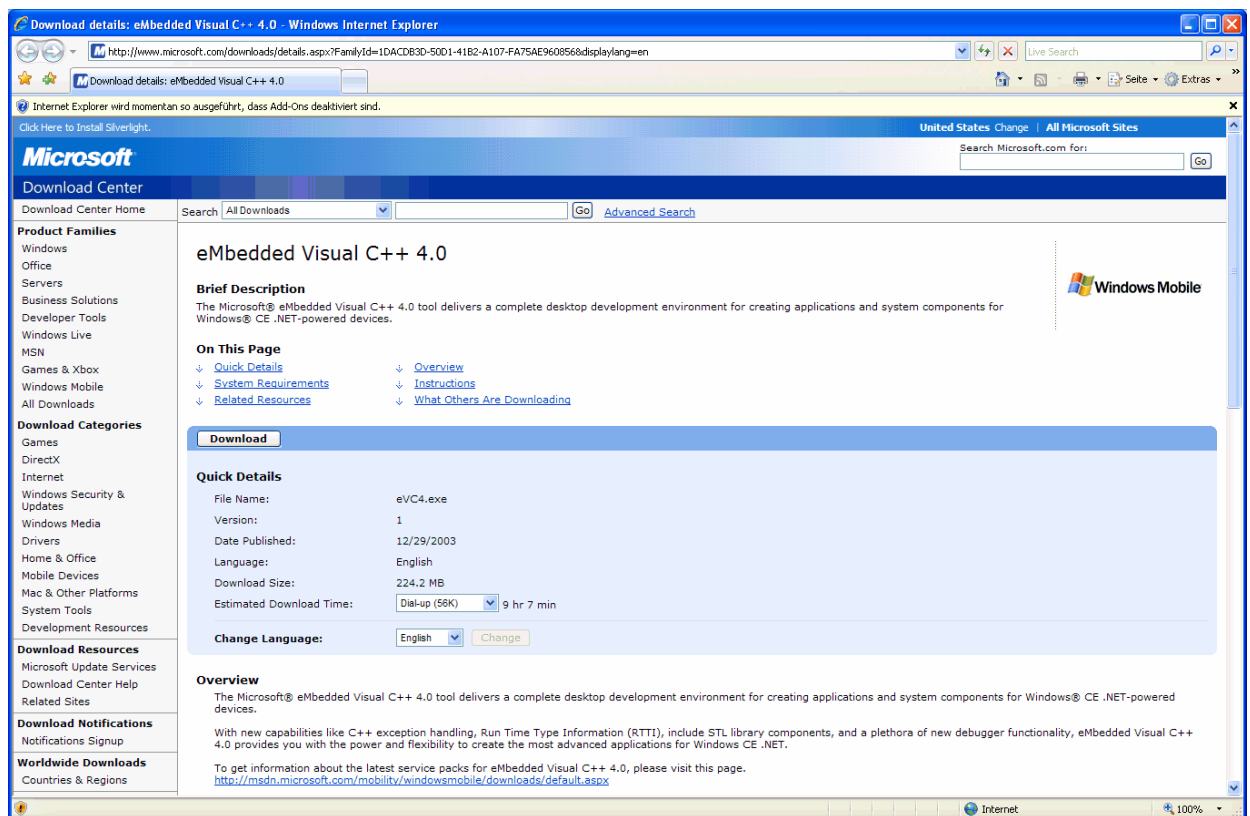


How to write a *Hello World* for the Windows CE-based DNP/9200

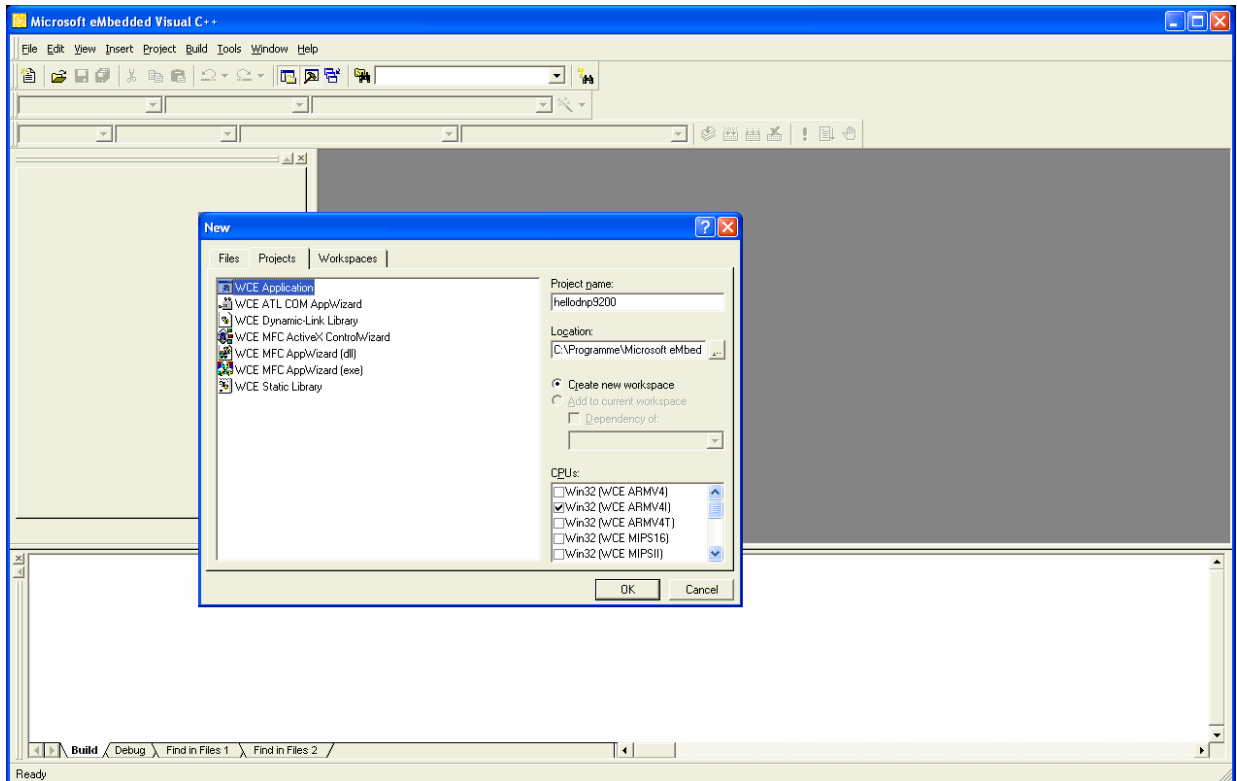
The DNP/9200 within the DNP/SK23-WCE Starter Kit comes with a preinstalled Microsoft Windows CE (WCE) operating system. This document describes how to write the first “Hello World” with the help of *eMbedded Visual C++ 4.0*. This development tool is freely available over the Microsoft Download Center web site.

- **1. Step:** Download *eMbedded Visual C++ 4.0* from the Microsoft Download Center and install this C/C++ development environment on your PC.

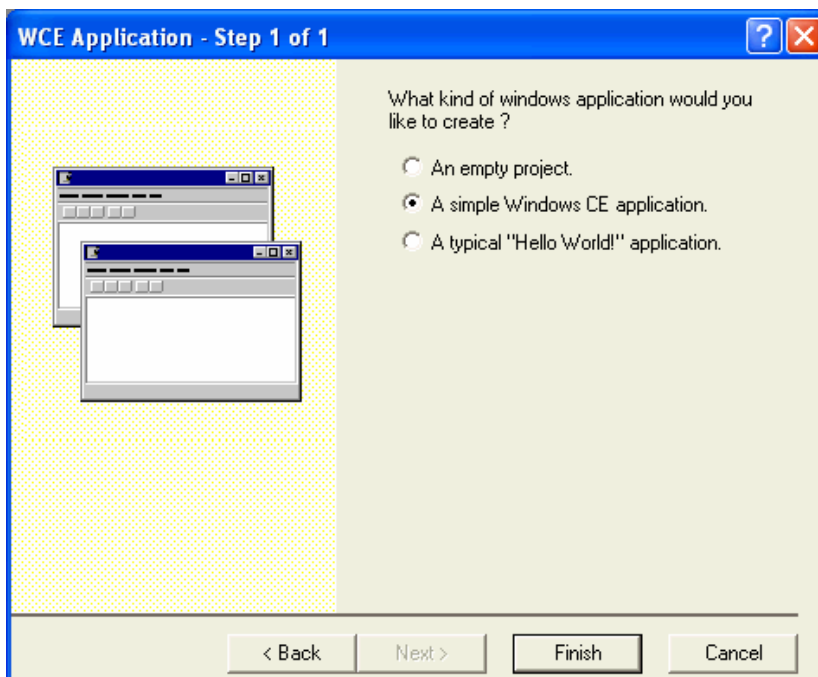


Please note: There is a CD key (e.g. *TRT7H-KD36T-FRH8D-6QH8P-VFJHQ*) within the Microsoft Download Center web page. You need this key for the *eMbedded Visual C++ 4.0* installer.

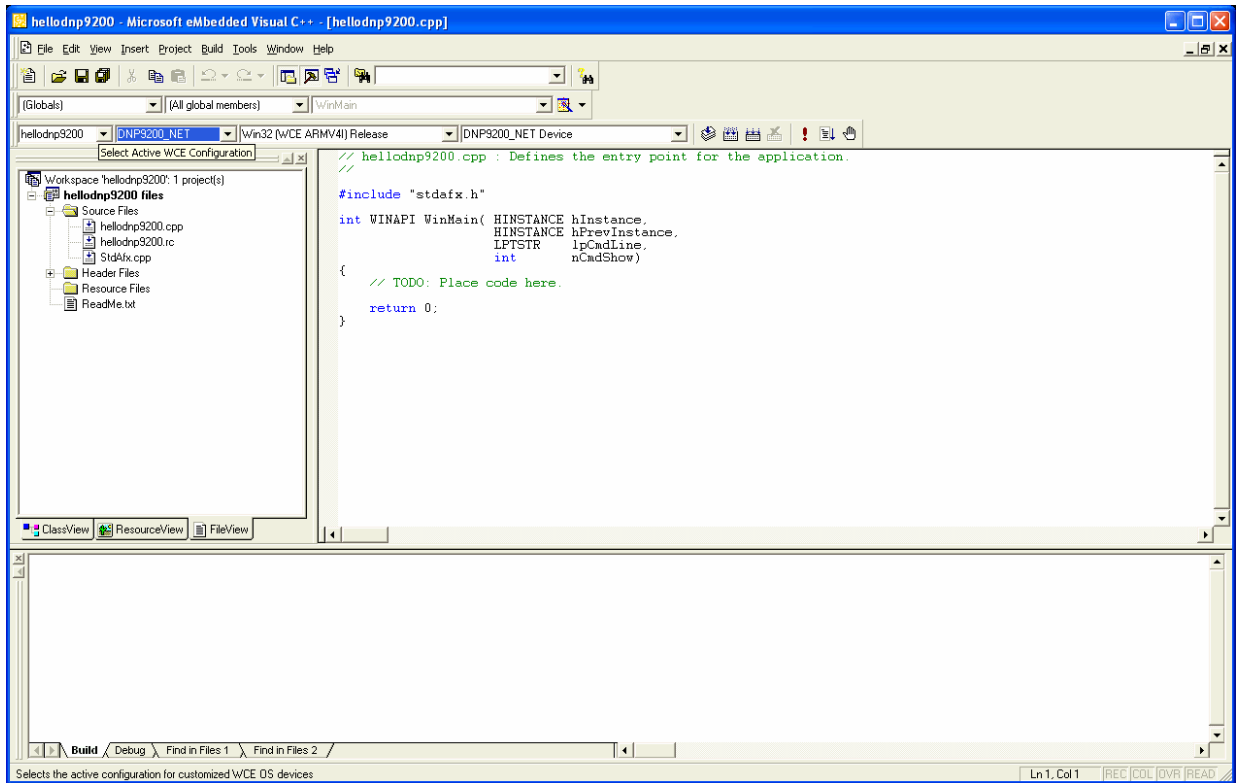
- **2. Step:** Download the service pack 4 (*eMbedded Visual C++ 4.0 SP4*) and install this service pack on your PC. The service pack SP4 is necessary to write C/C++ applications for the DNP/9200 with Windows CE operating system.
- **3. Step:** Please install the DNP/9200 Windows CE SDK (Software Development Kit) from the DNP/9200-WCE Starter Kit CD-ROM on your PC. See directory `\sdk` on this CD-ROM.
- **4. Step:** Run *eMbedded Visual C++ 4* on your PC and create a new project. Use the project type *WCE Application*. Supply the dialog window with a project name (i.e. *hellodnp9200*).



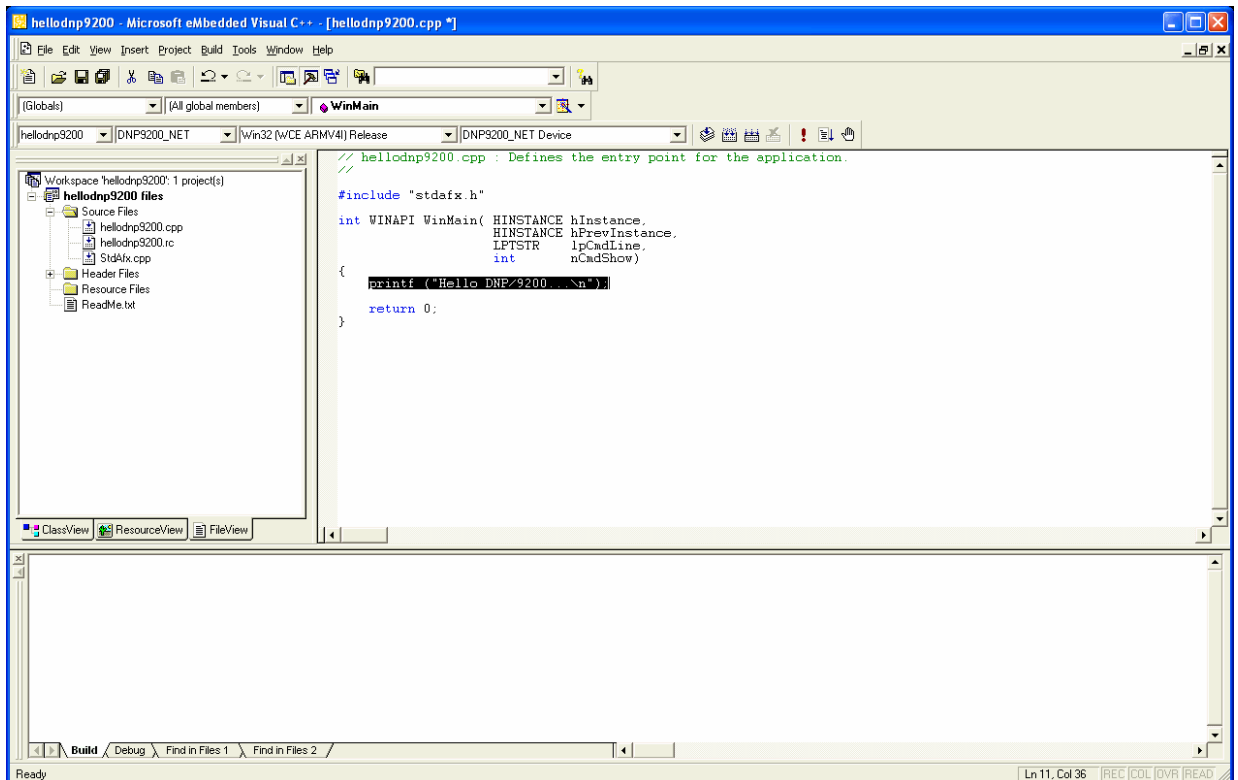
- **5. Step:** Select *A simple Windows CE application* within the WCE Application Wizard Step 1 of 1 window. Then click to the Finish button.



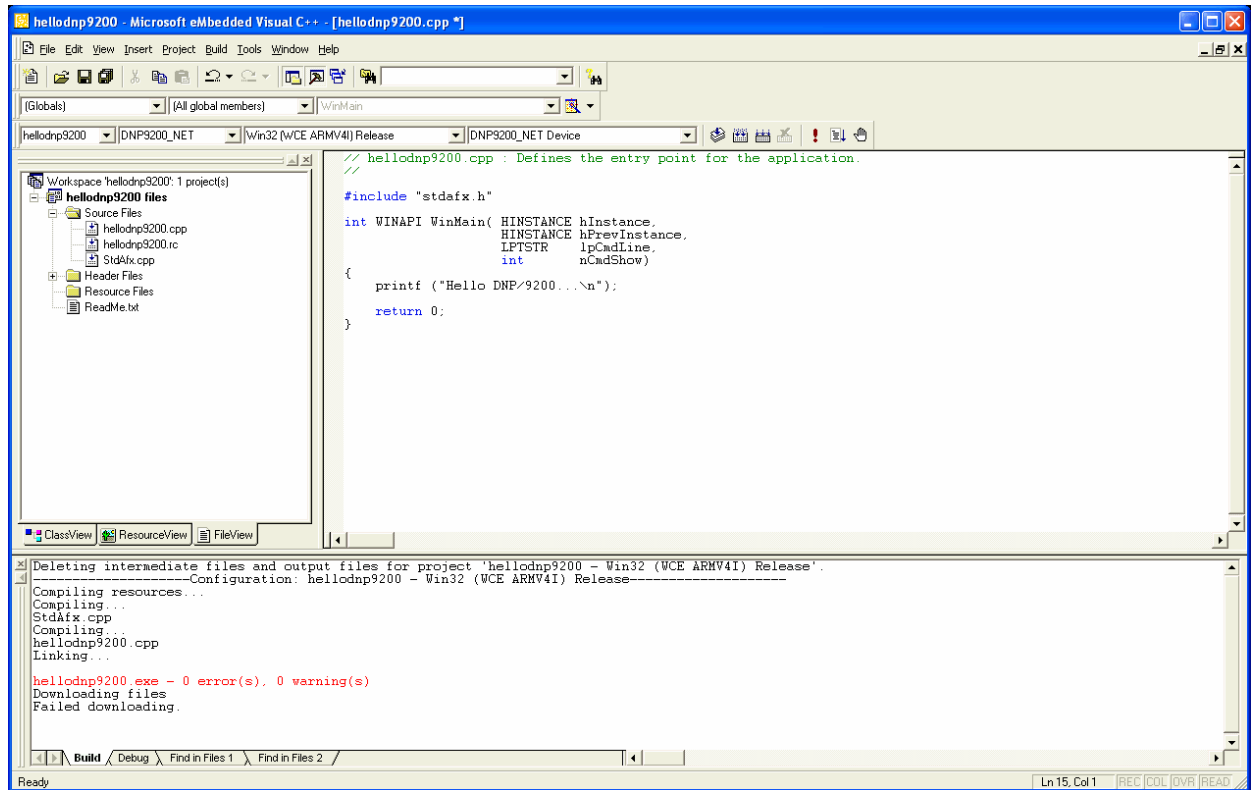
- **6. Step:** Choose *DNP/9200_NET* and *Win32 (WCE ARMV4I) Release* within the project settings. Then open the FileView for your project. Within this FileView you find the C/C++ source file (i.e. *hellodnp9200.cpp*). In the source file you find a line with the text *// TODO Place code here*.



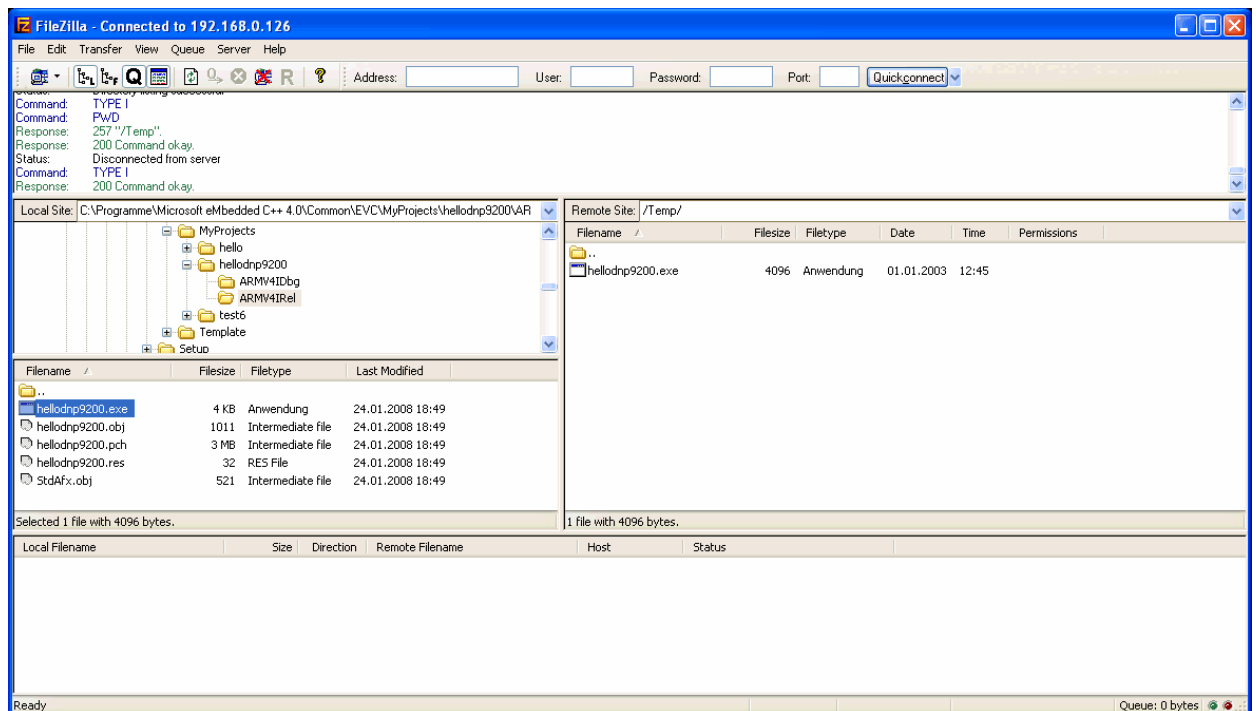
- **7. Step:** Replace the text line *// TODO: Place code here* with your own “Hello World” printf statement (i.e. `printf(“Hello DNP/9200...\n”);`);



- **8. Step:** Build the executable (see menu item *Build => Rebuild All*) for your DNP/9200 project.

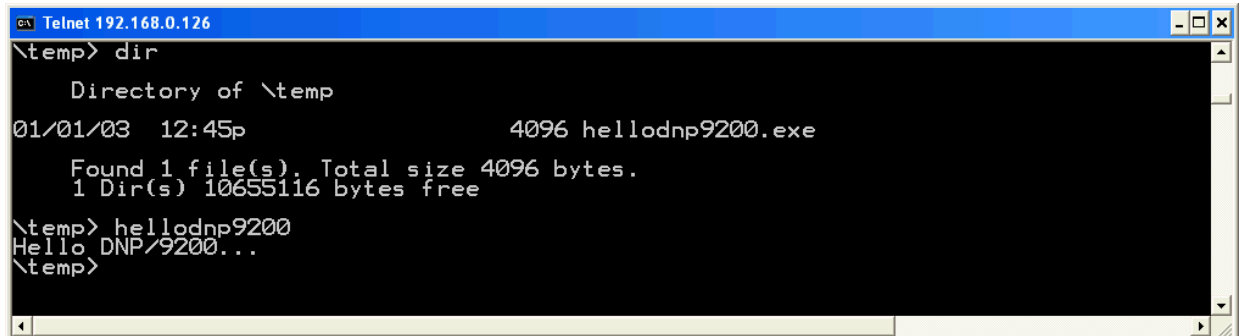


- **9. Step:** Download the executable (i.e. *hellodnp9200.exe*) with the help of the FTP client *FileZilla* to the DNP/9200 file system. Please see the *DNP/SK23-WCE Windows CE Starter Kit First Steps* manual for more details about the FTP link between your development PC and the DNP/9200.



- **10. Step:** Setup a Telnet session to the DNP/9200 Windows CE Telnet service and run the new

executable (i.e. *hellodnp9200.exe*) on the DNP/9200. Please see the *DNP/SK23-WCE Windows CE Starter Kit First Steps* manual for more details about the Telnet-based link between your development PC and the DNP/9200.



```
Telnet 192.168.0.126
\temp> dir
  Directory of \temp
01/01/03  12:45p                4096 hellodnp9200.exe
  Found 1 file(s). Total size 4096 bytes.
  1 Dir(s) 10655116 bytes free

\temp> hellodnp9200
Hello DNP/9200...
\temp>
```

Please note: *eMbedded Visual C++ 4.0* try to setup an Active Sync connection after each build in some development environments. This kind of connection is not supported by the DNP/9200 Windows CE configuration.

That is all.