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Coming Soon: New & Improved Simplay Labs Website

We've been working on a major update to our website, which will be up and running by next week. The redesigned site will be broader in scope, featuring more information designed for manufacturers, installers, and retailers. It will also include easier access to tools, technologies, and training resources, while retaining important consumer-facing content such as the catalog of commercially available products that have been Simplay HD verified. Be sure to share your comments with us.

Come See Us at CEDIA Expo: Sept. 6-9, 2007

If you're planning on attending the CEDIA Expo in Denver this year, you're going to have a hard time not running into us on the show floor. That's because Simplay will be showcased in several leading CE manufacturer booths. These partners will be displaying a special presentation that demonstrates their support of the Simplay program and the significance of Simplay HD testing and verification. Additionally, Simplay representatives will make on-site, scheduled appearances in the booths on a rotating basis. We encourage you to visit these Simplay Labs partner booths during the show:

Audiovox Corporation (Booth 819)
Mitsubishi Electric (Booth 540)
Samsung Electric America (Booth 765).

Technology In-Depth with Dr. HD: DVR-Ready Set-Top Boxes

Digital Video Recorders have had a huge impact on the way we experience television, allowing us to watch what we want, when we want, in ways that just weren't practical back in the age of videotape. Ask anyone who uses a DVR and they'll tell you there's no going back. But this breakthrough technology is not entirely without its problems. First, that hard drive can fill up in no time, especially if you record a lot of HD programming. Even worse, the disk can crash, as disks are known to do, which potentially renders the television subscription service unusable until the entire DVR is replaced.

For anyone who's ever been frustrated by the limitations of a DVR's internal hard disk, there's an exciting new solution entering the market: the expandable DVR. Instead of relying solely on an internal drive, these next-generation set-top boxes allow multiple-drive configurations,

enabling users to expand their storage options with external disks. The new approach promises both more storage capacity and new backup options, so that deleting your favorite shows - either accidentally or on purpose - could soon become a thing of the past.

Of course, for cable and satellite providers, this is more than a lifestyle issue, it's a bottom-line concern. Swapping out a leased set-top box burns dollars and support hours, and a crashed disk is very frequently the culprit. If it can be avoided by making storage more flexible and more reliable, that's a big win for everyone.

Today, one vendor is offering a DVR-Ready solution: A cable receiver without a hard disk, which becomes a DVR when an external hard disk is attached. Future possibilities are even more intriguing: A solid-state DVR, which uses flash memory to store the most recent 30 minutes of content. A DVR such as this can be completely silent, use less power than a disk-based DVR, and last longer. Customers who purchase and attach an external hard disk can record television shows. Provided that the external drives correctly support power management, the system will use far less power and create less noise, because the hard disk spins only a few hours a day, when it is recording. By comparison, most of today's DVR hard disks read and write data 24 hours a day.

Depending on the manufacturer, DVRs may utilize either USB or eSATA to connect to an external disk, but it's the latter that's generating more buzz. eSATA, or External Serial Advanced Technology Attachment, is the latest and greatest iteration of the old ATA connection that's familiar to anyone who's ever peeked inside the case of a PC. But unlike that old ribbon cable connecting your drive to your motherboard, eSATA uses a much narrower cable, and can transmit reliably over longer distances - six feet instead of legacy ATA's stingy eighteen inches. It's hot-swappable, and its serial architecture means that it's also a lot faster, with speeds up to 3 gigabits per second, which is considerably faster than USB or FireWire.

The biggest reason why DVR designers choose eSATA over USB has to do with the design of the DVRs themselves. eSATA drives directly support ATA commands for reading and writing to storage. USB drives, on the other hand, require performance-robbing protocol translation software, which can be impossible to support on the already-busy 300 MHz processor of a typical DVR.

eSATA external drives are nothing new - there are models on the market from a number of manufacturers, including Western Digital, Seagate/Maxtor, and others. What's new is the notion of hooking one up to a DVR, and that is clearly a technology in its infancy. While certain set-top boxes may feature an eSATA port on the back, it's not necessarily supported or even enabled yet. While some drive manufacturers are promoting their products as compatible, this has to be viewed at this point as more of an experimental than an established technology.

Hard drives in a video recording and playback environment have much higher performance requirements than their PC counterparts: continuous and sustained reading and writing, simultaneous recording and playback of multiple programs, minimum latency delays, and so forth. For this reason, it is critical that external drives from different vendors meet key performance requirements for operating flawlessly. DVR vendors, service operators, and retailers are looking for ways to ensure compatibility between the DVR and external storage, to deliver a quality HD entertainment experience.

Stay tuned for updates on this exciting new product development.