Magnolia
Content Management Suite
Contents

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About Magnolia

- Browser-based Web Authoring
- Open-source Content Management
- Uses Java Content Repository (JSR-170)
- Speaks 15 Major Languages

Magnolia's main goal is ease of use for all parties involved in running a CMS.
Magnolia Modules

- Web Content Management System
- Digital Media Management System
- Document Management System
- Business Process Navigator
- Enterprise Edition Repository
Magnolia Modules

Module Relationships
Magnolia Modules

Web Content Management System
Magnolia Modules

Digital Media Management System
Magnolia for Documents

Easy to use, powerful and standards compliant Magnolia for Documents is a document management system (DMS) in true Magnolia style. Its outstanding web-based user interface makes document management benefits like access control, versioning or meta data search instantly available on your network. Full integration into the Magnolia Suite and role based access control make sure that documents are easily found while confidentiality is maintained where desired.

Magnolia for Documents is the first available DMS built on the JSR-170 standard, which allows the use of a variety of repositories as well as easy standardized access from other systems, and allows for seamless system integration.

Magnolia for Documents has been developed to make Document Management straightforward and easy-to-use. Magnolia is renown for its intuitive web-based user interface, and Magnolia for Documents further extends that lead by providing a rich user experience directly in the browser without additional client software installation.

Experience Magnolia for Documents today, and see why the Magnolia Content Management Suite is amongst the leading content management products in the world.
Magnolia Modules

Business Process Navigator

Magnolia for Business Processes

Magnolia for Business Processes enables you to summarize information which is spread throughout your company in a process-oriented way and to visualize, navigate, administer and publish it on-line.

A picture facilitates the intuitive understanding of complex patterns, of correlations and dependencies. Magnolia for Business Processes uses this quality in a unique way: the visualizing of process-oriented knowledge is at the same time the navigation interface to obtain information. Business processes, activities and interfaces are represented in a way that they show temporal dependencies immediately. The result: you see at a glance how your company functions.

You can include any kind of information from third party systems and visualize existent process descriptions semi-automatically. For example you can link your quality management manual with SOPs and Best Practice. The result: you can find all relevant information intuitively, task-oriented and thus efficiently.

Magnolia for Business Processes is the first system in its class built on the JSR-170 standard. JSR-170 allows the use of a variety of repositories as well as standardized access from other systems, and allows for seamless system integration.

Complexity translates into information. Information translates into knowledge. Knowledge translates into competitive advantages.
Magnolia Modules

Enterprise Edition Repository

Enterprise Edition contains a professional grade commercial repository (Magnolia Power Pack).

<table>
<thead>
<tr>
<th>Feature</th>
<th>Community Edition</th>
<th>Enterprise Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>recommended users</td>
<td>&lt; 100</td>
<td>&gt;100</td>
</tr>
<tr>
<td>scalability</td>
<td>medium</td>
<td>high</td>
</tr>
<tr>
<td>role-based user management</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>LDAP / ADS available</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>repository implementation</td>
<td>Open Source</td>
<td>Commercial</td>
</tr>
<tr>
<td>level 2 JSR-170 API implementation</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>online (hot) backup</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>technical support</td>
<td>mailing list</td>
<td>issue tracker</td>
</tr>
</tbody>
</table>

Enterprise Edition is therefore much better suited for large enterprise requirements.
Magnolia Licensing

- Web Content Management (Open-Source)
- Digital Media Management (Beta)
- Document Management (Commercial)
- Business Process Navigator (Commercial)
- Enterprise Edition Repository (Commercial)
Magnolia Server is Open-Source
Magnolia Licensing

Commercial modules are licensed on a per-user, per-year basis from Obinary.
Magnolia Features

- Native search
- XML-based import/export
- Cross-browser compatibility *
- No Admin software needed
- Rich-Text editor (FCKeditor)
- Role-based user management
- Friendly URLs

* Content authoring, media management, and site administration do not work in Safari.
Magnolia Features

Features for Content Administrators

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instant inline editing</td>
<td>You no longer need to switch between different navigation mechanisms to make a small change on a web page. Simply switch any browsed page to edit-mode for instant editing in the look and feel of your website.</td>
</tr>
<tr>
<td>Browser-based user interface</td>
<td>All authoring tasks such as managing the site hierarchy and inline editing are carried out in a browser. No more client installations, no platform dependencies.</td>
</tr>
<tr>
<td>Runs with any browser</td>
<td>The authoring environment works in all major browsers. Use the one you like best – not the one your vendor likes best.</td>
</tr>
<tr>
<td>Move, copy, reorder</td>
<td>Move or copy entire site-structures with ease. Reorder pages and pagecontent via drag and drop – directly in the browser.</td>
</tr>
<tr>
<td>Virtual static web addresses</td>
<td>Magnolia’s web addresses are indistinguishable from static URLs. This makes them easy to read, easy to communicate, easy to bookmark and easy to spider by search engines.</td>
</tr>
<tr>
<td>Role-based user management</td>
<td>Define roles for document access and assign them to your users to make sure each user has only the rights that he or she should have. Documents can only be seen, read and changed by those who are allowed to do so.</td>
</tr>
<tr>
<td>Automatic meta-data storage</td>
<td>Magnolia automatically saves meta-data such as the name of an author and the last authoring date.</td>
</tr>
</tbody>
</table>
Magnolia Features

Features for Site Developers

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic form-dialog generation</td>
<td>Form dialogs for data entry are generated automatically. You concentrate on the &quot;what&quot; – Magnolia provides the &quot;how&quot;.</td>
</tr>
<tr>
<td>Standards-based templating in JSP and Servlets</td>
<td>Utilize your existing Java knowledge – no need to learn proprietary script languages any more.</td>
</tr>
<tr>
<td>Custom-tag library speeds up templating</td>
<td>The Magnolia tag library allows you to customize the authoring environment and create templates in a fast, efficient and re-usable way. Magnolia additionally supports third-party tag libraries such as JSTL to minimize the amount of code you have to write.</td>
</tr>
<tr>
<td>Unlimited page and paragraph designs</td>
<td>Magnolia gives you the flexibility you want while preserving corporate design guidelines.</td>
</tr>
<tr>
<td>Syndication and staging</td>
<td>The built-in publish &amp; subscribe mechanism allows you to syndicate content easily to any other application which understands HTTP.</td>
</tr>
<tr>
<td>Java Content Repository (JCR)</td>
<td>Magnolia is custom-built from scratch to support the upcoming standard for Java content repositories. This makes it extremely easy to customize Magnolia and unify content access.</td>
</tr>
<tr>
<td>Logging with Apache Log4j</td>
<td>Magnolia uses standard Log4j logging. Its extensive customization options allow you to focus logs on your particular needs.</td>
</tr>
</tbody>
</table>
## Magnolia Features

### Features for System Administrators

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Java/J2EE compliance</td>
<td>Magnolia is developed in Java and runs on any J2EE compliant application server.</td>
</tr>
<tr>
<td>Prepackaged with Apache Tomcat for quick and easy deployment</td>
<td>Magnolia is delivered with Apache Tomcat by default but may be configured to run on any J2EE compliant server such as IBM WebSphere, Be a WebLogic, Pramati Server, JBoss Application Server, etc...</td>
</tr>
<tr>
<td>Unlimited scalability, clustering and load-balancing</td>
<td>The integrated publish &amp; subscribe mechanism allows you to mirror your website to as many physically distributed servers as you want.</td>
</tr>
<tr>
<td>High-performance caching system</td>
<td>Magnolia has its own caching mechanism to increase speed and minimize CPU load. The cache is written on the file system and is automatically updated whenever needed. It is configurable by tree or by page.</td>
</tr>
</tbody>
</table>
Magnolia Requirements

- Java 1.4.2_x or higher
- Any J2EE Application Server
  - Apache Tomcat Version 5.0.28
    - Bundled with Magnolia for convenience
- Supported web browser *
- QuickTime (for DMMS)
Magnolia Concepts

- Users & Roles
- Publishing Content
- File System
- Cache, tmp, and work Folders
- Logs
- Templating
- AdminCentral
Magnolia Concepts

Users & Roles

Role-based User Management

Define roles for site-tree access and assign them to your users to make sure each user has only the rights that he or she should have.
To allow or forbid user access to certain pages in the Website, the proper access controls need to be defined in the role settings.

A role without any access controls forbids access to all pages.
Users & Roles - Create User

To create a user, go to the Users section in AdminCentral, click the right mouse button in the main window, and select "New user"

If you want to allow the user to activate content from the authoring to the public instance, you must activate the user.

Make sure that the user's roles have been activated as well.
A Magnolia web site is normally running on two application instances. This provides flexibility, scalability, and security.
Magnolia Concepts

Publishing Content

Author System

- Used for making changes and updates on pages and structure of the web site
Magnolia Concepts

Publishing Content

Public System

- Serves the contents of the web site to the visitors on the Internet

Home

Welcome to the Mac Managers website at the University of Utah.

Mac Manager Meetings

The next meeting will be held on Wed, Nov 16th @ 1 PM in MMC room 1725.

www.macenterprise.org

A project with a community sharing info & solutions of integrating Macs in the enterprise.

Streamed Media

We have streamed video of monthly meetings.
This setup enables you to make changes to pages and structure of your website in the authoring environment, to test and review these changes thoroughly, or have them reviewed by someone else - and to release, or “activate”, these changes for the public once the change and review cycle is completed.
There can be any number of subscribers.

Content is ‘published’ by ‘activating’ new or updated content from the author environment to its subscriber(s).
Magnolia Concepts

Publishing Content

Activation Status Color Scheme

<table>
<thead>
<tr>
<th>Color</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>green</td>
<td>the page has been activated before, and therefore is visible on the public instance. The page content and settings on author and public instance are the same.</td>
</tr>
<tr>
<td>yellow</td>
<td>the page has been activated before, and therefore is visible on the public instance. But the page has been changed after the last activation.</td>
</tr>
<tr>
<td>red</td>
<td>the page is not activated (i.e. visible) on the public instance.</td>
</tr>
</tbody>
</table>
Magnolia Concepts

File System

Tomcat Configuration
Docroot
Templating

These processes are managed using the file system.

All other Administrative tasks are done in a browser inside AdminCentral.
Magnolia Concepts

File System - Configuring Tomcat

- Configure Ports
- Define Services
- Establish Tomcat Users

No Admin user in default config (tomcat-users.xml)
Magnolia Concepts

File System - Understanding Docroot

Used for files that must be accessed via standard web mechanisms (static links)

- Exists outside of Magnolia code
- Not published during activation
- Relative to webapp (http://myserver.com/docroot/)
Magnolia Concepts

File System - Templating

- JSP, JSPX, or Servlet (choose one)
- Must be manually copied to other instances
- Tomcat uses file modification date to establish current version
The Tomcat Application server generates data in the following locations as you work:

- Cache
- tmp
- work
Magnolia Concepts

Cache, tmp, and work Folders

- Cache
  - Pages rendered as HTML in this folder automatically when you visit them in a web browser
  - Cached pages are delivered much faster to visitors than pages that have not yet been cached

LOCATION: /tomcat/webapps/mactech/cache/
Magnolia Concepts

Cache, tmp, and work Folders

- **tmp**
  - files and media are temporarily stored here during editing operations in AdminCentral

LOCATION: /tomcat/webapps/mactech/tmp/
Magnolia Concepts

Cache, tmp, and work Folders

- JSPs and content are compiled here as Java
- Will remain in synch with webapp as long as webapp files have the most recent modification date

LOCATION: /tomcat/work/
Magnolia Concepts

Logs

There are two types of logs to be aware of when troubleshooting services:

- Tomcat-related logs
- Webapp-related logs
Magnolia Concepts

Logs - Tomcat-related Logs

- catalina.out
- PATH: /tomcat/logs/catalina.out
Magnolia Concepts

Logs - Webapp-related Logs

Webapp-related Activity Specific Logs
- PATH: /tomcat/logs/catalina.out
Magnolia Concepts

Templating

Templates exist on two levels:

- Page Templates
- Paragraph Templates
Magnolia Concepts

Templating - Page Templates

Page Templates commonly include:

- HTML head
- CSS includes
- Javascript
- Navigation
Magnolia Concepts

Templating - Page Templates

When a Magnolia user creates a new page, they will have a choice of available page templates in a dialog window.

The available choices are a configuration issue and are defined in the “Config” repository.

AdminCentral://config/modules/templating/Templates
Paragraph Templates define the layout and functionality of paragraphs.

Select a type for the new paragraph

- **Samples: Text and image paragraph**
  Paragraph with title, text and image

- **Samples: Download paragraph**
  Upload a file

- **Samples: Link paragraph**
  Set an internal or external link

- **Samples: Table paragraph**
  Draw and configure a table

- **MagnoliaQT Image**
  Select an image from your magnoliaQT collection to publish

- **MagnoliaQT Movie**
  Select a movie from your magnoliaQT collection to publish

- **MagnoliaQT Sound**
  Select a soundfile from your magnoliaQT collection to publish

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**Introduction**

We have documentation covering Mac OS X and Mac OS 9 so Apple & third-party companies. To view documentation click 

**Apple & Third-Party Hardware**
Magnolia Concepts

AdminCentral

GUI tools for site administration, configuration, and content authoring.
### Magnolia Concepts

#### AdminCentral

#### MacManagers

<table>
<thead>
<tr>
<th>Title</th>
<th>Template</th>
<th>Mod. date</th>
</tr>
</thead>
<tbody>
<tr>
<td>home</td>
<td>Home</td>
<td>Magnolia samples: 01-11-10, 00:13</td>
</tr>
<tr>
<td>documentation</td>
<td>Documentation</td>
<td>Magnolia samples: 01-11-13, 12:55</td>
</tr>
<tr>
<td>hardware</td>
<td>Hardware</td>
<td>Magnolia samples: 01-11-17, 09:59</td>
</tr>
<tr>
<td>mac_os_9</td>
<td>Mac OS 9</td>
<td>Magnolia samples: 01-11-18, 09:16</td>
</tr>
<tr>
<td>mac_os_x</td>
<td>Mac OS X</td>
<td>Magnolia samples: 01-11-17, 09:59</td>
</tr>
<tr>
<td>whats_new</td>
<td>What's New</td>
<td>Magnolia samples: 01-01-16, 22:39</td>
</tr>
<tr>
<td>mail</td>
<td>Mail List</td>
<td>Magnolia samples: 01-11-10, 08:47</td>
</tr>
<tr>
<td>meetings</td>
<td>Meetings</td>
<td>Magnolia samples: 01-01-15, 13:06</td>
</tr>
<tr>
<td>presentations</td>
<td>Presentations</td>
<td>Magnolia samples: 01-11-13, 13:20</td>
</tr>
<tr>
<td>resources</td>
<td>Resources</td>
<td>Magnolia samples: 01-11-04, 15:46</td>
</tr>
<tr>
<td>training</td>
<td>Training</td>
<td>Magnolia samples: 01-01-06, 09:01</td>
</tr>
<tr>
<td>help</td>
<td>Help</td>
<td>Magnolia samples: 01-11-04, 15:46</td>
</tr>
</tbody>
</table>

/home
Magnolia Concepts

AdminCentral

For both Author and Public site

Author Instance defaults to AdminCentral

To change default page:

- AdminCentral://config/modules/adminInterface/VirtualURIMapping/default

AdminCentral is disabled for Public Instance

- URL: http://mysite.com/webapp/.magnolia
Magnolia Deployment

- Magnolia Distributions
- MagnoliaQT
- Java HOME and Catalina HOME
- Startup Script
- StartupItem
- Launching the CATALINA Service
Magnolia Deployment

Magnolia Distributions

Magnolia Content Management System

About Magnolia Content Management System

Magnolia is a free, open source, Java based, J2EE deployable Content-Management-System (CMS) supporting the JCR API (JSR-170). It has an easy to use WebBrowser Interface, a clear API and a useful custom tag library for easy templating in JSP and Servlets.

Latest File Releases

<table>
<thead>
<tr>
<th>Package</th>
<th>Release</th>
<th>Date</th>
<th>Notes/Monitor</th>
<th>Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>magnolia</td>
<td>magnolia 2.1.3</td>
<td>October 20, 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>magnoliaQT</td>
<td>magnoliaQT_beta_3</td>
<td>September 21, 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>magnolia source-code</td>
<td>magnolia 2.1.3</td>
<td>October 20, 2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Magnolia Deployment

Tomcat Bundle or WAR Files?

Tomcat Bundle
- magnolia-2.1.3_with_tomcat.zip

WAR Files
- magnolia-2.1.3_war_files.zip
  - For deployment on different J2EE Application Server
    - Jetty
    - Jonas
    - JBoss
magnoliaQT makes heavy use of the QuickTime for Java libraries, a collection of API's that allow access to the powerful multimedia-capabilities of Apple's QuickTime Software through the Java language.
Magnolia Deployment

MagnoliaQT - About

MagnoliaQT is a diploma project by Thomas Martin

He had assistance integrating the QuickTime for Java libraries from Anthony Rogers, the co-author of QuickTime and QuickTime for Java at Apple.
Magnolia Deployment

MagnoliaQT - Technology

The integration QuickTime and Magnolia creates the possibility to edit images, movies, and audio files directly in a web browser.

This shortens the pipeline for publication of multimedia content.
Magnolia QT - Editing Functions

Images
- Scale
- Rotate/Flip
- Crop
- Compression
Magnolia Deployment

MagnoliaQT - Editing Functions

Movies
- Scale
- Rotate/Flip
- Cut (Set In and Out Point)
- Add/Delete Tracks
- Compression
Magnolia Deployment

MagnoliaQT - Editing Functions

Audio
- Cut (Set In and Out Point)
- Compression
Magnolia Deployment

MagnoliaQT - File Formats

Any Format Supported By QuickTime
Magnolia Deployment

Defining Java Home and Catalina Home Variables

- `export JAVA_HOME="/Library/Java/Home"`
- `export CATALINA_HOME="/Path/to/tomcat/"`
Magnolia Deployment

Startup Script

```
#!/bin/sh
#
# Start Magnolia.
#
. /etc/rc.common

export JAVA_HOME="/Library/Java/Home"
export CATALINA_HOME="/path/to/tomcat/"

StartService ()
{
    sh -c "$CATALINA_HOME/bin/startup.sh"
}

StopService ()
{
    sh -c "$CATALINA_HOME/bin/shutdown.sh"
}

RestartService ()
{
    StopService;
    StartService;
}

RunService "$1"
```
Magnolia Deployment

StartupItem

Magnolia (Startup Script)

StartupParameters.plist

PATH: /Library/StartupItems/Magnolia
Magnolia Deployment

Launching the Catalina Service

Command Line:

/Library/StartupItems/Magnolia/Magnolia start
Magnolia Customization

Magnolia OSX Installer
Upgrading to New Versions
Support
Magnolia Customization

Magnolia OSX Installer

Created to simplify the install and configuration process of Tomcat, Magnolia, and MagnoliaQT in OS X.
Magnolia Customization

Magnolia OSX Installer

**Package Installs:**
- Tomcat 5
- Magnolia 2.1.3
- Magnolia for QuickTime Beta 3
- Magnolia StartupItem for OSX
Magnolia Customization

Magnoia OSX Installer

Installation and Startup For Magnolia OSX

- Run the Magnolia OSX.pkg installer
- Restart
- Visit Magnolia OSX in a browser:
  - PUBLIC INSTANCE: http://localhost:8081/magnoliaQT
  - AUTHOR INSTANCE: http://localhost:8081/magnoliaAuthor
    - Login: superuser
    - Password: superuser
Magnolia Customization

Upgrading to New Versions

- Deploy New Version
- Configure as a Subscriber
- Activate Content
- Copy Templates, CSS, and docroot
Magnolia Customization

Upgrading - Deploy

Deploy Newest Version of Magnolia
Magnolia Customization

Upgrading - Configure

Configure New Instance as a Subscriber

- AdminCentral://subscribers/SubscriberConfig/0001/address
Magnolia Customization

Upgrading - Activate

Activate Content to New Author Instance
- Roles
- Users
- Pages
Magnolia Customization

Upgrading - Copy Files

Copy Files to both Author and Public
- `/tomcat/webapps/magnolia/docroot/`
- `/tomcat/webapps/magnolia/templates/`
Magnolia Customization

Support

WIKI
- http://www.magnolia.info/wiki

Magnolia User List
- http://www.mail-archive.com/user-list%40magnolia.info/

Magnolia Developer List
- http://www.mail-archive.com/dev-list%40magnolia.info/
Magnolia Customization

Support

FAQs

• NewbiePerspective
  • http://www.magnolia.info/wiki/Wiki.jsp?page=NewbiePerspective

• Renaming magnoliaAuthor
  • http://www.mail-archive.com/user-list@magnolia.info/msg01829.html

• Set up 404 page
  • http://www.magnolia.info/wiki/Wiki.jsp?page=Setup404Handler
Questions & Answers

Any questions or answers?