

eZ Components Webdav

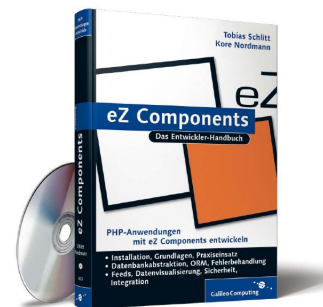
- International PHP Conference
- Möhrfelden, 6th of November 2007
- Tobias Schlitt <ts@ez.no>

Agenda

- **Welcome**
- About eZ Components
- What is WebDAV?
- Pitfalls and solutions
- The Webdav component
- Setting up your own server
- Extending the component
- Q & A

About me

- Tobias Schlitt
 - More than 6 years of PHP experience
 - Qualified IT specialist
 - Studying computer science at the Technical University Dortmund
 - Working for eZ systems on the eZ Components project
 - Contributing to multiple open source projects: PHPUnit, PEAR, Serendipity,...
 - Author of the brand new eZ Components book



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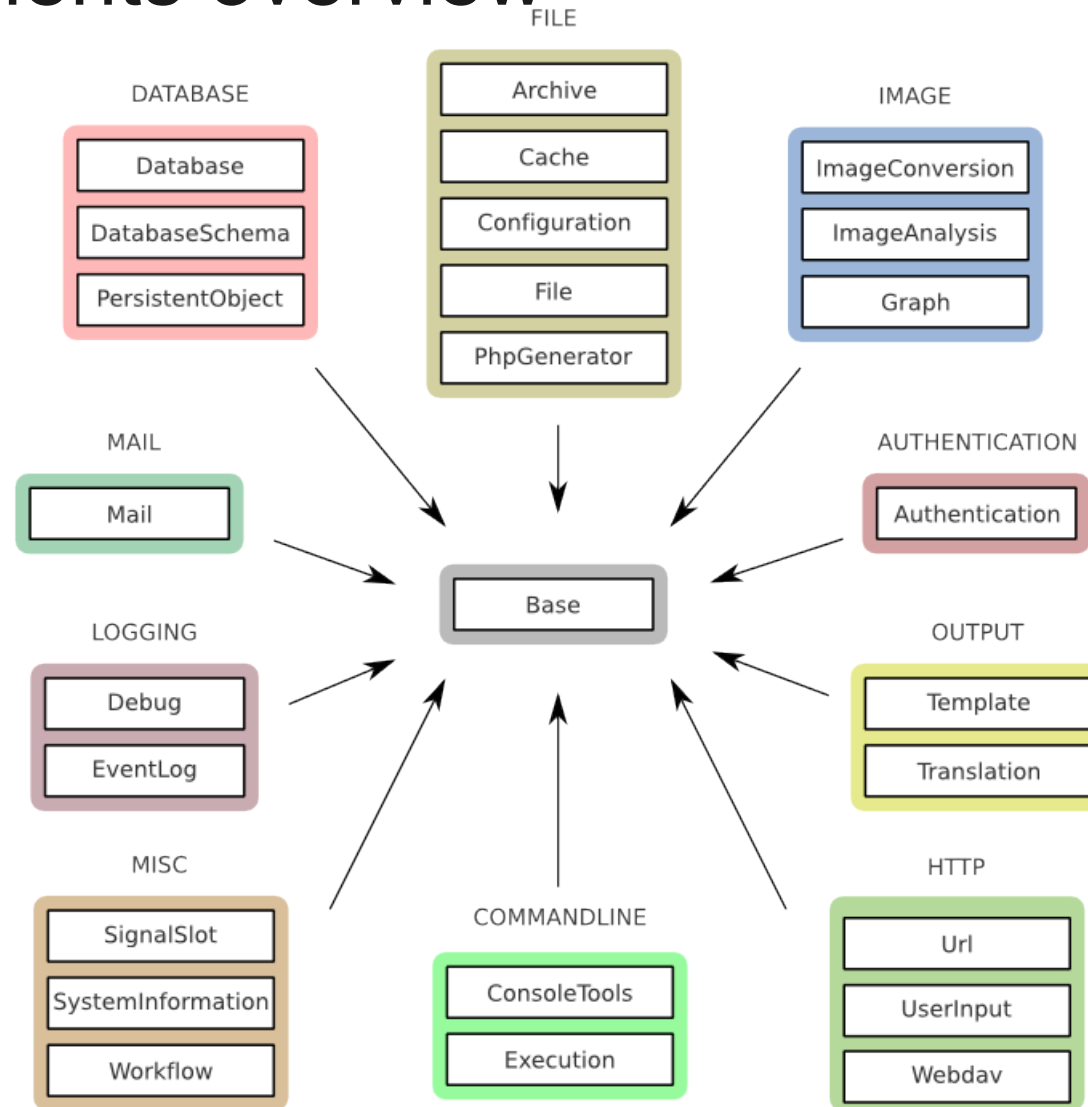
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What are eZ Components?

- Library for PHP 5 applications
- Loosely coupled components
- General purpose
- Enterprise directed
- Open Source (New BSD license)
- Produced and supported by eZ Systems
- <http://ezcomponents.org>

Components overview



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WebDAV is...

- “... an extension to the HTTP/1.1 protocol that allows clients to perform remote web content authoring operations.” (RFC 2518)
- Originally defined in RFC 2518
 - <http://tools.ietf.org/html/rfc2518>
 - Basis for our Webdav component
- Updated version in RFC 4918
 - <http://tools.ietf.org/html/rfc4918>
 - Published in June 2007

Structure

- Based on (new) HTTP request methods, headers and XML bodies
- File-system like „resource“ structure
 - Collection resources == directories
 - Non-collection resources == files
- Meta information for resources
 - Live properties
 - Dead properties

Operations

- Request methods
 - PUT / DELETE
 - COPY / MOVE
 - MKCOL
 - PROPFIND / PROPPATCH
 - LOCK / UNLOCK
(not mandatory; not supported, yet)

How can I use it?

- WebdDAV is supported by many clients
 - Cadaver (Unix)
 - Nautilus (Gnome)
 - Konqueror (KDE)
 - InternetExplorer (Windows)
 - Finder (MacOS)
 - ...

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What is wrong with WebDAV?

- The RFC is fungous and inconsistent
 - Different date formats in use
 - Many reactions for requests not defined or defined very unclear
- Standard violation
 - “DAV:” namespace in XML
- Messy structure of the RFC document

What is wrong in the real world?

- Many clients misbehave (maybe a result of the RFC quality?)
 - Broken requests
 - Expecting additional information
 - Misuse of request methods
 - Operation system specific behavior
- For some requests you simply need to test what clients expect and how they react

A solution?

- Full abstraction of client communication (transport layer)
 - Base transport (RFC compliant)
 - Extended transports for misbehaving clients
- Dispatching of the correct transport by User-Agent

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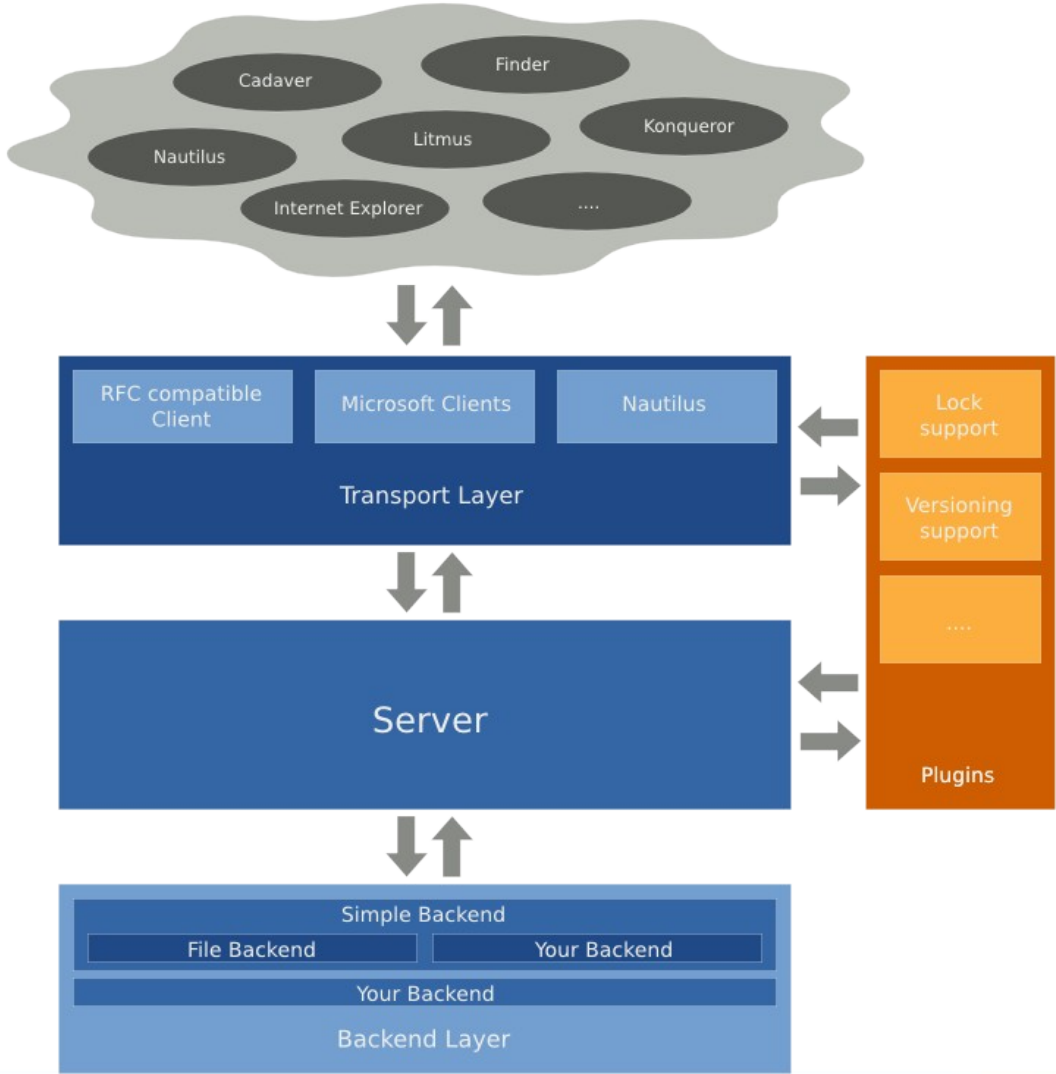
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Design of the Webdav component

- Full data structure abstraction
- 3 layer architecture
 - Transport
 - Server
 - Backend
- Plugin-API

Architecture chart



Current status

- 1st alpha released
- Stable version planned for 2007.2
 - By the end of the year
- A lot of clients already work fine
- LOCK support still missing
 - Planned as a first plugin
 - Hopefully will be part of first release

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Code browsing

- Let's try out WebDAV
- See how to setup a WebDAV server on your own



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Unsupported client

- If your client does not work
 - Extend ezcWebdavTransport
 - Fix everything necessary
 - Wireshark is a good help
 - Analyze how other servers communicate with the client
 - There is no real way beside trial-and-error
 - Missing client specifications
 - Uncooperative vendors
 - Generate a client test suite
 - Contribute your adjustments to eZ Components!

New backend

- If you need a different backend
 - Implement ezcWebdavBackend* interfaces
 - Or extend ezcWebdavSimpleBackend
- Ideas for backends could be...
 - Database
 - Java Content Repository / Zope Object Database
 - IMAP / FTP / ... ;-)

Additional functionality

- If you want to add functionality
 - Create a plugin
 - Extend ezcWebdavPluginConfiguration
 - Implement hook callbacks
 - Plugin API
 - Allows you to hook into many places of the component
 - Transport layer
 - Request parsing / Response sending
 - Property related hooks
 - Server layer
 - Request handling

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Q & A

- Do you have questions?
- Please share your experiences!
- Tell me your feedback and critics!
- Do you have cool ideas for Webdav or eZ Components in general?

The end

- Thanks for listening!
- I hope you enjoyed the session or slept well
- Try out Webdav yourself
 - <http://svn.ez.no/svn/ezcomponents/trunk/Webdav>
 - \$ pear channel-discover components.ez.no && pear install ezc/Webdav-alpha
- Contact me
 - Tobias Schlitt <ts@ez.no>
- Buy Kores and my brand-new book (at the eZ booth)

