

uspace user manual

v0.06

Václav Haisman

vhaisman@gmail.com

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1 Introduction

This $\text{\LaTeX}$ package gives useful meaning to various Unicode space characters so that they fulfill their intended function when used in $\text{\LaTeX}$ source. It uses `\newunicodechar` macro to do it. Its source is hosted on GitHub in [wilx/project-uspace](https://github.com/wilx/project-uspace) repository.

Here is a list of the implemented characters and their implementations:

ZERO WIDTH SPACE (U+200B)	<code>\hspace{0pt}</code>
NARROW NO-BREAK SPACE (U+202F)	<code>\leavevmode\,</code>
NON-BREAKING SPACE ¹ (U+00A0)	<code>~</code>
SOFT HYPHEN ¹ (U+00AD)	<code>\-</code>
EM QUAD ² (U+2001)	<code>\quad</code>
EM SPACE ² (U+2003)	<code>\quad</code>
EN QUAD ³ (U+2000)	<code>\enskip</code>
EN SPACE ³ (U+2002)	<code>\enskip</code>
THREE-PER-EM SPACE (U+2004)	<code>\hspace{0.33333em}</code>
FOUR-PER-EM SPACE (U+2005)	<code>\hspace{0.25em}</code>
SIX-PER-EM SPACE (U+2006)	<code>\hspace{0.16667em}</code>
FIGURE SPACE (U+2007)	<code>\leavevmode\hphantom{0}</code>
PUNCTUATION SPACE (U+2008)	<code>\hspace{\fontcharwd \font `\",}</code>
THIN SPACE (U+2009)	<code>\leavevmode\allowbreak\,</code>
HAIR SPACE (U+200A)	<code>\hspace{0.08333em}</code>
MEDIUM MATH SPACE (U+205F)	<code>\hspace{0.22222em}</code>

LINE SEPARATOR (U+2028)	<code>\ifvmode\else\newline\fi</code>
NEXT LINE (NEL) (U+0085)	<code>\ifvmode\else\newline\fi</code>
PARAGRAPH SEPARATOR (U+2029)	<code>\csname par\endcsname</code>

The LINE SEPARATOR and NEXT LINE (NEL) characters insert a line break within a paragraph. They are ignored in vertical mode, including before the first paragraph and immediately after a PARAGRAPH SEPARATOR character.

2 History

This package would not be what it is without help and comments from people of [T_EX](#), [L^AT_EX](#) and [Friends](#) StackExchange chat room and the [T_EX.SE](#) site itself.

- v0.06** Ignore LINE SEPARATOR and NEXT LINE (NEL) in vertical mode, including before the first paragraph and immediately after a PARAGRAPH SEPARATOR, instead of raising an error. Their line-breaking behaviour within paragraphs is unchanged.
- v0.05** Add implementation for MEDIUM MATH SPACE.
- v0.04** Add implementation for LINE SEPARATOR, NEXT LINE (NEL) and PARAGRAPH SEPARATOR.
- v0.03** Change implementation for PUNCTUATION SPACE and THIN SPACE to fix issues with line wrapping when using these characters.
- v0.02** Round lengths to five digits after decimal point. List also Unicode code point values beside character names.
- v0.01** First published version of this package.

¹This already defined for pdf $\text{\TeX}$ because we use inputenc with utf8 option when compiling with pdf $\text{\TeX}$, therefore this is only defined for Lua $\text{\TeX}$ and X_Y $\text{\TeX}$.

²According to Unicode, these two are canonically equivalent. See <http://unicode.org/notes/tn5/> for explanation of the term.

³These two are also canonically equivalent. See previous footnote.