

Press Release

Ponemon Study Demonstrates 75% Cost Savings When Using Hardware-based Encryption

WinMagic commissioned study co-sponsored by leading industry OEMs outlines definitive cost savings of Self Encrypting Drives (SEDs)

Mississauga, ON, Canada – April 18, 2013 - WinMagic Inc., the global innovator in full disk/drive encryption (FDE), along with the Ponemon Institute and industry leaders in Self Encrypting Drives (SEDs), LSI Corporation, Micron, PLEXTOR, Seagate, Samsung and Toshiba, today announced the results of a new study that compares the TCO of Software vs. Hardware-based FDE. In this study, it was found that hardware-based encryption solutions such as SEDs offer more than a 75 per cent cost savings when compared to software-based encryption solutions.

This study was commissioned by WinMagic and has received unprecedented industry support from leading SED manufacturers that have co-sponsored the work done by Ponemon. The purpose of the study was to learn how organizations are deploying software and hardware-based FDE solutions for desktop and laptop computers as well as determine the total cost and benefits for organizations. The Ponemon Institute surveyed 1,335 individuals in IT and IT security in four separate country samples: the United States (US), United Kingdom (UK), Germany (DE) and Japan (JP), representing a variety of industry sectors.

Key findings from the study include:

- SEDs offer a significant savings as it relates to lost end-user productivity by reducing total idle time during encryption and excess time spent on traditional operation of the computer.
- With SEDs there is no user or IT idle time during the encryption process as it happens instantly.
- In the U.S. the per-user/per-year savings value of SEDs compared to software-based encryption is \$300.
- On average, when compared to software-based encryption, hardware based encryption with SEDs can offer a 75 percent total cost savings.
- The TCO for all form of drive encryption is an astounding \$300 to \$600 per year while the average licensing cost for FDE solutions is less than \$20 per year.
- Regardless of the encryption method used, the benefits of encrypting data outweigh the total cost of ownership by a factor of 4 to 20x, depending on the country sample.

"For the past five years, we have been saying there are two key technologies that will drive significant change in the drive encryption market, SEDs and pre-boot networking. The results of this study clearly demonstrate the value that SEDs offer and we can enhance that value with our pre-boot networking solution - PBConnex," said Thi Nguyen-Huu, CEO of WinMagic Inc. "We believe it's important for businesses to be aware of security technologies such as SEDs and the benefits they offer. We're very pleased to be working with these industry-leading OEM providers to share this information with the broader community and businesses globally."

"In looking at our data, it is clear there is a substantial cost difference between software-based and hardware-based FDE methods," said Larry Ponemon, Chairman and Founder of the Ponemon Institute. "The main source of differences between software and hardware FDE solutions concern IT tech time/labor, end-user productivity and licensing fees."

The information revealed in this study, which touted the benefits of hardware-based encryption, really is an exciting revelation. WinMagic, recognized by leading SED OEMs as the industry leader in FDE and contributing member of the TCG, is one of the few software vendors today that has the ability to support both software FDE and hardware-based FDE.



SEDs are Hard Disk Drives (HDDs) or Solid State Drives (SSDs) that encrypt the data stored at a hardware level, built directly into the drive electronics, without the assistance of software. This means encryption is always on, the encryption keys never leave the drive and authentication is done independently of the Operating System.

Many drives today follow Trusted Computing Group (TCG) standards when manufacturing SEDs designed to Opal. Opal is a TCG-developed standard for building and managing SEDs. Opal is a common set of criteria that SED drive manufacturers follow to ensure compatibility. Many of the cosponsors of this study are members of the TCG and support Opal standards in their SEDs.

A full Webinar walking through the results of this study will take place on April 30th, 2013. This Webinar will feature Larry Ponemon reviewing the results along with representatives from WinMagic, LSI, Micron, PLEXTOR, Samsung, Seagate and Toshiba in attendance. Registration can be found here: https://www.winmagic.com/ponemonstudy2/webinar

The full study summary can be found on WinMagic's web site and is free to download at: https://www.winmagic.com/ponemonstudy2.

Industry feedback and support for the findings regarding SEDs in this study:

<u>Micron</u>

"Encrypted SSDs are undoubtedly the future of business computing," said Justin Sykes, general manager of Micron's client SSD division. "The strong encryption capabilities built into our M500 SSD are drawing significant interest from multiple customers—including those in cloud and web 2.0 applications. We're proud to work with WinMagic to provide a complete and easy-to-use data security solution."

About Micron Technology

For more than 30 years, Micron Technology has redefined innovation, designing and manufacturing some of the world's most advanced semiconductor technologies. The company offers a wide range of DRAM, NAND, NOR, and SSDs, including enterprise SATA, SAS, and PCIe SSDs. Micron SSDs are differentiated by the fact that they are built in-house, using Micron's own high-quality NAND devices. With the superior reliability, endurance, and performance that Micron SSDs deliver, customers can maximize the scalability and efficiency of their mission-critical storage applications.

LSI Corporation

"LSI was a pioneer in the development of hardware-based encryption for SSDs and we're excited to see the Ponemon study clearly validate the significant cost savings compared to software-based encryption solutions," said Kent Smith, senior director of marketing, Flash Components Division, LSI. "LSI SandForce® Flash Storage Processors have always supported full AES hardware-based encryption to minimize CPU burden and deliver TCO benefits related to provisioning, management and end user productivity. As a key contributor to the TCG-developed Opal specification, LSI continues to be at the forefront of innovations that help to drive the broad industry adoption of hardware-based FDE solutions."

About LSI

LSI Corporation (NASDAQ: LSI) designs semiconductors and software that accelerate storage and networking in datacenters, mobile networks and client computing. Our technology is the intelligence critical to enhanced application performance, and is applied in solutions created in collaboration with our partners. More information is available at www.lsi.com.

PLEXTOR

"Plextor is fully committed to leadership in the storage industry and we take that role very seriously. We are excited to partner with WinMagic as one of the first SSD manufacturer to sponsor this study," Darlo Perez, Managing Director for Plextor Americas commented. "Plextor has gone to great lengths to



produce what we believe to be the best storage products on the market. For us, that has meant taking one hundred percent ownership of the R&D and manufacturing process and making a substantial investment in the ground-up development of our proprietary firmware and TrueProtect and TrueSpeed technologies."

About PLEXTOR

PLEXTOR is a world-leading developer of multi-award winning solid-state drives, Blu-ray optical disc drives, and other high-performance digital storage devices for professionals, consumers, and enterprises. Since the company's introduction of its first CD-ROM drive in 1989, Plextor's prestigious multi-award-winning products have set the standard for quality and high performance. Plextor will continue to deliver new generations of products based on our core values of market-leading innovation, unequalled quality, complete service, and our belief that users should have full confidence in the performance and stability of the equipment we supply. The PLEXTOR brand of storage and multimedia products is owned by Shinano Kenshi of Japan.

Samsung

"Samsung is proud to be the first drive vendor to offer a solid-state version of a self-encrypting drive (SED), as defined by the Trusted Computing Group," said Dr. Michael Willett, Storage Security Consultant with Samsung Electronics Corporation. "The Ponemon study quantifies the significant cost savings for the customer of using hardware-based SEDs versus traditional software encryption solutions. The pairing of the superior performance and durability of a solid-state drive with the robust security of an SED creates a winning combination."

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. is a global leader in technology, opening new possibilities for people everywhere. Through relentless innovation and discovery, we are transforming the worlds of televisions, smartphones, personal computers, printers, cameras, home appliances, LTE systems, medical devices, semiconductors and LED solutions. We employ 236,000 people across 79 countries with annual sales exceeding US\$187.8 billion. To discover more, please visit www.samsung.com.

Seagate

"Seagate has been investing in a broad portfolio of HW-based storage security solutions for many years, and works closely with security vendors like WinMagic to support customer needs around data-at-rest security," said Bob Griswold, Seagate's senior vice president, product line management. "As the leading SED storage provider in the market today, we're excited to see the results of this study, which clearly validates the value SEDs offer for customers looking for maximum security in the most efficient and cost-effective solutions."

About Seagate

Seagate is a world leader in hard disk drives and storage solutions. Learn more at www.seagate.com.

Toshiba

"The results of Ponemon's survey reinforce the importance of self-encrypting storage technology in enterprise environments," said Scott Wright, product manager, Toshiba Storage Products Business. "Toshiba and WinMagic are dedicated to delivering end users with the most reliable and secure storage hardware available, in an effort to reduce TCO and increase efficiency."

About Toshiba Corp. and Toshiba America Electronic Components, Inc. (TAEC)

Toshiba Corporation and its affiliates offer one-of-a-kind global storage solutions, offering hard disk drives (HDDs), solid state drives (SSDs) and NAND flash memories. Toshiba America Electronic Components, Inc. is an independent operating company owned by Toshiba America, Inc., a subsidiary of Toshiba Corporation, Japan's largest semiconductor manufacturer and the world's fifth largest semiconductor manufacturer (Gartner, 2012 Worldwide Semiconductor Revenue, March 2013). In North America, the Storage Products Business Unit of Toshiba America Electronic Components, Inc., markets high-quality storage peripherals to original equipment manufacturers, original design



manufacturers, value-added resellers, value-added dealers, systems integrators and distributors worldwide. Visit TAEC's web site at www.toshiba.com/taec.

About the Ponemon Institute

The Ponemon Institute© is dedicated to advancing responsible information and privacy management practices in business and government. To achieve this objective, the Institute conducts independent research, educates leaders from the private and public sectors, and verifies the privacy and data protection practices of organizations in a variety of industries.

About WinMagic Inc.

WinMagic Inc. provides the world's most secure, manageable and easy-to-use data security solutions. WinMagic's SecureDoc is a comprehensive encryption and security management product that can manage data security across the enterprise. By encrypting entire disks, specific files or folders locally or on the network as well as mobile devices and removable media, SecureDoc secures your data wherever it is stored, providing enterprise grade data security policy and key management across all operating systems such as Windows, Mac OS, Android and Linux. SecureDoc is trusted by thousands of enterprises and government organizations worldwide. Our solutions help organizations to minimize business risks, meet privacy/regulatory compliance requirements, and protect valuable information assets against unauthorized access. With a full complement of professional and customer services, WinMagic supports over three million SecureDoc users in more than 80 countries.

For more information, please visit www.winmagic.com, call 1-888-879-5879 or e-mail us at info@winmagic.com.

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