

Upgrade

This page belongs to the Core Team (category Core Team)

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[edit] ^[1]

This is a step by step guide on how to upgrade an installation of TYPO3 to a newer version.

Note If a step is not understandable, you can note that here!

General information

Think of active users

Think of users who might want to do any changes during your upgrading and/or fallback. Inform them **before** you start!

Backup

Make a backup first! If things go wrong, you can at least go back to the old version.

You need a backup of

- all files of your TYPO3 installation (by using FTP, SCP, rsync, or any other method)
- the database (by exporting the database to an SQL file)

Which version to use

Generally (when there are no backwards compatibility concerns), you should always use the most recent version of a branch.

You can download the source code from typo3.org/download ^[2].

Install the newest version from the branch you want. You should not only go through the notes for *the* version, to which you are updating, but also the notes for any intermediate versions, as these might also contain instructions you should follow.

Read the Release Notes for the main versions

You should read the Release Notes of the main versions you go through when updating (e.g. 6.0.0 and 6.1.0). These documents contain a section called "Upgrading", which you should follow.

See list of all Release Notes.

Common procedures

Depending on your situation you might have to do some or all of the following during your upgrade. We put those general information in front so that we don't have to repeat them all over. Go on with the special section which applies to the update you want to do. But if the special instructions refer to this section, follow the procedures explained here.

Converting global to local extensions

Global extensions used to be saved in folders inside `typo3/ext/`, such as `typo3/ext/realurl`. In current versions of TYPO3, this location should no longer be used. Instead, save local extensions in `typo3conf/ext/[Ext-Name]`. (Note `typo3conf/` instead of `typo3/`.)

To convert a global extension to a local one, do the following:

1. Go to the Extension Manager.
2. Uninstall the global extension.
3. Delete the files of the extension from `typo3/ext/[Ext-Name]`, including the directory `typo3/ext/[Ext-Name]` itself.
4. Reinstall the extension from TER as *local*.

Installing a new TYPO3 version ("upgrading TYPO3 core source code")

If you're using symbolic links for the TYPO3 core (see below, *nix only):

- Extract the source code package alongside the old version directory
- Unlink the old `typo3_src` folder
- Link the new `typo3_src` folder to the new version's directory

If the TYPO3 core is physically located directly inside the web root:

- Unlink the folders
 - `typo3/`
 - `media/`
 - `tslib/`
 - `t3lib/`
 - and the files `showpic.php` and `index.php`
- 2. Copy the extracted contents of the new source code into the same location where you've just deleted the old source code.

Upgrading the database after installing a new version

1. Enter the install tool.
 - You can access it by appending `typo3/install` to the URL of your site. If you see a message saying that it has been disabled, you can create an empty file called `ENABLE_INSTALL_TOOL` in the folder `typo3conf/`. Depending on your TYPO3 version you can also create this file in the BE via "User Tools"->"User Settings"->"Admin Functions"->"Create Install Tool Enable File". In newer versions you can just go the Install Tool from inside the BE and you will see a button "Unlock the Install Tool". The page must once be refreshed and you should be able to log in.
2. In section "Database Analyzer":
 - Scroll down to "Update required tables"
 - Click "COMPARE" and apply the proposed changes: Add and change all definitions as proposed. You *can* also remove those columns/tables, which are marked to be removed; these are no longer needed in the new TYPO3 version.
 - Click "IMPORT" and apply the proposed changes: Import the data for the tables in the list.
3. In section "Basic Configuration":

- If no Encryption Key is set, set an Encryption Key. (It is likely that the Encryption Key is not set, if you are updating from a TYPO3 version prior to 4.1.)
4. In section "Upgrade Wizard":
 - Set the compatibility version. It is optional to set this to the version number of your new TYPO3 version. Doing so, however, enables you to use the new features concerning the frontend output (like new default styling rules from CSS Styled Content). **Changing this can affect the frontend output!**
 5. In section "Edit files in typo3conf/":
 - Delete all `temp_CACHED*` files.

Upgrading to 4.5 Long Term Support

Situation: You want to upgrade from version 4.4 to 4.5 with Long Term Support.

In short

1. Change all global extensions to local ones (see "Common procedures" above).
2. Install new source code (see "Common procedures" above).
3. Upgrade database (see "Common procedures" above). Also install the new system extensions, if you want them: Some functionalities, which could not be deactivated in former TYPO3 versions, are now system extensions, which you can deactivate if you don't use them. This applies to Filelist (File > Filelist), Perm (Web > Access), Func (Web > Func), Info (Web > Info) and Recordlist (Web > List).

Important: Update to UTF-8

From TYPO3 4.5, charsets other than UTF-8 are deprecated. Although TYPO3 still supports different charsets, the default is now UTF-8. **In one of the later major releases of TYPO3, support for charsets other than UTF-8 will be dropped.**

To find out which charset your installation is currently using, use the the Update Wizard. See <Issue>18501</Issue> for details.

You can find upgrading instructions in our page about Updating to UTF-8.

Next steps

- Then use the section "Database Analyser", do a "Compare" and do the proposed updates until the Install Tool says, that everything is OK.
- Below "Compare", you find "Dump static data" and the link "IMPORT". Follow this link and select table "sys_ter" in order to add initial "TYPO3.org Main Repository" to the list of repositories.
- Then go to the section "Edit files in typo3conf/" and delete the `temp_CACHED*`-files. This clears all caches.

After upgrading

- **Upgrade the extensions you use.** Delete unused extensions.
- Go to the Extension Manager and open the section "Translation Handling". Check and **update your translations.** In TYPO3 4.5 especially the texts in the forms for editing Pages and Content Elements have been changed. If you don't update your translations, you will partly see these texts in English only. (The translations are available, after the translation team for your language has translated the texts.)

Notes

- Hints on UTF-8 and broken special chars can already be found in UTF-8 support.
- If you have problems with the error "BLOB/TEXT column 'identifier' used in key specification without a key length" popping up while migrating your database, try changing the `$TYPO3_CONF_VARS['SYS']['multiplyDBfieldSize']` to 1. (Note that 1 is the default value and that values other than 1 are not necessary when your database uses UTF-8 encoding.)
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Upgrading to 4.6

Situation: You want to upgrade from version 4.5 to 4.6.

Be aware that you need **PHP 5.3** at least!

In short

1. Change all global extensions to local ones (see "Common procedures" above).
2. Install new source code (see "Common procedures" above).
3. Upgrade database (see "Common procedures" above).

Important: Update your RTE configuration

From TYPO3 4.6 on, some TSconfig properties related to the RTE have become deprecated. Use the Upgrade Wizard in the Install Tool to check and adjust your TypoScript. Some of the replacements have to be done by hand as noted in the Upgrade Wizard.

Note that the developers have also adjusted the default configuration of the RTE to use the new properties instead of the old ones. If you've overridden any of the old properties, be sure to port the changes over to the new properties or you might get unexpected results since modification of the old defaults won't work anymore (because the old defaults are no longer used).

After upgrading

- **Upgrade the extensions you use.** Delete unused extensions.
- In the Extension Manager, section "Translation Handling", check and **update your translations**. Older TYPO3 versions used `locallang.xml` files to translate the backend. In TYPO3 4.6, this has been changed to XLIFF. All old labels have been converted and new labels are provided solely in this format. For backwards compatibility the new translation packages also contain the old files.

Notes

- TYPO3 4.6 is subtitled "--rebase". This alludes to the fact that code that has been deprecated since at least TYPO3 4.4 has now been removed. Make sure to use the newest versions of all extensions, because old versions will likely use some of these formerly deprecated and now removed functions. By reading the deprecation log (located in `typo3conf/`, if it is enabled), you can find out about code using deprecated functionality.
- A list of all important changes and improvements is available [here](#).
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Extensions that are not yet compatible

The following Extensions are not compatible with TYPO3 4.6:

- **ics_awstats** Version 0.5.3. -> Workarounds can be found in <issue>31466</issue> and in <issue>37122</issue>. With them ics_awstats is working with TYPO3 4.6. <extension>ics_awstats</extension>

Upgrading to 4.7

Situation: You want to upgrade from version 4.6 to 4.7.

As in TYPO3 4.6 you need PHP 5.3 at least.

In short

1. Change all global extensions to local ones (see "Common procedures" above).
2. Install new source code (see "Common procedures" above).
3. Upgrade database (see "Common procedures" above).

Important: UTF-8 is the only supported character set

In earlier releases it has been announced that TYPO3 in the future will only support UTF-8 as the charset to work with internally. **TYPO3 4.7 now is the first release, which only supports UTF-8.**

The following configuration options have been changed[3][4] and might need adjustment in your installation:

- `$TYPO3_CONF_VARS['BE']['forceCharset']`: This option is not used anymore in TYPO3 4.7. If you have set it, TYPO3 will only work, if its value is "utf-8".
 - If you already used the value "utf-8", you can just remove this line from your localconf.php. As this setting is no longer used, explicitly setting it is discouraged.
 - All values other than "utf-8" will prevent TYPO3 from running and will trigger an error. If you used another value, please proceed to the Update Wizard in the TYPO3 Install Tool to update your configuration. Since the backend and the database will communicate "thinking" that they use the charset UTF-8, you must make sure that they really do. Otherwise you will create a charset mix in your database, which will be hard to fix later. See our page on UTF-8 conversion for information on how to fix your environment accordingly.
- `$TYPO3_CONF_VARS['SYS']['setDBinit']`: This option is not used anymore in TYPO3 4.7. If you have set it, TYPO3 will only work, if its value contains "SET NAMES utf8;".
 - If your value already contains "SET NAMES utf8;", it's just fine. If that is all you have set there (might probably be), you should remove this line from your localconf.php file; TYPO3 4.7 makes sure that `SET NAMES utf8;` is sent to the database anyway.
 - If you have set this option and your value does not contain `SET NAMES utf8;`, TYPO3 will not run and will only give out an error message. Your database, its connection and TYPO3 must then be migrated to UTF-8. Please change your setup accordingly. Our page on UTF-8 conversion contains all the information you might need to update your installation.

After upgrading

- **Upgrade the extensions you use.** Delete unused extensions.
- In the Extension Manager, section "Translation Handling", check and **update your translations**. If you don't update your translations, new texts will only be displayed in English to you. (The translations are available, after the translation team for your language has translated the texts.)

Notes

- Instructions on switching to UTF-8 can be found in UTF-8 support...

Upgrading to 6.0

Situation: You want to upgrade from version 4.7 to 6.0.

Be aware that you need **PHP 5.3.7** at least!

In short

1. Change all global extensions to local ones (see "Common procedures" above).
2. Install new source code (see "Common procedures" above).
3. Upgrade database (see "Common procedures" above and special notes below).

Important: Changed localconf.php handling

Using the file `typo3conf/localconf.php` now is deprecated. Directly after completing the steps above you should use the Upgrade Wizard in the Install Tool and migrate your `localconf.php` file to the new format.

The wizard will create two new files in the folder `typo3conf/`: `LocalConfiguration.php` and `AdditionalConfiguration.php`.

- `LocalConfiguration.php` will contain all the settings from `$TYPO3_CONF_VARS` or `$GLOBALS['TYPO3_CONF_VARS']`. Additionally your database settings will be migrated into this file as well; you find them in the array with the key 'DB'.
- `AdditionalConfiguration.php` basically is an empty file, which is executed somewhen after `LocalConfiguration.php`. If you had additional stuff besides `$TYPO3_CONF_VARS` (this might be `require_once`-calls to some scripts you use or settings of enviroment variables) in `localconf.php`, they will be added to `AdditionalConfiguration.php`. **During this process comments are *not* transferred, so take a look at `localconf.php` and copy all wanted comments to `AdditionalConfiguration.php`.**
- `localconf.php` will be renamed to `localconf.obsolete.php` and is no longer needed. If everything works, you can safely remove it.

After upgrading

- **Upgrade the extensions you use.** Delete unused extensions.
- In the (new) module "Language" check and **update your translations**. If you don't update your translations, new texts will only be displayed in English to you. (The translations are available, after the translation team for your language has translated the texts.)

Important: Adjust user/group permissions

- If you gave your editors access to some image-related features, you have to **update the access list** of the BE user or of the BE group to allow them viewing and editing images in content elements. To do so give them access to the tables "File Storage", "File", "File Reference" and "File Collection".
- Also update the list with the **allowed exclusion fields**: If you granted the user/the group the right to edit the **image position** or the **column number**, you have to add the according rights "imageorient" and "imagecols" again.

Notes

- Compared to older versions nearly all files were moved in TYPO3 6.0. Although a compatibility layer has been brought in place, there is a slightly higher chance that you run into errors (e.g. if you are calling functions directly inside `LocalConfiguration.php`). If you get an error that a certain class or a function could not be found, open the file, which is mentioned in the error message and read the comment to find out, where this particular class has been moved. Then replace the call to the old class with a call to the new one.
Example: If you get an error that `t3lib_div::getIndpEnv()` could not be found, check the file `t3lib/t3lib_div.php` to find out, where the content of this file has been moved. Then replace the call with a call to `TYPO3\CMS\Core\Utility\GeneralUtility::getIndpEnv()`, where this function is located now.
- If you used the setting `mod.SHARED.colPos_list` in Page TSconfig in order to display only selected columns in the page module, you have to replace this setting by a Backend Layout. This gives you more flexibility: E.g. it allows you to define different layouts and to let your editors pick the one they need on a page-by-page basis.

Upgrading to 6.1

Situation: You want to upgrade from version 6.0 to 6.1.

You need **PHP 5.3.7** at least!

In short

1. Change all global extensions to local ones (see "Common procedures" above).
2. Install new source code (see "Common procedures" above).
3. Upgrade database (see "Common procedures" above and special notes below).

Important: System extension "statictemplates" has been removed

The system extension "statictemplates" was removed from the TYPO3 Core. If you used it, make sure to go through the according Upgrade Wizard in the Install Tool. It will import and install the extension from TER.

After upgrading

- Truncate all cf_* tables due to outdated cached information.
- **Upgrade the extensions you use.** Delete unused extensions.
- In the module "Language" check and **update your translations**. If you don't update your translations, new texts will only be displayed in English to you. (The translations are available, after the translation team for your language has translated the texts.)

Notes

- EXT:tt_news: Version 3.4.0 (currently in TER) is not compatible with TYPO3 CMS 6.1; but there is a working (and patched) tt_news-version in the governmentpackage
- EXT:tt_news: updatescript of 3.4.0 is currently not compatible with TYPO3 CMS 6.1; if you upgrade from tt_news version 2.x, use the extensions updatescript before upgrading TYPO3 itself

Upgrading to 6.2

Situation: You want to upgrade from version 6.1 to 6.2.

You need **PHP 5.3.7** at least!

In short

1. Change all global extensions to local ones (see "Common procedures" above).
2. Install new source code (see "Common procedures" above).
3. Upgrade database (see "Common procedures" above and special notes below).

After upgrading

- Truncate all cf_* tables due to outdated cached information.
- **Upgrade the extensions you use.** Delete unused extensions.
- In the module "Language" check and **update your translations**. If you don't update your translations, new texts will only be displayed in English to you. (The translations are available, after the translation team for your language has translated the texts.)

Notes

- The folder `t3lib/` has been removed; remove the according symlink!
- A smooth migration extension is available - it is especially useful for upgraders from TYPO3 4.5. It can be downloaded from TER (`<extension>smoothmigration</extension>`) or from its GitHub repository ^[5].
- Additional information on smooth migration is available in the Forge smooth migration project ^[6].
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References

- [1] <http://wiki.typo3.org/wiki/index.php?title=Upgrade&action=edit§ion=0>
 - [2] <http://typo3.org/download/>
 - [3] <http://forge.typo3.org/issues/34092>
 - [4] <http://forge.typo3.org/issues/34369>
 - [5] <https://github.com/nxpthx/typo3-upgradereport>
 - [6] <http://forge.typo3.org/projects/typo3cms-smoothmigration/wiki>
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