LilyPond

Changes

The LilyPond development team

> This document lists changes and new features in LilyPond version 2.21.7 since 2.20.

> 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/`.

For LilyPond version 2.21.7

- An accidental glyph corresponding to SMuFL code U+E2E3 has been added (Extended Helmholtz-Ellis accidentals: Raise by one undecimal quartertone).

- A new grob `DurationLine` is now available. It continues a rhythmic grob with a line, ending at the next rhythmic grob. Possible styles are `'beam`, `'line`, `'dashed-line`, `'dotted-line`, `'zigzag`, `'trill` and `'none`. The duration line may end with a hook (beam-style only) or an arrow.

- PDF bookmarks are now supported and allow for `\tocItem` entries to appear in the 'table of contents' panel of PDF viewers that support it.

- `\table-of-contents` now accepts a hierarchical structure; `\tocItem` entries may optionally take a symbol (like `\label`) or a dot-separated list of symbols, indicating their position in the score's structure. A side-effect of that feature is that `\tocItem` can no longer take a simple string as its argument; a `\markup` command must be used.

```
\tocItem \markup "Top-level entry"
\tocItem symbol "Named top-level entry"
\tocItem symbol.list "Second-level (child) entry"
```

- A lyric hyphen may now be repeated at the start of a system beginning with a new syllable:
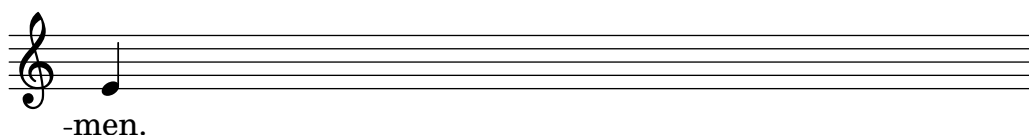
- CSS-style colors can now be used directly as text strings; either with predefined color names (like with the already available `css-color` function), or with hexadecimal color codes prefixed with `#`. All stencils that support a `color` property now accept either a list or a string; in the latter case, that string is used directly in the SVG output. This allows to use alpha transparency (entered as "#RRGGBBAA" or "#RGBA") in SVG.

```
\override NoteHead.color = "lightsalmon"
\override Flag.color = "#E30074"
\override Beam.color = "#5e45ad"
\override Rest.color = "#3058"
g'8 \huge r4 a'16 f'
```

- SVG output is now available through the `--svg` command-line option (or its canonical form `--format=svg`, also shortened as `-fsvg`). Due to its backend's specificity, that option is not yet compatible with other output formats; to get a file in both SVG and PDF, PNG or EPS, a second LilyPond run is required.

- As announced in version 2.17.3 nearly eight years ago, the `'relative-includes` option is now enabled by default; included files that contain an `\include` command of their own must account for their own path rather than the main file's directory. That behavior may however be switched off by setting `'relative-includes` to `#f`, either as a command line option or using `ly:set-option` in source files.

- Tuplets can now be printed with slurs instead of brackets:

```
\relative {
  \tuplet 3/2 4 {
    \override TupletBracket.tuplet-slur = ##t
    c'4 e8 d4 f8
    \override TupletBracket.bracket-visibility = ##t
    e f g f e d
  } c1
}
```
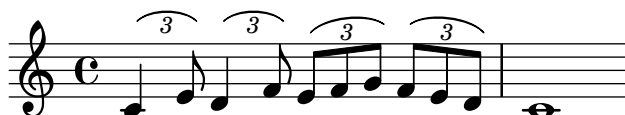
- `\compressFullBarRests` has been renamed to `\compressEmptyMeasures`, to avoid possible confusion with `\compressMMRests`. Likewise, `\expandFullBarRests` has now become `\expandEmptyMeasures`.

- A gradual change of vowel (or sustained consonant) may be indicated by adding a vowel transition between lyric syllables with the command `\vowelTransition`.

```
{ g'2 g' }
\addlyrics { Ah \vowelTransition oh. }
```

- LilyPond for Windows (MinGW) can handle Unicode filenames on Windows 10 1903 and above.

- French beaming (`\override Stem.french-beaming = ##t`) now *exactly* behaves like standard (i.e., default) beaming in every respect (beam positioning and placement of any articulation, fingering, etc.). The only remaining difference are inner stems not passing through beams.

- Quarter-tone note names are now available in all the input languages.

```
\language "català"
\relative { do'4 sol' miqb re do1 }
```

- All input languages (`\language` statement) can be entered using their proper UTF-8 spelling (i.e., including special characters. The missing names `català` and `português` are available now in addition to the original names `catalan` and `portugues`.

- Setting `suggestAccidentals` to `'cautionary` turns only cautionary accidentals into `AccidentalSuggestion`s. This can be used to distinguish between facsimile and editorial accidentals.

```
\relative {
  \key d \minor
  d''4 cis8 b? cis2
  \set suggestAccidentals = ##t
  d4 cis8 b? cis2
  \set suggestAccidentals = #'cautionary
  d4 cis8 b? cis2

}
```

- Ottava brackets are now introduced with a single number by default (e.g., '8' or '15'), and printed in bold. A new `ottavationMarkups` property has been introduced to modify that behavior, with several predefined lists of markups available:

```
\relative c'' {
  \ottava #1
  a'2 b
  \ottava #2
  a'2 b
  \bar "||"
  \set Staff.ottavationMarkups = #ottavation-ordinals
  \ottava #1
  a,2 b
  \ottava #2
  a'2 b
  \bar "||"
  \set Staff.ottavationMarkups = #ottavation-simple-ordinals
  \ottava #1
  a,2 b
  \ottava #2
  a'2 b
}
```
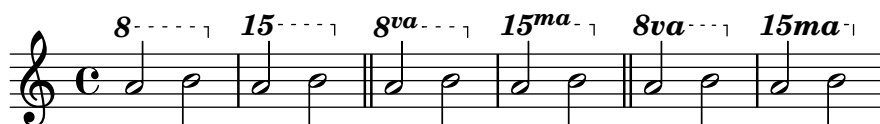
- The command `\ambitusAfter` has been added. It is used to move the ambitus to a different position.

```
\new Staff \with {
  \consists Ambitus_engraver
} \relative {
  \ambitusAfter key-signature
  \key d \major
  es'8 g bes cis d2
}
```
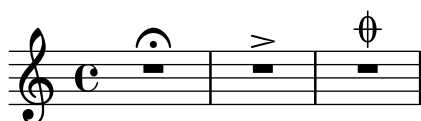
- A very short fermata and Henze variants of long and short fermatas have been added.

```
{
  c'1\veryshortfermata
  c'2\henzeshortfermata c'\henzelongfermata
}
```
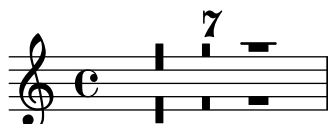
- Fermatas and other articulations can now be added directly to multi-measure rests. Therefore the command `\fermataMarkup` is deprecated.

```
{
  R1\fermata
  R->
  R\coda
}
```

- The new `Merge_mmrest_numbers_engraver` hides duplicate numbers on multi-measure rests.

- Swing and irregular rhythmic patterns may now be applied to music expressions made of regular durations, which may be used to render inequal rhythmic interpretation in MIDI.

```
\include "swing.ly"
<<
  \new Staff \with {
    instrumentName = "ordinary"
  } \repeat unfold 8 c'8
```

```
    \new Staff \with {
      instrumentName = "with swing"
    } \repeat unfold 4 \tripletFeel 8 { c'8 c' }
    \new Staff \with {
      instrumentName = "triplets"
    } \tuplet 3/2 4 \repeat unfold 12 c'8
  >>
```


- Chords may now be automatically inverted or voiced with dropped notes.

```
  \chordmode {
    \dropNote 2 {
      c2:maj7 d:m7
    }
    \invertChords 1 d1:maj7
  }
```


- Some ukulele fretboard-diagrams have been fixed, and new diagrams have also been added.

- Legacy chord naming functions `banter-chord-names` and `jazz-chord-names`, have been removed from the main codebase, as have been the properties `chordNamesExceptionsFull` and `chordNamesExceptionsPartial`. As part of that rewrite, power chords are now included in the default exceptions; they will be printed correctly (with a superscript like all other chords) with no additional tweaks required, thereby removing the need for the `\powerChords` predefined command. Anyone interested in the legacy functions may found a (somewhat working) copy of them in the `chord-names-alternative.ly` snippet.

- The `\partcombine` command, as well as all `partCombine`-prefixed commands, subroutines and property names, are now written with a capital C, such as `\partCombine`, `\partCombineApart` etc. The `\autochange` command is now also capitalized as `\autoChange`.

- The `New_fingering_engraver` will now consider the `X-align-on-main-noteheads` property of the `self-alignment-interface`. If set to true (`##t`), all fingerings oriented up or down will be arranged in a straight column and aligned on the noteheads on the correct side of the stem:
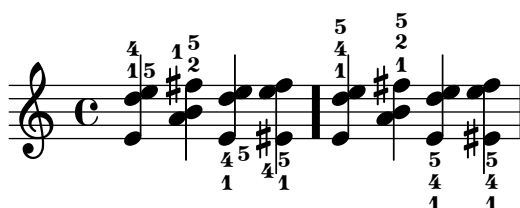
```
  {
    \set fingeringOrientations = #'(up)
    <e'-1 d''-4 e''-5>4 <a'-1 b'-2 fis''-5>
    \set fingeringOrientations = #'(down)
```

```
<e'-1 d''-4 e''-5> <eis'-1 e''-4 fis''-5>
\bar "."
\override Fingering.X-align-on-main-noteheads = ##t
\set fingeringOrientations = #'(up)
<e'-1 d''-4 e''-5> <a'-1 b'-2 fis''-5>
\set fingeringOrientations = #'(down)
<e'-1 d''-4 e''-5> <eis'-1 e''-4 fis''-5>
}
```
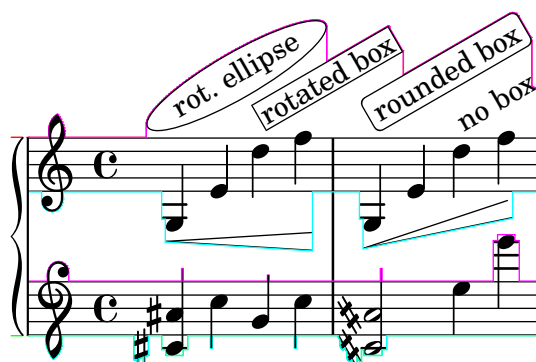

- Skylines will now take account of the `rotation` property of layout objects. Rotating a crescendo hairpin by applying `\override Hairpin.rotation = #'(15 0 0)`, for instance, will now actually have influence on the skylines and thus help to enhance spacing.

- Slight padding added between natural glyphs just touching at the corners in key cancellations.

```
{
  \omit Staff.TimeSignature
  \key ces \major s1 \key c \major s
}
```
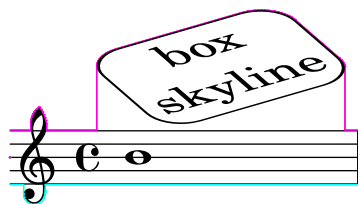

- Skylines of boxes now reflect the actual box outline including rounded corners and rotation.

```
#(ly:set-option 'debug-skylines #t)
{
  b'1^\markup \scale #'(2 . 1)
            \rotate #30
            \override #'(corner-radius . 3)
            \rounded-box \center-column { box skyline }
}
```
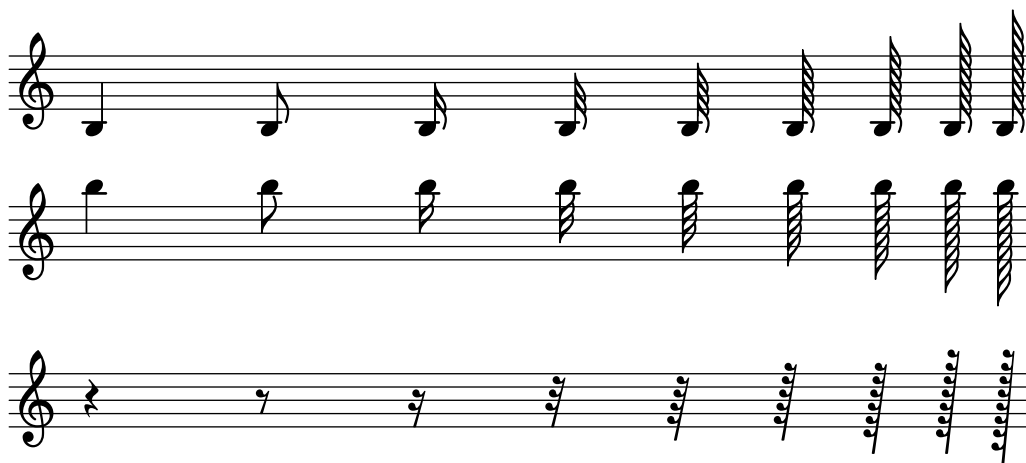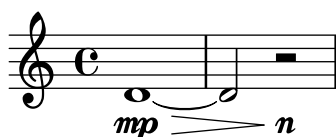
- Two new ornaments have been added.

```
{
  c''2\slashturn c''\haydnturn
}
```


- Font glyphs for 256th, 512th, and 1024th flags and rests have been added.

- A dynamic command `\n` for *niente* has been added.

- Fret-diagrams may now be printed left-handed, setting `handedness` to `LEFT` (as a subproperty of `fret-diagram-details`).

```
\markup
  \center-column {
    "C"
    "(left-handed)"
     \override #`(fret-diagram-details . ((handedness . ,LEFT)))
     \fret-diagram "6-x;5-3-3;4-2-2;3-o;2-1;1-o;"
  }
```
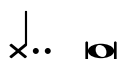

- The `output-classic-framework` procedure and the `-dclip-systems` are now available with the `SVG` backend.

- An argument, `-dcrop`, has been added, formatting SVG and PDF output without margins or page-breaks.
- The `\note` markup command now takes as its first argument a duration instead of a string:

```
\markup {
  \override #'(style . cross) {
    \note {4..} #UP
  }
  \hspace #2
  \note {\breve} #0
}
```


- The default fonts are now those from the URW Core 35 set, version 2.0, replacing the TeX Gyre fonts. Note that the fonts come with a ligature for 'Nr.'; see Section "Fonts explained" in *Notation Reference* for solutions to avoid it locally and globally.
- Using the new options `-dpng-width` and `-dpng-height` it is now possible to specify the pixel size of PNG output images.