Developing and operating testbeds for the Future Internet
OneLab’s offers:

For testbed users
- **Testbed access**
  Carry out your networking experiments on OneLab’s federation of testbeds

For platform builders
- **Testbed components**
  Build your own network-based platforms and testbeds using OneLab’s specialised building blocks

For testbed owners
- **Testbed federation**
  Federate your testbed with the OneLab facility
Onelab Experimental Facilities

• Onelab is a federation of testbeds:

<table>
<thead>
<tr>
<th>Testbed</th>
<th>Experiments supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>PlanetLab Europe</td>
<td>A world-wide platform for Internet developers</td>
</tr>
<tr>
<td>NITOS</td>
<td>Wireless experimentation in a real-life environment</td>
</tr>
<tr>
<td>ETOMIC</td>
<td>High-precision active measurements, Europe-wide</td>
</tr>
<tr>
<td>DIMES</td>
<td>Worldwide distributed topology measurement infrastructure</td>
</tr>
</tbody>
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OneLab’s worldwide federation of testbeds.
A typical use case scenario

Research challenge:

To setup an experiment where the wireless node associates with the BS that gives the best route to the destination, including the wired and the wireless path.

- Involves multiple Onelab testbeds (Planetlab, Nitos, Etomic)
- The user log-in to the different facilities using the same credentials
- The user builds and runs the scenario using a unified managerial framework (OMF, OML)