# LaTeX News

Issue 41, June 2025 — DRAFT version for upcoming release (LaTeX release 2025-06-01)

## Contents

## Introduction

*to write*

## Replacement for the legacy mark mechanism

LaTeX's legacy mechanism only supported two classes (left and right marks) and setting the left mark (with `\markboth`) always altered the state of the right mark as well, i.e., they were far from independent. For generating running headers with "chapter titles" on the left and "section titles" on the right they work reasonably well but without much flexibility, e.g., `\leftmark` always generated the first "left"-mark on the page, while `\rightmark` always generated the last "right"-mark.

A few releases ago [3] we therefore introduced a new mark mechanism for LaTeX that supports arbitrary many truly independent mark classes and also offers querying the state at the top of the page, something that wasn't available in LaTeX at all.

Up to now, both mechanisms coexisted with completely separate implementations. With this release we have retired the legacy code and instead implement its public interfaces by using the new concepts, i.e., `\markboth`, `\markright`, `\leftmark`, and `\rightmark` remain supported but internally use `\InsertMark`, etc. Existing document classes or documents using the interfaces will therefore continue to work without any modifications but use a single underlying implementation and new documents can benefit from the additional flexibility, e.g., by displaying not only the last right-mark (`\leftmark` or `\LastMark{2e-right}`) but also the first right-mark (`\FirstMark{2e-right}`) or the top right-mark (`\TopMark{2e-right}`), etc.

See [6] for details on the extended functionality.

## New or improved commands

## Code improvements

### Refinement of `\MakeTitlecase`

We introduced `\MakeTitlecase` as a late addition to the June 2022 release, making use of the improved case code in expl3. Unlike upper and lowercasing, making text titlecased is more tricky to get right: this can apply either to the whole text or on a word-by-word basis.

A subtle issue was reported against the expl3 repository (`https://github.com/latex3/latex3/issues/1316`) which links to how we deal with the question of case changing "words" but shows up if you titlecase text stored in a command.

We have looked again at how to implement `\MakeTitlecase` to be as predictable as possible, and have made a change in this release. The command no longer tries to lowercase text before applying titlecasing, and gives the correct result for text stored in commands.

We have also added an additional key to the optional argument to `\MakeTitlecase` which allows the user to decide if this will apply only to the first word (the default) or to all words.

### Tab character as a special

In LaTeX News 38, we described the extension of `\verb`, etc., to cover the tab character as equivalent to a space. We have now added tabs to the standard list of characters covered by `\dospecials`. This allows them to be used in for example a `v` specification document command without additional steps.

## Bug fixes

## Changes to packages in the tools category

### multicol: Full support for extended marks

In 2022 we introduced a new mark mechanism for LaTeX [3]. However, the initial implementation only covered the standard output routine of LaTeX. As a result the extended marks were not available within columns produced with the multicol package (where they would be especially useful). This limitation has finally been lifted and the new mechanism is now fully supported.    *(github issue 1421)*

## References

[1] Leslie Lamport. *LaTeX: A Document Preparation System: User's Guide and Reference Manual.* Addison-Wesley, Reading, MA, USA, 2nd edition, 1994. ISBN 0-201-52983-1. Reprinted with corrections in 1996.

[2] LaTeX Project Team. *LaTeX 2ε news 1–39.* June, 2024. `https://latex-project.org/news/latex2e-news/ltnews.pdf`

[3] LaTeX Project Team. *LaTeX 2ε news 35.* June 2022. `https://latex-project.org/news/latex2e-news/ltnews35.pdf`

[4] LaTeX Project Team. *LaTeX 2ε news 38.* November 2023. `https://latex-project.org/news/latex2e-news/ltnews38.pdf`

[5] LaTeX Project Team. *LaTeX 2ε news 40.* November 2024. `https://latex-project.org/news/latex2e-news/ltnews40.pdf`

[6] Frank Mittelbach, LaTeX Project Team. *The `ltmarks.dtx` code.* June 2025. `https://latex-project.org/help/documentation/ltmarks-doc.pdf`