

Stadiul si perspectivele participarii romanesti la CERN

Mini-workshop IFA – 23.06.2008

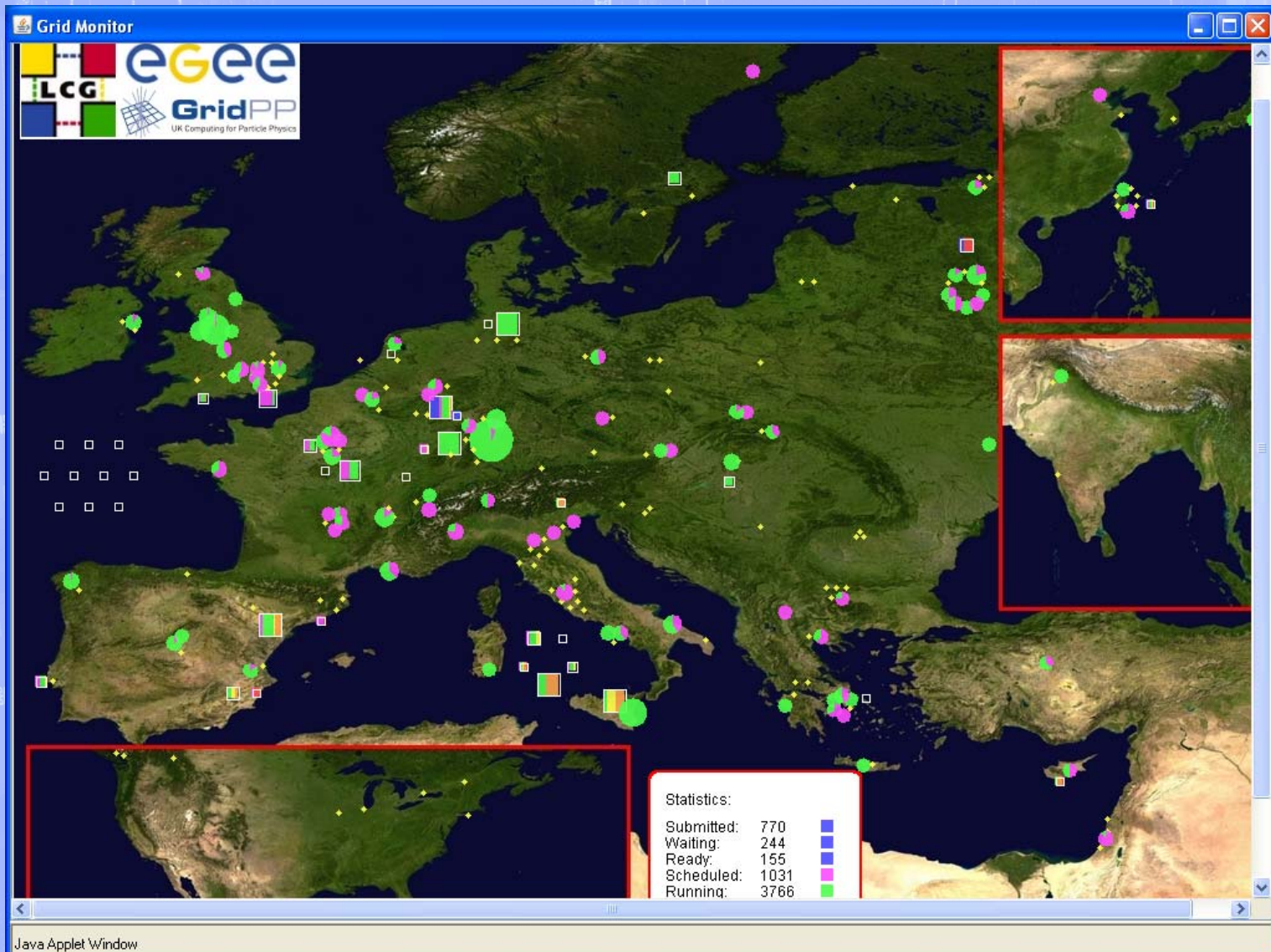
Colaborarea internationala WLCG
Federatia Romana Tier 2
contributia nationala la colaborarea
Worldwide LHC Computing Grid

Mihnea Dulea
CTIC, IFIN-HH



Worldwide LHC Computing Grid

Distributed Production Environment for Physics data Processing





Participarea Romaniei la WLCG

FRT2 ocupa pozitia 12 in WLCG

Romania Tier 2 Monitoring - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://moni.nipne.ro:8080/show?page=index.html



MonALISA Client

Click on the button below to start the Monalisa Client.

Client

Romania Tier 2

- Statistics
- Farms usage
- VO jobs
- VO disks
- Site Info

close all

[ABPinq Configuration](#)

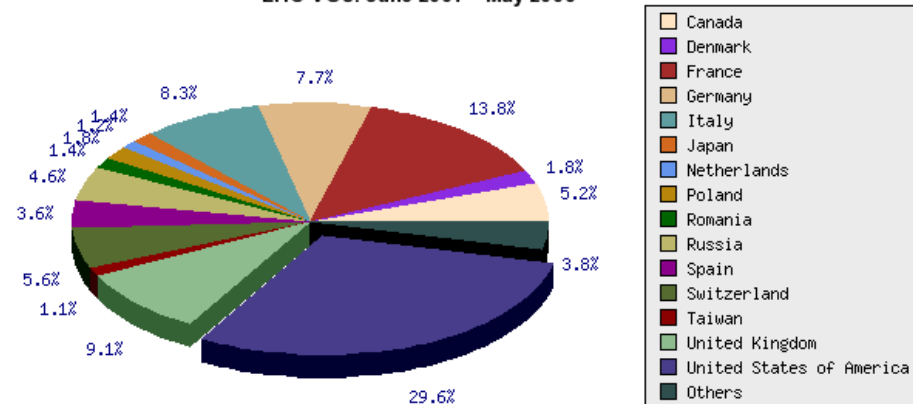
[Site Administration](#)

[Layout configuration](#)



Free Nodes Busy Nodes No Data

COUNTRY Normalised CPU time per COUNTRY (Excluded dteam and ops VOs)
LHC VOs. June 2007 - May 2008



(C) CESGA 'EGEE View': COUNTRY / normcpu / 2007:6-2008:5 / COUNTRY-VO / lhc (x) / ACCBAR-LIN / x

2008-06-20 20:41 UTC

javascript:move(1,0);

Proiect CORINT SINDEGRID:

“Sistem national de dezvoltare si exploatare a gridului de calcul LCG pentru fizica particulelor elementare”

Echipa SINDEGRID

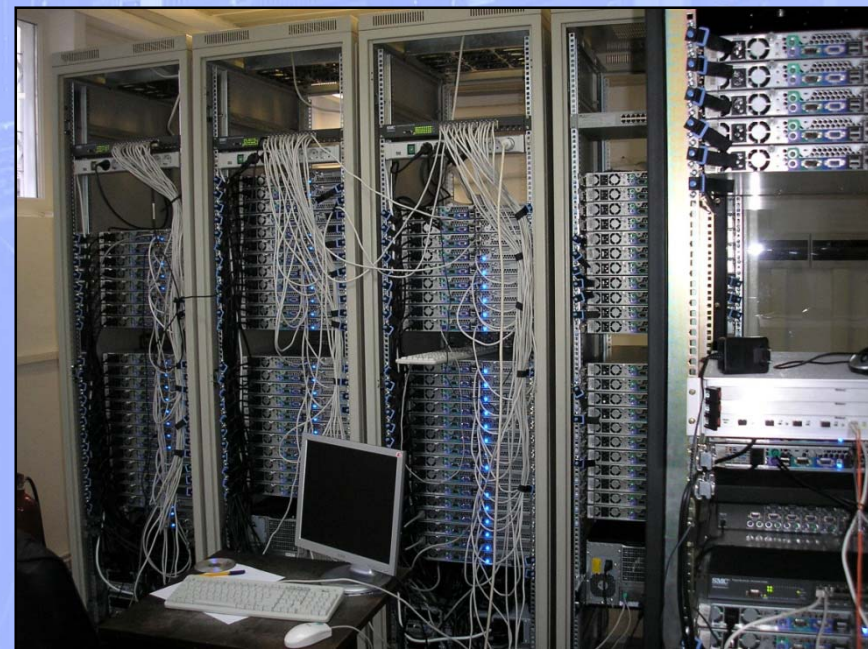
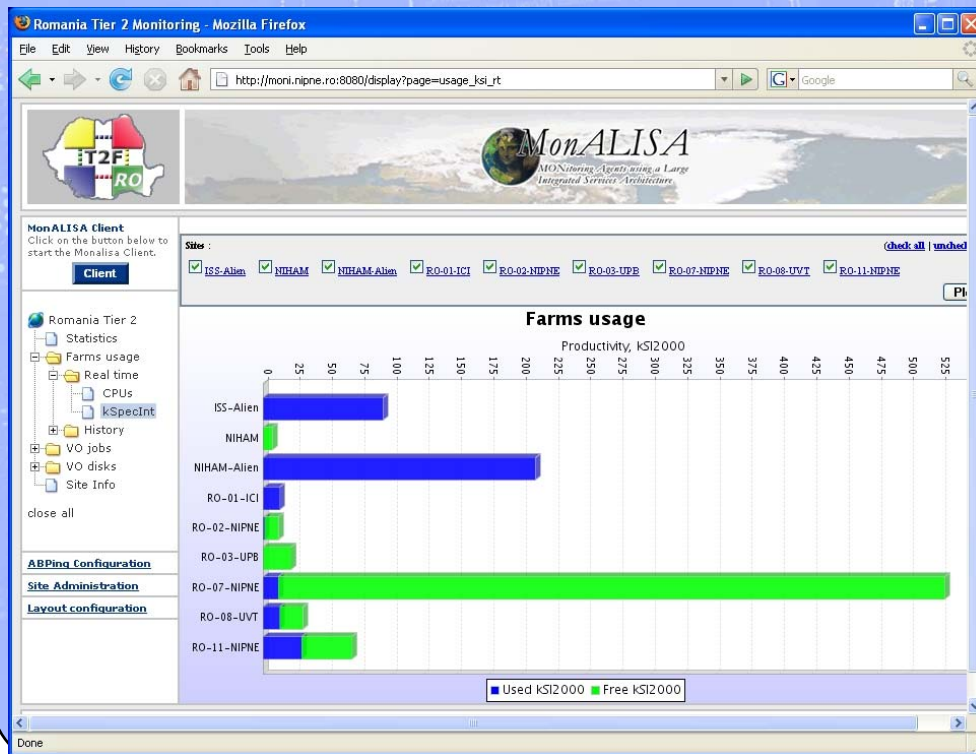
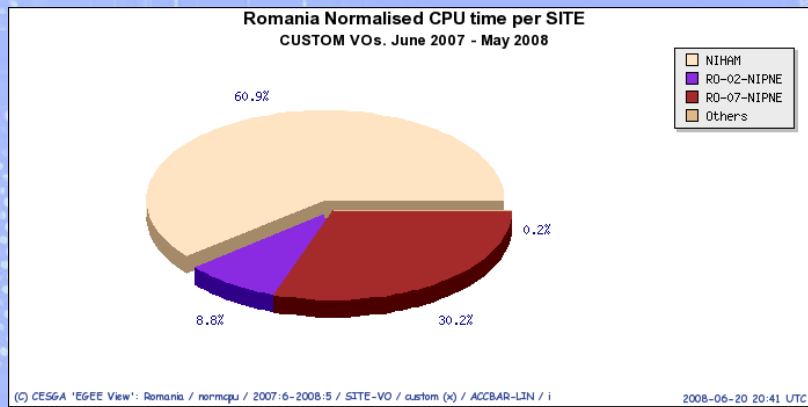
IFIN-HH (CTIC)	CO	
ICI	P1	D. Banciu
ISS	P2	S. Zgura
ITIM-Cluj	P3	F.Farcas
UPB	P4	N.Tapus

Utilizarea fondurilor

Dotari	30%
Manopera, regie	60%
Amenajari	3,2%
Materiale,diseminare, etc	

IFIN-HH	1.540.000	61,6%
ICI	160.000	6,4%
ISS	400.000	16%
ITIM	160.000	6,4%
UPB	240.000	9,6%
Total	2.500.000	

CONTRIBUTIA CO





**CONTRIBUTIA CO
CENTRU DE DATE**

**AMENAJARE
+
ECHIPAMENTE**



**SISTEM
STOCARE SAN**



**SERVERE
PROCESARE**

CONTRIBUTIA CO

-Climatizare profesionala 4x 25 KW

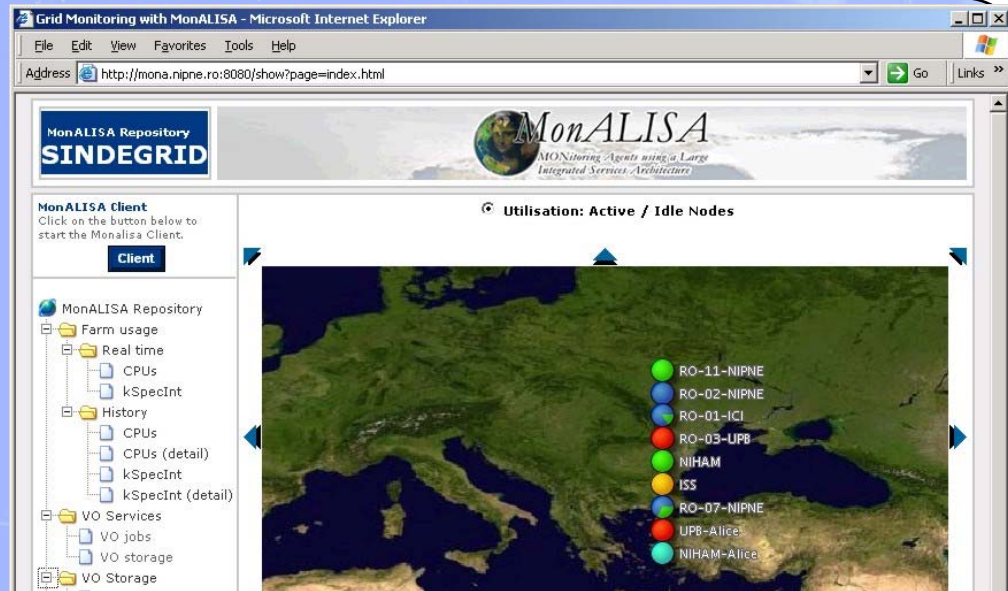
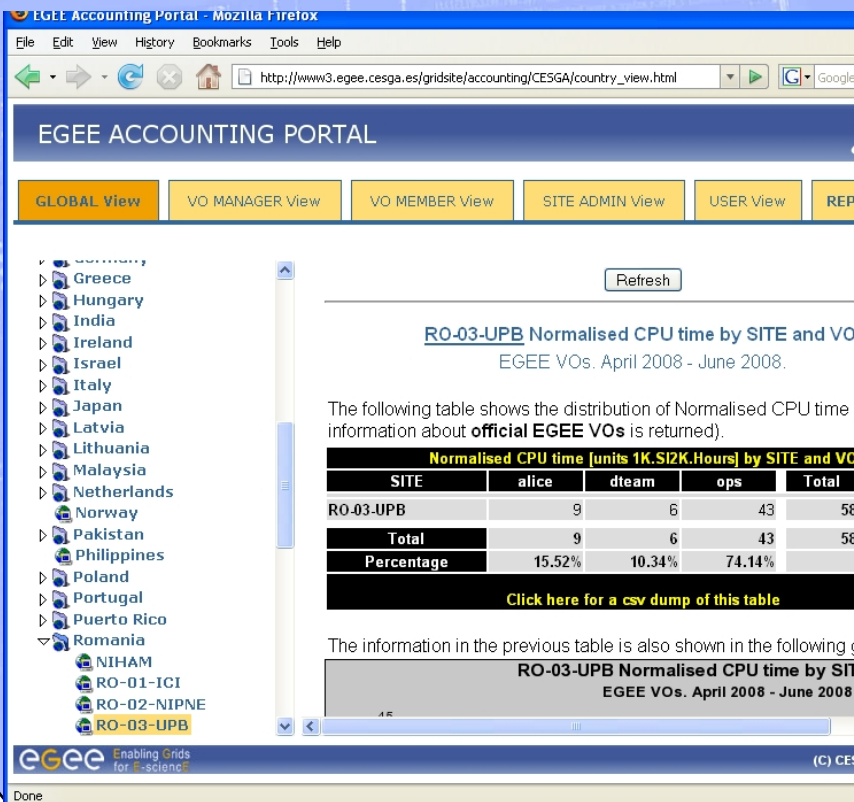
-Sistem UPS-uri redundanta 4x 80 kVA



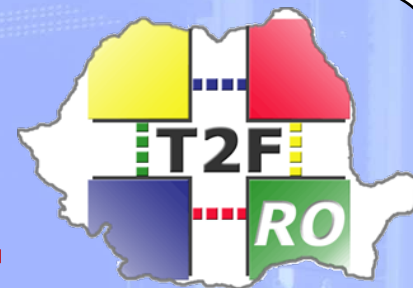
Partener UPB

Site-ul grid RO-03-UPB in LCG

Software de monitorizare grid



Partener ISS

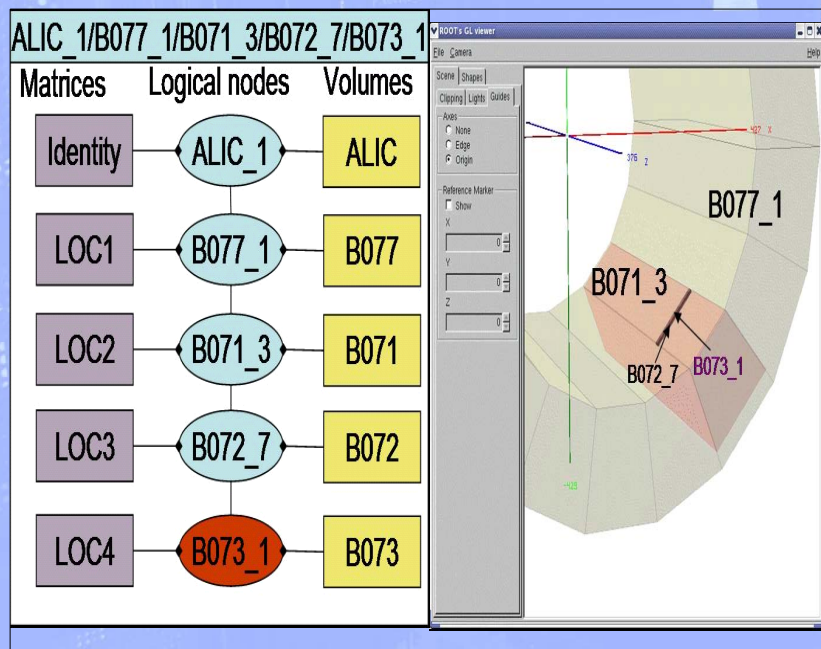


Dotare si migrarea site-ului ISS-ALICE (ALIEN) in LCG

Dezvoltare software pentru simulare sistem detectori ALICE

Modelarea incertitudinilor de pozitionare a detectorilor ALICE

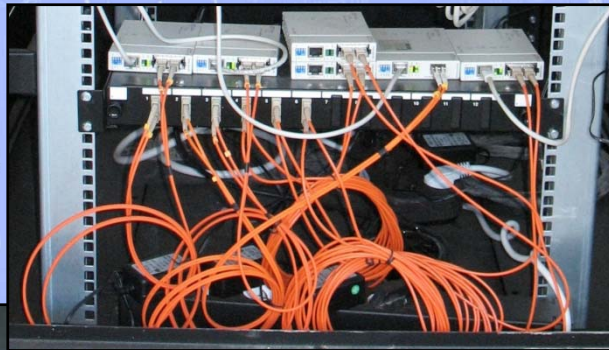
Simularea distributiilor de impuls transvers si rapiditate ale perechilor cchar si bbbar in interactiile proton-proton, proton-nucleu si nucleu-nucleu la energiile LHC.



Partener ITIM

Upgrade la conectivitate grid (1 Mbps)

Contributie pt. site grid propriu



Partener ICI

Site-ul grid RO-12-ICI

Diseminare: workshop, conferinta

1st Annual Meeting of the Romanian Tier-2 Federation - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://wlg.nipne.ro/

Worldwide LHC Computing Grid SINDEGRID GRD

Romanian Tier-2 Federation Workshop
29-30 November 2007

NEWS Opening on 29.11 at 9:30

First Annual Meeting of the Romanian Tier-2 Federation

This event is the first in a series of meetings of the Romanian LCG community, which brings together representatives of the Romanian LCG community.

The goals of the workshop are:

- 1) To define the national grid infrastructure
- 2) To present an overview of the development
- 3) To give the grid the LCG technology
- 4) To provide a forum
- 5) To attract new centers
- 6) To discuss the future

The workshop is supported by the project SINDEGRID Computing Grid for Romania.

© 2007 IF

Done

GStat: RO-12-ICI 09:21:24 06/22/08 GMT - @wgoc01 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://goc.grid.slnica.edu.tw/gstat/RO-12-ICI/

GStat: RO-12-ICI 09:21:24 06/22/08 GMT - @wgoc01

home alert table service regional service metrics links prod pps test baltic eela euchina euindia eumed seegrid alida trigrid pi2s2 gnuu ireland

RO-12-ICI Status: OFF

GOCD Configuration information:
status: Candidate, type: Production
glis url: ldap://ce.ncgrid.ici.ro:2170/ads-vo-name=RO-12-ICI,o=grid

To test site GIIS: ldapsearch -x -H ldap://ce.ncgrid.ici.ro:2170 -b ads-vo-name=RO-12-ICI,o=grid

BDII Node Check: . alert history ?

CERN SE Check: . alert history ?

No BDII Node to check in GOCD
test: ldapsearch -xLLL -l 15 -h bdihostname -p 2170 -b 'GlueUniqueID=ixdpal01.cern.ch,ads-vo-name=CERN-PROD,ads'

GIIS Perf Check: ok alert history ?

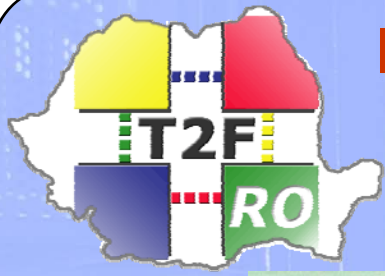
Query Response Time (ms): 2442.0 - OK
GIIS Entries Found: 25 - OK
GIIS Old Entries Found: 0 - OK

GIIS Entries

glisEntry glisOld
glisEntry max: 25.0 avg: 25.0 cur: 25.0

GIIS Response (ms)

glisTime



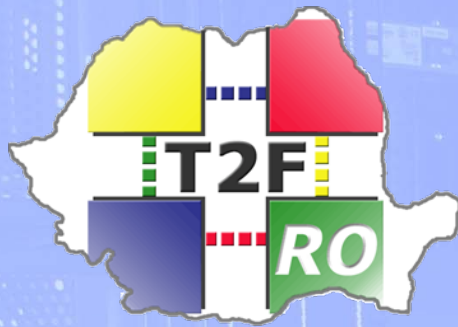
IFIN-HH + ICI



Romanian Tier-2 Federation Workshop

29-30 November 2007





SINDEGRID - 2

Program Capacitati - Modul III

OBIECTIV STRATEGIC: sustinerea sistemului unitar de management si dezvoltare la nivel national a resurselor si serviciilor destinate gridului de calcul LCG pentru fizica particulelor elementare, in cadrul Federatiei Romane Tier-2.

OBIECTIVE SPECIFICE PROPUSE

Implementarea de noi tehnologii de calcul si stocare de date pentru cresterea eficientei serviciilor grid oferite de FRT2;

Asigurarea bazei tehnice de calcul grid prin achizitia de echipament hardware performant, in conformitate cu prevederile MoU;

Asigurarea resurselor umane calificate necesare operarii si monitorizarii locale a gridului LCG la nivelul calitativ prevazut in MoU;

Conectarea la gridul LCG a comunitatilor de cercetatori interesate de fizica LHC, dar care nu participa inca la WLCG (Timisoara, Iasi)

Dezvoltarea si operarea site-urilor grid in regim de productie;

Diseminare in cadrul comunitatii stiintifice privind rolul FRT2 in cadrul WLCG, serviciile oferite de aceasta si rezultatele proiectului SINDEGRID,

Suport pentru tranzitia la EGI a structurilor FRT2.

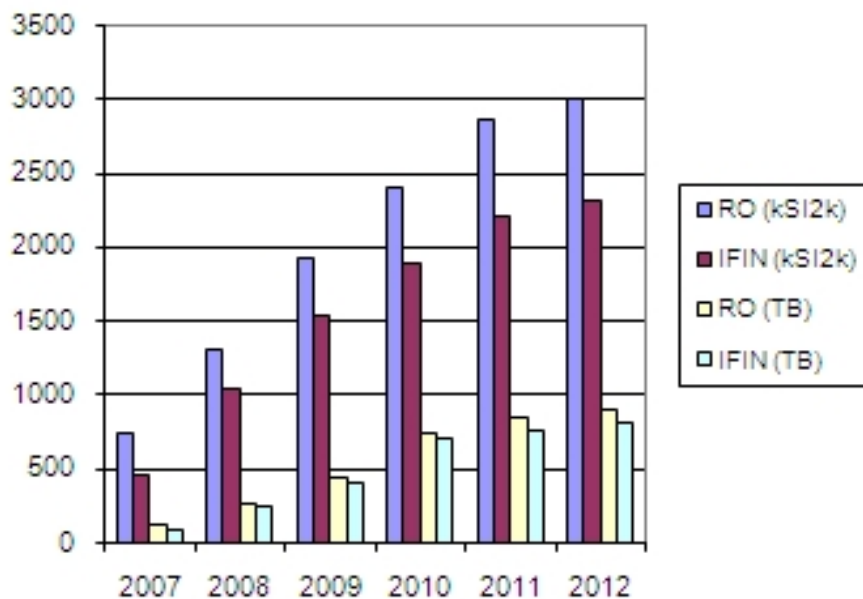


RESURSE HARDWARE

Angajamentul actual din MoU:

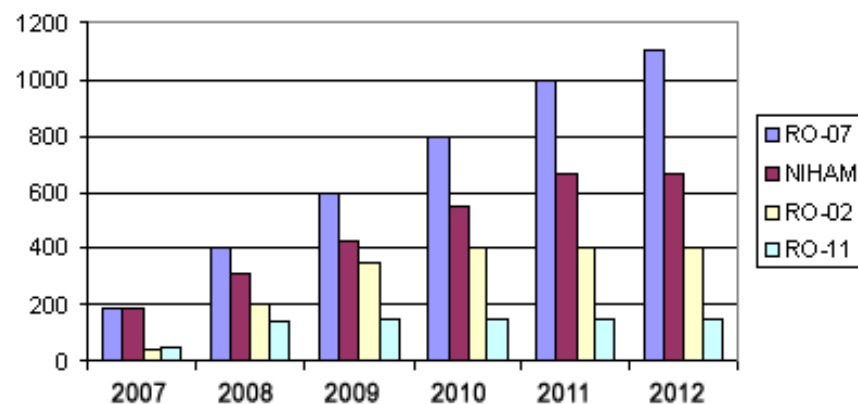
Crestere RO de 5x (8x Tier-2) a puterii de procesare si de 10x a capacitatii de stocare in perioada 2007-2012

Resursele de calcul si stocare RO-LCG

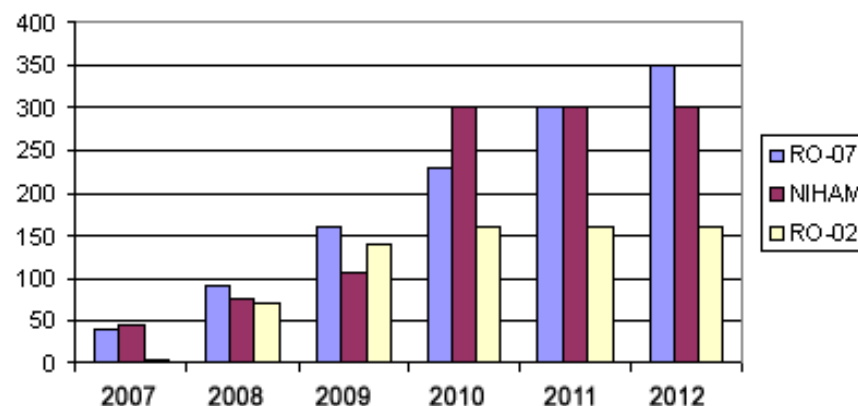


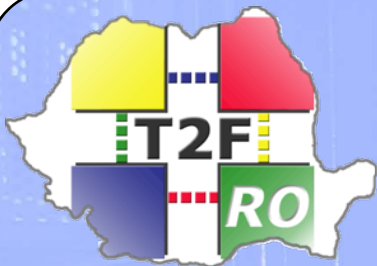
CTIC (RO-07) / grupuri experimentale (10.07)

Resurse procesare IFIN (kSI2k)



Resurse stocare IFIN (TB)





SINDEGRID-2: ETAPE, RESURSE

ETAPE DE REALIZARE

1. ian.- iun.2009

Prima etapa upgrade resurse

2. iul.- dec. 2009

**Conectarea la LCG a centrelor noi
Realizarea Centrului de Operatiuni
Workshop FRT2**

3. ian.- iun. 2010

**A doua etapa upgrade resurse
Incheierea trecerii la EGI**

4. iul.- dec. 2010

**Instrumente software pt. aplicatii grid
Conferinta FRT2**

RESURSE ANUALE NECESARE

Resurse umane

13 norme intregi

Resurse financiare

dotari

650.000 lei

manopera+etc.

950.000 lei

1.600.000 lei