

Greek and hyperref

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On 2010-11-05, Heiko Oberdiek wrote in comp.text.tex:

```
\pdfstringdef (converting TeX code to PDF strings for bookmarks)
supports NFSS2 and needs active characters. Encoding stuff based
on the internal font machinery of TeX (letters with catcode 11 or
12, ligatures) does not work, because the strings don't reach TeX's
stomach.
```

The *greek-fontenc* package allows input of Greek characters in a way that “reaches TeX’s stomach” and hence works in both, the main document as well as in PDF strings (e.g. bookmarks). Hyperref’s “puenc.def” font encoding file defines LICR macros for monotonic Greek (Greek characters of the “Greek and Coptic” unicode block).

All utf8-encoded literal Unicode characters work in PDF strings. With *greek-fontenc* and *greek-inputenc*, this enables use of all Greek character in text and PDF strings.

1 Transcription: λογος, λογος

`\textgreek + LGR` transcription or Greek language (babel) + LGR transcription: In the PDF-bookmark are Latin letters instead of Greek ones.

2 Macros: λογος, λογος, λογος

textalpha package with `\textalpha ... \textomega` macros or *alphabetalpha* package with `\alpha ... \Omega` macros. With 8-bit TeX engines (pdflatex), literal Greek Unicode characters are converted to LICR Macros, too.

Works, if the `unicode` or `pdfencoding=auto` option is given to *hyperref*.¹

The generic short macros from the *alphabetalpha* package result in hyperref warnings. See [alphabetalpha-doc.pdf](#) and [alphabetalpha-doc.tex](#) for details and workarounds.

¹With the “xpdf” viewer, Greek letters are not shown in PDF bookmarks.

3 LGR + Macros: λογος

LICR-macro input works also if the font encoding is LGR.

4 Kerning: ΑΥΛ ΑΥΛ ΑΥΛ

Kerning is impossible if the font encoding is switched for every single character. To fix this, wrap the Greek part in a command switching to a font encoding supporting Greek, either `\ensuregreek{...}` (with package *textalpha* or *Babel*) or `\foreignlanguage{greek}{...}` (with *Babel*).

5 Literal Unicode input

The following subsection headings contain all characters from the “Greek and Coptic” and “Greek Extended” Unicode Blocks that are supported by the LGR font encoding.

5.1 ‘,; ’ * ‘Α·Ε’Η’Τ’Ο’Υ’Ω’ΑΒΓΔΕΖΗΘΙΚΑΜΝ

5.2 ΞΟΠΡΣΤΥΦΧΨΩΪΫϘϙϚϛ

Greek and Coptic Unicode block: punctuation and uppercase letters

5.3 άέήίύαβγδεζηθικλμν

5.4 ξοπρςστυφχψωϊϋόύώβθφπϙϚϛϜϝϞϟϠϡϢϣϤϥϦϧϨϩϪϫϬϭϮϯϰϱϲϳϴϵ϶ϷϸϹϺϻϼϽϾϿϿ

Greek and Coptic Unicode block: lowercase letters

