

# IAM - Authentication and Authorization at ETH Zurich

"IAM" is the central user management system of the ETH Zürich. It regulates the access to the following IT user services of the ETH: the ETH network via VPN, cabled and wireless LAN, email, central file storage located on the NAS server, to computers in the student computer rooms, etc.

The authentication data and authorization data are managed by the central IAM system "DirX". This system controls the Directories openLDAP, Active Directory and RADIUS, the use of which is also offered to ETH organizational units.

The ETH user administration **IAM** is integrated in the Swiss universities authentication and authorizing infrastructure federation (AAI) [Switch](#).

## Specifications

- high availability achieved by means of redundantly laid out systems
- encrypted password repository
- automatic allocation of account data and default services to ETH members, at entry or enrolment, respectively
- automatic expiration of access to services, after leaving the ETH or deregistering, respectively
- management of personal passwords by web application with reset self-service
- administration of passwords and services by entitled persons using the web application
- accounts for guests, courses, congresses with a definable start and expiration date
- self-registration for day guests

## Default Services

- general authentication for applications
- Mailbox: email-/calendar service, Active Directory account
- WLAN\_VPN: software distribution system for employees and students

## Authentication Systems

- **AAI** -- Authentication/authorization of web page applications with Shibboleth. We operate a so called home organization (Identity Provider) on the basis of Sibboleth and the LDAP infrastructure described below.
- **Idaps** -- Authentication/authorization with LDAP, connection possible with SSL **and** registered web server IP number only.
- **Active Directory** -- Authentication/authorization against a Windows 2003 domain.
- **RADIUS** -- Authentication/authorization using RADIUS protocol against a RADIUS server (radiator).

RADIUS is used for the following network access services: VPN and iPass.

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