**Troubleshooting overview** <https://drupal.org/node/1925512>

1. Stop and think

* Have you made any recent changes to your site such as:
  + installing new modules?
  + updating existing modules?
  + making configuration changes?
  + granting or revoking permissions?
  + Does the version of the module you installed match your version of Drupal?

1. Read the error messages. Depending on how you have set your error messages to display, Drupal-specific error messages may display on the page. When the core dblog module is enabled, you can find error reports at /admin/reports/dblog. When debugging, you should also check non-Drupal logs, such as Apache, PHP, etc. Your hosting provider can help you locate these logs.

Errors may include:

* .htaccess config problems - "Internal server error" - Error 500 directive not allowed here
* Memory problems - Fatal error: Allowed memory size of 8388608 bytes exhausted
* JavaScript problems - modules/troublesome/utility.js 404 file not found.

1. Validate your page

Incomplete HTML markup tags and structural problems can cause problems with your site theme such as misalignment, incorrect font sizes, overflowing blocks, etc. As you debug your site, go through each error message and evaluate why the error exists and how important it is to solve. You might not be able to solve all validation issues, but you should be aware of why each one exists.

1. Check your site's CSS

Your site may not be displaying correctly because one CSS rule is overriding another one. If you are unfamiliar with CSS, your first step should be to learn more about cascading. Once you are familiar with CSS, look to child and container elements for possible issues. In particular, the margin for one item may be the padding for another (particularly in list items). Additionally, when you need to override the CSS of your site, do so in a new style.css file in your theme, not by modifying core files.

You can inspect your site's code with these tools:

* FireBug - for Firefox
* Web Developer Toolbar - for Firefox and Chrome
* DOM Explorer - part of F12 Developer Tools included with IE11

1. Clear Drupal's cache

To enhance performance, Drupal builds a cache of requested resources. When Drupal answers your request for a page, it may include an older cached version that does not reflect a recent change. To address this problem, you can clear any or all of Drupal's caches, and receive only newly generated pages.

Drupal 7: To clear all caches, click the "Clear all caches" button at the top of /admin/config/development/performance.

1. Read the README for your modules

The README.txt file for a module often contains:

* General information and advice from the contributor(s)
* Dependencies (such as server PHP extensions)
* Requirements
* Installation instructions
* Caveats (such as module conflicts and patches)

1. Search for your error

Thanks to Drupal's popularity, chances are that someone has run into your problem before. Use Google to search for your error message. When searching, be sure to remove any paths that are specific to your local or hosting environment and to include quotes around your error message. Adding the word "drupal" to your search, can help return more accurate results. For example, Google: "Argument #1 is not an array" drupal.

1. Dive into code to identify the source of SQL errors.

You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '(n.nid), n.title FROM category c INNER JOIN category\_node r ON c.cid = r.cid INN' at line 1 ... in /var/www/html/doadance/drupal/includes/database.mysql.inc on line 120.

Errors like this are almost never caused by Drupal's core code. Instead, they are often the result of a contributed or custom module sending bad instructions to Drupal. When debugging, try to identify the database table being addressed in this query to identify which module may be the culprit. In this case it looks like the category module. However, the cause may be another module that's trying to directly access data about categories.

1. Debug by diving into module code

The best way to find the source of a problem is often to display the code involved. If it is not already installed, your first step should be to install the Devel module Here's a step-by-step approach to finding and debugging this error:

warning: in\_array() [function.in-array]: Wrong datatype for second argument in /home/httpd/global/drupal/modules/node.module on line 1303.

* Go to line 1303 of node.module. You are going to make changes to the file so first save a backup copy or make sure your version control is up-to-date.
* On line 1303, node.module locate in\_array('status', $node\_options).
* on the line before insert the code: print("Node options are : '".print\_r($node\_options,1)."'");.
* Look through the output and try and identify where the wrong datatype is coming from.

1. Ask questions that lead to answers

When posting questions on the Drupal forum, make sure to ask questions the smart way. Once your problem is resolved, make sure to follow-up in the same thread.

1. Identify the module that's giving you problems

Once you find the module that's causing problems, open its .module file. The module's custom pages are usually defined within hook\_menu(). Many modules can be debugged by first looking at a URL, then identifying the module serving the content, and finally looking for the code using hook\_menu() and .module files.

Account, permission and login issues

# Recovering the administrator password

## Recover password with DrupalConsole drupal user:login:url

## Recover password with Drush drush uli

## Change password with a database query Use password-hash shell script

## Request new password via e-mail Use drupal login page

# Resetting the administrator password with sql-query (Drupal 7)

When, in Drupal 7, the password for user 1 (the administrator) is lost and the [email notification or drush methods don't work](https://www.drupal.org/node/44164), it is possible to set the password via a database query.

But first, you have to generate a password hash that is valid for your site.

Execute the following commands from the command line, in the Drupal root directory:

./scripts/password-hash.sh newpwd

Of course, change "newpwd" to the desired password. If the password contains special characters such as a space, \* or ? you must escape them, or wrap the password in quotes appropriate for the shell used.

The script will output a password hash that is valid for the site. Copy this to the clipboard or write it down somewhere; you'll need it for the next step. Be careful not to include more or less characters as the hash. These hashes look somewhat like $S$CTo9G7Lx28rzCfpn4WB2hUlknDKv6QTqHaf82WLbhPT2K5TzKzML

Then execute the following query on the Drupal database:

UPDATE users SET pass ='$S$CTo9G7Lx28rzCfpn4WB2hUlknDKv6QTqHaf82WLbhPT2K5TzKzML' WHERE uid = 1;

To execute this query it will be necessary to login to the database. This is typically done through the command line or through a GUI interface such as phpMyAdmin.

### Clear flood table (Drupal 7 only)

# Resetting the administrator password with a PHP file (Drupal7)

1. First, create a file with a random name (gh34tu9.php for example).
2. Copy and paste the following contents into the file, and save the file.

define('DRUPAL\_ROOT', getcwd());

require\_once DRUPAL\_ROOT . '/includes/bootstrap.inc';

drupal\_bootstrap(DRUPAL\_BOOTSTRAP\_FULL);

require\_once DRUPAL\_ROOT . '/includes/password.inc';

if (isset($\_GET['pass']) && !empty($\_GET['pass'])) {

$newhash = user\_hash\_password($\_GET['pass']);

}

else {

die('Retry with ?pass=PASSWORD set in the URL');

}

$updatepass = db\_update('users')

->fields(array(

'pass' => $newhash,

// Uncomment the following lines to reset the administrative username and/or email address, if necessary.

// 'name' => 'admin',

// 'mail' => 'yourmail@example.com'

))

->condition('uid', '1', '=')

->execute();

print "Done. Please delete this file immediately!";

drupal\_exit();

1. Upload the file to the root of the Drupal installation directory (i.e., where index.php, update.php, robots.txt and other files and directories exist).
2. Execute the script, by requesting the file in a web browser using the following URL pattern:  
   http://example.com/gh34tu9.php?pass=mypassword  
   In the above URL,  
   - replace example.com with your actual domain name,  
   - replace gh34tu9.php with the actual file name that you specified in step one above,  
   - replace mypassword with the desired new password.  
   Note: It is highly recommended you choose a password that contains upper and lowercase letters and numbers, and is at least 12 digits in length.
3. If the script executes successfully, you will see the text "Done" in your web browser. The password of the administrative account created when installing Drupal (i.e., user/1) will be changed to "mypassword" (or whatever value you specify).
4. Finally, **delete the file from the Drupal installation root directory.**

# Anonymous users unable to store and save values in $\_SESSION.

While testing our main web site I noticed that anonymous users were not able to store and save values in $\_SESSION. Running down the path of what could be going wrong I called functions such as session\_id(), and debug\_print\_backtrace() to see what might be causing this anomaly.

Now this post mentioned that the user whose uid was zero is missing from the database and that restoring it was the answer to the issue. Opening a terminal and logging into our database I executed SELECT \* FROM users WHERE uid=0;, the results returned zero rows for the query. Thinking back to when Drupal was first installed, I found a user with a uid of zero and though that this user with uid set to zero, no user name and password was a bug from installation and deleted the row.

If $\_SESSION is not being read from and written to as an anonymous user from page to page, take a look at the users table in the database. Chances are that you can save yourself a lot of debugging time by making sure that a user of uid set to zero exists. If there isn't one in the database there is a simple fix for this issue, execute the following SQL command: INSERT INTO users (uid) VALUES (0);

Clear your cache and then go back to the pages in question and see if it makes any differences in what values are stored in $\_SESSION as an anonymous user.

# Failure to log in as admin after initial installation

If the configuration in an Apache 2 installation is not correct with respect to the naming of the sites-enabled and sites-available entries in the /etc/apache2 configuration subdirectories, the sessions become messed up and this prevents login without any errors for diagnosis.

Thus, if you are installing fresh and encountering a situation where you cannot login with your admin user, check the Apache configuration.

# Log in after blocking user 1 by an access rule

Say you accidentally "block" your admin account (user 1) by an access rule (for example *"%admin%"*) and cannot log in. You can undo this by accessing the table *access* and deleting the row where the *mask* field contains the access rule (in our example *"%admin%"*.)

Using phpMyAdmin this is done by:

1. Clicking on the name of the Drupal database in the left menu (e.g. *"\_Drupal"*)
2. **Beside the table name (*access*) and under the *Action* column click on the *Browse* icon.**
3. Find the row in the table with the *mask* field (e.g. *"%****admin****%"*) and click on the *delete* icon beside it.
4. Press *OK* on the confirmation message.
5. Now log in normally from the front page...

# Log in after disabling the user login block

If you disabled the User login block and need to log in, you can visit the login page on:

http://example.com/?q=user

or, if clean URLs are enabled, use

http://example.com/user

# Log in while site is off-line for maintenance

Once you have turned your site off-line using admin » settings » site maintenance (admin/settings), you can log back in by visiting:

http://example.com/?q=user

Make sure to note: Use the literal word user, not your username or user id. Do, however, replace example.com with the proper URL parts pointing to your website.

Two additional things to try to access admin login:

http://example.com/?q=admin

http://example.com/user

You need to enter the username and password of an account with permission to administer site configuration. User 1 has this ability as a safety net, should you not have this turned on in other administrator account(s).

If you are truly desperate you can try the following database queries to restore access:

UPDATE variable SET value = 's:1:"0";' WHERE name= 'site\_offline';

DELETE FROM cache WHERE cid = 'variables';

# Login blocked after 5 failed login attempts

Drupal 7 prevents brute force attacks on accounts. It blocks login by a user that has more than 5 failed login attempts (within six hours) or an IP address that has more than 50 failed login attempts (within one hour).

The amount of failed logins is recorded in the table 'flood'. You can either wait before trying to login again (6 hours) or clean the flood table with the procedure below.

Execute the following query on the Drupal database:

DELETE FROM `flood`;

If command above doesn't work try this:

TRUNCATE flood RESTART IDENTITY;

Other options

drush php-eval 'db\_query("DELETE FROM `flood`");'

DELETE FROM flood WHERE event = 'failed\_login\_attempt\_user' AND identifier LIKE '1234-%';  
(where1234is the UID of the blocked user)

# Login doesn't "stick" after upgrade to PHP 5.2+

# You can appear to log in OK, but on the very next page view the system seems to forget that you have just logged in and you revert to being an "anonymous" user

// Temporary fix to login/sessions problem.

// Remove this line when upgrading to 4.6.11, 4.7.11 or 5.x or later.

register\_shutdown\_function('session\_write\_close');

# Login doesn't work or must be done twice

# When a browser makes a request, Drupal checks to see if it has set an HTTP cookie in the browser, and compares it against sessions stored in its database. This process can be interrupted either in the browser, in the database, or both, preventing the authenticated session from persisting.

## Cookies

If you are able to log in using one browser but not another from the same machine, the problem is most likely local.

* Make sure cookies are enabled in your browser.
* Make sure your firewall or ad blocker is not blocking or rewriting session cookies.
* Cookies are text files stored on the user's hard disk, and may get corrupted. Try deleting cookies for the site in question.
* Internet Explorer 6 was known to cause problems when its cache was full. Try clearing the 'Temporary Internet Files' folder(s).

## Logging in at www on a site with no www in the base URL

If a site is set with example.com as the base URL and the user instead browses to and logs in from [www.example.com](http://www.example.com/), a session cookie will be set for [www.example.com](http://www.example.com/). But the site will then forward the user to the non-www version, and the user will not be detected as logged in.

To avoid this problem, first decide whether the www or non-www version of the domain will be canonical, then redirect the other version

# Second, the domain name for session cookies can be set explicitly in settings.php. For instance, if you want sessions from example.net to be recognized by gallery.example.net and forum.example.net, set $cookie\_domain to .example.net.

# If you have access to php.ini on your system, setting session.cookie\_path = \ has also been reported to fix the problem.

## Cache Problems

# Sometimes the Drupal cache is not updated when logging into a site, so even after logging in the user is still shown the cached version of the site. Different reports have blamed various browser, web server, and Drupal settings. It should have been corrected in Drupal 5.7.

# One solution seems to be to disable the Drupal cache of the site, though that has the undesired side effect of increasing the load on your site.

# Another workaround is for the users to hit the browser refresh button which seems to work fairly well, but has the drawback of not being easily discoverable and is a hassle for every user of the site. On a site where only one or two users login, this is not a problem. On a community site it is a bigger problem

# Recreate first user account

If, by accident, you happen to delete the original "Administrator" account/user, you will need to recreate it.

INSERT INTO users (uid, name, pass) VALUES ('1', 'yourname', md5('yourpassword'));

you can also try and work with the methods below:

UID1 is the 'super admin' account.

- create a new account with user name and password of your choice : this account will initially be a regular user account, to be turned into an "Administrator" account following the next step.  
- go to database table "users" and change the UID of this new account to "1" - You may now login to this account as the super admin account.

if you use phpMyAdmin for MySQL database administration, this should only take a few seconds to fix.

### user\_register not enabled

The above only works if the "user\_register" variable is \*not\* set to s:1:"0";.

UPDATE variable SET value = 's:1:"1";' WHERE name = 'user\_register';

DELETE FROM cache WHERE cid = 'variables';

This will change your site so that you can follow the above instructions.

# Restore the anonymous (user ID 0) user record

Having the Anonymous user deleted in your site breaks Drupal in unexpected ways, including a message like:

* "Could not login with user ID #0." error from Drush
* "warning: Invalid argument supplied for foreach() in /includes/form.inc on line 1181." and various other strange errors from Drupal core

For Drupal 7, you can run two queries:

INSERT INTO users (name, pass, mail, theme, signature, language, init, timezone) VALUES ('', '', '', '', '', '', '', '');

UPDATE users SET uid = 0 WHERE name = '';

e.g. via Drush:

drush -u 1 sql-query "INSERT INTO users (name, pass, mail, theme, signature, language, init, timezone) VALUES ('', '', '', '', '', '', '', '')"

drush -u 1 sql-query "UPDATE users SET uid = 0 WHERE name = ''"

This will insert a new row getting a random UID and then the update query fixes to get the right uid for the user.

# Unblocking an account using SQL

Say you accidentally "block" your admin account and cannot log in. From within a MySQL client you can run this command to unblock it

update users set status = 1 where uid = 1;

# Admin pages hang or are very slow

# Update module makes your Drupal website connect to drupal.org so that it can check for newer versions of Drupal and of core and contributed themes. However, some hosts do not allow the server to make outgoing connections, and this can cause the admin pages to "hang". This can also be a problem if you are running Drupal on your own computer, for example, behind a corporate firewall/proxy.

# Disable update module.

# Blank pages or "white screen of death" (WSOD)

# Occasionally a site user or developer will navigate to a page and suddenly the page content disappears, and it becomes blank. No content. No errors. Nothing. This happens sometimes, It could happen after updating a module, theme, or Drupal core. This is what is referred to by most members of the Drupal community as the White Screen of Death or WSOD. There are several reasons why this might occur, and therefore several possible solutions to the issue.

# "Invisible" Errors

# If error reporting is turned off, you could be getting a fatal error but not seeing it. On a production site, it is common to have error reporting turned off. If that is the case and PHP has hit an unrecoverable error, neither an error nor content will be displayed, therefore you end up with a completely blank page.

# What you can do about this is either turn on PHP error reporting so it displays a message on the page itself, or check your log files (from the server) to look for the error. How to do both of these are explained below.

### Enable Error Reporting

# Although it may be turned off on commercial hosts and production sites (for good reason, so that users do not see the errors), these errors are one of your best tools for troubleshooting. To enable error reporting, temporarily edit your index.php file (normally located in your root directory) directly after the first opening PHP tag (do not edit the actual file info!) to add the following:

<?php

error\_reporting(E\_ALL);

ini\_set('display\_errors', TRUE);

ini\_set('display\_startup\_errors', TRUE);

// $Id: index.php,v 1.94 2007/12/26...

You will now be able to see any errors that are occurring directly on the screen. Memory problems may still not be displayed, but it's the first step in a process of elimination.

If you are using a multi-site setup and only want errors to appear for one site, then check the name of the host first as in:

if ($\_SERVER['HTTP\_HOST']==='some.domain.name.here') {

error\_reporting(E\_ALL);

ini\_set('display\_errors', TRUE);

ini\_set('display\_startup\_errors', TRUE);

}

If the problem occurs while running update.php open update.php in a text editor and uncomment the following line:

ini\_set('display\_errors', FALSE);

### Change the shutdown handler

# Another way to force errors to display is to change the shutdown handler. Add the following code (originally from http://stackoverflow.com/questions/1475297/phps-white-screen-of-death), to the front of index.php:

// ----------------------------------------------------------------------------------------------------

// - Display Errors

// ----------------------------------------------------------------------------------------------------

ini\_set('display\_errors', 'On');

ini\_set('html\_errors', 0);

// ----------------------------------------------------------------------------------------------------

// - Error Reporting

// ----------------------------------------------------------------------------------------------------

error\_reporting(-1);

// ----------------------------------------------------------------------------------------------------

// - Shutdown Handler

// ----------------------------------------------------------------------------------------------------

function ShutdownHandler()

{

if(@is\_array($error = @error\_get\_last()))

{

return(@call\_user\_func\_array('ErrorHandler', $error));

};

return(TRUE);

};

register\_shutdown\_function('ShutdownHandler');

// ----------------------------------------------------------------------------------------------------

// - Error Handler

// ----------------------------------------------------------------------------------------------------

function ErrorHandler($type, $message, $file, $line)

{

$\_ERRORS = Array(

0x0001 => 'E\_ERROR',

0x0002 => 'E\_WARNING',

0x0004 => 'E\_PARSE',

0x0008 => 'E\_NOTICE',

0x0010 => 'E\_CORE\_ERROR',

0x0020 => 'E\_CORE\_WARNING',

0x0040 => 'E\_COMPILE\_ERROR',

0x0080 => 'E\_COMPILE\_WARNING',

0x0100 => 'E\_USER\_ERROR',

0x0200 => 'E\_USER\_WARNING',

0x0400 => 'E\_USER\_NOTICE',

0x0800 => 'E\_STRICT',

0x1000 => 'E\_RECOVERABLE\_ERROR',

0x2000 => 'E\_DEPRECATED',

0x4000 => 'E\_USER\_DEPRECATED'

);

if(!@is\_string($name = @array\_search($type, @array\_flip($\_ERRORS))))

{

$name = 'E\_UNKNOWN';

};

return(print(@sprintf("%s Error in file \xBB%s\xAB at line %d: %s\n", $name, @basename($file), $line, $message)));

};

$old\_error\_handler = set\_error\_handler("ErrorHandler");

### Log Files

Your log files can be accessed a few different places. This will vary depending on your host, but it's good to know what and where they are.

To access the files directly on a server running Apache, on some unix shells (you may need to alter this to suit your environment), you can type the following command:

tail /var/log/apache2/error.log

For nginx, depending on your .conf file, you can usually find log files by typing the following command:

tail /var/log/nginx/[sitename]\_error.log

### Whitespace at the End of a PHP File

The most common code error that causes a WSOD is having additional whitespace at the end of a PHP file. To avoid this issue, it is a [Drupal coding standard](https://www.drupal.org/node/318#phptags) to not include the closing ?>on a PHP file.

You may also have the 'Include Unicode Signature (BOM)' option turned on on your editor, which should be turned off.

### PHP Versions

If you were previously running Drupal on a server with multiple versions of PHP you may have had special code in your .htaccess file telling Drupal which version to use. For instance, you may have added AddType x-mapp-php5 .php to your .htaccess file if your hosting provider required it to ensure PHP5 was used rather than PHP4.

If that is the case, remove this line in your .htaccess file.

### Invisible Errors for Developers

If you are developing a module, you may first want to test loading your file(s) to make sure that there aren't any obvious PHP syntax errors. This happens because the include\_once() or require\_once() function calls simply do not always report the errors

$ php -l <filename>

This command will ask PHP to parse your file. If you forgot a semi-colon ";", or a closing bracket "}" it will give you the error immediately. Fix it, and try again on your server.

Additionally, you can do check all \*.php files for syntax errors. On \*nix, run:

$ find . -type f -name '\*.php' -exec php -l '{}' \;

Better yet, you may want to write an automated test to check for such errors.

### Implement Hook Twice

You can also get a blank screen if you have by mistake implemented the same hook more than once. For example, accidentally implementing hook\_help twice.

### Output Buffering

Some modules need output buffering turned on.

To do this, try adding these lines to your .htaccess file (normally located in your root directory:

php\_value output\_buffering On

php\_value output\_handler mb\_output\_handler

### Zend Compatibility Mode

If you get the WSOD while setting up a new server, you may have a problem with zend compatibility being on. If you check the error reporting you may see an error with "Trying to clone an uncloneable object of class mysqli." This is caused by the zend compatibility mode being On in the php.ini file.

To fix this, set zend compatibility to off by editing the applicable line:

; Enable compatibility mode with Zend Engine 1 (PHP 4.x)

zend.ze1\_compatibility\_mode = Off

[More detail about zend compatibility can be found here.](https://www.drupal.org/node/101670)

### Clearing the Cache Table

Depending on the problem, clearing the cache table (via phpmyadmin for example) can resolve a WSOD.

### Restarting Web server

WSOD can be caused by web server issues. Especially if you are using apache and PHP fails with error "undefined function: drupal\_bootstrap() in ... index.php" but file includes/bootstrap.inc is in place with correct permissions, try restart (not just reload) web server.

### Ionic Rewriter: WIMP

If you are using Drupal on a WIMP stack and getting the WSOD on the <http://www.example.com/install.php> page it may be that you cannot have the Ionic Rewriter ISAPI module installed in IIS during the Drupal install.

The solution in this case is to add it in after install is completed.

### Malformed ctools plugins

Some malformed ctools plugins (for example custom panel layouts) can cause a WSOD. If you have any custom ctools plugins, try disabling them to see if they are the issue.

## PHP Memory Limits

Another common reason for the WSOD is issues with memory limit. Traditionally, this has most often been a problem showing up (or rather, not showing up) in the modules admin screen, by it giving a WSOD. This issue has pretty much been solved for that page; however, there are still instances that will occur in other modules (usually showing up during admin actions like bulk updates) where PHP memory can be exhausted.

[Try the solutions here](https://www.drupal.org/node/31819)first if this issue came up when you tried to go to the module page.

You may also want to try running the update.php script. If you do not know how to run update.php or your user does not have the permissions to run it (and you do not have the user1 login), [there is more info about update.php here](https://www.drupal.org/node/61736).

Next, you'll want to confirm that the change has had an effect with a [phpinfo() page](https://www.drupal.org/node/59680" \o "phpinfo). If you are hosting the site and it didn't work, check that you were modifying the correct php.ini file (it's named in the phpinfo). If your site is hosted by someone else and you failed to increase the memory limit, then your host has probably locked it down (for good reason) and you'll have to negotiate with them. There may be a few work-arounds to try, like [creating a custom php.ini](https://www.drupal.org/node/147534), but it will vary from host to host.

## PHP execution time limits

Another PHP setting that can lead to WSOD is max\_execution\_time. Apparently, on WAMP, the default is 30 seconds, but some administrative pages may take longer than that to process and load. Change this setting (see other sections on this page for instructions on how to change PHP settings in php.ini or using php\_value() and do the same steps with this setting) to a larger value, and it might clear up your WSOD problems.

## Module and Theme Related Errors

If the error is not originating from a memory limit, or any of the above errors, the error may be coming from bad code in a module or your site's theme.

### Theme or module lacking

Check if the theme needed for your site is in drupal7/all/themes or drupal7/default/themes, if drupal7 is your drupal directory (If you use a multisite installation, the latter is drupal7/my\_site.com/themes , my\_site.com being your site directory). Especially if you use a sub-theme, check if both the master theme and the sub-theme are there, with the right names and read permission.  
The same way, modules required by your site must be present in drupal7/all/modules or drupal7/default/modules (or drupal7/my\_site.com/modules in a multisite installation).

### Non-recommended Module Versions

If you are working with a module that is not in a recommended release version, you may have success by upgrading it to a recommended version or disabling/removing the module. To disable the module, simply go to the module admin page (Administer > Site Building > Modules) and uncheck the checkbox next to the module, then click "Save Configuration."

You can tell whether a module is recommended by looking on the module page, the version will have a green background with a green checkmark at the right, and say eg. "Recommended for 6.x." Particularly if the module is a development version, eg. "6.x-1.x-dev" it may not be recommended, and will then have a red background with an "x" at the right.

### Name Clashes

Another possible cause for a blank page is a name clash, i.e. a module and a theme are using the same name. For example, if module "foo" implements hook\_block() with foo\_block()and there is also a theme "foo", then the theme engine will invoke foo\_block() as the theme function to render a block. While foo\_block() might not trigger a WSOD, foo\_page() will.

No error messages are produced, because this is a wanted behavior of Drupal's theme system.

The solution in most cases is that if either the module or the theme (or both) are custom (created by yourself), rename it.

### Character Encoding on template.php

If the error is as follows, particularly if the output started at line 1, it may be that the character encoding on your template.php file is not set correctly.

Cannot modify header information – headers already sent by (output started at .../sites/all/themes/THEME\_NAME/template.php:1) in .../includes/common.inc on line 314.

This is most likely if you are using an editor such as Dreamweaver, in which case you should either set the encoding to utf8\_unicode\_ci or use a plain text editor to edit the template code.

### Disabling Modules

**Via the Module Administration Page in the UI**

Disabling all the modules, then enabling them one by one can help narrow down a culprit module. To disable the module, simply go to the module admin page (Administer > Site Building > Modules) and uncheck the checkbox next to the module, then click "Save Configuration."

**Via the Database**

If your WSOD is caused by a specific module (e.g. you enabled a module, then got the white screen) and you cannot access the module admin page, it's usually effective to disable the module in the system table of the Drupal database by setting its status to 0 and then clear the cache table.

## WSODs Due to Specific Modules

If you are using any of the following modules, you may want to look at these specific issues that have the potential to cause the WSOD.

### FCKEditor + Webform

If FCKEditor is enabled when adding a new webform on Drupal 5, the 'Additional Processing' field under the 'Webform advanced settings' fieldgroup gets the value of <br /> by default. This causes a blank screen when the form is submitted. To remedy, delete the <br /> from the field.

### Node Access

If you have just enabled or disabled [node access](https://www.drupal.org/project/nodeaccess) module and get the WSOD when attempting to update, you may need to rebuild node permissions. You can do this one of two ways.

First, you can rebuild permissions via the "Rebuild Permissions" button under "Node Access Status" on the Post Settings page at <http://www.example.com/admin/content/node-settings>.

Alternately, you can use a script to update the db node permissions table:

<?php

require\_once './includes/bootstrap.inc';

drupal\_bootstrap(DRUPAL\_BOOTSTRAP\_FULL);

user\_authenticate('admin', 'admin');

$actual=db\_result(db\_query("SELECT nid FROM {node} WHERE nid > %d ORDER BY nid",$\_GET['node']));

if ($actual>0) {

$sencer=node\_load($actual);

node\_access\_acquire\_grants($sencer);

}

?><html>

<head>

<script type="text/javascript">

<!--

function delayer(){

window.location = "rebuild\_permissions.php?node=<?=$actual?>"

}

//-->

</script>

</head>

<body <?=($actual>0 ? " onLoad=\"setTimeout('delayer()', 500)\"" : "") ?>>

<?php

if ($actual>0) echo "doing... ".$actual;

else echo "Done";

?>

</body>

</html>

### Gallery 2 (Embedded)

If you are using [embedded Gallery 2](https://www.drupal.org/handbook/modules/gallery), you have to edit gallerydirectory/config.php to point to the new database server. If you do not do this, you may get the WSOD without any errors (after enabling errors as above).

### PEAR Wiki Filter

If you have moved your module directory, the PEAR Wiki filter will not be able to find the PEAR modules (assuming you installed them underneath the module directory.)

Check your input format in the admin pages and make sure that the "Path of PEAR packages" is correct.

## WSOD on Multisite Installs

If this happens during installation or when starting a multi-site configuration where you are sharing databases or database tables, the reason may also be in the settings.php file in the sites/yoursite/ directory. This happens if you have already edited the $db\_url variable in settings.php. The installer will no longer be automatically invoked, because Drupal assumes installation has already been completed.

If you get the following error messages for example (Drupal 6), the above may be the reason:

PHP Warning: Table 'testing.access' doesn't exist

query: SELECT 1 FROM access WHERE type = 'host' AND LOWER('127.0.0.1') LIKE LOWER(mask) AND status = 0 LIMIT 0, 1 in C:\\My\_webdev\\htdocs\\drupal\\includes\\database.mysql.inc on line 128

PHP Warning: Table 'testing.users' doesn't exist

query: SELECT u.\*, s.\* FROM users u INNER JOIN sessions s ON u.uid = s.uid WHERE s.sid = 'da5qecc9rsf1dinhb4ko1e5dm0' in C:\\My\_webdev\\htdocs\\drupal\\includes\\database.mysql.inc on line 128

PHP Warning: Table 'testing.cache' doesn't exist

query: SELECT data, created, headers, expire, serialized FROM cache WHERE cid = 'variables' in C:\\My\_webdev\\htdocs\\drupal\\includes\\database.mysql.inc on line 128

PHP Warning: Table 'testing.variable' doesn't exist

query: SELECT \* FROM variable in C:\\My\_webdev\\htdocs\\drupal\\includes\\database.mysql.inc on line 128

PHP Notice: Undefined variable: variables in C:\\My\_webdev\\htdocs\\drupal\\includes\\bootstrap.inc on line 427

PHP Warning: Table 'testing.cache' doesn't exist

query: UPDATE cache SET data = '', created = 1209809924, expire = 0, headers = '', serialized = 0 WHERE cid = 'variables' in C:\\My\_webdev\\htdocs\\drupal\\includes\\database.mysql.inc on line 128

PHP Notice: Undefined variable: variables in C:\\My\_webdev\\htdocs\\drupal\\includes\\bootstrap.inc on line 434

PHP Warning: Table 'testing.system' doesn't exist

query: SELECT name, filename, throttle FROM system WHERE type = 'module' AND status = 1 AND bootstrap = 1 ORDER BY weight ASC, filename ASC in C:\\My\_webdev\\htdocs\\drupal\\includes\\database.mysql.inc on line 128

PHP Warning: Table 'testing.url\_alias' doesn't exist

query: SELECT COUNT(pid) FROM url\_alias in C:\\My\_webdev\\htdocs\\drupal\\includes\\database.mysql.inc on line 128

## WSOD on Cloned or Duplicate Sites

There are a few possible culprits for a WSOD on cloned sites.

### Include Paths

If you have created a new Drupal site by copying the files from an install and then importing the db over, and then edited the settings.php file with your new db info, you may still end up with the WSOD.

The [pathauto module](https://www.drupal.org/project/pathauto" \o "Pathauto) has caused problems in this scenario, where it throws fatal errors because of missing includes. In this case, adding this line to the .htaccess file solves the problem instantaneously (the right base path for your own server may be obtained through info.php or by logging into your control panel):

php\_value include\_path '.:/var/www/vhosts/example.com/httpdocs'

### Missing Database Tables

If you are moving a large site and using phpmyadmin to import the DB, it may have either hanged and timed out or caused some tables not be be loaded into the db. to begin, be sure to double check your db to see if all the tables are there.

If moving a large site with a huge db then better import the db via a console (command line), as phpmyadmin is not always able to handle large db files.

## Relic index.html Files, and Server Setup

Sometimes a server will be setup with a blank index.html file in the root directory, and/or Apache may not be configured to search for index.php files with the DirectoryIndex directive. It can look like a WSOD, but really is just an empty page.

To check if this is the case, navigate to <http://www.example.com/index.php> or look for an index.html file in your root directory. If there is an index.html file, make a copy of it outside your root folder, and then delete it and see if it resolves the issue.

## Infinite Loops in your Code

If your site gets a WSOD after a CPanel system update, with notices like this in the error log:

[notice] child pid ##### exit signal Illegal instruction (4)

You may have an infinite loop. Apache has become smart enough to detect this and terminate the script without waiting for a timeout.

You can try disabling modules in the system table until you find the offending module, or put a call to watchdog at the start of every function call in the module, so you can trace the call chain by looking at the watchdog table. If you find a repeating call pattern, look through the code for a loop cycling, eg. node\_load through hook\_nodeapi and/or other functions, and repeating node\_load again.

## PHP Timeout

The default PHP timeout defined in php.ini is 30 seconds. This is too short for some activities like listing/enabling modules.

[Here are details on how to increase the maximum execution time.](https://www.drupal.org/node/66105)

## Inappropriate naming of functions

Defining a custom function in your module code which acts as a Drupal hook function may result in WSOD. Check that the functions, that you define in your module do not use \_menu, \_auth or other extensions if they are not meant to implement that specific hook.

The following code generates a WSOD and Apache segfault in Drupal 5.

function mymodule\_menu() {

array(

'path' => 'auth'

'callback' => 'mymodule\_auth'

);

}

function mymodule\_auth() {

drupal\_execute('user\_login', array('name' => $\_POST['name'], 'pass' => $\_POST['pass']));

}

## Usage of PHP short open tag

Sometime ,mostly when moving to new server, you will get white screen. This may be because of usage of short open tag

<?

instead of

<?php

Solution : edit php.ini and enable short open tag

short\_open\_tag=On

# Fixing white screens step by step

A page being completely blank is commonly referred to as a White Screen of Death (WSOD). Because there is nothing on the page, it is not trivial resolving such a situation and you will have to go under the hood in order to restore your site.

## 1a. Ensure you have proper PHP Configuration, no PHP syntax errors or memory limit

The best approach to solving a WSOD problem is to identify the error– looking behind the blank screen or making it not blank. If you can access server / code at all, enable error reporting or find the system error logs first.

[The **White Screen of Death (Completely Blank Page)** handbook page covers seeing error messages and fixing common WSOD causes](http://drupal.org/node/158043).

## 1b. Check your recent Drupal logs

Try to go to: admin/reports/dblog (Administer -> Recent log entries)  
and check for recent errors.

If you can't, you can also check for recent errors manually in your *watchdog* table by executing following query directly in your SQL client:

SELECT \* FROM watchdog ORDER BY wid DESC LIMIT 20

On Windows you can download: MySQL Workbench (easy to use)  
<http://dev.mysql.com/downloads/workbench/>  
Server Hostname: localhost  
Username: root  
Default Schema: (your database name)

If using the Syslog module, these errors will likely be in your servers syslog.

If you have some errors, please search for it in [Google](http://www.google.com/) or raise a new support ticket:  
<http://drupal.org/node/add/forum/22>

## 2. Easy manual quick-fixing

### Rename a module

Renaming directory name of bad module can temporary ignore that module without database changing and find that one which cause the problem

* Go to the contributed module directory (sites\all\modules\ or modules\) and before each refreshment rename a couple of modules.
* For example:
  + Rename module dir: sites\all\modules\Views to sites\all\modules\Views\_
  + Refresh the page if this helped
  + Rename next module dir: sites\all\modules\Panels to sites\all\modules\Panels\_
  + Refresh the page if this helped
* Note: please ignore core modules like Filter, System, User, etc. to prevent internal error dependencies: those modules don't have any critical issues.

## 3. CSS & JS Compression Issues

If you upload your project to a shared host and do not have sites/default/files/css and /js folders with permissions set to 777, you could possibly experience a WSOD when you go to enable CSS and JS aggregation (admin/settings/performance). It's better to create these folders on your dev machine, give them the 777 permissions, and then upload your project to the live site.

However, if you find that you are live and you cannot change the permissions, disable the aggregation and try renaming the css & js folders. Then create new folders with permission 777.

When you re-enable compression, the WSOD should not re-occur.

## Debugging tricks

### Get backtrace

If some module passes unexpected data types the issues will be hard to track as the error is happening in a completely different place than the place that is causing it.

Some panels ajax only threw a 500 and apache errorlog only told us:  
PHP Fatal error: Unsupported operand types in .../includes/common.inc on line 4461  
No backtrace.

That source told us some module did not pass an array but php expected it:

// Add defaults to the special attached structures that should be processed differently.

$elements['#attached'] += array(

'library' => array(),

'js' => array(),

'css' => array(),

);

But with [Devel](https://www.drupal.org/project/devel) and [Commerce Devel](https://www.drupal.org/project/commerce_devel) module enabled hunting that down was as easy as inserting this code before said line:

if(!is\_array($elements['#attached']))

{

dpm(commerce\_devel\_printable\_backtrace(debug\_backtrace()));

// Don't continue processing bad data.

return;

}

...and collecting a backtrace in the database log.

# Modules page is blank, says "page not found" or returns an error message

If you attempt to load admin/build/modules and get a blank page, a message that says "The requested page could not be found" or a server error, this is most likely a memory issue.

There are two fixes:

1. Increase PHP's memory limit, e.g. to set it to 16MB try one of these:
   * memory\_limit = 16M to your system's main php.ini file (recommended, if you have access. In case you don't, you can try to upload your own php.ini file in the root folder of your Drupal installation, but bear in mind that this will only have an effect if PHP is running as CGI)
   * ini\_set('memory\_limit', '16M'); in your sites/default/settings.php file (this doesn't work on all servers)
   * php\_value memory\_limit 16M in your .htaccess file in the Drupal root (this only works if PHP is running as an Apache module)

Depending on the amount of modules you have enabled and their 'impact' on the site you may need to increase the memory\_limit even more, but don't exceed you server memory limit as it could cause your site more problems. Experiment with what memory value works for your needs. **Some people find they need to set the memory to 24M or 32MB or higher** (e.g. 96MB is recommended for a site with built-in image processing using ImageAPI GD).

1. You can reduce the memory required by your site by disabling modules by directly editing the {system} table in the database and setting the status column to 0. It's best just to disable contributed modules, and preferably those that are not dependents of others. Take a database backup first, in case you mess things up.

# All fatal errors can result in a blank modules page. If you want to be sure if the memory limit is causing this problem, you should check your web server error logs. Hunt for a line that looks like:

# Fatal error: Allowed memory size of 8388608 bytes exhausted (tried to allocate 418591 bytes) in /path/to/drupal/includes/database.mysql.inc on line 29

# That indicates that Drupal needed more memory than PHP was allowed to give it.

# Blank pages or browser errors after enabling page\_cache\_without\_database

# This can only occur after configuring the page cache not bootstrap the database by setting page\_cache\_without\_database. Browsers may show white pages or display error messages to anonymous users hitting pages in the cache.

The cause is bug [#1476810](https://www.drupal.org/node/1476810) in Drupal core. This issue is currently unsolved, but workarounds exist.

Either:

* Enable the setting Compress cached pages on admin/config/development/performance
* Set page\_compresssion to FALSE in settings.php's conf array.

# Missing URL for main admin page

If you haven't enabled the clean URLs option for your site, adding a /?q=admin after your website address will direct you to your admin area. For example: example.com/?q=admin or example.com/drupalsubdir/?q=admin

If you have clean URLs enabled, you can just add /admin after your site address. For example: example.com/admin or example.com/drupalsubdir/admin

# Missing color picker on theme configuration page

**The theme doesn't support color picker**

Not all themes support the color picker. Check the theme's documentation to find out.

**Color module is not enabled**

Make sure to enable color.module on *Administer » Site building » Modules* (admin/build/modules).

**File download settings**

The color picker is incompatible with the Private download method and will only show when the download method is set to **Public - files are available using HTTP directly**.

Visit *Administer » Site configuration » File system* (admin/settings/file-system) to check the download method your site uses.

**PHP's image library GD is not enabled.**

Check your status report at *Administer » Logs » Status Report* (admin/logs/status) to see if the GD library is working on your server. This is needed to actually create the images. If it is not, you need to install it or get your host to do so for you.

**Javascript is disabled.**

You still see the Color scheme fieldset with a select box and a number of textboxes, but no longer the color wheel or the preview.

Make sure you have Javascript enabled in your browser.

# Missing navigation block

A common question in the forums, is you disable a block without realizing the implications of what it does. For instance the main menu/navigation block.

Visit <http://www.example.com/?q=admin/build/block> to change block settings.

Visit <http://www.example.com/?q=admin/build/menu> to change menu items.

# Missing taxonomy choice when adding content

Just create a taxonomy (category) and fill it with a perfect array of terms and make sure your content type is assigned the new taxonomy (category) type.

Go to (*administer > categories > edit vocabulary*) and look under the "Types" heading. There you can assign your taxonomy to any content types you want. Save your configuration here, and try to submit a post. Your taxonomy should now be available in the submission post.

# Plain unstyled HTML output (Theme unavailable)

If your site appears as plain HTML with missing styles and/or images:

Try a view-source and see what the path to the theme CSS in the header is. Does it look correct? Sometimes this can get out of sync when migrating between sites that are almost-but-not-quite identical. Some things to check:

1. It could be **you are trying to use a theme that is not active**. This can happen when you have set the default theme in settings.php but that theme has not yet been added or configured. It can also occur if you did not switch back to the default theme before an upgrade. To fix that issue, go to admin > build > themes and select the default theme (Garland in 5.x and Bluemarine in 4.7 and 4.6).
2. Your $base\_url setting (in your settings.php file) may be misconfigured. The $base\_urlsetting is what gets prepended to all paths for extra resources, such as stylesheets, images, javascript includes and form handlers. If the browser can't find those resources on that path, then they will be missing from the rendered HTML you see in your browser.

**Example:**

When developing and testing on a local Drupal version you might use localhost in your $base\_url. This works fine when using the browser on the development computer, but when you access Drupal from another computer all these extra resources are missing. What is happening is that browser on the other computer is trying to access these extra resources from localhost and failing to find them there. The solution is to change $base\_url to use a hostname that points to Drupal from both computers (i.e., not localhost).

1. This can also happen if the expected theme is deleted, renamed or moved by accident. Occasionally if you are using multisites and have placed the theme into the default or sitename folder instead of all/themes the theme will be invisible after a migration.  
   In this case you can usually visit your themes configuration page to fix it. If the navigation block is unavailable, enter the URL ?q=admin/build/themes directly. ([You may have to log in the hard way first](http://drupal.org/node/111628)).  
   Often, **just viewing and saving that themes admin page** is enough to self-repair, as the system can now locate the real theme path by name. If not, you can at least choose a default theme to use and troubleshoot from there to find where your theme has gone.
2. Check that your theme folder is readable! Sometimes a bad copy or a restore from backup can put the files there but make them unreadable to web processes.
3. When using css aggregation, your system needs to be able to write to the sites/{sitename}/files/ folder (as always). Ensure that your files folder is still correctly writable. Try turning off css aggregation to test.

# Missing user login block

If you have disabled the User Login block, you can always log in to your site by visiting

example.com/?q=user

(or just example.com/user if you have clean URLs enabled).

Once you have logged in to an account with sufficient permissions, you can go to the block administration page to turn the User Login block back on:

Drupal 7/8: Administer > Structure > Blocks  
example.com/?q=admin/structure/block or example.com/admin/structure/block

# Test PHP code before putting it in blocks

# Drupal provides a great deal of power and flexibility when using PHP code in blocks. Unfortunately, a stray character or a missing semicolon may break code. Drupal then attempts to evaluate this broken code on any requested page, the PHP interpreter chokes on it and aborts, and a whole site can become inaccessible.

# Fortunately, there is a very simple solution. Instead of writing and testing code inside the Administer >> Site building >> Blocks page, go to Create content and create a new story or page node. Use PHP input format, write the code, and the Preview to debug your code. Once the code is working, copy and paste the code into the block.

# Alternate methods include:

# Create a block and set use the visibility section to restrict it to a single page until its functionality is confirmed

# "An image thumbnail was not able to be created." error

# Set the security permissions on the following folders to allow WRITE. In other words set the CHMOD to 755 on the following folders. To do so you could use a FTP tool.

# /sites/default/files/

# /files/

# /sites/your-domain-name-here.com/files/

# "Got a packet bigger than 'max\_allowed\_packet' " error

My.inf max\_allowed\_packet = 32M

Restart MySQL

# "Got error 28 from storage engine query" error

"Error 28" often occurs on

* Filesystem full. Hard drive full.
* Host oversell their shared hosting.
* Host misconfigured their shared MySQL install.

To fix this you must increase the space of your filesystem or make room by deleting files. In other words your hard drive is full and MySQL needs more space. If you don't have access you must contact your host provider to report the issue. To speed up their investigation provide them with a copy or a screenshot of the error

# "Method POST is not allowed for the URL /index.htm" error (Error 405)

# Your Drupal directory contains both an index.html and index.php file. Remove the index.html file or configure your web server to look for index.php first before index.html. The same goes for basically any html file in your Drupal directory. If you have for example "node.html" in your root, you get the error message for every form that is submitted to node/\*.

# "Page Not Found" Errors on every page except homepage.

### Narrow the problem

The most likely cause is misconfiguration of mod\_rewrite or clean URLs on the new server. Confirm this by short-circuiting the clean URL system and requesting pages directly, like this:

<http://www.example.com/index.php?q=user>

If the login page is shown, then you can assume that Drupal's page serving mechanism is working properly, but mod\_rewrite isn't working. To determine if mod\_rewrite is enabled, create a file called phpinfo.php in the root of your site. This file should be accessible from a web browser and contain this code:

phpinfo();

### Ensure that mod\_rewrite is enabled

Navigate to phpinfo.php in a browser like this: <http://www.example.com/phpinfo.php>

On that page, look for a section called "Loaded Modules" and check that mod\_rewrite is included. If not, mod\_rewrite is not being loaded by apache and will need to be enabled. The process will be different depending on the server platform and apache build. Keep the phpinfo.php file for now - it will be helpful later.

### Ensure that Drupal's .htaccess file is being used

Once it's been confirmed that mod\_rewrite is enabled, double check that Drupal's .htaccess file is in the site's root, and that it is working. Confirm that .htaccess is enabled by temporarily replacing Drupal's .htaccess file. Make a backup of the existing .htaccess and create one like this...

DirectoryIndex phpinfo.php

Now try the site URL without specifing a page or file in a web browser: <http://www.example.com/>. If you see PHP's phpinfo dump, the .htaccess file worked and you can restore the old one. If not, the server may not be allowing .htaccess overrides for your site.

### Double check your rewrite\_base setting

If phpinfo was displayed, something may be misconfigured in the existing Drupal .htaccess file. Check the documentation for "RewriteBase" and "RewriteEngine" settings.

<http://httpd.apache.org/docs/2.0/mod/mod_rewrite.html>

### Enable necessary .htaccess overrides

If phpinfo was not displayed, locate your apache configuration file and enable the necessary .htaccess overrides. This location will vary by server platform, so check the appropriate documentation. In this example (Ubuntu server), the default apache vhost configuration was located at:

# Crashed Drupal Sessions Table

A corrupt sessions table is rare. We've only noticed it 3 times so far.

Steps to Fix

- in phpMyAdmin select the sessions table and select the "repair table" option. If this does not work then  
- select the sessions table and then chose the "empty" table option. This will truncate the table and cause all data in the sessions table to be lost. The repercussion of this being that all your users will have to log in again.

# Duplicate entry error during node add

# Apparently is produced by a problem during database upgrade, because auto\_increment is not set for node\_revisions table.

Check if 'vid' is PRIMARY KEY on 'node\_revisions' and also check that is set to 'auto\_increment'

**If not try this to fix it:**

Obtain last node ID

SELECT max( nid ) FROM `node`

And sum 1 to the number obtained from previous query and replace YOUR\_NUMBER with it and run:

ALTER TABLE `node\_revisions` ADD PRIMARY KEY ( `vid` )

ALTER TABLE `node\_revisions` CHANGE `vid` `vid` INT(10) UNSIGNED NOT NULL AUTO\_INCREMENT

ALTER TABLE `node` AUTO\_INCREMENT=YOUR\_NUMBER

ALTER TABLE `node\_revisions` AUTO\_INCREMENT=YOUR\_NUMBER

# Fatal error: Allowed memory size of X bytes exhausted (tried to allocate Y bytes)...

* **For SHARED HOSTING -**complete the steps below, creating a php.ini file and putting it in the Drupal root. Copy the entire contents of the original php.ini file and paste them into the new php.ini file you've made in your Drupal root. Now change the memory\_limit directive to say 128M.

**How to make a shared server refresh and use this new php file -** Go to your host and open your cpanel account. Now look for a section that says "PHP Processes"...Open this section, and click "Kill Processes". This will refresh apache and pick up your new php.ini file on a shared hosting account.

* + Memory increase to 128M:  
    (This has worked every-time; and used to always work for D6 as well)  
      
    Create a new file php.ini, and add the code...  
    php\_value memory\_limit = "128M"  
    and put that file in your Drupal 7 (or D6) root folder.
    - For step-by-step details, see comment below...  
      [Drupal 7 "Fatal error: Allowed memory size of ..."](http://drupal.org/node/76156#comment-4582924).
  + If you need more than 128M:  
      
    Add the line  
    ini\_set('memory\_limit', '512M');  
    to your [Drupal 7 root]/sites/default/settings.php file.  
      
    I have yet to need this much memory, but I did achieve  
    a memory increase to 512M using this slightly more complicated  
    process that involved temporarily changing the permission level  
    for that file.
    - For step-by-step details see the comment below [Drupal 7 memory increase to more than 128M](http://drupal.org/node/76156#comment-4583384).

### Reducing Memory Usage

### 1. Views (can) use a lot of memory

### 2. Moving stuff from database into code is a very good practice

### 3. Themes can also eat memory

### 4. Don't go overboard on contrib modules

### 5. When all else fails, clone to localhost and beat it with a stick

# Workaround for images

# if this memory exhausted error occurs during image uploads, there is a workaround: decrease the image dimensions. I got this errors for 2448x1836 pixels, and after decreased the dimensions to 1024x768 pixels, it works fine at 32M PHP memory.

# PDOException: SQLSTATE[23000]: Integrity constraint violation: 1048 Column 'title' cannot be null

# drush eval 'foreach (entity\_get\_info() as $entity\_type => $entity\_info) { empty($entity\_info['label']) && var\_dump($entity\_type, $entity\_info); };'

# It will print the invalid entity type.