

# FEDERICA

Federated E-infrastructure Dedicated to  
European Researchers Innovating in  
Computing network Architectures



FEDERICA  
WWW.FP7-FEDERICA.EU

## LAUNCH EVENT – Lyon, 24 November 2008

Hotel de la Cité Concorde, 15.00 - 20.30

*The European project FEDERICA officially launches on Monday 24 November 2008 with an event featuring speakers from the project and from the European Commission. The launch event will highlight developments that have been made since the project started at the beginning of this year and the infrastructure that will be initially available to researchers. Project participants will be on hand to answer questions.*

*The FEDERICA launch coincides with ICT 2008 (25-27 November) and the 6th e-Infrastructure Concertation Meeting (24 November), also in Lyon.*

## PRESS RELEASE

### Virtualisation project to support Future Internet researchers is looking for users

The FEDERICA (Federated E-infrastructure Dedicated to European Researchers Innovating in Computing network Architectures) project is creating 'slices' of network infrastructure that can be allocated to researchers as virtual resources for experiments. FEDERICA is a two-and-a-half-year European Union-funded project to implement an experimental network infrastructure for testing new networking technologies. The project team is now opening access to users.

The FEDERICA project is creating an experimental testbed that provides a high level of reliability and quality. Network researchers from various disciplines and research groups do not need to be connected physically, but can access their 'slice' from anywhere on the Internet.

An official launch event on Monday 24 November in Lyon, France, featured presentations and demonstrations that highlighted progress made since the project began in January this year. While FEDERICA is only a third of the way through its 30 month lifespan, the project team has succeeded in defining a network architecture and the configuration of PoPs (points of presence) on its substrate, and is on the point of opening the network to users experimenting on the Future Internet.

Users may include network researchers from a range of disciplines across academia and also private sector and European projects. Their research has to not only use the network as a tool, but primarily as the subject of their work, experimenting on new Internet architectures and protocols. The virtual resources at their disposal will allow them to conduct potentially disruptive experiments without any adverse effect on existing production networks.

#### VENUE:

Renzo Piano Room,  
Hotel de la Cité,  
Cité Internationale,  
22 Quai Charles De Gaulle,  
69006 Lyon,  
FRANCE

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**Start** : 1 Jan 2008

**Duration:** 30 months

#### Collaboration with other projects:

GÉANT2  
Phosphorous  
Onelab2  
OGF Europe  
VINI

#### Project participants:

CESNET	CZ
DANTE	
DFN	DE
FCCN	PT
GARR	IT
GRNET	GR
HEAnet	IE
i2CAT	ES
ICCS	GR
Juniper Networks Inc.	
KTH	SE
Martel	CH
NIIF/Hungarnet	HU
NORDUnet	
POLITO	IT
PSNC	PL
Red.es/RedIRIS	ES
SWITCH	CH
TERENA	
UPC	ES

The FEDERICA infrastructure allows multiple research groups to trial new ideas in parallel and on the same physical resources. Each group receives an infrastructure ‘slice’ containing the virtual resources and topology requested.

To ensure optimal and fair technical use, access is granted through a User Policy Board.

The FEDERICA infrastructure is today offering its core resources in four points of presence, in the Czech Republic (CESNET), Germany (DFN), Italy (GARR) and Poland (PSNC). It is connected by Gigabit per second circuits provided by GÉANT2 and national networks, with high performance Ethernet services routers provided by Juniper Networks, Inc. The infrastructure will be extended in the coming months to include nine additional PoPs in Europe, hosted by project partners.

The project depends on global cooperation between researchers, vendors, national research and education networks (NRENs) and GÉANT2, the high bandwidth, pan-European research and education network.

### Next Goals

The second phase of the project will implement a ‘tool-bench’ that will integrate these mechanisms in order to support more automated on-demand allocation of ‘slices’ to researchers. The tool-bench will ultimately enable control of resources across multiple domains, allowing the FEDERICA concept to be extended to communities beyond the European research and education sector, which is the primary target user group.

Furthermore, FEDERICA will liaise with similar infrastructure projects such as the PlanetLab overlay network, the PanLab II project and the USA’s National Science Foundation GENI (Global Environment for Network Innovations) initiative. While the initial testing phase is limited to selected users, the infrastructure will be made available to other EC projects at the end of 2008.

For more information visit : <http://www.fp7-federica.eu>

### ACTIVITIES

#### Networking:

- NA1 Project Management
- NA2 Building consolidating the User Community
- NA3 Standardisation & Liaisons
- NA4 Dissemination & Training

#### Service:

- SA1 Infrastructure Support
- SA2 Operational User Support

#### Joint Research:

- JRA1 Network Control & Management
- JRA2 Novel paradigms & user control

#### OBJECTIVES:

- Develop suitable infrastructure;
- Develop solutions for allocating, controlling & managing virtual network resources in a multi-domain infrastructure;
- Identify users & their needs;
- Provide user training & support;
- Contribute to standardisation
- Disseminate results to NRENs, universities, research institutes etc.