



## Quick Start Guide

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### ***Abstract***

This document provides a Quick Start guide to installing and using the Component Architect Joomla! extension for the generation of your own bespoke Joomla!™ components/extensions.

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# Part I – Component Architect Quick Start Guide

## Introduction

This document provides a Quick Start guide to using the Component Architect extension to generate a bespoke Joomla!™ extension, fully ready to install and use in both the administrator area and your site's front end.

Full documentation of all the functionality of Component Architect is available in the Component Architect User Guide, which is downloadable from the Downloads and Documentation sections of the Component Architect website, and also via the Help files accessed in the Component Architect component itself.

The Steps in this document for the usage of Component Architect can also be viewed online in the Documentation section of the web site (<http://www.componentarchitect.com/support/documentation.html>)

## Component Architect Installation

Installing Component Architect is no different than installing any other Joomla!™ extension on your site. You can read the complete instructions for installing Joomla!™ extensions on the [official help page](#). Throughout this chapter we assume that you are familiar with these instructions and we will try not to duplicate them.

Just like with most Joomla! extensions there are three ways to install or manually update Component Architect on your site:

- Install from URL - It is the easiest and fastest one, if your server supports it. Most servers do support this method.
- Upload and install - That's the typical extension installation method for Joomla! extensions. It rarely fails.
- Manual installation - This is the hardest, but virtually fail-safe, installation method.

Please note that installing and updating Component Architect (and almost all Joomla! extensions) is actually the same thing. If you want to update Component Architect please remember that you **MUST NOT** uninstall it before installing the new version! When you uninstall Component Architect you will lose all your settings. This is definitely something you do not want to happen! Instead, simply install the new version on top of the old one. Joomla! will figure out that you are doing an update and will treat it as such, automatically.

### *Tip*

If you find that after installing or updating Component Architect it is missing some features or doesn't work, please try installing the same version a second time, without uninstalling the component. The reason is that very few times the Joomla! extensions installer infrastructure gets confused and fails to copy some files or entire folders. By repeating the installation you force it to copy the missing files and folders, solving the problem.

## Install from URL

The easiest way to install Component Architect Professional is using the Install from URL feature in Joomla!.

### *Important*

This Joomla! feature requires that your server supports fopen() URL wrappers ( `allow_url_fopen` is set to 1 in your server's `php.ini` file) or has the PHP cURL extension enabled. Moreover, if your server has a firewall, it as to allow TCP connections over ports 80 and 443 to `www.componentarchitect.com` and `liveupdate.componentarchitect.com`. If you don't see any updates or if they fail to download please ask your host to check that these conditions are met. If they are met but you still do not see the updates please file a bug report in the [official Joomla! forum](#). In the meantime you can use the manual update methods discussed further below this page.

First, go to our site's download page. Make sure you are logged in. If not, log in. These instructions won't work if you are not logged in! Click on the **View releases in this category** button for Component Architect. Then on the Component Architect releases page click on the **View files** button of the version you want to install. Please note that the latest released version is always listed *first* on the page. On this download page for Component Architect you will find the **Download Now** button and you will see the **DirectLink** link. Right click on **DirectLink** link and select *Copy link address* or whatever your browser calls this.

Now go to your site's administrator page and click on **Extensions/Extension Manager**. If you have Joomla! 3.x click on the **Install from URL** tab. Clear the contents of the **Install URL** field and paste the URL you copied from our site's download page. Then click on the **Install** button. Joomla! will download and install the Component Architect update.

If Joomla! cannot download the package, please use one of the other methods described in this section of the documentation.

## Upload and install.

You can download the latest installation packages from the download page for Component Architect, navigate to it as described above in 'Install from URL' and use the **Download Now** button, alternatively you can use the **Download Now** button from the Home page of the site – you do not have to log in to use the Home page download. Please note that on the download page the latest version is always on top.

All Component Architect installation packages contain the component and all of its associated extensions. Installing it will install all of these items automatically. It can also be used to upgrade Component Architect; just install it *without* uninstalling the previous release.

In any case, do not extract the ZIP files yet!

Log in to your site's administrator section. Click on **Extensions/Extension Manager** link on the top menu. If you are on Joomla! 3.x please click on the **Upload Package File** tab. Locate the **Browse** button next to the **Package File** (Joomla! 2.5, 3.0 and 3.1) or **Extension package file** (Joomla! 3.2 and later) field. Locate the installation ZIP file you had previously downloaded and select it. Back to the page, click on the **Upload & Install** button. After a short while, Joomla!™ show the results of the Component Architect install.

## Warning

Component Architect is a big extension (over 4Mb). Some servers do not allow you to upload files that big. If this is the case you can try the [Manual installation](#) or ask your host to follow [our installation troubleshooting instructions](#) under "You get an error about the package not being uploaded to the server".

If you have WAMPserver (or any other prepackaged local server), please note that its default configuration does not allow files over 2Mb to be uploaded. To work around that you will need to modify your php.ini and restart the server. On WAMPserver left-click on the WAMP icon (the green W), click on **PHP**, php.ini. Find the line beginning with

`upload_max_filesize`. Change it so that it reads:

```
upload_max_filesize = 6M
```

Save this file. Now, left-click on the WAMP icon, click on **Apache, Service, Restart Service** and you can now install the component. Editing the `php.ini` file should also work on all other servers, local and live alike.

If the installation did not work, please try the [manual installation](#) described below.

## Manual installation

Sometimes Joomla!™ is unable to properly extract ZIP archives due to technical limitations on your server. In this case, you can follow a manual installation procedure.

You can download the latest installation packages from our site's download page for Component Architect, as described above in 'Upload and Install'. Please note that the latest version is always on top. Click on the version you want to download and install.

All Component Architect installation packages contain the component and all of its associated extensions. Installing it will install all of these items automatically. It can also be used to upgrade Component Architect; just install it *without* uninstalling the previous release.

Before doing anything else, you have to extract the installation ZIP file in a subdirectory named `componentarchitect` on your local PC. Then, upload the entire subdirectory inside your site's temporary directory. At this point, there should be a subdirectory named `componentarchitect` inside your site's temporary directory which contains all of the ZIP package's files.

If you are unsure where your site's temporary directory is located, you can look it up by going to the **Global Configuration**, click on the **Server** tab and take a look at the **Path to Temp-folder** setting. The default setting is the `tmp` directory under your site's root. Rarely, especially on automated installations using Fantastico, this might have been assigned the system-wide `/tmp` directory. In this case, please consult your host for instructions on how to upload files inside this directory, or about changing your Joomla!™ temporary directory back to the default location and making it writable.

Assuming that you are past this uploading step, click on **Extensions/Extension Manager** link on the top menu. If you are on Joomla! 3.x please click on the **Install from Directory** tab. Locate the `Install Directory` edit box. It is already filled in with the absolute path to your temporary directory, for example `/var/www/joomla/tmp`. Please append `/componentarchitect` to it. In our example, it should look something like `/var/www/joomla/tmp/componentarchitect`. Then, click on the **Install** button.

If you still can't install Component Architect and you are receiving messages regarding unwritable directories, inability to move files or other similar file system related error messages, please contact us via the online Forum. Whilst we will make every effort to assist you; we may be unable to help you. Usually installation of Joomla!™ extension errors come from your site set up and can best be resolved by asking your host for assistance or by asking other users in the [official Joomla!™ forums](#).

# Quick Start Steps for Using Component Architect

Follow these steps to create your first bespoke component with Component Architect.

## Step 1 – Component Architect Installed

**Congratulations you have now installed Component Architect!**

The screenshot shows the Joomla! 3.3.1 Extension Manager: Install page. A green message bar at the top states "Installing component was successful." The main content area is titled "Component Architect Installation" and includes a thank you message, documentation links, and a list of installed plugins. A table titled "Component Architect Installation" shows the status of various components. At the bottom, there is a section for "Upload & Install Joomla Extension" with a "Choose File" button and an "Upload & Install" button.

Extension	Status
Component Architect	Successfully installed

Plugin	Group	Status
plg_componentarchitect_events	componentarchitect	Successfully installed
plg_componentarchitect_events	componentarchitect	Successfully published/enabled
plg_cacodeemplates_25standard	cacodeemplates	Successfully installed
plg_cacodeemplates_25standard	cacodeemplates	Successfully published/enabled
plg_cacodeemplates_32standard	cacodeemplates	Successfully installed
plg_cacodeemplates_32standard	cacodeemplates	Successfully published/enabled

## Step 2 – Go to Component Architect Dashboard

**First go to the Component Architect Dashboard**

The screenshot shows the Joomla! 3.3.1 Components menu. The "Component Architect" option is highlighted with a red box. A red arrow points from a text box to this option. The text box contains the instruction: "Click on Component Architect menu item to go to the Dashboard". The background shows the same Joomla! 3.3.1 Extension Manager: Install page as in Step 1.

Click on Component Architect menu item to go to the Dashboard

## Step 3 – Use the Component Wizard

**The Dashboard explains more about the features of Component Architect**

**Component Wizard**

The Component Wizard allows you to quickly create a component/extension and the objects/tables you require for a new component/extension.

**Click on Component Wizard**

The Generate button allows you to specify the component/extension and code templates (with other option parameters) to be used to generate the files and code for a new component.

**Components/Extensions**

A Component/Extension is the main definition record for the component (or extension) to be generated and provides the publishing details such as author, website, copyright etc. for the generation of the code. The default settings for the features and functionality to be generated for each Object/Table can also be specified.

**Objects/Tables**

Each table to be included in the Component/Extension must have an associated Object/Table defined. These records will define the key attributes of the object/table and also set the features and functionality that will be generated for the object/table. The selected features and functionality will result in pre-defined fieldsets and fields being automatically generated.

The term 'Object/Table' has been used because although most records will refer to database table, in the future there is the possibility of defining objects that are not database tables.

**Fieldsets**

Within each Object/Table the fields to be generated may be grouped into Fieldsets. This allows for the development of front end views that position sets of fields in specific areas of the components output e.g. one fieldset may be placed at bottom of the output area - overriding any sequence for the fields themselves.

Some predefined fieldsets are automatically generated based on the feature and functionality settings in an object/table.

**Fields**

Each attribute of a table or a property of an object is defined as a Field within a Fieldset and an Object/Table. The field will be one of a set of pre-defined Field Types. Currently all of the Joomla! field types are supported and further field types will be added as required.

Fields may also be contained in other fields i.e. Registry/JSON type fields. To do this first define the field into which other fields are stored with a field type of Registry. Then as you define the other fields you can specify a link to the registry field.

Some predefined fields are automatically generated based on the feature and functionality settings in an object/table.

**Field Types**

A field type defines the basic characteristics for certain types of Joomla! fields. Each field must be one of the pre-defined field types.

**Code Templates**

A code template is a set of files containing marked-up component code. The code templates are used as the skeletons structure and code for the generated components.

In the Standard (i.e. free version) of Component Architect the code templates are predefined and cannot be changed or new ones created. In the Pro version of Component Architect the supplied code templates may be copied and altered to meet the requirements of the developer.

**Categories**

Categories for the Component Architect component.

**View Logs**

View the log files for any component/extension generation that has had the Log parameter set.

**Component Architect**

Component Architect is a Joomla! extension that allows for the automated code generation of other Joomla! extensions (components, modules and plugins).

Component Architect uses code templates which contain the basic files and code required for a component/extension, or a set of extensions, and this code is 'marked-up' using the Component Architect mark-up syntax. Each component/extension to be generated is defined in the definition tables of Component Architect together with the objects/tables, fieldsets, fields and field values required. The generation process applies a defined component/extension against a selected code template to produce a fully working Joomla! component/extension or set of extensions (e.g. a component with associated modules and plugins).

**Updates**

We use the Joomla! Extension Update to notify you of available updates for Component Architect. Please visit your Joomla! Control Panel extension updates regularly to see if a new update is available for Component Architect.

If you prefer you can check on our website [www.componentarchitect.com](http://www.componentarchitect.com) to see if there is an update and download it from there. You can Joomla! Extension Manager/Install process to install this download.

Your current release: **Component Architect (Release 1.0.0)**

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## Step 4 – Enter the Names of your Component and Tables

**The Component Wizard let's you quickly create your first Component definition.**

**Component Architect Manager: Component Wizard**

**Create Cancel**

The Component Wizard allows you to quickly create a component/extension and the objects/tables you require for a new component/extension.

Just enter the names below - Objects/Tables should use the singular of the name (e.g. Event), the plural name (e.g. Events) and also code names will be automatically generated - and click on Create. This will create records for the component and the objects/tables and automatically generate pre-defined fieldsets and fields for the common Joomla! fields.

By later editing the object/table records you can adjust which common Joomla! fields are required. The predefined fieldsets and fields will then be automatically adjusted.

You can also select for each Object/Table a database table to import fields from. When you create the Component fields from the selected source table will be added to the fields of the Object/Table. If any imported field already exists (i.e. the name matches one of the pre-defined fields) then it will be ignored e.g. we wouldn't want to have two 'id' or 'name' fields.

Component Name \*

Object/Table Name(s)

Select a table to import

**Add Remove**

Remember: The Object/Table name should be the singular of the name (e.g. Event) then the plural name (e.g. Events) and code names will be automatically generated.

**Enter your component name e.g. My Events**

**Enter your table name e.g. Event NB: This should be singular**

**If you want more tables then just click Add**

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## Step 5 – Create your new Component and Tables

The Component Wizard allows you to have as many Tables as you want and import fields from existing database tables.

**Once finished adding tables then click on Create to have the Component Wizard auto create your Component, Tables, Fieldsets and Fields.**

**The drop down allows you to select any table in the current Joomla! database to import fields from.**

Component Name \*

Object/Table Name(s)

Remember: The Object/Table name should be the singular of the name of the component and code names will be automatically generated.

## Step 6 – View the Created Components/Extensions

The Component/Extensions Manager allows you to see all your defined Components

**Use the Component Wizard to create as many Components as you wish.**

**Click on the 'My Events' Component to edit it.**

**A count and link to the Tables in this Component**

**A count and link to the Fieldsets in this Component**

**A count and link to the Fields (predefined and custom) in this Component**

**A standard Joomla! administration manager view showing lists of items**

Component/Extensions	Objects/Tables	Fieldsets	Fields	Created By	Created Date	ID
My Events	3	12	241	Super User	2014-06-25	1



## Step 7 – Edit the Basic Details of the Component/Extension

The Component/Extension Edit view allows you to enter more details for your Component

Component Architect Manager: Edit Component/Extension

Name \* My Events

Component/Extension Details Joomla! Parts Joomla! Fields/Features Publishing Options

Enter a description for your Component

These fields can have default settings entered in the Component Architect Options via the Options button on the Dashboard or List Views.

Code Name \* my\_events

Author

Start Version 1.0.0

Web Address

Email

Copyright

Default Object Event Select Clear

Icon 16px Choose File No file chosen

Icon 40px Choose File No file chosen

Categories Icon 16px Choose File No file chosen

Categories Icon 48px Choose File No file chosen

Ordering 0. My Events

ID 1

Toggle editor

Image Page Break Read More

## Step 8 – Edit the Joomla! Parts of the Component/Extension

Select which Parts of a Joomla! site will be generated in your Component. If set to 'Do Not Generate' then no Table will be able to change this.

Component Architect Manager: Edit Component/Extension

Name \* My Events

Component/Extension Details Joomla! Parts Joomla! Fields/Features Publishing Options

Select the options to control which parts of Joomla! (admin, site, plugins and modules) are to be generated for this Component/Extension. The value at the Component/Extension level will override that at the Object/Table level. So if not set for the Component/Extension that part will not be generated irrespective of what is set for the Object/Table.

Generate Admin *	Generate	Do Not Generate
Generate Site *	Generate	Do Not Generate
Generate Site - Views *	Generate	Do Not Generate
Generate Site - Article Layout *	Generate	Do Not Generate
Generate Site - Blog Layout *	Generate	Do Not Generate
Generate Categories *	Generate	Do Not Generate
Generate Categories - Site Categories View *	Generate	Do Not Generate
Generate Categories - Site Category View *	Generate	Do Not Generate
Generate Plugins *	Generate	Do Not Generate
Generate Plugins - Search *	Generate	Do Not Generate
Generate Plugins - Finder *	Generate	Do Not Generate
Generate Plugins - Item Navigation *	Generate	Do Not Generate
Generate Plugins - Vote *	Generate	Do Not Generate
Generate Plugins - Page Break *	Generate	Do Not Generate
Generate Plugins - Events *	Generate	Do Not Generate
Generate Modules *	Generate	Do Not Generate

## Step 9 – Edit the Joomla! Fields/Features of the Component/Extension

Select which standard Joomla! Fields/Features will most commonly be generated for your Tables. These are global/default settings and can be over-ridden at Table level.

Component Architect Manager: Edit Component/Extension

Name \* My Events

Component/Extension Details Joomla! Parts Joomla! Fields/Features Publishing Options

Select the options that are standard features in Joomla! that you wish to include in your Component/Extension. The settings will include not just the field in a table and form but also the standard code for how it is used within the core Joomla! components. The values set at the Component/Extension level can be over ruled by a setting for a Object/Table.

Include Access *	Include	Do Not Include
Include Alias *	Include	Do Not Include
Include Asset ACL *	Include	Do Not Include
Include Asset ACL - Record Level *	Include	Do Not Include
Include Batch *	Include	Do Not Include
Include Check In/Out *	Include	Do Not Include
Include Copy *	Include	Do Not Include
Include Created *	Include	Do Not Include
Include Description *	Include	Do Not Include
Include Featured *	Include	Do Not Include
Include Hits *	Include	Do Not Include
Include Image *	Include	Do Not Include
Include Intro *	Include	Do Not Include
Include Language *	Include	Do Not Include
Include Meta Data *	Include	Do Not Include
Include Modified *	Include	Do Not Include
Include Name *	Include	Do Not Include
Include Ordering *	Include	Do Not Include
Include Params Global *	Include	Do Not Include
Include Params Menu *	Include	Do Not Include
Include Params Record *	Include	Do Not Include
Include Published Dates *	Include	Do Not Include
Include Status *	Include	Do Not Include
Include Tags *	Include	Do Not Include
Include Uris *	Include	Do Not Include
Include Versions *	Include	Do Not Include

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## Step 10 – Save the Component/Extension

All Component Architect edits allow you to Save the records in multiple ways

Component Architect Manager: Edit Component/Extension

Name \* My Events

Component/Extension Details Joomla! Parts Joomla! Fields/Features Publishing Options

Select the options that are standard features in Joomla! that you wish to include in your Component/Extension. The settings will include not just the field in a table and form but also the standard code for how it is used within the core Joomla! components. The values set at the Component/Extension level can be over ruled by a setting for a Object/Table.

Include Access *	Include	Do Not Include
Include Alias *	Include	Do Not Include
Include Asset ACL *	Include	Do Not Include
Include Asset ACL - Record Level *	Include	Do Not Include
Include Batch *	Include	Do Not Include
Include Check In/Out *	Include	Do Not Include
Include Copy *	Include	Do Not Include
Include Created *	Include	Do Not Include
Include Description *	Include	Do Not Include
Include Featured *	Include	Do Not Include
Include Hits *	Include	Do Not Include
Include Image *	Include	Do Not Include
Include Intro *	Include	Do Not Include
Include Language *	Include	Do Not Include
Include Meta Data *	Include	Do Not Include
Include Modified *	Include	Do Not Include
Include Name *	Include	Do Not Include
Include Ordering *	Include	Do Not Include
Include Params Global *	Include	Do Not Include
Include Params Menu *	Include	Do Not Include
Include Params Record *	Include	Do Not Include
Include Published Dates *	Include	Do Not Include
Include Status *	Include	Do Not Include
Include Tags *	Include	Do Not Include
Include Uris *	Include	Do Not Include
Include Versions *	Include	Do Not Include

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## Step 11 – Component/Extension Editing Completed

Now let's go and edit the Tables you created via the Component Wizard

Message  
Item successfully saved.

Component Architect Manager: Components/Extensions

Component Wizard New Edit Copy Check In Delete Dashboard Generate

Search [ ] Search tools+ Clear

Name Ascending 20

--Select Created By--

Name	Fieldsets	Fields	Created By	Created Date	ID
My Events	18	141	Super User	2014-06-25	1

Click on either of these links to go to view the created Tables - the one in the list on the left will give you an un-filtered view.

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## Step 12 – View the List of Created Objects/Tables

The Object/Table Manager view gives you access to all the Tables you created

Component Architect Manager: Objects/Tables

New Edit Copy Check In Delete Dashboard

Search [ ] Search tools+ Clear

Name Ascending 20

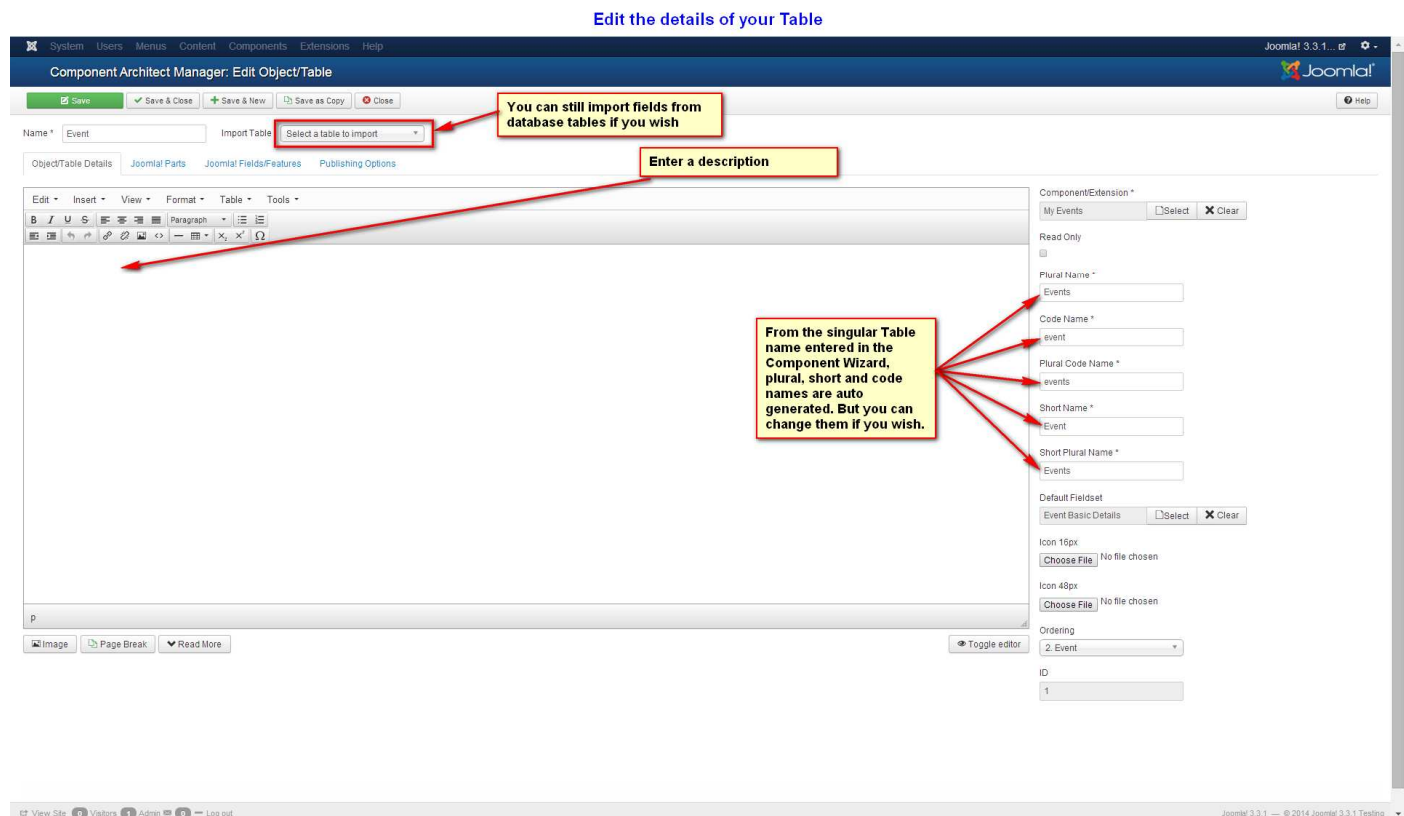
My Events --Select Created By--

Name	Component/Extension	Fieldsets	Fields	Created By	Created Date	ID
Attendee	My Events	6	47	Super User	2014-06-25	2
Document	My Events	6	47	Super User	2014-06-25	3
Event	My Events	6	47	Super User	2014-06-25	1

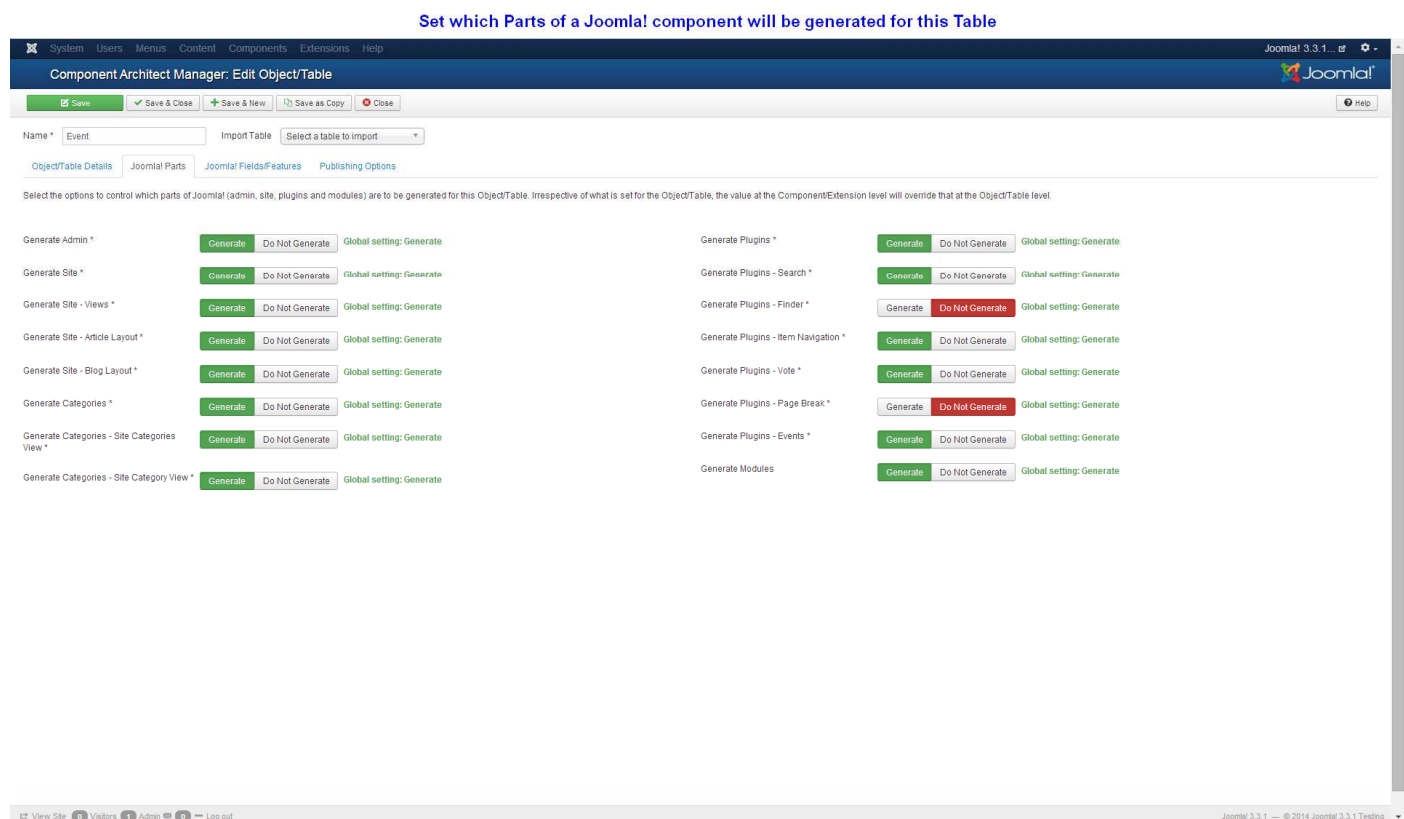
Select a Table and then click Edit to edit it.

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## Step 13 – Edit the Basic Details of an Object/Table



## Step 14 – Edit the Joomla! Parts of the Object/Table



## Step 15 – Edit the Joomla! Fields/Features of the Object/Table

**Set which standard Joomla! Fields/Features will be generated for this Table**

**Component Architect Manager: Edit Object/Table**

Name: Event Import Table: Select a table to import

Object/Field Details Joomla! Parts Joomla! Fields/Features Publishing Options

Select the options that are standard fields/features in Joomla! that you wish to include in this Object/Table. The settings will include not just the field in a table and form but also the standard code for how it is used within the core Joomla! component. The values set at the Component/Extension level may be over ruled by the settings for this Object/Table.

Field/Feature	Include	Do Not Include	Use Global	Global setting
Include Access	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Alias	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Asset ACL	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Asset ACL - Record Level	<input checked="" type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Do Not Include
Include Batch	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Check In/Out	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Copy	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Created	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Description	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Featured	<input type="button" value="Include"/>	<input checked="" type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Hits	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Image	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Intro	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Language	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Do Not Include
Include Meta Data	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Modified	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Name	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Ordering	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Params Global	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Params Menu	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Params Record	<input type="button" value="Include"/>	<input checked="" type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Published Dates	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Status	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Tags	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Uris	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include
Include Versions	<input type="button" value="Include"/>	<input type="button" value="Do Not Include"/>	<input type="button" value="Use Global"/>	Global setting: Include

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## Step 16 – Object/Table Editing Completed

**Now let's go and look at the Fieldsets for the Event table**

**Component Architect Manager: Objects/Tables**

New Edit Copy Check in Delete Dashboard

Components/Extensions Objects/Tables

Search: Search tools Clear

Name: Ascending 20

Component/Extension	Fieldsets	Fields	Created By	Created Date	ID
My Events	6	47	Super User	2014-06-25	2
My Events	6	47	Super User	2014-06-25	3
My Events	6	44	Super User	2014-06-25	1

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## Step 17 – View List of Auto Created Fieldsets

Like all list views you can filter and sort the Fieldsets listed. But let's create a new one.

The screenshot shows the Joomla! Component Architect Manager interface for Fieldsets. The 'New' button in the top toolbar is circled in red. A red arrow points from this button to a text box that says: "Click on New to open the Fieldset edit view with blank details." The main area displays a table of existing fieldsets.

Name	Component/Extension	Object/Table	Fields	Pre-defined	Created By	Created Date	ID
Event Admin	My Events	Event	1	Yes	Super User	2014-05-25	2
Event Basic Details	My Events	Event	11	Yes	Super User	2014-05-25	1
Event Image	My Events	Event	7	Yes	Super User	2014-05-25	4
Event Metadata	My Events	Event	5	Yes	Super User	2014-05-25	5
Event Publishing	My Events	Event	9	Yes	Super User	2014-05-25	3
Event Urls	My Events	Event	11	Yes	Super User	2014-05-25	6

## Step 18 – Edit Basic Details of a Fieldset

You can create as many Fieldsets as you want in your Table

The screenshot shows the Joomla! Component Architect Manager interface for creating a new fieldset. The form includes a 'Name' field, a 'Code Name' field, and a 'Select' button for the 'Object/Table' field. Red arrows point from text boxes to these elements.

**Enter a name (required) and a description (optional)**

**Click on the Select button to open a modal dialog to select an Object/Table for this Fieldset**

**Note: auto set to Pre-defined value of No (cannot be changed)**

The form also includes a 'Pre-defined' dropdown menu set to 'No' and an 'ID' field set to '0'.



## Step 19 – Modal Dialog to Select a Link

Modal dialog boxes allow filtering and searching of records to select the one you want

The screenshot shows the Joomla! Component Architect Manager interface. A modal dialog titled "Select Object/Table" is open, displaying a table with columns "Name", "Component/Extension", and "ID". The table lists three items: "Attendee" (My Events, ID 2), "Registration" (My Events, ID 3), and "Event" (My Events, ID 1). The "Event" row is highlighted with a red circle. A red arrow points from a text box to the "Event" row. The text box contains the following instructions:

Click on the Object/Table name to select it. This will close the modal dialog as well and set the values in the Fieldset details (both Object/Table and it's associated Component/Extension)

The background interface shows the "Event Special Parameters" fieldset with various configuration options like "Code Name", "Component/Extension", "Object/Table", "Pre-defined", and "Ordering".

## Step 20 – Save the Fieldset

Now we can save our new Fieldset

The screenshot shows the Joomla! Component Architect Manager interface. The "Save" button in the top toolbar is highlighted with a red circle. A red arrow points from a text box to the "Save" button. The text box contains the following note:

Note: Both values set automatically

The background interface shows the "Event Special Parameters" fieldset with various configuration options like "Code Name", "Component/Extension", "Object/Table", "Pre-defined", and "Ordering".



## Step 21 – Fieldset Editing Completed

Time to look at all the Fields we have in our Tables

Component Architect Manager: Fieldsets

Search: [ ] Search tools: [ ] Clear [ ]

Name: [ ] Ascending [ ] 20 [ ]

Name	Component/Extension	Object/Table	Fields	Pre-defined	Created By	Created Date	ID
Event Admin	My Events	Event	1	Yes	Super User	2014-05-25	2
Event Basic Details	My Events	Event	11	Yes	Super User	2014-05-25	1
Event Image	My Events	Event	7	Yes	Super User	2014-05-25	4
Event Metadata	My Events	Event	5	Yes	Super User	2014-05-25	5
Event Publishing	My Events	Event	9	Yes	Super User	2014-05-25	3
Event Special Parameters	My Events	Event	6	No	Super User	2014-05-25	19
Event Urls	My Events	Event	11	Yes	Super User	2014-05-25	6

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## Step 22 – View List of Auto Created Fields

You already have a large number of fields that have been pre-defined based on the Generate and Field/Feature values set for Tables

Component Architect Manager: Fields

Search: [ ] Search tools: [ ] Clear [ ]

Name: [ ] Ascending [ ] 20 [ ]

- Select Component/Extension - - Select Object/Table - - Select Fieldset - - Select Pre-defined - - Select Field Type - - Select Foreign Object - - Select Created By -

Name	Component/Extension	Object/Table	Fieldset	Pre-defined	Field Type	Foreign Object	Created By	Created Date	ID
Access	My Events	Attendee	Event Basic Details	Yes	Access Level		Super User	2014-05-25	2
Access	My Events	Attendee	Attendee Basic Details	Yes	Access Level		Super User	2014-05-25	49
Access	My Events	Document	Document Basic Details	Yes	Access Level		Super User	2014-05-25	95
Alias	My Events	Event	Event Basic Details	Yes	Text		Super User	2014-05-25	3
Alias	My Events	Attendee	Attendee Basic Details	Yes	Text		Super User	2014-05-25	50
Alias	My Events	Document	Document Basic Details	Yes	Text		Super User	2014-05-25	97
All Text	My Events	Event	Event Image	Yes	Text		Super User	2014-05-25	15
All Text	My Events	Attendee	Attendee Image	Yes	Text		Super User	2014-05-25	62
All Text	My Events	Document	Document Image	Yes	Text		Super User	2014-05-25	109
AssetId	My Events	Event	Event Admin	Yes	Hidden		Super User	2014-05-25	4
AssetId	My Events	Attendee	Attendee Admin	Yes	Hidden		Super User	2014-05-25	51
AssetId	My Events	Document	Document Admin	Yes	Hidden		Super User	2014-05-25	98
Author	My Events	Event	Event Metadata	Yes	Text		Super User	2014-05-25	25
Author	My Events	Attendee	Attendee Metadata	Yes	Text		Super User	2014-05-25	72
Author	My Events	Document	Document Metadata	Yes	Text		Super User	2014-05-25	119
Category	My Events	Event	Event Basic Details	Yes	Category		Super User	2014-05-25	47
Category	My Events	Attendee	Attendee Basic Details	Yes	Category		Super User	2014-05-25	94
Category	My Events	Document	Document Basic Details	Yes	Category		Super User	2014-05-25	141
Check Out Time	My Events	Event	Event Publishing	Yes	Hidden		Super User	2014-05-25	6
Check Out Time	My Events	Attendee	Attendee Publishing	Yes	Hidden		Super User	2014-05-25	53

1 2 3 4 ... 6 7

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## Step 23 – Add New Field

You can add new Fields to both Pre-defined and non Pre-defined Fieldsets. Let's add one to the new non Pre-defined Fieldset we created earlier

**Click on New to create a new Field**

Name	Component/Extension	Object/Table	Fieldset	Pre-defined	Field Type	Foreign Object	Created By	Created Date	ID
Access	My Events	Event	Event Basic Details	Yes	Access Level		Super User	2014-06-25	2
Alias	My Events	Event	Event Basic Details	Yes	Text		Super User	2014-06-25	3
Category	My Events	Event	Event Basic Details	Yes	Category		Super User	2014-06-25	47
Description	My Events	Event	Event Basic Details	Yes	Editor		Super User	2014-06-25	10
Hits	My Events	Event	Event Basic Details	Yes	Text		Super User	2014-06-25	12
Id	My Events	Event	Event Basic Details	Yes	Hidden		Super User	2014-06-25	1
Intro Text	My Events	Event	Event Basic Details	Yes	Editor		Super User	2014-06-25	20
Name	My Events	Event	Event Basic Details	Yes	Text		Super User	2014-06-25	29
Ordering	My Events	Event	Event Basic Details	Yes	Text		Super User	2014-06-25	30
Status	My Events	Event	Event Basic Details	Yes	List		Super User	2014-06-25	34
Version	My Events	Event	Event Basic Details	Yes	Text		Super User	2014-06-25	46

## Step 24 – Set Basic Details of New Field

Enter the details for the new Field. As with the Fieldset you can use the Select modal dialogs to set values

**Enter a name (required) and a description (optional)**

**A code name is auto generated when you enter the Field name**

**The Fieldset we created has been selected and the other value auto populated**

**You can select what type of Field you want. Most standard Joomla! field types are available plus some extra ones such as Modal and JSON/Registry to hold multiple other fields.**

**Select the value for the Field that you require**

## Step 25 – Set Field Specific Attributes of New Field

Set Field specific attributes that are common across all field types

The screenshot shows the Joomla! Component Architect Manager interface for creating a new field. The 'Field Specific Attributes' tab is selected. The form includes fields for Name, Validation, Allowed Input, Custom Error Message, Registry Field, PHP Variable Type, and Default. Two callout boxes provide instructions: one for the Validation Type dropdown and another for the Registry Field dropdown.

**Field Specific Attributes**

A set of fields that are attributes that are set for a specific Field.

Validate ☒

Validation Type: **Custom**

Allowed Input:

Custom Error Message:

Registry Field:

PHP Variable Type: **string**

Default:

**You can enter some Regex code to perform basic validation or as this is a Custom validation type then functions in the generated code will be created for you to enter specific validation checks.**

**If you have defined already a JSON/Registry field then you can select it here which would mean this field will be contained in that JSON/Registry field**

## Step 26 – Set Field Type Attributes of New Field

On this tab you will see different fields dependent on the Field Type you selected

The screenshot shows the Joomla! Component Architect Manager interface for creating a new field, specifically the 'Field Type Specific Attributes' tab. The form includes fields for Name, Class, Size, Field Value Source, Option Values, Multiple, On Click, and On Change. A table for Option Values is shown with three rows. Two callout boxes provide instructions: one for the Option Values table and another for the Add/Remove buttons.

**Field Type Specific Attributes**

A set of fields on a Field record that are specific to a Field Type.

Class: **inputbox**

Size: **1**

Field Value Source: **Option Values**

Value	Text displayed
0	Public
1	Private
2	Secret

Multiple: ☐

On Click:

On Change:

**A List field type was selected so we need to enter some values to display for selection**

**Click on Add/Remove to add new values or remove them**

## Step 27 – Set MySQL Settings and Save New Field

Field types have default values for the MySQL fields that will be created. You can change these if you wish.

**Click on one of the Save buttons to save your new Field.**

**Note: a default value must always be enclosed in single quotes. So if you want an empty fields enter ". If this field is completely empty then NULL will be assumed.**

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## Step 28 – Field Editing Completed

Enough editing for now let's just get on and Generate the your first Component!

**You can get to Generate Component from the main menu, the Component Architect Dashboard and the Component/Extension Manager view.**

localhost/j\_3\_3\_1\_test/administrator/index.php?option=com\_componentarchitect&view=gen...

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## Step 29 – Specify Component Generation Parameters

Just a few selections and a click of the Generate button and your Component Generation will begin.

**Generate Component Instructions**

Select the component/extension and code template you wish to use for the component generation.

You may then optionally select whether to:

- Change the path where the generated component will be stored (this is the relative address within your current site).
- Generate a zip file of the component when generated
- Log the steps performed during the component generation (usually only required to identify what caused an error)

Once parameters are set then click on the 'Generate' button. A progress dialog will appear showing the steps and % completion of the generation process. On completion of the component generation details of the name and location of the generated component (and any zip file) will be given and any error/warning messages shown.

Component/Extension \*

Code Template \*

Output Path

Zip Format

Logging

**Select the Component you wish to generate and the Code Template to use for the generation. Like before these will be modal dialogs. Note: The free Component Architect has just Standard code templates for the main versions of Joomla after 2.5. Component Architect Pro has many more with a lot of added functionality.**

**Select Zip to have a downloadable zip file created and if you want a log of the generation process set Logging to Yes.**

**Generate**

**Ok let's Generate**

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## Step 30 – Component Generation Progress

You can see the progress of the Component Generation. If you have a lot of Tables and Fields this may take some time.

**Generate Component Progress**

Please do not browse to another page unless you see a completion or error message.

If the process appears to stop completely then please cancel and then retry the component generation. This will not cause any harm. If the component generation continues to not complete please contact support.

**Stage 1 - Analysing Component** (the count of fields counts a field each time it needs to be processed so the count will be greater than the number of fields created)

278 of 278 fields processed - Stage 1 - Analysing Component completed

100%

**Stage 2 - Generate Component Files**

108 of 148 source files expanded - generating component files from source file 'administrator/components/com\_componentarchitectcode/templates/j\_3\_2\_standard/com\_architectcomp\_j32standard/site/models/comobject.php'

75%

**Stage 3 - Search/Replace Markup**

**Cancel**

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## Step 31 – Component Generation Completed

**That's it, your first Component 'My Events' has been generated. Congratulations!**

**Generate Component Progress**

Please do not browse to another page unless you see a completion or error message.  
If the process appears to stop completely then please cancel and then retry the component generation. This will not cause any harm. If the component generation continues to not complete please contact support.

**Stage 1 - Analysing Component** (the count of fields counts a field each time it needs to be processed so the count will be greater than the number of fields created)  
278 of 278 fields processed - Stage 1 - Analysing Component completed

**Stage 2 - Generate Component Files**  
148 of 148 source files expanded - Stage 2 - Generate Component Files completed

**Stage 3 - Search/Replace Markup**  
276 of 276 generated component files processed - Stage 3 - Search/Replace Markup completed

The component 'My Events' was successfully generated using code template 'J 3.2 Standard'.  
The component's files have been placed in directory: tmp/com\_myevents\_j32standard.  
The requested zip file has been created and can be downloaded using the Download button below.  
Or copy the following direct link and save it to use in the Joomla! Extensions/Install. Direct link: 'http://localhost/3\_3\_1\_test/tmp/com\_myevents\_j32standard.zip'

Close Generate Another **Install** **Download**

If you want just click Install and your Component will be installed in the current Joomla! site

Click Download to get a copy of the zip file to be installed into another Joomla! site.

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## Step 32 – Start Using your New Component

**If you clicked on Install then your new 'My Events' Component will be there in the Administrator menu.**

**My Events Manager: Events**

New Edit Publish Unpublish

Documents Attendees **Events** Categories

Banners CA Events Component Architect Contacts Joomla! Update Messaging **My Events** Newsfeeds Post-Installation Messages Redirect Search Smart Search Tags Weblinks

Search tools+ Clear

Sort Table By: Select the ordering: All

No Messages

Time for you to start entering some data and testing your new Component. Have fun!

localhost/3\_3\_1\_test/administrator/index.php?option=com\_myevents Joomla! 3.3.1 — © 2014 Joomla! 3.3.1 Testing

# Part II – Appendices

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