



Enabling Grids for E-science

Introduction to GILDA and gaining access

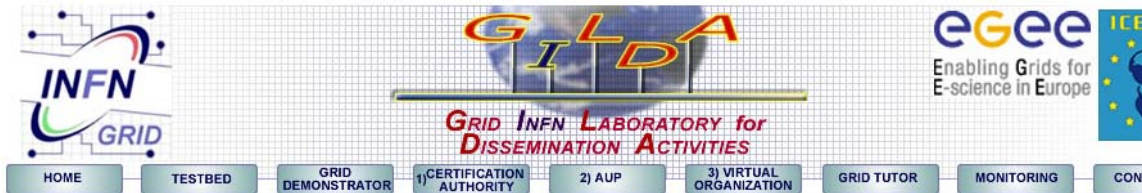
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NEW [New GILDA usage rule](#) **NEW**

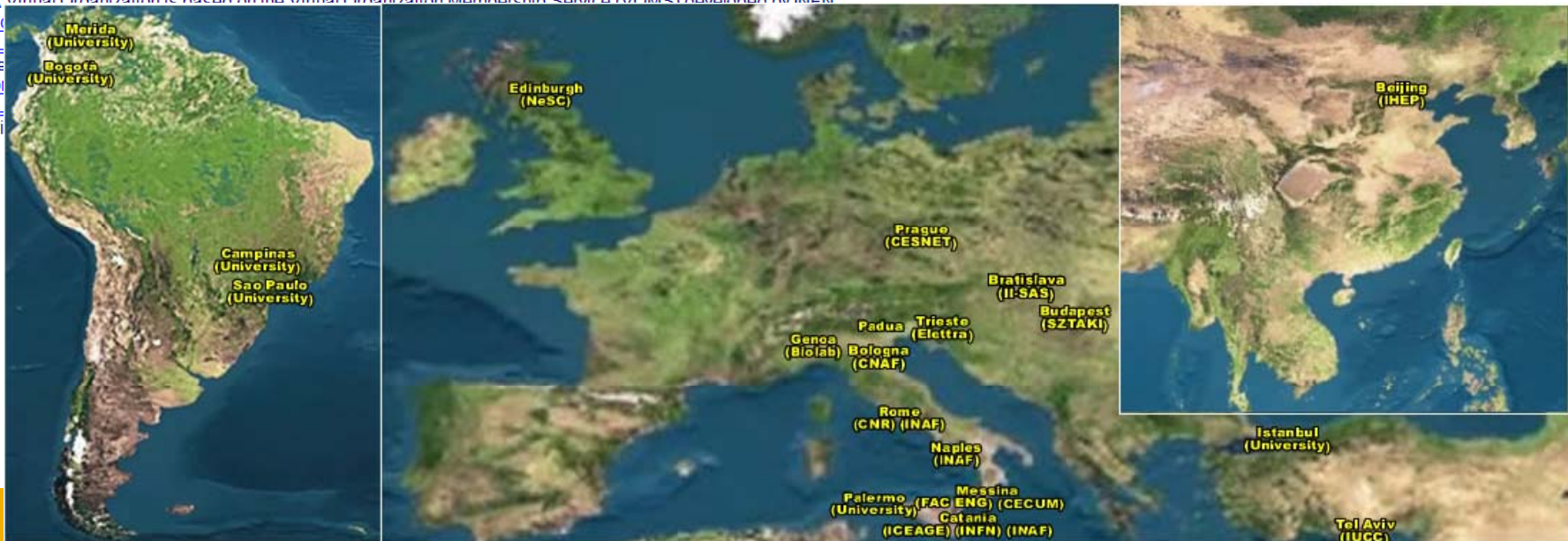
GILDA (G rid I nfn L aboratory for D issemination A ctivities)

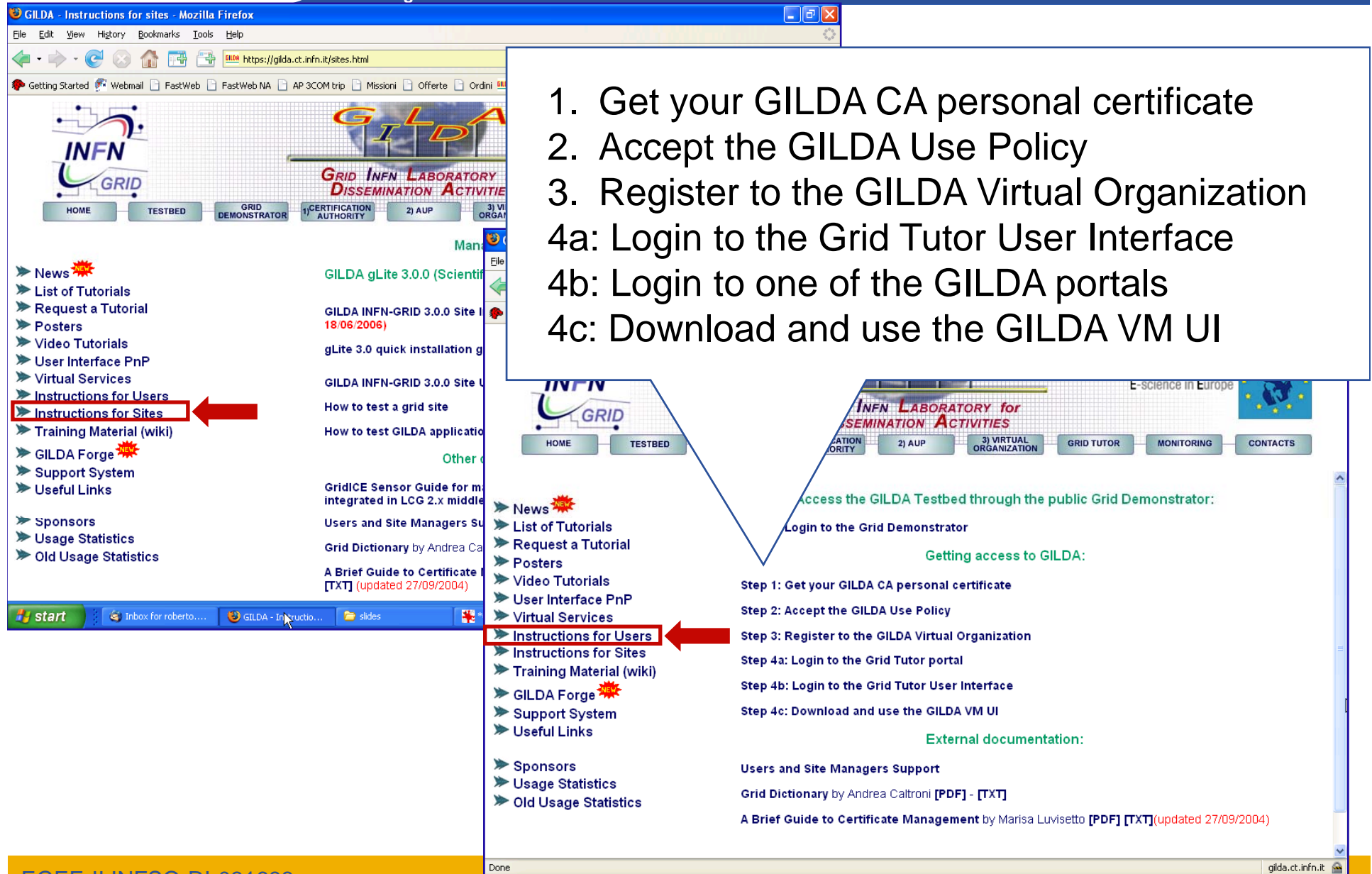
is a virtual laboratory to demonstrate/disseminate the strong capabilities of grid computing.

GILDA consists of the following elements:

- [the GILDA Testbed](#): a series of sites and services (Resource Broker, Information Index, Data Managers, Monitor Elements, and Storage Elements) spread all over Italy and the rest of the world on which the latest version of the [INFN G](#) compatible with [gLite](#) is installed;
- [the Grid Demonstrator](#): a customized version of the full [GENIUS web portal](#), jointly developed by INFN and [NICE](#), from which you 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 enable you 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](#)
- [the GIL](#)
- [the mo](#)
- [the GIL](#) subscri

- Training VO of EGEE
- Production VOs look like this!
- >20 sites in 3 continents
- Guaranteed response for tutorials
- Has its own CA:
 - 2 weeks long renewable certificates
 - No identity check
- Can be used by anyone any time (priority for tutorials)





1. Get your GILDA CA personal certificate
2. Accept the GILDA Use Policy
3. Register to the GILDA Virtual Organization
- 4a: Login to the Grid Tutor User Interface
- 4b: Login to one of the GILDA portals
- 4c: Download and use the GILDA VM UI

Access the GILDA Testbed through the public Grid Demonstrator:
Login to the Grid Demonstrator

Getting access to GILDA:

Step 1: Get your GILDA CA personal certificate

Step 2: Accept the GILDA Use Policy

Step 3: Register to the GILDA Virtual Organization

Step 4a: Login to the Grid Tutor portal

Step 4b: Login to the Grid Tutor User Interface

Step 4c: Download and use the GILDA VM UI

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)

Request a GILDA personal certificate - Windows Internet Explorer

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

Certificate Error

Google

This website wants to run the following add-on: 'Microsoft Certificate Enrollment Control' from 'Microsoft Corporation'. If you trust the website and the add-on and want to allow it to run, click here...

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>

- GILDA certificates are valid for two weeks
 - not for a year as normal certificates
- GILDA certificates are renewable
 - like normal certificates

First name and last name:

Account username
(max 8 characters; only not-accented letters and digits are allowed, both lowercase and uppercase):

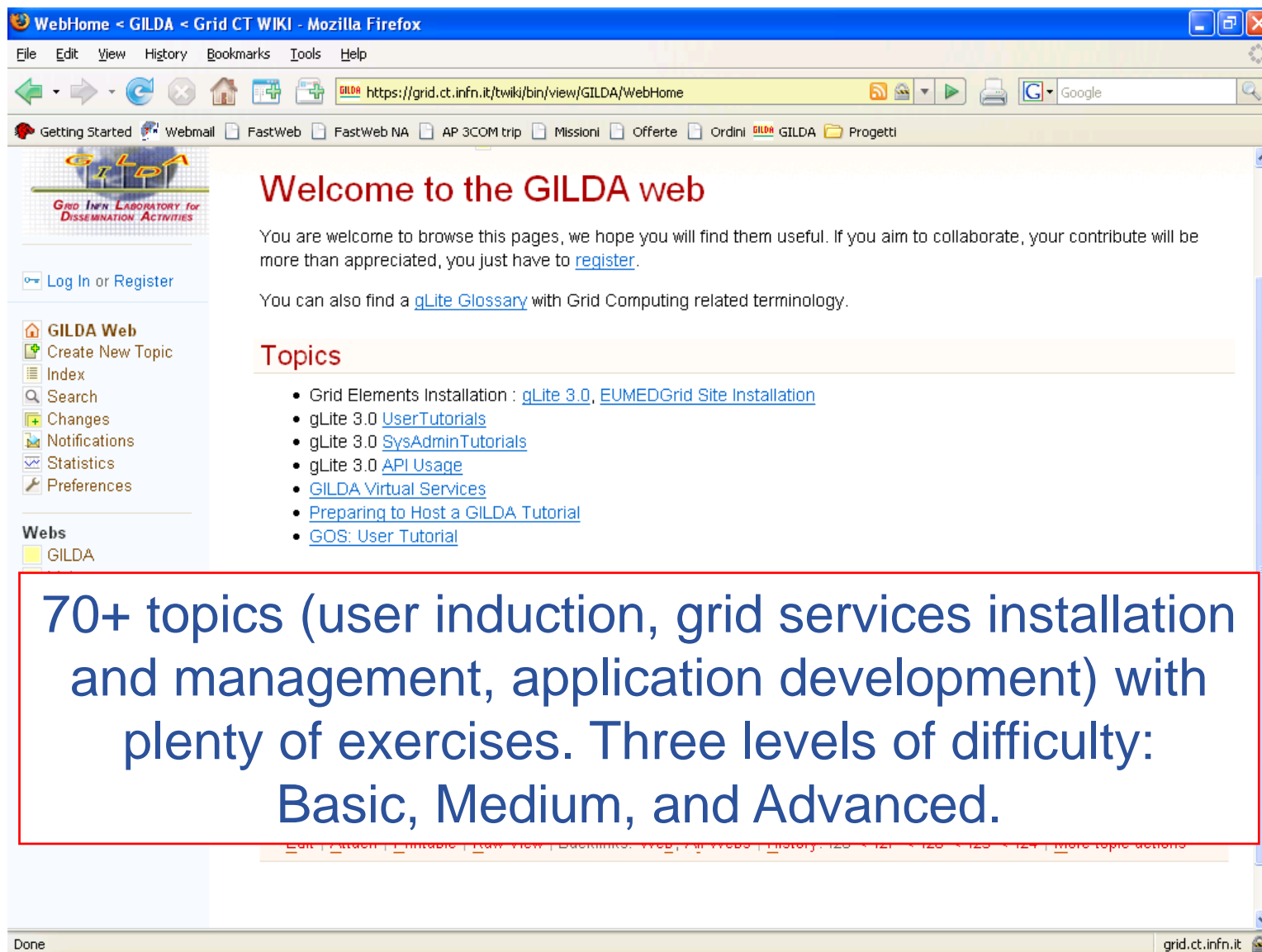
Account password
(only not-accented letters and digits are allowed, both lowercase and uppercase):

Confirm account password
(only not-accented letters and digits are allowed, both lowercase and uppercase):

E-mail:

Submit the request Clear form

Fill out the
No face-to-face





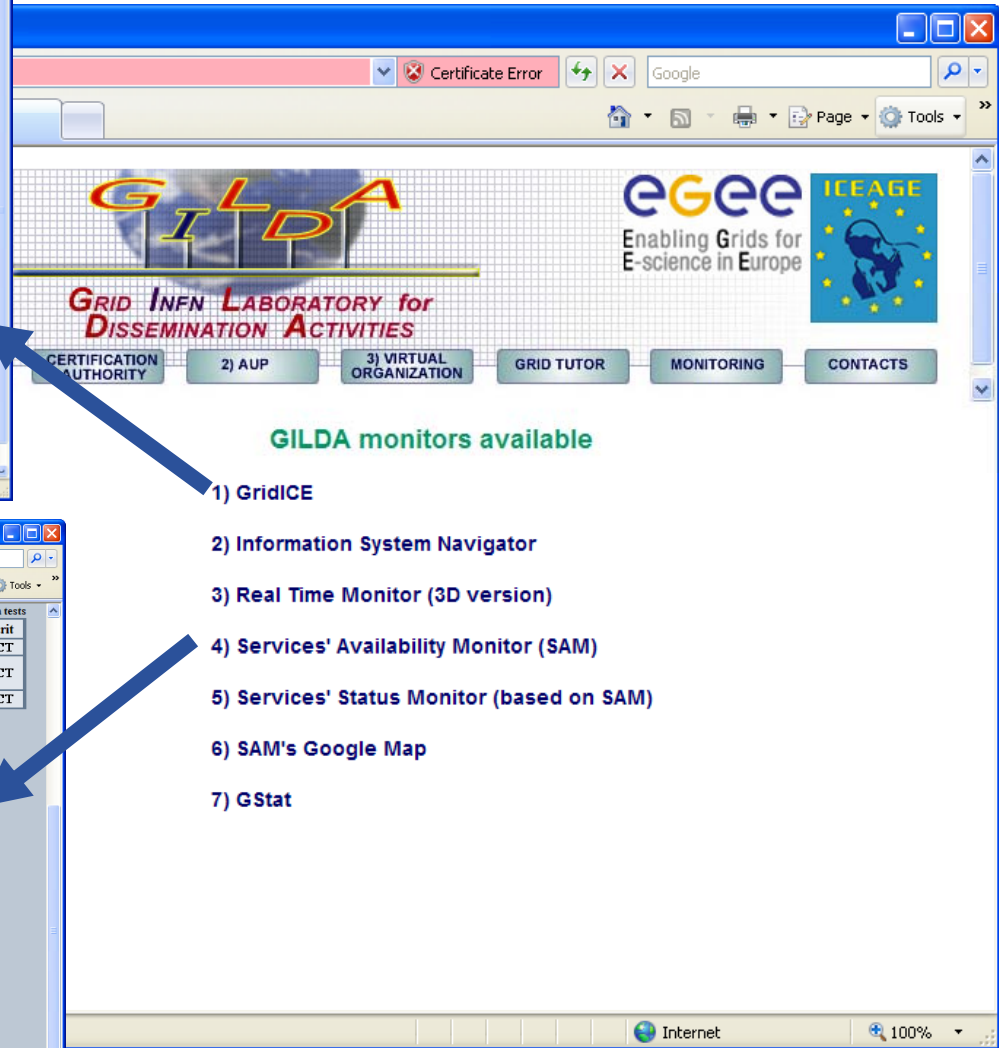
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The GILDA Support System

(<https://gilda-support.ct.infn.it>)

More than 200 tickets in less than 1 year.
More than 90% solved in a couple of days.

The screenshot displays the GILDA Support System interface. At the top, there are logos for INFN GRID and EGEE (Enabling Grids for E-science). The main content area includes a 'Login' section with fields for Username (RobertoB) and Password, and a 'Create Ticket' form. The 'Create Ticket' form has fields for Username (RobertoB), Assign To (Site INFN-CATANIA), Priority, Subject (Data Management), and Description. A navigation menu on the left includes options like 'View Account', 'Edit Account', 'Notifications', 'Logout', 'Inbox', and 'Who's Online'. The 'Who's Online' section shows 4 users online and 0 guests. The 'Create Ticket' form also includes an 'Add File' section and a list of available filetypes (doc, pdf, bmp, gif, jpeg).



GILDA monitors available

- 1) GridICE
- 2) Information System Navigator
- 3) Real Time Monitor (3D version)
- 4) Services' Availability Monitor (SAM)
- 5) Services' Status Monitor (based on SAM)
- 6) SAM's Google Map
- 7) GStat



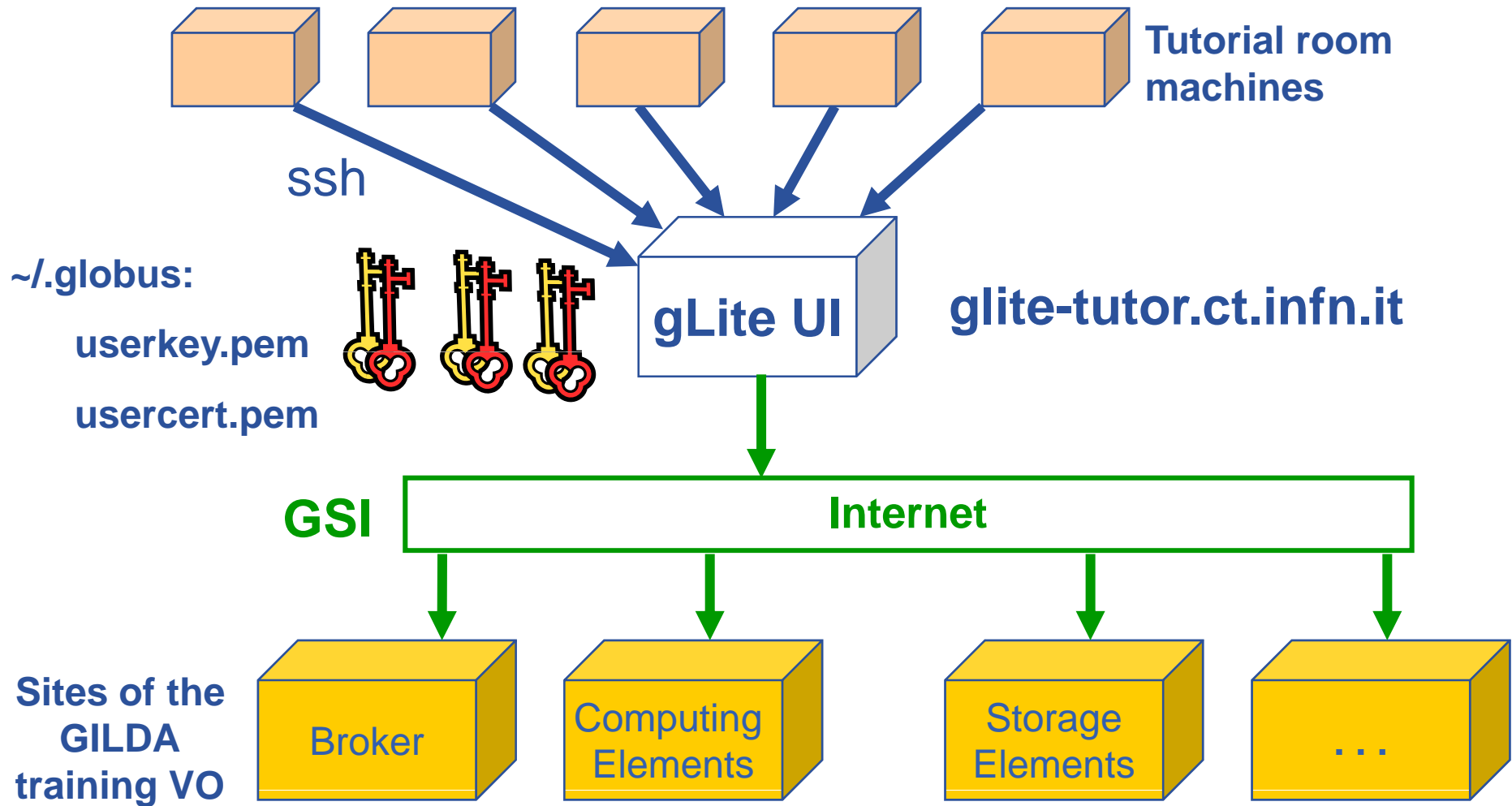
- **Tutors obtained certificates and private keys from GILDA CA:**
 - `usercert.pem` → certificate
 - `userkey.pem` → private key
- **Tutors registered the certificates at GILDA VO**
- **Certificates and keys are available on the GILDA user interface machine: `glite-tutor.ct.infn.it`**
- **`ls -l ~/.globus`**

```

-rw-r--r--  1 budapest23 users 1119 May 30 05:48 usercert.pem
-r-----  1 budapest23 users  963 May 30 05:48 userkey.pem
    
```

- **Tutorials starts at this point...**

- **You have a local user number on the student computers: XX**
- **Open a terminal and connect to GILDA UI:**
`ssh budapestXX@glite-tutor.ct.infn.it`
 - **username** → budapest**XX**
 - **password** → GridBUD**XX**
 - **Certificate passphrase: BUDAPEST**



Open the agenda:

<http://indico.cern.ch/conferenceDisplay.py?confId=18939>

Tutorial 1 – Security

- Listing private key and certificate files
- Generating short term proxy credentials with VOMS extension
- Listing proxy attributes
- (Destroying proxy)

Ask for help if you need.