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. 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.

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.

Complete feature list

Language system tags

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 Kashmiri, Kurdish, Sindhi and Urdu (but not Kyrgyz, Rohingya or Wolof). Some Harfbuzz-based apps, e.g., XeTeX, can access language-specific behavior. In the past, it was not always possible to override language-specific behavior in cases where the language-specific variants were undesirable but, as of version 4.300, the font now supports this possibility.

Kurdish (Northern), Rohingya, Sindhi, Urdu

Language	Meem	Heh Doachashmee (06BE)	4	6	7	0650/064E	064C	0652	Feature Setting
Default	م ممم	ھھھ ھ	۴	۶	۷	بِّ	بٌ	بْ	
Kashmiri	م ممم	ھھھ ھ	٣	٦	٧	بِّ	بٌ	بْ	lang='ks'
Kurdish (Northern)	م ممم	ھھھ ھ	۴	۶	۷	بِّ	بٌ	بْ	lang='ku'
Rohingya		ھھھ ھ	٤	٦	٧	بِّ	بٌ	بْ	lang='rhg'

Language	Meem	Heh Doachashmee (06BE)	4	6	7	0650/064E	064C	0652	Feature Setting
	مـ ممم								
Sindhi	مـ ممم	ھ ھھھ	۴	٦	٧	بِّ	بٌ	بْ	lang='sd'
Urdu	مـ ممم	ھ ھھھ	٢	٦	٧	بِّ	بٌ	بْ	lang='ur'

Kyrgyz and Wolof

Language	Dal	0626	0650/064E	064F	0657	Feature Setting
Default	د	ئ ئئئ	بِّ	بُ	بٗ	
Kyrgyz	د	ئ ئئئ	بِّ	بُ	بٗ	lang='ky'
Wolof	ڊ	ئ ئئئ	بِّ	بُ	بٗ	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	ح جحج ح ححح خ خخخ خ خٚخٚخ ځ ځحځ ڃ ڃحڃ ڂ ڂخڂ ڇ ڇحڇ چ چحچ ڿ ڿحڿ ڄ ڄحڄ ۿ ۿحۿ ݗ ݗحݗ ݘ ݘحݘ ࢊ ࢊحࢊ ࢢ ࢢحࢢ	cv08=0
Handwritten	ح جحج ح ححح خ خخخ خ خٚخٚخ ځ ځحځ ڃ ڃحڃ ڂ ڂخڂ ڇ ڇحڇ چ چحچ ڿ ڿحڿ ڄ ڄحڄ ۿ ۿحۿ ݗ ݗحݗ ݘ ݘحݘ ࢊ ࢊحࢊ ࢢ ࢢحࢢ	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	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ	cv12=0
Alternate	ـد ـذ ـڈ ـډ ـڊ ـڋ ـڌ ـڍ ـڎ ـڏ ـڐ ـۮ ـݙ ـݚ ـࢮ	cv12=1
Simple	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ	cv12=2

Sad/Dad

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

Feature	Sample	Feature setting
Standard	ص صص ض ضض ڝ ڝڝ ڞ ڞڞ ڞ ڞ ۻ ۻۻ	cv20=0
Half	ﺻ ﺻﺺ ﺿ ﺿﻀ ﯓ ﯓﯔ ﯕ ﯕﯖ ﯗ ﯘ ﯙ ﯙﯚ	cv20=1

Meem

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

Feature	Sample	Feature setting
Standard	م مم ـم ـمـ م بمـ ࢧ ࢧࢧ	cv44=0
Sindhi-style	ـم ـممـ ـمـ ـمـ بـ بمبـ ࢧ ࢧࢧ	cv44=1
Long-tail	م مم ـم ـمـ م بمـ ࢧ ࢧࢧ	cv44=2

Heh

Affects: U+0647

Feature	Sample	Feature setting
Standard	ه هه ه	cv48=0
Kurdish-style	ھ هھ ھ	cv48=3
Sindhi-style	ھ هھ ھ	cv48=1
Urdu-style	ہ ہہ ہ	cv48=2

Heh Doachashmee

Affects: U+06BE

Feature	Sample	Feature setting
Standard	ھ ھھ ھ	cv49=0
Knotted	ھ ھھ ھ	cv49=1
Bowtie	ھ ھھ ھ	cv49=2
Kurdish-style	ھ ھھ ھ	cv49=3

Kyrgyz OE

Affects: U+06C5

Feature	Sample	Feature setting
Loop	ۅ	cv51=0
Bar	ۅ	cv51=1

Yeh Hamza

Affects: U+0626

Feature	Sample	Feature setting
Standard	ئ ئ	cv54=0
Right hamza	ئ ئ	cv54=1
Mid hamza	ئ ئ	cv54=2

Maddah

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

| Feature	Sample	Feature setting
Small	ٓ آآ	cv60=0
Large	ٓ آآ	cv60=1

Shadda+kasra placement

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

Feature	Sample	Feature setting
Default	بِّ ٱِّ بِّ	cv62=0
Lowered	بِّ ٱِّ بِّ	cv62=1
Raised	بِّ ٱِّ بِّ	cv62=2

Damma

Affects: U+064F

Feature	Sample	Feature setting
Default	بُ ٱُ	cv70=0
Filled	بُ ٱُ	cv70=1
Short	بُ ٱُ	cv70=2
Crossed	بُ ٱُ	cv70=3

Dammatan

Affects: U+064C

Feature	Sample	Feature setting
Standard	بٌ ٱٌ	cv72=0
Six-nine	بٌ ٱٌ	cv72=1
Two-nine	بٌ ٱٌ	cv72=2
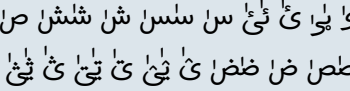
Inverted Damma

Affects: U+0657

Feature	Sample	Feature setting
Default	بٗ ٱٗ	cv74=0
Hollow	بٗ ٱٗ	cv74=1
Filled	بٗ ٱٗ	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	یٰ یٰ ئٰ ئٰ سٰ سٰ سٰ شٰ شٰشٰ صٰ طٰصٰ ضٰ ضٰضٰ ئٰ ئٰئٰ ئٰ ئٰ ئٰ ئٰئٰ	cv76=0

Feature	Sample	Feature setting
	ئ لئ يٰ لئٰ يٰ ئٰ ئُٰ بنٰ بنلبنٰ بنٰ بپلبپٰ پنٰ پٹلپپٰ ىٰ طىصٰ ضٰ ظضٰ ئ لئ يٰ بئ يٰ ئٰ لئٰ يٰ بپٰ يٰ پپٰ بٹٰ بٹبٹٰ ضٰ ظضٰ ثٹٰ ثلثثٰ ثٰ ثلثٰ ثٹٰ ثٹثٹٰ سٰ سلسسٰ سٰ سلسٰ ئٰ ٹٹٰ ئٰ ٹٹٰ يٰ بپٰ يٰ ئُٰ يٰ نىٰ يٰ چىٰ چلچىٰ يٰ نُيٰ	
Large	يٰ بُٰ ئٰ ئُٰ سٰ سلسٰ شٰ شلششٰ صٰ طصٰ ضٰ ظضٰ ئٰ ٹُٰ ثٰ ثٹٰ ثٰ ثُٰ ئ لئ يٰ لئٰ يٰ ئٰ ئُٰ بنٰ بنلبنٰ بنٰ بپلبپٰ پنٰ پٹلپپٰ ىٰ طىصٰ ضٰ ظضٰ ئ لئ يٰ بئ يٰ ئٰ لئٰ يٰ بپٰ يٰ پپٰ بٹٰ بٹبٹٰ ضٰ ظضٰ ثٹٰ ثلثثٰ ثٰ ثلثٰ ثٹٰ ثٹثٹٰ سٰ سلسسٰ سٰ سلسٰ ئٰ ٹٹٰ ئٰ ٹٹٰ يٰ بپٰ يٰ ئُٰ يٰ نىٰ يٰ چىٰ چلچىٰ يٰ نُيٰ	cv76=1
Small	يٰ بُٰ ئٰ ئُٰ سٰ سلسٰ شٰ شلششٰ صٰ طصٰ ضٰ ظضٰ ئٰ ٹُٰ ثٰ ثٹٰ ثٰ ثُٰ ئ لئ يٰ لئٰ يٰ ئٰ ئُٰ بنٰ بنلبنٰ بنٰ بپلبپٰ پنٰ پٹلپپٰ ىٰ طىصٰ ضٰ ظضٰ ئ لئ يٰ بئ يٰ ئٰ لئٰ يٰ بپٰ يٰ پپٰ بٹٰ بٹبٹٰ ضٰ ظضٰ ثٹٰ ثلثثٰ ثٰ ثلثٰ ثٹٰ ثٹثٹٰ سٰ سلسسٰ سٰ سلسٰ ئٰ ٹٹٰ ئٰ ٹٹٰ يٰ بپٰ يٰ ئُٰ يٰ نىٰ يٰ چىٰ چلچىٰ يٰ نُيٰ	cv76=2

Sukun

Affects: U+0652

Feature	Sample	Feature setting
Closed	بْ ْ	cv78=0
Open down	بْ ْ	cv78=1
Open left	بْ ْ	cv78=2
Closed	بْ ْ	cv78=3

End of ayah

Affects: U+06DD

These alternates are also available using the Stylistic Alternates (salt) feature, but at this time we know of no OpenType-based applications that can access these.

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	🛡123🛡 🛡١٢٣🛡	cv80=0
Simplified A	(123) (١٢٣)	cv80=1
Simplified B	123 ١٢٣	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.

۵
٣٤٥

Eastern digits

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

Feature	Sample	Feature setting
Standard	۴۶۷	cv82=0
Sindhi-style	۴٦۷	cv82=1
Urdu-style	٣٦۷	cv82=2
Kurdish-style	۴۶۷	cv82=3
Rohingya-style	٤٦۷	cv82=4
Default	۴۶۷	cv82=5

Comma

Affects: U+060C, U+061B (This feature is not recommended for use. The Unicode Standard recommends the use of ، U+2E41 and ؛ U+204F instead.)

Feature	Sample	Feature setting
Upward	؛ ،	cv84=0
Downward	؛ ،	cv84=1

Decimal separator

Affects: U+066B

Feature	Sample	Feature setting
Small reh	٫	cv85=0
Slash	٬	cv85=1

Other user font features

Line spacing

This feature is only available in TypeTuner Web.

Allows for adjustment of the default line spacing in the font (values shown are ordered in increasing line spacing).

Feature
Normal
Loose
1.0 Compatible Normal
1.0 Compatible Loose

This guide is from the Harmattan project version 4.3 and is copyright © 2014-2024 SIL International.