# Apache Lenya - Open Source Java/XML Content Management System

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Screenshot of the Apache Lenya menu bar

Apache Lenya is an Open Source Java/XML Content Management System and comes with revision control, site management, scheduling, search, WYSIWYG editors, and workflow.

Screenshots (screenshots.html) | Demo (http://olr.kbs.uni-hannover.de:8888) | Download (http://www.apache.org/dyn/closer.cgi/lenya)

# 1. News

- Two Lenya presentations at ApacheCon Europe 2005 (http://apachecon.com/) (Stuttgart, Germany 18-22 July 2005)
- New Lenya tutorials (1_2_x/tutorial/) posted (April 24, 2005)
- Lenya 1.2.2 released (February 28, 2005)
- Lenya 1.2.1 released (December 29, 2004)
- Apache Lenya becomes a top-level Apache project. (September 22, 2004)
- Lenya 1.2 released (June 27, 2004)

# 2. Features

If you have additional requirements beyond the features listed below, you have access to all Apache Cocoon features (http://cocoon.apache.org/2.1/features.html) to develop them.

## 2.1. Authoring

- Browser-based WYSIWYG Editors that validate input against a Relax NG Schema. This prevents invalid markup as produced by other WYSIWYG editors, and allows to enforce web site style guidelines. ships with the BXE (http://bxe.oscom.org) and Kupu (http://kupu.oscom.org) editors out of the box. Asset management and link management are integrated into BXE and Kupu.
- A forms editor is available for situations where a full-blown WYSIWYG editor is overkill or where legacy browsers need to be supported.
- Pages that are being edited are automatically locked for other users, preventing conflicting changes to the same page.
- Each edit of a page creates a new revision. It is possible to revert to any previous revision of a page.

## 2.2. Workflow

- A customizable workflow engine that uses an easy XML format to define workflows. Standard one- and two-stage workflows are included. Users can be notified by email about pending approvals.
- Workflow events such as publishing or deactivating a page can be scheduled.
- Supports separate authoring, staging and live areas. For convenience, the staging area is disabled by default.
- All workflow steps are logged, providing an audit trail.

## 2.3. Internationalization

- Pages can be created in multiple languages with no impact on your site structure. Lenya automatically displays your page in the default langue if it is not available in a specific language.
- The user interface is currently localized in spanish, italian, french, german, english, dutch and japanese.

## 2.4. Layout

- The publications concept allows reuse of the information architecture of a site and brings modularity to the content level. Different publications can share content and business logic, and new publications can be created with a cloning process.
- Supports XHTML+CSS templating, eliminating the need to learn yet another templating language. Wherever possible, uses CSS for styling, therefore enforcing the separation of content and layout.
- The navigation framework automatically creates navigation items such as menus, breadcrumb paths and tabs. A sitemap can be easily created.

- Produces clean URLs without request parameters and is thus optimally accessible for search engines.
- There are no restrictions on the nesting of templates. You can use any template you have defined at any level of your site structure thanks to the URI parametrizer.

## 2.5. Site Management

- Allows you to move, copy, rename, archive or delete individual pages or whole parts of your site within an easy to use site view that shows you the pages of your site in an explorer-like view.
- Each page has tabs for easy access to meta data, assets, workflow status, revisions, access control and scheduling.
- The archive function allows you to deactiviate pages and store them in an archive.
- Deleted pages can be retrieved from the trash.
- Each page can have Dublin Core metadata assigned. Other metadata standards can easily be added if required.
- Asset management allows you to keep track of images and documents that belong to a page.
- Link management ensures that internal links are not shown if the target page doesn't exist or the user has no access to it. Link management also warns users about broken links when they publish a page.
- Checks if parent pages of a page to be published are already live to avoid inconsistent sites.
- Deployment is flexible: Sites can be served dynamically by the authoring server (for small deployments) or another servlet container. It is also possible to export content statically or to use Apache as a proxy.
- If used with a reverse proxy, can be configured to rewrite URLs based on the site structure of the live site.

## 2.6. Security

- Each page or parts of your site can be protected by SSL. Protect just the parts of your site that need protection for best performance.
- The access control allows you to restrict access to parts of your site to members of a group or individuals. You can also restrict specific functionalities, such as editing, approval or administrative features.
- Users can be authenticated against an LDAP server.
- Access can also be controlled by IP ranges.

## 2.7. Misc

- A Windows Installer makes installation on windows a 3-click process.
- Apache Lucene is integrated for full-text and field search.

## 2.8. Under the Hood

- Based on Apache Cocoon. All Cocoon components can be used to develop customized functionality.
- Unit Tests help to discover regressions in the code.
- A publication API that defines a interface for common CMS operations.
- A fallback concept allows you to selectively override core functionality in your site where needed. Default implementations are provided for convenience and ease of development.
- Uses Ant for portable scripting.