

# Setting up Development Environment



## Tools

- Includes installing and setting up the SDK as well an IDE
- SDK Installation
  - Active Perl version 5.6.1 or newer (<http://wareseeker.com/free-activeperl-5.6.1/>)
  - JRE version 1.6 or newer (<http://wareseeker.com/free-jre-1.6/>)
  - S60 SDK ([http://www.forum.nokia.com/Library/Tools\\_and\\_downloads/Other/Symbian\\_SDKs/](http://www.forum.nokia.com/Library/Tools_and_downloads/Other/Symbian_SDKs/))
- Three IDEs are available
  - Carbide.c++ based on the open source IDE Eclipse.
  - Microsoft Visual Studio.
  - CodeWarrior



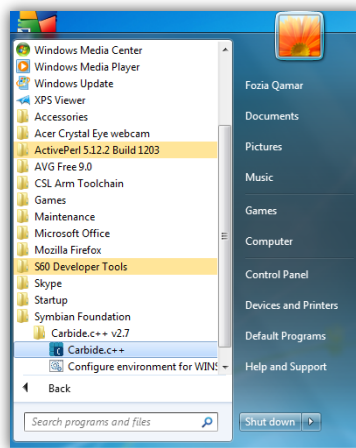
## Tools Installation Order

- Active Perl
- JRE Version 1.6
- S60 SDK
- Carbide C++ IDE



## Project Creation

- Start menu → All Programs → Symbian Foundation → Carbide.c++ → Carbide C++



## Project Creation

- Workspace is the working directory where Carbide.c++ stores all projects.
  - workspace directory must be created on the same drive where the Symbian SDK is installed.
  - the path must not contain any spaces or non-alphanumeric characters.



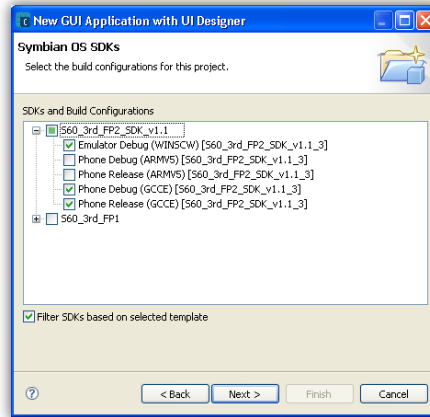
## Project Creation Wizard

- The Create Project Wizard can be launched from
  - **File** → **New** → **Symbian OS C++ Project**.
- The Next page of the wizard brings up some basic project specifications such as name and location. By default all new projects are saved in Carbide.c++ workspace directory.
  - The project name must not contain any spaces or special characters.



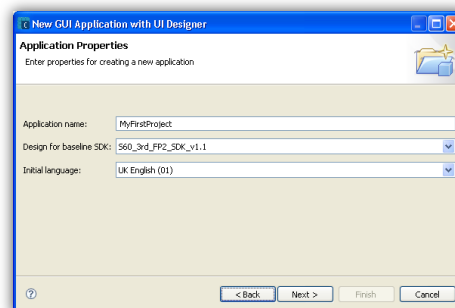
# Project Creation Wizard

- Choice of SDK



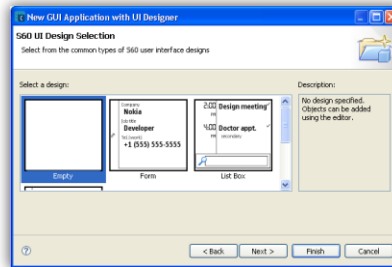
# Project Creation Wizard

- Project Properties

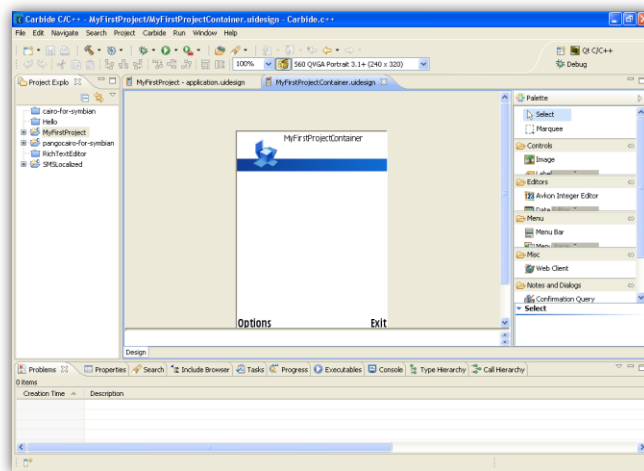


# Project creation Wizard

- UI design Selection



# Project Creation Wizard



## S60 SDK Emulator

- Used to Test application without Symbian Device



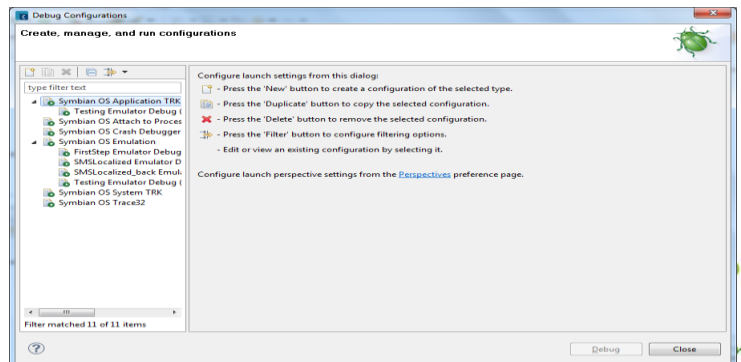
## Debugging & Testing on Emulator

- Add Breakpoints
  - Select line & Right Click
  - Click On Toggle Breakpoint
- Debug Application
  - Solution Explorer -> Project -> Right Click-> Debug As -> Debug Symbian on Emulator
  - Or Press F11
- Application stops at breakpoint
- Press F5 and F6 to debug line by line

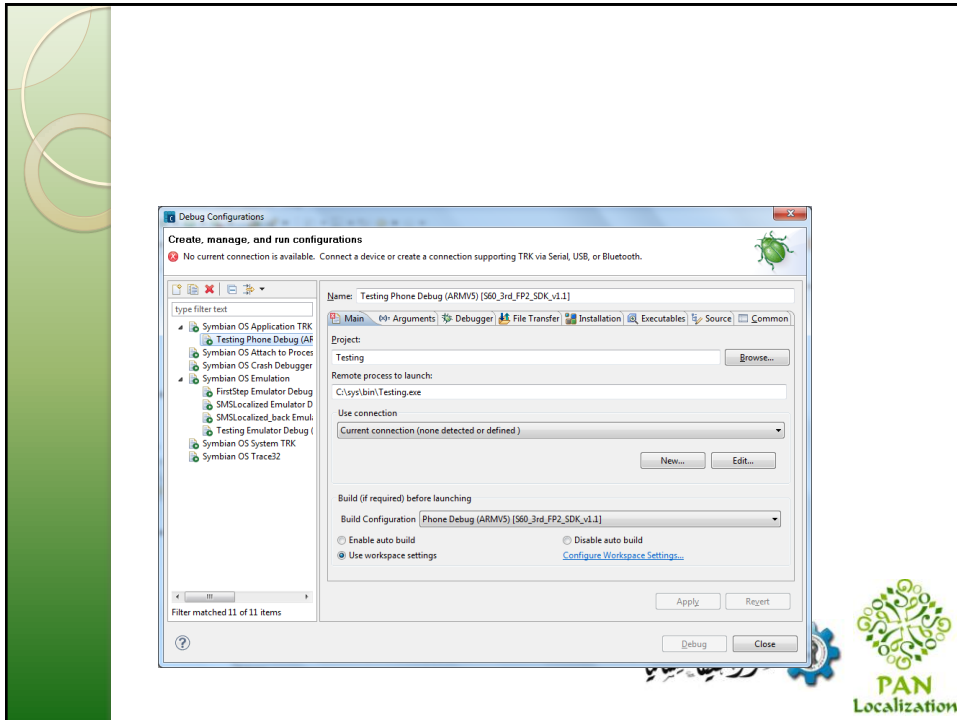


## On-Device Debugging & Testing

- On-Device Debugging & Testing can be done using App TRK
- Set Debug Configurations
  - Top Menu -> Run -> Debug Configurations

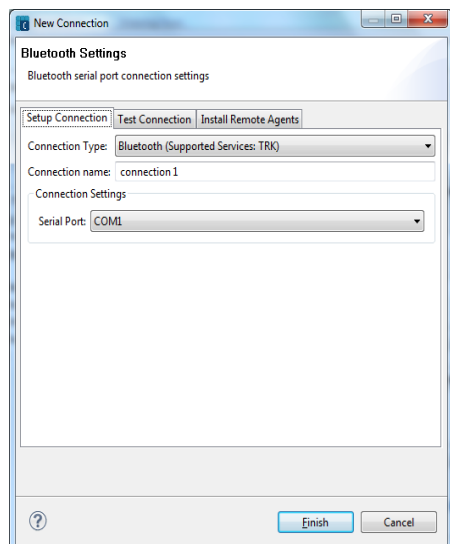


- Select Symbian OS Application TRK (Left menu)
- Click on New button present on Top Menu



## Set up connection

- Use Connection panel
  - Click on Edit Button
  - Connection Window open





## Packaging

- Solution Explorer -> Project -> Sis Folder -> Projectname.PKG
- A package (PKG) file contains information required by the SIS file creation tools to create a SIS file.
- Contains list of Files to install
- List format
  - ;<source> <destination>
  - E.g.  
"\$ (EPOCROOT)Epoc32\release\\$(PLATFORM)\\$ (TARGET)\Testing.exe" -"!:\sys\bin\Testing.exe"



## .sis File

- A Symbian Installation Source (SIS) file is a collection of executables and data files, packaged in a way that the software installer can install them onto a device. SIS files can be preinstalled on a device.

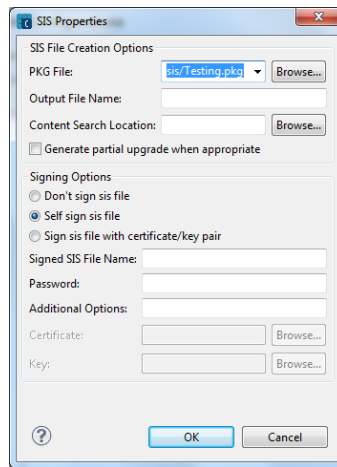


## Installation on Device

- Sis File is used.
- ProjectExplorer -> Project -> Properties -> Build Configuration-> Configuration DropDown->Phone Debug
- Open SIS Builder tab
- Select SIS file row and Click on Edit



## SIS Properties



## Signing options

- **Don't sign sis file** — builds sis file without signing it
  - Used incase of no capability
- **Self sign sis file** — signs the sis file without specifying the certificate/key pair
  - Used incase of Basic capability
- **Sign sis file with certificate/key pair** — signs the sis file using the specified certificate/key pair
  - Used incase of advanced capabilities



## Signing a .sis File

- Signing Can be done by using SymbianSigned online utility “Open Signed”
- Signing a .sis file needs
  - IMEI Number of Device (\*#06#)
  - Email ID
  - SIS file

*Localization of Mobile Platforms Pg 39*

