

# The chngcntr package\*

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## 1 Usage

In L<sup>A</sup>T<sub>E</sub>X, a new counter called, say ‘*ctr*’, is created by the command `\newcounter{ctr}[\within]`. If the optional *within* argument is given the the counter ‘*ctr*’ is reset to zero each time the counter ‘*within*’ changes. The command `\the<ctr>` typesets the value of the counter *ctr*. This is automatically defined by `\newcounter` and is initialised to typeset arabic numerals.

`\counterwithin`  
`\counterwithin*` It is sometimes desirable to change a counter that has been defined by `\newcounter{ctr}` to act as though it had been defined as `\newcounter{ctr}[\within]`. The package provides the command `\counterwithin{ctr}{within}` that accomplishes this. By default, it also redefines the `\the<ctr>` command so that it typesets values in the style `\the<within>.\arabic{ctr}`. The starred version of the command suppresses the redefinition of `\the<ctr>` (e.g., `\counterwithin*{ctr}{within}`).

`\counterwithout`  
`\counterwithout*` Likewise, the command `\counterwithout{ctr}{within}` changes a counter that has been created by `\newcounter{ctr}[\within]` to act as though it had been created by `\newcounter{ctr}`. By default it also redefines the `\the<ctr>` command so that it just typesets an arabic

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numeral. The starred version of the command suppresses the redefinition of `\the<ctr>`.

Any number of `\counterwithin{<ctr>}{<...>}` and `\counterwithout{<ctr>}{<...>}` commands can be issued for a given counter, `<ctr>`, if you wish to toggle between the two styles. The current value of `<ctr>` is unaffected by `\counterwithin` and `\counterwithout`. If you want to change the value after one of these commands, use `\setcounter{<ctr>}{<...>}`, and to change the typesetting style use `\renewcommand{\the<ctr>}{<...>}`.

## 2 Change History:

v1.0a – New maintainer (Will Robertson)