

Introductory Course 2024/10/16: HPC and Data Management @KIT

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Supported by: F. Bösert
All KIT, SCC



Before Starting:

- List of attendance:
 - Write your name, university and sign it
 - Entitlement of bwUniCluster → no **or**
Access to HoreKa → no
 - Write under „Notes“: „no access“

Before Leaving:

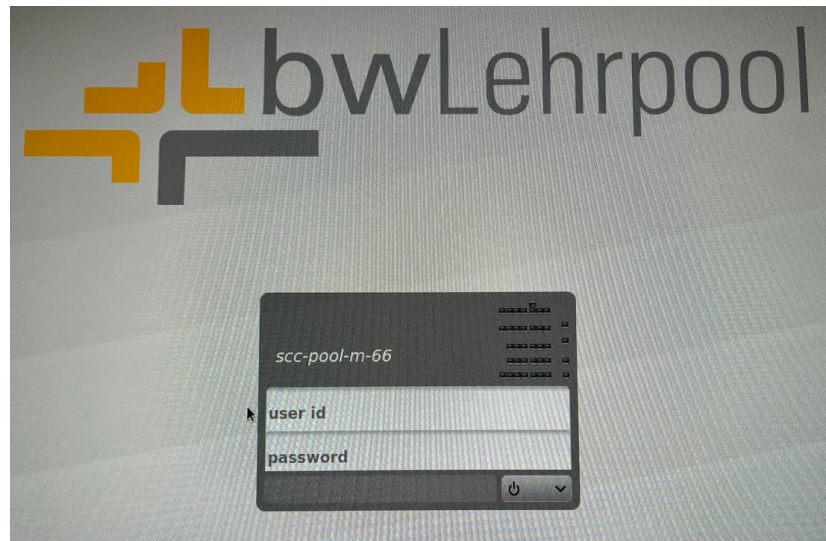
- Please fill the evaluation form:

The image shows a screenshot of an evaluation form titled "HPC in Baden-Württemberg" from the Leibniz Institute for Technology at KIT. The form is divided into several sections:

- Header:** HPC in Baden-Württemberg, Leibniz Institute for Technology, Dr. Robert Barthel, Introductory Course 2023/24: HPC and Data Management.
- Navigation:** Home, My Profile, My Courses, My Evaluations, My Comments, My Notifications, My Account, My Settings, My Help.
- Form Fields:** Name, Email, Password, Confirm Password, Mark, Correction.
- Section 1: Please rate the "lecture for beginners" regarding the following aspects.**
 - 1. How do you rate the lecture for beginners as a whole? (very good to very bad)
 - 2. How is the lecture for beginners structured? (very high to very low)
 - 3. Knowledge gain (very limited to very high)
 - 4. Contents (very clear to too little)
 - 5. Clarity (very clear to not clear)
 - 6. Speed (very clearly to not at all)
 - 7. Do you understand the importance of the course contents to your work? (very adequate to very inadequate)
 - 8. Suitability of teaching and learning material (handouts) (very adequate to very inadequate)
- Section 2: Please rate the "tutorials for beginners" regarding the following aspects.**
 - 1. How do you rate the tutorials for beginners as a whole? (very good to very bad)
 - 2. How are the tutorials for beginners structured? (very high to very low)
 - 3. Knowledge gain (very limited to very high)
 - 4. Contents (very clear to too little)
 - 5. Clarity (very clear to not clear)
 - 6. Speed (very clearly to not at all)
 - 7. Do you understand the importance of the course contents to your work? (very adequate to very inadequate)
 - 8. Suitability of teaching and learning material (handouts) (very adequate to very inadequate)
- Section 3: General Commentaries**
 - 1. In particular, I like: (text input field)
 - 2. In particular, I did not like: (text input field)
 - 3. Would you recommend this course to others? (very much to not at all)
- Section 4: Organisation**
 - 1. Registration (very good to very bad)
 - 2. Service (very good to very bad)
 - 3. Coffee break (very good to very bad)
 - 4. How were you informed about this course? (online, printed booklet, making list, other)
- Section 5: For our statistics, we need some more information**
 - 1. Affiliation type: student, PhD student, employee (but not PhD student)

Access Pool Computers (1)

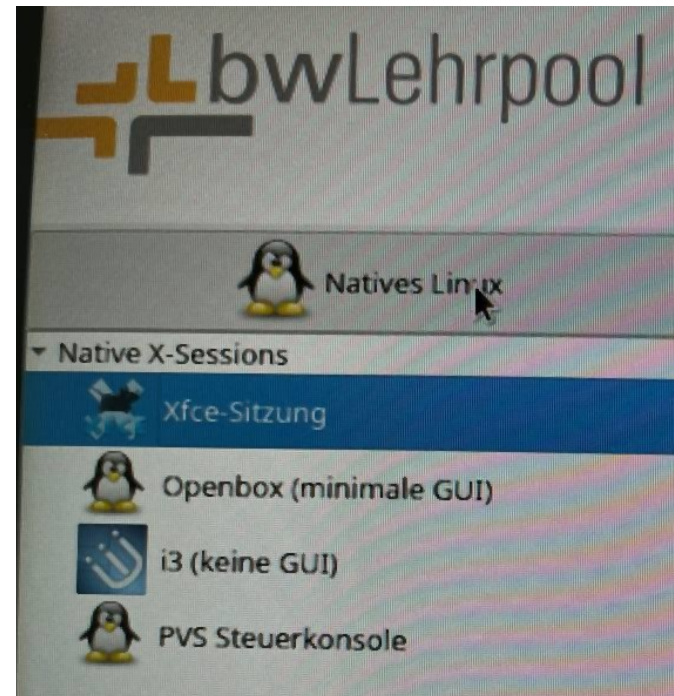
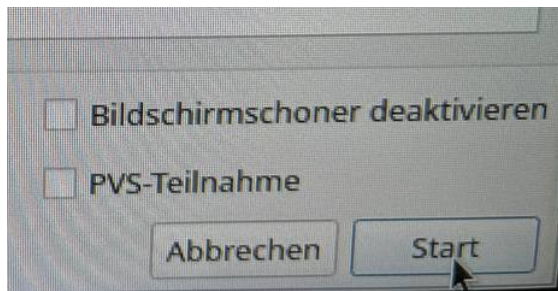
1. Reboot pool computer
2. Log in with your „User ID“ and home organization „password“
 - User ID = <university_accountname@<email-domain>
 - e.g.: KIT: `xy1234@kit.edu`
 - e.g.: Uni Stuttgart `ac123456@uni-stuttgart.de`



Access Pool Computers (2)

3. Choose „Natives Linux“
4. Choose from „Native X-Sessions“:
 - „Xfce-Sitzung“

5. Start Session



Where to get the slides and exercises?

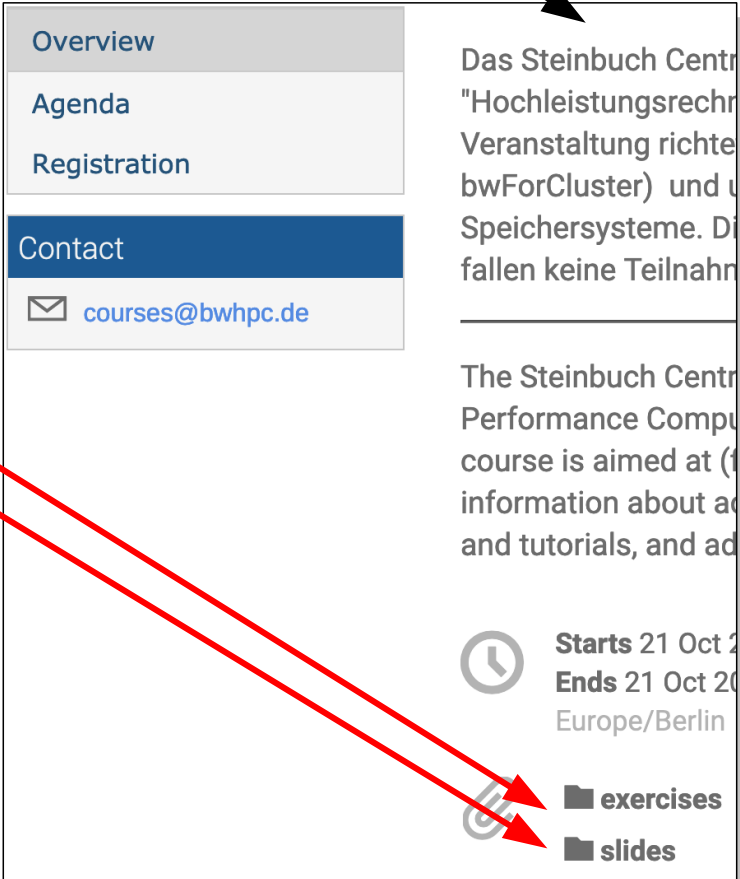
■ <https://indico.scc.kit.edu/event/4634/>

bwUniCluster: /opt/bwhpc/common/workshops/2024-10-16

HoreKa: /software/all/workshops/2024-10-16

■ exercises

■ slides



The screenshot shows a web page with a navigation menu on the left containing 'Overview', 'Agenda', 'Registration', 'Contact', and an email icon with 'courses@bwhpc.de'. The main content area has a title 'Das Steinbuch Centre for High-Performance Computing' and a description. Below the description, there is a clock icon and the text 'Starts 21 Oct 2024' and 'Ends 21 Oct 2024 Europe/Berlin'. At the bottom right, there are two folder icons labeled 'exercises' and 'slides'. A black arrow points from the top right of the slide to the top right of the screenshot. Two red arrows point from the 'exercises' and 'slides' text on the left to the corresponding folder icons in the screenshot.

Course Agenda – October 16th 2024

09:30	→ 10:00	bwHPC & NHR: Concept, Infrastructure and Support	🕒 30m	✎
10:00	→ 10:45	Access procedure: bwUniCluster 2.0, HoreKa, bwForClusters (JUSTUS 2, Helix, NEMO, BinAC) incl. exercises	🕒 45m	✎
10:45	→ 10:55	Break	🕒 10m	
10:55	→ 11:25	Hints for successful submitting procedure to the HPC cluster (Horeka)	🕒 30m	✎
11:25	→ 11:30	Break	🕒 5m	
11:30	→ 12:30	Linux Introduction (CLI, Editors, etc): Linux introduction + Permissions	🕒 1h	✎
12:30	→ 13:45	Lunch Break	🕒 1h 15m	
13:45	→ 14:20	Software Modules: UC2+HK	🕒 35m	✎
14:20	→ 14:25	Break	🕒 5m	
14:25	→ 15:40	Batch system introduction + Architecture incl. Exercise	🕒 1h 15m	✎
15:40	→ 15:45	Break	🕒 5m	
15:45	→ 16:25	File systems	🕒 40m	✎