#### **NAME**

t1disasm - disassemble PostScript Type 1 font

# **SYNOPSIS**

t1disasm [input [output]]

# **DESCRIPTION**

**t1disasm** disassembles Adobe Type 1 font programs in either PFA (hexadecimal) or PFB (binary) formats into human-readable form. If the file *output* is not specified output goes to the standard output. If the file *input* is not specified input comes from the standard input.

**t1disasm** performs eexec and charstring decryption as specified in the "black book", *Adobe Type 1 Font Format*. Additionally, the charstring binary tokens are expanded into human-readable text form, using the names given in the black book and later documents describing Type 2 opcodes.

## **EXAMPLES**

```
% t1disasm Utopia-Regular.pfb Utopia-Regular.raw
% t1disasm Utopia-Regular.pfa Utopia-Regular.raw
```

```
In Subrs entries in Utopia-Regular.raw will look like
```

```
dup 5 {
            8 111 vstem
             -12 128 hstem
             707 -20 hstem
             return
            }|
and the CharStrings entries like
        /exclam {
             58 242 hsbw
             6 callsubr
             5 4 callsubr
             63 707 rmoveto
             -54 0 -5 -22 4 -45 rrcurveto
             40 -431 rlineto
             29 hlineto
            42 431 rlineto
             4 45 -5 22 -55 0 rrcurveto
             closepath
             64 callsubr
             -719 vmoveto
             243 callsubr
             endchar
            } |-
```

### **SEE ALSO**

```
\pmb{t1asm}(1), \pmb{t1ascii}(1), \pmb{t1binary}(1), \pmb{t1unmac}(1), \pmb{t1mac}(1)
```

Adobe Type 1 Font Format is available free from Adobe as a PDF file: http://partners.adobe.com/asn/developer/PDFS/TN/T1\_SPEC.PDF

The Type 2 Charstring Format, also available from Adobe as a PDF file, describes the newer Type 2 operators, which are also used in some multiple-master Type 1 fonts like Adobe Jenson and Kepler: http://partners.adobe.com/asn/developer/PDFS/TN/5177.Type2.pdf

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