



ILIAS - an Example for the Cooperative Development of an Open Source Learning Management System

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ILIAS

- **Introduction**
 - What is ILIAS?
 - The History of ILIAS
- **Features of ILIAS**
 - Support of e-Learning Processes in ILIAS
 - ILIAS Features
- **The Open Source Process**
 - About Open Source
 - Organisation and Tasks
 - Developer Network
 - Towards a European Network



What is ILIAS?

ILIAS ...

...stands for **I**ntegrated **L**earning, **I**nformation and cooper**A**tion **S**ystem,

...integrates several tools for learning, information, working and authoring in one environment,

...supports learning and teaching processes in education, vocational and further training,

...can be adjusted to personal and organisational needs,

...is available as Open Source software and thus offers a flexible and reasonable solution for e-learning projects.



The History of ILIAS

ILIAS was developed within the **VIRTUS** project (1997-2001, Department of Economics, Business Administration and Social Sciences, University of Cologne, funded by Bertelsmann Foundation)



www.virtus-uni-koeln.de

Aims of VIRTUS:

- Time independent distance learning
- Expansion of traditional functions in higher education by a web-based learning and working environment
- Improved communication between students and teachers

The lack of a software covering the requirements of the project in 1997 made it necessary to develop an own solution.



The History of ILIAS (2)

- 1997-1999 Initial development of ILIAS within the VIRTUS project
- 2000 Start of the **ILIAS open source project**
Financial support: *University of Cologne, Ministry of Education NRW, Sal. Oppenheim Foundation, Federal Ministry of Education*
- 25.09.2000 First ILIAS open source release published (*ILIAS 1.7.0*)
- Today
- 30 releases published
 - Support for 15 languages
 - More than 15.000 downloads
 - Approx. 300 - 600 installations worldwide
 - Developer community stretching from Norway to Argentina and from Canada to Indonesia
 - Excellent results in LMS evaluations



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Support of e-Learning Processes in ILIAS

ILIAS offers support for ...

Personalised access to information

Publishing and using learning material

Communication

Cooperative work

Content creation and Import

System administration





Personalised Access to Information

- ‘ Personal Desktop’ as the personalised space for every user in the entire Learning environment
- All information relevant for a user is accessible on his ‘ Personal Desktop’ :
 - Subscribed courses and learning modules
 - Subscribed forums and groups
 - Personal bookmarks
 - Calendar
 - Personal settings: language, password and further user profile information
 - Awareness tool (‘ buddy list ’)



Publishing and using learning material

- Different types of learning material can be published:
 - ILIAS learning modules
 - ILIAS test and assessment objects
 - SCORM learning objects
 - Digital library objects
 - HTML files
 - Files for download such as pdf-files, excel-sheets, word-documents, slideshows
- Tools:
 - Search engine (full text, meta data)
 - Personal annotations
 - Print and download function



Content Creation and Import

- Integrated XML-based authoring environment:
 - XHTML-based user interface
 - Editor functions for text, tables, clickable maps, glossary
 - Integration of media objects (images, applets, animations, video and audio files etc.) and XHTML pages
 - File list for downloadable files
 - LOM meta data fully supported
 - Stylesheet editor (CSS)
- Re-Use of objects:
 - Referencing of object through unique Virtual Resource Identifiers (ILIAS VRI)
 - Repository for media objects
- Import of SCORM (1.2) objects
- Import of HTML sites



Communication

- Discussion forums
 - Forums can be attached to courses, groups and modules
 - Different views (flat, thread, tree)
 - Attachments
 - Export and print
- Integrated mail system
 - Internal mail to users, groups and course participants
 - External internet mail
- *Chat*



Cooperative Work

- Organisation of users in groups / courses
 - Administration of resources (files, learning objects etc...)
 - Administration of members (different roles)
- Tools:
 - File exchange
 - Cooperative content creation within the ILIAS authoring environment
 - Group forums
 - Group mail function
 - Group calendar
 - *Task manager*



System Administration

- Interfaces for administration of
 - Users
 - Objects
 - Access rights
 - Roles
 - System settings
 - Payment settings
 - LDAP
 - User tracking and statistics



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About Open Source

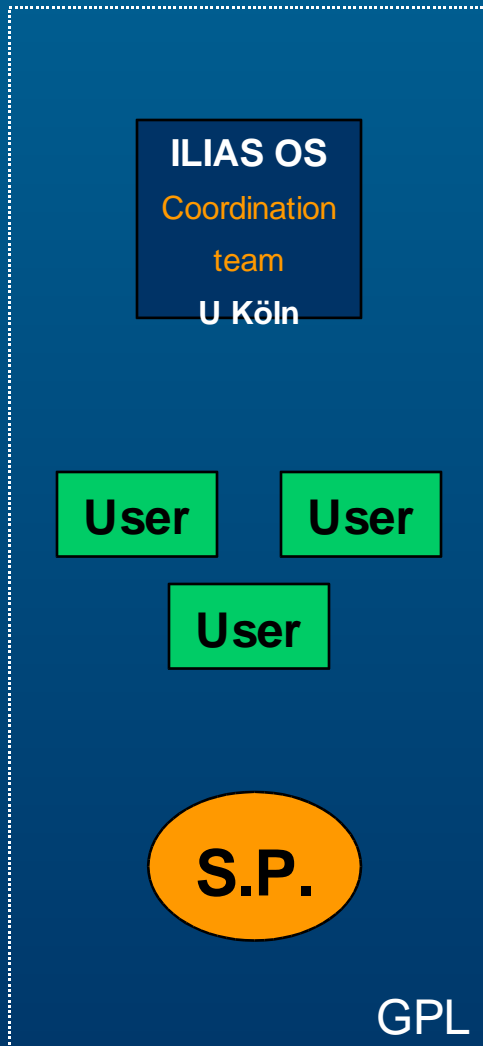
Open Source is:

- ... a community of people cooperatively developing software
- ... a source code development ethos and methodology
- ... a software development analogue of open scientific inquiry
- ... an attempt to account for the costs of software development honestly
- ... a software that is available to the world for modification and redistribution

(Michael. K. Johnson, Red Hat Inc.)



ILIAS open source Project: **Organisation and Tasks**



Coordination Team at Cologne University:

- Coordination of development efforts
- Quality control
- Definition of standards and interfaces
- Development of new functions and modules
- Publishing of releases and documentation
- Community workshops and public relations

ILIAS Community:

- Evaluation, bugfixing and definition of requirements
- Development of new functions and documentation
- Translations and maintenance

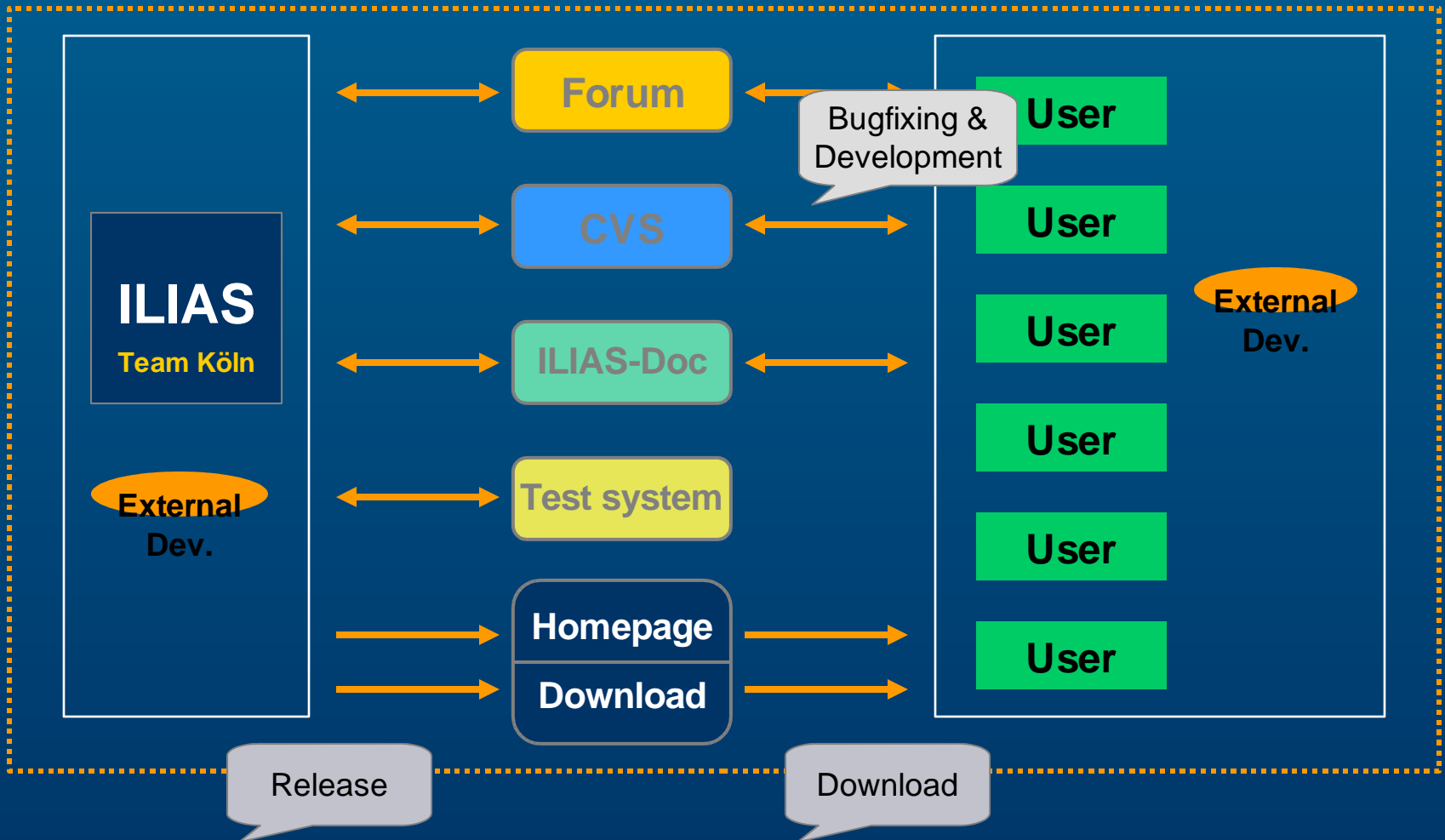
Service Provider:

- Training and workshops
- Development and customizing
- ASP / Hosting of installations



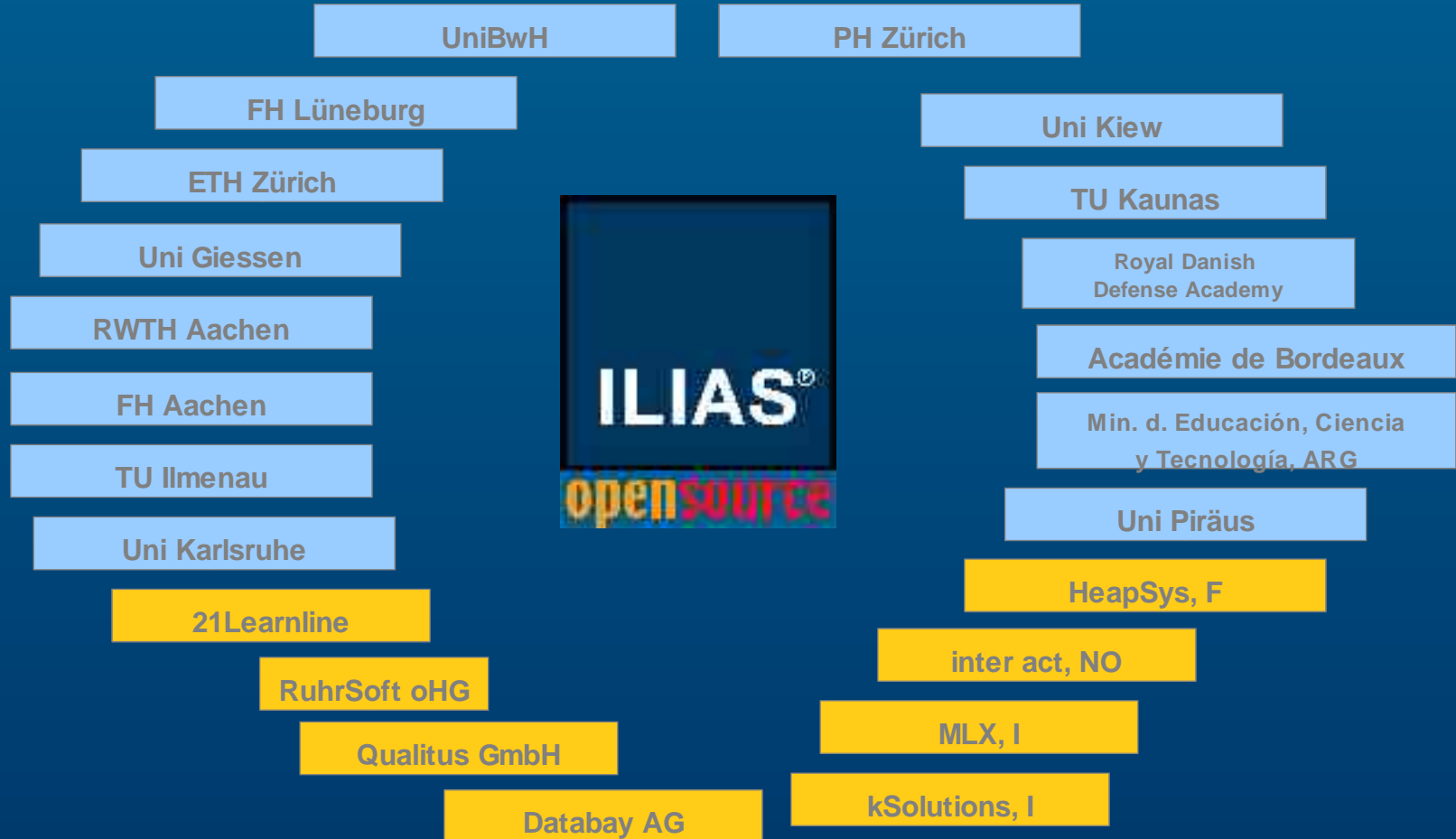
ILIAS open source Project: Developer Network

GPL





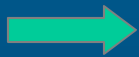
ILIAS open source Project: Developer Network





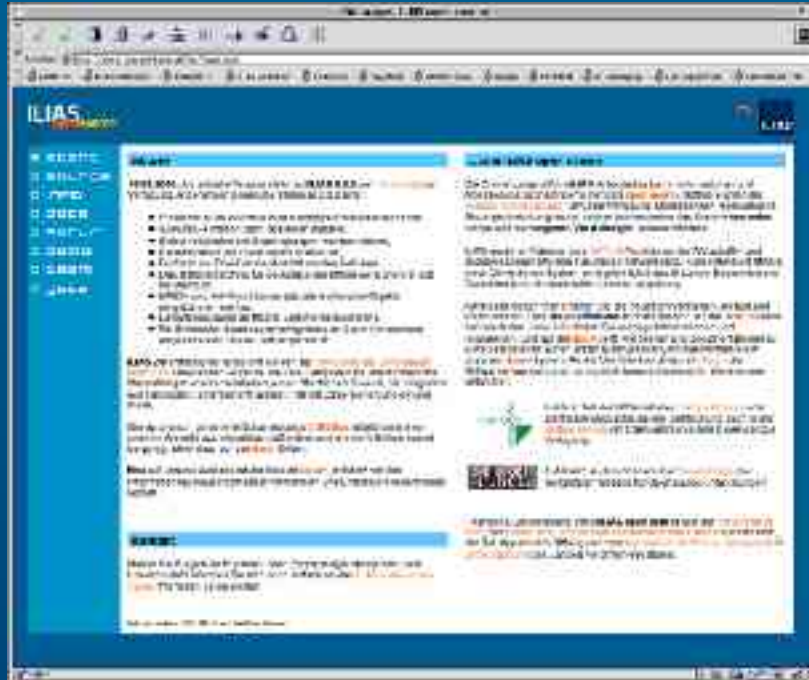
Towards a European Network

From the beginning ILIAS open source was designed as an international project.



One of the major goals was bringing together people involved in e-learning all around the world to profit from synergies.

1. Step: Translation of ILIAS to other languages:
at present 16 language versions are available:
Czech, Chinese, Danish, English, French, German, Greek, Indonesian, Italian, Lithuanian, Norwegian, Polish, Russian, Spanish, Swedish, Ukrainian
2. Step: Founding of regional competence centres for providing information, service and support
3. Step: Founding of development centres



For more information
visit our website:

www.ilias.de

Forum ILIAS:

www.ilias.de/iosbb

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