

Reviving Type 3 fonts for modern LuaLaTeX documents

TUG 2021

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Fonts in PostScript

Postscript Language Level 3

Type 0 Composite fonts

Type 1 Hinted outline fonts

Type 2 CFF

Type 3 Arbitrary PostScript

Type 9 CID fonts

Type 10 CID fonts

Type 11 CID fonts

Type 14 Chameleon

Type 32 CID fonts

Type 42 TrueType

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Why would you use them?

- Emojis in Unicode since 2010 

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 - CBDT/CBLC: Google, bitmaps
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 - CBDT/CBLC: Google, bitmaps
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 - COLRv0: Microsoft, combine existing characters
 - SVG: Mozilla, Adobe
 - COLRv1: Like v0, but better
- How to add them to PDF?

- Advantages
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- Disadvantages
 - Does not behave like other glyphs
 - Slow
 - No copy and paste support
 - Bad accessibility

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 - Works in all LuaTeX versions
 - Behaves like a glyph in TeX
 - Faster
 - Decent accessibility
- Disadvantages
 - Does not behave like other glyphs in PDF
 - Increases PDF file size
 - Unreliable copy and paste support

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 - Behaves exactly like other glyphs
 - Fast
 - Good accessibility
 - Minimal overhead
 - Good copy and paste

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 - Minimal overhead
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- What about the disadvantages?

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Questions?