

Ftrace cheatsheet :: interpreting the symbols

Eg. output line

```
0)      mycp-786      | .d.1h1 |      @ 175928.1 us | } /* sys_write */
^      ^              | ^      |      ^              |      ^ function name
cpu#   thread-PID      5/4 cols      time delay
\--- (see below) ---/
```

Symbol in (raw)
ftrace output

Meaning

'+'	a <i>wakeup</i> has occurred
==> (or =>)	a <i>context switch</i> has occurred
=====>	switch to an <i>interrupt</i> context (usually a hard irq)
<=====	switch back <i>from an interrupt</i> context to process context

Time (delay) nomenclature ; eg. @ 175928.1 us

'@'	> 100,000 us (100 ms)
'*'	> 10,000 us (10 ms)
'#'	> 1000 microseconds (1 ms)
'!'	> 100 us (<i>preempt_mark_thresh</i>)
'+'	> 1 us
' '	<= 1 microsecond

Latency Trace Format (the four/five columns): eg. 1d.h1

First column	CPU # the thread / interrupt was running upon
Second column	'.' = interrupts enabled; 'd' = interrupts disabled
Third column	need-resched; '.' = unset, 'N' = TIF_NEED_RESCHED bit has been set
Fourth column	'.' = process ctx (context); 'h' / 'H' = hard-irq interrupt ctx ; 's' = softirq interrupt ctx ('h' = hard irq is running ; 'H' = hard irq occurred inside a softirq)
Fifth column	preempt-depth; 0 = no locks held, +ve = that many locks are being held