

Report of JGN2 osaka

-Forwarding a Greeting Speech of PRAGMA
from Thailand using Tiled display solution



JGN2 researcher center , Osaka
YANG SHUO



About JGN2

Result of JGN2

Research of basic grid technology

- access control technology for dynamic site corporation
- QoS control technology for large-scale data transfer

theme: Grid technology is important to E-science

- The platform of large-scale data processing, sharing, and making to visible is important
- standardization is necessary through coordination and experiment with international community

Visible technology under network environment

Correspondence
method

using Tiled display and make a internal activity with
researchers at other country

*Key role To next
generation E-science*

What is the Tiled Display

Tiled Display...The multi display monitors which are arranged in Tiled

Feature

- Large high-resolution and increased physical size
- Extend the using field by cooperating with broadband network
 - cooperation with cluster computers
 - Sharing of data
 - Sharing of image

Use of grid、
QoS
technology

As a base of Tiled Display

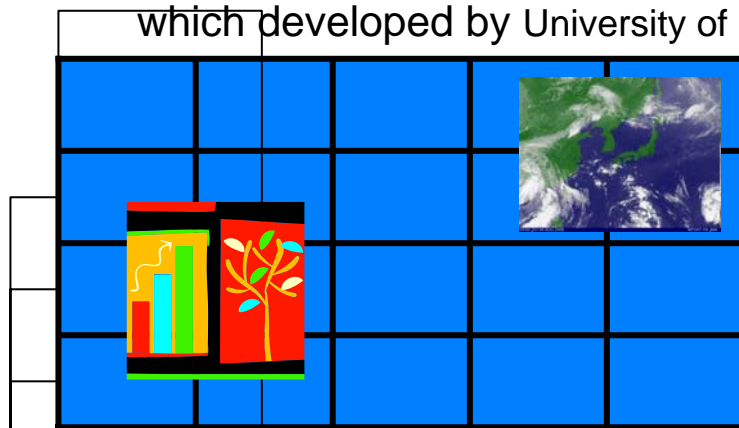
↓
SAGE



SAGE and Tiled Display

SAGE: Scalable Adaptive Graphics Environment (<http://www.evl.uic.edu/cavern/sage/index.php>)

which developed by University of Illinois at Chicago. Electronic Visualization Laboratory



feature

- distribute technology
- heterogeneous and scalability
- range from a single computer to the cluster computer.

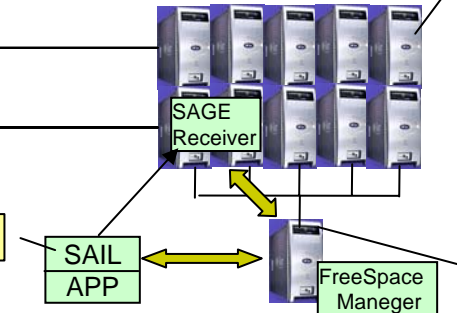
Display control server

each sun workstation control two LCD displays. SAGE Receiver receive the stream from Sail and indicate in tiled display

Management server...control the all of system

FSManager in Management server control the all components of system

Caputring the drawing



SAIL: Sage Application Interface Library

VLC and SAGE

- VLC:VideoLAN Client

- media player

a highly portable multimedia player for various audio and video formats(MPEG-1, MPEG-2, MPEG-4, DivX, mp3, ogg, ...) as well as DVDs, VCDs, and various streaming protocols.

- Stream server

It can also be used as a server to stream in unicast or multicast in IPv4 or IPv6 on a high-bandwidth network.

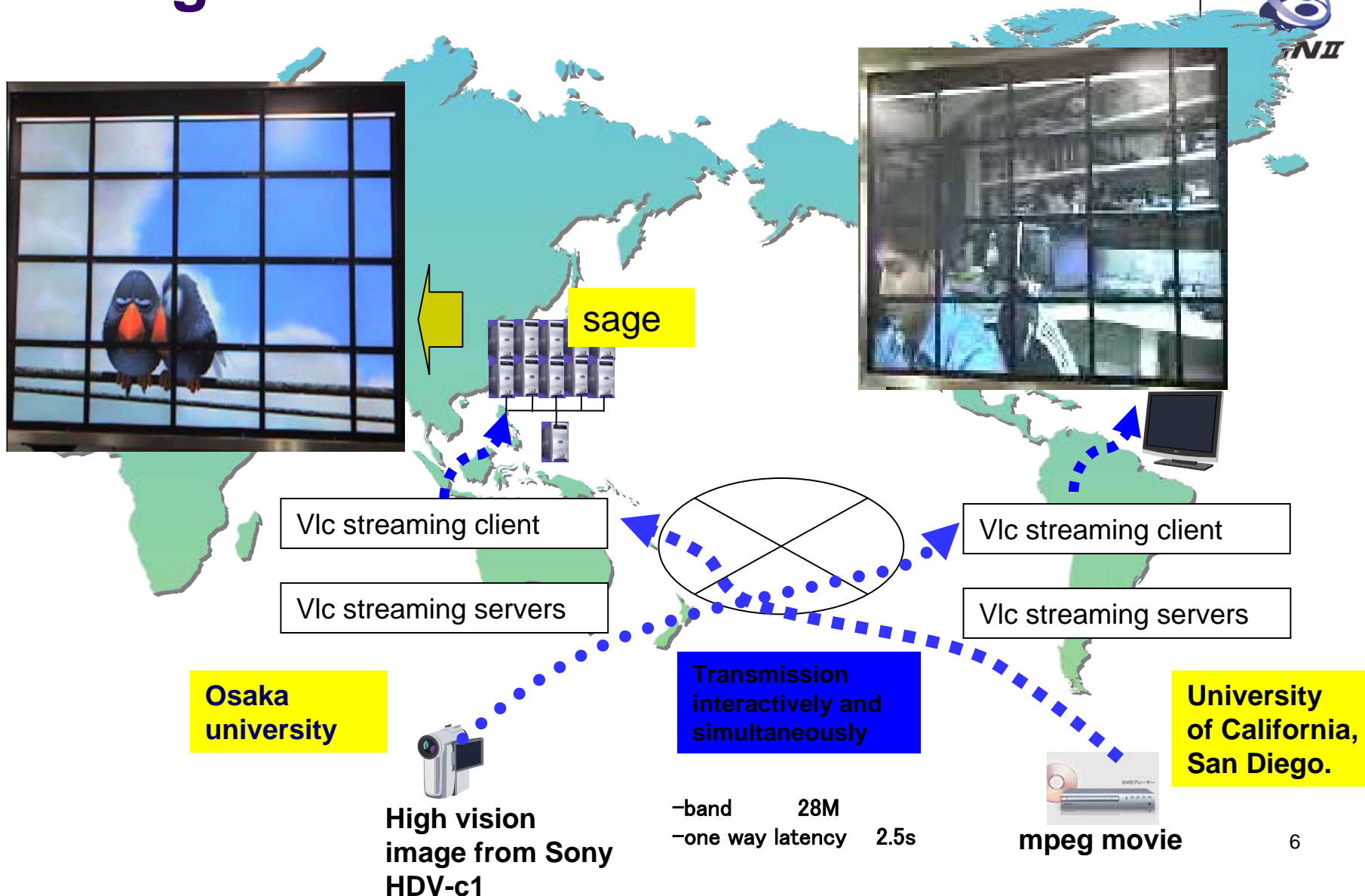
<http://www.videolan.org/>

- VLC on SAGE

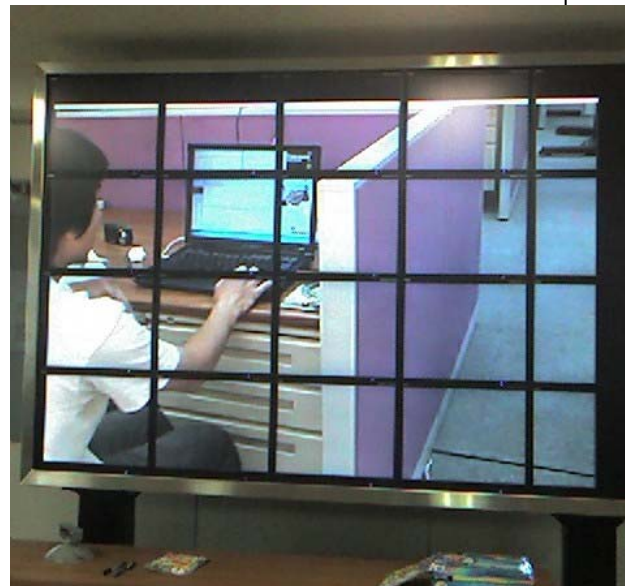
- VLC can be easily modified to pass its output to SAGE by intercepting the framebuffer that VLC creates with its output module

http://research.calit2.net/gems/vlc_sage/VLC_SAGE.html

The test UCSD⇔Osaka(9/21 JST) Using VLC+SAGE



Experiment between NCHC and Osaka Univ.



Vlc streaming client

Vlc streaming server

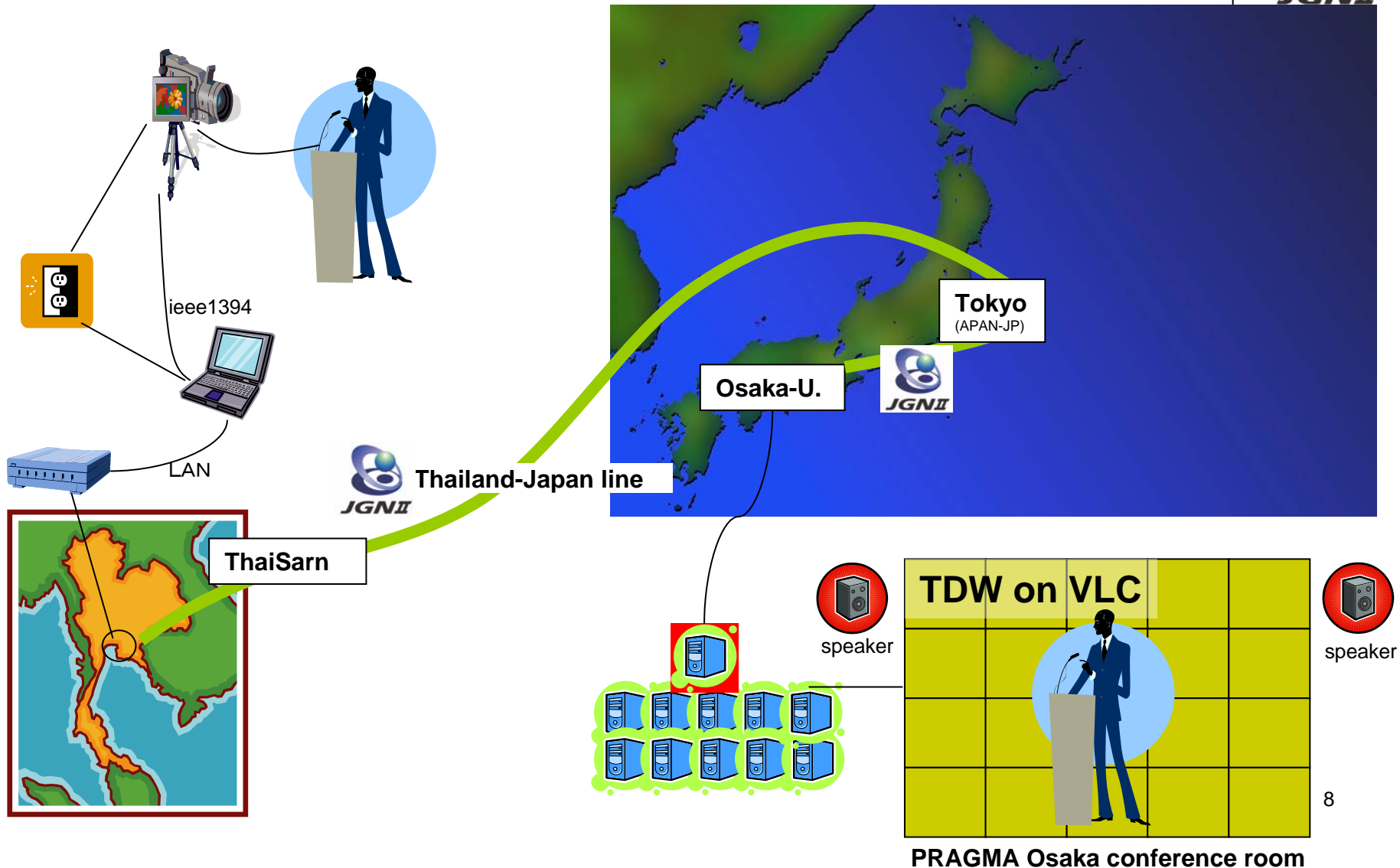
Vlc streaming client

Vlc streaming server

National center for high-performance computing of
TaiWan (NCHC)

Osaka
university

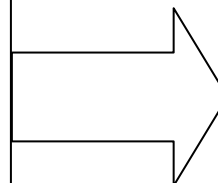
Forwarding a PRAGMA Greeting Message by Osaka Univ. President from Thailand USING JGNII TH-JP line.



Problem and future

Make a common foundation for e-science

- Resolve the difficulty setting problem and user interface problem
command → GUI
- Attestation and security
Setting by manager of each access point → single sign on
- Promotion of standardization
Various TWD system → Achievement of cooperation through standardization
- Efficient use of network (QoS)
Network traffic problem caused by cooperation → find and resolve the problem



The role of JGN2

Contribute to the cooperation with international related organization and the Promotion of experiment

JGN2/Osaka-U.

SDSC

NECTEC

NCHC



THANK YOU !