The following steps describe how to set up Glasnost on Measurement Lab.

1. Get a planetlab account.

2. create a ssh key pair. for that purpose type in the terminal "ssh-keygen -t rsa" and follow the instructions, use a passphrase. Once done the keys will be stored in the ".ssh" directory of the working directory.

3. Log on to your planetlab account and click on "My account". There is a link for uploading keys. Upload the public key from your .ssh directory.

4. you can ssh to the a m-lab node. there are two ways.

Firstly you can use a mpi-sws machine which is whitelisted and you can normally conncet through ssh using your private key. The command in this case is "ssh -i <path to your private key> mpisws_broadband@ <m lab node name>".

Or

use the port 806 from any machine by using "ssh -p 806 -i <path to your private key> mpisws_broadband@ <m lab node name>"

5. Now install these following libraries in your local machine. I have used ubuntu as my platform. You can also build Glasnost on a MPI-SWS Linux box (e.g., on the odin or loki cluster or a Linux desktop) which should have these libraries pre-installed.

- zlib
- libpcap (>0.8)
- libmicrohttpd
- curl (not needed as a snapshot is included in SVN)

6. to download the source files do : svn co https://svn.mpi-sb.mpg.de/NS/nets /network_transparency/code/mlab/glasnost/

7. go to the glasnost directory and run "make static". The executable "gserver" is created.

8. Create a directory named temp and copy gserver to it. Also copy the following files from SVN: install.sh, boot.sh, watchdog.sh, GlasnostReplayer.jar, GlasnostReplayerMac.jar, cleanup.pl, datapull_rename.pl, rsyncd.conf. In temp, create the subdirectories logs, glasnost, and scripts. Copy protocols.spec from SVN to the scripts subdirectory.

9. Go to the directory temp and run "sudo chmod 777 *".

10. use scp to copy all files and folders of directory "temp" in the m-lab node directory "/home /mpisws_broadband/".

10. ssh to the m lab node as told in point 4.

11. run "/sbin/ifconfig -a" and see which interface is attached with ip.

in my case it shows something like

```
eth0 Link encap:Ethernet HWaddr 00:22:19:56:2A:4C
     UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
     RX packets:1255582159 errors:0 dropped:1660 overruns:0 frame:0
     TX packets:1981240315 errors:0 dropped:0 overruns:0 carrier:0
     collisions:0 txqueuelen:1000
     RX bytes:1937578705 (1.8 GiB) TX bytes:2521086132 (2.3 GiB)
     Interrupt:16 Memory:f8000000-f8012100
eth0:2560 Link encap:Ethernet HWaddr 00:22:19:56:2A:4C
     inet addr:80.239.142.205 Bcast:80.239.142.255
     Mask:255.255.255.192
     UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
     Interrupt:16 Memory:f8000000-f8012100
```

So in my case interface is "eth0:2560" (as eth0 is not configured, thus not usable). This interface binds to the static and exclusive IP address of this M-Lab slice.

12. change the "ETH=eth0" line in watchdog.sh file. In my case I changed it to "ETH=eth0:2560"

13. run sudo ./install.sh

After this, the M-Lab node should be set up.
The node can now be tested here: http://loki10.mpi-sws.mpg.de/bb/glasnost-test.php You have to enter the IP address of the ethernet interface of the slice (e.g., here 80.239.142.205).

Setting up Glasnost on a Measurement Lab node (last edited 2011-07-29 09:41:37 by localhost)