_UIPnP/). The website content includes the GILDA logo, a navigation menu on the right, and sections for an introduction and system requirements.

**GILDA User Interface Plug & Play**

**GILDA USER INTERFACE PLUG & PLAY**

The *GILDA User Interface Plug & Play* tarball contains all the necessary software to seamlessly turn your Linux PC into a machine from you can access and use the [GILDA](#) dissemination grid realized in the context of both the Italian [INFN Grid Project](#) and the European [EGEE Project](#). The installation procedure installs the User Interface in the user directory so no root privilege is required.

**SYSTEM REQUIREMENTS**

The Grid middleware installed on the GILDA testbed and, then, on the *GILDA User Interface Plug & Play* tarball, is made of several services interplaying among each other. So, to ensure the correct functioning of the system, some requirements have to be satisfied.

**Date and time**

The *date and time* of the system must be correct! A more-than-5-minutes skew between the time on the system installed on the *GILDA User Interface Plug & Play* tarball and that of other grid elements available on the GILDA testbed determines an error.

**Navigation Menu:**

- [Introduction](#)
- [Use](#)
- [Download](#)
- [Useful links & info](#)
- [Contacts & acknowledgments](#)





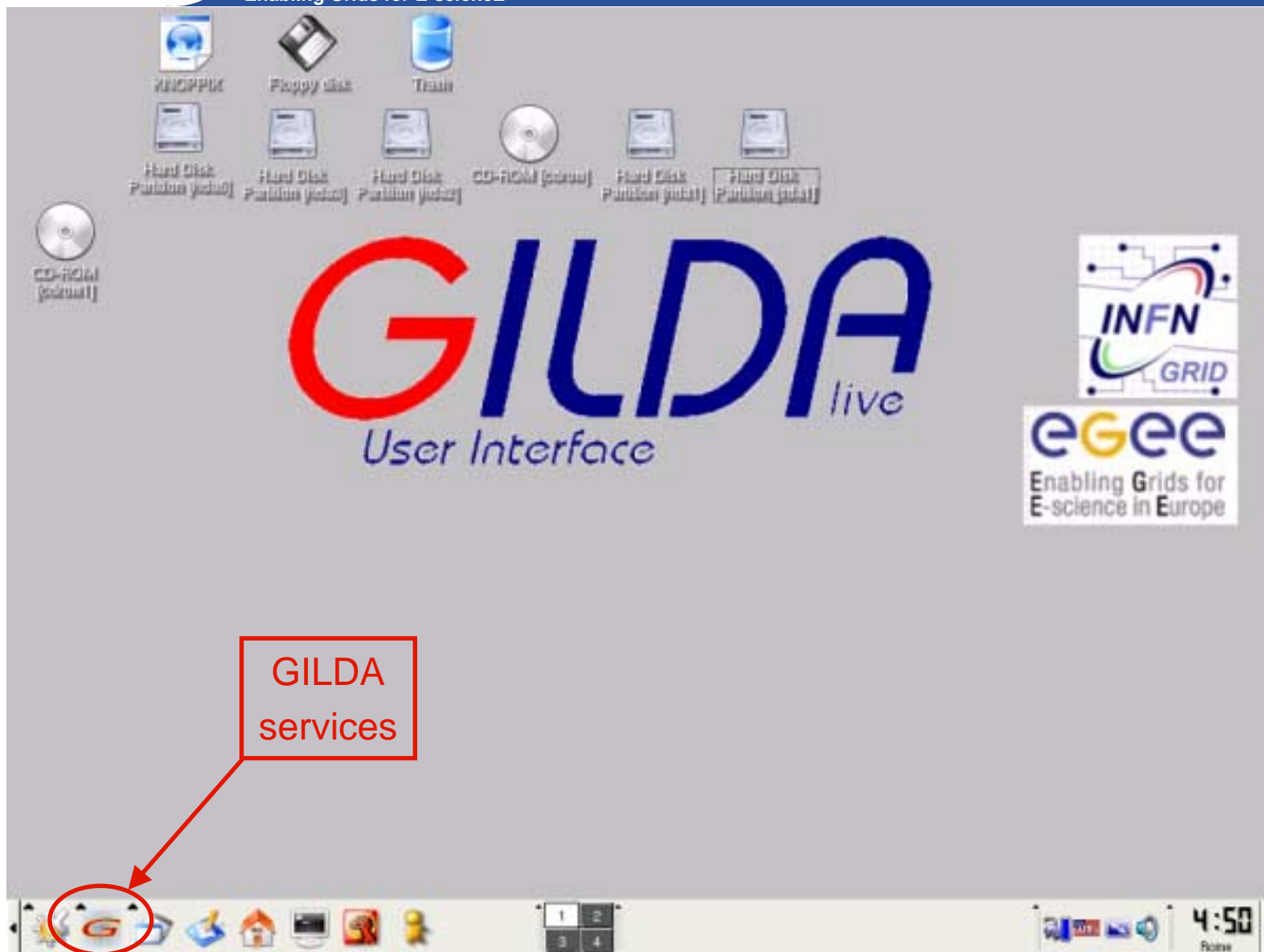
The screenshot shows a Mozilla browser window titled "GILDA Live UI - Mozilla" with the address bar containing "https://gilda.ct.infn.it/live-cd/". The page content includes:

- GILDA Live User Interface** logo.
- GILDA LIVE USER INTERFACE** section header.
- Text: "The *GILDA Live User Interface* CD contains all the necessary software to access and use the [GILDA](#) dissemination grid realized in the context of both the Italian [INFN Grid Project](#) and the European [EGEE Project](#). *GILDA Live User Interface* is based on [Knoppix 3.6](#)."
  - [Introduction](#)
  - [Requirements](#)
  - [Use](#)
  - [Download](#)
  - [Useful links & info](#)
  - [Contacts & acknowledgments](#)
- SYSTEM REQUIREMENTS** section header.
- Text: "The Grid middleware installed on the GILDA testbed and, then, on the *GILDA Live User Interface* CD, is made of several services interplaying among each other. So, to ensure the correct functioning of the system, some requirements have to be satisfied."
  - Date and time**

The date and time of the system must be correct! A more-than-5-minutes skew between the time on the system installed on the *GILDA Live User Interface* CD and that of other grid elements available on the GILDA testbed determines an error.

In order to make easier the correct setup of date and time, the system installed on the *GILDA Live User Interface* CD tries at the bootstrap to connect to a NTP server. In any case, however, please check date and time before invoking any grid service.

Enabling Grids for E-science



GILDA  
services

## 2004

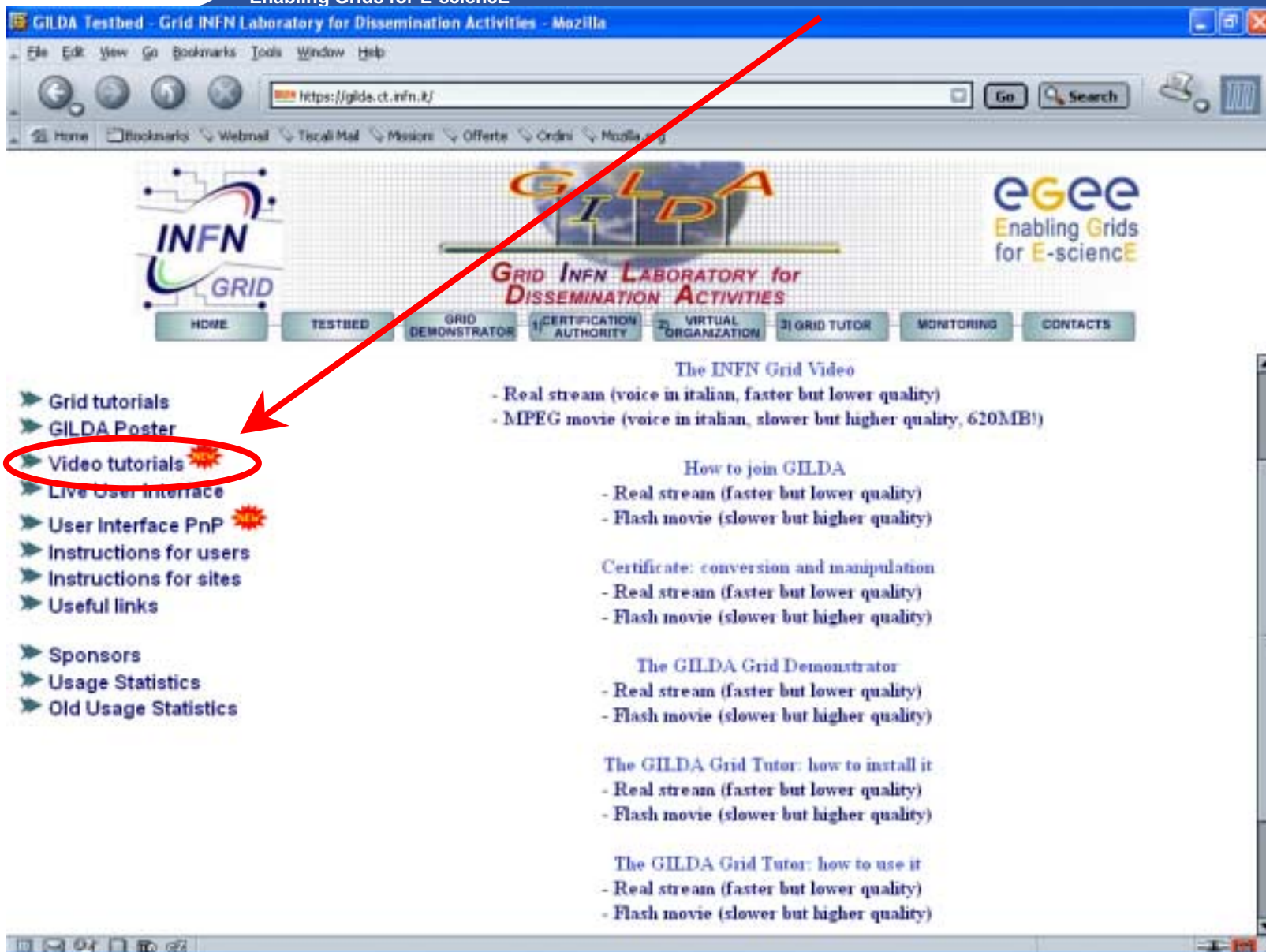
Edinburgh, 7 April 2004, [slides](#), [pictures](#)  
 Tunis, 22-23 April 2004, [pictures](#)  
 Edinburgh, 26-28 April 2004, [slides](#), [pictures](#)  
 CERN, 17-19 May 2004, [pictures](#)  
 Catania, 24-25 May 2004, [home page](#), [pictures](#)  
 Dubna, 29 June - 2 July 2004, [agenda](#)  
 Edinburgh, 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  
 CERN, 16 October 2004  
 Prague, 26 October 2004, [home page](#)  
 Warsaw, 4-6 November 2004, [home page](#), [agenda](#)  
 Lyon, 9-10 November 2004, [agenda](#)  
 The Hague, 15-17 November 2004, [pictures](#)  
 Merida, 15-20 November 2004, [home page](#), [agenda](#),  
[slides](#), [pictures](#)  
 Tunis, 20 November 2004  
 Rio de Janeiro, 22-23 November 2004, [home page](#),  
[agenda](#), [pictures](#)  
 The Hague, 24 November 2004, [agenda](#)  
 CERN, 29-30 November 2004, [agenda](#)  
 Kosice, 30 November - 1 December 2004, [agenda](#)  
 Tunis, 6-7 December 2004  
 Bochum, 7-10 December 2004, [home page](#), [agenda](#)  
 Edinburgh, 8 December 2004, [home page](#)  
 Istanbul, 9-10 December 2004, [agenda](#), [slides](#),  
[pictures](#)  
 Shanghai, 9-10 December 2004, [agenda](#)  
 Aurillac, 13-14 December 2004  
 Prague, 16 December 2004, [home page](#), [pictures](#)  
 Tel Aviv, 22-23 December 2004, [agenda](#), [pictures](#)

## 2005

CERN, 13 January 2005, [agenda](#)  
 Torino, 18-19 January 2005, [home page](#), [agenda](#)  
 CERN, 20 January 2005, [agenda](#)  
 CERN, 2-4 February 2005, [agenda](#)  
 Roma, 3 February 2005, [home page](#), [agenda](#),  
[pictures](#)  
 Sydney, 3-4 February 2005, [home page](#)  
 CERN, 9-11 February 2005, [agenda](#)  
 Amsterdam, 14-16 February 2005, [home page](#)  
 Trento, 23-25 February 2005, [home page](#), [agenda](#)  
 Amsterdam, 28 February - 1 March 2005, [home](#)  
[page](#)  
 Julich, 9 March 2005,  
 Clermont-Ferrand, 9-31 March 2005, [agenda](#)  
 Vienna, March-August 2005  
 Hamburg, 23-24 March 2005, [home page](#), [agenda](#)  
 Ula-Merida, 31 March-1 April 2005, [agenda](#)  
 Zilina, 4 April 2005, [home page and agenda](#)  
 Edinburgh, 9-13 May 2005, [home page and agenda](#)  
 Catania, 13-15 June 2005, [home page](#), [agenda](#)  
 Valencia, 14-16 June 2005, [home page](#), [agenda](#)










GILDA Testbed - Grid INFN Laboratory for Dissemination Activities - Mozilla



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- 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 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)

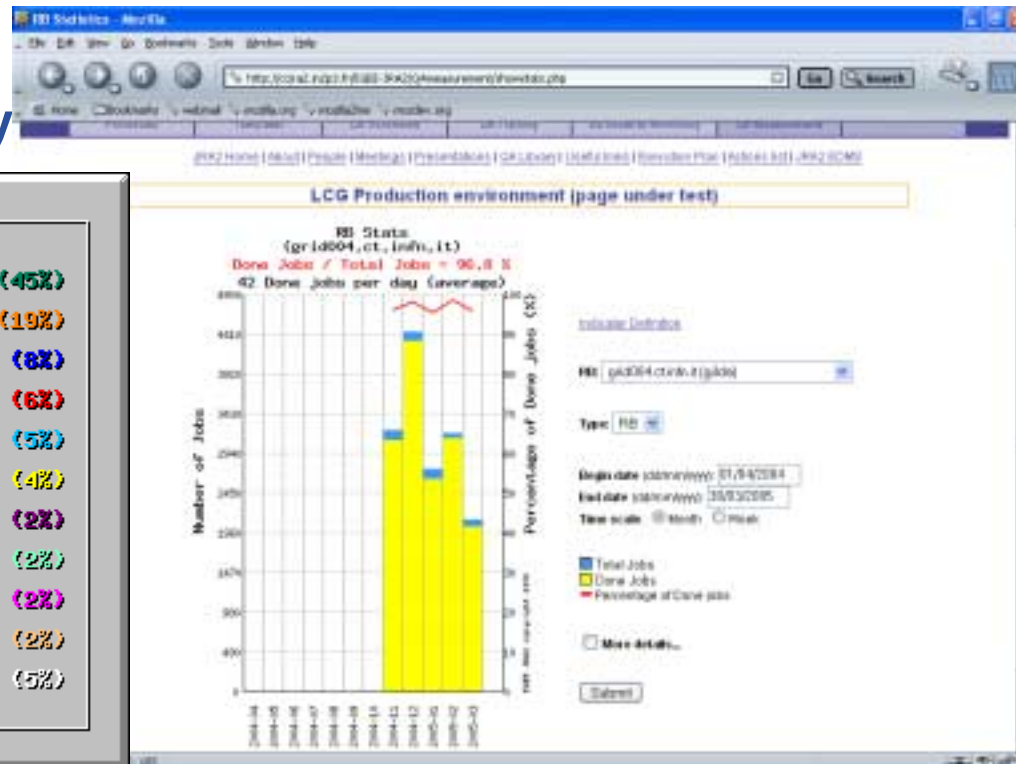
**The GILDA Grid Tutor: how to install it**

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

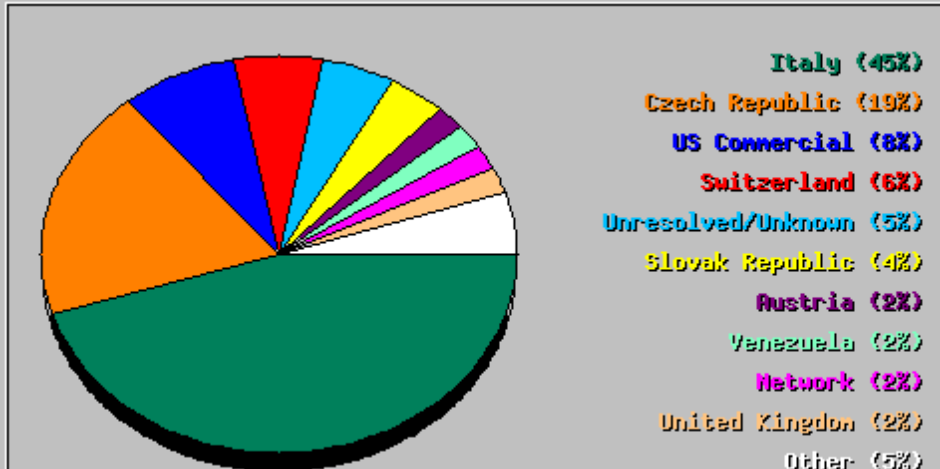
**The GILDA Grid Tutor: how to use it**

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

- 15 sites in 3 continents
- > 1400 certificates issued, 20% renewed at least once
- > 40 tutorials and demos performed in 13 months
- > 40 jobs/day on the average
- Job success rate above 96%
- > 500,000 hits on the web site from 10's of different countries
- > 200 copies of the UI live CD distributed in the world
- > 100 copies of the UI Plug&Play



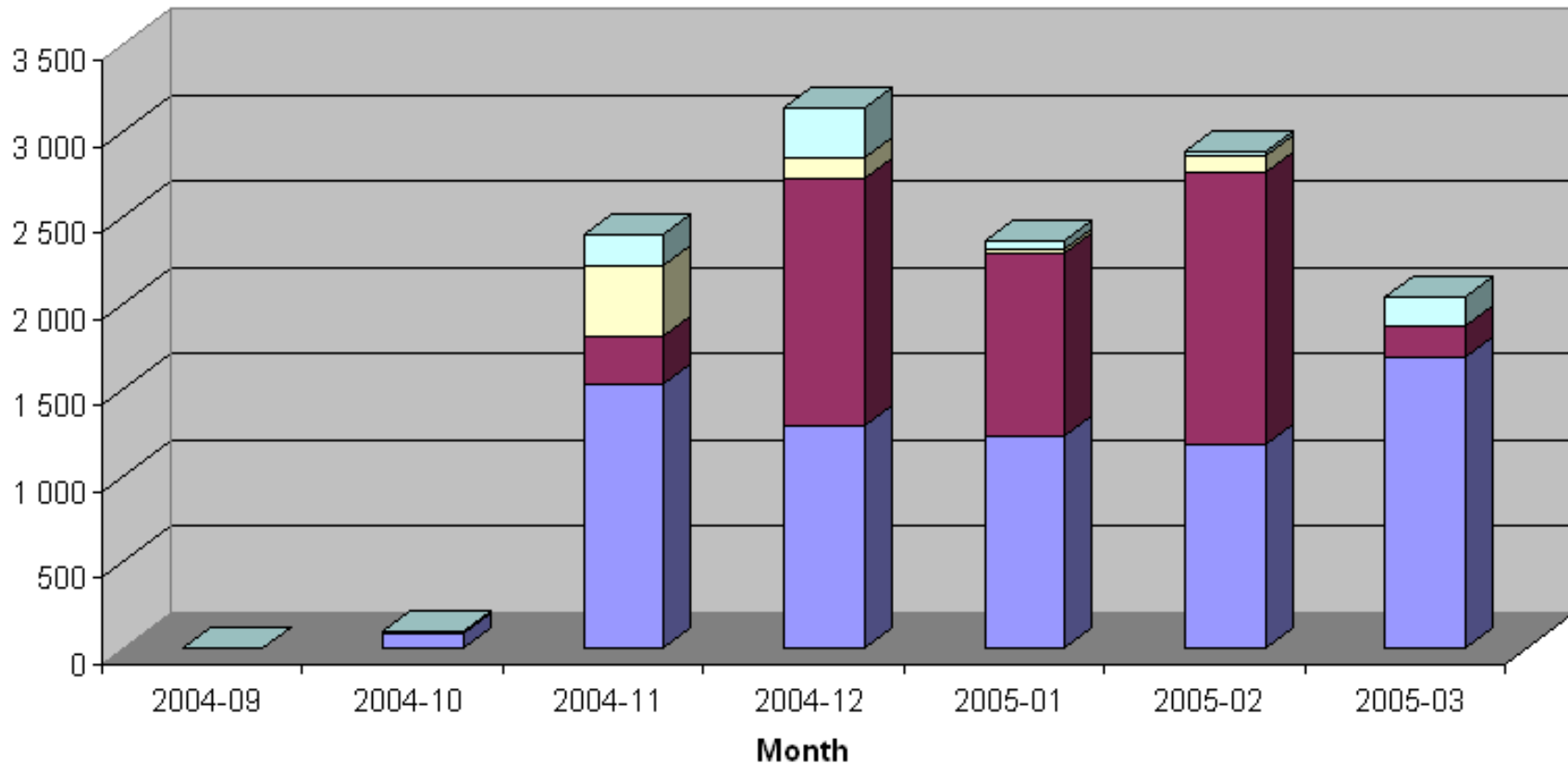
Usage by Country for January 2005

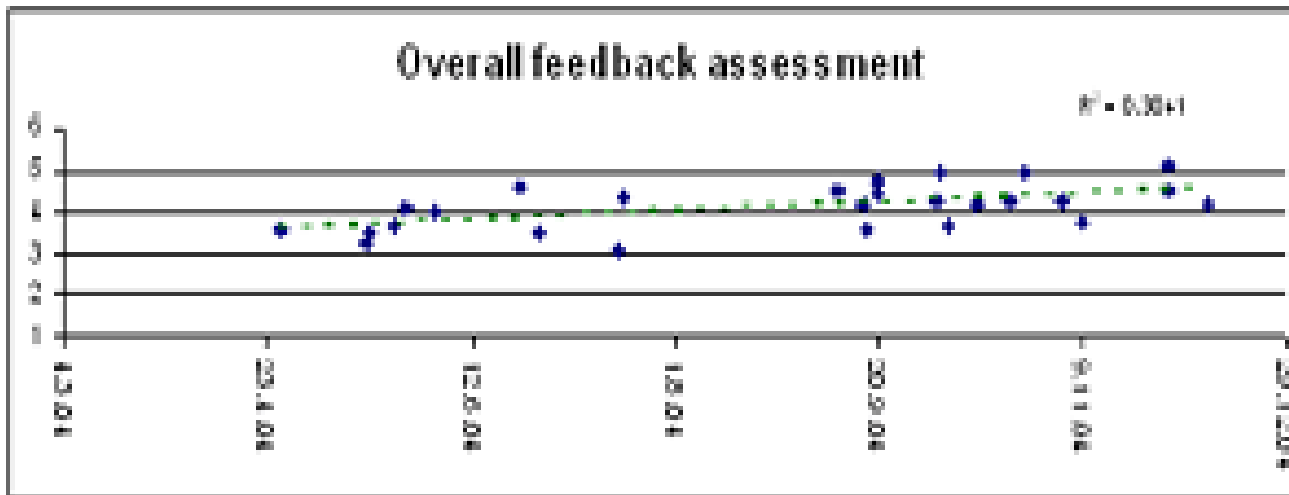
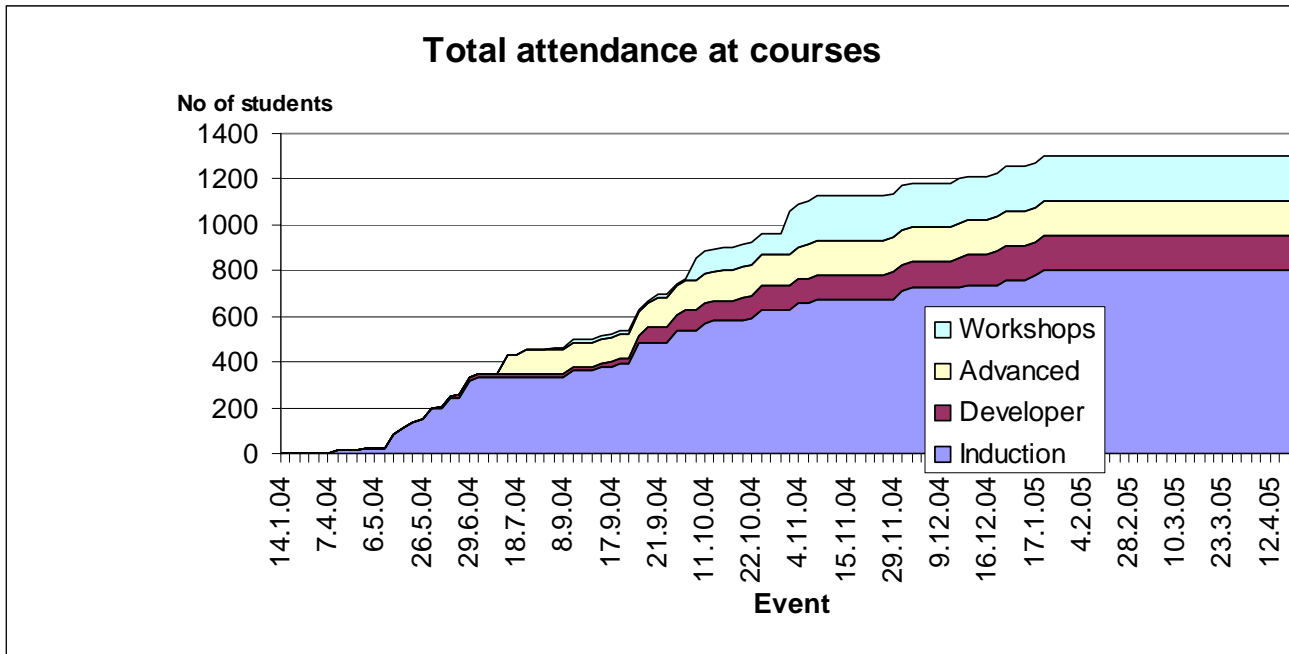


- short jobs < 300 secondes (5 min)
- 300 s < medium jobs < 2700 s ( 45 min )
- 2700 s < long jobs < 10800 s (3 hours )
- 10800 s < infinite jobs

Done jobs distribution - GILDA

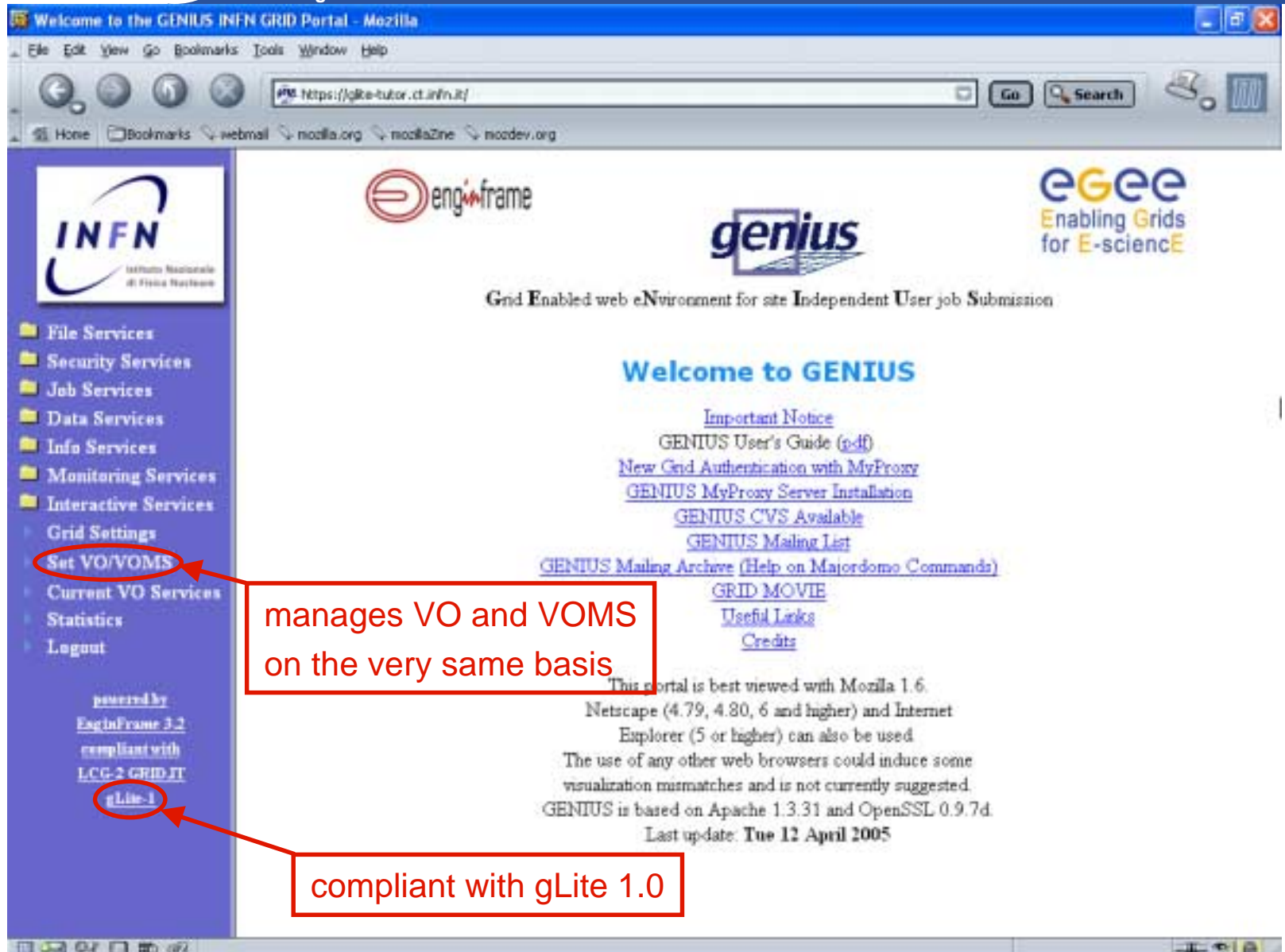
Number of done jobs







- **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/Arlecore**
- **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**



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

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

manages VO and VOMS on the very same basis

compliant with gLite 1.0

- GILDA is a real virtual laboratory for dissemination of grid computing.
- It is a “de facto” standard t-Infrastructure adopted both by EGEE and the forthcoming EU projects.
- 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-porting of new applications to EGEE Infrastructure.
- GILDA runs latest production (stable) version of the LCG grid middleware but it is also early adopting gLite in order to make the transition to the new middleware smoother and easier.