



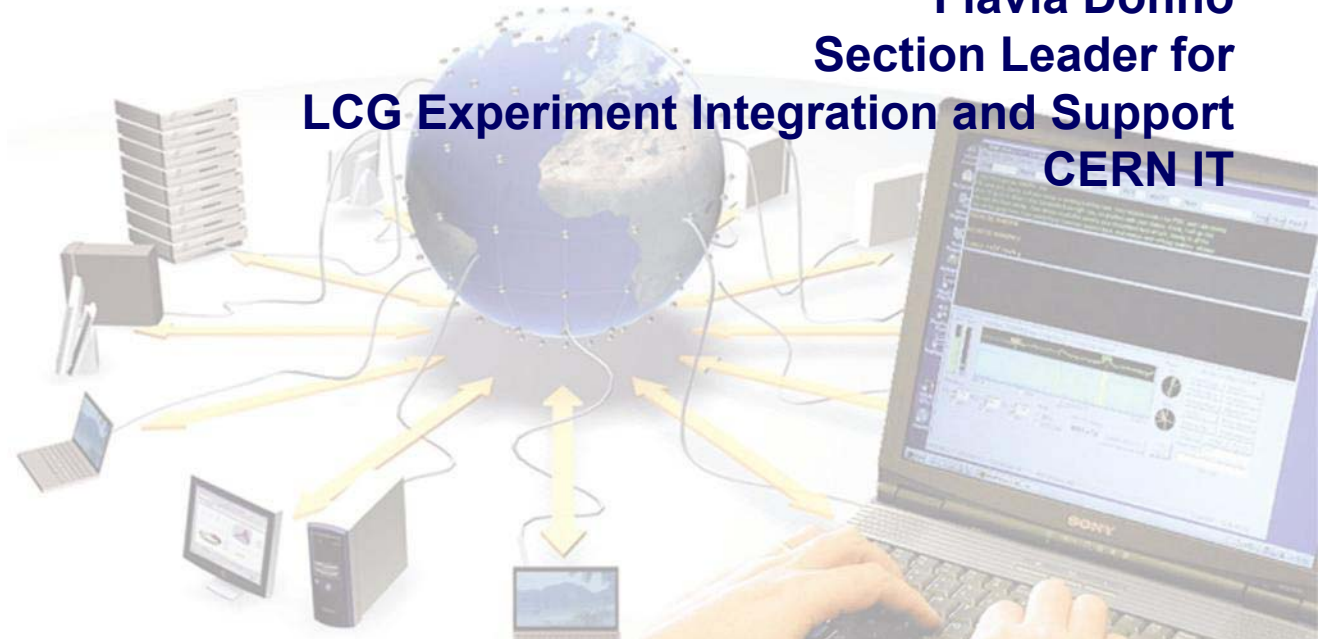
Enabling Grids for
E-science in Europe

www.eu-egee.org

Biomed Application Developer's Course
6th October 2004

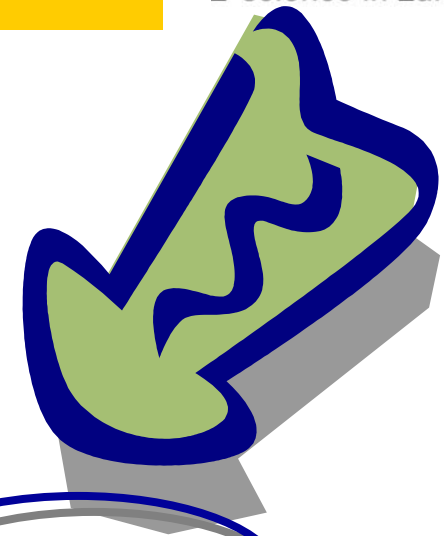
EGEE Usage and Programming Introduction

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Goal of the course



**Give an introduction on the current LCG-2 Grid
middleware and guidance on the use of the APIs
for writing grid-enabled applications**

- Overview and some technical details (10 mins)

Morning: (with hands-on)

- Authentication and Authorization 9:15 – 10:15
in LCG-2
- Information Systems 11:00 – 12:00

Afternoon: (with hands-on)

- Workload Management 14:00 – 15:30
- Data Management 16:00 – 17:00
- Storage interfaces 17:15 – 18:00
- Some API usage with compilation and linking examples.

Overview and technical details

- Each session includes a theoretical part on CLI and API usage in LCG-2 and it is followed by a hands-on part.
- Please, feel free to ask questions whenever you feel like
- Hands-on sessions will use the **GILDA** dissemination Grid: for more information, please refer to: <https://gilda.ct.infn.it>
- You all have already a temporary GILDA certificate and an account on the GILDA User Interfaces (UI):

Host: grid-tutor.ct.infn.it or grid-tutor1.ct.infn.it

User: madrid01 – madrid20

Password: GridMad01 - GridMad20

Certificate Pass Phrase: MADRID

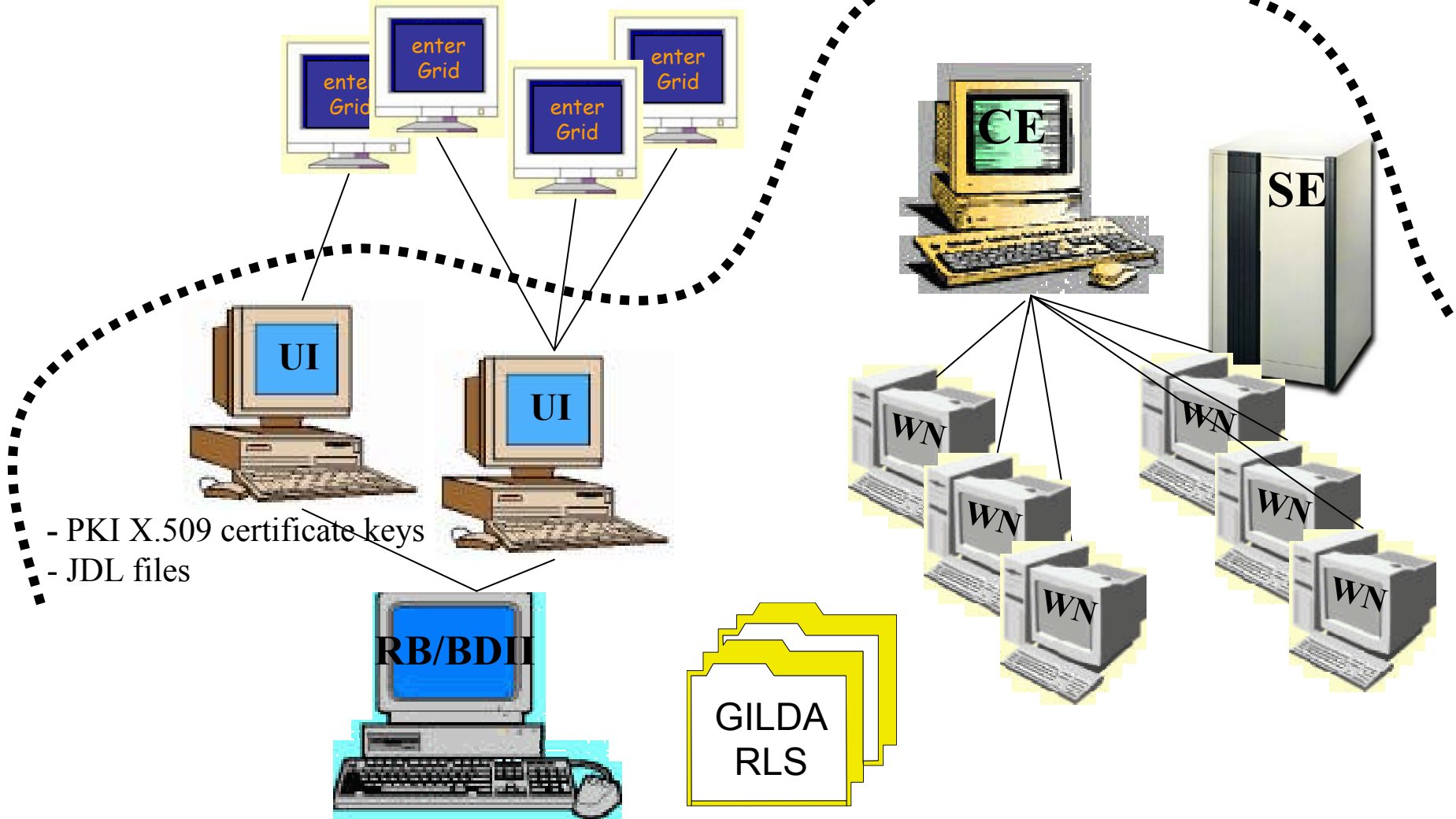
- You can login on GILDA UIs only from the following IP addresses:
150.244.80.191 - 150.244.80.196

Few notes on LCG-2 APIs

- The LCG middleware system has been developed in several different languages and by many different people in different countries
 - Programming languages such as C, C++, Python, Java etc. have been used
 - End user APIs usually exist in either C, C++ or Java
- The API signature is not very coherent; primarily due to different languages, technologies and maturity of middleware parts
 - Web services usually allow for a higher diversity of language bindings (APIs) than standard C or C++ based services
- All API libraries are either available in /opt/edg or /opt/lcg
 - .../lib for C, C++ libraries
 - .../share/java for Java libraries

Few notes on GILDA Infrastructure

Students Terminals



And



Hope you enjoy this lecture.
Thank you for attending !