

# The `l3sys-shell` package

## System shell functions

The L<sup>A</sup>T<sub>E</sub>X Project\*

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This module provides platform-neutral interfaces to system shell commands. These functions can only access the shell if a document is proceeded using `-shell-escape`, which allows *unrestricted* access to command line functions.

In general, arbitrary documents should *not* be processed in this way, as shell escape could either accidentally or deliberately lead to unexpected side-effects. In that sense, they should be treated like any other arbitrary script: with caution. No attempt is made by the functions here to avoid injection of additional commands into the arguments.

With the above security caveats in mind, these functions are provided for authors where a workflow scripting *within* a L<sup>A</sup>T<sub>E</sub>X document is preferable to using an external script. The latter would of course also have the ability to run arbitrary code.

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`\sys_shell_cp:nn`

New: 2018-07-28

`\sys_shell_cp:nn <{source}> <{dest}>`

Copies the files specified in the `<source>` (which may include wildcards) to the `<dest>`. The file paths should be specified using `/` as a path separator. Copying is *not* recursive: only files at the path level given are copied. If unrestricted shell escape is not enabled, no action is attempted.

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`\sys_shell_mkdir:n`

New: 2018-07-27

`\sys_shell_mkdir:n <{directory}>`

Creates the `<directory>`, which should be specified using `/` as a path separator. If unrestricted shell escape is not enabled, no action is attempted.

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`\sys_shell_mv:nn`

New: 2018-07-28

`\sys_shell_mv:nn <{old}> <{new}>`

Moves the files from the `<old>` to `<new>` names/locations: the `<old>` names may include wildcards. In both arguments, `/` should be used as the path separator. If unrestricted shell escape is not enabled, no action is attempted.

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`\sys_shell_rm:n`

New: 2018-07-27

`\sys_shell_rm:n <{files}>`

Removes the `<files>` (which may include wildcards). The file path should be specified using `/` as a path separator. If unrestricted shell escape is not enabled, no action is attempted.

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`\sys_shell_rmdir:n`

New: 2018-07-27

`\sys_shell_rmdir:n <{directory}>`

Removes the `<directory>`, which should be specified using `/` as a path separator. If unrestricted shell escape is not enabled, no action is attempted.

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\*E-mail: [latex-team@latex-project.org](mailto:latex-team@latex-project.org)

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`\sys_get_shell_pwd:N`

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New: 2018-07-28

`\sys_get_shell_pwd:N`  $\langle str\ var \rangle$

Sets the  $\langle str\ var \rangle$  to the present working directory (the output of `pwd` on Unix or `cd` on Windows). Note that on Windows this will contain string backslash chars (`\`). If unrestricted shell escape is not enabled, no action is taken.

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`\sys_shell_split_ls:nN`

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New: 2018-07-28

`\sys_shell_split_ls:N`  $\{ \langle glob \rangle \}$   $\langle seq \rangle$

Sets the  $\langle seq\ var \rangle$  to contain one entry per directory listing (equivalent to `ls -1` or `dir /b`) as specified by the  $\langle glob \rangle$ : the entries are strings. If unrestricted shell is not enabled, no action is taken.

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