

BASIC LINUX COMMANDS

Here is a list a commands and softwares we will use throughout the CROCO Training week.



1: Basic Linux commands

Linux command	Description	Linux command example
cd	Change director with a specific path	<code>cd lustre/croco; cd ..;</code>
clear	Clear the screen	<code>clear</code>
cp	Copy file(s)	<code>cp path1/file1 path2/file2</code>
diff	Compare the content of files	<code>diff file1 file2</code>
exit	Log out of Linux	<code>exit</code>
grep	Find a string of text in a file	<code>grep "NBPROCS" file1</code>
head	Display the heading of a file	<code>head file1</code>
ls	List contents of a directory	<code>ls path1/directory1</code>
ln	Create a symbolic link	<code>ln -sf /mnt/lustre lustre</code>
mv	Move file(s) or rename file(s)	<code>mv path1/file1 path2/file2</code>
mkdir	Create a directory	<code>mkdir directory</code>
rm	Delete file(s)	<code>rm file1</code>
rmdir	Remove an empty diectory	<code>rmdir directory</code>
tail	Display the end of a file	<code>tail file1</code>
tar	Store, list, or extract file in an archive	<code>tar file1</code>
scp	Copy file(s) from/to a distant machine	
ssh	Connect to a distant machine	<code>ssh login@lengau.chpc.ac.za</code>
vi	Edit file(s) with simple text editor	<code>vi file1</code>

2: List of useful softwares and how to execute them

- Text editor: nedit
 - ↳ Execute `nedit file1`
- To pre- and post- process CROCO files: Matlab ([https:// mathworks.com](https://mathworks.com))
 - ↳ Execute `matlab`
- To display the header of a NetCDF file: NetCDF library
 - ↳ Execute `ncdump -h my_NetCDF_file.nc`
- To inspect a NetCDF file: Ncview
 - ↳ Execute `ncview my_NetCDF_file.nc`
- To manipulate NetCDF files: NCO tools
 - ↳ Concatenate files: `ncrcat CROCO_avg*.nc My_CROCO_file.nc`
 - ↳ Extract a variable: `ncks -v Myvar My_CROCO_file.nc My__CROCO_Myvar.nc`