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. 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. 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 (WOFF) 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 *ScheherazadeNew-webfont-example.html* in the font package web folder.

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 "RenderingGraphite". If your browser does not support Graphite it should say "RenderingOpentype". Firefox is currently the only browser that supports Graphite. See the instructions on how to enable Graphite in Firefox.

Check

RenderingGraphite

Language

Affects: U+062F, U+0630, U+0688..U+068F, U+0690, U+06EE, U+0759, U+075A, U+08AE, U+0645, U+0765, U+0766, U+08A7, U+0647, U+0626, U+060C, U+061B, U+06F4, U+06F5, U+06F6, U+06F7, U+0650, U+064F, U+064C, U+0657

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	Meem	Heh	Comma	4	6	7	0650	064C	Feature Setting
default	م ممم	ه ههه	٠ ،	۴	۶	٧	بِّ ب	بٌ	
Kurdish (Northern)	م ممم	ه ههم	٤ ،	۴	۶	٧	بٌ	بٌ	lang=ku
Rohingya	م ممم	ه ههه	٤ ،	٤	٦	4	بِ	بٌ	lang=rhg
Sindhi	م ممم	ه ههه	; ;	۴	٦	4	بِ	بْ	lang=sd
Urdu	م ممم	ه ههه	٤ ،	٣	٦	4	ب	بْ	lang=ur

Kyrgyz and Wolof

Note: ky and wo do not work for creating this pdf (kir and wol must be used for proper display in this pdf). However, for proper display in html ky and wo must be used. Experimentation for your end product may be necessary!

Language Feature displays properly in html (and not pdf)

Language	Dal	0626	0650	064F	0657	Feature Setting
default	د	ئ ئئئ	بٌ	بُ	<u>'</u>	
Kyrgyz	د	ئ ئئئ	بٌ	بُ	، ب	lang=ky
Wolof	د	ئ ئئئ	ب	بُ	ب ب	lang=wo

Language Feature displays properly in pdf (and not html)

Language	Dal	0626	0650	064F	0657	Feature Setting
default	د	ئ ئئئ	بٌ	بُ	<u>'</u>	
Kyrgyz	د	ئى ئئنى	ب	بُ	<u>'</u>	lang=kir
Wolof	ک	ئ ئئئ	بِّ	بُ	بْ	lang=wol

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

Feature value	Sample	Feature setting
Standard	د ذ ځ ډ ب ځ ت ي څ ڏ ڏ ۀ ځ	cv12=0
Alternate	ۮۮۮ۠ۮڋڋڎۮڎ۠ۮٞڋۮڋڿڿ	cv12=1

Meem

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

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

Heh

Affects: U+0647

Feature value	Sample	Feature setting
Standard	ه ههه	cv48=0
Kurdish-style	ه ههم	cv48=3
Sindhi-style	ه ههم	cv48=1
Urdu-style	مہہ ہ	cv48=2

Kirghiz OE

Affects: U+06C5

Feature value	Sample	Feature setting
Loop	ð	cv51=0
Bar	و	cv51=1

Yeh Hamza

Affects: U+0626

Feature value	Sample	Feature setting
Standard	ئ ئ	cv54=0
Right hamza	ئى ئى	cv54=1

Maddah

Affects: U+0622, U+0627, U+0653, U+0653

Feature value	Sample	Feature setting
Small	ा र	cv60=0
Large	៊ែរ	cv60=1

Shadda+kasra placement

Affects: U+064D, U+0650 with U+0651

Feature value	•	Feature setting
Raised	بِّ بِّ عِ	cv62=0
Lowered	تِ کِ تِ	cv62=1

Damma

Affects: U+064F

Feature value	Sample	Feature setting
Standard	بُ ث	cv70=0
Filled	<i>و</i> بُ ث	cv70=1
Short	بُ ث	cv70=2

Dammatan

Affects: U+064C

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

Inverted Damma

Affects: U+0657

Feature value	Sample	Feature setting
Standard	ْ بْ	cv74=0
Hollow	بْ ث	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+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+077D U+077D U+077E

Feature value	Sample	Feature setting
Small	ئ نئئ ی نایی ی یایی کی نایی کی نایی کی نایی کی الله کی کا الله کی کی کا الله کی کی کا الله کی	cv76=0
Large	ئ نلئ كى للى كى ليلى عى نلئى كى الله كى نلئى كى الله	cv76=1

Sukun

Affects: U+0652

Feature value	Sample	Feature setting
Closed	بْ ث	cv78=0
Open down	$\hat{\hat{phash}}$ و	cv78=1
Open left	بْ ث	cv78=2

End of ayah

Affects: U+06DD

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

- 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+0031 U+0032 U+0033 U+202C U+202D U+06DD U+0611 U+0622 U+0663 U+202C.

Feature value	Sample	Feature setting
Standard		cv80=0
Simplified A	(123) (177)	cv80=1
Simplified B	123 (177)	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.



Honorific ligatures

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

Feature value	Sample	Feature setting
Calligraphic	ولان ولان ولان ولان ولان والله عليه الله الله الله الله الله الله الله ا	cv81=0
Simplified	رَاللَّهُ وَطَلِيْكُمْ وَطَلِيْكُمُ وَاللَّهُ مُ وَطَيِّهُمُ اللَّهِ مُنَ عَلَيْهِ المَّالِمُ الطَّالِمُ الطَّلِمُ وَالسَّالِمُ الطَّلِمُ وَاللَّهُ وَلَا اللَّهُ وَاللَّهُ وَال وَاللَّهُ وَاللَّهُ وَاللَّهُ وَاللَّهُ وَاللَّهُ وَاللَّهُ وَاللْمُولِمُ وَاللَّهُ وَاللَّهُ وَاللَّهُ وَالْ	cv81=1

Eastern digits

Affects: U+06F4, U+06F6, U+06F7

Feature value	Sample	Feature setting
Standard	497	cv82=0
Sindhi-style	474	cv82=1
Urdu-style	774	cv82=2
Rohingya-style	٤٦٧	cv82=4

Comma

Affects: U+060C, U+061B

Feature value	Sample	Feature setting
Upward	٤ ،	cv84=0
Downward	; ;	cv84=1

Decimal separator

Affects: U+066B

Feature value	Sample	Feature setting
Small reh	ر	cv85=0
Slash	1	cv85=1

Line spacing

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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