
Subject: Re: Socket Communication 101
Posted by [lectus](#) on Sat, 08 Dec 2012 14:37:16 GMT
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Yes, there's some optimization at CPU level when you compare a char with \0.

In ASM code a comparison happens like this:

```
CMP AX, ','  
JZ FOUND_COMMA  
.  
.  
.  
FOUND_COMMA:  
; Do something...
```

When you compare to zero it happens like this:

```
CMP AX, 0  
JZ FOUND_ZERO  
.  
.  
.  
FOUND_ZERO:  
; Do something...
```

The same with some instruction optimization:

```
XOR AX, AX  
JZ FOUND_ZERO  
.  
.  
.  
FOUND_ZERO:  
; Do something...
```

XOR instruction is a few bytes smaller than CMP, but XOR raises a CPU flag and so it works to compare to zero.
This saves a few CPU cycles. But with a good compiler and modern CPUs it becomes irrelevant.
