VOCE

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Information Society

Enabling Grids for E-sciencE

- **To create a volunteer Grid**
- **To enable fast joining for Grid newcomers**
- **Generic application portfolio**
  - Support for a wide range of application areas
  - Incubation of new applications
- **Advantageous utilization for training purposes**
  - Functional interface with P-GRADE portal
  - Dedicated resources for a training infrastructure
- **Better support for users**
  - Application-oriented support
  - Support of individual users and groups

- **VOCE - Virtual Organization for Central Europe**

  – Current status

    ▪ provides a complete and independent grid infrastructure
    ▪ officially registered as currently the one and only
      "Regional VO" for Central European region (see CIC portal)

  – Solutions provided

    ▪ on-going work to interconnect VOCE with **P-GRADE portal**
    ▪ flexible framework - **CHARON system** – is available
      for applications & jobs management (see demo on Wednesday)
    ▪ **AFS installation** available for easy integration with local
      national Grid projects (currently used on Czech farms & UI)
    ▪ **parallel execution support** will be ready in very near future (weeks)

- **VOCE & specific activities**

  – NA3 & NA4

    ▪ VOCE is an **application generic** virtual organization
    ▪ currently is used for computational chemistry, numerical computations, vizualizations, and astrophysics
    ▪ suitable for training purposes (especially after the P-GRADE portal interfacing)

  – SA1

    ▪ VOCE can serve as a test case for lighthweight way of setting and running essential grid services in reasonable time
    ▪ utilization for **setting up of new application-centric VOs** (not necessarily in CE region only)

  – JRA1

    ▪ provides feedback for middleware developers especially for IT/CZ cluster

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- ## **Infrastructure elements overview**

 - elementary infrastructure (WMS, CE, WNs, SE) fully functional and configured to accept users from CE

UI	skurut4.cesnet.cz
MyProxy	skurut3.cesnet.cz
RB	skurut3.cesnet.cz
VOCE LDAP	meta-ldap.cesnet.cz
VOCE VOMS	odorn.ics.muni.cz
	(temporary solution for tests)
GENIUS portal	https://skurut4.cesnet.cz/
	(uses GILDA MyProxy server)

  - access to UI using GSISSH, UI account is created automatically after registration to VOCE

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- ## Infrastructure elements overview

CE

ce.grid.tuke.sk

ce.polgrid.pl

grid109.kfki.hu

ares02.cyf-kr.edu.pl

zeus02.cyf-kr.edu.pl

skurut17.cesnet.cz

ce.egee.man.poznan.pl
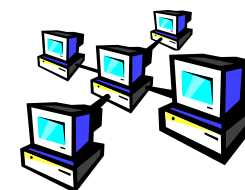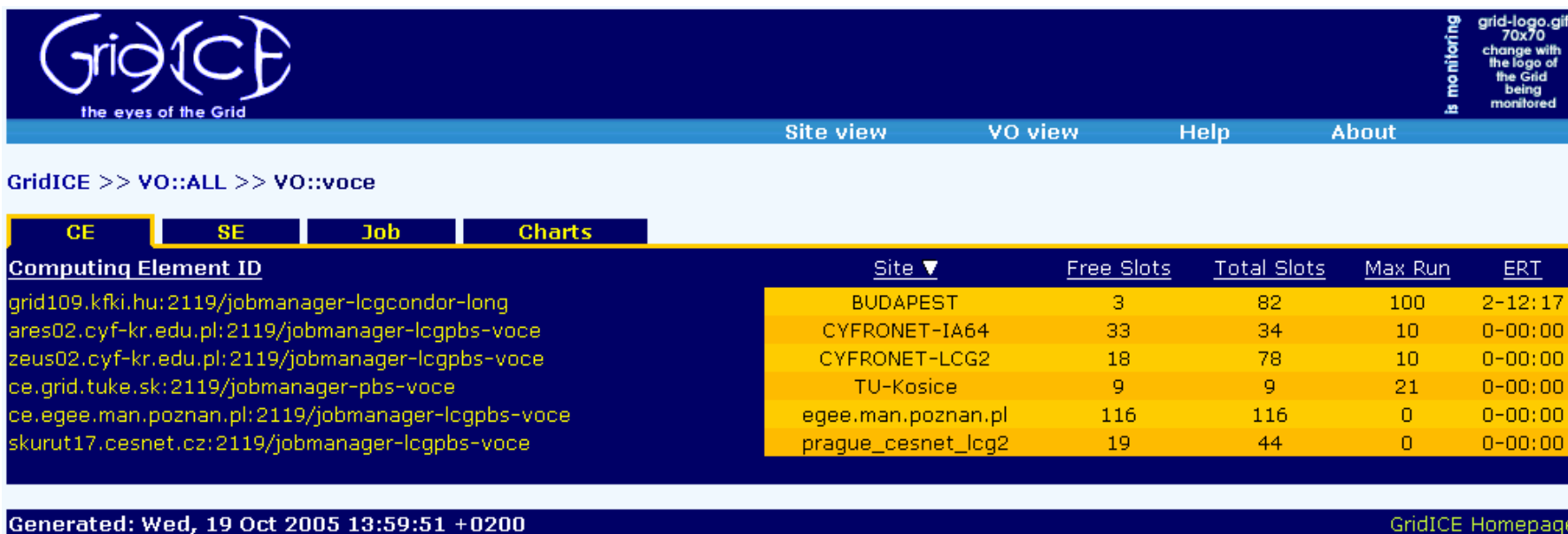
SE

ce.grid.tuke.sk

se.polgrid.pl

grid100.kfki.hu

ares03.cyf-kr.edu.pl

zeus03.cyf-kr.edu.pl

skurut18.cesnet.cz

se1.egee.man.poznan.pl

- **Summary of resources**

GridICE >> VO::ALL >> VO::voce

Computing Element ID	Site ▼	Free Slots	Total Slots	Max Run	ERT
grid109.kfki.hu:2119/jobmanager-lcgcondor-long	BUDAPEST	3	82	100	2-12:17
ares02.cyf-kr.edu.pl:2119/jobmanager-lcgpbs-voce	CYFRONET-IA64	33	34	10	0-00:00
zeus02.cyf-kr.edu.pl:2119/jobmanager-lcgpbs-voce	CYFRONET-LCG2	18	78	10	0-00:00
ce.grid.tuke.sk:2119/jobmanager-pbs-voce	TU-Kosice	9	9	21	0-00:00
ce.egee.man.poznan.pl:2119/jobmanager-lcgpbs-voce	egee.man.poznan.pl	116	116	0	0-00:00
skurut17.cesnet.cz:2119/jobmanager-lcgpbs-voce	prague_cesnet_lcg2	19	44	0	0-00:00

Generated: Wed, 19 Oct 2005 13:59:51 +0200   GridICE Homepage

- resources from   CESNET (Czech Republic)

  PSNC, CYFRONET, ICM (Poland)

  II-SAS (Slovakia)

  KFKI (Hungary)

- 20 registered users from 10 institutes and 4 countries
- in total   **539 CPUs, about 5.9 TB disk space**
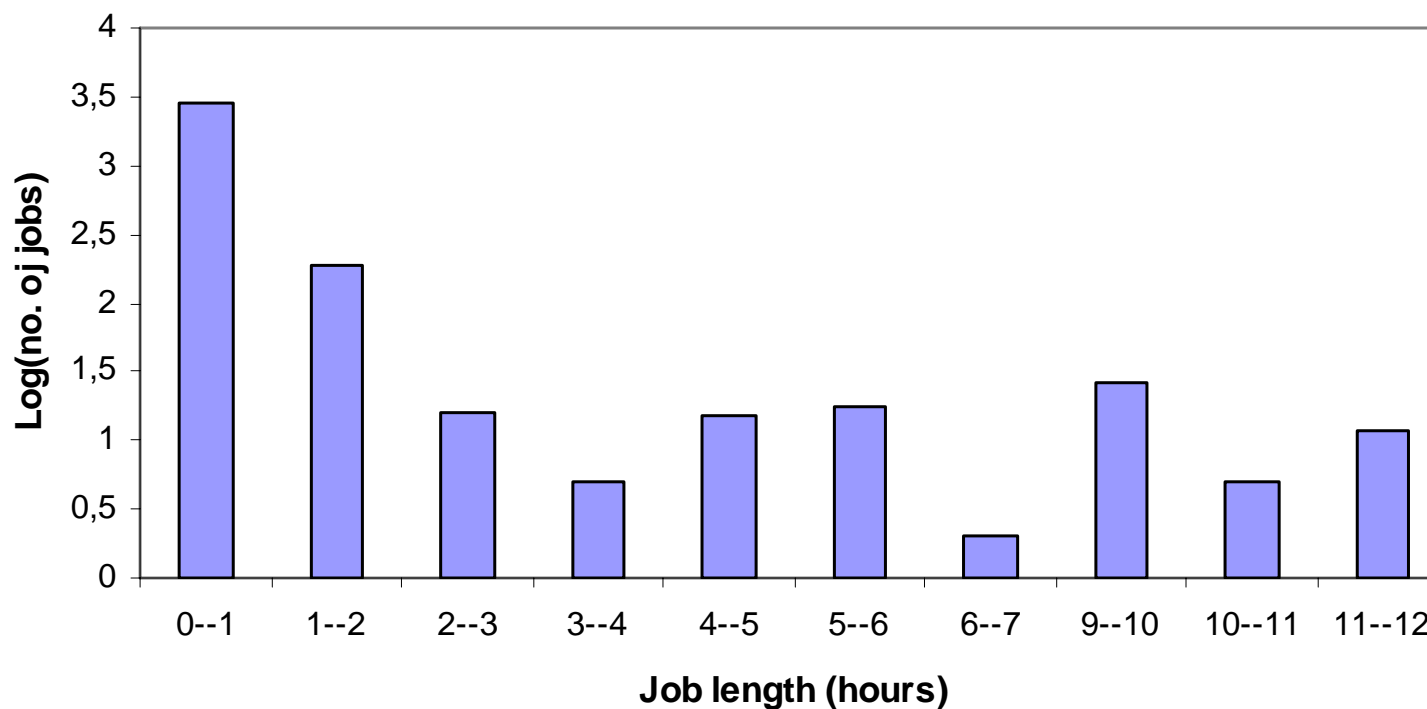
![egee logo] **Enabling Grids for E-sciencE**

How many jobs were running at VOCE?

VOCE utilization in 2005
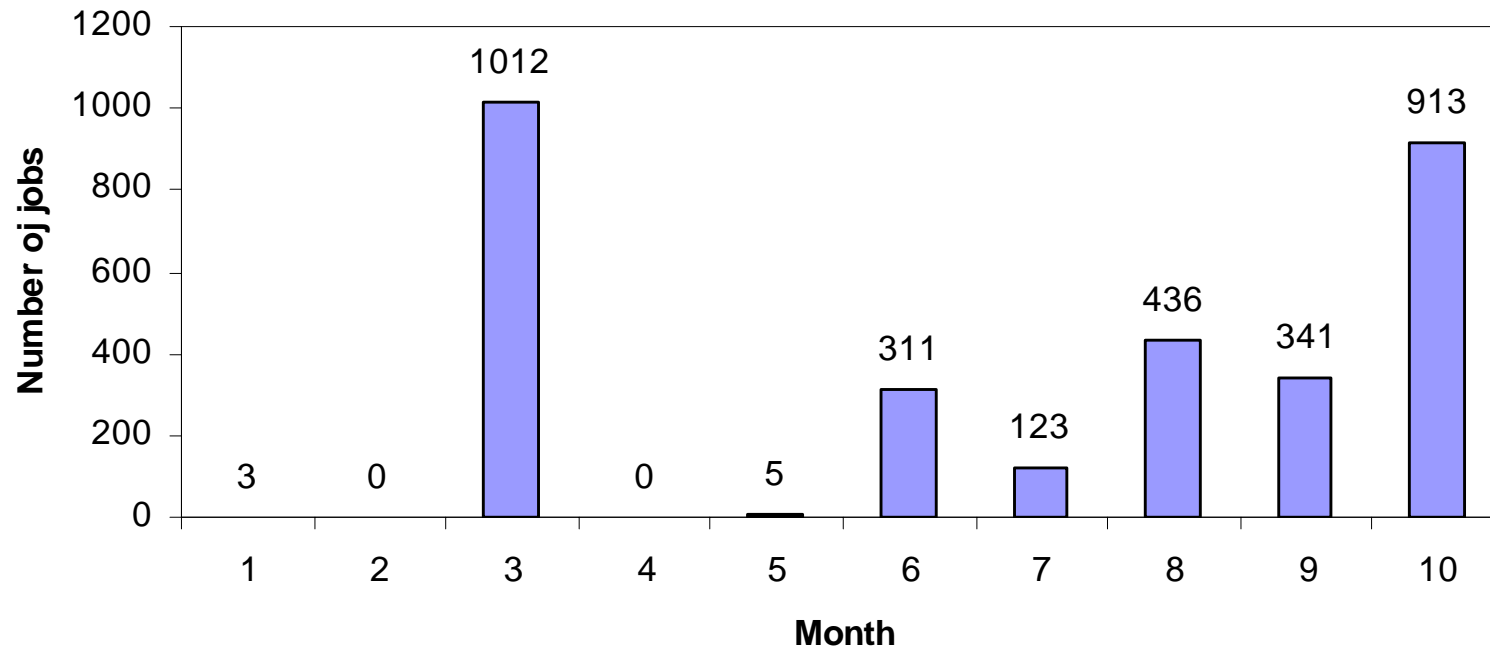
How were CPUs utilized by the jobs?

- number of jobs sent through RB skurut3.cesnet.cz
- other jobs were sent directly to CE using globus-job-run LM5

LM5   Máme odhad jejich počtu?
Ludek Matyska, 10/23/2005

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Reliability testing

– **200 simple jobs sent to random CE**

15.8.	150 jobs	OK	50 aborted
22.8.	200 jobs	OK	0 aborted
05.10.	200 jobs	OK	0 aborted
21.10.	200 jobs	OK	0 aborted

– **Jobs distribution based on CE**

15.8.		22.8.	
site	jobs OK	site	jobs OK
skurut	34	zeus02	92
cyf-kr.edu.pl	34	skurut	56
polgrid	34	ce.grid.tuke	44
grid.tuke.sk	48	grid109.kfki.hu	8
	150		200
site	jobs aborted	site	jobs aborted
zeus13	50		0

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- **VOCE summary**

  - User registration

    - VOCE registrar at   http://voce-register.farm.particle.cz/

  - Documentation

    - VOCE portal at   http://egee.cesnet.cz/en/voce/

  - Request tracking

    - Send requests to   voce@cesnet.cz