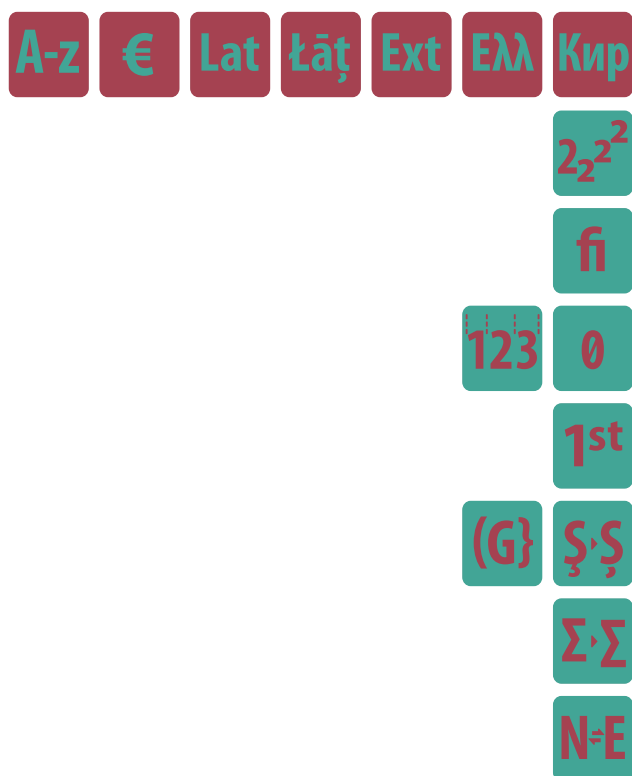


# CiscoSansTT HeavyOblique

*Technical Documentation*



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# Encoded Characters

All encoded characters should be accessible with every unicode capable application.  
For details about Unicode Blocks visit the [Unicode Website](https://unicode.org/faq/other.html).

## Basic Latin

Block from 0000 to 007F

0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
	<b>!</b>	<b>"</b>	<b>#</b>	<b>\$</b>	<b>%</b>	<b>&amp;</b>	<b>'</b>	<b>(</b>	<b>)</b>	<b>*</b>	<b>+</b>	<b>,</b>	<b>-</b>	<b>.</b>	<b>/</b>
0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>:</b>	<b>;</b>	<b>&lt;</b>	<b>=</b>	<b>&gt;</b>
0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
	<b>@</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>
0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>V</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>	<b>[</b>	<b>\</b>	<b>]</b>	<b>^</b>
0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
	<b>`</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>	<b>g</b>	<b>h</b>	<b>i</b>	<b>j</b>	<b>k</b>	<b>l</b>	<b>m</b>	<b>n</b>
0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	
	<b>p</b>	<b>q</b>	<b>r</b>	<b>s</b>	<b>t</b>	<b>u</b>	<b>v</b>	<b>w</b>	<b>x</b>	<b>y</b>	<b>z</b>	<b>{</b>	<b> </b>	<b>}</b>	<b>~</b>

## Latin-1 Supplement

Block from 0080 to 00FF

00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
	<b>ı</b>	<b>ç</b>	<b>£</b>	<b>¤</b>	<b>¥</b>	<b>¦</b>	<b>§</b>	<b>¨</b>	<b>©</b>	<b>ª</b>	<b>«</b>	<b>¬</b>	<b>­</b>	<b>®</b>	<b>¯</b>
00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
	<b>°</b>	<b>±</b>	<b>²</b>	<b>³</b>	<b>´</b>	<b>µ</b>	<b>¶</b>	<b>·</b>	<b>¸</b>	<b>¹</b>	<b>º</b>	<b>»</b>	<b>¼</b>	<b>½</b>	<b>¾</b>
00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
	<b>À</b>	<b>Á</b>	<b>Â</b>	<b>Ã</b>	<b>Ä</b>	<b>Å</b>	<b>Æ</b>	<b>Ç</b>	<b>È</b>	<b>É</b>	<b>Ê</b>	<b>Ë</b>	<b>Ì</b>	<b>Í</b>	<b>Î</b>
00D0	00D1	00D2	00D3	00D4	00D5	00D6	00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
	<b>Ð</b>	<b>Ñ</b>	<b>Ò</b>	<b>Ó</b>	<b>Ô</b>	<b>Õ</b>	<b>Ö</b>	<b>×</b>	<b>Ø</b>	<b>Ù</b>	<b>Ú</b>	<b>Û</b>	<b>Ü</b>	<b>Ý</b>	<b>Þ</b>
00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
	<b>à</b>	<b>á</b>	<b>â</b>	<b>ã</b>	<b>ä</b>	<b>å</b>	<b>æ</b>	<b>ç</b>	<b>è</b>	<b>é</b>	<b>ê</b>	<b>ë</b>	<b>ì</b>	<b>í</b>	<b>î</b>
00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
	<b>ð</b>	<b>ñ</b>	<b>ò</b>	<b>ó</b>	<b>ô</b>	<b>õ</b>	<b>ö</b>	<b>÷</b>	<b>ø</b>	<b>ù</b>	<b>ú</b>	<b>û</b>	<b>ü</b>	<b>ý</b>	<b>þ</b>

## Latin Extended-A

Block from 0100 to 017F

0100	0101	0102	0103	0104	0105	0106	0107	0108	0109	010A	010B	010C	010D	010E	010F
Ā ā	Ă ă	Ą ą	Ć ć	Ĉ ĉ	Ċ ċ	Č č	Ď ě	Đ đ	Ē ē	Ė ė	Ĝ ĝ	Ğ ğ	Ĥ ĥ	Ĵ ĵ	Ķ ķ
0110	0111	0112	0113	0116	0117	0118	0119	011A	011B	011C	011D	011E	011F	0120	0121
Ħ ħ	Ī ī	Ĵ ĵ	Ķ ķ	Ĳ ṛ	Ṛ ṛ	Ṣ ṣ	Ṥ ṥ	Ṧ ṧ	Ṩ ṩ	Ṫ ṽ	Ṷ ṷ	Ṹ ṹ	Ṻ ṻ	Ṽ ṽ	Ṽ ṽ
0122	0123	0124	0125	0126	0127	0128	0129	012A	012B	012E	012F	0130	0131	0134	0135
Ĝ ĝ	Ĥ ĥ	Ĵ ĵ	Ķ ķ	Ĳ ṛ	Ṛ ṛ	Ṣ ṣ	Ṥ ṥ	Ṧ ṧ	Ṩ ṩ	Ṫ ṽ	Ṷ ṷ	Ṹ ṹ	Ṻ ṻ	Ṽ ṽ	Ṽ ṽ
0136	0137	0138	0139	013A	013B	013C	013D	013E	0141	0142	0143	0144	0145	0146	0147
Ķ ķ	Ĳ ṛ	Ṛ ṛ	Ṣ ṣ	Ṥ ṥ	Ṧ ṧ	Ṩ ṩ	Ṫ ṽ	Ṷ ṷ	Ṹ ṹ	Ṻ ṻ	Ṽ ṽ	Ṽ ṽ	Ṽ ṽ	Ṽ ṽ	Ṽ ṽ
0148	014A	014B	014C	014D	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159	015A
ñ ñ	Ŋ ŋ	Ō ō	Ŏ ŏ	Ų ų	Ŵ ŵ	Ŷ ŷ	Ÿ Ź	Ż ż	Ź ź	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż
015B	015C	015D	015E	015F	0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	016A
ś ś	Ŷ ŷ	Ÿ Ź	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż
016B	016C	016D	016E	016F	0170	0171	0172	0173	0174	0175	0178	0179	017A	017B	017C
ū ū	Ū ū	Ų ų	Ŵ ŵ	Ŷ ŷ	Ÿ Ź	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż	Ż ż
017D	017E														
Ž ž	ž ž														

## Latin Extended-B

Block from 0180 to 024F

0192	0218	0219	021A	021B	0237
f f	Ŧ ŧ	Ţ ţ	Ť ť	Ŧ ŧ	Ŧ ŧ

## Spacing Modifier Letters

Block from 02B0 to 02FF

02C6	02C7	02C9	02D8	02D9	02DA	02DB	02DC	02DD
ˆ ˆ	˘ ˘	˚ ˚	˛ ˛	˜ ˜	˝ ˝	˞ ˞	˟ ˟	ˠ ˠ

## Combining Diacritical Marks

Block from 0300 to 036F

0312	0323
◌◌	◌◌

## Greek and Coptic

Block from 0370 to 03FF

037E	0384	0385	0386	0387	0388	0389	038A	038C	038E	038F	0390	0391	0392	0393	0394
;	´	ˆ	Α	·	Έ	Η	Ι	Ο	Υ	Ω	ΐ	Α	Β	Γ	Δ
0395	0396	0397	0398	0399	039A	039B	039C	039D	039E	039F	03A0	03A1	03A3	03A4	03A5
Ε	Ζ	Η	Θ	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ρ	Σ	Τ	Υ
03A6	03A7	03A8	03A9	03AA	03AB	03AC	03AD	03AE	03AF	03B0	03B1	03B2	03B3	03B4	03B5
Φ	Χ	Ψ	Ω	Ϊ	Ϋ	ά	έ	ή	ί	ύ	α	β	γ	δ	ε
03B6	03B7	03B8	03B9	03BA	03BB	03BC	03BD	03BE	03BF	03C0	03C1	03C2	03C3	03C4	03C5
ζ	η	θ	ι	κ	λ	μ	ν	ξ	ο	π	ρ	ς	σ	τ	υ
03C6	03C7	03C8	03C9	03CA	03CB	03CC	03CD	03CE							
φ	χ	ψ	ω	ϊ	ϋ	ό	ύ	ώ							

## Cyrillic

Block from 0400 to 04FF

0401	0402	0403	0404	0405	0406	0407	0408	0409	040A	040B	040C	040E	040F	0410	0411
Ё	Ѣ	Ѓ	Є	Ѕ	І	Ї	Ј	Љ	Њ	Ѧ	Ќ	Ў	Ѱ	А	Б
0412	0413	0414	0415	0416	0417	0418	0419	041A	041B	041C	041D	041E	041F	0420	0421
В	Г	Д	Е	Ж	З	И	Й	К	Л	М	Н	О	П	Р	С
0422	0423	0424	0425	0426	0427	0428	0429	042A	042B	042C	042D	042E	042F	0430	0431
Т	У	Ф	Х	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я	а	б
0432	0433	0434	0435	0436	0437	0438	0439	043A	043B	043C	043D	043E	043F	0440	0441
В	Г	Д	Е	Ж	З	И	Й	К	Л	М	Н	О	П	Р	С
0442	0443	0444	0445	0446	0447	0448	0449	044A	044B	044C	044D	044E	044F	0451	0452
т	у	ф	х	ц	ч	ш	щ	ъ	ы	ь	э	ю	я	ё	ђ
0453	0454	0455	0456	0457	0458	0459	045A	045B	045C	045E	045F	0462	0463	0472	0473
Ѓ	Є	Ѕ	І	Ї	Ј	Љ	Њ	ђ	Ќ	Ў	Ѱ	Ѣ	Ѧ	Ѣ	Ѣ
0474	0475	0490	0491	0492	0493	0496	0497	0498	0499	049A	049B	049C	049D	04A0	04A1
Ѧ	Ѧ	Ѓ	г	Ѧ	Ѧ	Ж	ж	З	з	Қ	қ	К	к	К	к
04A2	04A3	04AA	04AB	04AE	04AF	04B0	04B1	04B2	04B3	04B8	04B9	04BA	04BB	04C0	04CB
Ң	ң	Ҫ	ҥ	Ү	ү	Ұ	ұ	Х	х	Ң	ң	Һ	һ	І	Ҫ
04CC	04CF	04D8	04D9	04E2	04E3	04E8	04E9	04EE	04EF						
Ҫ	І	Ә	ә	Й	й	Ө	ө	Ү	ү						

## General Punctuation

Block from 2000 to 206F

2012	2013	2014	2015	2018	2019	201A	201C	201D	201E	2020	2021	2022	2026	2030	2039
—	—	—	—	‘	’	,	“	”	„	†	‡	•	...	‰	‹
203A	2044														
›	/														

## Superscripts and Subscripts

Block from 2070 to 209F

2074
₣

## Currency Symbols

Block from 20A0 to 20CF

20AC
€

## Letterlike Symbols

Block from 2100 to 214F

2116	2122	2126	212E
Nº	™	Ω	e

## Number Forms

Block from 2150 to 218F

2153	2154
$\frac{1}{3}$	$\frac{2}{3}$


## Arrows

Block from 2190 to 21FF

2190	2191	2192	2193	2194	2195	2196	2197	2198	2199
↶	↷	➔	⬇	↔	↕	↶	↷	↘	↙



## Mathematical Operators

Block from 2200 to 22FF

2202	2206	220F	2211	2212	2215	2219	221A	221E	222B	2248	2260	2264	2265	22C6
$\partial$	$\Delta$	$\Pi$	$\Sigma$	$-$	$/$	$\cdot$	$\sqrt{\phantom{x}}$	$\infty$	$\int$	$\approx$	$\neq$	$\leq$	$\geq$	

## Geometric Shapes

Block from 25A0 to 25FF

25AF	25CA
	

## Alphabetic Presentation Forms

Block from FB00 to FB4F

FB00	FB01	FB02	FB03	FB04
<b><i>ff</i></b>	<b><i>fi</i></b>	<b><i>fl</i></b>	<b><i>ffi</i></b>	<b><i>ffl</i></b>



# Unencoded Glyphs

All unencoded glyphs are accessible with OpenType layout feature capable applications. For a complete list of supported OpenType layout features see the next section.

## Case-Sensitive Forms

-	-	-	-	-	-	-	-	-	-	-	-	-	-
(	)	[	]	{	}	◁	▷	«	»	-	-	-	-

## Standard Ligatures

-	-	-	-	-	-	-
ff	fj	fi	fl	ff	ff	ff

## Localized Forms

-
i

## Proportional Figures

-	-	-	-	-	-	-	-	-	-
0	1	2	3	4	5	6	7	8	9

## Slashed Zero

-
0

## Other

-	-	-	-	-	-
□			,	~	,

# OpenType Layout Features

For details about OpenType Layout Features see the [OpenType Layout tag registry](#).

## Substitution Features



### Access All Alternates

This feature makes all variations of a selected character accessible.



### Standard Ligatures

Replaces a sequence of glyphs with a single glyph which is preferred for typographic purposes. This feature covers the ligatures which the designer/manufacturer judges should be used in normal conditions.



### Proportional Figures

Replaces figure glyphs set on uniform (tabular) widths with corresponding glyphs set on glyph-specific (proportional) widths.



### Slashed Zero

Some fonts contain both a default form of zero, and an alternative form which uses a diagonal slash through the counter. This feature allows the user to change from the default 0 to a slashed form.



### Ordinals

Replaces default alphabetic glyphs with the corresponding ordinal forms for use after figures.



### Case-Sensitive Forms

Shifts various punctuation marks up to a position that works better with all-capital sequences or sets of lining figures; also changes oldstyle figures to lining figures.



### Localized Forms

This feature enables localized forms of glyphs to be substituted for default forms.



### Mathematical Greek

Replaces standard typographic forms of Greek glyphs with corresponding forms commonly used in mathematical notation (which are a subset of the Greek alphabet).

## Positioning Features



### Capital Spacing

Globally adjusts inter-glyph spacing for all-capital text. Most typefaces contain capitals and lowercase characters, and the capitals are positioned to work with the lowercase. When capitals are used for words, they need more space between them for legibility and esthetics.

# Codepages

## MacOS

MacOS Central Europe  
MacOS Croatian  
MacOS Cyrillic  
MacOS Greek

MacOS Icelandic  
MacOS Roman  
MacOS Romanian  
MacOS Turkish

## MS Windows

MS Windows 1250 Central European  
MS Windows 1251 Cyrillic  
MS Windows 1252 Western (ANSI)

MS Windows 1253 Greek  
MS Windows 1254 Turkish  
MS Windows 1257 Baltic

## ISO

ISO 8859- 1 Latin 1 (Western)  
ISO 8859- 2 Latin 2 (Central Europe)  
ISO 8859- 3 Latin 3 (Tu, Malt, Gal, Esp)  
ISO 8859- 4 Latin 4 (Baltic)  
ISO 8859- 5 Cyrillic

ISO 8859- 9 Latin 5 (Turkish)  
ISO 8859-10 Latin 6 (Scandinavian)  
ISO 8859-13 Latin 7 (Baltic 2)  
ISO 8859-15 Latin 9  
ISO 8859-16 Latin 10

## IBM

IBM 37 United States - EBCDIC (IBM-28709)  
IBM 273 Germany - EBCDIC  
IBM 277 Denmark, Norway - EBCDIC  
IBM 278 Finland, Sweden - EBCDIC  
IBM 280 Italy - EBCDIC  
IBM 284 Spain, Latin America - EBCDIC  
IBM 285 United Kingdom - EBCDIC  
IBM 297 France - EBCDIC

IBM 500 International - EBCDIC  
IBM 871 Iceland - EBCDIC  
IBM 875 Greece - EBCDIC  
IBM 921 Baltic  
IBM 1025 Cyrillic - EBCDIC  
IBM 1047 Open Systems - EBCDIC  
IBM 1112 Baltic - EBCDIC  
IBM 1123 Cyrillic Ukraine EBCDIC

# Languages

Information about languages is mainly based on the Unicode Common Locale Data Repository. For details visit the [Unicode CLDR Project](#).

## Latin

Albanian	Finnish	Lithuanian	Somali
Basque	French	Malay	Sorbian, Lower
Bosnian	Frisian West	Maltese	Sorbian, Upper
Cornish	Friulian	Manx	Sotho, Northern
Crimean Tatar	Galician	Moldavian	Sotho, Southern
Croatian	German	Norwegian Bokmål	Spanish
Czech	Icelandic	Norwegian Nynorsk	Swahili
Danish	Indonesian	Oromo	Swati
Dutch	Interlingua	Polish	Swedish
English	Irish	Portuguese	Tsonga
Esperanto	Italian	Romanian	Turkish
Estonian	Kalaallisut	Sami Northern	Xhosa
Faroese	Kinyarwanda	Slovak	Zulu
Filipino	Latvian	Slovenian	

## Greek

Greek

## Cyrillic

Bashkir	Chechen	Russian	Uzbek
Belarusian	Kazakh	Serbian	
Bulgarian	Macedonian	Tatar	
Buriat	Mongolian	Uighur	