**CHEATSHEET FOR ORBIT NODE COMMANDS**

**Creating a new session for accessing sandbox in MobaXterm terminal (Windows OS)**

1. Download and install MobaXterm: <https://mobaxterm.mobatek.net/>
2. Make a reservation (max limit for one slot is 2 hours) for your required sandbox through ORBIT lab website: <https://www.orbit-lab.org/>
3. Create a new session in MobaXterm and fill the following information in the SSH settings
   1. Under basic SSH settings
      1. Remote host: console.sb7.orbit-lab.org (if you have reserved sb7 in step 2)
      2. Specify username: Your ORBIT account username.
   2. Under advanced SSH settings
      1. Enable use private key and give the location of your private key file (having .ppk file extension)
4. Now click Ok and then double click your newly created session from your session toolbar panel on the left.
5. Type your passphrase and hit enter key.

**Creating a new session for accessing node inside a sandbox in MobaXterm terminal (Windows OS)**

1. Create a new session in MobaXterm and fill the following information in the SSH settings
   1. Under basic SSH settings
      1. Remote host: node1-2
      2. Specify username: root
   2. Under network settings
      1. Enable connect through SSH gateway and enter the following details
         1. Gateway SSH server: console.sb7.orbit-lab.org
         2. User: Your ORBIT account username.
         3. Enable use private key and give the location of your private key file (having .ppk extension)
2. Now click Ok and then double click your newly created session from your session toolbar panel on the left.

**NOTE:** Separate lines represents separate commands.

For ease of use replace the commands mentioned here with commands having your username

**For rebooting:**

omf tell -a reboot -t all

**For turning off a node:**

omf tell -a offh -t node1-2

**For finding a saved image:**

cd /export/omf/omf-images/

ls

**For loading an image:**

omf load -t all -i mi251-node-node1-1.sb6.orbit-lab.org-2019-05-12-23-16-27.ndz

omf load -t node1-2 -i baseline.ndz

**For turning on all the nodes:**

omf tell -a on -t system:topo:all -c grid

**For powering on a single node:**

omf tell -a on -t node1-20

**For checking the status of all your nodes:**

omf stat -t all

**For checking the status of a single node:**

omf stat -t node1-8

omf stat -t node1-8,node1-9 (if you are using grid)

**For using SSH to connect to a node:**

ssh root@node1-1

**For using SSH to connect to a node (enabling function for gnuplot):**

ssh -X root@node1-1

**For extracting and saving files on your pc:**

Option 1: Use MobaXterm session for accessing node.

Option 2: Open a new terminal and use

mi251@console.sb5:~$ scp root@node1-2:/root/ns-allinone-3.29/ns-3.29/\*.txt .

**For saving an image:**

./prepare.sh

omf save -n node1-2.sb6.orbit-lab.org

**For move a file:**

mv source\_location/ destination\_location/

**For removing a file:**

rm file\_name

**For navigating inside a folder:**

cd folder\_name

**For creating/opening a new file:**

vim file\_name

**REFERENCES**

ORBIT tutorial: <https://www.orbit-lab.org/wiki/Documentation/CGettingStarted#no10>

LINUX commands: <https://files.fosswire.com/2007/08/fwunixref.pdf>