GWDG
AG Computing
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Exercise 1 / 2026-10-20
HPC System Administration / WiSe 2026/27
105 Minutes Total

Exercise Introduction

You have collected some experience in installing, configuring and setting up different tools. This exercise should give you an idea of the importance of documentation when administering systems. It will also give you the opportunity to look deeper into the ITIL framework.

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Task 1: Recall and document (10 min)

Recall what you have set up and installed yesterday. Document your steps from your memory. Also include what you would have documented on the go, even if you don't remember what exactly you did right now. In the end, you should have an admin-facing documentation on your Warewulf setup.

- Do you remember every step?
- Are you having difficulties remembering everything?
- Could you explain to a colleague what exactly he*she has to do?

Task 2: Peer Review of Documentation (10 min)

In your group, compare the documentation you created during the previous exercise. Discuss and agree on:

- One strong aspect (e.g., clear structure, helpful example, good audience fit)
- One area for improvement (e.g., missing context, unclear steps, hard to navigate)

Optional Task 3: Deep Dive into ITIL (45 min)

This is a difficult **additional** task which will support your understanding in the topic.

If you have additional time, read into the ITIL 4 Foundation. Focus on:

- Service Value System

- The Four Dimensions of Service Management

Further your understanding of ITIL by researching the relevance of two of the four dimensions for HPC system administration.

Task 4: Data Protection (10 min)

Apply the 7 Goals of the Standard Data Protection Model (SDM) to the operation of an HPC cluster. Identify relevant TOMs (Technical, Organizational, Management measures) and assess potential risks.

Task 5: Write Documentation as You Go (75 min)

For the rest of the course, write documentation as you go.

During each session, take notes on key concepts, commands used and setup steps. Convert your notes into user-facing documentation, using clear headings, step-by-step instructions, examples, and troubleshooting tips. Save the documentation in a Pad.

You may use our System Promt for Writing Documentation (cf. Further Reading) to aid you effort.

The documentation will be reviewed and discussed in a dedicated session at the end of this block course.

Further Reading

- `https://wiki.en.it-processmaps.com/index.php/Main_Page`
- `https://www.itil.com/`
- `https://chat-ai.academiccloud.de/chat?settings=eyJzeXN0ZW1fcHJvbXB0IjoiWW91IGFyZSBhbiBleHBlcn`