



FED4FIRE

**Testing your Future Internet
services and solutions
using the Fed4FIRE federation**



Stefan Bouckaert, Brecht Vermeulen,
Tim Wauters, Piet Demeester

October 14, 2014

Fed4FIRE – partners and general info

- Started in 10/2012
- Scheduled until 9/2016
- Total budget: 7.75 MEUR
- 28 partners



Fed4FIRE makes ICT testing facilities around Europe (and beyond) more easily accessible

- Diverse technologies
 - Cloud computing, wireless networking, wired networking, software defined networking, Internet of Things, Smart cities, etc.
- Accessible with a **single account**
- Common **user-friendly tools** support the entire testing/experimentation lifecycle (finding resources, configuration, monitoring, etc.).

Fed4FIRE lets you focus on what is important

- **Focus on experimenting** with/testing your Future Internet solution and getting the results you are looking for
- **Don't lose time** on setting up a testbed, creating your own experimentation tools, learning to work with different tools for each testbed, requesting accounts on each testbed,...

Current federated testbeds



Example of user-friendly tool for running experiments: jFed (<http://jfed.iminds.be>)

The screenshot displays the jFed Experimenter Toolkit interface. The window title is "jFed Experimenter Toolkit". The interface is divided into several sections:

- General Tab:** Contains icons for Run, Save, Copy, Paste, Duplicate, Auto Layout, Zoom In, Zoom Out, and Reset Zoom.
- Computing Elements Panel:** Lists various node types: Virtual Machine, Wireless Node, Physical Node, XEN VM, Generic Node, Dedicated Ext. Network Connection, and OpenVZ VM.
- Network Diagram:** A central workspace with a grid background. It shows a network topology with nodes: "node0" (purple), "link0" (orange), "i2cat" (blue globe), "i2cat vlan 197 network edge" (yellow), "node1" (green), and "VM node3" (green with a flame icon).
- Status Bar:** At the bottom, it shows "Untitled X" and a message: "Click and drag the circle to a target node to create a new link." There are also system icons for Proxy enabled for jFed only, a globe, a network icon, and a checkmark.

Overview of testbeds and tools

- Please refer to the online tutorials, available at

http://www.fed4fire.eu/fileadmin/documents/open-calls/Fed4FIRE_experimenter_training_v1.1.pdf

What to remember, for now:

The Fed4FIRE testbeds present a wide range of different technologies and supporting tools that will allow you to:

- Build and evaluate a technical prototype
- Analyze and optimize your FI solutions and services
- Analyze the scalability of your solutions

Two simple example cases for SMEs

- Testing the scalability of a cloud application by simulating over 10k realistic concurrent client requests
- Testing the connectivity and resistance to interference of a wireless sensor solution in a realistic environment

Fed4FIRE organizes an open call dedicated to SMEs

- Dedicated call: no competition from e.g. academia and research institutes
- Light-weight administration
 - Proposal: simple template, target length 9 – 14 pages
 - No consortium forming: (exactly) 1 organization per proposal
 - Fast notification of results (1 month after submission deadline)
 - Reporting: summary + 9 pages max
 - Contract/payment: SME becomes subcontractor of iMinds
- Short duration: max. 4 months
- Dedicated support from Fed4FIRE partners (“patrons”) at submission and execution time

Support from the Fed4FIRE consortium: “Patrons” concept

It is **compulsory** to seek contact with a member of the Fed4FIRE consortium, who will help you to achieve the results you are looking for:

- Before the final submission deadline: compulsory **feasibility check** by the patron of your choice
- During execution your patron will:
 - Help to get you started (e.g. pointers to documentation, assistance with setting up an initial experiment).
 - Technical support in case of issues or technical questions (e.g. checking server status, help you to configure a wireless interface, to interpret an unexpected result,...)

Support from the Fed4FIRE consortium: “Patrons” concept

Q: Who should be my patron?

A: Typically this will be the owner of the most important testbed to be used for your experiment

See list of testbeds at
<http://www.fed4fire.eu/testbeds.html>

How much funding, what can it be used for?

- Up to 25 000 EUR per experiment
- Overview of estimated costs to be included in proposal:

	Total PM	Cost
1. Personnel costs		
2. Other costs		
3. Total costs (Sum of row 1 and 2)		

=> e.g. equipment, travel, indirect personnel costs

Timeline

1. Choose a product/service under development to be tested, implemented, optimized (no new ideas)
2. Identify relevant testbed(s), and thus patron
3. **Oct. 23, 17:00 Brussels time:** deadline to contact your patron for feasibility check
4. **Oct. 30, 17:00 Brussels time:** submission deadline
5. Notification: approx. 1 month later

See details and remarks on
<http://www.fed4fire.eu/open-calls/2nd-call-for-sme.html>

What are my chances for success?

- 100 000 EUR available
 - => (we expect) 4 proposals to be funded
- Previous SME call?
 - 13 proposals received
 - 12 eligible
 - 4 were selected for funding

Questions?

- All information available online at <http://www.fed4fire.eu/open-calls/2nd-call-for-sme.html>
- Still got questions? E-mail us at contact@fed4fire.eu

Further reference

- Overview of testbeds and tools: <http://www.fed4fire.eu/tools/overview.html>
- Objectives: <http://www.fed4fire.eu/open-calls/2nd-call-for-sme/detailed-objectives.html>
- Proposal template: <http://www.fed4fire.eu/open-calls/2nd-call-for-sme/proposal-template.html>
- Evaluation criteria: <http://www.fed4fire.eu/open-calls/2nd-call-for-sme/evaluation-criteria.html>