



Global Lambda Integrated Facility

Global Arts and Media Experiments

Artur Serra Fundació i2cat

CERN, Geneve October 14th 2010

1. The Internet of Arts and Artists...

How a cultural anthropologist see the Internet evolution?

- Ist. 1970s-80s The Internet of the computer scientists and technological people (email,ftp,telnet,...) (6 M personas)
- 2nd. 90s-2010s The Internet of scientists and literated people. (WWW, Grid, Blogs, Wikipedia...). (1000 M people)
- 3rd. 2010s-2030s The Internet of artists and vocal and visual communities. (VoIP, HD,videoconf,...) (6.000 M personas)

Advanced Internet and Arts

eArts, eCultures Media: HD/3DVideo/Visualization/Telepresence

eScience Computation: Supercomputació/GRIDs/Clouds

> Research Networking: Lambda Networking,4G...

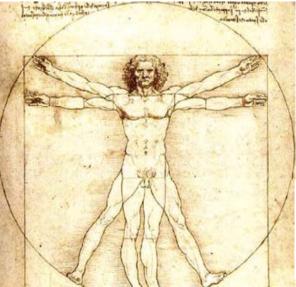
Digitalization of traditional arts

(Performing arts Cultural heritage,...)

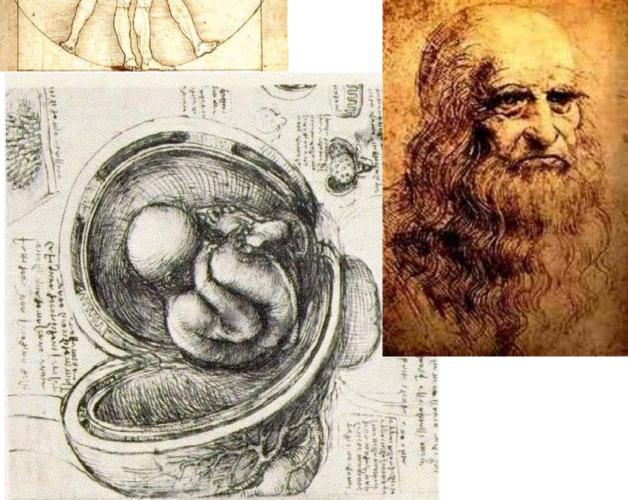
e-Arts

New forms of art

Performance art,Videoart, Netart,videogames, serious games,...



After 500 years





2. Different approaches

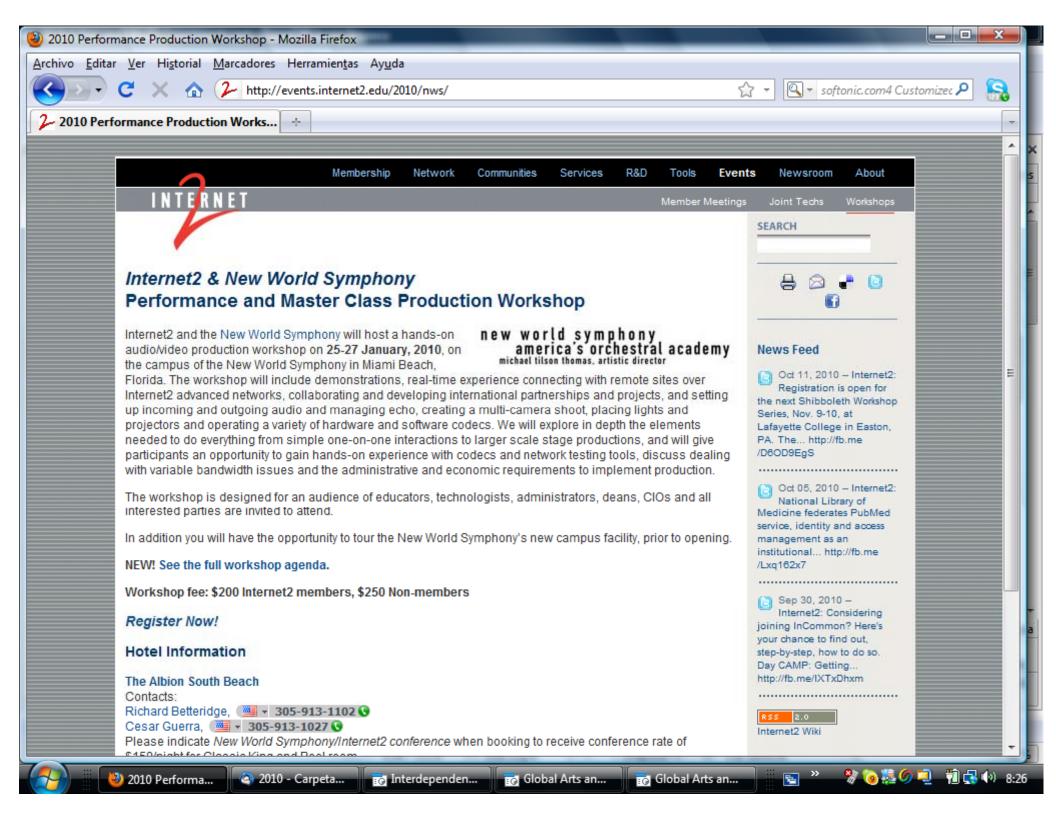
a). The University approach.

Internet 2, Arts and Humanities Initiatives at Universities 1998. Seattle



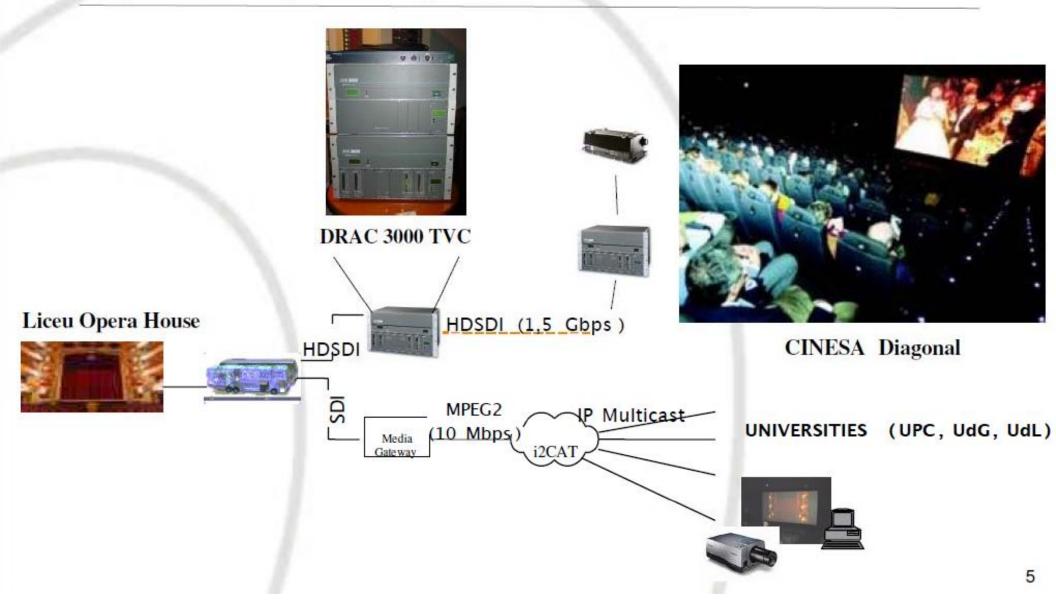
Characteristics

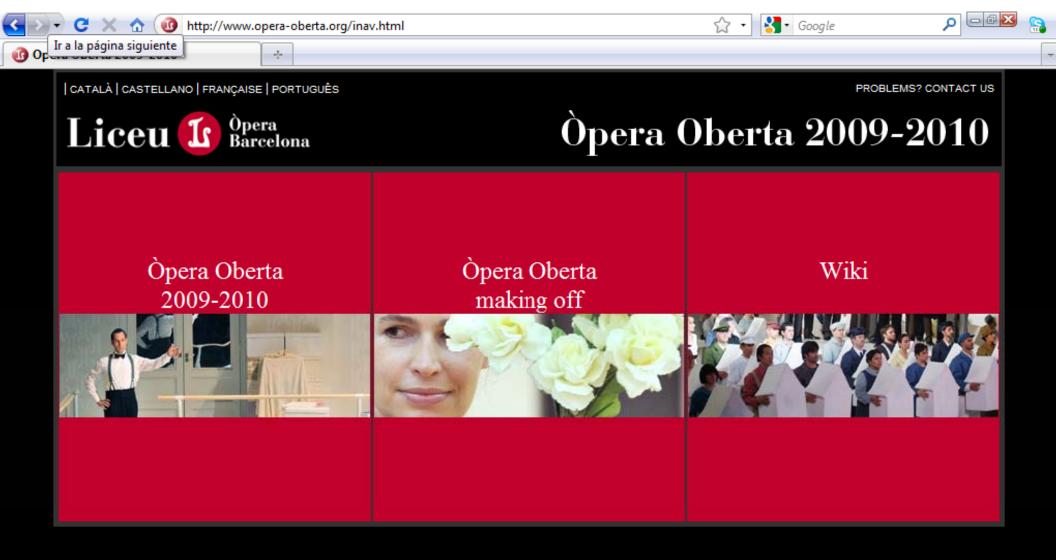
- Leadership from Fine Arts schools from Universities
- University to University communication
- Master classes,
- Interactive demonstrations,
- Relatively low bandwidth (around 100 mbps)
- Strong support from IT academic services





Open Opera (2001)







Dança Telemàtica Univ. Bahia Prof. Ivani Santana RNP









GARR will host the <u>TERENA</u> and <u>Internet2</u> hands-on audio/video production workshop that will be held on **13-15 July 2009**, at the <u>Music Conservatory of Trieste</u>, Italy. The workshop is meant to be the first in a series of annual events emphasising the equipment and staffing requirements for interactive performing arts education, multi-site performance events, and high quality netcasting over advanced networks.

The main target of the workshop are people from institutions which produce events in the performing arts area (music schools and academies, dance academies, arts academies, ...) and want to explore the new possibilities and challenges that advanced education and research networks can offer them and their institutions. More over also people involved in audio/video production in other areas can greatly benefit from the presentations, and practical "hands on" sessions with edge advanced applications and services.

The Performing Art Production Workshop feedback form is online at: http://www.servizi.garr.it/index.php?option=com_chronocontact&chronoformname=PAPWSfeedbackform



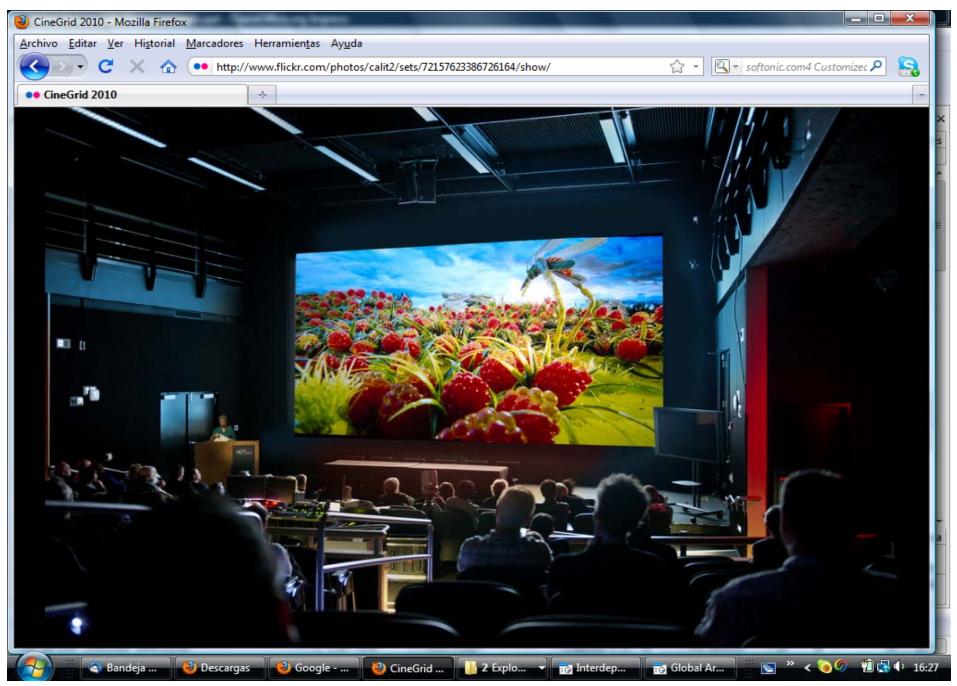
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b). The Technologist's Approach

CINEGRID (2006)



Cinegrid

- Visionary approach from technology
- Technology push: more bits, more bandwidth, "very high quality media over photonic networks"
- Virtual reality, telepresence, 4k,8k and beyond
- Strenght in scientific visualization.
- Cinegrid Exchange: Amsterdam, Chicago, Monterey, Prague, San Diego, Tokyo, and Toronto
- Interest from technological companies

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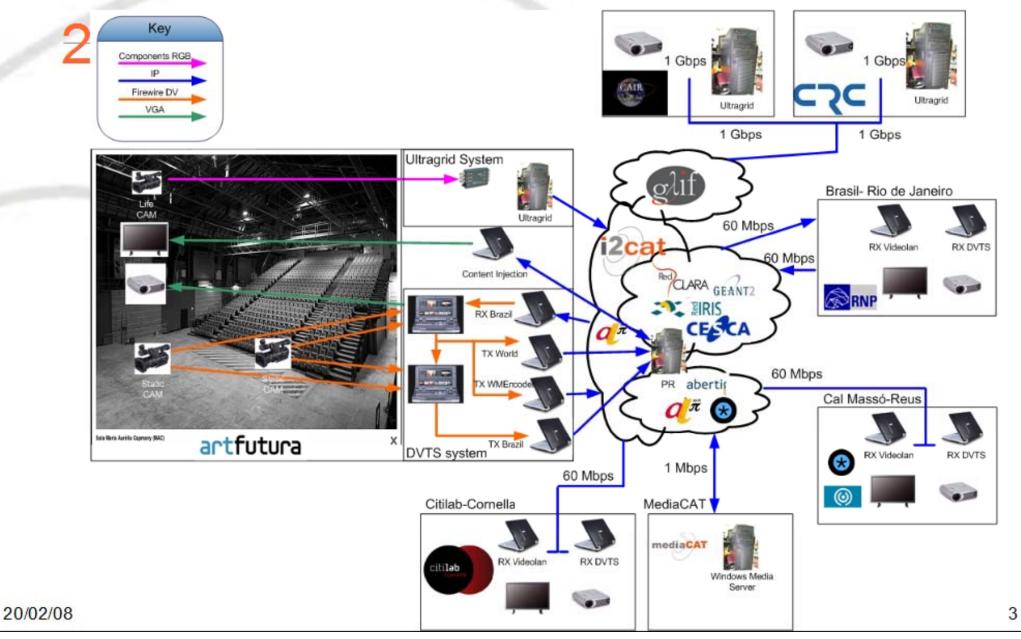
Cultural Ring/HPDMNet - ART FUTURA 2007

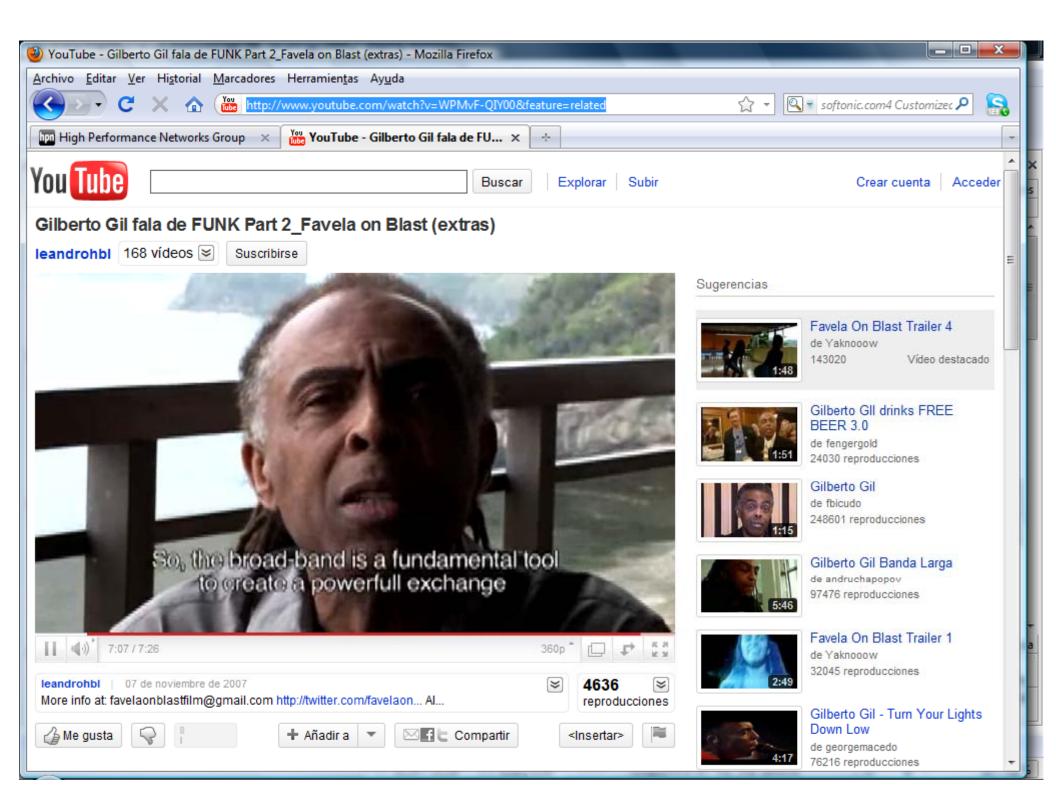
Music performance from Brazil





Cultural Ring – ART FUTURA





c). The Community Approach

Opening the RNs

Traditionally:

- few people using high bandwitdh,
- many people using low bandwitdh.
- Science and technology are at universities and research centers.

New reality:

- Many people using high bandwidth
- Many people can experiment with high bandwidth
- Arts and media experiments are in and out of Universities and research centers

The Anella Cultural, the Cultural Ring (2006-2008)

The user-driven innovation to Internet of arts

The team







Xarxa d'activitats culturals



Sponsors

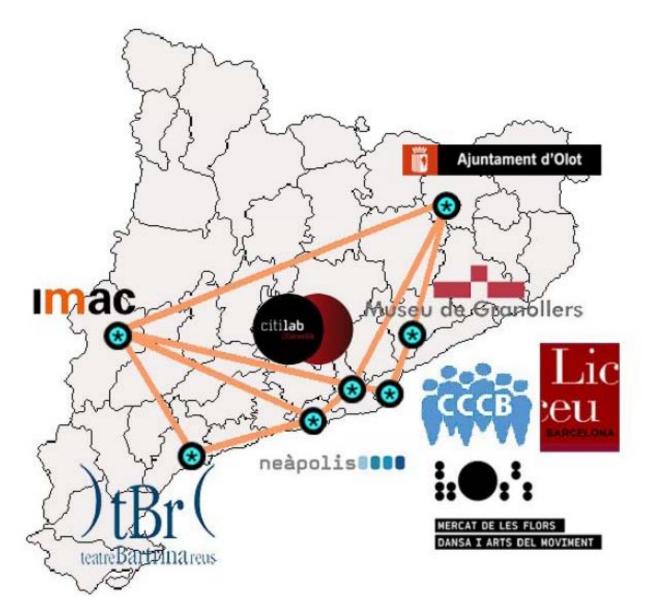




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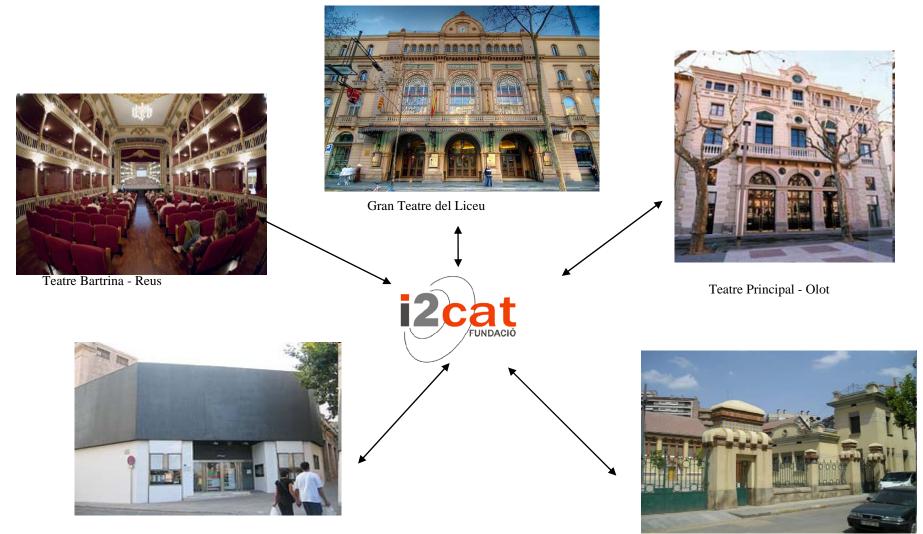
La Anella Cultural The Cultural Ring



La Xarxa Transversal: a network of cultural programmers in cities



1. Connecting cultural centers



Teatre Monumental - Mataró

Teatre de l'Escorxador - Lleida

•IP network, from 5Mbps to 1Gbps symmetrics

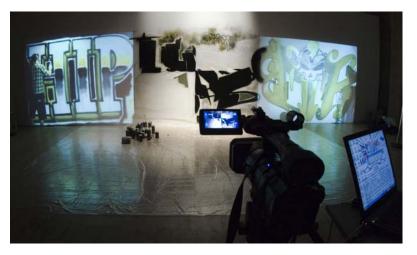
2. Transforming into media studios

- 2 portable PCs
- 1 audio card
- 1 HD projector
- Power amplifier
- Audio system.
- Audio mixer.
- Sony Anycast station



3. Sharing cultural events







Poetry festivals Guided tours Master Class Workshops Courses Conferences Artistic performances

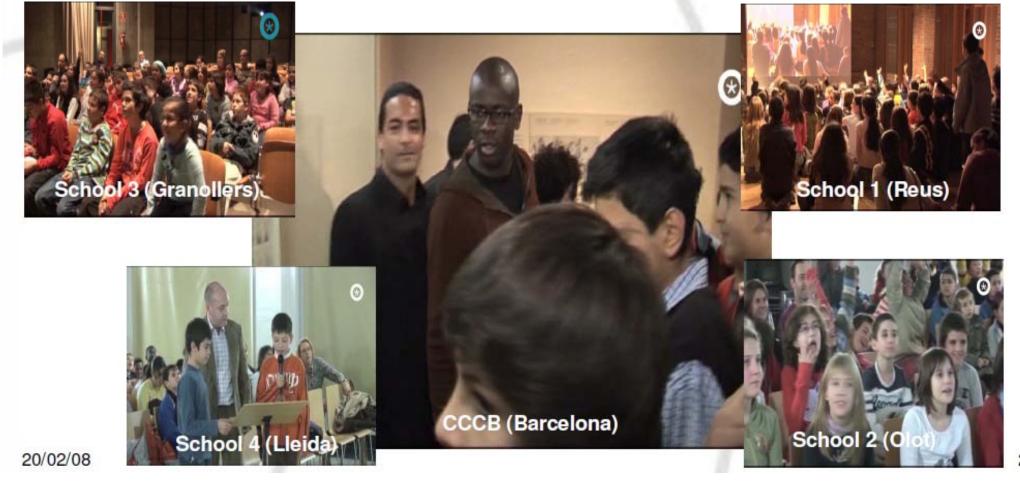
"Difussion is where technology offers major opportunities to the opera in the XXI century" J. Matabosch.



Cultural Ring – Apartheid Exhibition 2008

 Format: Exposition transmitted via I2 by Thuran (Barcelona soccer player)





MUSICLab



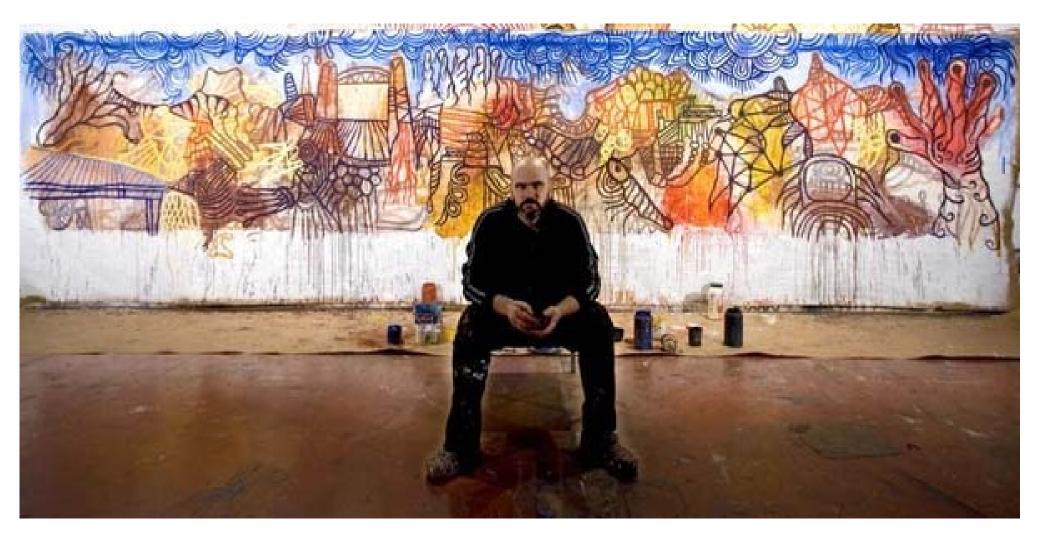




Metamembrana 2008, Exploring new art formats

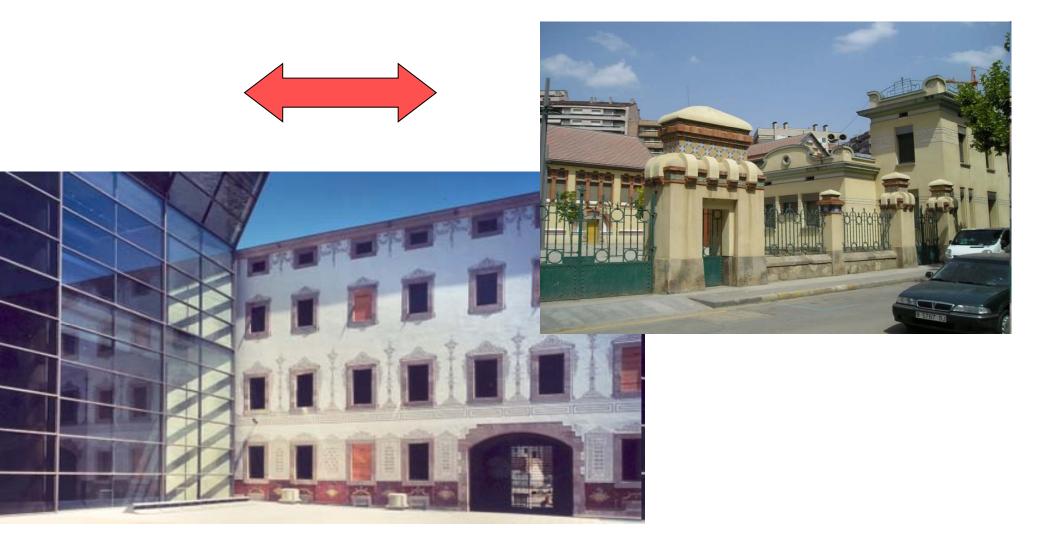


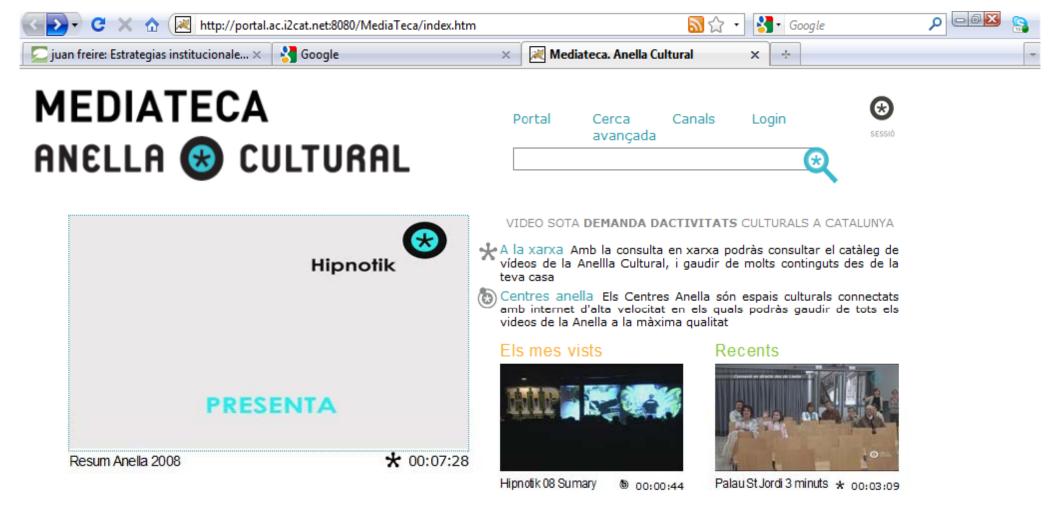
Marcel.lí Antunez





The main lesson: sharing muldirectional communication between cultural centers









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Poesia



3 minuts palau Sant Jordi: 00:03:09

Anilla Cultural Latinoamerica-Europa 2009-2010...



Dirección de contenidos:



Dirección tecnológica



Opening RNs in LA and Europe for Arts and Media experiments



Participants



MAC

Museo de Arte Contemporáneo

Facultad de Artes UNIVERSIDAD DE CHILE



Centro Cultural São Paulo

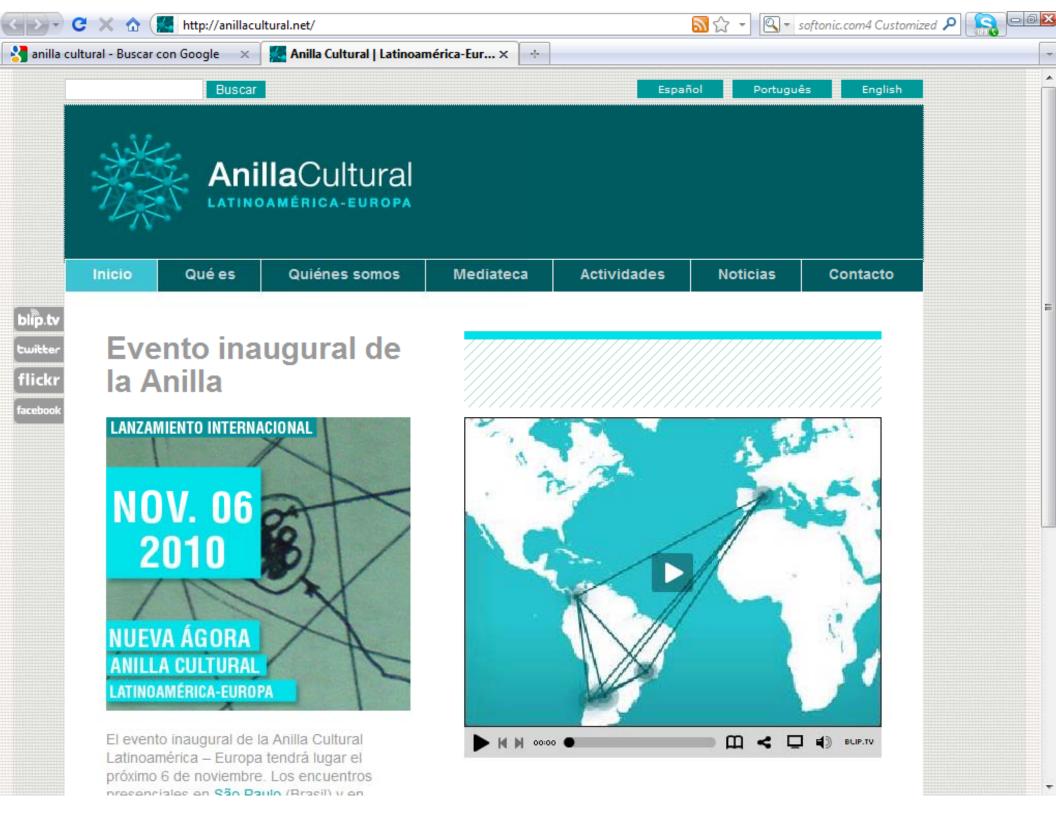


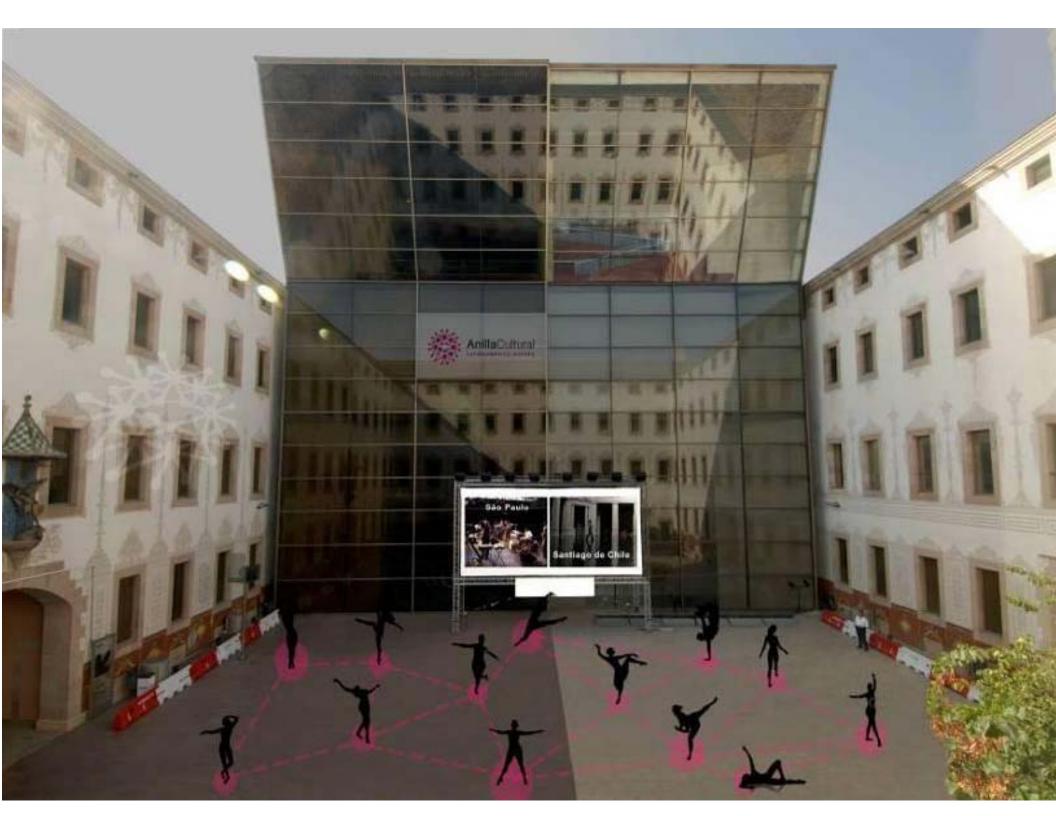




Collaborating institutions

RNP	REINA	PIRIS
	UNIVERSIDAD DE CHILE	ANELLA CIENTÍFICA
ССС	A STORE AND A DE CHILE	INNOVA RED Red Nacional de Investigación y Educación de Argentina
	UNIVERSIDAD DE ANTIOQUIA 1803	







Centro Cultural Sao Paulo, Brasil



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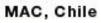
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CCEC, Argentina



MdA, Colombia





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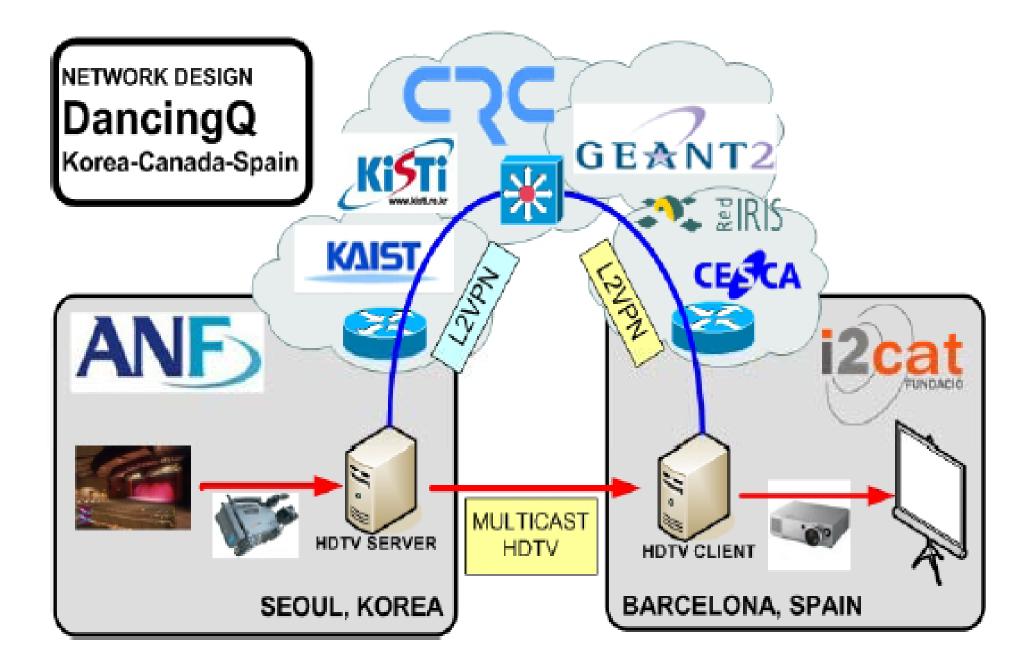


AnillaCultural

Next steps...

TEIN3 workshop in Daejeon, Korea

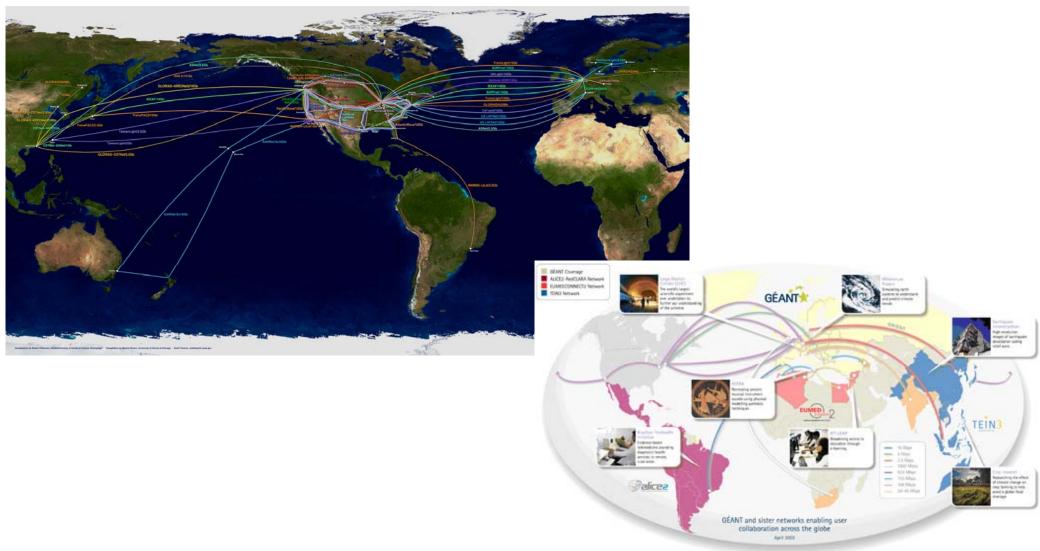
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🚺 Es	stá viendo este doo	cumento en modo PDF/A.				
2010 Application Workshop on TEIN3 Network Title: Cultural Heritage of Performing Arts over Future Internet Date: October 20th(Wed)~21st(Thu), 2010 Venue: Fusion Hall in KI Building(E4) at KAIST, Korea Host: KAIST Institute for Entertainment Engineering in KAIST, Korea						
		Time	Track			
	October 20th(Wed), 2010 Application Workshop on TEIN3 Network					
		14:00~14:30	Registration			
		14:30~14:40	Greetings Prof. Sungyong Shin (KAIST, Korea)			
	Session 1: Performing Arts over Future Internet Session chair: Fco. Javier Iglesias (i2cat, Spain) - TBC					
		14:40~15:10	 Future Internet as a New Media Platform for Performing Arts Daeyoung Kim (CNU, Korea) 			
		15:10~15:40	 EU-Asia Cultural Heritage Portal (CHIP) of Performing Arts: The Need for a Sustainable Future Faridah Noor Mohd Noor (Chair of APAN eCulture WG, Malaysia) 			
	15:40~16:00		Coffee Break			
		Special Session: Keynote Speech & Korean Music Performance Session chair: Daeyoung Kim (CNU, Korea)				
		16:00~16:50	• TBD Artur Serra (i2cat, Spain)			
		16:50~17:10	Introduction to Korean Music Younga Jaegal (Paichai Univ., Korea)			
%		17:10~17:40	 Reception Performance (Daejeon Yonjeong Institute, Korea) Pansori / Daegeum Sanjo / (Remote/Flamenco - TBD) 			
R		17:40~18:00	Break			
Ø		18:00~20:00	Banquet	-		
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HD Dancing Q from Seoul to Mercat de les Flors in Barcelona. 2005



Global Cultural Ring: Conecting Arts communities through Global Research Networks



Concluding remarks

Three approaches to e-Arts and Media experiments: the university one, the technologist and the community-based.

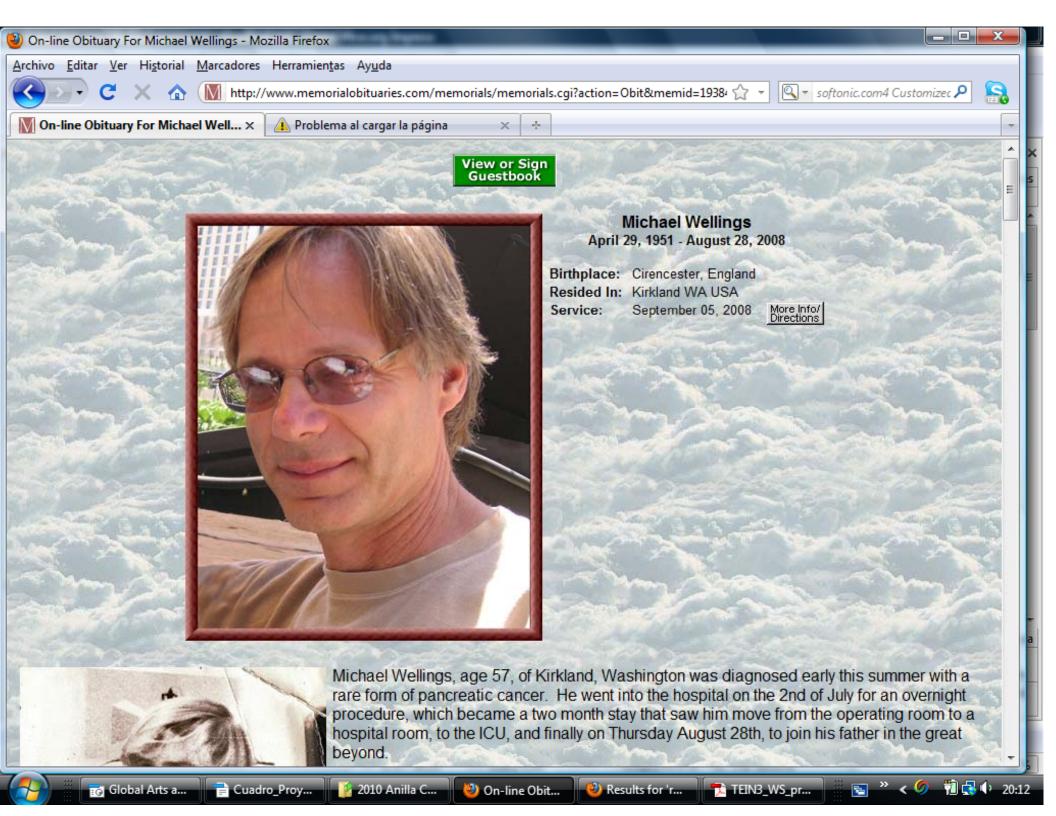
None of them is perfect. They respond to different contexts and settings.

Blending arts, science and technology experiments with our communities may be is the future of Internet as a knowledge network.

HD Gaudi, 2002

First compressed HD live transmissió between Europa-USA over Internet at 270 mbps by i2CAT-Research Channel









Global Lambda Integrated Facility

Thank youuuuu :-) Artur Serra, i2cat,

artur.serra@i2cat.net