OpenType
Font Naming & the Name Table

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28 April 2007
Overview

- PostScript name (ID 6)
- Win & OS X menu names (ID 1 & 2)
- Mac OS 8/9 menu names (ID 18)
- OpenType menu names (IDs 16 & 17)
- Cross-platform naming & style links
- WPF menu names (IDs 21 & 22)
- Managing names

NOTE: my and Miguel’s presentations will be posted on my blog:
http://blogs.adobe.com/typblography
PostScript FontName (ID 6)

- Original x-platform font name
- Only 7-bit ASCII alphabetic characters
- Can have dash(es)
  - Usually between family and style
  - e.g. MinionPro-SemiboldItalic
- Must include style designation
  - “MinionPro-Regular” (not just “MinionPro”)
- Max. 29 characters but suggest 27 for OT
  - FontName.otf or FontName.ttf in 31 chars
- In OT CFF fonts, also used for Win name ID 4 (full name)
  - Req’s correct FL pref setting
PostScript FontName (ID 6)
PostScript FontName (ID 6)
Win menu names (ID 1 & 2)

- ID 1 is the menu name
- ID 2 is the style
- Maximum 31 characters
- Windows style linking
  - Within a style-linked group, Win name ID 1 is the same
  - Win name ID 2 is style attributes (regular, bold, italic, bold italic)
  - Windows theoretically allows more than 4 in a style-linked group, but not really
Win menu names (ID 1 & 2)

- Family Name: Myriad Pro Light
- Style Name: Bold Italic
- Weight: Demibold
- Width: Normal
- PS Font Name: MyriadPro-SemiboldIt
- Full Name: Myriad Pro Semibold Italic
- Menu Name: Myriad Pro Light
- FOND Name: Myriad Pro Semibold It
OpenType menu names (ID 16 & 17)

- Long “preferred” typographic menu name
  - Allows extended families with separate family (16) and subfamily (17) menu names
  - IDs 16 & 17 have maximum 63 characters
- All fonts with same ID 1 should have same ID 16
  - No other necessary relation to 1, 2, 18
- Any # of fonts can have same “family” (ID 16)
- Only used by savvy applications
  - Most Adobe applications
OpenType menu names (ID 16 & 17)

OT Family Name: Myriad Pro
OT Style Name: Semibold Italic
Mac Name: Myriad Pro Semibold It
Mac Classic menu name, ID 18

- Maximum 63 characters, but…
- Max. 31 with MS Office limitations (older?)
- No req’d relation of names to style linking
- Each menu name must be unique
Mac Classic menu name, ID 18

Font Info - Myriad Pro Semibold Italic

OpenType-specific font names

- OT Family Name: Myriad Pro
- OT Style Name: Semibold Italic
- Mac Name: Myriad Pro Semibold It
OS X menu names

♣ OS X uses Mac name ID 1 & 2 for the “Fonts Panel” display

♣ Adobe approach:
  Mac name ID 1 & 2 = Win ID 16 & 17
  (req’s set FL prefs correctly, or use FDK)
OS X menu names

- Use the OpenType names as menu names on Macintosh

- Generate GDEF table

- Export VOLT data
Style linked group

How to?

- Same name ID 1 (& 16) for all four fonts
- No other fonts w/same Win name ID 1 beyond the four linked fonts
- Win name ID 2 is unique for all four
- Set style bits appropriately
  - FDK “isItalicStyle” and “isBoldStyle”
  - FontLab checkboxes
  - These set both OS/2 fsSelection & hhea Mac Style bits
- Recommendation:
  Only use bold style bit for style-linked bold font
Cross-platform menu names

✈ Within style-linked group

✈ name ID 1 Win for the “base font” should match same font’s name ID 18 Mac

✈ Style-linked bold, italic can’t match X-platform!

✈ Only base fonts can have x-platform Mac/Win menu names!

✈ Savvy apps use ID 6 (PS FontName) or 16+17 (pref. family/style) to track fonts x-platform
WPF menu names

- Windows Presentation Foundation
Why care about WPF?

- **What is Windows Presentation Foundation?**
  - WPF ("Avalon") is new with Windows Vista
  - But also available for XP at the same time Vista ships
  - Apps have to go out of their way to use it

- WPF may change your font’s menu name family/style for its own needs

- **Affected: TrueType and OpenType fonts**
  - WPF does not support Type 1 ("PostScript") fonts at all
  - Type 1 fonts still supported in GDI applications under Vista

- You might care about how your font shows up in WPF application menus

- **OpenType 1.5 will give you some additional controls over WPF treatment**
  - New in OpenType 1.5 and supported in WPF 1.0: WWS-only bit in fsSelection
  - New in OpenType 1.5 and **not** yet supported in WPF: new nameIDs 21/22 in name table
WPF & CSS

- WPF processing goal: Fit fonts into CSS style families
- What is CSS?
  - W3C “Cascading Style Sheets”
- Fonts within a CSS family are differentiated by:
  - “WWS” family
  - Weight
  - Width (“Stretch”)
  - Slope (“Style”): regular, italic, or oblique
WPF’s Processing: Overview

- Analyze each single font for WWS values & names
  - Assign face names and appropriate WWS values

- Analyze the family to ensure all members differ on WWS basis
  - Anything that WPF didn’t recognize as relevant to WWS earlier, gets left on the family name, not the style name!
  - Essentially splits families into two or more as needed
WPF’s Procrustean bed

- WPF looks at both names and table values to determine WWS
  - When they differ, complex processing to determine which value is “correct”
- In WPF, Arial, Arial Narrow & Arial Black can all be one happy family
- But fonts that differ on other grounds cannot. For example:
  - Adobe families with four optical sizes
  - Family with “regular” and “inline” variants

NOTE: rules are very complicated!

**Strongly recommend** new MS white paper:
http://blogs.msdn.com/text/attachment/2249036.ashx
Also my more detailed presentation on the subject, “CSS & OT 1.5”:
http://blogs.adobe.com/typblography/atypi2006/CSS%20&%20OT%201.5.pdf
Comments on CSS family model

- As font selection model, it’s broken
  - But major improvement over GDI

- It’s a standard
  - Many other programs are interested in using it
  - Probably other platforms too
New OpenType options for WWS families

- **Supported now in WPF 1.0**
  - OS/2 fsSelection bit 9 to denote an oblique font (set italic bits as well)
  - OS/2 fsSelection bit 8 to denote a WWS-only font (use “preferred family/subfamily,” nameIDs 16 & 17)

- **To be supported in a future version of WPF (1.x?)**
  - name table IDs 21 and 22 for WWS family and subfamily names (instead of using bit 8 and nameIDs 16 & 17)
Managing Names

♣ Use a spreadsheet or other central resource to coordinate across fonts
♣ Run Adobe FDK “CompareFamily” tool to cross-check family relationships
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