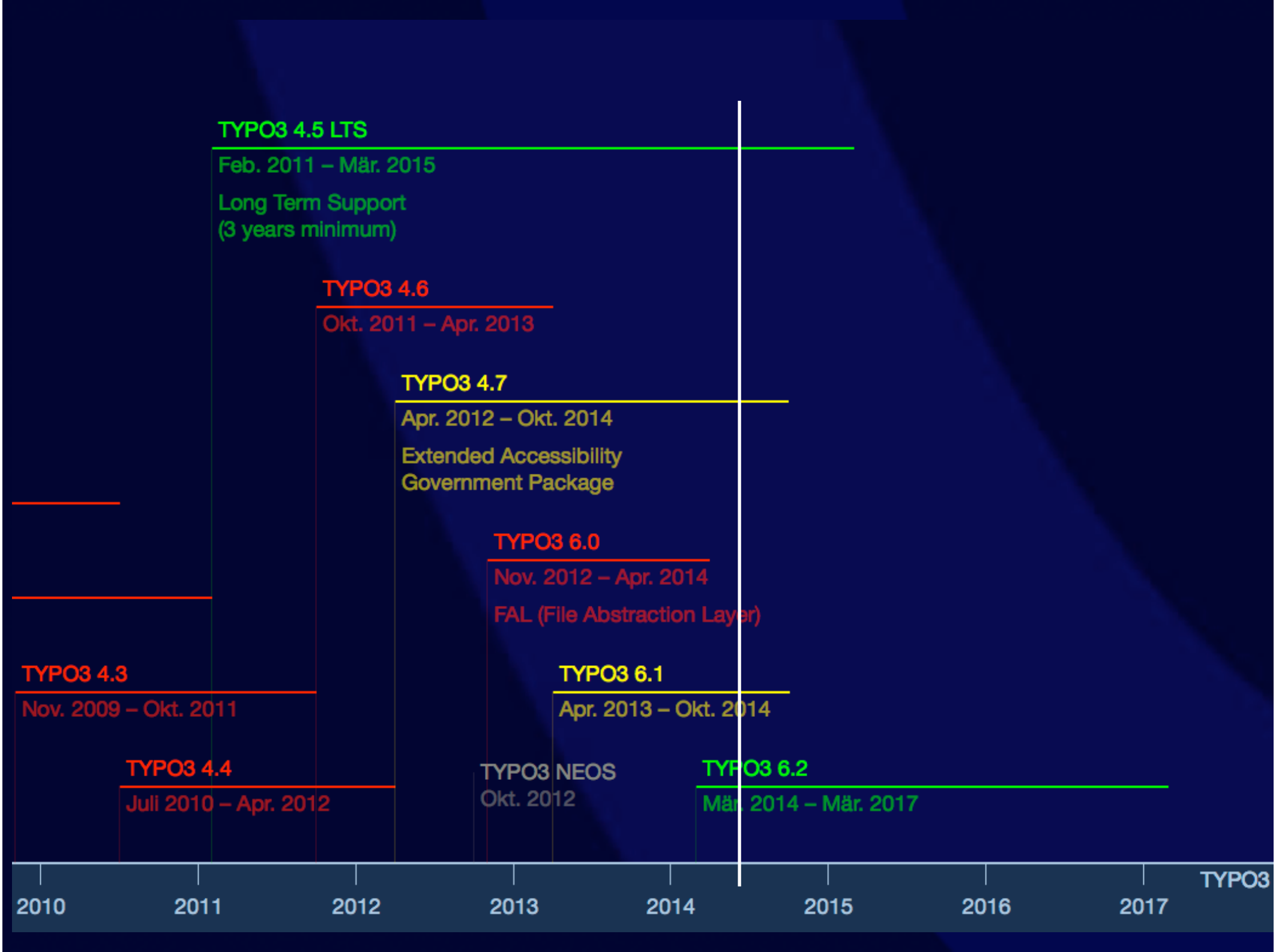
Smooth Migration TYPO3 4.5 > 6.2 LTS

Jürgen Godon

Phantasialand Brühl, 05.06.2015

jweiland.net


TYPO3 4.5 LTS
Feb. 2011 – Mär. 2015
Long Term Support
(3 years minimum)
TYPO3 4.6
Okt. 2011 – Apr. 2013
TYPO3 4.7
Apr. 2012 – Okt. 2014
Extended Accessibility
Government Package
TYPO3 6.0
Nov. 2012 – Apr. 2014
FAL (File Abstraction Layer)
TYPO3 4.3
Nov. 2009 – Okt. 2011
TYPO3 6.1
Apr. 2013 – Okt. 2014
TYPO3 4.4
Juli 2010 – Apr. 2012
TYPO3 NEOS
Okt. 2012
TYPO3 6.2
Mär. 2014 – Mär. 2017
TYPO3
2010
2011
2012
2013
2014
2015
2016
2017

facts

- customers loves LTS versions
- most TYPO3 projects are 4.5 LTS

jweiland.net

facts

- 4 years since release 4.5
- 40 releases since

jweiland.net

facts

- 5 Major Releases:

  4.5 → 4.6 → 4.7 → 6.0 → 6.1 → 6.2

  each with a lot of new features!

jweiland.net

thank you to Patrick Lobacher

(he documented all changes)

www.lobacher.de

NEU TYPO3 CMS 7.2 - DIE NEUERUNGEN (STAND 28.04.2015)

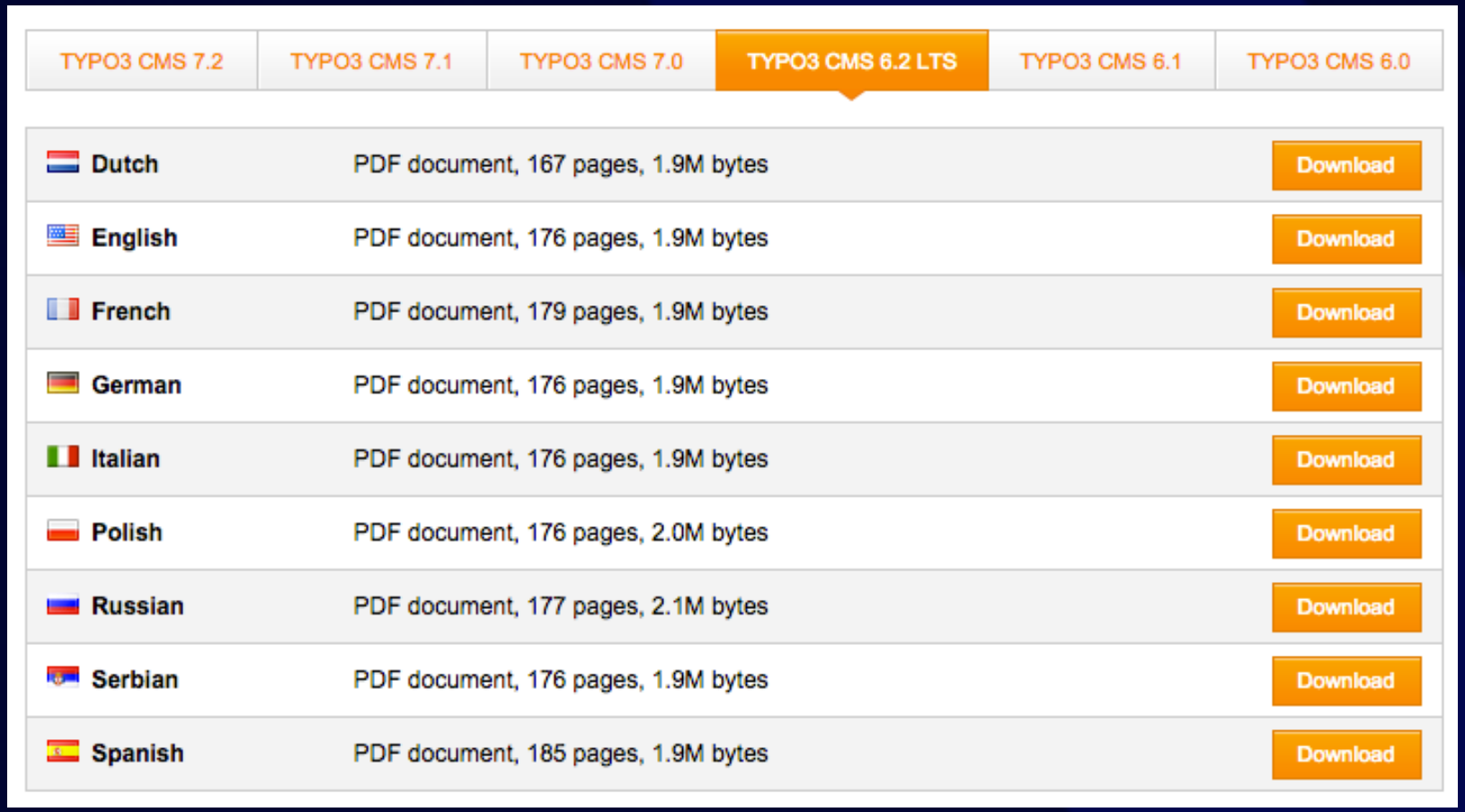
Am 28.04.2015 ist die neue Version TYPO3 CMS 7.2 LTS veröffentlicht worden. Wie bereits seit 5
Neuerungen detailliert recherchiert und zusammengefasst. Diesmal auf über 67 Slides - viel Spaß

Alte Versionen: 7.1 | 7.0 | 6.2 | 6.1 | 6.0 | 4.7| 4.6 | 4.5 LTS | 4.4 | 4.3

jweiland.net

550+ sites of changes

http://typo3.org/download/release-notes/whats-new/



jweiland.net

Preparing the upgrade

jweiland.net

IMPORTANT!

- Never do an update directly on the live page
- Always make upgrade on a copy
- Exists a backup? Really?

jweiland.net

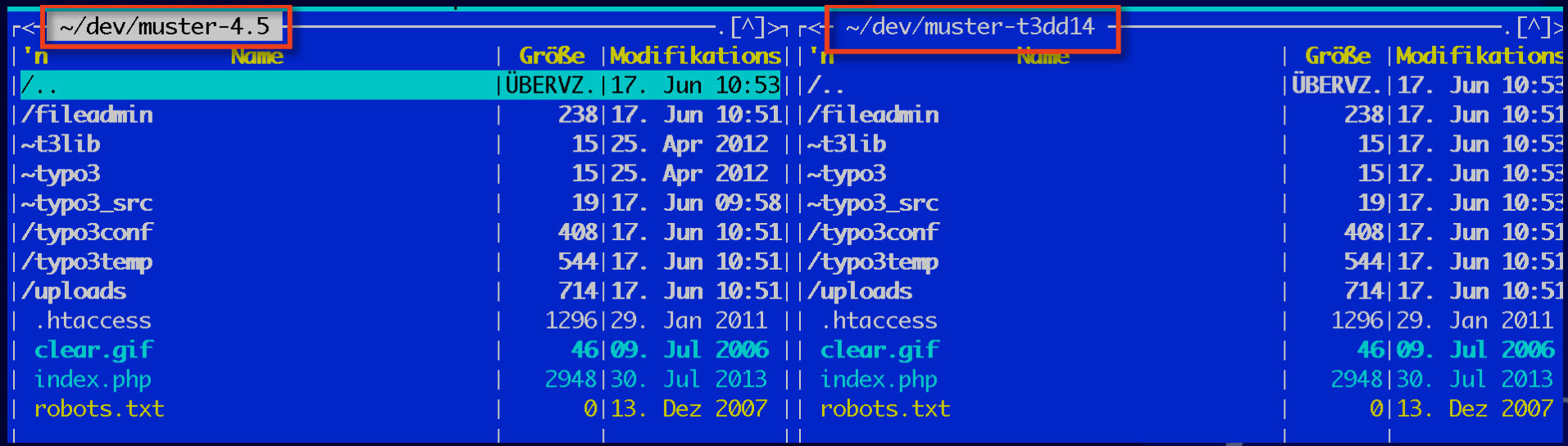
Your choice:

- Clean the installation, then create copy
  - faster, but changes on live side
- Create copy, then clean up
  - safer, but more slowly

jweiland.net

Make the copy

- Copy the complete file structure of the project



Copy the database

- Create a new empty database
  - Collation: utf8_general_ci
- make a dump of database:

```
mysqldump --opt -u user1
-ppassword1 olddatabase | mysql
-u user2 -ppassword2 newdatabase
```

jweiland.net

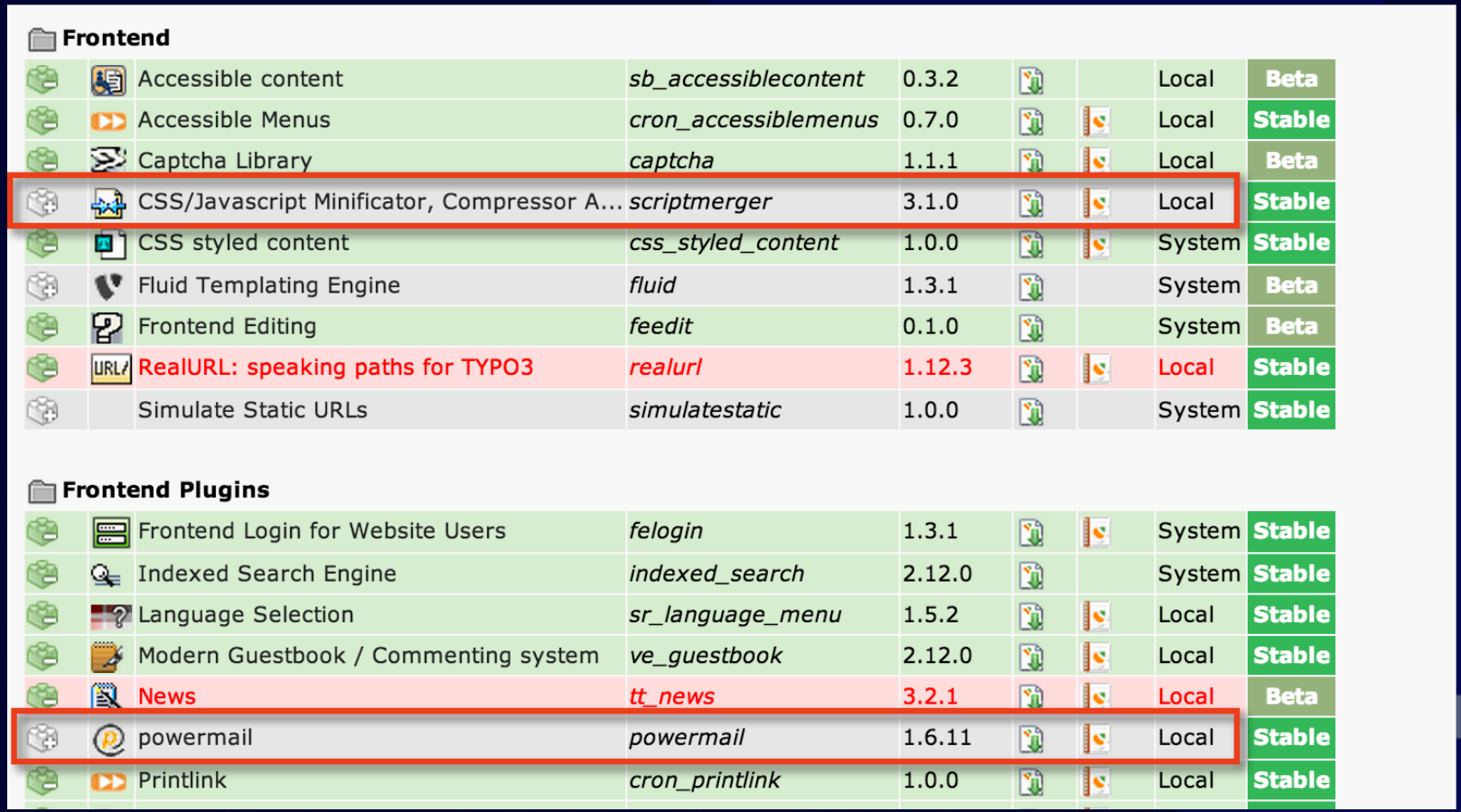
finish the copy

- Create an new (sub)domain (VHost) and customize domain record
- localconf.php (or via Install Tool): customize the database parameter
- TypoScript: change the baseURL

jweiland.net

Clean the installation

- Local, delete not installed Extensions

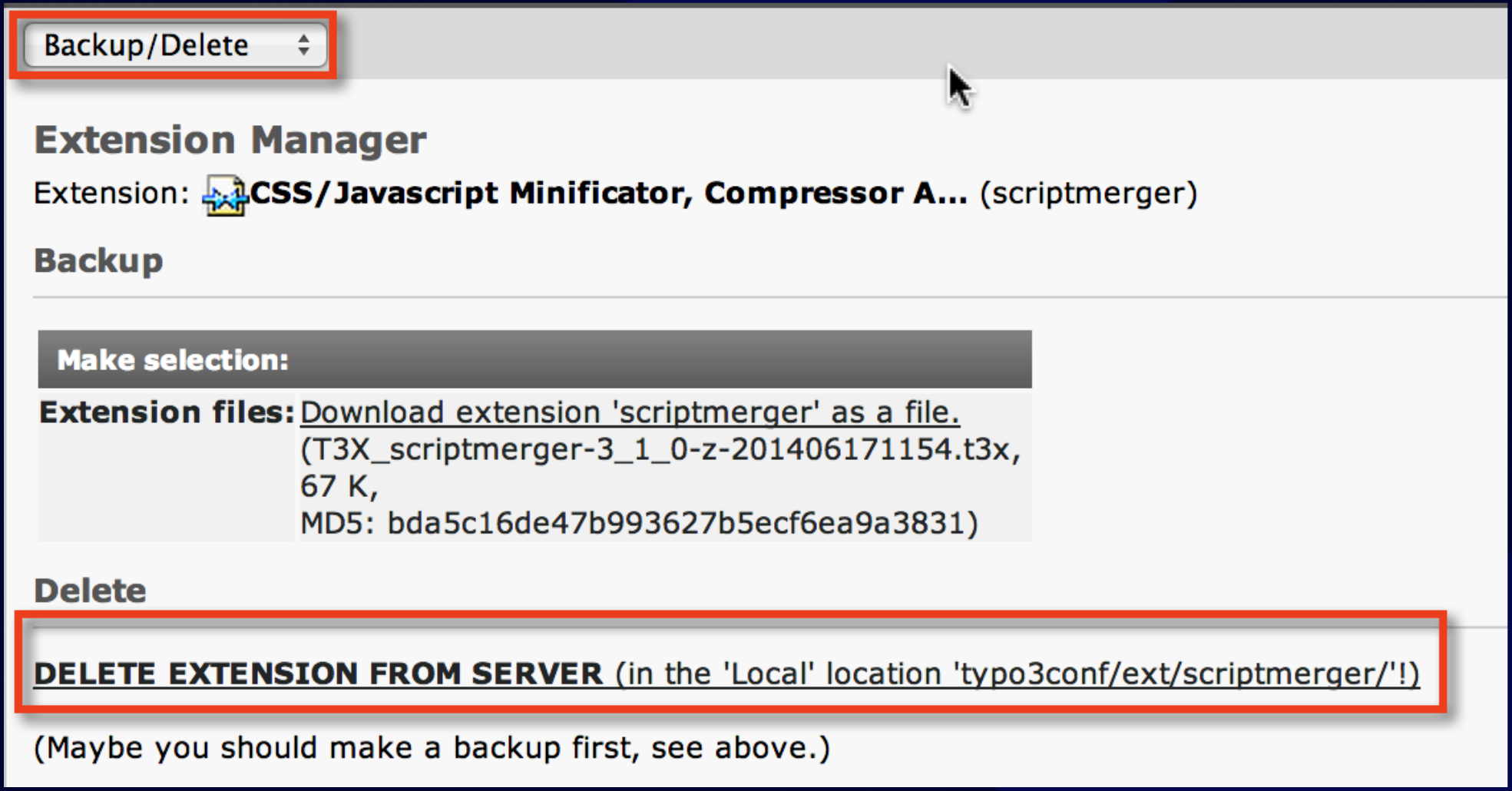


Frontend

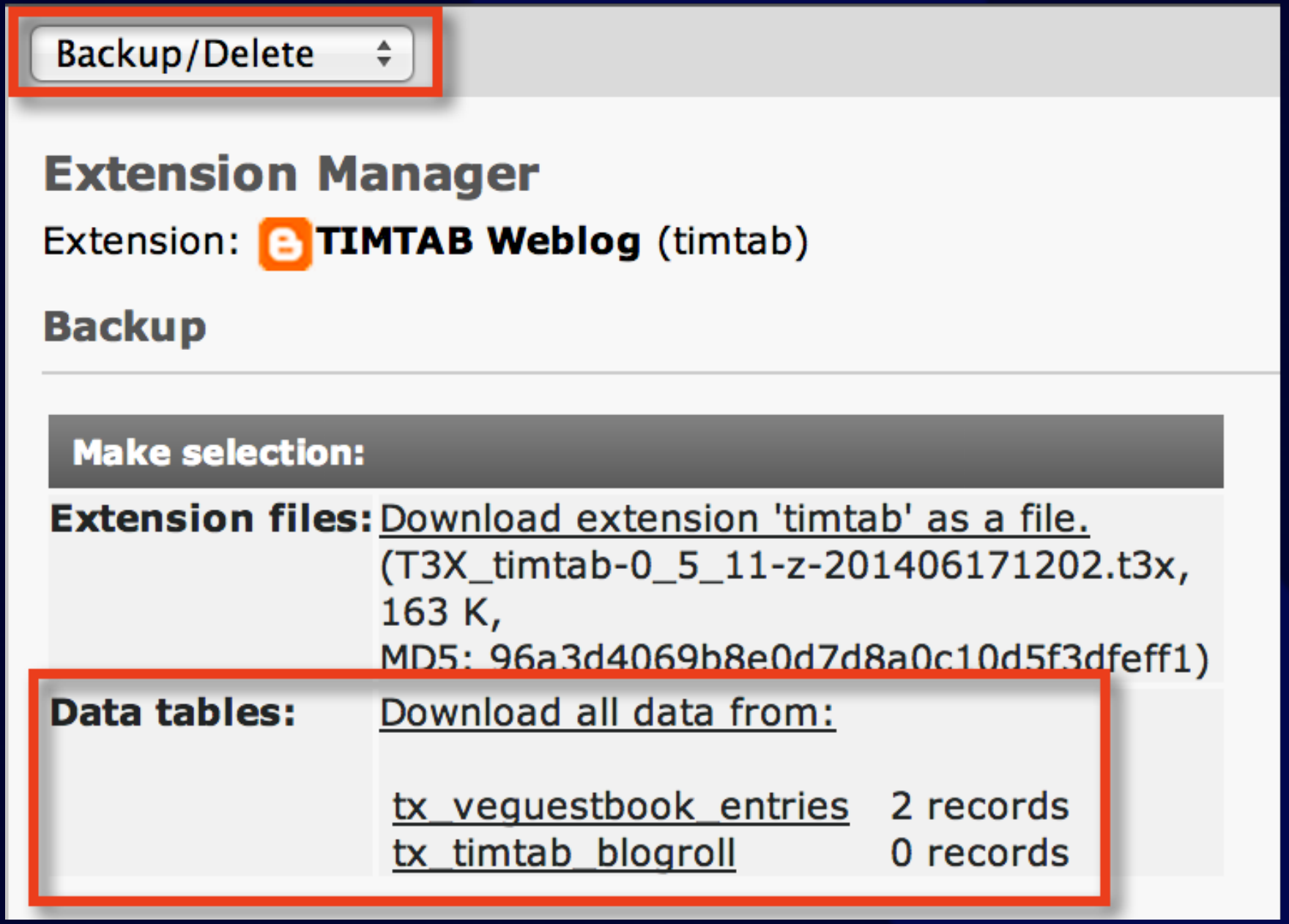
Accessible content	*sb_accessiblecontent*	0.3.2			Local	Beta
Accessible Menus	*cron_accessiblemenus*	0.7.0			Local	Stable
Captcha Library	*captcha*	1.1.1			Local	Beta
CSS/Javascript Minificator, Compressor A...	*scriptmerger*	3.1.0			Local	Stable
CSS styled content	*css_styled_content*	1.0.0			System	Stable
Fluid Templating Engine	*fluid*	1.3.1			System	Beta
Frontend Editing	*feedit*	0.1.0			System	Beta
RealURL: speaking paths for TYPO3	*realurl*	1.12.3			Local	Stable
Simulate Static URLs	*simulatestatic*	1.0.0			System	Stable

Frontend Plugins

Frontend Login for Website Users	*felogin*	1.3.1			System	Stable
Indexed Search Engine	*indexed_search*	2.12.0			System	Stable
Language Selection	*sr_language_menu*	1.5.2			Local	Stable
Modern Guestbook / Commenting system	*ve_guestbook*	2.12.0			Local	Stable
News	*tt_news*	3.2.1			Local	Beta
powermail	*powermail*	1.6.11			Local	Stable
Printlink	*cron_printlink*	1.0.0			Local	Stable

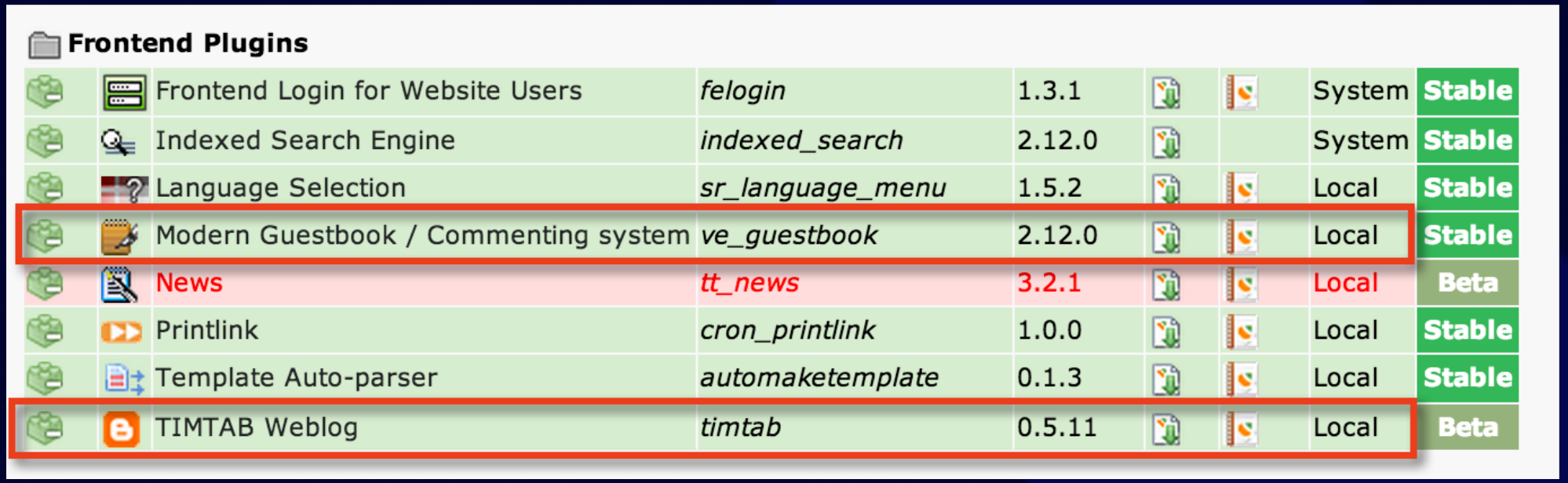


jweiland.net



jweiland.net

Deinstall the installed, unused Extensions



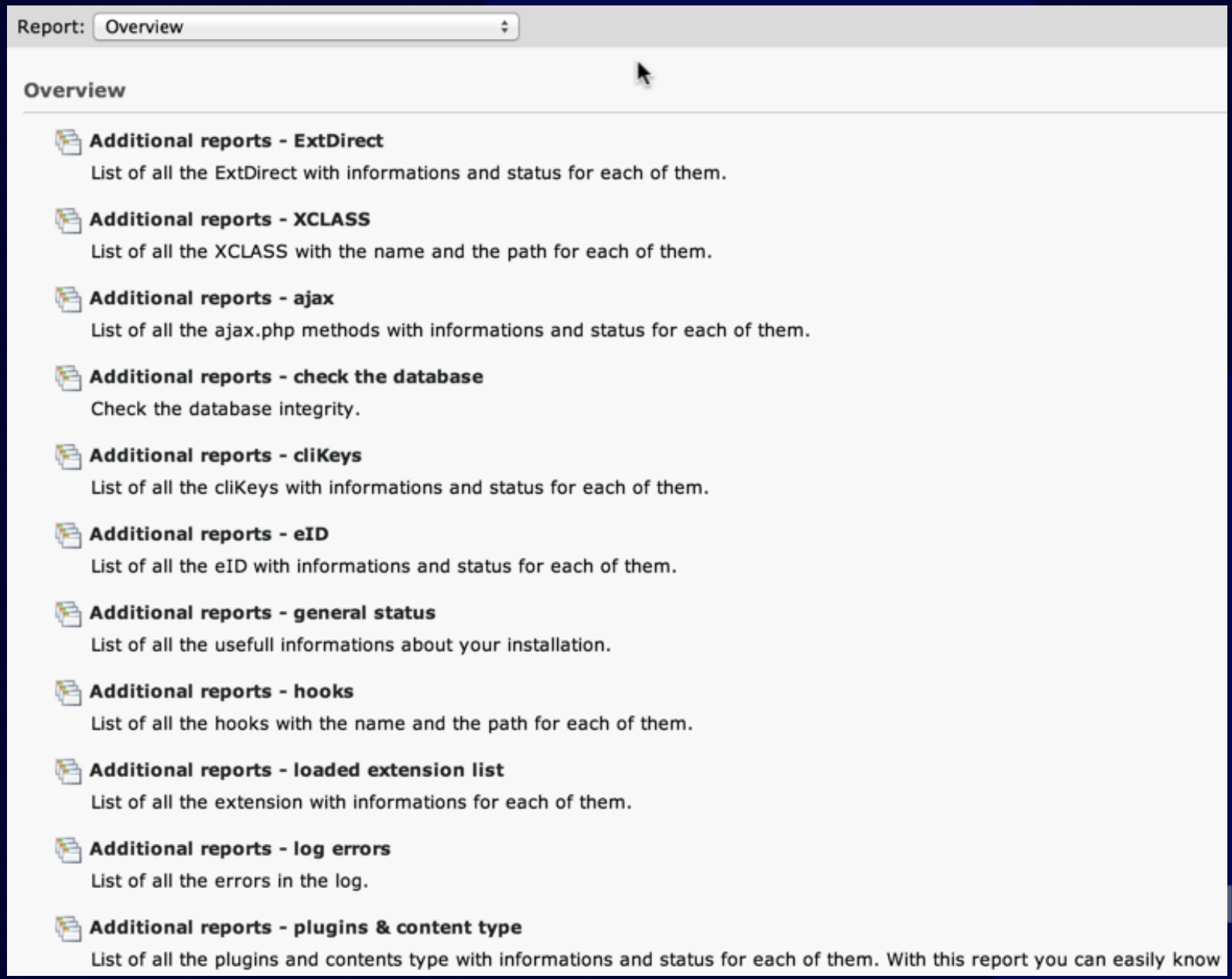
Frontend Plugins

Frontend Login for Website Users	*felogin*	1.3.1			System	Stable
Indexed Search Engine	*indexed_search*	2.12.0			System	Stable
Language Selection	*sr_language_menu*	1.5.2			Local	Stable
Modern Guestbook / Commenting system	*ve_guestbook*	2.12.0			Local	Stable
News	*tt_news*	3.2.1			Local	Beta
Printlink	*cron_printlink*	1.0.0			Local	Stable
Template Auto-parser	*automaketemplate*	0.1.3			Local	Stable
TIMTAB Weblog	*timtab*	0.5.11			Local	Beta

Tipp: Extension „Additional Reports“

jweiland.net

Ext: additional_reports



Additional reports - plugins & content type

Careful — A plugin/ctype can be also called in typoscript, typoscript file, php file...

- (•) List of used plugins
- ( ) List of used content types
- ( ) Summary
- ( ) List of used plugins (and hidden)
- ( ) List of used content types (and hidden)

All

List of used plugins

Extension	Plugin	Domain	Page uid	Content uid	Page title
tt_news	News (9)	muster.dev	5	14	Home
tt_news	News (9)	muster.dev	12	12	News Detailanzeige
tt_news	News (9)	muster.dev	12	136	News Detailanzeige
tt_news	News (9)	muster.dev	13	13	News Archiv
tt_news	News (9)	muster.dev	14	120	Aktuelles
tt_news	News (9)	muster.dev	14	15	Aktuelles
tt_news	News (9)	muster.dev	19	22	Blog
tt_news	News (9)	muster.dev	20	23	Blog Detailanzeige
indexed_search	Indexed search (indexed_search)	muster.dev	10	10	Suchergebnisse

jweiland.net

Obsolete Extensions

		Help>TYPO3 Manual	*cshmanual*	1.0.0			System
		ICS AWStats	*ics_awstats*	0.5.4			Local
		Linkvalidator	*linkvalidator*	1.0.20			System

- Runs perhaps in 6.2, but the log files are no longer created

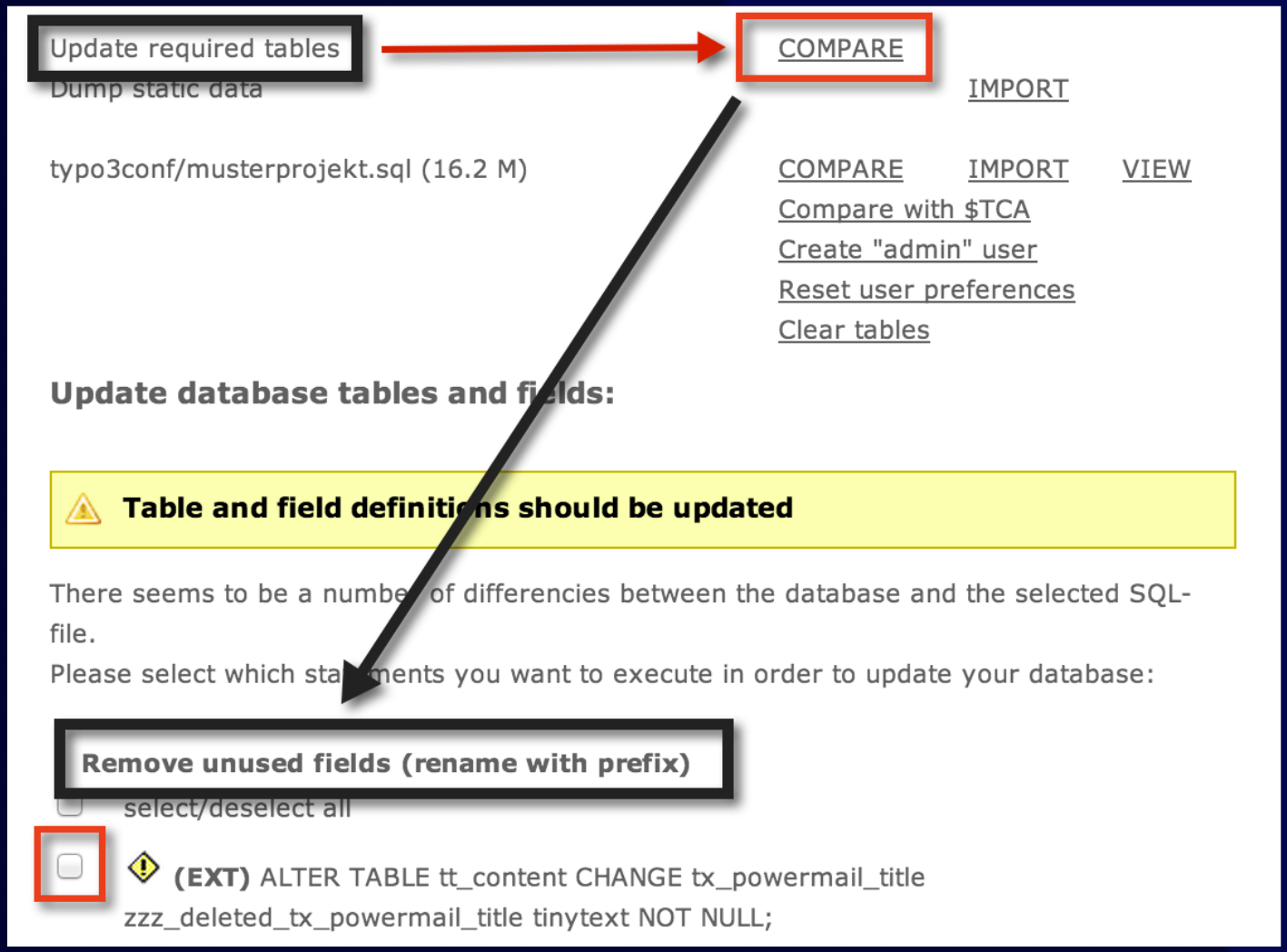
jweiland.net

Clean your Installation

- Database Analyzer in the Install Tool
  - Update Required Tables
  - Remove unused tables

jweiland.net

Remove unused Tables



jweiland.net

reduce the database

- Truncate tables:
  - cache_ …
  - cachingframework_ …
  - cf_ …
  - sys_log, sys_stat, …
  - tx_realurl_errorlog, …

jweiland.net

Reset user preferences

Clear tables

Clear out selected tables

Pressing this button will delete all records from the selected tables.

☐	**cache_pages**	(5 rows)	Pages
☐	**cache_pagesection**	(5 rows)	TS template related information
☐	**cache_hash**	(115 rows)	Multipurpose md5-hash cache
☐	**cache_imagesizes**	(9 rows)	Cached image sizes
☐	**sys_log**	(6 rows)	Backend action logging
☐	**sys_history**	(1 rows)	Addendum to the sys_log which tracks ALL changes to content through TCE. May become huge by time. Is used for rollback (undo) and the WorkFlow engine.
☐	**be_sessions**	(1 rows)	Backend User sessions
☐	**fe_sessions**	(0 rows)	Frontend User sessions
☐	**fe_session_data**	(0 rows)	Frontend User sessions data
☐	**index_words**	(1799 rows)	
☐	**index_rel**	(3664 rows)	
☐	**index_phash**	(108 rows)	
☐	**index_grlist**	(107 rows)	
☐	**index_section**	(108 rows)	
☐	**index_fulltext**	(108 rows)	

Write to database

jweiland.net

Update the extensions in 4.5

Check for extension updates

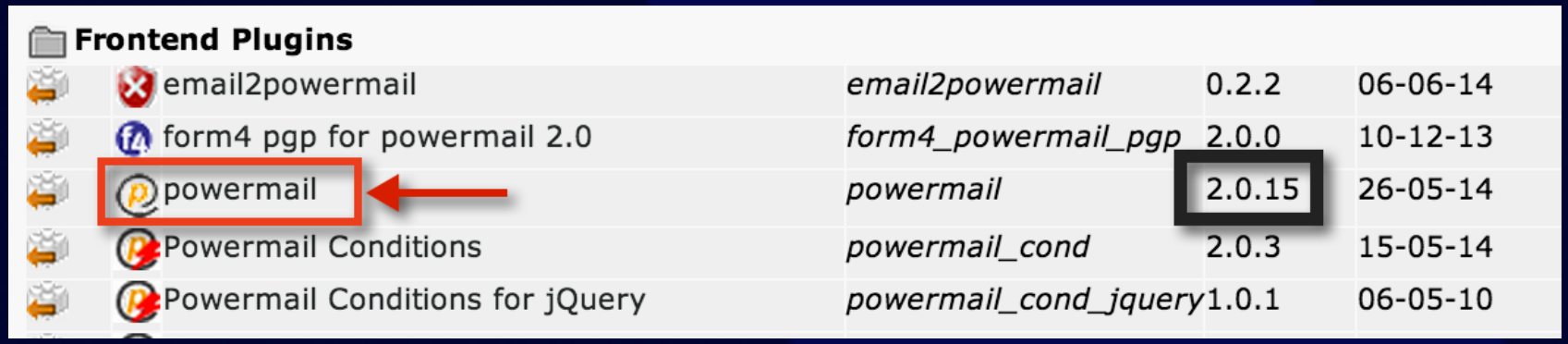
Extension Manager

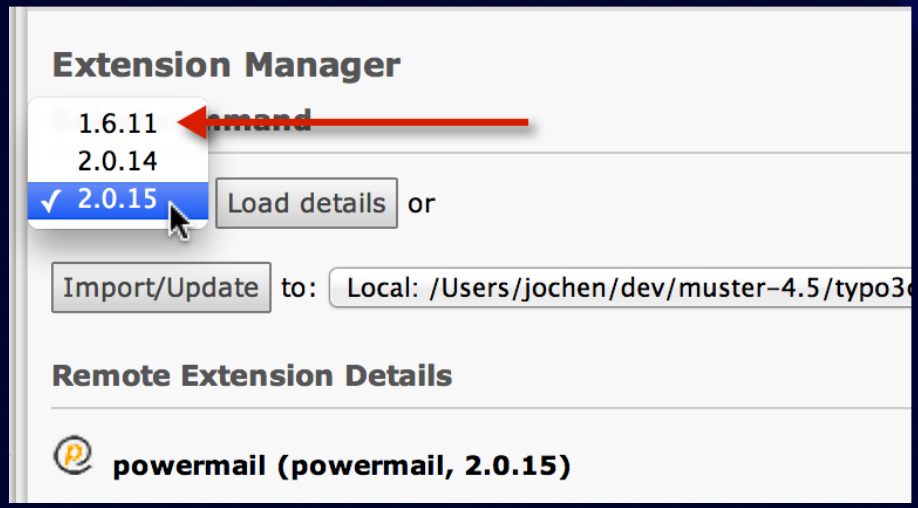
Display shy extensions ☑

There are new versions of the following extensions in the TER

Extension	Ext-Key	Local	Remote	Location	Upload-Comment
Template Auto-parser	automaketemplate	0.1.3	0.2.0		0.2.0 Compatibility with TYPO3 CMS 6.2, removed ereg_replace support
Captcha Library	captcha	1.1.1	1.2.1		1.2.0 [BUGFIX] Didnt work properly with 6.0 and 6.1 (reported by Reindl Bernd and Cornelius Illi)
					1.2.1 [BUGFIX] Didnt work properly with 6.0 and 6.1 (reported by Reindl Bernd and Cornelius Illi)
RealURL: speaking paths for TYPO3	realurl	1.12.3	1.12.8		1.12.7 Security fix. Please upgrade!
					1.12.8 TYPO3 6.2. compatibility update
Language Selection	sr_language_menu	1.5.2	6.0.5		6.0.0 Major rewrite.Requires TYPO3 6.0.6.Run the update script.
					6.0.1 Minor bug fix.
					6.0.2 Removes fix to Extbase now included in TYPO3.Requires TYPO3 6.0.7 (or 6.1.2).
					6.0.3 Enable in TYPO3 6.2.
					6.0.4 Bug fixes.Requires TYPO3 6.0.13, 6.1.8 or 6.2.0.
					6.0.5 Bug fixes.
Static Info Tables	static_info_tables	2.3.2	6.1.0		6.0.0 Major update.Extbase domain model&repository.Language pack creation module.Requires TYPO3 6.0.6.
					6.0.1 Two glitches fixed.
					6.0.2 Fix state on TER.No change to the extension.
					6.0.3 One bug fix.
					6.0.4 Minor changes.Fix for PHP 5.4.
					6.0.5 Minor bug fixes.Improves backward compatibility.Adds Montenegrin language.
					6.0.6 Bug fixes. Updated currency data.
					6.0.7 Enable in TYPO3 6.2.
					6.0.8 Bug fixes.Requires TYPO3 6.0.6.
					6.0.9 Bug fixes.
					6.0.10 Bug fixes.
					6.1.0 Bug fixes.New select view helper.
News	tt_news	3.2.1	3.6.0		3.5.2 Security Fix, PLEASE UPDATE.For details read advisory: typo3-ext-sa-2014-003
					3.6.0 tt_news for TYPO3 4.5 - 6.2 (compatibility update)

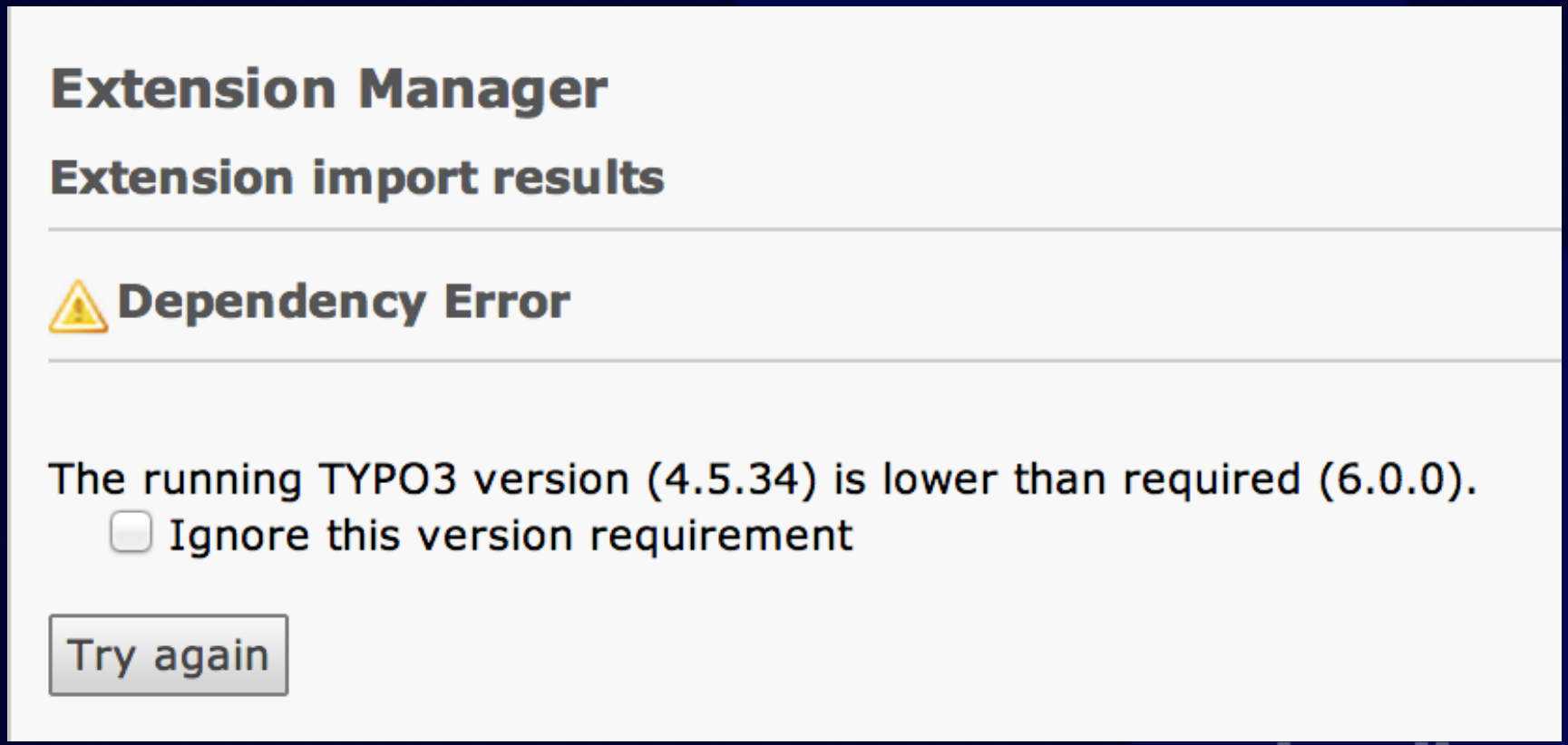
Extension versions (4.5)





jweiland.net

Warnings during Upgrade

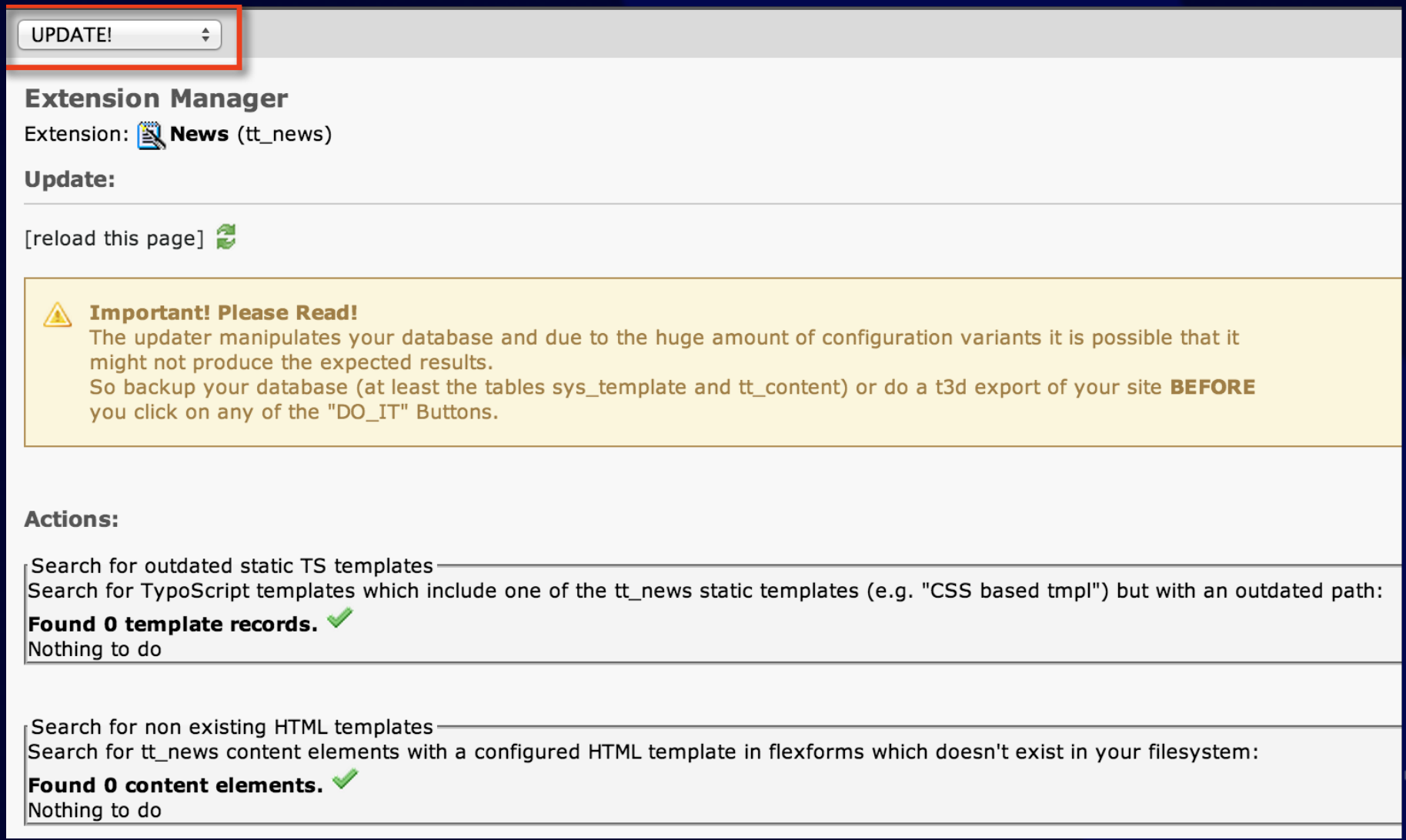


jweiland.net

Warnings PHP version

jweiland.net

Extensions with an update script



Deprecation Log

[SYS][enableDeprecationLog]

If set, this configuration enables the logging of deprecated methods and functions. The following options are allowed:

String: "file" (or integer "1")
  The log file will be written to typo3conf/deprecation_[hash-value].log
String: "devlog"
  The log will be written to the development log
String: "console"
  The log will be displayed in the Backend's Debug Console.

Logging options "file", "devlog" and "console" can be combined by comma-separating them.

file

```
TYPO3\CMS\Core\Utility\GeneralUtility::loadTCA() - since 6.1, will be removed two versions later - require(src-
TYPO3\CMS\Core\Utility\ExtensionManagementUtility::getRequiredExtensionListArray() - since 6,2, will be removed
TYPO3\CMS\Core\Utility\GeneralUtility::loadTCA() - since 6.1, will be removed two versions later - require_once(
TYPO3\CMS\Core\Utility\ExtensionManagementUtility::getRequiredExtensionListArray() - since 6,2, will be removed
TYPO3\CMS\Core\Utility\GeneralUtility::loadTCA() - since 6.1, will be removed two versions later - require(src-
TYPO3\CMS\Core\Utility\ExtensionManagementUtility::getRequiredExtensionListArray() - since 6,2, will be removed
TYPO3\CMS\Core\Utility\GeneralUtility::loadTCA() - since 6.1, will be removed two versions later - require(src-
TYPO3\CMS\Core\Utility\GeneralUtility::loadTCA() - since 6.1, will be removed two versions later - require(src-
```

Namespacing

typo3/sysext/core/Migrations/Code

```
't3lib_cache' => 'TYPO3\\CMS\\Core\\Cache\\Cache',
't3lib_cache_Factory' => 'TYPO3\\CMS\\Core\\Cache\\CacheFactory',
't3lib_cache_Manager' => 'TYPO3\\CMS\\Core\\Cache\\CacheManager',
't3lib_cache_Exception' => 'TYPO3\\CMS\\Core\\Cache\\Exception',
```

für IDE:

```
/**
 * @deprecated since 6.0 will be removed in 7.0
 */
class TYPO3_tcefile extends \TYPO3\CMS\Backend\Controller\File\FileController {}
```

Checking PHP version

- TYPO3 4.5, 4.6 needs PHP 5.2-5.5
- TYPO3 4.7 and higher needs PHP 5.3-5.5

jweiland.net

Activate display_errors

[displayErrors]

Integer (-1, 0, 1, 2). Configures whether PHP errors should be displayed.

0
Do not display any PHP error messages. Overrides the value of "exceptionalErrors" and sets it to 0 (= no errors are turned into exceptions), the configured "productionExceptionHandler" is used as exception handler

1
Display error messages with the registered errorhandler. The configured "debugExceptionHandler" is used as exception handler

2
Display errors only if client matches [SYS][devIPmask]. If devIPmask matches the users IP address the configured "debugExceptionHandler" is used for exceptions, if not "productionExceptionHandler" will be used

-1
Default setting. With this option, you can override the PHP setting "display_errors". If devIPmask matches the users IP address the configured "debugExceptionHandler" is used for exceptions, if not "productionExceptionHandler" will be used.

[SYS][displayErrors] = 1

1

and.net

Check ExplicitAllow/Deny

[explicitADmode]

Sets the general allow/deny mode for selector box values. Value can be either "explicitAllow" or "explicitDeny", nothing else!

[BE][explicitADmode] = explicitDeny

explicitDeny

Explicitly allow/deny field values:

Page Content: Type:

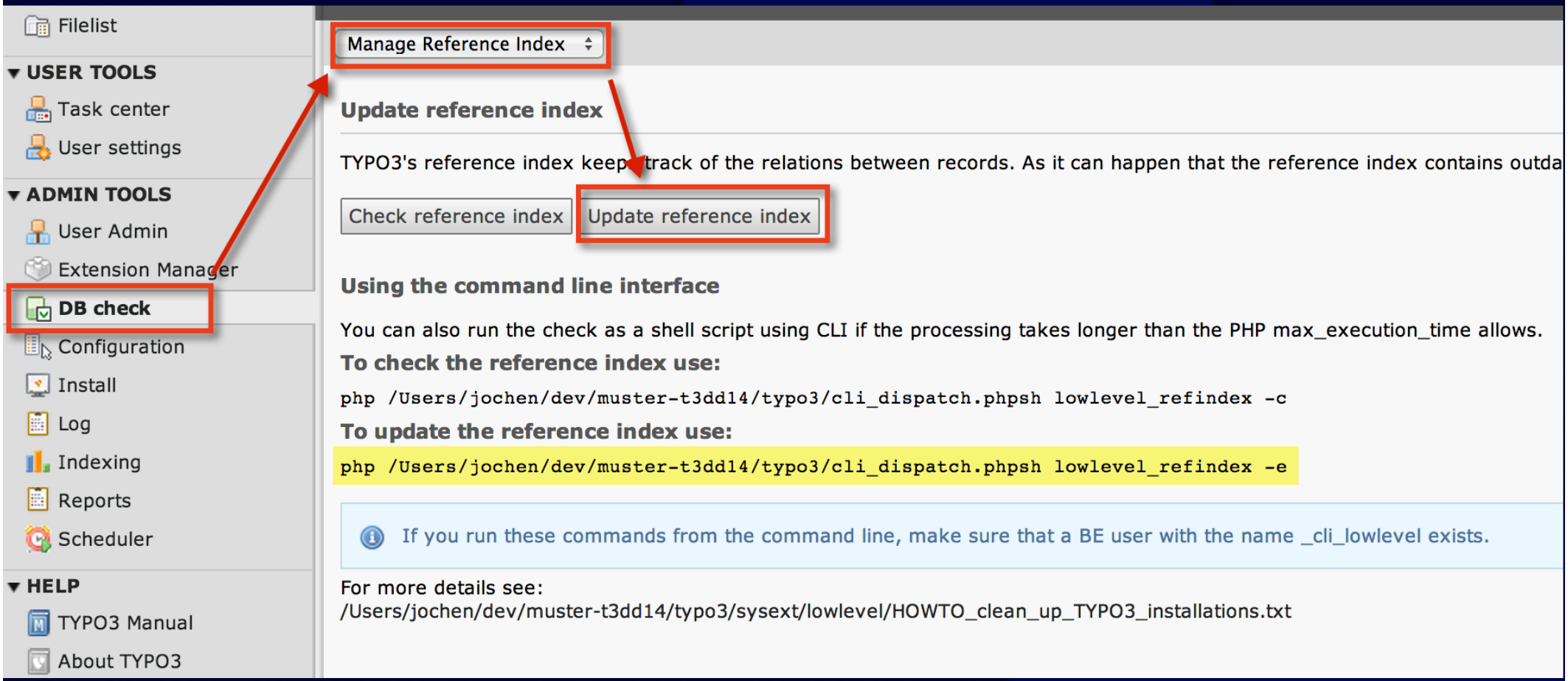
- [Deny] Special
- [Deny] Header
- [Deny] Text
- [Deny] Text & Images
- [Deny] Images

Explicitly allow/deny field values:

Page Content: Type:

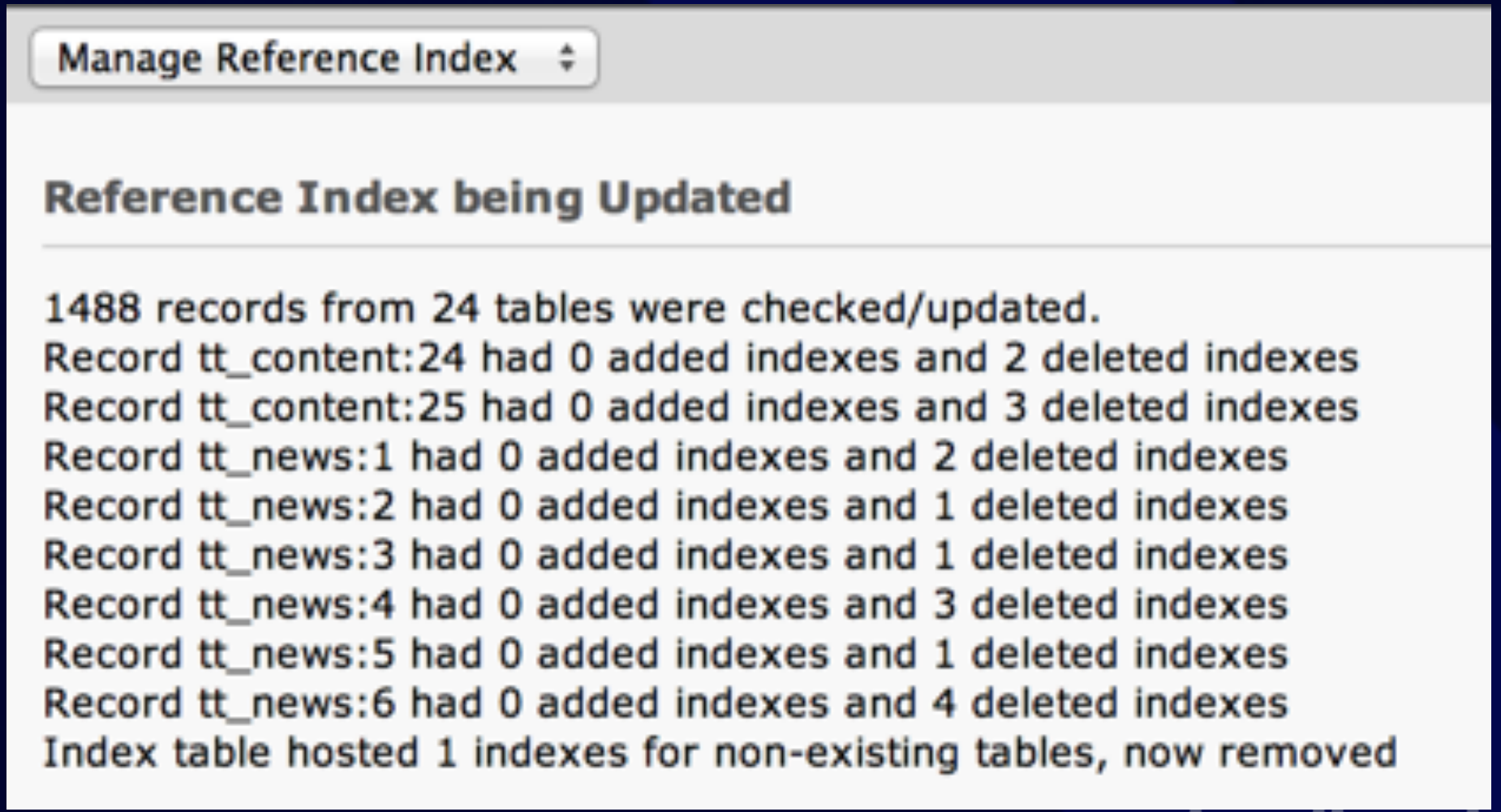
- [Allow] Special
- [Allow] Header
- [Allow] Text
- [Allow] Text & Images
- [Allow] Images

Update the reference Index



jweiland.net

Reference index



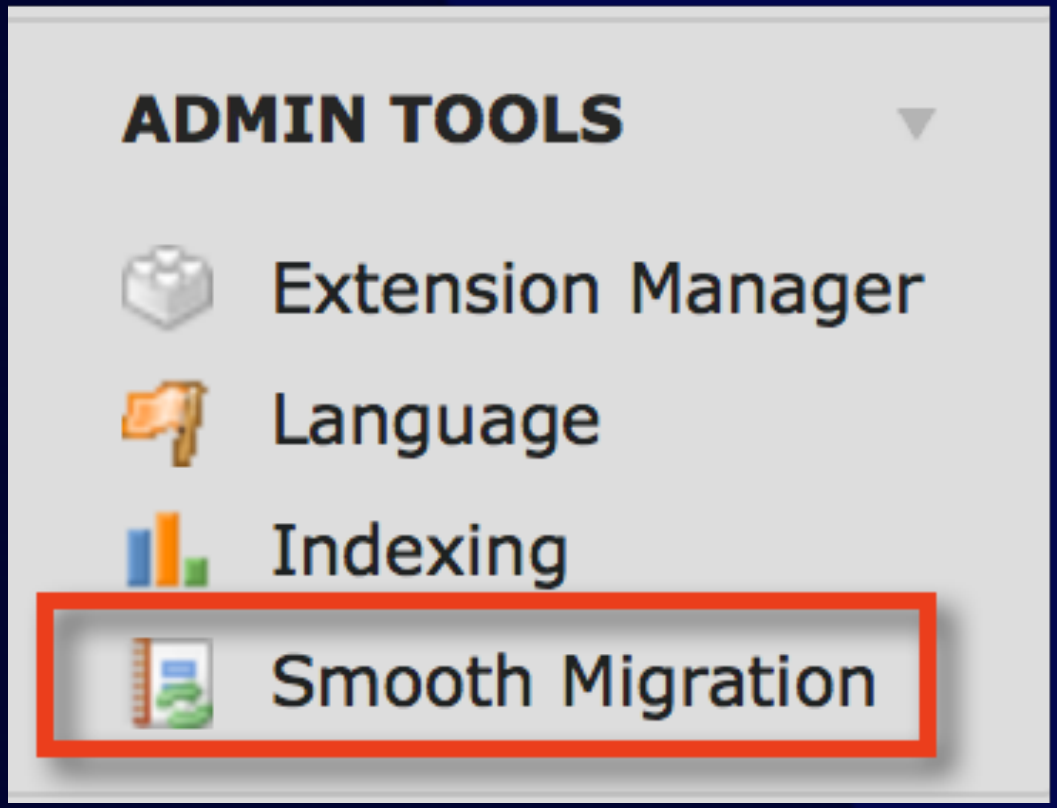
jweiland.net

Smooth Migration

- Extensions extbase and fluid must be installed at first
- Install the extension smoothmigration
- Create BE User _cli_smoothmigration
- Reload the backend

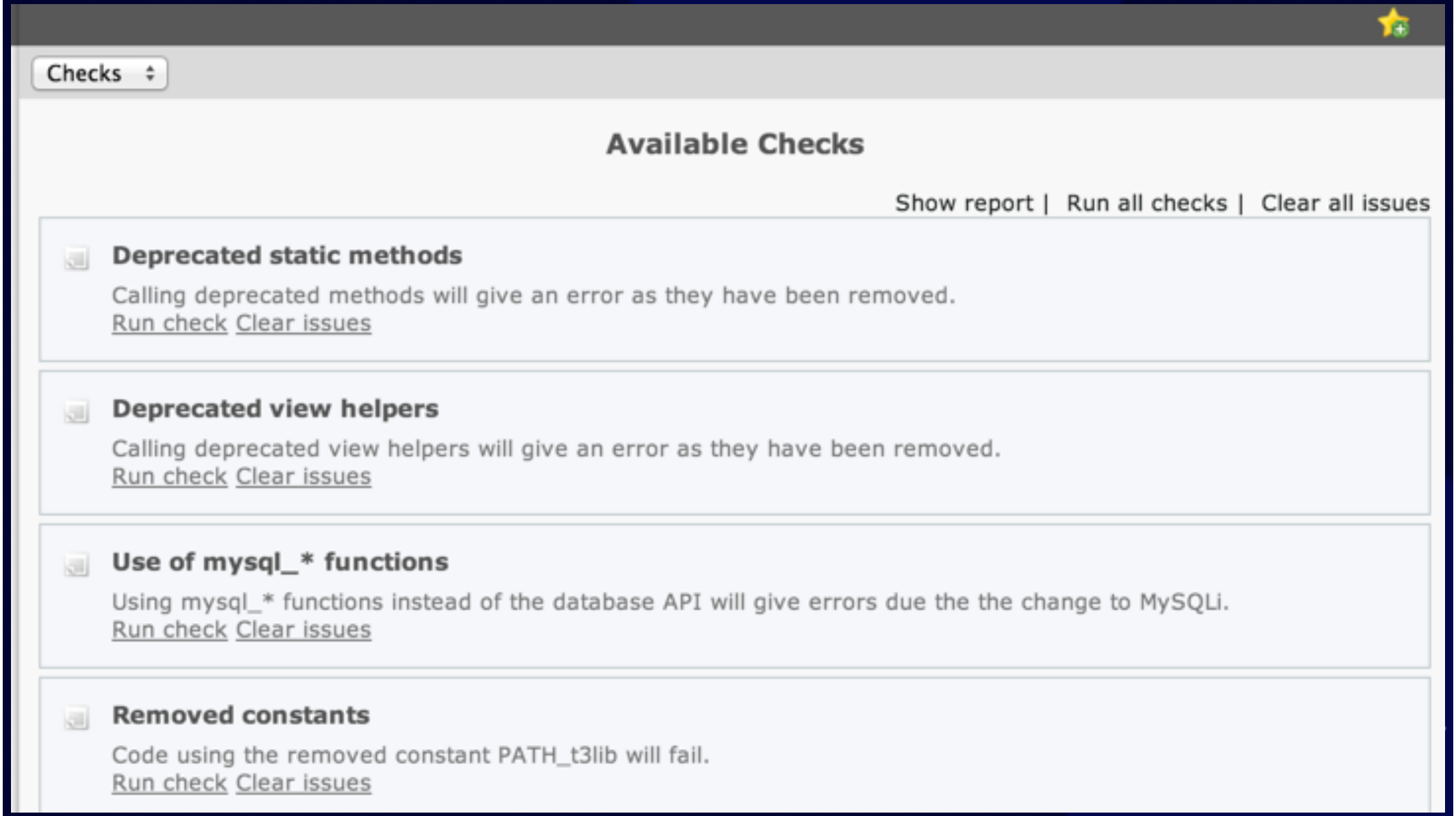
jweiland.net

Smooth Migration

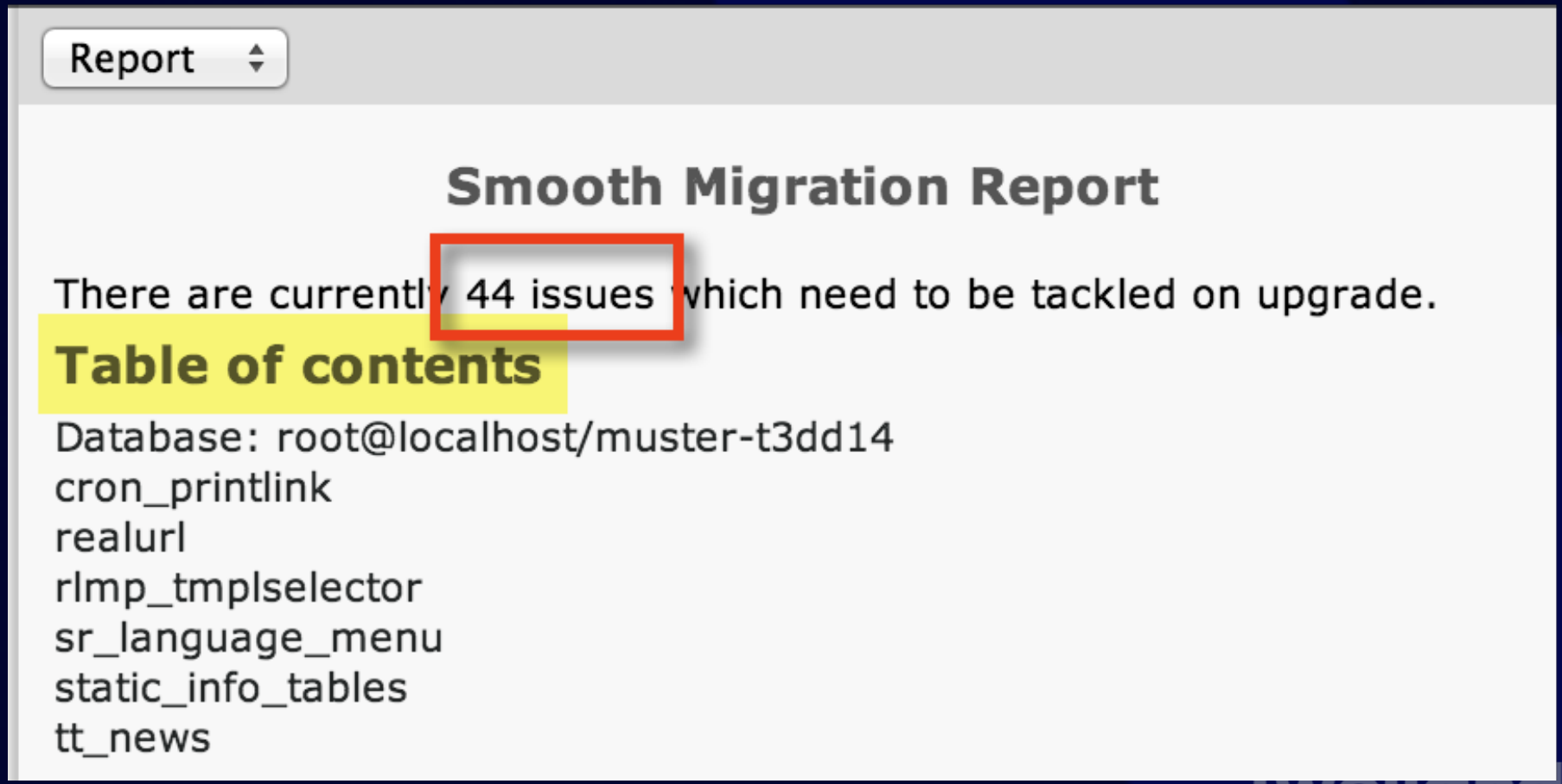


jweiland.net

Smooth Migration



Overview



jweiland.net

Database utf-8

jweiland.net

Database utf-8

[forceCharset]

String: Normally the charset of the backend users language selection is used. If you set this value to a charset found in t3lib/csconvtbl/ (or "utf-8") the backend (and database) will ALWAYS use this charset. Always use a lowercase value. NOTICE: This option is deprecated since TYPO3 4.5, and will be removed in 4.7. Please use proper tools to set your installation to native UTF-8.

[BE][forceCharset] = utf-8

utf-8

[setDBinit]

String (textarea): Commands to send to database right after connecting, separated by newline. Ignored by the DBAL extension except for the 'native' type!

[SYS][setDBinit] = set names utf8;

set names utf8;

iland.net

phpmyadmin

1	Blog	1	
1	Blog Detailanzeige	1	
1	Blog Beiträge	254	
1	Blog Kommentare	254	
1	Blog Links	254	
1	Blog Kategorien	254	
1	Media	1	
1	Browsercheck	1	
1	Menütest	1	
1	2. Ebene	1	

and.net

require_once

cron_printlink

require_once // include_once

Using require_once, include_once, include or require on core files will fail since files have been relocated.
While namespacing all the classes have been restructured, relocated and renamed. Including old files therefore will fail. Since TYPO3 CMS 4.3 there is an autoloader which makes manual requiring superfluous: simply use the needed classes.

⚠ Remove the require_once(PATH_tslib."class.tslib_pibase.php") statement in typo3conf/ext/cron_printlink/pi1/class.tx_cronprintlink_pi1.php on line 33.
Migration status: Not processed yet

⚠ Remove the require_once(PATH_tslib."class.tslib_pibase.php") statement in typo3conf/ext/cron_printlink/pi2/class.tx_cronprintlink_pi2.php on line 31.
Migration status: Not processed yet

```
// require_once(PATH_tslib."class.tslib_pibase.php");
require_once(t3lib_extMgm::extPath('cron_printlink') .
```

.net

Update the typo3_src symlink

- Change to the new TYPO3 Version:

  typo3_src -> typo3_src-6.2.x

jweiland.net

Call the install tool

jweiland.net

These files or folders have errors and may be fixed automatically:

Path /index.php is not a link
The target /index.php should be a link, but is of type file. This cannot be fixed automatically. Please investigate.

File /typo3temp/index.html does not exist
By using "Try to fix errors" we can try to create it

File /uploads/media/index.html does not exist
By using "Try to fix errors" we can try to create it

File /uploads/pics/index.html does not exist
By using "Try to fix errors" we can try to create it

File /uploads/tf/index.html does not exist
By using "Try to fix errors" we can try to create it

File /fileadmin/user_upload/_temp_/index.html does not exist
By using "Try to fix errors" we can try to create it

Directory /fileadmin/user_upload/_temp_/importexport does not exist
The Install Tool can try to create it

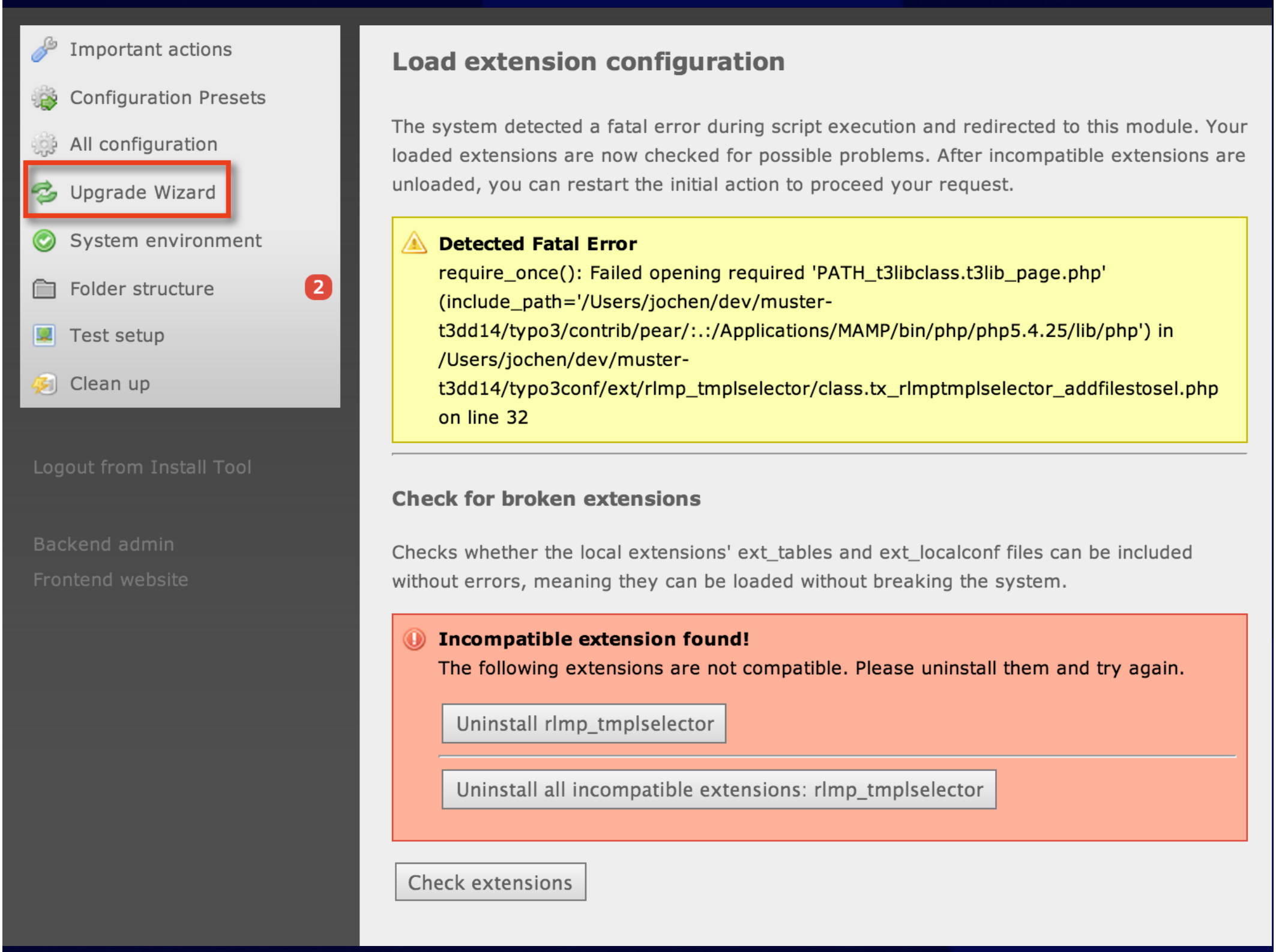
File /fileadmin/user_upload/_temp_/importexport/.htaccess does not exist
By using "Try to fix errors" we can try to create it

File /fileadmin/user_upload/_temp_/importexport/index.html does not exist
By using "Try to fix errors" we can try to create it

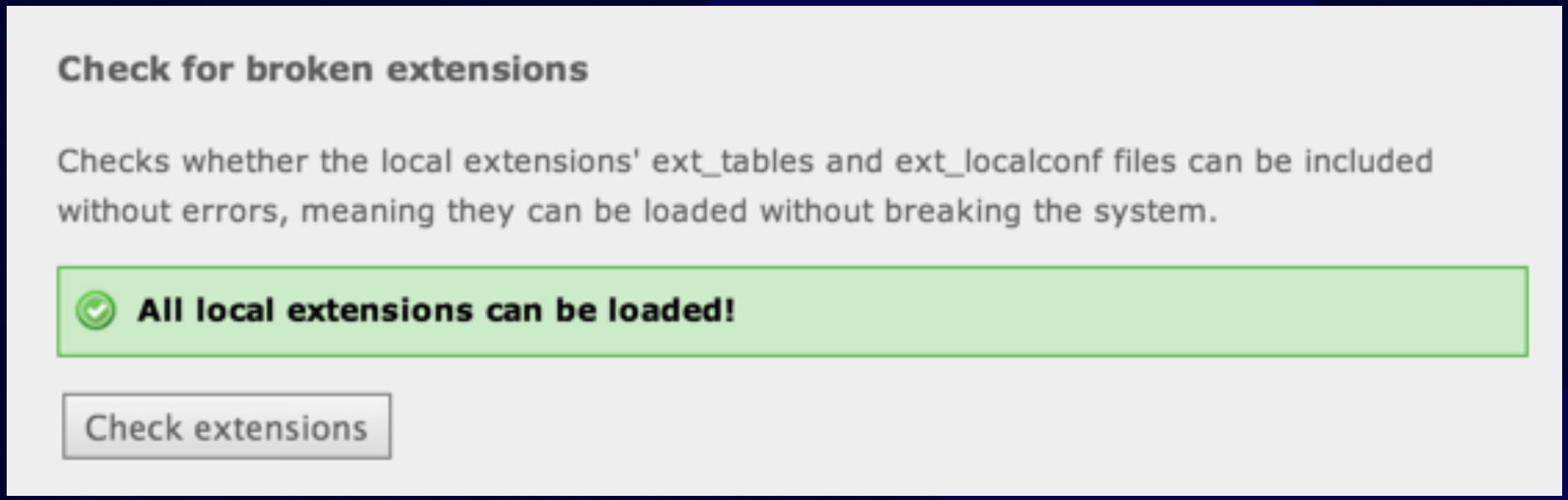
File /fileadmin/user_upload/index.html does not exist
By using "Try to fix errors" we can try to create it

Try to fix file and folder permissions

veiland.net

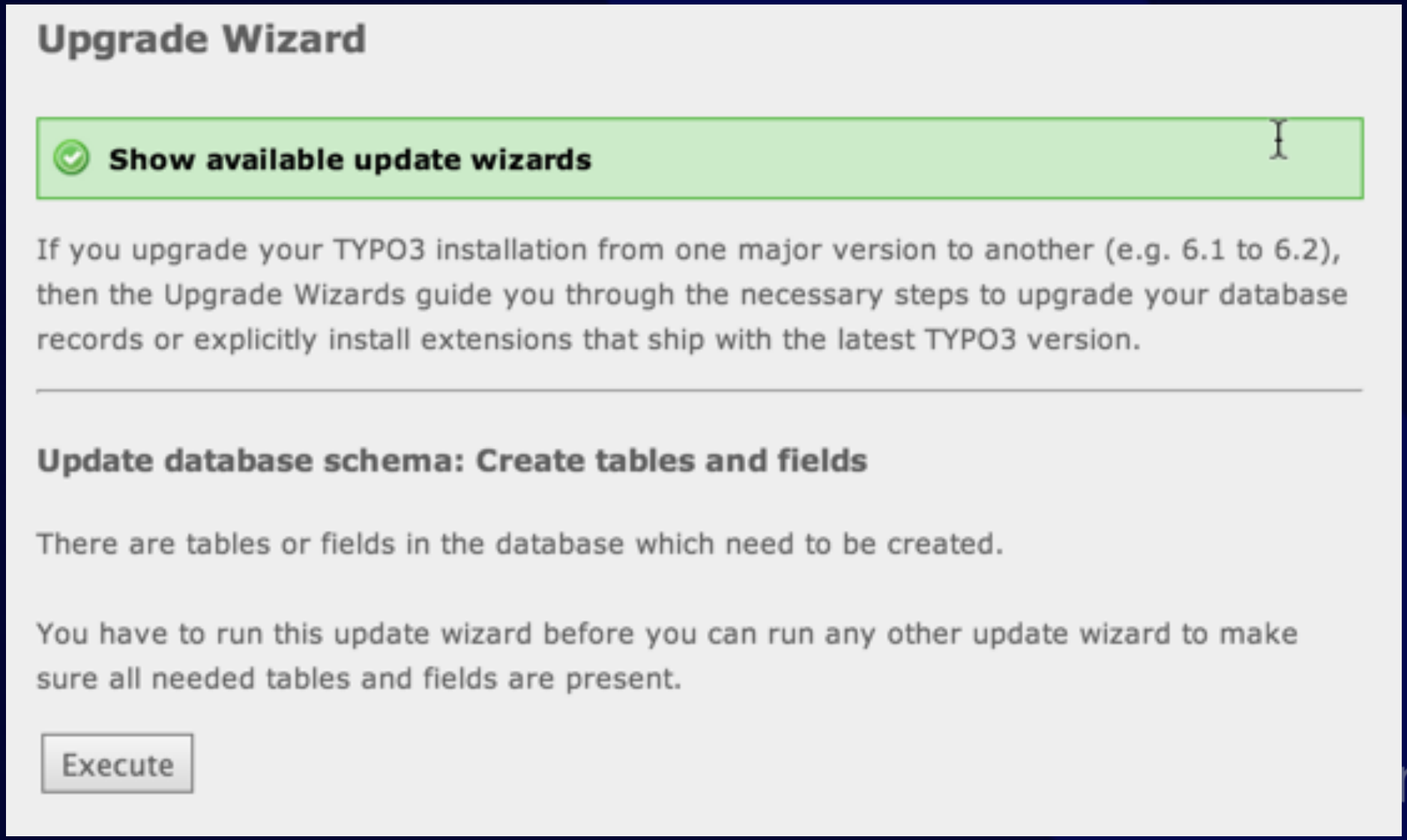

Important actions
Configuration Presets
All configuration
Upgrade Wizard
System environment
Folder structure
2
Test setup
Clean up
Logout from Install Tool
Backend admin
Frontend website
Load extension configuration
The system detected a fatal error during script execution and redirected to this module. Your loaded extensions are now checked for possible problems. After incompatible extensions are unloaded, you can restart the initial action to proceed your request.
Detected Fatal Error
require_once(): Failed opening required 'PATH_t3libclass.t3lib_page.php' (include_path='/Users/jochen/dev/muster-t3dd14/typo3/contrib/pear/:.:/Applications/MAMP/bin/php/php5.4.25/lib/php') in /Users/jochen/dev/muster-t3dd14/typo3conf/ext/rlmp_tmplselector/class.tx_rlmptmplselector_addfilestosel.php on line 32
Check for broken extensions
Checks whether the local extensions' ext_tables and ext_localconf files can be included without errors, meaning they can be loaded without breaking the system.
Incompatible extension found!
The following extensions are not compatible. Please uninstall them and try again.
Uninstall rlmp_tmplselector
Uninstall all incompatible extensions: rlmp_tmplselector
Check extensions

After uninstall

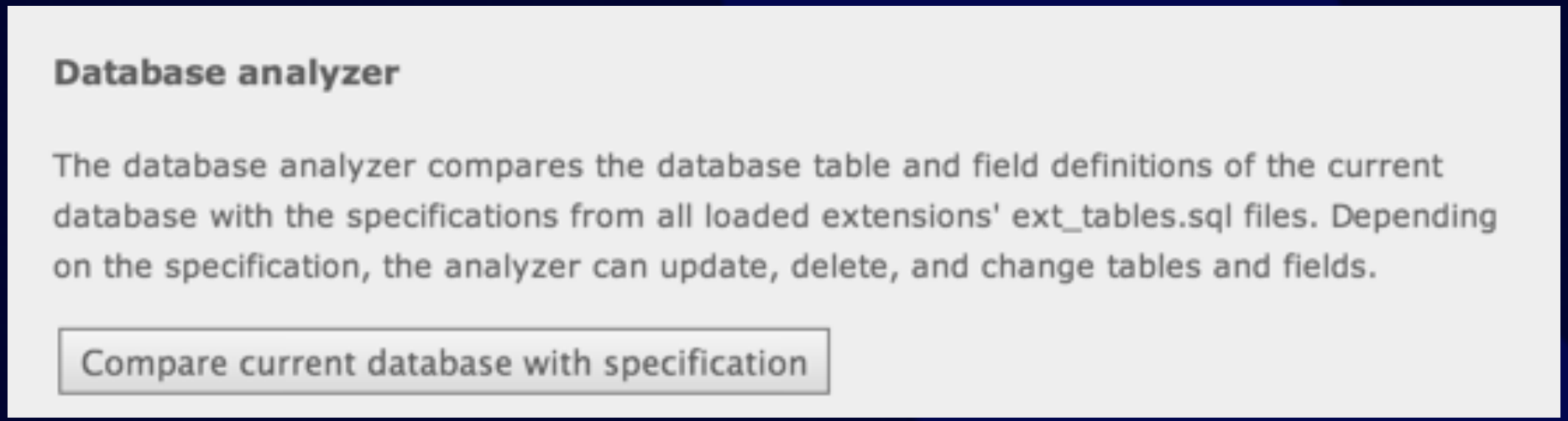


jweiland.net

Upgrade Wizard

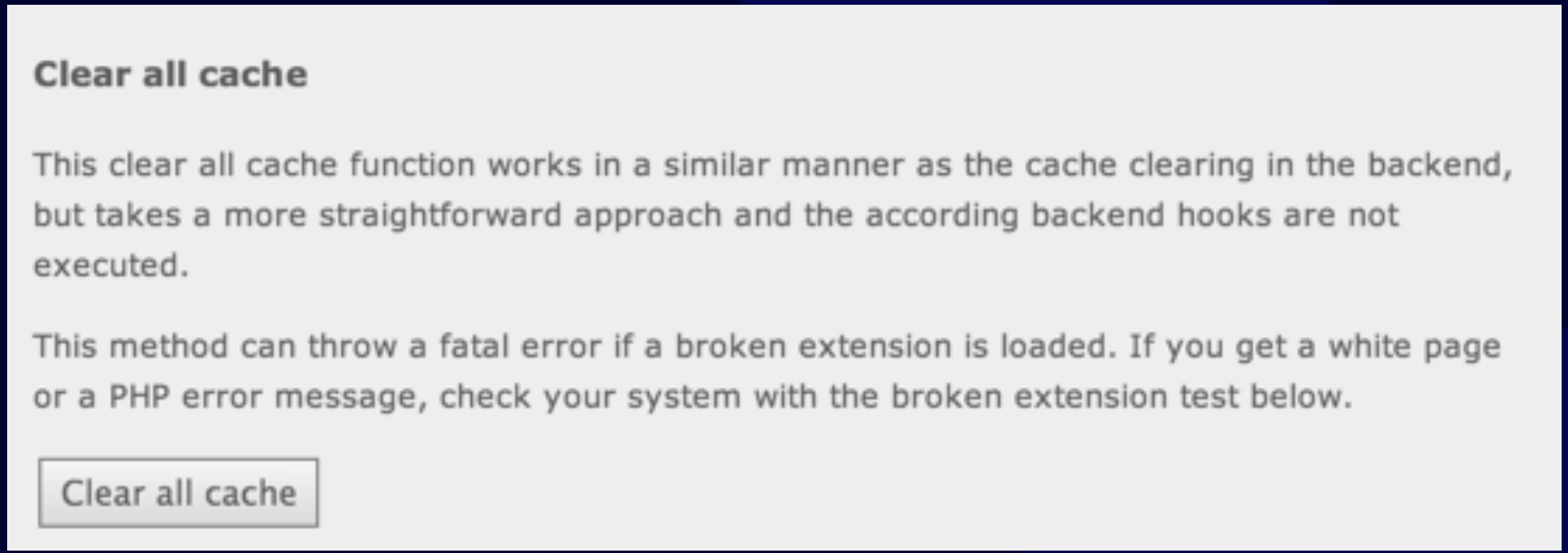


Database analyzer



jweiland.net

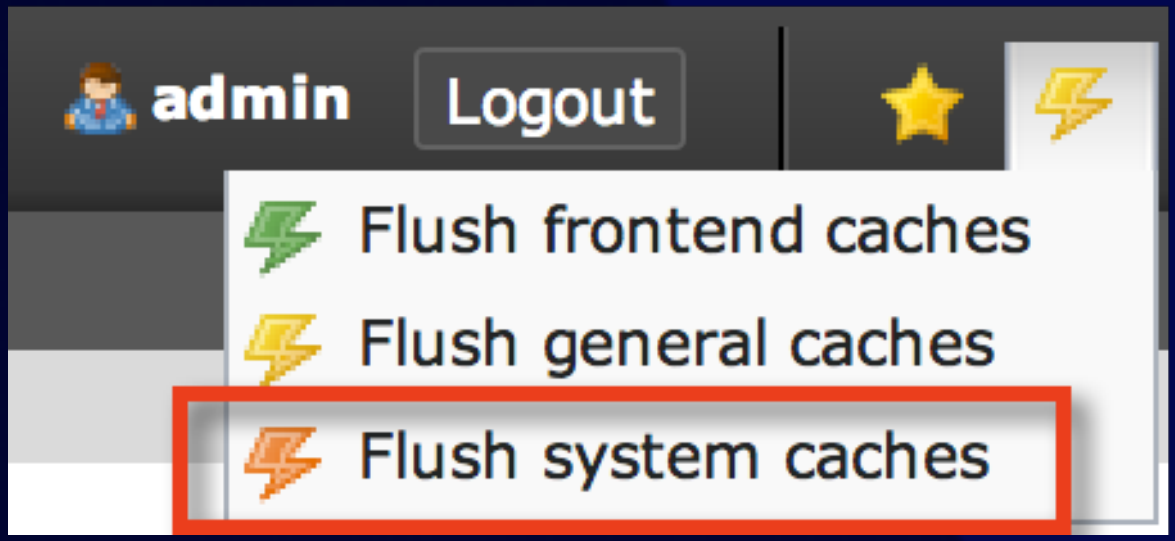
Clear all cache



jweiland.net

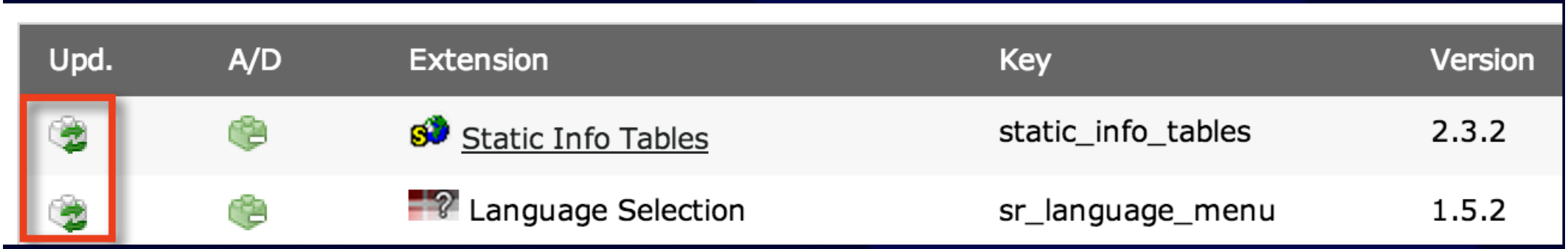
Admin User TSconfig

- options.clearCache.system = 1

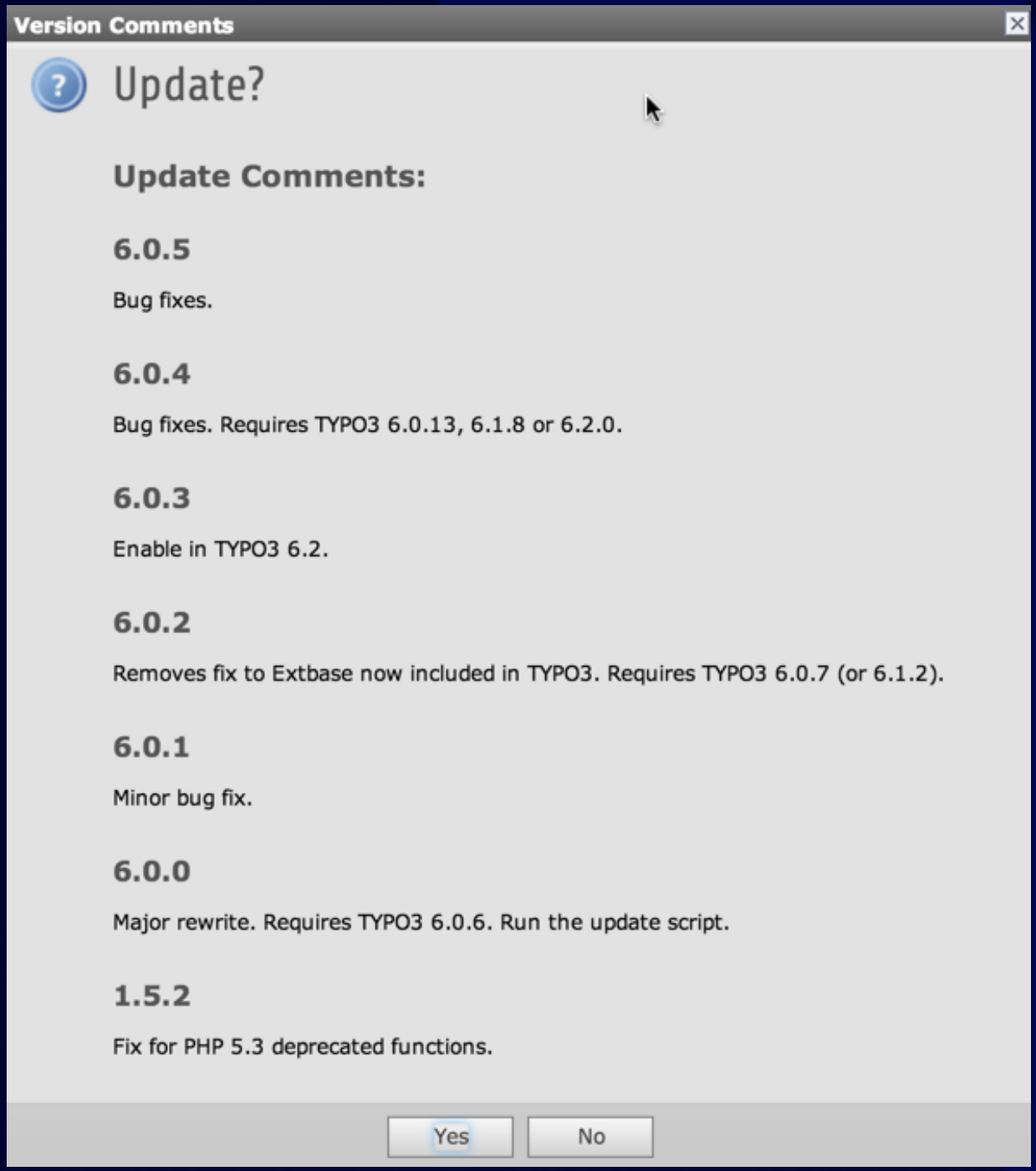


jweiland.net

Extensions Aktualisieren

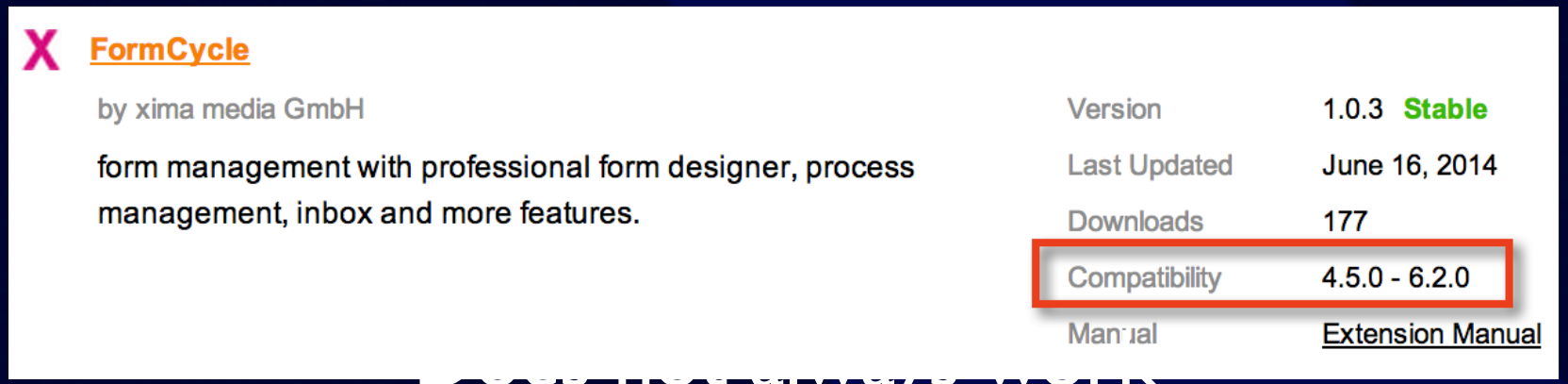


jweiland.net



jweiland.net

Unsupported versions?



ext_emconf.php

```
'constraints' => array(
        'depends' => array(
                'extbase' => '1.3',
                'fluid' => '1.3',
                'typo3' => '4.5.0-6.2.0',
        ),
```

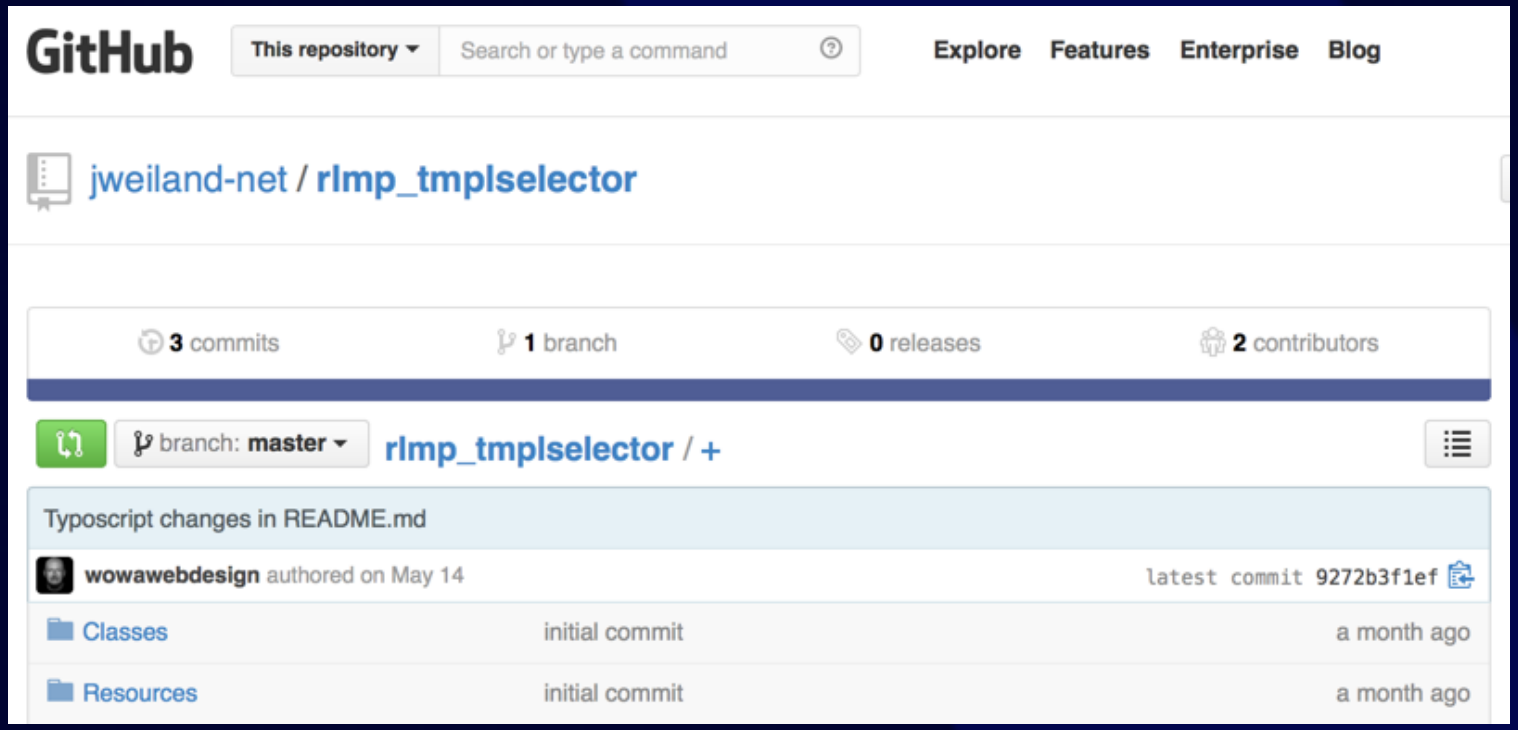
and.net

Not in TER? check GIT!

- git.typo3.org
- Repository from author, e.g.

  github.com/jweiland-net/rlmp_tmplselector

Extension from GIT



- in typo3conf/ext:
  git clone https://github.com/jweiland-net/rlmp_tmplselector

jweiland.net

Changes in TypoScript

- file.treatIdAsReference = 1
- cObject HTML => TEXT

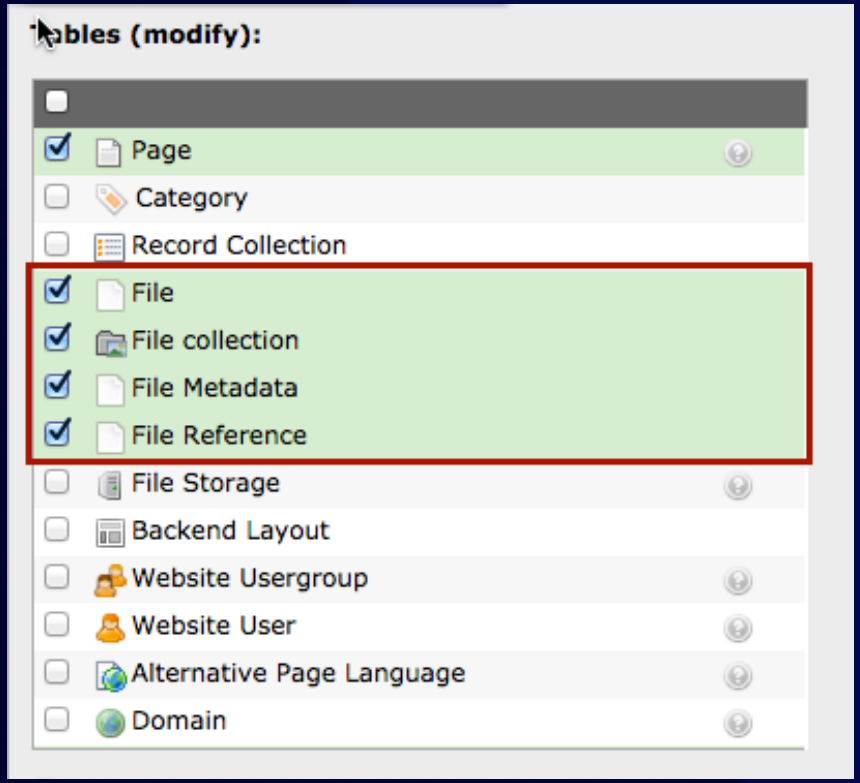
jweiland.net

Editor-rights

- Backend user rights for non-admins
- Unlock the fields for file information in the user settings

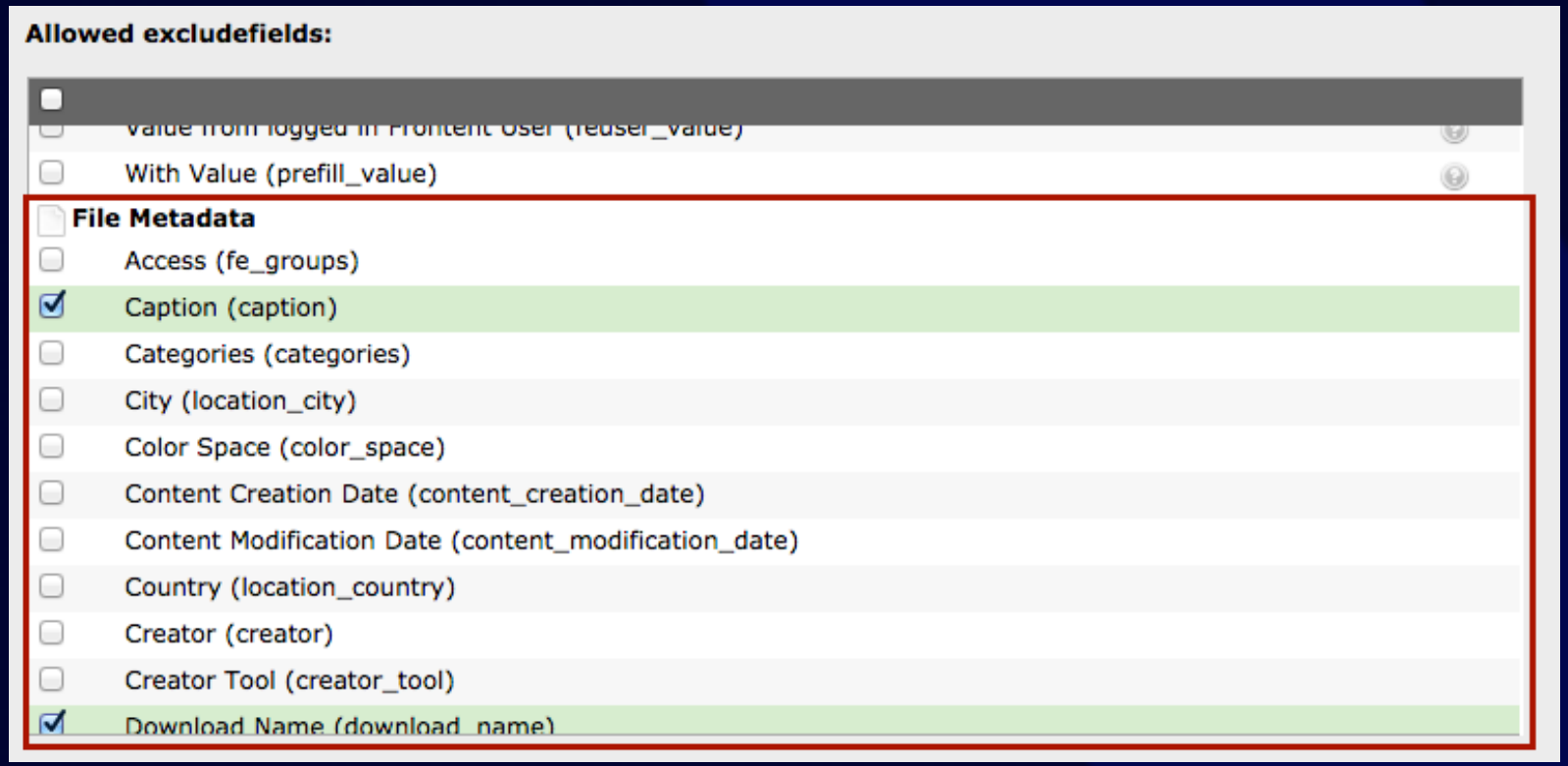
jweiland.net

Allow changing new database tables



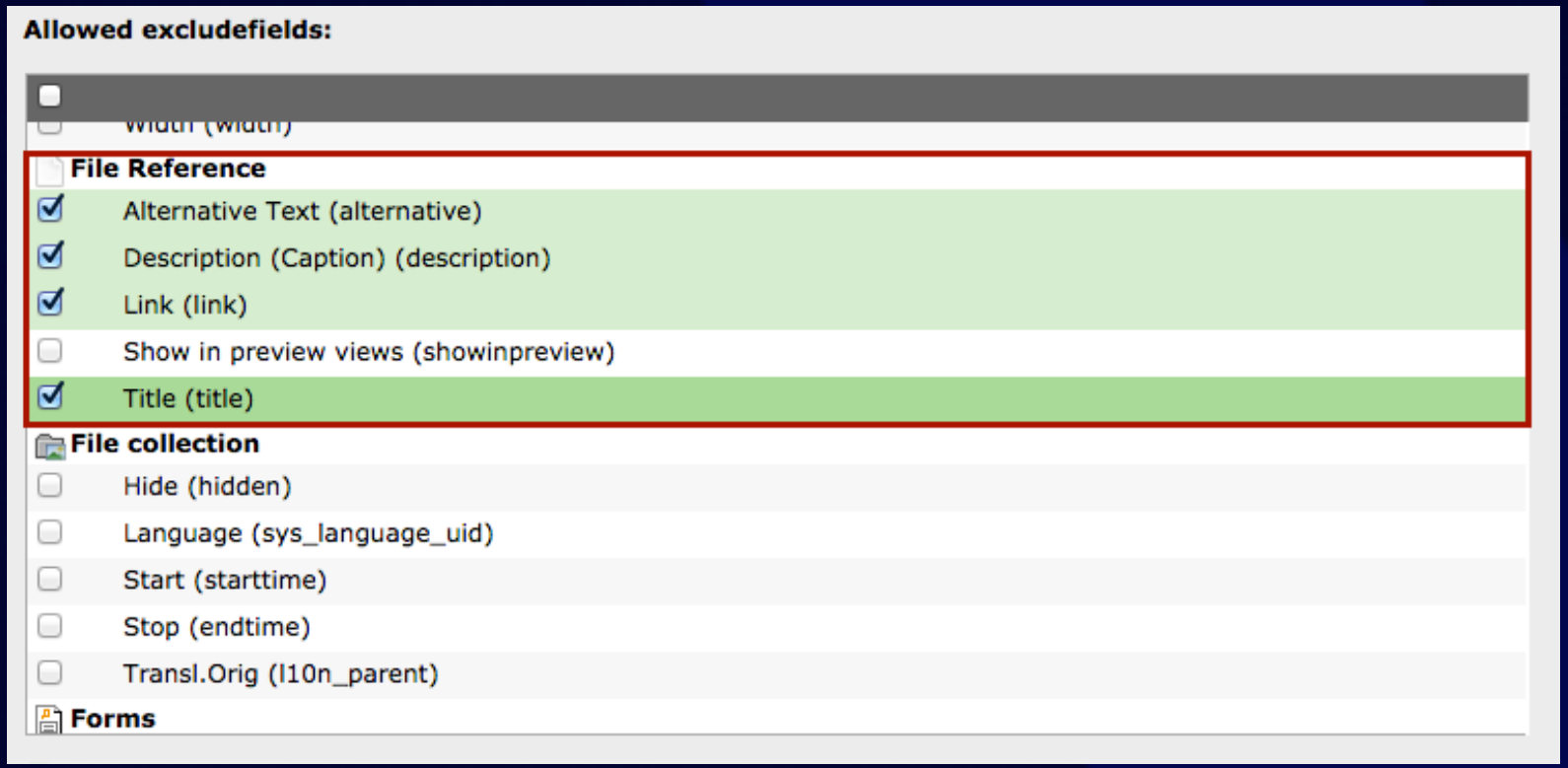
jweiland.net

Allowed excludefields for file metadata



jweiland.net

Allowed excludefields for File Reference



jweiland.net

DAM to FAL Migration

- there are some helpful extensions

DAM to FAL Migration

- Extension dam_falmigration
  https://github.com/froemken/t3ext-dam_falmigration
- Migrates tx_dam records to sys_file
- Migrates tx_dam metadata to sys_filemetadata
- Migrates media-tags from RTE to link-tags
- Migrates dam_category to sys_category

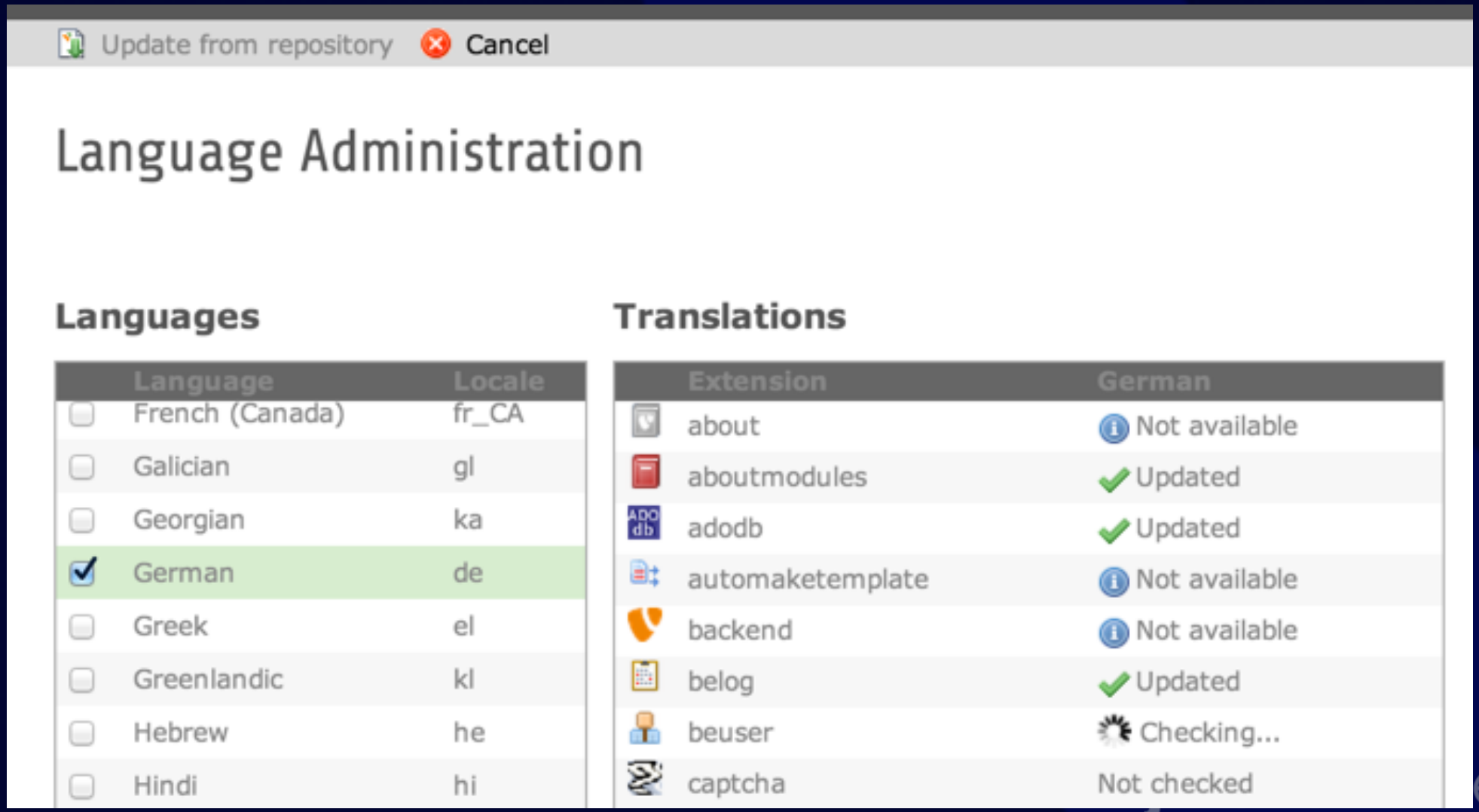
jweiland.net

DAM to FAL Migration

- Extension we_dam2fal62
  http://typo3.org/extensions/repository/view/we_dam2fal62
- it has an own backend model for the migration

jweiland.net

Update Language Packs



Scheduler Tasks

- the scheduler tasks have to be recreated

jweiland.net

Helpful Video

you can find helpful videos for upgrading from TYPO3 Version 4.5 to 6.2 on our website

https://jweiland.net/typo3-hosting/service/video-anleitungen/upgrade-auf-typo3-62.html

jweiland.net

Thank you for your attention and enjoy the day at Phantasialand

jweiland.net