LilyPond

The music typesetter

Changes

The LilyPond development team

This document lists changes and new features in LilyPond version 2.23.1 since 2.22.

For more information about how this manual fits with the other documentation, or to read this manual in other formats, see Section “Manuals” in *General Information*.

If you are missing any manuals, the complete documentation can be found at `http://lilypond.org/`.

This document has been placed in the public domain.

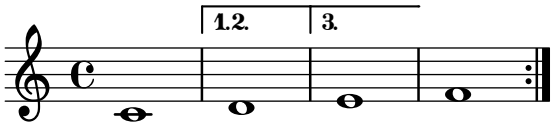
For LilyPond version 2.23.1

- In the Emmentaler font, identical-looking noteheads whose only difference was stem direction have been consolidated into a single glyph. For instance, the glyphs `noteheads.u2triangle` and `noteheads.d2triangle` have been replaced by a single glyph, `noteheads.s2triangle`. Notehead pairs that look visually different depending on the direction remain distinct.

  In addition, the `stem-attachment` property of `NoteHead` grobs now returns its actual, direction-dependent stem attachment point instead of a hypothetical upwards-stem attachment point.

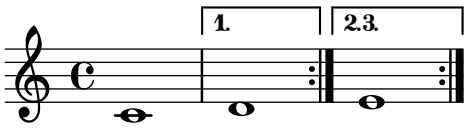
- Repeat alternatives may appear in places other than the end of the repeated section.

```
\repeat volta 3 { c'1 \alternative { d' e' } f' }
```
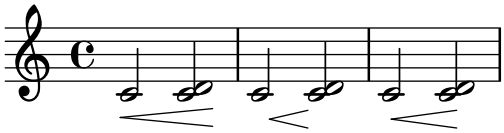


- The volta numbers for repeat alternatives may be set with the `\volta` command.

```
\repeat volta 3 c'1 \alternative { \volta 1 d' \volta 2,3 e' }
```



- The `\volta` command removes music when a repeat is unfolded.
- The `\unfolded` command adds music when a repeat is unfolded.
- The ends of hairpins may now be aligned to the `LEFT`, `CENTER` or `RIGHT` of `NoteColumn` grobs by overriding the property `endpoint-alignments`.

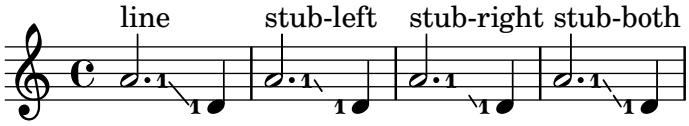


- The `lilypond-book` script now allows braces in the argument of the commands `\lilypond` (for LaTeX) and `@lilypond` (for Texinfo).
- With the new markup list command `string-lines` it is now possible to split a string at a given character. The default is to split at line break. Surrounding white space gets dropped. The resulting list of markups may be further formatted. This is a very convenient way of entering additional stanzas for songs.

  Twinkle, twinkle, little star,
  How I wonder what you are!
  Up above the world so high,
  Like a diamond in the sky.
  Twinkle, twinkle, little star,
  How I wonder what you are!

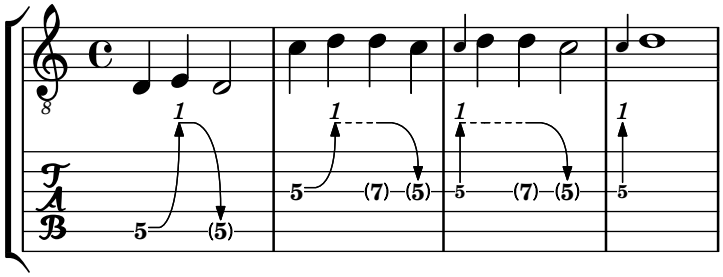
- Color transparency is supported when generating Postscript and PDF files. To use this new feature, it is necessary to use Ghostscript version 9.53 or later.

- A new grob `FingerGlideSpanner` is now available, indicating a finger gliding on a string from one to another position. Several appearances are possible, depending on the setting of `style`. Shown in the image are `line`, `stub-left`, `stub-right` and `stub-both`.
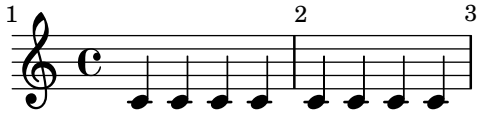


  Also possible is `dashed-line`, `dotted-line`, `zigzag`, `trill`, `bow` and `none`.

- A new grob `BendSpanner` is now available for `TabStaff`, indicating a bent string. Apart from the default three styles are possible: `'hold`, `'pre-bend` and `'pre-bend-hold`.



- A new grob callback function `break-alignment-list` is now available for returning different values depending on a grob's break direction. As an example, use it to provide different alignments of a grob depending on whether it is positioned at the beginning, the middle, or the end of a line.



- The alignment of bar numbers appearing in the middle or end of a system has been changed to align them on their left edge. This is in keeping with the advice of Elaine Gould (*Behind Bars*, p. 237), and was mostly the consensus reached in a discussion of the issue by developers. The alignment of bars at the beginning of a system remains unchanged.