

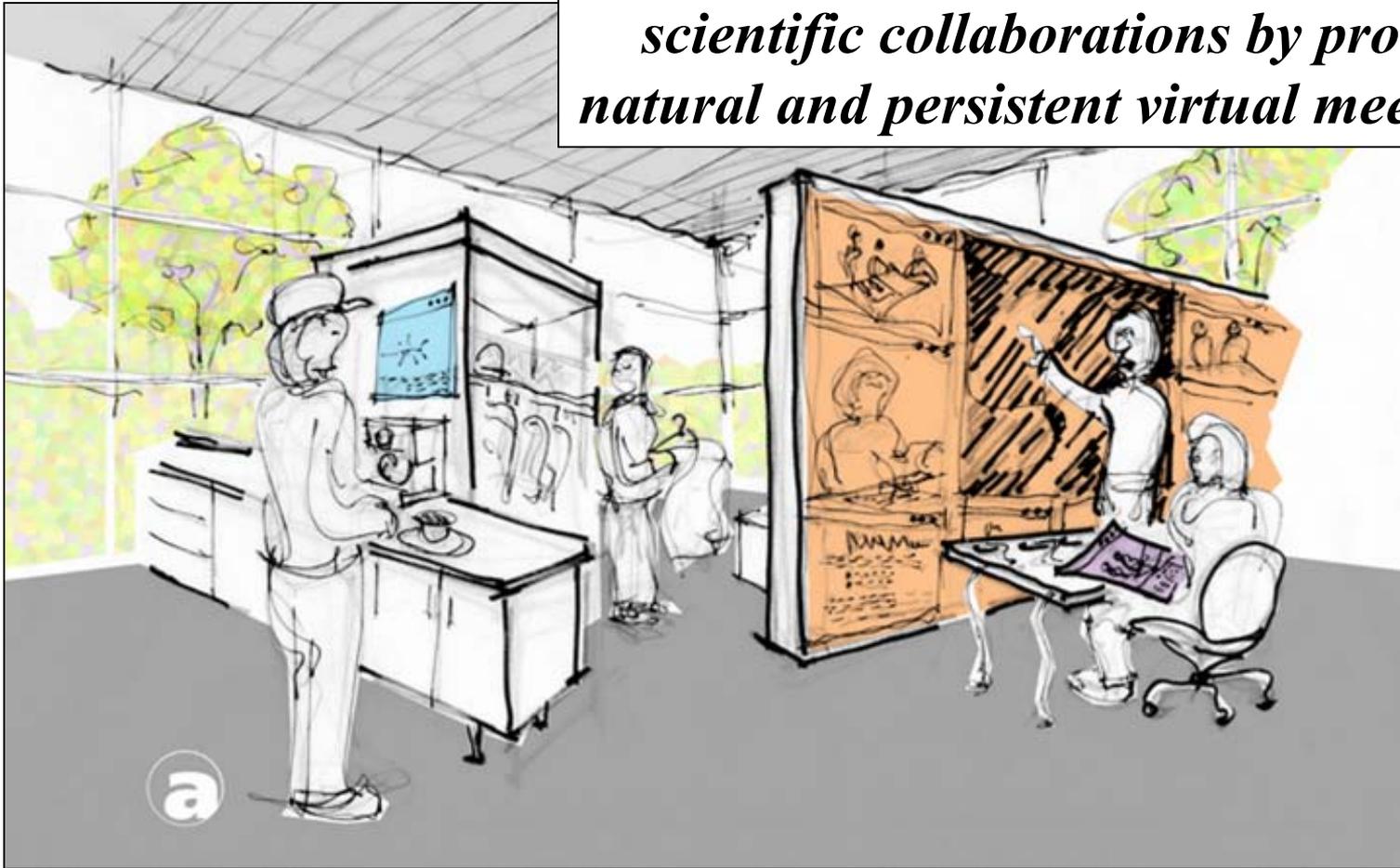
Access Grid User Overview

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Project Goal

Improve the effectiveness of distributed scientific collaborations by providing a natural and persistent virtual meeting space



Project Goal

- Support group-to-group collaboration over the Internet
 - Target sites from 2 to 20 people
 - 10 to 20 participating sites should be possible
- Explore advanced collaborative environments
 - High resolution displays and video
 - Sophisticated audio system
 - Integrated visualization
 - Incorporated Grid technologies
- Use of spatial metaphors
 - Intuitive model for navigation and resource organization
- Platform for scientific collaborative tools
 - Allow researchers to build their own tools on top of the Access Grid



Node: A Dedicated Access Grid Space



Argonne Workshop Node:

- Three projectors
- Two speakers
- Four cameras
- Three microphones
- Video display machine
- Audio/video capture machine
- Echo cancellation hardware



Access Grid Sites Around the World

Australia

Austria

Belize

Brazil

Canada

Chile

China

Christmas Island

Colombia

Czech Republic

Denmark

Finland

France

Germany

Greece

Hong Kong

Hungary

Iceland

India

Ireland

Israel

Italy

Japan

Korea (South)

Malaysia

Mexico

Namibia

Netherlands

New Zealand (Aotearoa)

Norway

Oman

Philippines

Poland

Portugal

Romania

Russia

Samoa

Singapore

Slovenia

Spain

Sweden

Switzerland

Taiwan

Thailand

United Kingdom

United States

Venezuela

Total = 47 countries



Access Grid Global Communities

European Access Grid (<http://euroag.accessgrid.org>)

Asia Pacific Access Grid (<http://www.ap-accessgrid.org/>)

Access Grid Korea (<http://www.accessgrid.or.kr>)

Access Grid Canada (<http://www.accessgrid.ca/>)



Example Deployments

- Scientific Workspaces of the Future (NSF)
 - Scientific visualization
- National Fusion Collaboratory (DOE)
 - Efficient use of existing experimental facilities
 - Integration of experiment, theory, and modeling
- Advance Biomedical Collaboration Project (NIH)
 - Immersive collaboration
 - Distance education



SARS Combat Task Force

<http://sarsgrid.nchc.org.tw>

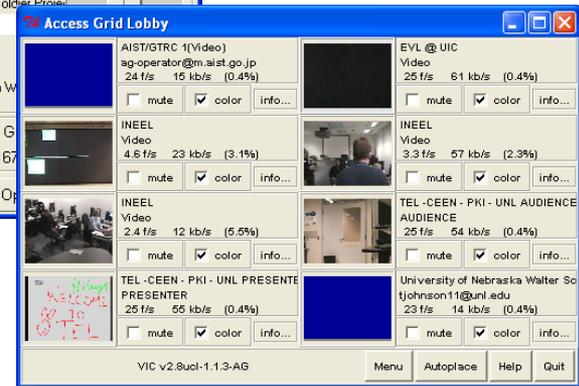
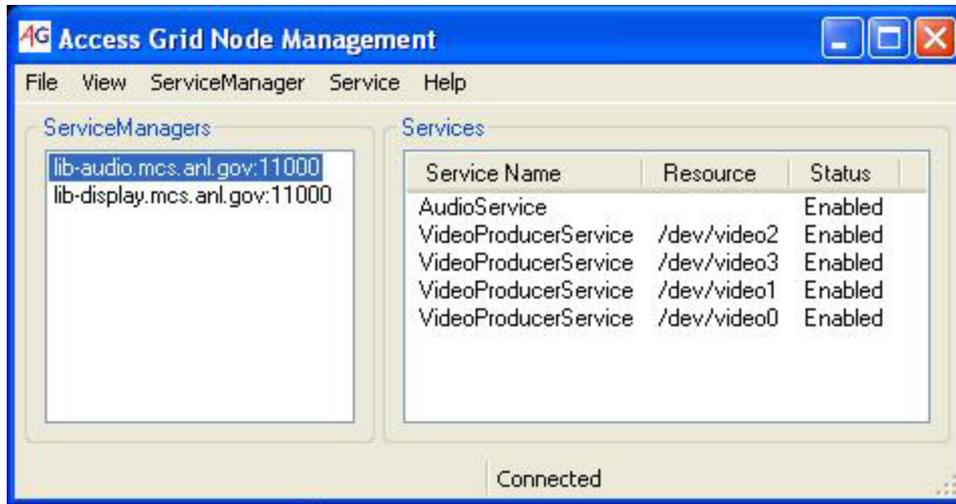
- Access Grid enabled radiologists all over Taiwan to remotely review patients x-rays.
- Access Grid nodes installed:
 - Sanchung Hospital
 - Chang Gung Memorial Hospital
 - Taiwan's Center of Disease Control
 - Taipei Municipal Jen-Ai Hospital
 - Operational in 10 medical centers



Software: Venue Client

The screenshot displays the 'Venue Client' application window. At the top, there is a menu bar with 'Venue', 'Preferences', 'My Venues', and 'Help'. Below the menu is a browser address bar containing the URL 'https://ivs.mcs.anl.gov:9000/Venues/default'. The main content area is titled 'Venue Server Lobby' and is divided into two panes. The left pane, labeled 'Exits', lists several lobby categories: Air Transport Members Lobby, Businesses Lobby, Commercial Organizations Lobby, Cooperative Associations Lobby, Credentialed Professionals Lobby, Educational Institution Lobby, and Geographic Lobby. The right pane is divided into sections: 'Participants' (listing Argonne Workshop and Susanne @ Argonne), 'Data' (listing DataStoreClientAPI.pdf, DevelopingSharedApplications.ppt, and VenueClientManual.doc), 'Services' (listing Google), and 'Application Sessions' (listing AGJuggler launcher, Shared Browser, Shared Presentation, and VenueVNC with their respective timestamps). At the bottom of the window is a chat window with a text input field containing 'Hello, how are you do' and a 'Display' button. Below the chat window, a status bar indicates 'Argonne Workshop entered the venue'.

Software: Node Management



Library Node Configuration:

- **lib-audio:**
 - *Audio Service* controlling RAT (Robust Audio Tool)
 - *Video Producer Service* sending video via VIC (Video Conference Tool)
- **lib-display:**
 - *Video Consumer Service* receiving video via VIC

Software: Certificate Management

What is a certificate?

The AG uses certificates to identify users and services.

- Identity
- Anonymous
- Service

How do I get a certificate?

Request from the AG Certificate Authority free of charge. Takes at the most two business days.

Request Certificate - Step 3 of 4

Enter Your Information

The name fields should contain your first and last name; requests with incomplete names may be rejected. The e-mail address will be used for verification; please make sure it is valid.

The domain represents the institution you belong to; it will default to the hostname part of your email address. The domain will be used for verification; please make sure it is valid.

The passphrase will be used to access your generated certificate after it is created. You will need to remember it: it is not possible to determine the passphrase from the certificate, and it cannot be reset.

First name: Last name:

E-mail:

Domain:

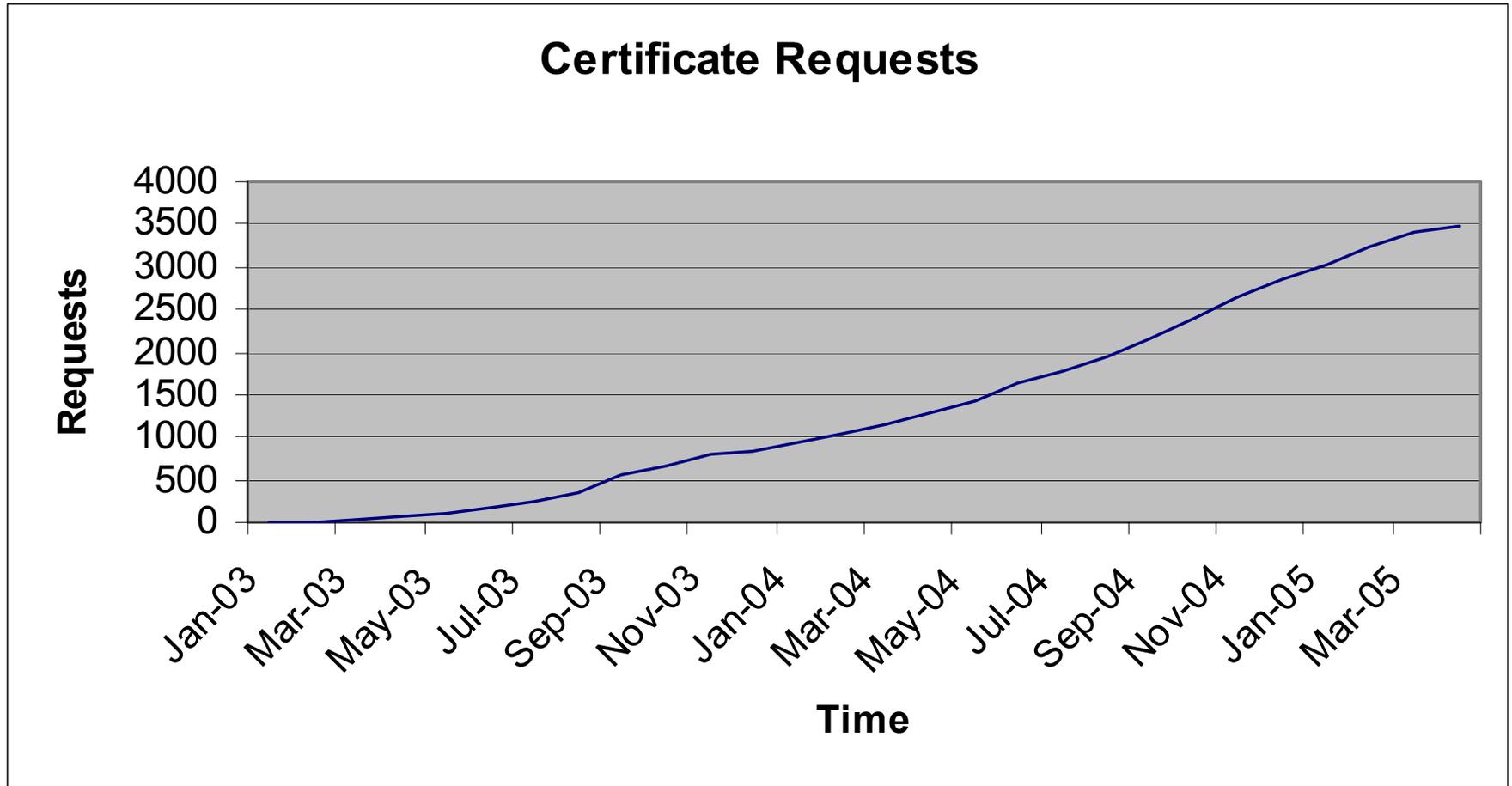
Passphrase:

Retype passphrase:

< Back Next > Cancel

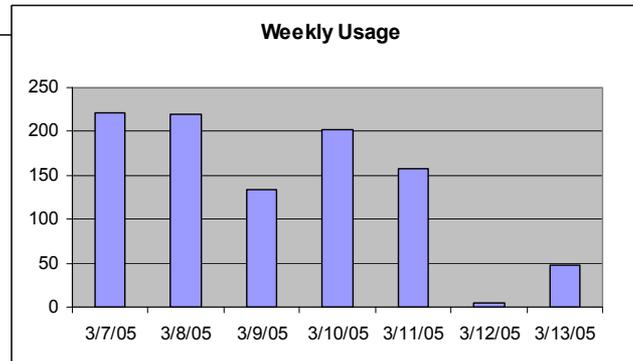
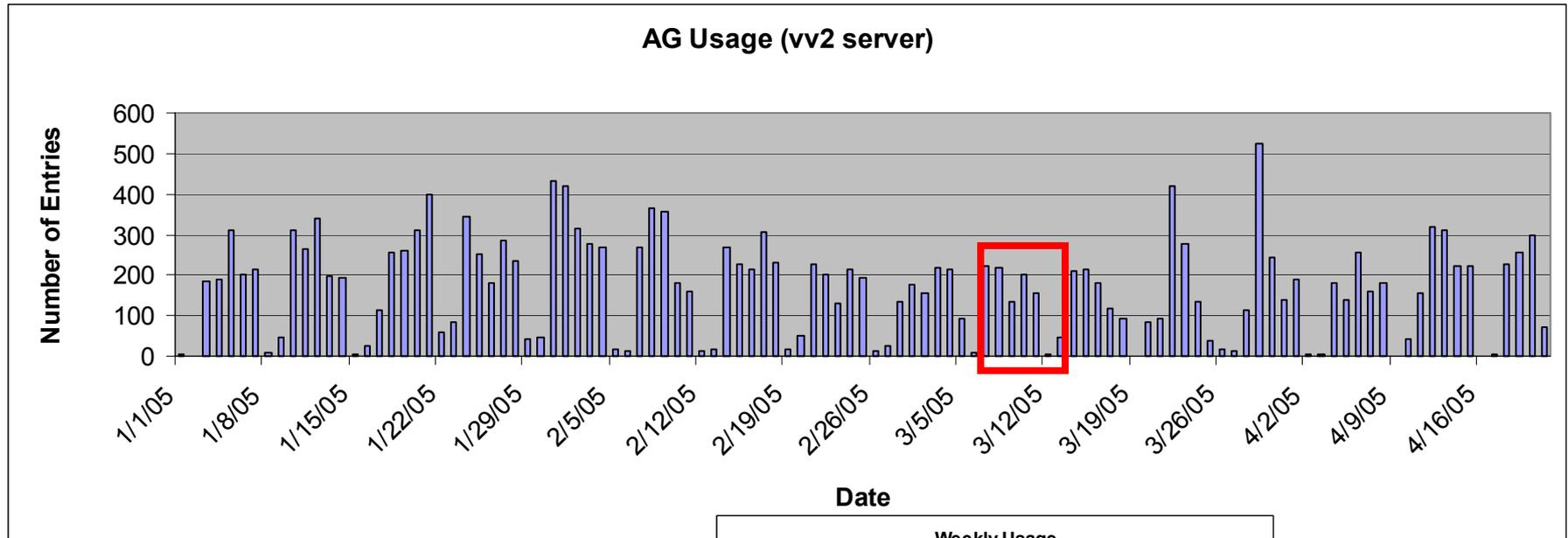
Access Grid Growth

Total number of certificate requests (Jan 03–Apr 05) = 3461



Access Grid Usage

Entries into virtual spaces (Jan 05–Apr 05)



Scheduling

- AGSchedule is developed by NCSA to make organizing meetings on the Access Grid easier and more automated.

<http://agschedule.ncsa.uiuc.edu/>

The screenshot shows the NCSA AGSchedule website in a Microsoft Internet Explorer browser window. The address bar shows the URL <http://agschedule.ncsa.uiuc.edu/default.asp>. The page features the AGSchedule logo and a navigation menu with links for Home, View Calendar, Schedule a Meeting, AG Directory, Tour, and Register. A 'Login' link is also present. The current date is 4/20/2005, and the time zone is set to Central. The page displays a calendar for April 2005, with the 20th highlighted. Below the calendar is a 'Today's Lineup' section listing various meetings and seminars, including 'Sarah Sullivan PsyGRID', 'Strongly Interacting Quantum Gases', 'DialogPlus Project Meeting', 'General CS Meeting (LSU-CCT)', 'Astro Seminar', 'LEAD Meteo Meeting', 'TeraGrid GIG Directors meeting', 'Advanced Architecture and Language Theory', 'Advanced Graphics', 'AG demo to LSUHSC Business Managers', 'LSU - Univ. of Iowa, Joint Topology Seminar', 'SCOOP', 'NSF Informational Meeting on Broadening Participation in Computing program solicitation', 'CCS Wednesday Seminar Series', 'Evolutionary Computing', 'Touch Project Meeting', 'HPC course', 'faculty meeting', and 'Human-Computer Interaction'. A section for 'First Time Users - Take the Tour!' is also visible at the bottom.

Documentation

- Access Grid Documentation Project (AGDP)
<http://www.accessgrid.org/agdp/>
- Venue Client Manual



More Information

- The Access Grid web pages at Argonne:
 - <http://www.mcs.anl.gov/fl/research/accessgrid>
- The Access Grid community web pages:
 - <http://www.accessgrid.org>

