# **Akatab - Font Features**

Akatab is an 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 is 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

Fe	eature	Sample	Sample right-to-left	Feature setting
St	andard	•		cv01=0
Ci	rcle	•	•	cv01=1

#### **Alternate YAF**

Affects: U+2D3C

Feature	Sample	Sample right-to-left	Feature setting
Standard	30	30	cv02=0
I-shape	I	I	cv02=1
Open top and bottom	붜	H	cv02=2

## **Alternate YAGHH**

Affects: U+2D34

Feature	Sample	Sample right-to-left	Feature setting
Standard	Δ	Δ	cv03=0
Round bottom	8	8	cv03=1

## **Alternate YAGN**

Affects: U+2D50

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

# Alternate YU (Tuareg YAW) Tuareg YAGH, YAH and YAQ (short strokes)

Affects: U+2D53 U+2D57 U+2D42 U+2D48

Feature	Sample	Sample right-to-left	Feature setting
Standard	: : :	:	cv05=0
Short strokes	: I I	··· 🚦 🗒 =	cv05=1

## **Alternate YAZ**

Affects: U+2D63

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

## **Alternate AHAGGAR YAZH**

Affects: U+2D4B

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

## **Alternate YAB**

Affects: U+2D31

Feature	Sample	Sample right-to-left	Feature setting
Standard	θ	θ	cv08=0
Rectangle style	8	В	cv08=1

## **Alternate YAG**

Affects: U+2D33

Feature	Sample	Sample right-to-left	Feature setting
Standard	X	X	cv09=0
Rounded top	8	8	cv09=1

## **Alternate YAJ**

Affects: U+2D36

Feature	Sample	Sample right-to-left	Feature setting
Standard	Ϊ	ï	cv10=0
Lower dots	J.	Ĭ.	cv10=1

# Alternate YAH (Tuareg yab)

Affects: U+2D40

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

## **Alternate YASH**

Affects: U+2D5B

Feature	Sample	Sample right-to-left	Feature setting
Standard	C	ລ	cv12=0
8 shape	8	8	cv12=1

## **Alternate YATT**

Affects: U+2D5F

Feature	Sample	Sample right-to-left	Feature setting
Standard	E	∄	cv13=0
F shape	F	7	cv13=1

## **Alternate YADH**

Affects: U+2D38

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

## **Neo-Tifinagh**

Affects: 2D30 2D3C 2D4D 2D53 2D5A 2D5B 2D5C

Feature	Sample	Feature setting
Standard	· ][    : # C +	cv18=0
Neo-Tifinagh	. Ж И : O C +	cv18=1

## **Alternate YAN and YAL**

Affects: U+2D4D U+2D4F

Feature	Sample	Sample right-to-left	Feature setting
Standard	1,1 1,1 11,11 11,11	11,11 11 <sub>11</sub> 11 1 <sub>11</sub> 1	cv19=0
Slanted	1/1 1/41 11/41 11/11	/     //    //   /	cv19=1

## **Alternate punctuation**

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

Feature	Sample	Feature setting
Standard Latin	!,.	cv20=0
Decorative	<b>₩</b> ♥ @	cv20=1

## **Alternate YO**

Affects: U+2D67

Feature	Sample	Sample right-to-left	Feature setting
Standard			cv21=0
Dots			cv21=1

# Ligature variants

## **Alternate YAB YAT**

Affects: U+2D31 U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	⊕+	+⊖	cv31=0
Interior T	$\Theta$	$\Theta$	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	$\oplus$	$\oplus$	cv32=1
Small interior T	$\Theta$	$\Theta$	cv32=2

## **Alternate YAS YAT**

Affects: U+2D59 U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	<b>O</b> +	+⊙	cv33=0
Large interior T lower dot	$\oplus$	$\oplus$	cv33=1
Small interior T	⊕	⊕	cv33=2
Large interior T upper dot	<b>⊕</b>	<b>⊕</b>	cv33=3

## **Alternate YAM YAT**

Affects: U+2D4E U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	<u></u>	Ç	cv34=0
Mid exterior T	Đ	Ð	cv34=1
Low interior T	Ç	J	cv34=2
Center T	Œ	Ð	cv34=3

## **Alternate YAF YAT**

Affects: U+2D3C U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	JC <sub>+</sub>	JC	cv35=0
Single bar, middle exterior T	F	Ŧ	cv02=1
Double bar, middle exterior T	J <del>[:</del>	<del>1</del> ][	cv35=1
Single bar, middle interior T	Ξ	Ŧ	cv35=2
Open top & bottom, interior T	¥	¥	cv02=2

## **Alternate YAN TUAREG YAK**

Affects: U+2D4F U+2D3E

Feature	Sample	Sample right-to-left	Feature setting
Standard	Î	Ϊ	cv36=0
Double cluster dots	Ĵ	Ĵ	cv36=1

## **Alternate YAN YAT**

Affects: U+2D4F U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	<del> </del> +	+1	cv37=0
Side bar	F	4	cv37=1
Top bar	Т	Т	cv37=2

## **Alternate YAL YAT**

Affects: U+2D4D U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	+	+11	cv38=0
Internal T	Н	н	cv38=1
Middle bar	#	#	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	<del>:1</del>	<del>!:</del>	cv39=0
Left short strokes	÷	#=	cv05=1
Tall T, left dots	<del>+</del>	<del> ;</del>	cv39=1
Tall T, cross dots	<del>;</del> †	<del>1.</del>	cv39=2

## **Alternate TUAREG YAZH YAT**

Affects: U+2D4C U+2D5C

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

## **Alternate YAN YAD**

Affects: U+2D4F U+2D37

Feature	Sample	Sample right-to-left	Feature setting
Standard	<b>^</b>	<b>^</b>	cv41=0
Up down pointers	X	X	cv41=1

## **Alternate YAN YAF**

Affects: U+2D4F U+2D3C

Feature	Sample	Sample right-to-left	Feature setting
Standard	¥	H	cv42=0
Top and bottom bars	I	I	cv42=1
No bars	JC	JC	cv02=2

## **Alternate YAN YAJ**

Affects: U+2D4F U+2D36

Feature	Sample	Sample right-to-left	Feature setting
Standard	Ϋ́	Ϋ́	cv43=0
Top and bottom dots	31.	31.	cv43=1

## **Alternate YAN YAS**

Affects: U+2D4F U+2D59

Feature	Sample	Sample right-to-left	Feature setting
Standard	€	Θ	cv44=0
Interior YAN	<b>©</b>	•	cv44=1

## **Alternate YAN TUAREG YAZH**

Affects: U+2D4F U+2D4C

Feature	Sample	Sample right-to-left	Feature setting
Standard	#	#	cv45=0
Exterior circles	<b>‡</b>	#	cv45=1

## **Alternate YAR TUAREG YAK**

Affects: U+2D54 U+2D3E

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

## **Alternate YASH TUAREG YAK**

Affects: U+2D5B U+2D3E

Feature	Sample	Sample right-to-left	Feature setting
Standard	Ë	ä	cv47=0
Double cluster dots	Ė	; ;	cv47=1
8 shape	<b>8</b>	<b>8</b>	cv12=1
8 shape, double cluster dots	<b>8</b>	<b>\$</b>	cv47=2

## **Alternate YASH YAT**

Affects: U+2D5B U+2D5C

Feature	Sample	Sample right-to-left	Feature setting
Standard	ಈ	₽	cv48=0
Internal T	E	3	cv48=1

# **Stylistic sets**

## **Alternate YA**

Affects: U+2D30

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

## **Alternate YAF**

Affects: U+2D3C

Feature	Sample	Sample right-to-left	Feature setting
Standard	30	30	ss02=0
I-shape	I	I	ss02=1
Open top and bottom	H	H	ss14=1

## **Alternate YAGHH**

Affects: U+2D34

Feature	Sample	Sample right-to-left	Feature setting
Standard	Δ	X	ss03=0
Round bottom	8	8	ss03=1

## **Alternate YAGN**

Affects: U+2D50

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

# Alternate YU (Tuareg YAW) Tuareg YAGH, YAH and YAQ (short strokes)

Affects: U+2D53 U+2D57 U+2D42 U+2D48

Feature	Sample	Sample right-to-left	Feature setting
Standard	: : :	:	ss05=0
Short strokes	: I I	··· { } = =	ss05=1

## **Alternate YAZ**

Affects: U+2D63

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

## Alternate Ahaggar YAZH

Affects: U+2D4B

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

## **Alternate YAB**

Affects: U+2D31

Feature	Sample	Sample right-to-left	Feature setting
Standard	θ	θ	ss08=0
Rectangle style	8	8	ss08=1

## **Alternate YAG**

Affects: U+2D33

Feature	Sample	Sample right-to-left	Feature setting
Standard	X	X	ss09=0
Rounded top	8	8	ss09=1

## **Alternate YAJ**

Affects: U+2D36

Feature	Sample	Sample right-to-left	Feature setting
Standard	Ϊ	ï	ss10=0
Lower dots	J.	Ĭ.	ss10=1

# Alternate YAH (Tuareg yab)

Affects: U+2D40

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

## **Alternate YASH**

Affects: U+2D5B

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

#### **Alternate YATT**

Affects: U+2D5F

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

## **Alternate YADH**

Affects: U+2D38

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

## **Neo-Tifinagh**

Affects: 2D30 2D3C 2D4D 2D53 2D5A 2D5B 2D5C

Feature	Sample	Feature setting
Standard	· ][    : # C +	ss18=0
Neo-Tifinagh	. ни: ос+	ss18=1

#### **Alternate YAN and YAL**

Affects: U+2D4D U+2D4F

Feature	Sample	Sample right-to-left	Feature setting
Standard	tit t <sub>u</sub> t II <sub>u</sub> II II <sub>t</sub> II	11,11 11,11 1 <sub>1</sub> 1 1 <sub>1</sub> 1	ss19=0
Slanted	1/1 1/1 11/11 11/11	/     //   //   /	ss19=1

#### **Alternate punctuation**

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

Feature	Sample	Feature setting
Standard Latin	!,.	ss20=0
Decorative	<b>₩</b> ♥ @	ss20=1

# **Using language system tags**

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 ???. Microsoft Word 2019, but not LibreOffice, supports language-specific behavior for ???. Neither application provides

support for the ??? languages. 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 ???, the font now supports this possibility.

## Language list

#### Tamasheq (TAQ)

Affects: U+2D30

Language	Sample	Sample right-to-left	Feature setting
default	Ι C E IL, Ή € ⊙+ Ё Ç	ICEIĻĦ€⊙+ Ĉ Ç	
Tamasheq	I8F 1→ I + + + + + + + + + + + + + + + + + +	3° +⊙ ₽ Ξ Η ∃ β Ι β	lang='taq'

## Tahaggart (THV)

Affects: U+2D30

Language	Sample	Feature setting
default		
Tahaggart		lang='thv'

#### **Tawallammat (TTQ)**

Affects: U+2D30

Language	Sample	Sample slant variants	Feature setting
default	ΙΊ, Η Γ, Ή Ϊ ⊕ Η Ο+ <b>&amp;</b>	1,1 1,1 11,11 11,11	
Tawallammat	∺ X E JC ; ; ⊙ F ⊕ €	1/1 1/1 11/11 11/11	lang='ttq'

# **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 produces 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:

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.  $\Theta$  (U+2D31), the TIFINAGH CONSONANT JOINER \_\_(U+2D7F), and then the second character, e.g. +, to get the  $\Theta$ + ligature.

⊕+ → ↔	<u>I</u> Λ → Λ	<u>IX</u> → <del>X</del>	<b>€</b> → <b>Ġ</b>
<b>⊕</b> + → <b>⊕</b> +	I∨ → Ψ	<u>I</u> ï → Ÿ	<u></u> → €
O → Ö	<u> </u>	ï+ →	€ + → €
O+ → O+	<u>I</u> → <b>H</b>	<u></u> : → Ï	: <u>+</u> → ++
<u>⊙</u> → Ö	3[+ → 3[4	<u> </u> + → +	# <u>+</u> + + #
1 → •	₹ → ₹.	II → İİ	X+ → X+
<u>0</u> + → 0+	X + → X+	II.+ → I+	X+ → X+

Akatab biconsonant 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:

- 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:

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

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

$$0|+++0$$
: $||^{1}:0+|^{2}|+|^{2}=0$ : $||++0$ : $||++0$ : $||++0$ : $||++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|++1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ : $|+1$ :

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