Annapurna SIL - Font Features

Annapurna SIL is a Graphite and OpenType-enabled font family that supports the Devanagari script. It includes a number of optional user-selected features that may be useful or required for particular uses or languages. These Graphite and OpenType features are primarily specified using four-letter tags (e.g. 'cv04' or 'ss04') to display variant characters or specific behavior. Certain apps, such as web browsers, can also use language tags to display all the language-specific variants and behaviors.

This document lists all the language and user-selected features in Annapurna SIL. For more information on how to access these features in specific environments and applications, see Using Font Features. This is the preferred way of using features; however, Annapurna SIL is also available through the TypeTuner Web service, which allows you to choose among the user-selected font features (shown below) and download a font with those features preset. This enables them to work in many applications that do not make use of Graphite or OpenType Stylistic Sets.

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

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

Language-specific features

Affects: U+091D U+096B U+096E U+096F

Language	Test sequences	OpenType/ Graphite tag
Default	झ झ झ झ झ ५८९	none
Nepali	भ भ् भ भ् भ भ ४८६	NEP / ne
Newari	कक्छक् कूळू ५८८	NEW / new

User-selected feature list

Character Variants and Stylistic Sets

Jha alternates

Affects: U+091D

Feature	Sample	Feature setting
Standard	झ झ् झ झु झ	cv01=0 or ss01=0
Nepali style	भ भ् भ भ् भ्र भ्र	cv01=1 or ss01=1
Newari style	क क् क़ क़् क़्र	cv01=2 or ss02=1

Kra alternate

Affects: U+0915 U+0930

Feature	Sample	Feature setting
Standard	क्र क्र	cv03=0 or ss03=0
Open style	ऋ ऋ	cv03=1 or ss03=1

Tra alternate

Affects: U+0924 U+0930

Feature	Sample	Feature setting
Standard	त्र त्र	cv04=0 or ss04=0
Closed style	त्र त्र	cv04=1 or ss04=1

Shra alternate

Affects: U+0936 U+0930

Feature	Sample	Feature setting
Standard	श्र श्र	cv05=0 or ss05=0
Sha style	श्र श्र	cv05=1 or ss05=1

Ukar nukta position

Affects: U+0941 U+0942 U+093C

Feature	Sample	Feature setting
Standard	कुकू क्कू	cv06=0 or ss06=0
Outside	कुकू कु कू	cv06=1 or ss06=1

Ekar nukta position

Affects: U+0947 U+093C

Feature	Sample	Feature setting
Standard	के	cv07=0 or ss07=0
Above bar	के	cv07=1 or ss07=1

Digit five alternate

Affects: U+096B

Feature	Sample	Feature setting
Standard	ч	cv08=0 or ss08=0
Nepali style	y	cv08=1 or ss08=1

Digit eight alternate

Affects: U+096E

Feature	Sample	Feature setting
Standard	۷	cv09=0 or ss09=0
Nepali style	7	cv09=1 or ss09=1

Digit nine alternates

Affects: U+096F

Feature	Sample	Feature setting
Standard	९	cv10=0 or ss10=0
Nepali style	3	cv10=1 or ss10=1
Newari style	C	cv10=2 or ss11=1

Visarga with connecting bar

Affects: U+0903

Feature	Sample	Feature setting
Standard	:	cv12=0 or ss12=0
With bar	<u> </u>	cv12=1 or ss12=1

Glottal stop - no connecting bar

Affects: U+097D

Feature	Sample	Feature setting
Standard	7	cv13=0 or ss13=0
No bar	7	cv13=1 or ss13=1

Dya and Hya alternates

Affects: U+0926 U+0939 U+094D U+092F

Feature	Sample	Feature setting
Standard	द्य द्य द्य द्य द्य्र ह्य ह्य ह्य ह्य ह्य ह्य	cv14=0 or ss14=0
Open Ya	दय दर दय दर दय दय हय हर हय हर हय हय	cv14=1 or ss14=1

Archaic forms

Affects: U+0905 U+0906 U+0913 U+0914 U+0923 (U+0915 U+0937)

Feature	Sample	Feature setting
Standard	अ आ ओ औ ण ए क्ष क्ष	cv15=0 or ss15=0
Archaic form	म्र म्रा म्रो मौ ए ए च च	cv15=1 or ss15=1

Ra Ukar with Nukta ligatures

Affects: U+0930 U+0931 U+0941 U+093C

Feature	Sample	Feature setting
Standard	रु रु रू रू	cv16=0 or ss16=0
Ligature form	रु रू रू	cv16=1 or ss16=1

Cha alternate

Affects: U+091B U+094D

Feature	Sample	Feature setting
Standard	छ छ् छ्क	cv17=0 or ss17=0
With tail or no stem	छ छ् छक	cv17=1 or ss17=1

Headstroke alternates

Affects: U+A8FB

Feature	Sample	Feature setting
Standard	— कम	cv21=0
Discrete	- क-म	cv21=1
Narrow	- कम	cv21=2
Filler (zero advance width)	- कम	cv21=3

JainOm alternate

Affects: U+A8FD

Feature	Sample	Feature setting
Standard	ਭੈ	cv22=0
Extended headstroke	ਹ ੱ	cv22=1

Default behavior

Many font features in Annapurna SIL, common to both OpenType and Graphite rendering engines, work behind the scenes to display the proper shaping of Devanagari characters, such as half forms and conjuncts, and to correctly position diacritics or marks. Other features (listed below) are used to create a more pleasing look. These features are always "on".

Stacking conjunct compression

If there is a matra below a stacking conjunct, this feature compresses the conjunct which raises the matra above the descender height line. Otherwise, they could clash with matras or signs above the bar on the following line. In the test sequence below, note the first conjunct (without a matra) is normal height.

Affects: U+0915 U+0916 U+0917 U+0918 U+0919 U+091A U+091F U+0920 U+0921 U+092E U+0932 U+0939

Feature	Sample	Feature setting
Conjunct compression	क्ष क्षू क्षु क्षू	Contextual Alternate 'calt'

Fractions

Note: The Ligature feature is included in the font since some OpenType applications use it instead of the Fractions feature setting.

Affects: U+0967 U+0968 U+0969 U+096A U+2044

Feature	Sample	Feature setting
No ligature (using ZWNJ)	१/२ १/४ ३/४	None
Fractions	% % %	Fractions 'frac' or Ligature 'liga'

Latin punctuation

The Latin characters in Annapurna SIL are derived from the Charis SIL font. However, the exclamation and question marks were redrawn to fit the style of the Annapurna Devanagari glyphs and are used by default. But they will switch to the Charis style punctuation when preceded by a Latin character. This is accomplished by use of the Contextual Alternates OpenType feature.

Affects: U+0021 U+003F

Feature	Sample	Feature setting
Devanagari style	test क्र! test क्र?	Default
Latin style	test kra! test kra?	Contextual Alternate 'calt'
Mixed styles	नमस्ते! Namaste!	Contextual Alternate 'calt'

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