



Joomla Multi Sites v1.1

User's Manual

November 2008

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<i>Starting Date: 11-May-2008 11:15</i>	<i>Review Date: 18-nov-2008</i>
<i>Last Update date: 18-Nov-2008 7:27</i>	
<i>Version: V1.1.0</i>	
<i>File name: UsersManual_V110.doc</i>	

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Revision History

Version	Date	Description
1.0	11-July-2008	Initial version
1.0.3	4-Aug-2008	Add a trouble shooting section
1.0.5	19-Aug-2008	Add a section to describe the possible installation architecture. (Use a single database, or one database for the master and another one for the slave sites, or use as many databases than there are websites). Add also a section concerning the upgrade of Joomla and extensions
1.0.5.1	28-Oct-2008	Grammar check
1.1.0	29-Oct-2008	Joomla Multi Sites version 1.1.0 functionalities - Update Site management - Add template management - Add front-end slave site creation - Add payment module sample and configuration (VirtueMart case study) - Add setting and “billable” website quota

1. Introduction

Welcome to the Joomla Multi Sites' world. This user manual describes the “Joomla Multi Sites” native 1.5 Joomla component.

“Joomla Multi Sites” is a component that extends Joomla 1.5 with the ability to manage multiple configurations, while sharing the same Joomla installation. With Joomla Multi Sites you can use a single Joomla installation to manage multiple databases, or the same database with multiple table prefixes (other than jos_).

Each Joomla configuration file can be mapped to one or more domain names. When Joomla Multi Sites receives a query for a special host (i.e. www.domain1.com), it searches to see if the domain corresponds to a special Multi Sites configuration file. When the site is served, it uses the specific configuration file to connect to the database. If no special configuration is found, it uses the default original configuration file (The master website configuration).

The install/uninstall of a component is also possible within a ‘slave’ site. A slave site can only re-install an extension that is previously installed on the master site, and only if it has exactly the same version number.

With the new Object Oriented Joomla 1.5 architecture, it is possible to reduce the number of places where the core Joomla files will need patching. A special menu is provided to let you supervise the files that are patched and check if the patches are correctly installed.

1.1. What is new in Joomla Multi Sites 1.1

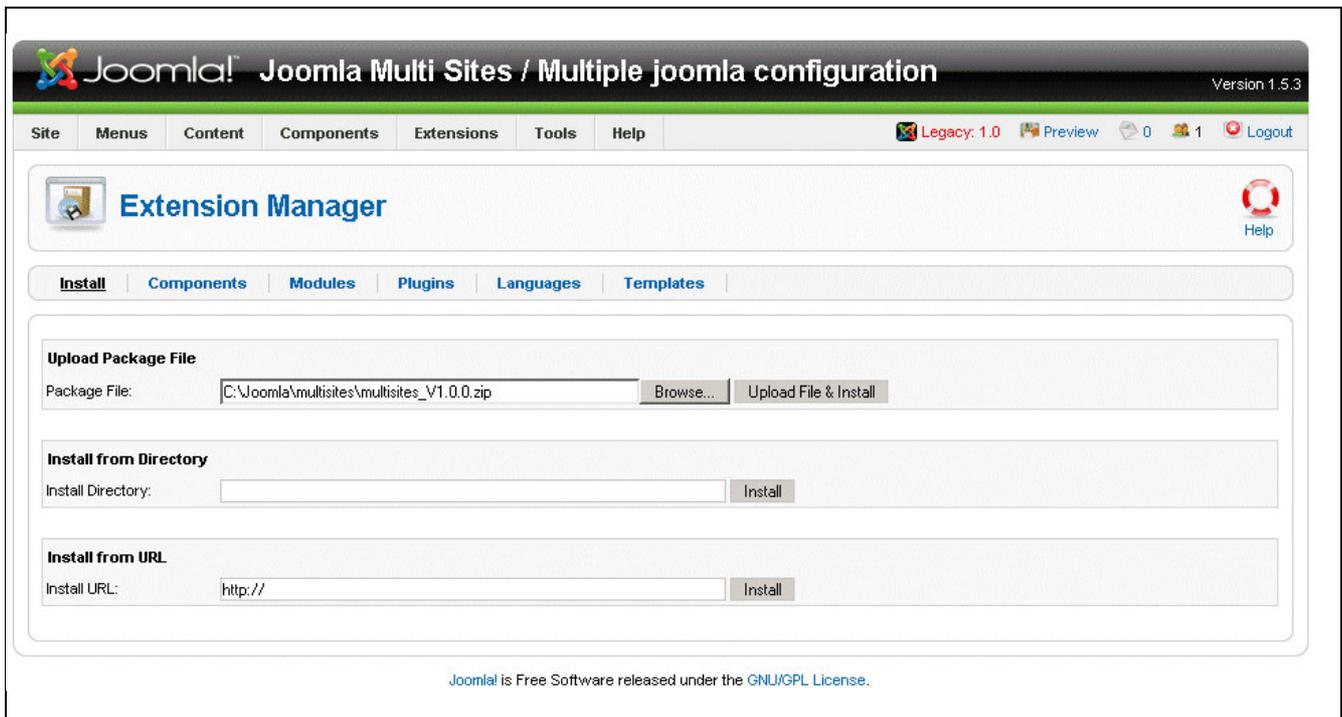
Joomla Multi Sites 1.1 adds new functionality to simplify the creation of slave sites:

- A basic database replication that can be used to create a slave sites based on another one. This allows you to avoid the re-installation of extensions as the database is copied with its content. This functionality allows creating “template websites” rules that will be used during a slave site creation.
- For a Unix platform, the possibility to deploy a slave site into another directory than the master website using the “Symbolic Link” mechanism. A new interface allows you to partially define the new website structure based on master structure.
- The possibility the have specific template, image, media, cache, log, and tmp folders. (When a themes folder is specific, this allows the website to manage [install, uninstall] its own templates.)
- A system to allow creating slave sites from the front-end
 - It is possible to create “free” slave sites or
 - Create “billable” slave sites.
With this function, it is possible to use an eCommerce application such as VirtueMart to order slave sites and wait until their payment to activate the slave site.
 - You can either develop your own interface with your eShop or
 - In the case of VirtueMart use a special plugin we have developed to propose a fully integrated system.
See Plugin “Joomla Multi Sites for VirtueMart”.

2. Installation

Joomla 1.5 provides a very simple installation interface.

The installation consists of setting the “Joomla Multi Sites” Zip file into the package field (as shown below).



The screenshot shows the Joomla! Extension Manager interface. At the top, the Joomla! logo and the text "Joomla Multi Sites / Multiple Joomla configuration" are visible, along with the version number "Version 1.5.3". Below this is a navigation menu with tabs for "Site", "Menus", "Content", "Components", "Extensions", "Tools", and "Help". The "Extensions" tab is selected. The main content area is titled "Extension Manager" and includes a "Help" icon. Below the title is a sub-menu with tabs for "Install", "Components", "Modules", "Plugins", "Languages", and "Templates". The "Install" tab is active. The "Upload Package File" section contains a "Package File:" label, a text input field with the path "C:\Joomla\multisites\multisites_V1.0.0.zip", a "Browse..." button, and an "Upload File & Install" button. The "Install from Directory" section has an "Install Directory:" label, a text input field, and an "Install" button. The "Install from URL" section has an "Install URL:" label, a text input field with "http://", and an "Install" button. At the bottom of the interface, a small text line reads "Joomla! is Free Software released under the GNU/GPL License."

When the installation is complete, you are informed that a backup of some core Joomla files is performed in case you decide to uninstall the component. You are also invited to register the application, although this is not mandatory. If you decline to register, the application will work perfectly. However, you will receive ads in the administration of the multi sites.

[Install](#) | [Components](#) | [Modules](#) | [Plugins](#) | [Languages](#) | [Templates](#)

 **Install Component Success**

Joomla Multi Sites.
Single Joomla installation using multiple configurations.
With benefit of multiple configuration files, it is possible to connect on multiple databases or use the same database with different table prefix.

It is strongly recommended to never use 'jos_' as table prefix. Event for the master site.
We have notice that standard Joomla installation process can delete the users present in jos_users table.

A backup directory 'c:\inetpub\scripts\PHP\w\creditcard\administrator\components\com_multisites\backup_on_install' is created.
 This directory contain ALL the joomla core files that will be patched.
 The installation of the patches can be performed by using the MultiSites administration.

This component is not registered.
 Please consider to register this component.
 If you have purchased this component, it will be asked that you enter the registration code sent by email.
 If you are a new user, it will be proposed to buy this component.
 If you don't want to register this component now, ads will be displayed during the administration of this component
 Go to the about menu if you want register this component later.

Register

Upload Package File

Package File: Browse... Upload File & Install

When the registration is completed, you are redirected to Multi Sites administration component.



Site Manager

 Delete
 Edit
 New
 Help

[Manage sites](#) | [Check patches](#) | [User's Manual](#) | [About us](#)

 **Thank you for the registration.**
It is completed SUCCESSFULLY.

 **Some patches are not installed.**
Please check patches and proceed with patch installation to allow mutlisites working properly.

- Select server - - Select db -

#	<input type="checkbox"/>	ID	Site name	domains	db server	DB	Prefix	User
1	<input type="checkbox"/>	test01	Slave site Test 01	test_01	localhost	dbmaster	test01_	joomla

Display # 20

3. Administration of multiple sites

The administration divided into three main parts:

- **Manage Sites:** Administration of the ‘Slave’ sites
This part consists in giving a ‘symbolic’ name to a slave site and in supplying the list of domain names associated with this site.
- **Template Sites:** Administration of ‘template websites’
This part consists in selecting an existing slave site, defining the rules to create a new table prefix, and managing domain rules to create the deployment directory structure.
- **Check patches:** Administration of the ‘Master’ site.
This part deals with installing/un-installing the ‘Master’ site’s patches.

[Manage sites](#)[Templates](#)[Check patches](#)[User's Manual](#)[Check for Updates](#)[Settings](#)[About us](#)

The other options give you access to the latest version of this manual, the patches definition update, settings for the “billable” websites, and additional information about the component.

3.1. Check patches

Once the component is installed, the first operation that needs to be performed is installing the patches.

Each time you access the management of the site, verification is performed and a warning message will inform you of a potential issue.

“Check patches” scans several files and directory to verify if the patches are installed.

For each file or directory, a diagnosis with a short description of the corrective action is reported. The permission of the files and directories is also checked to report potential problems during the patches installation. This should let the user know where to update permissions before installing the patches.


Check patches installation

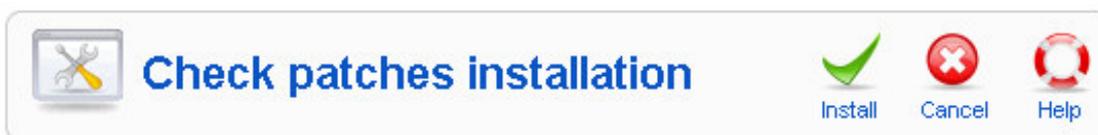
Files	Status
administrator/.....php	<p style="color: red; margin: 0;">Not OK</p> <ul style="list-style-type: none"> Multisites definition not present Configuration redefinition not possible Installation redefinition not possible <p style="margin: 5px 0;">Actions:</p> <ul style="list-style-type: none"> Add 1 line Update 2 lines
includes/.....php	<p style="color: red; margin: 0;">Not OK</p> <ul style="list-style-type: none"> Multisites definition not present Configuration redefinition not possible Installation redefinition not possible <p style="margin: 5px 0;">Actions:</p> <ul style="list-style-type: none"> Add 1 line Update 2 lines
includes/defines_multisites.php	<p style="color: red; margin: 0;">Not OK</p> <ul style="list-style-type: none"> File Not Found <p style="margin: 5px 0;">Actions:</p> <ul style="list-style-type: none"> Add the file
installation	<p style="color: red; margin: 0;">Not OK</p> <ul style="list-style-type: none"> [NOK]Directory Not Found <p style="margin: 5px 0;">Actions:</p> <ul style="list-style-type: none"> Rename / Restore the directory
installation/.....php	<p style="color: red; margin: 0;">Not OK</p> <ul style="list-style-type: none"> File Not Found
xmlrpc/.....php	<p style="color: red; margin: 0;">Not OK</p> <ul style="list-style-type: none"> Multisites definition not present Configuration redefinition not possible Installation redefinition not possible <p style="margin: 5px 0;">Actions:</p> <ul style="list-style-type: none"> Add 1 line Update 2 lines

Notes:
Some files needs to be patched.
Press the 'install' button to update your system.

As you can see, a very limited number of patches are required to extend Joomla with Multi Sites functionality. Some of the patches concern core Joomla files, and others concern some extensions like VirtueMart, Community Builder, JCE, etc. Taking advantage of the new Joomla Object Oriented Architecture, it is now possible to gain control of some part of Joomla, and in particular, to perform some pre-processing without changing Joomla itself.

3.1.1. Install the patches

If the patches installer finds that any patches are missing, the “Install” button will be visible.



The installation will execute all the actions reported by “Check patches”. When the patches are installed, you might need to re-login into the administration screen.

Return to “Check Patches” to verify the installation.



Patches definition version: 1.0.4

Files	Status
administrator/includes/.....php	OK
includes/.....php	OK
includes/defines_multisites.php	OK
installation	OK
installation/includes/.....php	OK
xmlrpc/includes/.....php	OK
configuration.php	OK
administrator/components/.....h.php	OK

Congratulation, all the patches are successfully installed.

3.1.2. Uninstall the patches

When at least one patch is installed, the “Uninstall” button will be available. This button allows you to restore all files that were saved during the installation of the patches.

3.2. Manage Sites

The management of the sites is very simple and consists of the declaration of the domain name (or sub-domain) you wish to share the master Joomla installation with.

Before describing the creation of 'slave' sites, we present possible architecture and organisation.

3.2.1. Multi sites architecture

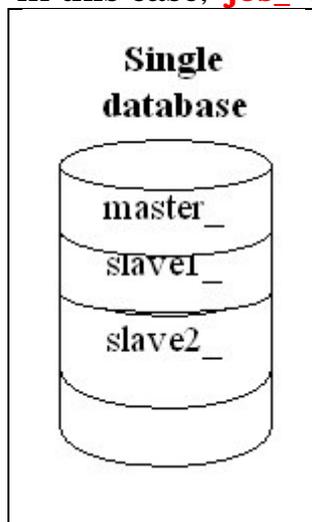
Joomla Multi Sites architecture mainly consists of using separate configuration files for each individual website. To separate the content of each website, it is important to use a different database, or the same database with different table prefix (other than jos_).

A limitation discovered in an old standard Joomla installation which concerns the 'jos_users' table: all its records are deleted during the standard Joomla installation no matter what table prefix the user has decided to use during this installation. It seems that this limitation is no more present in Joomla 1.5.3 or higher.

To prevent the deletion of the 'jos_users' records created by another website, it is mandatory to never use the 'jos_' table prefix if the database is shared by multiple sites.

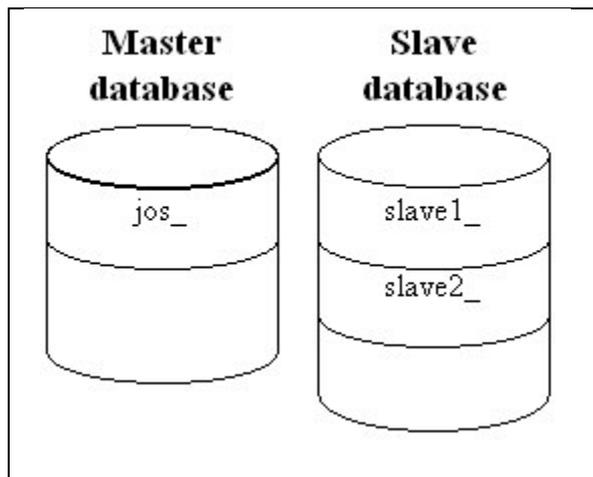
This leads to the following possible architectures:

- **Single database** to store the information of all the websites (master and slave sites). In this case, 'jos_' table prefix is **forbidden**.

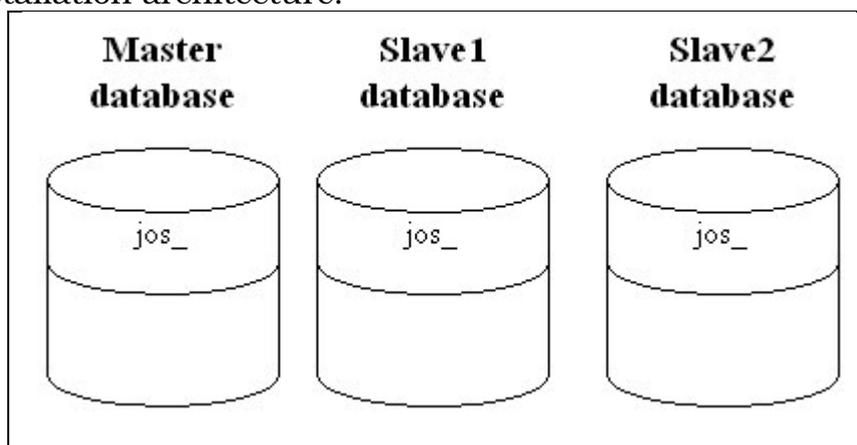


- Use **one** database for the **master** site and **one** database for the **slave** sites. In this case, 'jos_' table prefix is **allowed** for the **master database** and is **forbidden** for the **slave database**.

This architecture is used when you install Joomla Multi Sites on an existing website which has limitations on the number of databases you can create.



- Use **as many databases** as there are **websites**. In this case the “**jos_**” table prefix is **allowed** for all the websites. When your hosting provider does not limit the number of databases, you can use this architecture to work with the Joomla default installation architecture.



3.2.2. Create a new 'Slave' site

When you want to create a new website, you can either enter some information here, or make reference to a “website template” that contains the rules to create the new website. The definition of a “website template” is given in chapter “Website template” management.”

To create a slave site, three pieces of information are required:

- a **site identifier**: The identifier is used as directory name where Joomla will store the new configuration.php file created by the Joomla standard installation.
- a **site status**: This status indicates whether the websites can be used in production, or should be hidden. This status is also used in conjunction with ‘billable’ websites that can be created from the front-end. In this case, the website status can be synchronised with the order status.

There is also a '**payment reference**' field that display the payment reference used when creating a 'billable' website from the front-end.

When the status is not "Confirmed", the slave site will be considered as not present by JMS. This means that the list of domains will be ignored and navigating to this domain will show the master website.

- a **List of domain names**: This is the list of domain names that will be routed to the correct slave site.

Optional fields

- **owner**: this allows you to assign a user to the website. Only the websites having an owner defined can be displayed in the front-end.
- **expiration date**: this allows you to define a publishing date for the website. When the date is not present, this means it will always be displayed. To modify a date, use the button just after the field to select or clear the date.

In addition to the required site definitions, it is possible to define parameters to duplicate a reference database based on a "template website," or specific rules. The idea behind this is to define rules that will be used when replicating the table present in the reference database.

For the moment, the [replication](#) is performed [in the same database](#).

The replication consists of copying all the tables having the Joomla prefix of the "source DB" into a new table prefix defined here (manage site) or in a template.

At the same time, it is possible to customise the new database and its associated Joomla configuration file.

Below are the parameters of the Database and/or Joomla configuration file that can be configured.

- a **template website**: This combo box lists the available templates defined in the "template" menu.

A template is defined by:

- Its name (or master DB)
- A DB name
- A rule that describes the new "to" DB prefix

When you select a template, this refreshes the "template directory" information to help the user decide if they want to use the template values or change them.

- the **new DB prefix**: when present, or when a template is selected with a table prefix rule, this unlocks the fields that allow you to customize the database and also trigger the creation of the Joomla configuration file.
- the **new site title**: This allows you to specify a new website title. This replaces the website title that was present in the "from template website" that is replicated to create this new website.
- the **new admin email**: This allows you to give a new email address to the "admin" user selected in the template. When there is no template (or a template without an "admin user" selected), the first "Super Administrator" user is used to setup a new email address.
- the **new admin password**: This allows you to define a new administrator password to the "admin user" selected in the template. When there is no

- template (or a template without an “admin user” selected), the first “Super Administrator” user is assigned the password.
- the **new media folder**: This allows you to specify a new Joomla Global Configuration, system settings, and media folder settings.
When specified, the “source” media folder is copied into the new location. The source media folder is either the source path defined in the “template website” database, or when there is no database, the path defined in the master website.
 - the **new image folder**: This allows you to specify a new Joomla Global Configuration – system – image folder settings.
When specified, the “source” image folder is copied into the new location. The source image folder is either the source path defined in the “template website” database or when there is no database, the path defined in the master website.
 - the **new theme folder**: This allows you to define a specific “template” or theme front-end directory. When it is specified, a new directory “/template” directory is created and the content will be either a copy (for Windows servers) or a symbolic link (for Unix servers) to all the templates present in the source template directory.
The source theme folder is either the theme folder from the “template website” (when selected) or from master website.

When a website is already defined, additional information is displayed. The information displayed from the Joomla configuration is:

- DB server name;
- DB name;
- DB table prefix;
- DB login or User name;
- DB password.



Site Details: [New]

Save

Cancel

Help

ID (*): 

Status (*): Confirmed  Payment reference:

Owner : - Owners - 

List of domain names (*):  

Expiration date:   

(*) Fields mandatory

Replicate the tables from an existing DB prefix into a new tables prefix using the same DB

Templates: Template_03 (test_011 : test03_ => u{user_id}{site_prefix}_) 

New DB Prefix:  

New site title:  

New admin email: 

New admin password: 

Master site directory: *c:\inetpub\scripts\PHPAW\multisites*

Template Media folder:

New Media folder:  

Template Images folder: *{rel_site_dir}\images\stories*

New Images folder:  

Template Themes folder:

New Themes folder:  

Gray fields corresponds to information that are stored into the new DB.
To replicate a DB, select either a template having a "to" prefix rule defined or enter a prefix here..
When there is no DB defined in the template, this is the master DB that is used for the replication.

Parameters that come from standard Joomla configuration

DB host name:

DB:

DB prefix:

DB user:

DB password:

Remark: Save operation will create a new directory

3.2.3. Configure the 'Slave' site

The configuration of a new slave site is very simple, and uses the standard Joomla installation. If you plan to use the same database for multiple web sites, we recommend you perform a backup before installing the new website. We assume that you have declared all the domains on your server and that you have routed them to the same Joomla installation.

This configuration depends on your personnel environment.

Here below, we give some guidance for some specific cases:

- We illustrate the case where you are using an Apache server that administrate yourself;
- We illustrate the case with Cpanel that has been used by one of our customers;
- We illustrate the case with Plesk used by another customer.

Refer to your server administrator, or contact your hosting provider if you need help configuring domains correctly.

In all the cases illustrated below, the objective is to define the same folder path for all the websites.

Suppose you have a [master](#) website with the domain “[www.master.com](#)” physically installed in the directory ‘[/public_html/master](#)’ and that you have defined ‘slave 1’ with the domain “[www.slave1.com](#)”.

This means that you have to setup your environment to declare the “[www.slave1.com](#)” that it is mapped to the same directory than the master ‘[/public_html/master](#)’.

The expected result is :

Website	Domain	Folder path
Master	www.master.com	/public_html/master
Slave 1	www.slave1.com	/public_html/master

3.2.4. How to configure httpd.conf with apache

In apache, you can configure the “httpd.conf” file to declare multiple virtualhost entries pointing to the same directory.

```

<VirtualHost *>
    ServerName domain\_01.com
    ServerAlias *. domain\_01.com
    DocumentRoot /var/www/html/php/MultiSites
    User apache
    Group apache
</VirtualHost>
<VirtualHost *>
    ServerName domain\_02.com
    ServerAlias *. domain\_02.com
    DocumentRoot /var/www/html/php/MultiSites
    User apache
    Group apache
    
```

</VirtualHost>

3.2.5. How to configure CPanel

Some hosting providers use CPanel to administer the domain.

Most CPanel users know how to create a domain but not necessary how to provide a specific folder for this domain. Usually, the users create a domain that has its own folder.

When working on Unix platforms, Joomla Multi Sites Version 1.1.x or higher gives you the possibility to deploy a website in a different directory than the master. In this case, you can specify the directory that has been created by CPanel., from within JMS

If you want to use the same directory as the master website (as we recommend), the procedure below is provided by one of our customers.

We are providing it to help CPanel users in the configuration of their system. We cannot guarantee the accuracy.

1. In the CPANEL, click on AddOn Domains section:



2. Once in the AddOn Domains, then you will see an interface similar to this:

Create an Add on Domain

New Domain Name:

Subdomain/Ftp Username:

Document Root: 

Password:

Password Strength:
Very Weak (0/100)

Password (Again):

Hint: This feature must be enabled for your account before you can use it. Addon Domains will not be functional unless the domain name is registered with a valid registrar and configured to point to our DNS servers.

- **New Domain Name:** the “slave site” domain name (ie. slave1.com)
- **Subdomain/Ftp Username:** Any name you choose.
- **Document Root:** This is the root where the Master Site is installed. (ie. [/public_html/master](#))

3.2.6. How to configure Plesk

Some customers use Plesk for the administration of their domains. Most Plesk users know how to create a domain but not necessary how to provide a specific folder for this domain. In general the users create a domain that has its own folder.

When working on Unix platform, Joomla Multi Sites Version 1.1.x or higher offers you the possibility to deploy a website in a different directory than the master. In this case, you can specify the directory that is created by Plesk from within JMS.

If you want to use the same directory as the master website (as we recommend), the procedure below is provided by one of our customers.

We are providing it to help Plesk users in the configuration of their system.

We cannot guarantee the accuracy.

1. First Login into Plesk:



Log in to Parallels
Plesk Control Panel 8.6

Enter the login name into "Login" and password into the "Password" fields respectively.
Then click "Login".

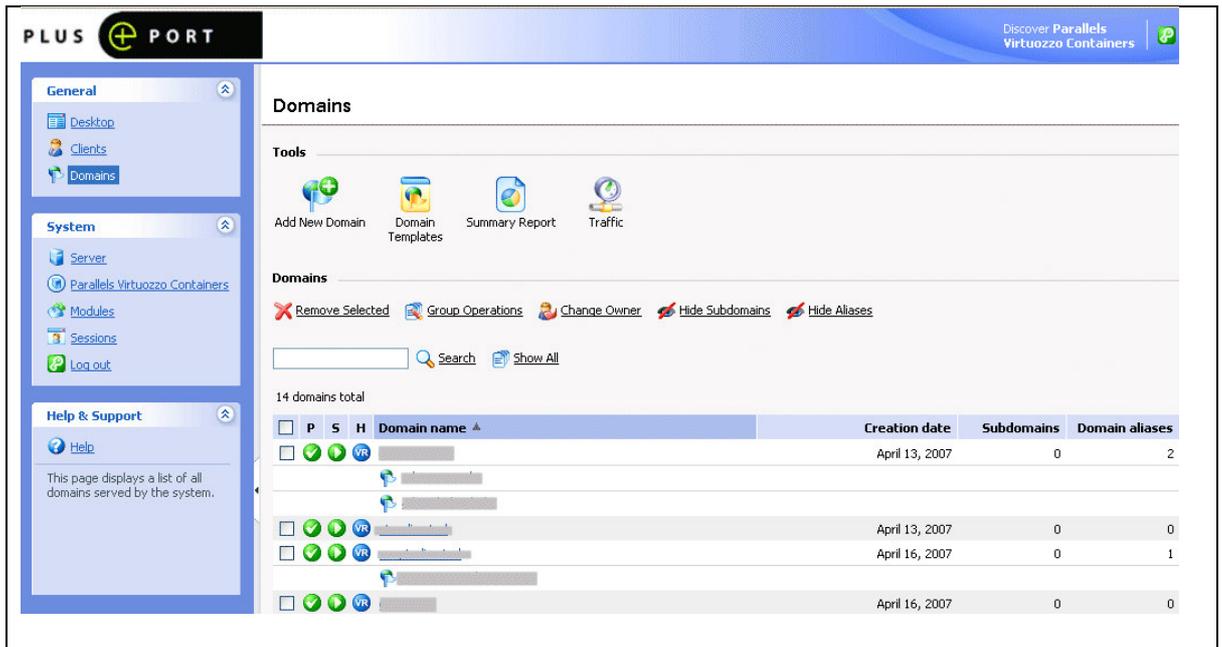
Login

Password

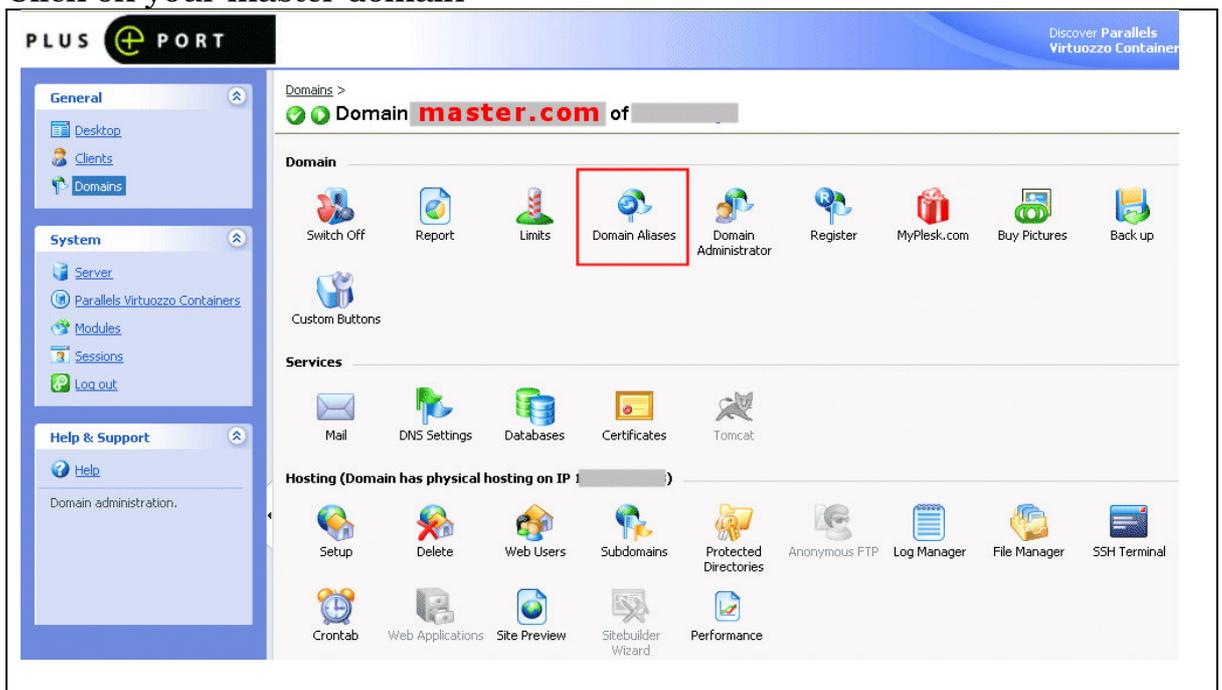
Interface language

[Forgot your password?](#)

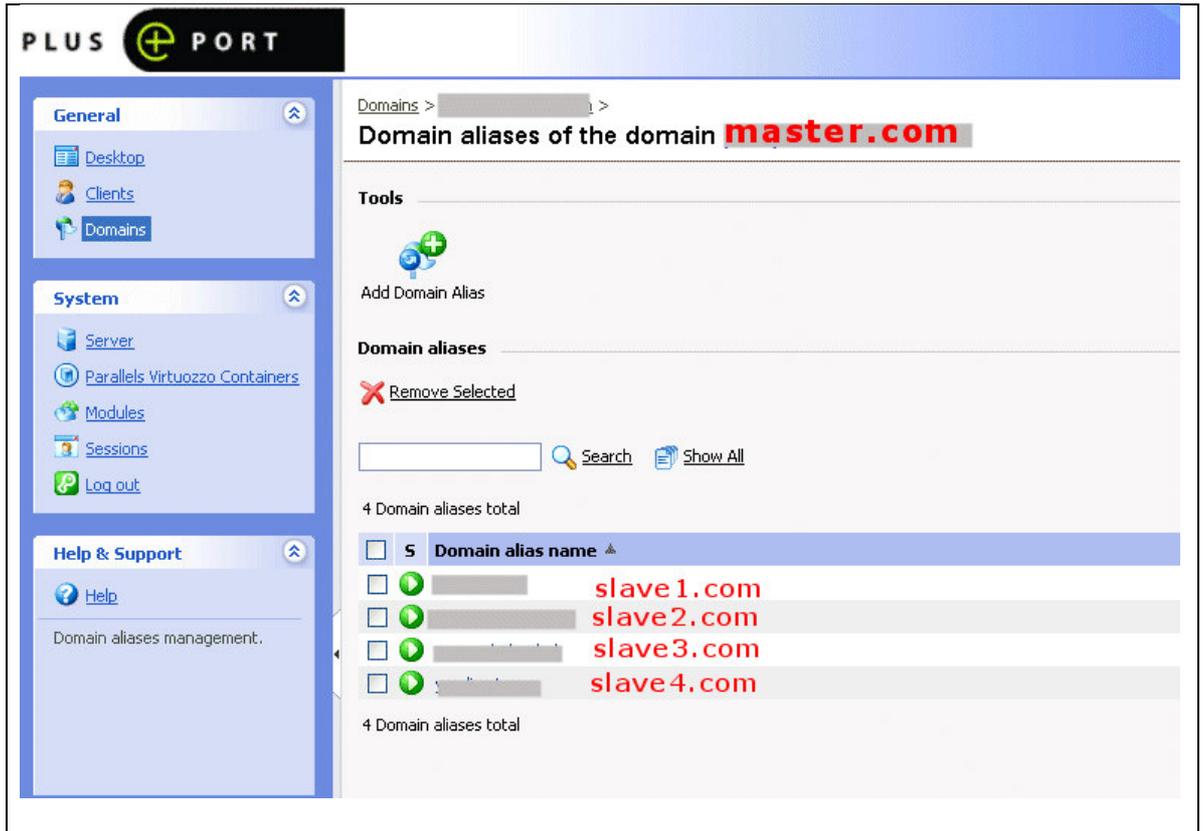
2. Click on Domain



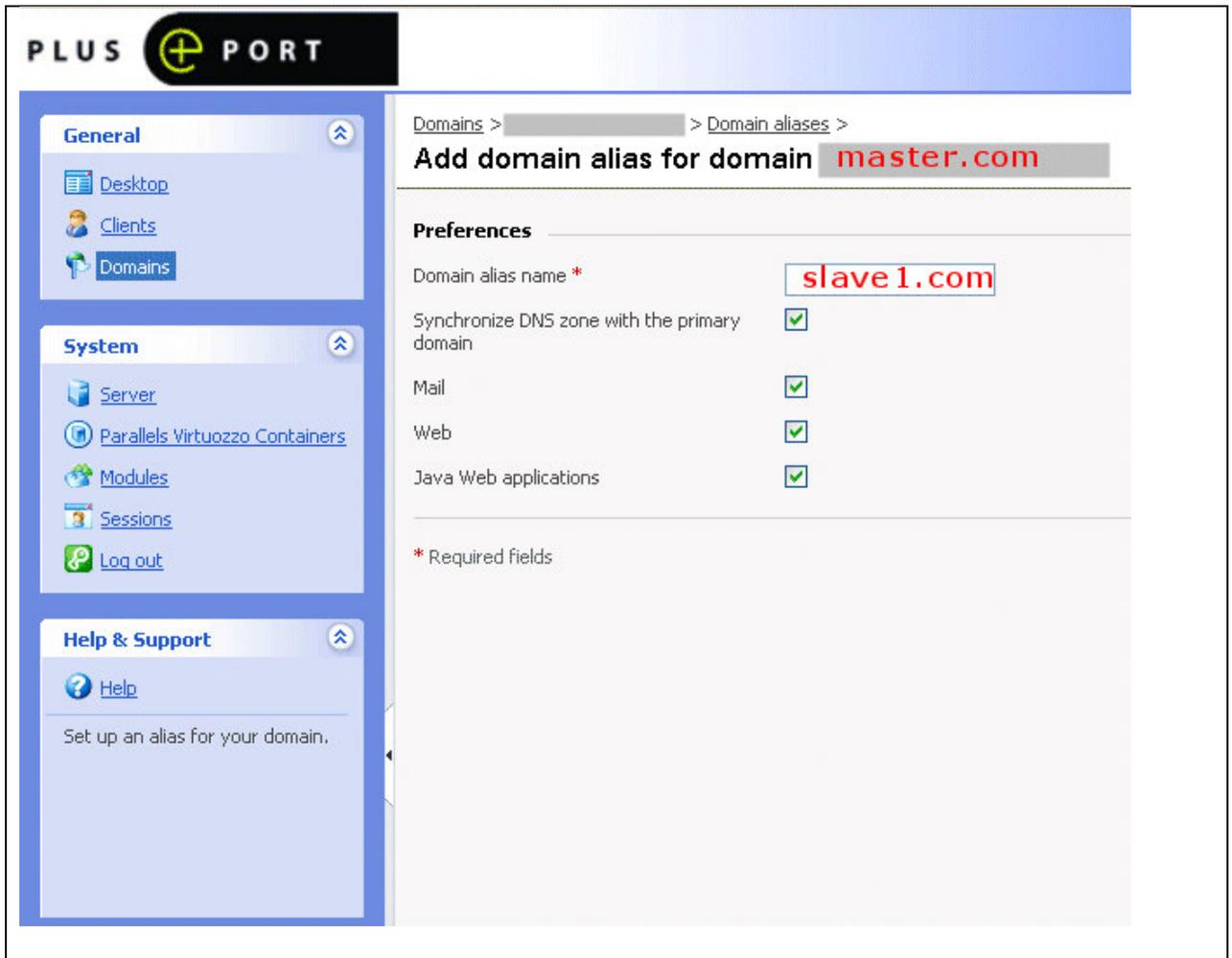
3. Click on your master domain



4. Click on domain alias



5. Add domain alias



Type in the Domain Alias Name Field your new SLAVE domain name with no www in front of it ex (slave1.com) and press OK.

Also, make sure you don't host the newly made Domain alias name on the Plesk server as a full domain. You will get the error Domain name already exists. In this case delete the existing domain and after that make the Alias.

When the Alias is in place make sure that the DNS records are pointing to the right domain IP.

Then when you enter your new domain alias slave site into you web browser it will show you the new Joomla installer.

Plesk will configure your apache with all the rest of the virtualhosts etc nothing more than making an alias to the master domain and make sure plesk isn't using the same domain name in a other domain as alias or as full domain name then you get an error.

3.2.7.Proceed with the standard Joomla Installation

The procedure below will demonstrate how to install a fresh slave site.

If you chose to replicate a website using a "template website", this section can be ignored, as the database and configuration file will be computed based on the rules defined in the "template website".

When the new domain names are correctly routed to your Joomla directory, the rest is performed by Joomla Multi Sites. It uses the domain name to retrieve the Multi Sites identifier and checks if the Joomla configuration is present. If you access the domain for the first time, it redirects you to the standard Joomla installation that allows you to describe the new configuration.

The screenshot shows the Joomla! Installation interface at the 'Choose Language' step. On the left, a 'Steps' sidebar lists: 1: Language, 2: Pre-installation Check, 3: License, 4: Database, 5: FTP Configuration, 6: Configuration, and 7: Finish. The main area is titled 'Choose Language' and contains a 'Select Language' section with the instruction: 'Please select the Language to use during the Joomla! installation steps.' A scrollable list of languages is shown, with 'en-GB - English (United Kingdom)' highlighted. Other visible languages include be-BY, bg-BG, bn-IN, bs-BA, ca-ES, cs-CZ, da-DK, de-AT, de-CH, de-DE, el-GR, eo-XX, es-ES, eu-ES, fa-IR, fi-FI, fr-FR, he-LI, and hr-HR. A 'Next' button with a green arrow is in the top right. At the bottom, a small text reads: 'Joomla! is Free Software released under the GNU/GPL v2.0 License.'

Continue the installation until you arrive to database configuration.

The screenshot shows the Joomla! Installation 'Database Configuration' screen. It features a 'Previous' and 'Next' navigation bar at the top right. The main content is divided into 'Connection Settings' and 'Basic Settings'. Under 'Basic Settings', the following fields are visible: 'Database Type' (mysql), 'Host Name' (localhost), 'User Name' (demo), and 'Database Name' (multisites). The 'Advanced Settings' section is expanded, showing two radio button options: 'Drop Existing Tables' (selected) and 'Backup Old Tables'. Below these is a 'Table Prefix' field containing 'demo1_'. The interface includes explanatory text for each field and a 'Next' button.

The most **important** here is to correctly select the appropriate **database name** and the **table prefix**. If you don't understand this, please refer to the possible architectures in previous section.

To avoid having an impact on another Joomla installation, it is important to carefully choose the database name and prefix, particularly when you choose an existing database.

WARNING:

Prior to Joomla 1.5.3, our test shows us that prefix “jos_” CAN NOT BE USED when multiple sites share the same database. This is due to a problem we noticed during the standard Joomla installation procedure. In fact, Joomla always delete the jos_users records no matter the table prefix chosen. This makes the administration of the site using the “jos_” prefix impossible. If by mistake you have a table jos_users where all the records are deleted, you need to restore its content from a backup. Normally, the standard Joomla installation performs a backup of the jos_users where you can retrieve them. Therefore, it is **strongly recommended** never to use a database that has tables with “jos_” prefix.

Don't remove the installation directory:

At the end of the installation of the new site, Joomla asks you to delete the installation directory.

With Joomla multisites, this is not required. We strongly recommended that you do not remove the Joomla installation directory. Joomla Multi Sites is able to detect if the installation is already completed and will grant access to the administration and the front-end.

If you delete the installation directory, you will have to restore it each time you will want create a new 'slave' site. It is possible to restore the installation directory from the “Check Patches” menu. Joomla Multi Sites is supplied with a copy of this installation directory.

When working on Unix (and if you have chosen to deploy the slave site into another directory than the master) JMS will create “Symbolic Links” to the master folder. In this case only, you can delete the installation “Symbolic Link” as it only affects this slave sites.

3.2.8. Installing an extension

To maintain consistency between all the websites sharing the same Joomla installation, it is also required that each 'slave' website shares the same extensions coming from the 'master' website. The master website can be seen as a repository for all the slave sites.

Since many extensions are available on the internet, and it is difficult to know exactly the database table and other parameters they use, we have decided to allow each 'slave' website to re-install the extensions previously installed by the 'master' site.

'Slave' sites can only re-install an extension that has exactly the same name and same version number.

A consequence of the re-installation is that all files present on the disk for this extension will be overwritten therefore causing a potential damage to the configuration file used by the extension.

When you re-install an extension (in particular components) it is therefore recommended to re-configure them exactly the same way for all websites.

This procedure only affects components, modules and plugins. Languages and templates are not concerned as they are automatically shared by all the websites. The re-installation of Languages and templates is disabled from within the slave site.

3.2.9. Uninstalling an extension

It is possible to remove an extension from a ‘slave’ site.

In fact, the uninstalling of an extension from a ‘slave’ site only consists of deleting the entries that describe the extension in the database.

This also calls the “uninstall” queries present in the extension manifest.

The other specific uninstall process defined by the extension are not called because it is not possible to know whether some files on the disk will be destroyed. Therefore, this part of the uninstallation of an extension is disabled.

This could also result in database ghost table.

Therefore, we do not recommend uninstalling an extension that could lead to ghost database tables.

3.3. “Website template” management

Website template is a feature that allows you to define generic rules that are used to create new web sites. The rules are very important when you want to use the “front-end” slave sites dynamic creation.

When you propose to your front-end “registered users” the possibility to create slave sites, the “website template” is used to compute the parameter that would normally be introduced by the JMS administrator when using the “site manager”.

The “website template” is used to define the rules for:

- Which database must be used as reference database to create the new slave site? In fact, in the template, you select an existing slave site where all the information, such as the database and the configuration file, will be used and replicated to create the new slave site.
- You also have to define the rules on how to create a unique table prefix
- The rule to create a unique site ID.
- The “generic” domain name must also be specified.

It is possible to use sub-directory which is computed based on some parameters provided by the user. In particular, it is possible to define a domain name alias.

- When you decide to publish the template to the front-end to allow dynamic slave site creation, it is required to specify which user will be used as administrator.

Other parameters can also be specified to customize the slave site that will be created with the temple. You can also define:

- A deployment folder (this is only available for unix platform [not windows] because it will use Symbolic Links that are not available on windows. This field can be used when the hosting provider provides tools like Cpanel, Plesk, or other applications that assign a specific directory for each domain by default. As some customers may encounter difficulties setting up those tools, JMS provides the functionality to deploy a slave site into a specific folder, and it will create symbolic links on the master directory. Also see the “folders and files” panel that can be used to customise the deployment.
- A new media folder;
- A new image folder;
- A new theme (template) folder

With the “website template” you can also define some rules on the directory structure that you want for a slave site when it is created.

When working on Unix platform, it is possible to create a “root” website directory that is based on Symbolic Links. The objective of the “Symbolic Links” is to provide the possibility to have a specific disk work space for the slave Website and increase the security when the slave sites are available from the front-end. This give for example the possibility to have specific templates folders deployed for the customers and not share them for all the slave sites.

Template Details: [New]

Save
 Cancel
 Help

Common

Folders and files

ID: ⓘ

Group: ⓘ

Validity duration: days ⓘ

Product reference (SKU): ⓘ

Description: ⓘ

List of domain names (*): ⓘ💡

Replicate the tables from an existing DB prefix into a new tables prefix using the same DB

Template site (*): ⓘ

To site ID (*): ⓘ💡

Admin User (*): ⓘ

New DB Prefix (*): ⓘ💡

Specific slave site folders

Master site folder: /homez.51/edwinwin/jms/test

Deployment folder: ⓘ💡

Path to Media folder: ⓘ💡

Path to Image folder: ⓘ💡

Templates (themes) folder: ⓘ💡

(*) Fields required to have the template available from the front-end

- **ID:** This is the identifier of the template.
- **Group:** When defining a menu entry to allow front-end user create slave sites, it is possible to filter the template displayed on a specific group name. Enter any text you want to use to group some template into a same menu here. You could use this group field to create a category of templates or whatever.
- **Validity:** This parameter gives you the possibility to define a validity duration when you propose a “billable” website service. When present, it may be used to compute a slave site expiration date.
- **SKU:** This is a field you can use when you develop a bridge with your eShop or shopping cart system. In the case of “MultiSites for VirtueMart”, we have

used this parameter to specify an external reference to a product defined in VirtueMart. This allows you to use the VirtueMart shopping cart system to place an order of a “billable” slave site.

- **Title:** This is template title that is displayed to the front-end user that created the slave site.
- **Description:** Free text that allows you to describe the template. This text is displayed to the “front-end” when a user selects the template.
- **List of domain:** This field is mandatory when you want to show this template into the front-end.

Define the rule to create the new domain name here.

You can use multiple keywords in the definition of a domain. See next section for an exhaustive list of keywords available.

You could define rules like:

- `http://{site_url}/u{user_id}{site_prefix}`
- `http://{site_url}/{site_alias}`

Where:

- `{site_url}` : define the current URL of the website
 - `{user_id}` : define the Joomla user identifier
 - `{site_prefix}` : Is a prefix introduced by the front-end user when it creates a slave site.
 - `{site_alias}` : Is an alias introduced by the front-end user when it creates a slave site.
- **Template site:** This field is mandatory when you want to show this template into the front-end.

It is used to select an existing slave site that will be replicated when creating a new slave site.

- **To site ID:** This field is mandatory when you want to show this template into the front-end.

It is used to define the rule for the creation of the slave site identifier.

You could use for example a rule such as:

- `u{user_id}{site_prefix}`

- **Admin user:** This field is mandatory when you want to show this template into the front-end.

It allows you to select the “admin user” that will be available to the front-end user and for which the administrator email and password can be setup during the slave sites creation.

You could use, for example, a rule such as:

- **New DB prefix:** This field is mandatory when you want to show this template into the front-end.

It is used to define the rule for the creation of the new database table prefix.

You could use, for example, a rule such as:

- `u{user_id}{site_prefix}`

- **Deployment folder:** This field is only available for “non Windows” systems – probably Unix platform. When present, it allows to specify where the slave site will be deployed. In this case, it is possible to define Symbolic Links or other rules in the “Files and Folders” panel as described in another section.

- **Path to media folder:** This field can be used when you want to use a specific media folder. When specified, it duplicates the media folder

associated with the “template website,” and also updates the new database with the new path.

The new slave site Joomla / Global Configuration / Server panel is changed with the parameter with this new media folder path

- **Path to image folder:** This field can be used when you want to use a specific image folder. When specified, it duplicate the image folder associated to the “template website” and also updates the new database with the new path.

The new slave site Joomla / Global Configuration / Server panel is changed with the parameter with this new image folder path

- **Themes folder:** This field can be used when you want to have a specific themes folder for the slave sites.

In case of Windows platform, this duplicates the “template site” themes folder.

On non Windows – probably Unix, this creates Symbolic Links on the “template site” themes folder. We have chosen to create “Symbolic Links” instead of duplication to simplify the maintenance and allow reduce the number of place where template must be updated. This can help some companies that use JMS to propose “themes” to their customers. They could have only one place where to maintain the “themes”.

3.3.1. Keywords available to create generic slave sites

Keyword are text between parenthesis.

- **{user_id}** : define the Joomla user identifier
- **{site_id}** : This is the site identifier.
- **{site_alias}** : Is an alias introduced by the front-end user when they create a slave site.
- **{root}** : Absolute path 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}** : define the current URL of the website
- **{site_prefix}** : Is a prefix introduced by the front-end user when they create a slave site.

3.3.2. New Folder and files

The “folder and files” panel is used to customise the new slave site root directory structure.

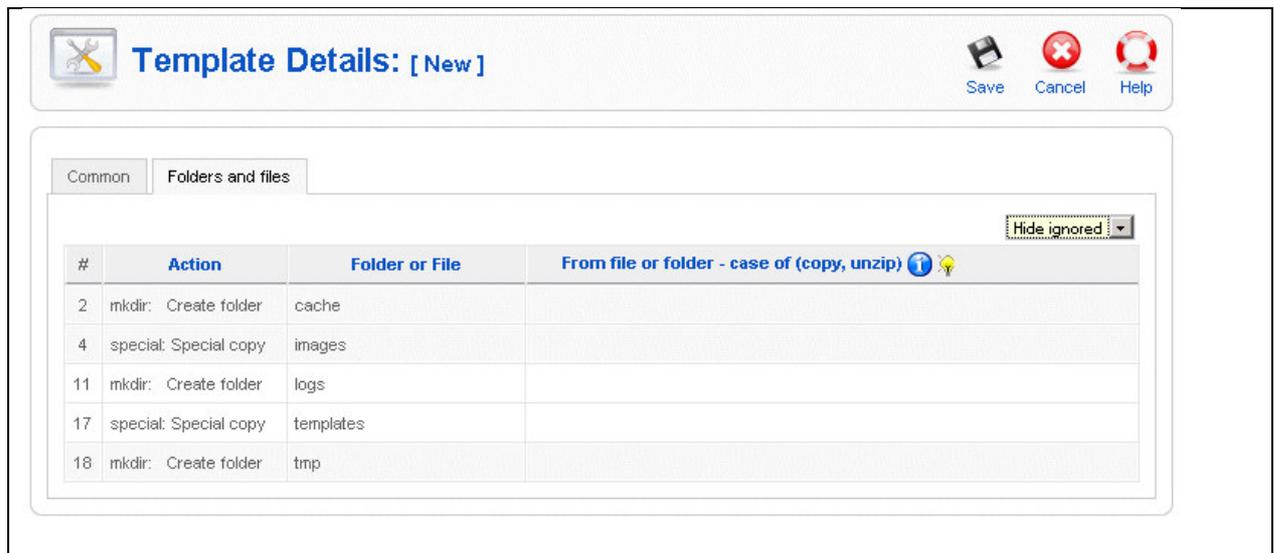
When working on Unix platform, this is used to create a replication of the master website using “Symbolic Links”. In this case (Unix), this allows a domain to be mapped to another directory than the master website. This

can be helpful for plesk or cpanel users, or any other Unix tools that propose by default a specific directory for each domain.

With this tool, it is also possible to decide to copy or create a directory from a tar.gz file.

Some files and folders cannot be customized because they have a specific processing. This concern:

- the “index.php” and “index2.php” that can not be a link because this may crash website. We create a basic PHP include of the original file present in the master directory for those files.
- The cache folder, the log folder, the tmp folder, the media folder, the image folder, and the themes folder.



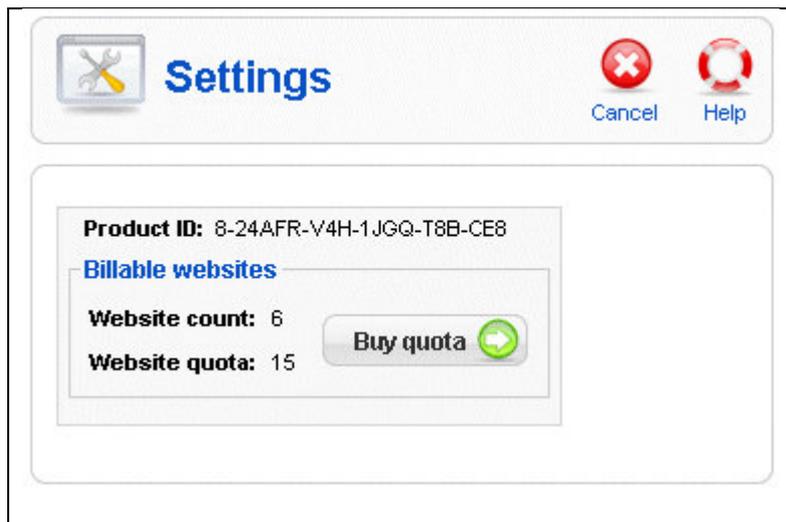
3.4. Settings

When you want to use the functionality of “billable” front-end websites, it is required to buy quota on www.jms2win.com.

The interface that you can use to buy quota is present in Settings menu.

This menu shows you the current number of “billable” front-end websites that have been created and your current website quota.

The website quota you have already purchased and that is attached to your “jms2win” login. Therefore, you can share your website quota between multiple JMS master installation.



When you click on “Buy quota”, you are redirected on www.jms2win.com website and it will show you the different volume package available based on your current quota.

When you have purchased quota, this will give you access to a special menu in www.jms2win.com with your website quota history.

3.5. User's manual

This user's manual is available online.

It gives a direct access to this document.

A special feature is implemented to always give access to the latest version of this manual that matches your Joomla Multi Sites version.

The help screens are also available online.

3.6. Check for Update

“Check for Update” is a functionality to allows you to download update automatically into the patches definitions.

This allows us to add patches definition for the extensions that could require a modification to be compatible with Joomla Multi Sites.

This “check for update” does not upgrade the Joomla Multi Sites kernel. Only the list of patches is updated.

If a user identifies a problem with a specific extension he can report it to us and if we can provide a solution with a patch, this is the channel we will use to distribute the patch to the user community.

3.7. About us and registration

The about menu displays the version of the extension and possibly shows you a registration button when you have not yet registered the component.

The registration is a mechanism that we use to determine if the user has paid a fee for the download of this product and if he can have access “check for update”.

[Manage sites](#)[Check patches](#)[User's Manual](#)[About us](#)

Multisites for Joomla! 1.5.x

Version 1.0.0

Copyright

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Rue des robiniers, 107
B-7024 Ciplu
Belgium

All rights reserved.

www.jms2win.com

This component is not registered.

Please consider to register this component.

If you have purchased this component, it will be asked that you enter the registration code sent by email.

If you are a new user, it will be proposed to buy this component.

If you don't want to register this component now, ads will be displayed during the administration of this component

Go to the about menu if you want register this component later.

[Register](#)

4. Front-end dynamic slave sites creation

Creating a slave site from the front-end is a functionality that works with “website template”. With the “website template” you define the rules for the creation of a new website site.

You can either create “free” or “billable” slave site from the front-end.

First, we describe the parameter that can be entered by a final user.

Next, we describe the parameters that can be defined in the Joomla menu to specify additional “billable” information.

Finally, we have a section that gives you some general information to help you in the communication between JMS and your specific eShop. We have a plugin “MultiSites for VirtueMart” that propose a complete integration with very popular VirtueMart. This plugin allows you to automatically add an item into the VM shopping cart, redirect the user to the check-out, process the VM order to update the slave site status according the VM order status associate to the slave site.

The front-end can only define a limited number of parameters. Those parameters can be used by the “website template” in the definition of the rules:

- Select a “website **template**”. The template defines the rules that must be used to create the new slave site.
- A **site prefix**: This is a field that can be used as a keyword in the “website template”. It can be used for example in the rule that defines the site ID. In that sample below, use have used the template site ID rule = “u{user_id}{site_prefix}”.
`{user_id}` is a keyword that represent the Joomla user ID.
`{site_prefix}` is a keyword that represents the value introduced by the user in this field.
- An **alias**: This is a word that could be used in the creation of a domain name. In our example, we have used this field in the rule that defines the domain.
`http://{site_url}/u{user_id}{site_prefix}`
`http://{site_url}/{site_alias}`
`{site_url}` is the keyword that return the value of the current site URL
`{site_alias}` is the keyword that corresponds to the field entered by the user.
- **Site title**: This is the title of the slave site that will be created.
- **Administrator login**: is the field that display the login name of the administrator. This is the name defined in the “website template”.
- **Administrator email**: This is the new email address that must be associated to the administrator user selected in the template.
- **Administrator password**: This is the new password that the user wants to associate to the administrator user defined in the template.
- **Comment**: This is a free text that the user can add a few things he wants to remember. This field is not displayed anywhere. This is just a field to write some notes.

- **Status:** The status is a field computed during the slave site creation that is a result of the processing. When the creation starts, the website is set in a “Pending” status, and when completed, in a “Confirmed” status.

The status can also be synchronized with a eShop application such as “VirtueMart”. It can be used by “billable” front-end websites.

- **Expiration date:** This is a field computed during the creation of the slave site and that depends on the validity duration defined in the “website template”. When it is specified, this means that JMS will recognize the slave site until this date. After this period, this is the master website that will be displayed.

The front-end user has the possibility to edit its slave site and request to pay (buy button) for additional service. In this case, the payment procedure will increment the expiration of the “validity duration”.

Websites

Delete
 edit
 New

- Status -

#	<input type="checkbox"/>	Prefix	Alias	Site title	Parent	Domain	status	Expiration
1	<input type="radio"/>	test01	alias01	site no 1	D'essais	http://127.0.0.1/computer/1/1/1/multisites/u63test01, /multisites/alias01	Cancelled	03-Nov-2008
2	<input type="radio"/>	test04	alias04	Site no 4	D'essais	/multisites/u63test04, /multisites/alias04	Confirmed	30-Oct-2008

Results 1 - 2 of 2

Display Num

Powered by Joomla Multi Sites
Copyright © 2008 - Edwin2Win sprlu - all right reserved.

Website Details: [New]

Save
 Cancel

Status:

Template: ⓘ

Template info: *This is a description of the website template*

Site prefix: ⓘ

Alias: ⓘ

Site title: ⓘ

Administrator login: Administrator

Administrator email: ⓘ

Administrator password: ⓘ

Comment: ⓘ

4.1. Front-end menu definition

To give access to the dynamic slave site creation, you can use the menu type “Multi Sites / Slaves sites”.

When you supply a front-end slave site creation, you must define the criteria that are used to display the templates available.

- **Filter on group name:** This is a group name present in the “website templates”. This limit the list of templates proposed to the user with the group name you have entered.
- **Title :** This field allows you to change the title displayed of the list of slave sites.

This allows you to avoid having to change the language file to update the title.

- **Delete Button:** It is possible to hide the “delete” button to avoid giving the user the possibility to delete the slave site he has created.
- **Billable website:** This is a flag that indicated if you propose a “billable slave site” service or free slave site creation.

When it is enabled, it requires that you have available quota. See settings menu to buy website quota.

When enabled, this also enable the usage of the “Joomla Multi Sites” plugin and different additional PHP scripts that can be executed during the slave site creation.

When enable, this also hides the “powered by Joomla Multi Sites” message that appears in the bottom of the front-end list of websites.

- **Payment script:** This field allows you to introduce a valid PHP code that must be executed to proceed with payment.

Below, we give a sample of script that we have used to test the integration in VirtueMart.

It adds an item in the shopping cart using the “sku” product reference defined in the “website template”.

```
<?php
$payment_ref = uniqid(rand());
if ( $renew) {
    // Put here the code to renew a website
}
else {
    // Put here the code when a new website is created
}
?>
```

- **Deploy on success:** This is a script that is executed when the site deployment is success.

It can be used for example to redirect the user to the checkout or to add specific things such as update external files or environment that must be aligned with the new slave site. By example, this could be used to automatically update the apache ‘httpd.conf’ file.

The sample below is given for VirtueMart and shows how to redirect the processing to the VirtueMart check out.

```
<?php
global $mainframe;
// Redirect to the check out
$root_url = JURI::base();
$mainframe->redirect(
"$root_url/index.php?page=checkout.index&ssl_redirect=1&option=com_virtuemart&Itemid=$Itemid");
```

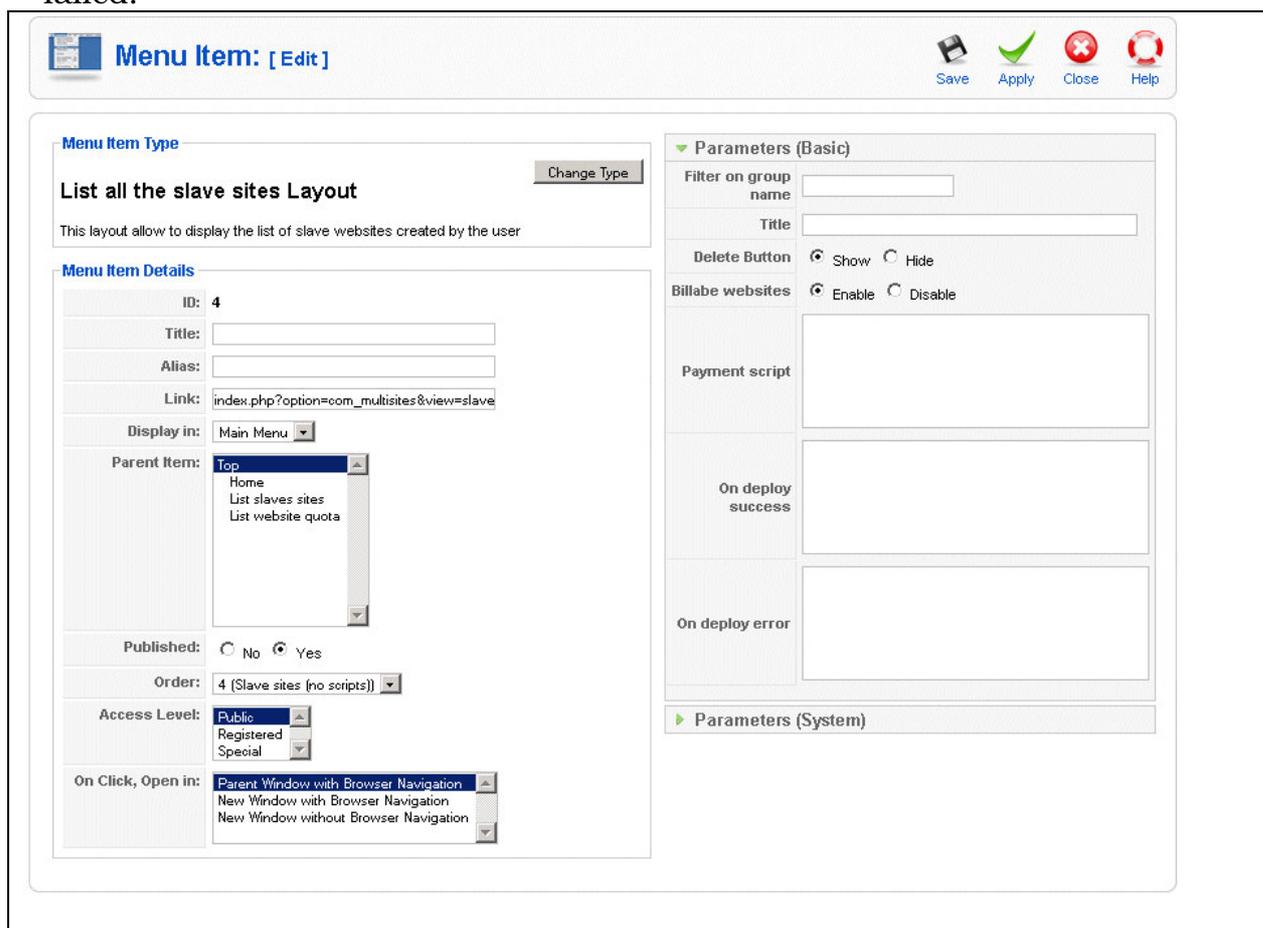
?>

When VirtueMart is present, we have included a patch that allows you to add a plugin on each modification of an order status.

The “Joomla Multi Sites for VirtueMart” plugin implements the slave site status update based on VirtueMart order status update.

For example when a payment notification is sent by PayPal to VirtueMart, this calls a VM order status update that is intercepted by the plugin. With this plugin, the VirtueMart status is used to update the JMS slave site status.

- **Deploy on error:** This is a script that is executed when the site deployment failed.



4.2. How to define script for additional specific processing

The script can be used for different purposes and is available with “billable websites”.

The scripts can be used to perform additional processes such as specific database updates required by some specific extensions, setup additional files or communicate with other components like VirtueMart.

Here we illustrate the case where you want to create you own payment module.

In this case, you can either develop a plugin such as “Joomla Multi Sites for VirtueMart” plugin or use additional scripts.

The principal is to:

- Create a unique payment reference that will be used to identify a payment transaction

This transaction number is created using the “payment script”.

This script is called in a “sanity routine” to make all variables hidden.

This routine must either use

- return xxxx;
- or \$payment_ref = xxx;

where xxx is the payment reference that must be attached to the website.

At this moment, you have all the information to add an item into the shopping cart.

The information available and that can be used for a shopping cart are:

- ItemID : This is the Joomla Item ID that is used for the breadcrumb;
 - Site_id: that is the name of the site that can be used to update the status or store information such as the expiration or validity duration or any other information that must be attached to the website site identifier.
 - Sku : This is the SKU information that is defined in the “website template” selected by the user
 - Validity: This is a number that contain the validity value introduced in the “website template”;
 - Validity_unit: This variable can contain the values [days, months, years]
 - Renew: This is a flag that is set to true when the user clicks on the “buy” button to renew its payment.
- When the website is deployed, it is set in “Pending” status until the order is paid. At this moment, the “on deploy success” script can be called to give the opportunity to redirect the user to the “check out” section.
 - When an error occurs during the website creation, this script gives the opportunity to undo or cancel some operations
 - When the payment is performed with your favorite eShop or any other system, you have to notify JMS that the slave site status is confirmed (or cancelled).

We have developed a routine ‘updateStatus” that is documented in the next section and that can be used from anywhere to update a slave site status.

Remark:

This payment module description is given as a sample.

Depending on the eShop, specific development is required to interface JMS with this eShop.

4.2.1. Multisites Utils functions

4.2.1.1. function updateSiteInfo(\$site_id, \$values)

Generic routine that allow to update some JMS website values using a site ID.

This update the content of the file "config_multisites.php" file present in the site ID.

This routine starts by reading the current configuration values. Next it updates the DBInfo values with new values parameter. Finally, it rewrites the configuration files with the new values.

This routine can be used to store the eShop order identifier when it is known.

Parameters:

- **\$site_id**: The slave site identifier that must be updated;
- **\$values**: An array of key/values that must be written into the sites information section.

Sample:

```
// Retrieve the contract information present in the session
$session      =& JFactory::getSession();
$site_id      = $session->get( 'site_id',      null, 'contracts');
$payment_ref  = $session->get( 'payment_ref', null, 'contracts');
$validity     = $session->get( 'validity',    null, 'contracts');
$validity_unit = $session->get( 'validity_unit', null, 'contracts');

$values = array();
// VirtueMart infos
$values['order_id']      = $db->f("order_id");
$values['order_number'] = $db->f("order_number");

// JMS Template infos retrieved from the session
$values['inc_validity']  = $validity;
$values['inc_validity_unit'] = $validity_unit;

require_once(
  JPATH_ADMINISTRATOR.DS.'components'.DS.'com_multisites'.DS.'classes'.DS.'utils.php');
MultisitesUtils::updateSiteInfo( $site_id, $values);
```

4.2.1.2. function updateStatus(\$key, \$value, \$newStatus)

Update the status value based on a key and a value.

This function searches for the site that has the key name = value expected.

This function scans all the slave sites and searches for “key” (variable) defined in the slave site and that has the “value” given in the second parameter. When the condition is a success, it updates the “status” fields with the “newStatus” value provided in the third parameter.

This allows you to use any key field in the scan.
For example, VirtueMart use the 'order_id' field to identify the order and this information can be stored in the website info to later update the status.

This routine is used by billable website post processing to update an order status.

In case of VirtueMart, it is used by the plugin "onUpdateStatus".

Parameters:

- **\$key:** The Key name the must be used to retrieve a website. (ie. 'order_id')
- **\$value:** The value of the key. (ie 145 => 'order_id' = 145)
- **\$newStatus:** An array with the list of new values to store in DBInfo.

The possible status of a slave sites are:

- Confirmed
- Pending
- Cancelled
- Refunded

Returns:

- **True** when update is OK
- **False** when an error occurs.

Sample:

Here below we give you an extract of very basic PHP code that could be used to update a slave site status with the JMS VirtueMart plugin Slave Update Status.

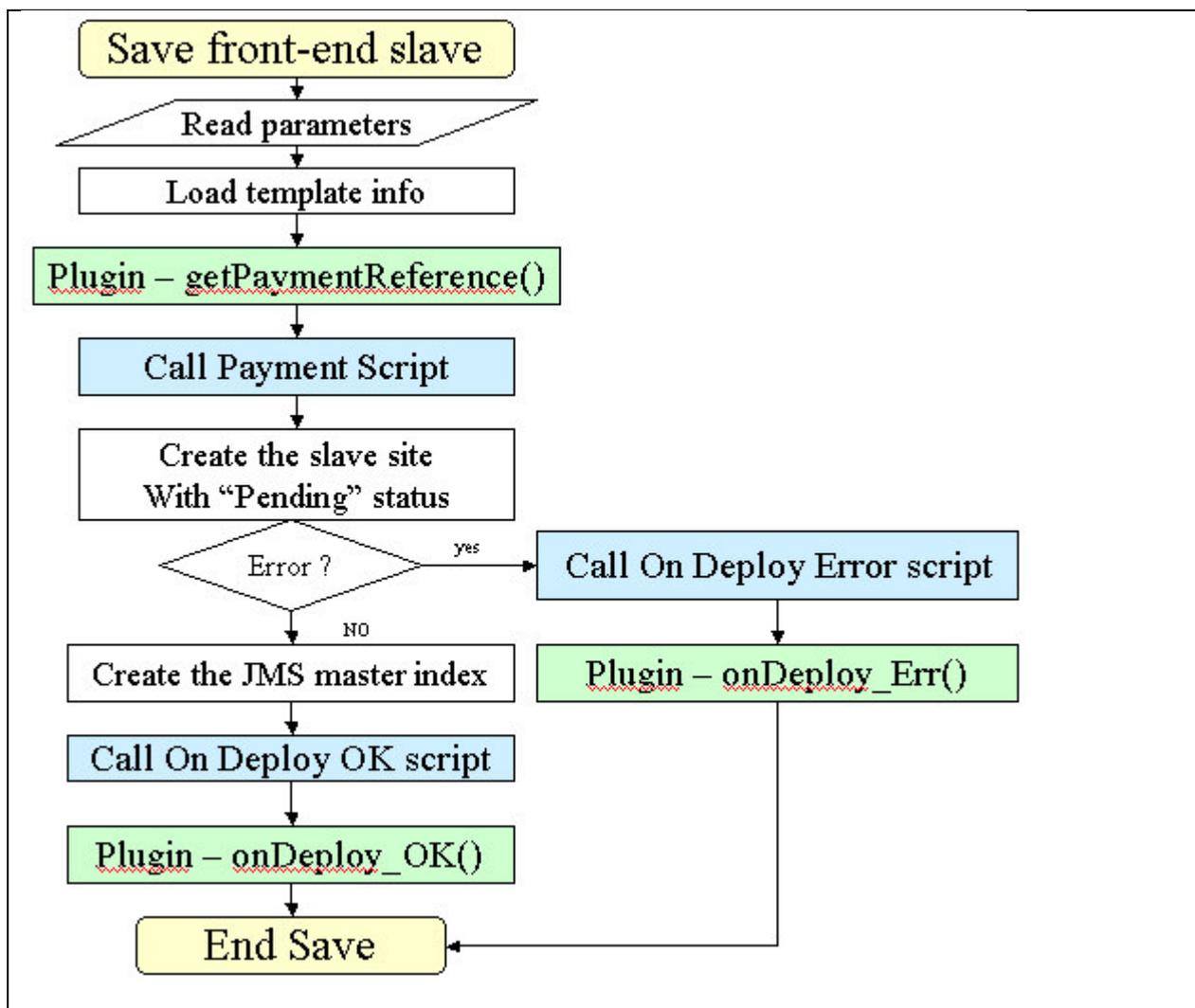
```
// Convert the VirtueMart status code into JMS status code
$statusCodes = array( 'P' => 'Pending',
                    'C' => 'Confirmed',
                    'X' => 'Cancelled',
                    'W' => 'Pending' // Waiting for payment confirmation
                );
$newStatus = $statusCodes[ $order_status];

// retrieve the VirtueMart order_id
$order_id = (int)$d["order_id"];

// Update the slave site that match the order ID and set the new status
require_once( JPATH_ADMINISTRATOR.DS.'components'.DS.'com_multisites'.DS.'classes'.DS.'utils.php');
MultisitesUtils::updateStatus( 'order_id', $order_id, $newStatus);
```

4.2.2. Multisites “front-end” slave site flow chart

In the figure below, we have summarized the processing of the front-end slave site saving in aim to highlight the different places where the external script is called.



In green box, is displayed the calls to the plugins and in the blue box, the call to the menu scripts.

4.2.3. MultiSites plugin API

When creating “billable” slave sites, JMS performs a call to “MultiSites” plugins.

In this section we describe the public functions that can be implemented for specific requirements.

The plugin can be used to implement a special bridge between Joomla Multi Sites and a specific eShop, or can be used to implement special database updates required by some extensions.

Some extensions may save specific data that perhaps should be updated to reflect the new website URL, path or whatever that could be website dependent.

4.2.3.1. getPaymentReference(**&\$d, &\$enteredvalues, &\$model, &\$template, \$renew**)

This function is called before the creation of a slave site and requires that you return a “payment reference”.

Parameters:

- **\$d**: An array of data;
- **\$enteredvalues**: This is an array with the parameter entered by the users.
- **\$model**: This parameter gives access to the “slave site” model. (MVC – Model View Controller)
- **\$template**: This is a template object that contains the “website template” information.
- **\$renew**: This is a boolean flag that indicates if this is a new website or the update of an existing website.

Returns:

- **a Payment Reference** : A string with the payment reference
- **Null or empty** when an error occurs.

4.2.3.2. function onDeploy_OK(**\$d, &\$enteredvalues, &\$model**)

This function is called once the website is created.

Parameters:

- **\$d**: An array of data;
- **\$enteredvalues**: This is an array with the parameter entered by the users.
- **\$model**: This parameter gives access to the “slave site” model. (MVC – Model View Controller)

Returns:

- **none**

4.2.3.3. function onDeploy_Err (**\$d, &\$enteredvalues, &\$model**)

This function is called when an error occurs during the website creation.

Parameters:

- **\$d**: An array of data;
- **\$enteredvalues**: This is an array with the parameter entered by the users.
- **\$model**: This parameter gives access to the “slave site” model. (MVC – Model View Controller)

Returns:

- **none**

4.2.3.4. function onBeforeDeleteSlave(**\$site id, &\$model**)

This function is called before to delete a slave site.

Parameters:

- **\$site_id**: The site identifier that will be deleted
- **\$model**: This parameter gives access to the “slave site” model. (MVC – Model View Controller)

Returns:

- **none**

4.2.3.5. function onAfterDeleteSlave (**\$site id, &\$model**)

This function is called after a website is delete.

This allows the example to perform additional cleanup.

Parameters:

- **\$site_id**: The site identifier that will be deleted
- **\$model**: This parameter gives access to the “slave site” model. (MVC – Model View Controller)

Returns:

- **none**

4.2.4. Multisites “front-end” slave site - sample scripts for VirtueMart.

The following description and scripts are given to explain the logic and must be used as a case study. In any manner it should not be used in production, as it does not process all the cases. It has been simplified for the case study. If you need a bridge between Joomla Multi Sites and VirtueMart see the plugin “Joomla Multi Sites for VirtueMart”.

For VirtueMart the logic we have used is shown in green box in the following flow chart.

Here we have used the VirtueMart “payment extra info” that is available for some payment method. (ie. PayPal).

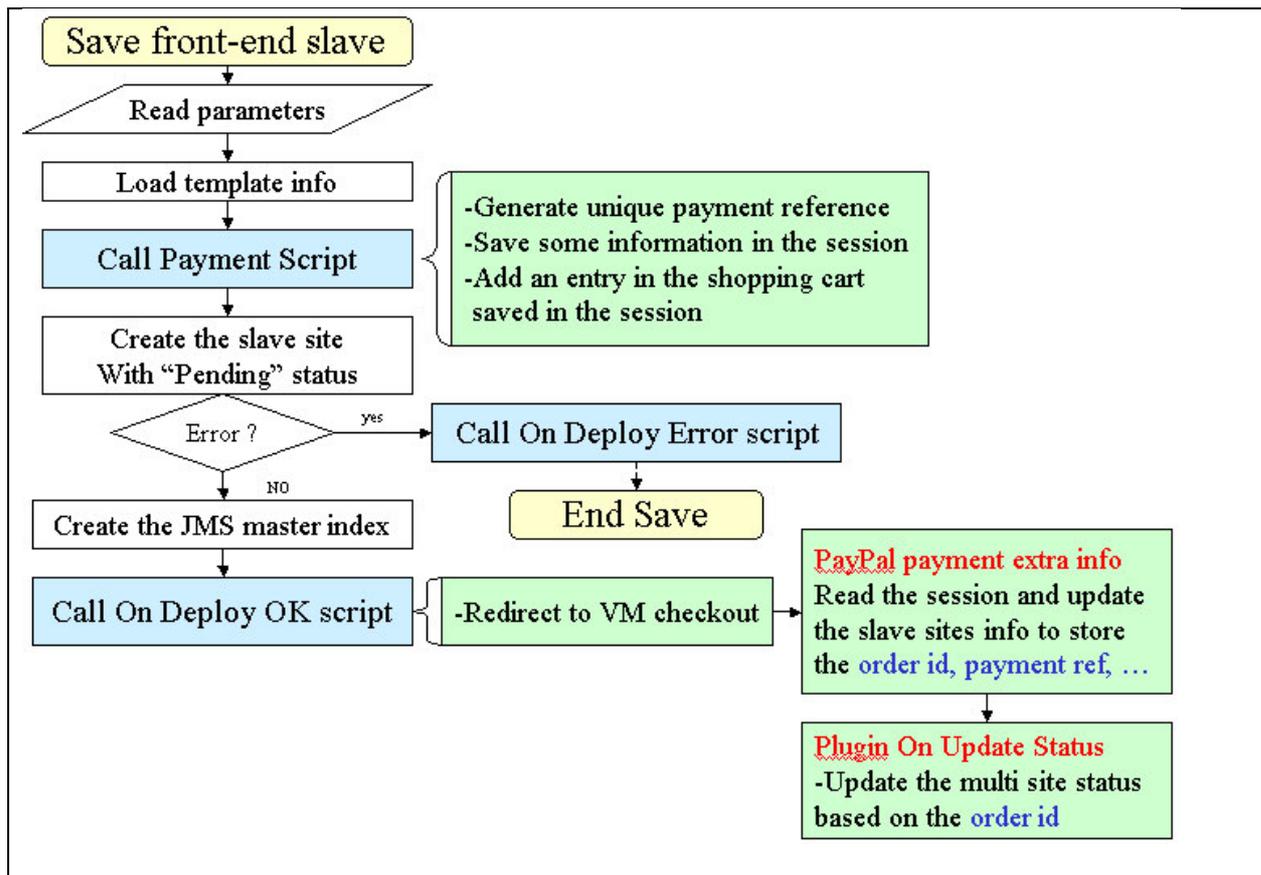
If you want to use VirtueMart with another payment module that does not use payment extra info, perhaps you should modify some VirtueMart code to update the slave site information with order id, payment reference and other things like that. In fact the problem is that you have to wait that VirtueMart has process the shopping cart to have an order ID.

The sample PHP code is present in the directory

“...administrator/components/com_multisites/samples/VirtueMart”

The following files are present:

- **checkout.jms2win_result.php**: *A PHP script that can be used as URL OK. In the following example, we have not used because we have used a plugin that do the same.*
- **payment_extra_info.php**: *A script that can be added into VirtueMart payment extra info field. We have used it with PayPal.*
- **vm_utils.php**: *Some usefull function to communicate between VirtueMart and JMS.*
- **plgvmslaveupdstatus_V1.1.0.zip**: *A very basic Joomla Multi Sites plugin that demonstrate how to update a slave site status when a VirtueMart order status is updated. This require the JMS patch for VirtueMart.*



The associated PHP scripts are:

1) Generate the Payment Reference and add an item in shopping cart

```

<?php
require_once( JPATH_COMPONENT_ADMINISTRATOR.' /samples/VirtueMart/vm_utils.php');
$payment_ref = uniqid(rand());
if ( $renew) {
    Jms2Win_VM_Utills::addItem_Cart( $Itemid, $site_id, $payment_ref, $sku, $validity,
    $validityUnit);
}
else {
    Jms2Win_VM_Utills::addItem_Cart( $Itemid, $site_id, $payment_ref, $sku);
}
?>
    
```

2) Redirect to VirtueMart checkout

```

<?php
require_once( JPATH_COMPONENT_ADMINISTRATOR.' /samples/VirtueMart/vm_utils.php');
Jms2Win_VM_Utills::redirect_CheckOut( $Itemid);
?>
    
```

3) Payment Extra Info to add in PayPal VirtueMart payment module

This payment extra info allows you to update the order ID, the validity duration and payment reference into the slave site. Part of this information is retrieved for the session.

```
<?php
if ( !defined( 'DS' )) define('DS', DIRECTORY_SEPARATOR);
require_once( $mosConfig_absolute_path
    .DS. 'administrator'
    .DS. 'components'
    .DS. 'com_multisites'
    .DS. 'samples'
    .DS. 'VirtueMart'
    .DS. 'payment_extra_info.php'
);

?>
```

4) Update the Site status (with the VirtueMart plugin)

```
// Convert the VirtueMart status code into JMS status code
$statusCodes = array( 'P' => 'Pending',
    'C' => 'Confirmed',
    'X' => 'Cancelled',
    'W' => 'Pending' // Waiting for payment confirmation (case of
ClearPark)
    );
$newStatus = $statusCodes[ $order_status];

$order_id = (int)$d["order_id"];

// Update the slave site that match the order ID and set the new status
require_once(
    JPATH_ADMINISTRATOR.DS.'components'.DS.'com_multisites'.DS.'classes'.DS.'utils.php');
MultisitesUtils::updateStatus( 'order_id', $order_id, $newStatus);
```

5. Joomla Multi Sites for VirtueMart plugin

This plugin allows JMS to communicate with VirtueMart. In fact it uses the VirtueMart shopping cart system to add items, proceed with payment and update the website status regarding the VM order status.

The following screen shot illustrate a typical Website ordering. In Joomla, you define a menu item that uses the “MultiSites” layout. This functionality is only available for registered users. A control is performed to check if the user is registered event if you select “Public” menu. With this menu, this give access to the front-end website management

#	Prefix	Alias	Site title	Parent	Domain	status	Expiration
1	test01	alias01	site no 1	Template title	http://[redacted]/multisites/u63test01, http://[redacted]/multisites/alias01	Cancelled	03-Nov-2008
2	test03	dyn03	site no 3	Template title	http://[redacted]/multisites/u63test03, http://[redacted]/multisites/dyn03	Cancelled	20-Nov-2008
3	test04	alias04	Site no 4	Template title	http://[redacted]/multisites/u63test04, http://[redacted]/multisites/alias04	Confirmed	30-Oct-2008
4	test05	dyn05	site no 5	Template title	http://[redacted]/multisites/u63test05, http://[redacted]/multisites/dyn05	Confirmed	20-Nov-2008
5	test06	alias06	site no 6	Template title	http://[redacted]/multisites/u63test06, http://[redacted]/multisites/alias06	Pending	20-Nov-2008
6	test07	alias07	Site no 7	Template title	http://[redacted]/multisites/u63test07, http://[redacted]/multisites/alias07	Refunded	20-Nov-2008

Results 1 - 6 of 6
Display Num

When a user create a new Website, they receive an empty screen

Website Details: [New] Save Cancel

Template: ⓘ

Template info: *This is a description of the website template*

Status:

Site prefix: ⓘ

Alias: ⓘ

Site title: ⓘ

Administrator login: Administrator

Administrator email: ⓘ

Administrator password: ⓘ

Comment: ⓘ

Once he has introduced the parameters and click on “save” button, the plugin takes the hand and saves some information into session. The website is created with the “Pending” status and the user is redirected to the VirtueMart checkout.

Website Details: [New] Save Cancel

ⓘ Please wait while creating the website.
This operation can take few minutes ...

Checkout



Payment Method
Complete Order

Name	SKU	Price	Quantity / Update	Subtotal
Test product	my-sku	EUR8.48	1	EUR8.48
				Subtotal: EUR8.48
				Total: EUR8.48
				Tax Total: EUR0.65

If you have a coupon code, please enter it below:

Please select a Payment Method!

Payment Method

PayPal

Dexia DirectNet PayButton

The product name is the one defined in VirtueMart and the SKU corresponds to the one that is defined in the JMS “website template”. VirtueMart provides the price and other information. Once the order is confirmed, JMS plugin again receives the hand to update the website information and add the corresponding VM order ID.

Thank you for your order.

Your order has been successfully placed!

A confirmation email has been sent to:

Total amount to pay: EUR

[Follow this link to view the Order Details.](#)

The order id that is stored in the Website is used to synchronise the VM order status with the JMS website status.



Each time VM update the status of an order, it is reflected to the JMS website that corresponds to this order.

6. Language and internationalisation

The current component uses the standard Joomla language mechanism to display most of the messages.

It delivers English messages located in:

- “/administrator/languages/en-GB/en-GB.com_multisites.ini”.
- “/administrator/languages/en-GB/en-GB.com_multisites.menu.ini”.
- “/languages/en-GB/en-GB.com_multisites.ini”.

It delivers French messages located in:

- “/administrator/languages/fr-FR/fr-FR.com_multisites.ini”.
- “/administrator/languages/fr-FR/fr-FR.com_multisites.menu.ini”.
- “/languages/fr-FR/fr-FR.com_multisites.ini”.

If you have installed this component in another language than “English” or “French”, you probably need to create another file for the appropriate language and translate all entries.

7. System requirements

- “Joomla Multi Sites” has been tested with Joomla 1.5.3 through 1.5.8 stable builds.
- The JMS version 1.0.x was originally developed on PHP 4.3.3 with MySQL 4.0.15.
- The JMS Version 1.1.x requires mySQL 4.1.x or better for the database replication. It uses SQL statements that only exists in MySQL 4.1 or higher. For the development we have used mySQL 4.1.22
- We also tested the component on PHP 4.4.8, 4.4.9, PHP 5.2.6 with MySQL 5.0.32.

8. Joomla and extension upgrades

This section describes what to take into consideration when Joomla, or/and extensions, have an update that must be installed.

8.1. Upgrading the Joomla Core

As for Joomla itself, the upgrade can be performed only once. In general the upgrade deals with files that are not modified by Joomla Multi Sites.

If the Joomla upgrade restores a file that is patched by JMS, the installation patch will have to be re-applied.

In some cases Joomla might restore a file that will require the installation directory to be removed in order to access the back-end. In this case, you will have to rename or delete the installation directory in order to Joomla Multi Sites.

(If you want to know if a Joomla upgrade will restore a file that is patched by Joomla Multi Sites, you can explore the Joomla upgrade distribution (zip, tar.gz, etc.). Search to find files in their distribution that will replace one or more files that are part of Joomla Multi Sites patch list.)

8.2. Updating Extensions

The upgrade of a foreign extension depends on the kind of upgrade you wish to perform.

To know if the upgrade must be replicated on each web site, you must know whether this impacts the database definition. If not, you can install the update on the master site and it will be automatically available for all the slave sites.

If the extension update impacts the database definition, (i.e. adds table, adds fields, adds values, etc.) you will have to repeat the upgrade of the extension on each slave site to apply this database upgrade.

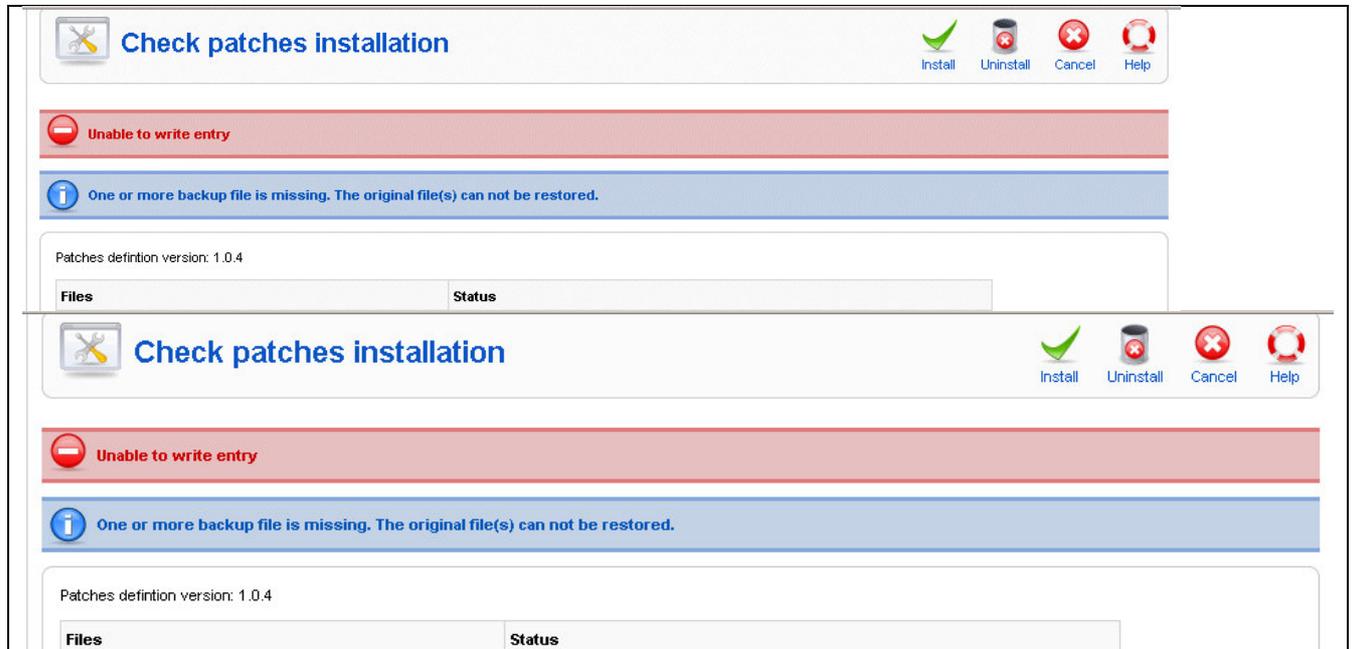
In general a bug fix does not concern the database and can therefore be applied only once on the master website.

8.3. Joomla Multi Sites upgrade

As for the upgrade of Joomla Multi Sites itself, it is designed to overwrite the files of a previous installation, as it does not save any information into the database. This means there is no need to un-install a previous Joomla Multi Sites installation to upgrade to a new version of Multi Sites.

9. Troubleshooting

9.1. Unable to write entry



If the error message, “Unable to write entry” appears, this means that one or more files that require patching are set to “read only,” or that you do not have the necessary permissions to modify the file.

To help the user identify the files that have potential permission problem, the “check patches” function gives a report on each file and directory that could be problematic. It is up to the user to correct the permission of the files and/or directories to allow patches deployment -- this can be done using a Unix prompt or other tools.

In Unix, the command `chmod` and `chown` can be used to change the permissions, and the owner of a files/directories. For more information on Unix permissions, please refer [here](#).

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