

Cram 1.1

Real Time Software

Bugs/Questions/Suggestions
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Introduction:

Cram allows the user to print up to four text pages per sheet of paper using MS-Windows True Type fonts and the Print Manager print spooler. You can print on front and back using a duplexing/non-duplexing Laser printer or on a DeskJet (this utility supports the **HP LaserJet 4** series printers). As well as being able to choose the font to print with, you can print more than 66 lines of text per page (depending on the point size chosen).



Cram now sports a slightly more efficient interface as well as the ability to select more than one file to print, by using either the Open file dialog or File Manager Drag & Drop onto the minimized Cram icon. Cram now also prints the current filename on the bottom of each page. The landscape option still must be enabled by the user via the Printer Setup dialog (you can use Cram, Print Manager or Control Panel to do this), but it does detect whether or not the option is set when you try to print a file. One major bug has been fixed which involved printing with a point size of 7 or less. At this size Windows has difficulty calculating the text line width in Twips accurately. When a given line of text was near the width of a page column, it could be measured as longer by one method and shorter by another. Unfortunately both methods are needed, and when they disagreed, the print job would be cancelled. A new method is now being employed that is more accurate but a bit slower (some systems might not notice the difference). A future version of Cram will support Unix text files (hopefully) and might have a filter for a few word processing packages like MS Write (included with MS Windows) but more likely there will be the option to print text saved onto the Clipboard. The sooner a new feature is asked for, the sooner it will be available, and even sooner with a little incentive to put in my pocket.

This is a full functioning application (but it does require VBRUN300.DLL to run). Nothing has been disabled to persuade you to register. The registered version does remove the About banner and the "days unregistered" panel (wait 30 days and you will see what I mean). You will also be given the most recent copy of the program on your favorite media. See below for registration information or print (using Cram) the file REGISTER.FRM included in the .zip.

Quick Start:

To get going immediately, start Cram from File Manager or use Run from Program Manager. Open the Options dialog by clicking on the Options button and configuring the program to work with your particular printer. If you have a DeskJet, you must enable DeskJet printing option the get the front and back of each page to print properly. The same is true when printing to a HP laserJet 4L (and other printers that pull the paper from the front of the paper bin, not the back). If neither is selected, Cram formats the output for the LaserJet series printers. Make sure all of the other options are disabled for your first print job to get a feel for how the program works. Click on the Save button. Now **Open your text file (or you may Drag and Drop a text file(s) from File Manager onto the CRAM**

icon). The text file will automatically be loaded and processed and the statistics will be displayed. To print the job click on Print . When the first half is done you will be prompted to print the next side. Wait until the printer has finished printing the first half. Take out the stack and place it back into the paper tray the exact same way it came out (if you have a LaserJet 4, 4L, 4P or similar printer, you MUST turn the stack over, short edge over short edge so the printed text is facing up). Do not turn the stack around or over (see previous note). When the stack is in the tray properly, click on the OK button to continue the next side. When the printer is done you will have your document printed with the 1st page (1st two text pages) on top and the 2nd page (next two text pages) on the back side of the same piece of paper.

Purpose:

The intended use for Cram is to allow the user to print text files (not wordprocessor documents, which are usually in a binary format) like source code and some shareware documentation (telix.doc is a good example). Of course the Cram documentation cannot be printed with Cram since it is in a .wri (MS Write) format (I used the .wri format since I want to eventually convert the documentation to .hlp (Help) format, Write also allows me to display useful graphics, hopefully to be seen on the next release or so). The best way for you to know what file formats Cram will print, you should know how Cram prints.

First off, please remember that all of this information may or may not be completely correct, but it gives those who know nothing, something. A text file consists of horizontal lines of information, usually ASCII text. In some cases, each line is limited to x number of columns or characters (somewhere between 72 - 80 or so). In other cases, an line of text might not be limited to x number of columns per line, it doesn't contain linefeeds, only returns. Thus each line would be equivalent to a paragraph in a generic wordprocessor. This generic wordprocessor would be responsible for determining the column width and format the text accordingly (using factors such as page width, font size and style, tab stops, and possibly kerning). Before Cram loads a text file, it determines the page dimensions using the information in the Options dialog (explained in detail below). Cram then loads a line of text, compensates for tab characters (explained below), and then chops up the line (if it is longer than the maximum page width) into multiple lines. When Cram is chopping or line wrapping it also attempts to word wrap (forcing whole words to the next line, instead of cutting them in half). Then Cram loads the next line of text from your file, and the above process is repeated. Cram will fit as much text on a line that it can so fewer lines will be needed, and then hopefully fewer sheets of paper. Cram, as mentioned above, is not intended to replace a wordprocessor, if you spent time trying to make your document look good by adding blank lines and indentions, they may not, or most likely will not come out the same when printed with Cram. Later versions of Cram will give the user some more control over how the page is formatted, but what control this may be will be determined by its users and their input.

Using Cram:

Install Cram.exe [and Cram.wri, REGISTER.FRM, Cram.txt, and SHAREWAR.DOC] into any sub-directory [all other files may be placed into the WINDOWS\SYSTEM directory or with the other Cram files, these files are the most recent available as of this release but you could be reading this a year from now, so make sure you aren't replacing a newer file to be safe] and then put Cram into any Program Manager group or into its own.

When you start Cram you are given four options; Open, Options, Close, and About. Open loads the text file you choose and displays an information windows giving statistics about the pending print job. These statistics are dependent on the settings in the Options dialog. Here you may either Print the text file or Cancel the job and change the option settings or exit the program. The Options dialog lets you choose how you want the text file to be processed and printed. **Note that if neither the DeskJet or LaserJet 4 options are selected, Cram formats for a standard LaserJet series printer** (II, III, IIP, IIIP, and IIISi * the series 4Si has not been tested, you may need to determine the way each printed page is outputed and select your options accordingly). Each of these options is explained below:

Best Fit:

When this is enabled, the margins are reduced as much as possible to allow as

much text to fit on a side of paper as possible. Usually when the point size is 7 or less, you can get 70 or more lines and over 85 columns per page. With large print jobs you can save significant amounts of paper. Please note that some text files are formatted to print with 66 lines per page. If you print with more lines, their page numbering may be offset somewhat.

DeskJet:

If you have a HP DeskJet or other similar printer (on which the output page is face up, not face down) this option must be enabled to print front and back. Deselect this option for the LaserJet series printers, if using the series 4 line of printers see below.

LaserJet 4 L/P:

If you have a LaserJet 4, 4L or 4P, you must enable this option box. When printing, you must turn the stack over short edge to short edge. The reason is that when the printer prints, it pulls paper from the paper bin from the front, not the back, like other laser printers. If you took a blank piece of paper and placed a big X on one side and put it back into the paper bin, after printing, the X will be on the same side as it was when put in the bin (top or bottom). On other LaserJets, the X would end up on the opposite side (top or bottom). Thus you have to manually turn the pages over so you won't print on the same side twice. By deselecting this option, Cram formats for a standard LaserJet series printer (II, III, IIP, IIIP, and IIISi * the series 4Si has not been tested, you may need to determine the way each printed page is outputted and select your options accordingly) .

Fixed pitch fonts only:

This option tells the Font dialog box only to display the fixed width and height fonts that are available for your printer. Use this function if the text file you are printing contains ASCII diagrams and pictures. If you don't use a fixed font in this case the diagram characters will not line up properly.

Remove duplicate blank lines:

With this enabled, multiple blank lines will be removed leaving one blank line. Again you must be careful with text files already formatted to be printed "as is" to a printer like documentation for games and utilities.

One side or duplex (Print one side):

This option depends on the DeskJet or LaserJet 4 option. With the these options enabled, meaning you are using a DeskJet, LaserJet 4/4P or similar printer, you do not have the duplexing (printing on both sides on one page during the same print job) capabilities that some high end laser printers have (IIISi IIID). This option allows you to print the whole job on just one side of paper. If you do have a laser printer but do not have duplexing you can also only print on one side if needed. If your printer does support duplexing, you must enable it in your printer driver by using the Printer Setup dialog or through Control Panel. If you enable duplexing in the printer driver it will be enabled in Cram when you exit the Printer Setup Dialog. If you disable the duplex option in the printer driver and it is enabled in Cram, it will remain enabled in Cram to allow you to print on one side if desired.

Front only & Back only:

These options allow you to print just one side of a two sided job. In other words, with Front only enabled Cram prints only pages 1,3,5, etc., just the pages that would be on top. The Back only does just the opposite. It prints pages 2,4,6, etc. or the pages that would make up the back.

Font Select:

This dialog allows you to select any available printer font and nearly any point size. Keep in mind that this program was designed to conserve paper and ink or toner by printing as many text pages on each piece of paper as possible. Choosing a large point size could cause problems or render the output unreadable. You can now choose Bold or Italics and they will be applied. Previously, if either was chosen, they were not applied.

Printer Setup:

Here you can change the default printer used by Cram and its specific options to optimize printer output. In some cases it might be beneficial to set print quality to draft, this should speed things up or save ink/toner on the DeskJet or LaserJet 4 printers with econo mode.

Spaces per Tab:

If your document contains tab characters (ASCII code 09), this setting will determine the number of spaces between each tab stop. A tab character will push the text line to the next stop. If the tab is set to 5 spaces, a line containing three characters, the last being a tab character, when printed the line will have 5 characters. abc<tab><eol> = abc__<eol> where the _ = 1 space and <eol>=end of line. This lets all of your tabs remain lined up properly even if there are random spaces included in the line. This feature was suggested by Mike N. Rubino.

The Close button exits the program. The next time Cram starts it will reload the options saved in the Options dialog. The About button displays the warranty information also printed below as well as registration information.

Warranty and Registration:

This program [**Cram**] is being made available on an "as is" basis, and carries no warranties, express or implied. The author shall in no way be held liable for any damages resulting from the use of this program or the media on which it is distributed, including, without limitation, loss of business profits, interruption of business, loss of information, damage to equipment, or any other incidental or consequential damages.

This program is **NOT registered for Commercial or Government** use beyond a 30 day trial period. After 30 days this program should be registered for \$20 a user or \$75 for a site license. Individuals may feel free to send whatever they feel the program is worth. Please remember that I am doing this for a living, so if you can afford to pay, please pay. Any suggestions or bugs brought to my attention (ones that I have not been made aware of before) will be rewarded with a registered single user version, and you will be put on my mailing list.

Contract Programming & Consulting Services:

If you like this application, please contact me for a list of others being developed or already available to the public. If you have need for any particular type of program, please feel free to contact me about contract programming. I have developed applications as simple as screen savers to regional disease propagation simulators to VLSI defect analysis programs. Ranging from Visual Basic for Windows to Unix GNU C with X-Windows library. Since I don't happen to own a Sparc station, I am currently limited to PC applications. Also a full range of consulting services are available for the Bryan/College Station/Houston areas. Resume available upon request.

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