

3/21/10 SGVMug renamed to “Apps and Traps” by David Whitby

## Focus This Month on iOS 4.3!

### What hasn't changed

iOS 4.3 looks to have interesting albeit far from numerous changes thus far.

### System-wide changes

#### AirPlay



AirPlay was introduced in iOS 4.2 and allows video and audio to be sent from iPhone, iPod touch, iPad, and iTunes on Windows or Mac to an Apple TV, or audio-only to a growing number of 3rd party speakers and other accessories. While iOS 4.2 only provided video-to-Apple TV support from the YouTube and iPod/Video apps, iOS 4.3 gives both App Store apps and web content the ability to send video to Apple TV. (Note: Apps like Hulu may well block this functionality due to Hollywood being catastrophically short sighted when it comes to the digital age.)



## Video Mirroring (iPad 2 only)



With iPad 2 and either the old VGA adapter or new HDMI adapter, you'll be able to mirror your device display on an external monitor.

Video mirroring, as the name suggests, means everything and anything you see on iPad 2, from Home Screen to apps, will be shown exactly the same on your external monitor or HD TV. (Hulu and similar apps might have a way to block this, we'll have to test it and see.)



Previous devices like iPad and iPhone 4 will only be able to output video the way they currently do, if the particular app enables it. (like iPod, Video, Keynote, YouTube, Safari, Photos, and App Store apps that support it.)

## Home Screen



SpringBoard, the app that runs the home screen and overall interface in iOS, gets its multitasking dock UI tweaked once again on iPad.

### **Multitouch navigation gestures (iPad only, developers only)**

Apple has introduced 4 or 5 finger multitouch navigation gestures in the iOS

4.3 for iPad but only for developers to test. They won't be available to regular users. To get them to appear in Settings, you need to connect your iPad to Xcode and enable the device for development. (See our [how to enable iPad multitasking gestures in iOS 4.3](#) article for more.)

The new gestures don't replace the Home Button but do reduce the amount of times you need to single or double click it, which could reduce concerns of hardware wear and tear post iOS 4 multitasking.

The new gestures can be done with 4 or 5 fingers and resemble multitouch trackpad gestures available on Mac OS X since the introduction of the original MacBook Air in 2008 and expanded upon in the recent Mac OS X 10.7 Lion preview given by Steve Jobs at the Back to the Mac event. The gestures currently include

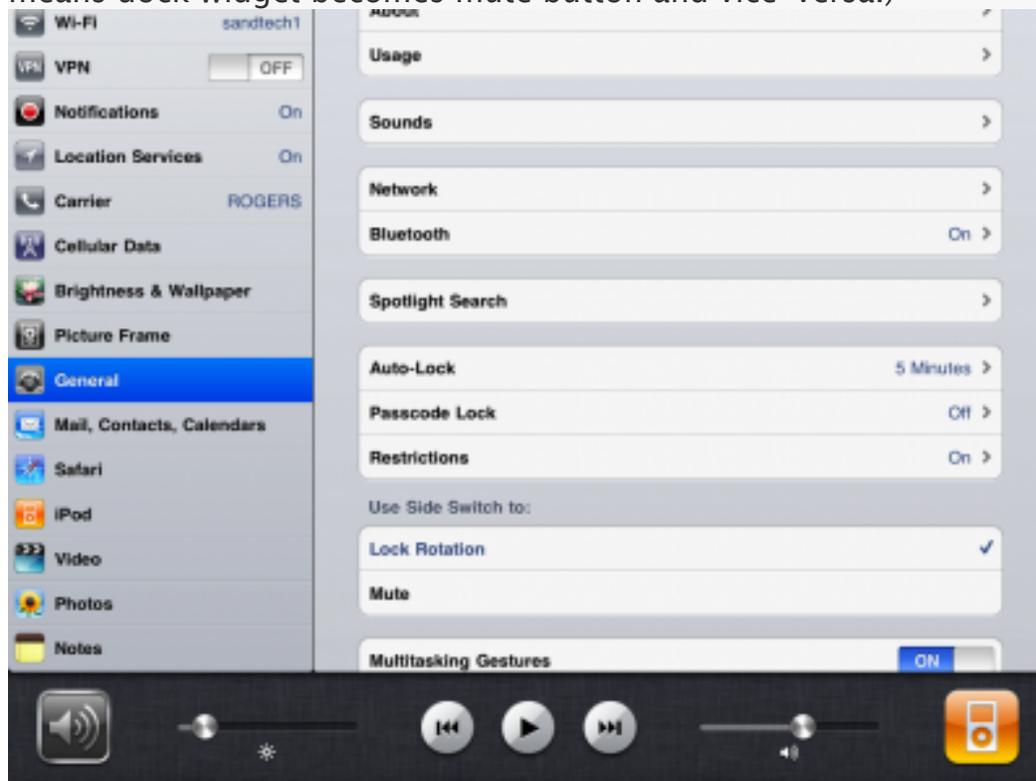
- Pinch all fingers in to exit an app and return to the Home Screen (identical to single-clicking the Home Button).
- Swipe up from the bottom bezel to reveal the multitasking Fast App Switcher Dock (identical to double-clicking the Home Button).
- Swipe sideways from left to right or right to left to move between recently open apps (similar to double-clicking the Home Button to reveal the Fast App Switcher and tapping on an app icon immediately to right).

The sideways swipe is interesting in that it allows you to go left or right whereas the Fast App Switcher reorders the recent app icons so you always go backwards in "time" to the right. It seems perceptively faster for a single app-back movement since there's no carousel animation, yet you can only swipe back one app at a time whereas you can tap on any of 4 immediately available app icons in the Fast App Switcher and swipe back 4 additional apps at a time. Performance on the current generation iPad, however, is hampered by lack of

RAM. With only 256MB many apps will need to reload when you swipe back to them (at least so far in the beta). If iPad 2 has at least 512MB — or better yet 1GB — it would fly with this system.

## Mute widget (iPad only)

When iPad shipped with iOS 3.2 the hardware switch above the volume rocker was set to lock or unlock screen orientation. In iOS 4.2 it was changed to a mute/un-mute switch like iPhone. Uncharacteristically, Apple has now added a Settings toggle to let the user choose which function they want the switch to perform. Since iOS 4.2 added a software orientation lock widget in the multitasking Fast App Switcher dock, iOS 4.3 now also toggles between that widget and a software mute button to fill whichever function is no longer being provided by the hardware switch. (Hardware switch set to orientation lock means dock widget becomes mute button and vice-versa.)



## Photos



As mentioned above, you now have the ability to send recorded videos out over AirPlay to Apple TV, something which was noticeably missing when the feature was introduced in iOS 4.2.

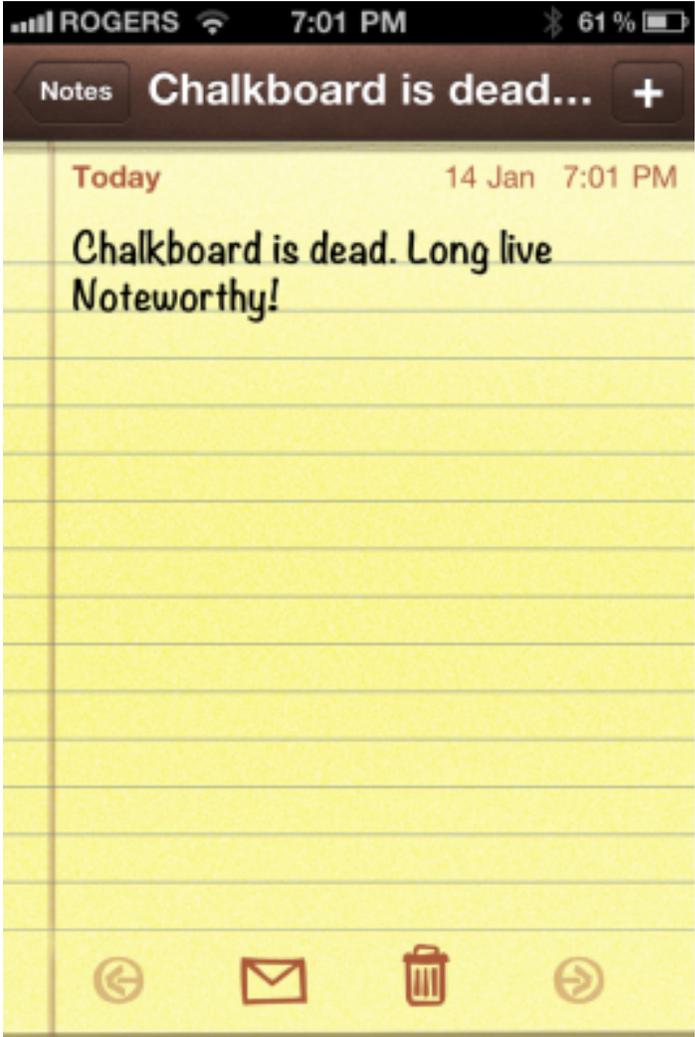


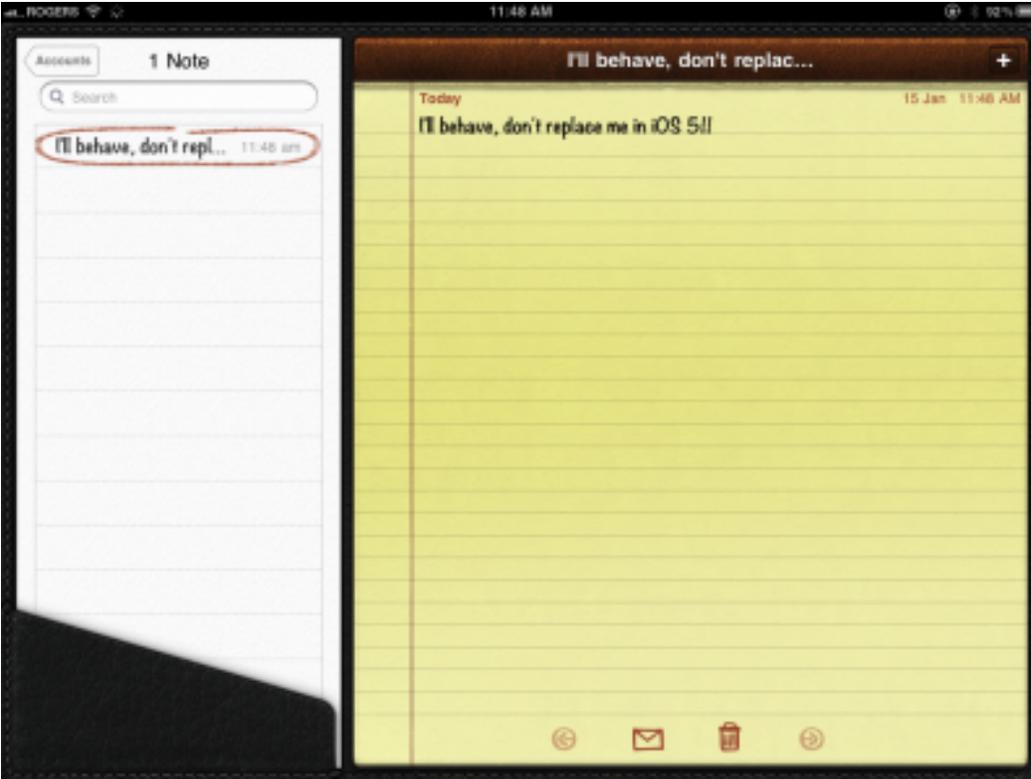
## Notes



iOS 4.2 finally let us change the Notes font from Marker Felt to something — anything — else, as long as that anything else was Helvetica or Chalkboard.

Well it turns out Chalkboard wasn't long for this world as it has been replaced in iOS 4.3 with Noteworthy.





# App Store

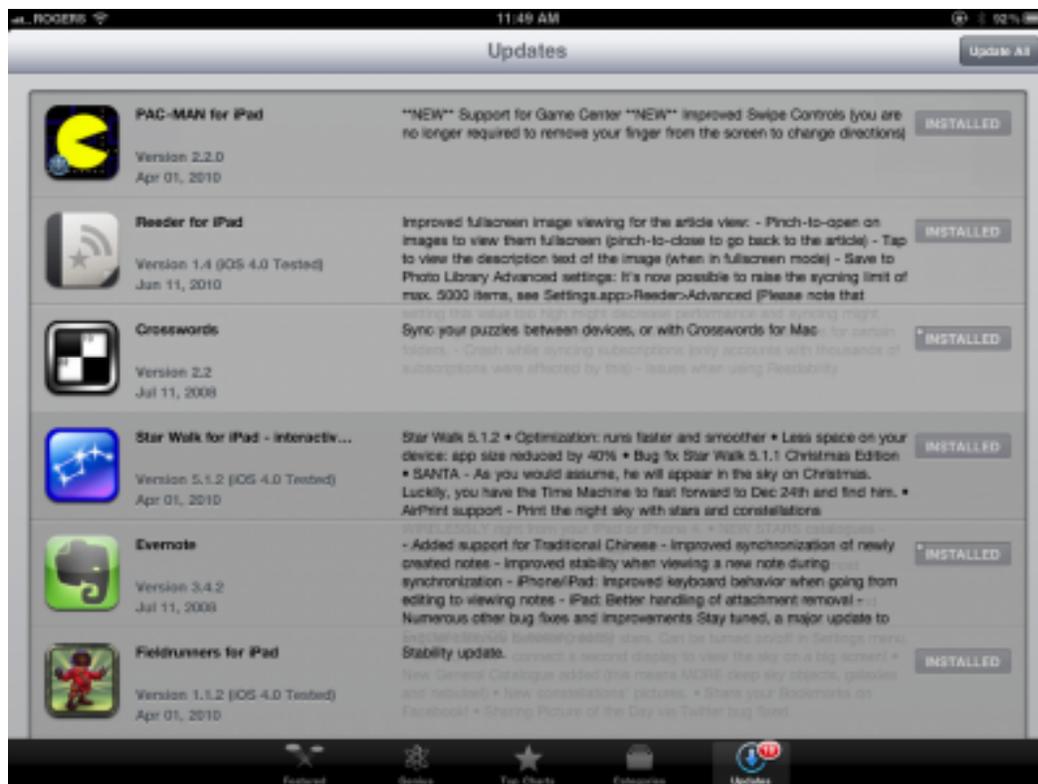


The App Store gets a new design for the Updates page.

# Updates

Update All

-  Amazon.com  
**Kindle** + INSTALLED
-  Mysterious Tro...  
**Calvetica Cal...** INSTALLED
-  Google  
**Google Mobil...** + INSTALLED
-  Chillingo Ltd  
**Cut the Rope** INSTALLED
-  Synthetic Corp  
**Hipstamatic** INSTALLED



## Install buttons

Although it's not an iOS 4.3 specific feature, App Store has also been updated recently on the server side with a few new features. On all devices, if you've already bought or downloaded an app but it's not currently loaded on your iPhone, iPod touch, or iPad, instead of the Free or price button, you get an Install button. (This doesn't seem true in all regional App Store yet, but is working in the US App Store.)

## Search filters

Also not iOS 4.3 specific but since the timing fits, on the iPad there are also new filters in place on the search page, including Category, Release Date, Customer Rating, Price, and Device, as well as a Reset Filters option. Since App Store, like iTunes is really just an app-wrapped, internet powered, WebKit UI Apple can make all sorts of changes without having to wait for a new iOS version to ship. Usually these are just content features, banners, etc. (or the

addition of [Ping...](#)) but it's nice to see new functionality sneak in every once and a while.



Also, if you leave a search to go to Featured or Top Charts, etc. and then tap the search field at the top right, you're whisked right back the previous search results, sans keyboard.

## In-app purchases

In-app purchases now always require a password. Previously iOS would remember a password for a short amount of time after it was last entered. This led to children purchasing huge quantities of Smurfberries and other "freemium" content, which in turn led to the new password challenge system.

(Of course this does nothing to protect parents who give their children their iTunes password or use an easily guessed or observed password — be warned!)

## iAds



For developers, iAds can now go full screen. That includes the big iPad screen, which Apple says allow for “immersive, interactive iAd experience”. They also say the new banner format is easy to implement.

## HTTP Live Streaming metrics

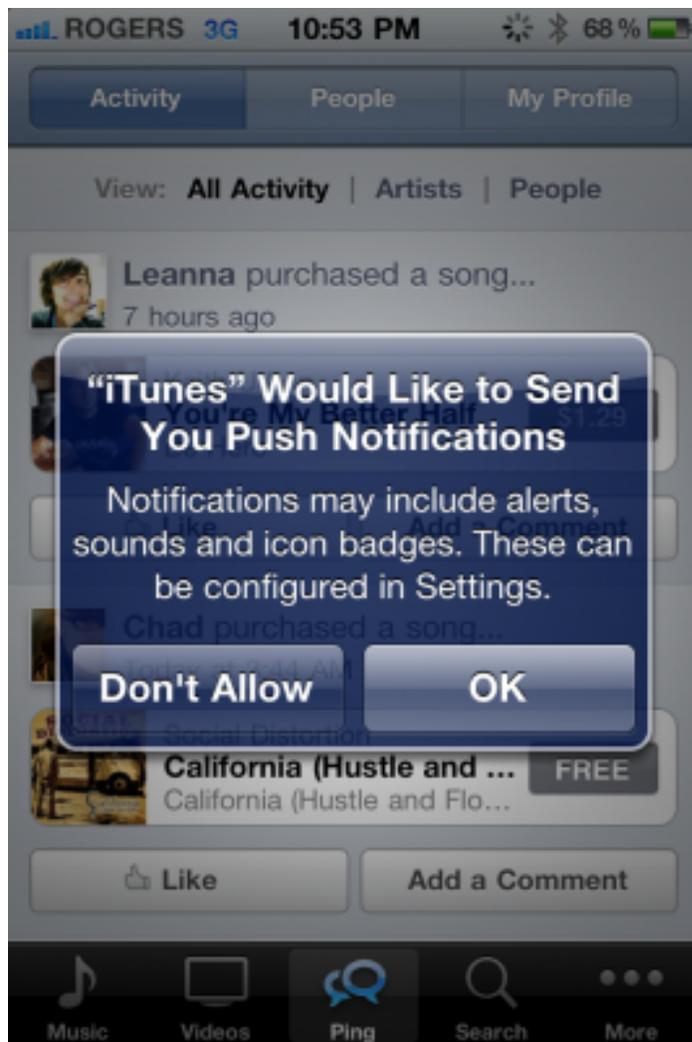


HTTP Live Streaming, the technology Apple uses to stream high quality video including their own press conferences and events, now includes viewer engagement and performance metrics. This is intended to help developers fine tune and optimize their content.

## iTunes



iOS 4.3 brings a new set of push notifications to the table — for Apple’s Ping social musical network. So if you’ve been dying to know what Phil Schiller — or Chad — has bought, liked, or commented on in iTunes as instantaneously as possible you’ll get your wish.



## FaceTime (iPad 2)



iPhone 4 got FaceTime with iOS 4 and iPod touch 4 with iOS 4.1, and now it's iPad 2's turn with iOS 4.3. Just like iPod touch 4, there's a dedicated — and newly redesigned — FaceTime icon so you can easily launch it (iPhone still launches from the Phone app). Since, also like iPod touch 4, there's no phone number associated with an iPad 2, it uses Apple/iTunes IDs to map the connections.

Enter your credentials and you'll be able to FaceTime with anyone on iPhone 4,

iPod touch 4, iPad 2, or Mac.



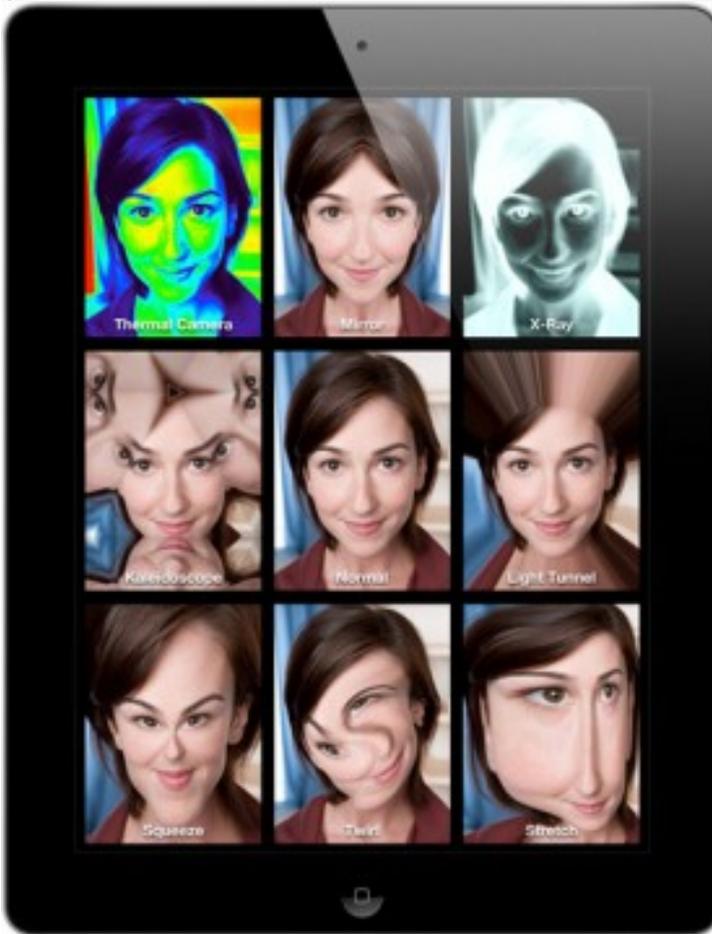
[We'll update this when iPad 2 ships and we have a chance to test it.]

## Photo Booth (iPad 2 only)



Photo Booth, like the Mac app of the same name, is a fun time-killer where you can apply effects to the live camera view and save the pictures for use in profiles or just to share with friends and family. Thanks to the new cameras in iPad 2 and the powerful A5 processor you can see 9 live video streams, with effects applied, in real time. Since iOS is multitouch enabled, you can also use

gestures to manipulate the effects in real time.



[We'll update this when iPad 2 ships and we have a chance to test it.]

## Settings



Not only does Settings hide the usually interesting tweaks found in any new iOS version but this time it's home to one of the marquee new features — Wi-Fi Personal Hotspot.

**Wi-Fi Personal Hotspot (iPhone 4 only)**



Freshly sandwiched in between VPN and Notifications for iPhone users is the new top-level Personal Hotspot setting. (It also find it in Settings: General: Network: Personal Hotspot, where it replaces the previous Tethering setting, but why dig that deep when you no longer have to?)

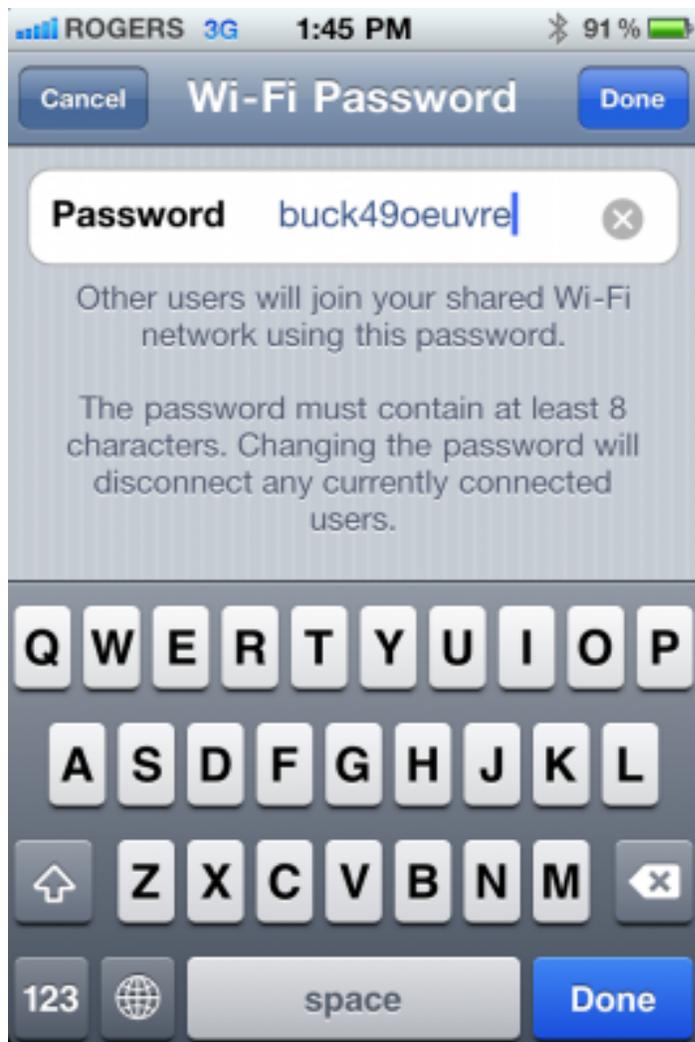




When you tap Personal Hotspot you're taken to a screen that lets you toggle it on or off (why can't we do this top-level like Airplane Mode or VPN?) along with your — visible — current WPA access point password (with no choice to hide it). Instructions on how "to connect using Wi-Fi" have been added to the previous tethering instructions for Bluetooth and USB. As before with Bluetooth, if you don't have Wi-Fi enabled you'll get a popup asking if you'd like to enable it or if you'd prefer to tether via Bluetooth (if that's enabled) or USB.



You can change your WPA password by tapping on it, and you're warned the new password must be at least 8 characters long (we recommend something not easily guessed like "password") and that changing the password will disconnect any currently connected devices.



When activated you get the same blue bar across the top of your iPhone that tethering presented under iOS 3 and iOS 4, though renamed Personal Hotspot and now indicating the number of devices connected (up to a maximum of 5 on Verizon, 3 on most GSM carriers like AT&T).



For iPhone 3GS users personal hotspot is there and in the same top-level position, but is limited to the old-style Bluetooth and USB.

## Location Services

Location Services has also been promoted to top level in iPhone, iPod touch, and iPad. (see iPhone screenshot above, iPad screen shot below)

## Sounds

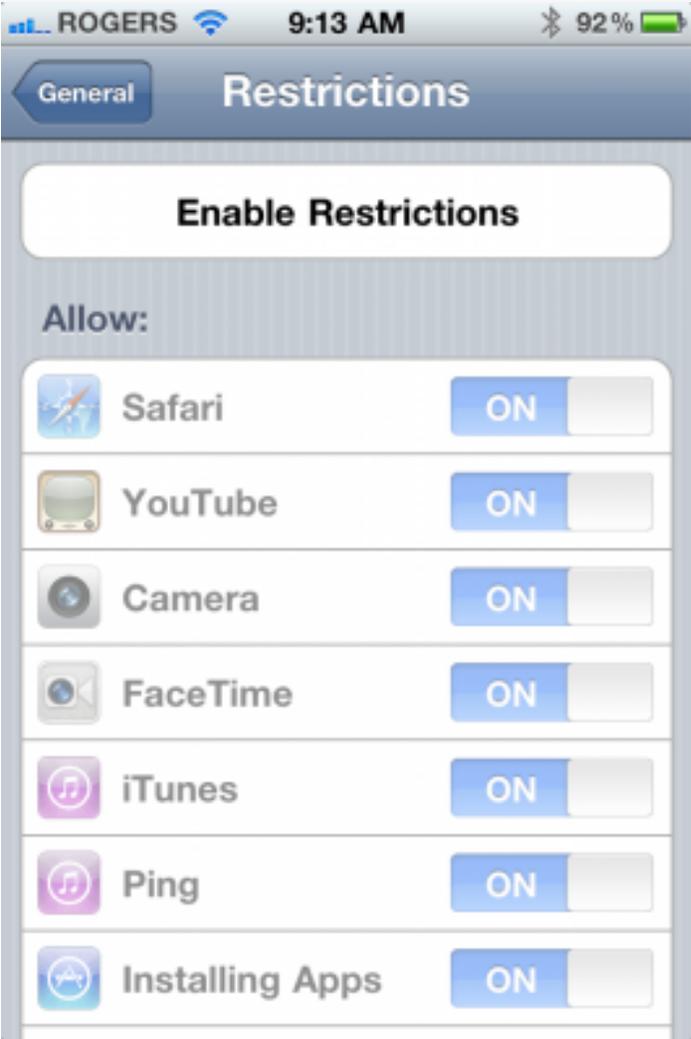
Mercifully, the new Text Tones for iPhone 4 introduced in iOS 4.2 have been made shorter as better fits Text Tones. Tragically, they haven't been made any better. It's bewildering.

Vibration has also changed for text/SMS alerts. Now you get two short

vibrations for an SMS on both iPhone 4 and iPhone 3GS.

## General: Restrictions

If you don't want your children discovering new, electronic hipster songs on Apple's social music network, Ping, iOS 4.3 lets you disable it via the Parental Controls.





## General: Use Side Switch to (iPad only)

The iPad's hardware switch, originally released as an orientation lock/unlock in iOS 3.2 and changed to an iPhone-like mute/un-mute switch in iOS 4.2 now becomes user assignable in iOS 4.3. Yes, with a simple checkbox you can choose which way you personally like it.

As mentioned up top, whichever option you do not choose becomes a software control in the multitasking Fast App Switcher dock.



## General: Multitasking Gestures (iPad developers only)

A simple toggle allows you to turn on or off the new multitasking navigation gestures (see the description under system-wide changes, above). These are intended for developers only, not end-users so you need to connect to Xcode to enable them. (See our [how to enable iPad multitasking gestures in iOS 4.3](#) article for more.)



## Messages (iPhone only)

The settings for Messages now allow you to choose how many times you want SMS/MMS alerts to sound, repeated at two minute intervals. Choices include:

- Once
- Twice
- 3 Times
- 5 Times
- 10 Times.

Settings Messages

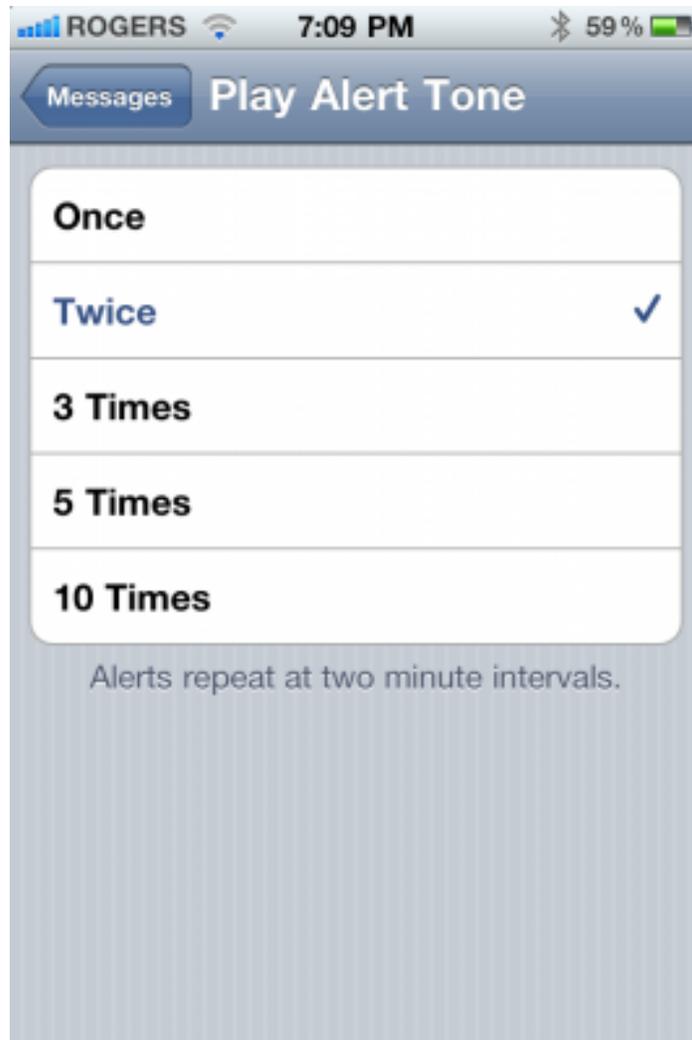
Show Preview  ON

Play Alert Tone Twice >

MMS Messaging  ON

Show Subject Field  OFF

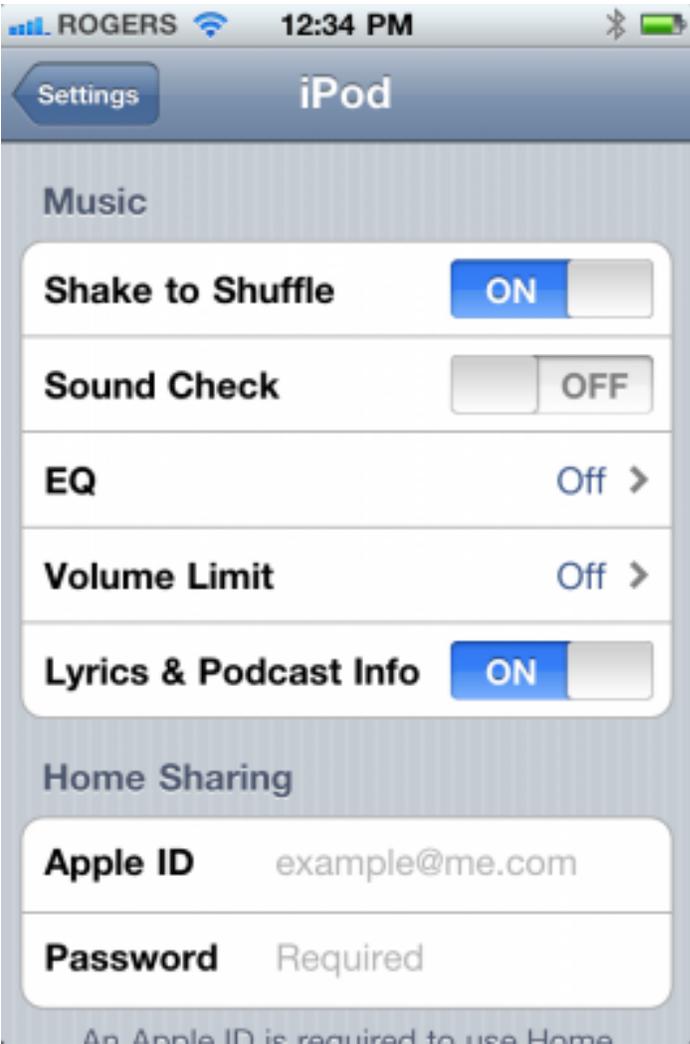
Character Count  OFF



## iPod



New to iPod Settings, you can scroll down and enter your iTunes username and password to enable Home Sharing (if you enter the wrong information, you'll get a popup telling you it can't be enabled).



## Notes

As mentioned previously, Noteworthy replaces Chalkboard in the Notes settings.

Settings Notes

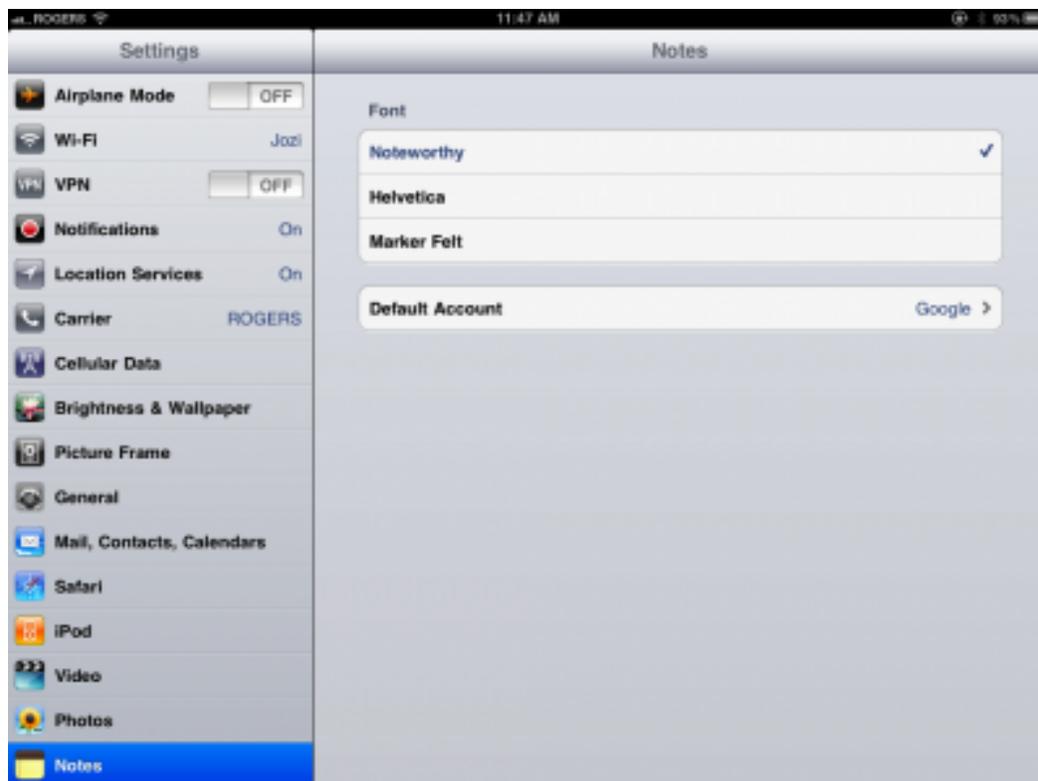
Font

Noteworthy ✓

Helvetica

Marker Felt

Default Account MobileMe >



## Phone + Contacts



A minor but likely very welcome change in iOS 4.3 beta sees the addition of a wait button to the add contact phone number's extended keyboard and the rejigging of some of the other buttons like pause.



This can also be used to setup single-tap conference call dialing, with the pause to send passcodes.

## Safari



Hopefully Apple's comments about AirPlay supporting web content means we'll be able to stream H.264 video from Safari to Apple TV as well under iOS 4.3. In addition we'd expect Apple adds whatever other HTML 5, CSS, and Nitro (their JavaScript rendering engine) improvements they've made since iOS 4.2 shipped.

# iPod



iPod gains Home Sharing under iOS 4.3, the ability to stream media from your Mac or Windows PC the same way Apple TV (2010) has been doing since last fall.

## Home Sharing



Once you enable Home Sharing in Settings (see above) you can tap on More on the bottom tabs, select the new Shared icon at the bottom, and tap on the computer name you want to access under Shared Libraries

Edit More

-  Albums >
-  Audiobooks
-  Compilations
-  Composers >
-  Genres >
-  iTunes U
-  Podcasts
-  Shared

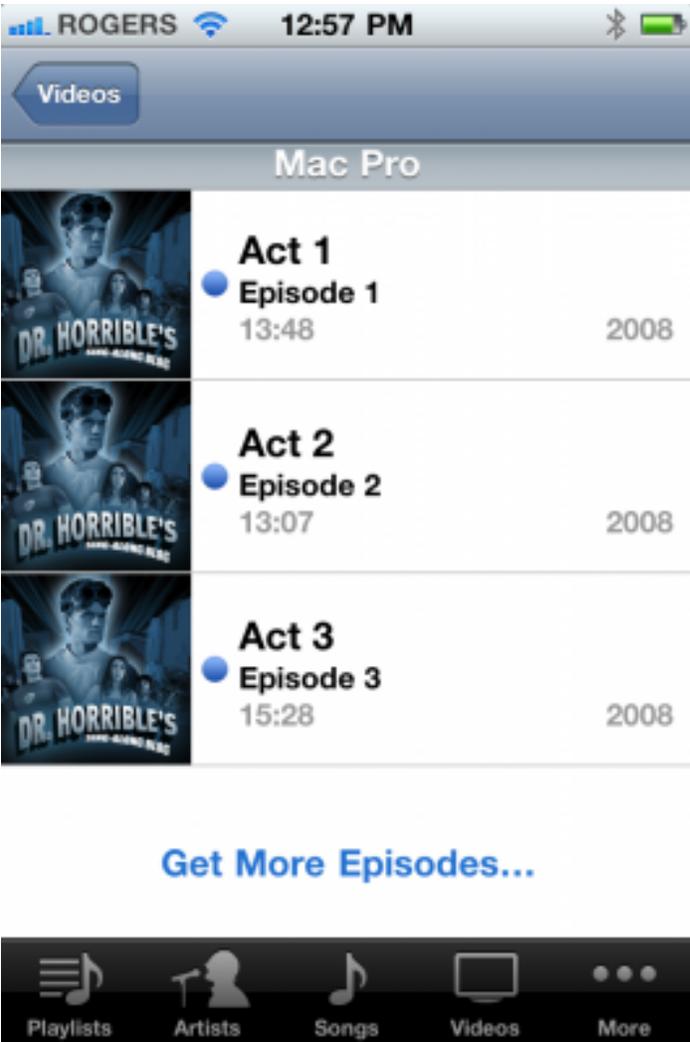


You'll be taken "back" to the iPod app media list but you'll now be seeing your PC's library instead of your local device library (it can be a little confusing at first but the PC library name is written on top of the scroll list). Choose your music, TV, movies, or other media just as you would have previously, but it'll now stream from your PC over Wi-Fi.

# Playlists

Mac Pro

- Purchased >
- Genius >
- 90's Music >
- Classical Music >
- Music Videos >
- My Top Rated >
- Purchased >
- Recently Added >



To change back to your local device library, tap on More, tap on Sharing, and select your local device from the top of the list (you'll see a checkmark next to whichever library is currently the active one).



So it's a little complex and it can be confusing, but it works and for media you only want access to occasionally, it can save you a lot of occasional syncing

## Ping

Apple says you can also post and like songs on Ping directly from the Now Playing screen but I haven't seen the controls for it yet.

## Apple TV

Apple TV is also getting the iOS 4.3 treatment. Major new features include:

- AirPlay for App Store apps and compatible web video
- Dolby Digital 5.1 for Netflix
- New slideshow themes

- An improved keyboard
- MLB HD streaming for MLB.com subscribers
- NBA HD streaming for NBA league pass subscribers

MLB and NBA are built-in, just like Netflix.

## Pricing and compatibility

iOS 4.3 is available free of charge to all compatible iOS devices. Compatibility, however, is so far even more restricted that iOS 4 — namely iPhone 3G/iPod touch G2 do not have beta versions of iOS 4.3 to date.

- iPhone 4 (GSM), iPod touch 4 (2010): All features except display mirroring
- iPhone 4 (Verizon): No update announced.
- iPhone 3GS and iPod touch G3 (2009), iPad 1 (2010): No features requiring iPhone 4, iPod touch 4, or iPad2-type hardware (i.e. front facing camera)
- iPhone 3G and iPod touch G2 (2008): not compatible
- iPhone 2G and iPod touch G1 (2007): not compatible

## Conclusion

iOS 4.3 gives AirPlay some much-needed improvements, adds Home Sharing, begins to fix the horrible text-tones for iPhone, and provides the fantastic personal hotspot feature for iPhone 4. It's not a huge update but it's a good one.

If you were expecting more major updates, like notification SIRI-infused, OS-wide VoiceControl system, etc. etc. then you'll need to wait for a more major update like [iOS 5](#). (Which should be previewed this month or next.) For now you have a few more toys to play with in your iOS chest.

As always, If you noticed we missed anything, drop us a note in the comments

or send us an email and we'll update as needed.