# The LOFAR Clusters

This page describes the LOFAR clusters for (potential) users. The CEP4 cluster is used to store the data from Cobalt and to run the pipelines that will do the "standard" reduction and calibration of this data. After this pipeline processing, the results are stored in the Lofar Export (staging) Archive. For further processing the CEP3 cluster can be used.

We welcome authorized users on the LOFAR clusters.

### **User Access**

### Access through portal to Cluster frontend

You can access the Lofar cluster through the portal. On your own system, try:

> ssh -X portal.lofar.eu

to connect. We maintain a ssh whitelist, so only registered institutes are able to login. Please send an email to *grit at astron.nl* or *h.paas at rug.nl* to add your institute or personal IP number to this white list. When you are logged in for the first time, you'll have an empty home directory.

To get onto the CEP1 cluster, you first have to login at one of the two frontend nodes lfe001 oflfe002 using ssh -X (as above). When you don't know which one, please use lfe001 by default.

To get onto the CEP2 cluster, you first have to login at one of the two frontend nodes lhn001 oflhn002

For more sophisticated useage of ssh read this page.

### **LOGIN** environment

See The Lofar Login Environment page for information on your default login environment. Only the default environment is supported, so if you defer from this, you're on your own..!

#### Do and Don'ts

#### DON'T:

Store data in your \$HOME on portal.lofar.eu ; this system has a ridiculously small

disk and filling it will prevent other users to access properly

- Pump around large amounts of data between nodes.
- Leave unused data on the systems. Clean it up, so others can make use of the available disk



space.

#### DO:

• Help improve the system by sending suggestions for improvements or new packages to the administrators

# **Contributed Software**

Some groups or people would like their favourite tools or pipelines added to the cluster software. That can usually be accomodated, but there are some guidelines. Click here to learn more!

# CEP3

CEP3 is the processing cluster that is available to LOFAR users that need additional processing and storage of their data. Details on requesting access and its usage are on this page.

