



# Using Access Grid for distributed collaboration

E. Imamagic, P. Vujasinovic

# Overview

- ❖ Introduction
- ❖ Grid
- ❖ Distributed collaboration
- ❖ Access Grid
- ❖ Access Grid @ Srce
- ❖ Conclusion

# Introduction

## ❖ e-Science

- ♦ Contemporary scientific experiments
- ♦ Global collaboration

## ❖ Examples:

- ♦ CERN – Particle physics
- ♦ BIRN – neural images
- ♦ NEES Grid - earthquakes

NEESgrid: NEES System Integration



# Grid

Astronomy  
services



Mass Storage  
Systems



Mainframes



Physics  
resources



Beowulf  
clusters



Servers



Large  
databases

Supercomputers



Bioinformatics  
resources



Disk pools



Classrooms



PCs



High  
performance  
parallel storage



srce

CUC 2005 / Distributed password cracking with Condor and John the Ripper

# Access Grid

- ❖ Collaboration system
- ❖ Based on contemporary grid technology
  - ♦ Globus Security Infrastructure (GSI)
- ❖ Group to group teleconferencing
- ❖ Shared applications – PowerPoint, scientific applications
- ❖ Using multicast audio (rat) & video (vic) technologies
- ❖ <http://www.accessgrid.org/>



# Access Grid architecture



- ❖ Venue Server
  - Hosts **venues** – virtual rooms
- ❖ Bridge Server
  - Enables access to non-multicast networks
- ❖ Access Grid nodes
  - High-tech multimedia classrooms
  - Access points for collaborators
  - There are 60 nodes in the world
- ❖ PIGs
  - Personal Interface to Grid
  - Access Grid installations on personal computers




# AccessGrid@Srce

- ❖ Several deployments
- ❖ Two Access Grid nodes:
  - ♦ Distributed on two computers
  - ♦ PIG
- ❖ Two Access Grid nodes + Venue Server
  - ♦ Venue Server
  - ♦ Distributed node + PIG
- ❖ Two Access Grid nodes + Venue Server + Bridge Server

# AccessGrid@Srce


Applications Actions  Tue May 3, 17:40 

"Video" - □ ×




VIC v2.8ucl-1.1.3-AG Menu Autoplace Help Quit

Larry Katz(Video) - □ ×



Predrag Vujasinovic(Video) - □ ×




RAT v4.2.22: Testing\_Lobby - □ ×

Listen	256.2 kb/s	Talk	256.0 kb/s
Speaker	Vol 100	Microphone	Gain 99

◆ Predrag Vujasinovic  
◆ Larry Katz

"Testing\_Lobby"  
Address: venueserver2.westgrid.ca Port: 50562 TTL: 15

Options... About... Quit

AG [Venue Cli RAT v4.2.2: Larry Katz "Video" Predrag V. [Testing Lo 26°C us  Lookup



# AccessGrid practical

- ❖ Board meetings
  - ♦ Venue Server in Canada
  - ♦ Collaborators from Austria, Germany, Canada and Australia
- ❖ IACCS
  - ♦ <http://www.iacss2005.hr/>
  - ♦ Streaming & participation



[www.srce.hr/crogrid](http://www.srce.hr/crogrid)

