

Just a little something to help you get going with your site...

... a document from Wasen.net

FIGURING OUT THAT JQUERY CONFLICT!

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Introduction

Although this "guide" goes a bit in-depth on the technical details you will not need much of a development skill to follow it through. There are pointer in here that require no coding (but relies on external "jQuery no-conflict" plugins).

The extensions mentioned here are the ones from Wasen.net but the technique and information is valid and will work for any site with (or without) extensions and even with or without Joomla...

What is jQuery?

Well, I'm not really going into detail on what jQuery is (and isn't).

Basically jQuery is the foundation JavaScript that allows your site to show all those cool animations, popups, carousels, image flippers, etc.

jQuery is referred to as a JavaScript library!

For further details go to http://jquery.com/ and read until your eyes bleed...

What is a "conflict"?

First off there are two different kinds of conflicts, one where the "shorthand" conflicts with another library and one where there are multiple jQuery versions or instances loaded.

Joomla has long been using another (older) library called "mootools", both mootools and jQuery is using a shorthand of a \$-sign. The first kind of conflict thus is that the \$-sign can refer to both mootools library and jQuery library.

There is a coding solution called "noConflict" that can be used to avoid this but even better the developer can choose to not use the shorthands and instead write out the full library, that is instead of writing \$(jQ-Function) write jQuery(jQ-Function). If you need both libraries and both are using the shorthand you need to add a "noConflict" statement (see "Add jQuery.noConflict()").

The other type of conflict is when extensions (or templates) loads their own instance of jQuery into the extension. This is (in my opinion) bad coding!

NO extension or template for Joomla 3 should load jQuery by itself. If jQuery is needed the developer should have Joomla load it for them, which is a Joomla function added from Joomla 3.

Unfortunately many developers don't know about this (or doesn't care) or haven't developed a new version to support Joomla 3 natively and are "cheating" and using the same version to support older pre version 3 Joomla installations.

All extensions found on http://wasen.net/ are loading jQuery through Joomla 3!

As there are many extensions not following the "rules" and when a conflict arises it affects all extensions on the same page I have added some settings to try and get round the conflict (more on that in "Problem solving").

What this means is that <u>ONE</u> badly coded extension may wreck other (better coded) extensions!

Please bear this in mind when contacting the support/developer of the extension and don't be surprised if they point you to another extension and/or problem even if it's their extension not working!

Add jQuery.noConflict()

Depending of where you need jQuery and how you use it you can either add the JavaScript noConflict statement in the extension code or if jQuery is widely used in the template. If you are no coder yourself there are several "no-conflict" extensions (normally system plugins) that will do the work for you!

See this site for further information and code samples: http://www.valpocreative.com/blog/jquery-no-conflict.html

Problem solving

On Wasen.net you'll find the following extensions:

- Simple PopUp
- Simple File Upload
- Simple File Lister

All of which are using the jQuery library. Simple PopUp and Simple File Upload also uses a jQuery dependent plugin called "FancyBox".

In order to launch the FancyBox (which is the PopUp window) jQuery must be loaded and "conflict free" and there should be only ONE instance of the FancyBox plugin loaded as well!

The most common problem is that libraries and/or plugins are loaded multiple times!

Step 1 of problem solving is naturally to see if you have a problem... In **Simple PopUp there is no pop-up** box, in **Simple File Upload nothing happens when you click the button** or in **Simple File Lister the "browse next" button isn't working**. Those are typical problems related to jQuery.

In Simple PopUp there is another jQuery related issue if you see your whole page being loaded into the popup the second time opening or if you can only open the popup once. In that case you are using a specific jQuery version which has a problem in FancyBox, in that case just go to "Advanced" settings for Simple PopUp in plugin manager and set "FancyBox fix Joomla 3 (jQuery 1.10.2)" to "yes". See "Simple Popup jQuery settings" on page 9!

If you have come to the conclusion that you do have a problem and it is not the above "FancyBox fix" then you need to see if there is a JavaScript error.

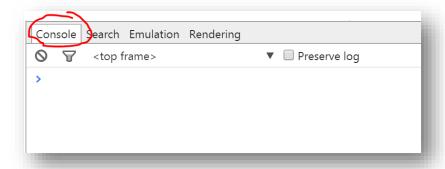
In order to find that out you must check your browsers "Console". Most browsers today have an "Inspect Element" menu. Just right-click anywhere on the loaded web-page and hit the "Inspect Element" menu.

This will bring up the "web development and debugging" tools window (and don't be alarmed, you can close it again). Most browsers show it as a docked window in the browser but some might have it as a floating window, regardless find the tab or window labeled "Console":

Internet Explorer:



Google Chrome:



If the Console widow (like above) is empty, then there is no JavaScript error and thus no conflict or you haven't triggered the conflict yet. In that case play around with the page and hit the buttons that caused the problem and see if you can trigger it again and if any message is included then in the Console.

If not, then you most likely have a PHP and/or server error and should turn to PHP fault tracking instead.

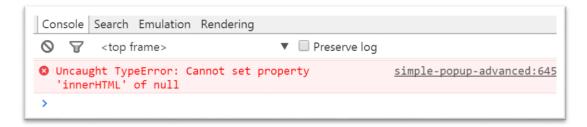
A typical jQuery error might look something like this:

```
Console | Search Emulation Rendering | Console | Search Emulation | Console | Search Emulation | Console |
```

Or this:

The text here is not important really but rather that you can see the "is not a function" text and the \$-sign or a reference to jQuery. If you see something similar (with other text) you can be quite certain you have a jQuery conflict.

The below here is a sample of a JavaScript error but NOT a jQuery error (note the lack of a jQuery or \$-sign reference and the lack of the text "is not a function"):



Solving the conflict

It is always best to try and get the code right, but if you are no developer yourself the only way to do that is to contact the developer of the template and/or extension and have them do it (which they might not do in a snap).

In that case a "jQuery conflict remover" extension might be worth a try. *Please note though that it might not always help and that they can be quite intrusive* so I always recommend to back up your site and database prior to adding a "jQuery conflict remover" extension!

Also try several "jQuery conflict remover" extensions if the first one doesn't work!

To do it for real, you need to find out the issue, what is causing the problem and to do that you need to look into the HTML code produced by Joomla.

First make sure you are on the correct page and that you can see the error in the Console, then right-click the page and select "View source" or "View page source" (or from the main menu of the browser if right-click is disabled).

This will either open a text-editor, Word or a new tab in your browser with the source code. This is only your local copy of the code and you can't change or "destroy" anything so don't be afraid to browse and poke around!

While there is a lot of text you should focus on finding anything with the text "jquery" in it, e.g.:

```
<script src="/media/jui/js/jquery.min.js" type="text/javascript"></script>
<script src="/media/jui/js/jquery-noconflict.js" type="text/javascript"></script>
<script src="/media/jui/js/jquery-migrate.min.js" type="text/javascript"></script>
<script src="/media/jui/js/jouery.migrate.min.js" type="text/javascript"></script>
<script src="/media/jui/js/jquery.ui.core.min.js" type="text/javascript"></script>
<script src="/media/jui/js/jquery.ui.core.min.js" type="text/javascript"></script>
<script src="/media/jui/js/jquery.ui.sortable.min.js" type="text/javascript"></script>
<script src="/media/system/js/mootools-core.js" type="text/javascript"></script>
<script src="/media/system/js/core.js" type="text/javascript"></script>
<script src="/media/system/js/core.js" type="text/javascript"></script>
<script src="/media/system/js/core.js" type="text/javascript"></script>
<script src="/plugins/content/simplepopup/simplepopup/fancybox/jquery.mousewheel-3.0.4.pack.js" type="text/javascript"></script>
<script src="/plugins/content/simplepopup/simplepopup/fancybox/jquery.fancybox-1.3.4.patch.js" type="text/javascript"></script>
<script src="/media/system/js/caption.js" type="text/javascript"></script>
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As you can see from the sample above there are many references for "jquery".

However there is only one jQuery library, "jquery.min.js" (yellow), and then a bunch of jQuery dependent plugins, e.g. "jquery.fancybox-1.3.4.patch.js" (green).

jQuery plugins are typically named with "jquery.<plugin name>.js" and those are not a jQuery library but instead, as said, dependent on that jQuery is loaded.

It is also important that the **jQuery library is loaded before the jQuery plugins** (as above).

The important thing here is firstly to search the WHOLE page for references to "jquery" as they might be "inline", i.e. "baked into" the code.

The jQuery library might also be named as e.g. "jquery-1.11.3.min.js", "jquery-1.11.3.js", "jquery.js" and so on with different version numbers. The thing to note is that there is no plugin name in there and you should, as stated, only have one library loaded at the top of the page, preferably inside of the <head>tag of your page!

If you have multiple jQuery libraries loaded anywhere in the page (head tag or not) you must get rid of all but the one inside the <head> tag!

This might be difficult to do and especially to figure out where that are coming from. You can look at the paths and try to see if there is an extension name in there, see what code comes next or simply disable extension by extension and see when it goes away. Once you have isolated the extension start with looking for a replacement extension that is coded up to standard but if you can't find it edit the code (or ask the developers) to remove the loading of jQuery library for Joomla 3 versions.

Since all extensions are coded differently I can't help you further to find the code that loads jQuery but as a pointer here's what I do:

- 1) Download the directory for the extension (or template) to your local disk
- 2) Use Agent Ransack (or similar "search for text in files" program) and search for the text "jquery*.js"
- 3) In the list of files you get as a result find the file that outputs the code corresponding to the HTLM source of your page
- 4) Comment away (or if you're brave, delete) the line/s of code loading jQuery library
- 5) Test it!

If you still have jQuery related errors in your page you need to compare all jQuery plugin names and see that you only load a plugin ONCE and that the plugin is loaded AFTER the jQuery library!

The practice for getting rid of multiple jQuery plugins is the same as for the library above, BUT first check that the extension don't have a setting for not loading any jQuery plugins!

All extensions on Wasen.net has a setting for not loading the jQuery plugins:

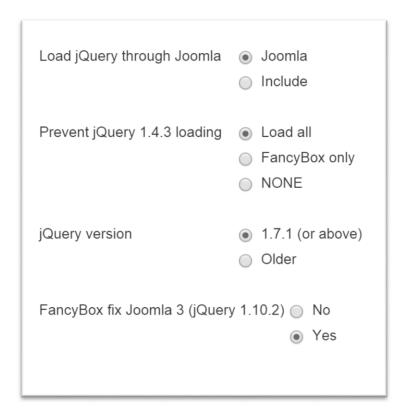


If you have multiple copies of the same Module, or other extensions using FancyBox, on the same page you can simply tick "No" on loading FancyBox to avoid a conflict with multiple FancyBox plugins loaded in the page.

Note though that if you have "inline" loaded jQuery and you use "Load FancyBox through Joomla" as "Include" (=inline) you must keep track of which Module/extension is loaded first and enable FancyBox on that one and set the rest to not load FancyBox.

Which order they are loaded in depends on the template position they are in. The easiest way to find out is to give all Modules unique names first and check the HTML code which appear first (closest to the top) in the HTML code.

Simple Popup jQuery settings:



In Simple PopUp you can set jQuery and plugins to load as "inline" but setting the first option to load as "Include". This should only be used if you have some other jQuery library loaded that is not loaded through Joomla or inside of the <head> tag.

If you have multiple instances of FancyBox you can select to not load it at all, "NONE", or to just load the FancyBox plugin.

FancyBox requires some special code for really old jQuery versions so you can set it to work with older Joomla version. You should however only see such old versions in Joomla 1.5 or 1.6 possibly.

If you see the popup being loaded with the whole page in it or you can only load one popup and the second one fails on the same page you need to tick the "FancyBox fix Joomla 3 (jQuery 1.10.2)" to "Yes".