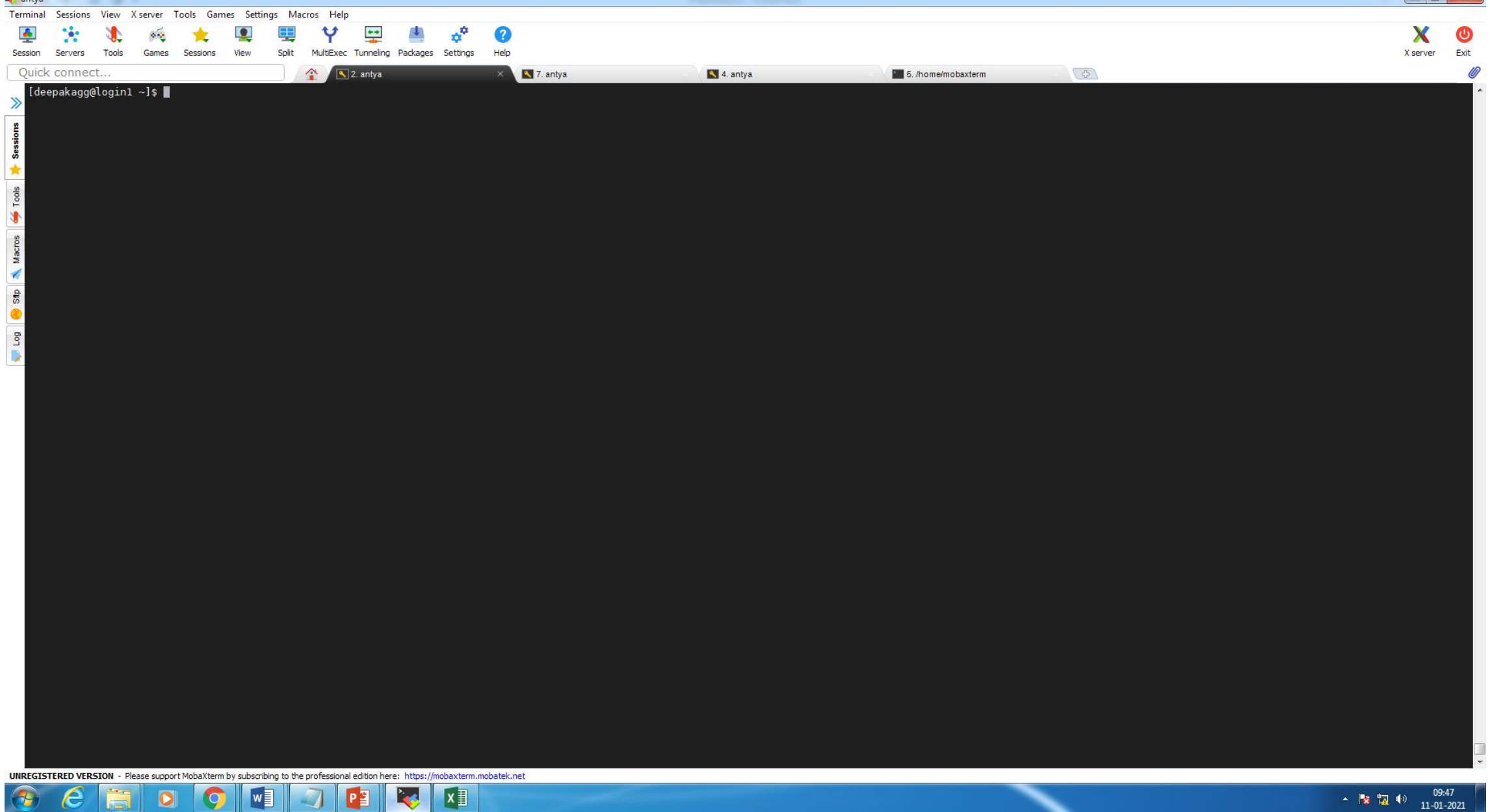


Good Morning
Welcome to AI Bootcamp for
Science at IPR
11th Jan 2021



```
[deepakagg@login1 ~]$ cat jupyter.sh
#!/bin/bash
#PBS -N Bk_Notebook
#PBS -l select=1:ncpus=8:ngpus=1
#PBS -l walltime=24:00:00
#PBS -q serialq
#PBS -j oe
```

```
cd $PBS_O_WORKDIR
```

```
NOTEBOOK_LOGFILE=jupyterlog.out
```

```
# get tunneling info
node=$(hostname -s)
user=$(whoami)
cluster="10.20.39.5"
port=9000
export JUPYTER_PORT=9000
```

```
##### -- After job submission open the connection.txt file for port forwarding --
#####
echo -e "
Command to create ssh tunnel. Run the following command from your local machine terminal:
$ ssh -N -f -L ${port}:${node}:${port} ${user}@${cluster}
```

Use a Browser on your local machine and in search bar enter the following:
localhost:\${port}

This will ask for the token which is available in the jupyterlog.out file in your working directory on the cluster.
To get the token from the jupyterlog.out, do the following
tailf jupyterlog.out

You will see something like the following line:

```
http://gn11:8889/?token=5ab95bd6f72986fb7b7167aed0e8259132a04a101175f35d
```

Just copy and paste the token without the equal sign (5ab95bd6f72986fb7b7167aed0e8259132a04a101175f35d) in the token window in browser.

Now you will be in your working directory on your local machine browser.
" > connection.txt

```
module load singularity/3.4.1/3.4.1
# copy from the image the working directory
#singularity run climate.simg cp -rT /workspace workspace
```

```
# launch the singularity run
singularity run --nv climate1.simg jupyter notebook --notebook-dir=/workspace/python/jupyter_notebook --
ip=0.0.0.0 > ${NOTEBOOK_LOGFILE} 2>&1
#singularity run --nv climate.simg jupyter notebook --ip=${node} --port=${port} > ${NOTEBOOK_LOGFILE} 2>&1 --
notebook-dir=workspace/python/jupyter_notebook
```

```
#singularity run --nv climate.simg jupyter notebook --ip=${node} --port=${port} > ${NOTEBOOK_LOGFILE} 2>&1
#jupyter notebook --no-browser --ip=${node} --port=${port} > ${NOTEBOOK_LOGFILE} 2>&1
```

- [deepakagg@login1 ~]\$ qsub jupyter.sh
136407.ANTYA

```
[deepakagg@login1 ~]$ cat connection.txt
```

Command to create ssh tunnel. Run the following command from your local machine terminal:

```
$ ssh -N -f -L 9000:gn10:9000 deepakagg@10.20.39.5
```

Use a Browser on your local machine and in search bar enter the following:

localhost:9000

This will ask for the token which is available in the jupyterlog.out file in your working directory on the cluster.

To get the token from the jupyterlog.out, do the following

```
tailf jupyterlog.out
```

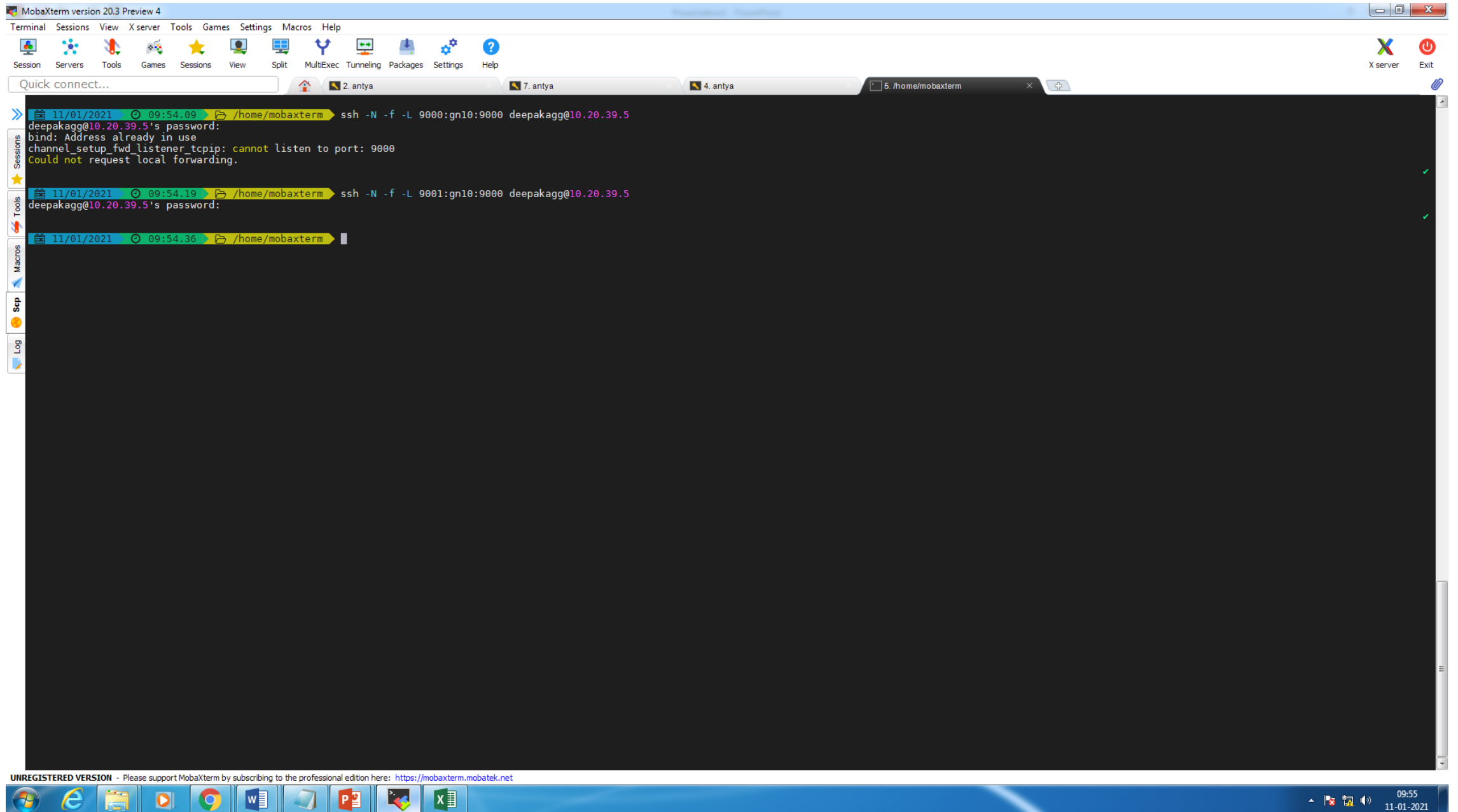
You will see something like the following line:

```
http://gn11:8889/?token=5ab95bd6f72986fb7b7167aed0e8259132a04a101175f35d
```

Just copy and paste the token without the equal sign (5ab95bd6f72986fb7b7167aed0e8259132a04a101175f35d) in the token window in browser.

Now you will be in your working directory on your local machine browser.

```
[deepakagg@login1 ~]$
```





Search Google or type a URL



Sign In



Zimbra Web ...



Welcome



Home



IPR e



Bright Cluster...



People Finder



10.20.39.4



Gmail



Add shortcut

Customize



Password or token:

Log in

Token authentication is enabled

If no password has been configured, you need to open the notebook server with its login token in the URL, or paste it above. This requirement will be lifted if you [enable a password](#).

The command:

```
jupyter notebook list
```

will show you the URLs of running servers with their tokens, which you can copy and paste into your browser. For example:

```
Currently running servers:
http://localhost:8888/?token=c8de56fa... :: /Users/you/notebooks
```

or you can paste just the token value into the password field on this page.

See [the documentation on how to enable a password](#) in place of token authentication, if you would like to avoid dealing with random tokens.

Cookies are required for authenticated access to notebooks.

Setup a Password

You can also setup a password by entering your token and a new password on the fields below:

Token

New Password

Log in and set new password

antya

Terminal Sessions View Xserver Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

2. antya 7. antya 4. antya 5. /home/mobaxterm

```
[deepakagg@login1 ~]$ cat jupyterlog.out
2021-01-11 04:21:13.007296: I tensorflow/stream_executor/platform/default/dso_loader.cc:44] Successfully opened dynamic library libcudart.so.10.2
[I 04:21:16.002 NotebookApp] jupyter_tensorboard extension loaded.
[I 04:21:16.083 NotebookApp] JupyterLab extension loaded from /usr/local/lib/python3.6/dist-packages/jupyterlab
[I 04:21:16.083 NotebookApp] JupyterLab application directory is /usr/local/share/jupyter/lab
[I 04:21:16.087 NotebookApp] [JupyterText Server Extension] NotebookApp.contents_manager_class is (a subclass of) jupyter.TextFileContentsManager already - OK
[I 04:21:16.087 NotebookApp] Serving notebooks from local directory: /workspace/python/jupyter_notebook
[I 04:21:16.087 NotebookApp] The Jupyter Notebook is running at:
[I 04:21:16.087 NotebookApp] http://hostname:9000/?token=38c6e3a7542268661fd4aabec0b6e4eb101f98050ff29273
[I 04:21:16.087 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 04:21:16.102 NotebookApp]

To access the notebook, open this file in a browser:
file:///home/deepakagg/.local/share/jupyter/runtime/nbserver-154462-open.html
Or copy and paste one of these URLs:
http://hostname:9000/?token=38c6e3a7542268661fd4aabec0b6e4eb101f98050ff29273
[I 04:24:47.598 NotebookApp] 302 GET / (172.21.3.104) 1.22ms
[I 04:24:47.801 NotebookApp] 302 GET /tree? (172.21.3.104) 1.94ms
[deepakagg@login1 ~]$
```

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09:56 11-01-2021

antya

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

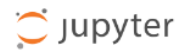
2. antya 7. antya 4. antya 5. /home/mobaxterm

```
[deepakagg@login1 ~]$ cat jupyterlog.out
2021-01-11 04:21:13.007296: I tensorflow/stream_executor/platform/default/dso_loader.cc:44] Successfully opened dynamic library libcudart.so.10.2
[I 04:21:16.002 NotebookApp] jupyter_tensorboard extension loaded.
[I 04:21:16.083 NotebookApp] JupyterLab extension loaded from /usr/local/lib/python3.6/dist-packages/jupyterlab
[I 04:21:16.083 NotebookApp] JupyterLab application directory is /usr/local/share/jupyter/lab
[I 04:21:16.087 NotebookApp] [JupyterText Server Extension] NotebookApp.contents_manager_class is (a subclass of) jupyter_text.TextFileContentsManager already - OK
[I 04:21:16.087 NotebookApp] Serving notebooks from local directory: /workspace/python/jupyter_notebook
[I 04:21:16.087 NotebookApp] The Jupyter Notebook is running at:
[I 04:21:16.087 NotebookApp] http://hostname:9000/?token=38c6e3a7542268661fd4aabec0b6e4eb101f98050ff29273
[I 04:21:16.087 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 04:21:16.102 NotebookApp]

To access the notebook, open this file in a browser:
file:///home/deepakagg/.local/share/jupyter/runtime/nbserver-154462-open.html
Or copy and paste one of these URLs:
http://hostname:9000/?token=38c6e3a7542268661fd4aabec0b6e4eb101f98050ff29273
[I 04:24:47.598 NotebookApp] 302 GET / (172.21.3.104) 1.22ms
[I 04:24:47.801 NotebookApp] 302 GET /tree? (172.21.3.104) 1.94ms
[deepakagg@login1 ~]$
```

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09:57 11-01-2021



Quit

Logout

Files Running Clusters

Select items to perform actions on them.

Upload

New ▾



<input type="checkbox"/> 0 ▾	/	Name ▾	Last Modified	File size
<input type="checkbox"/>	Intro_to_DL		5 days ago	
<input type="checkbox"/>	Tropical_Cyclone_Intensity_Estimation		5 days ago	
<input type="checkbox"/>	Start_Here.ipynb		5 days ago	3.07 kB

antya

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

2. antya 7. antya 4. antya 5. /home/mobaxterm

Sessions

Tools

Macros

STP

Log

```
136350.ANTYA mywish.a serialq case5 289428 1 1 -- 360:0 R 00:20 hmcn02/75
136351.ANTYA mywish.a serialq case5 289448 1 1 -- 360:0 R 00:20 hmcn02/76
136352.ANTYA mywish.a serialq case5 289581 1 1 -- 360:0 R 00:20 hmcn02/77
136353.ANTYA mywish.a serialq case5 289582 1 1 -- 360:0 R 00:20 hmcn02/78
136354.ANTYA mywish.a serialq case5 289724 1 1 -- 360:0 R 00:20 hmcn02/79
136355.ANTYA mywish.a serialq case5 192718 1 1 -- 360:0 R 00:20 cn233/0
136356.ANTYA mywish.a serialq case5 192719 1 1 -- 360:0 R 00:20 cn233/1
136357.ANTYA mywish.a serialq case5 192722 1 1 -- 360:0 R 00:20 cn233/2
136358.ANTYA mywish.a serialq case5 192723 1 1 -- 360:0 R 00:20 cn233/3
136359.ANTYA mywish.a serialq case5 192724 1 1 -- 360:0 R 00:20 cn233/4
136360.ANTYA mywish.a serialq case5 192725 1 1 -- 360:0 R 00:20 cn233/5
136361.ANTYA mywish.a serialq case5 192726 1 1 -- 360:0 R 00:20 cn233/6
136362.ANTYA mywish.a serialq case5 192727 1 1 -- 360:0 R 00:20 cn233/7
136363.ANTYA mywish.a serialq case5 192728 1 1 -- 360:0 R 00:20 cn233/8
136364.ANTYA mywish.a serialq case5 192729 1 1 -- 360:0 R 00:20 cn233/9
136365.ANTYA mywish.a serialq case5 192730 1 1 -- 360:0 R 00:20 cn233/10
136366.ANTYA mywish.a serialq case5 192731 1 1 -- 360:0 R 00:20 cn233/11
136367.ANTYA mywish.a serialq case5 192732 1 1 -- 360:0 R 00:20 cn233/12
136368.ANTYA mywish.a serialq case5 192733 1 1 -- 360:0 R 00:20 cn233/13
136369.ANTYA mywish.a serialq case5 192734 1 1 -- 360:0 R 00:20 cn233/14
136370.ANTYA mywish.a serialq case5 192735 1 1 -- 360:0 R 00:20 cn233/15
136371.ANTYA mywish.a serialq case5 192736 1 1 -- 360:0 R 00:20 cn233/16
136372.ANTYA mywish.a serialq case5 192737 1 1 -- 360:0 R 00:20 cn233/17
136373.ANTYA mywish.a serialq case5 192738 1 1 -- 360:0 R 00:20 cn233/18
136374.ANTYA mywish.a serialq case5 192739 1 1 -- 360:0 R 00:20 cn233/19
136375.ANTYA mywish.a serialq case5 192740 1 1 -- 360:0 R 00:20 cn233/20
136376.ANTYA mywish.a serialq case5 192741 1 1 -- 360:0 R 00:20 cn233/21
136377.ANTYA mywish.a serialq case5 192742 1 1 -- 360:0 R 00:20 cn233/22
136378.ANTYA mywish.a serialq case5 192743 1 1 -- 360:0 R 00:20 cn233/23
136379.ANTYA mywish.a serialq case5 192744 1 1 -- 360:0 R 00:20 cn233/24
136380.ANTYA mywish.a serialq case5 192745 1 1 -- 360:0 R 00:20 cn233/25
136381.ANTYA mywish.a serialq case5 192746 1 1 -- 360:0 R 00:20 cn233/26
136382.ANTYA mywish.a serialq case5 192747 1 1 -- 360:0 R 00:20 cn233/27
136383.ANTYA mywish.a serialq case5 192748 1 1 -- 360:0 R 00:20 cn233/28
136384.ANTYA mywish.a serialq case5 192749 1 1 -- 360:0 R 00:20 cn233/29
136385.ANTYA mywish.a serialq case5 192750 1 1 -- 360:0 R 00:20 cn233/30
136386.ANTYA mywish.a serialq case5 192751 1 1 -- 360:0 R 00:20 cn233/31
136387.ANTYA mywish.a serialq case5 192752 1 1 -- 360:0 R 00:20 cn233/32
136388.ANTYA mywish.a serialq case5 192753 1 1 -- 360:0 R 00:20 cn233/33
136389.ANTYA mywish.a serialq case5 192754 1 1 -- 360:0 R 00:20 cn233/34
136390.ANTYA mywish.a serialq case5 192755 1 1 -- 360:0 R 00:20 cn233/35
136391.ANTYA mywish.a serialq case5 192756 1 1 -- 360:0 R 00:20 cn233/36
136392.ANTYA mywish.a serialq case5 192757 1 1 -- 360:0 R 00:20 cn233/37
136393.ANTYA mywish.a serialq case5 192758 1 1 -- 360:0 R 00:20 cn233/38
136394.ANTYA mywish.a serialq case5 192759 1 1 -- 360:0 R 00:20 cn233/39
136395.ANTYA mywish.a serialq case5 226043 1 1 -- 360:0 R 00:20 hmcn01/9
136396.ANTYA mywish.a serialq case5 226044 1 1 -- 360:0 R 00:20 hmcn01/10
136397.ANTYA mywish.a serialq case5 226099 1 1 -- 360:0 R 00:20 hmcn01/11
136398.ANTYA mywish.a serialq case5 226102 1 1 -- 360:0 R 00:20 hmcn01/12
136399.ANTYA mywish.a serialq case5 226245 1 1 -- 360:0 R 00:20 hmcn01/14
136400.ANTYA mywish.a serialq case5 226271 1 1 -- 360:0 R 00:20 hmcn01/15
136401.ANTYA mywish.a serialq case5 226425 1 1 -- 360:0 R 00:20 hmcn01/16
136402.ANTYA mywish.a serialq case5 226427 1 1 -- 360:0 R 00:20 hmcn01/17
136403.ANTYA mywish.a serialq case5 226428 1 1 -- 360:0 R 00:20 hmcn01/18
136404.ANTYA mywish.a serialq case5 226599 1 1 -- 360:0 R 00:20 hmcn01/19
136405.ANTYA mywish.a serialq case5 226600 1 1 -- 360:0 R 00:20 hmcn01/20
136406.ANTYA mywish.a serialq case5 226659 1 1 -- 360:0 R 00:20 hmcn01/21
136407.ANTYA deepakag serialq DA_Noteboo 153819 1 8 -- 04:00 R 00:08 gn10/0*8
[deepakagg@login1 ~]$ qstat -an
```

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