Harmattan Features

The Harmattan font includes a number of optional features that provide alternative rendering that might be preferable for use in some contexts. The chart 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.

Features

When Harmattan is used in applications that support Graphite or OpenType, and that provide an appropriate user interface, various user-controllable font features are available allowing access to alternatively-designed glyphs.

The table below gives a visual representation of the featured character glyphs in the font. Note that within each feature the top-most value is the default. The other lines show the first alternate and, if available, the second or third alternates.

List of Graphite features and OpenType Character Variants

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Character Shapes	Implementation Notes[1]
Alef diacritic placement (U+0623, U+0625, U+0627, U+064E, U+0650, U+0654, U+0655)	cv02	0=Standard	أإاَاِأإلألإ	G,O,T
		1=Hamza touching	أإاَاِأإلألإ	
		2=Touching	أإاَاِأإلألإ	
Jeem/Hah (U+062C, U+062D, U+062E, U+0682, U+0683, U+0684, U+0685, U+0686, U+06BF, U+0757, U+0758, U+08A2, U+08C1, U+08C5, U+08C6)	cv08	0=Standard	ج ججج ح ححح خ خخخ ڂ ڂڂڂ ڃ ڃڃڃ ڄ ڄڄڄ څ څڅڅ چ چچچ ڿ ڿڿڿ ݗ ݗݗݗ ݘ ݘݘݘ ࢢ ࢢࢢࢢ ࣁ ࣁࣁࣁ ࣅ ࣅࣅࣅ ࣆ ࣆࣆࣆ	G,O,T
		1=Handwritten	ج ججج ح ححح خ خخخ ڂ ڂڂڂ ڃ ڃڃڃ ڄ ڄڄڄ څ څڅڅ چ چچچ ڿ ڿڿڿ ݗ ݗݗݗ ݘ ݘݘݘ ࢢ ࢢࢢࢢ ࣁ ࣁࣁࣁ ࣅ ࣅࣅࣅ ࣆ ࣆࣆࣆ	

1 **Implementation Notes: G**=Implemented in Graphite; **O**=Implemented in OpenType; **T**=Implemented in TypeTuner (command line version: http://scripts.sil.org/TypeTuner and web-based version: http://scripts.sil.org/ttw) .

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Character Shapes	Implementation Notes
Dal (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)	cv12	0=Standard	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ	G,O,T
		1=Alternate XeTeX: "Scheherazade/GR:Dal=Alternate"	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ	
Sad/Dad (U+0635, U+0636, U+069D, U+069E, U+06FB, U+08AF)	cv20	0=Standard	ص صصص ض ضضض ڝ ڝڝڝ ڞ ڞڞڞ ۻ ۻۻۻ ࢯ ࢯࢯࢯ	G,O,T
		1=Half XeTeX: "Harmattan/GR:Sad/Dad=Half"	ص صصص ض ضضض ڝ ڝڝڝ ڞ ڞڞڞ ۻ ۻۻۻ ࢯ ࢯࢯࢯ	
Meem (U+0645, U+0765, U+0766, U+08A7)	cv44	0=Standard	م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ	G,O,T
		1=Sindhi-style XeTeX: "Harmattan/GR:Meem=Sindhi-style"	م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ	
Heh (U+0647)	cv48	0=Standard	ه ههه	G,O,T
		3=Kurdish-style XeTeX: "Harmattan/GR:Heh=Kurdish-style"	ه ههه	
		1=Sindhi-style XeTeX: "Harmattan/GR:Heh=Sindhi-style"	ه ههه	
		2=Urdu-style XeTeX: "Harmattan/GR:Heh=Urdu-style"	ه ههه	
Arabic U (U+0677, U+06C7)	cv50	0=Standard	ٷ ۇ	G,O,T
		1=Filled XeTeX: "Harmattan/GR:Arabic U=Filled"	ٷ ۇ	
Maddah (U+0622, U+0627+U+0653, U+0653)	cv60	0=Small	آ آ ◌ٓ	G,O,T
		1=Large	آ آ ◌ٓ	

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Character Shapes	Implementation Notes
Shadda+kasra placement (U+064D, U+0650 with U+0651)	cv62	0=Default	بِّ ◌ِّ بٍّ ◌ٍّ	G,O,T
		1=Lowered XeTeX: "Harmattan/GR:Shadda+kasra placement=Raised"	بِّ ◌ِّ بٍّ ◌ٍّ	
		2=Raised XeTeX: "Harmattan/GR:Shadda+kasra placement=Raised"	بِّ ◌ِّ بٍّ ◌ٍّ	
Damma (U+064F)	cv70	0=Standard	بُ ◌ُ	G,O,T
		1=Filled XeTeX: "Harmattan/GR:Damma=Filled"	بُ ◌ُ	
		2=Short XeTeX: "Harmattan/GR:Damma=Short"	بُ ◌ُ	
Dammatan (U+064C)	cv72	0=Standard	بٌ ◌ٌ	G,O,T
		1=Six-nine XeTeX: "Harmattan/GR:Dammatan=Six-nine"	بٌ ◌ٌ	
Inverted Damma (U+0657)	cv74	0=Standard	بٗ ◌ٗ	G,O,T
		2=Filled XeTeX: "Harmattan/GR:Inverted Damma=Filled"	بٗ ◌ٗ	
Superscript Alef (U+0670 on all yeh, sad and seen-like characters U+0649 U+064A U+06D0 U+06D1 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+076D U+077E)	cv76	0=Small	ىٰ ىٰىٰىٰ يٰ يٰيٰيٰ ېٰ ېٰېٰېٰ ۑٰ ۑٰۑٰۑٰ یٰ یٰیٰیٰ صٰ صٰصٰصٰ ضٰ ضٰضٰضٰ ڝٰ ڝٰڝٰڝٰ ڞٰ ڞٰڞٰڞٰ ۻٰ ۻٰۻٰۻٰ ࢯٰ ࢯٰࢯٰࢯٰ سٰ سٰسٰسٰ شٰ شٰشٰشٰ ښٰ ښٰښٰښٰ ڛٰ ڛٰڛٰڛٰ ڜٰ ڜٰڜٰڜٰ ۺٰ ۺٰۺٰۺٰ ݭٰ ݭٰݭٰݭٰ ݾٰ ݾٰݾٰݾٰ	G,O,T

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Character Shapes	Implementation Notes
		1=Large XeTeX: "Harmattan/GR:Superscript Alef=Large"	ىٰ ٮٰٮٰىٰ يٰ يٰيٰيٰ ېٰ ېٰېٰېٰ ۑٰ ۑٰۑٰۑٰ ىٰ يٰيٰىٰ صٰ طٰطٰصٰ ضٰ ظٰظٰضٰ ڝٰ ڝٰڝٰڝٰ ڞٰ ڞٰڞٰڞٰ ۻٰ ۻٰۻٰۻٰ ڝٰ ڝٰڝٰڝٰ سٰ سٰسٰسٰ شٰ شٰشٰشٰ ښٰ ښٰښٰښٰ ڛٰ ڛٰڛٰڛٰ ڜٰ ڜٰڜٰڜٰ ۺٰ ۺٰۺٰۺٰ ثٰ ثٰثٰثٰ شٰ شٰشٰشٰ	
Sukun (U+0652)	cv78	0=Closed	بْ ◌ْ	G,O,T
		1=Open down XeTeX: "Harmattan/GR:Sukun=Open down"	بْ ◌ْ	
		2=Open left XeTeX: "Harmattan/GR:Sukun=Open left"	بْ ◌ْ	
End of ayah (U+06DD)	cv80	0=Standard	۝123	G,O,T
		1=Simplified A XeTeX: "Harmattan/GR:End of ayah=Simplified A"	۝123	
		2=Simplified B XeTeX: "Harmattan/GR:End of ayah=Simplified B"	۝123	
Eastern digits (U+06F4, U+06F6, U+06F7)	cv82	0=Standard	۴۵۶۷	G,O,T
		1=Sindhi-style XeTeX: "Harmattan/GR:Eastern digits=Sindhi-style"	۴۵۶۷	
		2=Urdu-style XeTeX: "Harmattan/GR:Eastern digits=Urdu-style"	۴۵۶۷	
		3=Kurdish-style	۴۵۶۷	
		4=Rohingya-style	٤٥٦٧	

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Character Shapes	Implementation Notes
Comma (U+060C, U+061B)	cv84	0=Upward	؛ ،	G,O,T
		1=Downward XeTeX: "Harmattan/GR:Comma=Downward"	؛ ،	
Line spacing		Normal Loose 1.0 Compatible Normal 1.0 Compatible Loose	Allows for adjustment of the default line spacing in the font.	T

List of Language-specific features

The language-specific features that are in the font are demonstrated below:

Language	**Language ID**	**Feature Setting** (top-most in each section is default)	**Character Shapes**	**Implementation Notes**[2]
Default			د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ ه ههه ۴۵۶۷ ◌ِّ ◌ٗ	G,O,T
Kurdish (Northern)	ku	Language set to Kurdish XeTeX: "Harmattan/GR:language=ku" (Graphite) XeTeX: "Harmattan:language=ku" (OpenType) HTML: lang="ku"	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ ه ههه ۴۵۶۷ ◌ِّ ◌ٗ	
Rohingya	rhg	Language set to Rohingya XeTeX: "Harmattan/GR:language=rhg" (Graphite) XeTeX: "Harmattan:language=rhg" (OpenType) HTML: lang="rhg"	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ ه ههه ٤٥٦٧ ◌ِّ ◌ٗ	
Sindhi	sd	Language set to Sindhi XeTeX: "Harmattan/GR:language=sd" (Graphite) XeTeX: "Harmattan:language=sd" (OpenType) HTML: lang="sd"	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ ه ههه ۴۵٦٧ ◌ِّ ◌ٗ	
Urdu	ur	Language set to Urdu XeTeX: "Harmattan/GR:language=ur" (Graphite) XeTeX: "Harmattan:language=ur" (OpenType) HTML: lang="ur"	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ ه ههه ۴۵٦٧ ◌ِّ ◌ٗ	
Wolof	wo	Language set to Wolof XeTeX: "Harmattan/GR:language=wo" (Graphite) XeTeX: "Harmattan:language=wo" (OpenType) HTML: lang="wo"	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ م ممم ݥ ݥݥݥ ݦ ݦݦݦ ࢧ ࢧࢧࢧ ه ههه ۴۵۶۷ ◌ِّ ◌ٗ	

2 **Implementation Notes: G**=Implemented in Graphite; **O**=Implemented in OpenType; **T**=Implemented in TypeTuner (command line version: http://scripts.sil.org/TypeTuner and web-based version: http://scripts.sil.org/ttw) .

Special rules for rendering Allah

In certain types of literature, the name *Allah* and words related to this name are given unique rendering. Unicode has a *presentation form* character (U+FDF2 ARABIC LIGATURE ALLAH ISOLATED FORM) that implements this rendering and, while this can work (in some fonts) for the word in isolation, it doesn't help users obtain special rendering in other contexts where it is desired.

Starting with v2.000, Harmattan provides the special rendering for sequences of Arabic letters that meet specific patterns, giving much more flexibility to document authors. To obtain the special rendering, all of the following must be true:

- The basic sequence of letters is either:
  - lam-lam-heh
    - Preceded by some Arabic letter (joining or not, with or without diacritic marks)
    - The second lam *must* be followed (in either order) by shadda and either superscript alef or fatha
  - alef-lam-lam-heh
    - alef is the *isolate* form (with or without diacritic marks)
    - The second lam *may* be followed (in either order) by shadda and either superscript alef or fatha
- The heh used is the *final* form of either *heh goal* (U+06C1) final OR *heh* (U+0647) final
- There are no diacritic marks between the two *lam* characters

FEH	ALEF	LAM	LAM	SHADDA	FATHA	SUPERSCRIPT ALEF	HEH			
	ا +	ل +	ل +				ه	→	ٱلله	Ligature is formed
	ا +	ل +	ل +	ّ +	ـَ +		ه	→	ٱللَّه	Ligature is formed
	ا +	ل +	ل +	ّ +		ٰ +	ه	→	ٱللّٰه	Ligature is formed
ف +		ل +	ل +	ّ +	ـَ +		ه	→	فللَّه	Ligature is formed
ف +		ل +	ل +				ه	→	فلله	Ligature is not formed

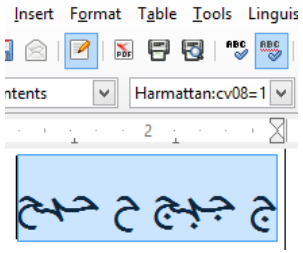
Users may find these rules cause the special rendering when it is not desired. The rendering can be suppressed by inserting U+200D ZERO WIDTH JOINER after either *lam*.

Use of Graphite Features, OpenType Character Variants, and Language-specific features

LibreOffice

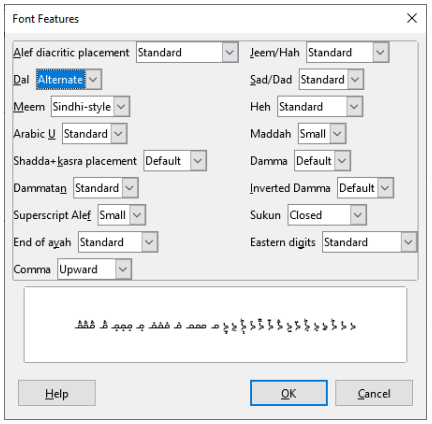
In LibreOffice 3.4+[3] there are a few steps the user may need to do before using Arabic script and language support. The font would be set to “Harmattan” and then the language must be selected in the application. In LibreOffice, first enable complex text layout (**Tools / Options / Language Settings / Languages** and then select **Enabled for complex text layout (CTL).** Then, select the text, click on the status bar to change the language, select the language (if it is not displayed, click on “More...”).

The font features can be turned on by choosing the font (ie Harmattan), followed by a colon, followed by the feature ID, and then followed by the feature setting. So, for example, if the “Jeem/Hah” handwriting variant is desired, the font selection would be “**Harmattan:cv08=1**”.



If you wish to apply two (or more) features, you can separate them with an “&”. Thus, “Harmattan:cv08=1&cv20=1” would apply the “Jeem/Hah” plus the “Sad/Dad” feature.

Newer versions of LibreOffice have a user interface which allows selection of the Font Features. Select your text (or style) and go to **Format / Character**. Choose the Harmattan font and click on **Features**. Then select the features you wish to turn on.



3 Download here: http://www.libreoffice.org/download.

LibreOffice allows the user to select languages (or even add a language); the default glyphs will change based on the language preferences. Currently LibreOffice allow for the selection of Kurdish, Sindhi, and Urdu. If an application allows you to select any of the languages, the default glyphs will change based on the language preferences.

In the following screenshot, the Sindhi language has been selected.

It is also possible to choose the language through the font menu in LibreOffice:

Wolof: د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ۮ ݙ ݚ ࢮ (Harmattan:lang=wo)

Sindhi: م ممم ف ففف ب ببب ڦ ڦڦڦ (Harmattan:lang=sd)

Microsoft Word

Word does not allow for the selection of Character Variants. However, it does support language selection of Urdu and Sindhi.

Before opening Word, go to **Start / All Programs / Microsoft Office / Microsoft Office 2016 Tools / Microsoft Office 2016 Language Preferences** and add any editing languages you want to use.

XeTeX

For XeTeX[4], Graphite Feature IDs are not used. Use the **Feature Name** and **Feature setting**, e.g., if Character Variant 12 was desired, the font selection would be: "Harmattan/GR:Dal=Alternate" at 12pt

Languages in XeTeX can be accessed by using: "Harmattan/GR:language=ur" (for Graphite) or "Harmattan:Arab:language=URD" (for OpenType).

OpenType Character Variants

Currently there are very few applications which support OpenType Character Variants.
For applications which do support OpenType Character Variants, such as in CSS, the Character Variant ID and setting is chosen. For example, in CSS, if cv32, is desired, you might have this code in your .css:

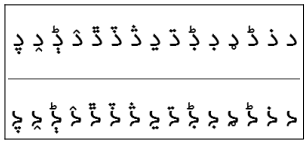
4 http://tug.org/xetex/

```
...
@font-face {
  font-family: Harmattan;
  src: url(Harmattan-Regular.woff);
}
.cv120 {
  font-family: Harmattan;
  font-feature-settings: "cv12" 0;
}
.cv121 {
  font-family: Harmattan;
  font-feature-settings: "cv12" 1;
}
...
```

and this in your .html:

```
<p class=cv120>ډ ډ ډ ډ ډ ډ ډ ډ ډ ډ</cv120></p>
<p class=cv121>ډ ډ ډ ډ ډ ډ ډ ډ ډ ډ</cv121></p>
```

Which would produce this:



TypeTuner

At this point, most applications do not make use of these features (neither Graphite or OpenType Character Variants nor language features) so another solution is needed to use the variant characters. TypeTuner creates tuned fonts that use the variant glyph in place of the standard glyph. The TypeTuner Web site is http://scripts.sil.org/ttw/fonts2go.cgi.