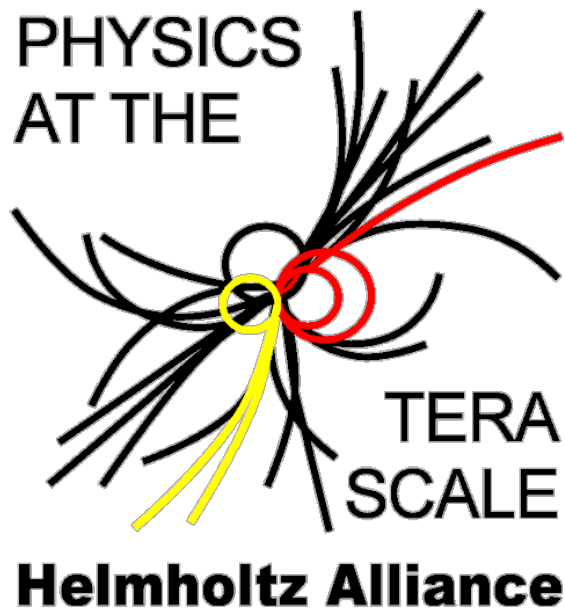


A NAF primer ... and how to get you started for the tutorials



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What is the NAF?

- > NAF stands for "National Analysis Facility"
 - > Facility means: Something where you can do real work
 - > Analysis means: Analysing data taken in the Terascale Alliance ...
 - ATLAS, CMS, ILC, Belle, Hera-Legacy
 - > National means: For people working in institutes in the Terascale Alliance
 - > Basically: The NAF is a facility where **YOU** can do your analysis (and stuff around your analysis)



What is the NAF?

- > The NAF is located at DESY Hamburg and comprises
 - > Some work-group-server to do interactive work, testing and development
 - > A large batch cluster ... currently ~5000 CPU cores for the NAF (but not all for ATLAS, also CMS, ILC, BELLE, and some others using it)
 - > Additional dCache storage
 - > Dedicated fast filesystem



How to get an NAF account?

- > You work with ATLAS/CMS/ILC/Belle? You are member of a German institute (participating in the Terascale Alliance) ?
 - > probably all of you can say "yes" now...
- > <https://naf-wiki.desy.de/GettingANafAccount>
 - > If you never had a DESY account before, you will need a Grid certificate to register.
- > For school purposes, we created school accounts with limited validity
 - > You should have gotten a piece of paper with personalized information.
- > You should create yourself a personal NAF account next week :-)



Accessing NAF school: 1) via ssh

- > Use ssh for text-oriented, small graphics and/or good connections
- > **NOT for the Roostats/Roofit tutorial!**
- > Everybody has a computer with an SSH client?
 - > Linux: Konsole, terminal, xterm, whatever, and then ssh
 - > OSX: Terminal (look under Applications -> Utilities) and then ssh
 - > Windows: Putty (be aware that graphical applications will not work)
- > ssh -Y schoolNN@naf-schoolMM.desy.de
 - > "-Y" : trusted X-Forwarding turned on
 - > schoolNN is written on your piece of paper. Beware: NN is a two-digit *number*!
 - > naf-schoolMM.desy.de is your preferred WGS. (01 or 02)
 - > Can you read your password? Beware of 0/O , l/1 and other similar characters



Accessing NAF school: 2) via FastX

- > Graphics-oriented
- > **NOT for the Roostats/Roofit tutorial!**
- > Either via browser: <https://naf-schoolMM.desy.de:3389/>
 - You must add an exception for the certificate
- > Or via client: Get the adequate package from AFS:
[/afs/desy.de/products/source/starnet/StarNet_FastX2/client/](https://afs.desy.de/products/source/starnet/StarNet_FastX2/client/)
 - e.g. by using scp to a naf-schoolMM machine
 - You will not need an additional licence when connecting

Login & password: written on your piece of paper.

naf-schoolMM.desy.de is your preferred WGS. (01 or 02)

Can you read your password? Beware of 0/O , l/1 and other similar characters



Accessing NAF school: 3) via Jupyter Notebook

- > Web-client access
- > **ONLY for the Roostats/Roofit tutorial!**
- > Use your browser: <http://naf-schoolMM.desy.de:443/>
 - Beware: http , not https!

Login & password: written on your piece of paper.

naf-schoolMM.desy.de is your preferred WGS. **(03 or 04)**

Can you read your password? Beware of 0/O , l/1 and other similar characters



Starting the tutorial:

- > Everyone is able to login?
- > ... OK , let's start the real work
- > Setting up stand-alone ROOT
 - > Show available software: module avail
 - > Load ROOT 5: module load root
 - > Load ROOT 6: module load root6

