

# Changes for Xcode 4.5

This document details the change I made when updating the book from Xcode 4.4 to 4.5. I've organized the changes by chapter.

## Chapter 1

### File Templates

Apple added the GeoJSON file template in Xcode 4.5. It is in the Resource group under iOS. Use a GeoJSON file to store geographic data when generating routes from one location to another.

### Organizer

When you click the Devices button at the top of the Organizer, the bottom of the Organizer has buttons to import, export, and resymbolicate crash logs. Select a crash log from the list to export or resymbolicate the log.

Xcode 4.5 has a Teams section on the left side of the Organizer if you click the Devices button. The Teams section replaces the Developer Profile item in earlier versions of Xcode.

There is no Automatic Device Provisioning checkbox in Xcode 4.5. Click the Refresh button to update the provisioning profile.

## Chapter 3

### Identity Inspector

The identity inspector now has a Document section. It contains the information that was previously in the Identity section.

The Identity section contains an Identifier text field. This text field allows you to set a unique identifier for the user interface element. You do not need to enter an identifier. A unique identifier will be generated when the xib file loads. Set an identifier if you want to control the identifier's value.

## Split Views

The Vertical Layout checkbox has been replaced with an Arrange menu. Use the menu to choose the type of split view: horizontal or vertical.

## Auto Layout

If you select a user interface element and open the size inspector, you will see two sets of sliders: content hugging priority and content compression resistance priority. Each set has two sliders: horizontal and vertical. The value for each slider can range from 0 to 1000, with 1000 being the highest priority.

The content hugging priority measures how much the edges of the element hug the element's content. The higher the content hugging priority, the less likely the element will resize. A button normally has high vertical content hugging priority and lower horizontal content hugging priority. Horizontal padding on a button is more acceptable than vertical padding.

The content compression resistance priority measures how likely the element's content is to be clipped or compressed. The higher the priority, the less likely the element's content will be clipped. A button should have higher content compression resistance priority than a text view. Clipping a button's title can make it unusable while clipping a text view's content allows the user to read at least some of the text in the view.

Xcode 4.5 adds a set of three buttons to the lower right corner of the canvas to make working with auto layout easier. The left button aligns and centers views. The center button pins a view's size and spacing. The right button lets you determine how constraints are applied when resizing views. You can apply constraints to the resized view's descendants or to its siblings and ancestors.

## Chapter 4

### Object Library

Apple added the following items to the object library in Xcode 4.5: collection view, collection view cell, collection reusable view, and collection view controller. A collection view is similar to a table view, but you can customize the collection view's layout. Using a collection view allows you to have multi-column grids and tiled layouts. The collection view consists of collection view cells. A collection reusable view defines the behavior for the cells in the collection view. The collection reusable view allows you to use the same view for different types of content.

## Identity Inspector

Apple added the User Defined Runtime Attributes and Document sections in Xcode 4.5. The Document section contains the information that was previously in the Identity section. The User Defined Runtime Attributes section is similar to the same section for Mac applications. Read the “User Defined Runtime Attributes” section in Chapter 3.

In Xcode 4.5 and later the Identity section contains a Restoration ID text field. The restoration ID works with application state preservation, which was added in iOS 6. Application state preservation allows you to restore your application’s interface when the application goes into the background.

Give a user interface element a restoration ID to have its application state preserved. A restoration ID can be any string value. If you want to preserve the state of your application, it is very important to supply a restoration ID for each view controller. If a view controller has no restoration ID, none of its child views will be preserved, even if the child views have restoration IDs.

## Working with Scenes and Segues

If you add a modal segue, there is an Animates checkbox. Select the Animates checkbox if you want the modal segue to be animated.

## Auto Layout

Auto layout is now available for iOS applications. Auto layout requires iOS 6 or later. New projects and xib files have auto layout enabled. Open the file inspector and deselect the Uses Autolayout checkbox to disable autolayout.

Auto layout on iOS is similar to how it works on Mac OS X. Read the “Auto Layout” section at the end of Chapter 3.

## Chapter 6

### iOS Target Summary

The iCloud Containers table is now named Ubiquity Containers.

iPhone targets now have a Status bar section to control the appearance of the status bar.

Xcode 4.5 adds a Passes section. The Passes section works with Passbook, which was introduced in iOS 6. To use Passbook in your application, you must get a pass type identifier from Apple. Go to the iOS Provisioning Portal at Apple's iOS Dev Center to request a pass type identifier. Initially Xcode is set to use the pass type identifiers from your provisioning profile. Select the Use selected pass type identifiers radio button if you need more control over the pass type identifiers for the target.

Xcode 4.5 adds a Maps Integration section. The Maps Integration section works with the Maps service introduced in iOS 6. Select the Accept transit routing requests checkbox to enable directions. Select the checkbox for each mode of transportation you want to generate directions.

## iOS Document Types

iOS exposes less of the file system than Mac OS X so there are fewer options for adding document types in iOS applications. Enter the name of your document type in the Name text field. Enter the UTIs for the document type in the Types text field. A custom document UTI takes the form `com.CompanyName.DocumentType`. Click the + button in the icon list to add a document icon.

## What Should My Deployment Target Be?

In Xcode 4.5 the earliest deployment target is iOS 4.3. iOS 5.0 is a reasonable deployment target if you're using Xcode 4.5. Every device that runs iOS 4.3 can also run iOS 5.0.

## Build Settings

The Standard configuration for the Architectures build setting in Xcode 4.5 builds for `armv7` and `armv7s`, which is the architecture for the iPhone 5. Xcode 4.5 no longer supports building for `armv6`.

## Chapter 7

### OpenGL ES Debugging

OpenGL ES frame capture is automatically enabled. There is no need to make any changes in the scheme editor.

## Chapter 11

### OpenGL ES Performance Detective

In Xcode 4.5 and later OpenGL ES Performance Detective is integrated into Xcode's frame debugger. There is no separate OpenGL ES Performance Detective application.