

pkgcheck Utility, v3.2.0

Manfred Lotz

June 11, 2024

Contents

1	Introduction	5
2	pkgcheck utility	5
3	Requirements	5
4	Installation	5
5	Utility usage	5
5.1	Help option	5
5.2	Config file	6
5.3	Generate shell completions	6
5.3.1	bash completion	7
5.3.2	zsh completion	7
5.3.3	fish completion	7
5.4	Check a package	7
5.5	Check a package which has a TDS archive	8
5.6	Pkgcheck messages	8
5.7	Duplicate files	8
5.8	Permissions	8
5.9	CRLF line endings	8
5.10	Help options	9
6	About checking file types	10
7	About permissions checking	10
8	Different kind of messages	10
9	Informational messages	11
9.1	I0001 -- Successfully converted from CRLF to LF	11

Contents

9.2	I0002 -- Checking package files in directory	11
9.3	I0003 -- Checking TDS zip archive	11
9.4	I0004 -- Correcting line endings for file	11
9.5	I0005 -- Correcting permissions for file or directory	12
9.6	I0006 -- Files having one of the following file name endings are regarded as temporary	12
9.7	I0007 -- Successfully corrected wrong line endings to LF resp. CRLF	12
9.8	I0008 -- Using config file	12
9.9	I0009 -- Updating entry <pkgname> -> <tpkg> with <pkgname> -> <new tpkg> from config file”,	12
10	Warning messages	13
10.1	W0001 -- Archive as package file detected	13
10.2	W0002 -- Duplicate files detected	13
10.3	W0003 -- Same named files detected in the package tree	13
10.4	W0004 -- encoding with BOM detected	13
10.5	W0005 -- Very large file with size <size> detected in package	13
10.6	W0006 -- Very large file with size <size> detected in TDS zip archive	13
10.7	W0007 -- Empty directory detected in the TDS zip archive	14
10.8	W0008 -- Windows file has Unix line endings	14
10.9	W0009 -- Replacing <pkgname> -> <tpkg> with the same from config file”,	14
10.10	W0010 -- Hardlinks detected with inode	14
10.11	W0011 -- has an mtime in the future by seconds, or <hours, minutes, seconds>	14
11	Error messages	14
11.1	E0001 -- Bad characters in file name	14
11.2	E0002 -- File Permissions	15
11.3	E0003 -- README is not a text file	15
11.4	E0004 -- Empty directory not allowed	15
11.5	E0005 -- Empty files not allowed	15
11.6	E0006 -- Hidden directories not allowed	15
11.7	E0007 -- Hidden files not allowed	15
11.8	E0008 -- Temporary file detected	16
11.9	E0009 -- Package doesn't contain a README file	16
11.10	E0010 -- Broken symlink detected	16
11.11	E0011 -- Wrong permission for directory	16
11.12	E0012 -- CRLF line endings detected	16
11.13	E0013 -- Socket special file detected	16
11.14	E0014 -- Fifo special file detected	16
11.15	E0015 -- Bloch device file detected	16
11.16	E0016 -- Character device file detected	17
11.17	E0017 -- PDF document is in error	17
11.18	E0018 -- Unwanted directory detected	17

Contents

11.19	E0019 -- Generated file detected	17
11.20	E0020 -- Unwanted directory detected in the top level directory in TDS zip archive	17
11.21	E0021 -- Error when reading a file	18
11.22	E0022 -- Check of an URL in a README file failed	18
11.23	E0023 -- Follow up error when trying to read a directory with in- sufficient permissions	18
11.24	E0024 -- TDS zip archive has wrong permissions	18
11.25	E0025 -- Duplicate names when ignoring letter case for files or directories	18
11.26	E0026 -- Files not in TDS or different in TDS and non-install tree	18
11.27	E0027 -- An I/O error occurred	18
11.28	E0028 -- A path name in a TDS zip archive must contain the pack- age name	19
11.29	E0029 -- README file: encoding with BOM detected	19
11.30	E0030 -- A symlink was found which points outside of the package directory tree	19
11.31	E0031 -- File name contains invalid UTF-8 character(s)	19
11.32	E0033 -- Error when unpacking tds archive	19
11.33	E0034 -- Unwanted file detected in the top level directory in TDS zip archive	19
11.34	E0035 -- Unwanted TDS archive detected in package directory tree	19
11.35	E0036 -- .dtx/.ins files found in wrong directory in TDS zip archive	20
11.36	E0037 -- CR line endings detected	20
11.37	E0038 -- File has inconsistent line endings: CR: x, LF: y, CRLF: z .	20
11.38	E0039 -- No doc/ directory found in the top level directory of the TDS zip archive	20
11.39	E0040 -- Too few top level directories in the TDS zip archive . . .	20
11.40	E0041 -- One or more map file found for the package but none of them is in a path starting with fonts/map/dvips	20
11.41	E0042 -- TDS zip archive: duplicate names when ignoring letter case for files or directories	21
11.42	E0043 -- Symlink found in TDS zip archive	21
12	Fatal messages	21
12.1	F0001 -- Specify a directory to check (use option -d)	21
12.2	F0002 -- Specified directory does not exist. Exiting...	21
12.3	F0003 -- Specified TDS archive does not exist or is no file	21
12.4	F0004 -- The file specified as TDS archive is no zip archive	21
12.5	F0005 -- Bad file name for the zip archive	21
12.6	F0006 -- Unknown error code specified with option -e resp. --- explain. Exiting...	21
12.7	F0007 -- Could not create temporary directory for unzipping the TDS zip archive	22
12.8	F0008 -- Config file doesn't exist. Exiting...	22

Contents

12.9 F0009 -- Error reading config file <config_file>: Exiting... 22
12.10 F0010 -- Config file's content could not be read properly: Exiting... 22

Abstract

This document describes the pkgcheck command line utility which is used by the author when checking uploaded packages to CTAN.

1 Introduction

Uploaded packages to CTAN must satisfy various requirements in order to get installed on CTAN.

A first introduction is given here <https://ctan.org/help/upload-pkg>.

Even more details are to be found in the excellent CTAN-upload addendum <https://ctan.org/file/help/ctan/CTAN-upload-addendum> written by Petra Rube-Pugliese.

The pkgcheck utility which runs on Linux systems only checks those requirements which can be checked by a program.

2 pkgcheck utility

The pkgcheck utility is a compiled program written in the Rust programming language. It runs in a Linux environment. Currently, Windows is not supported. Simply, because the author doesn't use Windows at all.

It will be invoked from the command line, and any error or warning message has a certain message id. pkgcheck offers an option to get more information for a certain error.

3 Requirements

pkgcheck doesn't have any special runtime requirements.

The pkgcheck is a 64-bit statically linked binary, and should work on any 64-bit Linux. It is available in the repository in directory `bin/`.

Currently, the only external program required is `/usr/bin/pdfinfo`. It is used when a PDF document will be checked.

4 Installation

Copy the binary from `bin/pkgcheck` to a suitable location on your hard disk, and (recommended) make sure the directory is in the PATH or call pkgcheck using an absolute path name.

5 Utility usage

5.1 Help option

Running `pkgcheck --help` shows the available command line options.

Here a sample output:

5 Utility usage

pkgcheck 3.0.0
Manfred Lotz <manfred@ctan.org>
Command-line tool to check packages uploaded to CTAN.

USAGE:

pkgcheck [OPTIONS]

OPTIONS:

-C, --correct-perms	Correct permissions
--config-file <CONFIG_FILE>	Specify config file to use
-d, --package-dir <PKG_DIR>	Package directory
-e, --explain <EXPLAIN>	Explain error or warning message
--explain-all	Explains all error or warning messages
--generate-completion <GENERATOR>	[possible values: bash, elvish, fish, powershell, zsh]
-h, --help	Print help information
-I, --ignore-dupes	Ignore dupes
--ignore-same-named	Ignore same-named files
-L, --correct-le	Correct line endings
--no-colors	Don't display messages in color
--show-temp-endings	Show file endings for temporary files
-T, --tds-zip <TDS_ZIP>	tds zip archive
--urlcheck	Check URLs found in README files
-v, --verbose	Verbose operation?
-V, --version	Print version information

5.2 Config file

It is now possible to have a config file for pkgcheck which then is a YAML file. A config file can be specified by using the command line option `--config-file`. If no config file is specified during invocation of pkgcheck then pkgcheck checks two locations for existence of a config file.

- `~/.ctan/pkgcheck.yml`
- `.config/ctan/pkgcheck.yml`

Currently, the config file may contain only TDS path exceptions. For more details see message [I0009x](#).

5.3 Generate shell completions

pkgcheck offers an option to generate shell completions for various shells, most notably bash, zsh and fish.

5.3.1 bash completion

In bash one recommendation is to put completions directly into the `~/ .bash_completion` file.

Example:

```
1 pkgcheck -generate-completion bash » ~/.bash-completion
```

5.3.2 zsh completion

zsh doesn't recommend a specific location for completions. One possibility is the following:

```
1 # Prepare
2 mkdir -p ~/.zfunc/completions
3 pkgcheck -generate-completion zsh » ~/.zfunc/completions/_pkgcheck
```

Put the following into `~/ .zshrc`

```
1 fpath+=~/.zfunc/completions
2 autoload -Uz compinit
3 zstyle ':completion:*' menu select
4 compinit
```

5.3.3 fish completion

fish is pretty straight forward as it offers the `/.config/fish/completions/` directory for completions.

Run

```
1 pkgcheck -generate-completion fish > ~/.config/fish/completions/pkgcheck.fish
```

5.4 Check a package

A package for CTAN is supposed to be uploaded as a ZIP or a g-zipped tar archive. The package must have a top level directory.

After unpacking the archive of a package `mypkg` into directory `mypkg/` it can be checked by running `pkgcheck` with option `--package-dir` or shorter `-d`.

```
1 pkgcheck -d mypkg
```

`pkgcheck` returns 1 if there are any errors, otherwise 0.

5.5 Check a package which has a TDS archive

If a package contains a TDS ZIP archive it is supposed to be in the top level directory of a package.

In order to check the TDS ZIP archive the option `-T <tds_zip>` or `--tds-zip <tds_zip>` can be used.

Please note that a TDS ZIP archive will always be checked together with the non-install tree of the package which means that `--tds-zip` requires option `--package-dir` as well.

Checking package `mypkg` `pkgcheck` will be invoked like follows:

```
1 pkgcheck -d mypkg -T mypkg.tds.zip
```

As before `pkgcheck` returns 1 if there are any errors, otherwise 0.

5.6 Pkgcheck messages

`pkgcheck` issues three kind of messages

- Information messages
- Warning messages
- Error messages

Messages have unique ids and the detailed explanation of a message can be either looked up in this document, or it can be displayed by using command line option `--explain` or `-e`.

```
1 pkgcheck --explain e0012
```

Example

5.7 Duplicate files

By default, `pkgcheck` detects duplicate files in a package. This could be disabled by using command line switch `--ignore-dups` or shorter `-I`.

5.8 Permissions

`pkgcheck` offers the option `--correct-crlf` or shorter `-L` to correct wrong permissions in a package.

5.9 CRLF line endings

`pkgcheck` detects CRLF line endings in text files as good as it can. It reads up to 1 MB to check for CRLF line endings.

Option `--correct-crlf` or for short `-L` can be used to convert a file from CRLF to LF line endings.

5.10 Help options

- -V
Outputs pkgcheck's version number.
- --help
--help shows the available command line options.

```
pkgcheck 1.0.0
Manfred Lotz <manfred@ctan.org>
A checker for uploaded packages to CTAN.
```

```
USAGE:
  pkgcheck [FLAGS] [OPTIONS]
```

```
FLAGS:
  -L, --correct-crlf          Correct CRLF line endings
  -C, --correct-perms        Correct permissions
  --explain-all              Explains all error or warning messages
  -h, --help                  Prints help information
  -I, --ignore-dupes         Ignore dupes
  --no-colors                 Don't display messages in color
  --show-temp-endings        Show file endings for temporary files
  --urlcheck                  Check URLs found in README files
  -V, --version               Prints version information
  -v, --verbose               Verbose operation?
```

```
OPTIONS:
  -e, --explain <explain>    Explain error or warning message
  -d, --package-dir <pkg_dir> Package directory
  -T, --tds-zip <tds_zip>    tds zip archive
```

- --explain <explain>
This option explains an error message in more detail.

Example:

```
1  pkgcheck -e e0012
```

- --explain-all
Outputs a list of explanations of all messages.
- --show-temp-endings
Outputs a list of all file name endings which pkgcheck uses to detect temporary files.

6 About checking file types

pkgcheck determines, similar to the UNIX `file` command, the type of file. This is required before for example checking permissions or complaining that a text file has CRLF line endings.

It is very important to note that determining file types is not bullet proof. So, it might happen in some cases that pkgcheck makes mistakes when determining a file type. This could lead to a subsequent mistake when complaining about an x-bit, or complaining about CRF line ending.

7 About permissions checking

From an installation point of view the files and directories of a package

- must be at least world readable
- must be writable by owner or group
- must not have the x-bit on for the owner if the file isn't an executable, i.e. a script or binary

The reason for this minimal requirement is that the installation utility used by the CTAN team (which by the way was written by Rainer Schöpf a long time ago) sets permissions correctly if the owner permission is set correctly.

Examples:

- `README.md` with `666` is ok because the installation utility converts the permission to `664`
- `README.md` with `660` is wrong because the installation utility wouldn't have access to the file
- some `.pdf` with `744` would be wrong because a PDF document must not have the x-bit on for the owner

Because of the smartness of the installation utility pkgcheck does check minimal requirements only, i.e some weird looking permissions like the `666` above are accepted.

8 Different kind of messages

Innnn Informational messages

These are message which usually announce pkgcheck actions.

9 Informational messages

Fnnnn Fatal messages

Fatal messages are related to environmental issues and not related to packages. They are usually unrecoverable errors, and pkgcheck's only option is to terminate. Fatal messages are written to standard error.

If for example, the package directory specified at the command line doesn't exist then the only option is to issue a message and to terminate.

Ennnn Error messages

Error messages report errors which must be fixed before installing a package.

Wnnnn Warning messages

Warning messages denote possible errors depending upon the situation.

For example, for a font package having many duplicate files might be ok. For another package it could be regarded as an error.

9 Informational messages

9.1 I0001 -- Successfully converted from CRLF to LF

Just an information that pkgcheck has successfully converted a file from CRLF to LF line endings

9.2 I0002 -- Checking package files in directory

Just an information that pkgcheck starts checking the package files in the unzipped directory trees

9.3 I0003 -- Checking TDS zip archive

Just an information that pkgcheck starts checking the TDS zip archive

9.4 I0004 -- Correcting line endings for file

The file had CRLF line ending and will be corrected to have LF (Unix like) line endings.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#crlf>

9.5 I0005 -- Correcting permissions for file or directory

pkgcheck corrects wrong permissions for package files and directories. It runs the `chmod` command in verbose mode.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#filepermissions>

9.6 I0006 -- Files having one of the following file name endings are regarded as temporary

Option `--show-temp-endings` was used, and pkgcheck prints a list of temporary file endings and their meanings.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#noauxfiles>

9.7 I0007 -- Successfully corrected wrong line endings to LF resp. CRLF

pkgcheck successfully converted wrong line endings to LF line endings or to CRLF line endings if it the file was a Windows text file.

Wrong line endings could be CR, CRLF or a mixture of line endings.

9.8 I0008 -- Using config file

Tells the user which config file is used.

9.9 I0009 -- Updating entry `<pkgname> -> <tpkg>` with `<pkgname> -> <new tpkg>` from config file",

This message can only show up if pkgcheck got called with `--config`. It is required that the path names in the TDS zip archive contain the package name. There are exceptions however, and if such an exception is defined in the config file pkgcheck reports the usage of an exception.

Example: `tex/latex/microtype/microtype-luatex.de` in the TDS zip archive `microtype.tds.zip` contains the package name `microtype`

There are exceptions, however.

Example: The file names in `latex-amsmath.tds.zip` do not contain `latex-amsmath` but just `latex`

These exceptions are hard-coded in pkgcheck but can be overridden in the `pkgcheck.yml` config file like in the following example

```
tds_path_exceptions:  
- pkg: latex-amsmath  
  tpkg: latexnew
```

10 Warning messages

10.1 W0001 -- Archive as package file detected

Usually a CTAN package should not contain archives. An exception are situations where, for example, the source code of a package is kept in a separate zip archive.

10.2 W0002 -- Duplicate files detected

Duplicate files were detected which are listed right after this message.

The message is a warning message as something like this could not be seen as an error in general.

10.3 W0003 -- Same named files detected in the package tree

We like to have unique file names over the whole package directory tree. When we discover same named files we report it as a warning. Common names like README, README.txt, README.md, Makefile, Makefile.in, Makefile.am and makefile are ignored when checking.

For more details refer to: <http://mirror.utexas.edu/ctan/help/ctan/CTAN-upload-addendum.html#uniquefilenames>

10.4 W0004 -- encoding with BOM detected

A UTF encoded package file contains a BOM (byte order mark). Currently, we issues a warning.

Nevertheless, the CTAN team discourages uses of BOM. Please be aware, that in some future time this could be reagarded as an error.

10.5 W0005 -- Very large file with size <size> detected in package

(Experimental) We issue the message if there is a file is larger than 40MiB in the package directory tree.

10.6 W0006 -- Very large file with size <size> detected in TDS zip archive

(Experimental) We issue the message if there is a file larger than 40MiB in the TDS zip archive.

10.7 W0007 -- Empty directory detected in the TDS zip archive

Empty directories in a TDS zip archive are discouraged. As they usually don't create errors in the distribution we issue a warning only.

10.8 W0008 -- Windows file has Unix line endings

A Windows file with Unix line endings was detected.

We regard a file as a Windows file if its name ends with:

- .bat
- .cmd
- .nsh, or
- .reg

10.9 W0009 -- Replacing <pkgname> -> <tpkg> with the same from config file”,

This message can only show up if pkgcheck got called with `--config`. Indicates that an entry in the pkgcheck config file does the same as the hard-coded entry. This helps to keep a clean config file.

10.10 W0010 -- Hardlinks detected with inode

Hardlinks found in the package directory tree. The inode number will be displayed

10.11 W0011 -- has an mtime in the future by seconds, or <hours, minutes, seconds>

The file has a future modification time. This is most probably caused by the archiver tool which doesn't pay attention to the timezone when adding the file to the archive

The future time will be displayed in

- seconds
- and hours, minutes and seconds

11 Error messages

11.1 E0001 -- Bad characters in file name

File name should not contain non-ascii characters. Additionally, file names should not contain control characters or other characters which may have a special mean-

ing for UNIX shells.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#nunixspecialcharacters>

11.2 E0002 -- File Permissions

Files submitted to CTAN should be world readable.

Only files that are truly executable (like scripts and binaries) should be marked as such.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#filepermissions>

11.3 E0003 -- README is not a text file

The README file specified in the error message must be a text file but it isn't.

11.4 E0004 -- Empty directory not allowed

Empty directories are considered as rubbish, and are usually not accepted as part of a package, neither in the package tree nor in the TDS zip archive.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#noemptyfiles>

11.5 E0005 -- Empty files not allowed

Empty files are considered as rubbish, and are usually not accepted as part of a package.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#noemptyfiles>

11.6 E0006 -- Hidden directories not allowed

A package should not contain hidden directories, neither in the package tree nor in the TDS zip archive.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#noauxfiles>

11.7 E0007 -- Hidden files not allowed

A package should not contain hidden files, neither in the package tree nor in the TDS zip archive.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#noauxfiles>

11.8 E0008 -- Temporary file detected

A temporary file was detected. These are typically files created by TeX & friends and should not be part of a package.

Temporary files will also be detected in a TDS zip archive.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#noauxfiles>

11.9 E0009 -- Package doesn't contain a README file

A package must contain at least one of README, README.md or README.txt file.

For more details refer to: <http://mirrors.ibiblio.org/CTAN/help/ctan/CTAN-upload-addendum.html#readme>

11.10 E0010 -- Broken symlink detected

A broken symlink was detected.

11.11 E0011 -- Wrong permission for directory

Directories should have rwx for the owner and at least r-x for others (i.e. world readable).

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#filepermissions>

11.12 E0012 -- CRLF line endings detected

The file specified in the error message contains CRLF line endings. Text files should have UNIX style line endings.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#crlf>

11.13 E0013 -- Socket special file detected

The file specified in the error message is a socket special file which is not allowed.

11.14 E0014 -- Fifo special file detected

The file specified in the error message is a fifo special file which is not allowed.

11.15 E0015 -- Block device file detected

The file specified in the error message is a block device file which is not allowed.

11.16 E0016 -- Character device file detected

The file specified in the error message is a character device file which is not allowed.

11.17 E0017 -- PDF document is in error

The PDF document mentioned in the message is in error.

pdfinfo will be run to check if a PDF document can be read. Message E0017 will be followed by the error messages from pdfinfo.

Example:

```
I0002   Checking package files in directory somepkg
E0017   PDF error detected in somepkg/sompkg.pdf
Syntax Error (1293042): Illegal character ')'
Syntax Error: Couldn't find trailer dictionary
Syntax Error (1293042): Illegal character ')'
Syntax Error: Couldn't find trailer dictionary
Syntax Error: Couldn't read xref table
```

11.18 E0018 -- Unwanted directory detected

A directory was detected which should not be part of a package. Example: `__MACOSX`

11.19 E0019 -- Generated file detected

In order to avoid redundancy we don't want to have included files in a package which easily can be generated from other files in the submission.

Exceptions are the README files of the package, i.e. README, README.md or README.txt, .pdf, .html, or .css files.

pkgcheck detects generated files anywhere in the package directory tree.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#nogeneratedfiles>

11.20 E0020 -- Unwanted directory detected in the top level directory in TDS zip archive

The name of a top level directory of a TDS archive must be one of those listed here: asymptote, bibtex, chktex, context, doc, dvipdfmx, dvips, fonts, hbf2gf, makeindex, metafont, metapost, mft, omega, pbibtex, psutils, scripts, source, tex, tex4ht, texconfig, texdoc, texdoctk, ttf2pk, web2c, xdvi, xindy,

Any other other directory at the top level is an error.

11.21 E0021 -- Error when reading a file

An error was encountered when reading the file specified in the message.

11.22 E0022 -- Check of an URL in a README file failed

URL checking is in effect. An error occurred when trying to retrieve an URL which was found in the specified README file.

11.23 E0023 -- Follow up error when trying to read a directory with insufficient permissions

Error which is a follow-up error. For instance, when a directory could not be read.

11.24 E0024 -- TDS zip archive has wrong permissions

The TDS zip archive should have at least `r--` for the owner and at least `r--` for others (i.e. world readable).

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#filepermissions>

11.25 E0025 -- Duplicate names when ignoring letter case for files or directories

As there are operating systems which do not distinguish between `myfile` and `MYFILE` we don't want to have file names in a directory which are the same after converting to lower case.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#filenames>

11.26 E0026 -- Files not in TDS or different in TDS and non-install tree

The file mentioned in the error message is either not existing in the TDS zip archive, or it is different to the one in the non-install tree

11.27 E0027 -- An I/O error occurred

Some kind of I/O error occurred. If you believe there is an error in `pkgcheck` please contact the author.

11.28 E0028 -- A path name in a TDS zip archive must contain the package name

The path names in a TDS zip archive must contain the package name.

Example: Assume a package somepkg. Then path names should look like follows:

```
tex/latex/somepkg/somepkg.cls
doc/latex/somepkg/README
source/latex/somepkg/somepkg.dtx
...
```

11.29 E0029 -- README file: encoding with BOM detected

A README file should be either ASCII or UTF-8 without BOM(byte order mark)

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#readme>

11.30 E0030 -- A symlink was found which points outside of the package directory tree

A symlink must not point to a file or directory outside of the package directory tree.

11.31 E0031 -- File name contains invalid UTF-8 character(s)

A file name contains invalid UTF-8 character(s).

11.32 E0033 -- Error when unpacking tds archive

In order to investigate the contents of the TDS zip archive pkgcheck unpacks the TDS zip archive to a temporary location which failed for the reason given in the error message.

11.33 E0034 -- Unwanted file detected in the top level directory in TDS zip archive

A top level directory of a TDS archive should only contain certain directories but no files.

11.34 E0035 -- Unwanted TDS archive detected in package directory tree

A package directory should not contain a TDS zip archive.

11.35 E0036 -- .dtx/.ins files found in wrong directory in TDS zip archive

In a TDS zip archive a .dtx resp. .ins file must be in a subdirectory of either of source/ or doc/ top level directories.

11.36 E0037 -- CR line endings detected

The file specified in the error message contains CR line endings. Text files should have UNIX style line endings.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#crlf>

11.37 E0038 -- File has inconsistent line endings: CR: x, LF: y, CRLF: z

The file specified in the error message contains CR line endings. Text files should have UNIX style line endings.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#crlf>

11.38 E0039 -- No doc/ directory found in the top level directory of the TDS zip archive

A TDS zip archive is required to contain a top level directory doc/.

11.39 E0040 -- Too few top level directories in the TDS zip archive

The top level directory of a TDS zip archive must contain at least a doc directory and one or more of the following directories: asymptote, bibtex, chktex, context, dvipdfmx, dvips, fonts, hbf2gf, makeindex, metafont, metapost, mft, omega, pbibtex, psutils, scripts, source, tex, tex4ht, texconfig, texdoc, texdoctk, ttf2pk, web2c, xdvi, xindy,

Any other other directory at the top level is an error.

11.40 E0041 -- One or more map file found for the package but none of them is in a path starting with fonts/map/dvips

At least one map file was found which was not in a path starting with fonts/map/dvips.

11.41 E0042 -- TDS zip archive: duplicate names when ignoring letter case for files or directories

As there are operating systems which do not distinguish between myfile and MYFILE we don't want to have file names in a directory which are the same after converting to lower case.

For more details refer to: <http://mirror.ctan.org/help/ctan/CTAN-upload-addendum.html#filenames>

11.42 E0043 -- Symlink found in TDS zip archive

The TDS zip archive contained a symlink which is not allowed.

12 Fatal messages

12.1 F0001 -- Specify a directory to check (use option -d)

pkgcheck was called without any options. Use option -d to check a directory

12.2 F0002 -- Specified directory does not exist. Exiting...

The directory specified at the command line does not exist.

12.3 F0003 -- Specified TDS archive does not exist or is no file

Specify a valid TDS zip archive when calling pkgcheck

12.4 F0004 -- The file specified as TDS archive is no zip archive

Specify a valid TDS zip archive when calling pkgcheck

12.5 F0005 -- Bad file name for the zip archive

pkgcheck detected that the file name of the TDS zip archive doesn't end with .tds.zip

12.6 F0006 -- Unknown error code specified with option -e resp. ---explain. Exiting...

pkgcheck was called with option -e resp. --explain, and an unknown error code was specified.

12.7 F0007 -- Could not create temporary directory for unzipping the TDS zip archive

Make sure the temp directory is writable and/or the temp directory has enough space.

12.8 F0008 -- Config file doesn't exist. Exiting...

The config file specified at the command line doesn't exist.

12.9 F0009 -- Error reading config file <config_file>: Exiting...

The config file <config_file> could not be read.

12.10 F0010 -- Config file's content could not be read properly: Exiting...

The content of the config has errors as given in . Please correct and rerun.