Computing Policy of the chair Richter

April 9, 2014

1 Introduction

This computing policy of the chair Richter has the aim to fix the orally defined rules for the use and the work with computers at the chair in written form. This way a obligatory modus vivendi for the work with computers will be established. This is done in order to simplify the tasks of the system administrators and to ensure a good working environment.

2 General

In general all rules and policies concerning the work with computers and the network of the university as published by the computer centre are valid. For more information see: http://www.uni-regensburg.de/Einrichtungen/Rechenzentrum/Benutzer/Benutzerordnung http://www.uni-regensburg.de/e/r/Benutzer/Speziell/Linux/

Additionally the following rules are effective:

- The operation system provided for all computers is the RZ-Linux, which is a Debian based Linux distribution supported by the computer centre. In accordance with the Linux philosophy users do not have root privileges.

- The operation system Windows will not be installed in addition to RZ-Linux. Windows is installed by default on the laptops of the chair.

- A multimedia-Windows computer (including scanner and a CD/DVD copying device) is disposable in room PHY 4.1.29 and in the diploma student’s office PHY 5.1.34 (see also point 4).

- Software and updates are provided by the computer centre and will be installed automatically. The user is obliged to reboot her/his computer as soon as possible, if a security update can only be activated via this reboot. If the user will not do so, the system administrators are authorized to take care of rebooting regardless of running jobs.
• The chair Richter has the following system administrators responsible for the Linux and Windows computers (status: April 2014):
  Jan Bundesmann, PHY 4.1.17, Tel. 2016
  Sven Essert, PHY 4.1.21, Tel. 2020
  Tobias Frank, PHY 4.1.36, Tel. 2032
  Timo Hartmann, PHY 4.1.17, Tel. 2016
  Lisa Hese, PHY 4.1.17, Tel. 2016
  Viktor Krückl, PHY 4.1.30, Tel. 2026
  Josef Michl, PHY 4.1.17, Tel. 2016

These persons are the first you should contact in case of questions or problems. They will forward your enquiry to the responsible persons if necessary.

3 Storage and Account management

Every user has the directory /home for saving her/his data. This directory is provided by the computer centre and is backed up incrementally each day. Additionally the user has a certain amount of space on his local hard disc in the directory /temp_local. This local space is not backed up.

Furthermore, the users of the chair Richter have the possibility to store their data in the following directories:

• The directory /data1/workgroup/nds-shorttag (abbreviated as DATA) (RAID6, backed up in the computer centre) This directory is intended for the secure storage of scientific (!) data. Only important scientific data should be saved here (e.g. the final results of calculations), which excludes preliminary data, test runs of programs or temporary data.

• The directory /condmat/workgroup/nds-shorttag (abbreviated as SCRATCH) (RAID6 system) This directory is intended as storage for temporary data, preliminary results and test runs of programs. On announcement, the complete data on SCRATCH can be removed within one week.

Both, DATA and SCRATCH, serve as a storage for scientific data. This means that no storage of unscientific files, namely each kind of media file, not intended for research or teaching (e.g. private photo albums) should be saved here. If the system administrators find files like that, they are authorized to delete them without further notification.

When a user leaves the chair her or his account (NDS and Unix) will be deleted after 3 months. If the account is needed for further scientific collaboration (e.g. collaboration with her/his former workgroup), the system administrator has to be informed by the user.

The same statement is valid for the user’s directories on DATA and SCRATCH. These directories will be moved to:
/data1/old_accounts/workgroup/nds-shorttag respectively
/condmat/old_accounts/workgroup/nds-shorttag
when the user has left the chair.
They will remain available for the next 3 months. After that they will be deleted without any further backup. Informations on the date of the deletion can be looked up under: 
/data1/old_accounts/README.txt and /condmat/old_accounts/README.txt.
These rules are valid from 2005-01-01.
Up to now there is no quota restriction on DATA and SCRATCH. The users are thus obliged to use the available resources responsible minded.

4 Submitting of jobs

There are several possibilities for the users of the chair Richter to submit jobs for calculations:

• Locally at her/his own computer: the user responsible for this computer can start calculations on this computer as they wish.

• The other local computers of the chair (for a list see http://www-app.uni-regensburg.de/Fakultaeten/Physik/Richter/ganglia/?c=Arbeitsplatzrechner%20Richter) can also be used for calculations. The user starting the calculation is responsible that the job is submitted with nice +19. If a job is not submitted with the correct “nice”, the system administrators are authorized to kill this job.

• A Linux compute cluster with queuing system is available in the computing centre (more detailed information can be looked up on: http://www.uni-regensburg.de/e/r/Benutzer/Speziell/Linux/Cluster/01787_de.phtml Sadley, the documentation there is quite outdated. Consult the Computing at the Chair Richter manual for more information. Users are strongly encouraged to use this possibility when doing scientific calculations.

• In addition the members of the chair Richter, Grifoni, Schäfer and Braun have access to their own Linux compute cluster. A list about the available computers with information about their hardware (including processor and memory) can be found on www-app.uni-regensburg.de/Fakultaeten/Physik/Richter/ganglia/?c=Physik%20Cluster
As no queuing-system is installed on this cluster (possibility of submitting very long jobs) the following rules apply:
* Only one job per processor! (Amount of processors of each machine is available on the homepage of the chair Richter, the info in /proc/cpuinfo may be incorrect!). The system administrators are authorized to cancel jobs, that surpass this limitation.
* As no queuing system is installed on the cluster computers the users are obliged to use the available resources reasonable.
* It is also worth to note that the computing cluster is intended for calculations, which arise from scientific projects of the members of the chairs (programs like
“SETI@HOME” are not part of this classification and will be cancelled without notification!

In addition we have the possibility to get access to the LRZ München for submitting jobs. For detailed information about that subject please contact the sysadmins.

5 Windows PC

The members of the chair Richter have access to a multimedia Windows computer in the room PHY 4.1.29. This computer is installed with Windows 7 and has a scanner, a printer and a DVD/CD copying device. The users can log in with their NDS-account into the network of the university. Additionally they have to log in locally as “User” with the provided password. They have access to all programs installed by the computer centre for Windows. In addition some program packages are installed locally (e.g. Photoshop, ...) A second Windows machine can be found in the diploma students’ office PHY 5.1.34. It is configured similarly. Again to login, you need your NDS-account. Afterwards you can locally log in as “Administrator” with the password provided there.

This computer is dedicated to tasks which are up to now not feasible under Linux (e.g. scanning).

The members of the chair can created their own directory under the local device D:\Gast\NDSshorttag. A better way to store data is the device G:\, the Windows network storage device. You can mount this directory in ReX-Linux with rexmountG.py /path/to/mountpoint.

Data or links not saved in the intended directories of the users will be deleted by the system administrator without notification. As all computers of the chair, this computer is not intended to store -.mp3, -.avi collections (or comparable file types). Files of this kind will be erased without notification.

Additionally it is possible to use the computers located in the Windows CIP Pools of the faculty (for their location, please refer to the homepage of the faculty), where a large number of programs is also installed. On these computers, too, the network-directory G:\ is available for storing personal data.