Apache Lenya

by Lenya community

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1. Introduction

Apache Lenya is an Open-Source Content Management System written in Java and based on open standards such as XML and XSLT. Lenya is built on top of Apache Cocoon and other components from the Apache Software Stack. Its XML-centric architecture allows for content delivery targeted to the capabilities of various devices, and avoids data lock-in. Apache Lenya is built around Off the Shelf components from the Apache Software Foundation.

Apache Lenya comes with the features you can expect of a modern Content Management System, such as Revision Control, Scheduling, a built-in Search Engine, separate Staging Areas, and Workflow.

Because Apache Lenya is based on Cocoon, you can use Cocoon features (http://cocoon.apache.org/2.1/features.html) such as robust Caching, multi-channel output, it's many connectivity options to quickly build customized solutions to meet your specific needs that are not already covered by Apache Lenya today.

Download Apache Lenya (http://www.apache.org/dyn/closer.cgi/lenya) .

2. News and events

- **Apache Lenya 1.2.2 released** (February 28, 2005)
- **Apache Lenya 1.2.1 released** (December 29, 2004)
- The Lenya project has evolved to become a "top-level" Apache project.
- Apache Lenya 1.2 released (June 27, 2004)

3. Features

3.1. 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. Lenya ships with the BXE (http://bxe.oscom.org) and Kupu (http://kupu.oscom.org) editors out of the box. Lenya asset management and link management are integrated into BXE.
- 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.

3.2. Workflow

- Lenya contains a customizable workflow engine that uses an easy XML format to define workflows. Standard one- and two-stage workflows ship with Lenya. Users can be notified by email about pending approvals.
- Workflow events such as publishing or deactivating a page can be scheduled.
- Lenya 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.

3.3. Internationalization

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

3.4. 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.
- Lenya supports XHTML+CSS templating, eliminating the need to learn yet another templating language. Wherever

possible, Lenya 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.
- Lenya has clean URLs 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.

3.5. Site Management

- Lenya 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.
- Lenya 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, Lenya can be configured to rewrite URLs based on the site structure of the live site.

3.6. 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 Lenya access control allows you to restrict access to parts of your site to members of a group or individuals. You can also restrict specific Lenya functionalities, such as editing, approval or administrative features.
- Lenya users can be authenticated against an LDAP server.
- Access can also be controlled by IP ranges.

3.7. Misc

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

3.8. Under the Hood

- The integration with Cocoon has been improved. For the next release, it is planned to move Lenya to a block-based system which should make it much easier to mix and match Cocoon and Lenya components.
- 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.
- Lenya uses Ant for portable scripting. This allows you to integrate Lenya into your enviroment and accomplish custom tasks easily.