

Joomla

We chose Joomla as one of our fellow colleagues uses Joomla! for his company called First Munich Event Tec.

Entities

Language Entities

Programming Language: PHP

Query language: MySQL/PostgreSQL

Technology Entities

Strato hosted webserver

Google Chrome as Webbrowser

Software System Entities

Information System: Easyjob (Rental Management System)

Web Application: First Munich Event Tec -specific Joomla Distribution

Virtuemart: Joomla Warehousing Plugin

Remository: File Repository for Joomla

Artifact Entities

Template (directory)

Components (directory)

Plugins (directory)

Modules (directory)

Includes (directory)

Router.php (internal backend file structure: joomla/administrator/includes)

Index.php

JDate (Date.php as defined in /libraries/joomla in utilities as date.php)

JFTP ([ftp.php](#) as defined in /libraries/joomla in client as ftp.php)

Software fragment entities

Function build (\$url)

```
{  
    $uri=patent::build($url);  
    $route=$uri->getPath();
```

```

        $uri->setPath(JURI::base(true).'/'.$route);
        Return $uri
    }

    $date = new JDate('2014-04-03')

    $date->add(new DateInterval('P12D'));

    $ftp = JFTP::getInstance($host, $port, $options, $user, $pass);

```

Meaning Entities

Function build (\$url) converts internal URIs to routes

The artifact JDate saves a date and can be manipulated as well as printed in different styles New JDate() updates the dates
Add(new DateInterval()) adds a specified amount of time to the current date

The Artifact JFTP is an FTP client class that allows connecting and interacting with an FTP server.

The JFTP::getInstance() method will connect Joomla to the FTP server and automatically log in.

Software Concept Entities:

Model-View-Controller

WYSIWYG-Editing Concept

Resource Entities:

Joomla Wiki: http://www.joomla-wiki.de/dokumentation/Joomla!_Wiki

Joomla Documentation: http://docs.joomla.org/Main_Page

Remository Extension/Component Description <http://extensions.joomla.org/extensions/directory-a-documentation/downloads/83>

Portal: <http://www.joomla.org/> and <http://www.joomlaportal.de/>

Developer: <http://www.joomlaexpertdeveloper.com/>

Request

JFTP::getInstance()

Protocol

FTP is the protocol with which the developer can exchange data with the webserver that Joomla is hosted on

HTTP protocols (Actual user/visitor interface)

SSL Protocols

Standards

CSS (in correspondence with the W3C Standard classification)

Organizations

First Munich Event Tech

People:

Marc Straubinger

Role

Manager and Developer

Relations

Relationships

Part of

Index.php is **part of** Joomla!

\$ftp = JFTP::getInstance(\$host, \$port, \$options, \$user, \$pass) **partOf** JFTP

Implements

router.php **implements** router

Conforms to

Joomla **conforms to** Model-View-Controller pattern

Uses

Joomla **uses** PHP

Joomla **uses** MySQL

Joomla **uses** JavaScript

Developer **uses** Joomla Wiki

Defines

JDate **defines** date

Develops

JoomlaExpertDeveloper **develops** Joomla interfaces

Element of

\$ftp = JFTP::getInstance(\$host, \$port, \$options, \$user, \$pass) **ElementOf** PHP

Supports

Joomla **supports** SSL Protocol

Yields

JFTP::getInstance() **yields** FTP host name (and others)

Knows of

MarcStraubinger **knows of** PHP

Sources:

http://www.joomla-wiki.de/dokumentation/Joomla!_Programmierung/Framework/JDate

http://www.joomla-wiki.de/dokumentation/Joomla!_Programmierung/Framework/JFTP

<http://extensions.joomla.org/extensions/directory-a-documentation/downloads/83>

Drupal

Entities

Language Entities

Programming Language: PHP

Query language: any

Software System Entities

Web Application: First Munich Event Tec -specific Drupal Distribution

Database Management System: SQLite

Artifact Entities

Drupal core files

Sites folder

Index.php

Content files

Contributed Modules

Database.inc

Software Fragment Entities

PHP Data Objects

Concept Entities

Presentation-Abstraction-Control

WYSIWYG editing

Database Abstraction

Overriding

Content Taxonomy

Resource Entities

Drupal Community Documentation: <https://drupal.org/documentation>

Protocol

HTTP

Standards

CSS (in correspondence with the W3C Standard classification)

People

Marc Straubinger

WebDesigner

Role

Content Editor

Developer

Relations

Relationships

Part of

Drupal core files are **part of** Drupal Distribution

Index.php is **part of** Drupal Distribution

Sites directory is **part of** Drupal Distribution

Content files are **part of** Sites Directory

Uses

Drupal **uses** PHP

Drupal **uses** SQLite

Drupal **uses** any query Language (MySQL, MS SQL,..)

Drupal **uses** PHP Data Objects

Drupal **uses** HTTP

Webdesigner **uses** Drupal Community Documentation

Conforms to

Drupal **conforms to** Presentation-Abstraction-Control (PAC)

Content files **conform to** CSS

Is

Marc Straubinger **is** Content Editor

WebDesigner **is** Developer

Supports

Drupal **supports** SSL

Knows of

Marc Straubinger **knows of** Content files

WebDesigner **knows of** Drupal core files

Implements

Database.inc **implements** Database Abstraction

Core files **implement** Content Taxonomy

Core files **implement** WYSIWYG editing

Contributed modules **implement** Overriding

Sources:

<http://en.wikipedia.org/wiki/Drupal>

<https://api.drupal.org/api/drupal/8>

<https://drupal.org/documentation>

Comparison:

- Joomla is more user-friendly than Drupal which is more developer-oriented, hence Drupal is capable of producing more complex sites than Joomla (ease of use)
- Joomla has more social networking features (community platform) whereas Drupal is stronger in the organization of complex content (features)
- Both web application frameworks are mainly written in PHP and belong to the PHP Web Application Framework System
- Due to the strict separation of content and design all content-specific data is stored in databases for which both system use SQL (Drupal also supports other Database Systems)
- The directory structure of both Web Application Frameworks is very similar, the API is included both times in an directory called "includes" and themes and other design-relevant directories are located in a distinct directory. Nevertheless, Drupal does not differentiate between plugins, modules and components and features a single directory for all third-party extensions
- The architecture of both CMS differ in the following points:
 - Joomla incorporates the Model-View-Controller Design Concept whereas Drupal incorporates the Presentation-Abstraction-Control Concept
 - Drupal has a core
- Both Drupal and Joomla offer caching plug-ins