## **Scheherazade New - Font Features**

Scheherazade New is a TrueType font with smart font capabilities added using OpenType and Graphite font technologies. The Scheherazade New font includes a number of optional features that provide alternative rendering that might be preferable for use in some contexts. The sections below enumerates the details of 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. Some applications let the user control certain features such as Character Variants to turn on the rendering of variant characters. However, at this point, most applications do not make use of those features so another solution is needed to show the variant characters. TypeTuner creates tuned fonts that use the variant glyph in place of the standard glyph. TypeTuner also provides the ability to turn on support for the Kurdish, Kyrgyz, Rohingya, Sindhi, Urdu, and Wolof languages variants.

See Using Font Features. Although that page is not targeted at Arabic script support, it does provide a comprehensive list of applications that make full use of the OpenType and Graphite font technologies.

See also Arabic Fonts — Application Support. It provides a fairly comprehensive list of applications that make full use of the OpenType and Graphite font technologies.

This page uses web fonts (WOFF2) to demonstrate font features and should display correctly in all modern browsers. For a more concise example of how to use Scheherazade New as a web font see Scheherazade New Webfont Example. For detailed information see Using SIL Fonts on Web Pages.

If this document is not displaying correctly a PDF version is also provided in the documentation/pdf folder of the release package.

## End of Ayah (U+06DD), Disputed End of Ayah (U+08E2), and subtending marks (U+0600..U+0605)

These Arabic characters are intended to enclose or hold one or more digits.

Specific technical details of how to use them are discussed in the Arabic fonts FAQ -- Subtending marks.

Additionally, Scheherazade New includes two simplified alternates for U+06DD ARABIC END OF AYAH under the Stylistic Alternates (salt) feature, but at this time we know of no OpenType-based applications that can access these. The two alternates are also available through the Character Variants feature discussed below.

# **Customizing with TypeTuner**

For applications that do not make use of Graphite features or the OpenType Character Variants, you can now download fonts customized with the variant glyphs you choose. Read this document, visit TypeTuner Web, then choose the variants and download your font.

## Test rendering engine choice

Here is a simple test to see if Graphite is working in your browser. If it is, the following will say "RenderingOpentype". Firefox is currently the only browser that supports Graphite. See the instructions on how to enable Graphite in Firefox.

RenderingOpenType Check

Language Affects: U+062F, U+0630, U+0688...U+068F, U+0690, U+06EE, U+0759, U+0754, U+084E, U+0765, U+0766, U+0766, U+0647, U+0647, U+0647, U+0647, U+0618, U+0618, U+06F4, U+06F4, U+06F7, U+06

Unfortunately, the UI needed to access the language-specific behavior is not yet present in many applications. LibreOffice and Microsoft Word 2016 support language-specific behavior for Kurdish, Sindhi and Urdu (but not Kyrgyz, Rohingya or Wolof). Some Harfbuzz-based apps, e.g., XeTeX, can access language-specific behavior.

Language	Dal	Meem	Heh	Yeh with hamza	Comma	4	6	7	kasra	damma	dammatan	lnv damma	Feature setting
default	د	م ممم	ه ههه	ئ ئئئ	٤ ،	۴	۶	٧	بِّ	بُ	بٌ	ڹ	
Kurdish (Northern)	د	م ممم	ه ههم	ئ ئئئ	٠,	¥	۶	٧	بِّ	بُ	بٌ	ڹ	lang=ku
Kyrgyz	د	م ممم	ه ههه	ئى ئىئى	٤.	۴	۶	٧	بِّ	بُ	بٌ	ڹ	lang=ky
Rohingya	د	م ممم	ه ههه	ئ ئئئ	٤.	٤	۶	4	بِ	بُ	بٌ	ڹ	lang=rhg
Sindhi	د	م ممم	ه ههه	ئ ئئئ	; ;	۴	٦	4	بِّ	بُ	بٌ	ڹ	lang=sd
Urdu	د	م ممم	ه ههه	ئ ئئئ	٠.	٣	٦	4	بِ	بُ	بٌ	ڹ	lang=ur
Wolof	5	م ممم	ه ههه	ئ ئئئ	٠,	¥	۶	٧	<i>ٿ</i>	بُ	بٌ	ب	lang=wo

## Character variants

There are some character shape differences in different languages which use the Arabic script. These can be accessed by using Graphite features, OpenType Character Variants, or through the language support mentioned above.

## Dal

Affects: 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

	readire value	Sample	reature setting
Standard		د ذ د ډ ډ ډ د د د د د د د د د د د د د د	cv12=0
Alternate		ۮۮڴڿڋڋڐڿڎ۠ۮٞڐ۠ۮٛڋ۪ڿڿ	cv12=1

## Meem

Affects: U+0645, U+0765, U+0766, U+08A7

Feature value	Sample	Feature setting
Standard	م ممم م ممنم م ممنم م ممنم م	cv44=0
Sindhi-style	م ممم فر منفر مر مجم فر فشقر	cv44=1

## Affects: U+0647

Heh

Arects, 0 + 0047					
	Feature value	Sample		Feature setting	
Standard		ه ههه	cv48=0		
Kurdish-style		ه ههم	cv48=3		
Sindhi-style		ه ههم	cv48=1		
Urdu-style		ه پہ	cv48=2		

### Kirghiz OE Affects: U+06C5

	Feature value	Sample	Feature setting
Loop		<b>9</b> cv51=0	
Bar		<b>≜</b> cv51=1	

## Yeh Hamza

Affects: U+0626		
Feature value	Sample	Feature setting
Standard	ئ ئ	cv54=0

## Right hamza

Small

cv54=1 Maddah

Feature value

Large	5 TT cv60=1
Shadda+kasra placement Affects: U+064D, U+0650 with U+0651	

Sample

5TT cv60=0

**Feature setting** 

Feature setting

Feature setting

Feature setting

## Feature value

Raised Lowered

# Damma

Affects: U+064F

Feature value	Sample Feature setting
Standard	் ் cv70=0
Filled	் ் cv70=1
Short	் ் cv70=2

## **Dammatan** Affects: U+064C

Feature value	Sample	Feature setting
Standard	ో 👛 cv72=0	
Six-nine	ُّ بُّ cv72=1	

## **Inverted Damma** Affects: U+0657

reature value	Sample	reature setting
Standard	<b>ံ</b> cv74=0	
Hollow	ံ cv74=1	

## Superscript Alef Affects: 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+069D U+069E U+069E U+069A U+069A U+069B U+069C U+06FA U+075C U+076D U+0770 U+077D U+077E

Feature value Feature setting ئُ نُئِي يَ لِلِّي عَلَيْ لِيلِ عَلَى تُلْتَى عَلِي لِلِّي عَلِيلِ عِلْ لِلِّي عَلَيْ لِيلًا عَلَى اللَّهِ عَلَيْ عَلَيْ اللَّهِ عَلَيْ عَلَيْ اللَّهِ عَلَيْ عَلَيْ عَلَيْ اللَّهِ عَلَيْ اللَّهِ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَّهُ عَلَيْ عَلَّهُ عَلَّهُ عَلَيْ عَلَيْ عَلَّهُ عَلَيْ عَلَّهُ عَلَيْ اللَّهِ عَلَيْ عَلَّهُ عَلَيْ عَلَّهُ عَلَيْ عَلَّهُ عَلَيْ عَلَّهُ عَلَيْ عَلَّى عَلَيْ اللَّهِ عَلَيْ عَلَّهُ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلْ اللَّهِ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَّهُ عَلَيْ عَلَّهُ عَلَيْ عَلَّ عَلَيْ عَلَّهُ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْ عَلَيْعِ عَلَيْ عَلَّهُ عَلَّهِ عَلَيْ عَلَيْ عَلَيْكُوا عَلَيْ عَلَيْكُوا عَلَيْ عَلَّهُ عَلَيْعِ عَلَيْعِ عَلَيْعِ عَلَيْكُ عَلَّهُ عَلَيْكُوا عَلَيْعِ عَلَيْعِ عَلَيْكُوا عَلَيْكُوا عَلَيْكُوا عَلَيْكُوا عَلَّهُ عَلَيْكُوا عَلَيْكُوا عَلَيْكُوا عَلَّهُ عَلَيْكُوا عَلَيْكُوا عَلَّ Small

		ئ يَلِيٰ فَ يَٰلِيٰ فَ يَلِيٰ فَ يَٰلِيٰ فَ يَلِيٰ فَ لَلَهٰ فَ لَلَهٰ فَا لَكُوْ عَلَى اللَّهُ الللللَّا الللللَّا الللللَّا الللللَّا اللللللَّا الللَّهُ الللللَّا اللّه	
1	Large	ئ لئى كى للى كى للى كى للى كى ئلى كى للى كى كالى كال	cv76=1
	ikun		

# Affects: U+0652

Closed	° ب دv78=0
Open down	ُ ب cv78=1
Open left	ُ دُ cv78=2
End of ayah	

Sample

# Firefox allows you to use U+06DD followed by the digits and proper rendering occurs. Some applications require the following:

Affects: U+06DD

• precede the entire sequence (subtending mark plus following digits) with 202D LEFT-TO-RIGHT OVERRIDE • follow the entire sequence with U+202C POP DIRECTIONAL FORMATTING. Surrounding the sequence with U+202D and U+202C seems to give the most reliable results in different browsers. However, we have not found a solution that works in Internet Explorer/Edge.

In the example below, the following codepoints are used: U+202D U+06DD U+06DD U+0031 U+0032 U+0033 U+202C U+202D U+06DD U+0611 U+0622 U+0663 U+202C.

Feature value

Feature value Sample **Feature setting** (123) (177) Standard cv80=0

Simplified A	(123) (1YT) cv80=1	
Simplified B	123 TYF cv80=2	
The new DISPUTED END OF AYAH (U+08E2) is also now available in the font. It works in the same way as End of ayah.		
۵		

Honorific ligatures Affects: U+FD40..U+FD4F, U+FDCF, U+FDFA..U+FDFB, U+FDFD..U+FDFF

# Feature value

Calligraphic

Simplified		رَالِلْهُوْمُهُمْ رَاللَّهُوْمُهُمْا رَاللَّهُ مُنَّ عَلَيْهِ السَّالِامُ السَّلَامُ السَّلَامُ السَّلَامُ وَاللَّهُم رَاللَّهُوْمُهُمْ رَاللَّهُومُهُمَا رَاللَّهُمُ عَنْ عَلَيْهِ السَّلَامُ عَلَيْهِمُ عَلَيْهُمْ عَنْوَجُلُ عَرُوجُلُ ـــــــــــــــــــــــــــــــــــ	cv81=1 وَاللَّهُ وَ مَاللَّهُ مِنَ وَاللَّهُ مِنَا وَاللَّهُ مِنَا وَاللَّهُ مِنَا وَاللَّهُ عَنِي وَاللَّهُ ع مَالِمَهُ صَالِمَاتُهُ حِلْهُ مِنْهُ عَلَيْهُ مِنْ وَصَالِمَاتُهُ حِلْهُ مِنْ
Eastern digits Affects: U+06F4, U+06F6, U+06F7			
	Feature value	Sample	Feature setting

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海海 與 如 與 然

Affects: U+06F4, U+06F6, U+06F7				
Fea	ature value	Sample		Feature setting
Standard		497	cv82=0	
Sindhi-style		474	cv82=1	
Urdu-style		r7<	cv82=2	

Rohingya-style	₹ 7.4 cv82=4	
<b>Comma</b> Affects: U+060C, U+061B		
Feature value	Sample	Feature setting
Upward	¢ 6 cv84=0	

# De

Downward

<b>Decimal separator</b> Affects: U+066B		
Feature value	Sample	Feature setting
Small reh	, cv85=0	

; ;

cv84=1

# Line spacing

Slash cv85=1 Allows for adjustment of the default line spacing in the font (values shown are ordered in increasing line spacing). This feature is only available with TypeTuner. Feature Value

Tight Normal Loose

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