



Enabling Grids for E-scienceE

Introduction to the gLite tutorial: the GILDA t-Infrastructure for Dissemination and Training

Roberto Barbera

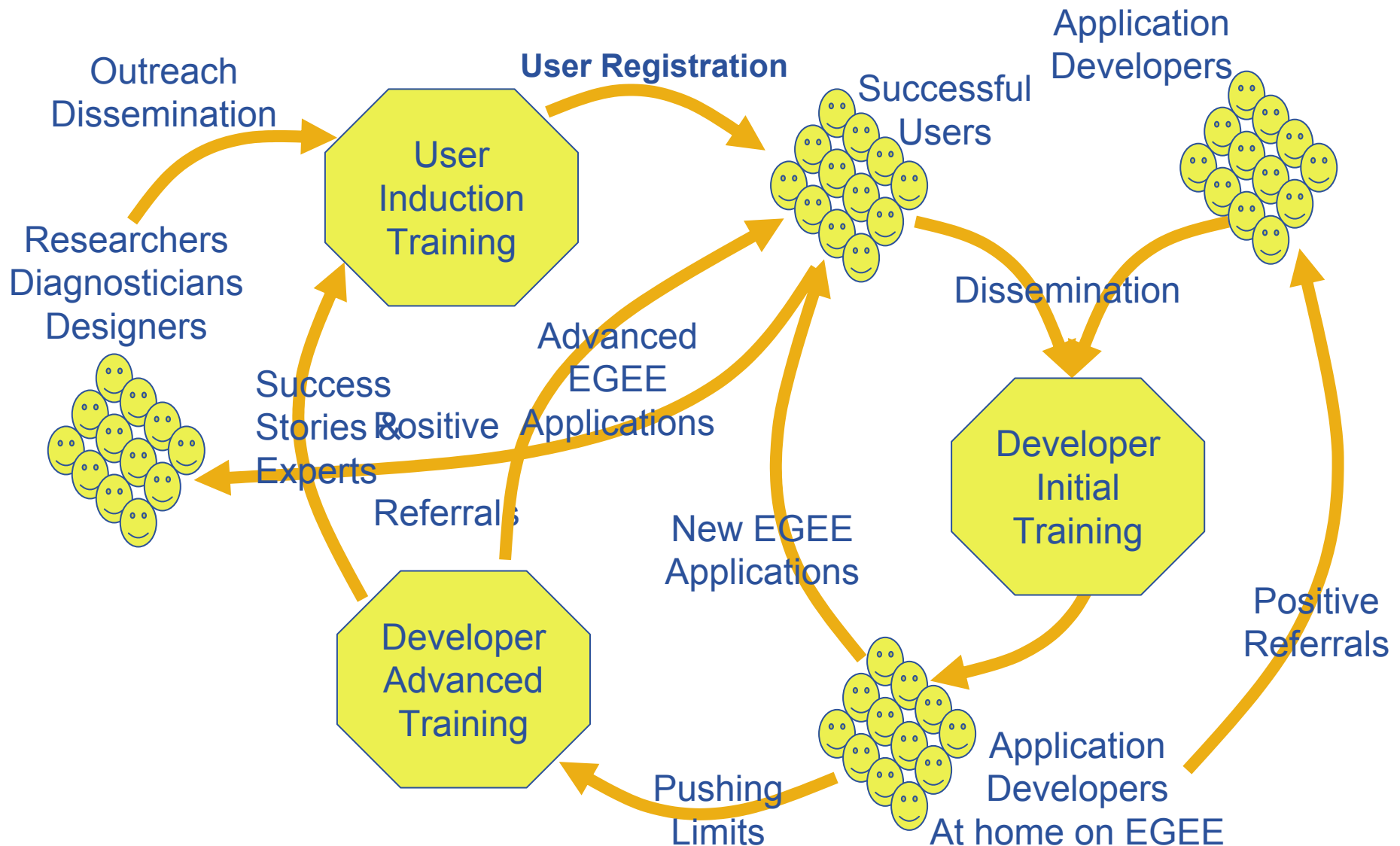
University of Catania and INFN

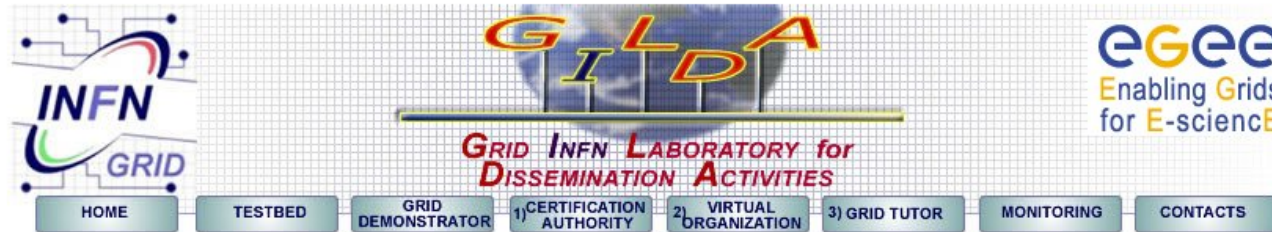
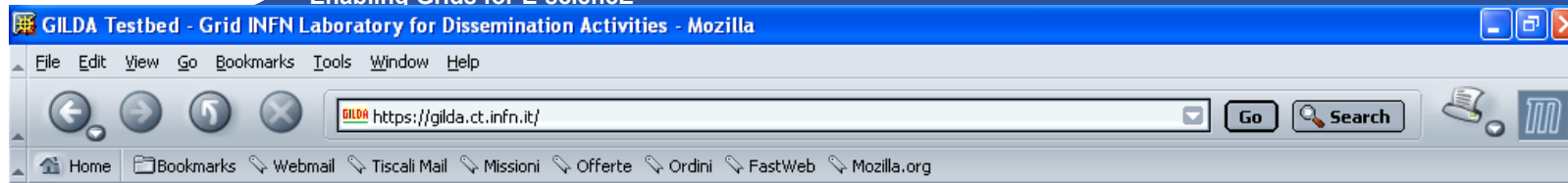
First gLite tutorial on GILDA, Catania, 13-15.06.2005

www.eu-egee.org



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






GILDA (Grid Infn 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:

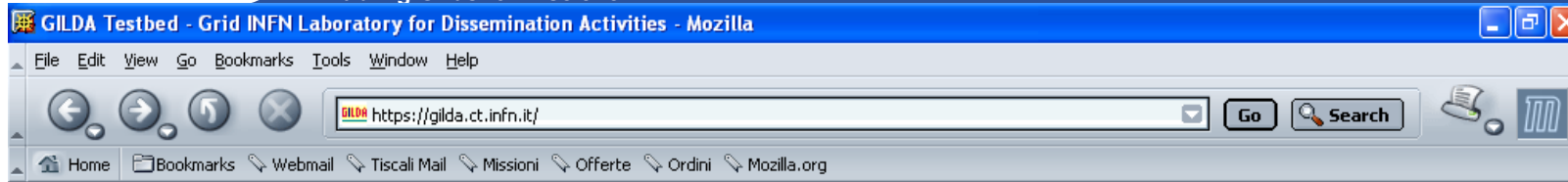
- Grid tutorials
- GILDA Poster
- Video tutorials
- Live User Interface
- User Interface PnP 
- Instructions for users
- Instructions for sites
- Useful links

- 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 !
all of them GEANT sites**



Grid services

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

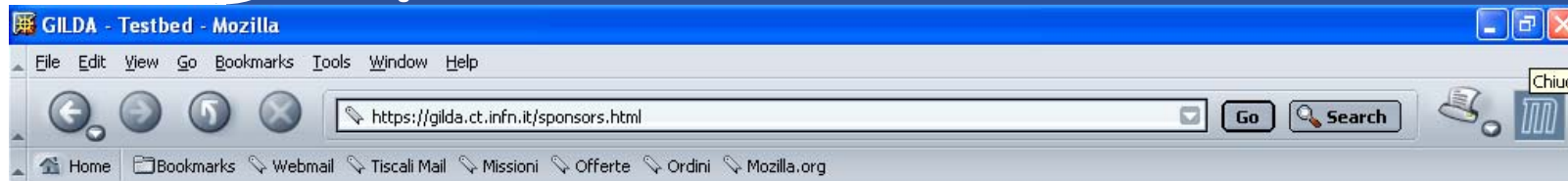
SERVICE	HOST
LCG-2 Resource Broker (RB)	grid004.ct.infn.it
LCG-2 Resource Broker (RB)	grid013.ct.infn.it
LCG-2 Resource Broker (RB)	skurut2.cesnet.cz
gLite Resource Broker (RB)	glite-rb.ct.infn.it
gLite Development Resource Broker (RB)	grid003.ct.infn.it
Information Index (BDII)	grid013.ct.infn.it
Backup Information Index (BDII)	grid004.ct.infn.it
GILDA VO server	grid-vo.cnaf.infn.it:10389
GridICE Monitoring System	alifarm7.ct.infn.it:50080
LCG-2 Replica Location Service (RLS)	grid008.ct.infn.it
gLite FiReMan Catalog	grid017.ct.infn.it
MyProxy Server	grid001.ct.infn.it
Backup MyProxy Server	grid014.ct.infn.it

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

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- Usage Statistics
- Old Usage Statistics

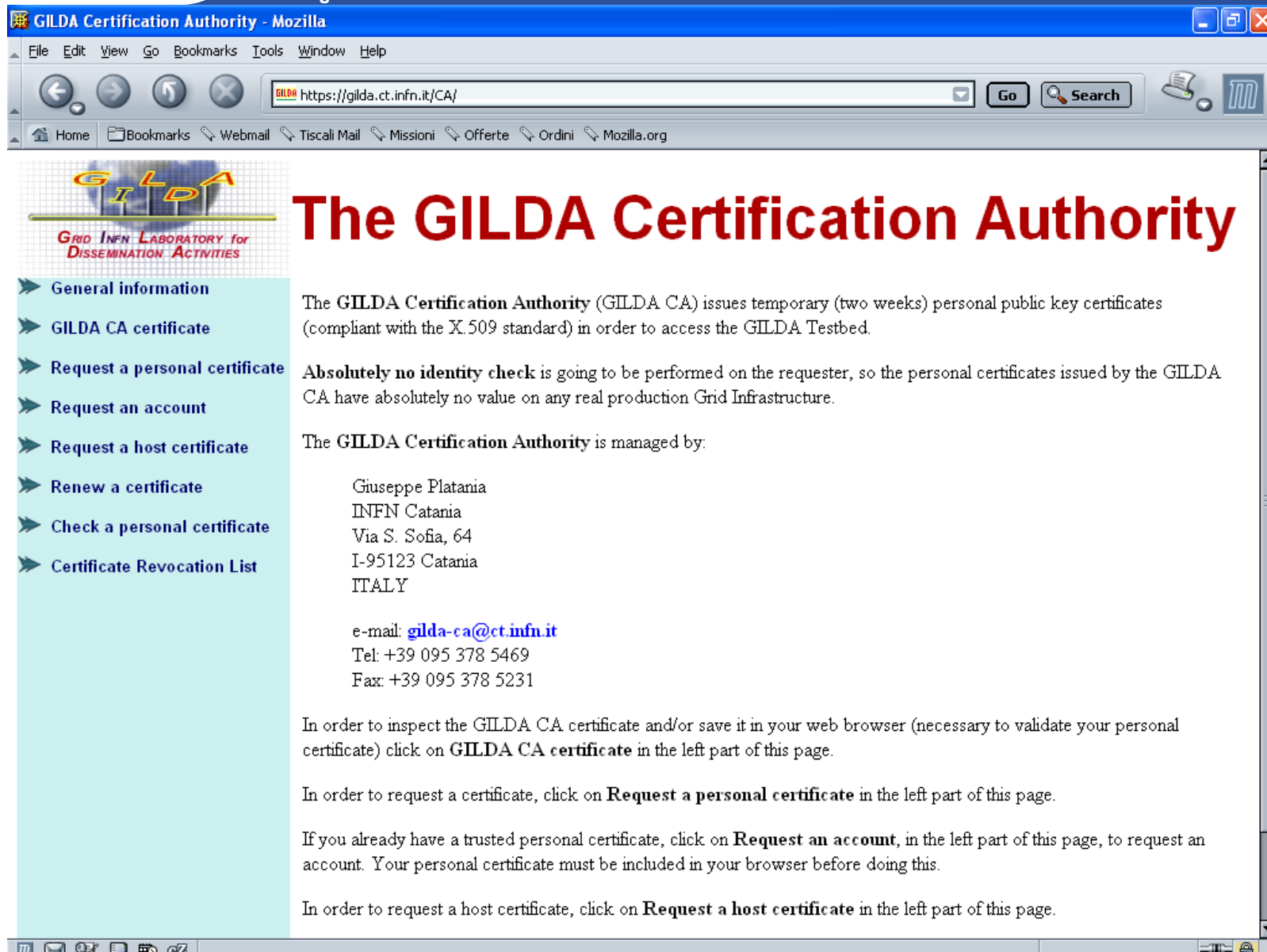
Ready for gLite !

Ports Used



GILDA is sponsored by:





The GILDA Certification Authority

GRID INFN LABORATORY for DISSEMINATION ACTIVITIES

- **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 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.

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

GRID INFN LABORATORY for DISSEMINATION ACTIVITIES

HOME TESTBED GRID DEMONSTRATOR 1) CERTIFICATION AUTHORITY 2) VIRTUAL ORGANIZATION 3) GRID TUTOR MONITORING CONTACTS

- 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



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



Enabling Grids for E-science

The GILDA Monitoring System (1/3)

(<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

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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

Computing Resources

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	3%	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	18%	5.4 Tb

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

GILDA - GridICE - Grid Monitoring Service - Mozilla

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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

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

Computing Resources Storage Resources

Storage Element ID	Storage Space ID	Site	Free Space	Used 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
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

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GridICE Homepage



The Grid Tutor

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

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enginframe

genius

eGEE
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Grid Enabled web eNvironment for site Independent User job Submission

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[GENIUS User's Guide \(pdf\)](#)
[New Grid Authentication with MyProxy](#)
[GENIUS MyProxy Server Installation](#)
[GENIUS CVS Available](#)
[GENIUS Mailing List](#)
[GENIUS Mailing Archive \(Help on Major-domo Commands\)](#)
[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

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 compliant with
[LCG-2 GRID.IT](#)
[gLite-1](#)

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Done

fn.it/

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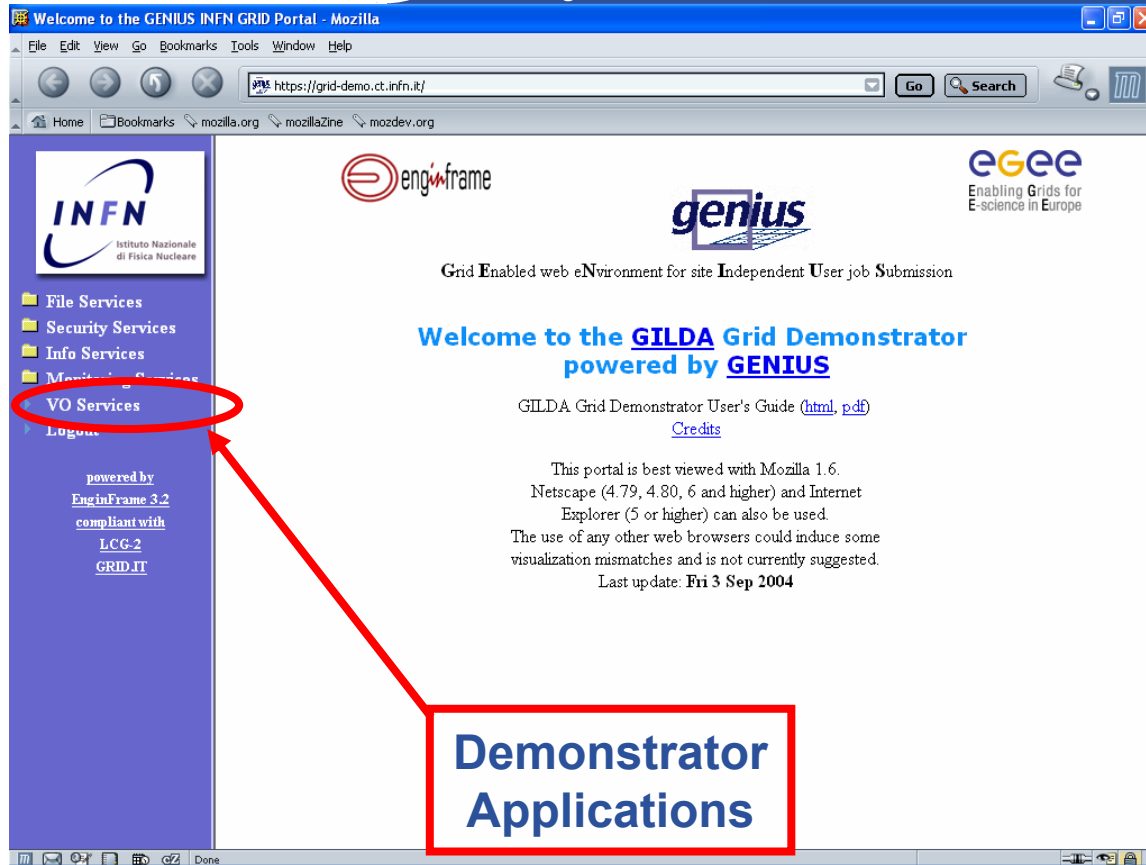
Grid Enabled web eNvironment for site Independent User job Submission

Welcome to GENIUS based on

[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 \(Help on Major-domo Commands\)](#)
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 The use of any other web browsers could induce some visualization mismatches and is not currently suggested.

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File Services

Security Services

Info Services

Monitoring Services

VO Services

Login

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

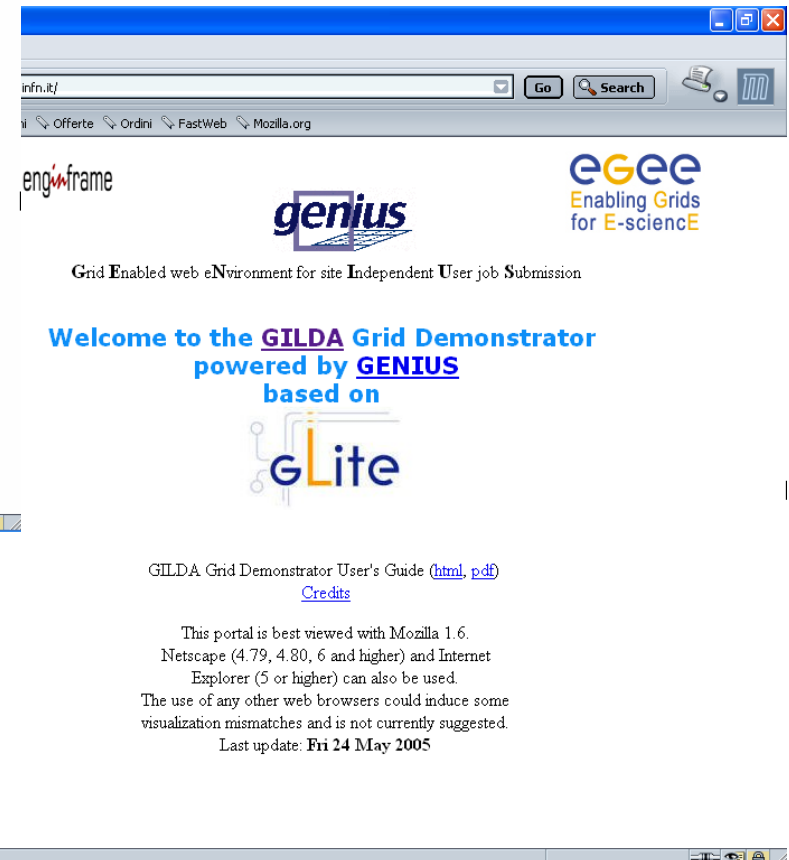
Welcome to the **GILDA Grid Demonstrator powered by GENIUS**

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

[Credits](#)

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Demonstrator Applications



infno.it/

Offerte Ordini FastWeb Mozilla.org

EnginFrame

genius

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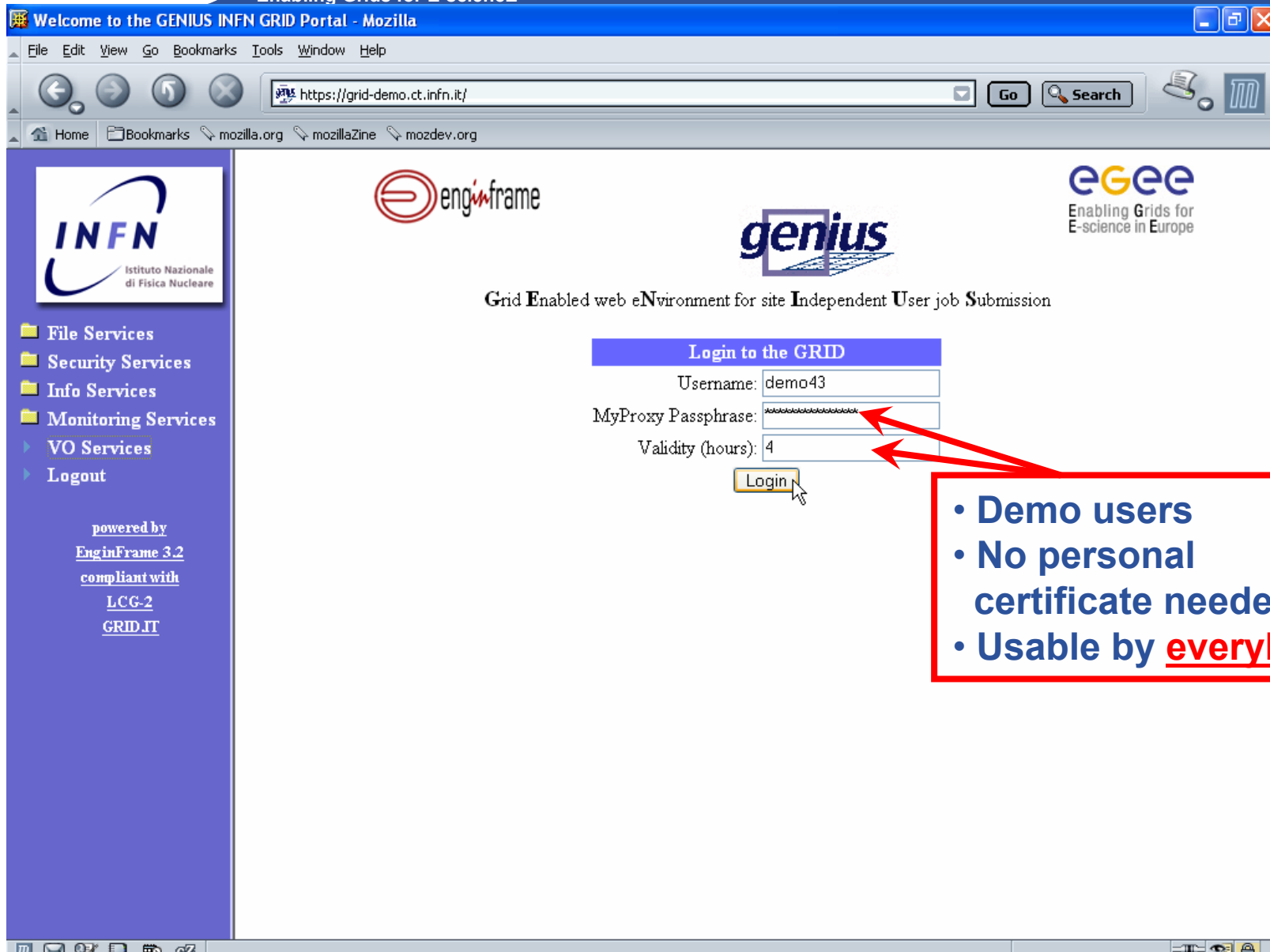
Grid Enabled web eNvironment for site Independent User job Submission

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

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

[Credits](#)

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Login to the GRID

Username: demo43

MyProxy Passphrase: [masked]

Validity (hours): 4

Login

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

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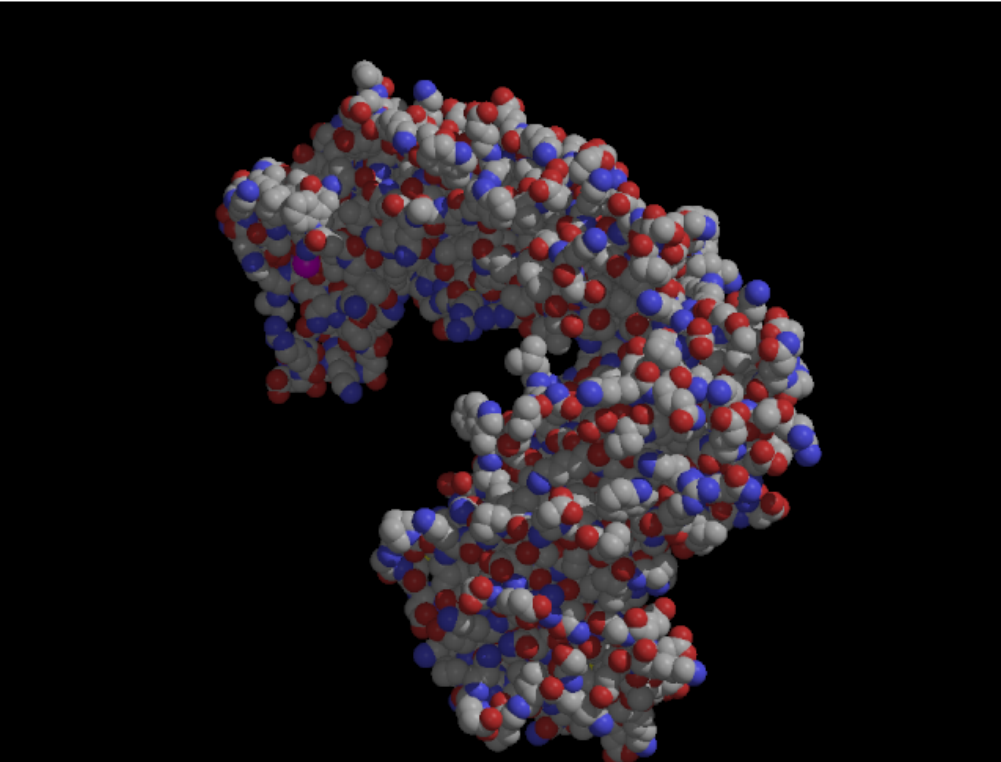
Enabling Grids for E-science in Europe

Grid Enabled web eNvironment for site Independent User job Submission

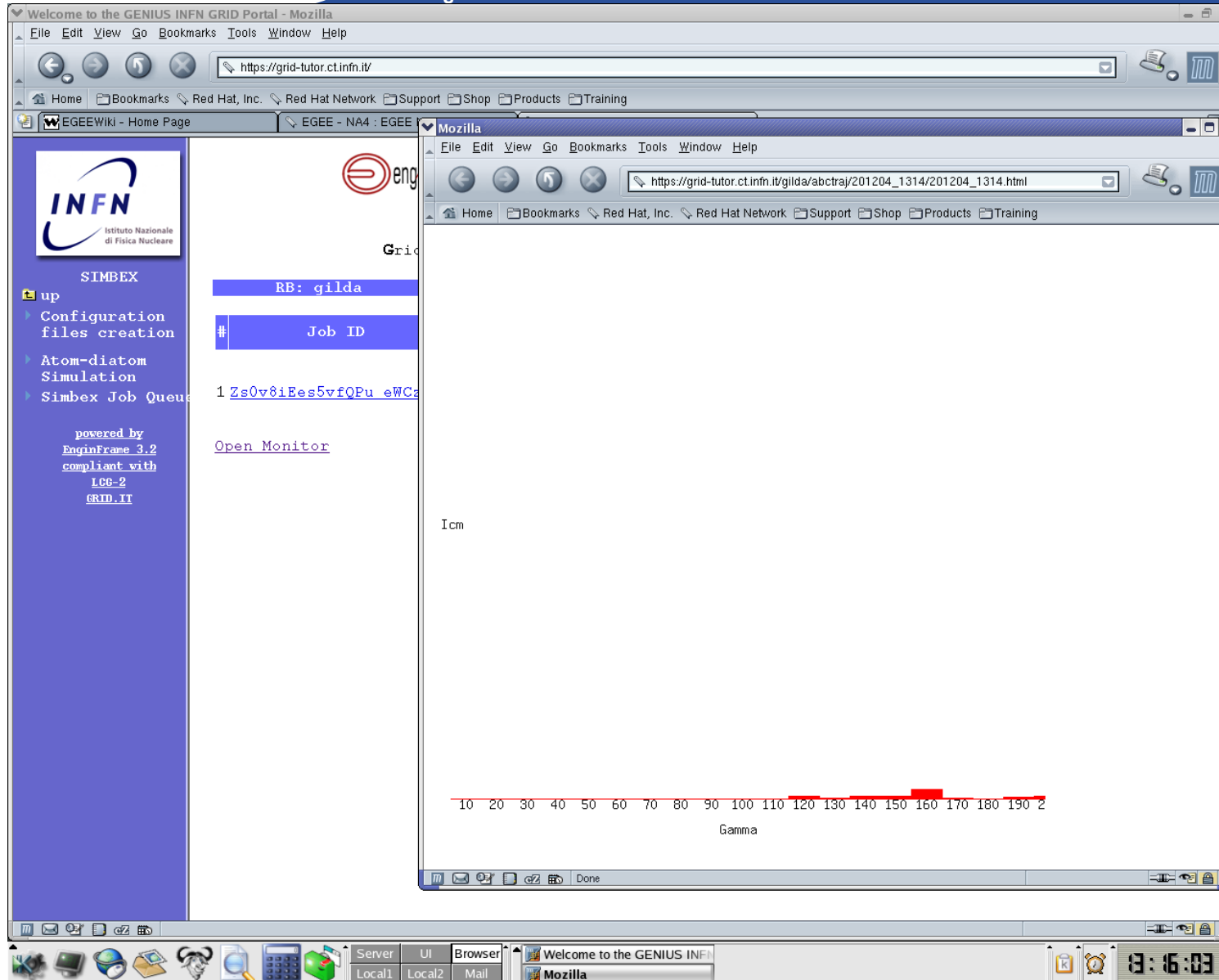
Raster-3D

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

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Done



Grid

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

Interactive
MPI jobs !


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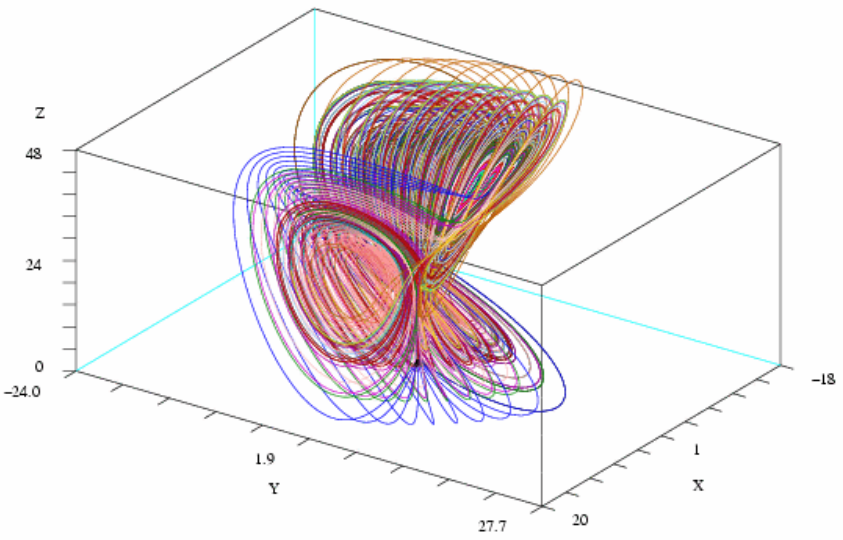
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SCILAB

up

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

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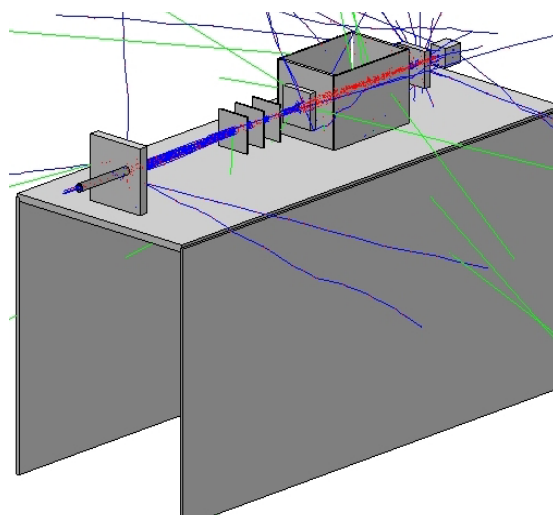
A 3D plot showing a complex, multi-colored surface within a wireframe box. The vertical axis is labeled 'Z' with values 0, 24, 48. The horizontal axes are labeled 'Y' and 'X'. The Y-axis has values 1.9, 27.7, and 20. The X-axis has values 1 and -18.

Done

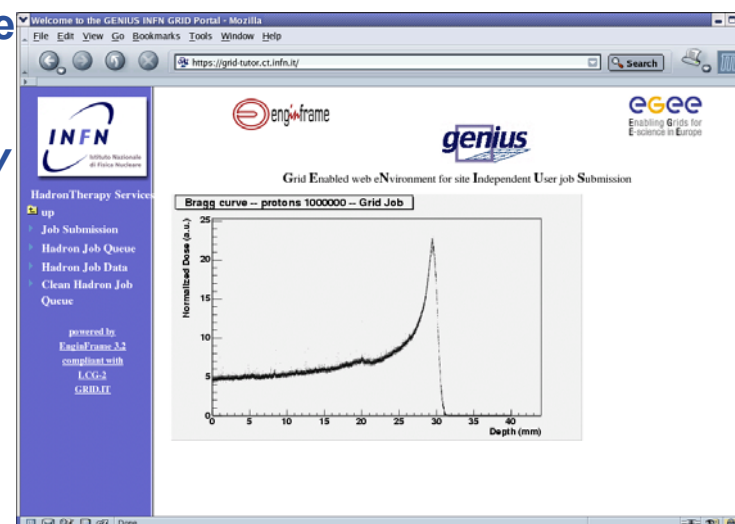
CATANA beam line in reality



hadronTherapy in GENIUS



CATANA beam line simulated by hadronTherapy




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



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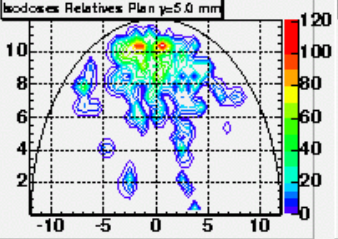
RB: gilda	VO: gilda	RLS: GILDA	Your Data	Logout
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Directory contents - tmp1100001761583.ef/gate_job_list_20041109_123955

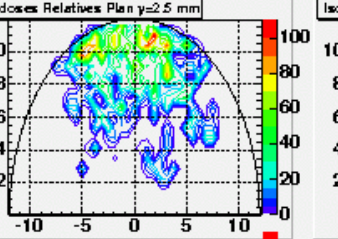
RelDoseTree.gif (GIF Image, 606x302 pixels) - Mozilla

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

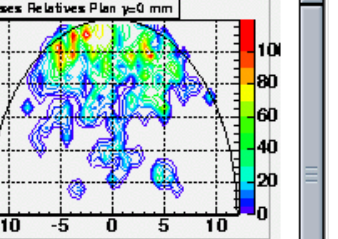
Isodoses Relatives Plan y=5.0 mm



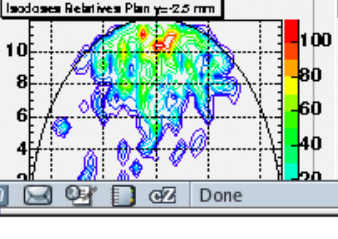
Isodoses Relatives Plan y=2.5 mm



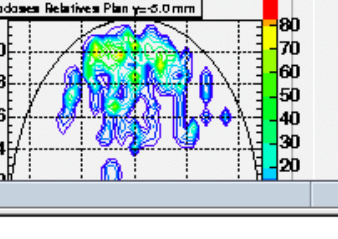
Isodoses Relatives Plan y=0 mm




Isodoses Relatives Plan y=-2.5 mm



Isodoses Relatives Plan y=-5.0 mm



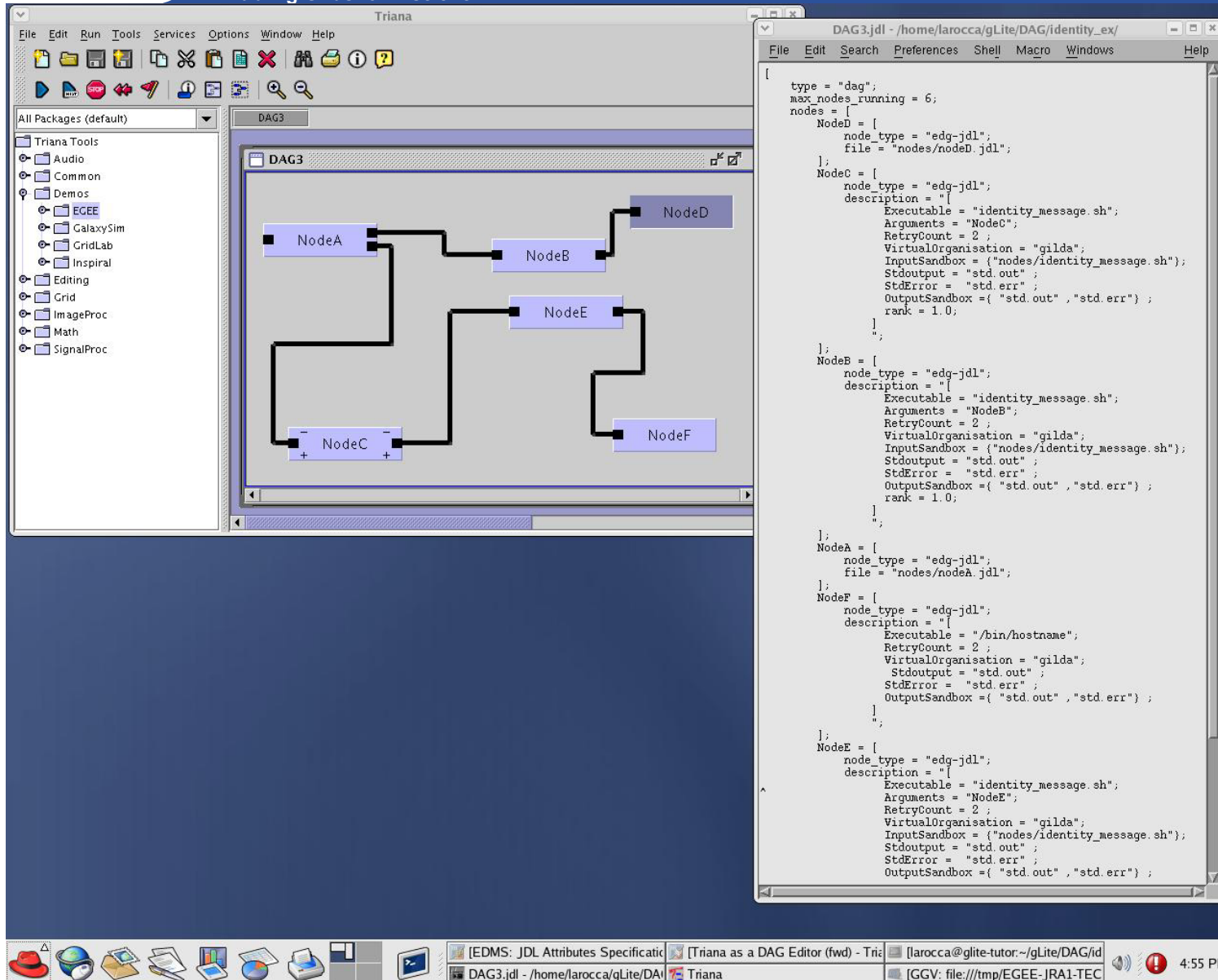


Jobs Services

- up
- Jobs Settings
- Jobs Submission
- Jobs Queue
- GATE job data

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GRID.IT

Enabling Grids for E-science



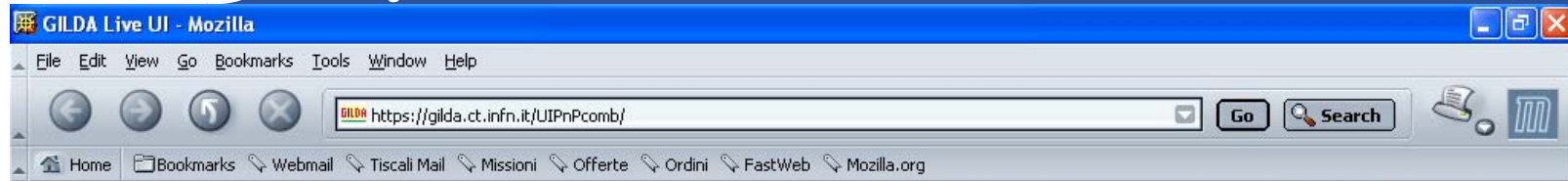
The screenshot displays the Triana workflow editor interface. On the left, a package browser shows various tool categories. The main workspace contains a Directed Acyclic Graph (DAG3) with six nodes: NodeA, NodeB, NodeC, NodeD, NodeE, and NodeF. NodeA and NodeC are the starting points, with NodeA leading to NodeB and NodeE, and NodeC leading to NodeE and NodeF. NodeB leads to NodeD, and NodeE leads to NodeF.

On the right, a text editor window shows the JDL code for the DAG3 workflow:

```

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"} ;
    ]";
  ];
];

```



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

- Sponsors
- Usage Statistics
- Old Usage Statistics



GILDA USER INTERFACE PLUG & PLAY COMBINED (LCG AND GLITE)

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. This User Interface is based both on *INFN Grid 2.4.0* (fully compatible with *LCG 2.4.0*) and *gLite 1.1*.

GILDA User Interface Plug & Play

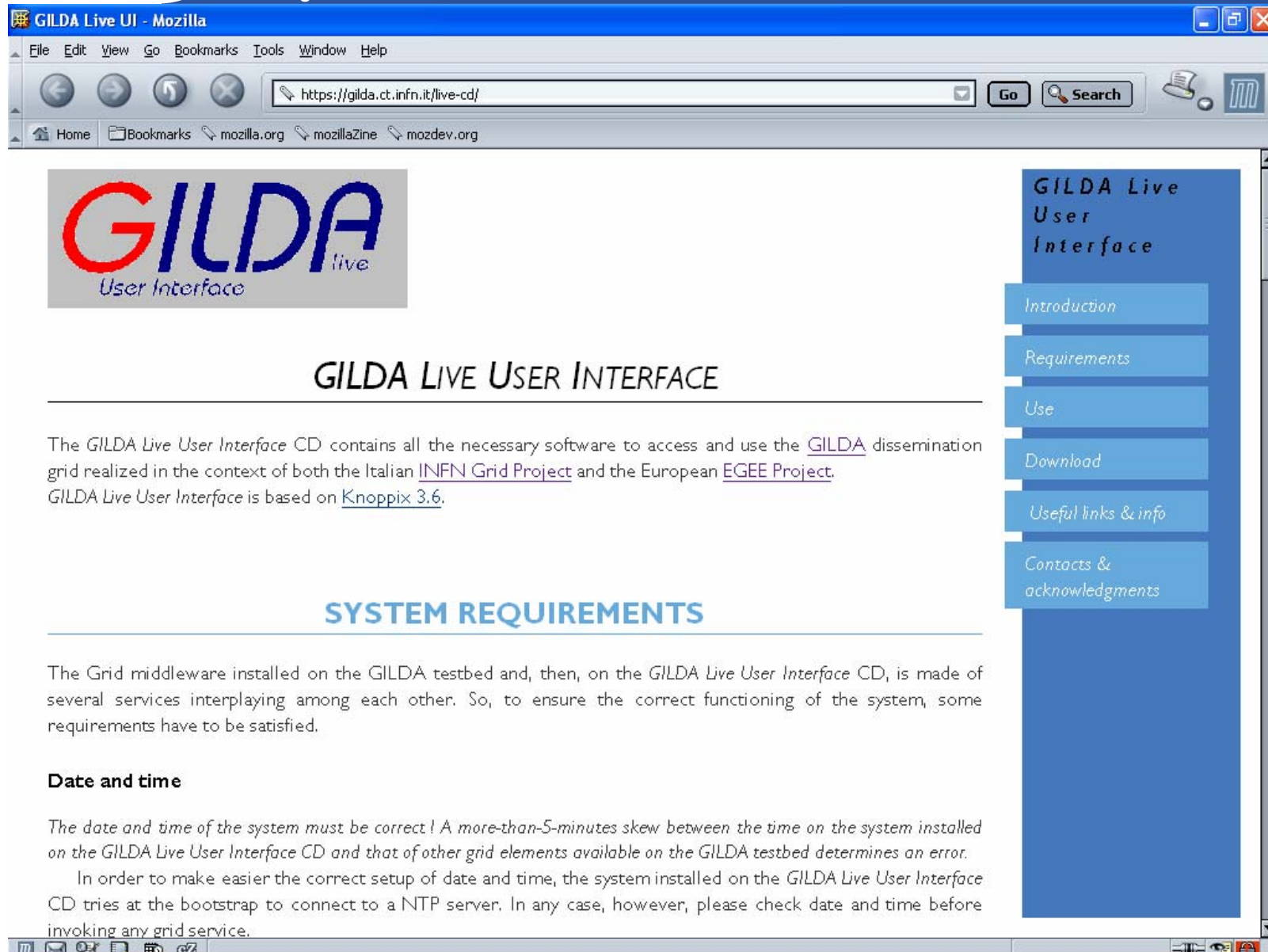
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GILDA Live User Interface

Introduction

Requirements

Use

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GILDA LIVE USER INTERFACE

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](#).

SYSTEM REQUIREMENTS

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



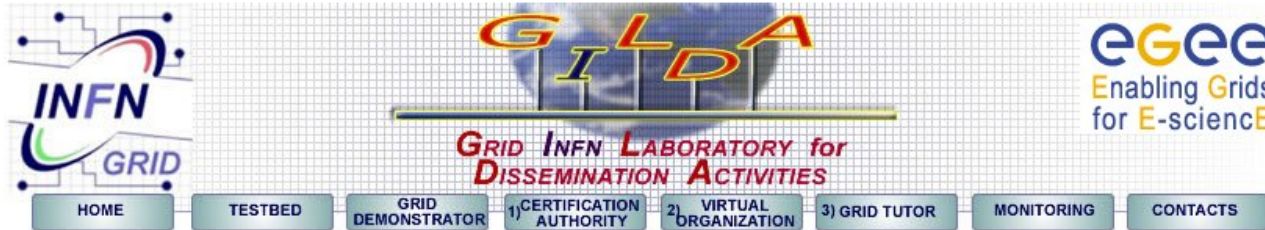
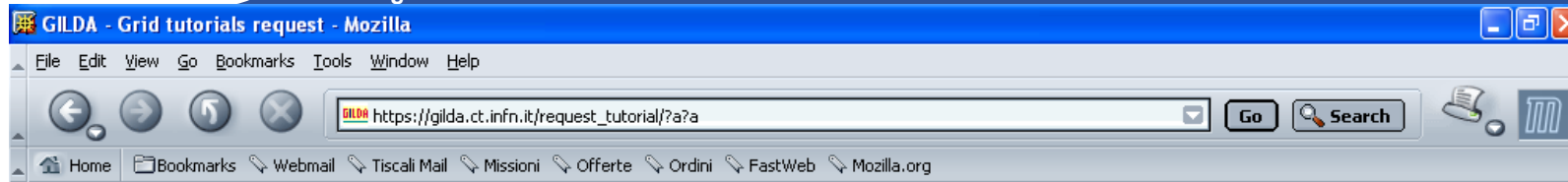
2004

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](#)





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Location

Start date

End date

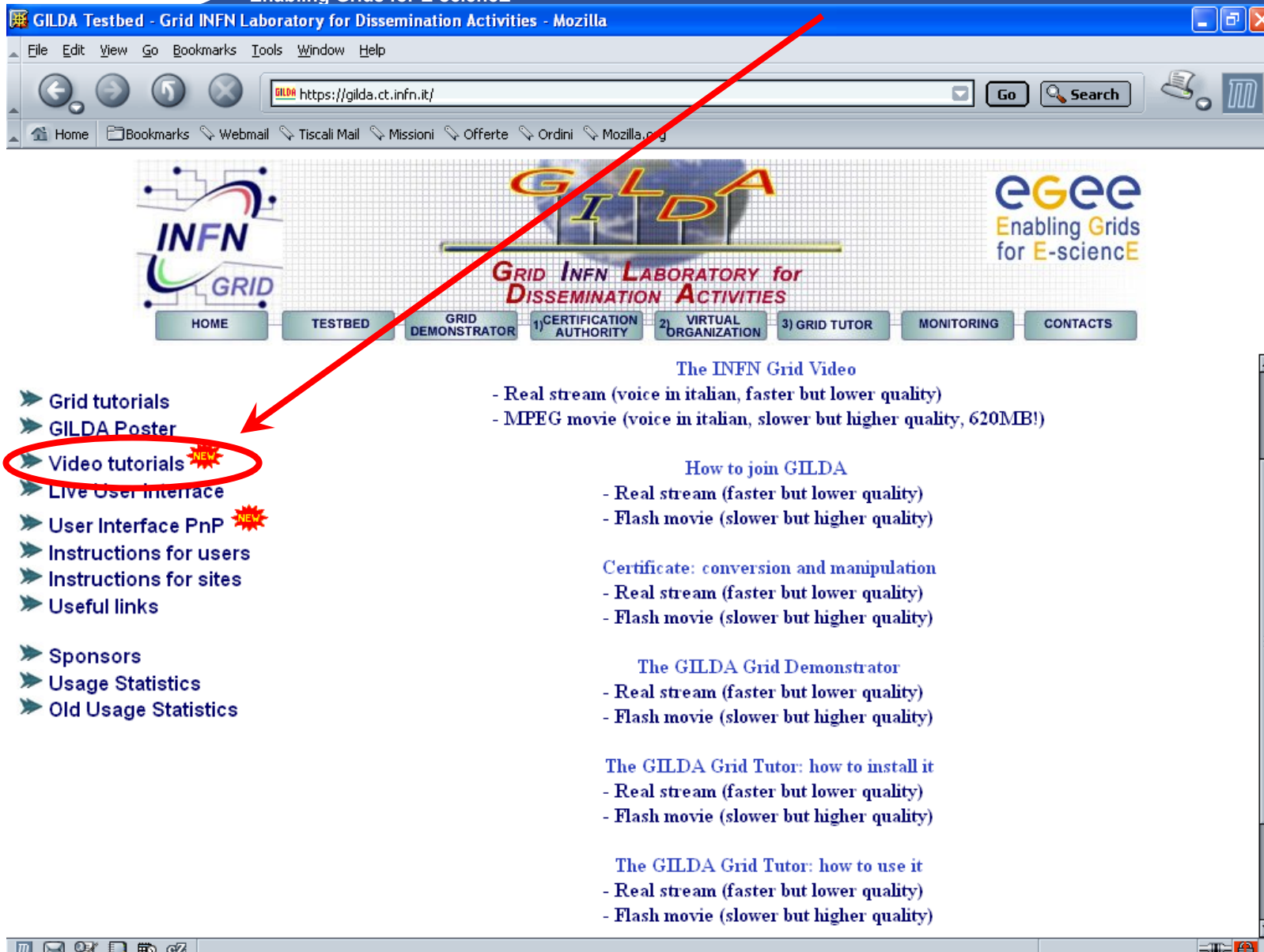
Tutorial home page

Agenda page

Expected number of participants

E-mail address of the organiser

IP range used



Grid tutorials

GILDA Poster

Video tutorials NEW

Live User Interface

User Interface PnP NEW

Instructions for users

Instructions for sites

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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)

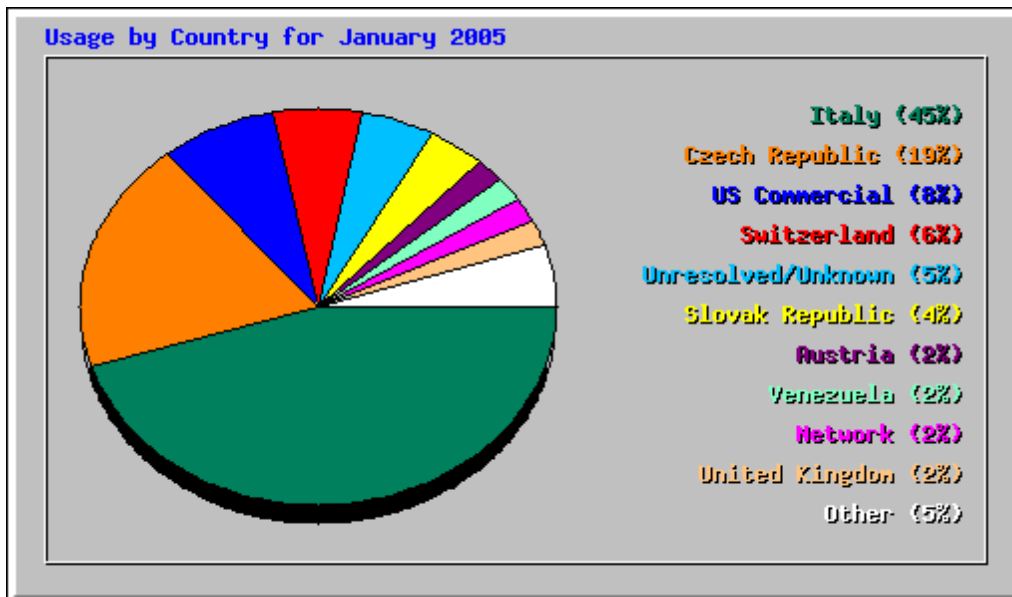
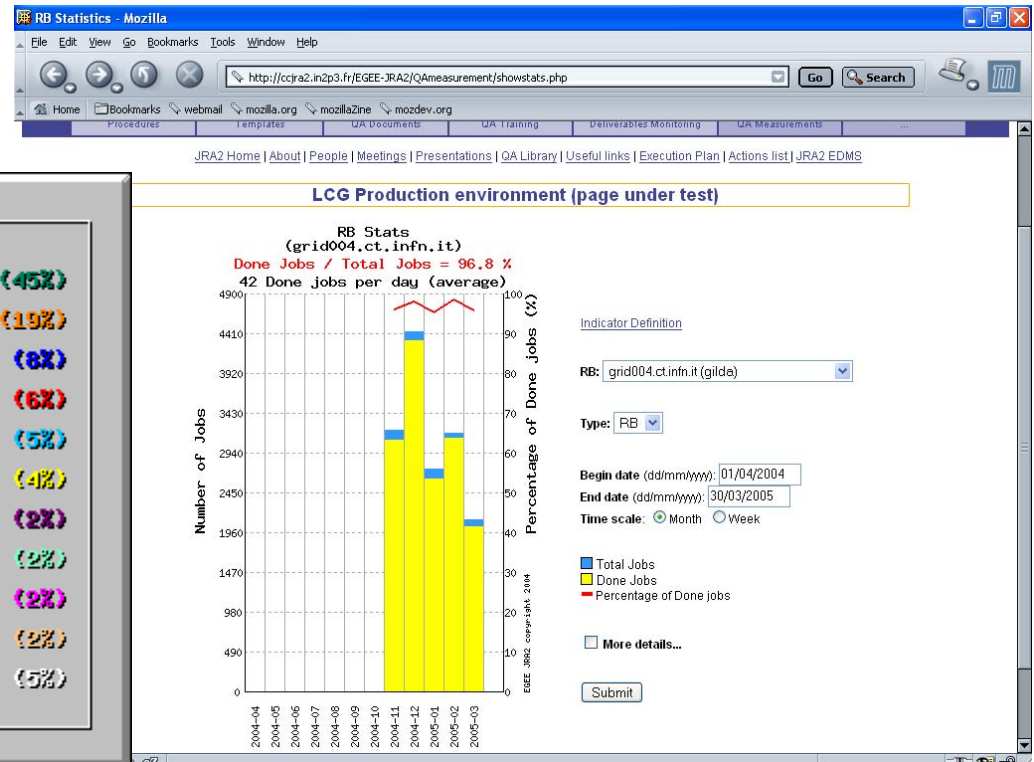
The GILDA Grid Tutor: how to install it

- 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)

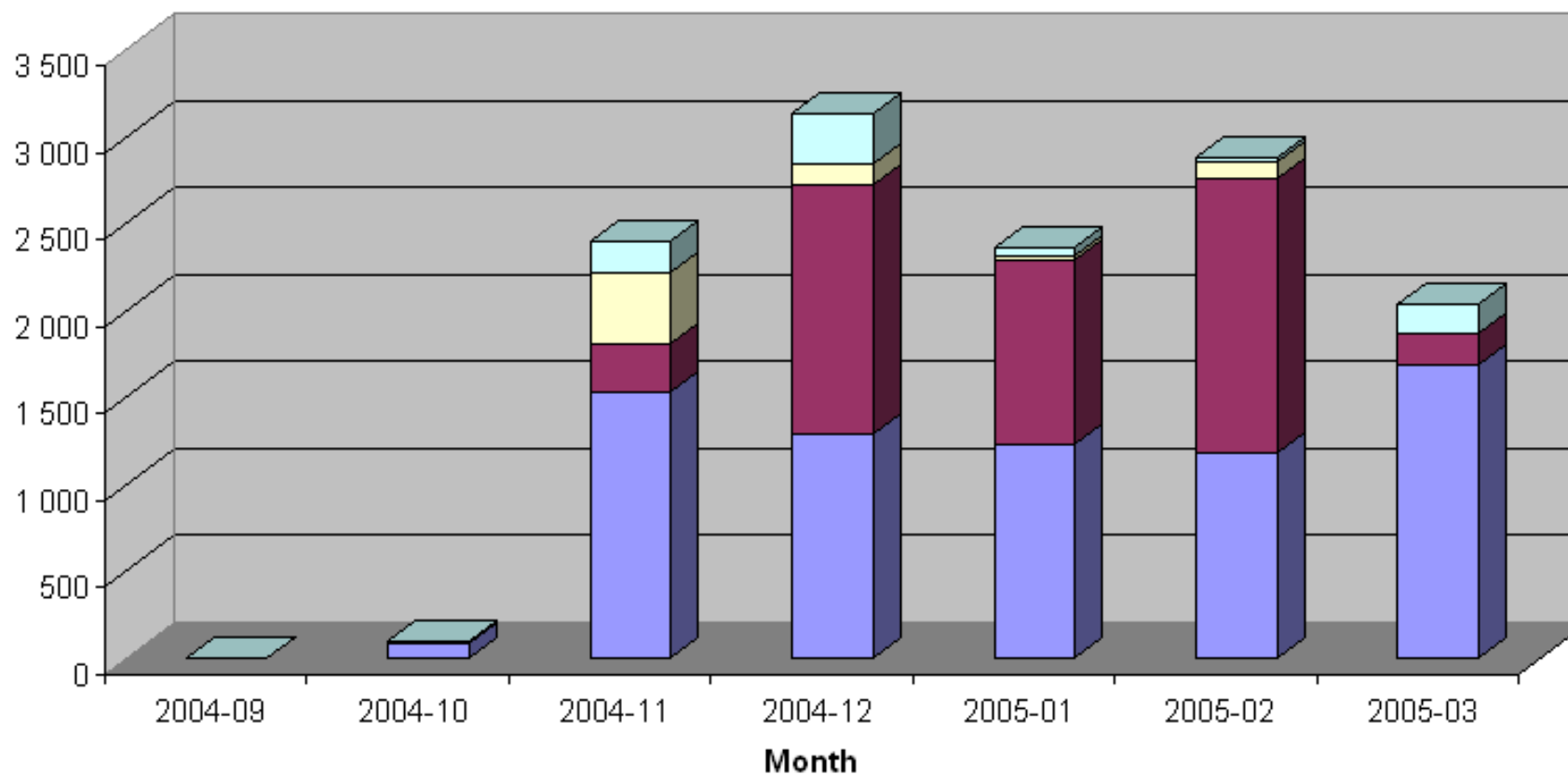
- 15 sites in 3 continents
- > 1540 certificates issued, 15% renewed at least once
- > 45 tutorials and demos performed in 15 months
- > 40 jobs/day on the average
- Job success rate above 80%
- > 600,000 hits (35,000 visits) on (of) the web site from 10's of different countries
- > 385 GB of videos and UI's downloaded from the web site

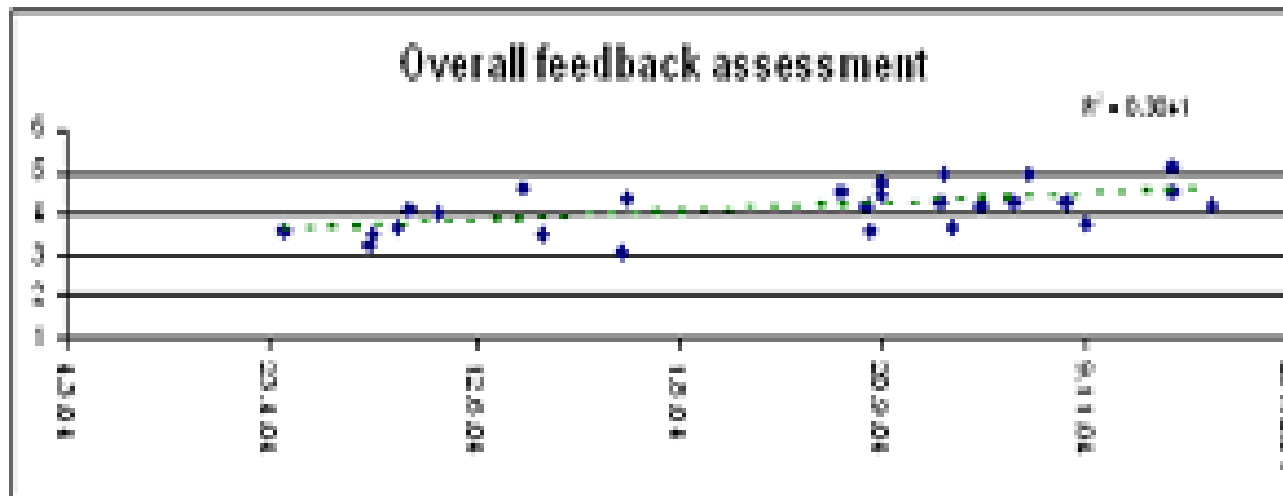
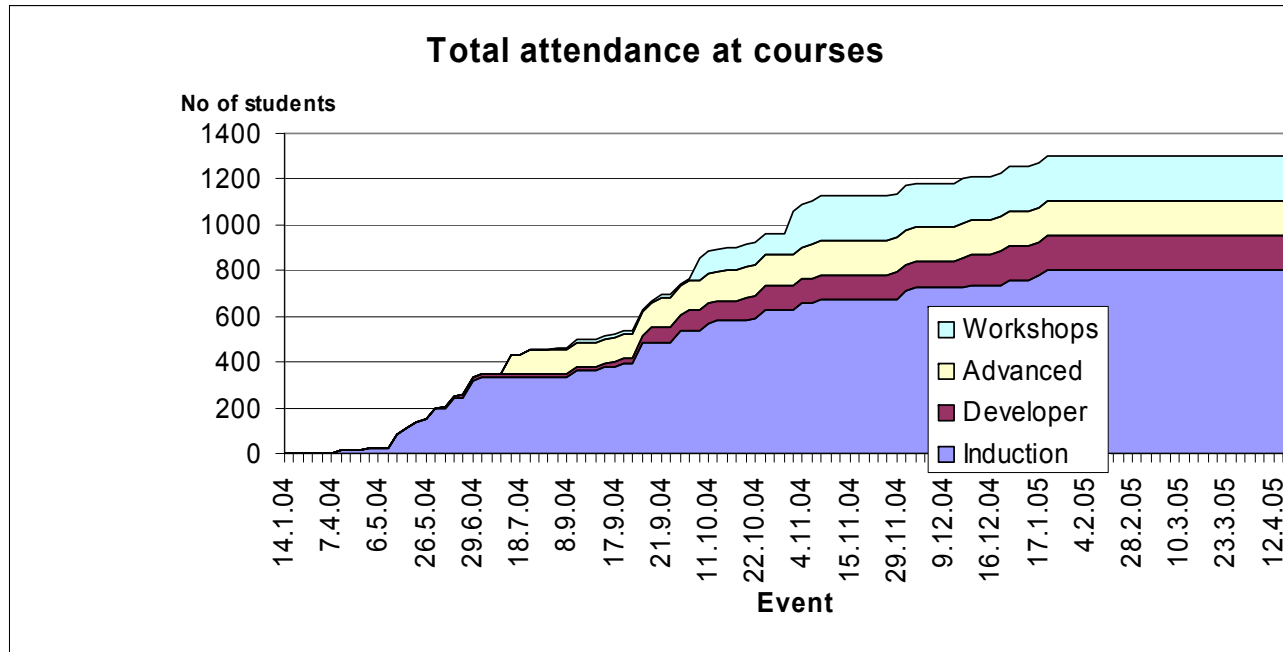


- short jobs < 300 secondes (5 min)
- 300 s < medium jobs < 2700 s (45 min)
- 2700 s < long jobs < 10800 s (3 hours)
- 10800 s < infinite jobs

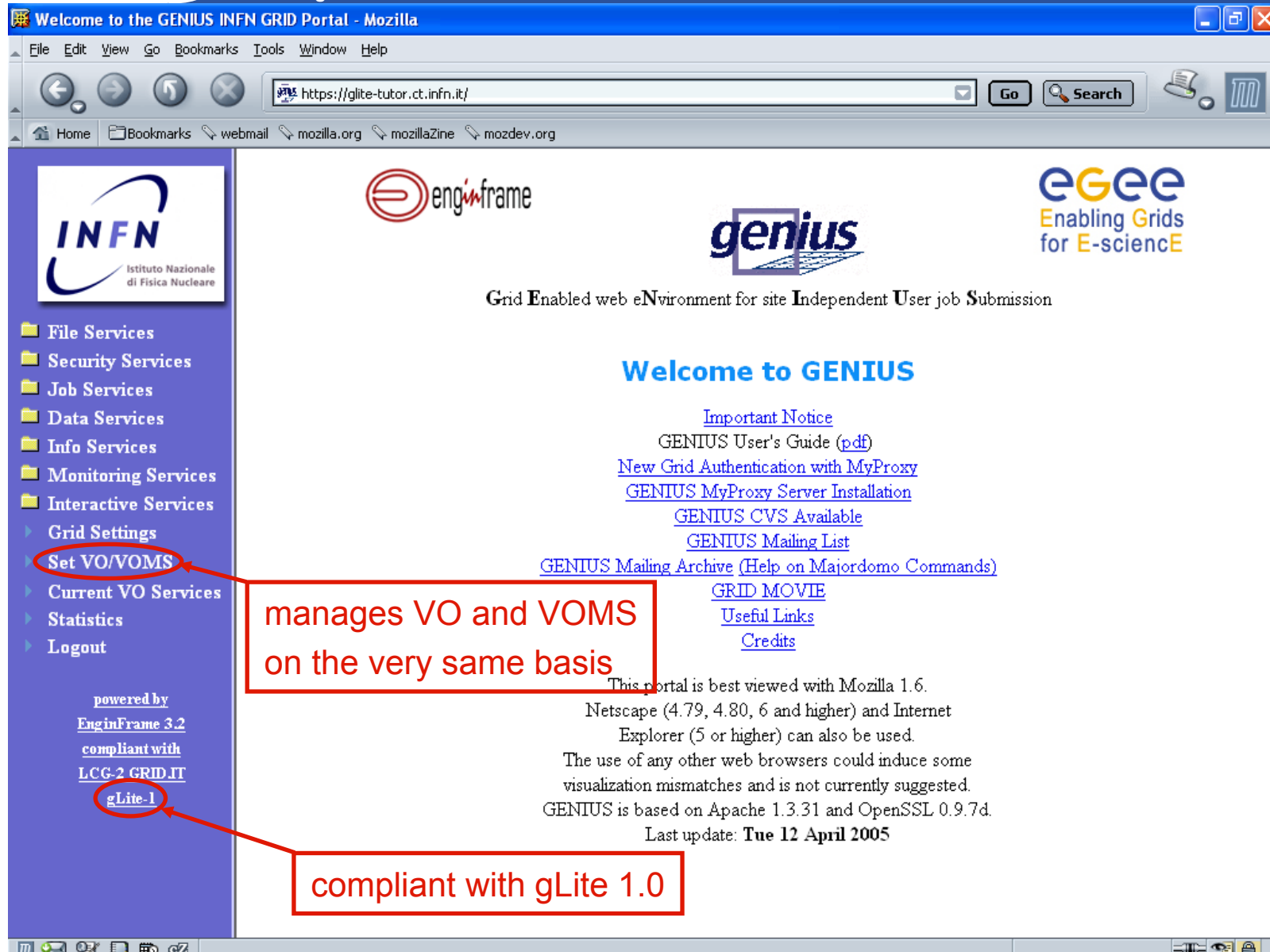
Done jobs distribution - GILDA

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/Arlecione**
- **Development of complete interfaces with GENIUS for 4 Generic Applications: EGEODE (CGG), MAGIC, GEMS, and CODESA-3D (ESR) (successful 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**







Welcome to the GENIUS INFN GRID Portal - Mozilla

File Edit View Go Bookmarks Tools Window Help

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

Home Bookmarks webmail mozilla.org mozillaZine mozdev.org

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.