eDocProcessor pdfCipher

5 to 10 times faster than other tools Unleash the Power of Your CPU

Target for batch processing, CGI application, and Web service, speed is the most important factor. eDocProcessor pdfCipher provides a way for real time response for your Content on Demand, Rights Control on Demand solution!!

So Fast! How could it be possible?

There are many factors affecting the performance. General speaking, applying standard security setting to PDF contains job of parsing PDF, traversing the whole PDF document, remove unused objects, ciphering the content, and flush it finally. By optimizing parser, memory management, and encryption calculation, pdfCipher provides ultimate performance for applying security settings for PDF documents.

The current benchmark on 1Ghz Celeron system shows throughput more than 500k bytes/sec for encrypting PDF documents. It takes only 35 seconds to finish encrypting a 18MB PDF document, in contrast to 220 seconds spent by a famous one. More than 6 times faster it shows. Check the comparison figure below. Seeing is believing, try it yourself to see how fast it is on your Pentium 4 machines. (download from http://www.iteksoft.com/)

Benchmark

Test Benchmark:

Save as a new pdf file with 128bit security setting from original unencrypted pdf files.

Test Platform:

OS: Windows 2000 Professional

Memory: 256MB

CPU: 1Ghz Celeron 256K Cache

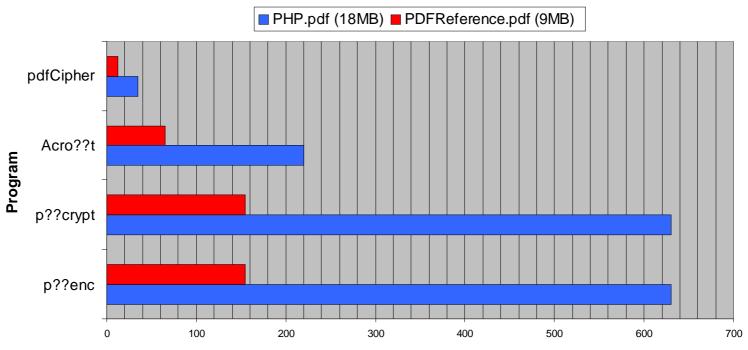
Test Files:

- 1. Php.pdf (PHP Manual) File Size: 18MB (18,315,198Bytes) Get this one from http://www.php.net/download-docs.php php_manual_en.pdf.bz2
- 2. Pdfref.pdf (PDFReference.pdf) File Size: 9MB (9,379,963Bytes)
 Get this one from http://partners.adobe.com/asn/developer/acrosdk/docs.html#filefmtspecs
 PDF Reference, Third Edition, Version 1.4

Program:

- 1. eDocProcessor pdfCipher (command line mode)
- 2. Acro??t (Test by do SaveAs from menu by user interaction, count only the cipher progress not including UI actions)
- 3. p??enc (command line mode, Perl based exe)
- 4. p??crypt (command line mode, Perl based exe)

Performance Comparison



Time to finish encrypt the whole test file. (in sec)

Comparison Table

	Language	Size	Garbage Collection (Remove all unused objects)	String/Name Escape/Unescape operation	Memory Usage	Linearize	Exception
pdfCipher	C++	320k	Yes, full traversal	Yes	Light, near constant (only xref table size is relevant to PDF file size) (1)	Not Applied	C++ exception handling
Acro??t	C??	???	Yes, full traversal	Yes	??	Not Applied	C Structure Exception Handling
P??enc	Perl	1.2MB	??	??	Huge (grow fast with PDF file size) (2)	Not Applied	?
P??crypt	Perl	800k	??	??	Constrained	Not Applied	?

Remarks:

- (1) pdfCipher consumes 4MB usage from Windows Task Manager when encrypt test case 2. (18MB Php.pdf)
- (2) It consumes hundreds of MB bytes when processing Php.pdf and fails finishing this testing case after 20min of processing.

	PHP.pdf	PDFReference.pdf	
	18,315,198	9,379,963	bytes
pdfCipher	35	12.5	sec
Acro??t	220	65	sec
P??enc	>=1200	155	sec
P??crypt	630	150	sec