

Symbian OS – Part 5

SDK Example „Sockets“

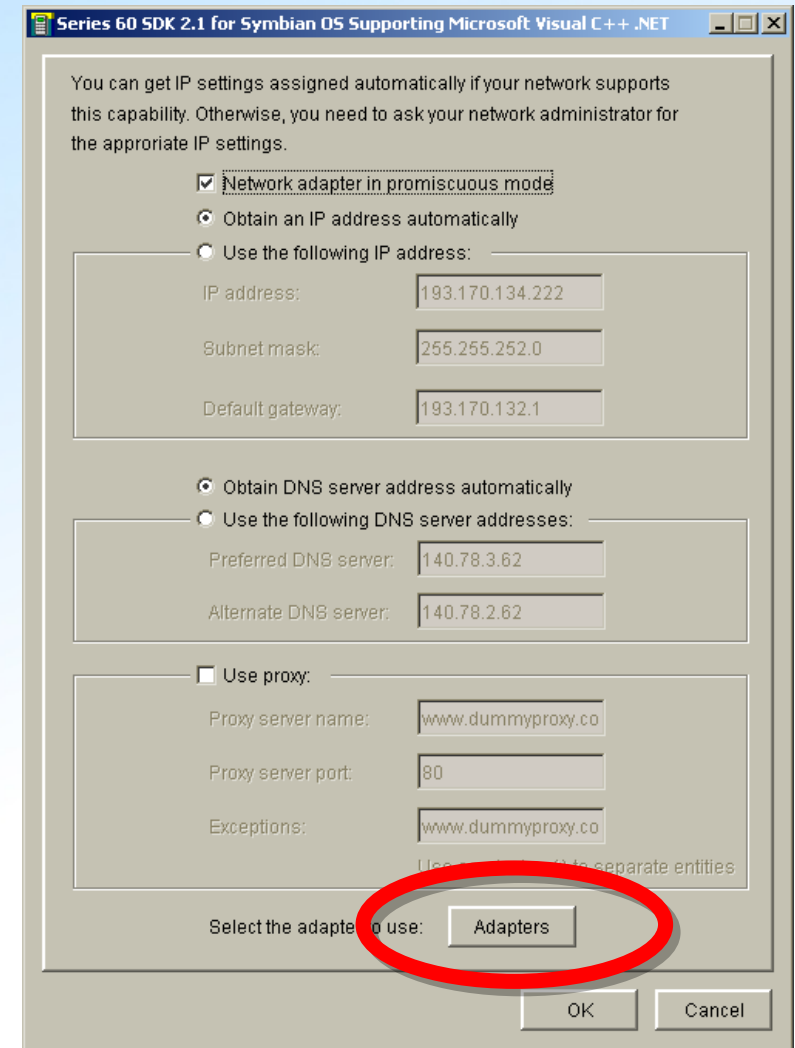


Internet-Chat

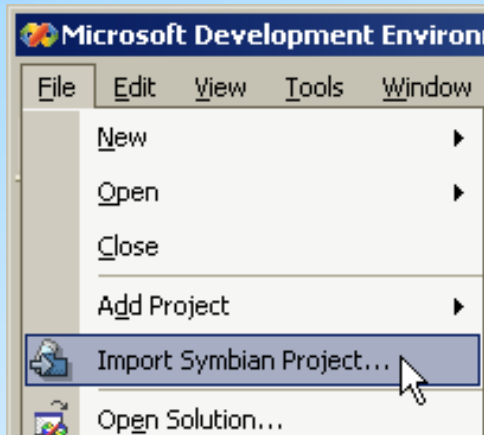
- Symbian OS comes with examples for nearly all topics
- Many tasks can be solved in no time by adapting an example
- Project: "Internet-Chat" - User should be able to connect to a chat server through a socket connection.
- Recommended: Use SDK 2nd Edition, FP1 (→ integrated support for Internet connections directly from the emulator)

Setup Internet connectivity

- Windows start menu:
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Tools → [...] → Tools
→ Ethernet Support
Configuration
- In most cases: leave
IP-configuration at
automatic
- “Adapters” → Choose
your network card



Prepare example



- Recommended: First copy examples to your own C:\Symbian\dev
- In this case copy:
C:\Symbian\7.0s\Series60_v21\
Series60Ex\sockets
→
C:\Symbian\dev\sockets
- VS.net: File → Import Symbian Project...

Import sample project

- Select the project file:
C:\Symbian\dev\sockets\group\sockets.mmp
- VS.net-Solution is created automatically
- GRPS-Connection on the mobile phone: Access point you'll need for socket connections has a name like „GPRS Internet“ or „GPRS Web“

Extend the project

- Current situation: Every character you enter is sent immediately
 - Problem when two people write at the same time
 - On the mobile phone it's only possible to enter numbers (no keyboard)
- Therefore we'll extend it with a text input box
- Implementation: We've done it all before!
- Server: Small sample chat server is provided (Java)

Differences

- The socket example does the whole command handling in the AppUi-class, not in the view like we did it.
- Therefore, we'll add the new functionality to that place!
- Up to now, chars are sent directly from the C.SocketsAppUi::HandleKeyEventL() to the SocketsEngine
- Now, an own method should send a whole string at once

Enter Message

- Steps to implement the text input box:
 - Add menu command to the .hrh file
 - Add menu item to the .rss file
 - Create new function in AppUi: SendMessageL()
 - Add new fragment to .rss (at the end of the file):
text input dialog (1 line)
 - Follow the instructions (see NDS-comment!) to
display the dialog in SendMessageL()
 - Call SendMessageL() in
CSocketsAppUi::HandleCommandL()



Send your message

- After user entered the text in your new dialog:
- Problem: Text input uses Unicode, socket communication ASCII (8 bit) -> have to convert the text
- Solution: Copy to an 8 bit descriptor
 - TBuf8<22> buf;
 - buf.Copy(input);
 - buf.Append(EKeyLineFeed);
- Copy sending-code from HandleKeyEventL()



Line feed at the end

Series 60 Programs

- Hundreds of programs and games available
- Overview of freeware applications
 - <http://3lib.ukonline.co.uk/nonagss60.htm>
 - <http://www.symbianwiki.com/>
- Commercial:
 - <http://www.mobile2day.de/>
 - <http://www.handango.com/>

The Journey

- „The Journey II“
The world's first mobile, location based adventure game!
- More information at:
journey2.mopius.com
- Source code of “The Journey” (Part 1) freely available (GPL):
journey.mopius.com



That's it!

Thanks for everything!

