PANDA: A Platform for Open Learning Analytics

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Overview

PANDA is a two-year research and development project funded by the German government. Partners involved in the project are Ilmenau University of Technology, the Fraunhofer Institute for Digital Media Technology (IDMT) and the company Magh & Boppert.
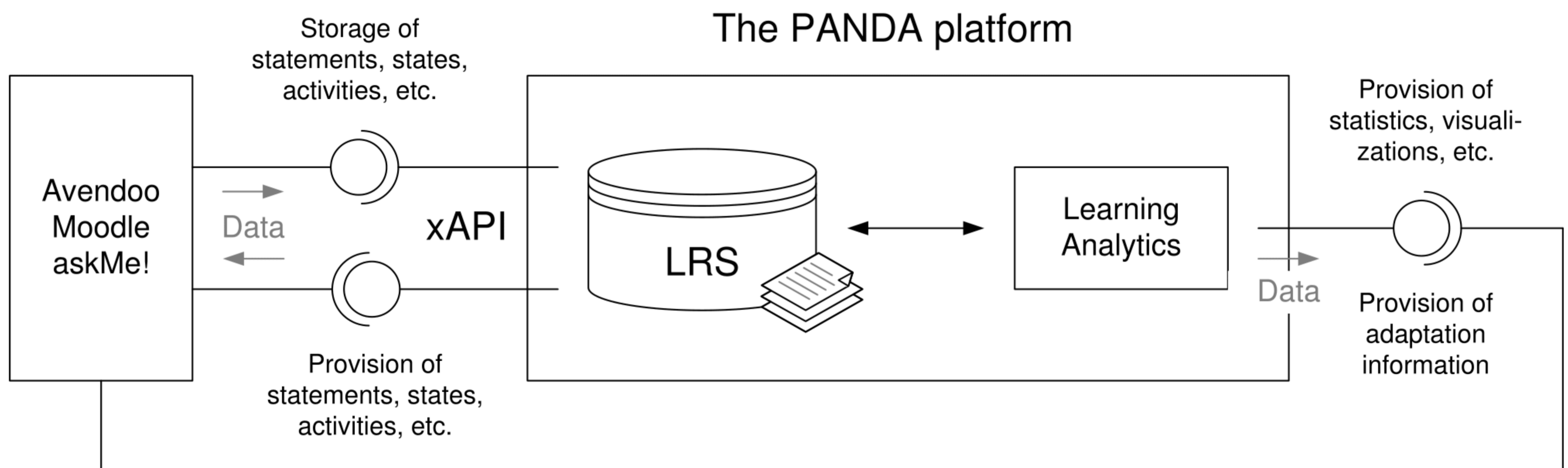
The main goal of the project is to develop a centralized platform that allows different learning systems to publish data about learners and their contexts anonymously with the benefit of getting useful information to foster learning in return. The PANDA platform applies different LA methods and techniques to analyze the collected data and to detect interesting patterns within.

Learning Record Store (LRS)

- Stores information about students' learning activities
- xAPI interface
- Actor-verb-object schema

Learning Analytics (LA)

- Analyzing data stored in the LRS
- Tries to discover patterns in data
- LA techniques:
    - Statistics
    - Information visualization
    - Data mining
    - Social network analysis

The PANDA platform

AskMe!

- Web-based e-assessment system
- Traditional question types
- Including ICOs
- Perfectly tailored feedback
- Information visualization

Moodle

- Open source learning platform
- Big community
- A lot of modules
- Including ICOs

Avendoo

- Learning platform developed by the company Magh & Boppert
- Provision of students' learning activities

RemoteLab

- University of Technology Ilmenau offers students real world working environment
- Design, verification and implementation of digital circuits
- Grid structure