# Boost Asio Setup Guide

NP TA 源灝

#### Linux

- 1. Use package manager to install boost library
- 2. That's all

#### Example

Ubuntu

sudo apt install libboost-all-dev

Download Visual Studio from NCTU CA

```
host: ftp://ca.nctu.edu.tw
account: [your student ID]
password: [NCTU portal password]
path:
  For_Windows/
     Developer_Tools/
        Visual_Studio/
            Visual_Studio_2017/
Setup EXE:
Multi_Language/Visual_Studio_Professional_2017_v15_3.EXE
License:
  Visual_Studio_Licenses.html
```

Run Setup EXE (Visual\_Studio\_Professional\_2017\_v15\_3.EXE)



Click 繼續



#### Check 使用 C++ 的桌面開發



#### Click 安裝

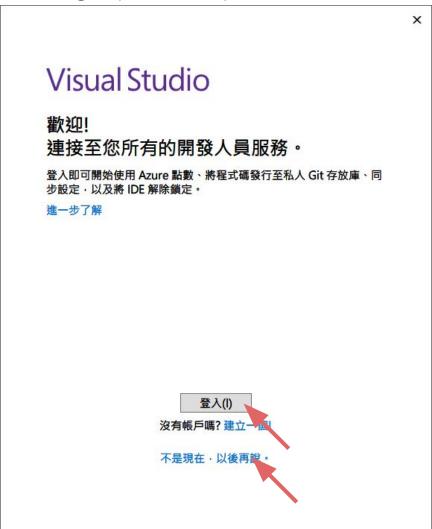


#### Click 重新啟動



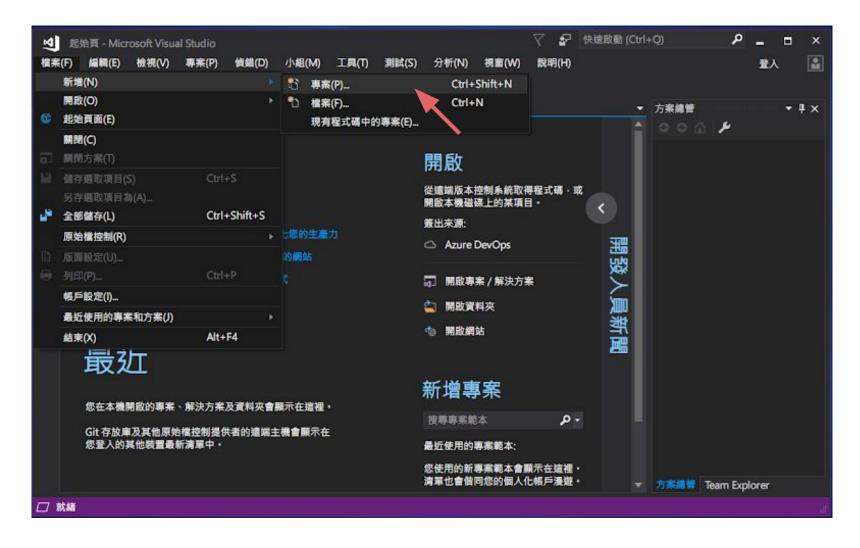
Open Visual Studio 2017, login (or not 👄)

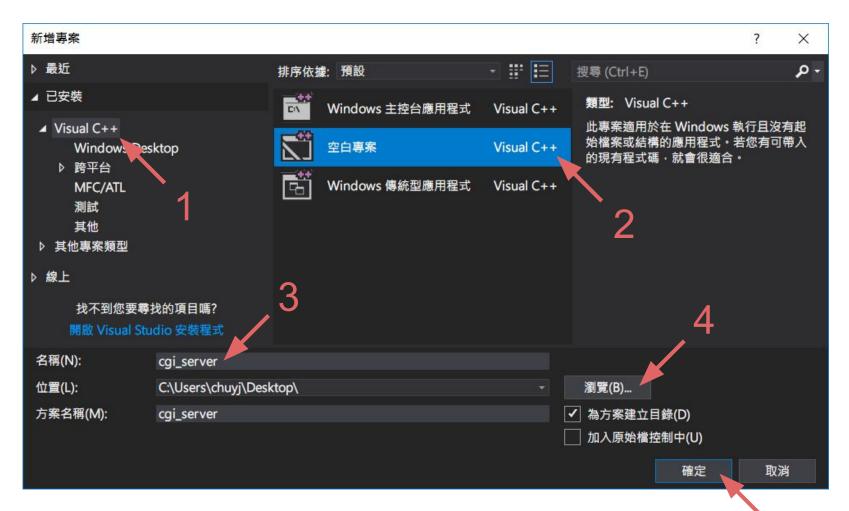




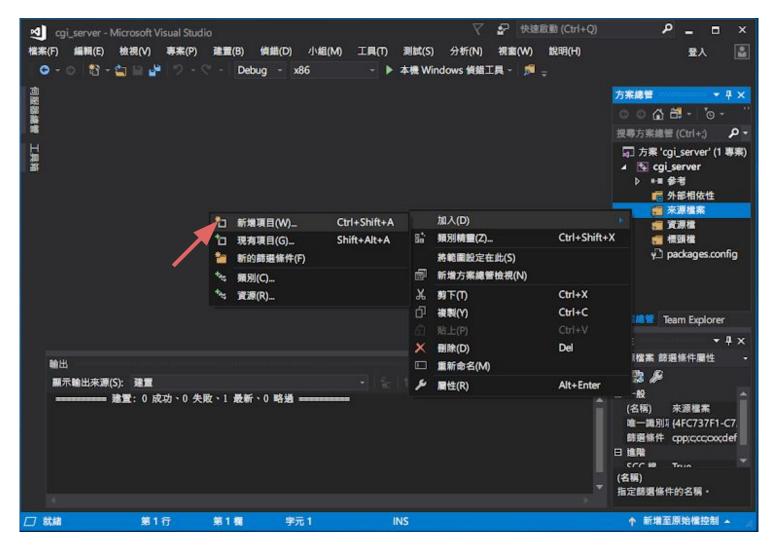
Some custom settings bla bla bla...

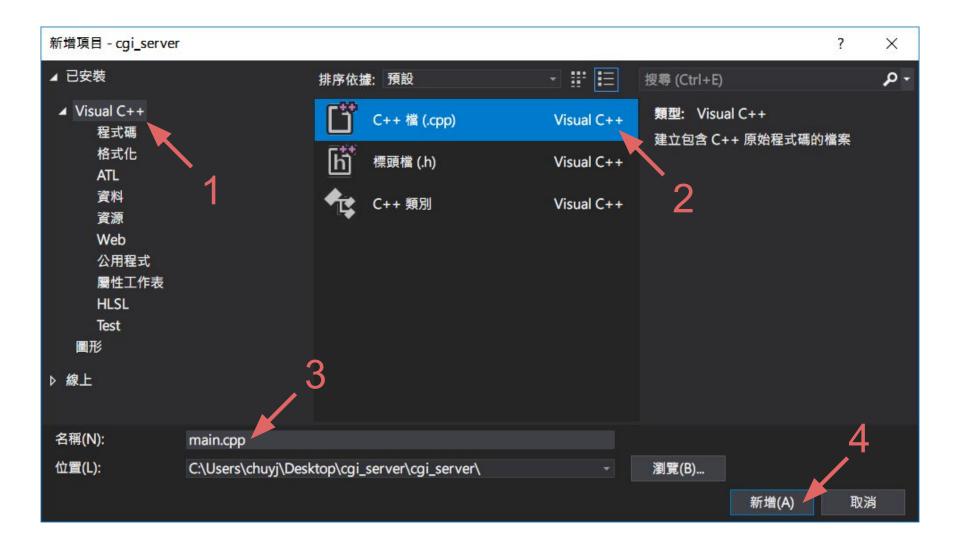
#### 檔案 > 新增 > 專案



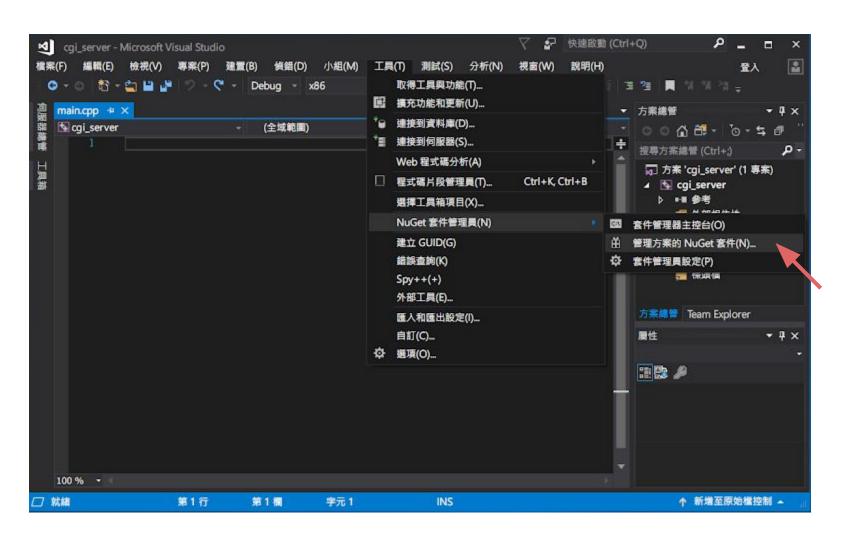


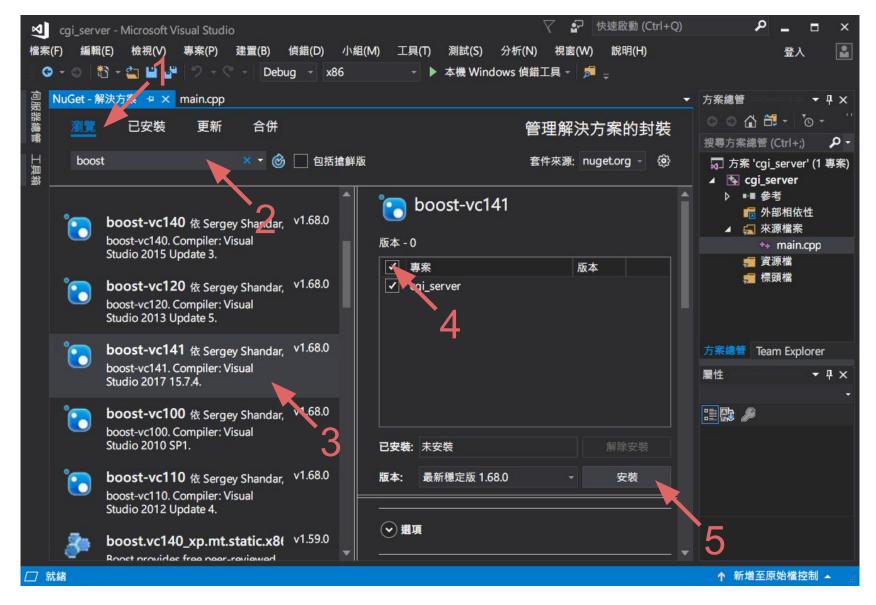
Right Click 來源檔案 > 加入 > 新增項目

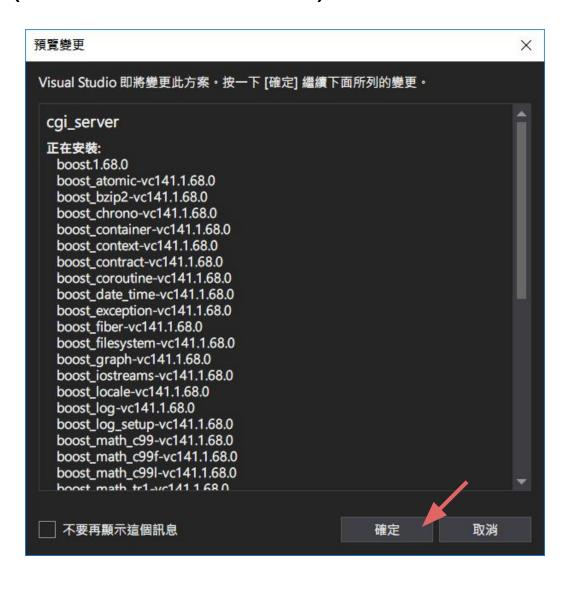




工具 > NuGet 套件管理員 > 管理方案的 NuGet 套件







Write your code in main.cpp

```
快速啟動 (Ctrl+Q)
    cgi_server - Microsoft Visual Studio
             檢視(V) 專案(P)
                                          小組(M)
                                                         測試(S) 分析(N)
                                                        本機 Windows 偵錯工具 🔻 🥦 📒
   main.cpp 🗢 🗙

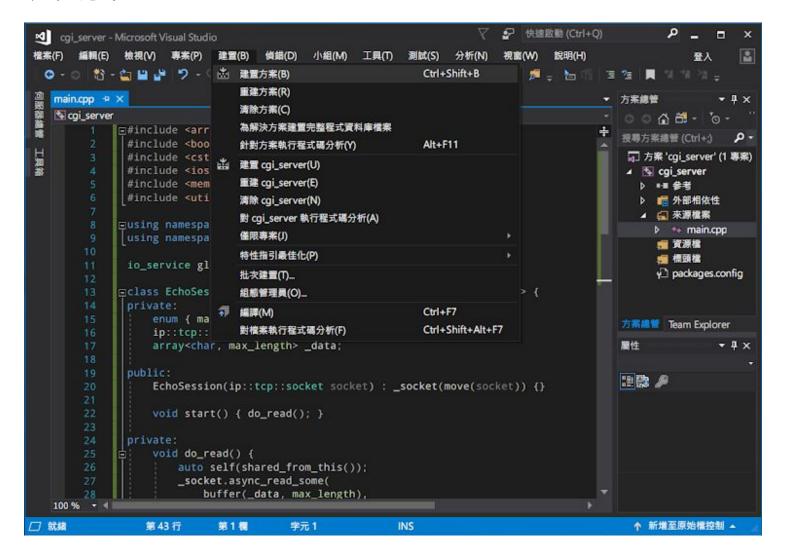
★ cgi_server

                                  (全域範圍)
                                                                                          O O 🖒 🛅 - 🐚 -
             ≡#include <array>
                                                                                          搜專方案總管 (Ctrl+;)
              #include <boost/asio.hpp>
              #include <cstdlib>
                                                                                           #include <iostream>

▲ the cgi_server

              #include <memory>
                                                                                             ▶ ■■ 參考
             #include <utility>
                                                                                             ▶ 📻 外部相依性
                                                                                             ▲ 🖳 來源檔案
             using namespace std;
                                                                                               main.cpp
             using namespace boost::asio;
                                                                                               資源檔
                                                                                               = 標頭檔
              io_service global_io_service;
                                                                                               packages.config
             □class EchoSession : public enable_shared_from_this<EchoSession> {
              private:
                  enum { max_length = 1024 };
                                                                                          方案總管 Team Explorer
                  ip::tcp::socket _socket;
                  array<char, max_length> _data;
                                                                                          EchoSession(ip::tcp::socket socket) : _socket(move(socket)) {}
                  void start() { do_read(); }
              private:
                  void do_read() {
                      auto self(shared_from_this());
                      _socket.async_read_some(
                          buffer(_data, max_length),
   100 % ▼ ◀ ■
                 第43行
                            第1欄
                                       字元1
                                                       INS
                                                                                            ↑ 新增至原始檔控制 ▲
□ 就緒
```

#### 建置 > 建置方案



You can find the executable in cgi\_server/Debug

