

RtSys Group Manual

This short manual gives a (more or less) systematic overview of "how things work" in our group. This manual is relevant for all "rtsys group members", which includes employees and students advised by a group member (bachelor/master/study/diploma/doctoral theses).

- [General Information](#)
- [Things to Do as a New Member](#)

General Information

- **Medical Emergencies:** A First Aid Kit (*Erste-Hilfe Kasten*) is in the kitchen (*Teeküche*, Room 1120). Above the first aid kit there is a poster with basic first aid information including the name of the first aid specialist (*Ersthelfer*) for the floor.
- **Evacuation (*Geschossbeauftragter*):** In case of evacuation Christoph Daniel Schulze is responsible that the floor is cleared.
- **Tea:** Probably the most important piece of advice (apart from the previous two, which might actually save lifes...): participate in the "tea meetings". Daily at 9:30 am in the lab 1114/1115. Yes, this also applies to students!
- **Energy Awareness:** Be conscious of resource usage, including unnecessary stand-by operations. PCs and Displays should be turned off when leaving for more than a couple of hours.
- **Group calendar:** The central calendar is software based, see [this page](#) for usage instructions. Please mark planned absences there (travel, holidays).
- **Oberseminar:** The forum for internal presentations of ongoing research, including student theses. All group members (except for non-scientific staff) should give a presentation there once per semester, and should attend all presentations. Please inform the Oberseminar organizer in advance if you cannot participate.
- **Data Backup:** Your home directory (rtsys account) is backed up daily. To save space on the backup drive, you should list parts that do not have to be backed up in `~/ .backup-ignore`.

▼ [Retrieving backups...](#)

Incremental hourly Backups are sent via incremental zfs-snapshots from skew to the backup host timesink. Every night a daily snapshot is taken and kept for 10 days. This means that if you accidentally deleted a file which is not in the daily snapshots, you would have at least one hour before it is lost. The Backup is auto-mounted under `/backup`:

Folder	Description
<code>/backup/<username>/</code>	The most recent snapshot (last full hour).
<code>/backup/<username>/ .zfs/snapshot/old/</code>	The snapshot from one hour before.
<code>/backup/<username>/ .zfs/snapshot/daily.X/</code>	Daily snapshots done 04:30 in the morning. <code>daily.0</code> is most recent.
<code>/backup/<username>/ .zfs/snapshot/weekly.X/</code>	See daily. Snapshots done 04:30 in the morning on Sundays .

- **Reporting Technical Problems:** Go talk to the system administrator, write him an e-mail, or mention the problem during the daily tea meetings.
- **Security:** To prevent theft, all offices, labs and server/printer rooms should generally be locked if nobody from the group is around. The protocols for the different rooms in question are as follows.
 - Rooms 1105, 1111–1113, 1116–1118: Locked by the last person to leave the room (for longer than a very short break - this qualification is henceforth omitted).
 - Lab 1114/1115: Locked by the last person to leave one of the rooms. If you don't have a suitable key, find somebody in the other offices who does. Furthermore, the last person to leave one of the other offices should check that both lab doors are locked, or that somebody that has a key for the lab is inside and is aware that he/she should lock the lab upon leaving.
 - Server/Printer Room 1122: Similarly to the lab, the last person to leave one of the offices should lock this room, or ensure that somebody is in the lab 1114/1115 that has a key to 1122 and is aware that he/she should lock 1122 upon leaving.
 - *General note:* Beyond these codifications, use common sense to prevent problems. Also, this protocol is meant to prevent theft, not to prevent work. If you regularly find yourself kicked out of the lab or not getting printer access as needed because you don't have the right key, contact the head of the group about the option of getting a different key.
- **Kitchen:** Don't ever dare to put dirty cups or plates or anything really anywhere except into the dish washer. If you notice that the dish washer has finished and is full of clean stuff, empty it and put everything into the cupboards. If the dish washer is still running, either clean your stuff yourself, or wait for the dish washer to finish, empty it, and put your stuff into it afterwards.

Things to Do as a New Member

There's some things you'll have to do as a new group member.

- **IfI Account:** If you do not have an account at the institute, you should get one at the [Technik Service](#) (see [here](#) for further details).

- **Account for Server:** If you need access to a specific server for your work, you need to contact your system administrator. You may want an account on *aeon* and *teach*.
- **Password:** You should change your Password immediately using [this site](#).
- **Mailing Lists:** As described [here](#), you should subscribe to *rt-all* and, if you are a new staff member (*Mitarbeiter*), also to *rt-ma*. KIELER developers are also required to subscribe to *rt-kieler-devel*.
- **SSH:** If you do not already have an SSH key, you should generate one to get access to some of the systems you'll be working with.

▼ [Generating an SSH key...](#)

An SSH-Key is a key pair for use in asymmetric cryptosystems. It can be generated with the program `ssh-keygen`, see `man ssh-keygen` for more details. An example for its use:

```
msp@launchpad:~> ssh-keygen -t dsa
Generating public/private dsa key pair.
Enter file in which to save the key (/home/msp/.ssh/id_dsa):
Created directory '/home/msp/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/msp/.ssh/id_dsa.
Your public key has been saved in /home/msp/.ssh/id_dsa.pub.
The key fingerprint is:
9f:1c:23:48:62:8c:e7:92:40:13:d5:c5:f5:79:e0:bd msp@launchpad
```

The filename prompt for the key can be skipped with return. The passphrase is a symmetric key that is used to encrypt your secret key; if you write something there, you have to enter that same password every time you use your key, e.g. when you log in with `ssh` on a machine where the key is needed. The file `.ssh/id_dsa` is your secret key, you must never give this file to anyone else. `.ssh/id_dsa.pub` is your public key, this is the one you can give to others so it can be used for cryptography.

- **Git:** To get access to our Git repositories, register with our [Stash](#) system, upload your SSH key and ask the system administrator to add you to the user groups there.
- **Photo:** To get listed on the group's website and poster, please send a portrait photo to the secretary. The portrait photo should have a height:width aspect ratio of **4:3**, eg 640x480 pixels (or higher resolution).
- **Keys:** To get a key to your office, please contact the secretary.
- **WWW:** To further familiarize yourself with the group's activities and processes, you should surf and read the group's [website](#) and [wiki](#). In particular, there is further advice if you [write a thesis](#) or if you [prepare a paper for publication](#).
- **BibTeX:** At the group we maintain central **BibTeX MIGRATE ME** files and a [Digital Library](#).
- **LaTeX:** The group uses the [kcss style](#) for publications and theses.
- **KIELER:** If you are working in the KIELER project, see the [project website](#) and especially read and follow the [KIELER wiki!](#)

And there's even more things you'll have to do if you are a new *Mitarbeiter*:

- **WWW Maintenance:** To get write-access to our website (that is, to the Typo3 content management system), please ask the system administrator to request this from the webmaster.
- **Personal Homepage:** You should create a personal homepage, following the layout of the other personal homepages. After doing that, you should contact the secretary, who will link in your page from the Kontakt/Contact page accordingly.
- **Drivers Licence:** You should get a *Landesfahrerlaubnis*, which permits you to drive a CAU vehicle (eg, for excursions).
- **Parking:** If you want to park on the CAU campus, you need a "Parkmarke". Contact the secretary for this.
- **Publications:** To list your publications correctly, you need to add your name to `/home/biblio/bib/bibgen.pl` on the *aeon* server.