

# ITEON CONSULTING, LLC

## Newsletter Q2 - 2008

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### Fly Clear

If you fly a lot, Fly Clear ([www.flyclear.com](http://www.flyclear.com)) will save you a lot of time. You fill out the form online and pay the fee (\$128); you go to any airport in the program to verify ID and get fingerprints/iris photo taken; three weeks later, you get a card, and the ability to jump to a shorter, faster line.

It is already running at all three Bay Area airports, plus JFK, Dulles, National, Newark, and about a dozen smaller ones (not O'Hare, yet, though). Once you've got it, you'll find yourself dreading going to airports that don't have it in place.

### Product Watch

#### *Palm*

AT&T now has the Palm Centro. I'm sure anyone who has talked to Steve already knows how nice the Centro is (as good as the latest Treo, but much smaller). The AT&T version doesn't yet come unlocked (although you can buy an unlocked version from a few sites in the UK, if you don't mind paying an extra \$300), but the AT&T phone works well in Europe. The only issue that we've seen was just switching between local carriers--voice was fine, but data once required a me to "call my Good Administrator." As always, there is an initial fight with AT&T--even if you've got International roaming enabled, they never turn it on until you actually call to complain.

#### *Microsoft*

While everyone is watching who will be buying Yahoo now that Microsoft has given up, we all have some closer-to-home things to think about regarding Microsoft.

It appears that over 90% of corporations have decided to "skip" Vista. Aside from the collective wisdom of many very good IT departments, there is another significance to this: Microsoft will not be pulling the plug on XP anytime soon. Vista (as the Apple commercials have demonstrated) has been a train-wreck in many ways. Ironically, it has been a huge-money maker for Microsoft as many consumers who might not have otherwise upgraded their old computers have bought expensive versions of Vista, only to have go back and purchase another retail copy of XP a few weeks later.

For Office 2007, Iteon is still recommending NOT upgrading. Office 2003 (especially Outlook 2003) is more stable. Also, the "ribbon" that replaces the menu system has many more detractors than evangelists.

#### *Apple*

Everyone wants the iPhone, but is it good? As a gadget the iPhone is a fun device. The 8GB version (\$399) holds a lot of music and even a few movies. Some of the features are really neat (like the gyro sensing what direction you have turned it in), and it is an Apple product--it looks cool. It is a hit as a personal cell phone/device.

However, there've been a few features missing from it that have prevented most business users from using it. One is that there has been no sync'ing with Exchange. Second, the security that it uses is especially weak in many ways. Finally, it will not use the faster AT&T network (called EDGE). Supposedly new firmware due in June will support ActiveSync, WPA2, and a variety of other important security features. While a beta version has recently been released, it might be wise to let others test these features--it took quite a while for RIM and Good to get their "push" and security working.

Rumors about the iPhone using EDGE are quite varied and sources are weak. While it is likely that Apple will produce an iPhone that uses the faster EDGE network, whether it happens in June or not is a question that we likely won't know until the actual release. The most current rumor, for those following, is that the EDGE iPhone will hit Austria in June, and it will be available for less (\$199, likely).

#### *Dell*

Right now is a good time to make a Dell purchase. Dell was very hard hit by lack of corporate sales over the past 6-8 months--many companies have avoided making large hardware purchases because they've been waiting to see what would happen with Vista.

To try to get back corporate sales, Dell has reduced prices significantly on most of their lines. Prices for servers, laptops, desktops, and even software have fallen 15-60% over the past 3-4 weeks. Prices will probably stay low for the next 2-4 weeks--but try to watch [dell.com](http://dell.com) and time purchases to save that extra 10% or get free shipping.

While Iteon can't get better prices than anyone else on smaller purchases, typically we can save some money on purchases over \$5k, though our Dell rep. Let us know, and we'll let you know whether it makes more sense to get it online or through us.

### Blu-Ray

For those of you who've been waiting patiently on the sidelines in the Blu-Ray vs. HD-DVD war, the battle has been fought. Blu-Ray came out on top in February, with all the major HD-DVD manufacturers capitulating within a

period of weeks. So, shouldn't we all be going out to buy Blu-Ray players? Not necessarily.

First, watching any media is still limited by the TV. Be it LCD, Plasma, or tube-TV, our viewing experience will only be as good as the weakest link. If you've don't have a big 1080p or 1080i screen (the latest resolution standards), a Blu-Ray player may not make much difference.

Second, quality Blu-Ray players are still \$400-\$600. Compared to a regular high-end DVD player (with good upscaling—not all DVD players are equal) running less than \$100, \$400+ still seems like a lot of money.

Finally, stock of Blu-Ray DVD titles is slim. Again, this will be a chicken and egg thing--when there is demand, movies will start coming in Blu-Ray.

If you aren't a hard-core early adopter, it may be worth waiting for Blu-Ray prices to drop and more Blu-Ray titles to start coming out. If you are looking for an interim solution, Sony has a great DVD Player (DVP-NS77HS) has both great upscaling and HDMI for less than \$100.

## Storage

A Terabyte (TB) used to be a lot. It isn't anymore. Prices have dropped on 1TB drives so much that a 1TB drive now costs only marginally more than an 80GB drive. Some 1TB SATA drives have dipped below the \$200 mark.

### SAS

Did anyone notice how I stuck SATA into the last sentence? SATA is the main technology being used with drives right now, but there is much faster technology called SAS.

SATA drives spin at roughly 7,200 RPM (faster spin = faster drive). The new SAS drives spin at 15,000 RPM, meaning that the drives are roughly twice as fast in most real world situations. The one downside is that 1 TB of SAS drive capacity (with controller) costs well over \$2,000—more than 10x the cost of a SATA 1TB drive. Double the performance, but 10x the cost.

For most computers that wouldn't be worth it, but for some higher-end servers with a lot of disk use (like a busy Exchange server), it is. Because of advances in processing, drops in the cost of RAM, and overall improvements in technology, the hard drive is now the slowest component by far and improving its performance can have a very large impact on overall performance. SAS is a combination of SATA controllers which are cheaper and simpler, with SCSI disk architecture that is more reliable and spins faster. However, SAS is limited in size as SCSI was--300GB is the largest made right now, the main detail that drives the price so high.

### Solid State

For those with very deep pockets and really nice laptops, there is a new technology out there: solid state hard drives. The Mac Air has a 64GB solid state drive (\$4,000+ with this

option). There are other manufacturers advertising solid state, but usually the only models with them fall into the ultra-lite category (mini-laptops with mini-keyboards and 16GB solid state drives). There are a couple of vendors with 64GB and 128GB replacement hard drives, but they are quite expensive.

There are some huge advantages to solid state hard drives: they can be significantly lighter as there are no moving parts; they are more durable and produce far less heat; they use far less battery than a regular laptop hard drive, meaning that the newer laptops may make a trans-Atlantic flight on one battery.

Right now, 64GB drives run ~\$1,200. Hard-to-find 128GB drives go for north of \$4,000. This is the same technology as Thumb or USB drives, and this is the future for storage.

### Cheap NAS

NAS means Network Attached Storage--simply hard drive space available as a drive letter (like the N: drive) over the network, rather than inside a server. LaCie (a solid company that has been around since 1989) is making a 3TB RAID storage unit that incorporates 4 x 750GB hard drives to yield 2.2 TB of usable RAID5 space. It has 2GigE (gigabit Ethernet) connections. While it isn't good for storing data that needs to be kept secure (it does not integrate with Windows security, so usually anyone who has access to it will have access to all folders), it can be use for archives, near-line backups, data-vaults, and other large data needs. It isn't the fastest drive you'll ever use (it is over Ethernet, uses RAID5 which is slower, and the drives are SATA).

The 3TB model costs about \$2,500. LaCie is keeping up as drive sizes increase, and also has smaller sized models as well. They are also keeping up by continuing to drop prices.

## Price Watch

Large SATA drives are cheap. RAM is cheap. Dells are cheap. Now is a good time to spend money on hardware. While RAM and SATA drive prices will continue to stay low, Dell prices will likely start rising in 2-4 weeks, and when they do they will likely rise dramatically. Also, if you buy from Dell, be patient. When they lower prices, demand causes fulfillment to slow significantly.

SAS prices are at the top of the cycle right now (new product). They will probably not fall for at least 4-7 months. Watch for new 600GB drives--when they arrive, 300GB drives will likely fall to much more reasonable levels.

## Iteon News

As always, thanks for your continued support. Things at Iteon are good. Some of you will likely be seeing our newest additions, Andrew Ibarra, Nick Takacs, and Andy Brown. I'm sure you'll like them as much as we do.