JMS MULTISITE for joomla!
Extends joomla!™ with multisite functionality
« Technical (workshop) presentation »

Joomla Day Mallorca
9th and 10th April 2010
Table of content

- Why did we created JMS MULTISITE (its history) ?
- Which are our requirement and solutions ?
- For whom JMS MULTISITE is designed ?
- What is JMS MULTISITE ?
  - A super switch, a dispatcher that is able to display the appropriate website depending on the domain, subdomain or subdirectories
  - A set of tools
    • to create, replicate, clone websites (a copy machine) that can be used :
      - From the front-end (Free or Billable websites)
      - From the back-end to speed-up the website creation
    • To supervise the installation, sharing of extensions and also supervise the dependencies between websites
- How the « super switch » is working ?
  - Concept of JMS MULTISITE to share the same joomla installation
    • How a HTTP Server is working ?
    • Functionalities present in the different version of Jms Multi Sites ?
- Security and proposed architecture.
- How to use JMS MULTISITE (the set of tools) ?
  - How to create a websites from the front-end and back-end ?
  - How to create the rules to replicate, clone a website and how to share the content of some extensions
  - Creation of menu item for the front-end website creation
    • Possibility to have different layouts
  - How it is possible to share the articles ?
- Why to use JMS MULTISITE ?
- Who are using JMS MULTISITE today ?
- Our other products
- Conclusions
Why did we created Jms Multi Sites?

We have encounter a problem of disk space with our hosting provider. We had a limit of 900 MB with our hosting plan. Our problem was how to make 1000 websites of 35 MB enter into 900 MB. Impossible to put 35GB into 900MB.

We have decided to solve this issue in aim to reduce the disk space and the associated maintenance problems.

Disk space required

1000 sites x 35 Mb = 35 GB

INSUFFICIENT disk space!
SOLUTION
Why install JOOMLA several times?
We can use the same PHP code and therefore a single instance of 35 MB for all the websites.

Advantages!
Single disk space!
Single maintenance!
SAVE TIMES AND MONEY!
Our requirements & solutions

**Requirements**

- Have a unique maintenance and reduce the disk space
- Be able to create website from:
  - The Back-end
  - The Front-end
    - Be able to create a huge number of slave sites in a short time.
    - Have a secured environment and be able to filter the « front-end » parameters
- Share the users and data to avoid synchronisations
- Share the individual articles (not all the articles)
- Have a tool to supervise the extension installation

**Solutions**

- to share the same joomla installation. So share the same joomla directories.
- Replication (clone) of existing websites that will be used as template.
  - Just change the DB parameters
  - Use keywords (or variable) to change dynamically some parameters
- Share some MySQL tables (All records or none)
- Articles sharing
- **JMS MULTISITE « website tool »**
For whom JMS MULTISITES is designed?

**For users who need:**

- To create and manage a large number of websites.
- To create websites from the front-end to propose additional services.
- To share some content between websites (users, forum, ...).

**The problems that customers encounter are:**

- Maintenance of several websites.
- Maintenance of joomla and its extensions (bug fixes, security vulnerability, ...).
- Limited disk space.
- Time required to create a large number of websites.
- Synchronisation of the data between serveral websites.
- Etc ...
What is JMS MULTISITES?

Jms Multisite is a powerful extension to manage a lot of websites with only one joomla installation. So far we know all the joomla potential and all its large possibilities that make it a very popular CMS. With JMS Multisites for joomla you increase the power of joomla and you will no more see it as before.

JMS Multi Sites contain:

A super switch:
- That is able to display the appropriate website based on different domain name, subdomain name or subdirectory path.
- Where each website has its own content or can share the content of a limited number of extensions.
- Where each website can have its own look (template) and images folder.

A set of tools:
- To create, replicate, clone websites from the front-end or back-end: In the front-end, you can create free or billable websites (require the bridge to VirtueMart in aim to process the orders and payments).
- To define replication rules to create the new websites: Directories structure, folders sharing, sharing of a limited number of extensions (users, forum, ...)
- To supervise the installation, sharing or the un-installation of extensions.
- To supervise the relationship between websites.
Super switch / set of tools

1. **SUPER SWITCH**
   - **Single Installation**
   - Master website:
     - www.jms2win.com
   - Features:
     - 1 INSTALLATION JOOMLA
     - 1 INSTALLATION TEMPLATE
     - 1 INSTALLATION COMPONENTS
     - 1 INSTALLATION MODULES
     - 1 INSTALLATION PLUGINS

2. **SET OF TOOLS**
   - **Sharing of extensions**
     - www.faq2win.com
     - www.websitodesignor.bo
   - **Sharing of directories**
   - www.edwin2.com

---

**SHARING OF EXTENSIONS**: **SHARING** MySQL TABLE

**Advantages**:
- Single instance of the Data
- No need to synchronize data
- Reduct the risks of inconsistency (or missing synchronization)
- Link (share) MySQL tables
- Require MySQL 5.0 or higher
- Require MySQL user privileges

---

**JMS MULTI SITES**
- Joomla day Mallorca 9th and 10th April 2010
- www.jms2win.com 08-Apr-2010 Page : 8
Set of tools to replicate the websites

CREATION OF WEBSITES from the front-end or back-end

FRONT-END
The objectives are to reduce the number of parameters that a user need to enter and therefore reduce the risk of hacking.

Use of rules to convert templates of existing websites into new websites.

BACK-END
Also used to create fresh slave sites.

Have the access to all parameters.
How the super-switch is working?

Jms Multi Sites works like a HTTP Server (apache, IIS, ...)
- How a HTTP Server is working?
- How the HTTP Server processing is applied in Jms Multi Sites

HTTP Server (apache / IIS)

<table>
<thead>
<tr>
<th>VirtualHost</th>
<th>document root</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.domain1.com">www.domain1.com</a></td>
<td>Location 1 on disk</td>
</tr>
<tr>
<td><a href="http://www.domain2.com">www.domain2.com</a></td>
<td>Location no 2</td>
</tr>
</tbody>
</table>

Application #1 Index.php

Application #2 Index.php

Request (url)

http://www.domain1.com

Display the web page

execute PHP

Parked domains

<table>
<thead>
<tr>
<th>VirtualHost</th>
<th>document root</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.domain1.com">www.domain1.com</a></td>
<td>Location 1 on disk</td>
</tr>
<tr>
<td><a href="http://www.domain2.com">www.domain2.com</a></td>
<td>Location 1 on disk</td>
</tr>
</tbody>
</table>

AddOn domains

<table>
<thead>
<tr>
<th>VirtualHost</th>
<th>document root</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.domain1.com">www.domain1.com</a></td>
<td>Location 1 on disk</td>
</tr>
<tr>
<td><a href="http://www.domain2.com">www.domain2.com</a></td>
<td>Location 1 on disk</td>
</tr>
</tbody>
</table>

Symbolic Links

<table>
<thead>
<tr>
<th>VirtualHost</th>
<th>document root</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.domain1.com">www.domain1.com</a></td>
<td>Location 1 on disk</td>
</tr>
<tr>
<td><a href="http://www.domain2.com">www.domain2.com</a></td>
<td>Location no 2</td>
</tr>
</tbody>
</table>
HTTP Server processing

DNS Server
Convert name into IP address

Server
IP: 123.123.123.123

 Apache / IIS configuration
<table>
<thead>
<tr>
<th>Virtual host name</th>
<th>directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: domain1.com</td>
<td>/home/user1/domain1/www</td>
</tr>
<tr>
<td>Alias: <a href="http://www.domain1.com">www.domain1.com</a></td>
<td></td>
</tr>
<tr>
<td>Name: domain2.com</td>
<td>/home/user1/domain2/www</td>
</tr>
<tr>
<td>Alias: <a href="http://www.domain2.com">www.domain2.com</a></td>
<td></td>
</tr>
</tbody>
</table>

JMS >= 1.1 (Symbolic Links)

Apache / IIS configuration
<table>
<thead>
<tr>
<th>Virtual host name</th>
<th>directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: domain1.com</td>
<td>/home/user1/domain1/www</td>
</tr>
<tr>
<td>Alias: <a href="http://www.domain1.com">www.domain1.com</a></td>
<td></td>
</tr>
<tr>
<td>Name: domain2.com</td>
<td>/home/user1/domain2/www</td>
</tr>
<tr>
<td>Alias: <a href="http://www.domain2.com">www.domain2.com</a></td>
<td></td>
</tr>
</tbody>
</table>

Server admin tool
- Cpanel
- Plesk
- GoDaddy
- Etc ...

Server IP: 123.123.123.123

FDN
Name: domain1.com
IP: 123.123.123.123

Port 80
HTTP Server
Unix - apache
Windows - IIS

Port 21
FTP Server

AddOn domains

Parked domains

Bowd
Name: domain1.com

Symbolic Links

<VirtualHost *>
  ServerName domain1.com
  ServerAlias *.domain1.com
  DocumentRoot /home/user1/domain1/www
  . . . . .
</VirtualHost>
JMS MULTISITES concept

HTTP Server
- Unix - apache
- Windows - IIS

FTP Server
- port 80
- port 21

Apache / IIS configuration

<table>
<thead>
<tr>
<th>Virtual host name</th>
<th>directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>domain1.com</td>
<td>/home/user1/domain1/www</td>
</tr>
<tr>
<td><a href="http://www.domain1.com">www.domain1.com</a>,</td>
<td></td>
</tr>
<tr>
<td>domain2.com ,</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.domain2.com">www.domain2.com</a></td>
<td></td>
</tr>
</tbody>
</table>

Jms Multisite:
- Parse the HTTP protocol envelop to extract the domain, subdomain and subdirectory information
- Select the appropriate joomla « configuration.php » file

JMS Multisite configuration

<table>
<thead>
<tr>
<th>ID</th>
<th>Domains</th>
<th>DB Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>site1</td>
<td>domain1.com</td>
<td>....../multisites/site1/configuration.php</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.domain1.com">www.domain1.com</a></td>
<td></td>
</tr>
<tr>
<td>site2</td>
<td>domain2.com</td>
<td>....../multisites/site2/configuration.php</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.domain2.com">www.domain2.com</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default (not found) = master website</td>
<td>....../configuration.php</td>
</tr>
</tbody>
</table>

Server
- IP 123.123.123.123

<VirtualHost *>
  ServerName domain1.com
  ServerAlias *.domain1.com, *.domain2.com
  DocumentRoot /home/user1/domain1/www
</VirtualHost>
Version History

• **Version 1.0**
  - Just share the **same PHP code** and require to assign the **same « document root »** to each domain
  - Only select the appropriate « configuration.php » based on the « host » (domain or subdomain)
  - Only create fresh slave sites

• **Version 1.1**
  - Introduction of the **Symbolic Links** functionality to allow deploy a slave site into another directory.
    - Case where the HTTP admin tool does not allow assign a specific « document root »
  - Possibility to create websites from the front-end ⇒ **Template of websites**
    - Give the possibility to delears or branches, … to create their own websites and avoid « head quarter » create all the websites
    - Also request from « templates (themes) » company to propose « ready to use » websites among different themes
    - Etc …
  - Possibility to replicate websites into a same DB ⇒ **Template of websites**

• **Version 1.2**
  - Extended with the replication into another DB
  - Add the **sharing** of extensions
  - Creation of a « website tools » to supervise the « install », « sharing », « uninstall » of the extensions
Version 1.0: Share the joomla installation

HTTP Server
www.domain1.com
=> directory AAA

HTTP Server
www.domain2.com
=> directory BBB

HTTP Server
www.domain1.com
=> dir: common

HTTP Server
www.domain2.com
=> dir: common

As many maintenance as websites

Single joomla maintenance

Version JMS 1.0
Version 1.0: Compared directories

**Standard Joomla**
Hosting directory structure

Each websites duplicate the Joomla files and folders
This require as many maintenance as there are websites

**Version JMS 1.0**

**JMS MULTISITE**
Share the same Joomla files and folders

A single common Joomla installation reduce the maintenance!
Version 1.1: Symbolic Link + templates

HTTP Server
www.domain1.com
=> directory AAA

HTTP Server
www.domain2.com
=> directory BBB

Dir: AAA
joomla

Dir: BBB
joomla

As many maintenance as websites

Symbolic Link

HTTP Server
www.domain1.com
=> directory AAA

HTTP Server
www.domain2.com
=> directory BBB

Dir: AAA
ejoomla

Dir: BBB
linked to AAA

Version JMS >= 1.1

Single joomla maintenance

MultiSite

http://www.domain1.com/index.php

http://www.domain2.com/index.php
The unix **Symbolic Link** is similar to
- a shortcut on windows platform,
- an alias on macintosh

It does not consume disk space.

(this is an alias, a link, a shortcut, a pointer to a directory or file)
Version 1.1: Concept of templates

Template of websites: help to create websites from the Back-end or Front-end
Version 1.2: Concept on the sharing of extensions

Advantages:

• Single instance of the Data
  ⇒ No need to synchronize data
  ⇒ Reduce the risks of inconsistencies (or missing synchronization)

MySQL Table Sharing

- Link (share) MySQL tables
- Require MySQL 5.0 or higher
- Require MySQL user privileges

Single joomla maintenance
JMS MULTISITES is

- **A Super Switch** that works like a HTTP Server to display the appropriate website based on a domain or subdomain or subdirectory present in a URL
- **Able to use** symbolic link to **share the files and folders** and therefore reduce the disk space and the number of files on the disk
- **Able to share** the content of a limited number of **extensions** with usage of MySQL sharing
- **Able to create websites based on** « templates and replication rules »
Security and proposed architecture

The MASTER must be considered as a repository or a library where all the extensions are installed.

Security of joomla = the security of the less secured extension

∞ = ⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫵⫸
Objectives:
- Give to each slave sites their own directory beside the master (brother directory)
  - As the slave sites is not a subdirectory of the master then it is not seen by Search Engines
  - /domains/jms2win.org/public_html
  - /subdomains/slave1/public_html
- Give the slave site the opportunity to have « private » directories like a « download » directory
  - /subdomains/slave1/download
Proposed architecture

URL | Folders and DB | Location on disk
---|---|---
www.jms2win.org | Jms2win.org | /jd/domains/jms2win.org/public_html
master.jd.jms2win.com | master | /jd/subdomains/master/public_html
slave1.jd-jms2win.com | slave1 | /jd/subdomains/slave1/public_html
slave1a.jd-jms2win.com | Share extensions | /jd/subdomains/slave1a/public_html
slave2.jd-jms2win.com | slave2 | /jd/subdomains/slave2/public_html
master.jd.jms2win.com | slave3 | /jms/jd/public_html/slave3
Example of slave sites dependencies

- **Master**: `master.jd.jms2win.com`  
  - `/jd/subdomains/master/public_html`

- **Slave 1**: `slave1.jd.jms2win.com`  
  - `/jd/subdomains/slave1/public_html`

- **Slave 1A**: `slave1a.jd.jms2win.com`  
  - `/jd/subdomains/slave1a/public_html`

- **Slave 1B**: `slave1b.jd.jms2win.com`  
  - `/jd/subdomains/slave1b/public_html`

- **Slave 2**: `slave2.jd.jms2win.com`  
  - `/jd/subdomains/slave2/public_html`

- **Slave 3**: `slave3.jd.jms2win.com`  
  - `/jd/subdomains/slave3/public_html`

- **Group**: `master.jd.jms2win.com/multisites/group`  
  - `/jd/subdomains/master/public_html/multisites/group`

- **Jms2win.org**: `www.jms2win.org`  
  - `/jd/domains/jms2win.org/public_html`

- **Share extensions**:  
  - `/jd/subdomains/master/public_html`

- **URL Location on disk**

  - Master: `/jd/subdomains/master/public_html`
  - Slave 1: `/jd/subdomains/slave1/public_html`
  - Slave 1A: `/jd/subdomains/slave1a/public_html`
  - Slave 1B: `/jd/subdomains/slave1b/public_html`
  - Slave 2: `/jd/subdomains/slave2/public_html`
  - Slave 3: `/jd/subdomains/master/public_html /slave3`
How to create a website from the front-end and back-end?

1a. Create the website(s) that will be used as template.

2. Define the replication rules.

3a. Select a template to make a copy of a website.

1b. Install the pre-configured extensions and put a default content (menu, ...).
1a) Back-end: basic website creation

• Provide a « site ID »:
  This is a mnemonic

• Provide the domain(s) name
  www.domain1.com
  sudomain.domain.com
  www.domain.com/subdirectory

• Deploy directory (facultatif)
  This is the location that you have (or will) defined in your HTTP Server
  /home/domains/slave1
  /home/sousdomains/slave2

Path where deploy the slave

{site_id}

{root}

{deploy_dir}
1b) Installation of the extensions

1b Install an extension, you be done:
1. From the slave site standard « Extension/Installation »

OR

2. Use the « Websites Tools » that allows you connect on a slave site and perform the installation, sharing or un-install of the extension with possible propagation to the.
3.a) Create a website from the Front-end

3a

templates

rules

Select a template that contain the replication rules

Enter some parameters

• Site title
• Prefix
• A new admin email
• A new admin password
3a) Front-end website creation

Consist in the selection of a template (rules) and in providing some basic information such as a website prefix and a title.

The idea is to reduce the number of parameters to reduce the vulnerabilities. The rules uses keyword to convert the parameters into real values.

{site_prefix}
{site_alias}
2) Create a template

A template defines

- What to copy
- How to copy

**COMMON**
Set of fields that can be computed based on « keywords »

**SHARING of EXTENSIONS**
Defines which extension must be shared

**FOLDERS SHARING**
Defines the new directory structure

Select website to replicate

- Fresh slave (no replication)
- Master
- Slave sites with DB

**templates**

**RULES**

**MASTER**
- public_html
- administrator
- components
- images
- modules
- multisites
- plugins
- templates

**SLAVE**
- public_html
- administrator
- components
- images
- modules
- multisites
- plugins
- templates

Linked tables
2) Templates (Rules)

**COMMON**
Set of fields that can be computed based on « keywords »

*For example:*
- Select a website to replicate and change some fields
- Domain name = \{site_url\}/multisites/\{site_id\}
- New table prefix = \{site_id\}_
- Deploy folder = \{site_dir\}

**Possible keywords**
- \{user_id\}: This is the joomla user identifier
- \{site_id\}: Site identifier
- \{site_alias\}: Site alias given by the front-end user
- \{root\}: Absolute path on where is installed the current website
- \{multisites\}: Absolute path to the multisites directory. Equivalent to \{root\}/multisites
- \{site_dir\}: Absolute path of the site directory. Equivalent to \{multisites\}/\{site_id\}
- \{rel_site_dir\}: Relative path of the site directory. Equivalent to multisites/\{site_id\}
- \{site_domain\}: Field domain fo the site
- \{site_url\}: URL of the website
- \{deploy_dir\}: Absolute path where the site must be deployed.
- \{site_prefix\}: Specific site table prefix that a front-end would choose
- \{rnd_psw_6\} to \{rnd_psw_10\}: Random password on a length of 6 to 10 characters
- \{rnd_psw\}: Random password on a length of 8 characters
- \{reset\}: Force to reset the field value (clear it). Is generally used with FTP layer parameters

**SHARING of DIRECTORIES**
Defines the new directory structure

**SHARING of EXTENSIONS**
Defines which extension must be shared

**MASTER**
- public_html
- administrator
- components
- images
- modules
- multisites
- plugins
- templates

**SLAVE**
- public_html
- administrator
- components
- images
- modules
- multisites
- plugins
- templates

**Actions:**
- Create a Symbolic Link
- Ignore the directory
- Create a copy
  (and optionally use another source)
- Create the directory based on a Zip or Tar.gz
- Special copy (images and templates)
- Directory + subdirectory links
- Rewrite (for .htaccess)

**Full copy**
- templates
- bees
- ja_purity
- rhuk_milkyway
- system

**Partial links**
- templates
- bees
- ja_purity
- rhuk_milkyway
- system

**Remarks:**
- When a [front-end] parameters is entered, it is first converted into a back-end parameter.
- Jms Multisites only process the back-end parameters.
2.1) Template - common

Used when creation a website from the front-end

www.{site_id}
{site_id}
{site_id}.domain.com
{site_url}/{site_id}

{root}/{site_id}
{site_dir}

FRONT-END
2.1) Front-end specific template parameters

Front-end specific template parameters

- **Title**
- **Description**
- **Group**
  Is used by the front-end menu to filter the templates proposed to the users
- **Validity duration**
- **Maximum number of websites per user**
- **Redirection d'url**
- **Keywords (prefix, alias, …)**
- **Billable websites fields**
  - **Product SKU**
    A reference to the VirtueMart SKU or any other product. (used by Bridge for VirtueMart).
  - The « Bridge for VirtueMart » update the website status (cancel, refund, pending, confirmed)
2.2) Template – folders

Define how to create the target directory based on the master directory structure.

**Actions:**
- Create a Symbolic Link
- Ignore the directory
- Create a copy (and optionally use another source)
- Create the directory based on a Zip or Tar.gz
- Special copy (images and templates)
- Directory + subdirectory links
- Rewrite (for htaccess)

**Source path**

Possibility to have a specific directory for the « images » and « templates ». 
2.3) Template – sharing of extensions

**Require**
- MySQL 5.0 or higher
- MySQL user with privileges to share tables

**Linked tables**

**cPanel limitations**

Remark: The list proposed of sharing extensions is based on the one installed in the master website. When enabling a sharing extension, ensure that it is installed in the "template site" that will be replicated.

**PHPMyAdmin (root)**

[Diagram showing DB sharing and linked tables]
Back-end menu overview

**BACK-END MENU OVERVIEW**

- **Manage site**: Create slave sites.
- **Template**: Define replication, sharing, rules.
- **Tools**: Supervise the install, sharing, architecture of the slave site.
- **Check patches**: Install / uninstall the patches.
- **Check for update**: Retrieve the latest JMS patches definitions.
- **Settings**: Gives product info and allow to buy quota for billable websites.
- **Layouts**: Allow to upload specific front-end layouts.

*Joomla! is Free Software released under the GNU GPL License.*
3a) Front-end menu

- Select Menu Item Type
  - Internal Link
  - Articles
  - Contacts
  - Multi Sites
    - Slaves sites
      - Create a slave site
      - List all slave sites
    - Multi Sites Articles sharing
    - Multi Sites Menu Item
    - News Feeds

- Billable website
  - Product SKU
  - Execute additional script
  - Bridge to VirtueMart
Layouts are used to change the front-end rendering.
Not only the colors and looks but also the content displayed.
For example it is possible to create a layout that would display the websites like a «directory» of websites for a «portal».
3b) back-end: create slave site using a template

Site Details: [ New ]

- Site ID: slave1a
- Status: Confirmed
- Owner: Owners
- Expiration date:

Manager of the websites templates

- Templates:
  - share_s1 (edwinwin_jms : d1s1 => s1/site)
  - share_test (edwinwin_jms : d1s1 => [site_id])

Template DB name:

- Share the whole site:
- Fresh slave site
- Master DB (prefix=d1 ')

- Replicate the tables from an existing DB prefix into a new table
  - share_s1 (edwinwin_jms : d1s1 => s1/site)
  - share_test (edwinwin_jms : d1s1 => [site_id])
  - share_test1 (::)
  - share_test2 (edwinwin_jms : m1slave1A =>)

- DB Sharing:
  - No sharing
  - Share the Joomla Users
  - Share the VirtueMart Users

- Folders and Files:
  - Billets
  - Community Board
  - Seminar
  - VirtueMart
Back-end: Menu Overview with content

![Joomla Multi Sites](image)

### Site Manager

**Filter:**
- ID
- Site name
- Domains
- DB server
- DB
- Prefix
- User
- Status
- Expiration
- Owner

<table>
<thead>
<tr>
<th>#</th>
<th>ID</th>
<th>Site name</th>
<th>Domains</th>
<th>DB server</th>
<th>DB</th>
<th>Prefix</th>
<th>User</th>
<th>Status</th>
<th>Expiration</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>group</td>
<td>JMS2Win - Joomla Day - Group</td>
<td>http://site_url/jms2win/joomla_day</td>
<td>mysql8-11</td>
<td>edwinwin_tst</td>
<td>group_</td>
<td>edwinwin_tst</td>
<td>Confirmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>jms2win</td>
<td>JMS2Win - JoomlaDay - JoomlaDay</td>
<td><a href="http://www.jms2win.org">http://www.jms2win.org</a></td>
<td>mysql8-11</td>
<td>edwinwin_tst</td>
<td>jms2win_</td>
<td>edwinwin_tst</td>
<td>Confirmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>slave1</td>
<td>JMS2Win - JoomlaDay - Slave1</td>
<td><a href="http://slave1.jms2win.com">http://slave1.jms2win.com</a></td>
<td>mysql8-11</td>
<td>edwinwin_tst</td>
<td>slave1_</td>
<td>edwinwin_tst</td>
<td>Confirmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>slave1a</td>
<td>JMS2Win - JoomlaDay - Slave1a</td>
<td><a href="http://slave1a.jms2win.com">http://slave1a.jms2win.com</a></td>
<td>mysql8-11</td>
<td>edwinwin_tst</td>
<td>slave1a_</td>
<td>edwinwin_tst</td>
<td>Confirmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>slave1b</td>
<td>JMS2Win - JoomlaDay - Slave1b</td>
<td><a href="http://slave1b.jms2win.com">http://slave1b.jms2win.com</a></td>
<td>mysql8-11</td>
<td>edwinwin_tst</td>
<td>slave1b_</td>
<td>edwinwin_tst</td>
<td>Confirmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>slave2</td>
<td>JMS2Win - JoomlaDay - Slave2</td>
<td><a href="http://slave2.jms2win.com">http://slave2.jms2win.com</a></td>
<td>mysql8-11</td>
<td>edwinwin_tst</td>
<td>slave2_</td>
<td>edwinwin_tst</td>
<td>Confirmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>slave3</td>
<td>JMS2Win - JoomlaDay - Slave3</td>
<td>http://site_url/jms2win/joomla_day</td>
<td>mysql8-11</td>
<td>edwinwin_tst</td>
<td>slave3_</td>
<td>edwinwin_tst</td>
<td>Confirmed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Display: 20
Sharing articles

Sharing Articles
Possibility to share individual articles, front-page articles, sections and categories.

Possibility to select FROM which website the article, category or section must be read. PULL the articles.
Menu « Sharing of Articles »

From any slaves sites

Slave 1, slave 2, slave 3,…
Article Sharing for JMS MULTISITE

Compare the standard joomla with « Multi Sites Article Sharing »

- Require JMS MULTISITE to retrieve the configurations
- Works with MySQL 4.0
- Can NOT submit an article for another website
Use the menu « Multi Sites Article Sharing »

Publisher website

Sections
- National articles

Categories
- Sports
- Culture
- Financial news

Display the articles as category/blog:
- Site id = publisher,
- section = national articles,
- category = sports

The publisher does not decide where the articles are displayed.
This is the slave sites that decide which articles are displayed (published).
Why to use JMS MULTISITE?

Save times
- To update the content of the websites
  - With benefit of sharing a limited number of extensions (including the users)
  - With the sharing of articles.
- To create new websites:
  - With benefit of the templates of websites ready to use.
  - With benefit of the sharing of directories that just require creating a DB when building a new website.
  - With benefit that the final user can create the websites themselves.
    (ie 300 persons * 1 site is easier than 1 administrateur * 300 sites).
- To update Joomla and its extensions as there is only one instance of the PHP code.
- To do backup as there is only one joomla installation to backup.

Save money
- Multi Level Marketing possibilities.
  - Minisites specialized on some « keywords » to promote specific products and therefore increase their sales (money).
- Hosting less expensive.
  - Reduce disk space
  - Reduce the number of number of files and folders to maintain. (Maybe a solution when the number of iNodes is limited).
- As you save time, you win money.
Who are using JMS MULTISITE today?

► Public administrations to equip mayors, cities, districts, departments, ...

► Schools to equip departments, promote projects, provide sites for students to training, ...

► Some large companies with many subsidiaries, representatives, dealers, projects, departments, present in several countries, ...

► Companies who wants use the Multi Level Marketing and create mini-sites for the promotion products, ...

► Online stores with several sites who want to share a single catalog of products, ...

► Websites such as newspapers, local publications, information services and themes destined to specific professions (ie doctor), ...

www.jms2win.com 08-Apr-2010 Page : 46
Our other products

- **JMS MULTISITE:**
  - Share the menu items.

- **JMS MULTISITE:**
  - Display the sections and categories with a FAQ layout.

- **BRIDGE FOR VIRTUEMART:**
  - Bridge using VirtueMart to process the order and payment of billable websites.

- **www.wsd2win.com**
  - Coming soon:
    - Templates for Joomla
    - Layouts for Jms Multisites front-end.

---

JMS MULTI SITES
Joomla day Mallorca 9th and 10th April 2010.
Conclusion

Thank you to the organizers of the Joomla Day Mallorca for their support and allowing us to present our extension "JMS MULTI SITE".

Thank you to all those who have or will watch this presentation and for their attention.

For more information on JMS MULTI SITE and see some videos, come visit our website.

www.jms2win.com