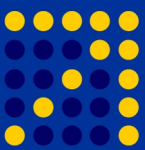


# GILDA T-Infrastructure

LA ROCCA, Giuseppe  
INFN Catania  
giuseppe.larocca@ct.infn.it

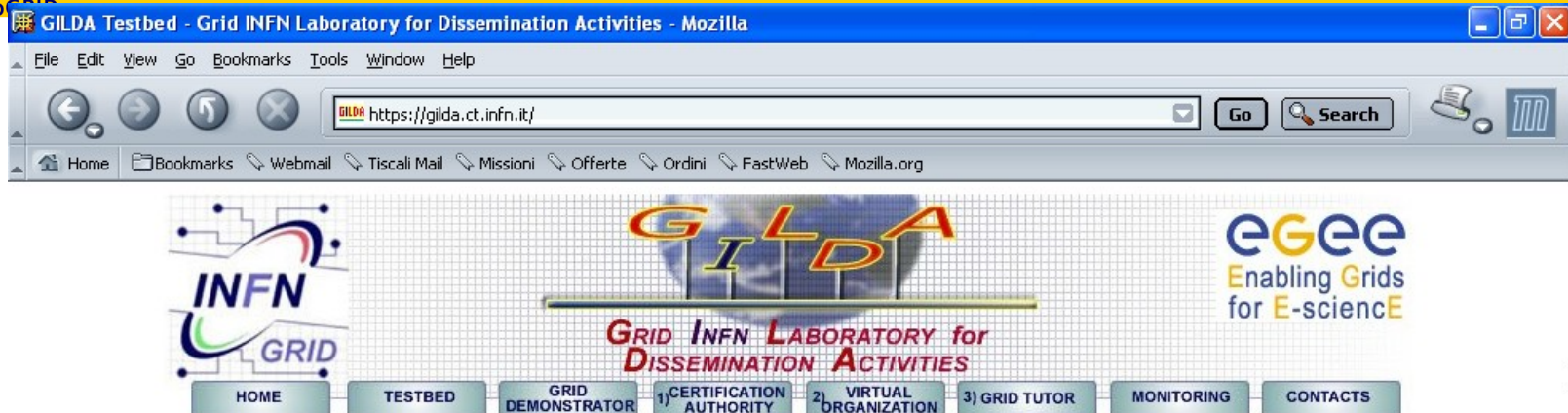




- The GILDA t-Infrastructure
  - Services
  - Tools
  - Applications
- How to join GILDA
- GILDA Support System
- Summary and conclusions

# The GILDA project (<https://gilda.ct.infn.it>)

Bioinformatics



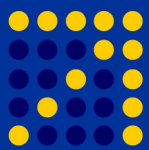
## GILDA ( G rid I nfn L aboratory for D issemination A ctivities )

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

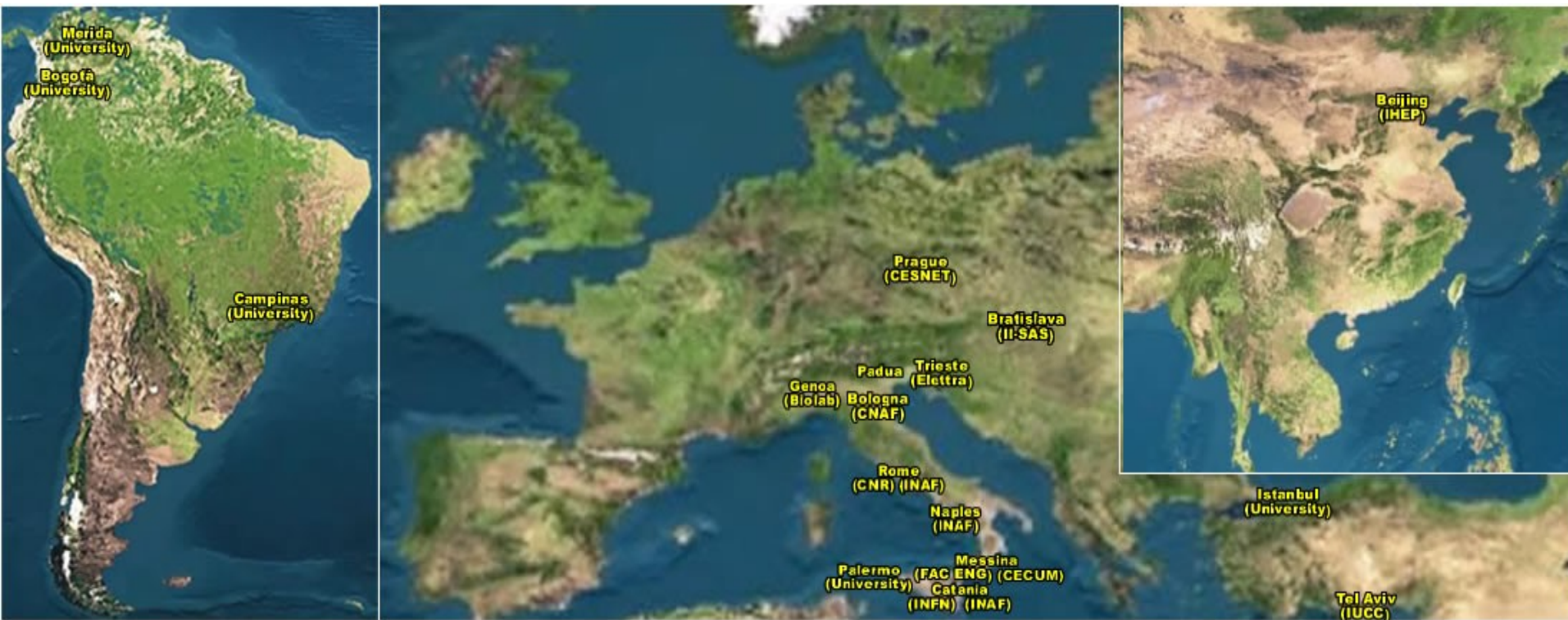
GILDA consists of the following elements:

- 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](mailto:gilda@infn.it), also archived on the web [here](#).

- 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

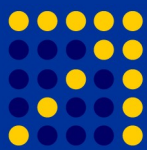


# The GILDA Test-bed (<https://gilda.ct.infn.it/testbed.html>)

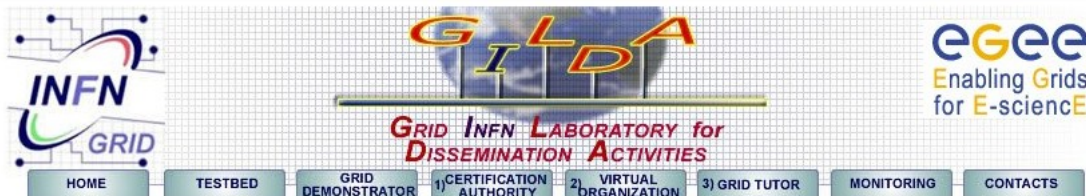
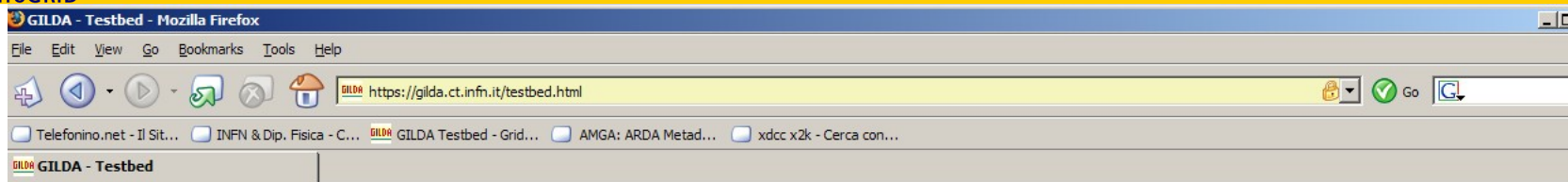


20 sites in 3 continents !





# All GILDA Services available and tested on GILDA



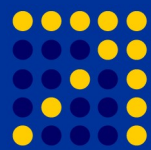
## Grid services

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

SERVICE	HOST
LCG-2 Resource Broker (RB)	<a href="https://grid004.ct.infn.it">grid004.ct.infn.it</a>
LCG-2 Resource Broker (RB)	<a href="https://grid013.ct.infn.it">grid013.ct.infn.it</a>
LCG-2 Resource Broker (RB)	<a href="https://skurut2.cesnet.cz">skurut2.cesnet.cz</a>
LCG-2 Resource Broker (RB)	<a href="https://rb.be.itu.edu.tr">rb.be.itu.edu.tr</a>
gLite Resource Broker (RB)	<a href="https://glite-rb.ct.infn.it">glite-rb.ct.infn.it</a>
gLite Resource Broker (RB)	<a href="https://glite-rb2.ct.infn.it">glite-rb2.ct.infn.it</a>
Information Index (BDII)	<a href="https://grid004.ct.infn.it">grid004.ct.infn.it</a>
Backup Information Index (BDII)	<a href="https://grid013.ct.infn.it">grid013.ct.infn.it</a>
GILDA VOMS server	<a href="https://voms.ct.infn.it:8443/voms/gilda">voms.ct.infn.it:8443/voms/gilda</a>
GILDA gLite DGAS Price Authority	<a href="https://grid-demo1.ct.infn.it:56568">grid-demo1.ct.infn.it:56568</a>
GILDA gLite DGAS HLR	<a href="https://grid-demo1.ct.infn.it:56567">grid-demo1.ct.infn.it:56567</a>
GridICE Monitoring System	<a href="https://alifarm7.ct.infn.it:50080">alifarm7.ct.infn.it:50080</a>
LCG-2 File Catalog (LFC)	<a href="https://lfc-gilda.ct.infn.it">lfc-gilda.ct.infn.it</a>
Backup LCG-2 File Catalog (LFC)	<a href="https://lfc-gilda.cern.ch">lfc-gilda.cern.ch</a>
gLite FiReMan Catalog	<a href="https://grid017.ct.infn.it">grid017.ct.infn.it</a>
gLite File Transfer/Placement Service	<a href="https://fts.ct.infn.it:8443">fts.ct.infn.it:8443</a>
AMGA Metadata Catalog	<a href="https://amga.ct.infn.it:8822">amga.ct.infn.it:8822</a>
gLite R-GMA server	<a href="https://rgmasrv.ct.infn.it:8443">rgmasrv.ct.infn.it:8443</a>
MyProxy Server	<a href="https://grid001.ct.infn.it">grid001.ct.infn.it</a>
Backup MyProxy Server	<a href="https://grid014.ct.infn.it">grid014.ct.infn.it</a>

gLite Services

- 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

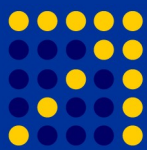


BioinfoGRID

# The GILDA Sponsors

(<https://gilda.ct.infn.it/sponsors.html>)





The screenshot shows a Mozilla browser window titled "GILDA Certification Authority - Mozilla". The address bar displays "https://gilda.ct.infn.it/CA/". The website content features the GILDA logo (GRID INFN LABORATORY for DISSEMINATION ACTIVITIES) and a large heading "The GILDA Certification Authority". On the left, a navigation menu lists: General information, GILDA CA certificate, Request a personal certificate, Request an account, Request a host certificate, Renew a certificate, Check a personal certificate, and Certificate Revocation List. The main content area explains that the GILDA Certification Authority issues temporary personal public key certificates compliant with the X.509 standard. It states that absolutely no identity check is performed, so certificates have no value on real production Grid Infrastructure. It provides contact information for Giuseppe Platania at INFN Catania, including address, email (gilda-ca@ct.infn.it), and phone/fax numbers. It also gives instructions on how to inspect, request, or renew certificates using the navigation menu.

**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

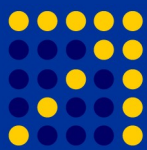
e-mail: [gilda-ca@ct.infn.it](mailto:gilda-ca@ct.infn.it)  
Tel: +39 095 378 5469  
Fax: +39 095 378 5231

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.




Virtual Organization Membership Service - Mozilla

File Edit View Go Bookmarks Tools Window Help

https://cert-voms-01.cnaf.infn.it:8443/voms/gildav/ Go Search

Home Bookmarks Webmail Missioni Offerte Ordini FastWeb Mozilla.org



## 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



# 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/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

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	4%	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
<b>TOTAL</b>	<b>10</b>	<b>34</b>	<b>5</b>	<b>24</b>	<b>15%</b>	<b>12%</b>	<b>56K</b>	<b>16</b>	<b>21</b>	<b>10%</b>	<b>5.4 Tb</b>

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/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

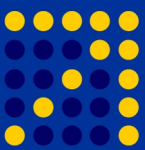
Computing Resources Storage Resources

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
gildace.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



Welcome to the GENIUS Grid Portal - Mozilla

Grid Enabled web eNvironment for site Independent User job Submission

**GENIUS Services**

- File
- Security
  - MyProxy
  - VOMS Exts
    - Info on proxy
    - Change OS Password
    - Remove proxy & Logout
- Job
- Data
- Info
- Monitoring
- Interactive
- Preferences
- VO Services

## Welcome to GENIUS Portal



**ver. 3.0**  
compliant with [gLite-1](#) and [LCG-2](#) middlewares  
[Credits](#)

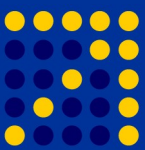
This portal is best viewed with Mozilla 1.7.12 or higher.  
Netscape (4.79, 4.80, 6 or higher) and Internet Explorer (5 or higher) can also be used.  
The use of any other web browsers could induce some visualization mismatches and is not currently suggested.

powered by 

Last update: **Fri 03 February 2006**

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javascript: navigation.o(11);



# The Glite Demonstrator

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

BiinfoGRID

Welcome to the GENIUS INFN GRID Portal - Mozilla

File Edit View Go Bookmarks Tools Window Help

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

Home Bookmarks mozilla.org mozillaZine mozdev.org

**INFN**  
Istituto Nazionale  
di Fisica Nucleare

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

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

**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**

**Demonstrator  
Applications**

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

infnet/ Go Search

Offerte Ordini FastWeb Mozilla.org

**enginframe**

**genius**

egee  
Enabling Grids  
for E-science

Grid Enabled web eNvironment for site Independent User job Submission

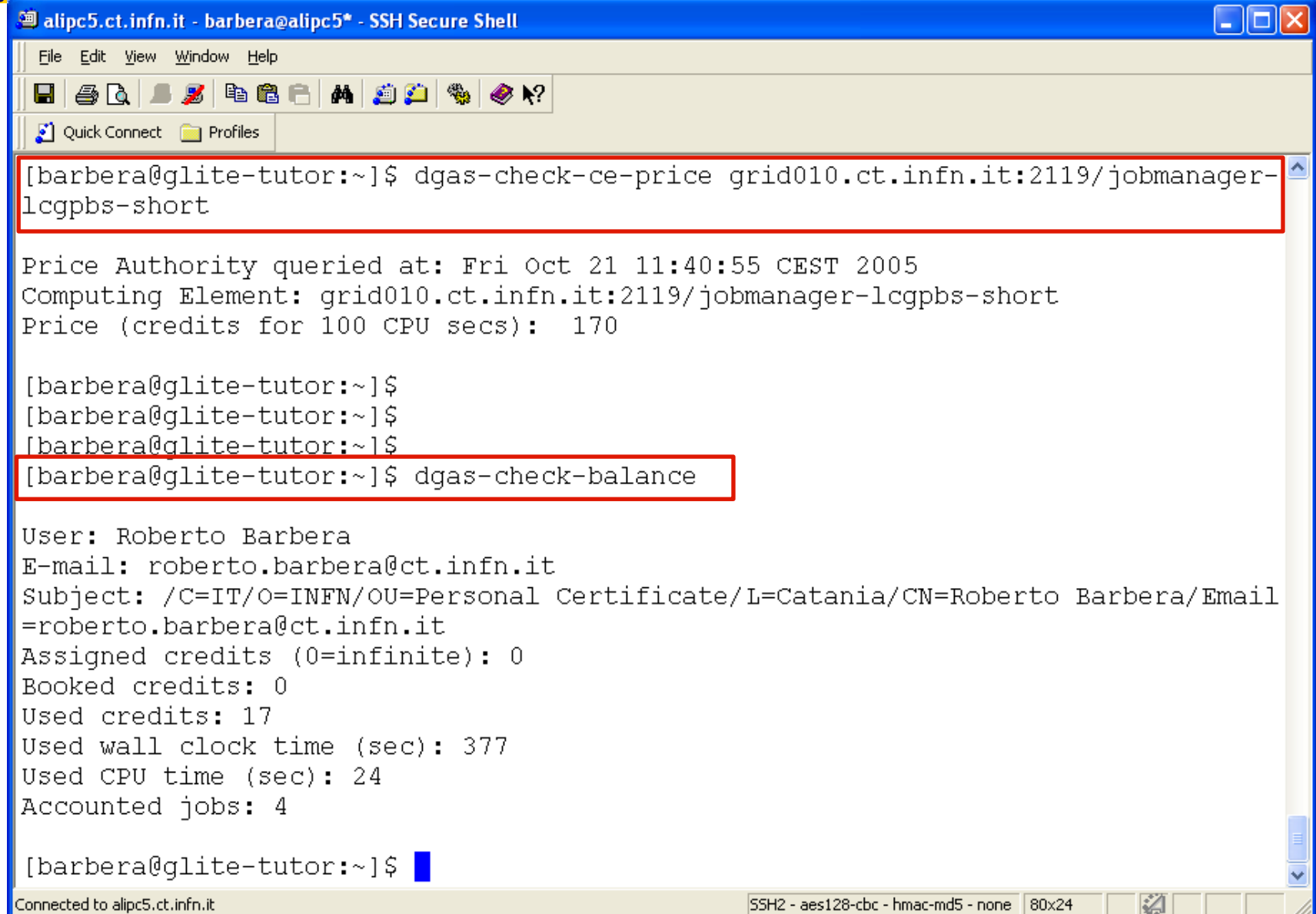
## Welcome to the **GILDA** Grid Demonstrator powered by **GENIUS** based on

**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**

# The GILDA Accounting System (based on DGAS)



```
alipc5.ct.infn.it - barbera@alipc5* - SSH Secure Shell
File Edit View Window Help
[barbera@glite-tutor:~]$ dgas-check-ce-price grid010.ct.infn.it:2119/jobmanager-
lcgpbs-short

Price Authority queried at: Fri Oct 21 11:40:55 CEST 2005
Computing Element: grid010.ct.infn.it:2119/jobmanager-lcgpbs-short
Price (credits for 100 CPU secs): 170

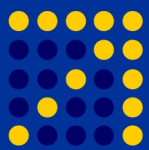
[barbera@glite-tutor:~]$
[barbera@glite-tutor:~]$
[barbera@glite-tutor:~]$
[barbera@glite-tutor:~]$ dgas-check-balance

User: Roberto Barbera
E-mail: roberto.barbera@ct.infn.it
Subject: /C=IT/O=INFN/OU=Personal Certificate/L=Catania/CN=Roberto Barbera/Email
=roberto.barbera@ct.infn.it
Assigned credits (0=infinite): 0
Booked credits: 0
Used credits: 17
Used wall clock time (sec): 377
Used CPU time (sec): 24
Accounted jobs: 4

[barbera@glite-tutor:~]$
```

Connected to alipc5.ct.infn.it SSH2 - aes128-cbc - hmac-md5 - none 80x24





# hadronTherapy example

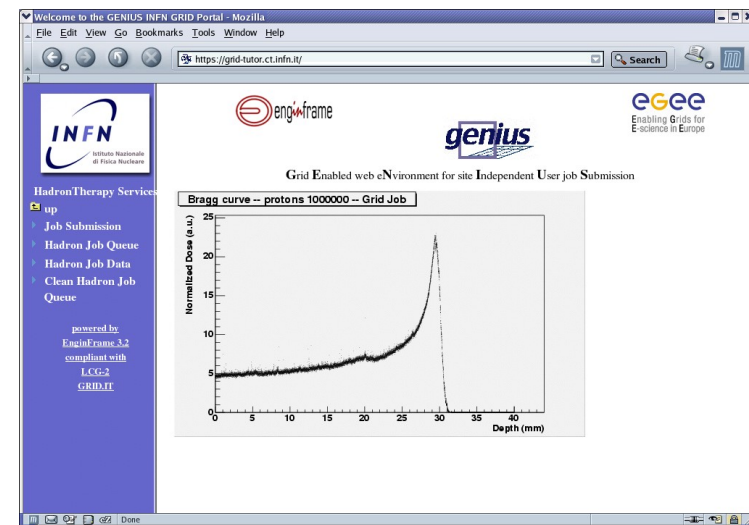
CATANA beam  
line in reality

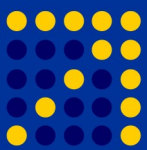


hadronTherapy in  
GENIUS



CATANA beam line  
simulated by  
*hadronTherapy*





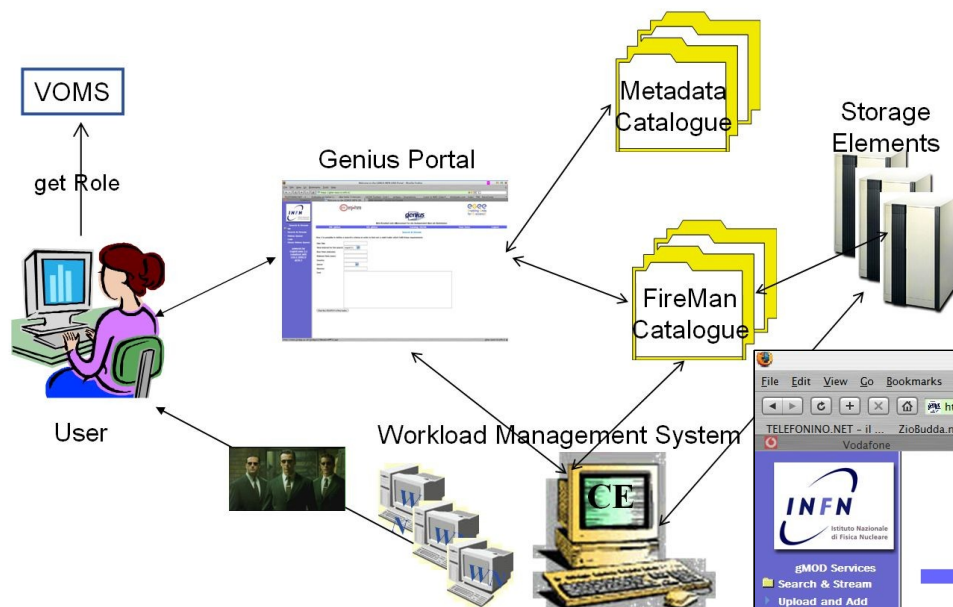
BioinfoGRID

# gMOD example



Enabling Grids for E-science

## gMOD interactions



Grid for  
Entertainment !

Welcome to the GENIUS INFN GRID Portal - Mozilla Firefox

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

TELEFONINO.NET - il ... ZioBudda.net Italian Li... eBay Italia: il mercato ... GILDA Testbed - Grid I... airfagev - Smartphone... Login to INAF-Gilda P... thinkpads.com :: Index TIM AstroCompo

Vodafone

Welcome to the GENIUS INFN GRID Portal

eng@frame

gMOD Services

- Search & Stream
- Upload and Add metadata to a Trailer
- Browse, Edit or Remove Metadata
- Back home

powered by  
EnginFrame 3.2  
compliant with  
LCO-2 GRID II  
glite-1

Grid Enabled web eNvironment for site Independent User job Submission

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

You have selected the trailer /trailers/Shrek2.mpg.  
These are the attributes of the trailer you have choosen.

Shrek 2					
Title					
Run Time	92	Country	USA	Release Date	2004
Genre	Action	Director	William Steig		
Cast	Mike Myers ... Shrek (voice) Eddie Murphy ... Donkey (voice) Cameron Diaz ... F (voice) John Cleese ... King (voice) Rupert Everett ... Prince Charming (voice) Jai Page/Eli/Nobleman/Nobleman's Son (voice) Cody Cameron ... Pinocchio/Three (voice) Christopher Knights ... Blind Mouse (voice) David P. Smith ... Herakl/Mar				
Plot Outline	The film picks up right where the first movie ended... Shrek and Fiona return from The only problem is that they have no idea that their daughter is now an ogre.				

LFN: /trailers/Shrek2.mpg  
Created: 2005-10-13 17:23:58.000  
Modified: 2005-10-13 17:23:58.000  
Size: 6100996  
Type: File  
Expires: Never  
GUID: 000f0e2e-7c0d-134e-a731-c1ced08dbef  
Created: 2005-10-13 17:24:03.000  
Modified: 2005-10-13 17:24:03.000  
Size: 6100996  
Checksum: 00000000  
Status: 0  
User: /C=IT/O=GILDA/OU=Personal Certificate/L=INAF  
Group: egee-group  
User rights: pdw1-gs  
Group rights: adu1-gs

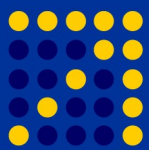
VLC media player

File Visualizza Impostazioni Audio Video Navigazione Aiuto

0:01:21 / 0:02:30 x1.00 C:\Documents and Settings\TonyU

Done

glite-tutor.ct.infn.it



# The GILDA User Interface Plug&Play combined (<https://gilda.ct.infn.it/UIPnPcomb/>)

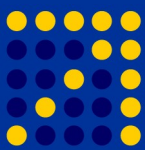
The screenshot shows a Mozilla browser window titled "GILDA Live UI - Mozilla". The address bar displays "https://gilda.ct.infn.it/UIPnPcomb/". The page features the INFN GRID logo on the left, the GILDA logo in the center, and the eGEE logo on the right. A navigation bar includes links for HOME, TESTBED, GRID DEMONSTRATOR, 1) CERTIFICATION AUTHORITY, 2) VIRTUAL ORGANIZATION, 3) GRID TUTOR, MONITORING, and CONTACTS. On the left side, there is a list of links: Grid tutorials, GILDA Poster, Video tutorials, Live User Interface, User Interface PnP (marked with a red star), Instructions for users, Instructions for sites, Useful links, Sponsors, Usage Statistics, and Old Usage Statistics. The main content area displays the "GILDA User Interfaces Plug & Play" logo, followed by the text "GILDA USER INTERFACE PLUG & PLAY COMBINED (LCG AND GLITE)", where "COMBINED (LCG AND GLITE)" is circled in red. Below this, a paragraph explains that the tarball contains software to turn a Linux PC into a machine for accessing and using the GILDA dissemination grid, realized in the context of the Italian INFN Grid Project and the European EGEE Project. The installation procedure installs the User Interface in the user directory, requiring no root privilege. The interface is based on INFN Grid 2.4.0 (fully compatible with LCG 2.4.0) and gLite 1.1. On the right side, a vertical menu lists: Introduction, Use, Download, Useful links & info, and Contacts & acknowledgments.

**GILDA User Interface Plug & Play**

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

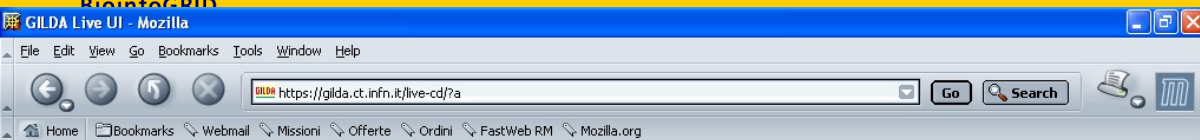
The GILDA User Interface Plug & Play tarball contains all the necessary software to seamlessly turn your Linux PC into a machine from you can access and use the GILDA dissemination grid realized in the context of both the Italian INFN Grid Project and the European EGEE Project. The installation procedure 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.





BioinfoGRID

# The GILDA Live User Interface (<https://gilda.ct.infn.it/live-cd/>)



**EGEE**  
Enabling Grids  
for E-science

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



GILDA Live  
User  
Interface

## 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

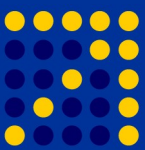


GILDA User Interface  
gLite 1.1 and LCG 2.4

**EGEE**  
Enabling Grids  
for E-science



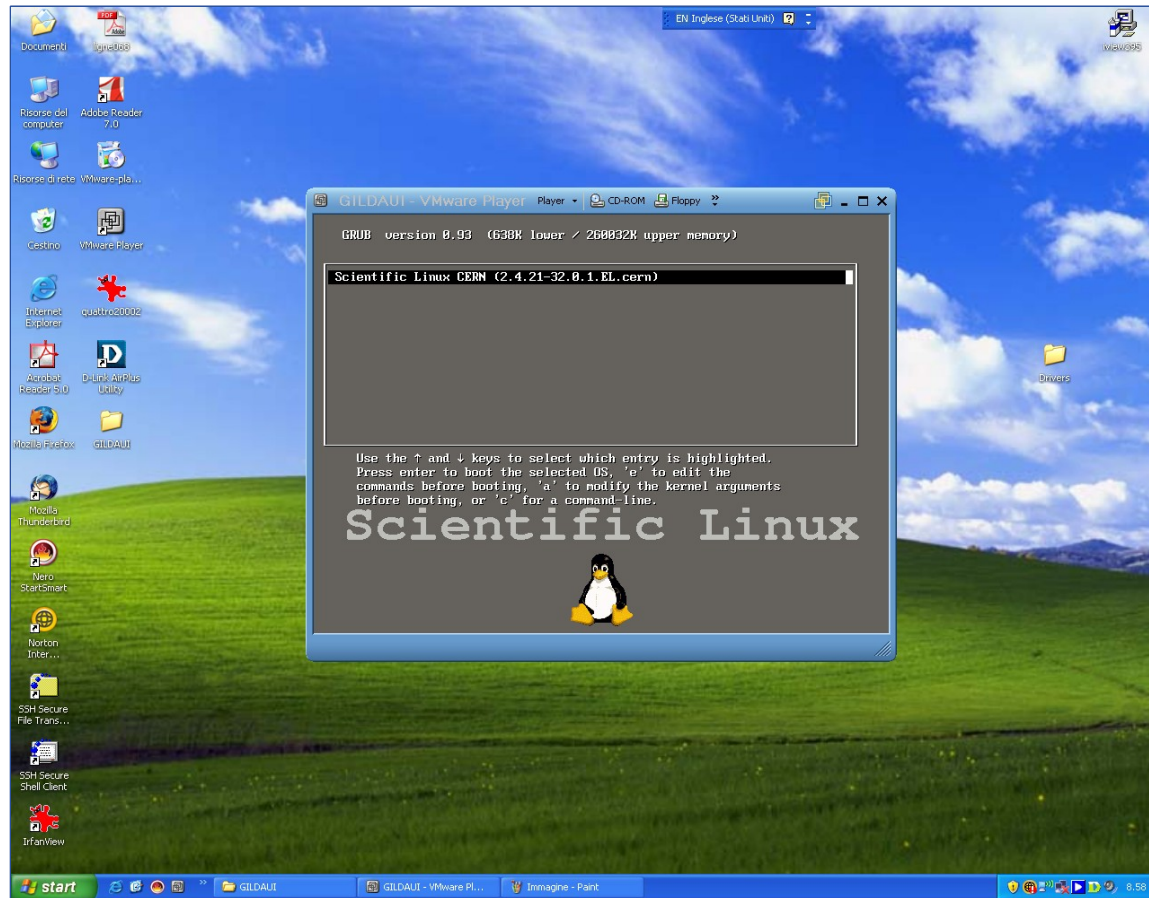




# GILDA UI on a Virtual Machine

BioinfoGRID

In order to allow all windows's users to access the grid, we have created a User Interface into a Virtual Machine built with VMWare Workstation 5.0. Thanks to the free VMWare-Player tool, any Windows users can run a UI on a Windows environment !



For more details and download <http://www.vmware.com/products/player/>

# The GILDA Video Tutorials (<https://gilda.ct.infn.it/video.html>)

BioinfoGRID

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

GRID INFN LABORATORY for DISSEMINATION ACTIVITIES

eGEE Enabling Grids for E-science

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**

**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)





## GILDA (Grid Infn Laboratory for Dissemination Activities)

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

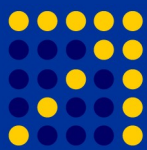
GILDA consists of the following elements:

- [the GILDA Testbed](#): a series of sites and services (Resource Broker, Information Index, 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; the GILDA Virtual Organization is based on 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](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 in the context of the following Projects:



- Grid tutorials
- GILDA Posters
- Video tutorials
- Live User Interface
- User Interface PnP
- Virtual Services
- **Instructions for users**
- Instructions for sites
- Support system NEW
- Useful links
- Sponsors
- Usage Statistics
- Old Usage Statistics



- Grid tutorials
- GILDA Posters
- Video tutorials
- Live User Interface
- User Interface PnP
- Virtual Services
- Instructions for users
- Instructions for sites
- Support system 
- Useful links
  
- Sponsors
- Usage Statistics
- Old Usage Statistics

## Access the GILDA Testbed through the public Grid Demonstrator:

Step 1: Login to the Grid Demonstrator (read the Grid Demonstrator User's Guide [html](#), [pdf](#) )

## Access the GILDA Testbed during tutorials and/or induction courses:

Step 1: Get your GILDA CA personal certificate

Step 2: Register to the GILDA Virtual Organization

Step 3: Login to the Grid Tutor (read the GENIUS Portal User's Guide [html](#), [pdf](#))

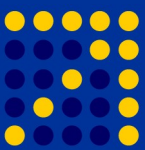
## External documentation:

Users and Site Managers Support

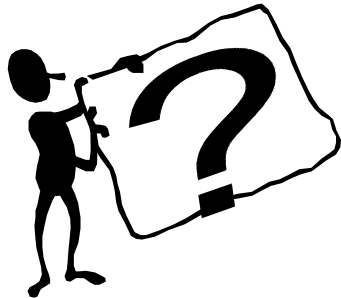
Grid Dictionary by Andrea Caltroni [\[PDF\]](#) - [\[TXT\]](#)

A Brief Guide to Certificate Management by Marisa Luvisetto [\[PDF\]](#) [\[TXT\]](#) (updated 27/09/2004)

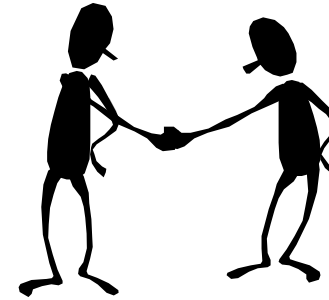




- How to obtain a certificate:



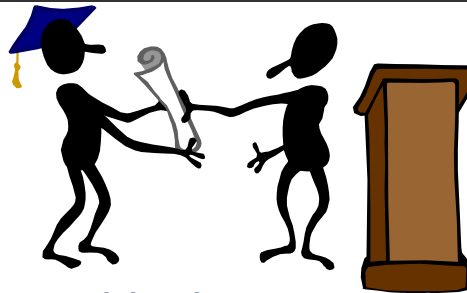
The user w



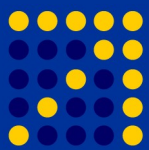
The users meets the RA (Registration Authority) that will verify the user's identity

**These steps are not needed to get a certificate from the GILDA CA**

/ra.php



The RA will provide the user with a key to be used in the registration form



# How to get a personal GILDA certificate (1/5)



- Grid tutorials
- GILDA Posters
- Video tutorials
- Live User Interface
- User Interface PnP
- Virtual Services
- Instructions for users
- Instructions for sites
- Support system NEW
- Useful links
  
- Sponsors
- Usage Statistics
- Old Usage Statistics

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

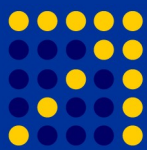
GILDA consists of the following:

- [the GILDA Testbed](#): a set of Managers, Monitoring tools, and the rest of the world on which (the LCG middle-ware) and the
- [the Grid Demonstrator](#): a set of INFN and [NICE](#), from where the Testbed;
- [the GILDA Certification Authority](#): a system that issues certificates to everybody who wants to use the
- [the GILDA Virtual Organization](#): a virtual organization for grid computing on the GILDA Virtual Organization Membership
- [the Grid Tutor](#): based on a set of tools for the
- [the monitoring system](#): a 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 in the context of the following Projects:





<https://gilda.ct.infn.it/CA/mgt/getCA.php>



## 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

### Download the GILDA CA certificate

#### WARNING !

This web server is certified by the same Certification Authority you are going to download the root certificate of. Hence, you have no objective ways to check its reliability and trustability!

If you do not trust it and would like to check the correctness of the fingerprints, you can call the CA manager on the phone (Giuseppe Platania, +39 095 378 5501).

These are the fingerprints of the GILDA CA certificate:

**B6:BA:BD:BC:72:53:05:93:78:A4:81:47:28:4E:3C:55 (MD5)**  
**4F:10:40:A9:B5:75:59:01:A3:59:74:9E:E3:E2:8F:E2:C7:2C:93:DD (SHA1)**

### Instructions

For the automatic installation in your web browser, select the **DER** format and save the GILDA CA certificate on your local disk with the **.der** extension in the filename. Then, double click on the filename and, when the installation dialog starts, choose the option 'Select automatically the archive'.

The **PEM** format must be selected only to visualize the GILDA CA certificate with your web browser (e.g., if you want to do "cut and paste").

Formato:

[Download/Visualize certificate](#)



- 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

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](mailto:gilda-ca@ct.infn.it)  
Tel: +39 095 378 5501  
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.

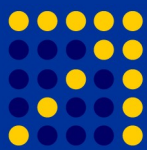
In order to request a certificate, click on **Request a personal certificate** in the left part of this page.

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.

Please, note that Netscape Communicator (version 4 and above), Mozilla (version 1.5 and above), and Internet Explorer (version 5 and above) are the only presently supported web browsers. The use of any other web browsers could induce some visualization mismatches and/or server misbehaviours and is not currently suggested.





# How to get a personal GILDA certificate(3/5)

Bioii



- 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

### Request a GILDA personal certificate

**WARNING:** the procedure requires the application of the security patch you can find at <http://www.microsoft.com/technet/security/bulletin/MS02-048.asp>

If you did not do it already, please [download the GILDA CA certificate](#) first.

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.

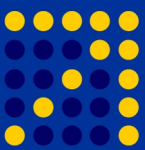
The password you are prompted about in the form below is the password of your personal account on the **GENIUS Portal** from where you will access the GILDA Testbed and it is **NOT** the passphrase of your personal certificate.

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"/>

Submit the request

Clear form



# How to get a personal GILDA certificate(4/5)

- You will get an e-mail at the e-mail address given in previous web form

Dear User,

you can download your GILDA Personal Certificate going,  
\*with the same browser you used to submit the request\*,  
to the URL:

<https://gilda.ct.infn.it/cgi-bin/gucert.pl?0A44>

Your certificate is valid for \$CERTIFICATE\_DAYS\_VALUE days.  
After that you can go to:

<https://voms.ct.infn.it:8443/voms/gilda/webui/request/user/create>

and register to the GILDA VOMS (usually, registration takes a working day).

Then, you can go to the GILDA Grid Demonstrator at the URL:

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

or, if you are participating to a tutorial or  
to the GILDA Grid Tutor at the URL:

<https://grid-tutor.ct.infn.it> (for LCG) or <https://glite-tutor.ct.infn.it> (for gLite)

Remember that:

1) whenever you are prompted for the Operating System, use the username  
and the password you have chosen when you requested the GILDA  
Personal Certificate as username and as password;

2) whenever you are prompted for the GRID username and password  
and the passphrase of your GILDA Personal Certificate as password.  
Best Regards

The GILDA CA Manager

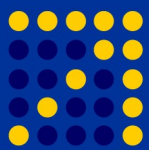
GILDA Certification Authority  
Tel: +39 095 378 5469  
Fax: +39 095 378 5231  
Via S. Sofia, 64  
I-95123 Catania  
ITALY  
<http://gilda.ct.infn.it/CA/>

From: GILDA-CA <gilda-ca@ct.infn.it>

To: <email address given in the request form>

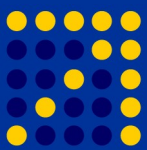
Subject: GILDA Personal Certificate for <username>

Just click the link to get the certificate.



## How to get a personal GILDA certificate (5/5)

- You will be informed that a new certificate is available in your browser certificate list.
- Very important: you HAVE TO use the same browser in all the previous steps
- It's suggested now to export the certificate and store it in a safe place.
- The certificate exporting procedure and the extension of the file is browser dependent (\*.p12 for Mozilla/Netscape/FireFox and \*.pfx for Internet Explorer).
- Exported certificates need to be converted in PEM format (\*.pem). This is the certificate format used by the gLite security services.



- In the same e-mail we showed before you can see one more link:

Dear User,

you can download your GILDA Personal Certificate going,  
\*with the same browser you used to submit the request\*,  
to the URL:

`https://gilda.ct.infn.it/cgi-l`

Just follow the link to be registered to the GILDA VO

Your certificate is valid for 365 days.

After that you can go to:

<https://voms.ct.infn.it:8443/voms/gilda/webui/request/user/create>

and register to the GILDA VO (usually, registration takes a working day).

Then, you can go to the GILDA Grid Demonstrator at the URL:

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

or, if you are participating to a tutorial or an induction course,  
to the GILDA Grid Tutor at the URL:

`https://grid-tutor.ct.infn.it` or `https://grid-tutor1.ct.infn.it`

Remember that:

1) whenever you are prompted for the Operating System, use the username  
and the password you have chosen when you requested the GILDA  
Personal Certificate as username and as password;

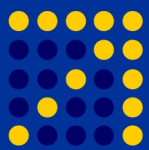
2) whenever you are prompted for the GRID username and password  
and the passphrase of your GILDA Personal Certificate as password.

Best Regards

The GILDA CA Manager

...





# VOMS registration (2/5)

Bioinfo



## Virtual Organization Membership Service

The gilda VO

Request to Administrators » requesting VO membership

REQUEST TO ADMINISTRATORS

### VO User Registration Request

LISTING REQUESTS

To access the VO resources, you must agree to the VO's Usage Rules. Please fill out all fields in the form below and click on the appropriate button at the bottom.

CONFIRMATION OF THE EMAIL ADDRESS

After you submit this request, you will receive an email with instructions on how to proceed. Your request will not be forwarded to the VO managers until you confirm that you have a valid email address by following those instructions.

**IMPORTANT:** By submitting this information you agree that it may be distributed to and stored by VO and site administrators. You also agree that action may be taken to confirm the information you provide is correct, that it may be used for the purpose of controlling access to VO resources and that it may be used to contact you in relation to this activity.

This page will be only accessible if you have imported successfully the received certificate

CA URL:

Family Name:

Given Name:

Institute:

Phone Number:

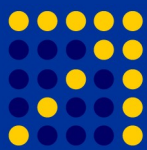
Email:

comment:

VOMS Admin 1.2.10  
Release 1

Copyright © 2003 GILDA  
on behalf of the GILDA Project

You are logged in as "/C=IT/O=GILDA/OU=Personal Certificate/L=INFNCT/CN=Riccardo Bruno/Email=ricsxn@hotmail.com"  
certified by "/C=IT/O=GILDA/CN=GILDA Certification Authority".



Email address confirmation for VO gilda

A request for a VO membership on gilda has been made using this email address.

If you have not made this request please ignore this message. It would be helpful if you would contact the VO registrar and tell us about this bogus request.

If the request was made by you, please click on the following URL to confirm this email address,

<https://voms.ct.infn.it:8443/voms/gilda/webui/request/user/confirm?cookie=g8840oolxpenbhfd&regid=2>

Make sure you have your client certificate loaded in your browser. One way to ensure this is to copy and paste the above URL into the same browser that you used to submit the request.

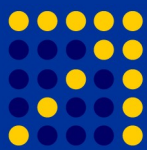
If you wish to confirm the request another way, then you need the following information:

Request number : 2  
Confirmation cookie: g8840oolxpenbhfd

**Confirm your VO registration request following the above link**

Once you have confirmed your email address the following information will be sent to the VO administrator:

Name : Barbera, Roberto  
Email : [roberto.barbera@ct.infn.it](mailto:roberto.barbera@ct.infn.it)  
Institute : Univ. Catania and INFN  
Phone Number : +390953785504  
Certificate DN : /C=IT/O=INFN/OU=Personal Certificate/L=Catania/CN=Roberto Barbera/Email=[roberto.barbera@ct.infn.it](mailto:roberto.barbera@ct.infn.it)  
Certificate CA : /C=IT/O=INFN/CN=INFN Certification Authority  
Comment :



# VOMS Registration (4/5)

Accepted email confirmation for VO gilda

Dear Barbera, Roberto,

Thank you for confirming your email address. Your request for an account on VO gilda has been sent to the VO administrators.

A VO administrator will create your account as soon as possible.

If you find any problem, please contact the VO administrators.

Thank You,  
VO Registration

Finally you will get a confirmation e-mail

Welcome to the gilda VO!

Dear Barbera, Roberto,

Your request (2) for the gilda VO has been accepted and allowed by the VO Administrator.

From this point you can use the voms-proxy-init command to acquire the VO specific credentials, which will enable you to use the resources of this VO.

Good Luck,  
VO Registration

Now you are member of the GILDA VO!!!

# The GILDA Support System



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

GILDA consists of the following elements:

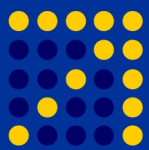
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- Live User Interface
- User Interface PnP
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- Instructions for users
- Instructions for sites
- **Support system** NEW
- Useful links
- Sponsors
- Usage Statistics
- Old Usage Statistics





# Registration (1/2)

- <http://gilda-support.ct.infn.it>



Monday, 3 April 2006

Site Search

## Login

Username:

Password:

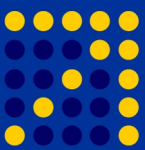
User Login




Lost Password?

[Register now!](#)

This is the entry point of the Support System of GILDA. You are welcome to register to it if you want to submit Tickets for problems and/or requests of information.

Powered by XOOPS 2.0 © 2001-2003 The XOOPS Project  
Page Load Statistics: 0.065 Seconds | 39 Queries  
Grid CT 2006





**GRID INFN LABORATORY for  
DISSEMINATION ACTIVITIES**

Monday, 3 April 2006

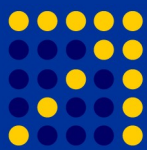
Site Search

**Login**  
Username:  
  
Password:  
  
  
  
Lost Password?  
  
Register now!

**User Registration**  
Username  
  
Email  
  
☐ Allow other users to view my email address  
Website  
  
Time Zone  
  
  
**Verify Password**  
  
  
Receive occasional email notices  
from administrators and moderators?  
☐ Yes ☒ No  
  
Disclaimer  

While the administrators and moderators of this  
site will attempt to remove  
or edit any generally objectionable material as  
quickly as possible, it is  
impossible to review every message. Therefore  
you acknowledge that all posts  
made to this site express the views and opinions  
of the author and not the

☐ I agree to the above



BioinfoGRID

# Ticket Creation (I)

The screenshot displays the BioinfoGRID website interface. At the top, there are logos for INFN, GILDA, and eGEE (Enabling Grids for E-science). A 'Login' button is visible. The main navigation menu is open, showing two sections: 'Main Menu' and 'User Menu'. The 'Main Menu' includes 'Home', 'Ticket Management' (which is circled in red), and 'Contact Us'. The 'User Menu' includes 'View Account', 'Edit Account', 'Notifications', 'Logout', and 'Inbox'. A red arrow points from the 'Ticket Management' link in the 'Main Menu' to a larger, detailed view of the 'Main Menu' on the left side of the page. This detailed view also lists the 'User Menu' items. The background of the website shows a pink banner with text about registration and a 'Site Search' box.

**Main Menu**

- Home
- Ticket Management**
- Contact Us

**User Menu**

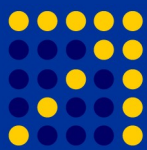
- View Account
- Edit Account
- Notifications
- Logout
- Inbox

This is the end of the page.

are welcome to register to it if you want to access the latest news and posts of information.

Site Search

GRID CF 2006



# Ticket Creation (II)



**Main Menu**

- Home
- Ticket Management
- Contact Us

**User Menu**

- View Account
- Edit Account
- Notifications
- Logout
- Inbox

**Create a Ticket**

**Username:**  Lookup User

**Class:**

**Priority:** ☐ ☒ ☐ ☐ ☐ ☐ ☐ ☐

**Subject:**

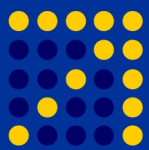
**Description:**

**Add File:**

**Accounting**  
Authorization / Authentication  
Data Management  
Grid Interactive  
Grid Monitoring  
Grid MPI jobs  
Grid Portal  
Grid User Environment  
Information System  
**Other**  
Security  
Site CECUM-ME  
Site CENAPAD-UNICAMP  
Site IHEP-BEIJING  
Site IISAS-BRATISLAVA  
Site INAF-CATANIA  
Site INFN-CATANIA  
Site INFN-CATANIA ( gLite )  
Site INFN-CNAF  
Site INFN-CNAF ( gLite )  
Site INFN-PADOVA  
Site INFN-PADOVA ( gLite )  
Site ING-MESSINA  
Site IUCC-LCG2  
Site TRIGRID\_UNIPA  
Site ULA-MERIDA  
Site UNIANDRES ( gLite )  
Site UNIDIST-GENOVA  
Workload Management

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Page Load Statistics: 0.102 Seconds | 87 Queries  
Grid CT 2006



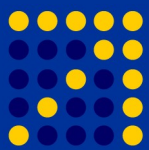


## 2004

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  
St. Augustin, 25 May 2005, home page and agenda  
Catania, 13-15 June 2005, home page, agenda, pictures  
Valencia, 14-16 June 2005, home page, agenda  
Lyon, 17 June 2005, home page and agenda  
Bratislava, 27-30 June 2005, agenda  
Forschungszentrum Karlsruhe, 08 July 2005, home page and agenda  
Vico Equense, 10-22 July 2005, home page, agenda  
Budapest, 11-16 July 2005, home page, agenda  
Clermont-Ferrand, 25-27 July 2005, home page, agenda  
Madrid, 26-27 July 2005, home page, agenda  
Swansea, 06 August 2005, home page and agenda  
Taipei, 22-23 August 2005, home page and agenda  
Tokyo, 25-26 August 2005, home page and agenda  
Seoul, 29-30 August 2005, home page and agenda  
Saint-Malo, 12-15 September 2005, home page, agenda  
Karlsruhe, 26-30 September 2005, home page, agenda  
Raana, 28-29 September 2005, home page, agenda

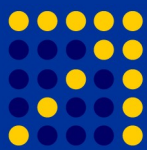


## 2005

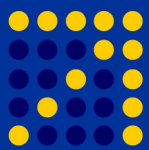
London, 6 October 2005, [home page and agenda](#)  
Sophia Antipolis, 10-14 October 2005, [home page, agenda](#)  
Tenerife, 16 October 2005, [home page and agenda](#)  
Pisa, 23 October 2005, [home page and agenda](#)  
Rome, 2-4 November 2005, [home page and agenda](#)  
Cracow, 20-24 November 2005, [home page, agenda](#)  
Merida, 21-25 November 2005, [home page, agenda](#)  
Aurillac, 23 November 2005  
Linz, 24 November - [home page and agenda](#)  
Zaragoza, 28-30 November 2005, [home page, agenda, pictures](#)  
Warsaw, 30 November - 3 December 2005, [home page, agenda](#)  
Linz, 30 November - 8 December 2005, [home page and agenda](#)  
Aurillac, 1 December 2005  
CERN, 6-7 December 2005, [home page and agenda](#)  
Aurillac, 8 December 2005  
Sophia-Antipolis, 8-9 December 2005, [home page and agenda](#)

## 2006

Clermont-Ferrand, 2 January - 17 February 2006, [home page and agenda](#)  
Aurillac, 5 January 2006  
Naples, 10 January - 28 February 2006  
Aurillac, 13 January 2006  
Melbourne, 30-31 January 2006, [home page and agenda](#)  
Brisbane, 2-3 February 2006, [home page and agenda](#)  
Trieste, 6-17 February 2006, [home page and agenda](#)  
Singapore, 9-10 February 2006, [home page, agenda](#)  
Tel Aviv, 15 February 2006, [home page, agenda](#)  
Madrid, 20-24 February 2006, [home page, agenda](#)  
CERN, 27-28 February 2006, [home page, agenda](#)  
Bari, 8-10 March 2006, [home page, agenda](#)  
Edinburgh, 16-23 March 2006, [home page, agenda](#)  
Beijing, 3-7 April 2006  
Catania, 5-6 April 2006, [home page and agenda](#)  
Geneva, 5-6 April 2006, [home page and agenda](#)  
Rome, 18-21 April 2006, [home page, agenda](#)  
Merida, 27-29 April 2006, [home page and agenda](#)  
Vilnius, 28 April 2006, [home page and agenda](#)  
Taipei, 1 May 2006, [home page and agenda](#)  
Wiesbaden, 1-7 May 2006, [home page](#)  
Beijing, 15-16 June 2006, [home page and agenda](#)  
**Garching, 26-28 June 2006, [home page and agenda](#)**  
Budapest, 3-8 July 2006, [home page, agenda](#)  
Tartu, 5-7 July 2006, [home page and agenda](#)  
Ischia, 9-21 July 2006, [home page, agenda](#)  
Helsinki, 28-31 August 2006, [home page](#)



- 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://glite-demo.ct.infn.it>)
- Development of complete interface with CLI for NEMO

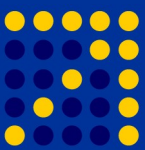


# Summary and conclusions

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-porting 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





- GILDA home page
  - <https://gilda.ct.infn.it>
- GILDA Certification Authority
  - <https://gilda.ct.infn.it/CA/>
- GILDA Virtual Organization
  - <https://voms.ct.infn.it:8443/voms/gilda/>
- Certificate Management Guide
  - <http://grid-it.cnaf.infn.it/fileadmin/users/certmgr/certmgr.pdf>
- Certificate Management Video
  - <https://gilda.ct.infn.it/video/Certification/Allproxy.html>
- To contact us send to : [grid-prod@ct.infn.it](mailto:grid-prod@ct.infn.it)

