

# Scheherazade New Font Features

The Scheherazade New font includes a number of optional features that provide alternative rendering that might be preferable for use in some contexts. The chart below enumerates the details of these features. Whether these features are available to users will depend on both the application and the rendering technology (Graphite or OpenType) being used. Most features are available in both Graphite and OpenType, though there may be minor differences in their implementation.

## Features

When Scheherazade New is used in applications that support Graphite or OpenType, and that provide an appropriate user interface, various user-controllable font features are available allowing access to alternatively-designed glyphs.







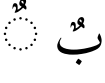

The table below gives a visual representation of the featured character glyphs in the font. Note that within each feature the top-most value is the default. The other lines show the first alternate and, if available, the second or third alternates.

## List of Graphite features and OpenType Character Variants

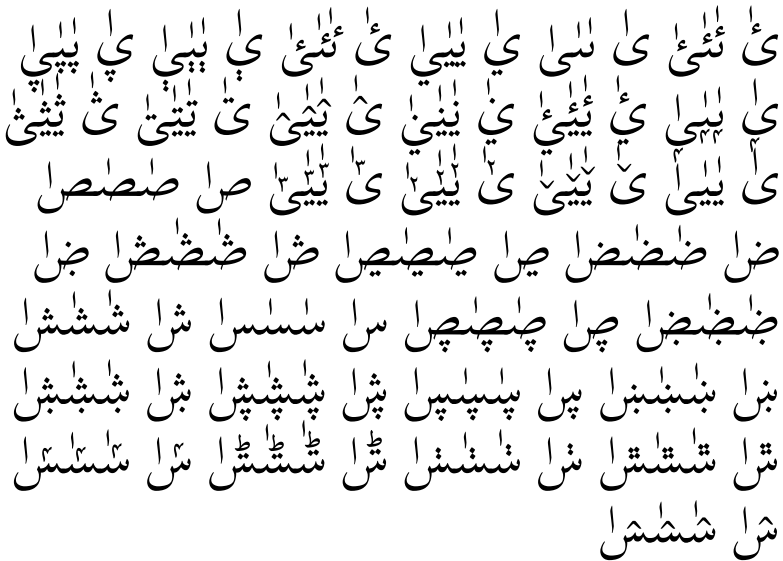




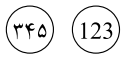
Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes <sup>1</sup>
<b>Dal</b> (U+062F, U+0630, U+0688, U+0689, U+068A, U+068B, U+068C, U+068D, U+068E, U+068F, U+0690, U+06EE, U+0759, U+075A, U+08AE)	cv12	0=Standard	د ذ ڈ دھ بے تے ثے ظ ح پ	G,O,T
		1=Alternate XeTeX: "Scheherazade New/GR:Dal=Alternate"	د ذ ڈ دھ بے تے ثے ظ ح پ	
<b>Meem</b> (U+0645, U+0765, U+0766, U+08A7)	cv44	0=Standard	م مم مہ منہ مہمبہ مقثم	G,O,T
		1=Sindhi-style XeTeX: "Scheherazade New/GR:Meem=Sindhi-style"	م مم مہ منہ مہمبہ مقثم	

1 **TypeTuner legend:** **G**=Implemented in Graphite; **O**=Implemented in OpenType; **T**=Implemented in TypeTuner (command line version: <http://scripts.sil.org/TypeTuner> and web-based version: <http://scripts.sil.org/ttw>) .

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
<b>Heh</b> (U+0647)	cv48	0=Standard	ه ههه	G,O,T
		3=Kurdish-style XeTeX: "Scheherazade New/GR:Heh=Kurdish-style"	ه ههه	
		1=Sindhi-style XeTeX: "Scheherazade New/GR:Heh=Sindhi-style"	ه ههه	
		2=Urdu-style XeTeX: "Scheherazade New/GR:Heh=Urdu-style"	ه بهه	
<b>Arabic U</b> (U+0677, U+06C7)	cv50	0=Standard	ؤ وؤ	G,O,T
		1=Filled XeTeX: "Scheherazade New/GR:Arabic U=Filled"	ؤ وؤ	
<b>Maddah</b> (U+0622, U+0627+U+0653, U+0653)	cv60	0=Small	آ آآ	G,O,T
		1=Large XeTeX: "Scheherazade New/GR:Maddah=Large"	آ آآ	

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
<b>Shadda+kasra placement</b> (U+064D, U+0650 with U+0651)	cv62	0=Default (Raised)		G,O,T
		1=Lowered XeTeX: "Scheherazade New/GR:Shadda+kasra placement=Lowered"		
		2=Raised		
<b>Damma</b> (U+064F)	cv70	0=Standard		G,O,T
		1=Filled XeTeX: "Scheherazade New/GR:Damma=Short"		
		2=Short XeTeX: "Scheherazade New/GR:Damma=Filled"		
<b>Dammatan</b> (U+064C)	cv72	0=Standard		G,O,T
		1=Six-nine XeTeX: "Scheherazade New/GR:Dammatan=Six-nine"		

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
<b>Inverted Damma</b> (U+0657)	cv74	0=Standard (Filled)	بْ	G,O,T
		1=Hollow XeTeX: "Scheherazade New/GR:Inverted Damma=Hollow"	بْ	
		2=Filled XeTeX: "Scheherazade New/GR:Inverted Damma=Filled"	بْ	
<b>Superscript Alef</b> (U+0670 on all yeh, sad and seen-like characters U+0649 U+064A U+06D0 U+06D1 U+0777 U+06CC U+0635 U+0636 U+069D U+069E U+06FB U+08AF U+0633 U+0634 U+069A U+069B U+069C U+06FA U+075C U+076D U+0770 U+077D U+077E)	cv76	0=Small	<p> يْ ئْ اْ لْ يْ يْ يْ اْ ئْ اْ بْ بْ يْ پْ پْ  يْ پْ پْ يْ يْ يْ يْ نْ نْ يْ يْ يْ تْ تْ تْ ثْ ثْ  اْ يْ يْ اْ يْ يْ اْ يْ يْ اْ يْ يْ اْ يْ يْ  ضْ ضْ ضْ صْ صْ صْ ضْ ضْ ضْ ضْ ضْ ضْ  ضْ ضْ ضْ صْ صْ صْ سْ سْ سْ شْ شْ شْ شْ  بْ بْ بْ پْ پْ پْ پْ پْ پْ پْ پْ پْ پْ پْ پْ  شْ شْ شْ شْ شْ شْ شْ شْ شْ شْ شْ شْ شْ شْ </p>	G,O,T

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
		1=Large XeTeX: "Scheherazade New/GR:Superscript Alef=Large"		
<b>Sukun</b> (U+0652)	cv78	0=Closed		G,O,T
		1=Open down XeTeX: "Scheherazade New/GR:Sukun=Open down"		
		2=Open left XeTeX: "Scheherazade New/GR:Sukun=Open left"		
<b>End of ayah</b> (U+06DD)	cv80	0=Standard		G,O,T
		1=Simplified A XeTeX: "Scheherazade New/GR:End of ayah=Simplified A"		

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
		2=Simplified B XeTeX: "Scheherazade New/GR:End of ayah=Simplified B"	۳۴۵ 123	
<b>Eastern digits</b> (U+06F4, U+06F6, U+06F7)	cv82	0=Standard	۴۵۶۷	G,O,T
		1=Sindhi-style XeTeX: "Scheherazade New/GR:Eastern digits=Sindhi-style"	۴۵۶<	
		2=Urdu-style XeTeX: "Scheherazade New/GR:Eastern digits=Urdu-style"	۴۵۶<	
		4=Rohingya-style XeTeX: "Scheherazade New/GR:Eastern digits=Rohingya-style"	۴۵۶<	
<b>Comma</b> (U+060C, U+061B)	cv84	0=Upward	؛ ٫	G,O,T
		1=Downward XeTeX: "Scheherazade New/GR:Comma=Downward"	؛ ٫	
<b>Line spacing</b>		Tight Normal Loose	Allows for adjustment of the default line spacing in the font (values shown are ordered in increasing line spacing).	T

## List of Language-specific features

The language-specific features that are in the font are demonstrated below:

[illegible]

2 **Implementation Notes:** **G**=Implemented in Graphite; **O**=Implemented in OpenType; **T**=Implemented in TypeTuner (command line version: <http://scripts.sil.org/TypeTuner> and web-based version: <http://scripts.sil.org/ttw>).

## Special rules for rendering Allah

In certain types of literature, the name *Allah* and words related to this name are given unique rendering. Unicode has a *presentation form* character (U+PDF2 ARABIC LIGATURE ALLAH ISOLATED FORM) that implements this rendering and, while this can work (in some fonts) for the word in isolation, it doesn't help users obtain special rendering in other contexts where it is desired.

Starting with v2.200, Scheherazade New provides the special rendering for sequences of Arabic letters that meet specific patterns, giving much more flexibility to document authors. To obtain the special rendering, all of the following must be true:

- The basic sequence of letters is either:
  - lam-lam-heh
    - Preceded by some Arabic letter (joining or not, with or without diacritic marks)
    - The second lam *must* be followed (in either order) by shadda and either superscript alef or fatha
  - alef-lam-lam-heh
    - alef is the *isolate* form (with or without diacritic marks)
    - The second lam *may* be followed (in either order) by shadda and either superscript alef or fatha
- The heh used is the *final* form of either *heh goal* (U+06C1) final OR *heh* (U+0647) final
- There are no diacritic marks between the two *lam* characters

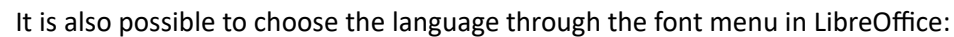
FEH	ALEF	LAM	LAM	SHADDA	FATHA	SUPERSCRIPT ALEF	HEH						
	ا	+	ل	+	ل	+	ه	→ الله Ligature is formed					
	ا	+	ل	+	ل	+	ّ	+	ه	→ الله Ligature is formed			
	ا	+	ل	+	ل	+	ّ	+		´	+	ه	→ الله Ligature is formed
ف	+		ل	+	ل	+	ّ	+			ه	→ فله Ligature is formed	
ف	+		ل	+	ل	+					ه	→ فله Ligature is not formed	

Users may find these rules cause the special rendering when it is not desired. The rendering can be suppressed by inserting U+200D ZERO WIDTH JOINER after either *lam*.





In the following screenshot, the Sindhi language has been selected.



Sindhi: مم م مم م مم م مم م مم م (Scheherazade New:lang=sd)

Word does not allow for the selection of Character Variants. However, it does support language selection of Urdu and Sindhi.

XeTeX

Languages in XeTeX can be accessed by using: "Scheherazade New/GR:language=ur" (for Graphite) or "Scheherazade New:Arab:language=URD" (for OpenType).

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## OpenType Character Variants

Currently there are very few applications which support OpenType Character Variants.

For applications which do support OpenType Character Variants, such as in CSS, the Character Variant ID and setting is chosen. For example, in CSS, if cv32, is desired, you might have this code in your .css:

```
...
@font-face {
    font-family: ScheherazadeNew;
    src: url(ScheherazadeNew-Regular.woff);
}

.cv120 {
    font-family: ScheherazadeNew;
    font-feature-settings: "cv12" 0;
}

.cv121 {
    font-family: ScheherazadeNew;
    font-feature-settings: "cv12" 1;
}

...
```

and this in your .html:

[illegible]

Which would produce this:

٠٠	٠١	٠٢	٠٣	٠٤	٠٥	٠٦	٠٧	٠٨	٠٩	١٠	١١	١٢	١٣	١٤	١٥	١٦	١٧	١٨	١٩	٢٠	٢١	٢٢	٢٣	٢٤	٢٥	٢٦	٢٧	٢٨	٢٩	٣٠	٣١	٣٢	٣٣	٣٤	٣٥	٣٦	٣٧	٣٨	٣٩	٤٠	٤١	٤٢	٤٣	٤٤	٤٥	٤٦	٤٧	٤٨	٤٩	٥٠	٥١	٥٢	٥٣	٥٤	٥٥	٥٦	٥٧	٥٨	٥٩	٦٠	٦١	٦٢	٦٣	٦٤	٦٥	٦٦	٦٧	٦٨	٦٩	٧٠	٧١	٧٢	٧٣	٧٤	٧٥	٧٦	٧٧	٧٨	٧٩	٨٠	٨١	٨٢	٨٣	٨٤	٨٥	٨٦	٨٧	٨٨	٨٩	٩٠	٩١	٩٢	٩٣	٩٤	٩٥	٩٦	٩٧	٩٨	٩٩	١٠٠
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

## TypeTuner

At this point, most applications do not make use of these features (neither Graphite or OpenType Character Variants nor language features) so another solution is needed to use the variant characters. TypeTuner creates tuned fonts that use the variant glyph in place of the standard glyph. The TypeTuner Web site is <http://scripts.sil.org/ttw/fonts2go.cgi>.