

Building your XNA Application

What to do the first time you build your application?

- Select one of the XNA Project build types : "XNA Windows project", "XNA Xbox Project" or "XNA Phone Project".
- Choose "File / Build / Application", and enter the name of your project (which will be the name of your application), and the path where to create the project folder. Clickteam Fusion 2.5 creates a new folder containing a complete Visual Studio XNA project.
- Launch Visual Studio 2010 or Visual Studio 2012 (depending on your version of Windows and the target project you want to build, as explained before).
- Select Open project, and choose the sln file at the root of your project folder.
 - **Windows XNA application**
Once your project is loaded in Visual Studio, press F5 to run the application.
 - **Xbox XNA application**
To enable debugging on the Xbox, the first thing to do is to add your Xbox to the list of recognized devices in "XNA Game Studio Device Center". This application can be found in the "Microsoft XNA Game Studio" submenu of your start menu.
Once your Xbox is added to the list of devices, you must switch it on, and start the "XNA Game Studio Connect" application on it.
Under Visual Studio Express, select the name of your Xbox in the "XNA Game Studio Device Management" toolbar and press F5. Your game data (images, sounds and fonts) will be uploaded to the Xbox using the WIFI network, and your application will start. Uploading the data can take a significant amount of time if your game contains a lot of images.
More info on [MSDN](#)
 - **Windows Phone development : registering your phone**
Although Visual Studio 2010 or 2012 contain a Windows Phone emulator, nothing can replace a test on an actual device. Simply connecting your phone to your PC with an USB cable is not enough : you have to register your phone with Microsoft. The procedure is explained in this page : [How to register your phone for development](#). Once your phone is registered, simply select it in the Visual Studio toolbar and press F5 to start the application on the device.

What to do during development :

Now that you have a working project on your PC, there is no need to rebuild the entire project each time you want to test your application. A much simpler method is provided by Clickteam Fusion 2.5.

- Go in the Application properties, "Build type", and select one of the following build types (depending on the type of your application) "XNA Windows Application", "XNA Xbox Application" or "XNA Phone Application"
- Build your application as usually, but as a file name, choose the sln file at the root of your XNA project. This will save the content of your application in the project folder.
- Go back to Visual Studio and rebuild your application. Note that if Visual Studio is opened when you save your application, it will ask to reload the project and the content. You should accept these actions.

Basic and Expert settings in Visual Studio

Visual Studio Express offers two main settings : the basic settings and the expert settings. To switch from one setting to another, select the option in the "Tools / Settings" menu. The expert setting offers an

important option : the choice between Debug and Release mode.

When you load a newly created project in Visual Studio, the default compilation mode is set to Debug. The code produced in debug mode is slower, as it is not optimised for speed. It is though easier to debug and step through the code should you be interested in discovering how the XNA runtime works.

To test and publish your application, we suggest that you switch to Release mode. Choose "Release" in the Combo box available in the "Build configurations" toolbar. The main feature of the release mode is the optimisation of the code, making the application run faster. When you package your application for distribution, you must compile in release mode.

If you ever encounter a problem with the XNA Runtime (a crash or an error), we suggest to switch to Debug mode, and carefully write down the line where the error occurred and the error message : this information can help us find the source of the problem.

Packaging your application for distribution

To distribute your application, you must first compile it in Release mode. And then:

- **Windows XNA Application**

Right click on the name of the project in Visual Studio's project window, and choose the "Publish" option. Visual Studio will create a complete installer for your application, ready to be distributed.

- **Xbox Application**

Right click on the name of your application in Visual Studio's project window. Choose the "Package as XNA Creators Club Game" option. Open the folder containing your project, and go in the following subfolder : ApplicationName\ApplicationName\bin\Xbox 360\Release. The file "ApplicationName.cgame" contains your game ready for distribution.

- **Windows Phone Application**

Once your application is compiled in Release mode, open the project folder of your application. Open the following sub-folders : ApplicationName\ApplicationName\bin\Windows Phone\Release. You will find your compiled application in the release folder under the name "ApplicationName.xap". This is the file you will distribute.

Game certification

- **Windows Phone**

Before being distributed, your application must be certified by Microsoft. Microsoft tests your game and ensures that it follows a set of rules to ensure both the quality of the game, and a good user experience. Prior to submitting your project, you should review the [Application Certification Guidelines](#) to ensure that your app or game is ready.

- **Xbox**

The certification process is not the same, your application will be reviewed and validated by the Xbox LIVE community. More info here : [Xbox Peer Review FAQ](#)