

# Moodle in a Kubernetes Cluster

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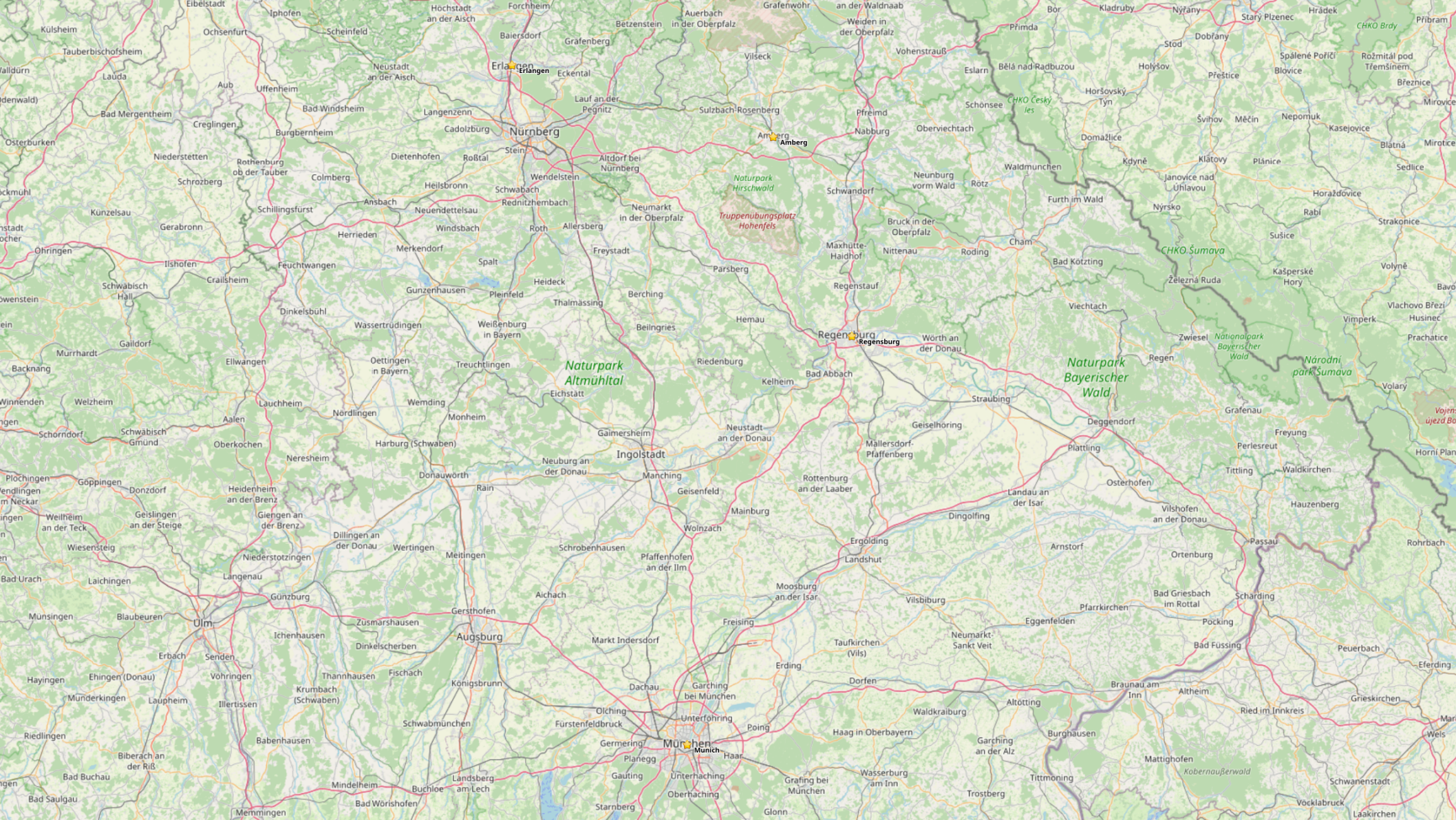
whoami

# whoami

- Bastian Meissner
- TTP since 2015
- M.Sc. @ FAU Erlangen
- DevOps @ UR









About

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- More about my trials and tribulations
- Feedback / comments very much welcome

# Basics

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- Moodle: open-source LMS
- ILIAS: another open-source LMS
- Kubernetes: container orchestration
- Helm: "K8s package manager"



Situation @ UR

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- Currently:
  - Both Moodle and ILIAS running in parallel
  - Two staff each
- Future:
  - Replace ILIAS with Moodle
  - Run Moodle in Kubernetes Cluster

Setting up

# Setting up

- Moodle:
  - Task: Get Moodle into a docker container
  - Solution: moodle-php-apache image
    - “[...] configured for Moodle development [...]”
      - you probably *shouldn't* use this in production...
      - ... but that doesn't mean you can't...
    - However, it only provides a bare backend!
      - `initContainers!`

# Setting up

- PostgreSQL:
  - Semi-official helm charts exist, but questionable licensing
    - Copyright © 2025 Broadcom. [...] Licensed under the Apache License, Version 2.0 [...]
  - Mathezirkel Augsburg came in clutch
    - Still working on some patches with them

# Setting up

- Redis:
  - Plug-and-play, thanks KeyDB



Next steps

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- Test-Migration ILIAS to Moodle
  - Requires version update...