



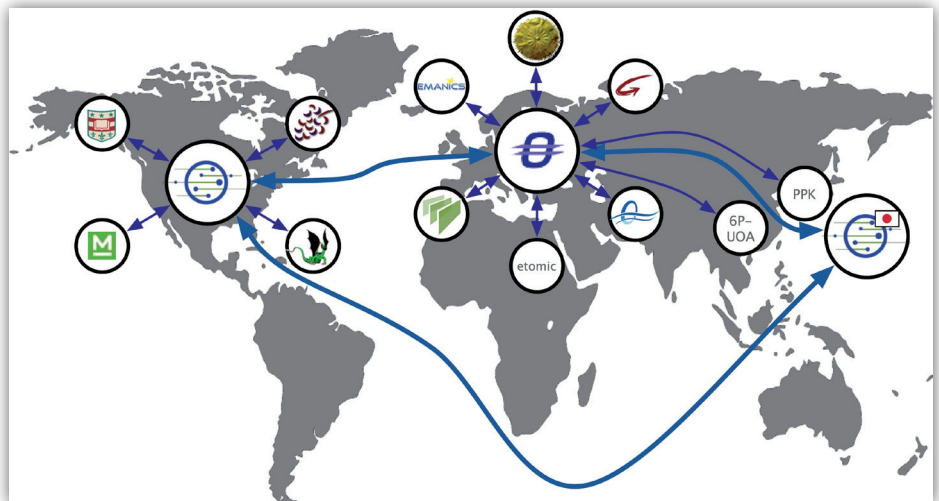
Connecting testbeds

OneLab federation

Strength in numbers

Federation with OneLab is an opportunity for testbed providers to optimize their facilities. A test platform for network applications is an increasingly popular research tool, but one that requires a great deal of investment from its owners. Federating with OneLab connects your testbed with a global community of active users, and can ease your operations workload.

The OneLab testbed federation, including PlanetLab Europe and the NITOS wireless testbed, is now open to third-party platforms, allowing you to promote use of your testbed, bringing in new users and offering support to facilitate their user experience.



The OneLab worldwide federation of testbeds

Thanks to the state-of-the-art Slice Federation Architecture (SFA), OneLab testbeds are now able to federate with PlanetLab-based testbeds, OMF-based testbeds, and, with some SFA back-end programming, testbeds based upon other technologies.

A federated testbed can grow its user numbers by making its facility available to those already using OneLab testbeds in Europe and across the world, while the testbed owner has access to an extensive scientific community and the possibility of scientific gain through exchanging best practices and comparing results. In addition, federation can offer the latest in computer networking tools to the testbed's current users.

Develop and promote your testbed

> Open your testbed to the thousands of registered users who are already part of OneLab's global network, and gain access to the expertise of the OneLab community.

Delegate user administration

> If desired, OneLab can take over the sign-up and management of testbed users, allowing you to concentrate on running and improving your testbed.

Offer new facilities to your users

> Through federation your users will gain access to new testbeds. For example, **PlanetLab Europe's** geographically distributed facility gives access to over 1000 machines located all over the world, while the **NITOS wireless testbed's** rich features offer extensive resources to users, including mobile nodes, cameras, sensors and software-radio boards. In addition, the **ETOMIC measurement infrastructure** offers high-precision measurements – synchronized active network measurements on the order of tens of nanoseconds.

Join a community of testbed developers

> When you connect your testbed, you also connect to a research community that includes some of the world's leading experts in computer networking, publishing in the world's top conferences and journals. You will have the opportunity to participate in forums and discussions that will shape the future of networking testbeds.

If you own a network research testbed, consider connecting your facility to the OneLab federation of testbeds. Software interfaces are already available to federate PlanetLab- and OMF-based testbeds, while owners of testbeds based upon other technologies can programme a simple Python backend for the API using the SFA code that we provide. More information, including details of technical requirements and example federation policies can be viewed at www.onelab.eu/federation. To start federating your testbed, or to simply learn more, please contact the OneLab support team at info@onelab.eu.

Now federating with OneLab

- PlanetLab Central (www.planet-lab.org)
- PlanetLab Japan (www.planet-lab.jp)
- EmanicsLab (www.emanics.org)
- G-Lab (www.german-lab.de)
- FEDERICA (www.fp7-federica.eu)
- Private PlanetLab Korea (www.planet-lab.kr)

OneLab is an initiative that develops testbeds for the Future Internet, offering a shared experimental facility that allows European industry and academia to innovate today and assess the performance of their solutions. OneLab is built on the results of the OneLab2 project, financed by the FIRE Unit of the European Commission's FP7 ICT programme under grant agreement n°224263. For more information visit us at www.onelab.eu.

Benefits

How to federate

Today's testbed union

About OneLab