Alkacon

OpenCms

An introduction to OpenCms, version 5.0

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May 2003

Agenda

- Overview
- Hard & Software requirements
- Basic System demonstration
- System development basics
- Notable features explained
- JSP support in the 5.0 release
- Advanced System demonstration
- Roadmap

OpenCms overview

- OpenCms is a Website Content Management System
- First released as Open Source in March 2000
- OpenCms 5.0 version released May 2003
- OpenCms 5.0 has undergone an extensive, 6 month testing period
- OpenCms is Open Source Software and published under the LGPL license
- OpenCms can be freely downloaded from the project‘s website: http://www.opencms.org

OpenCms overview (2)

- The “Java approach” to building a manageable website
- Especially suited to build company websites
- Best suited to the needs of medium-large enterprises with existing IT infrastructure
- Most features developed alongside of “real world” consulting projects
- Written in 100% Java
- Extensive documentation available from Alkacon Software at http://www.alkacon.com/downloads/

OpenCms 5.0 feature list

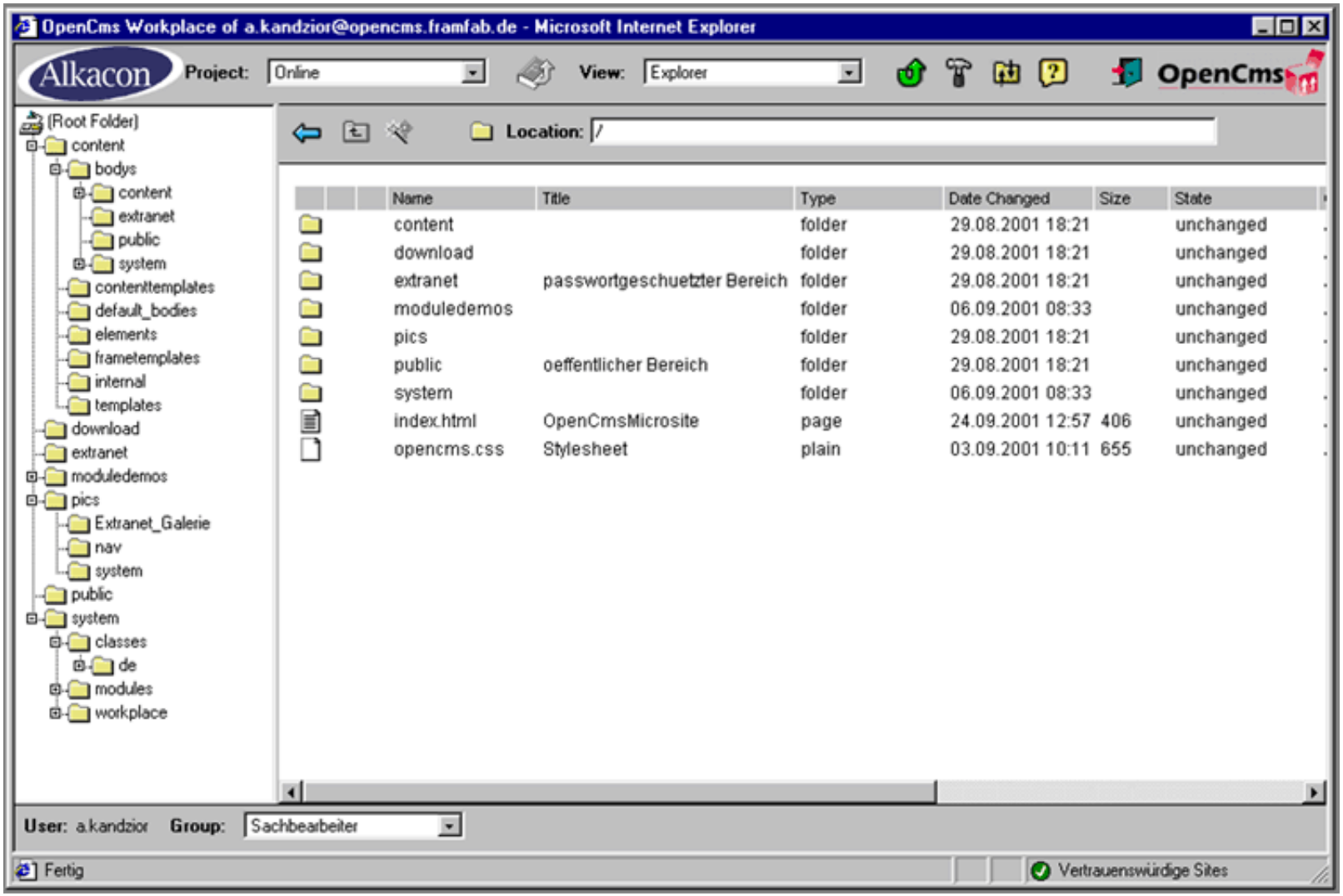
- Browser based editing
- Integrated user management
- Project based workflow
- Task management
- Version control of content
- History of changes
- Dynamic page rendering
- Fully database driven
- Static export with “backlink” capability
- i18n support for international char sets
- Flexible page & element caching mechanism
- Open module API for extensions
- Supports JSP and a wide variety of template mechanisms
- ...

Soft- & Hardware requirements

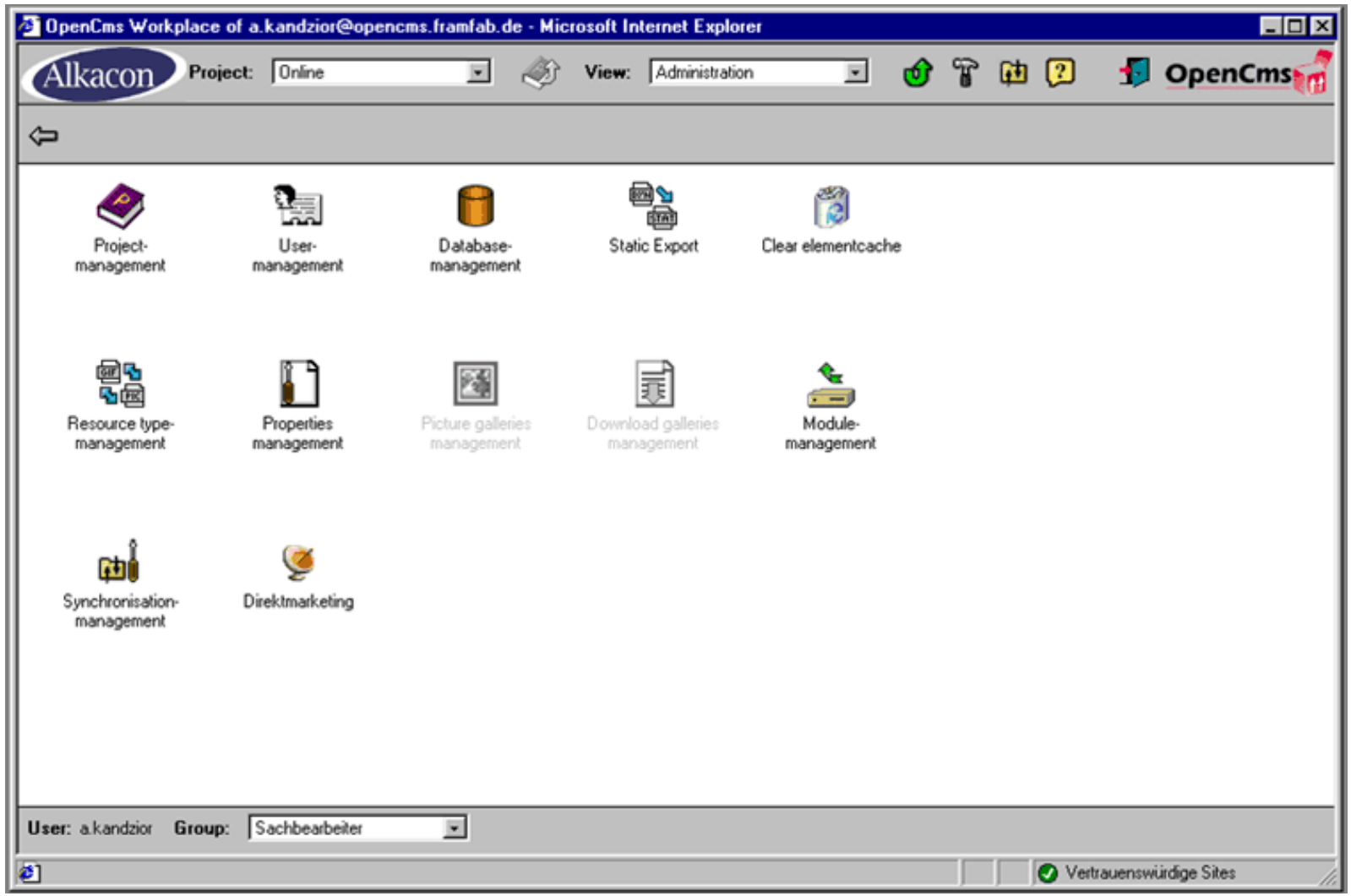
- **Software:** Open Source to „High End“
  - e.g. Linux + Tomcat + MySQL
  - e.g. Win NT + IIS + Tomcat + MS SQL
  - e.g. Solaris + BEA + Oracle
- **Hardware:** High flexibility
  - Runs on a notebook computer
  - Standard configuration:
    Normal Intel PC, 1Ghz CPU, 512 MB Ram
  - Other:
    SUN Sparc or HP Unix Hardware
    Clusters, Load – Balancers ...
- **Installation:** Wizard based on default components (Tomcat, MySQL), takes 5 minutes

Basic System Demonstration

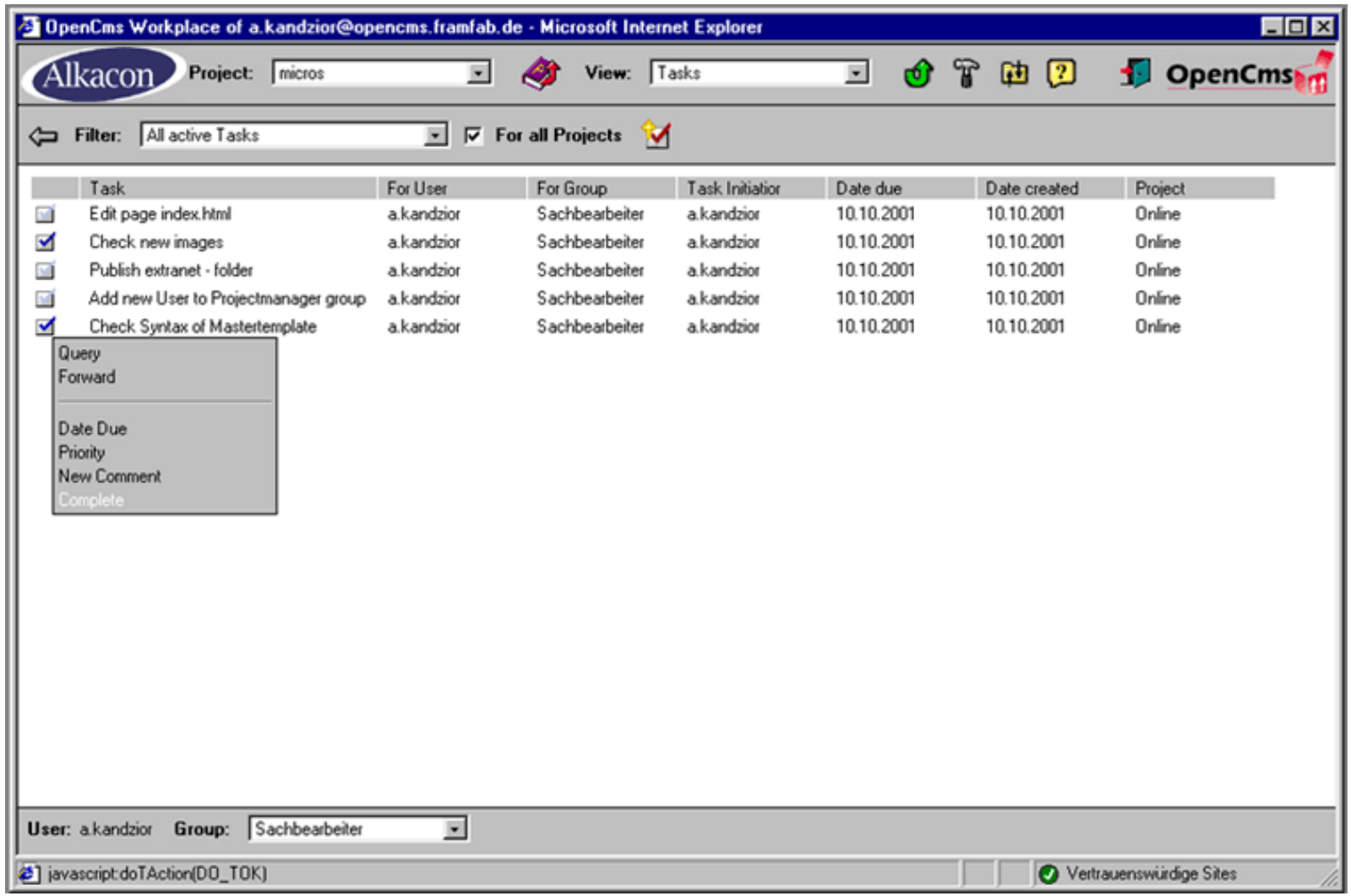
Demo Screenshot 1: The Explorer - View



Demo Screenshot 2: The Administration - View



Demo Screenshot 3: The Workflow - View

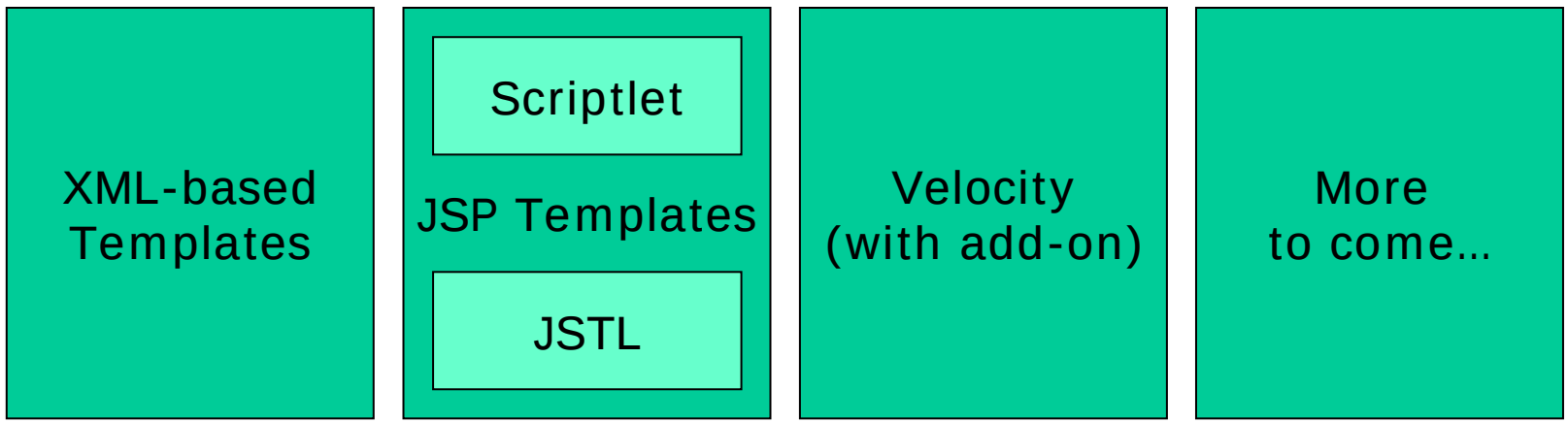


OpenCms Development Basics

- Development in OpenCms requires knowledge in
  - HTML
  - Java (basic syntax, opt. JSP)
  - OpenCms JSP Template API (JSP and/or XML)
  - OpenCms Java API
- Additional knowledge is helpful in
  - XML
  - SQL (JDBC)
- Development in general is separated in “Core” and “Module” development
- Development on a project is usually “Module” development. These modules are managed with the workplace.

OpenCms Template mechanism

- Pages are constructed from several elements and sub-elements
- OpenCms uses a flexible template mechanism to build the pages from a collection of elements



- Elements build in different Template languages can easily be combined

JSP Support

- OpenCms 5.0 features full support for JSP
- All JSP are available as *Online* and *Offline* version (like all resources in OpenCms)
- OpenCms `<cms:>` JSP Taglib for access to OpenCms features
- Standard JSTL 1.0 JSP Taglibs are supported in an optional add-on module
- JSP Templates: Easy and fast to use for rapid development websites templates

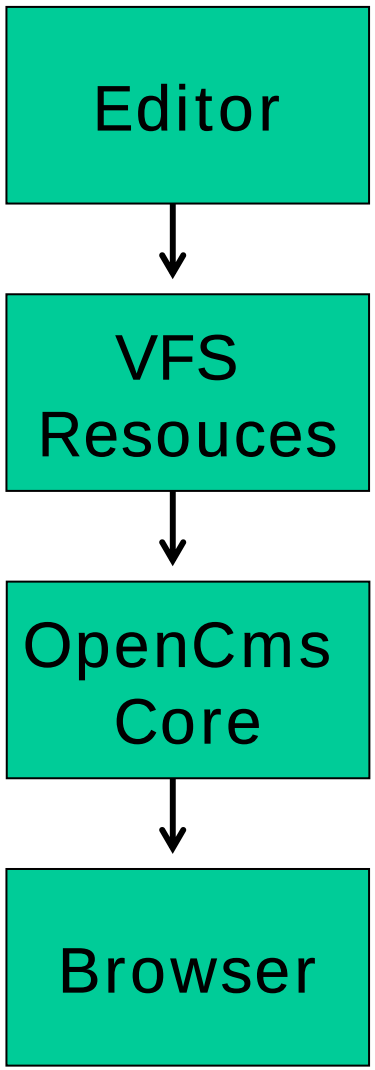
The FlexCache

- Easy, declarative based caching of JSP resources with the FlexCache
- Multiple versions of one resource can be cached to ensure optimal performance
- Caching controlled with easy to set page properties in special cache “language”
- Example:
  `cache=uri;params=(id);no-params=(action)`

  http://www.server.com/...

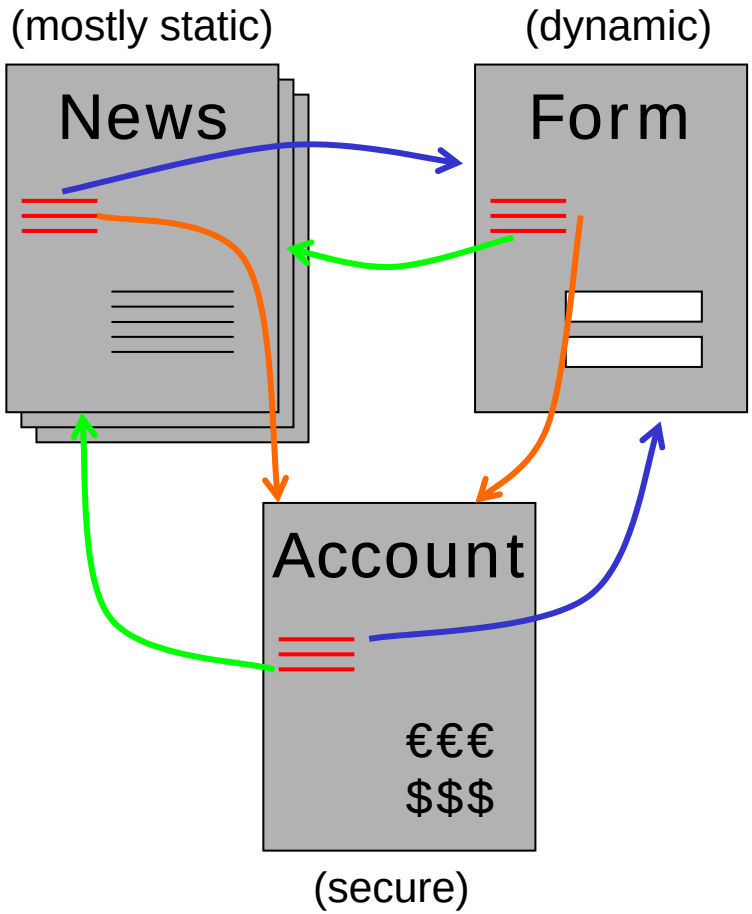
...page.html?id=11	→ cached (version 1)
...page.html?id=22	→ cached (version 2)
...page.html?id=11&action=submit	→ NOT cached

i18n Support (new in 5.0)



- Content can be in edited / stored in any encoding (e.g. “Big5”, “ISO8859_5” etc.)
- Resource is saved in native encoding in the OpenCms VFS repository
- While processing dynamic pages, content is converted to UTF-8 (Unicode)
- Response encoding is set depending on business logic of the application

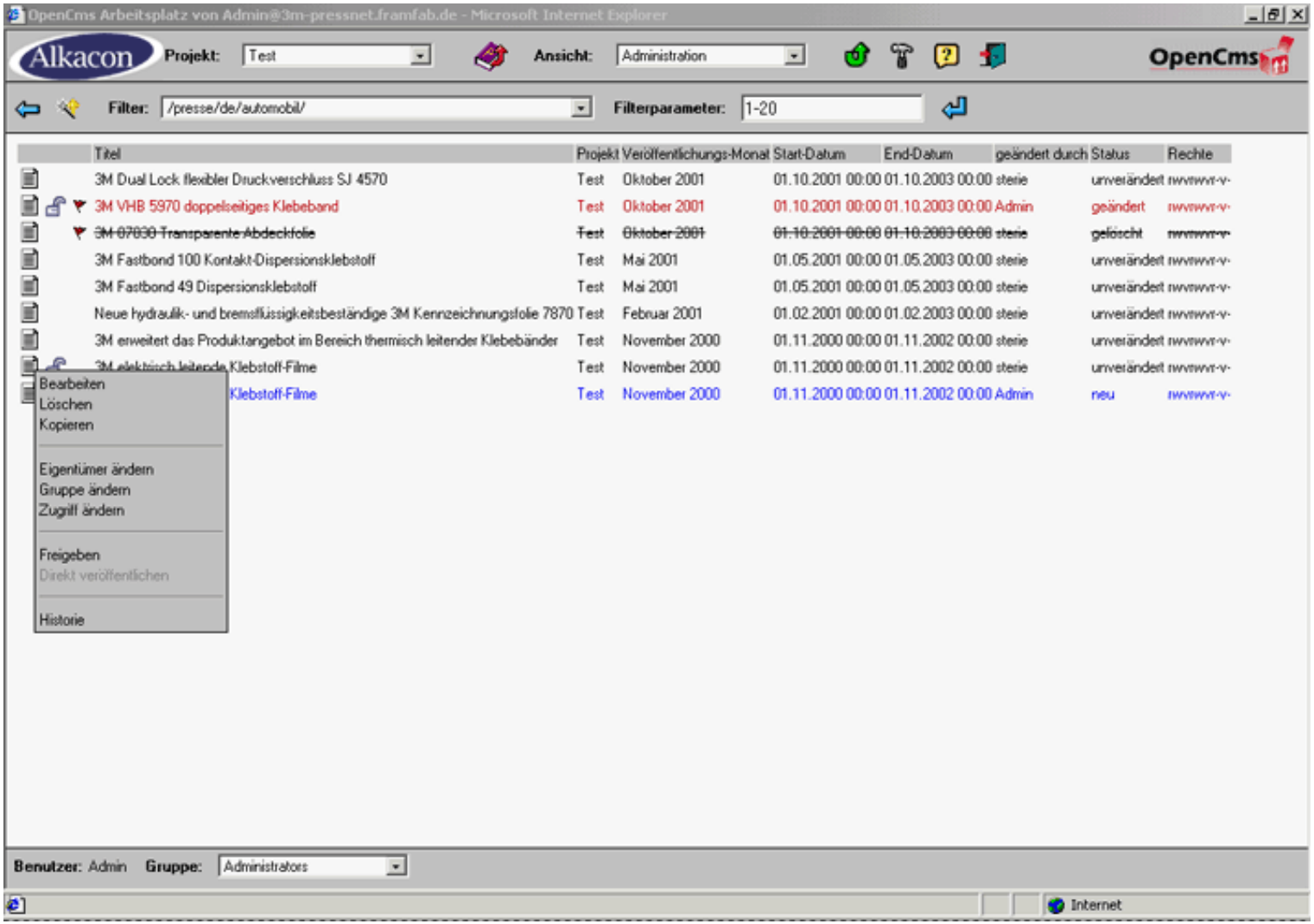
Static Export & “Backlink”



- Pages in “News” contain mostly static information
- Page “Form” is part of a dynamic application
- Page “Account” is dynamic and requires https security
- All 3 Pages should be based on the same system
- **OpenCms 5.0:** Manages all 3 servers with different URLs, sharing one set of templates, automatically ensuring consistent Links

Advanced System Demonstration

Demo Screenshot 4:
The Mastermodule Backoffice



Roadmap

- OpenCms Version 5.0.0 is the current release
  - Support for JSP
  - Internal link management
  - i18n support
  - Many “issues” solved ;-)
- Possible features for future releases, currently in discussion
  - Improved DB repository
  - LDAP support
  - WebDAV support
  - Integration of other / better WYSIWYG editors
  - Native XML/XSLT and Velocity template support
  - Advanced multilanguage features

Some OpenCms reference projects

- LGT Bank in Liechtenstein
  www.lgt.com
- BP South Africa
  www.bp.co.za
- 3M Imagine
  www.3m-magazin.info
- UNICEF Netherlands
  www.unicef.nl
- University of Würzburg
  www.wirtschaftsinformatik.net
- Catholic Church of Cologne
  www.erzbistum-koeln.de
- Darik Radio
  (Bulgarian radio station)
  www.darik.net
- Terra Semana
  (Spanish newspaper)
  www.semana.com

Find more OpenCms reference projects at:
http://www.opencms.org/opencms/en/support/references/

OpenCms Contacts

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