



Enabling Grids for E-science

User friendly high level application support for EGEE/gLite

Jan Kmuníček

NA4 CE region coordinator

www.eu-egee.org



- **CE region specifics**
- **VOCE infrastructure**
- **Application support - CHARON**
- **Application support - P-GRADE**
- **Additional CE regional tools**
- **Plans & further progress**

- **Central European federation (CE)**

- regional descriptor **heterogeneity**
(in both partners & organizations)



Austria

GUP, UNIINNSBRUCK



Czech Republic

CESNET



Hungary

MTA SZTAKI, NIIF, KFKI RMKI, ELUB, BUTE



Poland

ICM, PSNC, CYFRONET



Slovakia

II-SAS



Slovenia

JSI

- EGEE II

regional newcomer



Croatia

- **VOCE - Virtual Organization for Central Europe**
 - provides **complete grid infrastructure** under EGEE wings
 - officially registered as currently the one and only “Regional VO” for Central European (CE) region
 - based on **regional principle**
 - VOCE spans the whole CE Federation
 - core services operated by CESNET
 - resources are provided by several institutions across the CE (these resources are available to all / experienced users registered in VOCE)

- **VOCE - Description**
 - **fully production environment**
 - VOCE environment allows Grid newcomers to get quickly first experience with Grid computing
 - simultaneously allows users to smoothly move to production use of the Grid in the same environment
 - **self-contained infrastructure**
 - all the relevant services run by VOCE administration
 - currently on LCG middleware but simultaneously available gLite 1.4 installation (undergoing task)

- **VOCE - Aims**
 - **incubator** for new applications / new application areas
 - assistance in adapting a software for use on the Grid
 - even for applications that do not have any Grid/cluster/remote computing experience
 - outsourcing the burden of running an grid infrastructure to VOCE
 - **generic VO**
 - VOCE is an application neutral virtual organization
 - *not bound to any particular application*
 - *interested in broad scale of application areas*
 - also suitable for training purposes (in cooperation with P-GRADE)

- **VOCE - Features**

- comparison VOCE to GILDA VO

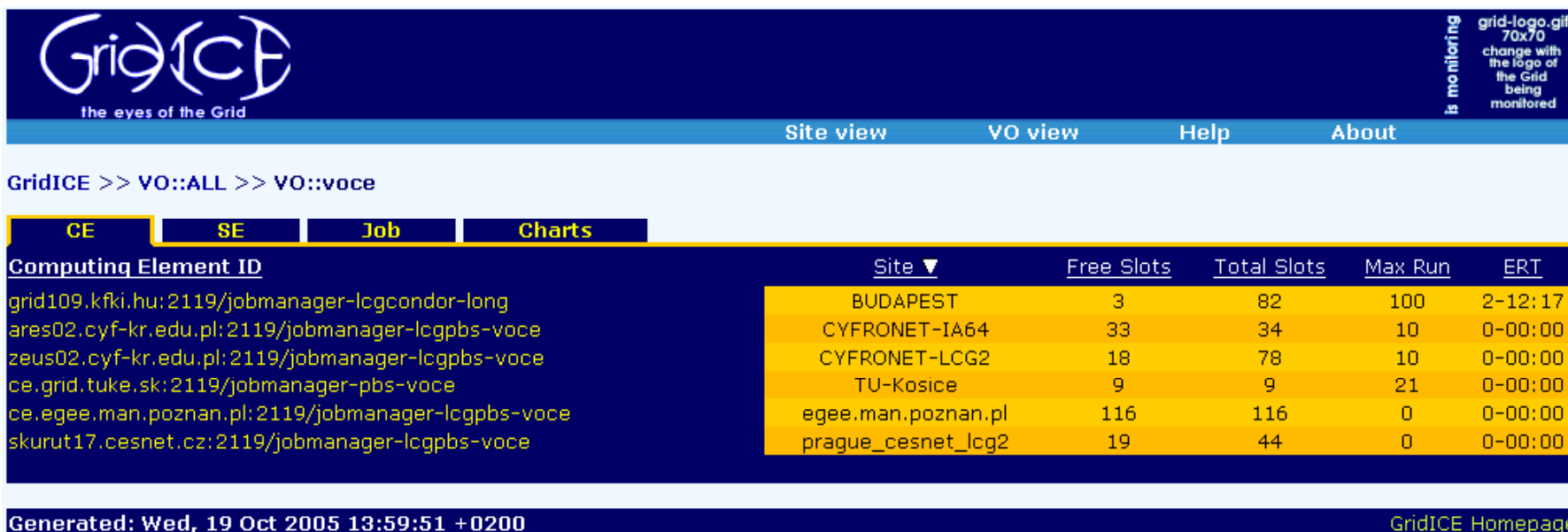
- **VOCE security**

- *no anonymous users (importance for resource owners)*
- *based on accredited CA's approved by the EUGridPMA body*

- **VOCE resources**

- *allocated guaranteed resources, not best effort approach*

- VOCE - Summary of resources



The screenshot shows the GridICE interface for the VOCE infrastructure. It includes a navigation menu with 'Site view', 'VO view', 'Help', and 'About'. The main content area displays a table of resources with columns for 'CE', 'SE', 'Job', and 'Charts'. Below this, a detailed table lists 'Computing Element ID', 'Site', 'Free Slots', 'Total Slots', 'Max Run', and 'ERT' for various sites.

CE	SE	Job	Charts
<u>Computing Element ID</u>			
grid109.kfki.hu:2119/jobmanager-lcgcondor-long			
ares02.cyf-kr.edu.pl:2119/jobmanager-lcgpbs-voce			
zeus02.cyf-kr.edu.pl:2119/jobmanager-lcgpbs-voce			
ce.grid.tuke.sk:2119/jobmanager-pbs-voce			
ce.egee.man.poznan.pl:2119/jobmanager-lcgpbs-voce			
skurut17.cesnet.cz:2119/jobmanager-lcgpbs-voce			

Site ▼	Free Slots	Total Slots	Max Run	ERT
BUDAPEST	3	82	100	2-12:17
CYFRONET-IA64	33	34	10	0-00:00
CYFRONET-LCG2	18	78	10	0-00:00
TU-Kosice	9	9	21	0-00:00
egee.man.poznan.pl	116	116	0	0-00:00
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)
- more than 40 registered users from 10 institutes and 4 countries
- in total **539 CPUs, about 5.9 TB disk space**

- **VOCE - Advantages**

- **regional self-organization**

- users are not tightly bound around specific applications
 - the region itself is self-organized from the bottom level

resources	...	infrastructure
applications	...	high level middleware

- potential users are not required to invest special effort to easy use the environment in a production mode

- **application neutrality**

- **VOCE - Summary**

- user registration

- VOCE registration 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

EGEE - User Interface - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites RSS Print Mail Stop

Address <http://egee.cesnet.cz/en/voce/ui.html> Go Links >>



ABOUT EGEE

EGEE EVENTS

GRIDS RELATED INFO

FOR USERS

VOCE

HOW TO JOIN

USAGE RULES

VOCE UTILIZATION

USER INTERFACE

MANUALS / GUIDES

VOCE SUPPORT


CHARON SYSTEM

VOCE UIPHP

WIKI

JRA1 CZ

VO AUGER



[Home](#) > [VOCE](#)

User Interface

Command line user interface

The user interface tools (UI) provide all commands needed to use the grid resources in a given VO. The users can either install the tools on their own machine or they can get an account on a machine provided by the user's organization or VO. The UI for VOCE runs on machine **skurut4.cesnet.cz**, account on that machine is created for each VOCE user as part of the VOCE registration process.

The VOCE UI machine can be accessed by the SSH protocol using several authentication methods:

- Password based authentication

The users authenticates using the password that was chosen by the applicant during the registration process. The password can be changed using the `kpasswd` command from the UI machine. If you forget the password and subsequently can not login to the UI, please contact [VOCE support](#).

- GSI authentication

If you have a GSI-enabled SSH client, you can use it as well to access the UI machine. If you use this mechanism, the GSI proxy will be delegated to the UI as part of the SSH authentication process so you do not have to copy your long-term credentials to the UI.

Sources for the GSI-enabled SSH client can be found at <http://grid.ncsa.uiuc.edu/ssh/>, we will also provide binary versions for the main operating systems.

- Kerberos tickets

You can also access the UI machine using native Kerberos v5 authentication. SSH clients that support Kerberos are part of all main Linux distributions and there are also SSH client for MS Windows.

In order to use this method, a Kerberos ticket to the realm VOCE (which is an analogy to the GSI proxy) must be created by the user before accessing the UI machine. The ticket is created using the password that was chosen by an applicant during the registration stage. We also provide a simple [configuration file](#) needed to create the ticket.

Special GSI to your home directory!!!

Internet

Start | Deb... | 7 M... | 5 M... | kacs... | 2 I... | SZT... | Wor... | EN | 8:29 AM

- **How to proceed further?**
 - expand **computational resources** in VOCE
 - utilize VOCE / CHARON / P-GRADE **training infrastructure**
 - extend **application portfolio**
 - migrate towards new application-centric CE VO based on VOCE production experience (e.g. specific MMCC VO)