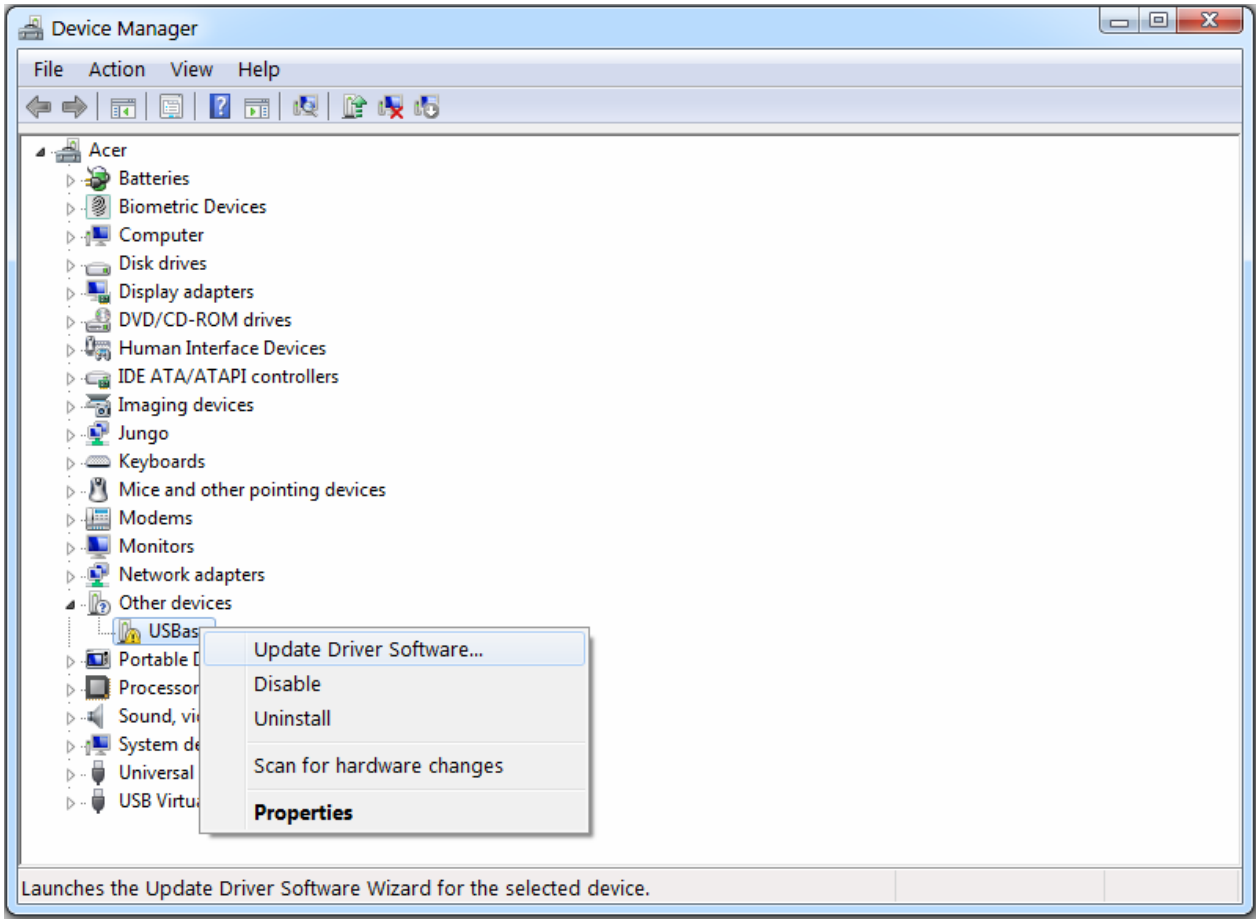
# Using the USBasp programmer with the CodeVisionAVR V3 IDE

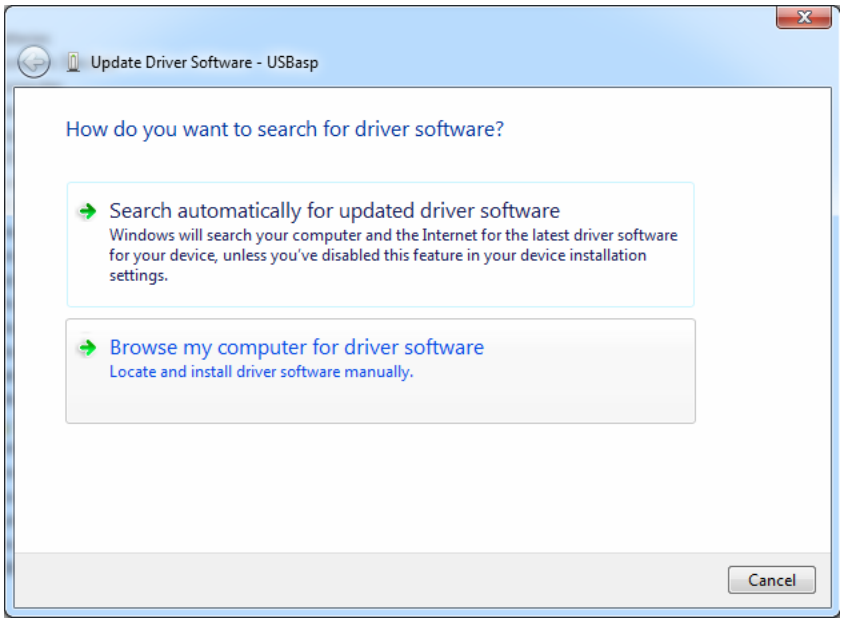
The USBasp programmer can be used along with the CodeVisionAVR IDE in order to automatically program an AVR chip after a successful build.
The AVRDude command line utility, Copyright © 2003-2005 Brian S. Dean and © 2006-2013 Joerg Wunsch, is used for this purpose.
The AVRDude source code is available at: http://savannah.nongnu.org/projects/avrdude.

**Installation instructions:**

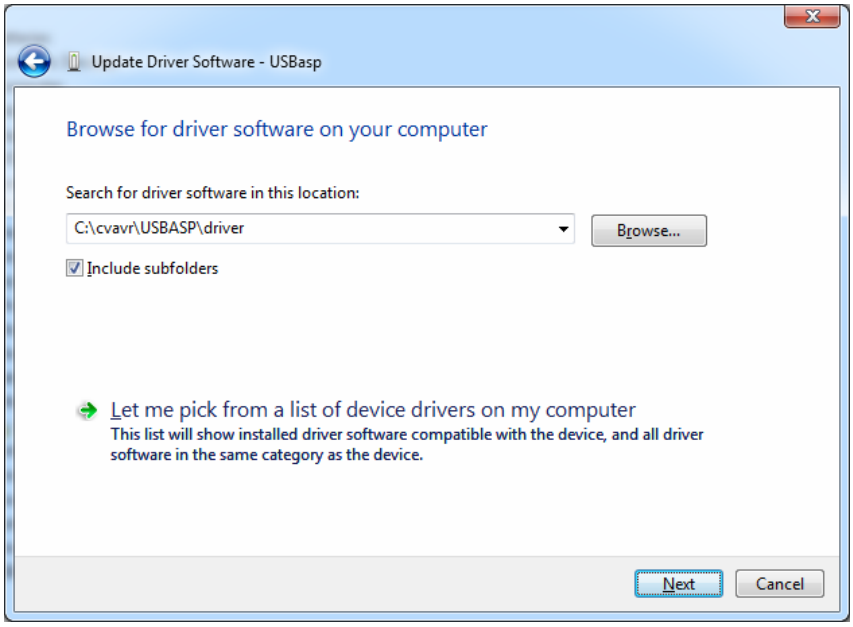
- Unzip with directories all the files from the **usbasp.zip** archive to the CodeVisionAVR installation directory: **C:\cvavr**
- The **C:\cvavr\USBASP** and **C:\cvavr\USBASP\driver** directories will be created
- Go to the **C:\cvavr\USBASP\driver** directory and execute **installer_x86.exe**, respectively **installer_x64.exe**, for x32 bit, respectively x64 bit versions of Windows
- Connect the USBasp programmer to an USB port of your computer
- Windows Vista or 7 will try to install the **USBasp** driver, but will fail
- The driver will have to be installed manually
- Press the **Windows** button and go to the **Control Panel**
- Select **Hardware and Sound**
- At **Devices and Printers**, select **Device Manager**
- In the **Device Manager** expand the **Other devices** node and right click on the **USBasp** node
- Select **Update Driver Software**:



- In the next dialog select **Browse my computer for driver software**

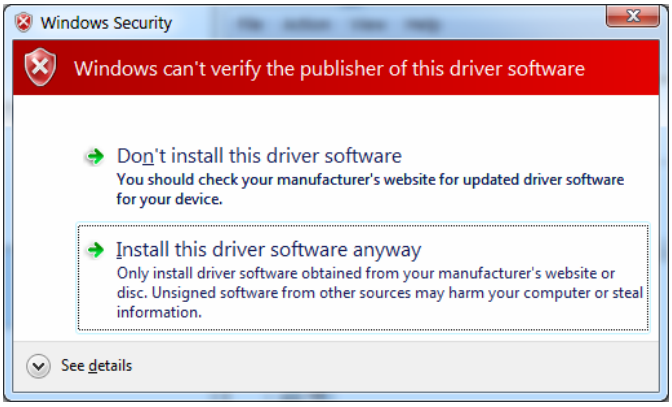



- Specify the path where the **USBasp** driver is located:



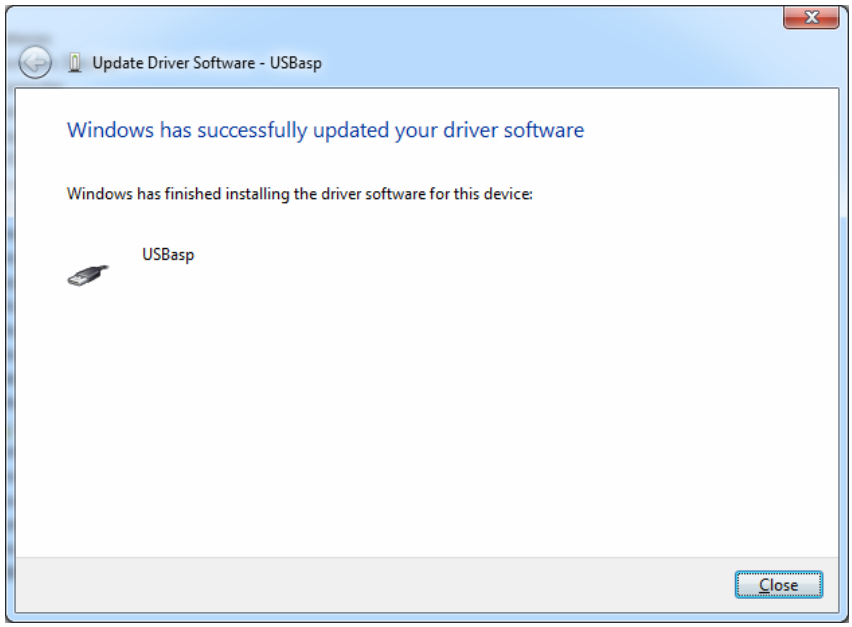

and press the **Next** button

- Windows will display the following warning message:

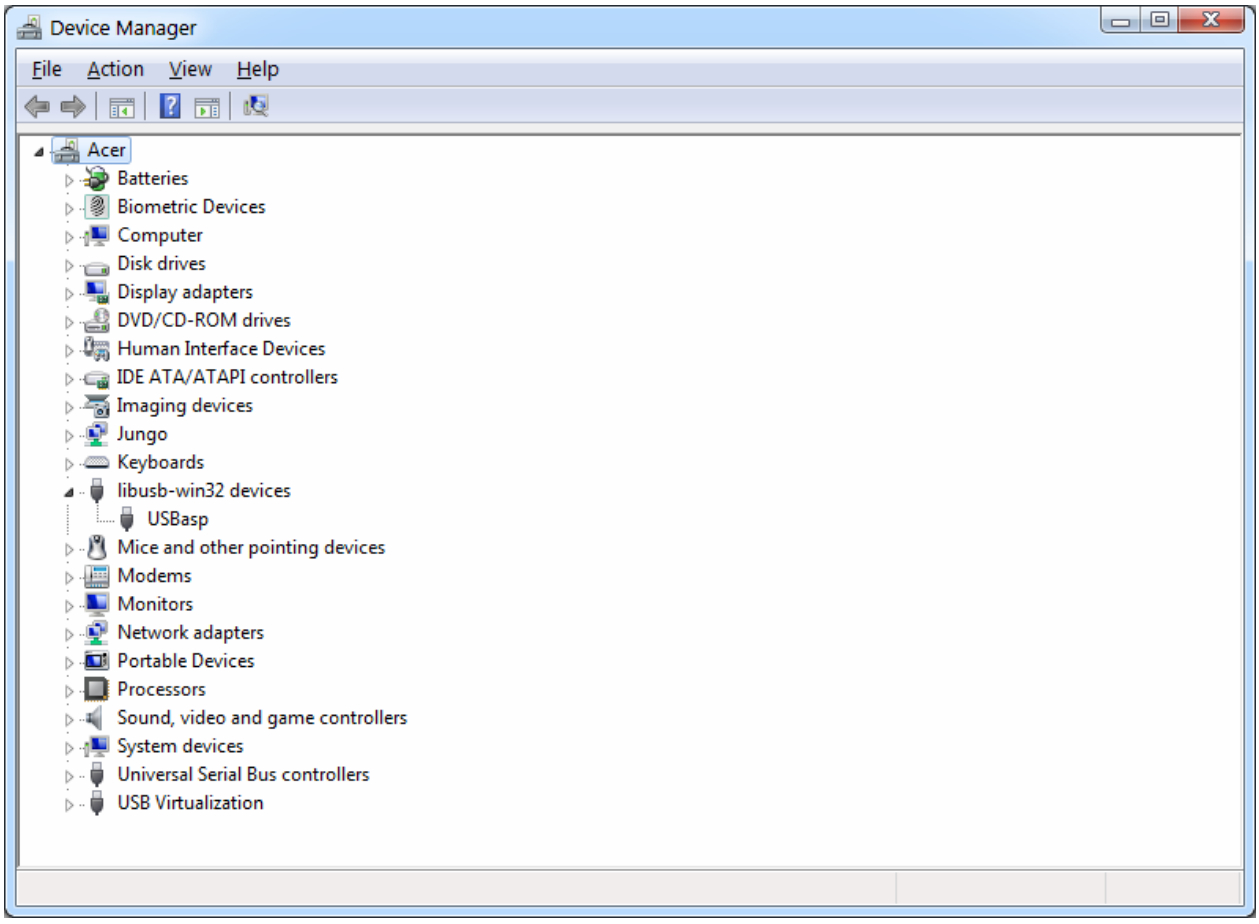



- Select **Install this driver software anyway**

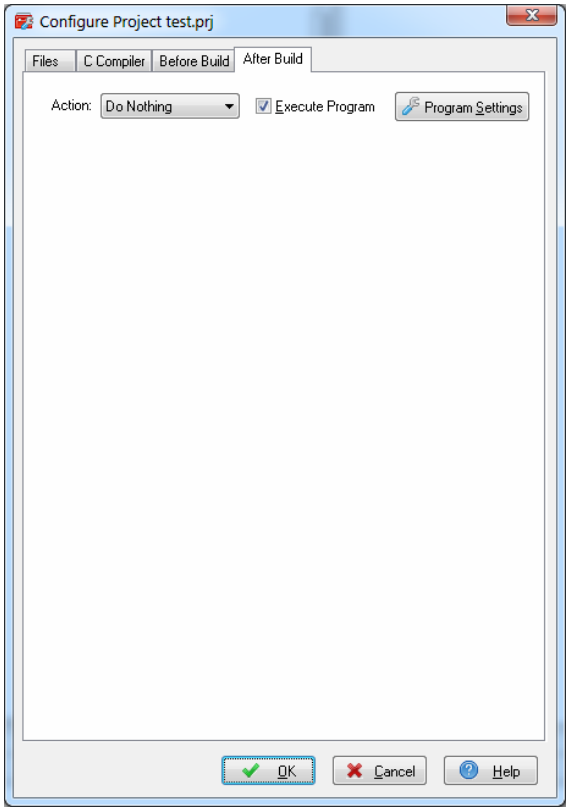
- Windows will then install the **USBasp** driver and finally display the confirmation message:




- Successful driver installation can be checked in the **Device Manager**, **USBasp** will appear listed as a **libusb-win32 device**:



- Launch the CodeVisionAVR IDE
- Open your project
- Execute the **Project|Configure** menu command
- Select the **After Build** tab:

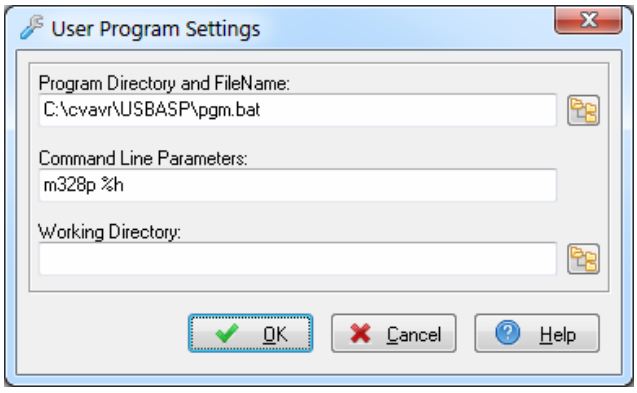



- Select **Action: Do Nothing**
- Enable the **Execute Program** option
- Press the **Program Settings** button
- In the **User Program Settings** window specify:
    - **Program Directory and FileName:** C:\cvavr\USBASP\pgm.bat
    - **Command Line Parameters:** *chip_type* %h

      Where *chip_type* must be the target chip type of your project.

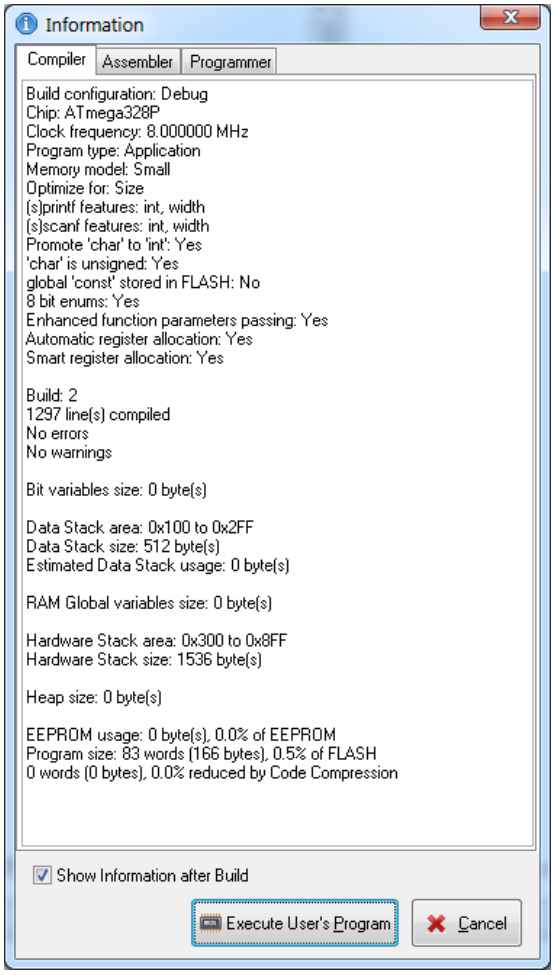
      For example for ATmega328P specify: m328p

      For other chips, please consult the file **C:\cvavr\USBASP\avrdude.conf**




Press the **OK** button to save the changes

- Do a **Project|Build** menu command
- After a successful build, the **Information** window will appear:




Press the **Execute User's Program** button to program the chip using the USBasp programmer.