



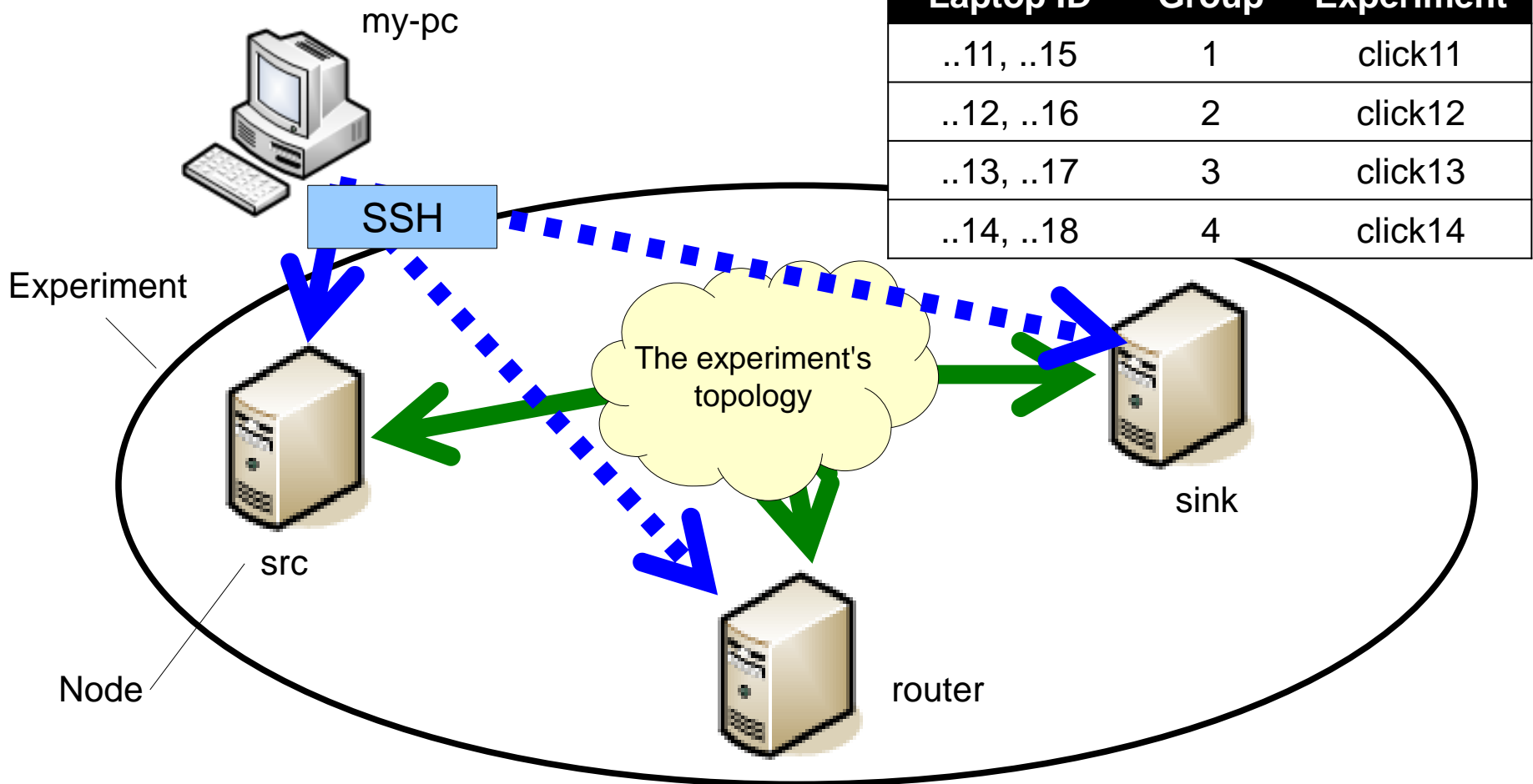
Click

Experiment

Future Internet Communication Technologies

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Accessing the Experimental Nodes in FILab



e.g. **ssh student@src.click11.filab.filab.uni-hannover.de**

Node name

Experiment name



- Preparation: system interfaces of your nodes
 - Check interfaces with `ifconfig`

Interface	eth____
IP	____.____.____.____
MAC	____:____:____:____:____:____

Interface	eth____
IP	____.____.____.____
MAC	____:____:____:____:____:____



Source
src

Node name

Interface	eth____
IP	____.____.____.____
MAC	____:____:____:____:____:____

1



Router
router

2



Sink
sink

Interface	eth____
IP	____.____.____.____
MAC	____:____:____:____:____:____

Example Configuration of the Node “sink”



SSH Login

Last login: Fri Apr 20 08:39:24 2012 from 130.75.73.1

[student@sink ~]\$ cd click11

[student@sink ~/click11]\$ ls

router.click sink.click source.click

[student@sink ~/click11]\$ more ./sink.click

Check your working group

FromDevice(eth25)->Counter->Discard;

[student@sink ~/click11]\$ vi ./sink.click

[student@sink ~/click11]\$ sudo /usr/local/click-git-20080715-dom0/sbin/click-install -C=/usr/local/click-git-20080715-dom0/lib ./sink.click

[student@sink ~/click11]\$ lsmod

Module	Size	Used by
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click	2228224	0
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proclikefs	11860	4 click
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igb	122160	0
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[student@sink ~/click11]\$ watch -n 1 "cat /proc/click/Counter@2/rate"

Statistics of click elements
at the receiver

- Edit the click configuration files for all 3 nodes
- Run Click and check if you receive packets at sink
- References
 - Future Internet course: Click tutorial and Lecture slides
 - Click Element list: <http://ead.cs.ucla.edu/click/elements>