



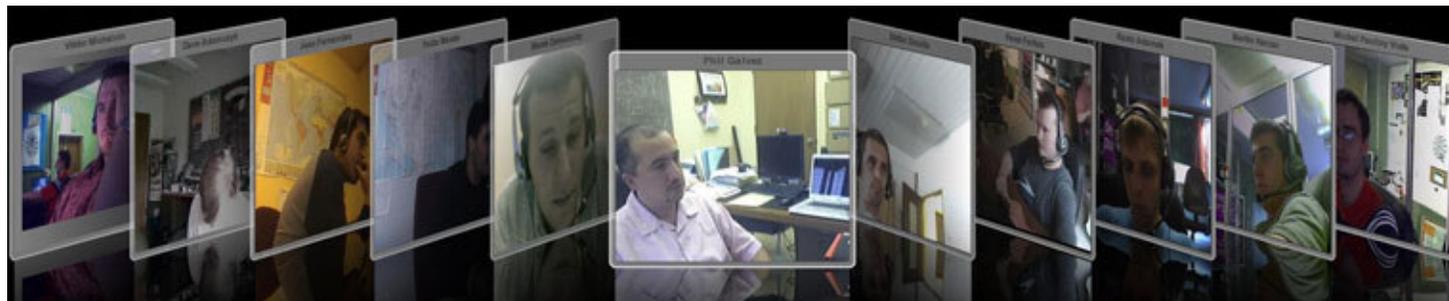
# EVO, a Collaborative Tool for e-HEP and a new server at KISTI

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# KISTI e-Science HEP

## Virtual Laboratory

HEP based on e-Science  
 ⇒ e-HEP (High Energy Physics)

“Whenever, Wherever  
 Same Environment as  
 Real Lab”

Build a “Virtual HEP Lab”  
 by expanding a “real  
 HEP Lab”  
 via e-HEP!

Data Production

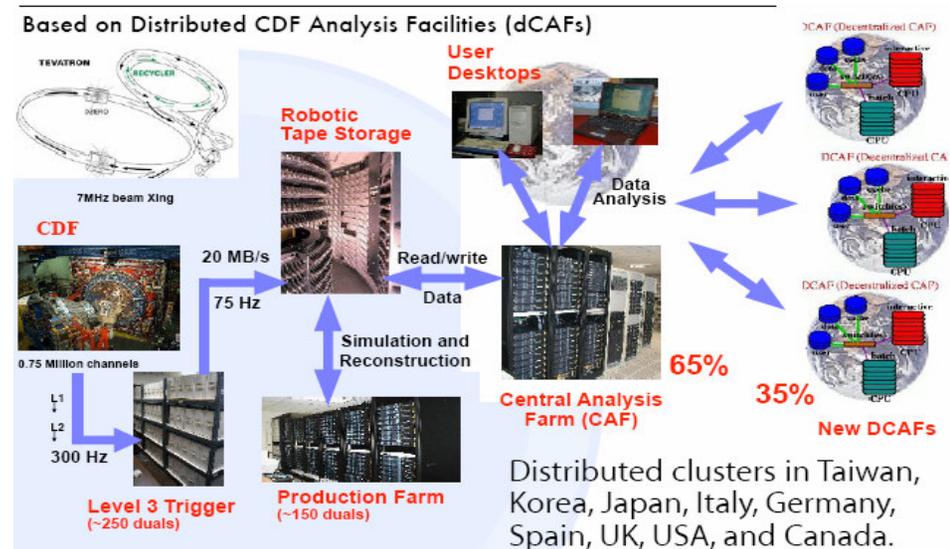
- Remote Control Room

Data Processing

- Data Center

Data Publication

- Enabling Virtual Organization



# Collaboration Facility

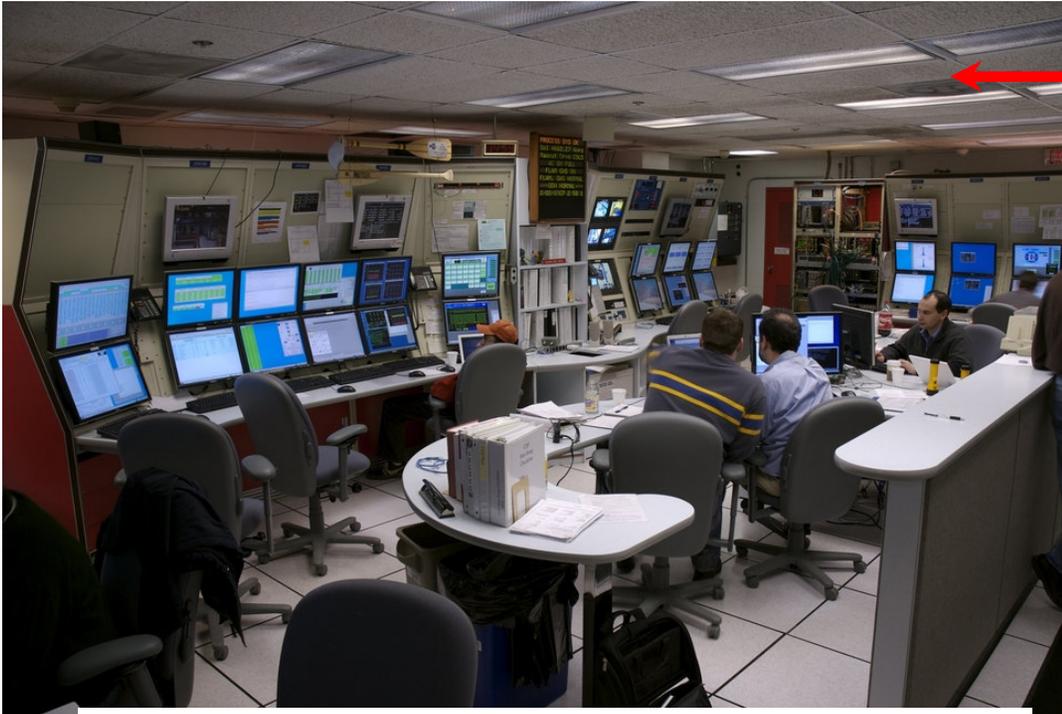
- Mid-level in virtual expansion of a real lab
- Remote Collaboration System
  - EVO: easy
  - Access Grid: large scale



2007 기  
우, 조기현 KISTI

# CDF@KISTI ROC

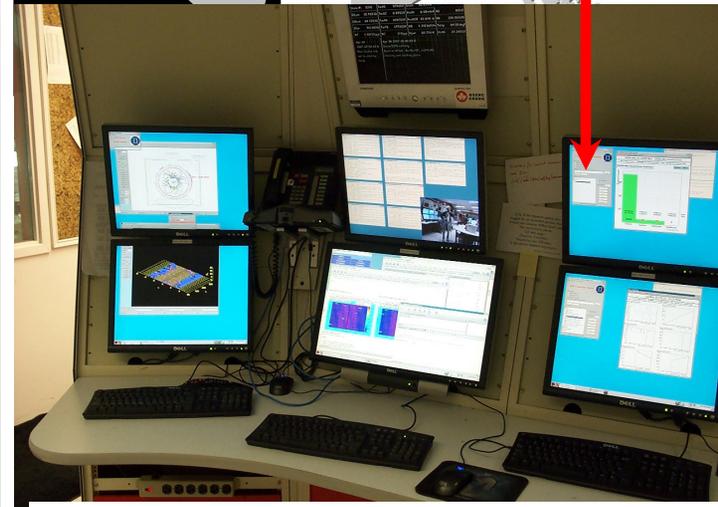
Remote Operation Center  
Fermilab CDF exp's Operation Center  
will be expanded to KISTI ROC (2007.11)



CDF Operation Center

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KPS 2007 가을 학회  
김현우, 조기현 KISTI



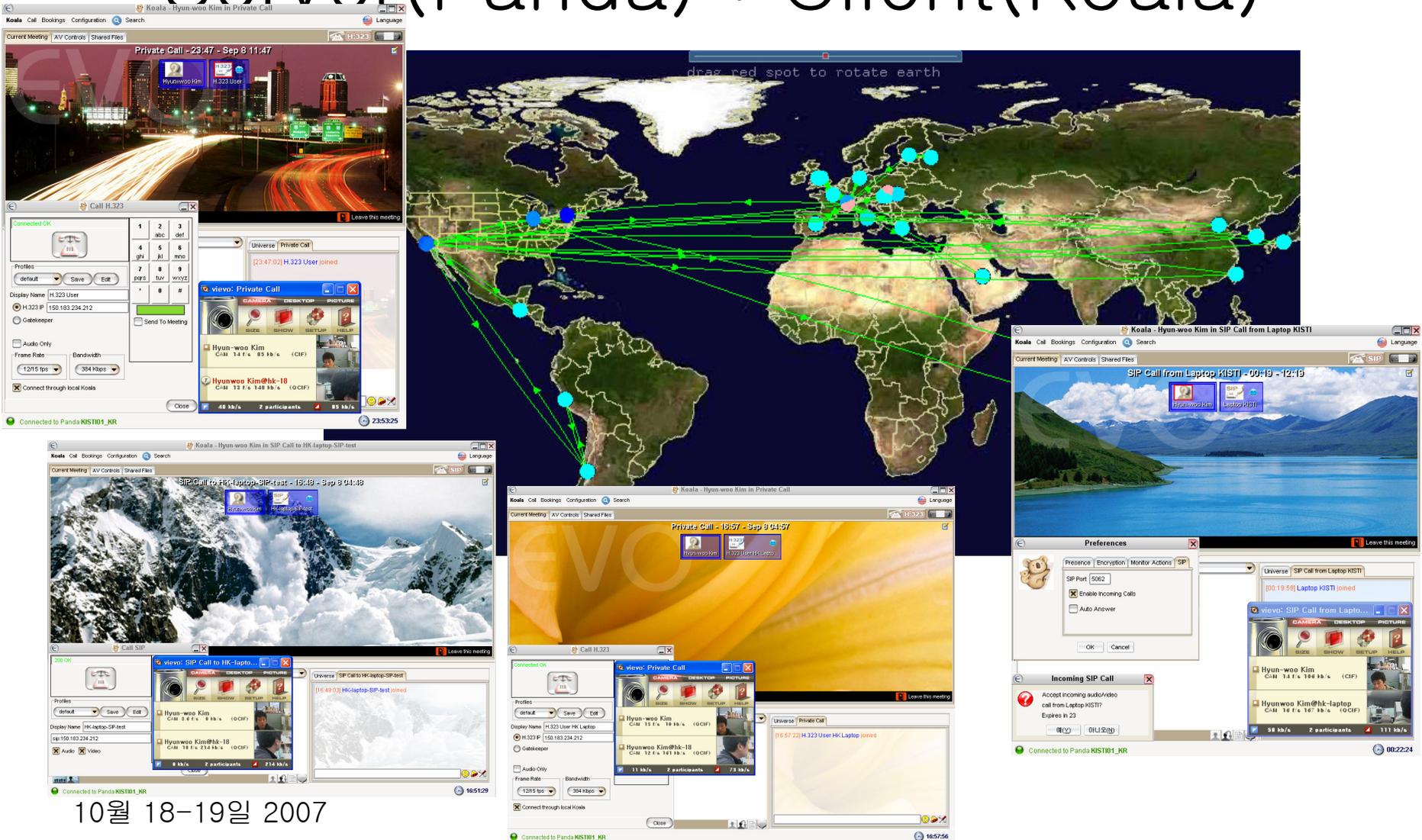
KISTI ROC  
(Under way)



# Introduction to EVO

- Enabling Virtual Organization
- First released in June 2007
- A Java application i.e. Java virtual machine required
- Successor to VRVS  
Virtual Room Videoconferencing System
- Client : Koala
- Server : Panda

# EVO Configuration Server(Panda) : Client(Koala)



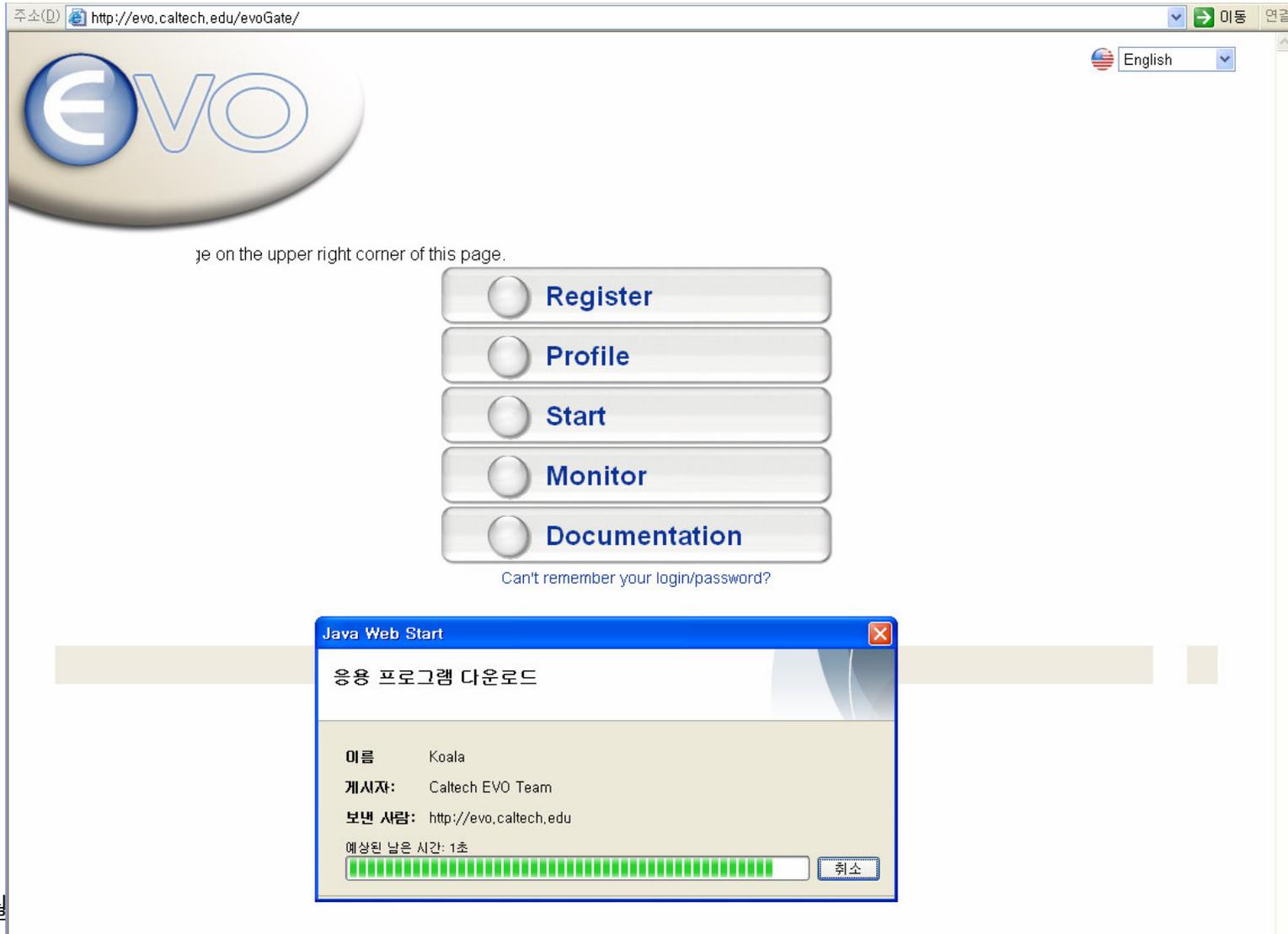
The image displays a central world map with green lines connecting various locations, representing a global network. Surrounding the map are several screenshots of the Koala SIP client interface in different states:

- Top Left:** A private call window showing a city night scene. The status bar indicates "Connected to Panda KIST01\_KR".
- Top Right:** A SIP call window showing a lake and mountains. The status bar indicates "Connected to Panda KIST01\_KR".
- Bottom Left:** A SIP call window showing a snowy mountain scene. The status bar indicates "Connected to Panda KIST01\_KR".
- Bottom Center:** A private call window showing a yellow background with the "evo" logo. The status bar indicates "Connected to Panda KIST01\_KR".
- Bottom Right:** A preferences window and an incoming SIP call notification. The status bar indicates "Connected to Panda KIST01\_KR".

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# Start a Koala



The screenshot shows a web browser window at the URL <http://evo.caltech.edu/evoGate/>. The page features the EVO logo and a navigation menu with buttons for Register, Profile, Start, Monitor, and Documentation. A "Can't remember your login/password?" link is also present. A Java Web Start dialog box is overlaid on the page, displaying the following information:

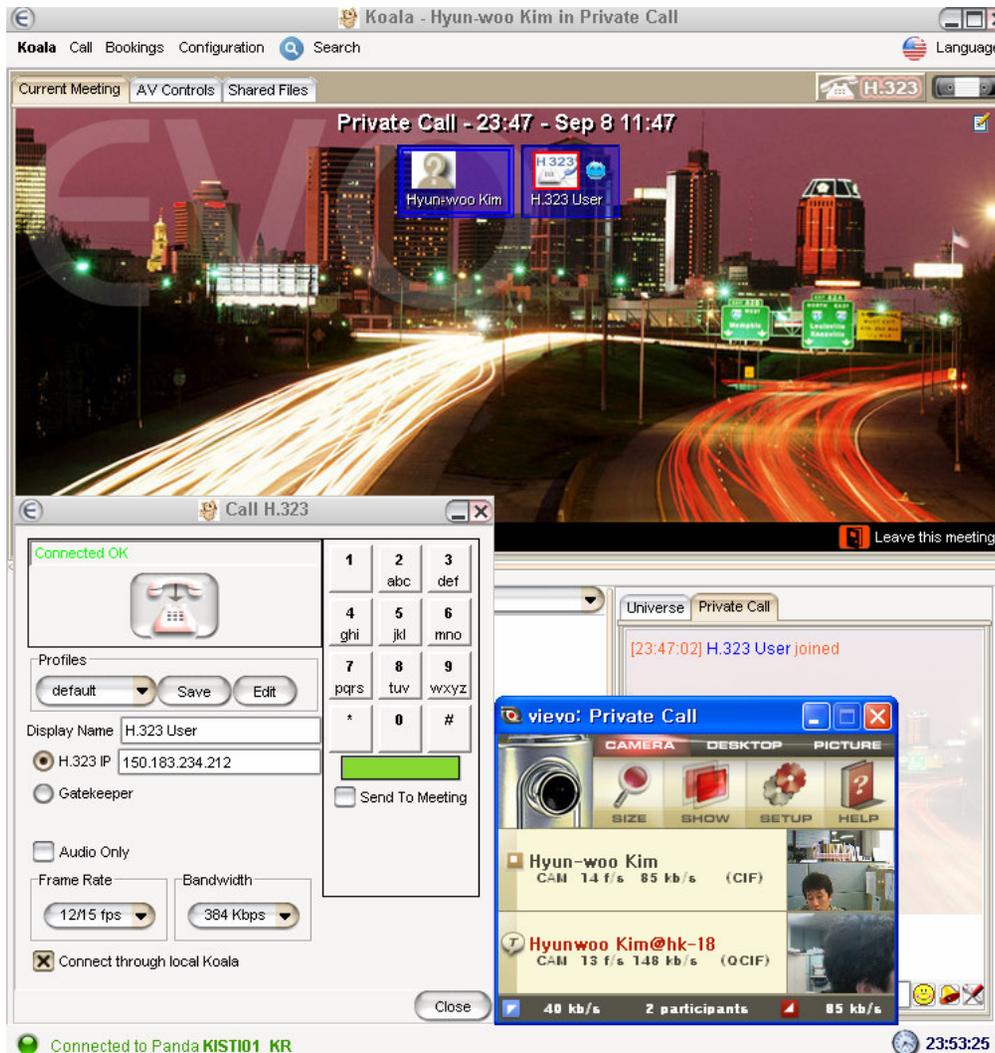
- 제목: Koala
- 게시자: Caltech EVO Team
- 보낸 사람: http://evo.caltech.edu
- 예상된 남은 시간: 1초

The dialog box includes a progress bar and a "취소" (Cancel) button.

# Use “Koala” as EVO Client

## Requirements

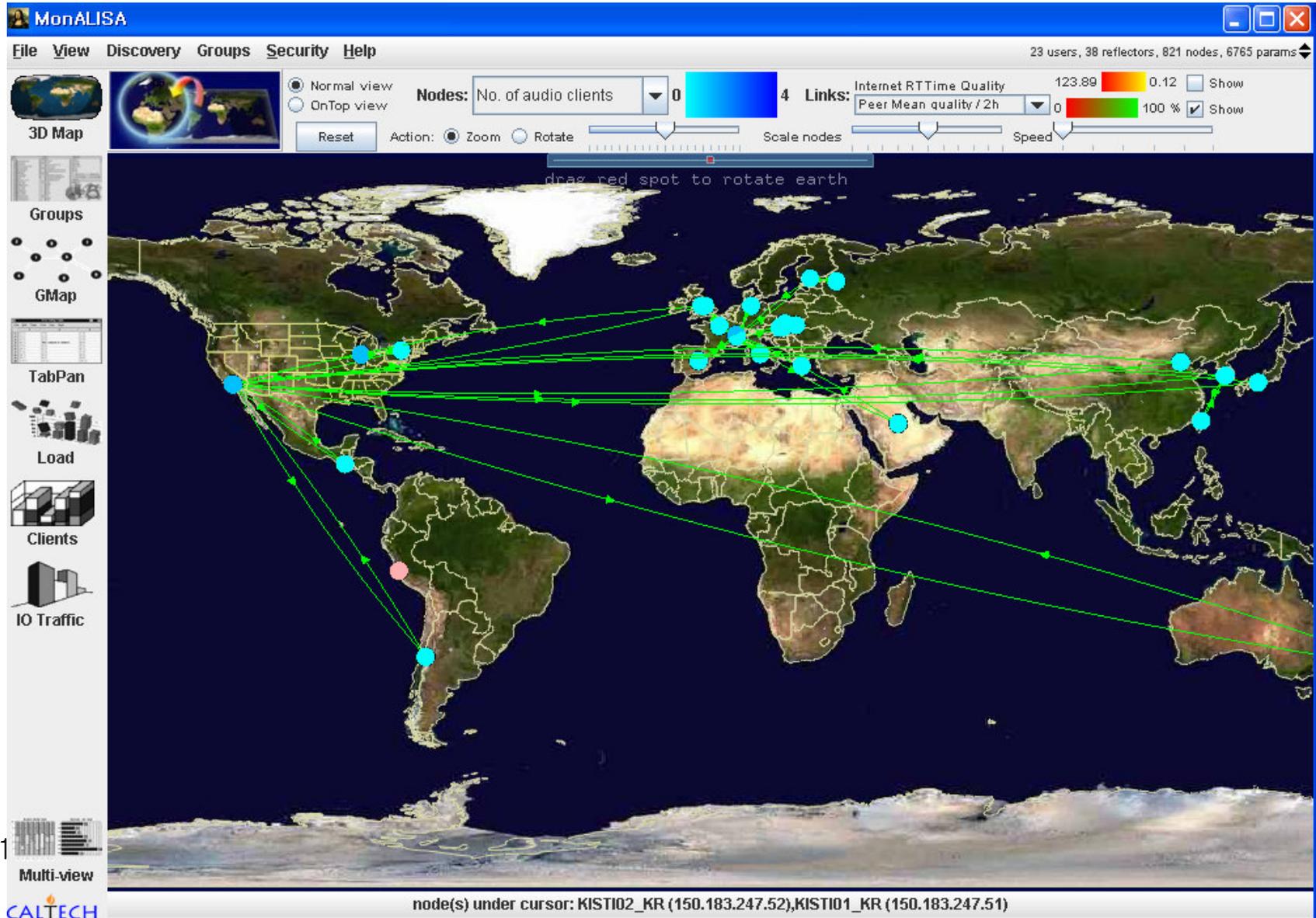
- Intel PC :  
(minimum)  
Pentium 4, 1.5GHz  
512 MB RAM
- Firewall : need to  
open certain ports  
for certain hosts



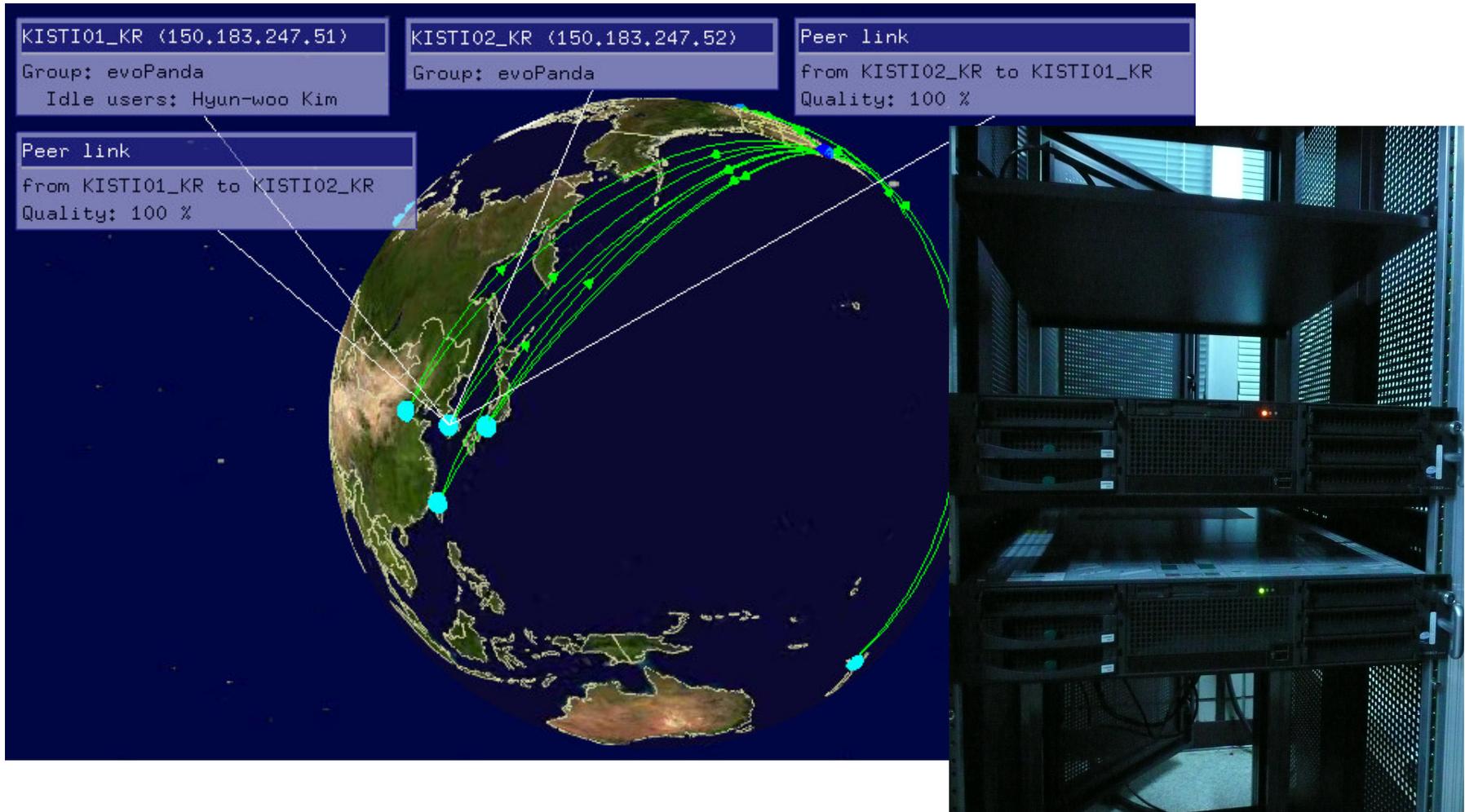
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# EVO Server : Panda



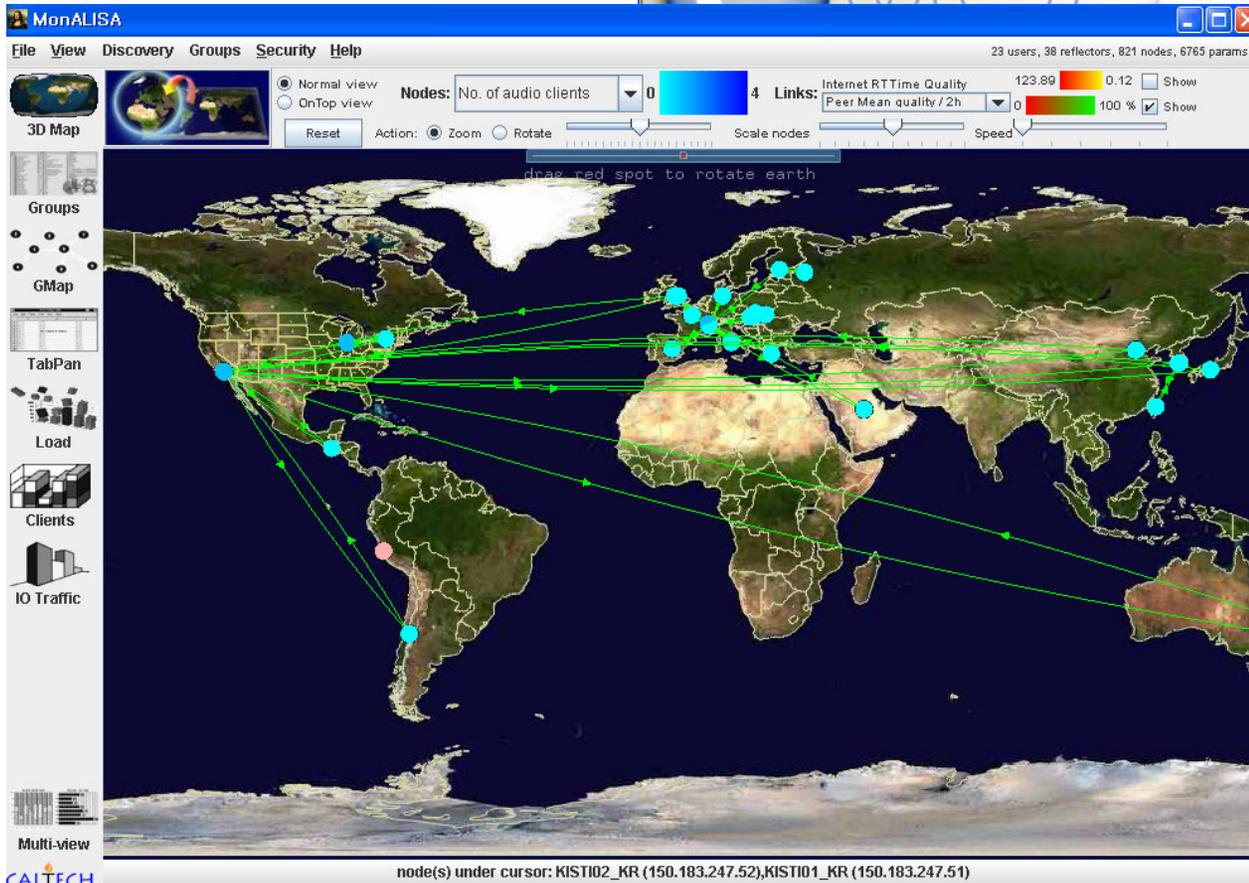
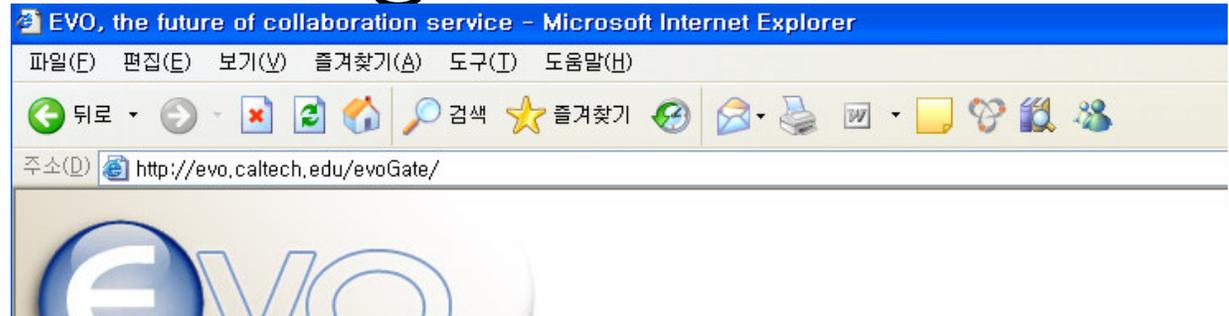
# KISTI EVO Server : Panda



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# Monitoring EVO



is mandatory to use EVO. On Linux the installed ver

Register

Profile

Start

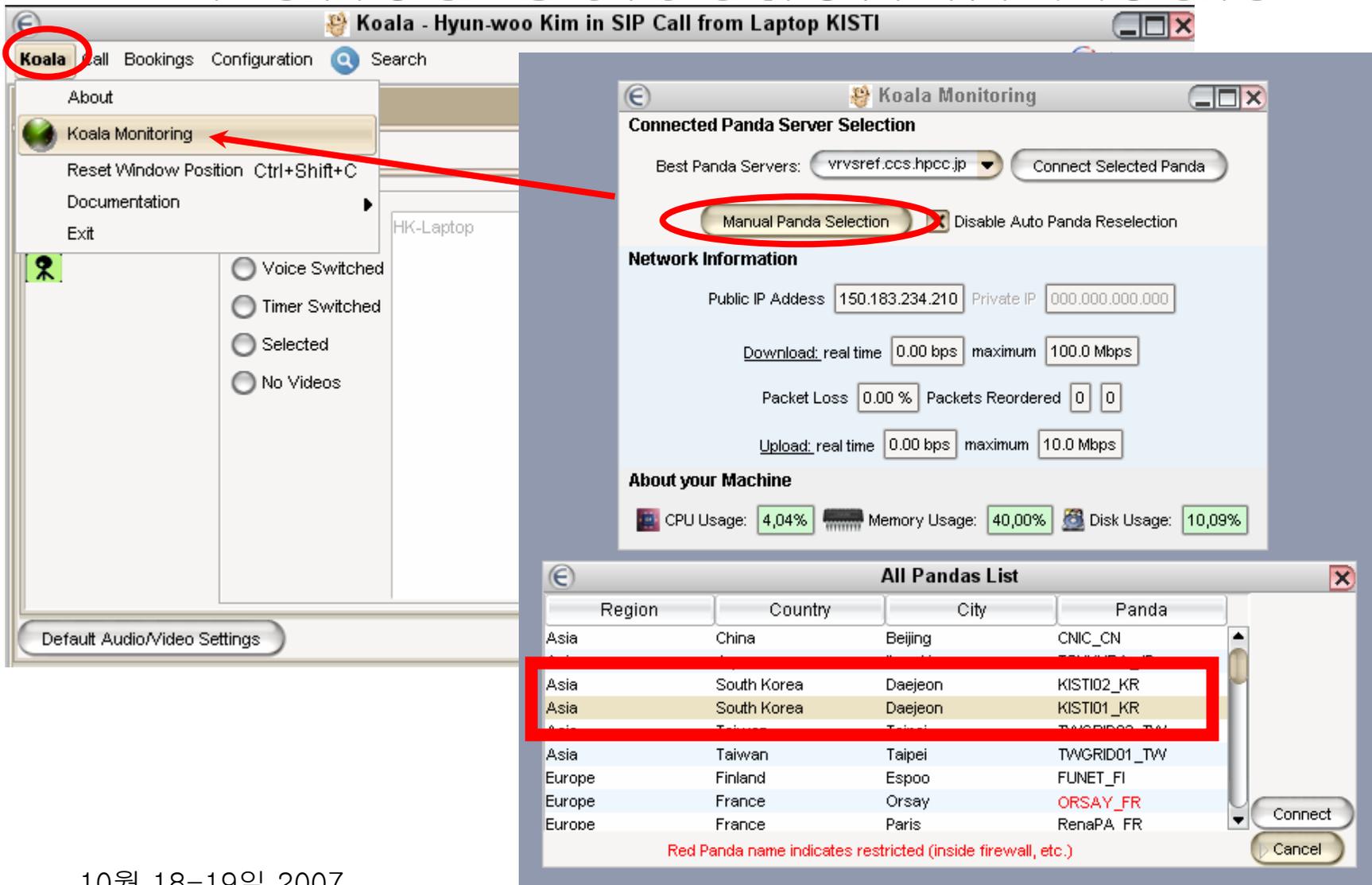
Monitor

Documentation

Can't remember your login/password?

Feedback/Help  
F.A.Q.

# Panda Selection in Koala



**Koala** Call Bookings Configuration Search

About  
Koala Monitoring  
Reset Window Position Ctrl+Shift+C  
Documentation  
Exit

HK-Laptop

Voice Switched  
Timer Switched  
Selected  
No Videos

Default Audio/Video Settings

**Koala Monitoring**

Connected Panda Server Selection

Best Panda Servers: vrvsref.ccs.hpcc.jp Connect Selected Panda

Manual Panda Selection  Disable Auto Panda Reselection

Network Information

Public IP Address: 150.183.234.210 Private IP: 000.000.000.000

Download: real time 0.00 bps maximum 100.0 Mbps

Packet Loss 0.00 % Packets Reordered 0 0

Upload: real time 0.00 bps maximum 10.0 Mbps

About your Machine

CPU Usage: 4,04% Memory Usage: 40,00% Disk Usage: 10,09%

**All Pendas List**

Region	Country	City	Panda
Asia	China	Beijing	CNIC_CN
Asia	South Korea	Daejeon	KISTI02_KR
Asia	South Korea	Daejeon	KISTI01_KR
Asia	Taiwan	Taipei	TWGRID00_TW
Asia	Taiwan	Taipei	TWGRID01_TW
Europe	Finland	Espoo	FUNET_FI
Europe	France	Orsay	ORSAY_FR
Europe	France	Paris	RenaPA_FR

Connect  
Cancel

Red Panda name indicates restricted (inside firewall, etc.)

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# Summary

- KISTI HEP in e-Science (e-HEP)
  - Data Production : Remote Shift Room
  - Data Processing
  - Data Publication : EVO
- First Korea EVO server (Panda) at KISTI
- In operation since August 2007
- Hopeful to be helpful for Korean LHC and other HEP communities!