DevOrSysAdminScripts

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January 1, 2026

Abstract

Some "small" useful scripts for enhancing development or system-administrators tasks

Current version: 2026-01-01
Current number of commits: 238
Current git SHA1: b8ec1eb9af1aaaf6e7c90517e31a31c4951516e6
Code lines: 6251 total lines, 5637 not empty lines, 614 empty lines.

1 Files tree

```
.
├── build_and_checks_dependencies
│   ├── build_and_checks.exec.sh.tpl
│   ├── build_md_from_printable_md.exec.sh
│   ├── check_shell_scripts_beginnings.libr.sh
│   ├── check_URLs.libr.sh
│   ├── common_build_and_checks.exec.sh
│   ├── common_build_and_checks.exec.sh.tpl
│   ├── comparisons.libr.sh
│   ├── create_PDF.exec.sh
│   ├── generate_from_template.libr.sh
│   ├── get_common_text_glob_patterns.libr.sh
│   ├── grammar_and_spell_check.libr.sh
│   ├── licenses_templates
│   │   ├── build_licenses_templates.exec.sh
│   │   ├── license_file_header_AGPLv3+.c.tpl
│   │   ├── license_file_header_AGPLv3+.py.tpl
│   │   ├── license_file_header_AGPLv3+.sh.tpl
│   │   ├── license_file_header_AGPLv3+.tex.tpl
│   │   ├── license_file_header_AGPLv3+.tpl
│   │   ├── license_file_header_GPLv3+.c
```

```
│   │       ├── license_file_header_GPLv3+.c.tpl
│   │       ├── license_file_header_GPLv3+.py
│   │       ├── license_file_header_GPLv3+.py.tpl
│   │       ├── license_file_header_GPLv3+.sh
│   │       ├── license_file_header_GPLv3+.sh.tpl
│   │       ├── license_file_header_GPLv3+.tex
│   │       ├── license_file_header_GPLv3+.tex.tpl
│   │       ├── license_file_header_GPLv3+.tpl
│   │       ├── license_file_header_LGPLv3+.c
│   │       ├── license_file_header_LGPLv3+.c.tpl
│   │       ├── license_file_header_LGPLv3+.py
│   │       ├── license_file_header_LGPLv3+.py.tpl
│   │       ├── license_file_header_LGPLv3+.sh
│   │       ├── license_file_header_LGPLv3+.sh.tpl
│   │       ├── license_file_header_LGPLv3+.tex
│   │       ├── license_file_header_LGPLv3+.tex.tpl
│   │       └── license_file_header_LGPLv3+.tpl
│   ├── lines_counts.libr.sh
│   ├── lines_filters.libr.sh
│   ├── lines_maps.libr.sh
│   ├── overwrite_if_not_equal.libr.sh
│   ├── python_black_complement.libr.sh
│   ├── python_isort_complement.libr.sh
│   ├── split_line_at_most.exec.php
│   ├── split_line_at_most.libr.php
│   ├── strings_functions.libr.sh
│   ├── too_long_code_lines.libr.sh
│   ├── update_common_build_and_checks.exec.sh
│   └── update_or_check_files_names_listing.exec.sh
├── build_and_checks.exec.sh
├── build_and_checks_variables
│   ├── DevOrSysAdminScripts.html.tpl
│   ├── DevOrSysAdminScripts.tex
│   ├── DevOrSysAdminScripts.tex.tpl
│   ├── files_listing.tex.tpl
│   ├── files_names_listing.txt
│   ├── .gitignore
│   ├── licenses_notes.txt
│   └── repository_data.txt
├── COPYING
├── COPYING.LESSER
├── DevOrSysAdminScripts.html
├── DevOrSysAdminScripts.pdf
├── git_helpers
│   ├── git_checks.libr.sh
│   ├── post-commit
```

```
│       ├── post_commit_renaming_comment.libr.sh
│       └── pre-commit
├── LiensUtiles.txt
├── README.html
├── README.md
├── README.md.tpl
├── unicode.libr.php
├── upgrade_build_and_checks.exec.sh
└── wget_sha512.libr.sh

5 directories, 71 files

[ 12K Jan  1 00:30]  ./
├── [4.0K Jan  1 00:30]  build_and_checks_dependencies/
│   ├── [2.6K Dec 30 22:26]  build_and_checks.exec.sh.tpl*
│   ├── [2.5K Dec 31 14:46]  build_md_from_printable_md.exec.sh*
│   ├── [1.3K Dec 30 17:50]  check_shell_scripts_beginnings.libr.sh
│   ├── [2.4K Dec 31 23:21]  check_URLs.libr.sh
│   ├── [ 17K Jan  1 00:30]  common_build_and_checks.exec.sh*
│   ├── [ 12K Dec 31 15:37]  common_build_and_checks.exec.sh.tpl
│   ├── [3.1K Dec 30 18:02]  comparisons.libr.sh
│   ├── [ 14K Jan  1 00:25]  create_PDF.exec.sh*
│   ├── [3.1K Dec 31 21:28]  generate_from_template.libr.sh
│   ├── [1.9K Dec 30 19:53]  get_common_text_glob_patterns.libr.sh
│   ├── [1.9K Dec 30 19:55]  grammar_and_spell_check.libr.sh
│   ├── [4.0K Jan  1 00:30]  licenses_templates/
│   │   ├── [7.7K Dec 30 19:53]  build_licenses_templates.exec.sh*
│   │   ├── [ 734 Dec 30 19:34]  license_file_header_AGPLv3+.c.tpl
│   │   ├── [ 736 Dec 30 19:34]  license_file_header_AGPLv3+.py.tpl
│   │   ├── [ 768 Dec 30 19:34]  license_file_header_AGPLv3+.sh.tpl
│   │   ├── [ 768 Dec 30 19:34]  license_file_header_AGPLv3+.tex.tpl
│   │   ├── [ 728 Dec 30 19:32]  license_file_header_AGPLv3+.tpl
│   │   ├── [ 761 Dec 30 16:12]  license_file_header_GPLv3+.c
│   │   ├── [ 713 Dec 27 21:48]  license_file_header_GPLv3+.c.tpl
│   │   ├── [ 763 Dec 30 16:12]  license_file_header_GPLv3+.py
│   │   ├── [ 715 Dec 27 21:48]  license_file_header_GPLv3+.py.tpl
│   │   ├── [ 795 Dec 30 16:12]  license_file_header_GPLv3+.sh
│   │   ├── [ 747 Dec 27 21:48]  license_file_header_GPLv3+.sh.tpl
│   │   ├── [ 795 Dec 30 16:12]  license_file_header_GPLv3+.tex
│   │   ├── [ 747 Dec 27 21:48]  license_file_header_GPLv3+.tex.tpl
│   │   ├── [ 707 Dec 27 21:48]  license_file_header_GPLv3+.tpl
│   │   ├── [ 782 Dec 27 21:48]  license_file_header_LGPLv3+.c
│   │   ├── [ 734 Dec 27 21:48]  license_file_header_LGPLv3+.c.tpl
│   │   ├── [ 784 Dec 27 21:48]  license_file_header_LGPLv3+.py
│   │   ├── [ 736 Dec 27 21:48]  license_file_header_LGPLv3+.py.tpl
│   │   ├── [ 816 Dec 27 21:48]  license_file_header_LGPLv3+.sh
```

```
│         ├── [ 768 Dec 27 21:48]  license_file_header_LGPLv3+.sh.tpl
│         ├── [ 816 Dec 27 21:48]  license_file_header_LGPLv3+.tex
│         ├── [ 768 Dec 27 21:48]  license_file_header_LGPLv3+.tex.tpl
│         └── [ 728 Dec 27 21:48]  license_file_header_LGPLv3+.tpl
├── [2.2K Dec 31 23:37]  lines_counts.libr.sh
├── [6.7K Dec 31 23:36]  lines_filters.libr.sh
├── [2.8K Dec 30 20:05]  lines_maps.libr.sh
├── [1.4K Dec 31 22:40]  overwrite_if_not_equal.libr.sh
├── [1.4K Dec 30 20:15]  python_black_complement.libr.sh
├── [1.7K Dec 30 20:16]  python_isort_complement.libr.sh
├── [1.8K Dec 30 20:17]  split_line_at_most.exec.php*
├── [2.2K Dec 29 22:52]  split_line_at_most.libr.php
├── [ 13K Dec 31 19:42]  strings_functions.libr.sh
├── [2.3K Jan  1 00:23]  too_long_code_lines.libr.sh
├── [3.8K Dec 30 21:43]  update_common_build_and_checks.exec.sh*
└── [4.3K Dec 30 22:40]  *
    │ update_or_check_files_names_listing.exec.sh**
├── [2.8K Jan  1 00:30]  build_and_checks.exec.sh*
├── [4.0K Jan  1 00:31]  build_and_checks_variables/
│   ├── [4.4K Dec 31 22:13]  DevOrSysAdminScripts.html.tpl
│   ├── [ 26K Jan  1 00:30]  DevOrSysAdminScripts.tex
│   ├── [3.7K Dec 31 15:41]  DevOrSysAdminScripts.tex.tpl
│   ├── [ 15K Dec 31 19:44]  files_listing.tex.tpl
│   ├── [5.2K Dec 31 16:15]  files_names_listing.txt
│   ├── [   7 Dec 29 17:13]  .gitignore
│   ├── [1.0K Dec 31 14:41]  licenses_notes.txt
│   └── [ 645 Dec 30 16:37]  repository_data.txt
├── [ 34K May  6  2024]  COPYING
├── [7.5K Dec 27 21:48]  COPYING.LESSER
├── [250K Jan  1 00:30]  DevOrSysAdminScripts.html
├── [249K Jan  1 00:30]  DevOrSysAdminScripts.pdf
├── [4.0K Dec 31 15:11]  git_helpers/
│   ├── [3.4K Dec 30 17:02]  git_checks.libr.sh
│   ├── [1.2K Dec 30 17:25]  post-commit
│   ├── [ 13K Dec 31 15:11]  post_commit_renaming_comment.libr.sh
│   └── [1.3K Dec 30 17:03]  pre-commit
├── [ 830 Dec 29 19:10]  LiensUtiles.txt
├── [2.7K Dec 31 16:31]  README.html
├── [2.4K Dec 31 16:31]  README.md
├── [2.4K Dec 31 16:31]  README.md.tpl
├── [6.5K Jan  1 00:30]  unicode.libr.php
├── [1.3K Dec 30 16:51]  upgrade_build_and_checks.exec.sh*
└── [1.5K Dec 30 16:47]  wget_sha512.libr.sh

5 directories, 71 files
```

2 Listing of files

This repository is dual licensed. All the Bash scripts source code is covered by GPLv3+. All the PHP scripts source code is covered by LGPLv3+.

The text of the licenses is available at: `https://www.gnu.org/licenses/`. The git repository of this source code is also available at: `https://github.com/LLyaudet/DevOrSysAdminScripts/`.

Here is a listing of the dependencies of the code in this repository:

- The following dependencies are GPLv3+ licensed:
  basename, bash (and its builtins), cat, chmod, cp, cut, date, diff, dirname, find, grep, head, mkdir, mv, realpath, rm, sed, sha512sum, shellcheck, sort, tail, wc, wget, xargs

- The following dependencies are GPLv2+ licensed:
  more, pandoc, pdftex, pdflatex, tree

- The following dependencies are GPLv2 licensed:
  git

- The following dependencies are LGPLv2.1+ licensed:
  notify-send

- The following dependencies are MIT licensed:
  black, isort, mypy

- php is licensed under PHP License v3.01

- tex is licensed under Knuth license

- pcregrep has a custom license from Cambridge University

Remark: Some commands listed under GPLv3+ are POSIX and can have different implementations under another license; for example, uutils coreutils is MIT licensed, whilst GNU coreutils is GPLv3+ licensed.

2.1 build_and_checks_dependencies/build_and_checks.exec.sh.tpl

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
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10 #
11 # DevOrSysAdminScripts is distributed in the hope
```

```
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
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20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # The file "build_and_checks.exec.sh.tpl" was renamed from
25  # "build_and_checks.sh.tpl" to "build_and_checks.exec.sh.tpl".
26  # The file "build_and_checks.exec.sh" generated from the file
27  # "build_and_checks.sh.tpl" or "build_and_checks.exec.sh.tpl"
28  # was renamed from
29  # "build_and_checks.sh" to "build_and_checks.exec.sh".
30
31  build_and_checks(){
32    local LFBFL_working_directory="."
33    if [[ -n "$1" ]]; then
34      LFBFL_working_directory="$1"
35    fi
36    readonly LFBFL_working_directory
37
38    local LFBFL_verbose=""
39    if [[ "$2" == "--verbose" ]]; then
40      echo "$0 $*"
41      LFBFL_verbose="--verbose"
42    fi
43    readonly LFBFL_verbose
44
45    # shellcheck disable=SC1091
46    source ./wget_sha512.libr.sh
47
48    LFBFL_subdir="build_and_checks_dependencies"
49    mkdir -p "${LFBFL_subdir}/licenses_templates"
50    mkdir -p "build_and_checks_variables/temp"
51    if ! [[ -f "build_and_checks_variables/.gitignore" ]]; then
52      echo "temp/" > "build_and_checks_variables/.gitignore"
53      echo "" >> "build_and_checks_variables/.gitignore"
54    fi
55
56    # LFBFL_dependencies_raw_content_download_URL
57    local LFBFL_dependencies_URL
```

```bash
58    LFBFL_dependencies_URL="https://raw.githubusercontent.com/LLyaudet/"
59    LFBFL_dependencies_URL+="DevOrSysAdminScripts/main/${LFBFL_subdir}"
60    readonly LFBFL_dependencies_URL
61
62    declare -r LFBFL_common_file_name="common_build_and_checks.exec.sh"
63    # LFBFL_script_download_URL
64    declare -r\
65      LFBFL_script="${LFBFL_dependencies_URL}/${LFBFL_common_file_name}"
66    declare -r\
67      LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_common_file_name}"
68    @sha512_common_build_and_checks.exec.sh@
69    wget_sha512 "${LFBFL_file_path}" "${LFBFL_script}"\
70      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
71    chmod +x "./${LFBFL_file_path}"
72
73    "${LFBFL_file_path}" "${LFBFL_working_directory}"\
74      "${LFBFL_dependencies_URL}" "${LFBFL_verbose}"
75  }
76
77  build_and_checks "$@"
```

2.2 build_and_checks_dependencies/build_md_from_printable_md.exec.sh

```bash
1   #!/usr/bin/env bash
2   # This file is part of DevOrSysAdminScripts library.
3   #
4   # DevOrSysAdminScripts is free software:
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6   # of the GNU General Public License
7   # as published by the Free Software Foundation,
8   # either version 3 of the License,
9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
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15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
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17  #
18  # You should have received a copy of
19  # the GNU General Public License
20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
```

```
24  # This file was renamed from "build_md_from_printable_md.sh"
25  # to "build_md_from_printable_md.exec.sh".
26
27  LFBFL_verbose=""
28  if [[ "$3" == "--verbose" ]]; then
29    echo "$0 $*"
30    # shellcheck disable=SC2034
31    LFBFL_verbose="--verbose"
32  fi
33
34  LFBFL_subdir="build_and_checks_dependencies"
35  # shellcheck disable=SC1090
36  source "./${LFBFL_subdir}/overwrite_if_not_equal.libr.sh"
37
38  LFBFL_sed_expression='s/(\[[a-zA-Z0-9:-]*\]: [^\n\\]*)\\\n/\1/Mg'
39  LFBFL_sed_expression+=';s/(<http[^\n\\]*)\\\n/\1/Mg'
40  LFBFL_sed_expression+=';s/(- <http[^\n\\]*)\\\n/\1/Mg'
41
42  declare -i LFBFL_cd_result
43  pushd .
44  if [[ -n "$1" ]];
45  then
46    cd "$1" || {
47      LFBFL_cd_result=$?;
48      echo "build_md_from_printable_md no such directory";
49      # shellcheck disable=SC2248,2250
50      exit $LFBFL_cd_result;
51    }
52  fi
53
54  file_name="README"
55  if [[ -n "$2" ]];
56  then
57    file_name="$2"
58  fi
59
60  if [[ -f "${file_name}.md.tpl" ]];
61  then
62    sed -Ez "${LFBFL_sed_expression}" "${file_name}.md.tpl"\
63      > "${file_name}_temp1.md"
64    sed -Ez "${LFBFL_sed_expression}" "${file_name}_temp1.md"\
65      > "${file_name}_temp2.md"
66    sed -Ez "${LFBFL_sed_expression}" "${file_name}_temp2.md"\
67      > "${file_name}_temp3.md"
68    sed -Ez "${LFBFL_sed_expression}" "${file_name}_temp3.md"\
69      > "${file_name}_temp4.md"
```

```
70   overwrite_if_not_equal "${file_name}.md" "${file_name}_temp4.md"
71   rm "${file_name}_temp1.md" "${file_name}_temp2.md"\
72     "${file_name}_temp3.md"
73 else
74   echo "No file ${file_name}.md.tpl"
75 fi
76
77 pandoc -f markdown "${file_name}.md" > "${file_name}.html.temp"
78 overwrite_if_not_equal "${file_name}.html" "${file_name}.html.temp"
79
80 declare -i LFBFL_popd_result
81 popd || {
82   LFBFL_popd_result=$?;
83   echo "build_md_from_printable_md no popd";
84   # shellcheck disable=SC2248,2250
85   exit $LFBFL_popd_result;
86 }
```

2.3 build_and_checks_dependencies/check_shell_scripts_beginnings.libr.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
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10 #
11 # DevOrSysAdminScripts is distributed in the hope
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13 # but WITHOUT ANY WARRANTY;
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15 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU General Public License for more details.
17 #
18 # You should have received a copy of
19 # the GNU General Public License
20 # along with DevOrSysAdminScripts.
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22 #
23 # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24 # This file was renamed from "check_shell_scripts_beginnings.sh"
25 # to "check_shell_scripts_beginnings.libr.sh".
26
```

```
27  check_one_shell_script_beginning(){
28    declare -r LFBFL_file_name=$(basename "$1")
29    if [[ "${LFBFL_file_name}" =~ license_file_header_.*\.sh ]]; then
30      return 0
31    fi
32    # shellcheck disable=SC2312
33    diff <(head -n 1 "$1") <(echo '#!/usr/bin/env bash')
34  }
35
36
37  check_shell_scripts_beginnings(){
38    shopt -s globstar
39    local LFBFL_file_name
40    for LFBFL_file_name in **/*.sh; do
41      check_one_shell_script_beginning "${LFBFL_file_name}"
42    done
43  }
```

2.4 build_and_checks_dependencies/check_URLs.libr.sh

```
1   #!/usr/bin/env bash
2   # This file is part of DevOrSysAdminScripts library.
3   #
4   # DevOrSysAdminScripts is free software:
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7   # as published by the Free Software Foundation,
8   # either version 3 of the License,
9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  # See the GNU General Public License for more details.
17  #
18  # You should have received a copy of
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20  # along with DevOrSysAdminScripts.
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22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "check_URLs.sh" to "check_URLs.libr.sh".
25
26  LFBFL_subdir="build_and_checks_dependencies"
```

```
27  # shellcheck disable=SC1090
28  source "./${LFBFL_subdir}/get_common_text_glob_patterns.libr.sh"
29
30  check_URLs(){
31    get_COMMON_TEXT_FILES_GLOB_PATTERNS
32
33    declare -A LFBFL_substitutions
34    LFBFL_substitutions=(\
35      ["http://www.gnu.org/licenses/"]="https://www.gnu.org/licenses/"\
36    )
37
38    local LFBFL_pattern
39    local LFBFL_file_name
40    local LFBFL_base_file_name
41    local LFBFL_substitution
42    # shellcheck disable=SC2154
43    for LFBFL_pattern in "${COMMON_TEXT_FILES_GLOB_PATTERNS[@]}"; do
44      [[ "$1" != "-v" ]]\
45        || echo "Iterating on pattern: ${LFBFL_pattern}"
46      # shellcheck disable=SC2312
47      find . -type f -name "${LFBFL_pattern}" -printf '%P\n'\
48        | xargs grep -H 'http:'\
49        | grep -v "| xargs grep -H 'htt"\
50        | grep -vP "['\"]http(:[^'\"]*)['\"].*['\"]https\\1['\"]"
51      # Last grep just above will remove false positives from
52      # substitutions that fit on one line.
53      for LFBFL_file_name in ${LFBFL_pattern}; do
54        [[ -f "${LFBFL_file_name}" ]] || continue
55        LFBFL_base_file_name=$(basename "${LFBFL_file_name}")
56        [[ "${LFBFL_base_file_name}" != "check_URLs.libr.sh" ]]\
57          || continue
58        [[ "$1" != "-v" ]]\
59          || echo "Handling the file: ${LFBFL_file_name}"
60        for LFBFL_substitution in "${!LFBFL_substitutions[@]}"; do
61          LFBFL_substitution2=\
62  ${LFBFL_substitutions[${LFBFL_substitution}]}
63          if grep -q "${LFBFL_substitution}" "${LFBFL_file_name}"; then
64            sed -i "s|${LFBFL_substitution}|${LFBFL_substitution2}|g"\
65              "${LFBFL_file_name}"
66          fi
67        done
68      done
69    done
70  }
```

2.5 build_and_checks_dependencies/common_build_and_checks.exec.sh

```bash
#!/usr/bin/env bash
# This file is part of DevOrSysAdminScripts library.
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# The file "common_build_and_checks.exec.sh.tpl" was renamed from
# "common_build_and_checks.sh.tpl" to
# "common_build_and_checks.exec.sh.tpl".
# The file "common_build_and_checks.exec.sh" generated from the file
# "common_build_and_checks.sh.tpl"
# or "common_build_and_checks.exec.sh.tpl"
# was renamed from
# "common_build_and_checks.sh" to "common_build_and_checks.exec.sh".

common_build_and_checks(){
  # $1 LFBFL_working_directory
  # $2 LFBFL_dependencies_URL
  # $3 optional --verbose
  declare -r LFBFL_working_directory="$1"
  # declare -r LFBFL_dependencies_URL="$2" too long
  declare -r LFBFL_start_URL="$2"
  local LFBFL_verbose=""
  if [[ "$3" == "--verbose" ]]; then
    echo "$0 $*"
    LFBFL_verbose="--verbose"
  fi
```

```
45    readonly LFBFL_verbose

46

47    # shellcheck disable=SC1091
48    source ./wget_sha512.libr.sh

49

50    LFBFL_subdir="build_and_checks_dependencies"
51    local LFBFL_file_name
52    local LFBFL_URL
53    local LFBFL_file_path

54

55    LFBFL_file_name="build_md_from_printable_md.exec.sh"
56    # LFBFL_script_download_URL
57    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
58    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
59    local LFBFL_correct_sha512
60    LFBFL_correct_sha512='1f53caeb84d9ea0b597678118dbf028114c9a37fab952'
61    LFBFL_correct_sha512+='6d4a6d8e08f4dd5a05d8cc69b52cc405613a325c9bf9'
62    LFBFL_correct_sha512+='7e91ef5206efa1a151cc94ade7c3d708c7ed2ef'
63    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
64      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
65    chmod +x "./${LFBFL_file_path}"

66

67    LFBFL_file_name="check_shell_scripts_beginnings.libr.sh"
68    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
69    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
70    local LFBFL_correct_sha512
71    LFBFL_correct_sha512='a17c932546262c82c168e7d4495dd4f2c2409b27c72c0'
72    LFBFL_correct_sha512+='99c8ea3bc5277aa11c64b61de0b93a5bdc9b660483d9'
73    LFBFL_correct_sha512+='4e61cb79935eb1f4ca04bf4ffe4b713f5e7eccc'
74    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
75      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

76

77    LFBFL_file_name="check_URLs.libr.sh"
78    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
79    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
80    local LFBFL_correct_sha512
81    LFBFL_correct_sha512='5a713a223db287bbf1bdeef9b601b7127eefe680828cd'
82    LFBFL_correct_sha512+='f382b27672ef95bd4f9d78409673ab0c45a5784caa83'
83    LFBFL_correct_sha512+='8d017f028871194a56f118363dcaf17330e789e'
84    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
85      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

86

87    LFBFL_file_name="comparisons.libr.sh"
88    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
89    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
90    local LFBFL_correct_sha512
```

```
91    LFBFL_correct_sha512='1dac26153e23dc9c4455d18a2b3dd76c8fb8278d3b24f'
92    LFBFL_correct_sha512+='86d1c2dfe513e06b16f398f11cc7e52efaafdf360808'
93    LFBFL_correct_sha512+='d9b36f4562621203e3da2ed57897a894272202a'
94    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
95      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
96
97    LFBFL_file_name="create_PDF.exec.sh"
98    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
99    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
100   local LFBFL_correct_sha512
101   LFBFL_correct_sha512='79f35e52701ef46124eb797690111db43d22e690a7018'
102   LFBFL_correct_sha512+='cb268e59a3b09d86101517986f4cee3939b3db1acb93'
103   LFBFL_correct_sha512+='933262f95711c7a9c6b0e100eec4754254d04ce'
104   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
105     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
106   chmod +x "./${LFBFL_file_path}"
107
108   LFBFL_file_name="generate_from_template.libr.sh"
109   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
110   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
111   local LFBFL_correct_sha512
112   LFBFL_correct_sha512='9cdb123313f89fefb2c769e1e5e0bc2d768db1bf7e183'
113   LFBFL_correct_sha512+='1f703579e22a4cddae91713d1155c0357d858420ab9b'
114   LFBFL_correct_sha512+='5453eb0b54c6c74acc538e1ac76c905249e930a'
115   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
116     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
117
118   LFBFL_file_name="get_common_text_glob_patterns.libr.sh"
119   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
120   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
121   local LFBFL_correct_sha512
122   LFBFL_correct_sha512='eba2a6665977a84897075fbc3d227d14937cf9c7b2270'
123   LFBFL_correct_sha512+='339810caef1a120486979e538a9bc8a9f791564c13c2'
124   LFBFL_correct_sha512+='3e699f6fdb88e4bb29a5eab01bdebabedc3bc70'
125   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
126     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
127
128   LFBFL_file_name="grammar_and_spell_check.libr.sh"
129   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
130   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
131   local LFBFL_correct_sha512
132   LFBFL_correct_sha512='33a477d25e46c49ad000473c1d05a822427d5e769b26e'
133   LFBFL_correct_sha512+='d9457ab182f2ad12d20d26d32a46d6016d7d41be0994'
134   LFBFL_correct_sha512+='c3ca2f2130f0e62b10763cbda60645e1a49dd0c'
135   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
136     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
```

```
137
138    # /licenses_templates/ ---------------------------------------------
139    declare -r LFBFL_subdir2="${LFBFL_subdir}/licenses_templates"
140    declare -r LFBFL_start_URL2="${LFBFL_start_URL}/licenses_templates"
141    LFBFL_file_name="build_licenses_templates.exec.sh"
142    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
143    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
144    local LFBFL_correct_sha512
145    LFBFL_correct_sha512='acfc0dfd02e77d69e6e5b61c4c44cfa3ad76bd3657fa4'
146    LFBFL_correct_sha512+='875d19ec249e84db8bc5a8570621cbbf64aa2e9b44de'
147    LFBFL_correct_sha512+='932c28674cdf05372f8577c9345fa8ac5398f6c'
148    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
149      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
150    chmod +x "./${LFBFL_file_path}"
151
152    LFBFL_file_name="license_file_header_AGPLv3+.tpl"
153    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
154    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
155    local LFBFL_correct_sha512
156    LFBFL_correct_sha512='9f9aa56d9b90d5003a12c5ec3370ac31aab74fc4a2524'
157    LFBFL_correct_sha512+='2c5fbcb0197b0abbb8242f62dafc76eaf60faa5da173'
158    LFBFL_correct_sha512+='05924b31b64b037083532fced9f98445000e2d0'
159    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
160      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
161
162    LFBFL_file_name="license_file_header_GPLv3+.tpl"
163    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
164    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
165    local LFBFL_correct_sha512
166    LFBFL_correct_sha512='2bdef9a729a5a9ca5ed87ef8a518877c5ee6b31b45336'
167    LFBFL_correct_sha512+='08660316a4e595fb31465a4847f4d53a2f7264118bd4'
168    LFBFL_correct_sha512+='eab7c1d1892e00bc1861455ed02898f194db067'
169    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
170      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
171
172    LFBFL_file_name="license_file_header_LGPLv3+.tpl"
173    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
174    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
175    local LFBFL_correct_sha512
176    LFBFL_correct_sha512='265fd0d086b48ab798f35a072335a4976e4eda8c256fe'
177    LFBFL_correct_sha512+='bba6c77c98ca86cdd844c6ac150c3445c80debbb3fc2'
178    LFBFL_correct_sha512+='574b5fceeeaf79ec734a759bdef5fe798067c62'
179    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
180      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
181    # -----------------------------------------------------------------
182
```

```
183    LFBFL_file_name="lines_counts.libr.sh"
184    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
185    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
186    local LFBFL_correct_sha512
187    LFBFL_correct_sha512='4d9647cbd63661c9559dbe3c48542c2ce2afeb0f87b01'
188    LFBFL_correct_sha512+='f0192bcdb54862ff772b1f9a09045ecc2f85329b8d92'
189    LFBFL_correct_sha512+='f9f45bf1ce8906ed969c0bf908aeff6552fd555'
190    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
191      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

193    LFBFL_file_name="lines_filters.libr.sh"
194    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
195    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
196    local LFBFL_correct_sha512
197    LFBFL_correct_sha512='5e8ef6ab8a3262bc8cd13e1cf7f213a11e6496e178984'
198    LFBFL_correct_sha512+='45ee250f1e2cf532fd1324f0867532ef04d049f40322'
199    LFBFL_correct_sha512+='d041a82ddde1fe195b7ad06fb8aafe03782e13b'
200    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
201      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

203    LFBFL_file_name="lines_maps.libr.sh"
204    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
205    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
206    local LFBFL_correct_sha512
207    LFBFL_correct_sha512='10c650cddf78dd40bfde665989ae3561b2ae780bc1c8e'
208    LFBFL_correct_sha512+='841f5cdbe626cd1a61f01cea57757009c9b1ec3d2a7e'
209    LFBFL_correct_sha512+='ef57987dff725cff3e401e86b77a2f29324402d'
210    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
211      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

213    LFBFL_file_name="overwrite_if_not_equal.libr.sh"
214    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
215    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
216    local LFBFL_correct_sha512
217    LFBFL_correct_sha512='962a67fae138e48e3f19b47eddbffe2565ded5c074307'
218    LFBFL_correct_sha512+='2c12aece5f0ca9128476c13f13607ff52426c80ac772'
219    LFBFL_correct_sha512+='8d8036b6d82adde03dcfb193b069d29cb2db532'
220    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
221      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

223    LFBFL_file_name="python_black_complement.libr.sh"
224    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
225    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
226    local LFBFL_correct_sha512
227    LFBFL_correct_sha512='f23f9bbb20902c67f59d24ff46aef99490fa06b467d6c'
228    LFBFL_correct_sha512+='bb63de0b010129bf3994aeab307a1dbbcde5e41958e0'
```

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229    LFBFL_correct_sha512+='d5872add51d9e09c56e81845db34b9c50350d46'
230    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
231      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
232
233    LFBFL_file_name="python_isort_complement.libr.sh"
234    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
235    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
236    local LFBFL_correct_sha512
237    LFBFL_correct_sha512='5c27e0496016554cf8783ae0772db2564e56b92a5ed8a'
238    LFBFL_correct_sha512+='9b7b73a518c6a931fb431ee12feff001d5c33b6b22a2'
239    LFBFL_correct_sha512+='1af5491dd207eef3d810494baed7afc83cbf6cb'
240    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
241      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
242
243    LFBFL_file_name="split_line_at_most.exec.php"
244    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
245    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
246    local LFBFL_correct_sha512
247    LFBFL_correct_sha512='ecfc21afd7e4ba08c339e62647e3dc2cd3b7e9826364e'
248    LFBFL_correct_sha512+='d3d4dd5ce86db4ae6cb60271ed4f262350aa9690e82c'
249    LFBFL_correct_sha512+='865785abf3c531e74d196391e361cd599117935'
250    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
251      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
252
253    LFBFL_file_name="split_line_at_most.libr.php"
254    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
255    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
256    local LFBFL_correct_sha512
257    LFBFL_correct_sha512='3f8a9c760adadda201ca70a3e9523da139d66e821a192'
258    LFBFL_correct_sha512+='d4205560850047a22d72528ddc48289755d742312e15'
259    LFBFL_correct_sha512+='2134031477a66a48cbc16a03568ca6bfeb8ac32'
260    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
261      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
262
263    LFBFL_file_name="strings_functions.libr.sh"
264    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
265    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
266    local LFBFL_correct_sha512
267    LFBFL_correct_sha512='75619c4313145eab21b43c86e6725fe3a799b7d4f79ed'
268    LFBFL_correct_sha512+='7c3c9115f1caf4160625ab4c232d909d504483d46832'
269    LFBFL_correct_sha512+='fa9dffbe88ff177768a386eaea0b9c588142662'
270    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
271      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
272
273    LFBFL_file_name="too_long_code_lines.libr.sh"
274    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
```

```
275    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
276    local LFBFL_correct_sha512
277    LFBFL_correct_sha512='4f8a343e85516ad5f4093d754a2558862ef43e1d61425'
278    LFBFL_correct_sha512+='c5797219ee16afc10d56523f2d03f0fab6ad8ba3d8d6'
279    LFBFL_correct_sha512+='355d6de44952f2e86fcb27cf0defec8ca2bb8b9'
280    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
281      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
282
283    LFBFL_file_name="update_or_check_files_names_listing.exec.sh"
284    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
285    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
286    local LFBFL_correct_sha512
287    LFBFL_correct_sha512='da58ab2f0d0ff526c226212c1dce96f9280befebcb19a'
288    LFBFL_correct_sha512+='217617f0df610f563c25d1ed5d8681f07cba9096461b'
289    LFBFL_correct_sha512+='9a38c8a39f82e0259cfc21cef87a960f3c76c5d'
290    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
291      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
292    chmod +x "./${LFBFL_file_path}"
293
294    shopt -s globstar
295    # shellcheck disable=SC1090
296    source "./${LFBFL_subdir}/check_shell_scripts_beginnings.libr.sh"
297    # shellcheck disable=SC1090
298    source "./${LFBFL_subdir}/check_URLs.libr.sh"
299    # shellcheck disable=SC1090
300    source "./${LFBFL_subdir}/comparisons.libr.sh"
301    # shellcheck disable=SC1090
302    source "./${LFBFL_subdir}/generate_from_template.libr.sh"
303    # shellcheck disable=SC1090
304    source "./${LFBFL_subdir}/get_common_text_glob_patterns.libr.sh"
305    # shellcheck disable=SC1090
306    source "./${LFBFL_subdir}/grammar_and_spell_check.libr.sh"
307    # shellcheck disable=SC1090
308    source "./${LFBFL_subdir}/lines_counts.libr.sh"
309    # shellcheck disable=SC1090
310    source "./${LFBFL_subdir}/lines_filters.libr.sh"
311    # shellcheck disable=SC1090
312    source "./${LFBFL_subdir}/lines_maps.libr.sh"
313    # shellcheck disable=SC1090
314    source "./${LFBFL_subdir}/overwrite_if_not_equal.libr.sh"
315    # shellcheck disable=SC1090
316    source "./${LFBFL_subdir}/python_black_complement.libr.sh"
317    # shellcheck disable=SC1090
318    source "./${LFBFL_subdir}/python_isort_complement.libr.sh"
319    # shellcheck disable=SC1090
320    source "./${LFBFL_subdir}/strings_functions.libr.sh"
```

```
321  # shellcheck disable=SC1090
322  source "./${LFBFL_subdir}/too_long_code_lines.libr.sh"
323
324  echo "Building license headers"
325  "./${LFBFL_subdir2}/build_licenses_templates.exec.sh"\
326    "${LFBFL_verbose}"
327
328  echo "Building README.md"
329  "./${LFBFL_subdir}/build_md_from_printable_md.exec.sh"\
330    "${LFBFL_working_directory}" "README" "${LFBFL_verbose}"
331
332  pushd .
333  # shellcheck disable=SC2164
334  cd "${LFBFL_working_directory}"
335
336  echo "Running shellcheck"
337  declare -i LFBFL_file_path_length
338  declare -i LFBFL_to_skip_number
339  local LFBFL_file_path_end
340  # shellcheck disable=SC2312
341  find . -name "*.sh" | relevant_find | while read -r LFBFL_file_path;
342  do
343    LFBFL_file_path_length=${#LFBFL_file_path}
344    LFBFL_to_skip_number=$((LFBFL_file_path_length - 9))
345    LFBFL_file_path_end="${LFBFL_file_path:${LFBFL_to_skip_number}}"
346    if [[ "${LFBFL_file_path_end}" == "GPLv3+.sh" ]]; then
347      continue
348    fi
349    shellcheck --check-sourced --enable=all --external-sources\
350      "${LFBFL_file_path}"
351  done
352
353  echo "Running isort"
354  isort .
355  python_isort_complement
356
357  echo "Running black"
358  black .
359  python_black_complement
360
361  local LFBFL_directory_path
362  # shellcheck disable=SC2312
363  find . -name "pyproject.toml" | relevant_find\
364    | while read -r LFBFL_file_path;
365  do
366    if grep -q "Typing :: Typed" "${LFBFL_file_path}"; then
```

```
367    echo "Running mypy"
368    LFBFL_directory_path=$(dirname "${LFBFL_file_path}")
369    mypy "${LFBFL_directory_path}"
370   fi
371  done
372
373  echo "Analyzing too long lines"
374  # shellcheck disable=SC2312
375  too_long_code_lines | relevant_grep | not_license_grep
376
377  echo "Analyzing shell scripts beginnings"
378  # shellcheck disable=SC2312
379  check_shell_scripts_beginnings | relevant_grep
380
381  echo "Analyzing URLs"
382  # shellcheck disable=SC2312
383  check_URLs | relevant_grep
384
385  echo "Analyzing strange characters: hover over in doubt"
386  # shellcheck disable=SC1111
387  LFBFL_usual_characters="\x00-\x7Fàâéèêëîïôç©""└┤│«»"
388  # shellcheck disable=SC2312
389  grep --exclude-dir .git --color=always\
390    -nPr "[^${LFBFL_usual_characters}]" .
391
392  echo "Checking listed files"
393  "./${LFBFL_subdir}/update_or_check_files_names_listing.exec.sh"
394
395  echo "Creating the PDF file of the listing of the source code"
396  "./${LFBFL_subdir}/create_PDF.exec.sh" "${LFBFL_verbose}"
397
398  # shellcheck disable=SC2164
399  popd
400 }
401
402 common_build_and_checks "$@"
```

2.6 build_and_checks_dependencies/common_build_and_checks.exec.sh.tpl

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU General Public License
7  # as published by the Free Software Foundation,
```

```
8   # either version 3 of the License,
9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  # See the GNU General Public License for more details.
17  #
18  # You should have received a copy of
19  # the GNU General Public License
20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # The file "common_build_and_checks.exec.sh.tpl" was renamed from
25  # "common_build_and_checks.sh.tpl" to
26  # "common_build_and_checks.exec.sh.tpl".
27  # The file "common_build_and_checks.exec.sh" generated from the file
28  # "common_build_and_checks.sh.tpl"
29  # or "common_build_and_checks.exec.sh.tpl"
30  # was renamed from
31  # "common_build_and_checks.sh" to "common_build_and_checks.exec.sh".
32
33  common_build_and_checks(){
34    # $1 LFBFL_working_directory
35    # $2 LFBFL_dependencies_URL
36    # $3 optional --verbose
37    declare -r LFBFL_working_directory="$1"
38    # declare -r LFBFL_dependencies_URL="$2" too long
39    declare -r LFBFL_start_URL="$2"
40    local LFBFL_verbose=""
41    if [[ "$3" == "--verbose" ]]; then
42      echo "$0 $*"
43      LFBFL_verbose="--verbose"
44    fi
45    readonly LFBFL_verbose
46
47    # shellcheck disable=SC1091
48    source ./wget_sha512.libr.sh
49
50    LFBFL_subdir="build_and_checks_dependencies"
51    local LFBFL_file_name
52    local LFBFL_URL
53    local LFBFL_file_path
```

```
54
55   LFBFL_file_name="build_md_from_printable_md.exec.sh"
56   # LFBFL_script_download_URL
57   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
58   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
59   @sha512_build_md_from_printable_md.exec.sh@
60   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
61     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
62   chmod +x "./${LFBFL_file_path}"
63
64   LFBFL_file_name="check_shell_scripts_beginnings.libr.sh"
65   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
66   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
67   @sha512_check_shell_scripts_beginnings.libr.sh@
68   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
69     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
70
71   LFBFL_file_name="check_URLs.libr.sh"
72   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
73   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
74   @sha512_check_URLs.libr.sh@
75   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
76     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
77
78   LFBFL_file_name="comparisons.libr.sh"
79   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
80   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
81   @sha512_comparisons.libr.sh@
82   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
83     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
84
85   LFBFL_file_name="create_PDF.exec.sh"
86   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
87   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
88   @sha512_create_PDF.exec.sh@
89   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
90     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
91   chmod +x "./${LFBFL_file_path}"
92
93   LFBFL_file_name="generate_from_template.libr.sh"
94   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
95   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
96   @sha512_generate_from_template.libr.sh@
97   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
98     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
99
```

```
100    LFBFL_file_name="get_common_text_glob_patterns.libr.sh"
101    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
102    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
103    @sha512_get_common_text_glob_patterns.libr.sh@
104    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
105      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
106
107    LFBFL_file_name="grammar_and_spell_check.libr.sh"
108    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
109    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
110    @sha512_grammar_and_spell_check.libr.sh@
111    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
112      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
113
114    # /licenses_templates/ ---------------------------------------
115    declare -r LFBFL_subdir2="${LFBFL_subdir}/licenses_templates"
116    declare -r LFBFL_start_URL2="${LFBFL_start_URL}/licenses_templates"
117    LFBFL_file_name="build_licenses_templates.exec.sh"
118    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
119    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
120    @sha512_build_licenses_templates.exec.sh@
121    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
122      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
123    chmod +x "./${LFBFL_file_path}"
124
125    LFBFL_file_name="license_file_header_AGPLv3+.tpl"
126    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
127    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
128    @sha512_license_file_header_AGPLv3+.tpl@
129    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
130      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
131
132    LFBFL_file_name="license_file_header_GPLv3+.tpl"
133    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
134    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
135    @sha512_license_file_header_GPLv3+.tpl@
136    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
137      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
138
139    LFBFL_file_name="license_file_header_LGPLv3+.tpl"
140    LFBFL_URL="${LFBFL_start_URL2}/${LFBFL_file_name}"
141    LFBFL_file_path="./${LFBFL_subdir2}/${LFBFL_file_name}"
142    @sha512_license_file_header_LGPLv3+.tpl@
143    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
144      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
145    # ----------------------------------------------------------------
```

```
146
147    LFBFL_file_name="lines_counts.libr.sh"
148    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
149    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
150    @sha512_lines_counts.libr.sh@
151    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
152      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

154    LFBFL_file_name="lines_filters.libr.sh"
155    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
156    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
157    @sha512_lines_filters.libr.sh@
158    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
159      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

161    LFBFL_file_name="lines_maps.libr.sh"
162    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
163    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
164    @sha512_lines_maps.libr.sh@
165    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
166      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

168    LFBFL_file_name="overwrite_if_not_equal.libr.sh"
169    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
170    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
171    @sha512_overwrite_if_not_equal.libr.sh@
172    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
173      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

175    LFBFL_file_name="python_black_complement.libr.sh"
176    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
177    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
178    @sha512_python_black_complement.libr.sh@
179    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
180      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

182    LFBFL_file_name="python_isort_complement.libr.sh"
183    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
184    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
185    @sha512_python_isort_complement.libr.sh@
186    wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
187      "${LFBFL_correct_sha512}" "${LFBFL_verbose}"

189    LFBFL_file_name="split_line_at_most.exec.php"
190    LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
191    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
```

```
192   @sha512_split_line_at_most.exec.php@
193   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
194     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
195
196   LFBFL_file_name="split_line_at_most.libr.php"
197   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
198   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
199   @sha512_split_line_at_most.libr.php@
200   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
201     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
202
203   LFBFL_file_name="strings_functions.libr.sh"
204   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
205   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
206   @sha512_strings_functions.libr.sh@
207   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
208     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
209
210   LFBFL_file_name="too_long_code_lines.libr.sh"
211   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
212   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
213   @sha512_too_long_code_lines.libr.sh@
214   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
215     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
216
217   LFBFL_file_name="update_or_check_files_names_listing.exec.sh"
218   LFBFL_URL="${LFBFL_start_URL}/${LFBFL_file_name}"
219   LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_file_name}"
220   @sha512_update_or_check_files_names_listing.exec.sh@
221   wget_sha512 "${LFBFL_file_path}" "${LFBFL_URL}"\
222     "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
223   chmod +x "./${LFBFL_file_path}"
224
225   shopt -s globstar
226   # shellcheck disable=SC1090
227   source "./${LFBFL_subdir}/check_shell_scripts_beginnings.libr.sh"
228   # shellcheck disable=SC1090
229   source "./${LFBFL_subdir}/check_URLs.libr.sh"
230   # shellcheck disable=SC1090
231   source "./${LFBFL_subdir}/comparisons.libr.sh"
232   # shellcheck disable=SC1090
233   source "./${LFBFL_subdir}/generate_from_template.libr.sh"
234   # shellcheck disable=SC1090
235   source "./${LFBFL_subdir}/get_common_text_glob_patterns.libr.sh"
236   # shellcheck disable=SC1090
237   source "./${LFBFL_subdir}/grammar_and_spell_check.libr.sh"
```

25

```
238    # shellcheck disable=SC1090
239    source "./${LFBFL_subdir}/lines_counts.libr.sh"
240    # shellcheck disable=SC1090
241    source "./${LFBFL_subdir}/lines_filters.libr.sh"
242    # shellcheck disable=SC1090
243    source "./${LFBFL_subdir}/lines_maps.libr.sh"
244    # shellcheck disable=SC1090
245    source "./${LFBFL_subdir}/overwrite_if_not_equal.libr.sh"
246    # shellcheck disable=SC1090
247    source "./${LFBFL_subdir}/python_black_complement.libr.sh"
248    # shellcheck disable=SC1090
249    source "./${LFBFL_subdir}/python_isort_complement.libr.sh"
250    # shellcheck disable=SC1090
251    source "./${LFBFL_subdir}/strings_functions.libr.sh"
252    # shellcheck disable=SC1090
253    source "./${LFBFL_subdir}/too_long_code_lines.libr.sh"
254
255    echo "Building license headers"
256    "./${LFBFL_subdir2}/build_licenses_templates.exec.sh"\
257      "${LFBFL_verbose}"
258
259    echo "Building README.md"
260    "./${LFBFL_subdir}/build_md_from_printable_md.exec.sh"\
261      "${LFBFL_working_directory}" "README" "${LFBFL_verbose}"
262
263    pushd .
264    # shellcheck disable=SC2164
265    cd "${LFBFL_working_directory}"
266
267    echo "Running shellcheck"
268    declare -i LFBFL_file_path_length
269    declare -i LFBFL_to_skip_number
270    local LFBFL_file_path_end
271    # shellcheck disable=SC2312
272    find . -name "*.sh" | relevant_find | while read -r LFBFL_file_path;
273    do
274      LFBFL_file_path_length=${#LFBFL_file_path}
275      LFBFL_to_skip_number=$((LFBFL_file_path_length - 9))
276      LFBFL_file_path_end="${LFBFL_file_path:${LFBFL_to_skip_number}}"
277      if [[ "${LFBFL_file_path_end}" == "GPLv3+.sh" ]]; then
278        continue
279      fi
280      shellcheck --check-sourced --enable=all --external-sources\
281        "${LFBFL_file_path}"
282    done
283
```

```
284    echo "Running isort"
285    isort .
286    python_isort_complement
287
288    echo "Running black"
289    black .
290    python_black_complement
291
292    local LFBFL_directory_path
293    # shellcheck disable=SC2312
294    find . -name "pyproject.toml" | relevant_find\
295      | while read -r LFBFL_file_path;
296    do
297      if grep -q "Typing :: Typed" "${LFBFL_file_path}"; then
298        echo "Running mypy"
299        LFBFL_directory_path=$(dirname "${LFBFL_file_path}")
300        mypy "${LFBFL_directory_path}"
301      fi
302    done
303
304    echo "Analyzing too long lines"
305    # shellcheck disable=SC2312
306    too_long_code_lines | relevant_grep | not_license_grep
307
308    echo "Analyzing shell scripts beginnings"
309    # shellcheck disable=SC2312
310    check_shell_scripts_beginnings | relevant_grep
311
312    echo "Analyzing URLs"
313    # shellcheck disable=SC2312
314    check_URLs | relevant_grep
315
316    echo "Analyzing strange characters: hover over in doubt"
317    # shellcheck disable=SC1111
318    LFBFL_usual_characters="\x00-\x7Fàâéèêëîïôç©""└┤│«»"
319    # shellcheck disable=SC2312
320    grep --exclude-dir .git --color=always\
321      -nPr "[^${LFBFL_usual_characters}]" .
322
323    echo "Checking listed files"
324    "./${LFBFL_subdir}/update_or_check_files_names_listing.exec.sh"
325
326    echo "Creating the PDF file of the listing of the source code"
327    "./${LFBFL_subdir}/create_PDF.exec.sh" "${LFBFL_verbose}"
328
329    # shellcheck disable=SC2164
```

```
330   popd
331 }
332
333 common_build_and_checks "$@"
```

2.7 build_and_checks_dependencies/comparisons.libr.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
9  # or (at your option) any later version.
10 #
11 # DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
13 # but WITHOUT ANY WARRANTY;
14 # without even the implied warranty of
15 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU General Public License for more details.
17 #
18 # You should have received a copy of
19 # the GNU General Public License
20 # along with DevOrSysAdminScripts.
21 # If not, see <https://www.gnu.org/licenses/>.
22 #
23 # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24 # The file "comparisons.sh" was renamed to "comparisons.libr.sh".
25
26 equal(){
27   # Returns 1 if all the arguments strings are equal.
28   # Renvoie 1 dans $? si toutes les chaînes en arguments sont égales.
29   # J'ai rerepensé au 3-way-merge
30   # et à mon article sur le principe de première différence
31   # appliqué à la largeur modulaire, de clique ou de rang avec
32   # l'idée d'un principe de première différence ternaire.
33   declare -r LFBFL_all_args="'$*'"
34   local LFBFL_current="${LFBFL_all_args}"
35   local LFBFL_arg
36   for LFBFL_arg in "$@"; do
37     if [[ "${LFBFL_current}" == "${LFBFL_all_args}" ]]; then
38       LFBFL_current="${LFBFL_arg}"
39       continue
```

```
40    fi
41    if [[ "${LFBFL_current}" != "${LFBFL_arg}" ]]; then
42      return 0
43    fi
44  done
45  return 1
46 }
47
48 max(){
49   # Returns the maximum string among the arguments.
50   # Renvoie la chaîne la plus grande parmi celles proposées.
51   # $1=$sort command with the flags you want to be applied.
52   # $ max sort a b c
53   # c
54   if [[ "$#" == 0 ]]; then
55     return 1
56   fi
57   # shellcheck disable=SC2312
58   printf "%s\n" "${@:2}" | eval "$1 -r" | head -1
59 }
60
61 min(){
62   # Returns the minimum string among the arguments.
63   # Renvoie la chaîne la plus petite parmi celles proposées.
64   # $1=$sort command with the flags you want to be applied.
65   # $ min sort a b c
66   # a
67   if [[ "$#" == 0 ]]; then
68     return 1
69   fi
70   # shellcheck disable=SC2312
71   printf "%s\n" "${@:2}" | eval "$1" | head -1
72 }
73
74 is_substring(){
75   # $1=$string
76   # $2=$substring
77   declare -r LFBFL_var_1=$(\
78     echo "$1" | sed -e 's/\\/\\&/g' -e "s/'/\\\\&/g"\
79   )
80   declare -r LFBFL_var_2=$(\
81     echo "$2" | sed -e 's/\\/\\&/g' -e "s/'/\\\\&/g"\
82   )
83   local LFBFL_var_3="\$a = '${LFBFL_var_1}';"
84   LFBFL_var_3+=" \$b = preg_quote('${LFBFL_var_2}');"
85   LFBFL_var_3+=" \$c = '/'.addcslashes(\$b, '/')./';"
```

```
86   LFBFL_var_3+=" die(preg_match(\$c, \$a));"
87   readonly LFBFL_var_3
88   php -r "${LFBFL_var_3}"
89  }
90
91  is_subfile(){
92    # $1=$file_name
93    # $2=$sub_file_name
94    local LFBFL_var_1="\$a = file_get_contents('$1');"
95    LFBFL_var_1+=" \$b = preg_quote(file_get_contents('$2'));"
96    LFBFL_var_1+=" \$c = '/'.addcslashes(\$b, '/').'/';"
97    LFBFL_var_1+=" die(preg_match(\$c, \$a));"
98    readonly LFBFL_var_1
99    php -r "${LFBFL_var_1}"
100 }
101
102 alias min_from_int_sort="min 'sort --numeric-sort'"
103 alias max_from_int_sort="max 'sort --numeric-sort'"
```

2.8 build_and_checks_dependencies/create_PDF.exec.sh

```
1   #!/usr/bin/env bash
2   # This file is part of DevOrSysAdminScripts library.
3   #
4   # DevOrSysAdminScripts is free software:
5   # you can redistribute it and/or modify it under the terms
6   # of the GNU General Public License
7   # as published by the Free Software Foundation,
8   # either version 3 of the License,
9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  # See the GNU General Public License for more details.
17  #
18  # You should have received a copy of
19  # the GNU General Public License
20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "create_PDF.sh" to "create_PDF.exec.sh".
25
```

```
26  LFBFL_verbose=""
27  if [[ "$1" == "--verbose" ]]; then
28    echo "$0 $*"
29    LFBFL_verbose="--verbose"
30  fi
31
32  LFBFL_subdir="build_and_checks_dependencies"
33  # shellcheck disable=SC1090
34  source "./${LFBFL_subdir}/generate_from_template.libr.sh"
35  # shellcheck disable=SC1090
36  source "./${LFBFL_subdir}/lines_counts.libr.sh"
37  # shellcheck disable=SC1090
38  source "./${LFBFL_subdir}/lines_filters.libr.sh"
39  # shellcheck disable=SC1090
40  source "./${LFBFL_subdir}/lines_maps.libr.sh"
41  # shellcheck disable=SC1090
42  source "./${LFBFL_subdir}/overwrite_if_not_equal.libr.sh"
43  # shellcheck disable=SC1090
44  source "./${LFBFL_subdir}/strings_functions.libr.sh"
45  LFBFL_subdir2="build_and_checks_variables"
46
47  LFBFL_data_file_name="build_and_checks_variables/repository_data.txt"
48  repository_name=""
49  grep_variable "${LFBFL_data_file_name}" repository_name
50
51  abstract=""
52  grep_variable "${LFBFL_data_file_name}" abstract
53
54  acknowledgments=""
55  grep_variable "${LFBFL_data_file_name}" acknowledgments
56
57  author_email=""
58  grep_variable "${LFBFL_data_file_name}" author_email
59
60  author_full_name=""
61  grep_variable "${LFBFL_data_file_name}" author_full_name
62
63  author_website=""
64  grep_variable "${LFBFL_data_file_name}" author_website
65
66  # shellcheck disable=SC2155
67  declare -r LFBFL_current_date=$(date -I"date")
68
69  # shellcheck disable=SC2155
70  declare -r LFBFL_current_git_SHA1=$(git rev-parse HEAD)
71
```

```
72  # shellcheck disable=SC2155
73  declare -r LFBFL_number_of_commits=$(
74    git shortlog | space_starting_lines | wc -l
75  )
76
77  LFBFL_number_of_lines="$(code_lines_count_all) total lines,"
78  LFBFL_number_of_lines+=" $(code_lines_count_not_empty)"
79  LFBFL_number_of_lines+=" not empty lines,"
80  LFBFL_number_of_lines+=" $(code_lines_count_empty) empty lines."
81
82  # shellcheck disable=SC2094,SC2312
83  tree -a --gitignore\
84    -I "node_modules/"\
85    -I "__pycache__/"\
86    -I ".mypy_cache/"\
87    -I ".git/"\
88    | replace_non_ascii_spaces\
89    > "${LFBFL_subdir2}/temp/current_tree_light.txt"
90
91  # shellcheck disable=SC2094,SC2312
92  tree -a -DFh --gitignore\
93    -I "node_modules/"\
94    -I "__pycache__/"\
95    -I ".mypy_cache/"\
96    -I ".git/"\
97    | replace_non_ascii_spaces\
98    > "${LFBFL_subdir2}/temp/current_tree.txt"
99
100 LFBFL_temp_files_listing="./${LFBFL_subdir2}/temp/"
101 LFBFL_temp_files_listing+="files_listing.tex.tpl.temp"
102 : > "${LFBFL_temp_files_listing}"
103 LFBFL_temp_files_listing2="./${LFBFL_subdir2}/temp/"
104 LFBFL_temp_files_listing2+="files_listing.html.tpl.temp"
105 : > "${LFBFL_temp_files_listing2}"
106 get_split_score_after_before_simple 70 /
107 # split_score_command="$LFBFL_generic_result"
108 # shellcheck disable=SC2154
109 declare LFBFL_score_command="${get_split_score_after_before_result}"
110 # shellcheck disable=SC2154
111 declare LFBFL_score_command_properties=\
112 "${get_split_score_after_before_result2}"
113 get_split_score_after_before_simple 70 ':'
114 # split_score_command2="$LFBFL_generic_result"
115 # shellcheck disable=SC2154
116 declare LFBFL_score_command2="${get_split_score_after_before_result}"
117 declare LFBFL_score_command_properties2=\
```

```
118  "${get_split_score_after_before_result2}"
119  declare LFBFL_suffix='%'
120  declare LFBFL_sed_expression='s/\\\n//Mg'
121  declare -i LFBFL_i=0
122  declare LFBFL_suffix2='<!--'
123  declare LFBFL_prefix2='-->'
124  # shellcheck disable=SC2312
125  sed -Ez "${LFBFL_sed_expression}"\
126    "./${LFBFL_subdir2}/files_names_listing.txt"\
127    | sed -Ez "${LFBFL_sed_expression}"\
128    | sed -Ez "${LFBFL_sed_expression}"\
129    | sed -Ez "${LFBFL_sed_expression}"\
130    | grep -v '^//'\
131    | while read -r LFBFL_file_name;
132  do
133    echo "Listing file for tex/HTML : ${LFBFL_file_name}"
134    # echo "Listing file for tex : ${LFBFL_file_name}"
135    # LFBFL_base_file_name=$(basename "${LFBFL_file_name}")
136    LFBFL_cleaned_path1="${LFBFL_file_name//_/\\_}"
137    LFBFL_cleaned_path2=$(
138      sed -e 's/\//:/g' -e 's/\.//g' <(echo "${LFBFL_file_name}")
139    )
140    echo "\subsection{" >> "${LFBFL_temp_files_listing}"
141    LFBFL_new_lines="  ${LFBFL_cleaned_path1}"
142    if [[ ${#LFBFL_new_lines} -gt 70 ]]; then
143      repeated_split_last_line "${LFBFL_new_lines}" "" 70\
144        "${LFBFL_suffix}" "${LFBFL_score_command}"\
145        "${LFBFL_score_command_properties}" "\\"
146      # shellcheck disable=SC2154
147      LFBFL_new_lines=${repeated_split_last_line_result}
148    fi
149    # shellcheck disable=SC2129,SC2312
150    echo "  ${LFBFL_file_name}"\
151      | sed -e "s|  ${LFBFL_file_name}|${LFBFL_new_lines}|g"\
152          -e 's/_/\\_/g'\
153      >> "${LFBFL_temp_files_listing}"
154    echo "}" >> "${LFBFL_temp_files_listing}"
155    echo "\label{" >> "${LFBFL_temp_files_listing}"
156    LFBFL_new_lines="  ${LFBFL_cleaned_path2}"
157    if [[ ${#LFBFL_new_lines} -gt 70 ]]; then
158      repeated_split_last_line "${LFBFL_new_lines}" "" 70\
159        "${LFBFL_suffix}" "${LFBFL_score_command2}"\
160        "${LFBFL_score_command_properties2}"
161      # shellcheck disable=SC2154
162      LFBFL_new_lines=${repeated_split_last_line_result}
163    fi
```

```
164    # shellcheck disable=SC2129,SC2312
165    echo "  ${LFBFL_cleaned_path2}"\
166      | sed -e "s|  ${LFBFL_cleaned_path2}|${LFBFL_new_lines}|g"\
167      >> "${LFBFL_temp_files_listing}"
168    echo "}" >> "${LFBFL_temp_files_listing}"
169    echo "" >> "${LFBFL_temp_files_listing}"
170    echo "\VerbatimInput[numbers=left,xleftmargin=-5mm]{"\
171      >> "${LFBFL_temp_files_listing}"
172    LFBFL_new_lines="${LFBFL_file_name}"
173    if [[ ${#LFBFL_new_lines} -gt 70 ]]; then
174      repeated_split_last_line "${LFBFL_new_lines}" "" 70\
175        "${LFBFL_suffix}" "${LFBFL_score_command}"\
176        "${LFBFL_score_command_properties}"
177      # shellcheck disable=SC2154
178      LFBFL_new_lines=${repeated_split_last_line_result}
179    fi
180    # shellcheck disable=SC2129,SC2312
181    echo "  ${LFBFL_file_name}"\
182      | sed -e "s|  ${LFBFL_file_name}|${LFBFL_new_lines}|g"\
183      >> "${LFBFL_temp_files_listing}"
184    echo "}" >> "${LFBFL_temp_files_listing}"
185    echo "" >> "${LFBFL_temp_files_listing}"
186    echo "" >> "${LFBFL_temp_files_listing}"
187
188    # echo "Listing file for HTML : ${LFBFL_file_name}"
189    ((++LFBFL_i))
190    echo "<h3 id=\"subsection2.${LFBFL_i}\">2.${LFBFL_i}"\
191      >> "${LFBFL_temp_files_listing2}"
192    LFBFL_new_lines="${LFBFL_file_name}"
193    if [[ ${#LFBFL_file_name} -gt 70 ]]; then
194      repeated_split_last_line "${LFBFL_new_lines}" "${LFBFL_prefix2}"\
195        70 "${LFBFL_suffix2}" "${LFBFL_score_command}"\
196        "${LFBFL_score_command_properties}"
197      # shellcheck disable=SC2154
198      LFBFL_new_lines=${repeated_split_last_line_result}
199    fi
200    # shellcheck disable=SC2001,SC2129,SC2312
201    echo "${LFBFL_file_name}"\
202      | sed -e "s|${LFBFL_file_name}|${LFBFL_new_lines}|g"\
203      >> "${LFBFL_temp_files_listing2}"
204    echo "</h3>" >> "${LFBFL_temp_files_listing2}"
205    echo "<pre class=\"numbered_lines\">"\
206      >> "${LFBFL_temp_files_listing2}"
207    sed -e 's/&/\&amp;/g' -e 's/</\&lt;/g' < "${LFBFL_file_name}"\
208      >> "${LFBFL_temp_files_listing2}"
209    echo "</pre>" >> "${LFBFL_temp_files_listing2}"
```

```bash
210    echo "" >> "${LFBFL_temp_files_listing2}"
211    echo "" >> "${LFBFL_temp_files_listing2}"
212  done
213  overwrite_if_not_equal "./${LFBFL_subdir2}/files_listing.tex.tpl"\
214    "${LFBFL_temp_files_listing}"
215  sed -i -e "s|\\n</pre>|</pre>|g" "${LFBFL_temp_files_listing2}"
216  overwrite_if_not_equal\
217    "./${LFBFL_subdir2}/temp/files_listing.html.tpl"\
218    "${LFBFL_temp_files_listing2}"
219
220  # We verify if some lines are beyond 70 characters
221  # in current_tree_light.txt and current_tree.txt.
222  LFBFL_trees=("current_tree_light.txt" "current_tree.txt")
223  declare LFBFL_tree_path
224  for LFBFL_tree in "${LFBFL_trees[@]}"; do
225    LFBFL_tree_path="${LFBFL_subdir2}/temp/${LFBFL_tree}"
226    # shellcheck disable=SC2312
227    grep '.\{71\}' "${LFBFL_tree_path}" | while read -r LFBFL_line; do
228      # echo "LFBFL_line: ${LFBFL_line}"
229      # shellcheck disable=SC2312
230      LFBFL_prefix=$(\
231        echo "${LFBFL_line}"\
232          | sed -E -e 's/(.*)-[^-]+$/\1/g' -e 's/[^ ]+$//g'\
233      )
234      LFBFL_prefix+="│ "
235      # echo "LFBFL_prefix: ${LFBFL_prefix}"
236      # shellcheck disable=SC2312
237      LFBFL_file_name=$(\
238        echo "${LFBFL_line}"\
239          | sed -E 's|.* (([a-zA-Z0-9\._/-]+).)$|\1|g'\
240      )
241      # echo "LFBFL_file_name: ${LFBFL_file_name}"
242      # shellcheck disable=SC2312
243      LFBFL_line_start=$(\
244        echo "${LFBFL_line}"\
245          | sed -E "s/(.*)[ ]*${LFBFL_file_name}/\1/g"\
246          | sed -e 's/ *$//g'
247      )
248      # echo "LFBFL_line_start: ${LFBFL_line_start}"
249      LFBFL_line=$(\
250        echo "${LFBFL_line}"\
251          | sed -E -e 's/\[/\\\[/g' -e 's/\]/\\\]/g'\
252      )
253      LFBFL_new_lines="${LFBFL_prefix}${LFBFL_file_name}"
254      if [[ ${#LFBFL_new_lines} -gt 70 ]]; then
255        repeated_split_last_line "${LFBFL_new_lines}" "${LFBFL_prefix}"\
```

35

```
256        70 "" "" 3
257        # shellcheck disable=SC2154
258        LFBFL_new_lines=${repeated_split_last_line_result}
259     fi
260     sed -i -e\
261        "s/${LFBFL_line}/${LFBFL_line_start}\n${LFBFL_new_lines}/g"\
262        "${LFBFL_tree_path}"
263   done
264 done
265
266 if [[ -f "./${LFBFL_subdir2}/${repository_name}.tex.tpl" ]]; then
267   # If there is a template, we init the process from it.
268   cp "./${LFBFL_subdir2}/${repository_name}.tex.tpl"\
269      "./${LFBFL_subdir2}/temp/${repository_name}.tex.1"
270 elif [[ -f "./${LFBFL_subdir2}/${repository_name}.tex" ]]; then
271   # Otherwise if there is a tex file, we init the process from it.
272   cp "./${LFBFL_subdir2}/${repository_name}.tex"\
273      "./${LFBFL_subdir2}/temp/${repository_name}.tex.1"
274 else
275   echo "Neither .tex.tpl, nor .tex in ./${LFBFL_subdir2}/"
276 fi
277
278 # Same logic with repository HTML file.
279 if [[ -f "./${LFBFL_subdir2}/${repository_name}.html.tpl" ]]; then
280   cp "./${LFBFL_subdir2}/${repository_name}.html.tpl"\
281      "./${LFBFL_subdir2}/temp/${repository_name}.html.1"
282 elif [[ -f "./${repository_name}.html" ]]; then
283   cp "./${repository_name}.html"\
284      "./${LFBFL_subdir2}/temp/${repository_name}.html.1"
285 else
286   echo "Neither .html.tpl in ./${LFBFL_subdir2}/, nor .html in ./"
287 fi
288
289 declare -r LFBFL_tex_path_start=\
290 "./${LFBFL_subdir2}/temp/${repository_name}.tex"
291 declare -r LFBFL_html_path_start=\
292 "./${LFBFL_subdir2}/temp/${repository_name}.html"
293
294 # shellcheck disable=SC2001,SC2312
295 echo "${abstract}" | sed -e 's/\\n/\n/g'\
296   > "./${LFBFL_subdir2}/temp/abstract_temp"
297
298 # shellcheck disable=SC2001,SC2312
299 echo "${acknowledgments}" | sed -e 's/\\n/\n/g'\
300   > "./${LFBFL_subdir2}/temp/acknowledgments_temp"
301
```

```
302  # But the filling still occurs, in case the dev want to refill
303  # part of the tex/html file that he modified with @token@
304  # using some computed results.
305  # Tex filling:
306  if [[ -f "${LFBFL_tex_path_start}.1" ]]; then
307    sed -i "s|@repository_name@|${repository_name}|g"\
308      "${LFBFL_tex_path_start}.1"
309
310    insert_file_at_token "${LFBFL_tex_path_start}.1" @abstract@\
311      "./${LFBFL_subdir2}/temp/abstract_temp"\
312      "${LFBFL_tex_path_start}.2"
313
314    insert_file_at_token "${LFBFL_tex_path_start}.2" @acknowledgments@\
315      "./${LFBFL_subdir2}/temp/acknowledgments_temp"\
316      "${LFBFL_tex_path_start}.3"
317
318    sed -i "s|@author_email@|${author_email}|g"\
319      "${LFBFL_tex_path_start}.3"
320
321    sed -i "s|@author_full_name@|${author_full_name}|g"\
322      "${LFBFL_tex_path_start}.3"
323
324    sed -i "s|@author_website@|${author_website}|g"\
325      "${LFBFL_tex_path_start}.3"
326
327    sed -i "s|@current_date@|${LFBFL_current_date}|g"\
328      "${LFBFL_tex_path_start}.3"
329
330    sed -i "s|@current_git_SHA1@|${LFBFL_current_git_SHA1}|g"\
331      "${LFBFL_tex_path_start}.3"
332
333    sed -i "s|@number_of_commits@|${LFBFL_number_of_commits}|g"\
334      "${LFBFL_tex_path_start}.3"
335
336    sed -i "s|@number_of_lines@|${LFBFL_number_of_lines}|g"\
337      "${LFBFL_tex_path_start}.3"
338
339    pushd "./${LFBFL_subdir2}/temp/" || (echo "pushd failed" && exit)
340    sed -i -e '/@current_tree_light@/{r current_tree_light.txt' -e 'd}'\
341      "${repository_name}.tex.3"
342    sed -i -e '/@current_tree@/{r current_tree.txt' -e 'd}'\
343      "${repository_name}.tex.3"
344    popd || (echo "popd failed" && exit)
345
346    insert_file_at_token "${LFBFL_tex_path_start}.3"\
347      @files_listing_VerbatimInput@\
```

```
348    "./${LFBFL_subdir2}/files_listing.tex.tpl"\
349    "${LFBFL_tex_path_start}.4"

350
351  overwrite_if_not_equal "./${LFBFL_subdir2}/${repository_name}.tex"\
352    "${LFBFL_tex_path_start}.4" 1
353  fi

354
355  # HTML filling:
356  if [[ -f "${LFBFL_html_path_start}.1" ]]; then
357    sed -i "s|@repository_name@|${repository_name}|g"\
358      "${LFBFL_html_path_start}.1"

359
360    insert_file_at_token "${LFBFL_html_path_start}.1" @abstract@\
361      "./${LFBFL_subdir2}/temp/abstract_temp"\
362      "${LFBFL_html_path_start}.2"

363
364    insert_file_at_token "${LFBFL_html_path_start}.2" @acknowledgments@\
365      "./${LFBFL_subdir2}/temp/acknowledgments_temp"\
366      "${LFBFL_html_path_start}.3"

367
368    sed -i "s|@author_email@|${author_email}|g"\
369      "${LFBFL_html_path_start}.3"

370
371    sed -i "s|@author_full_name@|${author_full_name}|g"\
372      "${LFBFL_html_path_start}.3"

373
374    sed -i "s|@author_website@|${author_website}|g"\
375      "${LFBFL_html_path_start}.3"

376
377    sed -i "s|@current_date@|${LFBFL_current_date}|g"\
378      "${LFBFL_html_path_start}.3"

379
380    sed -i "s|@current_git_SHA1@|${LFBFL_current_git_SHA1}|g"\
381      "${LFBFL_html_path_start}.3"

382
383    sed -i "s|@number_of_commits@|${LFBFL_number_of_commits}|g"\
384      "${LFBFL_html_path_start}.3"

385
386    sed -i "s|@number_of_lines@|${LFBFL_number_of_lines}|g"\
387      "${LFBFL_html_path_start}.3"

388
389    pushd "./${LFBFL_subdir2}/temp/" || (echo "pushd failed" && exit)
390    sed -i -e '/@current_tree_light@/{r current_tree_light.txt' -e 'd}'\
391      "${repository_name}.html.3"
392    sed -i -e '/@current_tree@/{r current_tree.txt' -e 'd}'\
393      "${repository_name}.html.3"
```

```
394    popd || (echo "popd failed" && exit)
395
396    insert_file_at_token "${LFBFL_html_path_start}.3"\
397      @files_listing_HTMLPreInput@\
398      "./${LFBFL_subdir2}/temp/files_listing.html.tpl"\
399      "${LFBFL_html_path_start}.4"
400
401    overwrite_if_not_equal "./${repository_name}.html"\
402      "${LFBFL_html_path_start}.4" 1
403  fi
404
405  if [[ -n "${LFBFL_verbose}" ]]; then
406    for ((i=0; i<3; i++)); do
407      pdflatex "./${LFBFL_subdir2}/${repository_name}.tex"
408    done
409  else
410    for ((i=0; i<3; i++)); do
411      pdflatex "./${LFBFL_subdir2}/${repository_name}.tex" > /dev/null
412    done
413  fi
414
415  LFBFL_files_to_temp=(\
416    "${repository_name}.aux"\
417    "${repository_name}.log"\
418    "${repository_name}.out"
419  )
420  for LFBFL_file_name in "${LFBFL_files_to_temp[@]}"; do
421    mv "${LFBFL_file_name}" "${LFBFL_subdir2}/temp/"
422  done
```

2.9   build_and_checks_dependencies/generate_from_template.libr.sh

```
1   #!/usr/bin/env bash
2   # This file is part of DevOrSysAdminScripts library.
3   #
4   # DevOrSysAdminScripts is free software:
5   # you can redistribute it and/or modify it under the terms
6   # of the GNU General Public License
7   # as published by the Free Software Foundation,
8   # either version 3 of the License,
9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
```

```
15   # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16   # See the GNU General Public License for more details.
17   #
18   # You should have received a copy of
19   # the GNU General Public License
20   # along with DevOrSysAdminScripts.
21   # If not, see <https://www.gnu.org/licenses/>.
22   #
23   # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24   # This file was renamed from "generate_from_template.sh" to
25   # "generate_from_template.libr.sh".
26
27   LFBFL_subdir="build_and_checks_dependencies"
28   # shellcheck disable=SC1090
29   source "./${LFBFL_subdir}/lines_filters.libr.sh"
30
31   generate_from_template_with_block_comments(){
32     # $1=base_file_name
33     # $2=target_file_name
34     # $3=enter_block_comment
35     # $4=exit_block_comment
36     local LFBFL_temp
37     LFBFL_temp="$2.generate_from_template_with_block_comments.temp"
38     readonly LFBFL_temp
39     echo "$3" > "${LFBFL_temp}"
40     cat "$1" >> "${LFBFL_temp}"
41     echo "$4" >> "${LFBFL_temp}"
42     overwrite_if_not_equal "$2" "${LFBFL_temp}"
43   }
44
45   generate_from_template_with_line_comments(){
46     # $1=base_file_name
47     # $2=target_file_name
48     # $3=line_comment_prefix
49     # $4=optional_post_processing
50     local LFBFL_temp
51     LFBFL_temp="$2.generate_from_template_with_line_comments.temp"
52     readonly LFBFL_temp
53     sed -e "s/^/$3/g" "$1" > "${LFBFL_temp}"
54     if [[ -n "$4" ]]; then
55       eval "$4"
56     fi
57     overwrite_if_not_equal "$2" "${LFBFL_temp}"
58   }
59
60   split_file_in_two(){
```

40

```
61    # $1=$file_name
62    # $2=$token assume that token is the only thing on his line.
63    # $3=$file_name_part1
64    # $4=$file_name_part2
65    declare -ir LFBFL_line_number=$(
66      grep -n "$2" "$1" | head --lines=1 | cut -f 1 -d ':'
67    )
68    declare -ir LFBFL_line_count=$(ll_wc -l -n "$1")
69    declare -ir LFBFL_lines_after=$((
70      LFBFL_line_count - LFBFL_line_number
71    ))
72    head --lines="$((LFBFL_line_number - 1))" "$1" > "$3"
73    tail --lines="${LFBFL_lines_after}" "$1" > "$4"
74  }
75
76  insert_file_at_token(){
77    # $1=$file_name
78    # $2=$token assume that token is the only thing on his line.
79    # $3=$file_name_to_insert
80    # $4=$file_name_result
81    declare -r LFBFL_start_file_name="$1.insert_file_at_token1.temp"
82    declare -r LFBFL_end_file_name="$1.insert_file_at_token2.temp"
83    local LFBFL_result_file_name
84    if [[ -n "$4" ]]; then
85      LFBFL_result_file_name="$4"
86    else
87      LFBFL_result_file_name="$1.insert_file_at_token3.temp"
88    fi
89    readonly LFBFL_result_file_name
90    split_file_in_two "$1" "$2" "${LFBFL_start_file_name}"\
91      "${LFBFL_end_file_name}"
92    cat "${LFBFL_start_file_name}" "$3" "${LFBFL_end_file_name}"\
93      > "${LFBFL_result_file_name}"
94    if [[ -z "$4" ]]; then
95      overwrite_if_not_equal "$1" "${LFBFL_result_file_name}"
96    fi
97    rm "${LFBFL_start_file_name}" "${LFBFL_end_file_name}"
98  }
```

2.10 build_and_checks_dependencies/get_common_text_glob_patterns.libr.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
```

```
 6  # of the GNU General Public License
 7  # as published by the Free Software Foundation,
 8  # either version 3 of the License,
 9  # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  # See the GNU General Public License for more details.
17  #
18  # You should have received a copy of
19  # the GNU General Public License
20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "get_common_text_glob_patterns.sh"
25  # to "get_common_text_glob_patterns.libr.sh".
26
27  get_COMMON_TEXT_PATHS_GLOB_PATTERNS(){
28      # shellcheck disable=SC2034
29      declare -gr COMMON_TEXT_PATHS_GLOB_PATTERNS=(\
30        '**/*.c'\
31        '**/*.css'\
32        '**/*.h'\
33        '**/*.htm'\
34        '**/*.html'\
35        '**/*.js'\
36        '**/*.json'\
37        '**/*.md'\
38        '**/*.php'\
39        '**/*.py'\
40        '**/*.sh'\
41        '**/*.sql'\
42        '**/*.tex'\
43        '**/*.toml'\
44        '**/*.tpl'\
45        '**/*.ts'\
46        '**/*.txt'\
47        '**/*.yml'\
48        '**/COPYING'\
49        '**/COPYING.LESSER'\
50        '**/pre-commit'\
51        '**/post-commit'\
```

```
52    '**/.gitignore'\
53    '**/py.typed'\
54    )
55  }
56
57
58  get_COMMON_TEXT_FILES_GLOB_PATTERNS(){
59    # shellcheck disable=SC2034
60    declare -gr COMMON_TEXT_FILES_GLOB_PATTERNS=(\
61    '*.c'\
62    '*.css'\
63    '*.h'\
64    '*.htm'\
65    '*.html'\
66    '*.js'\
67    '*.json'\
68    '*.md'\
69    '*.php'\
70    '*.py'\
71    '*.sh'\
72    '*.sql'\
73    '*.tex'\
74    '*.toml'\
75    '*.tpl'\
76    '*.ts'\
77    '*.txt'\
78    '*.yml'\
79    'COPYING'\
80    'COPYING.LESSER'\
81    'pre-commit'\
82    'post-commit'\
83    '.gitignore'\
84    'py.typed'\
85    )
86  }
```

2.11   build_and_checks_dependencies/grammar_and_spell_check.libr.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
```

```bash
 9   # or (at your option) any later version.
10   #
11   # DevOrSysAdminScripts is distributed in the hope
12   # that it will be useful,
13   # but WITHOUT ANY WARRANTY;
14   # without even the implied warranty of
15   # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16   # See the GNU General Public License for more details.
17   #
18   # You should have received a copy of
19   # the GNU General Public License
20   # along with DevOrSysAdminScripts.
21   # If not, see <https://www.gnu.org/licenses/>.
22   #
23   # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24   # This file was renamed from "grammar_and_spell_check.sh"
25   # to "grammar_and_spell_check.libr.sh".
26
27   LFBFL_subdir="build_and_checks_dependencies"
28   # shellcheck disable=SC1090
29   source "./${LFBFL_subdir}/get_common_text_glob_patterns.libr.sh"
30   # shellcheck disable=SC1090
31   source "./${LFBFL_subdir}/lines_filters.libr.sh"
32
33   grammar_and_spell_check(){
34     get_COMMON_TEXT_FILES_GLOB_PATTERNS
35     grammar_or_spell_checker_command=""
36     grep_variable "$1" grammar_or_spell_checker_command
37     # shellcheck disable=SC2312
38     declare -r LFBFL_command=$(\
39       echo "${grammar_or_spell_checker_command}"\
40       | sed -Ez -e "s/\n//Mg"\
41     )
42     local LFBFL_file_path
43     local LFBFL_pattern
44     local LFBFL_eval_string
45     # shellcheck disable=SC2154
46     for LFBFL_pattern in "${COMMON_TEXT_FILES_GLOB_PATTERNS[@]}"; do
47       [[ "$2" != "-v" ]]\
48         || echo "Iterating on pattern: ${LFBFL_pattern}"
49       # shellcheck disable=SC2312
50       find . -type f -name "${LFBFL_pattern}" -printf '%P\n'\
51          | while read -r LFBFL_file_path;
52       do
53         LFBFL_eval_string="${LFBFL_command} ${LFBFL_file_path}"
54         eval "${LFBFL_eval_string}"
```

```
55    done
56  done
57 }
```

2.12 build_and_checks_dependencies/licenses_templates/build_licenses_templates.exec.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
9  # or (at your option) any later version.
10 #
11 # DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
13 # but WITHOUT ANY WARRANTY;
14 # without even the implied warranty of
15 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU General Public License for more details.
17 #
18 # You should have received a copy of
19 # the GNU General Public License
20 # along with DevOrSysAdminScripts.
21 # If not, see <https://www.gnu.org/licenses/>.
22 #
23 # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24 # This file was renamed from "build_licenses_templates.sh"
25 # to "build_licenses_templates.exec.sh".
26
27 LFBFL_verbose=""
28 if [[ "$1" == "--verbose" ]]; then
29   echo "$0 $*"
30   # shellcheck disable=SC2034
31   LFBFL_verbose="--verbose"
32 fi
33
34 LFBFL_subdir="build_and_checks_dependencies"
35 # shellcheck disable=SC1090
36 source "./${LFBFL_subdir}/comparisons.libr.sh"
37 # shellcheck disable=SC1090
38 source "./${LFBFL_subdir}/generate_from_template.libr.sh"
39 # shellcheck disable=SC1090
40 source "./${LFBFL_subdir}/lines_filters.libr.sh"
```

```
41  # shellcheck disable=SC1090
42  source "./${LFBFL_subdir}/overwrite_if_not_equal.libr.sh"
43
44  LFBFL_license_subdir="./${LFBFL_subdir}/licenses_templates/"
45  LFBFL_license_prefix="${LFBFL_license_subdir}license_file_header_"
46  licenses=(\
47    "AGPLv3+"\
48    "GPLv3+"\
49    "LGPLv3+"
50  )
51
52  # ----------------------------------------------------------------------
53  # Various language definitions for text file formats
54  block_comment_languages=(\
55    "c"\
56    "py"\
57  )
58  block_comment_enters=(\
59    '/*'\
60    '"""'\
61  )
62  block_comment_exits=(\
63    '*/'\
64    '"""'\
65  )
66  equal "${#block_comment_languages[@]}"\
67        "${#block_comment_enters[@]}"\
68        "${#block_comment_exits[@]}"
69  # shellcheck disable=SC2181
70  if [[ $? == 0 ]]; then
71    # shellcheck disable=SC1003
72    echo '/!\'"Problème de définition des tableaux de langages 1"'/!\'
73  fi
74
75  line_comment_languages=(\
76    "sh"\
77    "tex"\
78  )
79  line_comment_prefixes=(\
80    '# '\
81    '% '\
82  )
83  equal "${#line_comment_languages[@]}"\
84        "${#line_comment_prefixes[@]}"
85  # shellcheck disable=SC2181
86  if [[ $? == 0 ]]; then
```

```bash
87     # shellcheck disable=SC1003
88     echo '/!\'"Problème de définition des tableaux de langages 2"'/!\'
89  fi
90  # ---------------------------------------------------------------------
91
92  # ---------------------------------------------------------------------
93  # We generate the license header templates adapted to various text
94  # files formats.
95  # Kamoulox do endfor, Jacques Beauregard XD
96  # (C'est toujours mieux que l'inverse :) !)
97  # for do endfor -> for do done (Fort Doux Donne).
98  for LFBFL_license in "${licenses[@]}"; do
99    LFBFL_license_prefix2="${LFBFL_license_prefix}${LFBFL_license}"
100   for ((i=0; i<${#block_comment_languages[@]}; i++)); do
101     LFBFL_extension=${block_comment_languages[i]}
102     license_file_name="${LFBFL_license_prefix2}.${LFBFL_extension}"
103     LFBFL_enter_string=${block_comment_enters[i]}
104     LFBFL_exit_string=${block_comment_exits[i]}
105     generate_from_template_with_block_comments\
106       "${LFBFL_license_prefix2}.tpl"\
107       "${license_file_name}.tpl"\
108       "${LFBFL_enter_string}" "${LFBFL_exit_string}"
109   done
110   LFBFL_temp2=".generate_from_template_with_line_comments.temp"
111   for ((i=0; i<${#line_comment_languages[@]}; i++)); do
112     LFBFL_extension=${line_comment_languages[i]}
113     license_file_name="${LFBFL_license_prefix2}.${LFBFL_extension}"
114     LFBFL_prefix_string=${line_comment_prefixes[i]}
115     LFBFL_intermediate_file_name="${license_file_name}.tpl"
116     LFBFL_intermediate_file_name+="${LFBFL_temp2}"
117     generate_from_template_with_line_comments\
118       "${LFBFL_license_prefix2}.tpl"\
119       "${license_file_name}.tpl"\
120       "${LFBFL_prefix_string}"\
121       "sed -Ei -e 's/\s*$//g' '${LFBFL_intermediate_file_name}'"
122   done
123 done
124 # ---------------------------------------------------------------------
125
126 LFBFL_data_file_name="build_and_checks_variables/repository_data.txt"
127 repository_name=""
128 license=""
129 license2=""
130 author_full_name=""
131 grep_variable "${LFBFL_data_file_name}" repository_name
132 grep_variable "${LFBFL_data_file_name}" license
```

```
133  grep_variable "${LFBFL_data_file_name}" license2
134  grep_variable "${LFBFL_data_file_name}" author_full_name
135  LFBFL_license_prefix2="${LFBFL_license_prefix}${license}"
136  LFBFL_license_prefix3="${LFBFL_license_prefix}${license2}"
137  # First year according to current state of git repository.
138  # shellcheck disable=SC2312
139  first_year="$(git log | grep 'Date:' | cut -f 8 -d ' ' | tail -1)"
140  # Last year according to current state of git repository.
141  # shellcheck disable=SC2312
142  last_year="$(git log | grep 'Date:' | cut -f 8 -d ' ' | head -1)"
143  copyright_string="${first_year}-${last_year} ${author_full_name}"
144
145  prepare_filled_license_file_block(){
146    # $1=license_file_name
147    sed -e "s/@repository_name@/${repository_name}/g"\
148      -e "s/@copyright_string@/${copyright_string}/g"\
149      "$1.tpl" > "$1.temp"
150    overwrite_if_not_equal "$1" "$1.temp"
151    # shellcheck disable=SC2312
152    head --lines=-1 "$1" | tail --lines=+2 > "$1.temp"
153    # Strange world: tail --lines=-1 was working to exclude first line.
154    # I tested it months ago, and saw with my eyes the start and end
155    # block comments removed with:
156    # head --lines=-1 "$1" | tail --lines=-1.
157    # Now, man page says to use --lines=+2 instead.
158    # Welcome in the world where AI change your environment and your doc
159    # on the fly...
160  }
161
162  for ((i=0; i<${#block_comment_languages[@]}; i++)); do
163    LFBFL_extension=${block_comment_languages[i]}
164    license_file_name="${LFBFL_license_prefix2}.${LFBFL_extension}"
165    prepare_filled_license_file_block "${license_file_name}"
166    if [[ -n "${license2}" ]]; then
167      license_file_name2="${LFBFL_license_prefix3}.${LFBFL_extension}"
168      prepare_filled_license_file_block "${license_file_name2}"
169    fi
170    # shellcheck disable=SC2312
171    find . -type f -name "*.${LFBFL_extension}" -printf '%P\n'\
172      | relevant_find | while read -r LFBFL_file_name;
173    do
174      is_subfile "${LFBFL_file_name}" "${license_file_name}.temp"
175      declare -i LFBFL_not_subfile=$?
176      declare -i LFBFL_not_subfile2=1
177      if [[ -n "${license2}" ]]; then
178        is_subfile "${LFBFL_file_name}" "${license_file_name2}.temp"
```

```
179       LFBFL_not_subfile2=$?
180     fi
181     if [[ LFBFL_not_subfile -ge 1 && LFBFL_not_subfile2 -ge 1 ]]; then
182       echo "File ${LFBFL_file_name} has no/wrong license header?"
183     fi
184   done
185   rm "${license_file_name}.temp"
186   if [[ -n "${license2}" ]]; then
187     rm "${license_file_name2}.temp"
188   fi
189 done
190
191 prepare_filled_license_file_line(){
192   # $1=license_file_name
193   sed -e "s/@repository_name@/${repository_name}/g"\
194     -e "s/@copyright_string@/${copyright_string}/g"\
195     "$1.tpl" > "$1.temp"
196   overwrite_if_not_equal "$1" "$1.temp"
197 }
198
199 for ((i=0; i<${#line_comment_languages[@]}; i++)); do
200   LFBFL_extension=${line_comment_languages[i]}
201   license_file_name="${LFBFL_license_prefix2}.${LFBFL_extension}"
202   prepare_filled_license_file_line "${license_file_name}"
203   if [[ -n "${license2}" ]]; then
204     license_file_name2="${LFBFL_license_prefix3}.${LFBFL_extension}"
205     prepare_filled_license_file_line "${license_file_name2}"
206   fi
207   # shellcheck disable=SC2312
208   find . -type f -name "*.${LFBFL_extension}" -printf '%P\n'\
209     | relevant_find | while read -r LFBFL_file_name;
210   do
211     is_subfile "${LFBFL_file_name}" "${license_file_name}"
212     declare -i LFBFL_not_subfile=$?
213     declare -i LFBFL_not_subfile2=1
214     if [[ -n "${license2}" ]]; then
215       is_subfile "${LFBFL_file_name}" "${license_file_name2}"
216       LFBFL_not_subfile2=$?
217     fi
218     if [[ LFBFL_not_subfile -ge 1 && LFBFL_not_subfile2 -ge 1 ]]; then
219       echo "File ${LFBFL_file_name} has no/wrong license header?"
220     fi
221   done
222 done
```

2.13 build_and_checks_dependencies/licenses_templates/license_file_header_AGPLv3+.c.tpl

```
1   /*
2   This file is part of @repository_name@ library.
3
4   @repository_name@ is free software:
5   you can redistribute it and/or modify it under the terms
6   of the GNU Affero General Public License
7   as published by the Free Software Foundation,
8   either version 3 of the License,
9   or (at your option) any later version.
10
11  @repository_name@ is distributed in the hope
12  that it will be useful,
13  but WITHOUT ANY WARRANTY;
14  without even the implied warranty of
15  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  See the GNU Affero General Public License for more details.
17
18  You should have received a copy of
19  the GNU Affero General Public License
20  along with @repository_name@.
21  If not, see <https://www.gnu.org/licenses/>.
22
23  ©Copyright @copyright_string@
24  */
```

2.14 build_and_checks_dependencies/licenses_templates/license_file_header_AGPLv3+.py.tpl

```
1   """
2   This file is part of @repository_name@ library.
3
4   @repository_name@ is free software:
5   you can redistribute it and/or modify it under the terms
6   of the GNU Affero General Public License
7   as published by the Free Software Foundation,
8   either version 3 of the License,
9   or (at your option) any later version.
10
11  @repository_name@ is distributed in the hope
12  that it will be useful,
13  but WITHOUT ANY WARRANTY;
14  without even the implied warranty of
15  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  See the GNU Affero General Public License for more details.
17
```

```
18  You should have received a copy of
19  the GNU Affero General Public License
20  along with @repository_name@.
21  If not, see <https://www.gnu.org/licenses/>.
22
23  ©Copyright @copyright_string@
24  """
```

2.15 build_and_checks_dependencies/licenses_templates/license_file_header_AGPLv3+.sh.t

```
1   # This file is part of @repository_name@ library.
2   #
3   # @repository_name@ is free software:
4   # you can redistribute it and/or modify it under the terms
5   # of the GNU Affero General Public License
6   # as published by the Free Software Foundation,
7   # either version 3 of the License,
8   # or (at your option) any later version.
9   #
10  # @repository_name@ is distributed in the hope
11  # that it will be useful,
12  # but WITHOUT ANY WARRANTY;
13  # without even the implied warranty of
14  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15  # See the GNU Affero General Public License for more details.
16  #
17  # You should have received a copy of
18  # the GNU Affero General Public License
19  # along with @repository_name@.
20  # If not, see <https://www.gnu.org/licenses/>.
21  #
22  # ©Copyright @copyright_string@
```

2.16 build_and_checks_dependencies/licenses_templates/license_file_header_AGPLv3+.tex.t

```
1   % This file is part of @repository_name@ library.
2   %
3   % @repository_name@ is free software:
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5   % of the GNU Affero General Public License
6   % as published by the Free Software Foundation,
7   % either version 3 of the License,
8   % or (at your option) any later version.
9   %
10  % @repository_name@ is distributed in the hope
11  % that it will be useful,
```

```
12   % but WITHOUT ANY WARRANTY;
13   % without even the implied warranty of
14   % MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15   % See the GNU Affero General Public License for more details.
16   %
17   % You should have received a copy of
18   % the GNU Affero General Public License
19   % along with @repository_name@.
20   % If not, see <https://www.gnu.org/licenses/>.
21   %
22   % ©Copyright @copyright_string@
```

2.17   build_and_checks_dependencies/licenses_templates/license_file_header_AGPLv3+.tpl

```
1    This file is part of @repository_name@ library.
2
3    @repository_name@ is free software:
4    you can redistribute it and/or modify it under the terms
5    of the GNU Affero General Public License
6    as published by the Free Software Foundation,
7    either version 3 of the License,
8    or (at your option) any later version.
9
10   @repository_name@ is distributed in the hope
11   that it will be useful,
12   but WITHOUT ANY WARRANTY;
13   without even the implied warranty of
14   MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15   See the GNU Affero General Public License for more details.
16
17   You should have received a copy of
18   the GNU Affero General Public License
19   along with @repository_name@.
20   If not, see <https://www.gnu.org/licenses/>.
21
22   ©Copyright @copyright_string@
```

2.18   build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.c.tpl

```
1    /*
2    This file is part of @repository_name@ library.
3
4    @repository_name@ is free software:
5    you can redistribute it and/or modify it under the terms
6    of the GNU General Public License
7    as published by the Free Software Foundation,
```

```
8  either version 3 of the License,
9  or (at your option) any later version.
10
11 @repository_name@ is distributed in the hope
12 that it will be useful,
13 but WITHOUT ANY WARRANTY;
14 without even the implied warranty of
15 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 See the GNU General Public License for more details.
17
18 You should have received a copy of
19 the GNU General Public License
20 along with @repository_name@.
21 If not, see <https://www.gnu.org/licenses/>.
22
23 ©Copyright @copyright_string@
24 */
```

2.19 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.py.tpl

```
1  """
2  This file is part of @repository_name@ library.
3
4  @repository_name@ is free software:
5  you can redistribute it and/or modify it under the terms
6  of the GNU General Public License
7  as published by the Free Software Foundation,
8  either version 3 of the License,
9  or (at your option) any later version.
10
11 @repository_name@ is distributed in the hope
12 that it will be useful,
13 but WITHOUT ANY WARRANTY;
14 without even the implied warranty of
15 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 See the GNU General Public License for more details.
17
18 You should have received a copy of
19 the GNU General Public License
20 along with @repository_name@.
21 If not, see <https://www.gnu.org/licenses/>.
22
23 ©Copyright @copyright_string@
24 """
```

2.20 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.sh.tpl

```
1   # This file is part of @repository_name@ library.
2   #
3   # @repository_name@ is free software:
4   # you can redistribute it and/or modify it under the terms
5   # of the GNU General Public License
6   # as published by the Free Software Foundation,
7   # either version 3 of the License,
8   # or (at your option) any later version.
9   #
10  # @repository_name@ is distributed in the hope
11  # that it will be useful,
12  # but WITHOUT ANY WARRANTY;
13  # without even the implied warranty of
14  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15  # See the GNU General Public License for more details.
16  #
17  # You should have received a copy of
18  # the GNU General Public License
19  # along with @repository_name@.
20  # If not, see <https://www.gnu.org/licenses/>.
21  #
22  # ©Copyright @copyright_string@
```

2.21 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.tex.tp

```
1   % This file is part of @repository_name@ library.
2   %
3   % @repository_name@ is free software:
4   % you can redistribute it and/or modify it under the terms
5   % of the GNU General Public License
6   % as published by the Free Software Foundation,
7   % either version 3 of the License,
8   % or (at your option) any later version.
9   %
10  % @repository_name@ is distributed in the hope
11  % that it will be useful,
12  % but WITHOUT ANY WARRANTY;
13  % without even the implied warranty of
14  % MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15  % See the GNU General Public License for more details.
16  %
17  % You should have received a copy of
18  % the GNU General Public License
19  % along with @repository_name@.
```

```
20  % If not, see <https://www.gnu.org/licenses/>.
21  %
22  % ©Copyright @copyright_string@
```

2.22 build_and_checks_dependencies/licenses_templates/license_file_header_GPLv3+.tpl

```
1  This file is part of @repository_name@ library.
2
3  @repository_name@ is free software:
4  you can redistribute it and/or modify it under the terms
5  of the GNU General Public License
6  as published by the Free Software Foundation,
7  either version 3 of the License,
8  or (at your option) any later version.
9
10  @repository_name@ is distributed in the hope
11  that it will be useful,
12  but WITHOUT ANY WARRANTY;
13  without even the implied warranty of
14  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15  See the GNU General Public License for more details.
16
17  You should have received a copy of
18  the GNU General Public License
19  along with @repository_name@.
20  If not, see <https://www.gnu.org/licenses/>.
21
22  ©Copyright @copyright_string@
```

2.23 build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.c.tpl

```
1  /*
2  This file is part of @repository_name@ library.
3
4  @repository_name@ is free software:
5  you can redistribute it and/or modify it under the terms
6  of the GNU Lesser General Public License
7  as published by the Free Software Foundation,
8  either version 3 of the License,
9  or (at your option) any later version.
10
11  @repository_name@ is distributed in the hope
12  that it will be useful,
13  but WITHOUT ANY WARRANTY;
14  without even the implied warranty of
15  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

```
16  See the GNU Lesser General Public License for more details.
17
18  You should have received a copy of
19  the GNU Lesser General Public License
20  along with @repository_name@.
21  If not, see <https://www.gnu.org/licenses/>.
22
23  ©Copyright @copyright_string@
24  */
```

2.24   build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.py.t

```
1   """
2   This file is part of @repository_name@ library.
3
4   @repository_name@ is free software:
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9   or (at your option) any later version.
10
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14  without even the implied warranty of
15  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  See the GNU Lesser General Public License for more details.
17
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21  If not, see <https://www.gnu.org/licenses/>.
22
23  ©Copyright @copyright_string@
24  """
```

2.25   build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.sh.t

```
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```

```
8  # or (at your option) any later version.
9  #
10 # @repository_name@ is distributed in the hope
11 # that it will be useful,
12 # but WITHOUT ANY WARRANTY;
13 # without even the implied warranty of
14 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15 # See the GNU Lesser General Public License for more details.
16 #
17 # You should have received a copy of
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19 # along with @repository_name@.
20 # If not, see <https://www.gnu.org/licenses/>.
21 #
22 # ©Copyright @copyright_string@
```

2.26   build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.tex.t

```
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7  % either version 3 of the License,
8  % or (at your option) any later version.
9  %
10 % @repository_name@ is distributed in the hope
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12 % but WITHOUT ANY WARRANTY;
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20 % If not, see <https://www.gnu.org/licenses/>.
21 %
22 % ©Copyright @copyright_string@
```

2.27   build_and_checks_dependencies/licenses_templates/license_file_header_LGPLv3+.tpl

```
1  This file is part of @repository_name@ library.
2
3  @repository_name@ is free software:
```

2.28 build_and_checks_dependencies/lines_counts.libr.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
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22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "lines_counts.sh" to
```

```
25  # "lines_counts.libr.sh".
26
27  LFBFL_subdir="build_and_checks_dependencies"
28  # shellcheck disable=SC1090
29  source "./${LFBFL_subdir}/get_common_text_glob_patterns.libr.sh"
30  # shellcheck disable=SC1090
31  source "./${LFBFL_subdir}/lines_filters.libr.sh"
32
33  all_code_lines(){
34    get_COMMON_TEXT_FILES_GLOB_PATTERNS
35    local LFBFL_pattern
36    # shellcheck disable=SC2154
37    for LFBFL_pattern in "${COMMON_TEXT_FILES_GLOB_PATTERNS[@]}"; do
38      [[ "$1" != "-v" ]]\
39        || echo "Iterating on pattern: ${LFBFL_pattern}"
40      # shellcheck disable=SC2312
41      find . -type f -name "${LFBFL_pattern}" -printf '%P\n'\
42        | xargs grep -H -v 'a(?!a)a'
43    done
44  }
45
46  all_self_code_lines(){
47    # shellcheck disable=SC2312
48    all_code_lines "$@" | relevant_grep\
49      | not_license_grep | not_main_tex_grep | not_main_html_grep
50  }
51
52  all_self_empty_code_lines(){
53    # shellcheck disable=SC2312
54    all_self_code_lines "$@" | empty_lines_after_file_name
55  }
56
57  all_self_not_empty_code_lines(){
58    # shellcheck disable=SC2312
59    all_self_code_lines "$@" | not_empty_lines_after_file_name
60  }
61
62  code_lines_count_all(){
63    # shellcheck disable=SC2312
64    all_self_code_lines "$@" | wc -l
65  }
66
67  code_lines_count_empty(){
68    # shellcheck disable=SC2312
69    all_self_empty_code_lines "$@" | wc -l
70  }
```

```
71
72  code_lines_count_not_empty(){
73    # shellcheck disable=SC2312
74    all_self_not_empty_code_lines "$@" | wc -l
75  }
```

2.29   build_and_checks_dependencies/lines_filters.libr.sh

```
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22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "lines_filters.sh" to
25  # "lines_filters.libr.sh".
26
27  # The goal of this file is to have some common line filters
28  # for bash processing and pipes.
29  # As is the case for other .sh files in this repository,
30  # it can be copied somewhere in your home directory
31  # and sourced in your .bashrc.
32
33  ll_wc(){
34    # current options to wc:
35    # -c --bytes
36    # -m --chars
37    # -l --lines
38    # --files0-from # Incompatible with cat,
```

```
39    #                 # another thing intentional by ?
40    #                 # I don't see the meaning of "files0".
41    # -L --max-line-length
42    # -w --words
43    # --help
44    # --version
45    # New option by Laurent Lyaudet (and probably other before):
46    # -n --no-filenames display only number(s)
47    # I think I did that the first time many years ago (Teliae ?).
48    # Since then, they added it as ignored... (-n)
49    declare -a ll_wc_var_args=()
50    declare -i ll_wc_var_number_only=0
51    declare -i ll_wc_var_i=0
52    for ll_wc_var_arg in "$@"; do
53      # echo "$ll_wc_var_arg"
54      # shellcheck disable=SC2250
55      if [[ "${ll_wc_var_arg}" == "-n" ]]; then
56        ll_wc_var_number_only=1
57      elif [[ "${ll_wc_var_arg}" == "--no-filenames" ]]; then
58        ll_wc_var_number_only=1
59      elif [[ $ll_wc_var_number_only -eq 0 ]]; then
60        ll_wc_var_args[ll_wc_var_i]="${ll_wc_var_arg}"
61        ll_wc_var_i=$((ll_wc_var_i + 1))
62      elif [[ "${ll_wc_var_arg}" =~ -.* ]]; then
63        ll_wc_var_args[ll_wc_var_i]="${ll_wc_var_arg}"
64        ll_wc_var_i=$((ll_wc_var_i + 1))
65      fi
66    done
67    # typeset -p ll_wc_var_args
68    # echo "$ll_wc_var_number_only"
69    # shellcheck disable=SC2250
70    if [[ $ll_wc_var_number_only -gt 0 ]]; then
71      # Too simple code, only the base use case is handled now.
72      # Convenient but incomplete.
73      # With more time,
74      # the simpler would be to submit a patch to GNU coreutils,
75      # unless blockade from assholes.
76      # Otherwise, it may be more simply handled in PHP or Python
77      # (argparse, etc.).
78      # You'll need to start by improving cat first,
79      # with --files0-from handling.
80      # wc does not display file_name when stream...
81      # hence cat of last arg "${!#}"
82      # shellcheck disable=SC2312
83      cat "${!#}" | wc "${ll_wc_var_args[@]}"
84    else
```

```
85     # echo "normal"
86     wc "${ll_wc_var_args[@]}"
87   fi
88 }
89
90 # I submitted a patch for wc :).
91 # echo "https://domain/list-path/2024-05/msg00013.html" | \
92 #   sed -e 's|domain|lists.gnu.org|' \
93 #       -e 's|list-path|archive/html/bug-coreutils|'
94 # I found another way to have a long URL fit on 70 characters.
95 # If it is merged, the following would be better:
96 # If --no-filenames option available,
97 # we redefine ll_wc command as an alias.
98 wc_help_text=$(wc --help)
99 if [[ "${wc_help_text}" == *" --no-filenames "* ]]; then
100   alias ll_wc='wc'
101 fi
102
103 # Trace avant le (2e ?) renommage
104 # de wget_sha512.sh à wget_sha512.libr.sh.
105 # $ ll_wc wget_sha512.sh
106 #  41  189 1224 wget_sha512.sh
107 # $ ll_wc -n wget_sha512.sh
108 #    41     189    1224
109 # $ ll_wc -l wget_sha512.sh
110 # 41 wget_sha512.sh
111 # $ ll_wc -l -n wget_sha512.sh
112 # 41
113
114 in_place_grep(){
115   declare -r LFBFL_temp="${!#}.in_place_grep.temp"
116   grep "$@" > "${LFBFL_temp}"
117   declare -r LFBFL_lines_before=$(ll_wc -l -n "${!#}")
118   declare -r LFBFL_lines_after=$(ll_wc -l -n "${LFBFL_temp}")
119   # echo "$LFBFL_lines_before"
120   # echo "$LFBFL_lines_after"
121   if [[ "${LFBFL_lines_before}" ==  "${LFBFL_lines_after}" ]]; then
122     rm "${LFBFL_temp}"
123     return
124   fi
125   mv "${LFBFL_temp}" "${!#}"
126 }
127
128 grep_variable(){
129   # $1=$file
130   # $2=$variable_name
```

```
131  declare -r LFBFL_regexp="(?<=^$2=).*$"
132  # echo $LFBFL_regexp
133  declare -r LFBFL_variable_value="$(grep -oP "${LFBFL_regexp}" "$1")"
134  # echo $LFBFL_variable_value
135  declare -g "$2"="${LFBFL_variable_value}"
136  }
137
138  repository_name=""
139  grep_variable build_and_checks_variables/repository_data.txt\
140    repository_name
141
142  empty_lines(){
143    grep '^$'
144  }
145
146  not_empty_lines(){
147    grep -v '^$'
148  }
149
150  space_starting_lines(){
151    grep '^[ ]'
152  }
153
154  not_space_starting_lines(){
155    grep '^[^ ]'
156  }
157
158  empty_lines_after_file_name(){
159    grep '^[^:]\+:$'
160  }
161
162  not_empty_lines_after_file_name(){
163    grep -v '^[^:]\+:$'
164  }
165
166  space_starting_lines_after_file_name(){
167    grep '^[^:]\+: '
168  }
169
170  not_space_starting_lines_after_file_name(){
171    grep '^[^:]\+:[^ ]'
172  }
173
174  not_JS_dependencies_find(){
175    # shellcheck disable=SC2312
176    grep -vE "(^|/)node_modules/" | grep -vE "(^|/)package-lock\.json$"
```

```
177   }
178
179   not_JS_dependencies_grep(){
180     # shellcheck disable=SC2312
181     grep -v "^[^:]*node_modules/" | grep -v "^[^:]*package-lock\.json:"
182   }
183
184   not_dependencies_find(){
185     not_JS_dependencies_find
186   }
187
188   not_dependencies_grep(){
189     not_JS_dependencies_grep
190   }
191
192   not_python_cache_find(){
193     # shellcheck disable=SC2312
194     grep -vE "(^|/)__pycache__/" | grep -vE "(^|/)\.mypy_cache/"
195   }
196
197   not_python_cache_grep(){
198     # shellcheck disable=SC2312
199     grep -v "^[^:]*__pycache__/" | grep -v "^[^:]*\.mypy_cache/"
200   }
201
202   not_cache_find(){
203     not_python_cache_find
204   }
205
206   not_cache_grep(){
207     not_python_cache_grep
208   }
209
210   not_git_find(){
211     grep -vE "(^|/)\.git/"
212   }
213
214   not_git_grep(){
215     grep -v "^[^:]*\.git/"
216   }
217
218   not_archive_find(){
219     grep -vE "(\.gz|\.rar|\.tar|\.tgz|\.whl)$"
220   }
221
222   not_archive_grep(){
```

64

```
223    grep -vE "^[^:]*(\.gz|\.rar|\.tar|\.tgz|\.whl):"
224  }
225
226  not_license_find(){
227    # shellcheck disable=SC2312
228    grep -vE "(^|/)COPYING$" | grep -vE "(^|/)COPYING\.LESSER$"
229  }
230
231  not_license_grep(){
232    # shellcheck disable=SC2312
233    grep -v "^[^:]*COPYING:" | grep -v "^[^:]*COPYING\.LESSER:"
234  }
235
236  not_main_tex_find(){
237    grep -vE "(^|/)${repository_name}\.tex$"
238  }
239
240  not_main_tex_grep(){
241    grep -v "^[^:]*${repository_name}\.tex:"
242  }
243
244  not_main_html_find(){
245    grep -vE "(^|/)${repository_name}\.html$"
246  }
247
248  not_main_html_grep(){
249    grep -v "^[^:]*${repository_name}\.html:"
250  }
251
252  not_temp_file_find(){
253    grep -vE "(^|/)build_and_checks_variables/temp/.*$"
254  }
255
256  not_temp_file_grep(){
257    grep -v "^[^:]*build_and_checks_variables/temp/[^:]*:"
258  }
259
260  relevant_find(){
261    # shellcheck disable=SC2312
262    not_dependencies_find | not_cache_find | not_git_find\
263    | not_archive_find | not_temp_file_find
264  }
265
266  relevant_grep(){
267    # shellcheck disable=SC2312
268    not_dependencies_grep | not_cache_grep | not_git_grep\
```

```
269    | not_archive_grep | not_temp_file_grep
270  }
```

2.30 build_and_checks_dependencies/lines_maps.libr.sh

```
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22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "lines_maps.sh" to "lines_maps.libr.sh".
25
26  # https://en.wikibooks.org/wiki/Unicode/Character_reference/2000-2FFF
27  # Some invisible unicode characters that are a problem:
28  # 2000-200F 2028-202F 205F 2060-206F
29  # [
30  #   '2000', '2001', '2002', '2003', '2004', '2005', '2006', '2007',
31  #   '2008', '2009', '200A', '200B', '200C', '200D', '200E', '200F',
32  #   '2028', '2029', '202A', '202B', '202C', '202D', '202E', '202F',
33  #   '205F',
34  #   '2060', '2061', '2062', '2063', '2064', '2065', '2066', '2067',
35  #   '2068', '2069', '206A', '206B', '206C', '206D', '206E', '206F',
36  # ]
37  replace_non_ascii_spaces(){
38    # shellcheck disable=SC2312
39    sed -e 's/\xc2\xa0/ /g'\
40    | sed -e 's/\xe2\x80\x80/ /g'\
41    | sed -e 's/\xe2\x80\x81/ /g'\
```

66

```
42    | sed -e 's/\xe2\x80\x82/ /g'\
43    | sed -e 's/\xe2\x80\x83/ /g'\
44    | sed -e 's/\xe2\x80\x84/ /g'\
45    | sed -e 's/\xe2\x80\x85/ /g'\
46    | sed -e 's/\xe2\x80\x86/ /g'\
47    | sed -e 's/\xe2\x80\x87/ /g'\
48    | sed -e 's/\xe2\x80\x88/ /g'\
49    | sed -e 's/\xe2\x80\x89/ /g'\
50    | sed -e 's/\xe2\x80\x8a/ /g'\
51    | sed -e 's/\xe2\x80\x8b/ /g'\
52    | sed -e 's/\xe2\x80\x8c/ /g'\
53    | sed -e 's/\xe2\x80\x8d/ /g'\
54    | sed -e 's/\xe2\x80\x8e/ /g'\
55    | sed -e 's/\xe2\x80\x8f/ /g'\
56    | sed -e 's/\xe2\x80\xa8/ /g'\
57    | sed -e 's/\xe2\x80\xa9/ /g'\
58    | sed -e 's/\xe2\x80\xaa/ /g'\
59    | sed -e 's/\xe2\x80\xab/ /g'\
60    | sed -e 's/\xe2\x80\xac/ /g'\
61    | sed -e 's/\xe2\x80\xad/ /g'\
62    | sed -e 's/\xe2\x80\xae/ /g'\
63    | sed -e 's/\xe2\x80\xaf/ /g'\
64    | sed -e 's/\xe2\x81\x9f/ /g'\
65    | sed -e 's/\xe2\x81\xa0/ /g'\
66    | sed -e 's/\xe2\x81\xa1/ /g'\
67    | sed -e 's/\xe2\x81\xa2/ /g'\
68    | sed -e 's/\xe2\x81\xa3/ /g'\
69    | sed -e 's/\xe2\x81\xa4/ /g'\
70    | sed -e 's/\xe2\x81\xa5/ /g'\
71    | sed -e 's/\xe2\x81\xa6/ /g'\
72    | sed -e 's/\xe2\x81\xa7/ /g'\
73    | sed -e 's/\xe2\x81\xa8/ /g'\
74    | sed -e 's/\xe2\x81\xa9/ /g'\
75    | sed -e 's/\xe2\x81\xaa/ /g'\
76    | sed -e 's/\xe2\x81\xab/ /g'\
77    | sed -e 's/\xe2\x81\xac/ /g'\
78    | sed -e 's/\xe2\x81\xad/ /g'\
79    | sed -e 's/\xe2\x81\xae/ /g'\
80    | sed -e 's/\xe2\x81\xaf/ /g'
81  }
```

2.31 build_and_checks_dependencies/overwrite_if_not_equal.libr.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
```

```
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23   # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24   # This file was renamed from "overwrite_if_not_equal.sh"
25   # to "overwrite_if_not_equal.libr.sh".
26
27   overwrite_if_not_equal(){
28     # $1=$target_file_name
29     # $2=$temp_file_name
30     # $3=$keep_temp
31     if [[ ! -f "$1" ]]; then
32       if [[ -n "$3" ]]; then
33         cp -p "$2" "$1"
34       else
35         mv "$2" "$1"
36       fi
37       return
38     fi
39     diff -q "$1" "$2"
40     declare -ri LFBFL_is_equal=$?
41     # shellcheck disable=SC2250
42     if [[ $LFBFL_is_equal == 0 ]]; then
43       if [[ -z "$3" ]]; then
44         rm "$2"
45       fi
46     else
47       if [[ -n "$3" ]]; then
48         cp -p "$2" "$1"
49       else
```

```
50      mv "$2" "$1"
51    fi
52  fi
53  }
```

2.32   build_and_checks_dependencies/python_black_complement.libr.sh

```
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22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "python_black_complement.sh"
25  # to "python_black_complement.libr.sh".
26
27  # It was rejected to enhance black with this currently.
28  # And moreover, at some point, I saw the reverse rule
29  # in black or pylint to add an empty line...
30  # This regexp may give false positives,
31  # but that's not the end of the world.
32  check_no_empty_line_after_python_function_docstring(){
33    echo "Checking empty lines after Python function docstrings"
34    pcregrep -M $'def [^"]*"""([^"]|"(?!""))*"""\n\n(?!\s*def)'\
35      -- **/*.py
36  }
37
38  python_black_complement(){
39    check_no_empty_line_after_python_function_docstring
```

```
40   }
```

2.33   build_and_checks_dependencies/python_isort_complement.libr.sh

```
1    #!/usr/bin/env bash
2    # This file is part of DevOrSysAdminScripts library.
3    #
4    # DevOrSysAdminScripts is free software:
5    # you can redistribute it and/or modify it under the terms
6    # of the GNU General Public License
7    # as published by the Free Software Foundation,
8    # either version 3 of the License,
9    # or (at your option) any later version.
10   #
11   # DevOrSysAdminScripts is distributed in the hope
12   # that it will be useful,
13   # but WITHOUT ANY WARRANTY;
14   # without even the implied warranty of
15   # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16   # See the GNU General Public License for more details.
17   #
18   # You should have received a copy of
19   # the GNU General Public License
20   # along with DevOrSysAdminScripts.
21   # If not, see <https://www.gnu.org/licenses/>.
22   #
23   # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24   # This file was renamed from "python_isort_complement.sh"
25   # to "python_isort_complement.libr.sh".
26
27   LFBFL_subdir="build_and_checks_dependencies"
28   # shellcheck disable=SC1090
29   source "./${LFBFL_subdir}/lines_filters.libr.sh"
30   # shellcheck disable=SC1090
31   source "./${LFBFL_subdir}/overwrite_if_not_equal.libr.sh"
32
33   check_collections_abc_place(){
34     echo "Checking import of _collections_abc is at the right place"
35     declare -r LFBFL_temp=".check_collections_abc_place.temp"
36     # shellcheck disable=SC2312
37     find . -name "*.py" | relevant_find\
38       | while read -r LFBFL_file_name; do
39       [[ -f "${LFBFL_file_name}" ]] || continue
40       sed -Ez 's/\n(\nfrom _collections_abc[^\n]*)/\1\n/Mg'\
41         "${LFBFL_file_name}" > "${LFBFL_file_name}${LFBFL_temp}"
42       overwrite_if_not_equal "${LFBFL_file_name}"\
```

```
43      "${LFBFL_file_name}${LFBFL_temp}"
44   done
45 }
46
47 python_isort_complement(){
48   check_collections_abc_place
49 }
```

2.34   build_and_checks_dependencies/split_line_at_most.exec.php

```
1  #!/usr/bin/php
2  <?php
3  /*
4  This file is part of DevOrSysAdminScripts library.
5
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8  of the GNU Lesser General Public License
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22 along with DevOrSysAdminScripts.
23 If not, see <https://www.gnu.org/licenses/>.
24
25 ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
26 This file was renamed from
27 "call_split_score_after_before_or_before_after.exec.php" to
28 "split_line_at_most.exec.php".
29 This file was renamed from
30 "call_split_score_after_before_or_before_after.php" to
31 "call_split_score_after_before_or_before_after.exec.php".
32 */
33
34 require_once(
35   './build_and_checks_dependencies/split_line_at_most.libr.php'
36 );
```

```
37
38   /*
39   php -r\
40    $'require_once(\'./build_and_checks_dependencies/'\
41   $'split_line_at_most.libr.php\');'\
42   $' echo(generate_split_score_after_before'\
43   $'(70, [\'/\'])(\'/\', 60, true));'
44   */
45
46   $after_before = $argv[1];
47
48   if($after_before){
49     echo(
50       generate_split_score_after_before(
51       //  $argv[1], array_slice($argv, 5)
52       //)($argv[3], $argv[2], $argv[4])
53       //  $argv[1], explode(',', $argv[2]),
54       //)($argv[3], $argv[4], $argv[5])
55         (int) $argv[2], explode(',', $argv[3]),
56       )($argv[4], (int) $argv[5], $argv[6])
57     );
58     exit();
59   }
60
61   echo(
62     generate_split_score_before_after(
63       (int) $argv[2], explode(',', $argv[3]),
64     )($argv[4], (int) $argv[5], $argv[6])
65   );
```

2.35 build_and_checks_dependencies/split_line_at_most.libr.php

```
1   <?php
2   /*
3   This file is part of DevOrSysAdminScripts library.
4
5   DevOrSysAdminScripts is free software:
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7   of the GNU Lesser General Public License
8   as published by the Free Software Foundation,
9   either version 3 of the License,
10  or (at your option) any later version.
11
12  DevOrSysAdminScripts is distributed in the hope
13  that it will be useful,
14  but WITHOUT ANY WARRANTY;
```

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16 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
17 See the GNU Lesser General Public License for more details.
18
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21 along with DevOrSysAdminScripts.
22 If not, see <https://www.gnu.org/licenses/>.
23
24 ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
25 This file was renamed from "split_line_at_most.php" to
26 "split_line_at_most.libr.php".
27 */
```

```
28
29  function generate_split_score_after_before(
30    $max_length,
31    $delimiter_strings_domain,
32  ){
33    return function(
34      $delimiter_string,
35      $cut_position,
36      $is_cut_after,
37    ) use ($max_length, $delimiter_strings_domain){
38      if(!in_array($delimiter_string, $delimiter_strings_domain, true)){
39        // I do not handle regexps for the moment.
40        // I'm too brainfucked. I just want to finish this feature fast
41        // for HTML and Tex/PDF listings generation with HTML and Tex on
42        // at most 70 characters.
43        return 0;
44      }
45      if($is_cut_after){
46        // Always way better to cut after '/' than before it.
47        return 1 + $max_length + $cut_position;
48      }
49      return 1 + $cut_position;
50    };
51  }
52
53
54
55  function generate_split_score_before_after(
56    $max_length,
57    $delimiter_strings_domain,
58  ){
59    return function(
60      $delimiter_string,
```

```
61      $cut_position,
62      $is_cut_after,
63    ) use ($max_length, $delimiter_strings_domain){
64      if(!in_array($delimiter_string, $delimiter_strings_domain, true)){
65        // I do not handle regexps for the moment.
66        // I'm too brainfucked. I just want to finish this feature fast
67        // for HTML and Tex/PDF listings generation with HTML and Tex on
68        // at most 70 characters.
69        return 0;
70      }
71      if(!$is_cut_after){
72        // Always way better to cut before '/' than after it.
73        return 1 + $max_length + $cut_position;
74      }
75      return 1 + $cut_position;
76    };
77  }
78
```

2.36 build_and_checks_dependencies/strings_functions.libr.sh

```
1   #!/usr/bin/env bash
2   # This file is part of DevOrSysAdminScripts library.
3   #
4   # DevOrSysAdminScripts is free software:
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9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
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13  # but WITHOUT ANY WARRANTY;
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17  #
18  # You should have received a copy of
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20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # I think I created a file strings_functions.sh or renamed to
25  # strings_functions.sh at some point, before committing.
```

74

```
26  # Hence, someone must have changed or reversed the name of this file
27  # to string_functions.sh at some point.
28  # This file was renamed from "string_functions.sh" to
29  # "strings_functions.libr.sh".
30
31  LFBFL_subdir="build_and_checks_dependencies"
32  # shellcheck disable=SC1090
33  source "./${LFBFL_subdir}/get_common_text_glob_patterns.libr.sh"
34  # shellcheck disable=SC1090
35  source "./${LFBFL_subdir}/comparisons.libr.sh"
36
37  split_line_at(){
38    # $1=$line
39    # $2=$position
40    declare -g split_line_at_result_beginning="${1:0:$2}"
41    declare -g split_line_at_result_end="${1:$2}"
42    # echo "$split_line_at_result_beginning"
43    # echo "$split_line_at_result_end"
44  }
45
46  split_score_after_before_simple(){
47    # $1=$delimiters_strings_domain concatenated characters/delimiters
48    # $2=$delimiter_string a single character
49    # $3=$is_cut_after
50    if [[ "$1" != *$2* ]]; then
51      echo -n "0"
52      return
53    fi
54    if [[ "$3" == "1" ]]; then
55      echo -n "2"
56      return
57    fi
58    echo -n "1"
59    return
60  }
61
62  split_score_before_after_simple(){
63    # $1=$delimiters_strings_domain concatenated characters/delimiters
64    # $2=$delimiter_string a single character
65    # $3=$is_cut_after
66    if [[ "$1" != *$2* ]]; then
67      echo -n "0"
68      return
69    fi
70    if [[ "$3" == "0" ]]; then
71      echo -n "2"
```

75

```
72      return
73    fi
74    echo -n "1"
75    return
76  }
77
78  get_split_score_after_before_simple(){
79    # $1=$max_length
80    # $2=$delimiters_strings_domain
81    declare -g get_split_score_after_before_result=\
82  "split_score_after_before_simple '$2'"
83    # shellcheck disable=SC2034
84    declare -g get_split_score_after_before_result2="7"
85  }
86
87  get_split_score_before_after_simple(){
88    # $1=$max_length
89    # $2=$delimiters_strings_domain
90    declare -g get_split_score_before_after_result=\
91  "split_score_before_after_simple '$2'"
92    # shellcheck disable=SC2034
93    declare -g get_split_score_before_after_result2="11"
94  }
95
96  get_split_line_at_most_exec(){
97    declare -g SPLIT_LINE_AT_MOST_EXEC="./"
98    SPLIT_LINE_AT_MOST_EXEC+="build_and_checks_dependencies"
99    SPLIT_LINE_AT_MOST_EXEC+="/split_line_at_most.exec.php"
100 }
101
102 get_split_score_after_before(){
103   # $1=$max_length
104   # $2=$delimiters_strings_domain
105   get_split_line_at_most_exec
106   declare -g\
107     get_split_score_after_before_result="${SPLIT_LINE_AT_MOST_EXEC}"
108   get_split_score_after_before_result+=" 1 '$1' '$2'"
109   # shellcheck disable=SC2034
110   declare -g get_split_score_after_before_result2="5"
111 }
112
113 get_split_score_before_after(){
114   # $1=$max_length
115   # $2=$delimiters_strings_domain
116   get_split_line_at_most_exec
117   declare -g\
```

```
118      get_split_score_before_after_result="${SPLIT_LINE_AT_MOST_EXEC}"
119    get_split_score_before_after_result+=" 0 '$1' '$2'"
120    # shellcheck disable=SC2034
121    declare -g get_split_score_before_after_result2="9"
122  }
123
124  split_line_at_most(){
125    # $1=$line
126    # $2=$max_length of beginning result string
127    # $3=$split_score_command
128    #   negative score means do not consider as a possible split
129    # $4=$split_score_command_properties :
130    #   These properties are flags.
131    #   If someday some property is not a flag,
132    #   then create split_score_command_properties2.
133    #   - null or 0 no property;
134    #   - 1 split score doesn't depend on which delimiter matches;
135    #   - 2 split score doesn't depend on the current position;
136    #   - 4 any split score after is always larger
137    #     than any split score before;
138    #   - 8 any split score before is always larger
139    #     than any split score after;
140    # $5=$forbidden_previous_character
141    # $6=$split_score_command_delimiter_strings_domain
142    #   optimisation if small domain
143    #   - this argument can be "null", then we will use $3 only instead,
144    #     in that case, only mono-character strings are considered,
145    #   - this argument can be an array of characters,
146    #     optimize accordingly,
147    #   - this argument can be an array of strings,
148    #     optimize accordingly,
149    #   - this argument can be an array of regexps,
150    #     optimize accordingly.
151    #     Not sure an array of regexps makes more sense than a single
152    #     one. Maybe they could be both cases with corresponding
153    #     optimizations. Same for a single character or substring.
154    #
155    # Note that we're always looking for the last position to split
156    # among maximum score;
157    # if some position gets as score from 2 delimiters,
158    # its score is always the maximum of the two corresponding scores.
159    declare -g split_line_at_most_result_start
160    declare -g split_line_at_most_result_end
161    declare -A LFBFL_positions
162    # echo "$1 $2 $3 $4"
163    # For my use case in bash scripts, I will need only an array of
```

```
164   # characters. See get_split_score_after_before().
165   if [[ -n "$6" ]]; then
166     echo "split_line_at_most() \$4 NOT IMPLEMENTED YET"
167   fi
168   if [[ "$2" -ge "${#1}" ]]; then
169     split_line_at_most_result_start=$1
170     split_line_at_most_result_end=""
171     return
172   fi
173   declare -r LFBFL_sort_command="sort --numeric-sort"
174   declare -r LFBFL_length_minus_1=$((${#1} - 1))
175   declare -r LFBFL_i_max=$(
176     min "${LFBFL_sort_command}" "${LFBFL_length_minus_1}" "$2"
177   )
178   local LFBFL_i
179   local LFBFL_j
180   local LFBFL_previous_char
181   local LFBFL_current_char
182   local LFBFL_command1
183   local LFBFL_command2
184   local LFBFL_temp
185
186   # At the beginning, each position has score 0.
187   for ((LFBFL_i=0; LFBFL_i<=LFBFL_i_max; LFBFL_i++)) do
188     LFBFL_positions["${LFBFL_i}"]="0"
189   done
190   LFBFL_j=$((LFBFL_i+1))
191   LFBFL_positions["${LFBFL_j}"]="0"
192
193   # If we have a forbidden previous character,
194   # we mark the forbidden positions with -1.
195   if [[ -n "$5" ]]; then
196     LFBFL_previous_char=""
197     for ((LFBFL_i=0; LFBFL_i<LFBFL_i_max; LFBFL_i++)) do
198       LFBFL_j=$((LFBFL_i+1))
199       if [[ ${LFBFL_i} -ge 1 ]]; then
200         LFBFL_previous_char="${LFBFL_current_char}"
201       fi
202       LFBFL_current_char="${1:${LFBFL_i}:1}"
203       if [[ "${LFBFL_previous_char}" == "$5" ]]; then
204         LFBFL_positions["${LFBFL_i}"]="-1"
205       fi
206       if [[ "${LFBFL_current_char}" == "$5" ]]; then
207         LFBFL_positions["${LFBFL_j}"]="-1"
208       fi
209     done
```

```
210    fi
211
212    if [[ "$4" == "7" ]]; then
213      for ((LFBFL_j=LFBFL_i_max; LFBFL_j>0; LFBFL_j--)) do
214        LFBFL_i=$((LFBFL_j-1))
215        LFBFL_current_char="${1:${LFBFL_i}:1}"
216        LFBFL_command1="$3 '${LFBFL_current_char}' 0"
217        LFBFL_command2="$3 '${LFBFL_current_char}' 1"
218        # echo "${LFBFL_command1}"
219        # echo "${LFBFL_command2}"
220        LFBFL_temp=$(eval "${LFBFL_command1}")
221        # echo "${LFBFL_temp}|${LFBFL_i}"
222        if [[ ${LFBFL_temp} -ge 1 ]]; then
223          # echo "${LFBFL_temp}|${LFBFL_i}"
224          if [[ ${LFBFL_positions["${LFBFL_i}"]} != "-1" ]]; then
225            LFBFL_positions["${LFBFL_i}"]=$(
226              max "${LFBFL_sort_command}"\
227                "${LFBFL_positions["${LFBFL_i}"]}" "${LFBFL_temp}"
228            )
229          fi
230        fi
231        LFBFL_temp=$(eval "${LFBFL_command2}")
232        # echo "${LFBFL_temp}|${LFBFL_j}"
233        if [[ ${LFBFL_temp} -ge 1 ]]; then
234          # echo "${LFBFL_temp}|${LFBFL_j}"
235          if [[ ${LFBFL_positions["${LFBFL_j}"]} != "-1" ]]; then
236            LFBFL_positions["${LFBFL_j}"]=$(
237              max "${LFBFL_sort_command}"\
238                "${LFBFL_positions["${LFBFL_j}"]}" "${LFBFL_temp}"
239            )
240            break
241          fi
242        fi
243      done
244    else
245      for ((LFBFL_i=0; LFBFL_i<LFBFL_i_max; LFBFL_i++)) do
246        LFBFL_j=$((LFBFL_i+1))
247        LFBFL_current_char="${1:${LFBFL_i}:1}"
248        LFBFL_command1="$3 '${LFBFL_current_char}' ${LFBFL_i} 0"
249        LFBFL_command2="$3 '${LFBFL_current_char}' ${LFBFL_j} 1"
250        # echo "${LFBFL_command1}"
251        # echo "${LFBFL_command2}"
252        LFBFL_temp=$(eval "${LFBFL_command1}")
253        # echo "${LFBFL_temp}|${LFBFL_i}"
254        if [[ ${LFBFL_temp} -ge 1 ]]; then
255          # echo "${LFBFL_temp}|${LFBFL_i}"
```

```
256        if [[ ${LFBFL_positions["${LFBFL_i}"]} != "-1" ]]; then
257          LFBFL_positions["${LFBFL_i}"]=$(
258            max "${LFBFL_sort_command}"\
259              "${LFBFL_positions["${LFBFL_i}"]}" "${LFBFL_temp}"
260          )
261        fi
262      fi
263      LFBFL_temp=$(eval "${LFBFL_command2}")
264      # echo "${LFBFL_temp}|${LFBFL_j}"
265      if [[ ${LFBFL_temp} -ge 1 ]]; then
266        # echo "${LFBFL_temp}|${LFBFL_j}"
267        if [[ ${LFBFL_positions["${LFBFL_j}"]} != "-1" ]]; then
268          LFBFL_positions["${LFBFL_j}"]=$(
269            max "${LFBFL_sort_command}"\
270              "${LFBFL_positions["${LFBFL_j}"]}" "${LFBFL_temp}"
271          )
272        fi
273      fi
274    done
275  fi
276  declare -r LFBFL_max_score=\
277 $(max 'sort --numeric-sort' "${LFBFL_positions[@]}")
278  local LFBFL_best_position
279  for ((LFBFL_i=0; LFBFL_i<=LFBFL_i_max; LFBFL_i++)) do
280    local LFBFL_value=${LFBFL_positions[${LFBFL_i}]}
281    # echo "${LFBFL_i} ${LFBFL_value}"
282    if [[ "${LFBFL_value}" == "${LFBFL_max_score}" ]]; then
283      LFBFL_best_position="${LFBFL_i}"
284    fi
285  done
286  split_line_at "$1" "${LFBFL_best_position}"
287  # shellcheck disable=SC2250
288  split_line_at_most_result_start=$split_line_at_result_beginning
289  split_line_at_most_result_end="${split_line_at_result_end}"
290  # echo "$split_line_at_most_result_start"
291  # echo "$split_line_at_most_result_end"
292 }
293
294 split_last_line(){
295   # $1=$new_lines
296   # $2=$prefix
297   # $3=$max_length
298   # $4=$suffix
299   # $5=$split_score_command
300   # $6=$split_score_command_properties
301   # $7=$forbidden_previous_character ('\' usually)
```

```
302    # In general, a prefix/suffix can be a required line prefix/suffix
303    # for all final lines like a comment prefix,
304    # or it can be a continuation line prefix/suffix applied only
305    # when splitting a line in 2 lines,
306    # or it can be a prefix/suffix for the string made of all the lines.
307    # Clearly, there is no gain to couple handling a prefix/suffix for
308    # the string made of all the lines in this function.
309    # Since we add a prefix/suffix when splitting,
310    # it is easy to see that we do not need to distinguish between
311    # required line prefix/suffix and continuation line prefix/suffix.
312    # The $2 and $4 arguments are given as concatenation of the
313    # required and continuation line prefixes/suffixes as needed by the
314    # user.
315    # Thus lines arguments should be given already prefixed
316    # and suffixed.
317    # This is logic, since it would be cumbersome to handle prefixing
318    # or not already splitted lines in this function
319    # (see repeated_split_last_line).
320    # The given max_length is the goal.
321    # This function adapts the effective max position for the split by
322    # taking into account the length of the suffix.
323    declare -g split_last_line_result="$1"
324    declare -r LFBFL_max_length_plus=$(($3 + 1))
325    declare -r LFBFL_length2=$(($3 - ${#4}))
326    declare -r LFBFL_regexp='.\{'"${LFBFL_max_length_plus}"'\}$'
327    # shellcheck disable=SC2312
328    if echo "$1" | sed -e 's/\\n/\n/g' | grep -q "${LFBFL_regexp}"; then
329      # shellcheck disable=SC2312
330      declare -r LFBFL_start=$(\
331        echo "$1" | sed -e 's/\\n/\n/g' | head --lines=-1\
332        | sed -z 's/\n/\\n/g'\
333      )
334      # echo "start: $LFBFL_start"
335      declare -r LFBFL_last_line=$(\
336        echo "$1" | sed -e 's/\\n/\n/g' | tail --lines=1\
337      )
338      # echo "last_line: ${LFBFL_last_line}"
339      split_last_line_result=""
340      if [[ -n "${LFBFL_start}" ]]; then
341        split_last_line_result="${LFBFL_start}\n"
342      fi
343      if [[ -n "$5" ]]; then
344        split_line_at_most "${LFBFL_last_line}" "${LFBFL_length2}"\
345          "$5" "$6" "$7"
346        split_last_line_result+="${split_line_at_most_result_start}$4"
347        split_last_line_result+="\n"
```

81

```
348       split_last_line_result+="$2${split_line_at_most_result_end}"
349     else
350       # shellcheck disable=SC2250
351       split_last_line_result+="${LFBFL_last_line:0:$LFBFL_length2}$4"
352       split_last_line_result+="\n"
353       # shellcheck disable=SC2250
354       split_last_line_result+="$2${LFBFL_last_line:$LFBFL_length2}"
355     fi
356   fi
357 }
358
359 repeated_split_last_line(){
360   declare -g repeated_split_last_line_result="$1"
361   local LFBFL_i
362   for ((LFBFL_i=0; LFBFL_i<$6; ++LFBFL_i)) do
363     split_last_line "${repeated_split_last_line_result}" "$2" "$3"\
364       "$4" "$5" "$6" "$7"
365     repeated_split_last_line_result="${split_last_line_result}"
366     # echo "${split_last_line_result}"
367   done
368 }
```

2.37   build_and_checks_dependencies/too_long_code_lines.libr.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
9  # or (at your option) any later version.
10 #
11 # DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
13 # but WITHOUT ANY WARRANTY;
14 # without even the implied warranty of
15 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU General Public License for more details.
17 #
18 # You should have received a copy of
19 # the GNU General Public License
20 # along with DevOrSysAdminScripts.
21 # If not, see <https://www.gnu.org/licenses/>.
22 #
```

```
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "too_long_code_lines.sh"
25  # to "too_long_code_lines.libr.sh".
26
27  LFBFL_subdir="build_and_checks_dependencies"
28  # shellcheck disable=SC1090
29  source "./${LFBFL_subdir}/get_common_text_glob_patterns.libr.sh"
30
31  too_long_code_lines(){
32    get_COMMON_TEXT_FILES_GLOB_PATTERNS
33    local LFBFL_pattern
34    local LFBFL_file_name
35    local LFBFL_line
36    local LFBFL_extension
37    local LFBFL_base_name
38    # shellcheck disable=SC2154
39    for LFBFL_pattern in "${COMMON_TEXT_FILES_GLOB_PATTERNS[@]}"; do
40      [[ "$1" != "-v" ]]\
41        || echo "Iterating on pattern: ${LFBFL_pattern}"
42      # shellcheck disable=SC2312
43      find . -type f -name "${LFBFL_pattern}" -printf '%P\n'\
44        | xargs grep -H '.\{71\}' | while read -r LFBFL_long_line
45      do
46        LFBFL_file_name=${LFBFL_long_line%%:*}
47        LFBFL_line=${LFBFL_long_line#*:}
48        LFBFL_line="${LFBFL_line/%\\/}"
49        LFBFL_extension=${LFBFL_file_name##*.}
50        LFBFL_base_name=${LFBFL_file_name%.*}
51        if [[ "${LFBFL_extension}" == "html" ]]; then
52          if [[ -f "${LFBFL_base_name}.md" ]]; then
53            continue
54          fi
55          if grep --quiet --fixed-strings "${LFBFL_line}"\
56            "./build_and_checks_variables/temp/files_listing.html.tpl"
57          then
58            continue
59          fi
60          echo "${LFBFL_long_line}"
61        elif [[ "${LFBFL_extension}" == "md" ]]; then
62          if ! [[ -f "${LFBFL_base_name}.md.tpl" ]]; then
63            echo "${LFBFL_long_line}"
64          fi
65        else
66          echo "${LFBFL_long_line}"
67        fi
68      done
```

```
69   done
70 }
```

2.38   build_and_checks_dependencies/update_common_build_and_checks.exec.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
9  # or (at your option) any later version.
10 #
11 # DevOrSysAdminScripts is distributed in the hope
12 # that it will be useful,
13 # but WITHOUT ANY WARRANTY;
14 # without even the implied warranty of
15 # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16 # See the GNU General Public License for more details.
17 #
18 # You should have received a copy of
19 # the GNU General Public License
20 # along with DevOrSysAdminScripts.
21 # If not, see <https://www.gnu.org/licenses/>.
22 #
23 # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24 # This file was renamed from "update_common_build_and_checks.sh"
25 # to "update_common_build_and_checks.exec.sh".
26
27 update_common_build_and_checks(){
28   declare -i LFBFL_verbose=0
29   if [[ "$1" == "--verbose" ]]; then
30     echo "$0 $*"
31     LFBFL_verbose="--verbose"
32   fi
33   # shellcheck disable=SC2034
34   readonly LFBFL_verbose
35
36   declare -r LFBFL_common_file_name="common_build_and_checks.exec.sh"
37   cp "./${LFBFL_common_file_name}.tpl" "./${LFBFL_common_file_name}"
38
39   declare -r LFBFL_file_names=(\
40     "build_md_from_printable_md.exec.sh"\
41     "check_shell_scripts_beginnings.libr.sh"\
```

```
42        "check_URLs.libr.sh"\
43        "comparisons.libr.sh"\
44        "create_PDF.exec.sh"\
45        "generate_from_template.libr.sh"\
46        "get_common_text_glob_patterns.libr.sh"\
47        "grammar_and_spell_check.libr.sh"\
48        "licenses_templates/build_licenses_templates.exec.sh"\
49        "licenses_templates/license_file_header_AGPLv3+.tpl"\
50        "licenses_templates/license_file_header_GPLv3+.tpl"\
51        "licenses_templates/license_file_header_LGPLv3+.tpl"\
52        "lines_counts.libr.sh"\
53        "lines_filters.libr.sh"\
54        "lines_maps.libr.sh"\
55        "update_or_check_files_names_listing.exec.sh"\
56        "overwrite_if_not_equal.libr.sh"\
57        "python_black_complement.libr.sh"\
58        "python_isort_complement.libr.sh"\
59        "split_line_at_most.exec.php"\
60        "split_line_at_most.libr.php"\
61        "strings_functions.libr.sh"\
62        "too_long_code_lines.libr.sh"\
63      )
64
65      local LFBFL_file_name
66      local LFBFL_file_sha512
67      local LFBFL_file_sha512_all
68      local LFBFL_base_file_name
69      for LFBFL_file_name in "${LFBFL_file_names[@]}"; do
70        # shellcheck disable=SC2312
71        LFBFL_file_sha512=$(
72          sha512sum "./${LFBFL_file_name}" | cut -f1 -d' '
73        )
74        LFBFL_file_sha512_all="local LFBFL_correct_sha512\n"
75        LFBFL_file_sha512_all+="  LFBFL_correct_sha512="
76        LFBFL_file_sha512_all+="'${LFBFL_file_sha512:0:45}'\n"
77        LFBFL_file_sha512_all+="  LFBFL_correct_sha512\+="
78        LFBFL_file_sha512_all+="'${LFBFL_file_sha512:45:44}'\n"
79        LFBFL_file_sha512_all+="  LFBFL_correct_sha512\+="
80        LFBFL_file_sha512_all+="'${LFBFL_file_sha512:89}'"
81        LFBFL_base_file_name=$(basename "${LFBFL_file_name}")
82        sed -i\
83          "s|@sha512_${LFBFL_base_file_name}@|${LFBFL_file_sha512_all}|g"\
84          "./${LFBFL_common_file_name}"
85      done
86
87      declare -r LFBFL_main_file_name="build_and_checks.exec.sh"
```

```
88    cp "./${LFBFL_main_file_name}.tpl" "../${LFBFL_main_file_name}"

89
90    # shellcheck disable=SC2312
91    LFBFL_file_sha512=$(
92      sha512sum "./${LFBFL_common_file_name}" | cut -f1 -d' '
93    )
94    LFBFL_file_sha512_all="local LFBFL_correct_sha512\n"
95    LFBFL_file_sha512_all+="  LFBFL_correct_sha512="
96    LFBFL_file_sha512_all+="'${LFBFL_file_sha512:0:45}'\n"
97    LFBFL_file_sha512_all+="  LFBFL_correct_sha512\+="
98    LFBFL_file_sha512_all+="'${LFBFL_file_sha512:45:44}'\n"
99    LFBFL_file_sha512_all+="  LFBFL_correct_sha512\+="
100   LFBFL_file_sha512_all+="'${LFBFL_file_sha512:89}'"
101   sed -i\
102     "s|@sha512_${LFBFL_common_file_name}@|${LFBFL_file_sha512_all}|g"\
103     "../${LFBFL_main_file_name}"
104 }

105
106 update_common_build_and_checks "$@"
```

2.39   build_and_checks_dependencies/update_or_check_files_names_listing.exec.sh

```
1   #!/usr/bin/env bash
2   # This file is part of DevOrSysAdminScripts library.
3   #
4   # DevOrSysAdminScripts is free software:
5   # you can redistribute it and/or modify it under the terms
6   # of the GNU General Public License
7   # as published by the Free Software Foundation,
8   # either version 3 of the License,
9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  # See the GNU General Public License for more details.
17  #
18  # You should have received a copy of
19  # the GNU General Public License
20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24
```

```
25  # 2025-12-30T21:33+01:00: This file was moved from
26  # "./build_and_checks_dependencies/listings"
27  # to
28  # "./build_and_checks_dependencies".
29  # This file was renamed from "update_or_check_files_names_listing.sh"
30  # to "update_or_check_files_names_listing.exec.sh".
31  # This file was renamed from "update_or_check_file_names_listing.sh"
32  # to "update_or_check_files_names_listing.sh"?
33
34  LFBFL_verbose=""
35  if [[ "$2" == "--verbose" ]]; then
36    echo "$0 $*"
37    LFBFL_verbose="--verbose"
38  fi
39  readonly LFBFL_verbose
40
41  LFBFL_subdir="build_and_checks_dependencies"
42  # shellcheck disable=SC1090
43  source "./${LFBFL_subdir}/lines_filters.libr.sh"
44  # shellcheck disable=SC1090
45  source "./${LFBFL_subdir}/strings_functions.libr.sh"
46  LFBFL_subdir2="build_and_checks_variables"
47  files_names_listing="./${LFBFL_subdir2}/files_names_listing.txt"
48
49  if [[ "$1" == "--write" ]]; then
50    : > "${files_names_listing}"
51  fi
52  sed_expression='s/\\\n//Mg'
53  sed -Ez "${sed_expression}" "${files_names_listing}"\
54    > "${files_names_listing}.temp1"
55  sed -Ez "${sed_expression}" "${files_names_listing}.temp1"\
56    > "${files_names_listing}.temp2"
57  sed -Ez "${sed_expression}" "${files_names_listing}.temp2"\
58    > "${files_names_listing}.temp3"
59  sed -Ez "${sed_expression}" "${files_names_listing}.temp3"\
60    > "${files_names_listing}.temp4"
61  shopt -s dotglob
62  get_split_score_after_before_simple 70 /
63  # shellcheck disable=SC2154
64  split_score_command="${get_split_score_after_before_result}"
65  # shellcheck disable=SC2154
66  split_score_command_properties=\
67  "${get_split_score_after_before_result2}"
68  # shellcheck disable=SC1003
69  suffix='\\'
70  # shellcheck disable=SC2312
```

```
71  find . -type f -printf '%P\n' | relevant_find | sort\
72    | while read -r file_name;
73  do
74    git check-ignore -q "${file_name}" && continue
75    base_file_name=$(basename "${file_name}")
76    [[ "${base_file_name}" != "files_names_listing.txt.temp1" ]]\
77      || continue
78    [[ "${base_file_name}" != "files_names_listing.txt.temp2" ]]\
79      || continue
80    [[ "${base_file_name}" != "files_names_listing.txt.temp3" ]]\
81      || continue
82    [[ "${base_file_name}" != "files_names_listing.txt.temp4" ]]\
83      || continue
84    if [[ "${base_file_name}" == *.md ]]; then
85      if [[ -f "${file_name}.tpl" ]]; then
86        continue
87      fi
88    fi
89    repeated_split_last_line "${file_name}" "" 70 "${suffix}"\
90      "${split_score_command}" "${split_score_command_properties}"
91    # shellcheck disable=SC2154
92    split_file_name="${repeated_split_last_line_result}"
93    if [[ "$1" == "--write" ]]; then
94      # shellcheck disable=SC2001
95      echo "${file_name}"\
96        | sed -e "s|${file_name}|${split_file_name}|g"\
97        >> "${files_names_listing}"
98      continue
99    fi
100   if grep -q "${file_name}\$" "${files_names_listing}.temp4"; then
101     :
102   else
103     echo\
104       "The file ${file_name} is not listed in ${files_names_listing}."
105     if [[ "$1" == "--append" ]]; then
106       # shellcheck disable=SC2001
107       echo "${file_name}"\
108         | sed -e\
109         "s|${file_name}|${split_file_name}|g"\
110         >> "${files_names_listing}"
111     fi
112   fi
113 done
114
115 # shellcheck disable=SC2002,2312
116 cat "${files_names_listing}.temp4" | while read -r file_name;
```

```
117  do
118    [[ "${file_name}" != '//'* ]] || continue
119    base_file_name=$(basename "${file_name}")
120    if ! [[ -f "${file_name}" ]]; then
121      echo\
122        "The non-file ${file_name} is listed in ${files_names_listing}."
123    fi
124  done
125
126  rm "${files_names_listing}.temp1" "${files_names_listing}.temp2"\
127    "${files_names_listing}.temp3" "${files_names_listing}.temp4"
128  shopt -u dotglob
129  shopt -s globstar
130
131  if [[ -n "${LFBFL_verbose}" ]]; then
132    cat "${files_names_listing}"
133  fi
```

2.40 build_and_checks_variables/.gitignore

```
1  temp/
2
```

2.41 build_and_checks_variables/DevOrSysAdminScripts.html.tpl

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <!--
4  This file is part of DevOrSysAdminScripts library.
5
6  DevOrSysAdminScripts is free software:
7  you can redistribute it and/or modify it under the terms
8  of the GNU Lesser General Public License
9  as published by the Free Software Foundation,
10 either version 3 of the License,
11 or (at your option) any later version.
12
13 DevOrSysAdminScripts is distributed in the hope
14 that it will be useful,
15 but WITHOUT ANY WARRANTY;
16 without even the implied warranty of
17 MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
18 See the GNU Lesser General Public License for more details.
19
20 You should have received a copy of
21 the GNU Lesser General Public License
```

```
22  along with DevOrSysAdminScripts.
23  If not, see <https://www.gnu.org/licenses/>.
24
25  ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
26  -->
27  <head>
28  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
29  <meta name="generator" content="DevOrSysAdminScripts">
30  <style type="text/css">
31  .title{
32    margin: 2ex auto;
33    text-align: center;
34  }
35  .titlemain{
36    margin: 1ex 2ex 2ex 1ex;
37  }
38  .titlerest{
39    margin: 0ex 2ex;
40  }
41  table{
42    border-collapse: collapse;
43  }
44  td{
45    padding: 0;
46  }
47  pre{
48    text-align: left;
49    margin-left: 0ex;
50    margin-right: auto;
51  }
52  pre.numbered_lines:before{
53    background: snow;
54    border-right: 1px black solid;
55    color: #010101;
56    content: attr(line-numbers);
57    float: left;
58    padding: 0 1ch;
59    text-align: right;
60  }
61
62  blockquote{
63    margin-left: 4ex;
64    margin-right: 4ex;
65    text-align: left;
66  }
67  </style>
```

```
68   <title>@repository_name@</title>
69   </head>
70   <body >
71   <table class="title">
72     <tr>
73       <td style="padding:1ex">
74         <h1 class="titlemain">@repository_name@</h1>
75         <h3 class="titlerest">
76           @author_full_name@
77           <br>
78           <a href="@author_website@">
79             <span style="font-family:monospace">
80             @author_website@
81             </span>
82         </a>
83           <br>
84           <a href="mailto:@author_email@">
85             <span style="font-family:monospace">
86             @author_email@
87             </span>
88         </a>
89         </h3>
90       </td>
91     </tr>
92   </table>
93
94   <blockquote class="abstract">
95     <span style="font-weight:bold">Abstract:</span>
96     @abstract@
97   </blockquote>
98   <p>Current version: @current_date@</p>
99   <p>Current number of commits: @number_of_commits@</p>
100  <p>Current git SHA1: @current_git_SHA1@</p>
101  <p>
102  Code lines: @number_of_lines@
103  </p>
104
105
106  <h2 id="section1">1 Files tree</h2>
107  <pre class="verbatim">
108  @current_tree_light@
109  </pre>
110  <pre class="verbatim">
111  @current_tree@
112  </pre>
113
```

91

```
114
115  <h2 id="section2">2 Listing of files</h2>
116
117  <p>
118  This repository is dual licensed.
119  All the Bash scripts source code is covered by GPLv3+.
120  All the PHP scripts source code is covered by LGPLv3+.
121  </p>
122
123  <p>
124  The text of the licenses is available at:
125  <a href="https://www.gnu.org/licenses/"><span
126    style="font-family:monospace"
127  >https://www.gnu.org/licenses/</span></a>.
128  The git repository of this source code is also available at:
129  <a href="https://github.com/LLyaudet/@repository_name@/"><span
130    style="font-family:monospace"
131  >https://github.com/LLyaudet/@repository_name@/</span></a>.
132  </p>
133
134  <p>
135  Here is a listing of the dependencies of the code in this repository:
136  <ul>
137  <li> The following dependencies are GPLv3+ licensed:<br>
138  basename, bash (and its builtins), cat, chmod, cp, cut, date, diff,
139  dirname, find, grep, head, mkdir, mv, realpath, rm, sed, sha512sum,
140  shellcheck, sort, tail, wc, wget, xargs
141  <li> The following dependencies are GPLv2+ licensed:<br>
142  more, pandoc, pdftex, pdflatex, tree
143  <li> The following dependencies are GPLv2 licensed:<br>
144  git
145  <li> The following dependencies are LGPLv2.1+ licensed:<br>
146  notify-send
147  <li> The following dependencies are MIT licensed:<br>
148  black, isort, mypy
149  <li> php is licensed under PHP License v3.01
150  <li> tex is licensed under Knuth license
151  <li> pcregrep has a custom license from Cambridge University
152  </ul>
153  </p>
154
155  <p>
156  Remark: Some commands listed under GPLv3+ are POSIX
157  and can have different implementations under another license;
158  for example, uutils coreutils is MIT licensed,
159  whilst GNU coreutils is GPLv3+ licensed.
```

```
160  </p>

161

162  @files_listing_HTMLPreInput@

163

164  <p>
165  @acknowledgments@
166  </p>

167

168  <script>
169  "use strict";
170  const pres = Array.from(
171    document.getElementsByClassName('numbered_lines')
172  );
173  pres.forEach(
174    (pre) => {
175      const nb = Array.from(pre.innerText.matchAll("\n")).length + 1;
176      let numbers = "";
177      for(let i = 1; i <= nb; ++i){
178        numbers += i.toString();
179        if(i < nb){ numbers += "\n "; }
180      }
181      pre.setAttribute('line-numbers', numbers);
182    }
183  );
184  </script>
185  </html>
```

2.42 build_and_checks_variables/DevOrSysAdminScripts.tex.tpl

```
1   % This file is part of DevOrSysAdminScripts library.
2   %
3   % DevOrSysAdminScripts is free software:
4   % you can redistribute it and/or modify it under the terms
5   % of the GNU Lesser General Public License
6   % as published by the Free Software Foundation,
7   % either version 3 of the License,
8   % or (at your option) any later version.
9   %
10  % DevOrSysAdminScripts is distributed in the hope
11  % that it will be useful,
12  % but WITHOUT ANY WARRANTY;
13  % without even the implied warranty of
14  % MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15  % See the GNU Lesser General Public License for more details.
16  %
17  % You should have received a copy of
```

```latex
% the GNU Lesser General Public License
% along with DevOrSysAdminScripts.
% If not, see <https://www.gnu.org/licenses/>.
%
% ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet

% 2025-12-29T17:08+01:00: This file was moved from
% "./latex"
% to
% "./build_and_checks_variables".

\documentclass{article}

\usepackage[utf8]{inputenc}
\usepackage[T1]{fontenc}
\usepackage{subfigure}
\usepackage{amsmath}
\usepackage{amssymb}
\usepackage{amsthm}
\usepackage[pdftex]{hyperref}
\usepackage{tikz}
\usepackage{caption}
\usepackage[round]{natbib}
\usepackage{fancyhdr}
\usepackage{amsfonts}
\usepackage{times}
\usepackage{ifpdf}
\usepackage{latexsym}
\usepackage{graphicx}
\usepackage{enumerate}
\usepackage{pmboxdraw}
\usepackage{fancyvrb}
\usepackage[french,english]{babel}

% *** les environnements ***
%\theoremstyle{break}
\newtheorem{definition}{Definition}[section]
\newtheorem{proposition}[definition]{Proposition}
\newtheorem{theorem}[definition]{Theorem}
\newtheorem{lemma}[definition]{Lemma}
\newtheorem{corollary}[definition]{Corollary}
\newtheorem{remark}[definition]{Remark}
\newtheorem{openproblem}[definition]{Open problem}

\begin{document}
```

```latex
\author{
  @author_full_name@\\
  \url{@author_website@}\\
  \href{mailto:@author_email@}{@author_email@}
}
\title{@repository_name@}

\maketitle
\begin{abstract}
@abstract@
\end{abstract}

Current version: @current_date@

Current number of commits: @number_of_commits@

Current git SHA1: @current_git_SHA1@

Code lines: @number_of_lines@

\section{Files tree}
\label{section:tree}

\begin{verbatim}
@current_tree_light@
\end{verbatim}

\begin{verbatim}
@current_tree@
\end{verbatim}

\section{Listing of files}
\label{section:listing}

This repository is dual licensed.
All the Bash scripts source code is covered by GPLv3+.
All the PHP scripts source code is covered by LGPLv3+.

The text of the licenses is available at:
\url{https://www.gnu.org/licenses/}.
The git repository of this source code is also available at:
\url{https://github.com/LLyaudet/@repository_name@/}.

Here is a listing of the dependencies of the code in this repository:
\begin{itemize}
\item The following dependencies are GPLv3+ licensed:\newline
```

```
110  basename, bash (and its builtins), cat, chmod, cp, cut, date, diff,
111  dirname, find, grep, head, mkdir, mv, realpath, rm, sed, sha512sum,
112  shellcheck, sort, tail, wc, wget, xargs
113  \item The following dependencies are GPLv2+ licensed:\newline
114  more, pandoc, pdftex, pdflatex, tree
115  \item The following dependencies are GPLv2 licensed:\newline
116  git
117  \item The following dependencies are LGPLv2.1+ licensed:\newline
118  notify-send
119  \item The following dependencies are MIT licensed:\newline
120  black, isort, mypy
121  \item php is licensed under PHP License v3.01
122  \item tex is licensed under Knuth license
123  \item pcregrep has a custom license from Cambridge University
124  \end{itemize}
125
126  Remark: Some commands listed under GPLv3+ are POSIX
127  and can have different implementations under another license;
128  for example, uutils coreutils is MIT licensed,
129  whilst GNU coreutils is GPLv3+ licensed.
130
131  @files_listing_VerbatimInput@
132
133  @acknowledgments@
134
135  \end{document}
```

2.43 build_and_checks_variables/files_listing.tex.tpl

```
1   \subsection{
2     build\_and\_checks\_dependencies/build\_and\_checks.exec.sh.tpl
3   }
4   \label{
5     build_and_checks_dependencies:build_and_checksexecshtpl
6   }
7
8   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
9   build_and_checks_dependencies/build_and_checks.exec.sh.tpl
10  }
11
12
13  \subsection{
14    build\_and\_checks\_dependencies/%
15  build\_md\_from\_printable\_md.exec.sh
16  }
17  \label{
```

```
18    build_and_checks_dependencies:build_md_from_printable_mdexecsh
19  }

20
21  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
22  build_and_checks_dependencies/build_md_from_printable_md.exec.sh
23  }

24

25
26  \subsection{
27    build\_and\_checks\_dependencies/%
28  check\_shell\_scripts\_beginnings.libr.sh
29  }
30  \label{
31    build_and_checks_dependencies:check_shell_scripts_beginningslibrsh
32  }

33
34  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
35  build_and_checks_dependencies/check_shell_scripts_beginnings.libr.sh
36  }

37

38
39  \subsection{
40    build\_and\_checks\_dependencies/check\_URLs.libr.sh
41  }
42  \label{
43    build_and_checks_dependencies:check_URLslibrsh
44  }

45
46  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
47  build_and_checks_dependencies/check_URLs.libr.sh
48  }

49

50
51  \subsection{
52    build\_and\_checks\_dependencies/common\_build\_and\_checks.exec.sh
53  }
54  \label{
55    build_and_checks_dependencies:common_build_and_checksexecsh
56  }

57
58  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
59  build_and_checks_dependencies/common_build_and_checks.exec.sh
60  }

61

62
63  \subsection{
```

```
64    build\_and\_checks\_dependencies/%
65  common\_build\_and\_checks.exec.sh.tpl
66  }
67  \label{
68    build_and_checks_dependencies:common_build_and_checksexecshtpl
69  }
70
71  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
72  build_and_checks_dependencies/common_build_and_checks.exec.sh.tpl
73  }
74
75
76  \subsection{
77    build\_and\_checks\_dependencies/comparisons.libr.sh
78  }
79  \label{
80    build_and_checks_dependencies:comparisonslibrsh
81  }
82
83  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
84  build_and_checks_dependencies/comparisons.libr.sh
85  }
86
87
88  \subsection{
89    build\_and\_checks\_dependencies/create\_PDF.exec.sh
90  }
91  \label{
92    build_and_checks_dependencies:create_PDFexecsh
93  }
94
95  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
96  build_and_checks_dependencies/create_PDF.exec.sh
97  }
98
99
100  \subsection{
101    build\_and\_checks\_dependencies/generate\_from\_template.libr.sh
102  }
103  \label{
104    build_and_checks_dependencies:generate_from_templatelibrsh
105  }
106
107  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
108  build_and_checks_dependencies/generate_from_template.libr.sh
109  }
```

```
110
111
112  \subsection{
113    build\_and\_checks\_dependencies/%
114  get\_common\_text\_glob\_patterns.libr.sh
115  }
116  \label{
117    build_and_checks_dependencies:get_common_text_glob_patternslibrsh
118  }
119
120  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
121  build_and_checks_dependencies/get_common_text_glob_patterns.libr.sh
122  }
123
124
125  \subsection{
126    build\_and\_checks\_dependencies/grammar\_and\_spell\_check.libr.sh
127  }
128  \label{
129    build_and_checks_dependencies:grammar_and_spell_checklibrsh
130  }
131
132  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
133  build_and_checks_dependencies/grammar_and_spell_check.libr.sh
134  }
135
136
137  \subsection{
138    build\_and\_checks\_dependencies/licenses\_templates/%
139  build\_licenses\_templates.exec.sh
140  }
141  \label{
142    build_and_checks_dependencies:licenses_templates:%
143  build_licenses_templatesexecsh
144  }
145
146  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
147  build_and_checks_dependencies/licenses_templates/%
148  build_licenses_templates.exec.sh
149  }
150
151
152  \subsection{
153    build\_and\_checks\_dependencies/licenses\_templates/%
154  license\_file\_header\_AGPLv3+.c.tpl
155  }
```

```
156   \label{
157     build_and_checks_dependencies:licenses_templates:%
158   license_file_header_AGPLv3+ctpl
159   }

160
161   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
162   build_and_checks_dependencies/licenses_templates/%
163   license_file_header_AGPLv3+.c.tpl
164   }

165

166
167   \subsection{
168     build\_and\_checks\_dependencies/licenses\_templates/%
169   license\_file\_header\_AGPLv3+.py.tpl
170   }
171   \label{
172     build_and_checks_dependencies:licenses_templates:%
173   license_file_header_AGPLv3+pytpl
174   }

175
176   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
177   build_and_checks_dependencies/licenses_templates/%
178   license_file_header_AGPLv3+.py.tpl
179   }

180

181
182   \subsection{
183     build\_and\_checks\_dependencies/licenses\_templates/%
184   license\_file\_header\_AGPLv3+.sh.tpl
185   }
186   \label{
187     build_and_checks_dependencies:licenses_templates:%
188   license_file_header_AGPLv3+shtpl
189   }

190
191   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
192   build_and_checks_dependencies/licenses_templates/%
193   license_file_header_AGPLv3+.sh.tpl
194   }

195

196
197   \subsection{
198     build\_and\_checks\_dependencies/licenses\_templates/%
199   license\_file\_header\_AGPLv3+.tex.tpl
200   }
201   \label{
```

100

```
202    build_and_checks_dependencies:licenses_templates:%
203  license_file_header_AGPLv3+textpl
204  }
205
206  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
207  build_and_checks_dependencies/licenses_templates/%
208  license_file_header_AGPLv3+.tex.tpl
209  }
210
211
212  \subsection{
213    build\_and\_checks\_dependencies/licenses\_templates/%
214  license\_file\_header\_AGPLv3+.tpl
215  }
216  \label{
217    build_and_checks_dependencies:licenses_templates:%
218  license_file_header_AGPLv3+tpl
219  }
220
221  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
222  build_and_checks_dependencies/licenses_templates/%
223  license_file_header_AGPLv3+.tpl
224  }
225
226
227  \subsection{
228    build\_and\_checks\_dependencies/licenses\_templates/%
229  license\_file\_header\_GPLv3+.c.tpl
230  }
231  \label{
232    build_and_checks_dependencies:licenses_templates:%
233  license_file_header_GPLv3+ctpl
234  }
235
236  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
237  build_and_checks_dependencies/licenses_templates/%
238  license_file_header_GPLv3+.c.tpl
239  }
240
241
242  \subsection{
243    build\_and\_checks\_dependencies/licenses\_templates/%
244  license\_file\_header\_GPLv3+.py.tpl
245  }
246  \label{
247    build_and_checks_dependencies:licenses_templates:%
```

```
248  license_file_header_GPLv3+pytpl
249  }
250
251  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
252  build_and_checks_dependencies/licenses_templates/%
253  license_file_header_GPLv3+.py.tpl
254  }
255
256
257  \subsection{
258    build\_and\_checks\_dependencies/licenses\_templates/%
259  license\_file\_header\_GPLv3+.sh.tpl
260  }
261  \label{
262    build_and_checks_dependencies:licenses_templates:%
263  license_file_header_GPLv3+shtpl
264  }
265
266  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
267  build_and_checks_dependencies/licenses_templates/%
268  license_file_header_GPLv3+.sh.tpl
269  }
270
271
272  \subsection{
273    build\_and\_checks\_dependencies/licenses\_templates/%
274  license\_file\_header\_GPLv3+.tex.tpl
275  }
276  \label{
277    build_and_checks_dependencies:licenses_templates:%
278  license_file_header_GPLv3+textpl
279  }
280
281  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
282  build_and_checks_dependencies/licenses_templates/%
283  license_file_header_GPLv3+.tex.tpl
284  }
285
286
287  \subsection{
288    build\_and\_checks\_dependencies/licenses\_templates/%
289  license\_file\_header\_GPLv3+.tpl
290  }
291  \label{
292    build_and_checks_dependencies:licenses_templates:%
293  license_file_header_GPLv3+tpl
```

```
294    }
295
296    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
297    build_and_checks_dependencies/licenses_templates/%
298    license_file_header_GPLv3+.tpl
299    }
300
301
302    \subsection{
303      build\_and\_checks\_dependencies/licenses\_templates/%
304    license\_file\_header\_LGPLv3+.c.tpl
305    }
306    \label{
307      build_and_checks_dependencies:licenses_templates:%
308    license_file_header_LGPLv3+ctpl
309    }
310
311    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
312    build_and_checks_dependencies/licenses_templates/%
313    license_file_header_LGPLv3+.c.tpl
314    }
315
316
317    \subsection{
318      build\_and\_checks\_dependencies/licenses\_templates/%
319    license\_file\_header\_LGPLv3+.py.tpl
320    }
321    \label{
322      build_and_checks_dependencies:licenses_templates:%
323    license_file_header_LGPLv3+pytpl
324    }
325
326    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
327    build_and_checks_dependencies/licenses_templates/%
328    license_file_header_LGPLv3+.py.tpl
329    }
330
331
332    \subsection{
333      build\_and\_checks\_dependencies/licenses\_templates/%
334    license\_file\_header\_LGPLv3+.sh.tpl
335    }
336    \label{
337      build_and_checks_dependencies:licenses_templates:%
338    license_file_header_LGPLv3+shtpl
339    }
```

```
340
341 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
342 build_and_checks_dependencies/licenses_templates/%
343 license_file_header_LGPLv3+.sh.tpl
344 }
345

346
347 \subsection{
348   build\_and\_checks\_dependencies/licenses\_templates/%
349 license\_file\_header\_LGPLv3+.tex.tpl
350 }
351 \label{
352   build_and_checks_dependencies:licenses_templates:%
353 license_file_header_LGPLv3+textpl
354 }
355
356 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
357 build_and_checks_dependencies/licenses_templates/%
358 license_file_header_LGPLv3+.tex.tpl
359 }
360

361
362 \subsection{
363   build\_and\_checks\_dependencies/licenses\_templates/%
364 license\_file\_header\_LGPLv3+.tpl
365 }
366 \label{
367   build_and_checks_dependencies:licenses_templates:%
368 license_file_header_LGPLv3+tpl
369 }
370
371 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
372 build_and_checks_dependencies/licenses_templates/%
373 license_file_header_LGPLv3+.tpl
374 }
375

376
377 \subsection{
378   build\_and\_checks\_dependencies/lines\_counts.libr.sh
379 }
380 \label{
381   build_and_checks_dependencies:lines_countslibrsh
382 }
383
384 \VerbatimInput[numbers=left,xleftmargin=-5mm]{
385 build_and_checks_dependencies/lines_counts.libr.sh
```

```
386    }
387

388

389    \subsection{
390      build\_and\_checks\_dependencies/lines\_filters.libr.sh
391    }
392    \label{
393      build_and_checks_dependencies:lines_filterslibrsh
394    }
395

396    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
397    build_and_checks_dependencies/lines_filters.libr.sh
398    }
399

400

401    \subsection{
402      build\_and\_checks\_dependencies/lines\_maps.libr.sh
403    }
404    \label{
405      build_and_checks_dependencies:lines_mapslibrsh
406    }
407

408    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
409    build_and_checks_dependencies/lines_maps.libr.sh
410    }
411

412

413    \subsection{
414      build\_and\_checks\_dependencies/overwrite\_if\_not\_equal.libr.sh
415    }
416    \label{
417      build_and_checks_dependencies:overwrite_if_not_equallibrsh
418    }
419

420    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
421    build_and_checks_dependencies/overwrite_if_not_equal.libr.sh
422    }
423

424

425    \subsection{
426      build\_and\_checks\_dependencies/python\_black\_complement.libr.sh
427    }
428    \label{
429      build_and_checks_dependencies:python_black_complementlibrsh
430    }
431
```

```
432  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
433  build_and_checks_dependencies/python_black_complement.libr.sh
434  }
435
436
437  \subsection{
438    build\_and\_checks\_dependencies/python\_isort\_complement.libr.sh
439  }
440  \label{
441    build_and_checks_dependencies:python_isort_complementlibrsh
442  }
443
444  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
445  build_and_checks_dependencies/python_isort_complement.libr.sh
446  }
447
448
449  \subsection{
450    build\_and\_checks\_dependencies/split\_line\_at\_most.exec.php
451  }
452  \label{
453    build_and_checks_dependencies:split_line_at_mostexecphp
454  }
455
456  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
457  build_and_checks_dependencies/split_line_at_most.exec.php
458  }
459
460
461  \subsection{
462    build\_and\_checks\_dependencies/split\_line\_at\_most.libr.php
463  }
464  \label{
465    build_and_checks_dependencies:split_line_at_mostlibrphp
466  }
467
468  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
469  build_and_checks_dependencies/split_line_at_most.libr.php
470  }
471
472
473  \subsection{
474    build\_and\_checks\_dependencies/strings\_functions.libr.sh
475  }
476  \label{
477    build_and_checks_dependencies:strings_functionslibrsh
```

```
478    }

479

480    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
481    build_and_checks_dependencies/strings_functions.libr.sh
482    }

483

484

485    \subsection{
486      build\_and\_checks\_dependencies/too\_long\_code\_lines.libr.sh
487    }
488    \label{
489      build_and_checks_dependencies:too_long_code_lineslibrsh
490    }

491

492    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
493    build_and_checks_dependencies/too_long_code_lines.libr.sh
494    }

495

496

497    \subsection{
498      build\_and\_checks\_dependencies/%
499    update\_common\_build\_and\_checks.exec.sh
500    }
501    \label{
502      build_and_checks_dependencies:update_common_build_and_checksexecsh
503    }

504

505    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
506    build_and_checks_dependencies/update_common_build_and_checks.exec.sh
507    }

508

509

510    \subsection{
511      build\_and\_checks\_dependencies/%
512    update\_or\_check\_files\_names\_listing.exec.sh
513    }
514    \label{
515      build_and_checks_dependencies:%
516    update_or_check_files_names_listingexecsh
517    }

518

519    \VerbatimInput[numbers=left,xleftmargin=-5mm]{
520    build_and_checks_dependencies/%
521    update_or_check_files_names_listing.exec.sh
522    }

523
```

```
524
525  \subsection{
526    build\_and\_checks\_variables/.gitignore
527  }
528  \label{
529    build_and_checks_variables:gitignore
530  }
531
532  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
533  build_and_checks_variables/.gitignore
534  }
535
536
537  \subsection{
538    build\_and\_checks\_variables/DevOrSysAdminScripts.html.tpl
539  }
540  \label{
541    build_and_checks_variables:DevOrSysAdminScriptshtmltpl
542  }
543
544  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
545  build_and_checks_variables/DevOrSysAdminScripts.html.tpl
546  }
547
548
549  \subsection{
550    build\_and\_checks\_variables/DevOrSysAdminScripts.tex.tpl
551  }
552  \label{
553    build_and_checks_variables:DevOrSysAdminScriptstextpl
554  }
555
556  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
557  build_and_checks_variables/DevOrSysAdminScripts.tex.tpl
558  }
559
560
561  \subsection{
562    build\_and\_checks\_variables/files\_listing.tex.tpl
563  }
564  \label{
565    build_and_checks_variables:files_listingtextpl
566  }
567
568  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
569  build_and_checks_variables/files_listing.tex.tpl
```

```
570  }
571
572
573  \subsection{
574    build\_and\_checks\_variables/files\_names\_listing.txt
575  }
576  \label{
577    build_and_checks_variables:files_names_listingtxt
578  }
579
580  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
581  build_and_checks_variables/files_names_listing.txt
582  }
583
584
585  \subsection{
586    build\_and\_checks\_variables/licenses\_notes.txt
587  }
588  \label{
589    build_and_checks_variables:licenses_notestxt
590  }
591
592  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
593  build_and_checks_variables/licenses_notes.txt
594  }
595
596
597  \subsection{
598    build\_and\_checks\_variables/repository\_data.txt
599  }
600  \label{
601    build_and_checks_variables:repository_datatxt
602  }
603
604  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
605  build_and_checks_variables/repository_data.txt
606  }
607
608
609  \subsection{
610    build\_and\_checks.exec.sh
611  }
612  \label{
613    build_and_checksexecsh
614  }
615
```

```
616  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
617  build_and_checks.exec.sh
618  }
619
620
621  \subsection{
622    COPYING
623  }
624  \label{
625    COPYING
626  }
627
628  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
629  COPYING
630  }
631
632
633  \subsection{
634    COPYING.LESSER
635  }
636  \label{
637    COPYINGLESSER
638  }
639
640  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
641  COPYING.LESSER
642  }
643
644
645  \subsection{
646    git\_helpers/git\_checks.libr.sh
647  }
648  \label{
649    git_helpers:git_checkslibrsh
650  }
651
652  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
653  git_helpers/git_checks.libr.sh
654  }
655
656
657  \subsection{
658    git\_helpers/post-commit
659  }
660  \label{
661    git_helpers:post-commit
```

```
662   }

663

664   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
665   git_helpers/post-commit
666   }

667

668

669   \subsection{
670     git\_helpers/post\_commit\_renaming\_comment.libr.sh
671   }
672   \label{
673     git_helpers:post_commit_renaming_commentlibrsh
674   }

675

676   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
677   git_helpers/post_commit_renaming_comment.libr.sh
678   }

679

680

681   \subsection{
682     git\_helpers/pre-commit
683   }
684   \label{
685     git_helpers:pre-commit
686   }

687

688   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
689   git_helpers/pre-commit
690   }

691

692

693   \subsection{
694     LiensUtiles.txt
695   }
696   \label{
697     LiensUtilestxt
698   }

699

700   \VerbatimInput[numbers=left,xleftmargin=-5mm]{
701   LiensUtiles.txt
702   }

703

704

705   \subsection{
706     README.md.tpl
707   }
```

```
708  \label{
709    READMEmdtpl
710  }
711
712  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
713  README.md.tpl
714  }
715
716
717  \subsection{
718    unicode.libr.php
719  }
720  \label{
721    unicodelibrphp
722  }
723
724  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
725  unicode.libr.php
726  }
727
728
729  \subsection{
730    upgrade\_build\_and\_checks.exec.sh
731  }
732  \label{
733    upgrade_build_and_checksexecsh
734  }
735
736  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
737  upgrade_build_and_checks.exec.sh
738  }
739
740
741  \subsection{
742    wget\_sha512.libr.sh
743  }
744  \label{
745    wget_sha512librsh
746  }
747
748  \VerbatimInput[numbers=left,xleftmargin=-5mm]{
749  wget_sha512.libr.sh
750  }
751
752
```

2.44 build_and_checks_variables/files_names_listing.txt

```
1   // This file is part of DevOrSysAdminScripts library.
2   //
3   // DevOrSysAdminScripts is free software:
4   // you can redistribute it and/or modify it under the terms
5   // of the GNU Lesser General Public License
6   // as published by the Free Software Foundation,
7   // either version 3 of the License,
8   // or (at your option) any later version.
9   //
10  // DevOrSysAdminScripts is distributed in the hope
11  // that it will be useful,
12  // but WITHOUT ANY WARRANTY;
13  // without even the implied warranty of
14  // MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
15  // See the GNU Lesser General Public License for more details.
16  //
17  // You should have received a copy of
18  // the GNU Lesser General Public License
19  // along with DevOrSysAdminScripts.
20  // If not, see <https://www.gnu.org/licenses/>.
21  //
22  // ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
23  // 2024-10-31T21:37+01:00: This file was moved from
24  // "./build_and_checks_dependencies/listings"
25  // to
26  // "./build_and_checks_variables".
27  // Blasé20240517Résultat.txt
28  // Blasé20240517.sh
29  // Blasé20240518_2.txt
30  // Blasé20240518_3.txt
31  build_and_checks_dependencies/build_and_checks.exec.sh.tpl
32  build_and_checks_dependencies/build_md_from_printable_md.exec.sh
33  build_and_checks_dependencies/check_shell_scripts_beginnings.libr.sh
34  build_and_checks_dependencies/check_URLs.libr.sh
35  build_and_checks_dependencies/common_build_and_checks.exec.sh
36  build_and_checks_dependencies/common_build_and_checks.exec.sh.tpl
37  build_and_checks_dependencies/comparisons.libr.sh
38  build_and_checks_dependencies/create_PDF.exec.sh
39  build_and_checks_dependencies/generate_from_template.libr.sh
40  build_and_checks_dependencies/get_common_text_glob_patterns.libr.sh
41  build_and_checks_dependencies/grammar_and_spell_check.libr.sh
42  build_and_checks_dependencies/licenses_templates/\
43  build_licenses_templates.exec.sh
44  build_and_checks_dependencies/licenses_templates/\
```

```
45  license_file_header_AGPLv3+.c.tpl
46  build_and_checks_dependencies/licenses_templates/\
47  license_file_header_AGPLv3+.py.tpl
48  build_and_checks_dependencies/licenses_templates/\
49  license_file_header_AGPLv3+.sh.tpl
50  build_and_checks_dependencies/licenses_templates/\
51  license_file_header_AGPLv3+.tex.tpl
52  build_and_checks_dependencies/licenses_templates/\
53  license_file_header_AGPLv3+.tpl
54  // build_and_checks_dependencies/licenses_templates/\
55  license_file_header_GPLv3+.c
56  build_and_checks_dependencies/licenses_templates/\
57  license_file_header_GPLv3+.c.tpl
58  // build_and_checks_dependencies/licenses_templates/\
59  license_file_header_GPLv3+.py
60  build_and_checks_dependencies/licenses_templates/\
61  license_file_header_GPLv3+.py.tpl
62  // build_and_checks_dependencies/licenses_templates/\
63  license_file_header_GPLv3+.sh
64  build_and_checks_dependencies/licenses_templates/\
65  license_file_header_GPLv3+.sh.tpl
66  // build_and_checks_dependencies/licenses_templates/\
67  license_file_header_GPLv3+.tex
68  build_and_checks_dependencies/licenses_templates/\
69  license_file_header_GPLv3+.tex.tpl
70  build_and_checks_dependencies/licenses_templates/\
71  license_file_header_GPLv3+.tpl
72  // build_and_checks_dependencies/licenses_templates/\
73  license_file_header_LGPLv3+.c
74  build_and_checks_dependencies/licenses_templates/\
75  license_file_header_LGPLv3+.c.tpl
76  // build_and_checks_dependencies/licenses_templates/\
77  license_file_header_LGPLv3+.py
78  build_and_checks_dependencies/licenses_templates/\
79  license_file_header_LGPLv3+.py.tpl
80  // build_and_checks_dependencies/licenses_templates/\
81  license_file_header_LGPLv3+.sh
82  build_and_checks_dependencies/licenses_templates/\
83  license_file_header_LGPLv3+.sh.tpl
84  // build_and_checks_dependencies/licenses_templates/\
85  license_file_header_LGPLv3+.tex
86  build_and_checks_dependencies/licenses_templates/\
87  license_file_header_LGPLv3+.tex.tpl
88  build_and_checks_dependencies/licenses_templates/\
89  license_file_header_LGPLv3+.tpl
90  build_and_checks_dependencies/lines_counts.libr.sh
```

```
 91  build_and_checks_dependencies/lines_filters.libr.sh
 92  build_and_checks_dependencies/lines_maps.libr.sh
 93  // build_and_checks_dependencies/listings/files_listing.tex.tpl
 94  build_and_checks_dependencies/overwrite_if_not_equal.libr.sh
 95  build_and_checks_dependencies/python_black_complement.libr.sh
 96  build_and_checks_dependencies/python_isort_complement.libr.sh
 97  build_and_checks_dependencies/split_line_at_most.exec.php
 98  build_and_checks_dependencies/split_line_at_most.libr.php
 99  build_and_checks_dependencies/strings_functions.libr.sh
100  build_and_checks_dependencies/too_long_code_lines.libr.sh
101  build_and_checks_dependencies/update_common_build_and_checks.exec.sh
102  build_and_checks_dependencies/\
103  update_or_check_files_names_listing.exec.sh
104  build_and_checks_variables/.gitignore
105  build_and_checks_variables/DevOrSysAdminScripts.html.tpl
106  // build_and_checks_variables/DevOrSysAdminScripts.tex
107  build_and_checks_variables/DevOrSysAdminScripts.tex.tpl
108  build_and_checks_variables/files_listing.tex.tpl
109  build_and_checks_variables/files_names_listing.txt
110  build_and_checks_variables/licenses_notes.txt
111  build_and_checks_variables/repository_data.txt
112  build_and_checks.exec.sh
113  COPYING
114  COPYING.LESSER
115  // DevOrSysAdminScripts.html
116  // DevOrSysAdminScripts.pdf
117  // EncoreBlasé20240517-20240518.txt
118  git_helpers/git_checks.libr.sh
119  git_helpers/post-commit
120  git_helpers/post_commit_renaming_comment.libr.sh
121  git_helpers/pre-commit
122  LiensUtiles.txt
123  // README.html
124  // README.md
125  README.md.tpl
126  unicode.libr.php
127  upgrade_build_and_checks.exec.sh
128  wget_sha512.libr.sh
```

2.45 build_and_checks_variables/licenses_notes.txt

```
1  This repository is dual licensed.
2  All the Bash scripts source code is covered by GPLv3+.
3  All the PHP scripts source code is covered by LGPLv3+.
4
5  Here is a listing of the dependencies of the code in this repository:
```

```
6  - The following dependencies are GPLv3+ licensed:
7  basename, bash (and its builtins), cat, chmod, cp, cut, date, diff,
8  dirname, find, grep, head, mkdir, mv, realpath, rm, sed, sha512sum,
9  shellcheck, sort, tail, wc, wget, xargs
10 - The following dependencies are GPLv2+ licensed:
11 more, pandoc, pdftex, pdflatex, tree
12 - The following dependencies are GPLv2 licensed:
13 git
14 - The following dependencies are LGPLv2.1+ licensed:
15 notify-send
16 - The following dependencies are MIT licensed:
17 black, isort, mypy
18 - php is licensed under PHP License v3.01
19 - tex is licensed under Knuth license
20 - pcregrep has a custom license from Cambridge University
21
22 Remark: Some commands listed under GPLv3+ are POSIX
23 and can have different implementations under another license;
24 for example, uutils coreutils is MIT licensed,
25 whilst GNU coreutils is GPLv3+ licensed.
```

2.46 build_and_checks_variables/repository_data.txt

```
1  repository_name=DevOrSysAdminScripts
2  repository_web_url=https://github.com/LLyaudet/DevOrSysAdminScripts/
3  repository_git_url=git@github.com:LLyaudet/DevOrSysAdminScripts.git
4  abstract=Some "small" useful scripts
5  abstract=for enhancing development or system-administrators tasks
6  license=GPLv3+
7  license2=LGPLv3+
8  author_email=Laurent.Lyaudet@gmail.com
9  author_full_name=Laurent Frédéric Bernard François Lyaudet
10 author_last_name=Lyaudet
11 author_name=Laurent Lyaudet
12 author_website=https://lyaudet.eu/laurent/
13 acknowledgments=Merci Dieu !
14 acknowledgments=Merci Père ! Merci Seigneur ! Merci Saint Esprit !
15 grammar_or_spell_checker_command=more
```

2.47 build_and_checks.exec.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
```

```
6   # of the GNU General Public License
7   # as published by the Free Software Foundation,
8   # either version 3 of the License,
9   # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  # See the GNU General Public License for more details.
17  #
18  # You should have received a copy of
19  # the GNU General Public License
20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # The file "build_and_checks.exec.sh.tpl" was renamed from
25  # "build_and_checks.sh.tpl" to "build_and_checks.exec.sh.tpl".
26  # The file "build_and_checks.exec.sh" generated from the file
27  # "build_and_checks.sh.tpl" or "build_and_checks.exec.sh.tpl"
28  # was renamed from
29  # "build_and_checks.sh" to "build_and_checks.exec.sh".
30
31  build_and_checks(){
32    local LFBFL_working_directory="."
33    if [[ -n "$1" ]]; then
34      LFBFL_working_directory="$1"
35    fi
36    readonly LFBFL_working_directory
37
38    local LFBFL_verbose=""
39    if [[ "$2" == "--verbose" ]]; then
40      echo "$0 $*"
41      LFBFL_verbose="--verbose"
42    fi
43    readonly LFBFL_verbose
44
45    # shellcheck disable=SC1091
46    source ./wget_sha512.libr.sh
47
48    LFBFL_subdir="build_and_checks_dependencies"
49    mkdir -p "${LFBFL_subdir}/licenses_templates"
50    mkdir -p "build_and_checks_variables/temp"
51    if ! [[ -f "build_and_checks_variables/.gitignore" ]]; then
```

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```
52    echo "temp/" > "build_and_checks_variables/.gitignore"
53    echo "" >> "build_and_checks_variables/.gitignore"
54  fi
55
56  # LFBFL_dependencies_raw_content_download_URL
57  local LFBFL_dependencies_URL
58  LFBFL_dependencies_URL="https://raw.githubusercontent.com/LLyaudet/"
59  LFBFL_dependencies_URL+="DevOrSysAdminScripts/main/${LFBFL_subdir}"
60  readonly LFBFL_dependencies_URL
61
62  declare -r LFBFL_common_file_name="common_build_and_checks.exec.sh"
63  # LFBFL_script_download_URL
64  declare -r\
65    LFBFL_script="${LFBFL_dependencies_URL}/${LFBFL_common_file_name}"
66  declare -r\
67    LFBFL_file_path="./${LFBFL_subdir}/${LFBFL_common_file_name}"
68  local LFBFL_correct_sha512
69  LFBFL_correct_sha512='3b8017ee0866dce4d98984956017f94b51a661e66ff0e'
70  LFBFL_correct_sha512+='a72675d63ca18f0eb6ca67c023459bdcea0220f69846'
71  LFBFL_correct_sha512+='9f46537719f514a7ccd765d9bfbe8e13df28b7e'
72  wget_sha512 "${LFBFL_file_path}" "${LFBFL_script}"\
73    "${LFBFL_correct_sha512}" "${LFBFL_verbose}"
74  chmod +x "./${LFBFL_file_path}"
75
76  "${LFBFL_file_path}" "${LFBFL_working_directory}"\
77    "${LFBFL_dependencies_URL}" "${LFBFL_verbose}"
78  }
79
80  build_and_checks "$@"
```

2.48   COPYING

```
1                    GNU GENERAL PUBLIC LICENSE
2                       Version 3, 29 June 2007
3
4   Copyright (C) 2007 Free Software Foundation, Inc. <https://fsf.org/>
5   Everyone is permitted to copy and distribute verbatim copies
6   of this license document, but changing it is not allowed.
7
8                            Preamble
9
10    The GNU General Public License is a free, copyleft license for
11  software and other kinds of works.
12
13    The licenses for most software and other practical works are designed
14  to take away your freedom to share and change the works.  By contrast,
```

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your programs, too.

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have the freedom to distribute copies of free software (and charge for
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want it, that you can change the software or use pieces of it in new
free programs, and that you know you can do these things.

   To protect your rights, we need to prevent others from denying you
these rights or asking you to surrender the rights. Therefore, you have
certain responsibilities if you distribute copies of the software, or if
you modify it: responsibilities to respect the freedom of others.

   For example, if you distribute copies of such a program, whether
gratis or for a fee, you must pass on to the recipients the same
freedoms that you received. You must make sure that they, too, receive
or can get the source code. And you must show them these terms so they
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   Developers that use the GNU GPL protect your rights with two steps:
(1) assert copyright on the software, and (2) offer you this License
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   For the developers' and authors' protection, the GPL clearly explains
that there is no warranty for this free software. For both users' and
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changed, so that their problems will not be attributed erroneously to
authors of previous versions.

   Some devices are designed to deny users access to install or run
modified versions of the software inside them, although the manufacturer
can do so. This is fundamentally incompatible with the aim of
protecting users' freedom to change the software. The systematic
pattern of such abuse occurs in the area of products for individuals to
use, which is precisely where it is most unacceptable. Therefore, we
have designed this version of the GPL to prohibit the practice for those
products. If such problems arise substantially in other domains, we
stand ready to extend this provision to those domains in future versions
of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents.
States should not allow patents to restrict development and use of
software on general-purpose computers, but in those that do, we wish to
avoid the special danger that patents applied to a free program could
make it effectively proprietary. To prevent this, the GPL assures that
patents cannot be used to render the program non-free.

  The precise terms and conditions for copying, distribution and
modification follow.

                         TERMS AND CONDITIONS

  0. Definitions.

  "This License" refers to version 3 of the GNU General Public License.

  "Copyright" also means copyright-like laws that apply to other kinds of
works, such as semiconductor masks.

  "The Program" refers to any copyrightable work licensed under this
License. Each licensee is addressed as "you". "Licensees" and
"recipients" may be individuals or organizations.

  To "modify" a work means to copy from or adapt all or part of the work
in a fashion requiring copyright permission, other than the making of an
exact copy. The resulting work is called a "modified version" of the
earlier work or a work "based on" the earlier work.

  A "covered work" means either the unmodified Program or a work based
on the Program.

  To "propagate" a work means to do anything with it that, without
permission, would make you directly or secondarily liable for
infringement under applicable copyright law, except executing it on a
computer or modifying a private copy. Propagation includes copying,
distribution (with or without modification), making available to the
public, and in some countries other activities as well.

  To "convey" a work means any kind of propagation that enables other
parties to make or receive copies. Mere interaction with a user through
a computer network, with no transfer of a copy, is not conveying.

  An interactive user interface displays "Appropriate Legal Notices"
to the extent that it includes a convenient and prominently visible
feature that (1) displays an appropriate copyright notice, and (2)
tells the user that there is no warranty for the work (except to the

extent that warranties are provided), that licensees may convey the
work under this License, and how to view a copy of this License. If
the interface presents a list of user commands or options, such as a
menu, a prominent item in the list meets this criterion.

  1. Source Code.

  The "source code" for a work means the preferred form of the work
for making modifications to it. "Object code" means any non-source
form of a work.

  A "Standard Interface" means an interface that either is an official
standard defined by a recognized standards body, or, in the case of
interfaces specified for a particular programming language, one that
is widely used among developers working in that language.

  The "System Libraries" of an executable work include anything, other
than the work as a whole, that (a) is included in the normal form of
packaging a Major Component, but which is not part of that Major
Component, and (b) serves only to enable use of the work with that
Major Component, or to implement a Standard Interface for which an
implementation is available to the public in source code form. A
"Major Component", in this context, means a major essential component
(kernel, window system, and so on) of the specific operating system
(if any) on which the executable work runs, or a compiler used to
produce the work, or an object code interpreter used to run it.

  The "Corresponding Source" for a work in object code form means all
the source code needed to generate, install, and (for an executable
work) run the object code and to modify the work, including scripts to
control those activities. However, it does not include the work's
System Libraries, or general-purpose tools or generally available free
programs which are used unmodified in performing those activities but
which are not part of the work. For example, Corresponding Source
includes interface definition files associated with source files for
the work, and the source code for shared libraries and dynamically
linked subprograms that the work is specifically designed to require,
such as by intimate data communication or control flow between those
subprograms and other parts of the work.

  The Corresponding Source need not include anything that users
can regenerate automatically from other parts of the Corresponding
Source.

  The Corresponding Source for a work in source code form is that
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users, your or third parties' legal rights to forbid circumvention of
technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you
receive it, in any medium, provided that you conspicuously and

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keep intact all notices of the absence of any warranty; and give all
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and you may offer support or warranty protection for a fee.

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   You may convey a work based on the Program, or the modifications to
produce it from the Program, in the form of source code under the
terms of section 4, provided that you also meet all of these conditions:

     a) The work must carry prominent notices stating that you modified
     it, and giving a relevant date.

     b) The work must carry prominent notices stating that it is
     released under this License and any conditions added under section
     7. This requirement modifies the requirement in section 4 to
     "keep intact all notices".

     c) You must license the entire work, as a whole, under this
     License to anyone who comes into possession of a copy. This
     License will therefore apply, along with any applicable section 7
     additional terms, to the whole of the work, and all its parts,
     regardless of how they are packaged. This License gives no
     permission to license the work in any other way, but it does not
     invalidate such permission if you have separately received it.

     d) If the work has interactive user interfaces, each must display
     Appropriate Legal Notices; however, if the Program has interactive
     interfaces that do not display Appropriate Legal Notices, your
     work need not make them do so.

   A compilation of a covered work with other separate and independent
works, which are not by their nature extensions of the covered work,
and which are not combined with it such as to form a larger program,
in or on a volume of a storage or distribution medium, is called an
"aggregate" if the compilation and its resulting copyright are not
used to limit the access or legal rights of the compilation's users
beyond what the individual works permit. Inclusion of a covered work
in an aggregate does not cause this License to apply to the other
parts of the aggregate.

6. Conveying Non-Source Forms.

  You may convey a covered work in object code form under the terms
of sections 4 and 5, provided that you also convey the
machine-readable Corresponding Source under the terms of this License,
in one of these ways:

    a) Convey the object code in, or embodied in, a physical product
    (including a physical distribution medium), accompanied by the
    Corresponding Source fixed on a durable physical medium
    customarily used for software interchange.

    b) Convey the object code in, or embodied in, a physical product
    (including a physical distribution medium), accompanied by a
    written offer, valid for at least three years and valid for as
    long as you offer spare parts or customer support for that product
    model, to give anyone who possesses the object code either (1) a
    copy of the Corresponding Source for all the software in the
    product that is covered by this License, on a durable physical
    medium customarily used for software interchange, for a price no
    more than your reasonable cost of physically performing this
    conveying of source, or (2) access to copy the
    Corresponding Source from a network server at no charge.

    c) Convey individual copies of the object code with a copy of the
    written offer to provide the Corresponding Source. This
    alternative is allowed only occasionally and noncommercially, and
    only if you received the object code with such an offer, in accord
    with subsection 6b.

    d) Convey the object code by offering access from a designated
    place (gratis or for a charge), and offer equivalent access to the
    Corresponding Source in the same way through the same place at no
    further charge. You need not require recipients to copy the
    Corresponding Source along with the object code. If the place to
    copy the object code is a network server, the Corresponding Source
    may be on a different server (operated by you or a third party)
    that supports equivalent copying facilities, provided you maintain
    clear directions next to the object code saying where to find the
    Corresponding Source. Regardless of what server hosts the
    Corresponding Source, you remain obligated to ensure that it is
    available for as long as needed to satisfy these requirements.

    e) Convey the object code using peer-to-peer transmission, provided
    you inform other peers where the object code and Corresponding
    Source of the work are being offered to the general public at no

₂₉₁   charge under subsection 6d.

₂₉₂

₂₉₃   A separable portion of the object code, whose source code is excluded
₂₉₄ from the Corresponding Source as a System Library, need not be
₂₉₅ included in conveying the object code work.

₂₉₆

₂₉₇   A "User Product" is either (1) a "consumer product", which means any
₂₉₈ tangible personal property which is normally used for personal, family,
₂₉₉ or household purposes, or (2) anything designed or sold for incorporation
₃₀₀ into a dwelling. In determining whether a product is a consumer product,
₃₀₁ doubtful cases shall be resolved in favor of coverage. For a particular
₃₀₂ product received by a particular user, "normally used" refers to a
₃₀₃ typical or common use of that class of product, regardless of the status
₃₀₄ of the particular user or of the way in which the particular user
₃₀₅ actually uses, or expects or is expected to use, the product. A product
₃₀₆ is a consumer product regardless of whether the product has substantial
₃₀₇ commercial, industrial or non-consumer uses, unless such uses represent
₃₀₈ the only significant mode of use of the product.

₃₀₉

₃₁₀   "Installation Information" for a User Product means any methods,
₃₁₁ procedures, authorization keys, or other information required to install
₃₁₂ and execute modified versions of a covered work in that User Product from
₃₁₃ a modified version of its Corresponding Source. The information must
₃₁₄ suffice to ensure that the continued functioning of the modified object
₃₁₅ code is in no case prevented or interfered with solely because
₃₁₆ modification has been made.

₃₁₇

₃₁₈   If you convey an object code work under this section in, or with, or
₃₁₉ specifically for use in, a User Product, and the conveying occurs as
₃₂₀ part of a transaction in which the right of possession and use of the
₃₂₁ User Product is transferred to the recipient in perpetuity or for a
₃₂₂ fixed term (regardless of how the transaction is characterized), the
₃₂₃ Corresponding Source conveyed under this section must be accompanied
₃₂₄ by the Installation Information. But this requirement does not apply
₃₂₅ if neither you nor any third party retains the ability to install
₃₂₆ modified object code on the User Product (for example, the work has
₃₂₇ been installed in ROM).

₃₂₈

₃₂₉   The requirement to provide Installation Information does not include a
₃₃₀ requirement to continue to provide support service, warranty, or updates
₃₃₁ for a work that has been modified or installed by the recipient, or for
₃₃₂ the User Product in which it has been modified or installed. Access to a
₃₃₃ network may be denied when the modification itself materially and
₃₃₄ adversely affects the operation of the network or violates the rules and
₃₃₅ protocols for communication across the network.

₃₃₆

Corresponding Source conveyed, and Installation Information provided,
in accord with this section must be in a format that is publicly
documented (and with an implementation available to the public in
source code form), and must require no special password or key for
unpacking, reading or copying.

  7. Additional Terms.

  "Additional permissions" are terms that supplement the terms of this
License by making exceptions from one or more of its conditions.
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be treated as though they were included in this License, to the extent
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apply only to part of the Program, that part may be used separately
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622
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624
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628
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633
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649
650   Also add information on how to contact you by electronic and paper mail.
651
652     If the program does terminal interaction, make it output a short
653   notice like this when it starts in an interactive mode:
654
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656       This program comes with ABSOLUTELY NO WARRANTY; for details type 'show w'.
657       This is free software, and you are welcome to redistribute it
658       under certain conditions; type 'show c' for details.
```

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2.50 git_helpers/git_checks.libr.sh

```bash
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#
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# 2024-05-31T01:57+02:00: This file was renamed from
# "git_checks.libr.sh"
# to
# "git_checks.libr.sh".
# 2024-05-31T01:57+02:00: This file was moved from
# "."
# to
# "./git_helpers".
# 2024-05-31T01:49+02:00: This file was renamed from
# "git_checks.libr.sh"
# to
# "git_checks.libr.sh".
# 2024-05-31T01:49+02:00: This file was moved from
# "."
# to
# "./git_helpers".
# This file was renamed from "git_checks.sh" to "git_checks.libr.sh".

check_files(){
  # Checks used on Django projects.
  declare -r LFBFL_send_summary_1="ATTENTION : models modifiés"
```

```
45  declare -r LFBFL_send_body_1="Vérifiez si besoin de migrations"
46  local LFBFL_send_body_2="Pensez aussi aux contraintes d'unicités"
47  LFBFL_send_body_2+=" dès la création du modèle"
48  readonly LFBFL_send_body_2
49  declare -r LFBFL_send_summary_2="ATTENTION : serializers modifiés"
50  declare -r LFBFL_send_body_3=\
51  "Les nouveaux preloadings sont interdits -> #Prefetch()"
52  # shellcheck disable=SC2312
53  if git diff --cached --name-only | grep models;
54  then
55    notify-send "${LFBFL_send_summary_1}" "${LFBFL_send_body_1}"
56    notify-send "${LFBFL_send_summary_1}" "${LFBFL_send_body_2}"
57  fi
58  # shellcheck disable=SC2312
59  if git diff --cached --name-only | grep serializer;
60  then
61    notify-send "${LFBFL_send_summary_2}" "${LFBFL_send_body_3}"
62  fi
63  return 0
64 }


67 check_no_abusive_trailing_comma(){
68   # Useful for Python code, although it regularly yields
69   # false positives in Python code
70   # (but it is easy to distinguish by hand).
71   # Use `git commit --no-verify` after check.
72   declare -r LFBFL_send_summary_1="ATTENTION"
73   local LFBFL_send_body_1="Il semblerait que vous affectiez un tuple"
74   LFBFL_send_body_1+=" au lieu d'une autre valeur dans une variable."
75   readonly LFBFL_send_body_1
76   # shellcheck disable=SC2312
77   if git diff --cached -r | grep ' = .*,\s*$';
78   then
79     notify-send "${LFBFL_send_summary_1}" "${LFBFL_send_body_1}"
80     return 1
81   fi
82   return 0
83 }


86 check_black_code_formatting(){
87   # attention ça ne marche que sur les fichiers "stagés" avec git add
88   declare -r LFBFL_files_string=$(\
89     git diff --cached --name-only | grep '\.py'\
90   )
```

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```
91    echo "${LFBFL_files_string}"
92    declare -a LFBFL_some_files
93    mapfile -t LFBFL_some_files <<< "${LFBFL_files_string}"
94    readonly LFBFL_some_files
95    declare -i LFBFL_error=0
96    # Not very useful since LFBFL_file should be local to the loop by
97    # default.
98    local LFBFL_file
99    for LFBFL_file in "${LFBFL_some_files[@]}"; do
100     echo "Black will check formatting on file ${LFBFL_file}"
101     if ! black --check --diff "${LFBFL_file}";
102     then
103       LFBFL_error=1
104     fi
105   done
106   # shellcheck disable=SC2248,SC2250
107   return $LFBFL_error
108 }
```

2.51   git_helpers/post-commit

```
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22 #
23 # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
24 # 2024-05-31T01:49+02:00: This file was renamed from
25 # "post-commit"
```

```
26  # to
27  # "post-commit".
28  # 2024-05-31T01:49+02:00: This file was moved from
29  # "."
30  # to
31  # "./git_helpers".
32
33  LFBFL_library="../DevOrSysAdminScripts/git_helpers/"
34  LFBFL_library+="post_commit_renaming_comment.libr.sh"
35  # shellcheck disable=SC1090
36  source "${LFBFL_library}"
37
38  commit_a_file_renamed_comment --verbose --log-directory-change
39  exit 0
```

2.52   git_helpers/post_commit_renaming_comment.libr.sh

```
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22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # 2024-05-31T01:49+02:00: This file was renamed from
25  # "post_commit_renaming_comment.libr.sh"
26  # to
27  # "post_commit_renaming_comment.libr.sh".
28  # 2024-05-31T01:49+02:00: This file was moved from
29  # "."
```

```
30  # to
31  # "./git_helpers".
32  # This file was renamed from "post_commit_renaming_comment"
33  # to "post_commit_renaming_comment.libr.sh".
34  # (Before first commit it seems. But I had the old name in listing.)
35
36  LFBFL_this_file_path=$(realpath "${BASH_SOURCE[0]}")
37  LFBFL_this_file_directory=$(dirname "${LFBFL_this_file_path}")
38  LFBFL_some_directory="${LFBFL_this_file_directory}/../"
39  pushd .
40  # shellcheck disable=SC2164
41  cd "${LFBFL_some_directory}"
42  # shellcheck disable=SC1091
43  source "build_and_checks_dependencies/strings_functions.libr.sh"
44  # shellcheck disable=SC2164
45  popd
46
47  # Never forget that the worse security is the illusion of security
48  # (Kevin Mitnick). So, do not expect to have an accurate trackability
49  # of code history just because you use this post-commit hook or
50  # something else more evolved. This is useful but not a guarantee.
51  # For this reason, this function will only handle when all files
52  # impacted in the preceding commit are only renamed.
53  # It assumes that `diff` is the current default difference utility
54  # parametered with `git`. This point could be enhanced.
55  commit_a_file_renamed_comment(){
56    declare -i LFBFL_verbose=0
57    if [[ "$1" == "--verbose" ]]; then
58      echo "$0 commit_a_file_renamed_comment $*"
59      LFBFL_verbose=1
60    fi
61    readonly LFBFL_verbose
62
63    declare -i LFBFL_log_directory_change=0
64    if [[ "$2" == "--log-directory-change" ]]; then
65      LFBFL_log_directory_change=1
66    fi
67    readonly LFBFL_log_directory_change
68
69    declare -i LFBFL_max_comment_line_length=70
70    if [[ -n "$3" ]]; then
71      LFBFL_max_comment_line_length="$3"
72    fi
73    readonly LFBFL_max_comment_line_length
74    # shellcheck disable=SC2250
75    if [[ $LFBFL_verbose -eq 1 ]]; then
```

```
76    echo "LFBFL_log_directory_change: ${LFBFL_log_directory_change}"
77    echo\
78      "LFBFL_max_comment_line_length: ${LFBFL_max_comment_line_length}"
79    fi
80    #-------------------------------------------------------------
81
82    # shellcheck disable=SC2155
83    declare -r LFBFL_renaming_lines=$(
84      git log -p -1 | grep 'diff --git' -A 1
85    )
86    # shellcheck disable=SC2250
87    if [[ $LFBFL_verbose -eq 1 ]]; then
88      echo "LFBFL_renaming_lines: ${LFBFL_renaming_lines}"
89    fi
90
91    declare -a LFBFL_renaming_lines_array
92    mapfile -t LFBFL_renaming_lines_array <<< "${LFBFL_renaming_lines}"
93    readonly LFBFL_renaming_lines_array
94
95    # shellcheck disable=SC2155
96    declare -r LFBFL_timestamp=$(date --iso-8601="minute")
97    # shellcheck disable=SC2250
98    if [[ $LFBFL_verbose -eq 1 ]]; then
99      echo "LFBFL_timestamp: ${LFBFL_timestamp}"
100   fi
101   get_split_score_after_before_simple\
102     "${LFBFL_max_comment_line_length}" _
103   # shellcheck disable=SC2154
104   LFBFL_split_score_command1="${get_split_score_after_before_result}"
105   # shellcheck disable=SC2154
106   LFBFL_split_score_command_properties1=\
107 "${get_split_score_after_before_result2}"
108   get_split_score_after_before_simple\
109     "${LFBFL_max_comment_line_length}" /
110   # shellcheck disable=SC2154
111   LFBFL_split_score_command2="${get_split_score_after_before_result}"
112   # shellcheck disable=SC2154
113   LFBFL_split_score_command_properties2=\
114 "${get_split_score_after_before_result2}"
115   declare -i LFBFL_renaming_happened=0
116   declare -i LFBFL_i
117   # declare -r LFBFL_special_file_name="files_names_listing.txt"
118   declare -r LFBFL_sfn="files_names_listing.txt"
119   for ((LFBFL_i=0; LFBFL_i<${#LFBFL_renaming_lines_array[@]};)); do
120     # shellcheck disable=SC2250
121     local LFBFL_diff_line="${LFBFL_renaming_lines_array[$LFBFL_i]}"
```

```
122    LFBFL_i=$((LFBFL_i + 1))
123    # shellcheck disable=SC2250
124    local\
125      LFBFL_similarity_line="${LFBFL_renaming_lines_array[$LFBFL_i]}"
126    LFBFL_i=$((LFBFL_i + 1))
127    # We need to increment 3 times since grep adds "--" lines between.
128    LFBFL_i=$((LFBFL_i + 1))
129    # shellcheck disable=SC2250
130    if [[ $LFBFL_verbose -eq 1 ]]; then
131      echo "LFBFL_diff_line: ${LFBFL_diff_line}"
132      echo "LFBFL_similarity_line: ${LFBFL_similarity_line}"
133    fi
134    if [[ "${LFBFL_similarity_line:17:4}" == "100%" ]]; then
135      # Extract old file name from diff line. -----------------------
136      # shellcheck disable=SC2155
137      local LFBFL_old_file_path=$(
138        echo "${LFBFL_diff_line}" | cut -d ' ' -f 3
139      )
140      # It starts by "a/".
141      LFBFL_old_file_path=".${LFBFL_old_file_path:1}"
142      # shellcheck disable=SC2155
143      local LFBFL_old_file_name=$(basename "${LFBFL_old_file_path}")
144      # shellcheck disable=SC2155
145      local LFBFL_old_file_directory=$(
146        dirname "${LFBFL_old_file_path}"
147      )
148      # Extract new file name from diff line. -----------------------
149      # shellcheck disable=SC2155
150      local LFBFL_new_file_path=$(
151        echo "${LFBFL_diff_line}" | cut -d ' ' -f 4
152      )
153      # It starts by "b/".
154      LFBFL_new_file_path=".${LFBFL_new_file_path:1}"
155      # shellcheck disable=SC2155
156      local LFBFL_new_file_name=$(basename "${LFBFL_new_file_path}")
157      # shellcheck disable=SC2155
158      local LFBFL_new_file_directory=$(
159        dirname "${LFBFL_new_file_path}"
160      )
161      # shellcheck disable=SC2250
162      if [[ $LFBFL_verbose -eq 1 ]]; then
163        echo "LFBFL_old_file_path: ${LFBFL_old_file_path}"
164        echo "LFBFL_old_file_name: ${LFBFL_old_file_name}"
165        echo "LFBFL_old_file_directory: ${LFBFL_old_file_directory}"
166        echo "LFBFL_new_file_path: ${LFBFL_new_file_path}"
167        echo "LFBFL_new_file_name: ${LFBFL_new_file_name}"
```

143

```
168        echo "LFBFL_new_file_directory: ${LFBFL_new_file_directory}"
169      fi
170      # Extract "LFBFL_extension" with smart guessing for .tpl -------
171      # and set prefix for line with ©Copyright. --------------------
172      local LFBFL_useful_file_name="${LFBFL_new_file_name}"
173      local LFBFL_extension="${LFBFL_useful_file_name##*.}"
174      # shellcheck disable=SC2250
175      if [[ $LFBFL_verbose -eq 1 ]]; then
176        echo "LFBFL_useful_file_name: ${LFBFL_useful_file_name}"
177        echo "LFBFL_extension: ${LFBFL_extension}"
178      fi
179      declare -i LFBFL_j
180      for ((LFBFL_j=0; LFBFL_j<3; ++LFBFL_j)); do
181        if [[ "${LFBFL_extension}" != "tpl" ]]; then
182          break
183        fi
184        LFBFL_useful_file_name="${LFBFL_useful_file_name:0:-4}"
185        LFBFL_extension="${LFBFL_useful_file_name##*.}"
186        # shellcheck disable=SC2250
187        if [[ $LFBFL_verbose -eq 1 ]]; then
188          echo "LFBFL_useful_file_name: ${LFBFL_useful_file_name}"
189          echo "LFBFL_extension: ${LFBFL_extension}"
190        fi
191      done
192      local LFBFL_comment_prefix=""
193      if [[ "${LFBFL_extension}" == "sh" ]]; then
194        LFBFL_comment_prefix="# "
195      fi
196      if [[ "${LFBFL_extension}" == "sql" ]]; then
197        LFBFL_comment_prefix="-- "
198      fi
199      if [[ "${LFBFL_extension}" == "tex" ]]; then
200        LFBFL_comment_prefix="% "
201      fi
202      if [[ "${LFBFL_useful_file_name}" == "${LFBFL_sfn}" ]]; then
203        LFBFL_comment_prefix="// "
204      fi
205      # shellcheck disable=SC2250
206      if [[ $LFBFL_verbose -eq 1 ]]; then
207        echo "LFBFL_comment_prefix: ${LFBFL_comment_prefix}"
208      fi
209      #--------------------------------------------------------------
210      # Split if necessary old_file_name, new_file_name, etc. to have
211      # comment lines below max_comment_line_length.
212      local LFBFL_comment_prefix2="${LFBFL_comment_prefix}"'"'
213      # -----
```

```
214    local LFBFL_old_file_name2="${LFBFL_comment_prefix2}"
215    LFBFL_old_file_name2+="${LFBFL_old_file_name}"
216    repeated_split_last_line "${LFBFL_old_file_name2}"\
217      "${LFBFL_comment_prefix2}" "${LFBFL_max_comment_line_length}"\
218      '"' "${LFBFL_split_score_command1}"\
219      "${LFBFL_split_score_command_properties1}"
220    # shellcheck disable=SC2154
221    LFBFL_old_file_name2="${repeated_split_last_line_result}"
222    # -----
223    local LFBFL_old_file_directory2="${LFBFL_comment_prefix2}"
224    LFBFL_old_file_directory2+="${LFBFL_old_file_directory}"
225    repeated_split_last_line "${LFBFL_old_file_directory2}"\
226      "${LFBFL_comment_prefix2}" "${LFBFL_max_comment_line_length}"\
227      '"' "${LFBFL_split_score_command2}"\
228      "${LFBFL_split_score_command_properties2}"
229    # shellcheck disable=SC2154
230    LFBFL_old_file_directory2="${repeated_split_last_line_result}"
231    # -----
232    local LFBFL_new_file_name2="${LFBFL_comment_prefix2}"
233    LFBFL_new_file_name2+="${LFBFL_new_file_name}"
234    repeated_split_last_line "${LFBFL_new_file_name2}"\
235      "${LFBFL_comment_prefix2}" "${LFBFL_max_comment_line_length}"\
236      '"' "${LFBFL_split_score_command1}"\
237      "${LFBFL_split_score_command_properties1}"
238    # shellcheck disable=SC2154
239    LFBFL_new_file_name2="${repeated_split_last_line_result}"
240    # -----
241    local LFBFL_new_file_directory2="${LFBFL_comment_prefix2}"
242    LFBFL_new_file_directory2+="${LFBFL_new_file_directory}"
243    repeated_split_last_line "${LFBFL_new_file_directory2}"\
244      "${LFBFL_comment_prefix2}" "${LFBFL_max_comment_line_length}"\
245      '"' "${LFBFL_split_score_command2}"\
246      "${LFBFL_split_score_command_properties2}"
247    # shellcheck disable=SC2154
248    LFBFL_new_file_directory2="${repeated_split_last_line_result}"
249    # Create new comments strings. -------------------------------
250    local LFBFL_new_comment=""
251    if [[ "${LFBFL_new_file_name2}" != "${LFBFL_old_file_name2}" ]];
252    then
253      LFBFL_new_comment="${LFBFL_comment_prefix}"
254      LFBFL_new_comment+="${LFBFL_timestamp}"
255      LFBFL_new_comment+=": This file was renamed from\n"
256      LFBFL_new_comment+="${LFBFL_old_file_name2}"'"'"\n'
257      LFBFL_new_comment+="${LFBFL_comment_prefix}to\n"
258      LFBFL_new_comment+="${LFBFL_new_file_name2}"'"".'
259    fi
```

```
260    # shellcheck disable=SC2250
261    if [[ $LFBFL_log_directory_change -eq 1 ]] && [[\
262      "${LFBFL_new_file_directory}"\
263      != "${LFBFL_old_file_directory}"\
264    ]]; then
265      LFBFL_new_comment+="\n${LFBFL_comment_prefix}"
266      LFBFL_new_comment+="${LFBFL_timestamp}"
267      LFBFL_new_comment+=": This file was moved from\n"
268      LFBFL_new_comment+="${LFBFL_old_file_directory2}"'"'"\n'
269      LFBFL_new_comment+="${LFBFL_comment_prefix}to\n"
270      LFBFL_new_comment+="${LFBFL_new_file_directory2}"'"'".'
271    fi
272    # shellcheck disable=SC2250
273    if [[ $LFBFL_verbose -eq 1 ]]; then
274      echo "LFBFL_new_comment: ${LFBFL_new_comment}"
275    fi
276    # Find line with ©Copyright. ----------------------------------
277    # shellcheck disable=SC2155
278    declare -i LFBFL_copyright_line_number=$(
279      grep -n '©Copyright' "${LFBFL_new_file_path}"\
280      | head --lines=1\
281      | cut -d ':' -f 1
282    )
283    # shellcheck disable=SC2250
284    if [[ $LFBFL_verbose -eq 1 ]]; then
285      echo "LFBFL_copyright_line_number:"\
286          " ${LFBFL_copyright_line_number}"
287    fi
288    if [[ ${LFBFL_copyright_line_number} -eq 0 ]]; then
289      local LFBFL_send_summary_2="ATTENTION: No line with copyright"
290      notify-send "${LFBFL_send_summary_2}"\
291        "${LFBFL_send_summary_2} for: ${LFBFL_new_comment}"
292      # shellcheck disable=SC2250
293      if [[ $LFBFL_verbose -eq 1 ]]; then
294        echo "No copyright line. Skipping file."
295      fi
296      continue
297    fi
298    # Get total number of lines. ----------------------------------
299    # shellcheck disable=SC2002,SC2155
300    declare -i LFBFL_line_count=$(
301      cat "${LFBFL_new_file_path}" | wc -l
302    )
303    # shellcheck disable=SC2250
304    if [[ $LFBFL_verbose -eq 1 ]]; then
305      echo "LFBFL_line_count: ${LFBFL_line_count}"
```

```
306      fi
307      # Compute number of lines after. -----------------------------
308      # shellcheck disable=SC2155
309      declare -i LFBFL_lines_after=$((
310        LFBFL_line_count - LFBFL_copyright_line_number
311      ))
312      # shellcheck disable=SC2250
313      if [[ $LFBFL_verbose -eq 1 ]]; then
314        echo "LFBFL_lines_after: ${LFBFL_lines_after}"
315      fi
316      # Update file. ------------------------------------------------
317      local LFBFL_temp_file_path="${LFBFL_new_file_path}.LFBFL.temp"
318      head --lines="${LFBFL_copyright_line_number}"\
319        "${LFBFL_new_file_path}" > "${LFBFL_temp_file_path}"
320      echo -e "${LFBFL_new_comment}" >> "${LFBFL_temp_file_path}"
321      tail --lines="${LFBFL_lines_after}"\
322        "${LFBFL_new_file_path}" >> "${LFBFL_temp_file_path}"
323      mv "${LFBFL_temp_file_path}" "${LFBFL_new_file_path}"
324      # Add file to stage. ------------------------------------------
325      git add "${LFBFL_new_file_path}"
326      LFBFL_renaming_happened=1
327    fi
328  done
329  readonly LFBFL_renaming_happened
330  if [[ LFBFL_renaming_happened -eq 1 ]]; then
331    # Commit ------------------------------------------------------
332    local LFBFL_message="commit_a_file_renamed_comment()"
333    LFBFL_message+=" post-commit hook, ${LFBFL_timestamp}."
334    readonly LFBFL_message
335    git commit --message="${LFBFL_message}"
336  fi
337 }
```

2.53 git_helpers/pre-commit

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
5  # you can redistribute it and/or modify it under the terms
6  # of the GNU General Public License
7  # as published by the Free Software Foundation,
8  # either version 3 of the License,
9  # or (at your option) any later version.
10  #
11  # DevOrSysAdminScripts is distributed in the hope
```

```
12  # that it will be useful,
13  # but WITHOUT ANY WARRANTY;
14  # without even the implied warranty of
15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
16  # See the GNU General Public License for more details.
17  #
18  # You should have received a copy of
19  # the GNU General Public License
20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2024 Laurent Frédéric Bernard François Lyaudet
24  # 2024-05-31T01:57+02:00: This file was renamed from
25  # "pre-commit"
26  # to
27  # "pre-commit".
28  # 2024-05-31T01:57+02:00: This file was moved from
29  # "."
30  # to
31  # "./git_helpers".
32
33  # shellcheck disable=SC1091
34  . ../git_checks.sh
35
36  declare -ig LFBFL_git_hook_error=0
37  if ! check_files; then
38    LFBFL_git_hook_error=1
39  fi
40  if ! check_no_abusive_trailing_comma; then
41    LFBFL_git_hook_error=1
42  fi
43  if ! check_black_code_formatting; then
44    LFBFL_git_hook_error=1
45  fi
46  readonly LFBFL_git_hook_error
47  # shellcheck disable=SC2250
48  if [[ $LFBFL_git_hook_error -eq 1 ]]; then
49    exit 1
50  fi
51  exit 0
```

2.54   LiensUtiles.txt

```
1  https://support.google.com/a/answer/9476255?hl=fr#zippy=%2C%C3%A9tape\
2  -configurez-le-service-de-migration-de-donn%C3%A9es
3  --------------------------------------------------------------------
```

```
4   https://stackoverflow.com/a/78413334/5796086
5   https://stackoverflow.com/questions/21612980/\
6   why-is-usr-bin-env-bash-superior-to-bin-bash/78413334
7   https://web.archive.org/web/20240501105801/https://stackoverflow.com\
8   /questions/21612980/why-is-usr-bin-env-bash-superior-to-bin-bash/\
9   78413334#78413334
10  --------------------------------------------------------------------
11  https://news.ycombinator.com/item?id=22214690
12  https://github.com/koalaman/shellcheck/issues/2005
13  https://opensource.stackexchange.com/questions/6271/\
14  calling-gpld-programs-from-a-shell-script
15  --------------------------------------------------------------------
```

2.55 README.md.tpl

```
1   # DevOrSysAdminScripts
2
3   [![CodeFactor-badge]][CodeFactor-package-page]
4   [![Codacy-badge]][Codacy-package-page]
5   ![GitHub-top-language-badge]
6   ![GitHub-code-size-in-bytes-badge]
7
8   |                  **Some "small" useful scripts**              |
9   |:-----------------------------------------------------------:|
10  | **for enhancing development or system-administrators tasks** |
11
12  Currently, the biggest part of this repository is in
13  a suite of shell scripts about build and checks that
14  I use in some of my other repositories.
15
16  I tried to follow some conventions for my bash code:
17
18  - I tried to encapsulate most of the code in functions.
19  - Unless used as return values, variables in functions are defined
20    as local variables (`local` keyword or `declare`)
21    with prefix "LFBFL_".
22  - When used as return values, variables in functions are defined
23    as global variables (`declare -g`) with prefix
24    "@function_name@_result_".
25  - Whenever a variable is no more modified after some point,
26    add the keyword `readonly` or use `declare -r`.
27  - Whenever a variable will only contain integer values (or boolean
28    values as 0 or 1), use `declare -i`.
29  - I named bash files with suffixes ".exec.sh" when the script can
30    be runned
31    (executable, abbreviation stops before a vowel).
```

```
32  - I named bash files with suffixes ".libr.sh" when the script contains
33    only functions definitions
34    (library, abbreviation stops before a vowel).
35  - When some ".exec.sh" code is encapsulated into functions,
36    either these functions can be reused and go in some ".libr.sh" file,
37    either they are truly specific to this script and they are kept
38    in ".exec.sh" file.
39
40  But the files "pre-commit" and "post-commit" were not renamed,
41  since it is not possible to give them other names to use them as
42  pre-commit/post-commit hooks in `git`.
43
44  [CodeFactor-badge]: https://www.codefactor.io/repository/github/\
45  llyaudet/DevOrSysAdminScripts/badge
46
47  [CodeFactor-package-page]: https://www.codefactor.io/repository/\
48  github/llyaudet/DevOrSysAdminScripts
49
50  [Codacy-badge]: https://app.codacy.com/project/badge/Grade/\
51  3dd6ef85e8db4460991d1ebc404b68dd
52
53  [Codacy-package-page]: https://app.codacy.com/gh/LLyaudet/\
54  DevOrSysAdminScripts/dashboard?utm_source=gh&utm_medium=referral\
55  &utm_content=&utm_campaign=Badge_grade
56
57  [GitHub-top-language-badge]: https://img.shields.io/github/\
58  languages/top/llyaudet/DevOrSysAdminScripts
59
60  [GitHub-code-size-in-bytes-badge]: https://img.shields.io/github/\
61  languages/code-size/llyaudet/DevOrSysAdminScripts
```

2.56   unicode.libr.php

```
1   <?php
2   /*
3   This file is part of DevOrSysAdminScripts library.
4
5   DevOrSysAdminScripts is free software:
6   you can redistribute it and/or modify it under the terms
7   of the GNU Lesser General Public License
8   as published by the Free Software Foundation,
9   either version 3 of the License,
10  or (at your option) any later version.
11
12  DevOrSysAdminScripts is distributed in the hope
13  that it will be useful,
```

```
14  but WITHOUT ANY WARRANTY;
15  without even the implied warranty of
16  MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
17  See the GNU Lesser General Public License for more details.
18
19  You should have received a copy of
20  the GNU Lesser General Public License
21  along with DevOrSysAdminScripts.
22  If not, see <https://www.gnu.org/licenses/>.
23
24  ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
25  This file was renamed from "unicode.php" to "unicode.libr.php".
26  */
27
28  function decimal_code_point_to_UTF8(
29    $i_code_point_in_decimal_notation
30  ){
31    // var_dump($i_code_point_in_decimal_notation);
32    // 0xxxxxxx ASCII
33    if($i_code_point_in_decimal_notation < 128){
34      return chr($i_code_point_in_decimal_notation);
35    }
36    $i_continuation_base_value = 128;
37    // 110xxxxx 10xxxxxx
38    if($i_code_point_in_decimal_notation < 256 * (2**3)){
39      $i_first_byte_base_value = 192;
40      $i_last_byte_significant_bits = (
41        $i_code_point_in_decimal_notation % (2**6)
42      );
43      $i_first_byte_significant_bits = (int) (
44        (
45          $i_code_point_in_decimal_notation
46          - $i_last_byte_significant_bits
47        ) / (2**6)
48      );
49      $s_result = chr(
50        $i_first_byte_base_value
51        + $i_first_byte_significant_bits
52      );
53      $s_result .= chr(
54        $i_continuation_base_value
55        + $i_last_byte_significant_bits
56      );
57      return $s_result;
58    }
59    // 1110xxxx 10xxxxxx 10xxxxxx
```

```php
60    if($i_code_point_in_decimal_notation < 256 * 256){
61      $i_first_byte_base_value = 224;
62      $arr_arr_data_per_byte_reverse = [
63        ["i_bits" => 6, "i_base_value" => $i_continuation_base_value],
64        ["i_bits" => 6, "i_base_value" => $i_continuation_base_value],
65        ["i_bits" => 4, "i_base_value" => $i_first_byte_base_value],
66      ];
67      $i_rest = $i_code_point_in_decimal_notation;
68      $s_result = "";
69      foreach($arr_arr_data_per_byte_reverse as $arr_data){
70        // _Pragma unroll
71        // J'aurais pu "roller" les 4 cas des ifs.
72        // Mais pour les perfs, il faudrait tout unroller vu le nombre
73        // d'itérations. Et j'aimerais bien comparer du code unrollé
74        // aux 2 niveaux à la main avec celui unrollé par le compilateur
75        // sur les 2 niveaux. Je préjuge/présuppose qu'il unroll
76        // l'intérieur d'abord (pour ne pas refaire le même boulot)
77        // puis l'extérieur et qu'il oublie de réoptimiser l'intérieur
78        // en fonction de l'extérieur unrollé. Est-ce que j'ai raison ?
79        $i_significant_bits = $i_rest % (2**$arr_data["i_bits"]);
80        $i_rest = (int) (
81          ($i_rest - $i_significant_bits) / (2**$arr_data["i_bits"])
82        );
83        $s_result = (  // .= or =.
84          chr($i_significant_bits + $arr_data["i_base_value"])
85          .$s_result
86        );
87      }
88      return $s_result;
89    }
90    // 11110xxx 10xxxxxx 10xxxxxx 10xxxxxx
91    if($i_code_point_in_decimal_notation < 256 * 256 * (2**5)){
92      $i_first_byte_base_value = 240;
93      $arr_arr_data_per_byte_reverse = [
94        ["i_bits" => 6, "i_base_value" => $i_continuation_base_value],
95        ["i_bits" => 6, "i_base_value" => $i_continuation_base_value],
96        ["i_bits" => 6, "i_base_value" => $i_continuation_base_value],
97        ["i_bits" => 3, "i_base_value" => $i_first_byte_base_value],
98      ];
99      $i_rest = $i_code_point_in_decimal_notation;
100     $s_result = "";
101     foreach($arr_arr_data_per_byte_reverse as $arr_data){
102       // _Pragma unroll
103       $i_significant_bits = $i_rest % (2**$arr_data["i_bits"]);
104       $i_rest = (int) (
105         ($i_rest - $i_significant_bits) / (2**$arr_data["i_bits"])
```

```
106        );
107        $s_result = (   // .= or =.
108          chr($i_significant_bits + $arr_data["i_base_value"])
109          .$s_result
110        );
111      }
112      return $s_result;
113    }
114    throw new Exception(
115      "UTF-8 avec jusqu'à 6 octets a été abandonné il y a longtemps."
116      ." Autre anecdote \"débile\" : MySQL a de base UTF-8 avec jusqu'à"
117      ." 3 octets au lieu de 4 :face-palm:."
118      ." Du coup, ça peut donner quelques \"surprises\"."
119      ." Sinon, y'a aussi ASCII dans MySQL."
120      ." Et comme ça joue sur la mémoire et les performances,"
121      ." pourquoi ils n'ont pas fait ASCII, UTF-8-2, UTF-8-3, UTF-8-4 ?"
122      ." :)"
123    );
124  }
125
126
127
128  function hexa_code_point_to_UTF8(
129    $s_code_point_in_hexadecimal_notation
130  ){
131    $s_code_point_in_hexadecimal_notation = strtoupper(
132      $s_code_point_in_hexadecimal_notation
133    );
134    $i_code_point_in_decimal_notation = 0;
135    $i_ord_0 = ord('0');
136    $i_ord_A = ord('A');
137    $i_digit_offset = -$i_ord_0;
138    $i_letter_offset = 10 - $i_ord_A;
139    for(
140      $i = 0, $i_max = strlen($s_code_point_in_hexadecimal_notation);
141      $i < $i_max;
142      ++$i
143    ){
144      $s_hexa_digit = $s_code_point_in_hexadecimal_notation[$i];
145      $i_code_point_in_decimal_notation *= 16;
146      if(ctype_digit($s_hexa_digit)){
147        $i_code_point_in_decimal_notation += (
148          ord($s_hexa_digit) + $i_digit_offset
149        );
150        continue;
151      }
```

```php
152    if(ctype_xdigit($s_hexa_digit)){
153      $i_code_point_in_decimal_notation += (
154        ord($s_hexa_digit) + $i_letter_offset
155      );
156      continue;
157    }
158    throw new Exception("Not an hexadecimal digit.");
159  }
160  return decimal_code_point_to_UTF8(
161    $i_code_point_in_decimal_notation
162  );
163 }
164
165 /*
166 ?>
167 <?php
168 require_once("./unicode.libr.php");
169 var_dump(hexa_code_point_to_UTF8("002B"));
170 var_dump(hexa_code_point_to_UTF8("00E6"));
171 var_dump(hexa_code_point_to_UTF8("1400"));
172 var_dump(hexa_code_point_to_UTF8("10111"));
173 // https://en.wikibooks.org/wiki/Unicode/Character_reference/2000-2FFF
174 // Some invisible unicode characters that are a problem:
175 // 2000-200F 2028-202F 205F 2060-206F
176 $arr = [
177   '2000', '2001', '2002', '2003', '2004', '2005', '2006', '2007',
178   '2008', '2009', '200A', '200B', '200C', '200D', '200E', '200F',
179   '2028', '2029', '202A', '202B', '202C', '202D', '202E', '202F',
180   '205F',
181   '2060', '2061', '2062', '2063', '2064', '2065', '2066', '2067',
182   '2068', '2069', '206A', '206B', '206C', '206D', '206E', '206F',
183 ];
184 $arr_s = [];
185 $arr_s2 = [];
186 $arr_s3 = [];
187 foreach($arr as $s_hexa){
188   $s = hexa_code_point_to_UTF8($s_hexa);
189   $arr_s []= $s;
190   if(strlen($s) === 2){
191     $s2 = '\x'.bin2hex($s[0]).'\x'.bin2hex($s[1]);
192   }
193   if(strlen($s) === 3){
194     $s2 = '\x'.bin2hex($s[0]).'\x'.bin2hex($s[1])
195       .'\x'.bin2hex($s[2]);
196   }
197   $arr_s2 []= $s2;
```

```
198   $s3 = "  | sed -e 's/".$s2."/ /g'\\";
199   $arr_s3 []= $s3;
200   echo($s3."\n");
201 }
202 //*/
203
```

2.57 upgrade_build_and_checks.exec.sh

```
1  #!/usr/bin/env bash
2  # This file is part of DevOrSysAdminScripts library.
3  #
4  # DevOrSysAdminScripts is free software:
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17 #
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20 # along with DevOrSysAdminScripts.
21 # If not, see <https://www.gnu.org/licenses/>.
22 #
23 # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24 # This file was renamed from "upgrade_build_and_checks.sh"
25 # to "upgrade_build_and_checks.exec.sh".
26
27 upgrade_build_and_checks(){
28   local LFBFL_verbose=""
29   if [[ "$1" == "--verbose" ]]; then
30     echo "$0 $*"
31     LFBFL_verbose="--verbose"
32   fi
33   readonly LFBFL_verbose
34   (\
35     cd build_and_checks_dependencies/\
36     && ./update_common_build_and_checks.exec.sh "${LFBFL_verbose}"\
37   )
```

```
38    ./build_and_checks.exec.sh "." "${LFBFL_verbose}"
39  }
40
41  upgrade_build_and_checks "$@"
```

2.58   wget_sha512.libr.sh

```
1   #!/usr/bin/env bash
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15  # MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
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17  #
18  # You should have received a copy of
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20  # along with DevOrSysAdminScripts.
21  # If not, see <https://www.gnu.org/licenses/>.
22  #
23  # ©Copyright 2023-2025 Laurent Frédéric Bernard François Lyaudet
24  # This file was renamed from "wget_sha512.sh"
25  # to "wget_sha512.libr.sh".
26
27  wget_sha512(){
28    # $1 file_path
29    # $2 download_URL
30    # $3 correct_sha512
31    # $4 optional --verbose
32    local LFBFL_verbose=""
33    if [[ "$4" == "--verbose" ]]; then
34      echo "$0 wget_sha512 $*"
35      LFBFL_verbose="--verbose"
36    fi
37    readonly LFBFL_verbose
38    if [[ ! -f "$1" ]];
39    then
```

```
40     wget "${LFBFL_verbose}" -O "$1" "$2"
41   fi
42   # shellcheck disable=SC2312
43   declare -r \
44     LFBFL_present_sha512=$(sha512sum "$1" | cut -f1 -d' ')
45   if [[ "${LFBFL_present_sha512}" != "$3" ]];
46   then
47     echo "$1 does not have correct sha512"
48     echo "wanted $3"
49     echo "found ${LFBFL_present_sha512}"
50     exit
51   fi
52 }
```

Merci Dieu ! Merci Père ! Merci Seigneur ! Merci Saint Esprit !