Internet Technologies and Systems Prof. Dr. Christoph Meinel Research Assistant "HPI Identity Provider"



Research Assistant Identity Management

"HPI Identity Provider"

Background

To overcome the creation of new accounts for every new online service that would include a new username and complex password to remember, the OAuth and OpenID Connect Protocols were created. Using these protocols the actual authentication decision from any service can be delegated to one specific location where the only authentication needs to happen. Until today, they are widely deployed all over the internet and in company networks. Since some years, we provide the "HPI Identity Provider" that allows the usage of OpenID Connect within HPI to allow the usage of your HPI credentials for important study related services such as moodle or teletask, but also to quickly include user authentication into your own software projects at HPI.

Problem

Over the time, many services and project-specific clients were integrated within the provider and it is quite established at HPI. Apart from regular updates to our solution there are further extension ideas such as multi-factor authentication using also very new standards such as FIDO2. In this context, the individual implementation may not be the best solution anymore and the switch to a standard software and its extension such as keycloak or gluu may be the next step.

Goal

As a research assistant, you should evaluate and implement these extensions:

- Evaluate open source standard software solutions for identity management
- Propose and implement a 'new' version of the HPI Identity Provider
- Use some container technology to easily provide development, test and production versions

Contact

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