Subject: How to link assembler compiled file Posted by frederik.dumarey on Sun, 18 May 2025 09:51:20 GMT

View Forum Message <> Reply to Message

Hello,

I added a assembler file named my_strlen.S to my package, the contents of this file are below:

```
.global my strlen # Export the symbol my strlen
.text
        # code section
_my_strlen:
#function prologue
pushq %rbp
mova %rsp, %rbp
movq %rdi, %rsi # copy the string pointer to %rsi
xorg %rax, %rax # zero %rax to use as a counter
strlen loop:
cmpb $0, (%rsi) # compare byte at %rsi with 0 (null terminator)
je strlen_end # if zero, end of string reached
incq %rax # increment counter
incq %rsi
            # move to next character
imp strlen_loop # repeat loop
strlen end:
#function epilogue
popq %rbp
ret
Since this is AT&T assembler code, it compiled without any problem to a object file using
right click, build and compile option in TheIDE GUI. So far so good.
I then added a C++ file, which has the following content:
#include <iostream>
//declare the assembler function
extern "C" size_t my_strlen(const char* str);
int main(int argc, const char *argv[])
const char* message = "Hello from Assembler";
size t length = my strlen(message);
```

```
std::cout << "Message: " << message << std::endl;
std::cout << "Length: " << length << std::endl;
return 0;
}</pre>
```

which can also be compiled using the same method as stated before.

Now my question: how do I link those two object files in the GUI? I suppose I have to go to Project menu item, then Custom build steps, but what do I enter in all these fields?

Thanks.