# 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.

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.

# **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 the Scheherazade New Font Features, 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	Sample	Feature setting
default	د ذ د د د د د د د د د د د د د د د د د د	
Kurdish (Northern)	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ڋ ݚ ﭘ م ممم م منمنم ۾ مبمبم ۾ شمثم ه ههه ئ ئئي ، ۲ ۴ ۶ ۷ ٽ بُ بُ بُ	lang=ku
Kyrgyz	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ڋ ݚ ݚ م ممم م منمنم ۾ مبمبم ۾ شمثم ه ههه ئ ئئئ ، ؟ ۲ ۶ ۷ ٽ بُ بُ بُ	lang=ky
Rohingya	د د د د د د د د د د د د د د د د د د د	lang=rhg
Sindhi	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ڋ ڊ ڊ م ممم فر منفر ۾ مجم ڤر ڤڤڤ ههه ئ ئئئ ، ، ۲ ۲ > ٽِ بُ بُ بُ	lang=sd
Urdu	د ذ د ٔ ډ د ب ٔ د د د د د د د د د د د د د د د د د	lang=ur
Wolof	د ذ د ٔ ډ د ب ٔ د د د د د د د د د د د د د د د د د	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+068B, 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 څ	cv12=0
Alternate	ۮۮؗڴڿڋڋڎڿڎ۠ۮٞڐۮٛڴۭڿ۪ڮ	cv12=1

### Meem

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

Feature value	Sample	Feature setting
Standard	م ممم م منم م ممم م ممم	cv44=0
Sindhi-style	م ممم فر فنفف م مجم فر فشف	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	مہر ہ	cv48=2

# Kirghiz OE

Affects: U+06C5

Feature value	Sample	Feature setting
Loop	ð	cv51=0
Bar	<b>.</b>	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	্যা	cv60=0
Large	্যা	cv60=1

# Shadda+kasra placement

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

Feature value	Sample	Feature setting
Raised	<b>ٿ</b> ِ ٿِّ ٿِّ	cv62=0
Lowered	بِّ جِّ بِّ	cv62=1

### Damma

Affects: U+064F

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

#### **Dammatan**

Affects: U+064C

Feature value	Sample	Feature setting
Standard	<b>ీ</b> చీ	cv72=0
Six-nine	<b>ٿ</b> ٿ	cv72=1

### **Inverted Damma**

Affects: U+0657

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

Feature value	Sample	Feature setting
Small	ئ نتئی کی للی کی لیای علی اللی علی اللی کی	cv76=0
Large	ئ تلئى كى للى كى ليلى عى تلئى كى تلئى كى تلئى كى للى كى للى كى للى كى تلئى كى	cv76=1

### Sukun

Affects: U+0652

Feature value	Sample	Feature setting
Closed	ံ <i>ပုံ</i>	cv78=0
Open down	े <i>û</i>	cv78=1
Open left	<u>ن</u> ن	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	الله وفي وفي الله الله الله الله الله الله الله الل	cv81=0
Simplified	رَاللّٰهِ وَاللّٰمِينَ وَاللّٰهِ عُنَى اللّٰهِ عُنَى اللّٰهِ مُنَ عَلَيْهِ المَّالِمِ الطَّالِمِ الطَّلَّذِي وَلِيسِّوْ وَاللّٰهِ عَلَيْهِما الطَّلَّذِي وَلِيسِّوْ وَاللّٰهِ عَلَيْهِما الطَّلِيمِ وَاللّٰهِ وَاللّٰهِ عَلَيْهِما اللّٰهِ عَلَى اللّٰهِ عَلَيْهِما اللّٰهِ عَلَى اللّٰهِ اللّٰهِ الْعَلَى اللّٰهِ عَلَى اللّٰهِ عَلَى اللّٰهِ عَلَى اللّٰهِ اللّٰهِ الْعَلَى اللّٰهِ الْعَلَى اللّٰهِ عَلَى اللّٰهِ عَلَى اللّٰهِ عَلَى اللّٰهِ عَلَى اللّٰهِ عَلَى اللّٰهِ عَلَى اللّٰهِ الللّٰهِ اللّٰهِ اللّٰهِ اللّٰهِ اللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ اللّٰهِ اللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ اللّٰهِ الللّٰهِ اللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللللّٰهِ الللّٰهِ اللللّٰهِ الللللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ اللللّٰهِ الللّٰهِ الللّٰهِ الللللّٰ الللّٰهِ الللّٰهِ الللللّٰهِ الللللّٰهِ الللّٰهِ الللّٰهِ الللللللللّٰهِ اللللللّٰهِ الللّٰهِ الللّٰهِ الللّٰهِ الللللّٰهِ اللللللللّٰهِ الللّٰهِ الللّٰهِ الللللّٰهِ الللّٰهِ الللّٰهِ اللللللّٰهِ الللللللللّٰهِ الللّٰهِ الللّٰهِ الللللللّٰهِ الللّٰهِ اللللّٰهِ اللللللللللّٰهِ الللللّٰهِ الللّٰهِ الللّٰهِ الللللللللّ اللّٰهِ الللللللللللللللللللللللللللللللللللل	cv81=1

#### **Eastern digits**

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

Feature value	Sample	Feature setting
Standard	497	cv82=0
Sindhi-style	47<	cv82=1
Urdu-style	47<	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

# 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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