A note on phpbb migration from 3.0.12 to 3.1.x on Internet Information Services servers:

If you are about to upgrade your phpbb forum from 3.0.12 to 3.1.x on a Windows Server, the following information might help you or, if it doesn't, I hope it will at least be interesting and fun to read.

When upgrading your phpbb forum from 3.0.12 to 3.1 on a IIS server, you will eventually reach the state in which you need to run *database_update.php* to start the database migration from one version to another.

You can simply run *database_update.php* from the browser, but you might encounter a problem in which the website will remain in an "Updating" state forever.

Is it really updating at this point?

It wasn't for me. A smart way to know this is by pressing F12 in your browser, which will allow you to see some source display errors. In my case I clearly had a HTTP error 500 (Internal Server Error).

So, how can we know from here what is happening server side? What's the cause of the error 500? In these cases I find pretty useful to enable the *php.ini* flags for displaying php application errors on the Windows Event Viewer.

You will need *log errors* = *On* and *error log* = *syslog*.

Once this is ready, open the Windows Event Viewer and have a look at your latest application errors.

In my case, it was obvious that the system in charge of migrating the phpbb database to the latest version was failing to write logs into a not writable folder.

In particular, the error was coming from phpbb\db\log wrapper migrator output handler.php

```
protected function file_open($file)
{
    if (phpbb_is_writable(dirname($file)))
    {
        $this->file_handle = fopen($file, 'w');
    }
    else
    {
        throw new \RuntimeException('Unable to write to migrator log file');
    }
}
```

It turned out that during the migration process you had to make sure the folders cache, files, images and store were writable.

Depending on your Windows IIS settings, it might not be enough to do this from Windows Explorer or from a FTP client. The easiest way to do this is from the IIS Manager, by right clicking on the mentioned folders, and editing the security permissions for the corresponding user group (such as the Application Pool Identity).

Now you will be able to re-run database update.php successfully.

Once you have finished, depending on your preferences and security needs, you might want to reset the **images** folder permission settings.

Of course, it all depends on your server configuration and the above mentioned tips might not apply to certain setups.

Additional notes:

- The phpbb installation document mentions the affected folders on section 1.4 (https://www.phpbb.com/community/docs/INSTALL.html)
- It also provides a few bullet points on the post installation permissions setup and the fact that it might require Windows specific setup steps for IIS environments.