

High quality digital tool 2: Learning dashboard that can communicate with assessment software

Technical Overview

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About this document

The target audience of this technical overview are people with a technical background that want to use the learning dashboard and its communication with external assessment software.

PRISMA as basis

PRISMA is a learning dashboard that supports group discussions by showing the anonymized results of the individual answers given for questions in a task. The answers will be aggregated depending on the question type. E.g. for multiple choice question a frequency distribution is shown or for maker questions (where students need to mark a region of interest in an image) all markers are shown in one image.

The answers that are aggregated and displayed are coming from modules. A module is a connector to a software system that provides (a) the student answers and the (b) the context information. The context information contains the task containing the questions and additional information about the questions (e.g. what possibilities are correct).

Modules can be added to support other software systems.

Deployment

The following instructions show how to configure and use PRISMA in your own environment.

Prerequisites

- Server with Docker and Docker Compose installed
- Git
- nginx

Preparation

- Clone repository
- `cd prisma/docker_config`
- `cp .env.example .env`
- Edit `.env` according to your needs. At least the following needs to be set:
 - `PRISMA_SERVER=[domain]`
 - `[module]_API_URL` and `_TOKEN` for the modules you want to use
 - `AUTH_DEFAULTS_GUARD=local`
- Use nginx configuration `nginx_prisma`
 - replace domain `prisma.de` with your domain
 - make sure to add path to SSL certificate and key
 - if you need to use another connection port than the default one (8002), change it both in `docker-compose.yml` and the nginx configuration
- Build images with `docker compose build app web`

Running

- `docker compose up -d`
- Check with `docker ps | grep prisma` if PRISMA is running
- Init DB: `docker compose exec app php artisan migrate --seed --force`
- Adjust list of *modules* on DB
 - `docker compose exec db psql -U prisma -d prisma`
 - `select * from modules;`
 - e.g. `update modules set active=true where name = 'vquest-online';`

- Open [domain] in browser
- Login with *admin* and *secret*

More information is available in the GitHub repository: <https://github.com/clovid/prisma>

Connecting own assessment software

To connect a new assessment software package to PRISMA and show the results a new *module* needs to be created.

See <https://github.com/clovid/prisma/blob/public/config/modules.php> as the main configuration place for new modules.

An Aggregator class aggregates data from external services. See <https://github.com/clovid/prisma/blob/public/app/Services/VQuestAggregator.php> as an example for an existing module.