

What's New in App Publishing with iTunes Connect

Session 512

Max Müller

Director, iTunes Store, Digital Supply Chain Engineering

These are confidential sessions—please refrain from streaming, blogging, or taking pictures

Overview

- Welcome Mac OS X developers
 - Mac App store: Number one mac software store
- Graduating from the basics this year
 - Previous years sessions available with developer on iTunes
 - WWDC 2010, Session 310—App Publishing with iTunes Connect



App Publishing with iTunes Connect

What we'll cover

- What's new with:
 - Contracts
 - Game Center
 - In-App Purchases
 - App Review Resolution Center
 - iTunes Connect mobile
 - Application Loader
- Introduce setup for new iOS 5/Lion features
 - iCloud Storage
 - Newsstand
- Best practices and common pitfalls

Today's Agenda

What's New

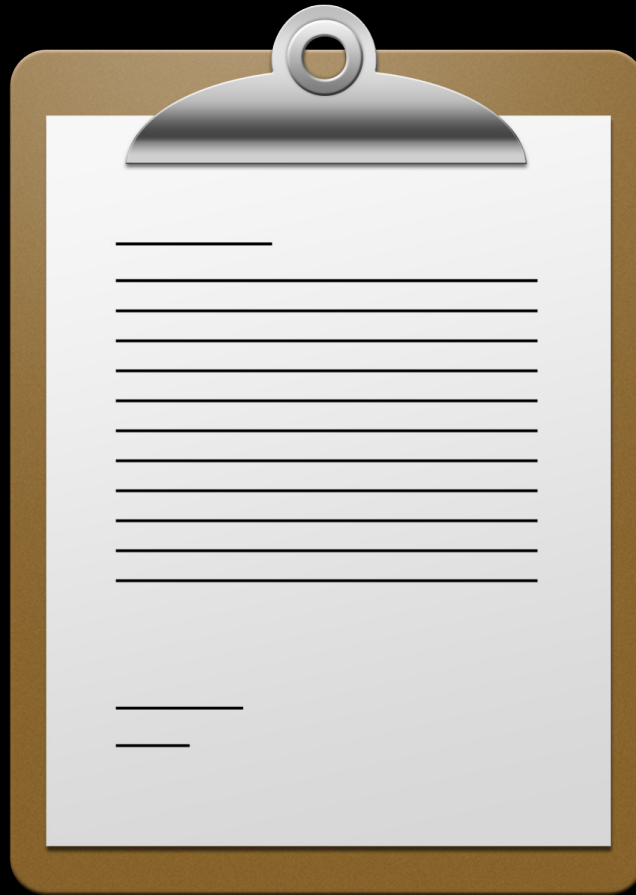


Best
Practices
and Pitfalls



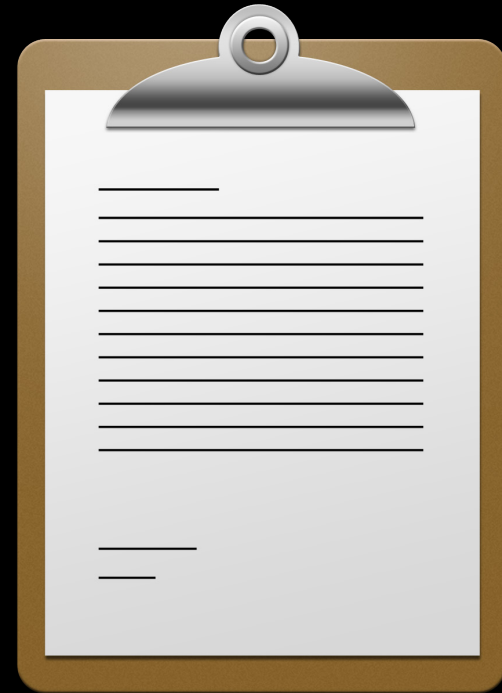
iOS 5 and Lion





New iOS and Mac OS Contracts

- Updated iOS program license agreement
 - iOS 5 features
 - iCloud Storage
 - Newsstand



New iOS and Mac OS Contracts

- Updated Mac developer program license agreement
 - Push notifications
 - iCloud Storage
- Updated Mac OS X schedule 2
 - In-App Purchases



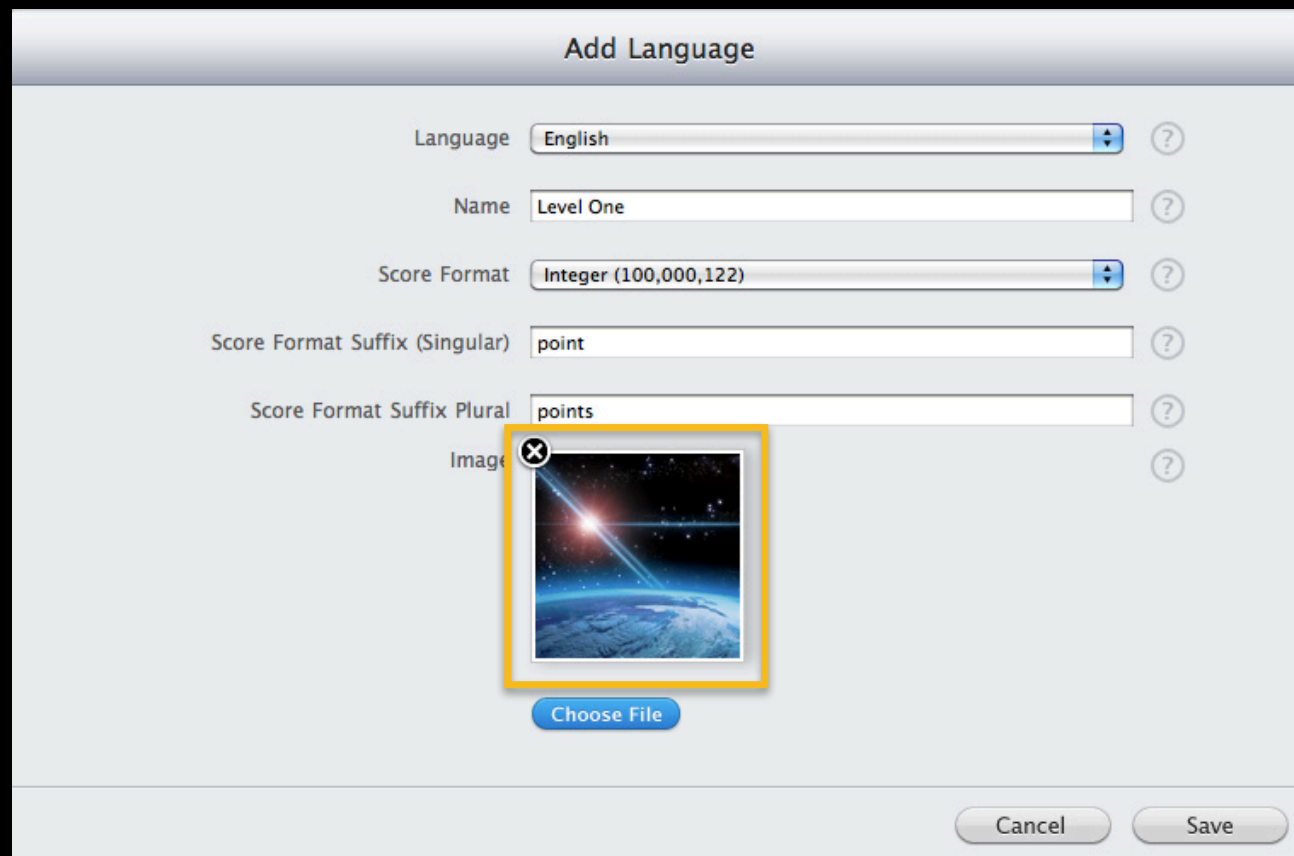
What's New?

Game Center: Leaderboard icons

- Leaderboard icons
 - Developer supplied icons for each leaderboard
 - Image must be 512x512, 72-dpi and JPEG, TIFF, or PNG format
 - Each leaderboard localization can have a different icon
 - Enabled in iOS 5 GM for Game Center

What's New?

Game Center: leaderboard icons




What's New?

Game Center: leaderboard icons

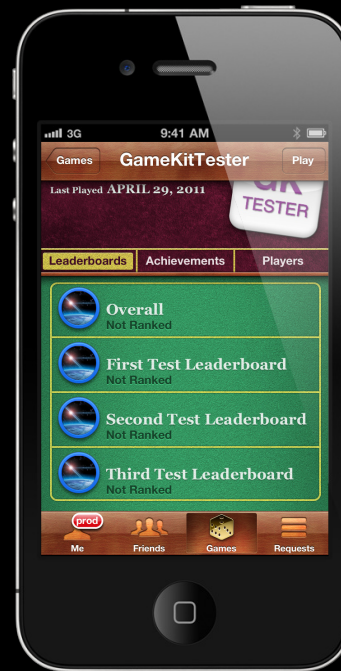
Leaderboard Localization
You must add at least one language below. For each language, provide a score format and a leaderboard name.

[Add Language](#)

Image	Language	Leaderboard Name	Score Format	Score Format Suffix	
	English	Level One	Integer (100,000,122)	points, point	Delete

What's New?

Game Center: leaderboard icons



What's New?

Game Center: min/max values

- Leaderboard min/max values
 - Developer-controlled limits on leaderboards
 - Helps prevent gaming of leaderboard scores
 - Scores outside provided range are automatically deleted
 - Min/maxes must be signed 64 bit integer

What's New?

Game Center: min/max values

Touch Fighter III - Add Leaderboard

Single Leaderboard

Leaderboard Reference Name ?

Leaderboard ID ?

Score Format Type ?


Sort Order Low to High High to Low ?

Score Range (optional) To ?
0 1000

Leaderboard Localization

You must add at least one language below. For each language, provide a score format and a leaderboard name.

[Add Language](#)

Image	Language	Leaderboard Name	Score Format	Score Format Suffix	
	English	Level One	Integer (100,000,122)	points, point	Delete

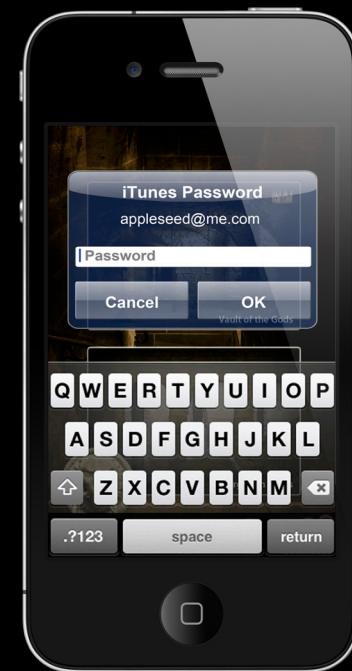
[Cancel](#) [Save](#)



What's New?

In-App Purchases: improved iTunes Connect workflow

- Improved layout and searching
- Streamlined sign off/developer approval
- Mass submit



What's New?

In-App Purchases: reworked iTunes Connect workflow

Touch Fighter III

App Information

Identifiers	Links	Rights and Pricing
SKU com.cyberinteractive.touchfighter.3	View in App Store	Manage In-App Purchases
Bundle ID com.cyberinteractive.touchfighter.3		Manage Game Center
Apple ID 440030095		Set Up iAd Network
Type iOS App		Delete App

Versions

Current Version

	Version 1.0
	Status Prepare for Upload
	Date Created 07 June 2011

[View Details](#)

[Done](#)

What's New?

In-App Purchases: reworked iTunes Connect workflow

Enter a reference name and a product ID for this In-App Purchase. You must also add at least one language, along with a display name and a description in that language.

Reference Name ?

Product ID ?

[Add Language](#)

Language	Display Name	Description	
Dutch	Twintig Raketten	Nog meer raketten	<input type="button" value="Delete"/>
English	Twenty Missiles	Buy twenty extra	<input type="button" value="Delete"/>

Delete this Language?

What's New?

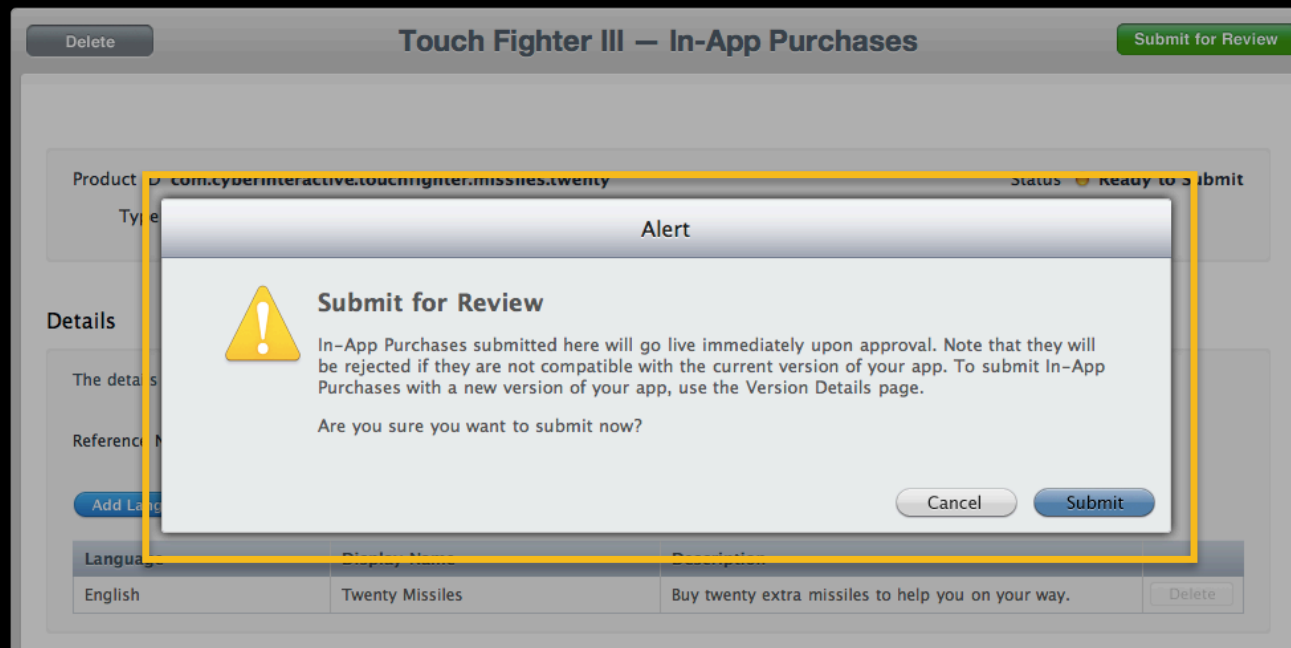
In-App Purchases: reworked iTunes Connect workflow

The screenshot shows the iTunes Connect interface for an in-app purchase. At the top, there is a header bar with a 'Delete' button on the left, the title 'Touch Fighter III - In-App Purchases' in the center, and a 'Submit for Review' button on the right. Below the header, a summary box displays the Product ID 'com.cyberinteractive.touchfighter.missiles.twenty' and the Type 'Consumable'. The Status is 'Ready to Submit'. A 'Details' section follows, containing a note about maintaining at least one language. Below this, the Reference Name is '20 Missiles'. An 'Add Language' button is present. A table lists the current language entry for English, with columns for Language, Display Name, Description, and a Delete button.

Language	Display Name	Description	
English	Twenty Missiles	Buy twenty extra missiles to help you on your way.	Delete

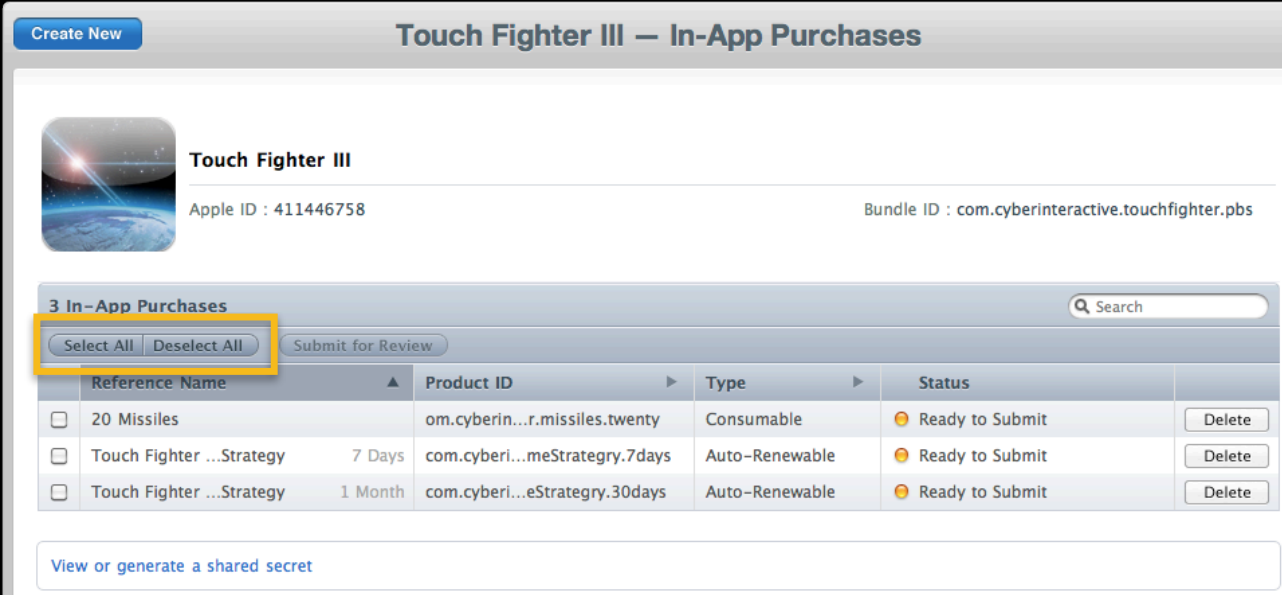
What's New?

In-App Purchases: reworked iTunes Connect workflow



What's New?

In-App Purchases: reworked iTunes Connect workflow



The screenshot shows the iTunes Connect interface for the app 'Touch Fighter III'. At the top, there is a 'Create New' button and the app title. Below the app icon, the name 'Touch Fighter III' is displayed along with its Apple ID (411446758) and Bundle ID (com.cyberinteractive.touchfighter.pbs). A section titled '3 In-App Purchases' contains a search bar and action buttons: 'Select All', 'Deselect All', and 'Submit for Review'. A table lists three in-app purchases with columns for Reference Name, Product ID, Type, and Status. Each row includes a checkbox and a 'Delete' button.

	Reference Name		Product ID	Type	Status	
<input type="checkbox"/>	20 Missiles		om.cyberin...r.missiles.twenty	Consumable	Ready to Submit	Delete
<input type="checkbox"/>	Touch Fighter ...Strategy	7 Days	com.cyberi...meStrategy.7days	Auto-Renewable	Ready to Submit	Delete
<input type="checkbox"/>	Touch Fighter ...Strategy	1 Month	com.cyberi...eStrategy.30days	Auto-Renewable	Ready to Submit	Delete

[View or generate a shared secret](#)



What's New?

In-App Purchases: auto-renewables

- Enables automatically renewing subscriptions to customers
- Subscription renewed at the end of the subscription period
 - Customer given option to opt out in iTunes or on iOS
- Duration options
 - 7 days, 1 month, 2 months, 3 months, 6 months, 1 year
- Only available on iOS

What's New?

In-App Purchases: auto-renewables

- Developer responsible for checking receipts to validate subscriptions
- Shared secret required to validate auto-renewables
- Marketing opt-in incentive
 - Customers receive free subscription extension for opting in
 - Duration chosen by developer/publisher in iTunes Connect
 - Publisher responsible for displaying duration bonus in their UI
- Publisher's privacy URL required
 - Shown on customer's invoice

What's New?

In-App Purchases: auto-renewables

Select Type

Consumable

A consumable In-App Purchase must be purchased every time the user downloads it. One-time services, such as fish food in a fishing app, are usually implemented as consumables.

Choose

Non-Consumable

A non-consumable In-App Purchase only needs to be purchased once by the user. Services that do not expire or decrease with use, such as a new race track for a game app, are usually implemented as non-consumables.

Choose

Auto-Renewable Subscriptions

An auto-renewable In-App Purchase subscription allows the user to purchase in-app content for a set duration of time. At the end of that duration the subscription will renew itself, unless the user opts out. An example of an auto-renewable subscription would be a magazine or newspaper that takes advantage of the auto-renewing functionality built into iOS.

Auto-renewable subscriptions will be delivered to all devices associated with the user's Apple ID. When you create an auto-renewable subscription in iTunes Connect, you begin by selecting the duration(s) that you will offer. When a duration ends, the App Store will automatically renew the subscription. Note that if the user has opted out of this functionality, the subscription will expire at the end of that duration. You must make sure that your app can determine whether a subscription is currently active and renewable.

Choose

What's New?

In-App Purchases: auto-renewables

Touch Fighter III – In-App Purchases

Reference Name and Languages

Enter a reference name for this family of auto-renewable In-App Purchase subscriptions. You must also add at least one language, along with a display name and a description in that language. Note that the localized display name(s) and description(s) will be used for every subscription duration that you offer for this family.

Reference Name ?

[Add Language](#)

Language	Display Name	Description	
English	Touch Fighter Game Strategy	Touch Fighter Game Strategy is designed with you the ga...	Delete

Subscription Durations and Pricing

A subscription duration is the length of time between autorenewals. You must add at least one. Note that each duration can only be used once per family.

[Add Duration](#)

Duration	Product ID	Price Tier	Status	
7 Days	com.cyberinteractive.touchfighter.game...	Tier 1	● Waiting for Screenshot	Delete
1 Month	com.cyberinteractive.touchfighter.game...	Tier 3	● Waiting for Screenshot	Delete

Screenshot for Review

What's New?

In-App Purchases: auto-renewables

Add Duration and Pricing

Duration: 1 Month

Product ID: com.cyberinteractive.touchfighter.gameStrategy.30days

Offer a marketing opt-in incentive? Yes No

Incentive Duration: 7 Days

Cleared for Sale Yes No

Price Tier: Tier 3

[View Price Tiers](#)

Price Tier 3												
App Store	U.S.*	Mexico	Canada	U.K.	European Union*	Norway	Sweden	Denmark	Switzerland	Australia	New Zealand	Japan
Customer Price	US\$2.99	\$30.00	CA\$2.99	£1.79	2,39 €	17.00Kr(NO)	22.00Kr(SE)	18.00Kr(DK)	3.30Fr	AUS\$3.99	NZ\$4.19	¥350
Your Proceeds	US\$2.10		CA\$2.10	£1.09	1,45 €					AUS2.54		¥245

Cancel Save

What's New?

In-App Purchases: auto-renewables

Add Privacy Policy URL

To save this family of auto-renewable In-App Purchase subscriptions, you must add a URL that links to your company's privacy policy. Privacy policy URLs are required for all apps that offer auto-renewable subscriptions. Customers will see this URL on their invoice and on the subscription confirmation email they receive. Enter a privacy policy URL for each language listed below. You will be able to view or edit these localized URLs on the Version Details page for your app.

English	<input type="text" value="http://touchfighter.com/Privacy"/>	?
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What's New?

In-App Purchases: auto-renewables

In-App Purchase Shared Secret

Generate Shared Secret

A shared secret is a unique code that you should use when you make the call to our servers for your In-App Purchase receipts. Without a shared secret, you will not be able to test auto-renewable In-App Purchase subscriptions in the sandbox mode. Also note that you will not be able to make them available on the App Store.

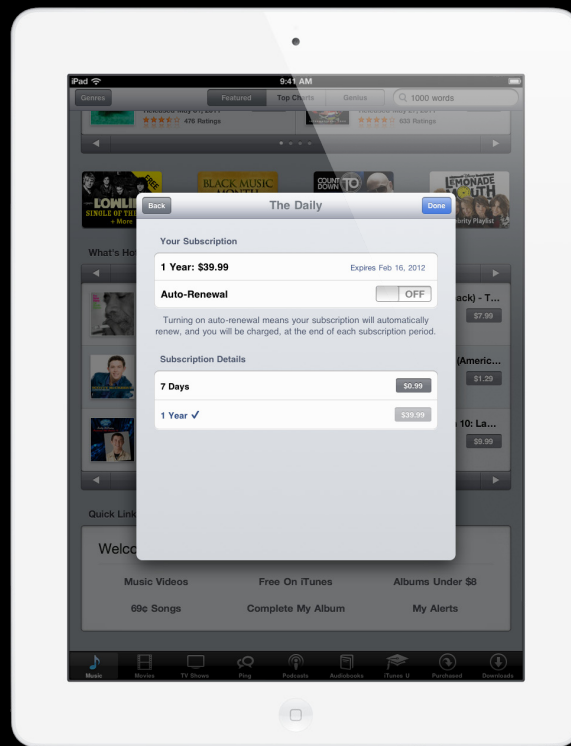
Note: Regardless of what app they are associated with, all of your auto-renewable subscriptions will use this same shared secret.

5ecf8af6a88b434da63ef54b178be2e9

[Generate New](#)

What's New?

In-App Purchases: auto-renewables



Demo

In-App Purchases in iTC

Aloke Bhatnagar

Engineering Manager, iTunes Store, iTunes Connect

Bugs!



What's New?

App Review Resolution Center


- Allows for centralized access to rejection information
- Apple may provide screenshots of your app
- Developer can input feedback on the issue
- History of app version's issues can be reviewed at anytime

What's New?

App Review Resolution Center

Touch Fighter III

Review Status



 The most recent version of your app has been rejected. Before resubmitting it, visit the Resolution Center for details on outstanding issues.

[Resolution Center](#)

App Information

Identifiers	Links	
SKU com.cyberinteractive.touchfighter.3	View in App Store	Rights and Pricing
Bundle ID com.cyberinteractive.touchfighter.3		Manage In-App Purchases
Apple ID 440030095		Manage Game Center
Type iOS App		Set Up iAd Network
		Delete App

Versions

Current Version	
	Version 1 Status  Rejected Date Created 07 June 2011

What's New?


App Review Resolution Center

App Summary Resolution Center

Review the information below to learn why your app version was rejected. If you have questions or concerns, use the text box to send a message to App Review. Replies from App Review will be posted here, in the Resolution Center. Note that you can correspond with App Review about this rejected binary until you resubmit it for review.

Binary Uploaded Jun 6, 2011 10:26 AM
2.1 Apps that crash will be rejected.
2.2: Apps that exhibit bugs will be rejected.

June 6, 2011 02:21 PM. From Apple.
We have rejected this app due to the numerous crashes. Please refer to the attached Crash Log report. Once you have fixed these bugs, please use the form below to tell us when you have uploaded a new binary.

 [CrashReport-TouchFighter.crash](#)

Send a message.

Send

What's New?

App Review Resolution Center


Binary Uploaded Jun 6, 2011 10:26 AM

2.1 Apps that crash will be rejected.

2.2: Apps that exhibit bugs will be rejected.

June 6, 2011 02:21 PM. From Apple.

We have rejected this app due to the numerous crashes. Please refer to the attached Crash Log report. Once you have fixed these bugs, please use the form below to tell us when you have uploaded a new binary.

 [CrashReport-TouchFighter.crash](#)

June 7, 2011 02:22 PM. From John Appleseed, jappleseed@cyberinteractive.com

I have fixed the bugs and completed a clean unit test of the code. A binary has been re-uploaded.



What's New?

iTC Mobile 1.1

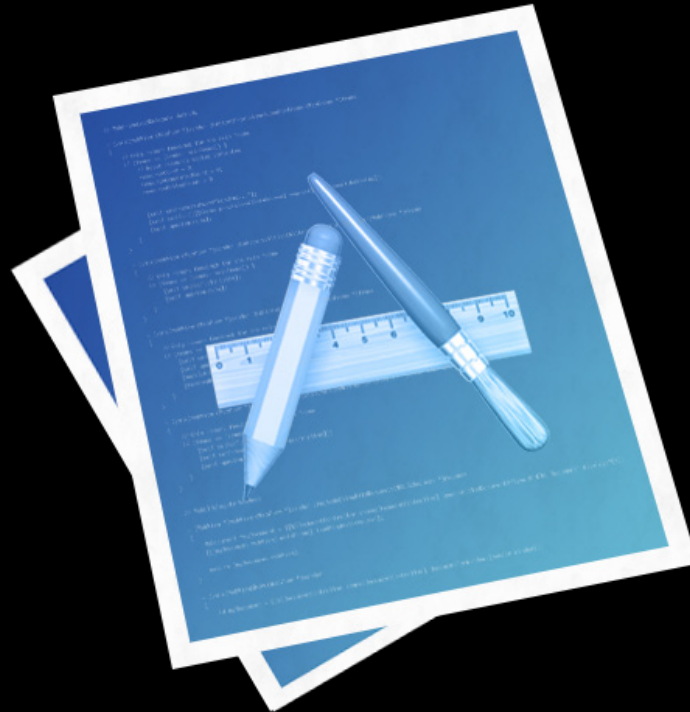
- iPad support
- iTC Mobile 1.2
 - Push notification support
 - Enables push alerts for app state transitions
 - Opt-in using default iOS push notification settings
 - App state transitions
 - Ready for sale, pending developer release, invalid binary, etc.



What's New?

iTC Mobile 1.2





What's New?

Application Loader

- Creation of In-App Purchase metadata is time consuming
- In-App Purchase metadata workflow introduced in Application Loader
- Enables mass import In-App Purchase metadata from a tab delimited file
- In-App Purchase submission can be ad hoc or with a binary
- Coming later this fall for iOS and OS X apps...

Application Loader: In-App Purchases

Welcome to Application Loader

Welcome to Application Loader
Version 2.4

Application Loader is a tool that helps you submit content for the iTunes Store.
Enter your iTunes Connect login information to get started.

Apple ID
Touch Fighter

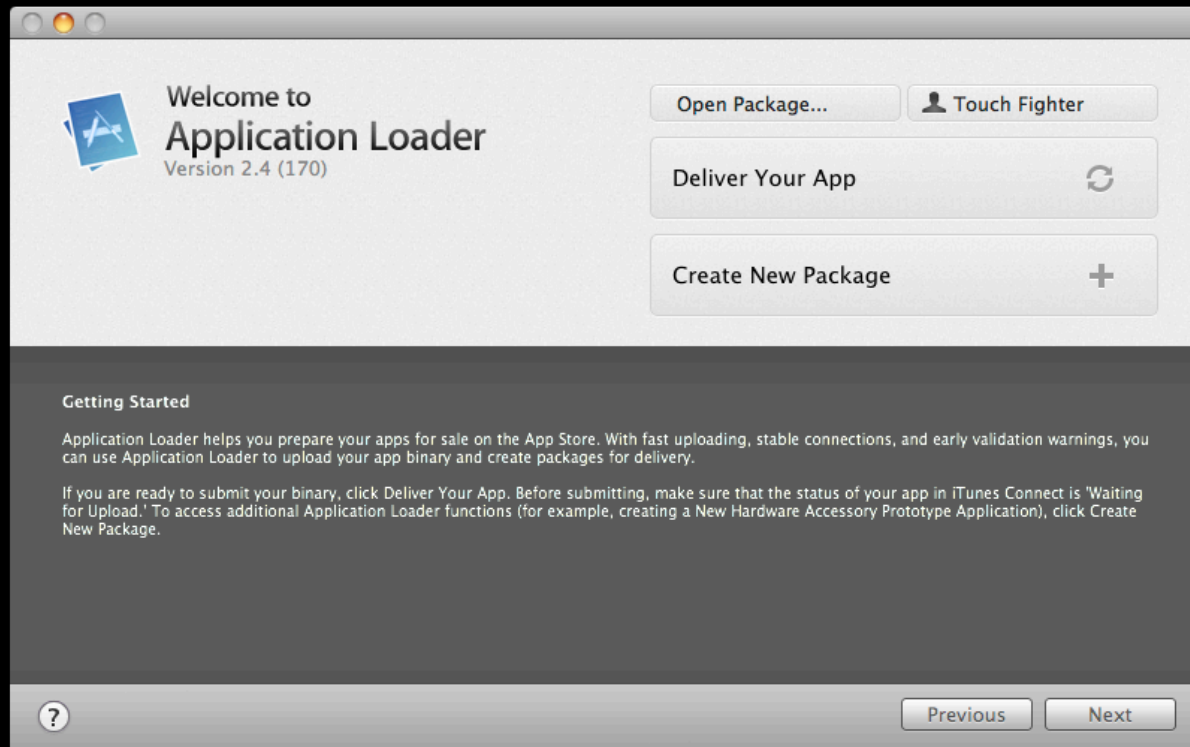
Password

[Forgot your password?](#)

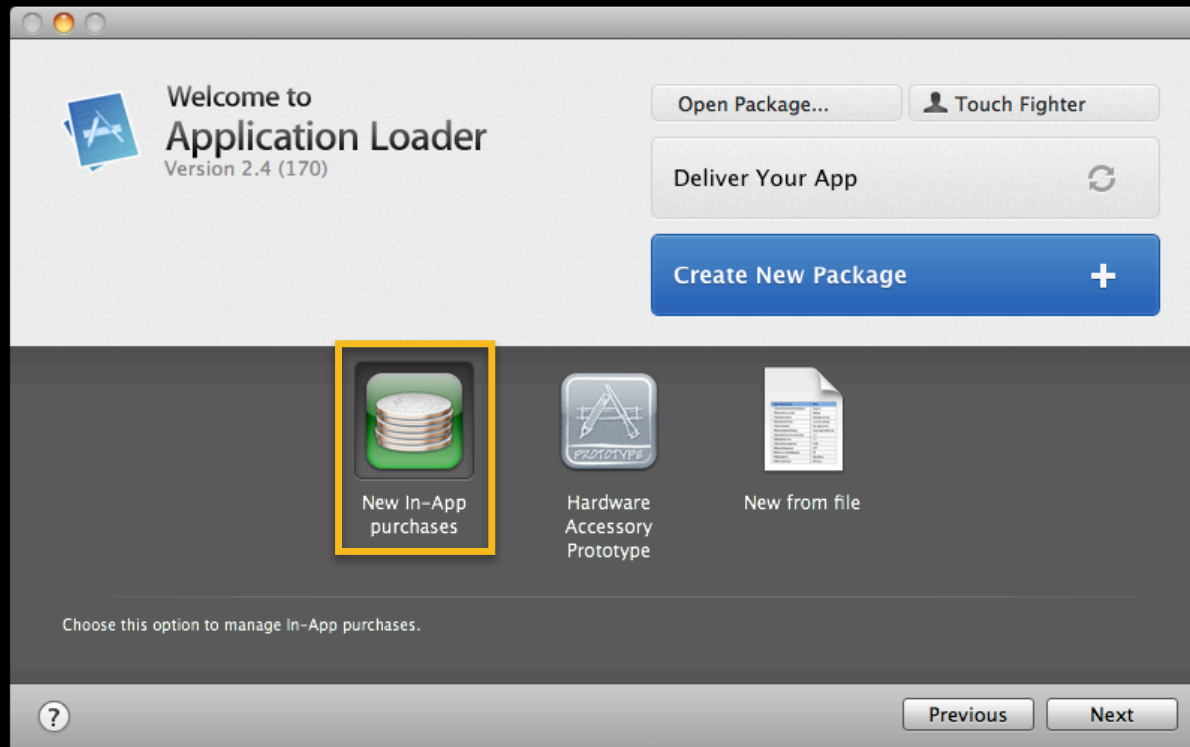
?

Cancel Next

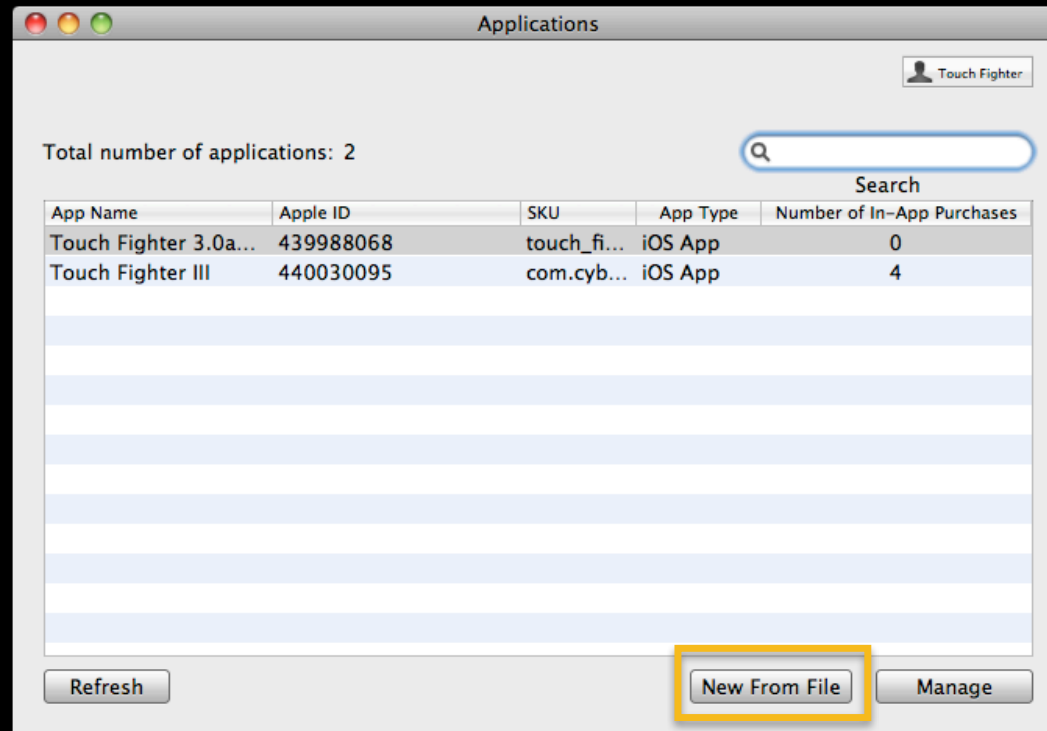
Application Loader: In-App Purchases



Application Loader: In-App Purchases



Application Loader: In-App Purchases



Application Loader: In-App Purchases

com.cyberinteractive.touchfighter.3-6.itmsp

In-App Purchases Delivery Touch Fighter

App Name: Touch Fighter III
SKU: com.cyberinteractiv
Apple ID: 440030095

bundle ID: com.cyberinteractive.touchfighter.3
App Type: iOS App

Search

Reference Name	Product ID	Type	Price Tier	Cleared For Sale
30 missiles	com.cyberinteractive.touchfighter....	Consumable	Tier 3	Yes
40 missiles	com.cyberinteractive.touchfighter....	Consumable	Tier 4	Yes
50 missiles	com.cyberinteractive.touchfighter....	Consumable	Tier 5	Yes
75 missiles	com.cyberinteractive.touchfighter....	Consumable	Tier 7	Yes
100 missiles	com.cyberinteractive.touchfighter....	Consumable	Tier 9	Yes

Add In-App Remove In-App Import Screenshots...

Language	Display Name	Description
English	75 missiles	Buy seventy five extra missiles to help you on your way.
French	75 missiles	Acheter soixante-quinze missiles supplémentaires ...

Add Language Remove Language

Description:
Buy seventy five extra missiles to help you on your way.

Info Pricing Languages

Demo

Application Loader

Jason Fosback

Engineering Manager, iTunes Store, Content Delivery

New iOS and Lion Features

Ricardo Cortes

Engineering Manager, iTunes Store, Provider Services

Today's Agenda

What's New



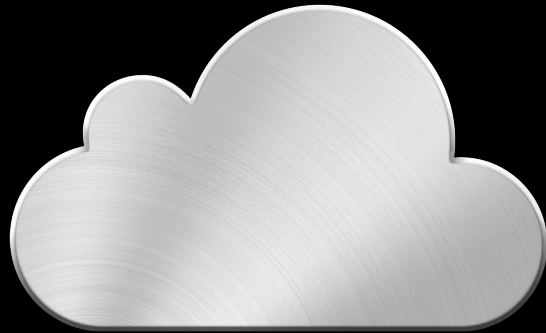
Best
Practices
and Pitfalls



iOS 5 and Lion



New iOS 5 and Lion Features



iCloud Storage



Newsstand

iCloud Storage

Overview



- New for iOS 5 and Lion
- Enables cloud storage of app document data
 - Documents
 - Key Value Data
- Works across iOS and OS X apps
 - Example: Touch Fighter for desktop and Tough Fighter mobile

iCloud Storage

Setup and configuration

- Enable iCloud Storage in the iOS developer portal
- Two new relevant entitlements:
 - Documents
 - `com.apple.developer.ubiquity-container-identifiers`
 - Key Value Data
 - `com.apple.developer.ubiquity-kvstore-identifier`
 - Governed by provisioning profile
- Enter entitlement keys and values in Entitlements.plist
 - Each entry prefixed with Team ID

iCloud Storage

Setup and configuration: Document Storage

- `com.apple.developer.ubiquity-container-identifiers`
 - Denotes the identifiers used by related apps to write to the same Document Storage space
 - Must only contain identifiers from the same developer
 - Example:

```
com.apple.developer.ubiquity-container-identifiers = {  
    "<TEAMID>.com.cyberinteractive.touchfighter.osx",  
    "<TEAMID>.com.cyberinteractive.touchfighter.lite",  
    ...  
};
```

iCloud Storage

Setup and configuration: Key Value Data

- `com.apple.developer.ubiquity-kvstore-identifier`
 - Denotes identifier used to access the default iCloud Key Value store
- Example

```
com.apple.developer.ubiquity-kvstore-identifier =  
"<TEAMID>.com.cyberinteractive.touchfighter.store";
```

iCloud Storage

Setup and configuration: Document Storage

- One new Info.plist key:
 - NSUbiquitousDisplaySet
 - Defines a grouping key for iCloud Storage display purposes; allows QuotaService to collapse results for multiple document sets into a single grouping (i.e. Settings.app)
 - Must match a display set configured in iTunes Connect
 - Reverse-domain syntax is recommended
 - “com.apple.iwork.keynote” - for iOS and OS X Keynote

iCloud Storage



iCloud Storage



iCloud Storage



iCloud Storage

iTunes Connect setup

Search

Name :

Apple ID :

Status :

Developer Guides
[English](#)
[Japanese](#)
[Chinese \(Simplified\)](#)

App Loader Guide
[English](#)

In-App Purchases
[Shared Secret](#)

iCloud
[Manage Display Sets](#)

iCloud Storage

iTunes Connect setup

[Create New](#) **Manage Your iCloud Display Sets**

Click Create New to add a new display set. To view or edit details for an existing display set, click on it in the table below.

1 iCloud Display Set

Reference Name	Display Set ID	Attached Apps	
Touch Fighter	com.cyberinteractive.touchfighter	2	Delete

[Done](#)

iCloud Storage

iTunes Connect setup

Create New iCloud Display Set

Display Set Details

The display set ID you enter will not be editable and must match the display set ID entered in your binary's info.plist. The reference name and display set language details can be edited at any time.

Reference Name ?

Display Set ID ?

[Add Language](#)

Language	Display Name	
English	Touch Fighter	Delete

[Cancel](#) [Save](#)

iCloud Storage iTunes Connect setup

Touch Fighter

Display Set Details

Details for your display set are shown below. Reference Name and display set language details can be edited at any time. To edit language details, click a display name in the table below.

Reference Name **Touch Fighter** [Edit](#)



Display Set ID **com.cyberinteractive.touchfighter**

[Add Language](#)

Language	Display Name	
English	Touch Fighter	Delete

Attached Apps

To attach an app to this display set, you must specify the display set ID in your app binary's info.plist. After you upload the binary, the app will be displayed here.

	App Name	Apple ID
	Touch Fighter II	324323335
	Touch Fighter III	405658128

Demo

iCloud Storage setup in iTC

Paul Turner

Engineering Manager, iTunes Store, Content Operations

Newsstand

Ricardo Cortes

Engineering Manager, iTunes Store, Provider Services

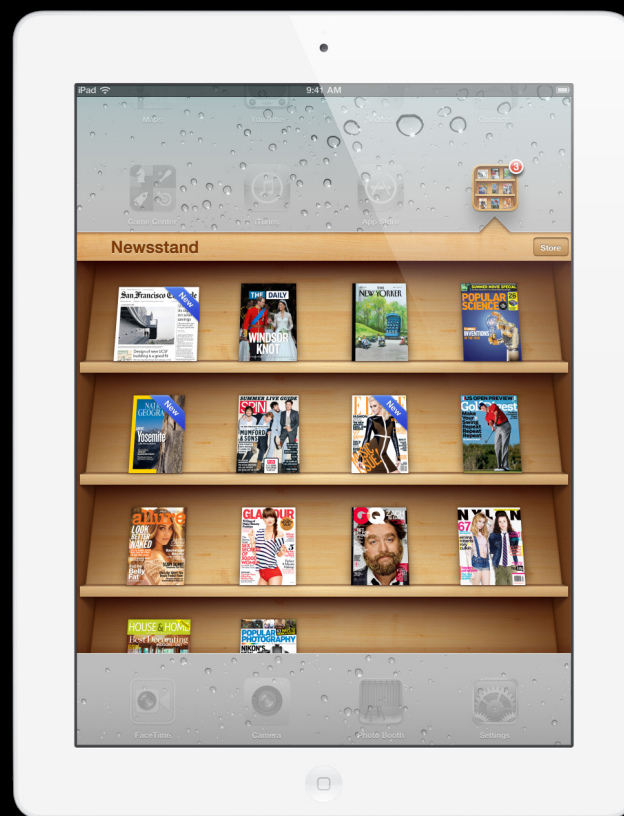
Newsstand

Overview



- New for iOS 5
- New area in the store specifically for our subscriptions and publications
- New framework called Newsstand Kit
- Enables dynamic delivery of asset covers and issue content
 - Backed by new push notification model
 - Upon receiving push, app communicates in background to developer's servers
 - Ongoing issue cover art and content delivered from publisher's servers
 - Default issue cover art supplied in iTunes Connect

Newsstand



Newsstand

Setup and configuration

- Two new Info.plist keys
 - UINewsstandApp
 - UINewstandIcon
 - Defines look and feel of binary artwork

Newsstand

Info.plist example

```
{
  CFBundleIcons = {
    ...
    UINewsstandIcon = {
      CFBundleIconFiles = ("News1x.png");
      UINewsstandBindingType = UINewsstandBindingTypeNewspaper;
      UINewsstandBindingEdge = UINewsstandBindingEdgeBottom;
    };
  };
};
```

Newsstand

Setup and configuration

- Optional developer supplied RSS Feed for dynamic updating of issue metadata and artwork
- iTunes Connect interface to see current and past issues
- Both RSS feed and iTunes Connect controls coming later this fall

Best Practices and Common Pitfalls

Max Müller

Director, iTunes Store, Digital Supply Chain Engineering

Today's Agenda

What's New



Best
Practices
and Pitfalls



iOS 5 and Lion



Best Practices and Pitfalls

- Functionality—app does not work as advertised
- Metadata—inappropriate information in supplied metadata
- Crashing—crashes on launch or during use
- Beta/trial—advertising app as a beta or trial version
- Ad hoc—limited utility where ad hoc is more suitable
- Icon mismatch— small and large icons need to be similar
- Name inconsistency—name on App Store is not name in the binary
- Advertising—limited utility, only used for marketing/advertising
- Cell bandwidth—streaming too much bandwidth
- iPod touch—features such as dialing present on iPod touch

Best Practices and Pitfalls

- Apple trademark—guidelines for using the Apple trademark
- App signature— new Lion features require a valid app signature
- Background multitasking—only approved background tasks
- In App Purchase types—non-consumable vs. consumable
- iCloud Storage—cached redownloadable content
- Lion testing—new and updated apps must work on Lion
- App consolidation—submitting the same app with different content
- Crashing—crashes on launch or during use

Summary

- Get ready with new iOS and Lion features
 - In-App Purchases (Lion)
 - Newsstand (iOS 5)
 - iCloud Storage (iOS 5, Lion)
- Binary submissions
 - Lion, coming soon
 - iOS 5, later this fall

More Information

Bill Dudney

Application Frameworks Evangelist
dudney@apple.com

Documentation

iTunes Connect Developer User Guide
http://itunesconnect.apple.com/docs/iTunesConnect_DeveloperGuide.pdf

Video

Development Videos
<http://developer.apple.com/videos>

Apple Developer Forums

<http://devforums.apple.com>

Related Sessions

In-App Purchase for iOS and Mac OS X	Mission Thursday 09:00AM
iCloud Storage Overview	Presidio Tuesday 11:30AM
Storing Documents in iCloud using iOS 5	Presidio Wednesday 3:15PM
Building Newsstand Apps	Marina Tuesday 4:30PM
Building Newsstand Apps (repeat)	Russian Hill Thursday 11:30AM

Labs

App Publishing with iTunes Connect Lab	Internet and Web Lab A Thursday 2pm - 4:15pm
In-App Purchase Lab	Internet and Web Lab B Thursday 11:30am - 1:30pm
iOS App Review Lab	3rd Floor All Week by Reservation
Mac App Review Lab	3rd Floor All Week by Reservation
Developer Program Services Lab	3rd Floor All Week
iTunes Connect Developer Lab	3rd Floor All Week by Reservation

Q&A

