Introduction to using the FIM PC labs WS 21/22



Faculty of Computer Science and Mathematics, University of Passau

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1 Overview computer labs and accounts

1.1 General computer labs and accounts

In most of the buildings on the university campus there are **general student computer labs**. In the building IM you find those labs in room 044. On all PCs in those rooms you find a standard office environment (Windows with Microsoft Office software). Due to corona-restrictions those general computer labs still may be closed.

Please login in those labs with your **general university account**. You should already have gotten such an account as part of your enrollment process. This account not only allows access to certain computer labs but will be used for almost all **official activities** on the campus (course registration, e-mail communications, WiFi-access...). Your general **university account** is named similar to: smith094 (family name and some digits).

1.2 FIM computer labs

The FIM maintains a number a student computer labs which differ from the general student computer labs in the installed **FIM specific software environment**. In these FIM labs you find the software you need to do exercises related to FIM courses and a number of tools to work on your bachelor- or master-thesis. Furthermore, some commercial software for software engineering (IntelliJ Idea...) or mathematics (Matlab or Maple) is installed.

Lab locations and opening hours:

All FIM computer labs for use by students are situated in the building **IM**, **Innstraße 33**:

Open-access computer labs (rooms are situated downstairs and are accessible 24h/day):

- Room K08b (PC-Pool Informatik C1). Phone: 0851/509-3015
- Room K08d (PC-Pool Informatik C2 "Aquarium"): Phone 0851/509-3136

During closing times of the building IM (at night or over the weekend) you are able to enter the building with your campus-card. There is a **card reader** for that card on the front door of the building.

Using computers in FIM student computer labs requires a **FIM computer account**, which is different from your general university account. The **FIM account name** consists of your family name, eventually combined with initials, and doesn't contain



any digits. Examples: smith, smithj or smithjoe. The FIM account is required for certain FIM courses, entitles you to install a choice of licensed software on your own devices and maybe used for FIM internal communication (for example when you will be informed that your FIM account expires). This account will also give you a personal Web site, an email address, and a quota-enabled disk space. Please follow

the instructions on the website <u>https://www.fim.uni-passau.de/en/it-services/login-and-account/fim-accounts/</u> to create your own FIM account.

Guided Exercising: Lab Room 028 IM (only accessible during guided exercises)

Operating system in the FIM student computer labs:

Room K08b, K08d and room 028 IM: **Debian Linux**. Please don't turn off or reset computers in especially in Room K08b because those may be in use for long term computing purposes.

2 IT-support

2.1.1 Support for general IT-services of the university

First of all please have a look at the ZIM **support website**: <u>http://zim.uni-passau.de/</u> On this website there is also a special section for new students: <u>http://www.zim.uni-passau.de/o-woche/</u>

To get **support for general university computer labs** and **general university accounts** please contact the **ZIM-user support** in **room 046 IM**. If you have for instance problems connecting your own devices to the university WiFi-network after reading the information on the ZIM-Website you'll get support there.

2.1.2 Support for FIM computer labs, -accounts and -services

First of all please have a look at our **support website**: <u>http://www.fim.uni-passau.de/it-dienste/</u> We have also got some **information in English** for you: <u>http://www.fim.uni-passau.de/en/it-services/</u>

 Contact:

 Klaus Schießl (Dipl.-Inf.)
 Franz Rautmann (Dipl.-Ing.)

 Innstraße 33, room 017 IM, phone 0851/509 Innstraße 33, room 014 IM, phone 0851/509

 3012
 3013

 E-Mail: schiessl@fim.uni-passau.de
 E-Mail: rautmann@fim.uni-passau.de

For support by e-mail please use support@fim.uni-passau.de.

Guided tours through FIM lab rooms: Only on request (please mail to support@fim.unipassau.de) for groups with a least 6 people. A tutor will explain to you the most important facts about the FIM IT facilities during an one hour tour.

3 Using the FIM student computer labs

3.1 Computer lab guidelines

Failure to comply with the following rules will result in disciplinary action and could mean removal from the University of Passau!

- Use of the lab is restricted to the current students, faculty, and staff.
- Do NOT share your password with anyone
- No games: there is a high demand for the PCs throughout the day
- No food, drinks, pets, or bicycles are permitted in the labs
- Children are not permitted in the labs without the supervision of their parents.
- The use of profanity and loud conversations are not permitted in the labs, as it is a disturbance to other users. This also includes listening to music with the earphone volume turned too high or students talking on cell phones. Students engaged in loud, disruptive conversations in the labs would be asked to leave.
- When all workstations are in use and students are waiting to use a computer, the lab monitor will ask those using computers for recreation (games, web browsing not related to class/instruction, etc.) to relinquish their seats to those needing to do their academic work.
- You cannot copy any software whatsoever without permission of the copyright owner.
- You must not use the computer system to store, transmit or display offensive material, such as sexual, pornographic, racially offensive or abusive material. If you have any doubt about any material's suitability, then don't touch it. Web access is monitored both within and outside our own department.
- You may not record on a computer system any information concerning living persons without authorisation.

- Do not shut down or switch off PCs in the LINUX lab K08b. These are often remotely accessed via the network throughout the day or you will kill processes from somebody's master thesis. When you have finished, simply Log Off.
- If PCs (hard- or software) get unusable in some respect do not leave the room without giving information about the defect component to the FIM Support team. You may inform us via phone or email.
- Do NOT unplug any cables there is a separate area if you wish to connect a laptop, and Wi-Fi is available throughout the room
- Switch off mobile phones. PLEASE!

3.2 Logging on and off

When you have got your FIM account you can log on to all FIM student computer labs.

3.2.1 Logging on and off using graphical interfaces

- LINUX log on and log off
 - First Log on: After input of username and password you can set a default windowmanager (for instance xfce...) which will be used automatically for all following log ons. To do so press the arrow-symbol below on the left side.
 - Loging off from the XFCE user interface: Move the mouse pointer to your name in the upper right corner of the screen and click on your name in order to get the logout option.

3.2.2 Password management

3.2.2.1 Changing your FIM password with the FIM AMS

Please change your password regularly. We strongly advise to use only the FIM Account Management System AMS for this purpose. If you use other tools which may be part of our Debian installation, you may break your account.

3.2.2.2 Password security, Password forgotten

You will now have to choose a secure password for yourself. Password policy:

- 1. Minimum password length: Eight characters
- 2. Passwords must include at least 3 out of the following 4 categories: lower case letters, upper case letters, digits and special characters
- 3. Prohibition of words found in dictionaries
- 4. Prohibition of words found in the user's personal information
- 5. Prohibition of passwords that match the format of calendar dates, telephone numbers or other common numbers
- 6. Never use the same password for more than one account
- 7. Never communicate a password by telephone, unencrypted e-mail or instant messaging
- 8. Never write down a password
- 9. Make sure that you choose a password you can remember (even after a long summer holiday!).

Weak passwords are rejected by the system. If you have forgotten your FIM password please login in an ZIM-PC-Pool and reset your FIM-Password by using the FIM AMS: https://ams.fim.uni-passau.de

3.3 Files and directories

Your files are stored on a **central FIM fileserver**. This means that you can access your files from any computer in the FIM student computer labs. When you log on to any PC in one of these labs you will automatically be linked to your own file space. You have a **storage allocation (quota) of 8 GB**. You will need to purge files regularly to keep well within this limit. If you exceed this quota, you will find that you can't login anymore, your programs will not run and you can't receive mails to your FIM mail account anymore due to lack of disk space.

3.4 Changing the language of the LINUX Graphical User Interface

International Master students of the FIM will welcome the possibily to change the language of menus in the LINUX Graphical User Interface in one simple step:

Login in one the FIM computer labs and open a LINUX command shell. Type in the following command:

change_language en

Press Return to execute this command. To make this change effective please logout now. Beginning with your next login your menu-language will be permanently set to English.

4 Printing

In all buildings over the University Campus you find **Multifunction-Printing devices** for making copies of your work, scanning and printing. These devices are called "Campus printers (**Campusdrucker**)". You should be able to print to these devices from whatever software package you happen to be working on. To do so you typically choose the Print function from the menu and then the appropriate kind of printing devices (Campusdrucker). Example:

• Choose Campus-Drucker in the printer menu.

- Hints:
- To minimize printing costs, define a range of pages which shall be actually printed.
- In the printer options you can choose between black & white or colour, which is more expensive.
- After choosing your print options press the Print button.

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A new window appears in consequence. **Please type in the number of your Campus-Card** in this windows to place your print job in the printing queue.

All Campusdrucker print jobs are collected on a central print server. To actually print your document, go to one of these Campus printers and run your Campus-Card through the reader. Choose PRINT from the options menu on the printer. Your document should now be listed and you may now confirm that you want to print out this document. After the document has printed, make sure not to forget your Campus-Card in the card reader.

Printing costs are 5 cents per sheet for black & white and 20 cents for colour prints. You have to buy credits using the machines which are situated next to most of the Campus printers. Your print credit is linked to your Campus-Card.

Printing Problems

- The Campus printers are not managed by staff from the University but by staff from a local copy shop. This shop has a little office on the campus downstairs in the WiWi building. Further information concerning the Campusdrucker-system you find on the website www.zim.uni-passau.de.
- Some older LINUX software packages (i.e. xemacs or gv) may not allow you to choose Campusdrucker as your printing device. If you are not able to define a printer for output, please save your document to disk. For printing your document then open this document in another application which is able to give you a correct choice of available printers. To print your documents, you may use the editor "kate" for documents of type text and the application ocular to print all other types of documents.

5 Document scanners

You may choose to use the **Campusdrucker** devices for scanning. But have in mind that each **scan costs** some cents on these devices.

As an alternative you can use **specialized document scanners** you find all over the campus in the rooms of the **library**. These specialized devices are very fast and you are not charged for your scans. Make sure, you have an USB-Stick with you in order to store your scans.

6 Remote access to FIM PC labs

There may be times you won't get direct access to the FIM PC lab computers, for example during certain phases of the Corona Pandemic.

In this case it's easy to connect to our PC lab ressources from your device at home. On our website we have describe in detail the following methods:

Ssh connection: <u>https://www.fim.uni-passau.de/en/it-services/remote-access/remote-login-via-ssh/</u> GUI based access: <u>https://www.fim.uni-passau.de/en/it-services/remote-access/remote-graphical-login-via-x2go/</u>

File transfer: https://www.fim.uni-passau.de/en/it-services/remote-access/remote-access-to-files/

7 Free access to licensed software

As a student of the University of Passau or the faculty of computer science and mathematics you are entitled to download and / or use software in the context of special license agreements.

Microsoft-Software

As a student of the University of Passau you are entitled to use Microsoft Office 365 for free.

Sophos-Antivirus

Students and employees of the University are entitled to download and use Sophos Antivirus.

For further details please see

https://www.uni-passau.de/bereiche/beschaeftigte/finanzen/it-einkauf/software/sonderkonditionen/

Further products for FIM students only: <u>http://www.fim.uni-passau.de/it-dienste/lizenzprogramme/</u> Available Software: UML-development: Jetbrains **Intellij**, Python: **Pycharm**, **Matlab** and **Maple** (for installation on University devices only, e. g. not for use on your own device), **Maple** (for lab use only)

Please contact us directly if you want to make use theses programs.

8 Using FIM computing facilities for your bachelor or master thesis

If you have to do some long term computing or you need compute power for your thesis please don't hesitate to contact us. You'll get useful hints which lab PCs will be suitable for this purpose and what are the right methods to setup your processes. It's even possible to give you access to a dedicated **virtual machine** on which you can implement your own computing environment.

Please keep in mind to inform us in advance if you have to run processes with an execution time longer than one day. That will prevent your processes from being killed during our daily system clean-ups.