

## Organising and conducting practical hands-on sessions in large online training courses

*Monday 29 September 2025 18:10 (30 minutes)*

For smooth onboarding of new users to their HPC systems, the Jülich Supercomputing Centre (JSC) offers twice per year an “Introduction to Supercomputing at JSC –Theory & Practice” course. This course is the largest course in the JSC training curriculum in terms of number of participants with repeatedly over 100 registrations, and is held online to ensure the widest reach. A key component of the 3.5-day course is a series of interactive hands-on sessions designed to actively engage participants through practical exercises. The hands-on sessions take place over three consecutive mornings, starting on day two, and typically involve 30 to 60 participants per session. In this talk we detail the organisational structure for a smooth conduction of practical hands-on exercises in a large online setting that can be adapted by other online courses with practical components. Interaction with participants is organised through a multi-platform setup, employing a chat based communication system for structured real-time Q&A, and a video conferencing tool allowing for parallel-running topic discussions with domain experts. Two organisers are in charge of navigating the participants through the practical sessions, matching help requests with HPC domain experts who are present online to assist participants based-on-demand, and foster an interactive environment for topic discussions. In this talk we share best practices and guidelines for structuring communication and manage information flows, addressing the diverse needs of participants while keeping overview of participants progress and potential struggles that require assistance. We share various techniques we implement to increase and uphold engagement, which is correlated with an increased knowledge retention rate and depth of understanding, in an online setting breaking the screen-barrier.

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