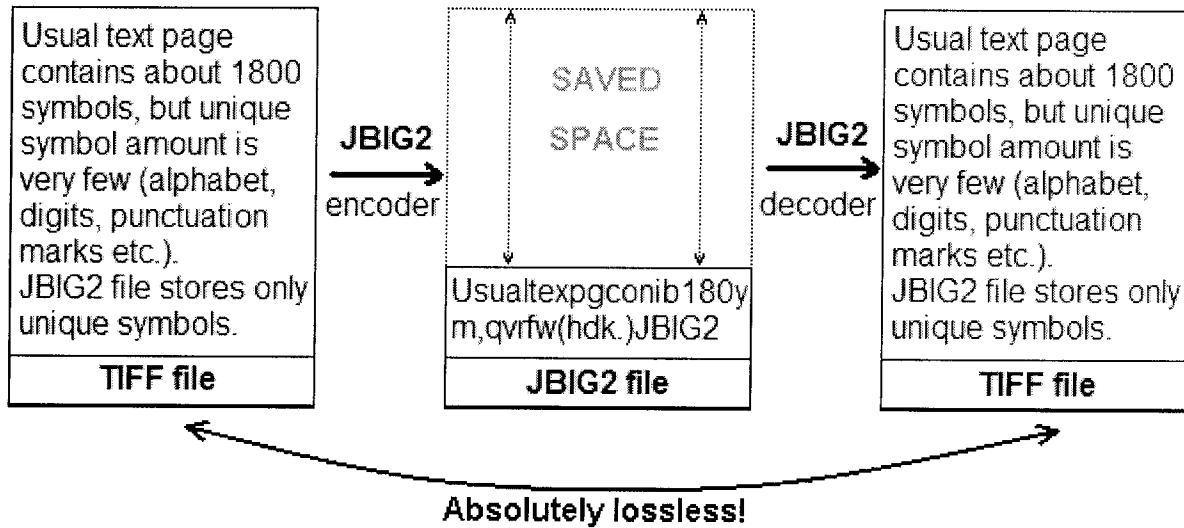


The JBIG2 standard

JBIG2 is the most efficient format for storing **multipage** black-and-white images. It is widespread in electronic documents circulation, e-books and archiving systems as standalone file or as part of PDF document.

JBIG2 compression: Symbol Dictionary



Usually text page contains about 1800 symbols and unique symbol amount is few (character set, digits, punctuation marks). JBIG2 file stores only unique symbols and their position on the page in Symbol Dictionary and provides efficient compression. The more pages, and therefore non-unique symbols, the better compression.

VintaSoft JBIG2.NET Encoder compression statistics:

Document	Zip		CCITT Group IV		JBIG2 lossless		PDF w/ JBIG2	
	Size	K*	Size	K*	Size	K*	Size	K*
1695x2833 1-bit, 927 pages, text	72 135 Kb	1	40 970 Kb	1.8	6 943 Kb	10.4	7 506 Kb	9.6

K* - compression ratio

JBIG2 vs CCITT 4

If you store multipage black-and-white images with textual content in TIFF (CCITT 4) format, JBIG2 codec can help you to save up to 90% (depending on file content) disk space with no loss in image quality.

JBIG2 and Image Quality

VintaSoft JBIG2 codec works efficiently in both lossless and lossy compression modes.

When converting black-and-white image file from your preferable format into JBIG2 you won't lose image quality on the one hand, and you will dramatically reduce the resulting file size on the other hand.

If you needn't pixel-to-pixel image quality but need the image content to be kept, then using certain image processing functions you can remove noise from the image and using JBIG2 codec tuned to lossy compression make your black-and-white image data as compact as possible.

PDF and JBIG2

PDF documents with embedded JBIG2 images became widespread in e-books and document circulation systems because of efficient disk space and data link channels usage.

VintaSoft PDF.NET and JBIG2.NET libraries are compatibility tested and provide you with cutting-edge data storage technology.

Data Portability: display JBIG2 in free PDF viewers

PDF documents with embedded JBIG2 images may easily be read using free distributed programs for PDF viewing like Adobe Reader. So you can always be sure that files generated using VintaSoft components can be displayed on any computer. Now you are reading PDF with JBIG2 document created by VintaSoft Document Imaging.NET SDK.