

1 Testing LaTeX Counters

Counter Foo [0] = 0.
Increment Foo[1] = 1.
Set Foo to 2 = 2.
Add 10 to Foo [12] = 12.
Double Foo [24] = 24.

1.1 Testing RefStep

Define bar to be reset within foo. Now (Foo,Bar)[24,0] is (24,0)
Refstep bar: Now (Foo,Bar)[24,1] is (24,1)
Refstep foo: Now (Foo,Bar)[25,0] is (25,0)

1.2 Number formatting

arabic[6] = 6
roman [vi] = vi
Roman [VI] = VI
alph [f] = f
Alph [F] = F
fnsymbol [[]] = ||
How far will \TeX go? Fubar is mmmmmmmmmcmxcix

2 Expanding LaTeX Counter Names

Counter Foo [0] = 0.
Increment Foo[1] = 1.
Set Foo to 2 = 2.
Add 10 to Foo [12] = 12.
Double Foo [24] = 24.

2.1 Testing RefStep

Define bar to be reset within Foo. Now (Foo,Bar)[24,0] is (24,0)
Refstep Bar: Now (Foo,Bar)[24,1] is (24,1)
Refstep Foo: Now (Foo,Bar)[25,0] is (25,0)

2.2 Number formatting

arabic[6] = 6
roman [vi] = vi
Roman [VI] = VI
alph [f] = f
Alph [F] = F
fnsymbol [[]] = ||

3 TeX Counters

3.1 Integers

7 = 7.
7 = 7.

3.2 Dimensions

HFuzz is 0.1pt. Now HFuzz is 2.0pt.
HFuzz is 2.0pt. Now HFuzz is 2.0pt.
Dimen 1.23pt = 1.23pt.
Dimen 1.23pt = 1.23pt.
Dimen 1.23pt = 1.23pt.
count 2: 3*65536 = 196608.
Now dimen: 3pt = 3.0pt
One em = 10.00002pt
One ex = 4.30554pt
Dimen: one ex = 4.30554pt
Dimen: 1pt = 1.0pt
Dimen: 1pt = 1.0pt
8 pt = 8.0pt
15 pt = 15.0pt
Catcodes? 15.0 POINTS = 15.0 POINTS

3.3 Glue

1pt plus 3pt = 1.0pt plus 3.0pt
1pt plus 3fil = 1.0pt plus 3.0fil
1pt plus 3fill = 1.0pt plus 3.0fill
Skip: 2pt plus 3fill = 2.0pt plus 3.0fill
0.1pt plus 3fill = 0.1pt plus 3.0fill
Catcodes? 1.0 POINTS PLUS 3.0 POINTS = 1.0 POINTS PLUS 3.0
POINTS

3.4 The

the count 127 [99] : 99
the two (countdef 2)[196608] : 196608
Tokens: abFOOcd = abFOOcd
Catcode: 11 = 11
Catcode: 12 = 12

3.5 New Count, etc

3 = 3

3.6 L^AT_EX style

1em = 10.00002pt 3em = 30.00005pt

3.7 Macrology

```
1=1
  [23=23]
  [29=29]
  [29=29]
  [10000=10000] [$a$ = $a$]
```

3.8 Quirks

Note that for toksdef and others, T_EX binds the token to relax before reading the number, in case the definition is immediagely followed by a usage or assignment (See TeX Program §1224)

```
Tooks:abc
dima:1.0pt
skipa:1.0pt plus 1.0pt
muskipa:1.0mu
@
Σ
```