



Inside Apple's once-secret wireless lab

08.16.10

Jason Snell, Macworld.com

After Friday morning's Apple press conference about the iPhone 4 and its antenna issues, Apple executives took a small group of journalists (11 all told, including myself) on a tour of the company's wireless-testing facilities. We were, the executives said, the first outsiders allowed into the area, a spot off-limits to most Apple employees. Even our escorts from Apple's PR department said they hadn't been in there before.

On a sunny and hot day in Silicon Valley, we were led through the center of Apple's campus and then across the street to the building housing the testing area. Behind a series of heavy security doors, we met Ruben Caballero, a senior Apple engineer and wireless expert. (Caballero, you might remember, was the subject of a Bloomberg report on Thursday suggesting that he had warned Steve Jobs about antenna problems in advance of the iPhone 4's release — a report referred to by Steve Jobs on Friday as "total bullshit.") The point of the tour was clear: to show that Apple takes the testing of wireless issues very seriously, and that suggestions that the company was simply sleeping on the job when it came time to test the iPhone 4 are misguided.

Despite being a guy who obviously spends most of his time behind closed doors working on fiendishly complex radio engineering problems, Caballero proved to be an excellent tour guide, answering reporters' questions with enthusiasm. As he welcomed us into his lair, Caballero pointed out that many of the workbenches around us were draped with black fabric. "This is what we call a black lab," he said, meaning that they're testing secret stuff. "We have to cover

all the benches when anyone comes in, even people from within Apple."

"The existence of this lab used to be secret," an Apple PR representative pointed out. "Now it's not." Not since Steve Jobs showed detailed pictures of it to members of the press a few hours earlier, anyway. Apple has since also posted a page about its testing methods, including a video overview.

Apple's wireless lab has 16 different anechoic chambers—think of them as bank vaults, padded with foam shaped into pointy cones to stop all reflections, designed to create completely radio-neutral environments—at a cost Caballero estimated at \$1.2 million per chamber.

"It was very simple in the old days," Caballero said, "when you had one antenna and one frequency." He pointed out that his first radio project involved a bunch of antennae on a football field. But these days, he pointed out, phones have in-built antennae, four GSM frequency bands, four UMTS frequency bands, they're sending and receiving massive amounts of data, there's Wi-Fi and Bluetooth and GPS as well—it's complicated.



Inside the Stargate chamber.

We toured several different chambers, and they're pretty eerie places. Caballero would occasionally step into a chamber, leading in a few reporters (they're generally far too small to fit more than a handful of people inside), and the moment he entered the chamber his voice became nearly inaudible, due to most of

Continued on page 2

iPad at work on dirty jobs: Five lessons learned

Posted on 08.01.10 by Tom Kaneshige, CIO

Editor's Note: The following article is reprinted from CIO.com. Visit CIO's [Macs in the Enterprise](#) page.



Nearly a dozen iPads have been put to work on rooftops and in basements at dirty construction sites, from San Francisco to Las Vegas. Joseph Daniels, president of D7 Consulting, a quality-assurance consulting firm, deployed them only a couple of weeks ago—and has already learned a lot.

D7 Consulting wanted to change the way its field employees made out reports, discarding pen and paper for electronic data entry that taps into a cloud service. And so D7 Consulting entered and won a promotional contest put on by Box.net, a hosted content management services provider, for free 3G iPads and service.

Earlier this summer, D7 Consulting employees tore the wrappings from the shiny iPads, signaling the beginning of a two-phase rollout. D7 Consulting is now in the middle of the process, with half of the 20 iPads in the field today and the other half set to go there soon.

Here's what D7 Consulting has learned so far:

iPad greases the change management wheels

Many of D7 Consulting's field employees, called quality assurance observers, are veterans of the trade. Suddenly, they were being told to change the way they create reports, using a new-fangled cloud service, Box.net. Hoping to stem resistance, the straight-talking Daniels delivered a hard line to his 20 or so field employees: "Get on board or get out."

Clearly, D7 Consulting's size gives it the flexibility to adopt cutting-edge technology and mandate employees use it. On

Continued on page 2

his sound being absorbed by the foam on the chamber's walls. Even the handles of the heavy doors are made of Fiberglas, and the doors are lined with copper to ensure the entire room is a Faraday cage.

The point of the chambers is to map the electromagnetic characteristics of a device by eliminating all other electromagnetic signals. The device to be tested gets placed in a chamber, and when the door is closed, it's cut off from the rest of the world. (There are antennae and sensors in the chamber, but they're all routed back outside the chamber to monitoring equipment on the outside.) Devices can be tested all by themselves, with just their radios turned on, and it can take as much as 25 hours to test a product through all frequencies. In a later stage, a device might be tested with more equipment active—monitors, other radios, and the like—in order to measure how those items affect the electromagnetic characteristics of the device.

Devices aren't just tested while seated on a rotating block of dielectrically neutral styrofoam. In addition, the labs run tests on hardware while it's being held by actual people. We're all mostly made of water, and that means we tend to absorb a lot of electromagnetic waves—in other words, we make a better door than a window. In one test chamber, an Apple employee sat on a rotating blue chair while holding an iPhone and resting his arms on a block of styrofoam. Surrounding him was a huge arcing instrument made by Satimo but affectionally called "the Stargate" by Apple engineers. This set-up allows Apple to measure the effects of a human body interacting with radio transmission and reception.

Then there are the "phantom heads"—and hands, and feet. These are proxies for human beings, used when living humans aren't necessary or early on in development when it's probably wiser not to expose humans to experimental radio radiation. A phantom head—the one we met was called "Sam"—is a mannequin-like head full of fluid, designed to match the dielectric characteristics of a human head, gray matter and fluid and all. Apple engineers can tape an iPhone to the side of a phantom head and then, inside an anechoic chamber, see what the results are.

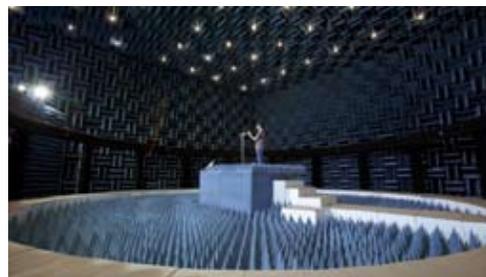
Likewise, a phantom hand can be used

to test what happens when a hand is holding a phone—we made a few jokes about if the phantom hand's fingers touched the wrong spot on the iPhone 4, but didn't really get any laughter from the Apple execs in attendance. And there's even a phantom foot, custom ordered by Apple so that the company could run radio tests on the Nike+ transceiver that goes in the bottom of a running shoe.

Caballero pointed out that testing products in the wireless labs at Apple isn't a linear process, from baseline tests to tests with phantom heads to test with real people. Instead, the testing ping-pongs back and forth, and can happen in parallel. Every time some component changes during the development of a product, Apple's engineers will re-test the product to see what those changes have done to its electromagnetic characteristics. The labs also will sometimes test products that have been returned by users as defective, in order to discover if there might be a production problem or other unanticipated error that is causing a defect.

Our last two stops on our tour were a CT scanner, purchased by Apple so that products can be scanned to search for defects, since actually opening up a product could change its electromagnetic characteristics and therefore make it impossible to get good test data. There's also a field-validation van, which can drive around and test radio reception in the real-world, equipped either with real humans or (to the terror of drivers who might spy one through a darkened window) phantom heads.

As we were escorted out of the building, Apple Senior Vice President Bob Mansfield summed up why Apple had gone to the trouble to take us into their labs. "This should give you an idea of the time, energy, and resources we put into design," he said. "There's no other way we could figure out how to make great products. There's real engineering going on here. If product design was simple, we wouldn't need" 16 anechoic chambers and a CT scanner.



the upside, the company's employees are pretty high on the tech-savvy scale.

Nevertheless, CIOs at small and large companies face similar problems in major technology rollouts. There's even a benign name for it: change management. Truth is, change management can be the biggest factor in the success or failure of an implementation at any size company.

The iPad can help grease the change-management wheels, Daniels says. The iPad is one of the most sought-after consumer electronic devices on the market today. When iPads arrived at D7 Consulting's southern California headquarters, people didn't look at the devices with fear or skepticism, rather they eagerly looked forward to using them.

"Almost everyone has used an iPhone or touch device, so getting them up to speed on that device was really a non-issue," says Terrell Woods, design and reprographics lead at D7 Consulting, as well as the in-house tech guru charged with iPad and Box.net training. (As a small firm, D7 Consulting outsources much of its IT needs).

Woods says it takes about three hours for an employee to learn how to organize and transfer files, take notes and input voice recordings on drawings and documents, find resource material, and collaborate on reports in real-time with reviewers miles away.

One best practice:

Rolling out iPads is quite an undertaking (more about that later) so you'll have to do it in phases, Woods says. D7 Consulting's tech-savvy bunch made adoption easier, but if your staff is not known for having many early adopters, Woods advises you start with your most excited employees who will have the best chance of success, thus setting a precedent for the next group.

iPad cuts customer response times

For years, quality assurance observers came to a construction site armed with a couple of pens, paper pads, a camera, a cell phone, a voice recorder, and a binder chock full of reference materials, forms, pictures and drawings. They'd make observations at a site and then find a computer to

A \$35 computer? India wants

to make it so,



and even cheaper!

July 23, 2010

Erika Kinetz, Associated Press

MUMBAI, INDIA—It looks like an iPad, only it's a fraction of the cost: India has unveiled the prototype of a \$35 basic touchscreen tablet aimed at students, which it hopes to bring into production by 2011.

If the government can find a manufacturer, the Linux operating system-based computer would be the latest in a string of "world's cheapest" innovations to hit the market out of India, which is home to the \$2,100 compact Nano car, the \$16 water purifier and the \$2,000 open-heart surgery.

The tablet can be used for functions like word processing, web browsing and video-conferencing. It has a solar power option too - important for India's energy-starved hinterlands - though that add-on costs extra.

"This is our answer to MIT's \$100 computer," Human Resource Development Minister Kapil Sibal told the Economic Times when he unveiled the device Thursday.

In 2005, Nicholas Negroponte — co-founder of the Massachusetts Institute of Technology's Media Lab — unveiled a prototype of a \$100 laptop for children in the developing world. India rejected that as too expensive and embarked on a multiyear effort to develop a cheaper option of its own.

Negroponte's laptop ended up costing about \$200, but in May his non-profit association, One Laptop Per Child, said it plans to launch a basic tablet computer for \$99.

Sibal turned to students and professors at India's elite technical universities to develop the \$35 tablet after receiving a "lukewarm" response from private sector players. He hopes to get the cost down to \$10 eventually.

Mamta Varma, a ministry spokeswoman, said falling hardware costs and intelligent design make the price tag plausible.

The tablet doesn't have a hard disk, but instead uses a memory card, much like a mobile phone. The tablet design cuts hardware costs, and the use of open-source software also adds to savings, she said.

Varma said several global manufacturers, including at least one from Taiwan, have shown interest in making the low-cost device, but no manufacturing or distribution deals have been finalized. She declined to name any of the companies.

India plans to subsidize the cost of the tablet for its students, bringing the purchase price down to around \$20.

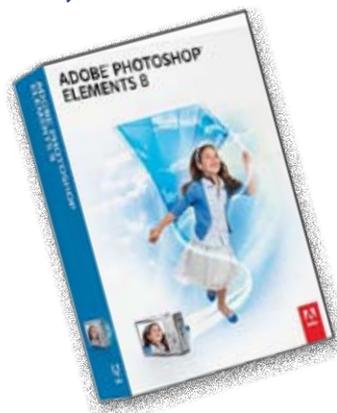
The project is part of an ambitious education technology initiative, which also aims to bring broadband connectivity to India's 25,000 colleges and 504 universities and make study materials available online.

So far nearly 8,500 colleges have been connected and nearly 500 web and video-based courses have been uploaded on YouTube and other portals, the ministry said.



For a chance to win **Photoshop Elements (v. 8)** during our presentation on **October 21st**. One copy will be given away to a lucky ticket holder following the demonstration.

It could be you!



dirty jobs:

Continued from page 2

3

type out a report and email it to a reviewer back at headquarters in Southern California.

After a series of follow-up work—that is, back and forth banter between the observer, reviewer and client—a final report would be e-mailed out to the client. The entire process took four or five days, says Woods.

D7 Consulting looked into alternatives to speed up this process. Field employees couldn't lug around a laptop because they're constantly moving around, taking notes and shooting pictures. iPhones? "Two words: stubby fingers," says Daniels. "There just is not enough [screen] space. Use of the phone while you're working on it also became problematic."

When the iPad hit Apple stores in April, Daniels bought one to test it out—and liked what he saw. Woods wrote up the entry for Box.net's promotional contest and won. "With the iPad, you can make changes on the fly, provide a summary to the client right then and there," Woods says, "and now we've gone from onsite to uploading [the report] to the client in 24 hours."

iPads can take the dirt but can overheat

Dirty construction sites are a far cry from comfortable cubicles. How did the iPad hold up amidst the grime? Not bad, as it turns out.

Granted, it's only been a couple of weeks, but D7 Consulting says it hasn't had any problems with breakage (although iPads are sheathed in protective cases). An iPad did overheat on a job near Las Vegas in the blistering desert heat. After cooling down for 25 minutes, the iPad began working again without any further problems, says Daniels.

Some QAOs requested carrying bags that make it easy to whip out the iPad. One person even considered a neck strap just for the iPad, turning the iPad into a hanging clip board always at the ready. Daniels looked at many carrying bags and finally settled on one that fits comfortably with a shoulder strap and has a zipper pocket that hides the iPad from view when stowed.

Daniels is a big fan of anything that keeps the iPad within hand's reach of a QAO. "My largest concern was that one of

Continued on page 6

Selling your old Mac?

Prepare it first

07.20.10

by Topher Kessler, MacFixit

If you sell a computer as-is without formatting it or otherwise removing your data, not only can the buyer get your personal files, but with the proper know-how that user can uncover all the passwords stored on your keychain and be able to access your online services.

I have seen numerous instances where people have purchased systems off eBay and started them up to find the seller's data still on the drive with automatic login enabled so anyone can access it. I have also helped people who have bought used computers that are having problems with their system, to find a secondary user account on the machine (the old owner's) that the current owner was unaware of.

Without going into the obvious reasons why distributing your personal data to strangers is a bad idea, once your old Mac has served its purpose and you are ready to sell it, be sure you properly prepare it for sale. Here are some tips for preparing your system so you can rest easy that your old system does not contain anything confidential.

1. Back up the system

Be sure to back up your system before you start preparing it for sale, since the next steps involve erasing your data. I recommend you do this with Time Machine or a cloning utility such as Carbon Copy Cloner or SuperDuper (there are others as well). You can use this backup as a source for migrating to your new system, if needed.

2. Disable services

This is a step that even seasoned computer geeks will often overlook. Many online services require you to authorize the systems you use with their service (Apple's iTunes service does this, and there may be others as well). Go through your system and de-authorize it from within the program, since even if you format the computer and remove these programs, the online service will still assume you have one system authorized. There are ways around this, but they're cumbersome and require



going to each service and resetting the authorized systems (at times you may need to call them).

Not only might there be software-based authorization services, but others may identify your system through hardware. One example is MAC filtering in routers, where only that system will be granted network access. During the transition to the new system, be aware of any hardware-based filtering or authentication you use and disable or change it accordingly.

3. Reset hardware

This is perhaps unnecessary, but while we're clearing out all user data and setting the system up from scratch we might as well clear any user-modifiable hardware settings. You can do this immediately before erasing the drive and optionally reinstalling the OS, so the system will be as fresh as possible upon first booting into the newly installed OS.

To do this, at this point insert your OS X installation DVD (preferably the one you are going to include with the system when you sell it). Then reset the SMC on the system according to the instructions in this Knowledgebase Article (support.apple.com/kb/ht3964), and then power up the system and immediately clear the PRAM by restarting the system and holding down the Option-Command-P-R keys all at once, allowing the system to reset several times before releasing the keys.

When you release the keys, so that the system boots normally, immediately hold down the "C" key so the system boots to the OS installation DVD instead of the boot drive.

4. Partition and format the drive

Many people might think quickly erasing the drive and running an OS reinstall will be enough to secure their data, but without performing a full format that at the

very least zeros out the data on disk, you chance leaving data that can be recovered by numerous file recovery programs.

4

The hard-disk device in Disk Utility is above the volume name. The "Partition" tab will only be available when you click the device.

Once you are booted to the OS X installation DVD, choose your language, and then open Disk Utility from the "Utilities" menu. From here, both repartition and format the drive to set the drive up completely from scratch.

Select the boot drive device from the list to the left (the item right above Macintosh HD) and choose the "Partition" tab. Select "1 Partition" from the Volume Scheme menu, and choose GUID as the partition scheme upon clicking the Options button. This will ensure the disk will be most compatible with your Mac (if you are using an older PowerPC Mac, choose the "Apple Partition Map" option).

Once the partition is ready click "Apply" to set up the new volume scheme. You do not need to set a volume format at this time but can if you want.

Now go to the "Erase" tab and choose the format to use (Mac OS Extended should be fine). In the "Security Options" button at least choose the option to zero out all data on the disk, but for added (and perhaps redundantly unnecessary) security you can choose a 7-pass or 35-pass erase. These ensure the residual data on the drive can never be recovered, but will take a long time to complete (hours if not days, depending on the volume size and erase scheme used).

Repeat this process for all drives in the system.

5. Reinstall the OS

Once the volume is formatted so no data can be retrieved, you might consider including OS X for the new owner, but you do not have to. I believe you are required to include the gray OS installation and recovery discs with the system upon selling it, but you do not need to spend the time installing the OS.

If you do not plan on reinstalling the OS, after formatting the drives in the system just shut the system down, and pack in the OS X installation DVD with the computer when you ship it.

If you plan on installing OS X, one option I recommend is to set it up so the new user will see the same Welcome screen that displays whenever a new computer is purchased. To do this, proceed with the installation of OS X and follow the on-screen instructions up to the point where it asks you to enter a username and password to create your first account. At this screen press Command-Q to quit the installer and shut down the system. The next time the system is powered on it will display the same welcome message and be ready to install OS X.



Safari still crashing after update?

07.28, 2010
by Topher Kessler, MacFixit



A number of people have complained about Safari often crashing on their systems. While Apple's latest Safari update (5.0.1) is supposed to address some stability issues with the program, a number of people are complaining of crashes. Here are some things you can try to hopefully clear these problems.

General maintenance

There are some general maintenance routines you can run both on Safari and on the system to help clear problems. In Safari, try clearing cookies and caches, among other items in the "Reset Safari" option in the Safari menu. You can also run general maintenance on your system to clear user account and system caches that could be contributing to the problem.

Adobe Flash

Since installing Safari 5, I have had numerous crashes that were Flash-related. You can see this when Flash and Adobe are referenced among the functions being run in the crashed thread in the crash report.

Try removing Flash from the /Macintosh HD/Library/Internet Plug-Ins/ folder to see if that helps. After that, if you need Flash, you can install the latest version from Adobe's Web site.

You may also benefit from using a Flash-blocking utility such as Click2Flash that will disable Flash components on Web pages unless you specifically enable them.

In addition to flash, if you have other plug-ins that you've installed, you might try uninstalling or updating them. Be sure they have been tested with your version of Safari before ruling them out as a cause for the crashes, and also be sure to manually troubleshoot them (remove them one-by-one and relaunch and test Safari each time you do this).

Input managers

Third-party input managers--Soft, Inquisitor, PithHelmet, SafariStand, and so on--can also cause crashes in Safari. Try either updating them or removing them from the system. They should be located in one of the following folders, but you should use an uninstaller if one is available.

/username/Library/Input Managers
/Macintosh HD/Library/Input Managers
/Macintosh HD/Library/Application Support

A commonly used input manager is SIMBL, which may load numerous plug-ins that may also be contributing to the crashes, so be sure to test them as well. We recently wrote an article on managing SIMBL with Safari 5.0.

Clear preferences

In addition to using Safari's "Reset" feature, you may be having problems a corrupt Safari's preferences file. Locate the file "com.apple.Safari.plist" in the /username/Library/Preferences/ folder and remove it. When you relaunch Safari, it will recreate the file. (Keep in mind custom settings in Safari's preferences will be reverted to default after doing this).



Tip: No wireless router? Use your Mac

08.03.10
by Topher Kessler, MacFixit

These days, wireless routers are quite common, and most retail options out there have some wireless capability; however, there still may be times when you are without a router and need to set up a wireless network for multiple computers, iPhones and iPads, or other devices that support Wi-Fi connectivity.

To do this, all you need is a Mac with an AirPort card in it. Connect it to an available network with the Ethernet connection, and then set up a shared wireless connection with the following procedure:



The Internet Sharing options are only editable when Internet Sharing is disabled

1. Go to the "Network" system preferences.
2. Select the "AirPort" connection (add it to the list if it is not there), and ensure it is set to "On."
3. Go to the "Sharing" system preferences.
4. Select "Internet Sharing" but do not turn it on yet.
5. From the drop-down menu select "Built-In Ethernet" (or whatever port is the source of the network to the computer).
6. Check "AirPort" and other ports you may use (Bluetooth, FireWire, etc.).
7. Click "AirPort Options..." to set a network name, and WEP password (use 128-bit over 40-bit encryption if you can), and then click "OK."
8. With the AirPort options now set, check the "Internet Sharing" box and confirm by clicking the "Start" button in the warning window.

Now you have an active wireless network; however, though it should work just fine, there are some drawbacks to using this feature.

- **Shorter range:** Keep in mind the signal will not be as powerful as most standalone routers. Nevertheless, it should have a decent enough range to be discoverable within a few rooms of the host computer.
- **Limited security:** Another drawback to this is it only has WEP as the password security options, which is not as secure as WPA or WPA2; however, it will be good enough to get you running until a more secure option can be set up.
- **Requires computer to be on:** Unlike routers that can use relatively minimal power, this setup will require the computer to be on at all times for the wireless network to function.



Apple Adds Touches to Its Mac Desktops

08.03.10

by Katherine Boehret, *The Wall Street Journal*

The Mossberg Solution



Last fall, I watched in awe as my friend's 1-year-old picked up an iPhone, swiped the screen with her pudgy pointer finger and scrolled through a list of emails. I had a similar reaction last month when my computer-challenged aunt discovered the joy of two-finger scrolling on a MacBook Pro's large, multi-touch trackpad. "Now this," she said without a trace of the frustrated tone she usually reserves for discussing technology, "is very cool."

Just what is it that makes gesture technology so very cool? For one thing, it's more satisfying and intimate to use your own fingers to control something on a screen rather than punching buttons or maneuvering a mouse to do so. And touch gestures are easy to remember because, more often than not, they work using intuitive movements you already know, like flicking a finger across a screen to page through an electronic book.

It's hard to find a consumer-technology company that doesn't use touch gestures in at least one of its products. Some Microsoft (MSFT) Windows PCs have touch screens, and certain Windows laptops have emulated at least some of the Mac's multi-touch trackpad features. But Apple Inc. (AAPL), in particular, has made a concerted effort to spread multi-touch gestures across all of its product categories from the iPod touch to the iPhone to the iPad to MacBook laptops with oversized touchpads that accept various gestures for controlling things on the screen.

The Magic Trackpad, which has a glass-top surface, is propped up on one end by a thin tube that holds two AA batteries.

Now, the Mac desktop can have a touch of fun, too. Apple's latest gadget, the **\$69 Magic Trackpad** (apple.com/magictackpad), is essentially a freestanding touchpad that brings multi-touch features to desktop Macs, which lack touch screens. Its entire surface also functions as a button for selecting and it measures about the size of a mousepad. The Trackpad connects wirelessly via Bluetooth to any Apple desktop PC running Snow Leopard, the latest iteration of the company's operating system. It works in addition to, or instead of a mouse.

I've been using the Magic Trackpad on two different iMacs, one that's about five years old and another that's less than a year old. In both cases, I found its glass surface to be cool and smooth, and it worked well as a solution for small work surfaces where a mouse can't move around much. I was also glad to finally bring the same touch gestures that I use on my MacBook Pro laptop to these desktops. For instance, I placed four fingers down on the Trackpad and pushed up to hide all opened programs and reveal

my computer desktop. Then, by swiping four fingers down, I showed all opened windows, a feature Apple calls Exposé. When photos are opened, moving two fingers apart or together will zoom in or out on an image. Turning two fingers clockwise or counterclockwise on the Trackpad rotates the image.

But \$69 is a lot to spend for the added pleasure of touch gestures, especially considering that the mouse already does some of these things—though not as cleverly—and keyboard shortcuts do others.

Installing the Magic Trackpad is a pain, as far as Apple standards go. First, users must be sure they've upgraded to the latest version of the Snow Leopard operating system—the most recent version is 10.6.4. Second, people must also go to <http://support.apple.com/downloads> to download a driver update for the Trackpad, a step that can be easily overlooked by users who are anxious to get going with their new gadget.

The Magic Trackpad weighs about 5 ounces and measures a bit more than 5 inches by 5 inches. It's slightly tilted, propped up on one end by a thin tube that holds two included AA batteries. If you happen to also own the \$69 Apple Wireless Keyboard, the Trackpad design is in line with that of the Magic Keyboard so when the two devices sit beside each other, it's easy to move from the keyboard to the Trackpad and back.

A button on one end of the Trackpad's battery tube turns the device on, and a blinking light indicates it's ready to pair via Bluetooth with your Mac desktop, assuming you've downloaded the two necessary software updates.



Apple's \$69 Magic Trackpad brings multi-touch gestures to the Mac desktop and connects wirelessly via Bluetooth.

If you don't pair the device within three minutes, the Magic Trackpad turns off to conserve battery. An Apple representative estimates that the Magic Trackpad's batteries will last about four and a half months with alkaline batteries.

My Magic Trackpad easily paired with my iMacs over a Bluetooth connection. After installing, a screen displayed settings and animated tutorials on how to use the touchpad. Settings included options like telling the Trackpad to enable right-clicking with a two-finger tap on the touchpad or just by touching its bottom right corner. All other gestures, which will be familiar to MacBook owners but not everyone else, are demonstrated in helpful animated videos.

If you can afford it, or if touch gestures simply make you a more productive computer user, the Magic Trackpad is a real asset. It can co-exist with a mouse or totally replace it, if you want. After just minutes of use, I stopped using my mouse altogether.

Edited by Walter S. Mossberg



of our guys would put the iPad down somewhere and someone would swipe it," he says. (It's a real concern given reports of thieves robbing people of iPhones at gunpoint.)

Interestingly, D7 Consulting hasn't run into the kinds of problems often cited about the iPad, at least not yet. Clients aren't concerned about the iPad's enterprise data security shortcomings even though D7 Consulting has non-disclosure agreements with them. Well-reported lackluster AT&T coverage in the San Francisco Bay Area where D7 Consulting has a big client also hasn't been an issue, Daniels says.

No iPad enterprise management tools yet

The biggest problems come from Apple itself, says Daniels. Apple has notoriously shunned the enterprise in favor of the consumer for years, and this hasn't changed with the iPad. D7 Consulting deployed only a handful of iPads, yet this was still a major undertaking, he says.

Simply put, there are no good enterprise management tools for deployment, Woods says. Every iPad has to be set up individually, as opposed to putting iPads into a group and pushing a button for the same configuration. "The operating system on the iPad does not allow you to configure your iPad as an enterprise device," Woods says. "That's where it's a little tricky."

Another area where Apple falls flat: supplying enough product. When consumers have to wait in line, they get giddy; when companies have to wait, they lose money.

For instance, QAOs take a lot of photos with their digital cameras while on the job and need to download them to the iPad in order to send them to reviewers. Apple does offer an iPad camera connection kit that fits the bill. The only problem is the kit is often out of stock.

"Nobody can get them anywhere," says Daniels. "Once we get over that hump, we'll be in really good shape."

Customers like the iPad coolness factor On the other hand, Apple delivers a really cool side benefit.

Consider this scenario: A client will sometimes ask a QAO a difficult question, putting the QAO on the spot. Instead of saying, "Can I get back to you with the

answer tomorrow?" the QAO can fire up the iPad, shoots out an email (with accompanying files) to a reviewer, and the reviewer can respond with the answer.

In essence, the iPad makes D7 Consulting look like a smart firm that taps technology for efficiency, accuracy and classy presentation of reports—all in front of the client at the site. Meanwhile, D7 Consulting's competitors still carry binders full of paper.

"We want to show people what we're doing and how we're doing it," Daniels says. "Hopefully, that will lead to more work and more interest in our company."

That might already be happening. Impressed with D7 Consulting's iPad-toting QAOs, a new client recently inquired about D7 Consulting's services for "more work across the country," Daniels says.

Manage apps from the



08.04.10

Contributed by: nathanator1, Mac OS X Hints

Press **Command-Tab** to bring up OS X's application switcher. Keep holding down the Command key. Press Tab to cycle forward through open applications, the **tilde (~)** key (just above Tab) to cycle backward, **the arrow keys** to move back and forth, or **the mouse** to point and choose an app. When you release the Command key, whichever application's icon was selected is made active.

However, without leaving the application switcher, you can quit or hide/unhide applications. Select the icon of the program you want to quit or hide, and press 'Q' to quit and 'H' to hide. Select the program you want to go to (for me, usually just the one I started in), and release the command key. This method also works for unhiding apps, just press 'H' again.

This is a great way to quit and hide applications without changing focus, and you can do it all with the keyboard. I've found it much faster than using the dock or switching, quitting, switching back.

Also, (I believe this has been noted here before) hold down option before dismissing the switcher and the selected application will come to focus and open the most recently minimized window, or, if there are no minimized windows, make a new one.

Opt out of Apple's iAds data collection for iOS 4 devices

07.09.10

Joe Aimonetti, MacFixit

Apple has started distributing its iAds advertising content in participating App Store Apps using data that has been collected from iTunes accounts and analyzed to customize your consumption experience. If you no longer want Apple to collect your data, opting out is simple.

Apple has partnered with several big-name brands to provide content-based, personalized advertising solutions to your iOS-enabled devices. Apple "uses cookies and other technologies in mobile advertising services to control the number of times you see a given ad, deliver ads that relate to your interests, and measure the effectiveness of ad campaigns."

While opting out of the iAd data collection program will stop Apple from collecting and analyzing data from your iTunes account habits, Apps that take advantage of the iAd program will continue to show iAds—but they may be less relevant to you. iAd advertisements will still use data from individual Apps to determine which ads are shown, though your personal data will no longer be used.

Keep in mind that you will need to have iOS 4 installed to opt out of the iAd data collection and you must opt out from each iOS device you own. Opting out also does not affect other Internet-based advertising that may be incorporated into Apps.

To opt out, navigate to the following link on your iOS 4 device: <https://oo.apple.com/>

If you receive an error message, "Unsuccessful Opt Out," you may need to wait a few hours and try again.



The **Tarmac Vaporware Gazette**, named in honor of past president Jerry Rowe, is published each month by Smitty's Printshop, a non-existent shop specializing in things of little or no importance to the world at large. Send your comments, good or bad, to smittysprintshop@mac.com.

Tarmac "Control Panel"

Tom Davis, president
Ray Kallman, vice-president
Jan Cook, treasurer
Brian Fountain, user group ambassador
Frank Smith, newsletter editor

other panel members

Eleanor Cavin
Gary Gobel
Nancy Goldstein
Cindy Huffman
Lynn McAlpine

Tarmac By-laws

If you show up you're a member
If you speak up you're an officer
If you stand up you're the president

website: homepage.mac.com/tidewatermug
e-mail: tidewatermug@mac.com