

**NAME**

Dpkg::Path – some common path handling functions

**DESCRIPTION**

It provides some functions to handle various path.

**FUNCTIONS**

`get_pkg_root_dir($file)`

This function will scan upwards the hierarchy of directory to find out the directory which contains the “DEBIAN” sub-directory and it will return its path. This directory is the root directory of a package being built.

If no DEBIAN subdirectory is found, it will return undef.

`relative_to_pkg_root($file)`

Returns the filename relative to `get_pkg_root_dir($file)`.

`guess_pkg_root_dir($file)`

This function tries to guess the root directory of the package build tree. It will first use **get\_pkg\_root\_dir()**, but it will fallback to a more imprecise check: namely it will use the parent directory that is a sub-directory of the debian directory.

It can still return undef if a file outside of the debian sub-directory is provided.

`check_files_are_the_same($file1, $file2, $resolve_symlink)`

This function verifies that both files are the same by checking that the device numbers and the inode numbers returned by **stat()/lstat()** are the same. If `$resolve_symlink` is true then **stat()** is used, otherwise **lstat()** is used.

`canonpath($file)`

This function returns a cleaned path. It simplifies double `//`, and remove `./` and `../` intelligently. For `../` it simplifies the path only if the previous element is not a symlink. Thus it should only be used on real filenames.

`$newpath = resolve_symlink($symlink)`

Return the filename of the file pointed by the symlink. The new name is canonicalized by **canonpath()**.

`check_directory_traversal($basedir, $dir)`

This function verifies that the directory `$dir` does not contain any symlink that goes beyond `$basedir` (which should be either equal or a parent of `$dir`).

`$cmdpath = find_command($command)`

Return the path of the command if defined and available on an absolute or relative path or on the `$PATH`, undef otherwise.

`$control_file = get_control_path($pkg, $filetype)`

Return the path of the control file of type `$filetype` for the given package.

`@control_files = get_control_path($pkg)`

Return the path of all available control files for the given package.

`$file = find_build_file($basename)`

Selects the right variant of the given file: the arch-specific variant (“`$basename.$sarch`”) has priority over the OS-specific variant (“`$basename.$os`”) which has priority over the default variant (“`$basename`”). If none of the files exists, then it returns undef.

`@files = find_build_file($basename)`

Return the available variants of the given file. Returns an empty list if none of the files exists.

**CHANGES****Version 1.05 (dpkg 1.20.4)**

New function: **check\_directory\_traversal()**.

**Version 1.04 (dpkg 1.17.11)**

Update semantics: **find\_command()** now handles an empty or undef argument.

**Version 1.03 (dpkg 1.16.1)**

New function: **find\_build\_file()**

**Version 1.02 (dpkg 1.16.0)**

New function: **get\_control\_path()**

**Version 1.01 (dpkg 1.15.8)**

New function: **find\_command()**

**Version 1.00 (dpkg 1.15.6)**

Mark the module as public.