



What's new in FontLab Studio 5

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NEW NAME: FONTLAB STUDIO

- Originally, **FontLab** was the only product from the FontLab Developers Group, St. Petersburg, Russia (main developer: Yuri Yarmola)
- Later, more products were created (ScanFont, TypeTool, TransType) and were marketed worldwide by Pyrus NA, USA (president: Ted Harrison)
- In 2000, new company **Fontlab Ltd.** was formed to unite Pyrus NA and the FontLab Developers Group
- Today, the FontLab application is just one of FontLab's product suite. To remove this ambiguity, new versions of the professional font editor will be named **FontLab Studio**.



BRIEF HISTORY OF FONTLAB STUDIO

- **1996** **FontLab 2.5** Type 1 editing
- **1998** **FontLab 3.0** native TrueType editing and hinting, MultipleMaster, Unicode
- **2000** **FontLab 3.1** improved drawing, minor improvements
- **2001** **FontLab 4.0** OpenType, Python scripting, new UI
- **2002** **FontLab 4.5** seriously improved drawing, much better OpenType support
- **2003** **FontLab 4.6** further improvements
- **2004** **FontLab Studio 5.0** ???

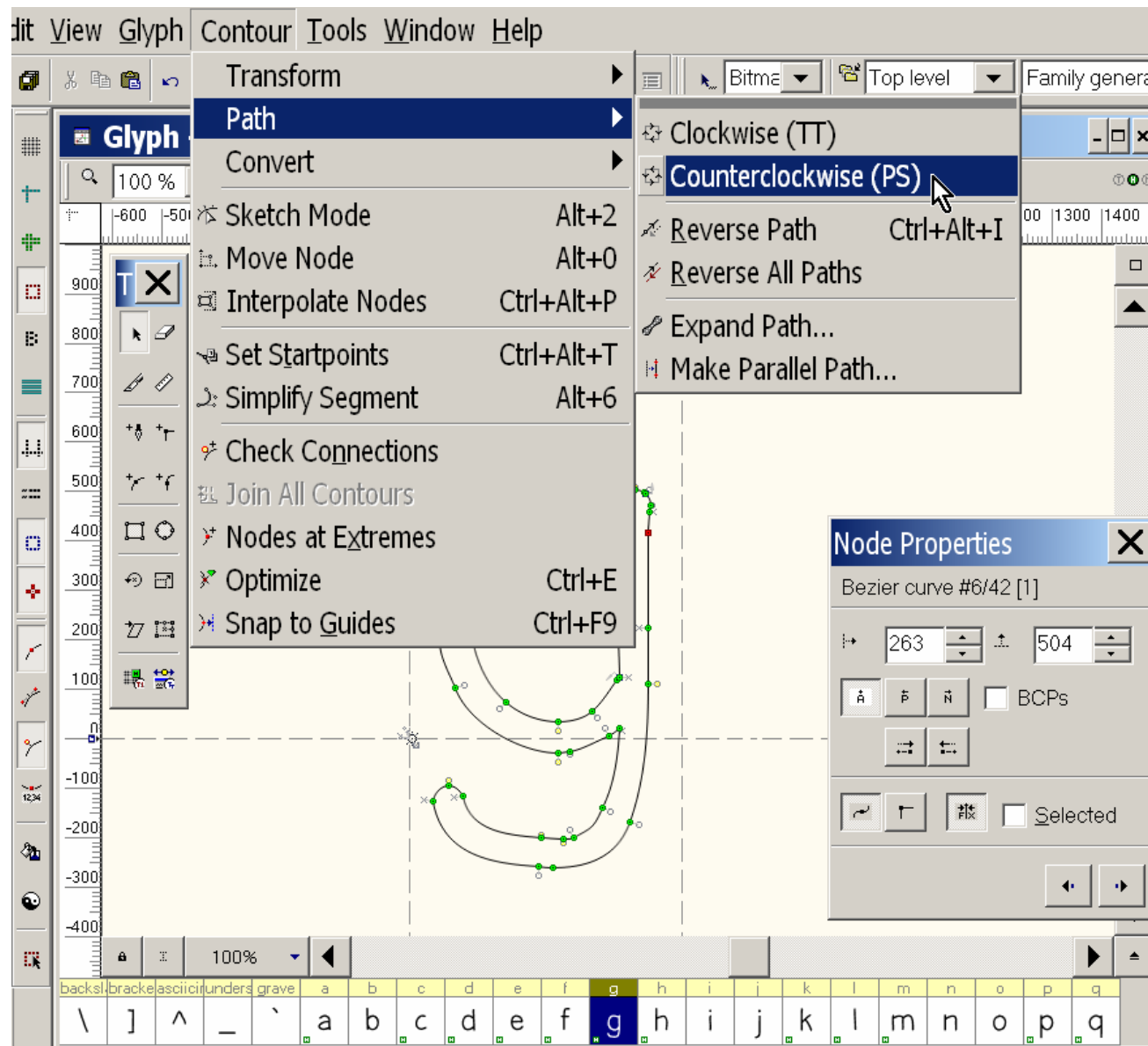


USER INTERFACE



USER INTERFACE

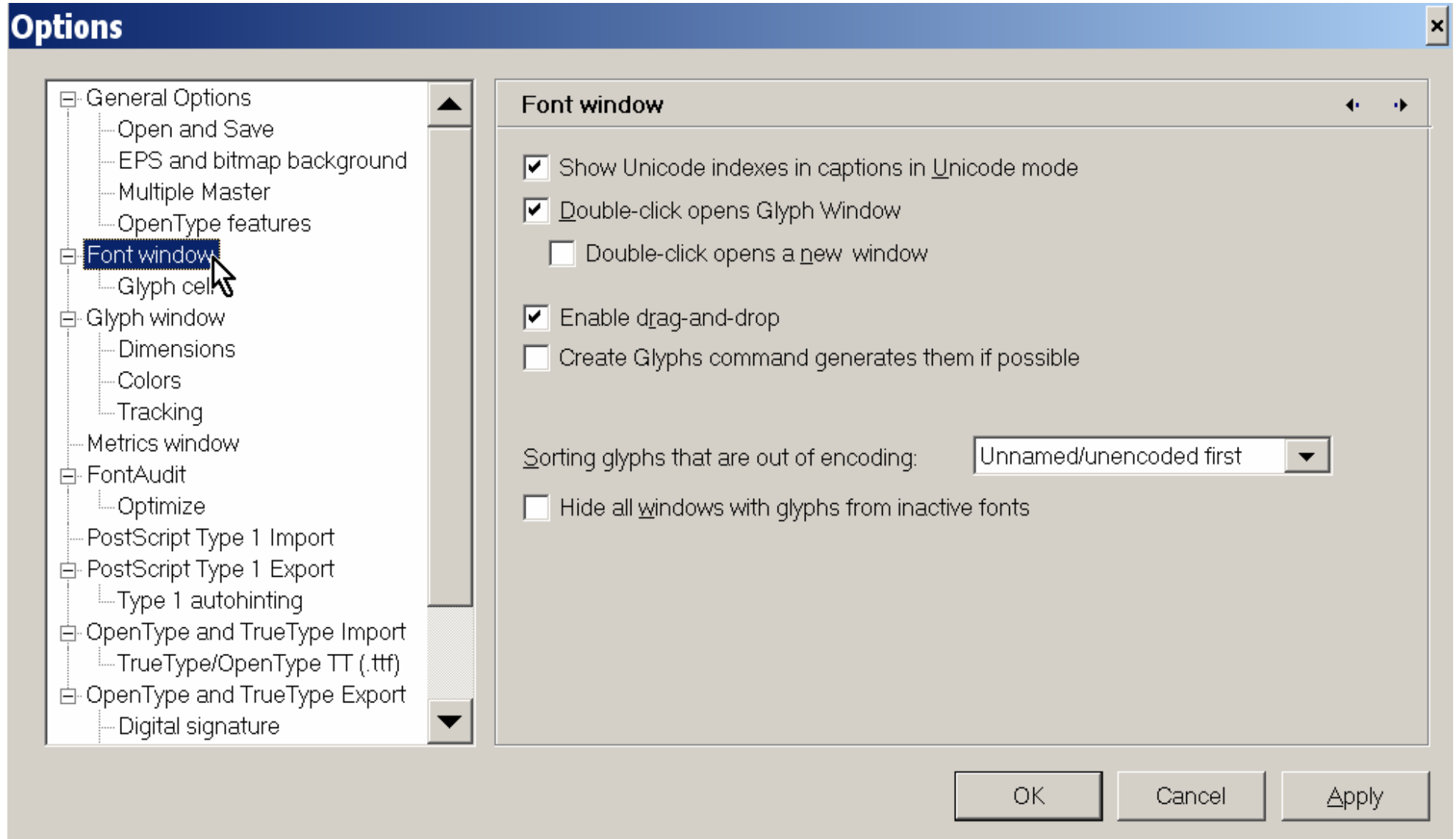
- Improved: More logical menus and toolbars





USER INTERFACE

■ Improved: Completely new Options/Preferences window

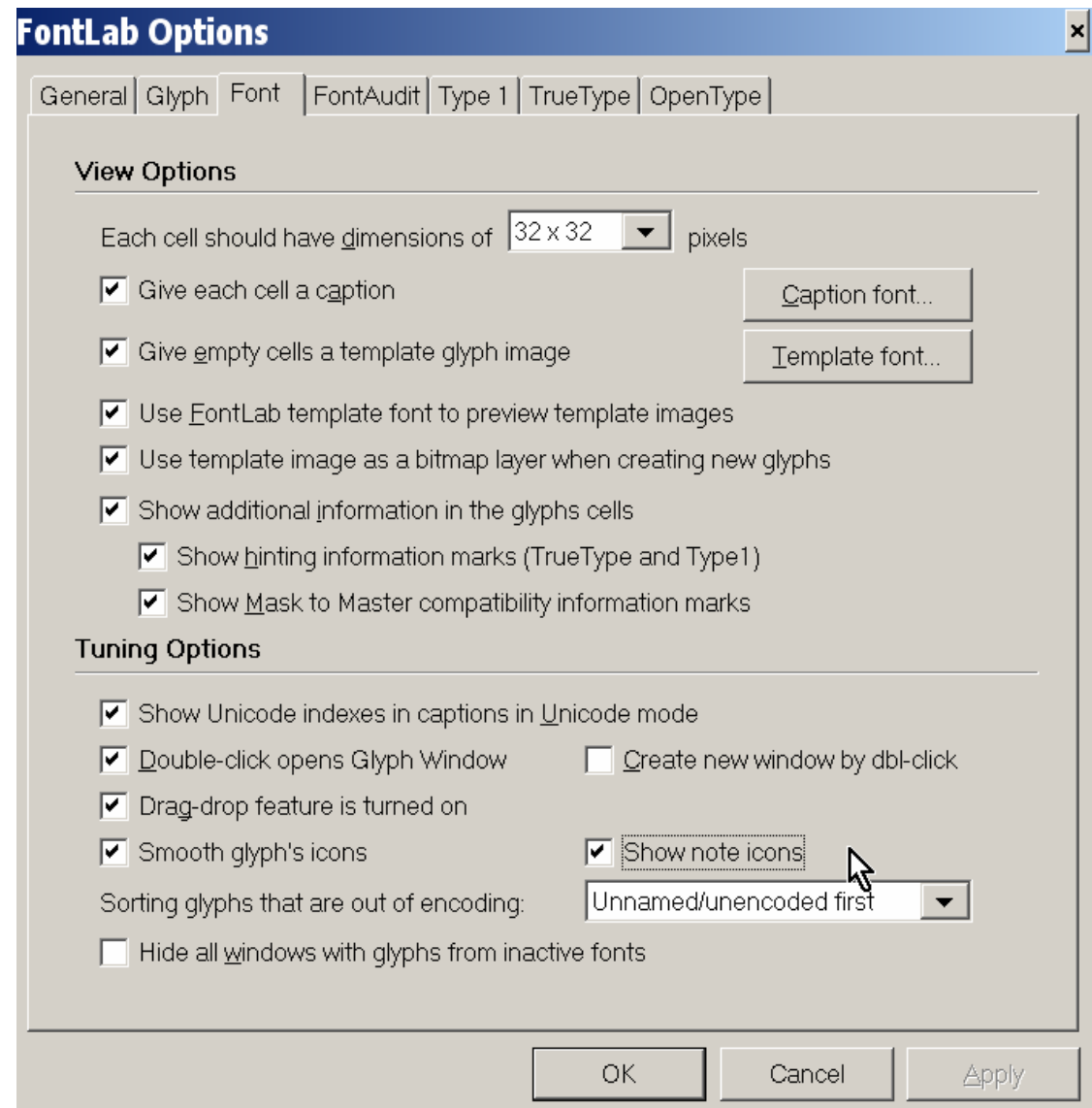




USER INTERFACE

■ Improved: Completely new Options/Preferences window

Compare with
FontLab 4.6:





USER INTERFACE

■ Improved: Fonts panel

The image displays a font management software interface. On the left is the 'Fonts' panel, which shows a tree view of font families. The 'FreeFontPro Black' family is expanded, and the 'TyTyTyTy' glyph set is selected. On the right are two 'Preview/Metrics' panels. The top panel shows the 'FreeFontPro' font style with the characters 'TyTyTyTy' and kerning values of 579 and 445. The bottom panel shows the 'FreeFontPro Black' font style with the same characters and kerning values of 675 and 525. Both panels have a 'Size: 72' setting and a 'Kerning' dropdown menu.



USER INTERFACE

■ Improved: Fonts panel

The screenshot displays a font management application interface. On the left is the 'Fonts' panel, which contains a tree view of font families. A context menu is open over the 'FreeFontPro' family, showing options 'Group By Family' and 'Group By OT Family'. The tree view includes:

- FreeFontPro
 - FreeFontPro [freefontpro-regular.vfb]
 - [TyTyTyTy]
 - y
 - y
 - FreeFontPro Black [freefontpro-black.vfb]
 - [TyTyTyTy]
 - T
 - T
 - FreeFontPro Bold [freefontpro-bold.vfb]
 - FreeFontPro Bold Italic [freefontpro-bolditalic.vfb]
 - FreeFontPro Cond [freefontpro-cond.vfb]
 - FreeFontPro Cond Black [freefontpro-condblack.vfb]
 - FreeFontPro Cond Bold [freefontpro-condbold.vfb]
 - FreeFontPro Italic [freefontpro-italic.vfb]
- Myriad Web Pro
 - MyriadWebPro-Bold [MyriadWebPro-Bold.vfb]
 - [TyTyTyTy]
 - y
 - T

At the bottom of the Fonts panel, it says 'Total Fonts: 9 Grouped by OT Family Name'. On the right, there are two preview windows. The top window is titled 'Preview/Metrics - FreeFontPro' and shows the text 'TyTyTyTy' in a light gray font. Below the text is a metrics table with columns for 'I', 'M', and 'Av' and values: 579, 445, 579, 445, 579, 445, 579, 445. The bottom window is titled 'Preview/Metrics - FreeFontPro Black' and shows the same text 'TyTyTyTy' in a bold black font. Its metrics table has values: 675, 525, 675, 525, 675, 525, 675, 525. Both preview windows have a control bar with 'Kerning', 'Size: 72', 'Options', and 'Tools' menus, and a text input field containing 'TyTyTyTy'.



METRICS AND KERNING



METRICS AND KERNING

■ FontLab 4.6

The screenshot displays the FontLab 4.6 interface. At the top, there is a toolbar with various icons and a menu bar. Below the toolbar, a text input field contains the string "/H/O/H/A/U/H/O/H/n/H/H/H/A/U/H/H/n/O/O/O/A/U/O/O/O/n/X/H/X/A/U/x/o/x/n". Below this, a table shows the metrics for each character in the string. The table has columns for character names (H, O, A, U) and their corresponding metrics (width, height, x-height, etc.). The table is as follows:

N:	H	O	H	A	U	H	O	H	H	H	H	A	U	H	H	H	O	O	O	A	U	O	O
W	1418	1490	1418	1358	1406	1418	1490	1418	1418	1418	1418	1358	1406	1418	1418	1418	1490	1490	1490	1358	1406	1490	1490
h	134	72	134	38	134	134	72	134	134	134	134	38	134	134	134	134	72	72	72	38	134	72	72
+	134	72	134	48	134	134	72	134	134	134	134	48	134	134	134	134	72	72	72	48	134	72	72
Ke	0	0	0	-74	0	0	0	0	0	0	0	-74	0	0	0	0	0	0	-52	-74	0	0	0

Below the table, a large text preview shows the characters "HOHAUHOHHHA" in a bold, black font. A vertical line is drawn through the center of the 'U' character, and a small triangle indicates a kerning adjustment of -74. The interface also shows a scroll bar at the bottom.



METRICS AND KERNING

■ FontLab Studio 5

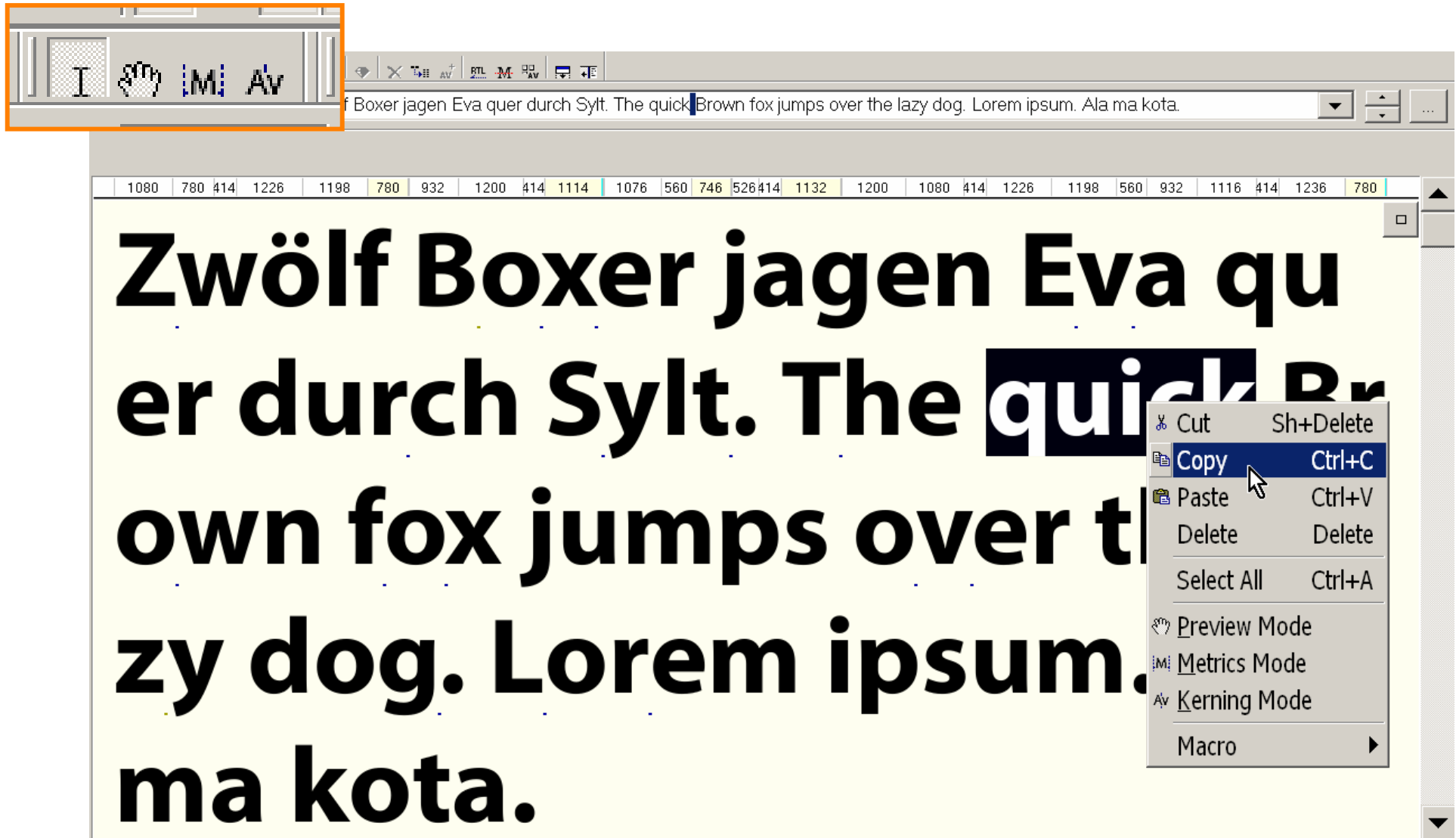
The screenshot displays the FontLab Studio 5 interface. At the top, a toolbar contains various icons for editing and viewing. Below the toolbar, a text input field shows the characters 'H O H A U H O H'. The main area is a grid representing the kerning table, with columns for '1st' and '2nd' characters and a 'Value' column. The 'U' character is selected, and its kerning values are visible in the 'Value' column. Below the grid, a preview window shows the font 'HOHAUHOH' in a large, bold, black serif typeface. The kerning adjustments are visible as small blue arrows and numbers (e.g., -74) between the characters.

1st	2nd	Value
A	U	-74
A	V	-164
A	W	-106
A	Y	-212
A	b	-10
A	c	-30
A	d	-30
A	e	-30
A	f	-28
A	g	-30
A	h	-14
A	i	-14
A	j	-14
A	k	-14
A	l	-14
A	m	-14
A	n	-14
A	o	-28
A	p	-14
A	q	-28
A	r	-14
A	s	-10
A	t	-44
A	u	-34
A	v	-96
A	w	-70
A	y	-66
A	z	22
A	quoteright	-140
A	quotedblright	-140
B	comma	-32
B	period	-50
B	A	-10
B	T	-40



METRICS AND KERNING

- New: “Text Mode” that allows live text editing





METRICS AND KERNING

■ New: Optional Metrics/Kerning table

The screenshot displays a font editor window with a toolbar at the top. The main area shows three lines of text: "HOHUHOH", "HHUHHH", and "OOUOO". Below the text, a metrics ruler shows values: 1418, 1490, 1418, 1406, 1418, 1490, 1418, and !00. A kerning table on the right lists metrics for various glyphs. A specific kerning table for 'U' is highlighted with an orange border, showing a width of 1406 and a left offset of 134. A mouse cursor is pointing at the 'U' row.

Name	Width	Left
G	1412	72
H	1418	134
I	578	134
J	848	-2
K	1264	134
L	1052	134
M	1742	106
N	1422	134
O	1490	72
P	1190	134
Q	1490	72
T	1132	30
U	1406	134
V	1316	20
W	1824	30
Z	1190	30
a	1082	60
b	1230	116
c	932	66
d	1226	68
e	1080	66
f	696	30
g	1202	68
h	1200	126
i	560	106
j	598	-80



METRICS AND KERNING

■ New: Optional Metrics/Kerning table

The screenshot shows a font editor interface with a kerning table. The main window displays three lines of text: "HOHAUHOH", "HHHAWHHH", and "OOOAWOOO". A kerning table on the right lists pairs of characters and their kerning values. The pair "A U" is highlighted with a value of -74.

1st	2nd	Value
parenleft	J	22
parenleft	T	90
parenleft	V	82
parenleft	W	82
parenleft	Y	80
comma	quoteright	24
comma	quotedblright	24
comma	uni00A0	-124
period	quoteright	-118
period	quotedblright	14
period	uni00A0	-122
colon	uni00A0	-90
semicolon	uni00A0	-80
A	C	-52
A	Q	-52
A	T	-190
A	U	-74
A	V	-164
A	W	-106
A	Y	-212
A	e	-30
A	f	-28
A	g	-30
A	h	-14
A	i	-14
A	j	-14
A	k	-14



METRICS AND KERNING

■ New: Live class kerning

The screenshot displays the Adobe Font Bundles interface. At the top, a table shows kerning values for pairs of characters. Below this, a preview window shows the letters 'A', 'A', and 'A' in black, followed by 'A', 'A', and 'A' in blue with various diacritics (Omacron, Otilde, Odieresis, Ohungarumlaut, Oacute, Ograve, Ocircumflex). A 'Classes' panel on the right lists the glyphs in the kerning class: 'O', 'Omacron', 'Otilde', 'Odieresis', 'Ohungarumlaut', 'Oacute', 'Ograve', and 'Ocircumflex'. A 'Kerning' panel on the right shows a list of pairs with their kerning values, with 'A' paired with 'G', 'O', and 'Q' all having a value of -52. A mouse cursor is pointing at the 'Kerning' panel.

1st	2nd	Value
parenleft	J	22
parenleft	T	90
parenleft	V	82
parenleft	W	82
parenleft	Y	80
comma	quoteright	24
comma	quotedblright	24
comma	uni00A0	-124
period	quoteright	-118
period	quotedblright	14
period	uni00A0	-122
colon	uni00A0	-90

1st	2nd	Value
A	G	-52
A	O	-52
A	Q	-52
A	T	-74
A	V	-164
A	W	-106
A	Y	-212
A	b	-10
A	c	-30
A	d	-30
A	e	-30
A	f	-28
A	g	-30
A	h	-14
A	i	-14
A	j	-14
A	k	-14
A	l	-14
A	m	-14



METRICS AND KERNING

- Improved: Expanding class kerning into plain kerning

OpenType Kerning Assistance

Top level Family genera

1st Classes

- _A, A
- _C, C
- _D, D
- _E, E
- _G, G
- _I, I
- _K, K
- _L, L
- _N, N
- _O, O
- _R, R
- _S, S
- _T, T

2nd Classes

Expand Kerning

With this function you can convert class-based kerning to some pair kerning table. Note that this may result in generation of thousand of new kerning pairs.

Generate only pairs with glyphs in following codepage:
MS Windows 1252 Latin 1

Limit total number of pairs in the table to : 2048

Expand Cancel

Kerning: -74

_U: U' Uogonek Udieresis Uhungarumlaut Uring Ugrave Ucircumflex Uacute Umacron

1st	2nd	Value
A0	T	-84
A0	V	-80
A0	W	-80
A0	Y	-88
A0	quotedbleft	-178
A0	quoteleft	-162
A0	quotesingl...	-196
A0	edblba...	-218
		22
		90
		82
		82
		80
A0		-124
edbright		24
eright		24
A0		-122
edbright		14
eright		-118
A0		-90
A0		-80
		-52
		-52
A	U	-52
A	Q	-52
A	T	-190
A	U	-74
A	V	-164
A	W	-106
A	Y	-212
A	b	-10
A	c	-30
A	d	-30

All pairs 665



METRICS AND KERNING

- Improved: Expanding class kerning into plain kerning

The screenshot shows a font editor interface. At the top, there's a toolbar with various icons. Below it, a text input field contains the string: `/H/O/H/Adieresis/G/H/O/H/n/H/H/H/Adieresis/G/H/H/H/n/O/O/O/Adieresis/G/O/O/O/n/X/H/X/Adieresis/G/w/o/x/n`. Below the text input is a kerning table with columns for 'H', 'O', 'H', 'Adieresis', 'G', 'H', 'O', 'H', 'H', 'H', 'H', 'Adieresis', 'G', 'H', 'H', 'H'. The table contains numerical values for kerning adjustments. Below the table is a preview area showing three lines of text: **HOHÄGHOH**, **HHHÄGHHH**, and **OOOÄGOOO**. To the right of the preview is a list of kerning pairs with columns for '1st', '2nd', and 'Value'. The list includes pairs like 'Atilde ucircumflex -34', 'Adieresis C -52', and 'Adieresis G -52'. A mouse cursor is pointing at the 'Adieresis G -52' entry. At the bottom right, there's a dropdown menu labeled 'All pairs' and a counter showing '2783'.

1st	2nd	Value
Atilde	ucircumflex	-34
Atilde	udieresis	-34
Atilde	yacute	-66
Atilde	yudieresis	-66
Adieresis	C	-52
Adieresis	G	-52
Adieresis	O	-52
Adieresis	Q	-52
Adieresis	T	-190
Adieresis	U	-74
Adieresis	V	-164
Adieresis	W	-106
Adieresis	Y	-212
Adieresis	b	-10
Adieresis	c	-30
Adieresis	d	-30
Adieresis	e	-30
Adieresis	f	-28
Adieresis	g	-30
Adieresis	h	-14
Adieresis	i	-14
Adieresis	j	-14
Adieresis	k	-14
Adieresis	l	-14
Adieresis	m	-14
Adieresis	n	-14
Adieresis	o	-28
Adieresis	p	-14
Adieresis	q	-28
Adieresis	r	-14
Adieresis	s	-10
Adieresis	t	-44
Adieresis	u	-34



METRICS AND KERNING

- **New: Compressing kerning into class kerning**

The screenshot displays the 'OpenType Kerning Assistance' dialog box in Adobe Font Bundles. The dialog is divided into two main sections. The left section, titled 'OpenType Kerning Assistance', contains two lists: '1st Classes' and '2nd Classes'. Both lists have checkboxes for various letter pairs, including combinations of letters and diacritics (e.g., _A, A; _C, C; _D, D; _E, E; _G, G; _I, I; _K, K; _L, L; _N, N; _O, O; _R, R; _S, S; _T, T; _U, U; _Y, Y; _Z, Z; _a, a; _c, c; _d, d; _e, e; _g, g). Below these lists is a preview area showing the text 'AO Ñ Ñ Ö Ö Ô Ô Â' with a kerning value of -52. The right section, titled 'Classes', shows a list of glyphs and their kerning values. A 'Compact' button is highlighted with an orange box. The 'Compact' button is located at the bottom of the dialog, next to the 'Expand' button. The 'Compact' button is currently disabled, as indicated by its greyed-out appearance. The 'Expand' button is also greyed out. The 'Save' and 'Cancel' buttons are visible at the bottom right of the dialog.

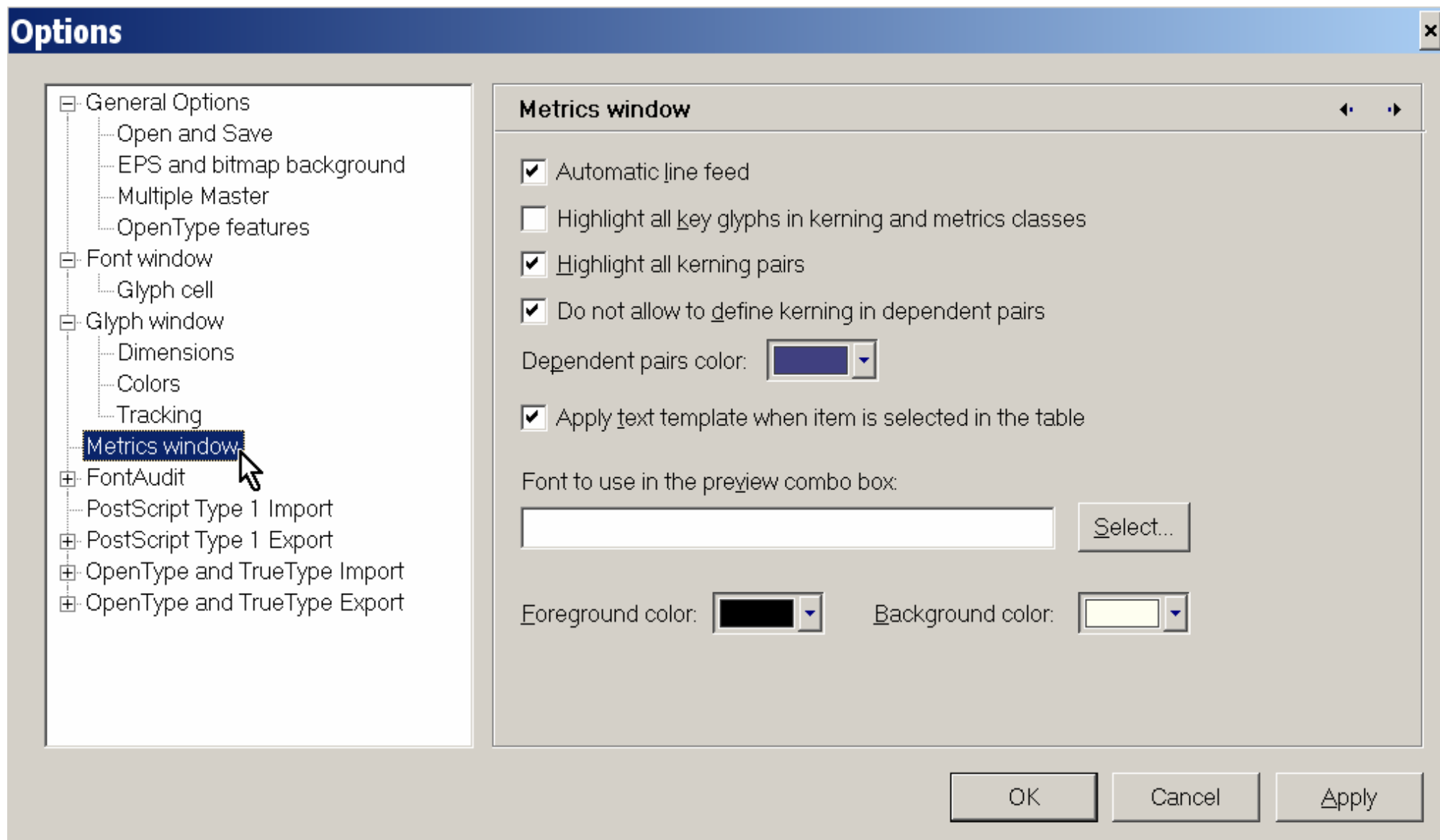
1st	2nd	Value
parenleft	J	22
parenleft	T	90
parenleft	V	82
parenleft	W	82

Class	Value	
A	c	-30
A	d	-30
A	e	-30
A	f	-28
A	g	-30
A	h	-14
A	i	-14
A	j	-14
A	k	-14



METRICS AND KERNING

■ New: Metrics window options



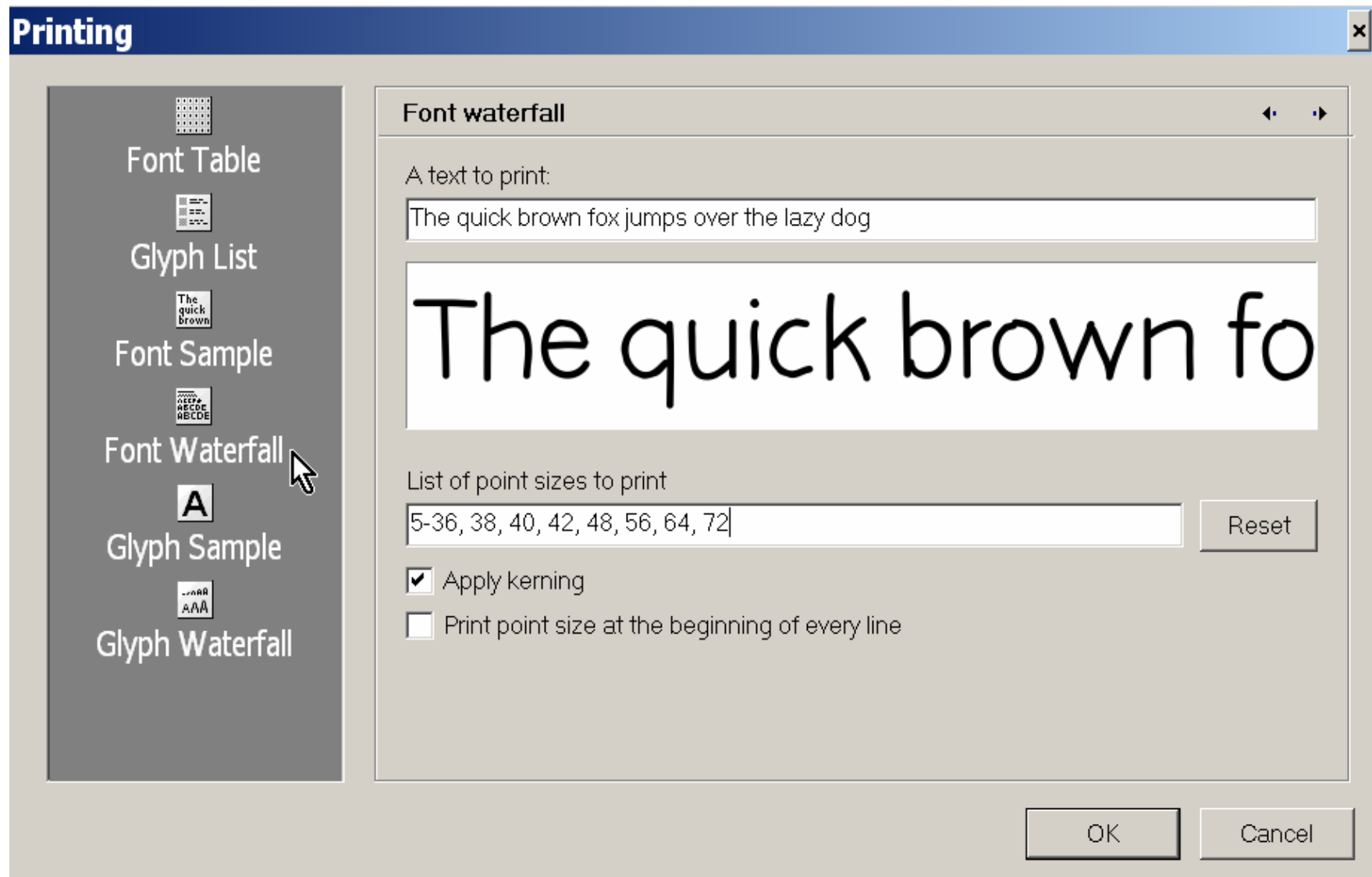


PRINTING



PRINTING

■ Improved: Printing





OPENTYPE FONTS



OPENTYPE FONTS

- **New: Basic OpenType features added on Type 1 import**

The image shows two overlapping windows from a font software interface. The top window is titled "Options" and has a tree view on the left with categories like "General Options", "Font window", "Glyph window", "Metrics window", "FontAudit", "PostScript Type 1 Import", "PostScript Type 1 Export", "OpenType and TrueType Import", and "OpenType and TrueType Export". The "PostScript Type 1 Import" category is expanded, showing a "Type 1 import" sub-panel. In this sub-panel, the checkbox "Generate basic OpenType features for Type 1 fonts with Standard encoding" is checked and highlighted with an orange box. A mouse cursor is pointing at the checkbox. The bottom window is titled "OpenType Features" and has tabs for "OpenType Features", "Preview", and "Anchors". The "OpenType Features" tab is active, showing "Script: latn" and "Language: DFLT". A list of features is shown on the left, with "ordn" checked and highlighted by a mouse cursor. The preview area on the right shows the text "fliegen finster 1a 1o 1/2" in two lines, demonstrating the effect of the "ordn" feature.

Options

Type 1 import

- Decompose all composite glyphs
- Generate basic OpenType features for Type 1 fonts with Standard encoding

OpenType Features | Preview | Anchors

Script: latn Language: DFLT

- csp
- frac
- liga
- ordn

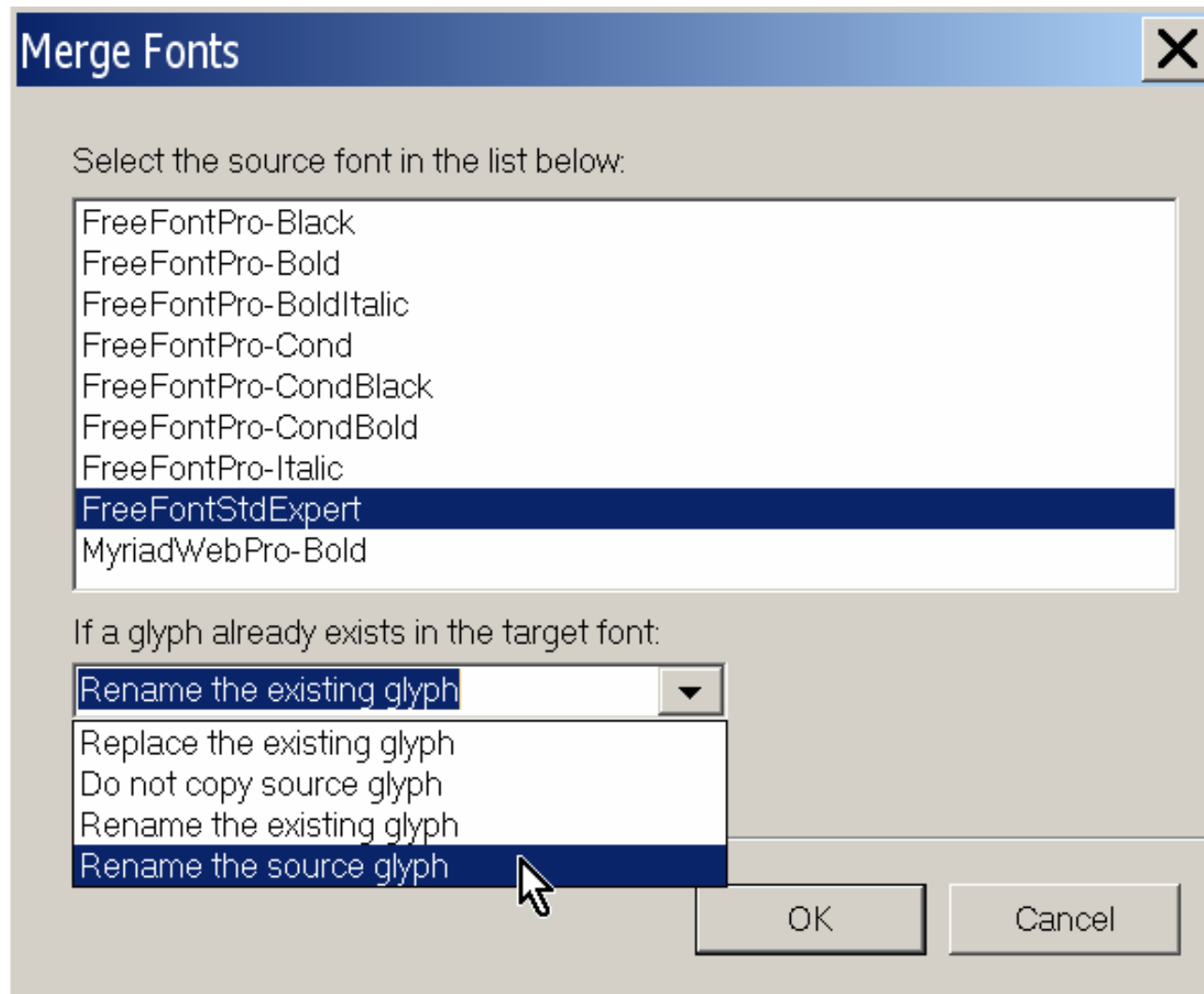
fliegen finster 1a 1o 1/2

fliegen finster 1^a 1^o 1/2



OPENTYPE FONTS

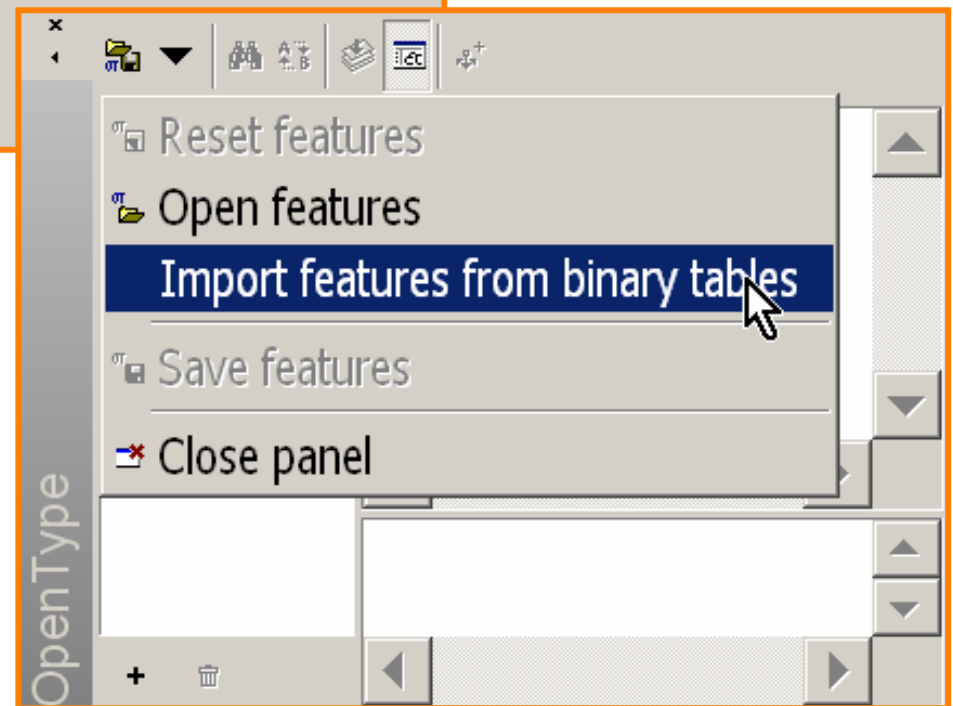
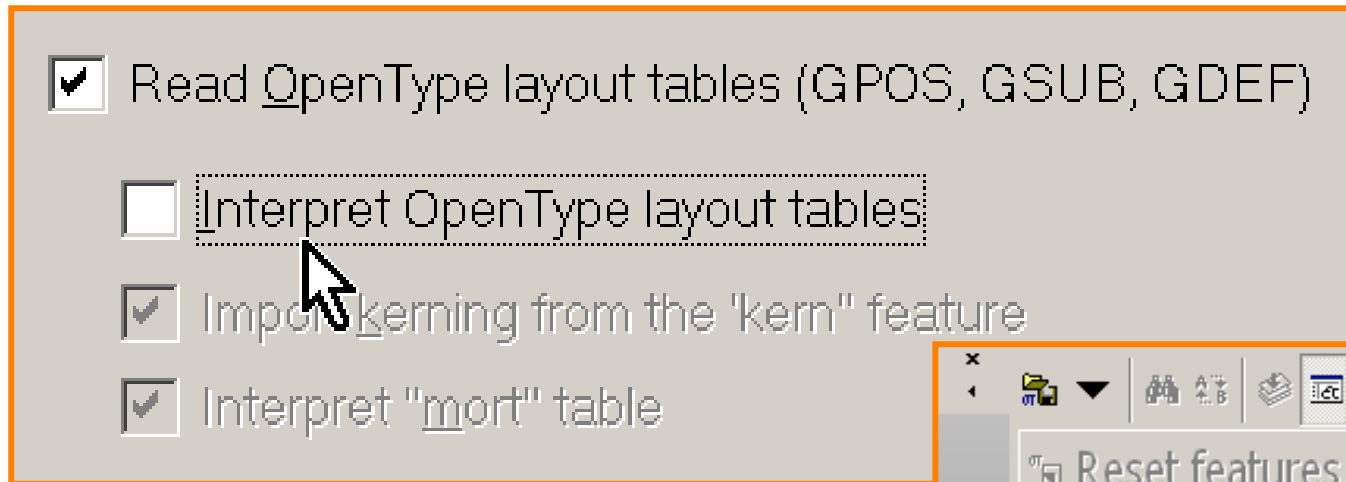
■ New: Merge fonts





OPENTYPE FONTS

■ New: Decompilation of OpenType features optional



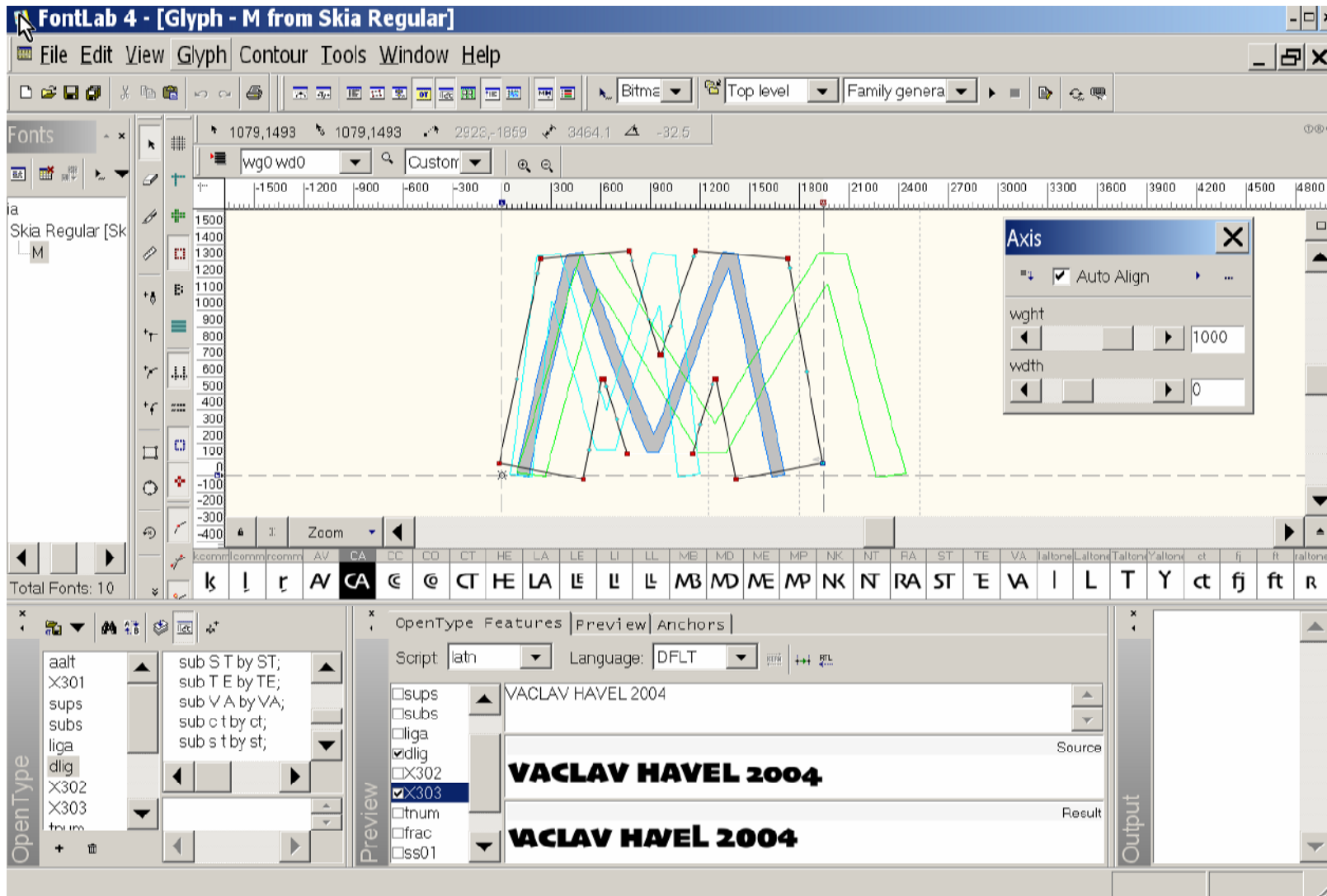


FONT FORMAT SUPPORT



FONT FORMAT SUPPORT

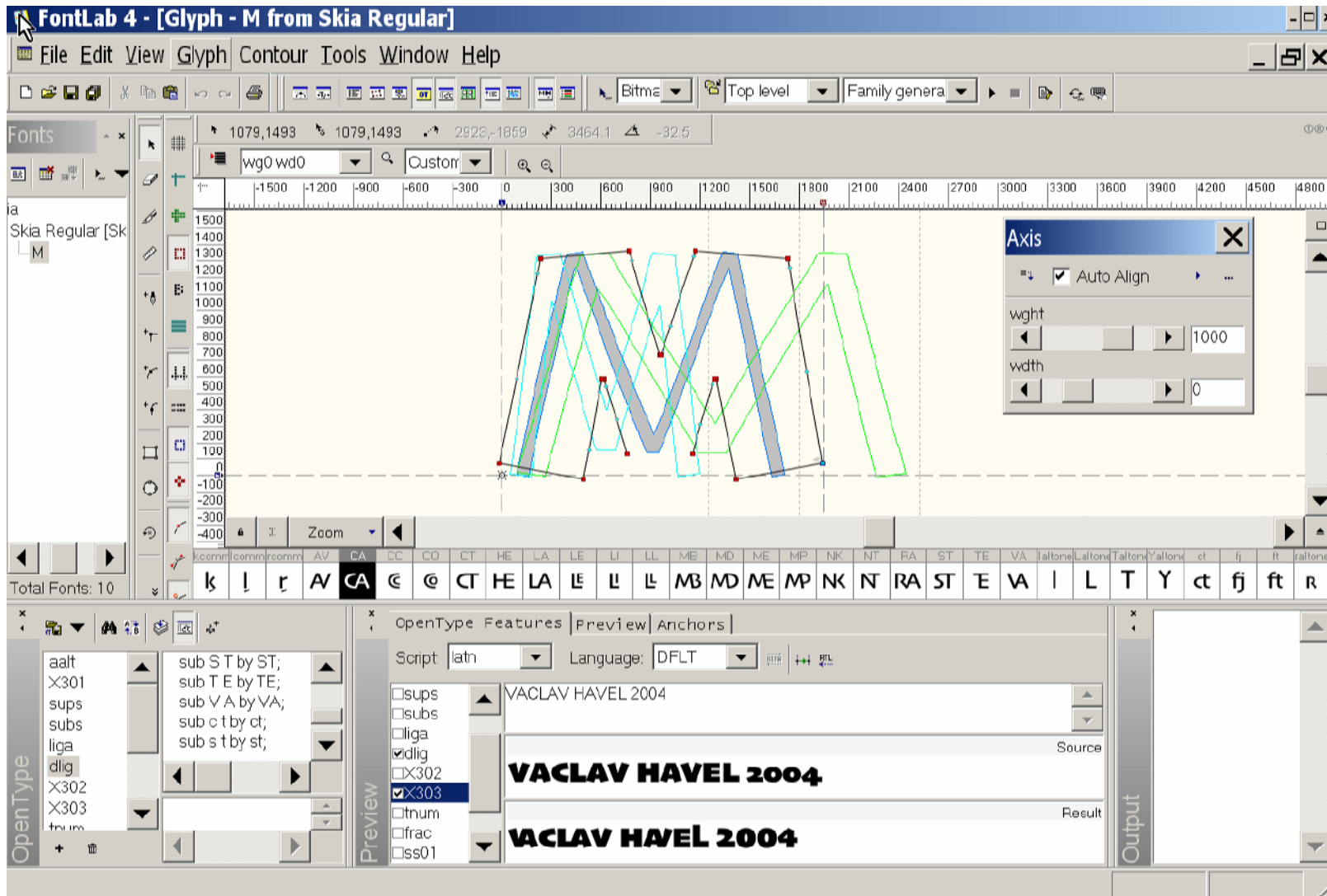
- **New/experimental: Import of TrueType AAT fonts with features and of Ikarus fonts**





FONT FORMAT SUPPORT

- **New: Internal support for TrueType-based multiple master fonts makes TrueType superhinting easier**



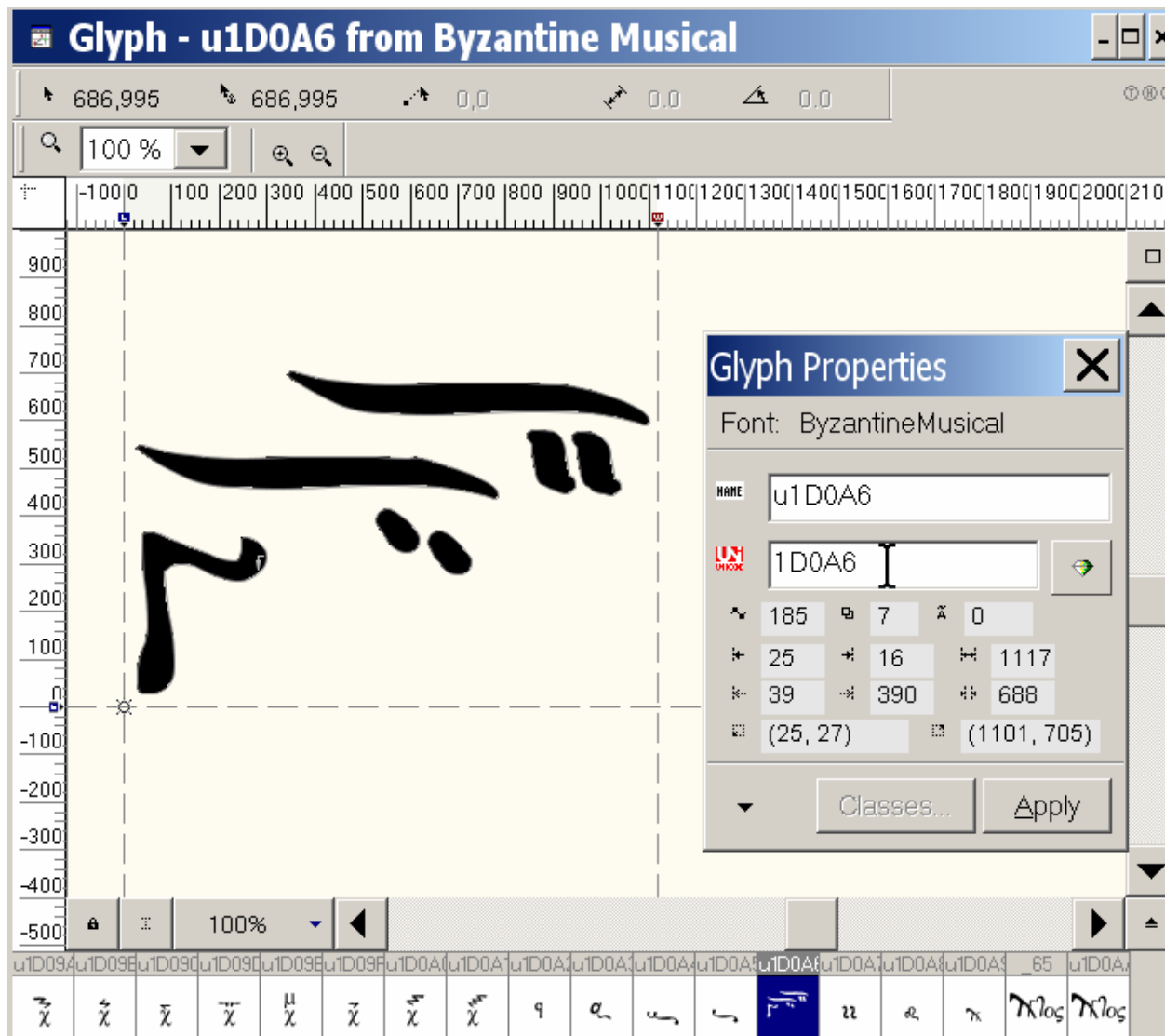


ENCODING



ENCODING

- Improved: Unicode 4.0 support (6-digit Unicodes)





ENCODING

■ New: Custom TrueType cmap editor

Font Info - MinionPro-Regular

Names and Copyright

- OpenType-specific names
- Additional OpenType names
- Copyright information
- Embedding
- Designer information
- License information

Version and Identification

- Key identification settings
- Panose identification
- IBM and MS identification

Metrics and Dimensions

- Key dimensions
- TrueType-specific metrics
- Subscript and Superscript

Encoding and Unicode

- Custom [cmap] encodings
- Unicode ranges

Hinting Settings

- Type 1-specific settings
- TrueType-specific settings

Additional [cmap] tables

Use custom [cmap] encoding

PID	EID	LID	For...	Contents	
1	29		6	MacOS CentralEurope	+
3	1		4	[Unicode]	-
0	3		4	[Unicode]	↕

Platform: 1 Macintosh
Encoding: 29 Slavic
Language: 0 English

[6] Trimmed table mapping

MacOS CentralEurope

OK Cancel Apply



What's new in FontLab Studio 5

<http://www.fontlab.com/>
adam@fontlab.com