

INFN Testbed1 status

L. Gaido, A. Ghiselli

WP6 meeting

CERN, 11 December 2001

- Integration Team:
 - packaging
 - installation and configuration using LCFG
 - Information Service
 - documentation
- Authorization
- Site managers

The goal

- The goal is to provide a working infrastructure for the middleware validation
- This is achieved by providing:
 - a simple automatic installation tool
 - test suites
 - a wide deployment of the infrastructure
 - an effective support service

- They consist of:
 - Dedicated resources for middleware testing & validation
 - 6 sites with a cluster (10 CPUs and a disk server with 300GB of disk space)
 - 12 sites with a small cluster (3-5 nodes)
 - A Tier1 Regional Centre prototype at CNAF
 - Experiments' Tier2 and Tier3 RCs

INFN TESTBED Sites



USA
600Mbps
Geant
2.5Gbps

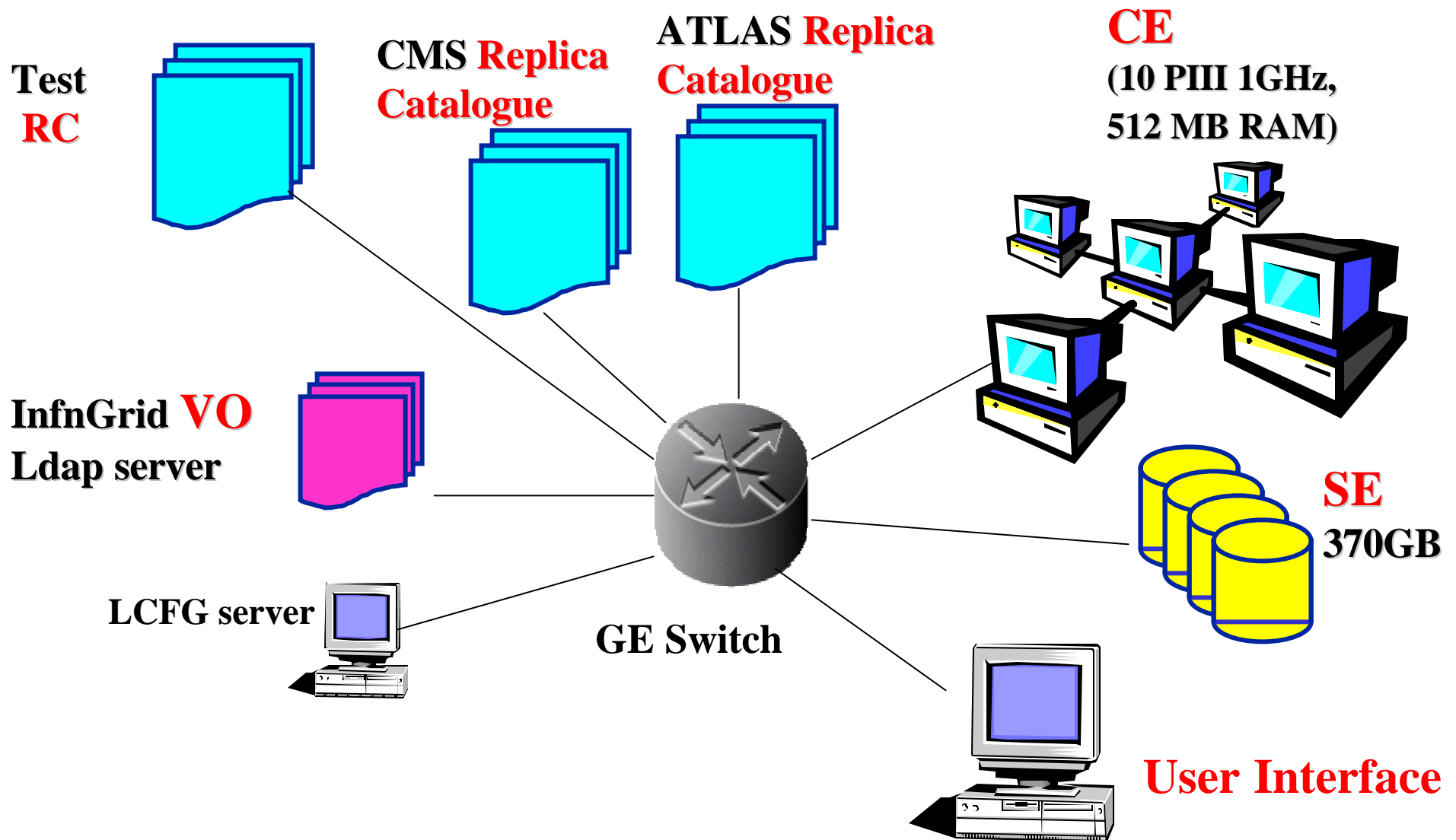


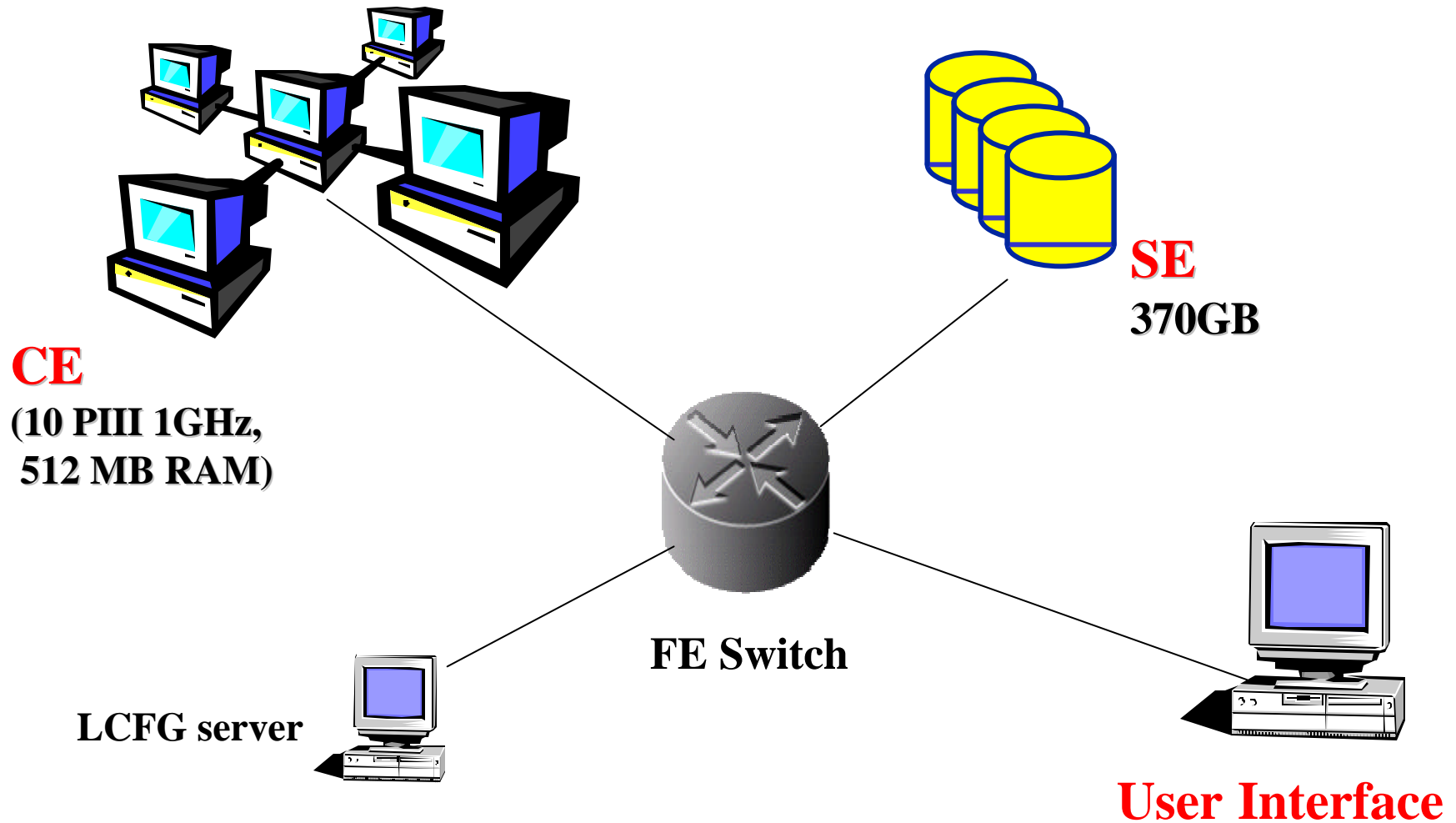
Testbed Sites

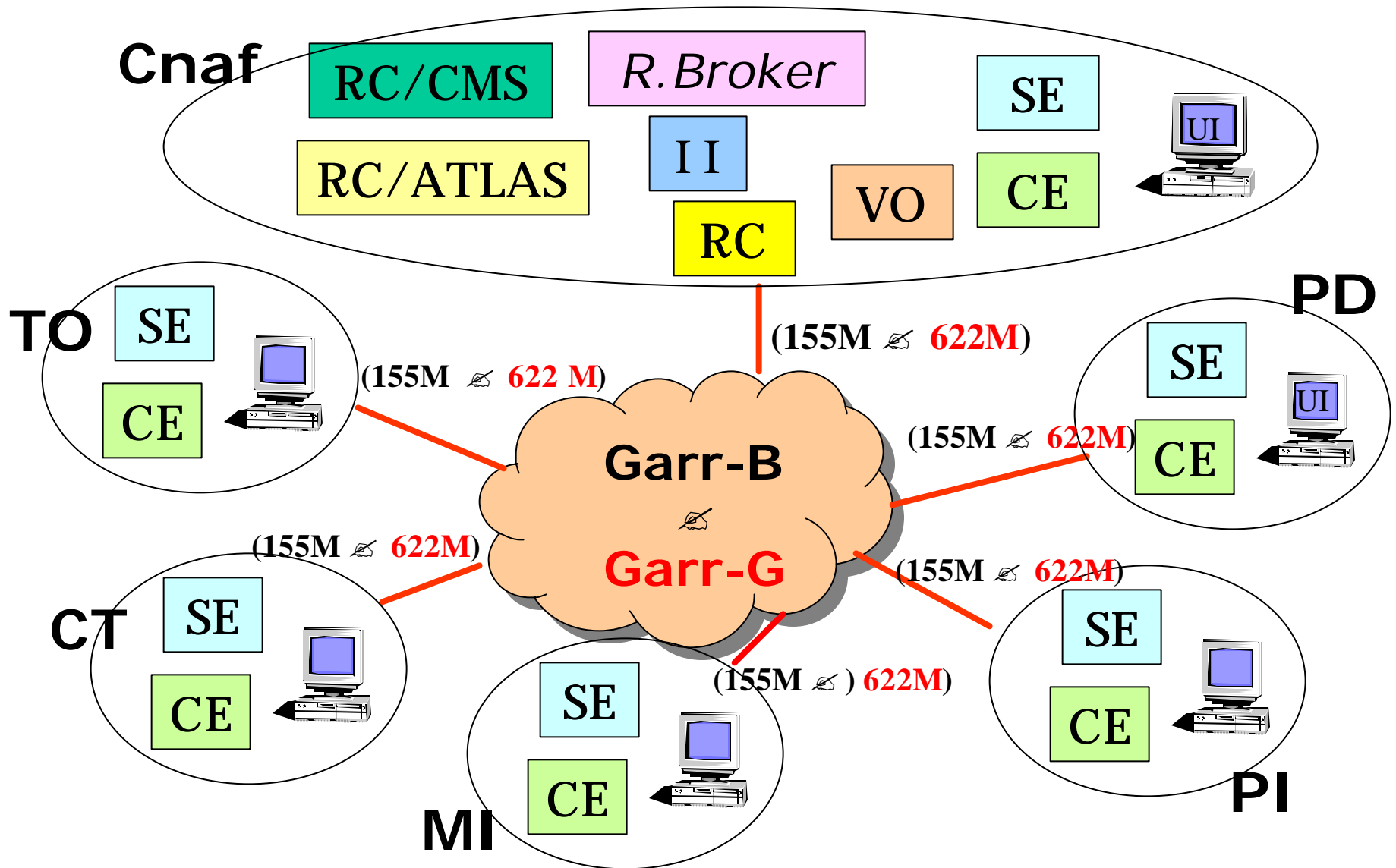
- 6 main
- 12 small

GARR PoP

- access points (PoP)
- main transport nodes







- The rpm lists for the grid elements (CE, WN, SE and UI) have been tested and manually configured at CNAF (**Globus2 alpha 15**)
- The CE, WN, SE and UI have been installed and configured using LCFG in the Testbed1 sites
- Test-suites for the grid elements are being developed (SE almost ready, CE, WN, UI under construction)
- CEs and SEs have been registered in II at CNAF
- The UI users have to be mapped to the local RB account (e.g. wp1 at CNAF, condor at CERN).

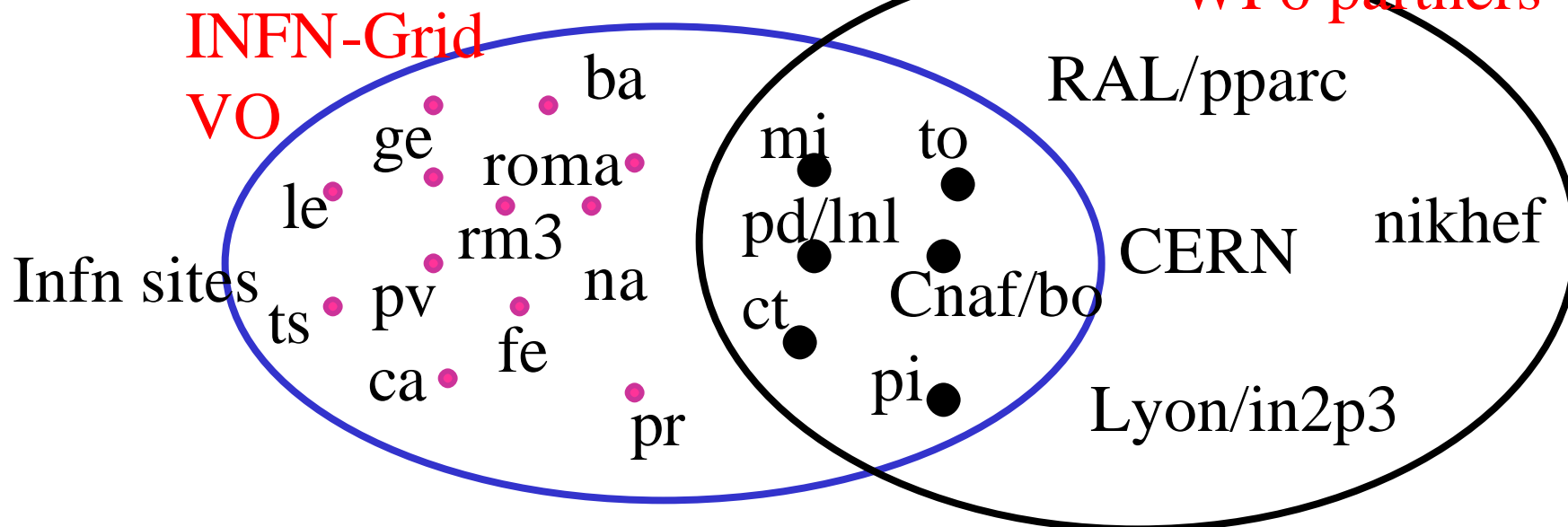
Testbed1 setup steps

- InfnGrid VO has been created and populated with every InfnGrid application-independent people
- Testbed1 group (inside InfnGrid VO) created (users involved in test and validation activities)
- Mkgridmap ready to be used to create the gridmapfile where needed (CEs)
- Testbed1 users created on the UIs
- NetSaint installed and configured to monitor the INFN Testbed1 resources (ping, CPU, disk usage)

2 grid domains:

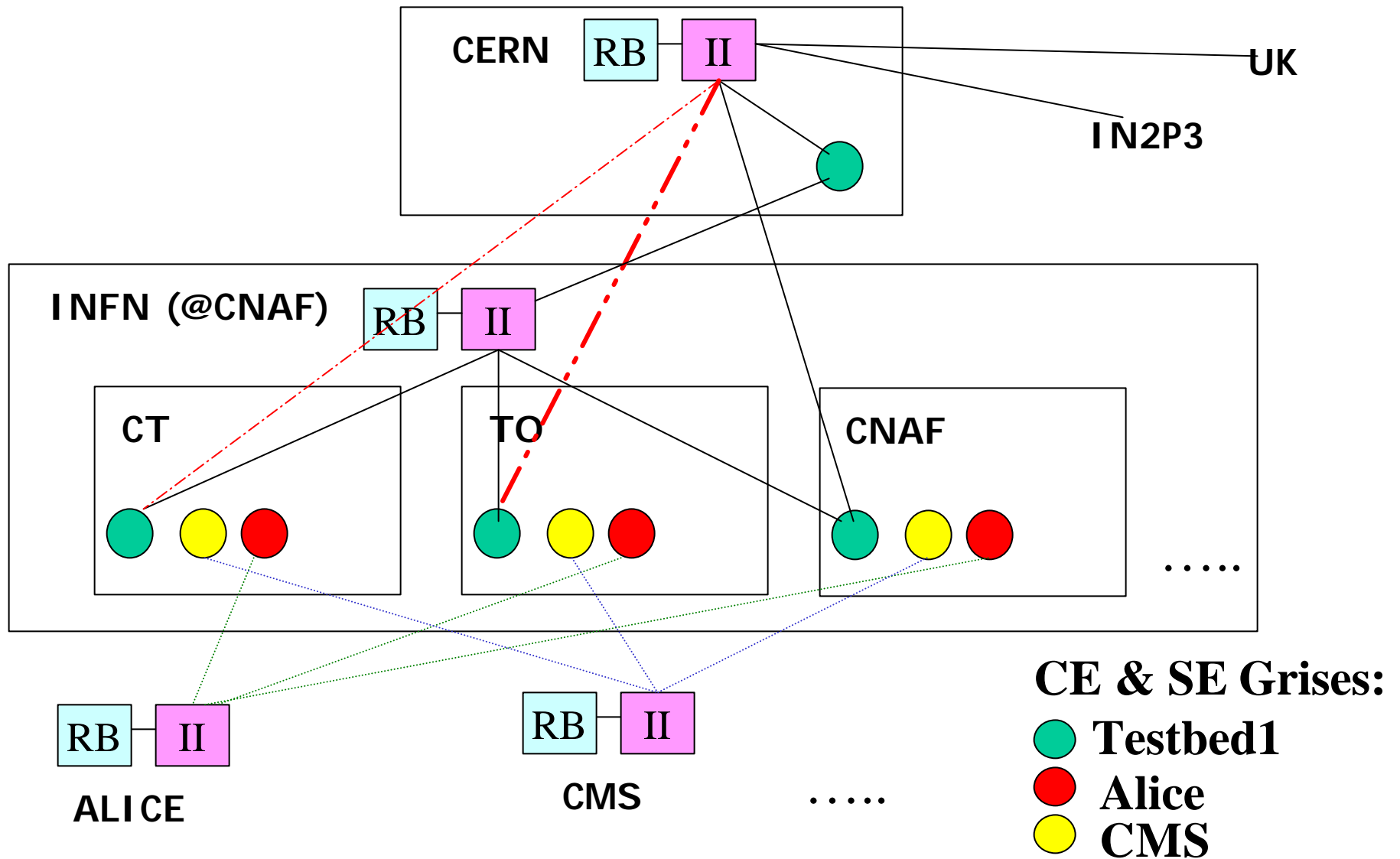
- 6 sites for DataGrid Testbed1
- 6+12sites for national Testbed1

DataGrid Appl. &
WP6 partners VOs



Each InfnGrid site can join the DataGrid Testbed if needed

RB - II - GRI S layout



- Interim solution
- Tool chosed: NetSaint (<http://www.nagios.org>)
- Present/future activities:
 - monitoring of all INFN Testbed1 sites
 - monitoring of the ALICE testbed
 - interface to the RRDTool for plots of historical trend of monitored parameters
 - interface to Globus MDS 2 under way
- Current implementation: <http://infngrid.ct.infn.it>
(username: infn-tb - password: guest)

Netscape: NetSaint Network Monitor

File Edit View Go Communicator

Back Forward Reload Home Search Netscape Print Security Shop

Bookmarks Location: <http://infngrid.ct.infn.it/>

Members WebMail Connections BizJournal SmartUpdate Mkplace

Current Network Status
 Last Updated: Mon Dec 10 09:51:05 CET 2001
 Updated every 30 seconds
 NetSaint Network Monitor - www.netsaint.org
 Logged in as: root@0

- NetSaint process is running
- Notifications can be sent out (active mode)
- Service checks are actively being executed

[View History For all hosts](#)
[View Notifications For All Hosts](#)
[View Status Detail For All Host Groups](#)
[View Status Summary For All Host Groups](#)

General

- Home
- Documentation

Monitoring

- Tactical Overview
- Status Detail
- Status Overview
- Status Summary
- Status Map
- 3-D Status Map
- Service Problems
- Network Outages
- Trends
- Availability
- Alert History
- Notifications
- Log File
- Comments
- Process Info
- Performance Info

Configuration

- View Config

[CAGLIARI \(INFN-GRID-TESTBED-CA\)](#)

Host	Status	Services	Actions
TE--CA--G31D001	UP	1 OK	
TE--CA--G31D002	DOWN	1 CRITICAL	
TE--CA--G31D003	DOWN	1 CRITICAL	
TE--CA--G31D004	UP	1 OK	

[LEGNARO \(INFN-GRID-TESTBED-LNL\)](#)

Host	Status	Services	Actions
rdp	PENDING	No matching services	

Netscape: NetSaint Network Monitor

File Edit View Go Communicator

Back Forward Reload Home Search Netscape Print Security Shop Stop

Bookmarks Location: <http://infngrid.ct.infn.it/>

Members WebMail Connections BizJournal SmartUpdate Mkplace

General

- Home
- Documentation

Monitoring

- Tactical Overview
- Status Detail
- Status Overview
- Status Summary
- Status Map
- 3-D Status Map
- Service Problems
- Network Outages
- Trends
- Availability
- Alert History
- Notifications
- Log File
- Comments
- Process Info
- Performance Info

Configuration

- View Config

RTT Graph for testbed002.cnaf.infn.it

AVG RTT: 33.49 ms
MAX RTT: 55.51 ms

Daily graph

AVG RTT: 31.29 ms
MAX RTT: 199.08 ms

Weekly graph

AVG RTT: 27.95 ms
MAX RTT: 202.82 ms

Conclusions

- A lot of work has been done to install and test the software
- Strong cooperation among people from different WPs
- Site managers support for installation and testing
- some work still to be done

- Strong need for well defined software releases to work on
- The grid should be widely distributed. We are at a very early stage.
Need for a deployment plan and a support structure
- Test of an MDS infrastructure for the grid domains (VO) and services needed

Thanks to

Marco Serra (Roma1)

Massimo Biasotto (Legnaro)

Andrea Chierici (CNAF)

Silvia Resconi (Milano)

Carlo Rocca (Catania)

Gennaro Tortone (Napoli)

Stefano Lusso (Torino)

Stefano Barale (Torino)

Daniele Mura (Cagliari)

Alessandro De Salvo (Roma)

Enrico Ferro (Legnaro)

Marco Verlato (Padova)

Flavia Donno (Pisa)

Roberto Barbera (Catania)

Giuseppe Sava (Catania)

Antonio Forte (Torino)

Alessandro Cavalli (CNAF)

Alessandro Italiano (CNAF)

Andrea Sciaba' (Pisa)

P. Lo Re (Napoli)

and, last but not least, Authorization WG, IT & Loose Cannons