

Breaking the Vicious Cycle of Hardware Upgrades: Elcomsoft Distributed Password Recovery Makes Simultaneous Use of GPU Acceleration Units That Are Generations Apart, Adds GPU Accelerated ZIP/RAR Password Recovery

Moscow, Russia – February 03, 2015 - ElcomSoft Co. Ltd. releases a major update to [Distributed Password Recovery](#), supporting mixed GPU acceleration units installed at the same time without any sort of performance penalty. Truly asynchronous heterogeneous multitasking enables users with a mix of hardware of different models, brands and manufacturers break passwords faster than ever. Customers who kept their old video cards after upgrading to a newer and faster model will enjoy faster speeds and shorter recovery times. In addition, the latest release enables GPU-accelerated, distributed attacks on all types of passwords protecting ZIP and RAR archives up to the latest RAR 5.



The latest release enables the use of GPU acceleration to break passwords protecting many types of documents faster than ever. Adobe Acrobat X/XI, ZIP and RAR archives with classic and advanced encryption options, PGP 8.1 to 10.2, WPA/WPA2 as well as many other formats are supported with full GPU acceleration, with the full list of supported formats available at <http://www.elcomsoft.com/edpr.html#formats>

Finally, the update adds support for Maxwell, NVIDIA's last-generation GPU architecture.

"Are your previous-generation video cards gathering dust? This release will make password recovery faster without forcing you to invest in the newest and greatest", says Vladimir Katalov, ElcomSoft CEO. "This time we concentrated our efforts on making the use of existing resources more effective. By allowing using different types of video cards together while removing the associated performance hit, we can double or triple recovery speeds if you kept your old video card after buying a new one".

Mixing GPU Acceleration Units

Using a last-generation, high-end video card is a must in today's password recovery business. Many organizations found themselves in a constant upgrade cycle, when buying new hardware becomes a necessity to stay in business. These constant upgrades result in a vicious cycle with prior investments in what used to be top hardware just a short time ago going quickly down the drain.

[Elcomsoft Distributed Password Recovery](#) addresses this issue by allowing using multiple different GPU acceleration units even if these units are generations apart, enabling significant savings to customers who have a stock of old video cards.

The latest release of Elcomsoft Distributed Password Recovery enables the use of multiple video cards at the same time regardless of their respective makes and models. With an unlimited number of video cards and external hardware acceleration units supported at the same time, customers can squeeze every last bit of performance out of their existing hardware even if no SLI or Crossfire interface is available in their computer.

The use of mixed-type GPU units is made possible with a new asynchronous GPU acceleration engine available in the latest version of Elcomsoft Distributed Password Recovery. The new GPU acceleration engine employs an asynchronous scheduler that no longer needs to wait for the slowest GPU unit to finish its job before assigning a new task. As a result, customers can use video cards that are several generations apart to squeeze all available performance down to the last bit.

Recovering ZIP and RAR Passwords

The lack of GPU-accelerated distributed recovery option for popular archive formats including ZIP and RAR is now a thing of the past. The latest release of Elcomsoft Distributed Password Recovery supports all classic and advanced encryption options available in ZIP and RAR archive formats, enabling fully distributed, GPU-accelerated attacks on these types of passwords. At this time, GPU acceleration for ZIP and RAR archives is only available on NVIDIA based boards.

The latest release includes support for the new RAR 5, enabling GPU-accelerated recovery for this highly secure format. Notably, non-accelerated attacks on encrypted RAR archives resulted in speeds of several hundred passwords per second. The addition of GPU-accelerated attacks greatly increases the chance of successful recovery.

New File Formats

The updated release adds support for the following file and data formats:

- IKE (Internet Key Exchange) dump
- Adobe Acrobat X/XI
- PGP versions 10.1 and 10.2 (including PGP Disk and PGP Zip)
- Salted MD5 hashes

In addition, the following formats receive GPU acceleration support (previously supported in CPU-only mode):

- PFX/P12 certificates (NVIDIA and AMD)
- Adobe Acrobat 9 (NVIDIA only)

Finally, GPU acceleration support was updated for many previously supported file formats, enabling NVIDIA Maxwell and AMD R9 2XX and 360X support.

New Performance Benchmark

By supporting the latest, highly optimized NVIDIA CUDA framework coupled with NVIDIA's last-generation Maxwell architecture, the new release of [Elcomsoft Distributed Password Recovery](#) sets a new benchmark in performance. By using a single NVidia GTX980 video card, ElcomSoft were able to achieve the following numbers:

Microsoft Office 2007 - 42100 passwords per second
Microsoft Office 2010 - 22800 passwords per second
Microsoft Office 2013 - 2500 passwords per second
WPA/WPA2 - 165000 passwords per second
OpenOffice – 530,000 passwords per second
IBM Notes – 275,000 passwords per second
ZIP (AES) - 400,000 passwords per second
RAR 3-4 – 15,500 passwords per second
RAR 5 – 5,400 passwords per second

It goes without saying that the latest AMD video cards are also supported, although the list of file formats available for GPU acceleration with AMD boards is somewhat shorter. Elcomsoft Distributed Password Recovery supports the latest generation of AMD video cards based on R9 360/290 chipsets.

Advanced Attacks: Exploiting the Human Factor

Traditionally, Elcomsoft Distributed Password Recovery has relied more on the power of brute force than on smart attacks. While earlier versions provided an option to use masks and mutations when breaking passwords, the new release takes smart attacks to a whole new level. In this release, Elcomsoft Distributed Password Recovery allows specifying 10 character groups to allow their use in the password mask. Additional password mutations are now available to greatly enhance dictionary-based attacks. The new smart attacks allow experts automating the recovery of passwords that contain a wide range of common typos, as well as recovering “hacker” type passwords (e.g. ‘p@\$\$w0rd’ instead of ‘password’).

Other Notable Changes

Other notable improvements include the increased attack speeds when using a CPU alone, support for Adobe Acrobat 3-4 and 9, and support for PFX/P12 format. There is now no limit to the number of concurrently recovered MD5, LM, and NTLM hashes (previously limited to 64 KB). There are hundreds of smaller improvements and bug fixes.

About Elcomsoft Distributed Password Recovery

[Elcomsoft Distributed Password Recovery](#) enables accelerated password recovery for Microsoft Office documents, Adobe PDF, PGP disks and archives, personal security certificates and exchange keys, MD5 hashes and Oracle passwords, Windows and UNIX login and domain passwords.

Supporting ElcomSoft’s patent-pending GPU acceleration technology and being able to scale to over 10,000 workstations with zero scalability overhead, Elcomsoft Distributed Password Recovery is a high-end password recovery solution offering the speediest recovery with the most sophisticated commercially available technologies.

Pricing and Availability

Elcomsoft Distributed Password Recovery is available immediately. Licensing starts from 599 EUR for 5 clients. A license for 100 clients is available for 4999 EUR. Other tiers are available on request. Customers are welcome to contact ElcomSoft about larger purchases. Local pricing may vary.

An additional licensing option is now available for smaller networks. The affordable option covers concurrent GPU-accelerated distributive recovery on up to 5 computers. Even this minimal 5-PC license supports up to 8 GPU cores, offering a maximum computational power of 40 GPU cores per license.

Elcomsoft Distributed Password Recovery supports Windows Vista, Windows 7, 8, 8.1, as well as Windows 2003, 2008 and 2012 Server.

About ElcomSoft Co. Ltd.

Founded in 1990, ElcomSoft Co. Ltd. develops state-of-the-art computer forensics tools, provides computer forensics training and computer evidence consulting services. Since 1997, ElcomSoft has been providing support to businesses, law enforcement, military, and intelligence agencies. ElcomSoft tools are used by most of the Fortune 500 corporations, multiple branches of the military all over the world, foreign governments, and all major accounting firms. ElcomSoft and its officers are members of the Russian Cryptology Association. ElcomSoft is a Microsoft Certified Partner and an Intel Software Partner.