FM: OpenType Name Table Entries

- Frank E. Blokland
OpenType otf/ttf Name table IDs:

nameid 0 "<Copyright notice>"
nameid 1 "<Font Family Name>"
nameid 2 "<Font Subfamily name>"
nameid 3 "<Unique font identifier>"
nameid 4 "<Full font name>"
nameid 5 "<Version string>"
nameid 6 "<Postscript name>"
nameid 7 "<Trademark>"
nameid 8 "<Manufacturer Name>"
nameid 9 "<Designer>"
nameid 10 "<Description>"
nameid 11 "<URL Vendor>"
nameid 12 "<URL Designer>"
nameid 13 "<License Description>"
nameid 14 "<License Info URL>"
OpenType otf/ttf Name table IDs:

nameid 16 "<Preferred Family>"
nameid 17 "<Preferred Subfamily>"
nameid 18 "<Compatible Full>"
nameid 19 "<Sample text>"
nameid 20 "<PostScript CID findfont name>"
nameid 21 "<WWS Family Name>"
nameid 22 "<WWS Subfamily Name>"
OpenType otf/ttf font naming in FM: where/how?

- In uFM program dialogs.
- Directly in the uFM (text) file.
- In the OpenType layout features (text) file.
- Using ot Master.
I. UFM program dialogs:

Version 001.000
FamilyName DTL Antares TPRO
FontName DTLAntaresTPRO-Regular
FullName DTL Antares TPRO
UniqueID 5083209
Weight Regular
IsFixedPitch false
Ascender 750
Descender -250
UnderlinePosition -133
UnderlineThickness 20
Bodysize 1000
CapHeight 715
FigureSize 725
XHeight 477
`Common` dialog for editing the UFM file

**Common Metrics Information**
- Underline Position [units]: -133
- Underline Thickness [units]: 59
- SubScript [units]: 0
- SuperScript [units]: 339
- SubScript Size [units]: 370
- SuperScript Size [units]: 370
- StrikeOut Offset [units]: 267
- StrikeOut Width [units]: 53

**Font Style Information**
- MacStyle: Regular (dropdown)
- PCWeight: Normal (dropdown)
- IsFixedPitch: □
‘Type 1’ dialog for editing the UFM file
'TTF/OTF (1)' dialog for editing the UFM file

TrueType Naming Table Information:
- FontFamilyName: Name table ID 1
- TrueType ID: Name table ID 3
- SubfamilyName: Regular - Name table ID 2
- Designer Name: Name table ID 9
- Vendor URL: Name table ID 11
- License URL: Name table ID 14

TrueType Horizontal Header Information (hhea):
- AscenderHHEA [units]: 650
- DesenderHHEA [units]: -250
- LineGapHHEA [units]: 0

OK  Cancel  Apply
1. UFM program dialogs:

- The dialogs provide entries for the most important name tables.
- For generating an OpenType font a modified version of Adobe®’s Hatch OpenType tool (HOT) is used to convert a temporarily created Type 1 font into OTF.
1. UFM program dialogs:

- The CFF table info is always taken from the CFF table in the UFM file, because CFF is just a compressed copy of the intermediate Type 1 font temporarily created with the URW++ Type 1 tool.
1. UFM program dialogs:

- The *Full font name* string for the Windows platform is automatically made identical to the *PostScript FontName* in the cff Name index.

- In case the *Font Subfamily name* is ‘Regular’ in cff fonts, the *Full Font name* for Mac OS is automatically identical to the *Font Family name*. Also for both platforms in TTF fonts.
1. UFM program dialogs:

- A kern file can be selected in the ‘PAR (1)’ dialog.
- An OpenType layout features file can be selected in the ‘TTF/OTF (3)’ dialog.
- With no features file selected a default features.txt file will be created.
II. UFM file editing:

- (Additional) Name tables can be directly added to the UFM file using a text editor.
- In case of overlap with ‘standard’ UFM entries, the TTName table entries are used.
II. UFM file editing:

StartFontMetrics

TTName 1 1 0 0 “DTL Argo”; #Macintosh
TTName 1 3 1 0x409 “DTL Argo”;
TTName 2 1 0 0 “Regular”; #Macintosh
TTName 2 3 1 0x409 “Regular”; #Macintosh
TTName 4 1 0 0 “DTL Argo”; #Macintosh
TTName 7 3 1 0x409 “DTL Argo is a trademark of the Dutch Type Library”; #Windows
TTName 7 1 0 0 “DTL Argo is a trademark of the Dutch Type Library”; #Macintosh
TTName 8 1 0 0 “Dutch Type Library”; #Macintosh
TTName 8 3 1 0x409 “Dutch Type Library”; #Windows
TTName 10 1 0 0 “Standard retail version”; #Macintosh
TTName 10 3 1 0x409 “Standard retail version”;
TTName 13 1 0 0 “By downloading, unpacking and/or
III. OpenType Layout features file:

- When exporting OpenType fonts all required conversions are done in a temporary directory, where all files needed by the conversion tools involved are created or copied.
III. OpenType Layout features file:

- `feathead.txt`, `featname.txt`, and `featos2.txt` contain table blocks for respectively the ‘head’, ‘name’ and ‘os/2’ table, with all entries based on the UFM and PAR files.
- `featkern.txt` contains a ‘kern’ feature block with kerning data taken from the kern file selected in the UFM program dialogs.
III. OpenType Layout features file:

- The temporary files are controlled by adding the following four lines to a features file with a ‘standard’ Adobe syntax:
  ‘include (featkern.txt);’
  ‘include (featos2.txt);’
  ‘include (feathead.txt);’
  ‘include (featname.txt);’
III. OpenType Layout features file:

- Name IDs from *featname.txt* are in the range of 1–6 (the standard range).

The original Adobe® HOT tool will not take these names from a features file, but the modified HOT tool will accept any ID.
III. OpenType Layout features file:

table name {

  nameid 0 "<Copyright notice>";
  nameid 0 1 "<Copyright notice>";
  nameid 1 "<Font Family Name>";
  nameid 1 1 "<Font Family Name>";
  nameid 2 "<Font Subfamily name>";
  nameid 2 1 "<Font Subfamily name>";
  nameid 3 "<Unique font identifier>";
  nameid 3 1 "<Unique font identifier>";
  nameid 4 "<Full font name>";
  nameid 4 1 "<Full font name>";
  nameid 5 "<Version string>";
  nameid 5 1 "<Version string>";
  nameid 6 "<Postscript name>";
}
III. OpenType Layout features file:

- The information for the temporary files will be taken directly from the features file if one or more of the four added lines is disabled:
  
  '# include (featkern.txt);'
  '# include (featos2.txt);'
  '# include (feathead.txt);'
  '# include (featname.txt);'
III. OpenType Layout features file:

- If the intermediate table block files are not included, the HOT tool will still create the respective tables, but it may use some clever but unknown algorithms to calculate some of the entries based on the intermediate Type 1 font file.
III. OpenType Layout features file:

- The `hot` tool may try to fill in some names more than once during the conversion process, first from the features file and then again according to some CFF names just to make sure that the name exists. The `urw++` version of `hot` will always keep the first one, i.e. the one from the features file.
III. OpenType Layout features file:

- When specifying a features file with its own name table block, there is always the risk that CFF names and names from `featname.txt` are not compatible, because they are not based on the same data source, i.e. UFM and PAR.
IV. Editing in OT Master:

- Besides many other functions, including the editing of glyphs, with OT Master the name records in OTF and TTF fonts can be edited.
## FM: OpenType Name Table Entries

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAR*</td>
<td>Version</td>
<td>001.000</td>
</tr>
<tr>
<td>CHAR*</td>
<td>Notice</td>
<td>Copyright (c) Dutch Type Library, 2007. All rights reserved</td>
</tr>
<tr>
<td>CHAR*</td>
<td>Copyright</td>
<td>Copyright Copyright (c) Dutch Type Library, 2007. All rights reserved</td>
</tr>
<tr>
<td>CHAR*</td>
<td>FontName</td>
<td>DTLAntaresTPRO-Regular</td>
</tr>
<tr>
<td>CHAR*</td>
<td>FullName</td>
<td>DTL Antares TPRO Regular</td>
</tr>
<tr>
<td>CHAR*</td>
<td>FamilyName</td>
<td>DTLAntaresTPRO</td>
</tr>
<tr>
<td>CHAR*</td>
<td>Weight</td>
<td>Regular</td>
</tr>
<tr>
<td>LONG</td>
<td>isFixedPitch</td>
<td>0</td>
</tr>
<tr>
<td>float</td>
<td>ItalicAngle</td>
<td>0.000</td>
</tr>
<tr>
<td>float</td>
<td>UnderlinePosition</td>
<td>-133.000</td>
</tr>
<tr>
<td>float</td>
<td>UnderlineThickness</td>
<td>20.000</td>
</tr>
<tr>
<td>LONG</td>
<td>UniqueID</td>
<td>5983200</td>
</tr>
<tr>
<td>float</td>
<td>FontBBox.left</td>
<td>-185.000</td>
</tr>
<tr>
<td>float</td>
<td>FontBBox.bottom</td>
<td>-275.000</td>
</tr>
<tr>
<td>float</td>
<td>FontBBox.right</td>
<td>1313.000</td>
</tr>
<tr>
<td>float</td>
<td>FontBBox.top</td>
<td>1015.000</td>
</tr>
<tr>
<td>float</td>
<td>StrokeWidth</td>
<td>0.000</td>
</tr>
<tr>
<td>LONG</td>
<td>FSType</td>
<td>-1</td>
</tr>
<tr>
<td>LONG</td>
<td>PaintType</td>
<td>0</td>
</tr>
<tr>
<td>list</td>
<td>XUID</td>
<td>+</td>
</tr>
<tr>
<td>list</td>
<td>FontMatrix</td>
<td>+</td>
</tr>
<tr>
<td>struct</td>
<td>Private</td>
<td>+</td>
</tr>
</tbody>
</table>
## OpenType Name Table Entries

<table>
<thead>
<tr>
<th>#</th>
<th>platformID</th>
<th>encodingID</th>
<th>languageID</th>
<th>nameID</th>
<th>nameString</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Copyright (c) Dutch Type Library, 2007.</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>DTL Antares TPRO</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>Regular</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>AP11X13T</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>DTL Antares TPRO</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>Version 001.000</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>DTLAntares TPRO – Regular</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>DTL Antares is a trademark of the Dutch</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>Dutch Type Library</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>Erhard Kaiser</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td><a href="http://www.dutchtypelibrary.com">http://www.dutchtypelibrary.com</a></td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>By downloading, unpacking and/or installing</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td><a href="http://www.dutchtypelibrary.com/support">http://www.dutchtypelibrary.com/support</a></td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>DTL Antares TPRO Regular</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>0</td>
<td>Copyright (c) Dutch Type Library, 2007.</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>1</td>
<td>DTL Antares TPRO</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>2</td>
<td>Regular</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>3</td>
<td>AP11X13T</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>4</td>
<td>DTLAntares TPRO – Regular</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>5</td>
<td>Version 001.000</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>6</td>
<td>DTLAntares TPRO – Regular</td>
</tr>
<tr>
<td>21</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>7</td>
<td>DTL Antares is a trademark of the Dutch</td>
</tr>
<tr>
<td>22</td>
<td>3</td>
<td>1</td>
<td>1033</td>
<td>8</td>
<td>Dutch Type Library</td>
</tr>
</tbody>
</table>

[NOTE] Extern to intern conversion of ‘post’ table successfully done.
FM: OpenType Name Table Entries

- Frank E. Blokland