

# Font features of Linux Libertine G and Linux Biolinum G<sup>1</sup>

László Németh (nemeth at numbertext dot org)

FSF.hu Foundation, Hungary

Set **extended font names** in LibreOffice/OpenOffice.org to use Graphite font features, eg.

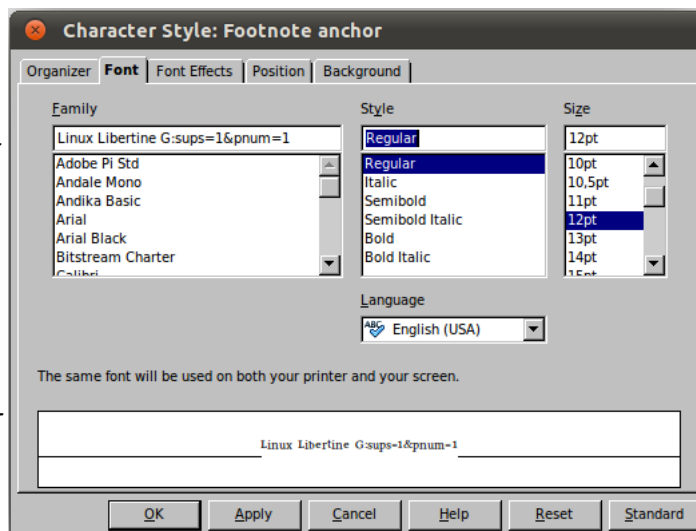
Linux Libertine G:smcp=1 (small caps)

Linux Libertine G:pnum=1&onum=1 (proportional old style numbers)

Example: using **true size variant in footnote anchoring** fix the typical typographical problem of word processors (mixing regular letters with too light, unreadable minimized numbers).

1. Change the character position to *normal* in the default *Footnote anchor* character style,

2. and (see picture) set the font to Linux Libertine G:sups=1&pnum=1 (proportional superiors).



## Ported and extended font features of Linux Libertine in Linux Libertine G

ID	Description	Test input	Result
c2sc	Capitals to Small Capital	Linux Libertine G	Linux Libertine G
case	Case-Sensitive Forms	(THE YEAR 2010)	(THE YEAR 2010)
cpsp	Capital spacing	LINUX LIBERTINE	LINUX LIBERTINE
dlig	Discretionary Ligatures	ck, ch, tz; ij	ck, ch, tȝ; <sup>1</sup> ij <sup>2</sup>
fina	Terminal Forms	σσσσσ	σσσσς
frac	Diagonal Fractions (value=1) Nut Fractions (value=2)	1/2, 1/3, 2/3, 1/4, 3/4, 1/99 1/2, 1/72, 1/256, 276/43	½, ⅓, ⅔, ¼, ¾, ⅑ ½, ⅓, ⅔, ¼, ¾, ⅑
hlig	Historic Ligatures	ct, st	cṭ, sṭ
liga <sup>3</sup>	Standard Ligatures	fb, ff, fh, ffh, fi, ffi, fj, ffj, fk, ffk, fl, ffl, ft, fft, fh, fl, fs, fl, ft, tt, Qu, QU, Th, °C °F, ..., !!, !?, ?!, ??, gf, gfi, gj, gy	fb, ff, fh, ffh, fi, ffi, fj, ffj, fk, ffk, fl, ffl, ft, fft, fh, fl, fs, fl, ft, tt, Qu, QU, Th, °C °F, ..., !!, !?, ?!, ??, gf, gfi, gj, gy <sup>4</sup>
locl	Localized Forms in Latin	ș, Ș, ț, Ț, ș, Ț	ș, Ș, ț, Ț, ș, Ț <sup>5</sup>
nalt	Alternate Annotation Forms	(1)–(20)	①–⑳

<sup>1</sup>Linux Libertine G (<http://www.numbertext.org/linux>) based on Linux Libertine (<http://linuxlibertine.sf.net>)

<sup>2</sup>German ligatures: ck, ch, tz. Note: these are default ligatures in the italic font variant.

<sup>3</sup>Dutch ligature.

<sup>4</sup>Default feature.

<sup>5</sup>Cursive gy in Hungarian

<sup>6</sup>Only in Romanian texts.

onum	Oldstyle Figures	1 234 567 890	1 234 567 890
pnum	Proportional Numbers	1 111 111 111	111111111
salt	Stylistic Alternatives	&, h, ß, θ, κ, φ, h, A	℘, h, ß, θ, κ, φ, h, A
sinf	Scientific Inferiors	1 234 567 890abcdefghij	1 234 567 890abcdefghij
smcp	Lowercase to Small Capitals	abcdefghijklmnoqp...	ABCDEFGHIJKLMNOQP...
ss01 <sup>6</sup>	Style Set 1	Ä, Ö, Ü	Ä, Ö, Ü
ss02	Style Set 2	J, K, R	Ĵ, K, R
ss03	Style Set 3	ß, ß, ß	ss, SS, ss
ss04	Style Set 4	℘	℘
ss05	Style Set 5	W	W
sup	Superscript	1 234 567 890abcdefghij	1234567890abcdefghij
zero	Slashed Zero	0	ø
ingl	Single Substitution	i, j	ı, J

### Extra font features of Linux Libertine G

ID	Description	Test input	Result
algn <sup>7</sup>	Right aligned numbers or footnote numbering signs (1=1em)	1            ‡	1            ‡
		10           §	10           §
		100        **	100        **
	Value 2=2, 3=3, 4=4 chars	2=1, 3=1, 4=1	2= 1, 3= 1, 4= 1
arti	Definitive article	1, 2, 3, 4, 5, ...	az 1, a 2, a 3, a 4, az 5, ... <sup>8</sup>
caps	Capitalized forms (1=first letter, 2=all caps (Note: <b>case</b> and <b>cpsp</b> are activated with this option), 3=title caps, 4=title caps 2)	hundred fifty-one	Hundred fifty-one HUNDRED FIFTY-ONE Hundred Fifty-One Hundred Fifty-one
circ	Enclosed alphanumerics (1=circled, 2=parenthesized, 3=white on black, 4=double circled)	1, 2, 3, 4, 5, ...	1: ①, ②, ③, ④, ⑤, ... 2: (1), (2), (3), (4), (5), ... 3: ❶, ❷, ❸, ❹, ❺, ... 4: ①, ②, ③, ④, ⑤, ...
dash	N-dash correction	Item - item item -, item - Item	Item – item item –, item – Item
dbls	Double-stroke letters	A Big CD	A Big CD
foot	Footnote numbering signs (1=*, †, ‡ <sup>9</sup> , 2=*, **, ***)	1, 2, 3, 4, 5, 6, ...	*, †, ‡, §, **, ††, ... *, **, ***, †, ††, †††

<sup>6</sup>Default feature, except German languages.

<sup>7</sup>Add missing feature for OpenOffice.org, see [Issue 18326](#) and [Issue 33553](#).

<sup>8</sup>Only in Hungarian texts.

<sup>9</sup>In Hungarian texts foot=1 results \*, \*\*, \*\*\*, too.

frsp <sup>10</sup>	French spacing	Go! Go? Go: Go; «Go»	Go! Go? Go: Go; «Go»
grkn	Numbers to Greek small letters	1, 2, 3, 4, 5, 6, 7, 8, 9, ...	α, β, γ, δ, ε, ζ, η, θ, ι, ...
hang	Hanging punctuation, hang=1	Co-operate, co-operate, operate, co-operate, co-operate, operate June–July, fine –really long–em dash. So “quotation” “marks” & punctuation. An exclamation mark! More question marks?	...Co-operate, co-operate, operate, co-operate, co-operate, operate June–July, final –really long–em dash. So “quotation” “marks” and punctuation. An exclamation mark! More question marks?
	Only single hyphens, hang=2 <sup>11</sup>	A hyphenation is a hyphenation.	A hyphenation is a hyphenation.
itlc (not yet in LibO v3.4)	<i>Italic correction, 1 = both side corrections on boundary spaces</i>	<i>a leaf louse</i>	<i>a leaf louse</i>
	<i>Value 2 = as above, but always right side correction</i>	l	l
ligc	Ligature correction at hyphenation (default in Hungarian)	„Egy fi- nom király- fi volna jó.”	„Egy fi- nom király- fi volna jó.”
lith	Extra switch for “Th” ligature	Thomas Quinn	Thomas Quinn
litt	Extra switch for “tt” ligature	matter	matter
minu <sup>12</sup>	True minus sign	-1	-1
name <sup>13</sup>	Number to number names (1=cardinal, 2=ordinal, 3=ordinal abbreviation)	99	1: ninety-nine 2: ninety-ninth 3: 99th
	<b>Warning! New Graphite 2 engine of LibreOffice 3.4/3.5 is not stable with feature name. Big numbers (&gt;99) can crash LibreOffice!</b>		
nfsp	Non French spacing: greater spaces between sentences.	One. Two? Ten! One.	One. Two? Ten! One.
para	Regular parenthesis in Italic	<i>Normal (slanted) signs</i>	<i>Normal (slanted) signs</i>
quot <sup>14</sup>	Quotation mark correction	"item"	“item”
sa01-	sa99 for single salt items	<i>a&amp;h</i>	<i>a&amp;h</i>

<sup>10</sup>1/8 em spacing. Default in French and Hungarian texts.

<sup>11</sup>Graphite integration hasn't supported real line end detection, yet. All character formatting boundaries can result hanging punctuation, so hang=2 limits it for hyphens with two boundaries, like hyphens added by automatic hyphenation.

<sup>12</sup>Default feature.

<sup>13</sup>It's dependent from the language of the text. Warning! Large numbers hasn't supported by LibO 3.4, yet.

<sup>14</sup>It's dependent from the language of the text.

<b>texm</b>	TeX-mode	$a^2, a_n^*, SO_{4^2} \rightarrow \sum_{k=1}^n \alpha_i$	$a^2, a_n^*, SO_4^2 \rightarrow \sum_{k=1}^n \alpha_i$
<b>thou</b> <sup>15</sup>	Thousand separation value=1: from 10 000 value=2: from 1000 for tables	12345 1234	12 345 1234 (thou = 1) 1 234 (thou = 2)
<b>vari</b>	Variant	1st one hundred and one	1 <sup>st</sup> one hundred one

### Supported languages of feature name<sup>16</sup>

Language	Code	Id	Example (spelling out of the Id)
Afrikaans	AFK	27	sewe-en-twintig
Catalan	CAT	37	trenta-set
Czech	CSY	42	čtyřicet dva
Danish	DAN	45	femogfyrre
Dutch	NLD	31	eenendertig
English	ENG	1	one
Esperanto	EO	200	ducent <sup>17</sup>
German	DEU	49	neunundvierzig
Greek	ELL	30	триάντα
Finnish	FIN	35	kolmekymmentäviisi
French	FRA	33	trente-trois
Hungarian	HUN	36	harminchat
Italian	ITA	39	trentanove
Luxembourgian	LBZ	201	zweehonnerteent
Polish	PLK	48	czterdzieści osiem
Portuguese	PTG	3	três
Romanian	ROM	40	patruzeci
Russian	RUS	7	семь
Serbian	SRPL	52	pedeset dva
Serbian (Cyrillic)	SRP	51	педесет један
Slovenian	SLV	50	petdeset
Spanish	ESP	34	treinta y cuatro
Swedish	SVE	46	fyrtiosex
Turkish	TRK	90	doksan

<sup>15</sup>Default feature (thou=1, thousand separation from 10 000).

<sup>16</sup>Multilingual solution for [OpenOffice.org Issue 92730](http://www.numbertext.org), based on the data of <http://www.numbertext.org>.

<sup>17</sup>Only with explicit language code "Ing=200".

## Symbols of TeX-mode

<code>\alpha</code> $\alpha$	<code>\Delta</code> $\Delta$	<code>\not\ni</code> $\ni \not$	<code>\Im</code> $\Im$
<code>\beta</code> $\beta$	<code>\Theta</code> $\Theta$	<code>\subset</code> $\subset$	<code>\ell</code> $\ell$
<code>\gamma</code> $\gamma$	<code>\Lamda</code> $\Lambda$	<code>\supset</code> $\supset$	<code>\aleph</code> $\aleph$
<code>\delta</code> $\delta$	<code>\Xi</code> $\Xi$	<code>\not\subset</code> $\not\subset$	<code>\emptyset</code> $\emptyset$
<code>\epsilon</code> $\epsilon$	<code>\Pi</code> $\Pi$	<code>\not\supset</code> $\not\supset$	<code>\forall</code> $\forall$
<code>\varepsilon</code> $\varepsilon$	<code>\Sigma</code> $\Sigma$	<code>\sim</code> $\sim$	<code>\exists</code> $\exists$
<code>\zeta</code> $\zeta$	<code>\Upsilon</code> $\Upsilon$	<code>\nsim</code> $\nsim$	<code>\triangle</code> $\triangle$
<code>\eta</code> $\eta$	<code>\Phi</code> $\Phi$	<code>\approx</code> $\approx$	<code>\infty</code> $\infty$
<code>\theta</code> $\theta$	<code>\Psi</code> $\Psi$	<code>\mid</code> $\mid$	<code>\partial</code> $\partial$
<code>\vartheta</code> $\vartheta$	<code>\Omega</code> $\Omega$	<code>\nmid</code> $\nmid$	<code>\angle</code> $\angle$
<code>\iota</code> $\iota$		<code>\ </code> $\ $	<code>\perp</code> $\perp$
<code>\kappa</code> $\kappa$	<code>\pm</code> $\pm$	<code>\not&lt;</code> $\not<$	
<code>\lamda</code> $\lambda$	<code>\mp</code> $\mp$	<code>\not&gt;</code> $\not>$	
<code>\mu</code> $\mu$	<code>\times</code> $\times$	<code>\parallel</code> $\parallel$	<code>\surd</code> $\surd$
<code>\nu</code> $\nu$	<code>\setminus</code> $\setminus$	<code>\not\ </code> $\not\ $	<code>\sum</code> $\Sigma$
<code>\xi</code> $\xi$	<code>\cap</code> $\cap$	<code>\nparallel</code> $\nparallel$	<code>\int</code> $\int$
<code>\pi</code> $\pi$	<code>\cup</code> $\cup$	<code>\gets</code> $\leftarrow$	<code>\iint</code> $\iint$
<code>\varpi</code> $\varpi$	<code>\wedge</code> $\wedge$	<code>\leftarrow</code> $\leftarrow$	<code>\iiint</code> $\iiint$
<code>\rho</code> $\rho$	<code>\vee</code> $\vee$	<code>\uparrow</code> $\uparrow$	<code>\oint</code> $\oint$
<code>\varrho</code> $\varrho$	<code>\leq</code> $\leq$	<code>\rightarrow</code> $\rightarrow$	<code>\prod</code> $\prod$
<code>\varsigma</code> $\varsigma$	<code>\geq</code> $\geq$	<code>\to</code> $\rightarrow$	<code>\prime</code> $'$
<code>\sigma</code> $\sigma$	<code>\leq</code> $\leq$	<code>\downarrow</code> $\downarrow$	
<code>\tau</code> $\tau$	<code>\geq</code> $\geq$	<code>\leftrightarrow</code> $\leftrightarrow$	<code>\mathbb{C}</code> $\mathbb{C}$
<code>\upsilon</code> $\upsilon$	<code>\not\leq</code> $\not\leq$	<code>\Leftarrow</code> $\Leftarrow$	<code>\mathbb{H}</code> $\mathbb{H}$
<code>\phi</code> $\phi$	<code>\not\geq</code> $\not\geq$	<code>\Uparrow</code> $\Uparrow$	<code>\mathbb{N}</code> $\mathbb{N}$
<code>\varphi</code> $\varphi$	<code>\ll</code> $\ll$	<code>\Rightarrow</code> $\Rightarrow$	<code>\mathbb{P}</code> $\mathbb{P}$
<code>\chi</code> $\chi$	<code>\gg</code> $\gg$	<code>\Downarrow</code> $\Downarrow$	<code>\mathbb{Q}</code> $\mathbb{Q}$
<code>\psi</code> $\psi$	<code>\neq</code> $\neq$	<code>\Leftrightarrow</code> $\Leftrightarrow$	<code>\mathbb{R}</code> $\mathbb{R}$
<code>\omega</code> $\omega$	<code>\in</code> $\in$		<code>\mathbb{Z}</code> $\mathbb{Z}$
	<code>\notin</code> $\notin$	<code>\hbar</code> $\hbar$	
<code>\Gamma</code> $\Gamma$	<code>\ni</code> $\ni$	<code>\Re</code> $\Re$	