NOVI: Networking innovations Over Virtualized Infrastructures

Testbed Providers’ Guide

Blazej Pietrzak, PSNC

7th TF-NOC meeting

Poznan (PL), December 13, 2012
Agenda

• What is NOVI
• Experimentation environment
• NOVI architecture
• How to join NOVI?
What is NOVI

NOVI INNOVATION CLOUD

- Monitoring Architectures
- Virtual Resource Brokering
- Semantic Resource Description
- Federated Virtualization Technologies

Security Awareness Access

FUTURE INTERNET FEDERATION

- PlanetLab Europe
- FEDERICA GÉANT
- Other FI Platforms
What is NOVI – cont.

NOVI (Networking innovations Over Virtualized Infrastructures) research concentrates on efficient approaches to compose virtualized e-Infrastructures towards a holistic Future Internet (FI) cloud service. Resources belonging to various levels, i.e. networking, storage and processing are in principle managed by separate yet interworking providers. NOVI will concentrate on methods, information systems and algorithms that will enable users with composite isolated slices, baskets of resources and services provided by federated infrastructures.
Experimentation environment
How to join NOVI?

• Provide a node for NOVI service layer
• Develop testbed specific services
• Install the software on the node
• Configure NOVI
• Pass validation & verification tests
Configure NOVI

- Testbed provider must create an account for NOVI that will be able to create virtualized resources
- In order to use NOVI experimenters must have a user account in at least one of the testbeds
- Testbed providers may limit the amount of available resources by configuring appropriate mission policies in NOVI service layer
Validation & verification tests

Services for each platform must pass:

• Repeatability tests
  – NOVI service layer must pass repeatability tests
  – Federation links must be stable
  – NOVI allocates resources that require capabilities on repeatable platforms

• Scalability tests
  – Horizontal
  – Vertical
  – Large requested topologies
Visit NOVI at:  http://www.fp7-novi.eu

Blazej Pietrzak blazej.pietrzak@man.poznan.pl

Poznan Supercomputing and Networking Center

THANK YOU!