



## ISO/IEC JTC 1/SC34 Information technology -- Document Description and Processing Languages

**TITLE:** Liaison statement to SC29/WG11 on ISO/IEC 14496-5/FDAM14/DCOR1 (Open Font Format reference software)

**SOURCE:** SC34/WG2

**PROJECT:**

**PROJECT EDITOR:**

**STATUS:** This document is forwarded to SC 29/WG 11 for consideration. It is circulated to the SC 34 members for information.

**ACTION:** FYI

**DATE:** 2009-07-24

**DISTRIBUTION:** SC34, SC34/WG2 and SC29/WG11

**REFER TO:**

**REPLY TO:** Secretariat, ISO/IEC JTC 1/SC 34  
IPJSJ/ITSCJ (Information Processing Society of Japan/Information Technology Standards Commission of Japan)\* Room 308-3, Kikai-Shinko-Kaikan Bldg., 3-5-8, Shiba-Koen, Minato-ku, Tokyo 105-0011 Japan \*Standard Organization Accredited by JISC  
Tel: +81-3-3431-2808 Fax: +81-3-3431-2808  
E-mail: [kimura@itscj.ipsj.or.jp](mailto:kimura@itscj.ipsj.or.jp)

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## ISO/IEC JTC1/SC34/WG2 N358

### Liaison statement to SC29/WG11 on ISO/IEC 14496-5:2001/ FDAM14:2009/DCOR1 (Open Font Format reference software)

SC34/WG2 would like to thank SC29/WG11 to reflect our liaison comment ISO/IEC 14496-5:2001/ FDAM14 to the corrigendum very quickly. Reviewing the corrigendum text SC29 N10366, we add a few recommendations to improve the text.

#### 1. Note to state the advantage to include fonttools.

We regard SC29/WG11's decision to include the fonttools-2.2. In the text, the purpose to include fonttools-2.2 is described as a convertor from OFF to XML, and from XML to OFF. We recommend to mention another advantage to include fonttools; it can disassemble the TrueType bytecode (however, the specification of TrueType instruction is not part of OFF specification) and we can

check whether any TrueType hinting instructions are used. Therefore, the user can distinct whether a font conforms to OFF level 1 (unhinted OFF) or higher levels (hinted OFF) described in ISO/IEC 14496-4:2004/Amd 26:2008. SIL's Perl library `Font::TTF` can distinct whether a given font is using TrueType hinting or not, but it does not include TrueType instruction disassembler, so it is difficult to learn how the hinting instructions are used.

However, the XML generated by fonttools is not standardized. As far as we know, there is no standard XML translation of OFF, almost software use its own XML format that is mutually incompatible. We recommend an insertion of word "for human readability" to avoid the misunderstanding of fonttools' output as SC29-adopted format. For example:

For reference purposes and for demonstration of how data can be converted and encoded in OFF, the TTX software module that implements conversion of the OFF data to human readable format (in TTX XML) and the human readable format to the OFF data is included. The TTX software module includes an assembler and disassembler for TrueType glyph description that is useful to distinguish OFF level 1 (without hinting instruction) and higher levels (with hinting instruction). This software module is written by Just van Rossum (Leterror.com), and is included in this reference software package under a separate license. For details see `fonttools-2.2.tar.gz` included as part of the electronic attachment.

## 2. Note for C source file naming convention.

In our previous liaison report SC34 N1176 (SC29 N10235), we had proposed a conventional Makefile for non-Microsoft platforms. We thank SC29/WG11 to decide the inclusion of the proposed Makefile. We had misunderstood that C source file names should be uppercased, so Makefile we had proposed in previous liaison report was following:

```
OTFONTCK: $@.C
    $(CC) -o $@ $<
```

Checking the file names in SC29 N10366 attachment carefully, the file names should be lowercased. Therefore, it is recommended to revise the Makefile as

```
otfontck: $@.c
    $(CC) -o $@ $<
```

Yet we have not checked the C source file naming conventions in ISO/IEC 10646-5, but we prefer the lowercased file names. Some C compilers recognize a file with the suffix ".C" (in uppercase) as a C++ source, therefore, `OTFONTCK.C` is compiled in C++ mode and the compilation is failed. We had checked that `gcc` (GNU C compiler) and HP ANSI C compiler have such issue. These compilers have the options to specify the compilation mode to C instead of C++, but there is no standard option.