

UTORauth API Proposal

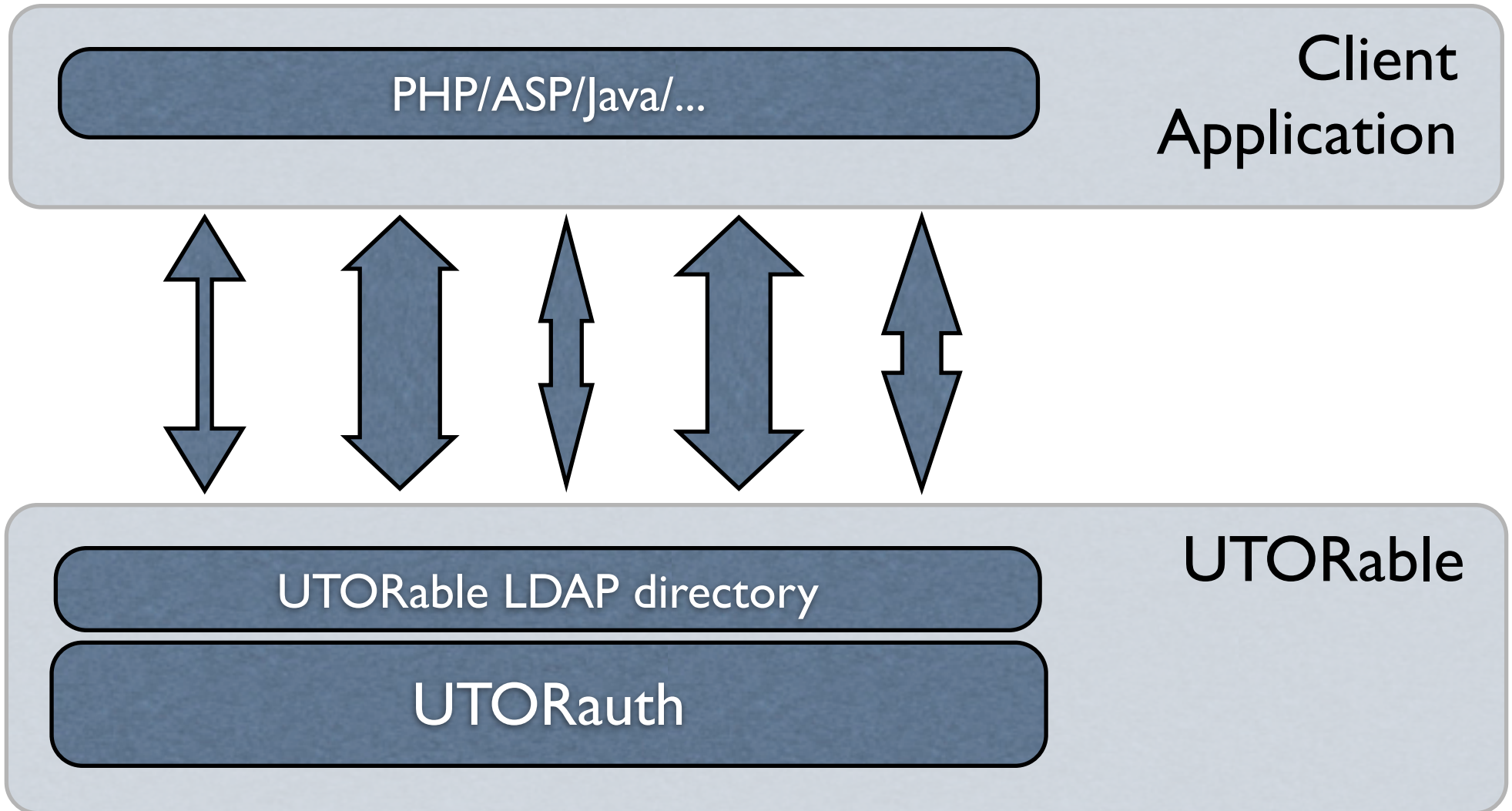
The Proposal

- a new API to the UTORauth system will be designed using SOAP (**S**imple **O**bject **A**ccess **P**rotocol)
- a Java implementation of the API will be offered to application developers to help them develop using the J2EE standard

What is an API?

- **A**pplication **P**rogramming **I**nterface
- an interface that a computer system provides to allow requests for service be made of it by other applications and/or to allow data to be exchanged between them

What is an API?



What is an API?

PHP/ASP/Java/...

Client
Application

API

UTORable LDAP directory

UTORauth

UTORable

Why an API?

- protects developers against future upgrades of UTORauth
- hides unnecessary details of the internals of UTORauth
- standardized communication permits more complex queries to be performed

Why an API?

- currently, simple queries are supported by LDAP:
 - is `terrylee` a student?
 - should `terrylee` be given staff privileges?
- with the new API, queries of this type could be supported:
 - what courses is `0999999999` taking?
 - who is currently enrolled in `CSC148`?

Why J2EE?

- industry standard, widely used in business and university settings
- wide selection of free, commercial-grade offerings implementing this specification
- scalability is built into the J2EE application server, paving the way for future expansion

ObjectWeb

- Open Source initiative by Bull, France Telecom R&D and INRIA: <http://www.objectweb.org/>
- ObjectWeb provides implementations for many parts of the J2EE specification, notably the JOnAS application server
- component based approach allows developers to choose which parts of the J2EE spec they will need for their application