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# Crossfire Getting Started Tutorial

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## Overview

*This tutorial targets a Palm OS - HiRes device.*

The following sections guide you through the process of writing the typical "Hello World" application using Crossfire. It should provide a good idea of the the basic processes involved in creating and deploying an application with Crossfire.

## Create a New Crossfire Project

Click on the **Start** button and select Programs > AppForge > Crossfire

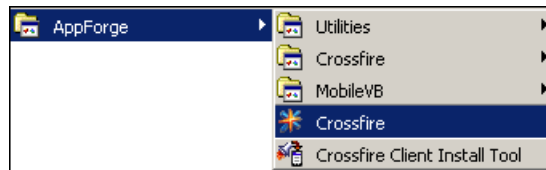


Figure 1: Crossfire Shortcut in the Start Menu

Crossfire launches Microsoft Visual Studio .NET in a mode that is ready for AppForge Crossfire projects.

If this is your first time using Crossfire the Introduction To Crossfire appears. This short slide show provides some valuable introductory information. We recommend you read through it. To keep this slide show from appearing every time you start up a new project, click the check box next to "Do not show this window when Microsoft ..." in the lower left hand corner of the window.

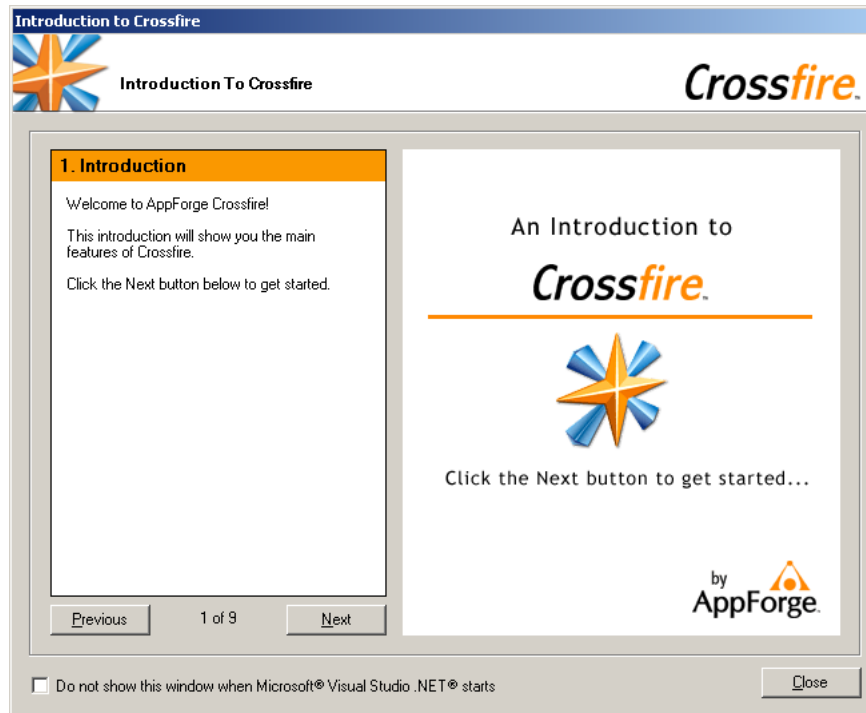


Figure 2: Introduction To Crossfire Slide Show

Once you have read through the slide show, click the **Close** button in the lower right hand corner of the window. This should bring up the Crossfire Project Manager.



Figure 3: Crossfire Project Manager

Click the **New Project...** button in the Crossfire Project Manager dialog.

The Microsoft Visual Studio .NET New Project dialog will appear.

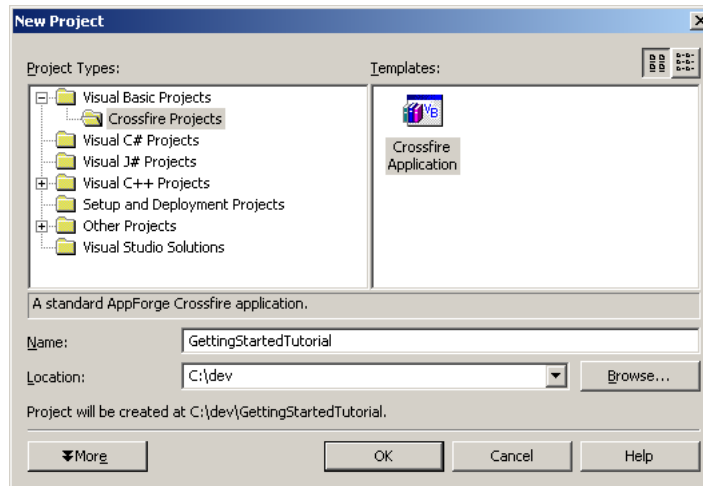


Figure 4: Microsoft Visual Studio .NET New Project Dialog

Under the Visual Basic Projects project folder, select the Crossfire Application template. Type in "GettingStartedTutorial" for the name of your project and select a location for your project.

#### Note

Use caution when saving .NET projects to a network. See the AppForge Knowledge Base (Answer ID 668) for details.

By default, a new directory will be created using the same name as your project. Also, a new solution will be created using the same name. To change any of these settings, press the More button. Press the **OK** button to continue.

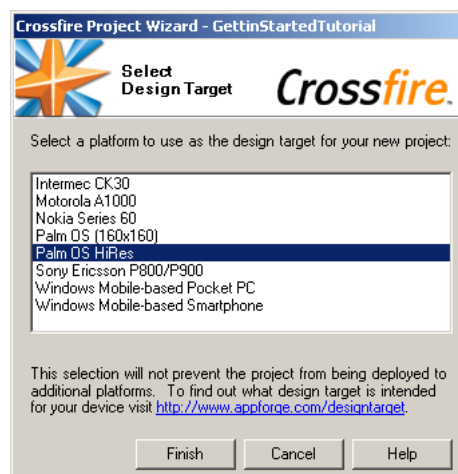


Figure 5: Crossfire Project Wizard

The Crossfire Project Wizard will appear. Select your Primary Design Target, **Palm OS HiRes**, and press the **Finish** button.

**Note**

A form that is the correct size for a Palm OS HiRes device will be automatically created. Except for in very special cases, it is best not to change the size of the form.

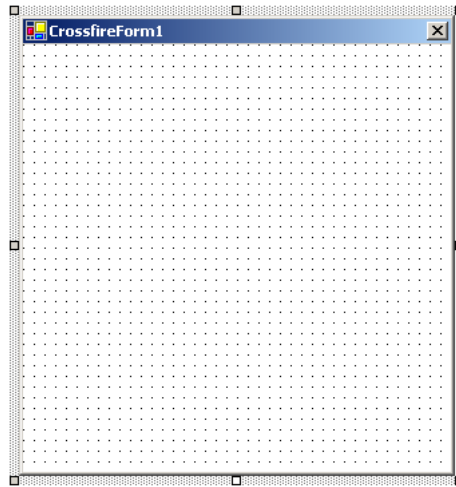


Figure 6: Blank Crossfire Form

## Lay Out The Form

To set the title bar for the form, follow these steps.

1. In the Project Explorer Window, click on CrossfireForm1.
2. If the Properties Window is not visible, right click on CrossfireForm1, and select Properties.
3. In the Properties Window, change the value of the Text property to "My First App!"

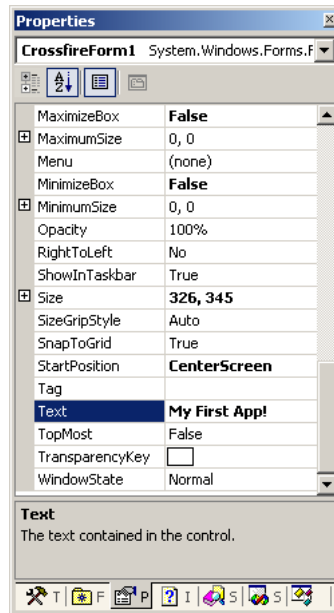


Figure 7: Properties Window

**Tip**

In Palm OS applications, the Title Bar is set with the Form Text property. If you do not want to have a Title Bar, delete all of the text in the Form Text.

The Palm Title Bar will not be drawn on the form when running in Windows, it only appears when running on the device. When designing your form, you need to leave 30 pixels at the top of the form for the Title Bar.

Next, you need to place an AppForge Button and ListBox control on the form. This will be done using the AppForge Toolbox. If the Toolbox Window is not visible, open it by selecting the **Toolbox** item from the **View** Menu.

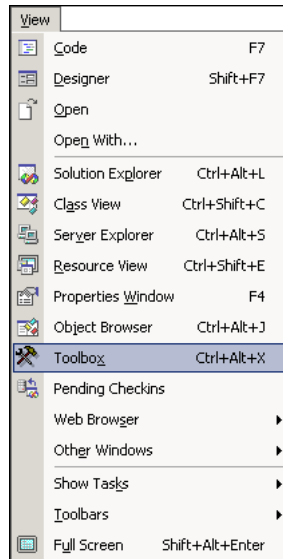




Figure 8: Display the Toolbox

Make sure you have the AppForge Tab selected in the toolbox. Double click on the ListBox icon  in the AppForge tab of the Toolbox. A ListBox will be placed on your form. Then, double click on the Button icon  in the AppForge tab of the Toolbox and button will be placed on your form.

Now that you have placed the controls are on the form, you need to set the properties that position them on the form.

## Button Settings

Click once on the Button, and set the following properties using the Properties Window. (The Properties Window can be opened by selecting the **Properties Window** item in the **View Menu** or by pressing **F4** .)

- Caption: Push Me
- Location: 219, 290
- Size: 100, 30

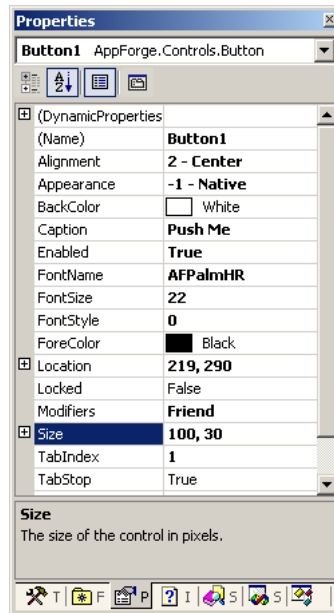


Figure 9: Properties Window for the New Button

## ListBox Settings

Click once on the ListBox, and set the following properties using the Properties Window.

- Location: 0, 30
- Size: 320, 255

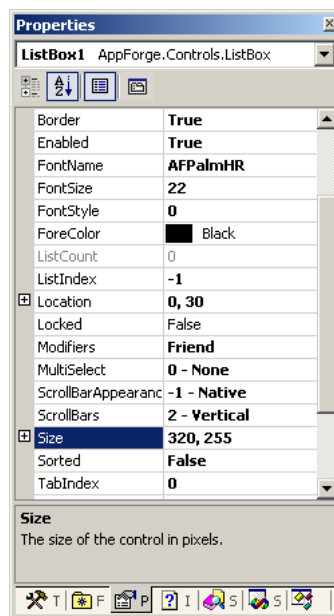


Figure 10: Properties Window for the New ListBox

Your form should now look like this:

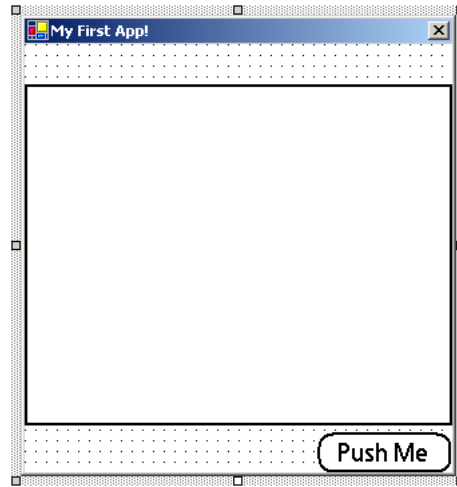


Figure 11: Form After Adding Button and ListBox.

## Write The Code

Double Click on the "Push Me" button that you placed on your form. This should open the code pane for your form. Type the following line of code in the Click Event for the Button:

```
ListBox1.AddItem("Hello World!")
```

Your code should now look similar like this:

```
Private Sub Button1_ClickEvent(ByVal sender As System.Object, _  
    ByVal e As System.EventArgs) Handles Button1.ClickEvent  
  
    ListBox1.AddItem("Hello World!")  
  
End Sub
```

### Tip

There is probably a slight difference between the previous code block and what you see in your code pane. We have used a line continuation sequence, a space followed by an underscore "\_", to keep the code from running off of the page. You may want to use the line continuation sequence in long lines of code to make your code easier to read.

## Test The Application In The Visual Studio .NET Environment

You are now ready to test your newly created "Hello World" application. Select the **Start** item in the Debug Menu, or press the **F5** key.

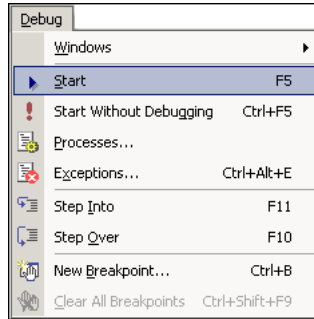


Figure 12: Start Your Application

This should launch the application in the Visual Studio .NET environment. Once the form appears click the "Push Me" button several times. The ListBox on your form should have several "Hello World!" entries in it, and should look something like this -

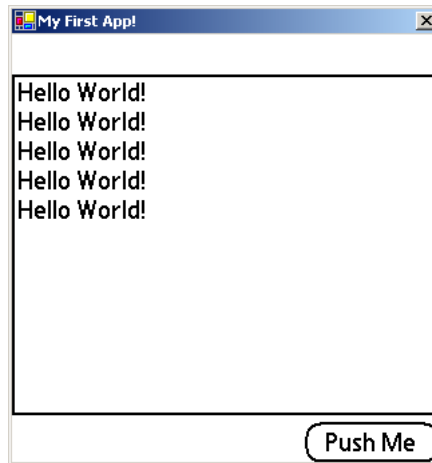


Figure 13: Your Crossfire Application After Hitting the Push Me Button

To stop the application, close the application window or select the **Stop Debugging** item from the Debug Menu.

## Prepare The Application For Deployment

### Change The Application Name

The following steps describe how to change the application name that appears on the device to be different from the project name.

1. From the **Project** Menu, select the **GettingStartedTutorial** Properties item.
2. Under the **Common Properties** folder, select **General**.
3. Change the text under **Assembly name:** to Hello World. Now the application name that appears on the device will be "Hello World" instead of "GettingStartedTutorial". The assembly name can have spaces, or any alphanumeric characters.

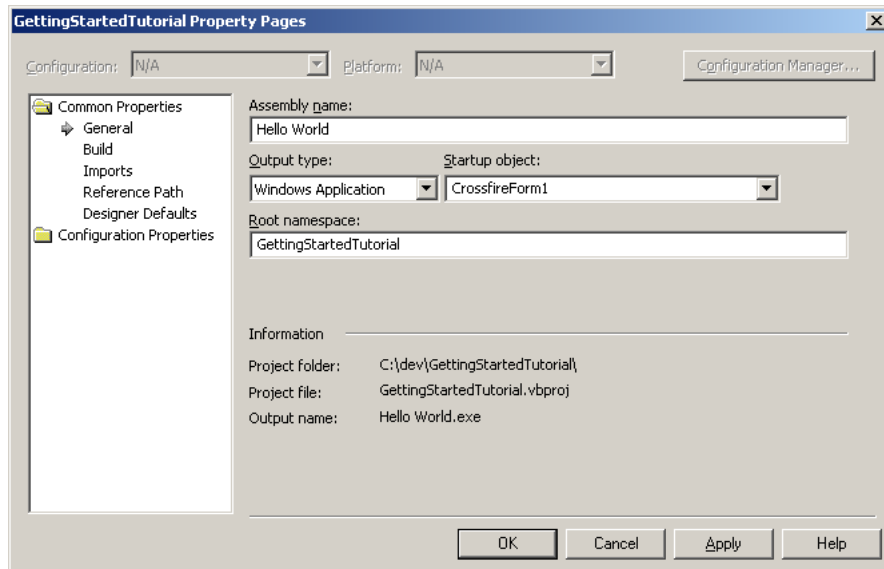


Figure 14: Property Pages For Hello World

**Tip**

This technique can be especially helpful when creating one application for various devices. You may want to have the project names describe the platform they were designed for, but on the device, you would only want the main application name. For example, the LaunchPad sample that ships with Crossfire has projects with names like LaunchPad\_PalmOSHires.vbproj and LaunchPad\_UIQ.vbproj, however, when those applications are run on a device, the app name is simply LaunchPad.

**Change The Application Icon (Optional)**

Crossfire allows developers to use custom icons for their applications. The following steps guide you through this process. If you choose not to change the application Icon, the default icon for your device will be displayed.

1. From the **Project** Menu, select the **GettingStartedTutorial** Properties item.
2. Under **Common Properties**, select **Build**.
3. Browse to find the icon that you would like to use for your project.
4. The AppForge Knowledge Base at <http://support.appforge.com> provides more information about assigning custom icons.

**Specifying Palm OS Settings**

From the **AppForge** Menu, select **Crossfire Settings...**

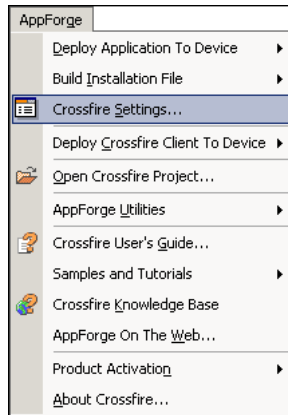


Figure 15: Select Crossfire Settings

This brings up the Crossfire Settings window. Select the **Palm OS** option on the left hand side of the pane. You should now see the Palm OS project Settings. Make sure the **General** tab is selected and set the Creator ID to "AF55".

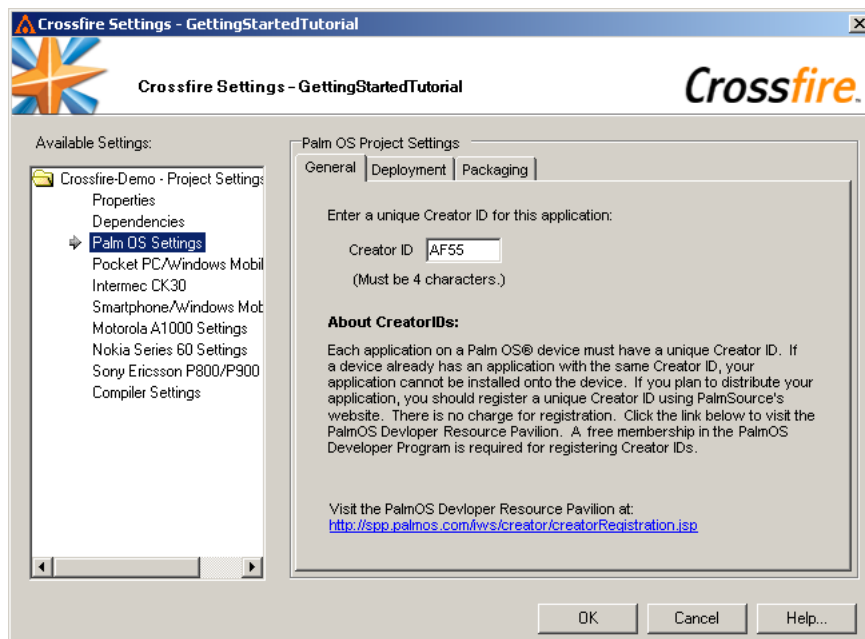


Figure 16: Crossfire Settings - Palm OS Settings

### Important Information

This Creator ID has been registered with the Palm OS Developer Resource Pavilion. This Creator ID is a unique identifier for a Palm OS application and must be registered at <http://dev.palmos.com/creatorid> . Additional information about Creator IDs in the AppForge Knowledge Base at <http://support.appforge.com> .

Next, click on the **Deployment** tab. Select the name of the device that you want to send this application to.

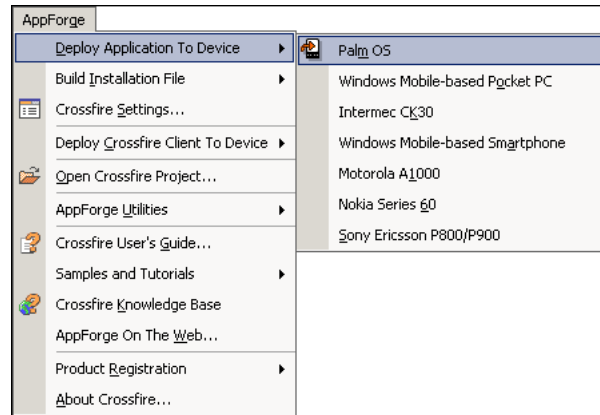


Figure 17: Select The Name Of The Device To Send The Application To


### Note

In this example, the name of our device is "AppForge TungstenT3". Yours will be different. If you don't know the name of your device, you can find out by running the HotSync application on your device. The device name will appear in the upper right-hand corner of the Palm screen.

Click **OK** to save the settings. Now you are ready to send the application to your device.

## Deploy the Application

Before deploying your application, make sure you have completed everything on this checklist.

- Palm HotSync® Manager is installed on your computer.
- Your device is connected to your computer via USB, Serial, IR, etc.
- Palm HotSync Manager is open. (You should see this icon  in the Taskbar on your monitor.)
- Your Crossfire License Key has been entered correctly.
- The proper Crossfire Client is installed on your device.
- Save your Application.

Next, select the **Palm OS** option from **Deploy Application To Device...** item in the **AppForge** Menu.

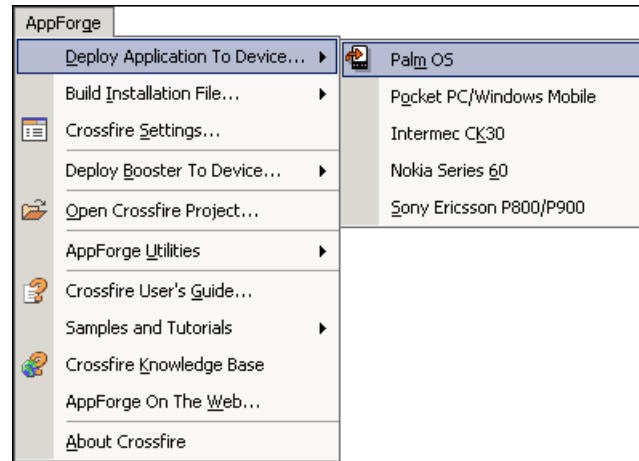


Figure 18: Deploying Your Application To a PalmOS Device.

Deployment progress should appear in the Output pane, and you should see the following window when your new application is ready to be transferred to a device.

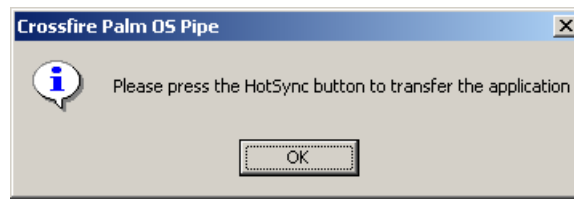


Figure 19: The Application Is Ready To Be Transferred To A Device

Now, follow these instructions to finish deploying your application to your Palm Powered® device.

1. Place your device in its cradle or attach it to its HotSync cable.
2. Begin a HotSync Operation to transfer the application to your device.
3. When the HotSync Operation is complete, press the Home button on your device. You should now see your Hello World application on the Home Screen.
4. To run your application, click once on the Hello World icon.

## **Congratulations!**

You have just created your first Palm OS HiRes application with AppForge Crossfire!