Akatab - Font Features

Akatab is a Graphite and OpenType-enabled font family that supports the Tifinagh script. It includes a number of optional user-selected features that may be useful or required for particular uses or languages. This document lists all the user-selected features. These features are primarily specified using four-letter tags (e.g. 'cv17'). For more information on how to access OpenType features in specific environments and applications, see Using Font Features.

Akatab also provides for a number of common features such as ligature formation, contextual substitution and diacritic positioning. It also provides right-to-left rendering of text. Most applications will make use of these features when the proper sequence of characters are entered.

This page uses web fonts (WOFF2) to demonstrate font features and should display correctly in all modern browsers. For detailed information see Using SIL Fonts on Web Pages. For a more concise example of how to use Akatab as a web font see Akatab Webfont Example.

If this document is not displaying correctly a PDF version is also provided in the documentation/pdf folder of the release package.

User-selected feature list

Character variants

Alternate YA
Affects: U+2D30

Feature	Sample	Sample right-to-left	Feature setting
Standard	•	•	cv01=0
Circle	°	°	cv01=1

Alternate YAF
Affects: U+2D3C

Feature	Sample	Sample right-to-left	Feature setting
Standard	]I[	]I[	cv02=0
I-shape	I	I	cv02=1
Open top and bottom	⊔	⊔	cv02=2

Alternate YAGHH
Affects: U+2D34

Feature	Sample	Sample right-to-left	Feature setting
Standard	X	X	cv03=0
Round bottom	℧	℧	cv03=1

Alternate YAGN

Affects: U+2D50

Feature	Sample	Sample right-to-left	Feature setting
Standard	‡	‡	cv04=0
Lowered bottom stroke	‡	‡	cv04=1

Alternate YU

Affects: U+2D53

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵓ	ⵓ	cv05=0
Short strokes	ⵓ	ⵓ	cv05=1

Alternate YAZ

Affects: U+2D63

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵣ	ⵣ	cv06=0
Squared	ⵣ	ⵣ	cv06=1

Alternate AHAGGAR YAZH

Affects: U+2D4B

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵋ	ⵋ	cv07=0
Squared	ⵋ	ⵋ	cv07=1

Alternate YAB

Affects: U+2D31

Feature	Sample	Sample right-to-left	Feature setting
Standard	⵱	⵱	cv08=0
Rectangle style	⵱	⵱	cv08=1

Alternate YAG

Affects: U+2D33

Feature	Sample	Sample right-to-left	Feature setting
Standard	⵳	⵳	cv09=0
Rounded top	⵳	⵳	cv09=1

Alternate YAJ

Affects: U+2D36

Feature	Sample	Sample right-to-left	Feature setting
Standard	ï	ï	cv10=0
Lower dots	!	!	cv10=1

Alternate YAH (Tuareg yab)

Affects: U+2D40

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⅅ	ⅅ	cv11=0
Rectangle style	ⅅ	ⅅ	cv11=1

Alternate YASH

Affects: U+2D5B

Feature	Sample	Sample right-to-left	Feature setting
Standard	Ɛ	ꓤ	cv12=0
8 shape	8	8	cv12=1

Alternate YATT

Affects: U+2D5F

Feature	Sample	Sample right-to-left	Feature setting
Standard	Ⴇ	Ⴇ	cv13=0
F shape	F	ꓞ	cv13=1

Alternate YADH

Affects: U+2D38

Feature	Sample	Sample right-to-left	Feature setting
Standard	∨	∨	cv15=0
Rounded bottom	∪	∪	cv15=1

Alternate YAL and YAL

Affects: U+2D4D U+2D4F

Feature	Sample	Sample right-to-left	Feature setting
Standard	¦'¦ ¦"¦ ¦¦"¦¦ ¦¦'¦¦	¦¦'¦¦ ¦¦"¦¦ ¦"¦ ¦'¦	cv19=0
Slanted	∖¦∖ ¦∖∖¦ ¦¦∖∖¦¦ ¦¦∖¦¦	¦¦∕¦¦ ¦¦∕∕¦¦ ¦∕∕¦ ¦∕¦	cv19=1

Alternate punctuation

Affects: U+0021 U+002C U+002E

Feature	Sample	Sample right-to-left	Feature setting
Standard Latin	! , .		cv20=0
Decorative			cv20=1

Ligature variants

Alternate YAB YAT

Affects: U+2D31 U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	Θ+	+Θ	cv31=0
Interior T	⊕	⊕	cv31=1

Alternate YAR YAT

Affects: U+2D54 U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	O+	+O	cv32=0
Large interior T	⊕	⊕	cv32=1
Small interior T	⊕	⊕	cv32=2

Alternate YAS YAT

Affects: U+2D59 U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	☉+	+☉	cv33=0
Large interior T lower dot	⊕	⊕	cv33=1
Small interior T	⊕	⊕	cv33=2
Large interior T upper dot	⊕	⊕	cv33=3

Alternate YAM YAT

Affects: U+2D4E U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	Ꝇ	ꝇ	cv34=0
Mid exterior T	Ᵽ	Ꝧ	cv34=1
Low interior T	Ꝇ	Ꝗ	cv34=2
Center T	Ᵽ	Ꝧ	cv34=3

Alternate YAF YAT

Affects: U+2D3C U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵝꝇ	ꝇⵝ	cv35=0
Single bar, middle exterior T	Ᵽ	Ᵽ	cv02=1
Double bar, middle exterior T	ⵝᵽ	ᵽⵝ	cv35=1
Single bar, middle interior T	Ᵽ	Ᵽ	cv35=2
Open top & bottom, interior T	ⵝ	ⵝ	cv35=3

Alternate YAN TUAREG YAK

Affects: U+2D4F U+2D3E

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵏ	ⵏ	cv36=0
Double cluster dots	ⵏ	ⵏ	cv36=1

Alternate YAN YAT

Affects: U+2D4F U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵏᵽ	ᵽⵏ	cv37=0
Side bar	ⵏ	ⵏ	cv37=1
Top bar	ⵟ	ⵟ	cv37=2

Alternate YAL YAT

Affects: U+2D4D U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵍᵽ	ᵽⵍ	cv38=0
Internal T			cv38=1

Feature	Sample	Sample right-to-left	Feature setting
	ⵂ	ⵂ	
Middle bar	ǂ	ǂ	cv38=2
X shape	X	X	cv38=3

Alternate YU YAT (WT)

Affects: U+2D53 U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵓ	ⵓ	cv39=0
Left short strokes	ⵓ	ⵓ	cv05=1
Tall T, left dots	ⵓ	ⵓ	cv39=1
Tall T, cross dots	ⵓ	ⵓ	cv39=2

Alternate TUAREG YAZH YAT

Affects: U+2D4C U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵌ	ⵌ	cv40=0
Mid exterior T	ⵌ	ⵌ	cv40=1
Center T	ⵌ	ⵌ	cv40=2

Alternate YAN YAD

Affects: U+2D4F U+2D37

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵏ	ⵏ	cv41=0
Up down pointers	ⵏ	ⵏ	cv41=1

Alternate YAN YAF

Affects: U+2D4F U+2D3C

Feature	Sample	Sample right-to-left	Feature setting
Standard	⵼	⵼	cv42=0
Top and bottom bars	⵼	⵼	cv42=1
No bars	⵼	⵼	cv42=2

Alternate YAN YAJ

Affects: U+2D4F U+2D36

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵏ	ⵏ	cv43=0
Top and bottom dots	ⵏ	ⵏ	cv43=1

Alternate YAN YAS

Affects: U+2D4F U+2D59

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵙ	ⵙ	cv44=0
Interior YAN	ⵙ	ⵙ	cv44=1

Alternate YAN TUAREG YAZH

Affects: U+2D4F U+2D4C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵌ	ⵌ	cv45=0
Exterior circles	ⵌ	ⵌ	cv45=1

Alternate YAR TUAREG YAK

Affects: U+2D54 U+2D3E

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵔ	ⵔ	cv46=0
Double cluster dots	ⵔ	ⵔ	cv46=1

Alternate YASH TUAREG YAK

Affects: U+2D5B U+2D3E

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵛ	ⵛ	cv47=0
Double cluster dots	ⵛ	ⵛ	cv47=1
8 shape	ⵛ	ⵛ	cv12=1
8 shape, double cluster dots	ⵛ	ⵛ	cv47=2

Alternate YASH YAT

Affects: U+2D5B U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⴛ	ⴛ	cv48=0
Internal T	ⴛ	ⴛ	cv48=1

Stylistic sets (OpenType only)

Alternate YA

Affects: U+2D30

Feature	Sample	Sample right-to-left	Feature setting
Standard	·	·	ss01=0
Circle	·	·	ss01=1

Alternate YAF

Affects: U+2D3C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵌ	ⵌ	ss02=0
I-shape	ⵌ	ⵌ	ss02=1
Open top and bottom	ⵌ	ⵌ	ss14=1

Alternate YAGHH

Affects: U+2D34

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⴴ	ⴴ	ss03=0
Round bottom	ⴴ	ⴴ	ss03=1

Alternate YAGN

Affects: U+2D50

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵐ	ⵐ	ss04=0
Lowered bottom stroke	ⵐ	ⵐ	ss04=1

Alternate YU

Affects: U+2D53

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵓ	ⵓ	ss05=0
Short strokes	ⵓ	ⵓ	ss05=1

Alternate YAZ

Affects: U+2D63

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵣ	ⵣ	ss06=0
Squared	ⵣ	ⵣ	ss06=1

Alternate Ahaggar YAZH

Affects: U+2D4B

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵋ	ⵋ	ss07=0
Squared	ⵋ	ⵋ	ss07=1

Alternate YAB

Affects: U+2D31

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⴱ	ⴱ	ss08=0
Rectangle style	ⴱ	ⴱ	ss08=1

Alternate YAG

Affects: U+2D33

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⴳ	ⴳ	ss09=0
Rounded top	ⴳ	ⴳ	ss09=1

Alternate YAJ

Affects: U+2D36

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⴶ	ⴶ	ss10=0
Lower dots	ⴶ	ⴶ	ss10=1

Alternate YAH (Tuareg yab)

Affects: U+2D40

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵀ	ⵀ	ss11=0
Rectangle style	ⵀ	ⵀ	ss11=1

Alternate YASH

Affects: U+2D5B

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵛ	ⵛ	ss12=0
8 shape	ⵛ	ⵛ	ss12=1

Alternate YATT

Affects: U+2D5F

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵟ	ⵟ	ss13=0
F shape	ⵟ	ⵟ	ss13=1

Alternate YADH

Affects: U+2D38

Feature	Sample	Sample right-to-left	Feature setting
Standard	⵸	⵸	ss15=0
Rounded bottom	⵸	⵸	ss15=1

Alternate YAL and YAL

Affects: U+2D4D U+2D4F

Feature	Sample	Sample right-to-left	Feature setting
Standard	ⵍ ⵍ ⵏ ⵏ	ⵏ ⵏ ⵍ ⵍ	ss19=0
Slanted	ⵍ ⵍ ⵏ ⵏ	ⵏ ⵏ ⵍ ⵍ	ss19=1

Alternate punctuation

Affects: U+0021 U+002C U+002E

Feature	Sample	Sample right-to-left	Feature setting
Standard Latin	! , .		ss20=0
Decorative	! , .		ss20=1

Common features list

The Akatab fonts contain logic that uses features to render certain glyphs and sequences properly. This logic processes the sequence of glyphs and outputs the proper visual representation.

The sections below show the use of some formatting characters, notably the TIFINAGH CONSONANT JOINER (U+2D7F) and RIGHT-TO-LEFT OVERRIDE (U+202E). A recommended keyboard for Tifinagh characters and these special characters can be downloaded at the Keyman Tuareg Tifinagh keyboard web site.

Contextual shaping

Two Tifinagh characters TIFINAGH LETTER YAL (U+2D4D) and TIFINAGH LETTER YAN (U+2D4F) could cause ambiguity when they appear next to each other. To prevent uncertainty, the second character in the sequence is raised as in the example below:

 Iˡl Iˡˡl llˡll llˡll

If the user's preference is slanted bars, the user-selected features *cv19* or *ss19* can be used, as illustrated in the user-selected font features section above.

Ligature formation

Bi-consonant ligatures are formed after typing the character sequences shown in the examples below. Type the first character e.g. ⴱ (U+2D31), the TIFINAGH CONSONANT JOINER ⸻ (U+2D7F) and then the second character e.g. ⴲ , to get the ⴱⴲ ligature.

Akatab bi-consonant ligature examples

Right-to-left Tifinagh

Historically, Tifinagh did not have a fixed direction. Modern Tifinagh is commonly printed as left-to-right text and The Unicode Standard: Tifinagh section specifies its directionality as strong left to right while recognizing it can be bidirectional. Akatab has glyph and rendering support for writing in both directions. To get right-to-left behaviour and then reverse the direction, the user can use two invisible formatting characters

to change the direction of the characters and the text as follows:

1. U+202E (RIGHT-TO-LEFT OVERRIDE) for right-to-left Tifinagh
   The text that follows will be right-to-left. Additionally, the directionality of characters is changed to right-to-left.
2. U+202C (POP DIRECTIONAL FORMATTING) to revert direction for Tifinagh text
   The text that follows reverts to the direction of the text before the previous U+202E character.

Akatab examples

The following text demonstrates Tifinagh left-to-right behaviour:

ⵙⵉⵜⵜ ⵜⵙⵟⵍⵏ ⵏⵙ ⵜⵏⴼⵍⵜ ⵎⵘ

The following text demonstrates Tifinagh right-to-left behaviour using the U+202E character:

ⵘⵎ ⵜⵍⴼⵏⵜ ⵙⵏ ⵏⵍⵟⵙⵜ ⵜⵜⵉⵙ

The following text demonstrates both Tifinagh directional behaviours using the U+202E and U+202C characters:

ⵙⵉⵜⵜ ⵜⵙⵟⵍⵏ ⵏⵙ ⵜⵏⴼⵍⵜ ⵎⵘ ⵘⵎ ⵜⵍⴼⵏⵜ ⵙⵏ ⵏⵍⵟⵙⵜ ⵜⵜⵉⵙ

Rendering support

RenderingGraphite

This guide is from the Akatab project version 3.000 and is copyright © 2010-2023 SIL International.