

NEXT GENERATION INTERNET

NGI Open Calls: Q&A Session
Fed4FIRE open call
brecht.vermeulen@imec.be

NGI

Testbeds: Multiple technologies






Discover our testbeds

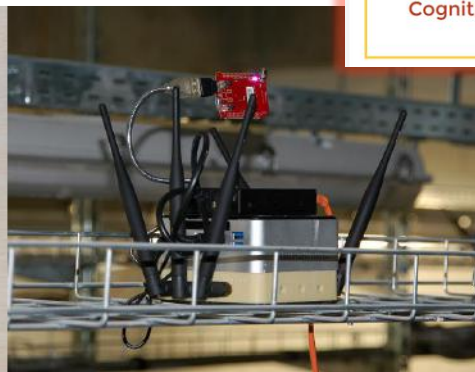
Find the testbed that is right for you

Fed4FIRE+ offers a wide range of testbeds in a wide range of technology domains.

To help you find a testbed that matches your needs, we provide an easy-to-use directory in which you can filter on available technologies, testbed properties, location and more.

Select the domain in which you are interested to continue:

| | | |
|--|--|--|
|  Wired |  Wireless |  5G |
|  IoT |  Big Data |  OpenFlow |
|  Cloud | SDN | AI |
| Cognitive Radio | HPC | GPU |



Fed4FIRE Open Call 9 (<https://fed4fire.eu>)

Fed4FIRE envisages experiments by which **existing products or services are tested**, implemented or optimized on the Fed4FIRE+ testbeds rather than proposing or developing new ideas from scratch.

| EXPERIMENT TYPE | MAX EXPERIMENTER FUNDING PER EXPERIMENT | TESTBED PATRON FUNDING PER EXPERIMENT | MAX NUMBER OF EXPERIMENTS FUNDED IN THIS CALL | MAX DURATION OF EXPERIMENT |
|-----------------|---|---------------------------------------|---|----------------------------|
| Medium | € 55 000 | € 5000 | 4 | 5 months |

SUBMISSION DEADLINE:

- **07 September 2021**, at 17:00 CET (Brussels local time)

FEASIBILITY CHECK SUBMISSION DEADLINE:

- **31 August 2021**, at 17:00 CET (Brussels local time)

All proposers must contact the Fed4FIRE+ consortium and elaborate their intentions in order to verify the feasibility of the proposals to be implemented in the scope of the project and to receive a first feedback on the proposal planned activities following the steps below:

1. Prepare a draft version of your proposal or a 1-page description and mention Fed4FIRE facilities to be used. **If you don't know a testbed please submit a question to contact@fed4fire.eu.**
2. **Submit this draft proposal as a feasibility check to contact@fed4fire.eu before 31 August 2021 at 17:00 CET** (Brussels local time)



Fed4FIRE Continuous Open Call for SMEs (<https://fed4fire.eu>)

Fed4FIRE envisages experiments by which **existing products or services are tested**, implemented or optimized on the Fed4FIRE+ testbeds rather than proposing or developing new ideas from scratch.

SUBMISSION DEADLINE:

Continuous submission (2-weekly cut-off dates)

FINANCIAL INFORMATION:

- Maximum requested funding per experiment: € 12 500 (incl. a max of €2 500 for patron)
- The above mentioned amounts include the budget for the Fed4FIRE+ partner(s) acting as Patron for the experiment. The split of budget between experimenter and patron is flexible with a maximum set for the budget allocated to the patron as indicated per stage.

Next deadline: July 27th

SMEs only

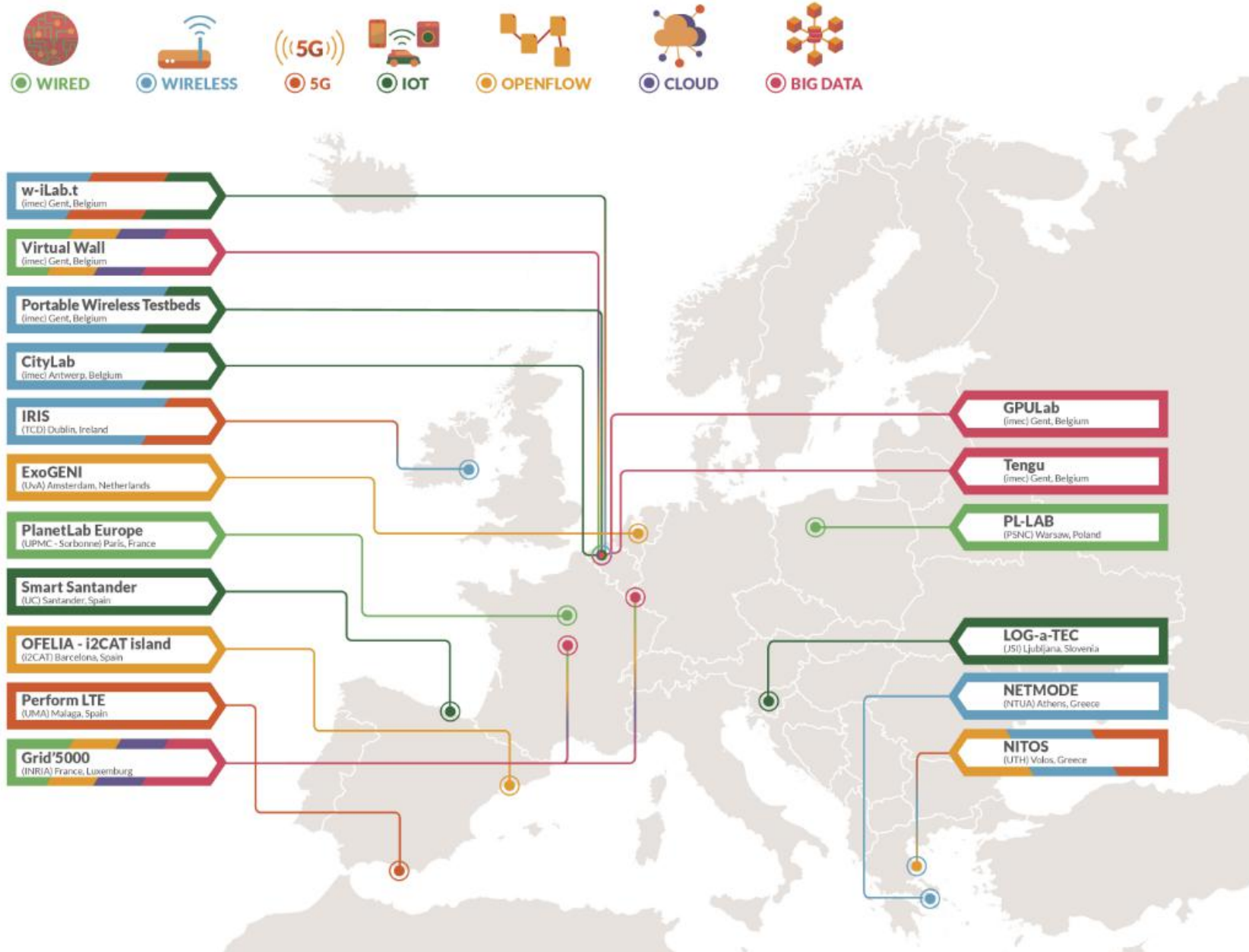
<https://www.fed4fire.eu/event/continuous-call-sme-cascaded-experiments>

Elegibility & Conditions

- Proposals will only be accepted from a **single party** eligible for participation in EC H2020-projects.
- Proposers must come from parties or organisations that are not already part of the Fed4FIRE+ project consortium.
- Proposers can submit multiple experiment proposals, but only **one experiment per proposer will be selected for funding in this Call.**
- Proposers who have submitted proposals in previous calls of the Fed4FIRE+ – project are allowed to re-submit.

Call listed at https://www.fed4fire.eu/event/9th-fed4fire-open-call/?instance_id=528

Fed4FIRE assets – facilities (<https://portal.fed4fire.eu>)



Fed4FIRE portal: <https://portal.fed4fire.eu>

Discover our testbeds

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Select the domain in which you are interested to continue:



Put your ICT idea or solution to the test!

We make it simple to test your solution on a wide range of infrastructure offered by testbeds across Europe, covering cloud computing, wireless and wired networking, sensor networks, software defined networking and more.

[Discover our testbeds](#) [Contact Us](#)

Open Access: Usage of our facilities is free of charge*



Full Remote Access

Our testbeds can be fully operated remotely. The only technical requirement to start using them is a standard internet connection!



Excellent tooling

We provide a set of tools to enable easy configuration and execution of experimental setups on our testbeds.

Find the testbed that is right for you



Access our testbeds

Ready to start your experiment?

[Login](#)

Fed4FIRE Testbed Portal

Explore our offering

All testbeds

Use the filters to find a testbed that matches your requirements best.

Your current selection matches 9 testbeds.

Category

- Wired (3)
- Wireless (3)
- 5G (1)
- IoT (5)
- Big Data (3)
- OpenFlow (3)
- Cloud (2)
- SDN (4)
- AI (1)
- Cognitive Radio (1)
- HPC (1)
- GPU (1)
- Show All (9)

Filters

Technologies

- Wireless
- CPUs
- Wired Networking
- Openflow (3)
- Infiniband (1)

Properties

- Resource reservation (3)
- Sensor Observations as a Service (1)
- Pub/Sub based (1)
- IPv6 Support (6)
- Job Based (2)

NETMODE

National Technical University of Athens (NTUA), Greece

Categories: Wireless, IoT,

Size: 25-100 nodes

Technologies: 802.11 a/b/g/n/ac

Properties: Resource reservation

DESCRIPTION

NETMODE testbeds can support research experiments on wireless, IoT and Edge Computing technologies. It provides wireless nodes, environmental sensors, robot, Raspberry Pis, and servers. The testbed is suitable for indoor and outdoor experiments and users have full control over the nodes through ssh.

[Learn more](#)

[Ask a question](#)

[Technical documentation](#)

SmartSantander

University of Cantabria, Spain

Categories: IoT, ,

Size: 500+ nodes

Technologies: 802.15.4, LoRaWan

Properties: Sensor Observations as a Service, Pub/Sub based

DESCRIPTION

SmartSantander testbed enables sensor-information based experimentation on top of a real life smart city scenario. It provides more than 500 heterogeneous sensors deployed across the city of Santander (Spain), offering near real time observations based on a subscription model. Available sensor information includes different domains, such as parking or environmental information.

[Learn more](#)

[Ask a question](#)

[Technical documentation](#)



GPULab

imec - Ghent University, Belgium

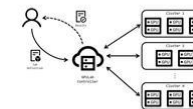
Categories: Big Data, HPC, AI, GPU,

Size: 25-100 nodes

Technologies: nVidia GPUs

Properties: IPv6 Support, Job Based, Large storage

DESCRIPTION



Virtual Wall

imec - Ghent University, Belgium

Categories: Wired, Cloud, SDN, Big Data, OpenFlow,

Size: 500+ nodes

Technologies: 1 Gigabit Ethernet, 10 Gigabit Ethernet, L2 Links support, Openflow

Properties: IPv6 Support, International L2 connectivity, Long running experiments



Goals of federation

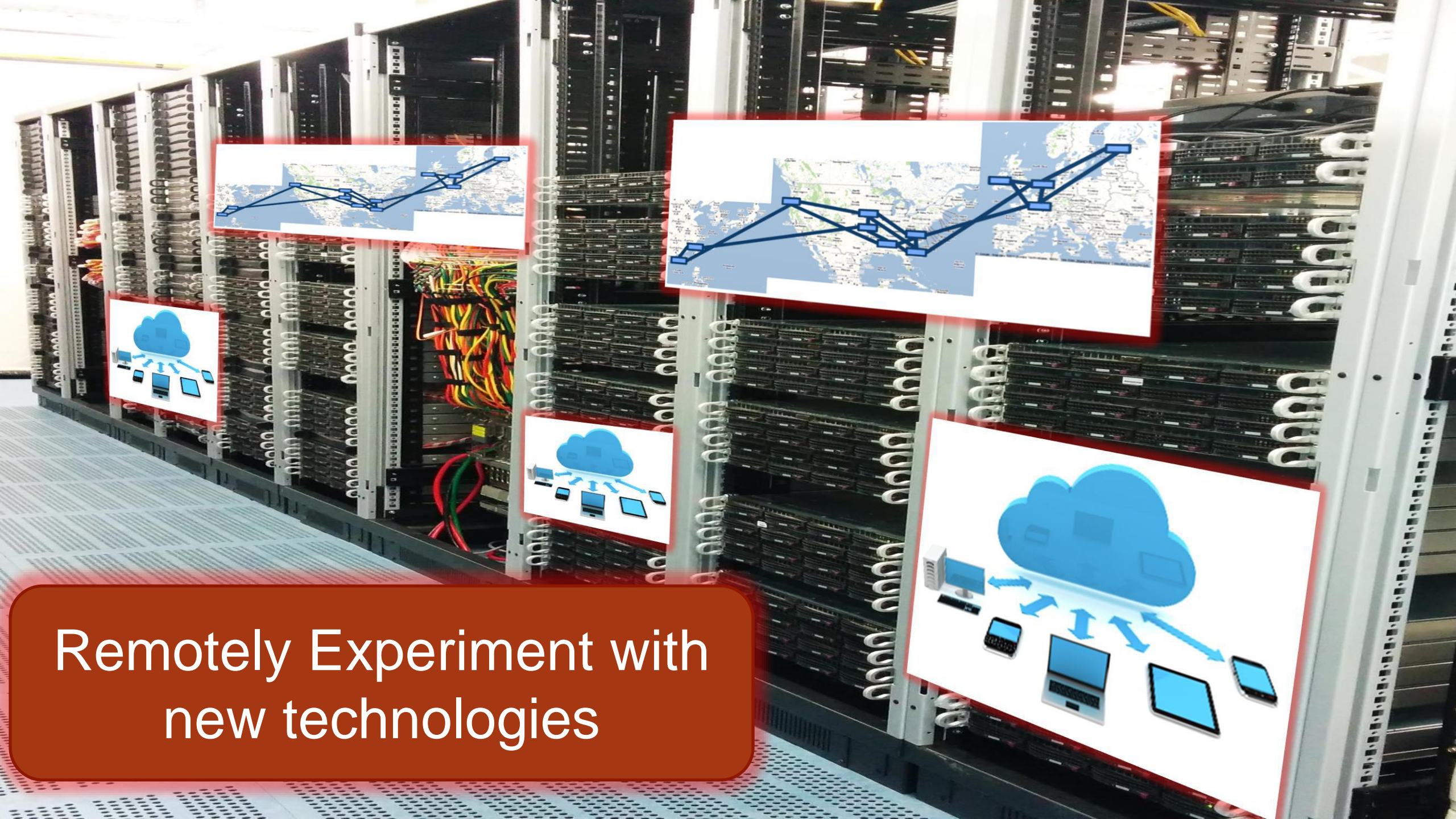


Make it easy for experimenters to use multiple testbeds

- Single account
- Single (or small number) of tools, choice of tools

Multiple testbeds

- To scale up
- To use/combine special resources (e.g. wireless robots)
- Redundancy (e.g. testbed in maintenance)
- To re-use experiments (class exercises, scientifically, ...)
- To compare environments (e.g. wireless, openflow hardware, ...)



Remotely Experiment with
new technologies

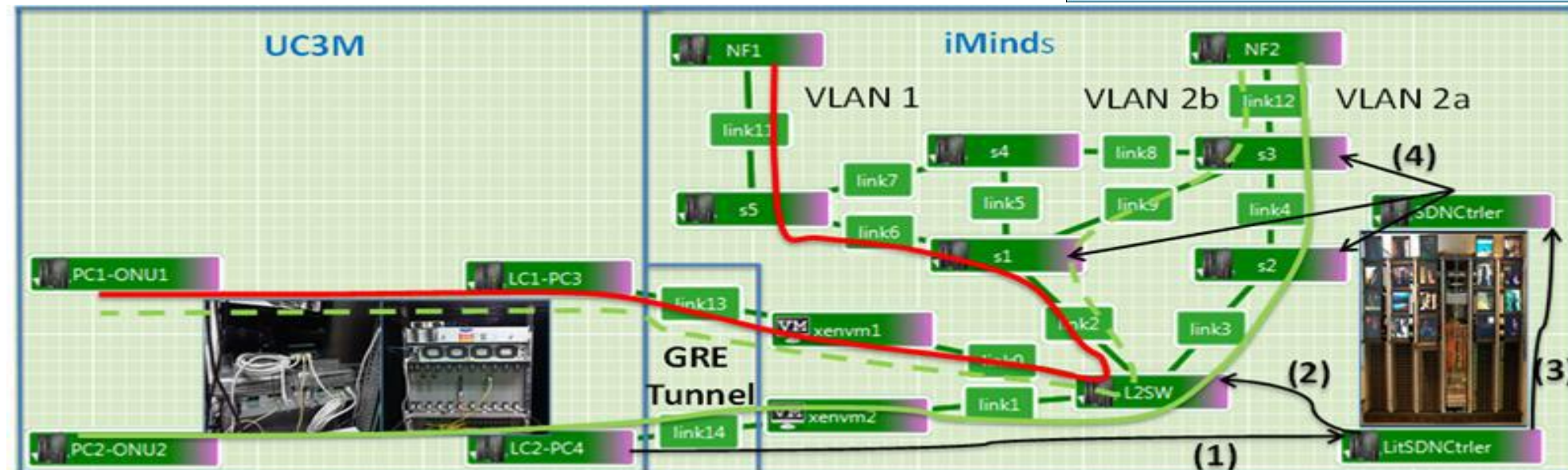
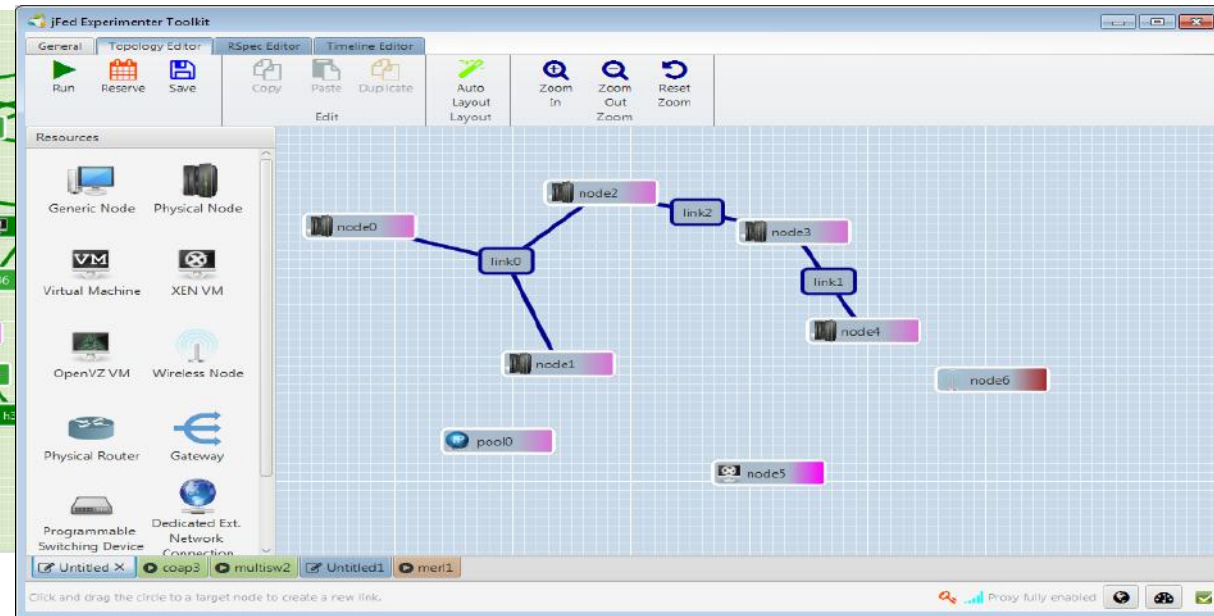
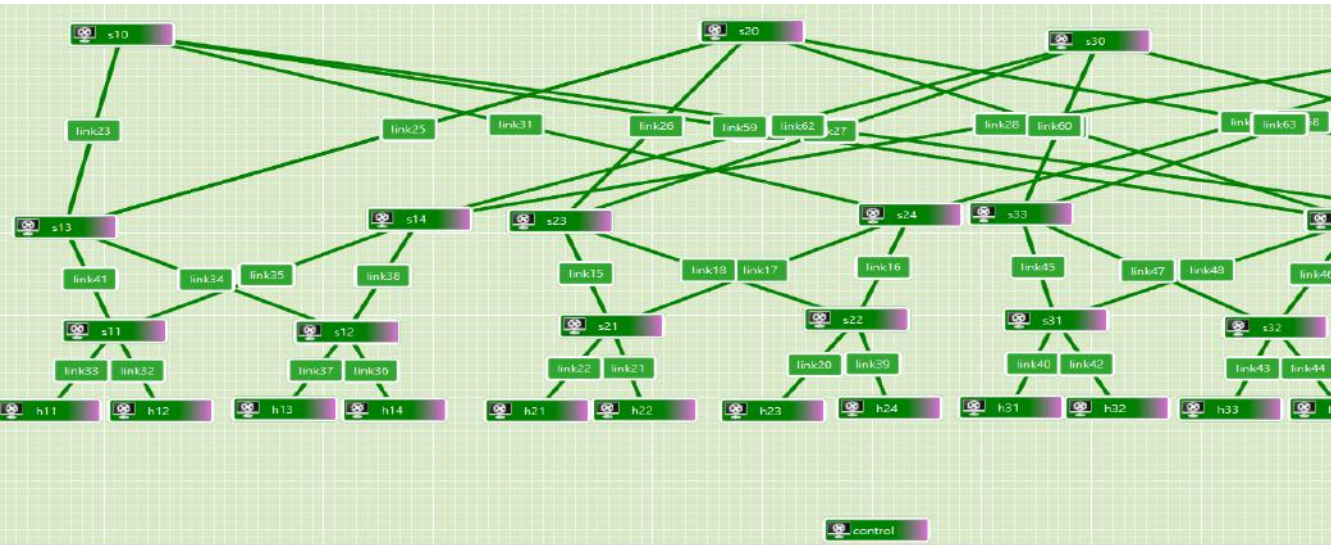
#Testbeds usable with Fed4FIRE account: +65



jFed tool: easy access for testbeds (jfed.ilabt.imec.be)



FED4FIRE



Besides open calls: also Open access



Fed4FIRE testbed access is free for research

With limited use of resources

With limited best-effort support

There is a learning curve, certainly for more complex experiments
(or for interconnecting testbeds)

- Focus on testing on the testbeds, not on developing something
- Focus on something you can not do at your premises/existing testing (prove that you need Fed4FIRE testbeds for this)
- Focus on something that fits in your roadmap, not something that pleases Fed4FIRE
- Using multiple testbeds can be a benefit if it really adds to your roadmap (see previous point)

Tips & Tricks for a Good Proposal



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[HTTPS://PORTAL.FED4FIRE.EU](https://portal.fed4fire.eu)

WWW.FED4FIRE.EU