

Harmattan - Font Features

Harmattan is an OpenType-enabled font family that supports the Arabic script. It includes a number of optional features that provide alternative rendering that might be preferable for use in some contexts. The sections below enumerate the details of these features. Whether these features are available to users will depend on both the application and the rendering technology being used. 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 language 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 font technology.

See also [Arabic Fonts — Application Support](#). It provides a fairly comprehensive list of applications that make full use of the OpenType font technology.

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 Harmattan as a web font see *harmattan-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, U+0890..U+0891)

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, Harmattan 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 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.

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.

Kurdish (Northern), Rohingya, Sindhi, Urdu

Language	Meem	Heh Doachashmee (06BE)	4	6	7	0650/064E	064C	Feature Setting
Default	م ممم	ه ههه	٤	٦	٧	بْ	بْ	
Kurdish (Northern)	م ممم	ه ههه	٤	٦	٧	بْ	بْ	lang= 'ku '
Rohingya	م ممم	ه ههه	٤	٦	٧	بْ	بْ	lang= 'rhg '
Sindhi	م ممم	ه ههه	٤	٦	٧	بْ	بْ	lang= 'sd '
Urdu	م ممم	ه ههه	٤	٦	٧	بْ	بْ	lang= 'ur '

Kyrgyz and Wolof

Language	Dal	0626	0650/064E	064F	0657	Feature Setting
Default	د	ئ ئئئ	بْ	بْ	بْ	
Kyrgyz	د	ئ ئئئ	بْ	بْ	بْ	lang= 'ky '
Wolof	د	ئ ئئئ	بْ	بْ	بْ	lang= 'wo '

Character variants

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



Jeem/Hah

Affects: U+062C, U+062D, U+062E, U+0682, U+0683, U+0684, U+0685, U+0686, U+06BF, U+0757, U+0758, U+088A, U+08A2, U+08C1, U+08C5, U+08C6

Feature	Sample	Feature setting
Standard		cv08=0
Handwritten		cv08=1

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	Sample	Feature setting
Standard		cv12=0
Alternate		cv12=1

Sad/Dad

Affects: U+0635, U+0636, U+069D, U+069E, U+06FB, U+08AF

Feature	Sample	Feature setting
Standard	ص صص ض ضض یں یییی ض ضضض چپچپی چں چں جججج	cv20=0
Half	ر رر زز ززز ییر یییر ژر ژژژر چپر پر پر جججج	cv20=1

Meem

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

Feature	Sample	Feature setting
Standard	م ممر نر فففر نر ممر نر فففر	cv44=0
Sindhi-style	م ممر م فففر م ممر م فففر	cv44=1

Heh

Affects: U+0647

Feature	Sample	Feature setting
Standard	ه ه	cv48=0
Kurdish-style	ه ه	cv48=3
Sindhi-style	ه ه	cv48=1
Urdu-style	ه ه	cv48=2

Heh Doachashmee

Affects: U+06BE

Feature	Sample	Feature setting
Standard	ه ه	cv49=0
Knotted	ه ه	cv49=1
Kurdish-style	ه ه	cv49=3

Kyrgyz OE

Affects: U+06C5

Feature	Sample	Feature setting
Loop	9	cv51=0

Feature	Sample	Feature setting
Bar	ﻉ	cv51=1

Yeh Hamza

Affects: U+0626

Feature	Sample	Feature setting
Standard	ﺀ ﺀ	cv54=0
Right hamza	ﺀ ﺀ	cv54=1

Maddah

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

Feature	Sample	Feature setting
Small	ﻮ̇ ﺀ ﺀ	cv60=0
Large	ﻮ̈ ﺀ ﺀ	cv60=1

Shadda+kasra placement

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

Feature	Sample	Feature setting
Default	ﻮ̇ ﺀ ﻮ̇ ﺀ	cv62=0
Lowered	ﻮ̈ ﺀ ﻮ̈ ﺀ	cv62=1
Raised	ﻮ̉ ﺀ ﻮ̉ ﺀ	cv62=2

Damma

Affects: U+064F

Feature	Sample	Feature setting
Default	بْ ُ	cv70=0
Filled	بْ ُ	cv70=1
Short	بْ ُ	cv70=2

Dammatan

Affects: U+064C

Feature	Sample	Feature setting
Standard	بْ ُ	cv72=0
Six-nine	بْ ُ	cv72=1

Inverted Damma

Affects: U+0657

Feature	Sample	Feature setting
Default	بْ ُ	cv74=0
Hollow	بْ ُ	cv74=1
Filled	بْ ُ	cv74=2

Superscript Alef

Affects: U+0670 on all yeh, sad and seen-like characters U+0620, U+0626, U+0633, U+0634, U+0635, U+0636, U+063D, U+063E, U+063F, U+0649, U+064A, U+0678, U+069A, U+069B, U+069C, U+069D, U+069E, U+06CC, U+06CD, U+06CE, U+06D0, U+06D1, U+06FA, U+06FB, U+075C, U+076D, U+0770, U+077D, U+077E, U+0775, U+0776, U+0777, U+08A8, U+08A9, U+08AF, U+08BA

Feature	Sample	Feature setting
Default	وَاِذَا سَأَلَ سَاسُ شِئْنًا مِنْ شَيْءٍ	cv76=0

[illegible]

Sukun

Affects: U+0652

Feature	Sample	Feature setting
Closed	بْ	cv78=0
Open down	ب̣	cv78=1

Feature	Sample	Feature setting
Open left	◌ْ ◌ْ	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	Sample	Feature setting
Standard	١٢٣ ١٢٣	cv80=0
Simplified A	١٢٣ ١٢٣	cv80=1
Simplified B	١٢٣ ١٢٣	cv80=2

The DISPUTED END OF AYAH (U+08E2) is also now available in the font. It works in the same way as End of ayah.

١٢٣٤٥

Eastern digits

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

Feature	Sample	Feature setting
Standard	٢٦٧	cv82=0
Kurdish-style	٢٦٧	cv82=3

Feature	Sample	Feature setting
Rohingya-style	٤٦٧	cv82=4
Sindhi-style	٤٦٧	cv82=1
Urdu-style	٤٦٧	cv82=2

Comma

Affects: U+060C, U+061B

Feature	Sample	Feature setting
Upward	٤٤٤	cv84=0
Downward	٤٤٤	cv84=1

Decimal separator

Affects: U+066B

Feature	Sample	Feature setting
Small reh	٤٤٤	cv85=0
Slash	٤٤٤	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
Normal
Loose
1.0 Compatible Normal

Feature

1.0 Compatible Loose

This guide is from the [Harmattan project](#) version 4.000 and is copyright © 2014-2023 SIL International.