



TO: HP PSG Business Technology Customers

SUBJECT: PSG Business Desktops, Business Notebooks, Retail-POS and Workstations will transition to Advanced Format Hard Disk Drive Technology in 4Q2011

May 21, 2011

New Hard Drive Technology Coming

Due to advancements in hard drive storage technologies, there is new hard drive technology coming in the industry. This hard drive technology; known as *Advanced Format* (AF), provides increased hard drive performance and reliability. This technology change will be implemented by all manufacturers; HP is not alone in this transition. For those of you not familiar with the coming HDD technology change, here is a brief summary:

- Current HDD technology uses 512 bytes per sector format (512n or 512 native drives)
- The new AF HDD technology uses 4096 bytes per sector format (4K physical format)
- AF technology uses 4K byte sector boundaries for physical data storage on the hard drive, but will continue to communicate logically to the system in 512 byte sectors. These 512 byte logical sectors are known as 512 byte emulation or 512e, and are necessary to maintain compatibility with current and legacy operating systems.
- AF HDDs are supported by Operating Systems from Vista SP1, Windows 7 and Windows 7 SP1
- Legacy OS versions such as XP require images to be aligned on 4K boundaries so the OS will be able to achieve optimal performance using AF HDDs.

Why is HP PSG telling me about this change?

HP PSG wants to make you aware of the coming change as many of our customers still utilize XP Pro as the standard in developing their software images. Following are items of importance to be aware of:

- Products that discontinue in 2011 will NOT ship from the factory with the new 4K drives
 - o EXCEPTION: the S Series notebooks are already shipping the 4K HDD in the 750GB 5400RPM configurations
- Products launching in 2011 will ship with either the current 512n or 4K HDDs starting in 4Q2011
 - o Once all the 512n drive supply is used – 4K drives will be shipped in all configurations
- Products that discontinue in 1H2012 will ship with either the current 512n or 4K HDDs starting in 4Q2011 (example: 6005 Pro, rp5700)
 - o Once all the 512n drive supply is used – 4K drives will be shipped in all configurations

- All HDD spares – regardless of platform to be used in, capacity or speed – will begin to transition to 4K HDDs in 4Q2011
 - o Once all the 512n drive supply is used – 4K drives will be shipped for all configurations
- The new 4K HDD technology will be phased in silently; meaning it is not being tracked by SKU number or Serial number

Easing the transition

HP is aware the transition to the new hard drive technology is not going to be seamless for every customer. To that end, we have created several tools to assist you during the transition. These tools include:

- **PCN:** A Product Change Notification for each product area has been distributed to registered customers and partners:
- **Technical Whitepaper:** Preparing Advanced Format hard drives for Microsoft Windows installations on HP Business Notebook PCs and desktop PCs:
<http://bizsupport1.austin.hp.com/bc/docs/support/SupportManual/c02691731/c02691731.pdf>
- **Advanced Format Drive Detection Tool:**
 - o A console version is planned to be released in June 2011
 - o For use with individual drives – SoftPaq 52575 is available now
- **Paragon Partition Alignment Tool:** (found under Utility – Tools in driver support area) enables customers to identify and resolve misalignment issues on 4K physical sector size Advanced Format Drives.
 - o **Desktops and RPOS:** SP53063 (version 10.0.16.13299)
 - o **Notebooks:** SP52890 (version 10.0.16.13299)
- **Identification logo/sticker:** Advanced Format drives will be identifiable by a 'AF' sticker placed on them by the supplier

If you should have questions that are not answered here or in the Whitepaper; please direct those to your HP PSG Account Manager or Technical Consultant.

HP appreciates very much the relationships we hold with our customers and will work to make this transition as seamless as possible.

Respectfully,

HP PSG Business Technology Team