

N91-27036

COSMIC

**Software Catalog
1991 Edition
Diskette Format**

This Catalog may be copied and shared

COSMIC

The University of Georgia
382 East Broad Street
Athens, GA 30602
Phone: (404) 542-3265
Fax: (404) 542-4807

E-Mail: COSMIC@UGA. (bitnet)
SERVICE@COSSACK.COSMIC.UGA.EDU (internet)

I. Introduction

This PC edition of the annual COSMIC Software Catalog contains descriptions of the over 1,200 computer programs available for use within the United States as of January 1, 1991. By using the PC version of the catalog, it is possible to conduct extensive searches of the software inventory for programs that meet specific criteria. Elements such as program keywords, hardware specifications, source code languages, and title acronyms can be used for the basis of such searches.

After isolating those programs that might be of interest to the user, it is then possible to either view at the monitor, or generate a hardcopy listing of all information on those packages. In addition to the program elements that the user can search on, information such as total program size, distribution media, and program price, as well as extensive abstracts on the programs, are also available to the user at this time.

Another useful feature of the catalog allows for the retention of programs that meet certain search criteria between individual sessions of using the catalog. This allows users to save the information on those programs that are of interest to them in possibly different areas of application. They can then recall a specific collection of programs for information retrieval or further search reduction if desired. In addition, this version of the catalog is adaptable to a network/shared resource environment, allowing multiple users access to a single copy of the catalog database simultaneously.

The enclosed disk contains all of the files and application programs necessary to install the COSMIC Software Catalog on a hard disk drive and/or a networked NETBIOS based environment.

II. Catalog Installation Instructions

Before installing the catalog software and data, it is suggested that the user backup the distribution disk with the DOS "diskcopy" command. In order to properly install the COSMIC Software Catalog, approximately 4.5 Mbytes of disk space is required. This provides for sufficient space to hold all information on COSMIC's entire inventory as well as the software to access the data. However, this space can either be located on a local hard disk, or a network (shared access) drive.

The user first must create a directory that will hold all the necessary files for the COSMIC Catalog. It is suggested that the directory be called "COSMIC" although it is not required.

example: C> md COSMIC

After creating the directory (hereafter referred to as COSMIC) the user then moves to that directory via the DOS "cd" command.

example: C> cd \COSMIC

Note that this directory may be located either on the user's local hard disk or on a shared resource networked drive.

The user then places the working copy of the COSMIC Catalog diskette into the appropriate local high density floppy disk drive. Next, the user must make that floppy drive the current or logged drive.

example: C> A:

We now will use PKWARE's PKUNZIP utility (included on the catalog distribution disk) to install the data and program files in the desired directory. This is done by typing PKUNZIP, CATALOG (the name of the ZIP file containing the program and data files) and the name of the destination drive ('C:' in our example):

A> pkunzip catalog c:

PKUNZIP will then display the names of the files as they are extracted from CATALOG.ZIP and placed in the default directory on the specified destination drive ('C:\COSMIC' in our example).

In order to conserve space on the distribution disk, several index files have been left off and must be generated before the program will function properly. The user must now make the destination drive and directory the current working directory ('C:\COSMIC' in our example) by logging on to the drive specified in the PKUNZIP command line above:

A> C:

We will now invoke the catalog program, COSMICAT, with a special command line option to generate the index files:

C> cosmicat reindex

The program will notify you that it is creating the index files and will return you to the DOS prompt when it is finished. You may now remove the working copy of the catalog diskette and return it to a safe place or give it to a friend. If you encounter problems with any of the steps above, please feel free to call COSMIC at (404) 542-3265 and we will help you resolve the situation.

To complete the installation process, the user (or system administrator) must decide if the catalog will be used in a shared environment or not. If the catalog is to be used solely by an individual on his or her own system, no other installation procedures are necessary, simply jump to section III on usage.

If, however, the catalog is to be used in a network environment, some additional steps are necessary. First, the shared access location of the catalog must be determined. It is in this shared location that multiple users can simultaneously access the database files (.DBT & .DBF) + index files (.NTX) mentioned above, with optional shared access to COSMICAT.EXE. This location (shared drive name + pathname) must be typed in a single line ASCII text file called PATHNAME.TXT. It is also important to have this path name end in a backslash ("\") character within the PATHNAME.TXT file for proper file name construction. PATHNAME.TXT will then be placed in the personal execution directory of all individuals who will be accessing the catalog. This personal execution directory is very important in using the catalog in a shared environment since the COSMIC Catalog creates temporary and semi-temporary files during the course of its execution.

The personal execution directory should be located on the local hard disk (could also be a floppy, but that's very slow) of the individual and should contain the following:

- 1) The file PATHNAME.TXT containing the shared resource location of the catalog data files (all .DBT, .DBF & .NTX files). Note that this file can be created with any ASCII text editor.

and

- 2) Either the executable portion of the catalog, COSMICAT.EXE or a batchfile which, when run, executes a shared version of COSMICAT.EXE through explicit pathname invocation.

In either case, the current working directory during execution of the catalog must remain in the personal execution directory.

For example, let us assume that the catalog databases, indexes, and the COSMICAT.EXE file have been placed in directory COSMIC on the shared network drive N:. Additionally, we'll assume that each user has created a personal directory named COSMIC on his/her local C: drive. Each user would then place an ASCII text file named-PATHNAME.TXT in their C:\COSMIC directory containing the single line:

```
N:\COSMIC\
```

For convenience sake, one might create a batch file in a directory that is referenced by the DOS PATH environmental variable (usually a directory called something like DOS, UTILS, or BATS) named COSMICAT.BAT. This file might be created as follows:

```
C>copy con: c:\bats\cosmicat.bat
ECHO OFF
CLS
ECHO One moment. Invoking COSMIC catalog...
C:
CD\COSMIC
N:\COSMIC\COSMICAT
```

(To terminate this input and return to the DOS prompt, type Ctrl-Z, and press the Enter key.)

For any questions on the installation process, feel free to call COSMIC at (404) 542 - 3265.

III. Catalog Usage Instructions

To begin a catalog session the user first must move to the directory containing the file COSMICAT.EXE (and the file PATHNAME.TXT if the database is to be located on a networked drive). To start the application, type "cosmicat" at the DOS prompt (C>). The application will then generate two successive screens with information on COSMIC as well as the address and phone number of COSMIC if further assistance is necessary. Pressing any key will move the user through these screens to the Main Menu.

After the two introductory screens, the Main Menu screen is displayed. At this point, four different activities are possible:

The user can either: 1) Generate a screen or hardcopy listing of all possible keywords that are used in the Catalog; 2) Begin searching the inventory for programs meeting user provided search criteria; 3) Generate a screen or hardcopy listing of all information on a particular program or programs; or 4) Exit the COSMIC Software Catalog and return to DOS. Pressing the appro-

priate key will then activate the activity desired. The following is a brief discussion of each activity.

A) List All Possible Keywords

All programs in the COSMIC inventory have been assigned an average of five different keywords selected from the NASA Thesaurus (NASA SP-7064). By selecting this option, the user is provided a mechanism to list all unique keywords employed in the current catalog. This is useful in deciding upon search criteria for use in later inventory searches. When this option is selected, the user is prompted to choose either the printer (PRN:) or the screen as the output device.

If the user selects the screen, an alphabetic listing of all keywords is sent to the monitor, one screen at a time. The user can then either successively view the proceeding screens (by pressing "m"), or terminate the current listing and return to the Main Menu (by typing "x"). If, however, the user chooses the printer as the output device, a continuous alphabetic listing of all keywords is sent to the printer immediately. This listing is rather lengthy — printing in a vertically compressed mode will help save paper. As soon as the listing is complete, the user is returned to the Main Menu.

B) Perform a Search on Inventory

By performing successive searches on the COSMIC software inventory, the user is provided a powerful mechanism for isolating those software packages that directly apply to the user's area of interest. Presently, searches can be done on four different information fields included with each program. When the Search Menu is first selected one of two possible situations will occur. Either the user will be prompted to select the field on which to search the entire inventory, or, if a past search produced a subset of programs (retained in a file called HOLDSAVE.DBF located in the current working directory), the user will be asked to choose which group to search on (the entire inventory or HOLDSAVE.DBF). If the user chooses to use the entire inventory as the search base, the present HOLDSAVE.DBF file will be discarded (ie. deleted) in favor of generating a new subset file from the upcoming search. This gives the user the ability to manually (ie. through appropriate DOS commands) save the current HOLDSAVE.DBF file under a different file name (the HSFSN.NTX index file must also be saved in this instance as well) in order that the results contained in HOLDSAVE.DBF can be retained for future reference. By simply renaming the files

back to HOLDSAVE.DBF and HSFSN.NTX within the COSMIC Catalog directory at some future time, the user can again recall these past results when using the catalog.

The fields on which a search can take place:

1) Titles & Acronyms; 2) Keywords; 3) Host Computer Types; and 4) Source Code Language. In addition, the user is given the option of returning to the Main Menu. All four search possibilities will prompt the user for a string of characters (NOT case sensitive) which will then be compared to the corresponding field of all programs in the inventory (or a subset thereof). It should be noted that all searches look for the string provided by the user to occur anywhere within the field being searched. This allows for context searching of strings within fields.

After typing a carriage return to terminate the search string (or <ESC> to cancel the present search), the text "....searching...." appears on the screen. The amount of time needed to search varies depending upon processor speed, as well as the search base being employed (entire inventory or HOLDSAVE.DBF subset). If the entire inventory was used for the search, the user is then prompted with the string "...One Moment Please..." while some file maintenance activities take place.

As soon as these activities are completed (again time may vary with processor speed), one of four possible windows will appear. If NO programs were found satisfying the previous search condition and the entire inventory was being used as a search base, the user will be prompted as such and will then be returned to the Main Menu. If the subset file HOLDSAVE.DBF was being searched and no programs were found, the user will be prompted as such with the current number of programs held in HOLDSAVE.DBF displayed as well. Since no programs were found, the HOLDSAVE.DBF subset file used as the previous search base will be retained for any future searches. Again, in this situation, the user is returned to the Main Menu.

When programs are found satisfying the search condition, a window appears displaying the current number found in the upper right hand corner. If the entire inventory was used as the search base, the user is then given three options:

1) listing the program call-numbers and partial titles of all currently found programs to the monitor (one screen at a time, if necessary); 2) listing the same information to the printer; or 3) immediately returning to the Main Menu. Regardless of the option chosen, those programs found will

automatically be retained in the subset file, HOLDSAVE.DBF, for later searching and reduction.

If, however, the search was performed on the HOLDSAVE.DBF subset file, the user is prompted with a window displaying the current number of programs found, as well as the number of programs that were being held in HOLDSAVE.DBF prior to the search. The user is then given the option of replacing the HOLDSAVE.DBF file with the newly found subset of programs for future searches; discarding the results of the last search in favor of retaining the search base just used (HOLDSAVE.DBF); or rejecting both the current results and the previous HOLDSAVE.DBF search base in favor of using the entire inventory for future searches. In all three cases, the user is immediately returned to the Main Menu after choosing an appropriate response. To further reduce the current HOLDSAVE.DBF, the user would again choose the Search option of the Main Menu.

C) Output Results

A most important aspect of any catalog is the way in which information on particular items is presented. The COSMIC Software Catalog for microcomputers has the ability to either browse information on particular programs at the screen, or generate a hard-copy listing on the local printer. In addition, the user can manually enter the call numbers of the item to be displayed, or use the programs held in HOLDSAVE.DBF as input into the listing routines.

When Output option is chosen from the Main Menu and there is currently NO HOLDSAVE.DBF in existence, the user is prompted to manually enter the call-numbers of the program to be displayed. The call-numbers consist of a three letter, 5 digit sequence of characters separated by a hyphen (-). The user can either type in the call number (followed by a carriage return <CR>) or simply press the <CR> to return to the Main Menu.

If the call-number provided does NOT match any in the current COSMIC inventory, the user will be informed of this fact and returned to the call-number entry window. Otherwise, the user is then prompted for the device for output purposes; the monitor screen or the local printer. Choosing the local printer will send a complete listing of all information on the selected program to the PRN: device. This includes program size, distribution media, and program price, as well as

a complete abstract on the program itself. If, however, the user selects the monitor as the output device, the entire screen will be filled with all information on the program. In addition, the user will be able to scroll through the program abstract window using the <UpArrow>, <DownArrow>, <PgUp>, and <PgDown> keys. To finish browsing the abstract, simply press the escape key (<Esc>). You will then be returned to the manual call-number entry screen.

If, however, a HOLDSAVE.DBF file exists, the user is given the option of either manually entering program call numbers to browse (described above), or using the call numbers that have been saved in the current HOLDSAVE.DBF subset file. By selecting the option of using HOLDSAVE.DBF for browsing, the user is displayed successive program call numbers to act upon. For each call number presented on the screen, the user may either display the program information at the terminal, generate a hard copy listing of the program information at the local printer, skip the particular program in question in favor of working with the next sequential program call number held in HOLDSAVE.DBF, or exit the output activity entirely and return to the Main Menu.

Note that the programs stored in HOLDSAVE.DBF will not be affected by returning to the Main Menu.

D) Exiting The COSMIC Software Catalog

Selecting this option cleans up all files and screen modes and returns the user to DOS. It should be noted here that if there was a HOLDSAVE.DBF file generated or retained during the current catalog session, it and its companion index file, HSFSN.NTX will be retained in the current working directory and can be used during the next execution of the catalog software.

If you have any suggestions on how to improve the catalog in future releases or have questions concerning the operation of this package, feel free to contact COSMIC.