

Re: size_t and int comparison

Source: <http://coding.derkeiler.com/Archive/C/ CPP/comp.lang.cpp/2005-01/1088.html>

From: Jerry Coffin (jcoffin_at_taeus.com)

Date: 01/09/05

Date: 9 Jan 2005 13:27:32 -0800

- > *Two solutions to remove the warning:*
- >
- > 1. *Change the type of the variable 'i' to 'size_t'.*
- > 2. *staic_cast i to "unsigned" type.*

It's giving you a warning because `strlen` returns a `size_t`, which is some unsigned type. You're comparing it to `i`, which is a (signed) `int`, and comparing a signed to an unsigned can cause rather strange results (since each type can normally represent some values the other can't).

It won't warn you, but you're re-computing the length of the string every time through the loop. This makes your loop $O(N * N)$ instead of $O(N)$ -- ugly unless your string is `_really_` short. I'd use something like:

```
for (int i=0; pathcmd[i] != '\0'; i++) {
```

Or, perhaps just switch to using an `std::string`, and while you're at it, you might want to quit using an explicit loop and replace it with an algorithm instead:

```
std::for_each(pathcmd.begin(), pathcmd.end(), do_whatever);
```

and possibly use `boost::lambda` to create `do_whatever` on the fly as well...

```
--  
Later,  
Jerry.  
The universe is a figment of its own imagination.
```