

iOS Hello World in 10 minutes with PubNub 3.4 on iOS

This HOWTO will walk you through setting up a simple PubNub 3.4 for iOS “Hello World application”. Its a super-simplified walkthrough which utilizes existing code to get you running quickly.

If you'd instead prefer a more robust PubNub iOS example, please refer to the iPad sample app which ships as a demo, available at <https://github.com/pubnub/objective-c/tree/master/iOS>.

The first step is to clone the PubNub objective-c repo:

```
$ git clone https://github.com/pubnub/objective-c.git
```

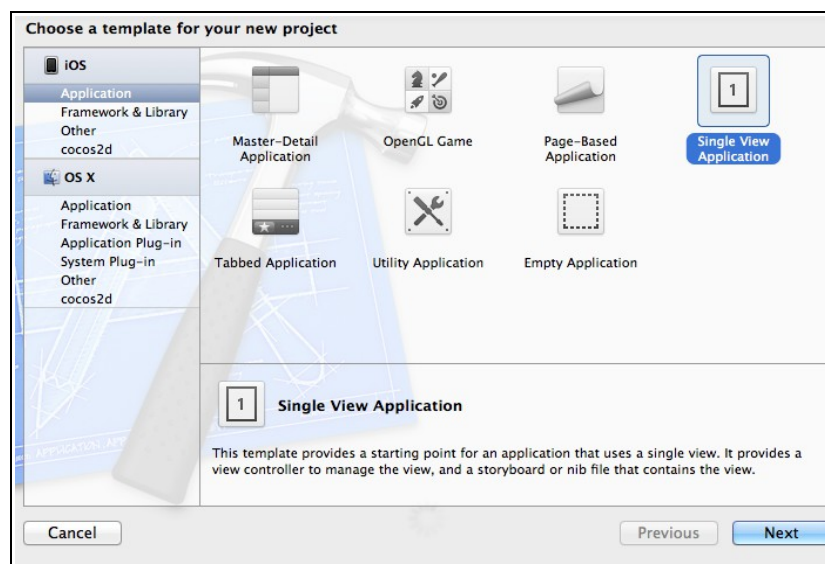
This will create PubNub-related files within a subdirectory called “objective-c” in the same directory you run the command from. You will need these files later.

Create a new PubNubDemo XCode Project

Lets first start with a new blank Xcode project. To create the new project:

1. Open Xcode
2. Select **File -> New -> Project** from the menu.

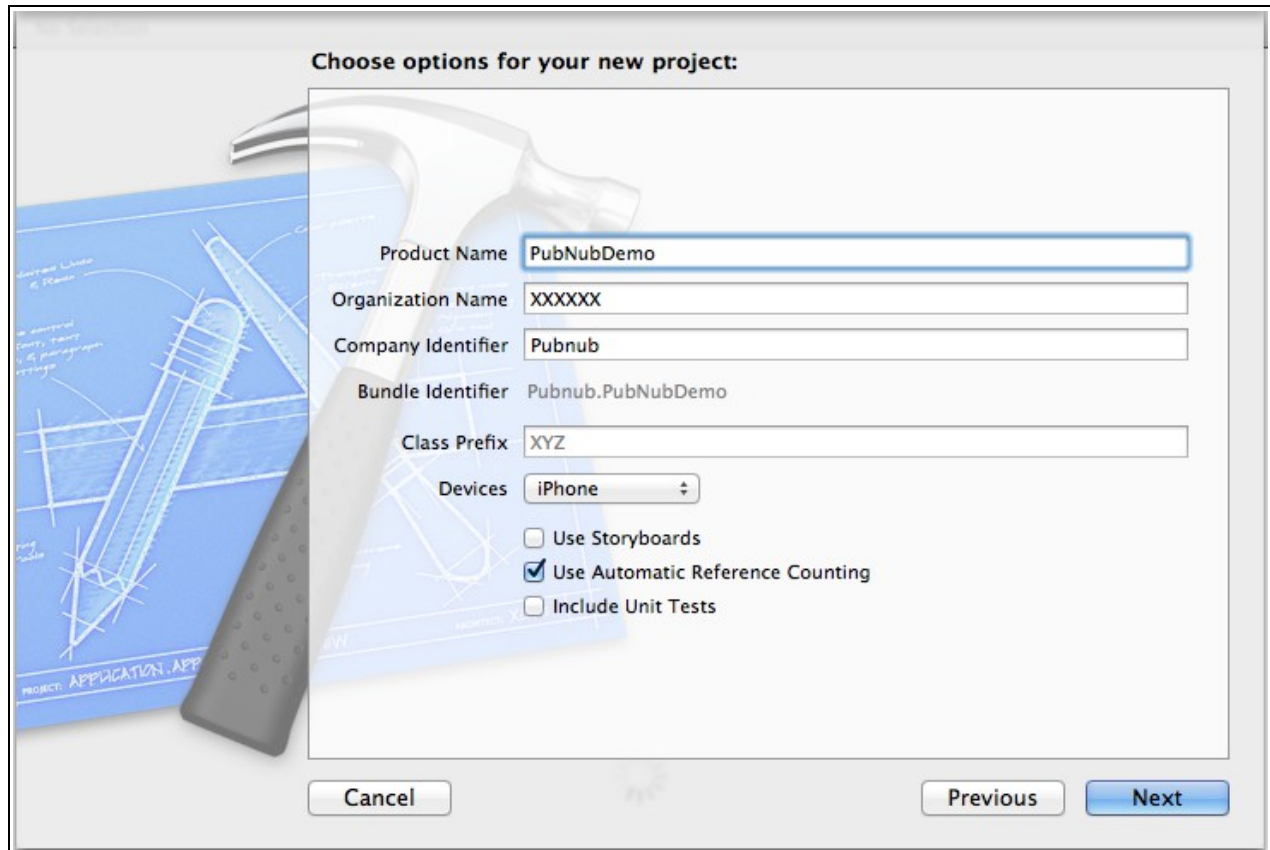
The “Choose a template for your new project” dialog will appear.



3. Select **iOS -> Application -> Single View Application**.
4. Click “Next”.

The “**Choose options for your new project**” dialog will be shown next.

NOTE: In order to make this HOWTO as easy as possible to follow, these following values are suggested:



NOTE: Don't actually enter “XYZ” for “Class Prefix”. Leave it blank, and it will display “XYZ” as placeholder text.

5. Click the “**Next**” button to proceed.
6. Select the folder which to save the project.
7. Click the “**Create**” button.

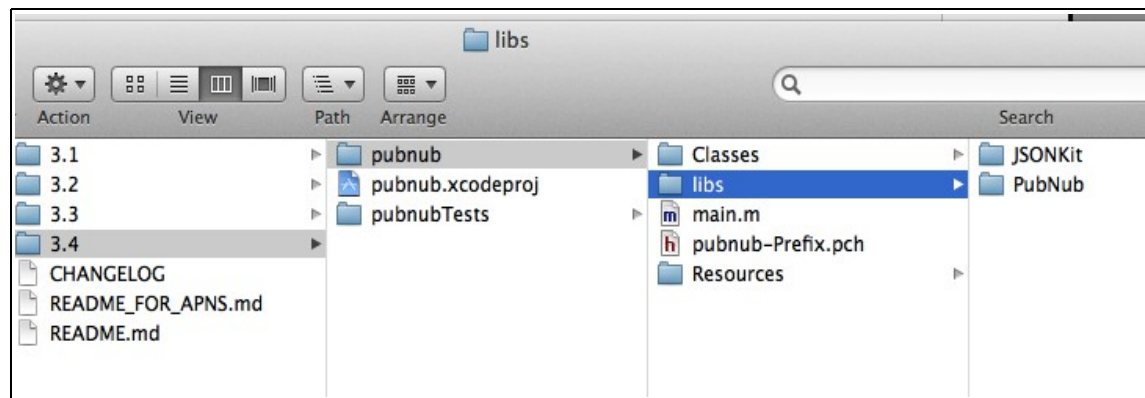
The template project is now created!

Next, we'll import and configure the PubNub libraries we obtained from the git clone performed earlier.

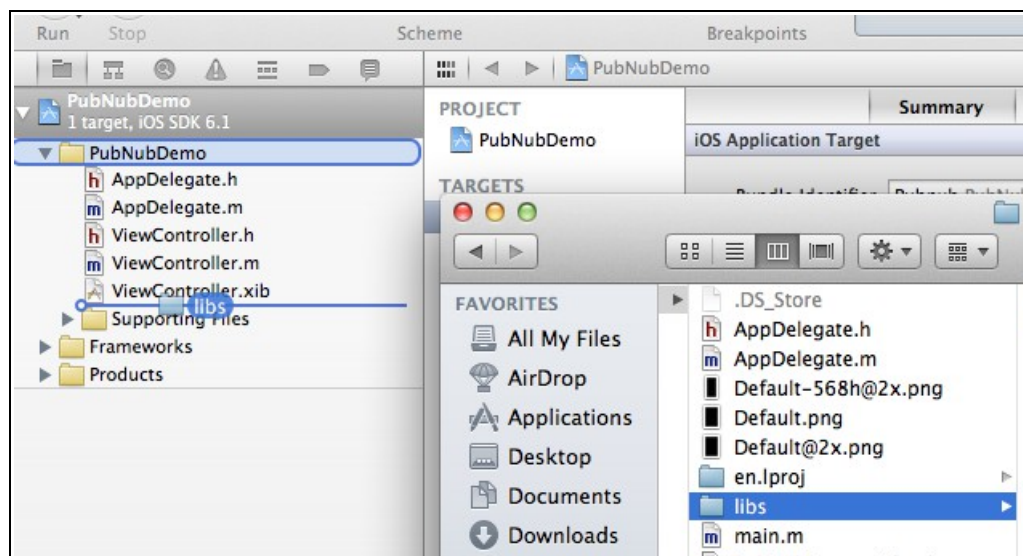
Import and Configure the PubNub Libraries

1. Open a Finder window to the directory created by the previous “git clone”, and select the

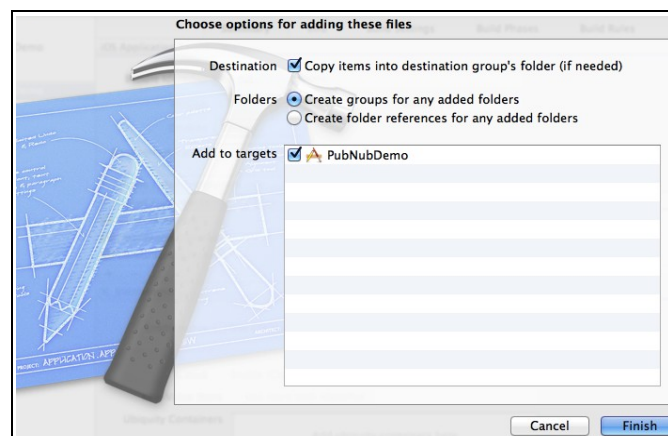
objective-c/iOS/3.4/pubnub/libs directory.



2. Drag the **libs** directory from the Finder window to just below the file **ViewController.xib** in your Xcode project's Project view.



The “Choose options for adding these files” dialog will appear.



3. Select “**Destination: Copy items into destination group's folder**” and “**Add to targets**”
4. Click **Finish**.

NOTE: Be sure “**Copy items into destination groups folder**” and “**Add to targets**” is selected for “PubNubDemo” when copying **any** files from the Finder into the project.

Next, we'll add the “PNImports.h” import statement to the **PubNubDemo-Prefix.pch** file.

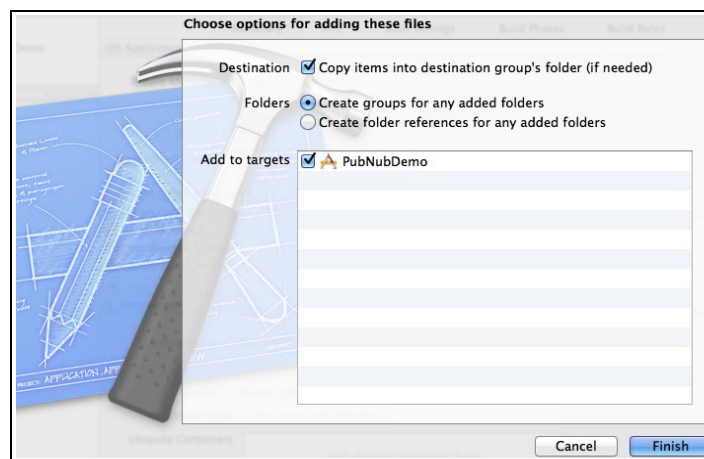
5. Delete **PubNubDemo-Prefix.pch** from the path *PubNubDemo/Supporting Files* in Project Navigator.

The “**Move To Trash**” dialog appears.



6. Select “**Move to Trash**”
7. Drag **objective-c/HOWTO_3.4/PubNubDemo/PubNubDemo-Prefix.pch** back to *PubNubDemo/Supporting Files* in Project Navigator

The “**Choose options for adding these files**” dialog will appear.



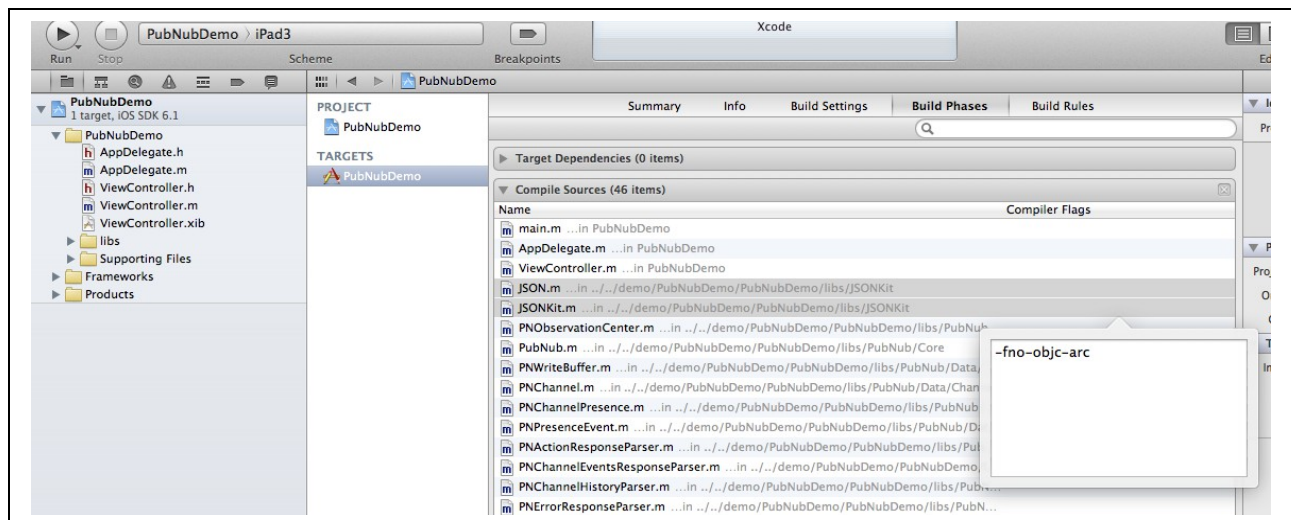
8. Select “**Destination: Copy items into destination group's folder**” and “**Add to targets**”
9. Click **Finish**.

NOTE: Be sure “**Copy items into destination groups folder**” and “**Add to targets**” is selected for “PubNubDemo” when copying files from the Finder into the project.

Disable ARC for Global JSON Support

The JSONKit library is supplied to make supporting all iOS target versions seamless and easy. Since JSONKit library is a non-arc library, we need to tell Xcode to compile these files without ARC.

1. From *Project Navigator* (the 1st vertical Xcode pane), click on the project name **PubNubDemo**
2. In the 2nd pane, click *PubNubDemo* under “**Targets**”
3. In the 3rd pane, from the top horizontal tab menu, click *Build Phases*
4. Expand *Compile Sources*
5. Command-click **JSON.m** and **JSONKit.m**
6. Press **Enter** to open a flags textfield
7. Paste in the string **-fno-objc-arc**



8. Press **Enter** when done.

Next, we need to define the additional framework support required to run our PubNub application. From the current *Build Phases* screen:

9. Close (un-expand) the *Compile Sources* dropdown.
10. Expand *Link Binary With Libraries* dropdown.
11. Click the + button
12. Add **CFNetwork.Framework**
13. Add **libz.dylib**
14. Add **SystemConfiguration.Framework**

Add the App Delegate files

The app delegate logic handles many of the PubNub actions, from low level PubNub initialization and observer registration, to higher level duties, such as displaying a messages as they are received and handling server response code as message are published.

This functionality lies within the **AppDelegate.*** files. We'll now replace them with the files from the finished tutorial.

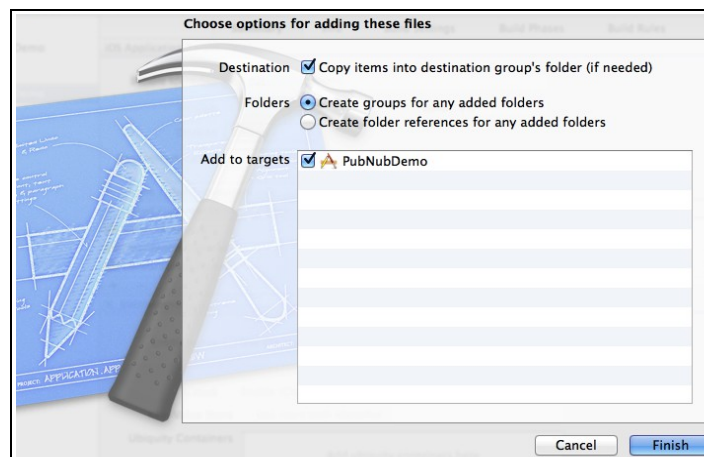
1. Delete **AppDelegate.*** from the path *PubNubDemo* in Project Navigator.

The “**Move To Trash**” dialog appears.



2. Select “**Move to Trash**”
3. Drag the **objective-c/HOWTO_3.4/PubNubDemo/AppDelegate.*** (.m and .h) to *PubNubDemo* in Project Navigator

The “**Choose options for adding these files**” dialog will appear.



4. Select “**Destination: Copy items into destination group's folder**” and “**Add to targets**”
5. Click **Finish**.

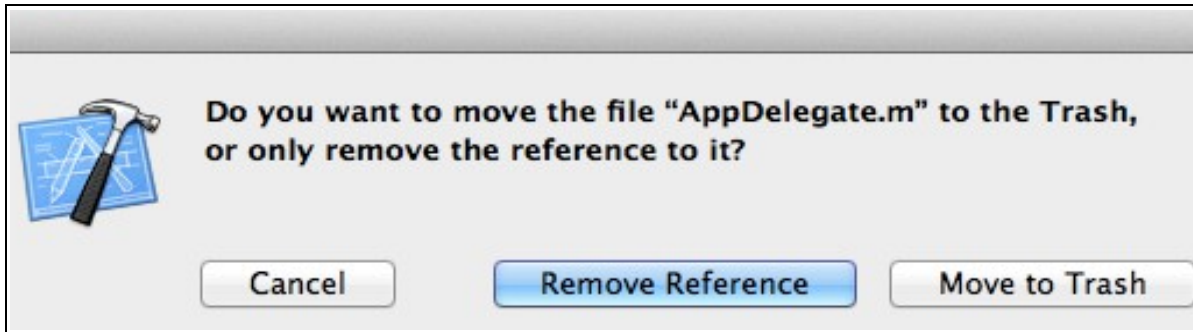
NOTE: Be sure “**Copy items into destination groups folder**” and “**Add to targets**” is selected for “**PubNubDemo**” when copying files from the Finder into the project.

Add the User Interface, Properties, and Actions, and View Controller

As our app will demonstrate connect, disconnect, subscribe, and publish, we'll need a UI that reflects that functionality as well.

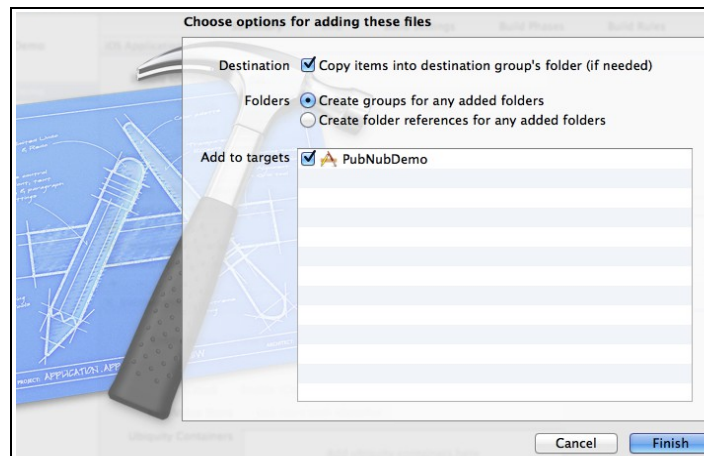
1. Delete **ViewController.xib** from the path *PubNubDemo* in Project Navigator.

The “**Move To Trash**” dialog appears.



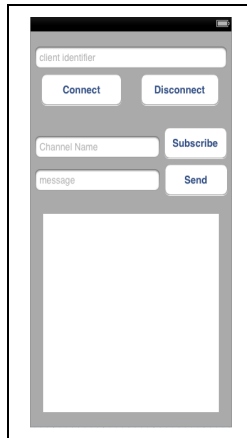
2. Select “**Move to Trash**”
3. Drag the **objective-c/HOWTO_3.4/PubNubDemo/en.lproj/ViewController.xib** to *PubNubDemo* in Project Navigator

The “**Choose options for adding these files**” dialog will appear.



4. Select “**Destination: Copy items into destination group's folder**” and “**Add to targets**”
5. Click **Finish**.

NOTE: Be sure “**Copy items into destination groups folder**” and “**Add to targets**” is selected for “**PubNubDemo**” when copying files from the Finder into the project.



You've now added the UI to the application!

The final step is to add the **ViewController.*** files which are responsible for handling all of the app's UI interaction. We'll define properties, button actions, and links to the UI via these files.

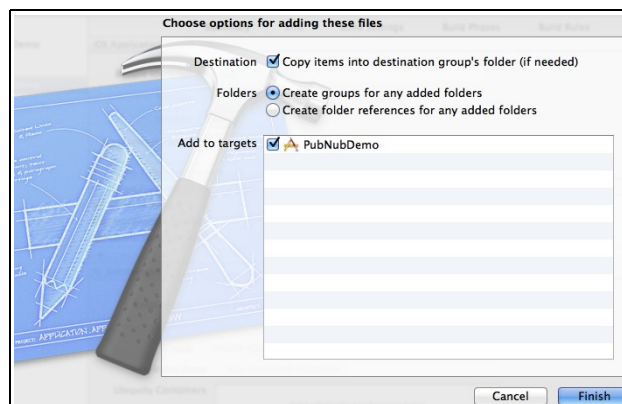
6. Delete **ViewController.*** from the path *PubNubDemo* in Project Navigator.

The “**Move To Trash**” dialog appears.



7. Select “**Move to Trash**”
8. Drag the **objective-c/HOWTO_3.4/PubNubDemo/ViewController.*** (.m and .h) to *PubNubDemo* in Project Navigator

The “**Choose options for adding these files**” dialog will appear.



9. Select “**Destination: Copy items into destination group's folder**” and “**Add to targets**”
10. Click **Finish**.

NOTE: Be sure “**Copy items into destination groups folder**” and “**Add to targets**” is selected for “PubNubDemo” when copying files from the Finder into the project.

You have now completed the HOWTO!

Go ahead and run the app! The app by default will connect using the “**demo**” publish and subscribe keypair.

Subscribe to the Unix Time echo channel on channel “**a**” for instant results! You can also publish messages using the “**Send**” button.

You may also connect a web browser to <http://www.pubnub.com/console> to publish and subscribe for testing purposes.

