OpenType
Font Naming & the Name Table

Thomas Phinney
Product Manager
Fonts & Global Typography
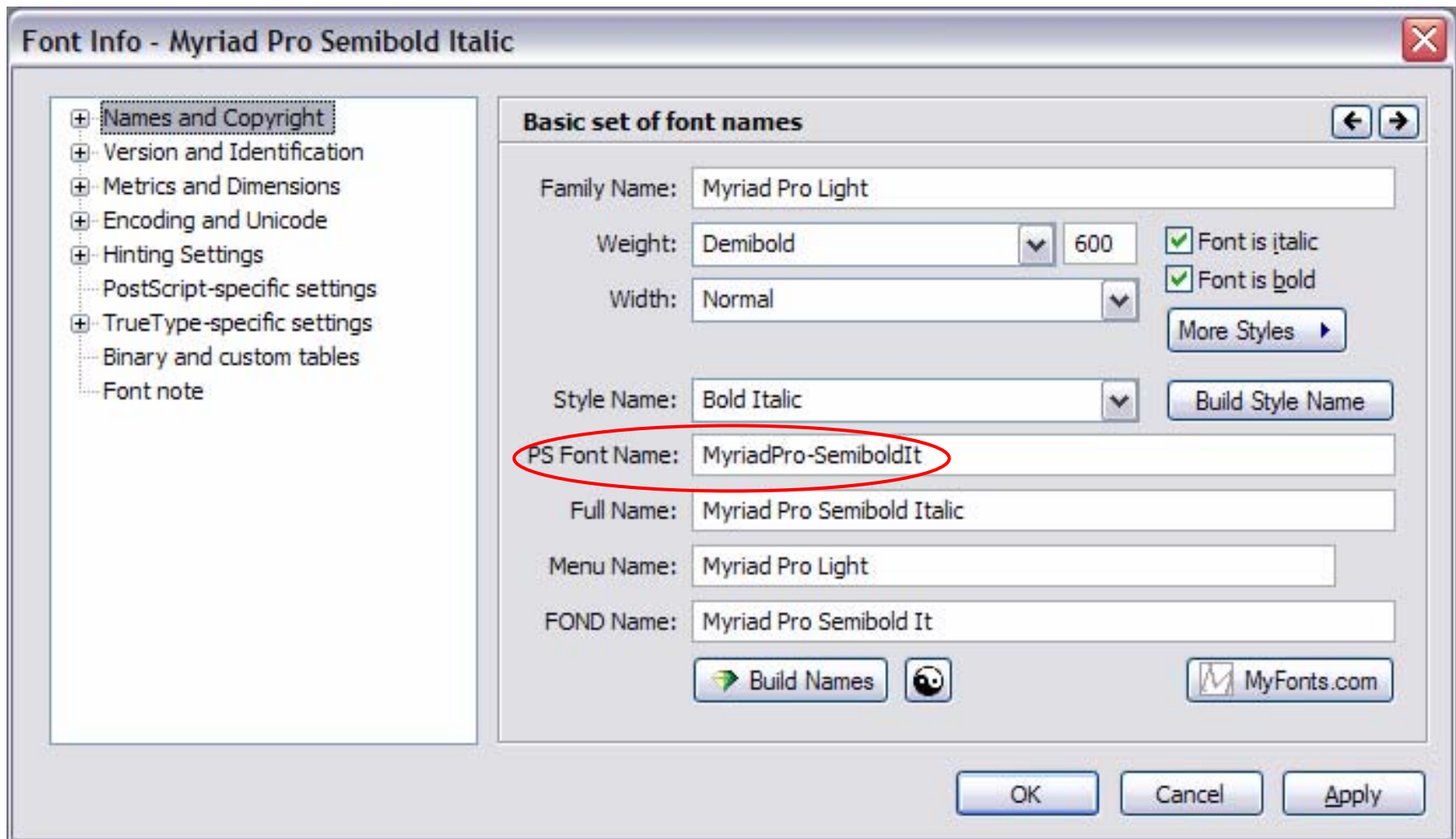
28 April 2007

Adobe

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
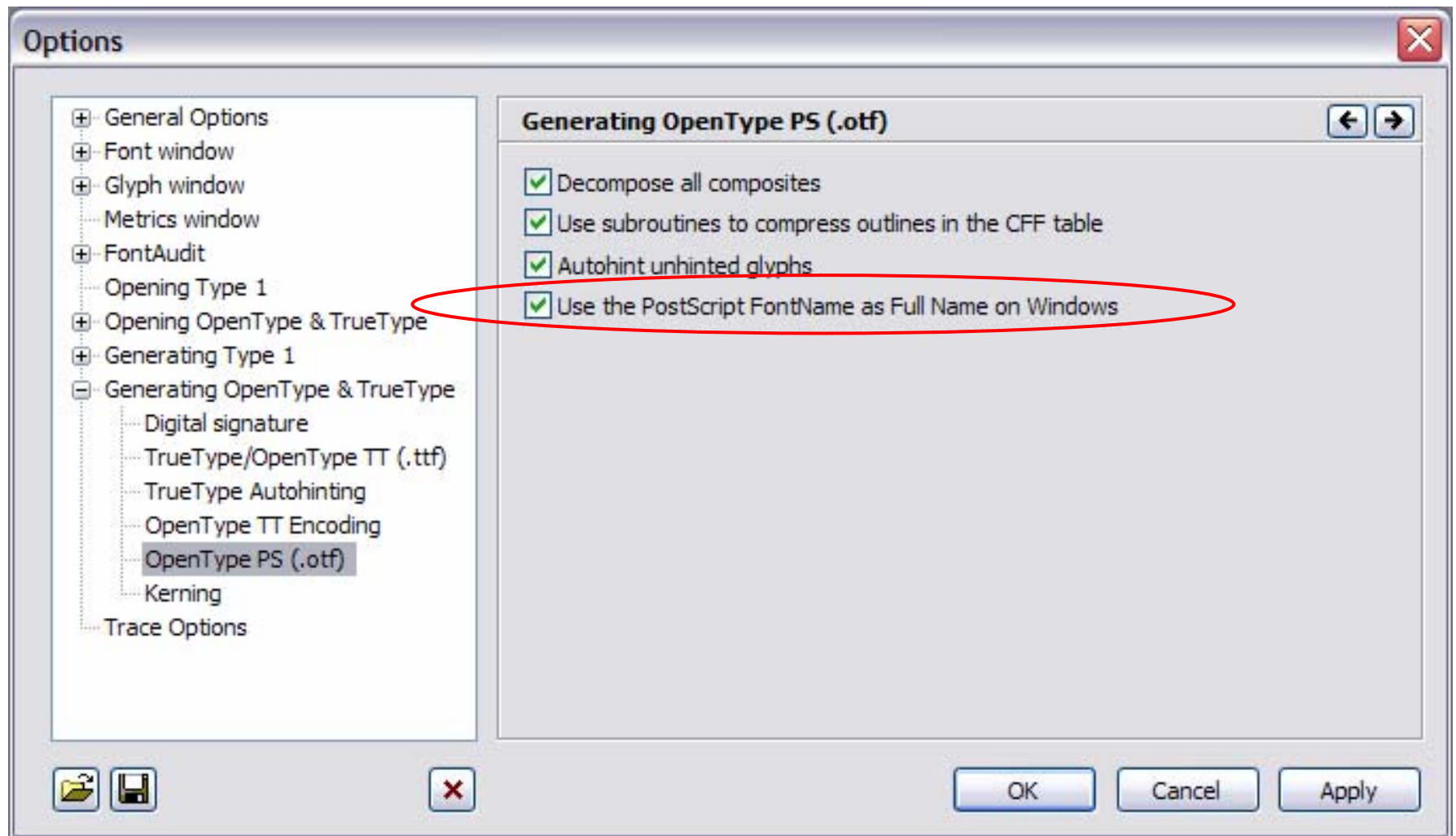
PostScript FontName (ID 6)

- ♣ 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

Adobe

PostScript FontName (ID 6)

Names and Copyright
Version and Identification
Metrics and Dimensions
Encoding and Unicode
Hinting Settings
PostScript-specific settings
TrueType-specific settings
Binary and custom tables
Font note

Basic set of font names

Family Name: Myriad Pro Light

Weight: Demibold   600   ☑ Font is italic

Width: Normal   ☑ Font is bold

More Styles ▶

Style Name: Bold Italic   Build Style Name

PS Font Name: MyriadPro-SemiboldIt

Full Name: Myriad Pro Semibold Italic

Menu Name: Myriad Pro Light

FOND Name: Myriad Pro Semibold It

Build Names   MyFonts.com

OK   Cancel   Apply

Adobe

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)

OpenType menu names (ID 16 & 17)

- Long "preferred" typographic menu name
  - Allows extended families w/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
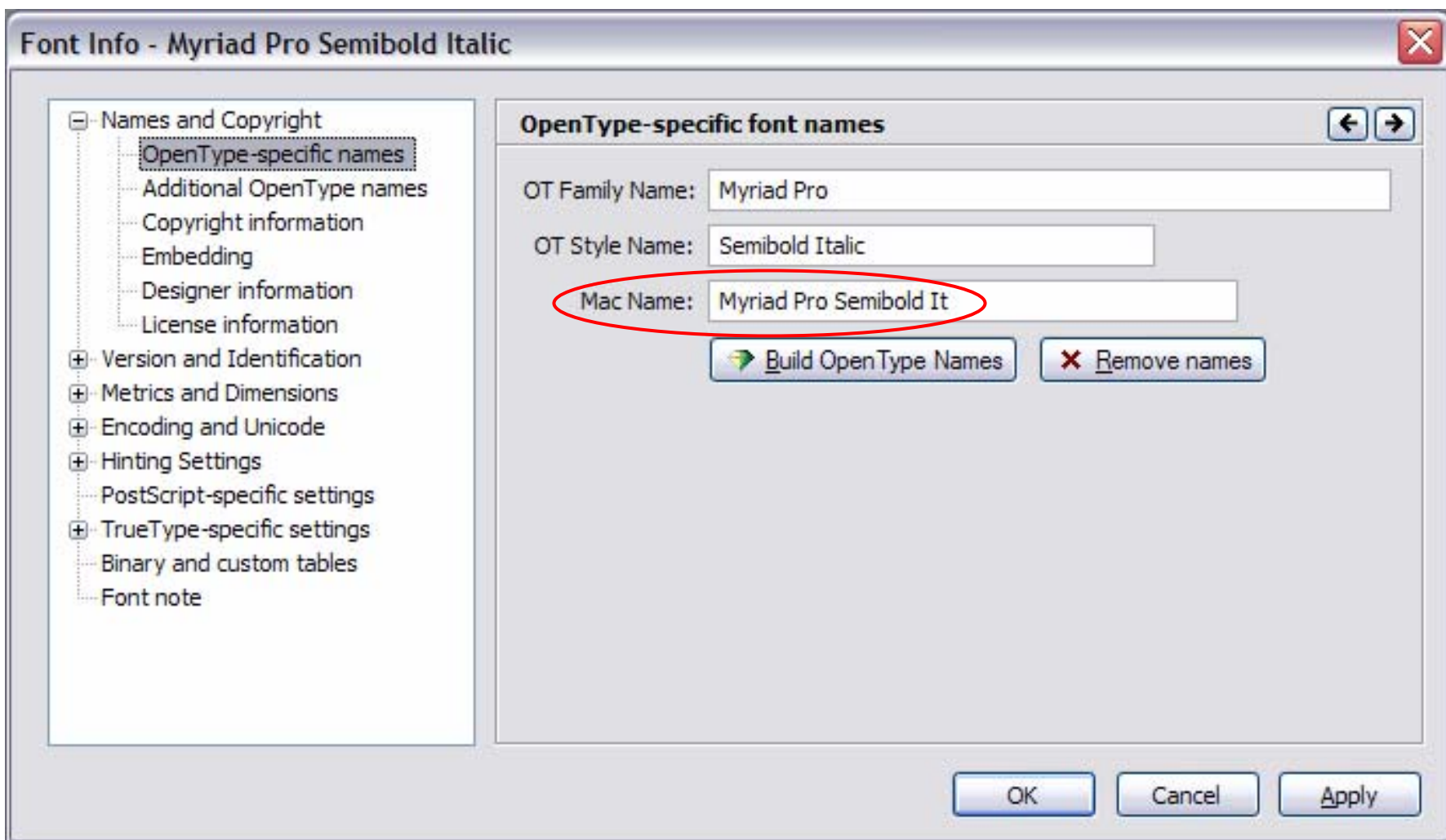 - Most Adobe applications

Adobe

OpenType menu names (ID 16 & 17)
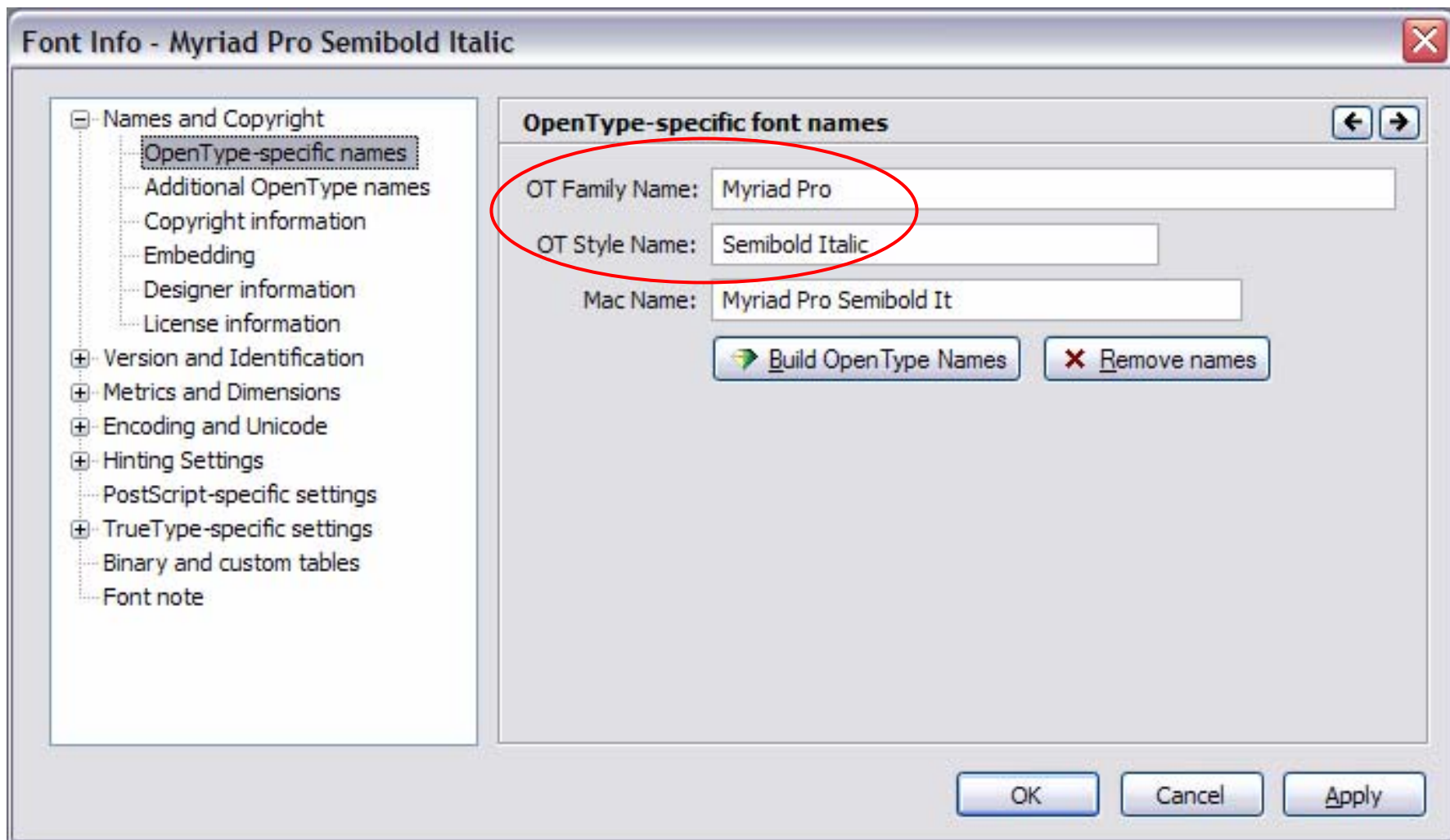
Mac Classic menu name, ID 18

- ♣ 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

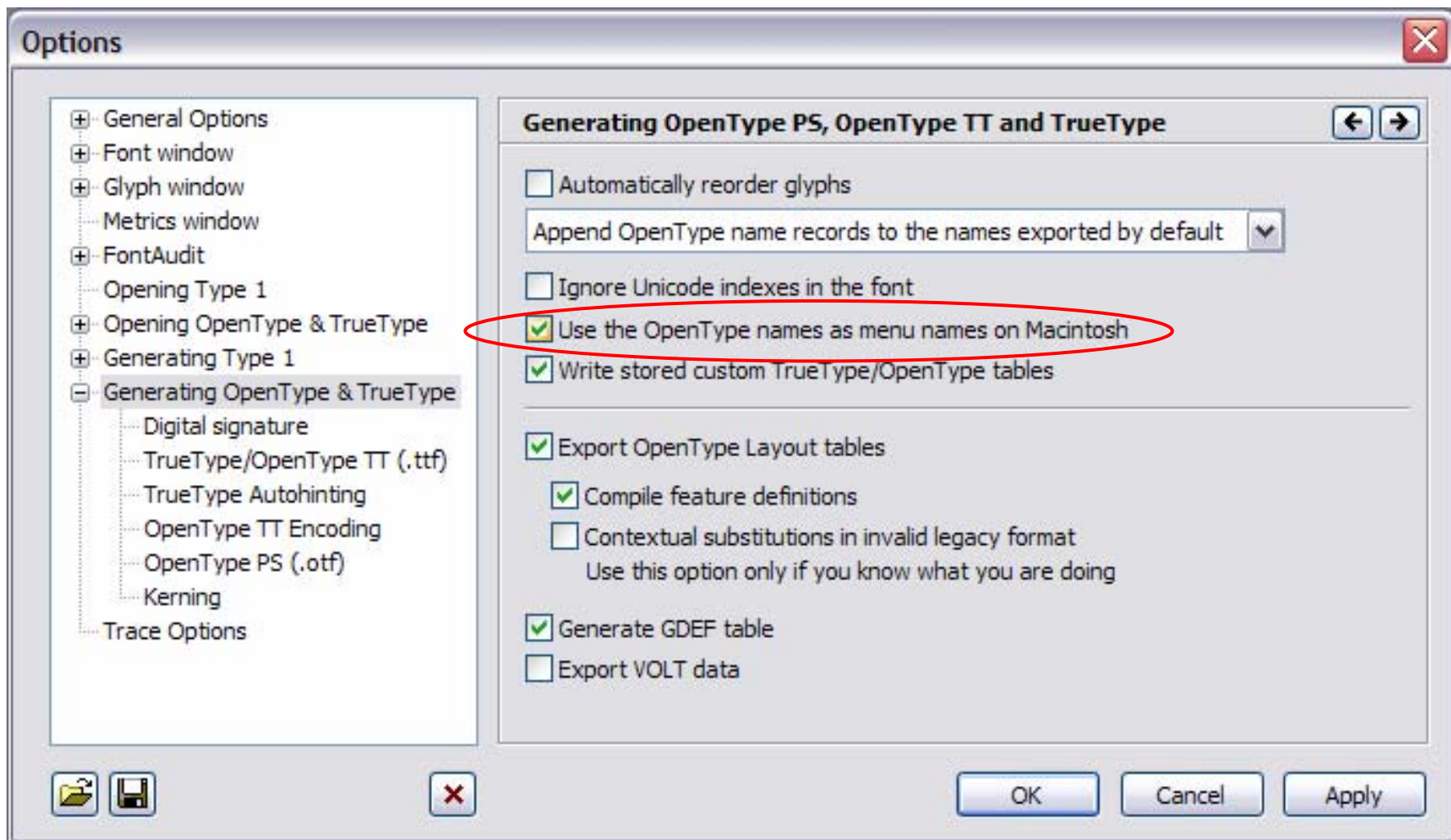**Adobe**

Mac Classic menu name, ID 18

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

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

Adobe

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

Adobe

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

Adobe

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%2015.pdf

Adobe

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

Adobe

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 and nameIDs 16 & 17)

Adobe

Managing Names

- Use a spreadsheet or other central resource to coordinate across fonts

- Run Adobe FDK "CompareFamily" tool to cross-check family relationships

Revolutionizing
how the world engages
with ideas and information

Adobe