

Font Features for Doulos SIL

When Doulos SIL is used in applications that support Graphite, and that provide an appropriate user interface, various user-controllable font features are available that allow access to alternatively-designed glyphs that might be preferable for use in some contexts. In the Graphite version of OpenOffice 3.0¹ the font features can be turned on by choosing the font (ie Doulos SIL), followed by a colon, followed by the feature ID, and then followed by the feature setting. So, for example, if the Uppercase eng alternate “Capital N with tail” is desired, the font selection would be “Doulos SIL:1024=2”. If you wish to apply two (or more) features, you can separate them with an “&”. Thus, “Doulos SIL:1024=2&1058=1” would apply “Capital N with tail” plus the “Small capitals” feature.

Some of these font features are also available in AAT applications on Mac OS X. A glyph palette is available for accessing the alternate glyphs in some applications such as Adobe InDesign.

Ideally the selection of these font features is done in application programs, but many applications do not yet support this functionality. In response to this lack of support for features, a program called TypeTuner² allows users to create derivative fonts with their own feature settings based on the needs of a local project or region.

In the table below, upper and lowercase pairs are shown (if they exist), even if the feature only affects one or the other. This is in order to see how the whole pair looks when a feature is applied. The following font features are available in Doulos SIL:

Feature Name	Feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes ³
Language specific					
Vietnamese-style diacritics (U+1EA4 U+1EA5 U+1EA6 U+1EA7 U+1EA8 U+1EA9 U+1EAA U+1EAB U+1EAE U+1EAF U+1EB0 U+1EB1 U+1EB2 U+1EB3 U+1EB4 U+1EB5 U+1EBE U+1EBF U+1EC0 U+1EC1 U+1EC2 U+1EC3 U+1EC4 U+1EC5 U+1ED0 U+1ED1 U+1ED2 U+1ED3 U+1ED4 U+1ED5 U+1ED6 U+1ED7)	1029	0=False	Ấấ Ẫẫ Ằằ Ẵẵ Ấấ Ằằ Ằằ Ẵẵ Ếế Ềề Ềề Ễễ Ớớ Ồồ Ồồ Ỗỗ	ẤẤ ẪẪ ẰẰ ẴẴ ẤẤ ẰẰ ẰẰ ẴẴ ẾẾ ỀỀ ỀỀ ỄỄ ỚỚ ỒỒ ỒỒ ỖỖ	R, O
		1=True	Ấấ Ẫẫ Ằằ Ẵẵ Ấấ Ằằ Ằằ Ẵẵ Ếế Ềề Ềề Ễễ Ớớ Ồồ Ồồ Ỗỗ	ẤẤ ẪẪ ẰẰ ẴẴ ẤẤ ẰẰ ẰẰ ẴẴ ẾẾ ỀỀ ỀỀ ỄỄ ỚỚ ỒỒ ỒỒ ỖỖ	
Romanian-style diacritics (U+015E U+015F U+0162 U+0163)	1041	0=False	Șș Țț	Șș Țț	R, O
		1=True	Șș Țț	Șș Țț	

¹ http://scripts.sil.org/OOo_20_graphite

² <http://scripts.sil.org/TypeTuner>

³ **TypeTuner legend:** **R**=glyphs are Reencoded (will work with dumb rendering); **O**=OpenType rules are activated; **G**=Graphite-only feature (All features are available for Graphite applications.)

Feature Name	Feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Chinantec tones (U+02CB U+02C8 U+02C9 U+02CA)	1057	0=False	˘ ˘ ˘ ˘	Small capitals are not available as there is no uppercase equivalent	R
		1=True	˘ ˘ ˘ ˘		
Bridging diacritics (U+0308 – used with “L” and “l”, U+0311, U+0361 and U+035F – used with “O”, “o”, “U” and “u”.)	1052	0=False	Naso: ÌÌ ìì Ìì Konai: ÔU Ôu ôu ÔU Ôu ôu ÔŪ Ōu ōu ŌŪ Ōu ōu	Small capitals do not work properly	G
		1=True	Naso: L̂L̂ l̂l̂ L̂l̂ Konai: Ô̂U Ô̂u ô̂u Ô̂U Ô̂u ô̂u Ô̂Ū Ō̂u ō̂u Ō̂Ū Ō̂u ō̂u		
Cyrillic ⁴					
Mongolian-style Cyrillic E (U+042D U+044D)	1027	0=False	ᠡᠡ	ᠡᠡ	R
		1=True	ᠡᠡ	ᠡᠡ	
Combining breve Cyrillic form (U+0306)	1028	0=False	anything with ͂ (ӇӇ)	anything with ͂ (ӇӇ)	R (no effect if data is NFC)
		1=True	anything with ͂ (ӇӇ)	anything with ͂ (ӇӇ)	
Cyrillic shha alternate (U+04BB)	1056	0=False	hh	hh	R
		1=True	ᠬᠬ	ᠬᠬ	

⁴ There are also Cyrillic characters affected by the “Slant italic specials”, “Capital Ezh alternates”, “Small capitals” and “Show deprecated PUA” features. Some languages may also use the “Modifier apostrophe alternates.”

Feature Name	Feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Tone-related					
Tone numbers (U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712 U+A713 U+A714 U+A715 U+A716)	1026	0=False	ἁ ἑ ἓ ἕ ἗ Ἑ ἓ ἕ ἗ Ἑ ἓ ἕ ἗ Ἑ	Small capitals are not available as there is no uppercase equivalent	G
		1=True	5 4 3 2 1 5 4 3 2 1		
Hide tone contour staves (U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712 U+A713 U+A714 U+A715 U+A716)	1050	0=False	ἁ ἑ ἓ ἕ ἗ Ἑ ἓ ἕ ἗ Ἑ (Λ Λ)	Small capitals are not available as there is no uppercase equivalent	G
		1=True	ἁ ἑ ἓ ἕ ἗ Ἑ ἓ ἕ ἗ Ἑ (Λ Λ)		
9-level pitches (U+F1F1 U+F1F2 U+F1F3 U+F1F4 U+F1F5 U+F1F6 U+F1F7 U+F1F8 U+F1F9)	1062	0=Ligated	Ḃ Ḅ Ḇ Ḉ Ṁ Ṃ Ṅ Ṇ Ṙ Ṛ Ṝ Ṟ Ṙ Ṛ Ṝ Ṟ	Small capitals are not available as there is no uppercase equivalent	G
		1=Show tramlines	Ḃ Ḅ Ḇ Ḉ Ṁ Ṃ Ṅ Ṇ Ṙ Ṛ Ṝ Ṟ Ṙ Ṛ Ṝ Ṟ		
		2=Non-ligated	Ḃ Ḅ Ḇ Ḉ Ṁ Ṃ Ṅ Ṇ Ṙ Ṛ Ṝ Ṟ Ṙ Ṛ Ṝ Ṟ		
		3=Show tramlines, non-ligated	Ḃ Ḅ Ḇ Ḉ Ṁ Ṃ Ṅ Ṇ Ṙ Ṛ Ṝ Ṟ Ṙ Ṛ Ṝ Ṟ		
Miscellaneous					
Literacy alternates (U+0061 U+00E0 U+00E1 U+00E2 U+00E3 U+00E4 U+00E5 U+0101 U+0103 U+0105 U+01CE U+01DF U+01E1 U+01FB U+0201 U+0203 U+0227 U+1E01 U+1E9A U+1EA1 U+1EA3 U+1EA5 U+1EA7 U+1EA9 U+1EAB U+1EAD U+1EAF U+1EB1 U+1EB3 U+1EB5 U+1EB7 U+2C65 U+0067 U+011D U+011F U+0121 U+0123 U+01E7 U+01F5 U+01E5 U+1E21)	1032	0=False	Aa Àà Áá Ââ Ãã Ää Åå Āā Ăă Aȧ Ăă Āā Āā Ấấ Ẫẫ Ầầ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ầầ Ầầ Ẫẫ Ậậ Ấấ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Êê Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ	Aa Àà Áá Ââ Ãã Ää Åå Āā Ăă Aȧ Ăă Āā Āā Ấấ Ẫẫ Ầầ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ầầ Ầầ Ẫẫ Ậậ Ấấ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Êê Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ	R
		1=True	Aa Àà Áá Ââ Ãã Ää Åå Āā Ăă Aȧ Ăă Āā Āā Ấấ Ẫẫ Ầầ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ầầ Ầầ Ẫẫ Ậậ Ấấ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ææ Ğğ Êê Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ	Aa Àà Áá Ââ Ãã Ää Åå Āā Ăă Aȧ Ăă Āā Āā Ấấ Ẫẫ Ầầ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ầầ Ầầ Ẫẫ Ậậ Ấấ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ẫẫ Ææ Ğğ Êê Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ Ğğ	

Feature Name	Feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Barred-bowl forms (U+0111 U+0180 U+01E5)	1031	0=False	Đđ Bḃ Gḡ	ĐĐ BḂ GḠ	R
		1=True	Đđ Bḃ Gḡ	ĐĐ BḂ GḠ	
Non-European caron alternates (U+0165 U+010F U+013D U+013E)	1063	0=False	Ťť Ďď Ľľ	ŤŤ ĎĎ ĽĽ	R
		1=True	Ťť Ďď Ľľ	ŤŤ ĎĎ ĽĽ	
Ogonek alternate (U+0328 U+0104 U+0105 U+0118 U+0119 U+012E U+012F U+0172 U+0173 U+01EA U+01EB U+01EC U+01ED)	1043	0=Curved	anything with ę (Ąą Ęę Ĳķ Ųų Qq Ūū)	anything with ę (ĄĄ ĘĘ ĲĲ ŲŲ QQ ŪŪ)	R
		1=Straight	anything with ę (Ąą Ęę Ĳķ Ųų Qq Ūū)	anything with ę (ĄĄ ĘĘ ĲĲ ŲŲ QQ ŪŪ)	
Capital B-hook alternate (U+0181)	1064	0=False	ḂḂ	ḂḂ	R
		1=True	ḂḂ	ḂḂ	
Rams horn alternates (U+0264)	1025	0=Small bowl	ϣ	Small capitals are not available as there is no uppercase equivalent	R
		1=Large bowl	ϣ		
		2=Small gamma	ϣ		
Capital H-stroke alternate (U+0126)	1038	0=Horizontal stroke	ḢḢ	ḢḢ	R
		1=Vertical stroke	ḢḢ	ḢḢ	
J stroke hook alternate (U+0284)	1049	0=No serif	ƒ	Small capitals are not available as there is no uppercase equivalent	R
		1=Top serif	ƒ		

Feature Name	Feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Uppercase Eng alternates (U+014A)	1024	0= Large eng with descender	Ŋŋ	Ŋŋ	R
		1=Large eng on baseline	Ɔŋ	Ɔŋ	
		2=Capital N with tail	Ŋŋ	ŊŊ	
		3=Large eng with short stem	Ɔŋ	Ɔŋ	
Capital N-left-hook alternate (U+019D)	1035	0=Uppercase style	Ŋŋ	ŊŊ	R
		1=Lowercase style	Ŋŋ	Ŋŋ	
Open o alternate (U+0186 U+0254 U+1D10 U+1D53 U+1D97)	1059	0=Bottom serif	Ɔ ɔ ɔ ɔ ɔ	Ɔ ɔ ɔ ɔ ɔ	R
		1=Top serif	Ɔ ɔ ɔ ɔ ɔ	Ɔ ɔ ɔ ɔ ɔ	
Small p-hook alternate (U+01A5)	1040	0=Left hook	ƆƆ	ƆƆ	R
		1=Right hook	ƆƆ	ƆƆ	
Capital R-tail alternate (U+2C64)	1039	0=Uppercase style	Ŕŕ	ŔŔ	R
		1=Lowercase style	Ŕŕ	Ŕŕ	
Capital T-hook alternate (U+01AC)	1037	0=Left hook	Ŧŧ	ŦŦ	R
		1=Right hook	Ŧŧ	ŦŦ	
V-hook alternates (U+01B2 U+028B)	1033	0=Curved	ƆƆ	ƆƆ	R
		1=Straight left	ƆƆ	ƆƆ	
		2=Straight left high hook	ƆƆ	ƆƆ	

Feature Name	Feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Capital Y-hook alternate (U+01B3)	1034	1=Right hook	Ÿŷ	ŸŸ	R
		0=Left hook	Ŷŷ	ŶŶ	
Small ezh-curl alternate (U+0293)	1036	0=Small bowl	Ʒ	Small capitals are not available as there is no uppercase equivalent	
		1=Large bowl	Ʒ		
Capital Ezh alternates (U+01B7 U+04E0)	1042	0=Normal	Ʒ Ʒ	Ʒ Ʒ	R
		1=Reversed sigma	Ʒ Ʒ	Ʒ Ʒ	
OU alternates (U+0222 U+0223)	1045	0=Closed	88	88	R
		1=Open	88	88	
Modifier apostrophe alternates (U+02BC U+A78B U=A78C)	1044	0=Small	‚ Ȼ	Small capitals are not available	R
		1=Large	‚ Ȼ		
Modifier colon alternate (U+A789)	1047	0=Tight	:	Small capitals are not available as there is no uppercase equivalent	R
		1=Wide	:		
Empty set alternates (U+2205)	1046	0=Circle	∅	Small capitals are not available as there is no uppercase equivalent	R
		1=Zero	∅		
Show invisible characters (U+00AD U+034F U+200B U+200C U+200D U+200E U+200F U+202A U+202B U+202C U+202D U+202E U+2060 U+2061 U+2062 U+2063 U+FE00 U+FE01 U+FE02 U+FE03 U+FE04 U+FE05 U+FE06 U+FE07 U+FE08 U+FE09 U+FE0A U+FE0B U+FE0C U+FE0D U+FE0E U+FE0F U+FEFF)	1030	0=False		Small capitals are not available as there is no uppercase equivalent	R
		1=True	<div> <div>CGJ</div> <div>ZWJ</div> <div>ZWJ</div> <div>LRM</div> <div>RLM</div> <div>LRE</div> <div>RLE</div> <div>PDF</div> <div>LRO</div> <div>RLO</div> </div> <div> <div>VS8</div> <div>VS7</div> <div>VS6</div> <div>VS5</div> <div>VS4</div> <div>VS3</div> <div>VS2</div> <div>VS1</div> <div>,</div> <div>X</div> <div>F()</div> </div> <div> <div>VS16</div> <div>VS15</div> <div>VS14</div> <div>VS13</div> <div>VS12</div> <div>VS11</div> <div>VS10</div> <div>VS9</div> <div>ZWNBSP</div> </div>		

[illegible]

Feature Name	Feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
			<p>ſ Ț ħ M P ꞥ v ʋ j J k K z Z ' l u J j X x X x Ɛ ε</p>		
		3=Through Unicode 5.0	<p>l l o o o o o o o o m m n n s s i i z z z z t t i i o o s s g g h h i i e e w w x x z z s s e e u u l l w w n n o o s s t t e e z z f f o o a a i i i i i i i i i i i i l l . . ' ' . . ' ' . . ^ ^ : = Q B c d f h p q Q r R R j e A w W s ' r e e h h b d f g k l m n p r s t v x z a a e e s s o i p u e d b o p i y y e 4 b d f m m p p a a s s f z u e ſ Ț ħ M P ꞥ v ʋ j J k K z Z ' l u J j X x X x Ɛ ε</p>		
		4=Through Unicode 5.1	<p>l l o o o o o o o o m m n n s s i i z z z z h h i i o o s s g g h h i i e e w w x x z z s s e e u u l l w w n n o o s s t t e e z z f f o o a a i i i i i i i i i i i i l l . . ' ' . . ' ' . . ^ ^ : = Q B c d f h p q Q r R R j e A w W s ' r e e h h b d f g k l m n p r s t v x z a a e e s s o i p u e d b o p i y y e g b d f m m p p a a s s f z u e ſ Ț ħ M P ꞥ v ʋ j J k K z Z ' l u J j X x X x Ɛ ε</p>		
Other feature interactions					
Vietnamese-style diacritics + Literacy alternates	1029 + 1032	True	<p>Ăă Àà Ằằ Ẵẵ Ắắ Ằằ Ằằ Ằằ Ếế Ềề Ểể Ễễ Ớớ Ồồ Ỗỗ Ỗỗ</p>	<p>Ắắ Àà Ằằ Ẵẵ Ắắ Ằằ Ằằ Ằằ Ểể Ềề Ềề Ểể Ễễ Ớớ Ồồ Ỗỗ Ỗỗ</p>	R