How to install and configure CYGWIN in Windows environment for building FBReaderJ native source package
(Windows 7 x64 in my case)

1.cygwin installation
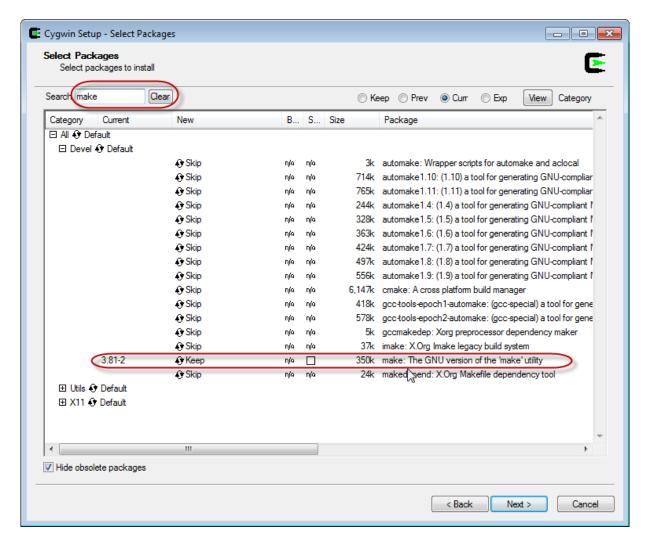
Go to site - http://www.cygwin.com/
download latest CYGWIN installation setup.exe (it was 1.7.7-1 at Nov 2010).
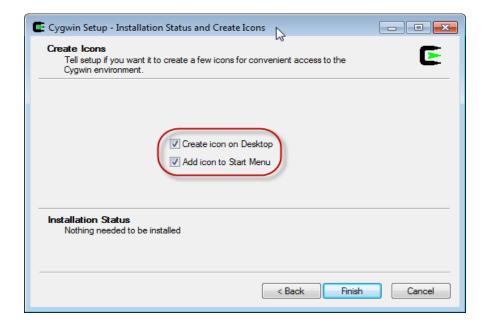It's a 'starter' install application that will help you to download all necessary, selected modules from HTTP/ FTP servers directly to you local PC.

Run setup.exe locally and go throught all installation process steps:
- select 'Install from internet'
- select local target directory for installation (I've selected c:\Programs\cygwin , so all farther examples are referenced to that folder)
- select local package directory (usually selected automatically inside folder with 'setup.exe' or... you can select another folder)
- select your internet connection type (Direct, IE settings, Proxy)
- select one of the source hosts from the list

Finally you'll see very long list of available cygwin packages. Make a quick search and select installing 'make' program to you local PC from **'Devel'** section. If it asks to install additional mandatory packages accept them too.

Accept creating shortcuts for running cygwin console.

2. configuration cygwin and exporting necessary environment variables

You need to download and install Android NDK locally before, if you don't have it yet.

Just download it from Android Developer site and decompress ZIP archive to some folder.
In my case it was version:
c:\Programs\android-ndk-r4b\

Cygwin creates following folder during installation:
c:\Programs\cygwin\home**Your_Login_User_Account_Name**\
Notice, that 'Your_Login_User_Account_Name' will be different on your PC.

Go to that folder and change file '**.bashrc**' by adding following environment variable
parameters to it:
....
PATH=/cygdrive/c/Programs/cygwin/bin:/cygdrive/c/Programs/android-ndk-r4b$PATH
export PATH

GNUMAKE=/cygdrive/c/Programs/cygwin/bin/make$GNUMAKE
export GNUMAKE

NDK=/cygdrive/c/Programs/android-ndk-r4b$NDK
export NDK

MANPATH=/cygdrive/c/Programs/cygwin/usr/share/man$MANPATH
export MANPATH

INFOPATH=/cygdrive/c/usr/share/info$INFOPATH
export INFOPATH
....

Notice, your variable value:
/cygdrive/c/Programs/cygwin/bin
corresponds folder:
c:/Programs/cygwin/bin

/cygdrive/c/Programs/cygwin/bin/make
corresponds
c:/Programs/cygwin/bin/make

/cygdrive/c/Programs/android-ndk-r4b
corresponds
c:/Programs/android-ndk-r4b

Every single env.varible should be exported by export directive:
export PATH, export GNUMAKE, export NDK
Save '**.bashrc**' file when you are done.

3. You are ready to build 'C' sources

Run cygwin console by created shortcut.
Assume, you already have downloaded FBReaderJ sources in folder:
d:\fbreaderj\

You should type and run following commands inside cygwin console:

1. Change current folder and go to \fbreaderj\ sources:

cd d:
cd fbreaderj

2. Now when you are inside 'fbreader' folder, run compilation of C sources by command:

$NDK/ndk-build

You should see following listing in cygwin console:

Compile++ thumb: DeflatingDecompressor <= /cygdrive/d/fbreaderj/jni/DeflatingDecompressor/
DeflatingDecompressor.cpp
SharedLibrary : libDeflatingDecompressor.so
Install : libDeflatingDecompressor.so => /cygdrive/d/fbreaderj/libs/armeabi
Compile thumb : LineBreak <= /cygdrive/d/fbreaderj/jni/LineBreak/liblinebreak-2.0/linebreak.c
Compile thumb : LineBreak <= /cygdrive/d/fbreaderj/jni/LineBreak/liblinebreak-2.0/linebreakdata.c
Compile thumb : LineBreak <= /cygdrive/d/fbreaderj/jni/LineBreak/liblinebreak-2.0/linebreakdef.c
Compile++ thumb: LineBreak <= /cygdrive/d/fbreaderj/jni/LineBreak/LineBreaker.cpp
SharedLibrary : libLineBreak.so
Install : libLineBreak.so => /cygdrive/d/fbreaderj/libs/armeabi

You are done. If something goes wrong, try to check all steps again or
look for solution in the google.