openHPI Course: Digital Identities – Who am I on the Internet?

Identity Management and Identity Provider

Prof. Dr. Christoph Meinel

Hasso Plattner Institute
University of Potsdam, Germany

HPI Hasso Plattner Institut

ID Management and ID Provider

Identity Management – ID Management – is concerned with all what is needed to be able to work with digital identities, in particular it manages the user access rights to network resources

Tasks

- Creation of digital identities
- Secure storage of digital identities
- Authenticating users
- Authorizing users
- Providing possibilities for external services to access digital identities

The instance, that performs these tasks, is called

→ **Identity provider – ID provider**

Creating a Digital Identity

Example: openHPI

Storing a Digital Identity

Example: openHPI

Online Service

Name

Email Address

Password

Database

Welcome to openHPI

Create a new account on openHPI. Just fill in your details.
Notice: Your name will be shown on your openHPI Record of Achievement.

Please notice: Your personal data will be processed on openHPI in accordance with our privacy policy. By creating a user account on openHPI, you agree to the terms of our privacy policy.

* Name

* E-mail address

* Password

* Repeat password
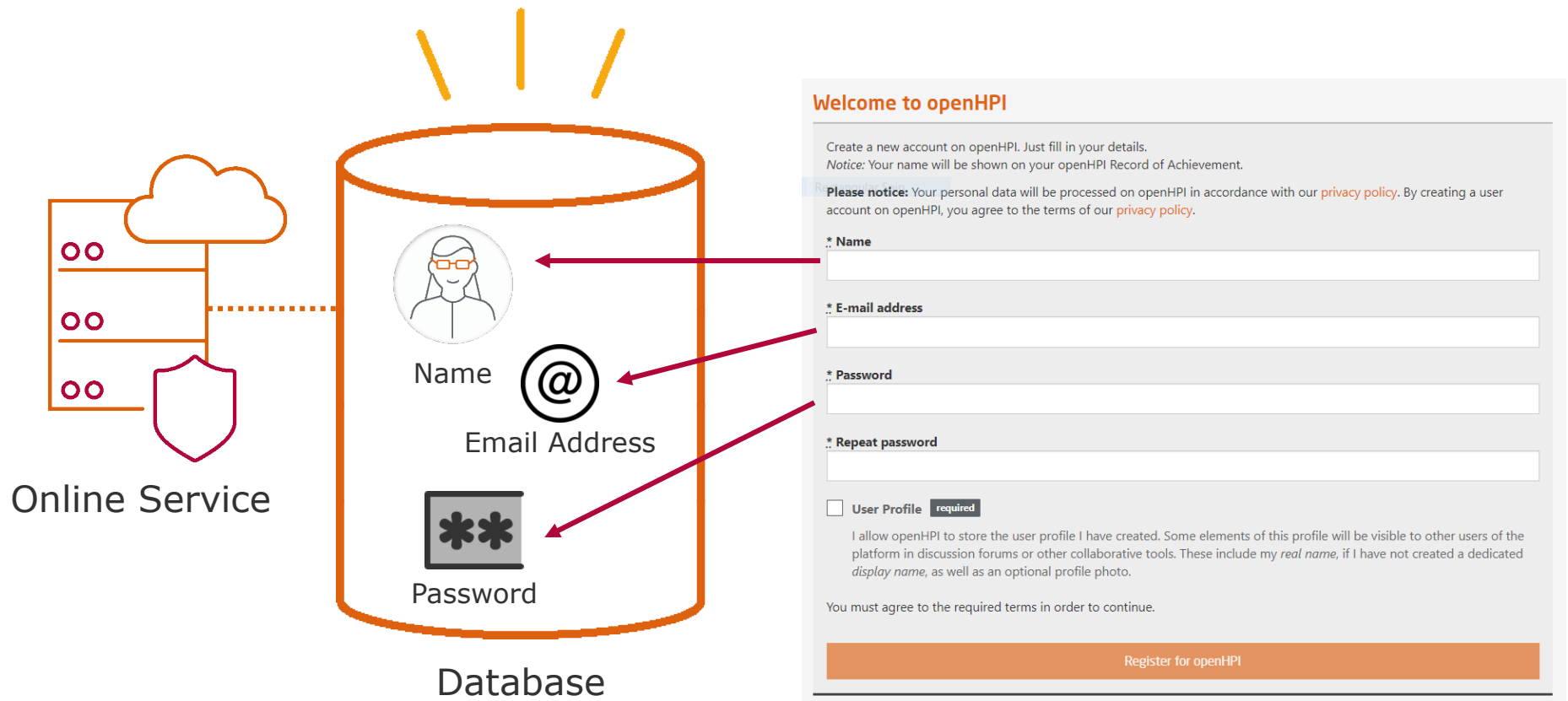
☐ User Profile `required`

I allow openHPI to store the user profile I have created. Some elements of this profile will be visible to other users of the platform in discussion forums or other collaborative tools. These include my *real name*, if I have not created a dedicated *display name*, as well as an optional profile photo.

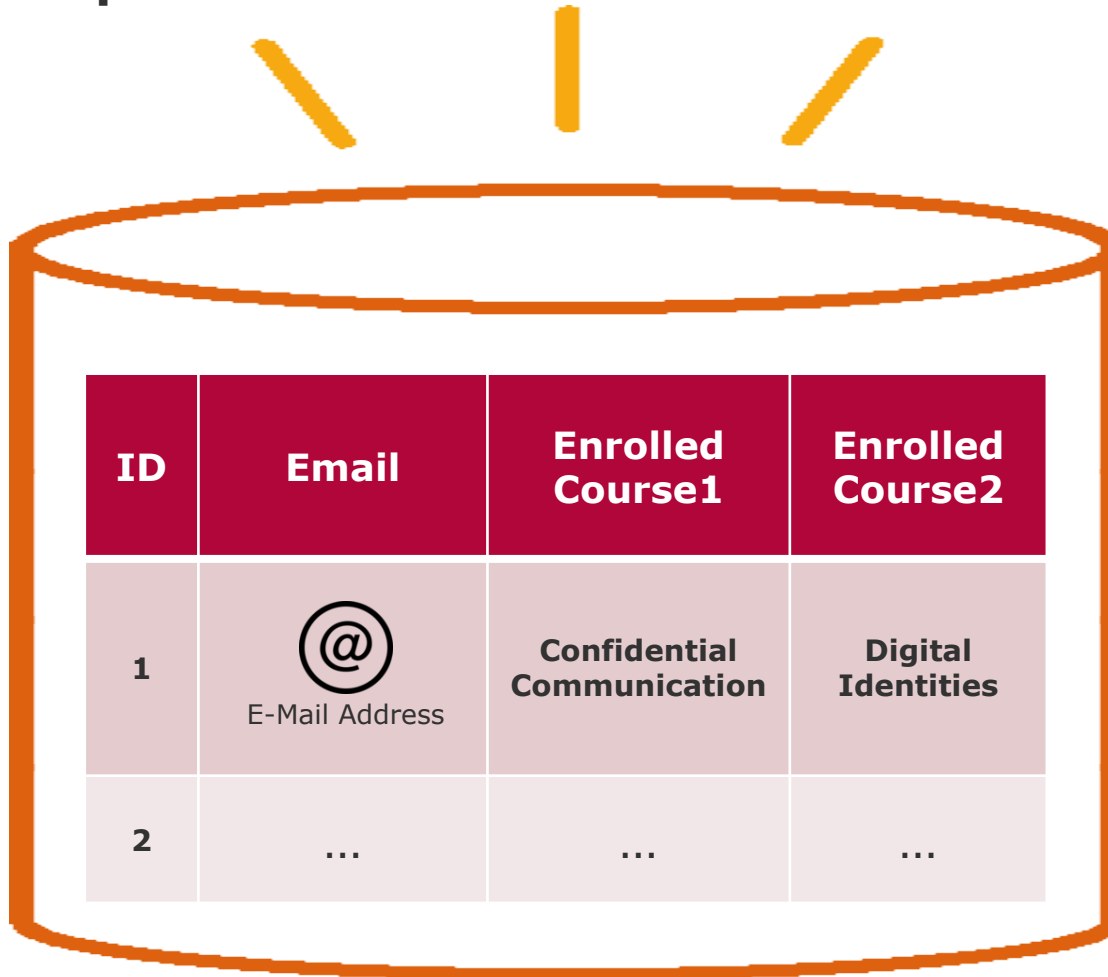You must agree to the required terms in order to continue.

Register for openHPI

Characteristics a Digital Identity

Example: openHPI

ID	Email	Enrolled Course1	Enrolled Course2
1	@ E-Mail Address	Confidential Communication	Digital Identities
2	…	…	…

Verification of User's Access Rights

Example: openHPI

User wants to watch video

Is user enrolled for this course?

User gets access to requested video

Yes, he/she is!

Online Service

Database
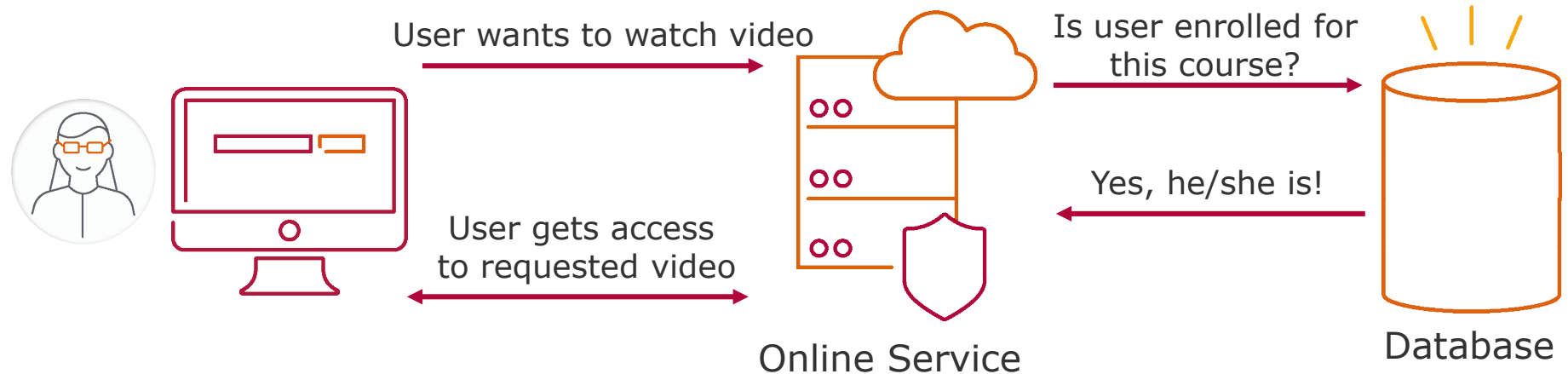
Life Cycle of a Digital Identity

Creating a digital identity (Registration)

Accessing a digital identity (Authentication / Login)

Useing digital identities

Checking access rights of a digital identity (Authorization)

Updating a digital identity (e.g. new email address)

Erasing a digital identity (Deregistration)