POINT4
DATA CORPORATION

U.SAVE

Utility Interface Module
for the SAVE Processor

USER'S GUIDE

POINT4 AUTOMATED SOFTWARE PRODUCTS

I. U.SAVE

U.SAVE is used to collectively load and save program source text files. U.SAVE, written in Business Basic under IRIS, is a Utility Interface Module which facilitates the use of the SAVE processor by creating a job stream.

U.SAVE builds a work file consisting of the names of program source text files that the user designates to be loaded and saved. File lists accumulated in this temporary storage area are displayed on the screen for the user to review and modify. By editing these sorted lists, the user makes a final determination of files to be processed and initiates the save function. The specified files are then collectively loaded and saved by the SAVE processor.

II. USING U.SAVE

To invoke U.SAVE from SCOPE, enter "U.SAVE". If U.SAVE is not on logical unit zero or the user's assigned logical unit, enter "nn/U.SAVE", where nn = the logical unit on which the U.SAVE program is resident. The terminal then displays a screen similar to the one shown below.

```
PORT NUMBER: 12       FILE SAVE FACILITY      U.SAVE V.R  MM/DD/YY




            FILE(S) PREFIX: _____

            LOGICAL UNIT: __



 COMMENT: ENTER A QUESTION MARK (?) AT ANY TIME FOR HELP
 COMMAND:
 MESSAGE:
```

The top line of the screen shows port number, program name, version, revision and release date. File selection criteria fields occupy the middle portion of the screen. Three lines at the bottom of the screen are for system/user interaction. The COMMENT line provides system prompts to the user. The COMMAND line is for user command input, and the MESSAGE line displays error messages from the system.

There are two help modules for the U.SAVE program. The user may access the first help module by entering "?" in the first keyable position of any field. It explains the various options that are permissible in response to the requested parameters.

While entering file selection criteria, an 'escape' aborts the current entry field and returns the cursor to the previous field for changes. An 'escape' at the first field aborts the U.SAVE program and returns the user to SCOPE.

The file prefix selection field allows the user to specify the beginning characters of the file names to be designated for processing. This is particularly helpful when naming conventions have been used to categorize a group of files that the user now wants to load and save (see Section IV, NAMING CONVENTIONS). If the file prefix entry is omitted (by pressing 'return'), all source text files on the specified logical unit are selected.

The logical unit selection enables the user to specify the logical
unit from which to select the specified files. In the event of a
default from this entry field, the user's logical unit is assumed.

If the user defaults from both file selection parameters, all program
text files on the user's assigned logical unit are selected.

After the user has responded to both of the requested parameters with
a valid entry (or default), the terminal displays a system prompt
asking if all of the entries are correct. An "N" returns the the user
to the selection criteria to change one or both of the parameters. A
"Y" causes the system to begin the file selection. The terminal
displays a "DO NOT DISTURB" message while file initialization is in
progress.

Note that files are not actually loaded and saved until the user has
reviewed or modified the list of selected files.

Once initialization is complete, the system displays sorted lists of
the specified files in groups of 36. If the 'escape' key is depressed
at any time after the first file list is displayed, the U.SAVE program
will be aborted and the user will be returned to SCOPE.

After the first list of files has been displayed, the user may access
the second help module. This help module aids in the final
determination of the files to be saved. Commands shown in the help
module are used to modify the list of files before execution of the
save function. Files that remain on the screen after review and
modification are processed when the 'execute' command is performed.

The user should examine all pages (i.e., groups of 36 files) of the
selected files prior to entering the 'execute' command in U.SAVE.
U.SAVE only processes files from those lists that the user has
reviewed. After the 'execute' command is entered, the terminal
displays "SAVED", or any other appropriate message, as each file is
processed in turn.

When the last file has been processed, the system asks if the user
wants to save any more files. A "Y" returns the user to the first
screen to initiate another session, while an "N" terminates the U.SAVE
program and returns the user to SCOPE.

The following is a walk-through of various U.SAVE procedures. It will
familiarize the first-time user with the U.SAVE program. In order to
utilize this self-teach package, a number of program source text files
must be built. To establish the necessary files, enter and run the
following Basic program.

```
10  IF ERR 0 STOP
20  DIM A$[40]
30  FOR Z=1 TO 40
40    LET A$="<00>T.XYZTEST00!"
50    LET A$[14,15]=Z USING "##"
60    IF Z<10 LET A$[14,14]="0"
70    BUILD #1,+A$
80    PRINT #1;"10 PRINT '"A$[5,15]"'"
90    CLOSE #1
100 NEXT Z
110 END
```

You have now established 40 Basic source text files (T.XYZTEST01
through T.XYZTEST40) on your assigned logical unit. These files are
used in the walk-through to demonstrate the capabilities of U.SAVE.

Read the comments that appear in the "DESCRIPTION" column. Then enter
the information exactly as it appears in the "INPUT" column. Note the
result of each entry and proceed to the next step. (CR) indicates that
the 'return' or 'enter' key should be depressed. (ESC) indicates that
the 'escape' key (CTRL D) should be used.

	DESCRIPTION	INPUT
1.	Run U.SAVE.	U.SAVE (CR)
2.	You want more information on the file prefix entry. Invoke and read the help summary.	? (CR)
3.	Return to the file prefix entry field.	(CR)
4.	Specify that you want to select files with the prefix "XYZ".	XYZ (CR)
5.	Return to the previous field and change the entry to specify files whose names begin with the characters "T.XYZ".	(ESC) T.XYZ (CR)
6.	Specify your assigned logical unit by a default from the logical unit entry field.	(CR)
7.	The file selection criteria are correct. The system will now perform a LIBR using the specified criteria to begin building the work file.	Y (CR)
8.	The screen now displays the files you specified with the selection criteria. Invoke the help facility and read the screen mofification commands.	? (CR)
9.	Return to the list of files.	(CR)
10.	Page forward to review the rest of the list. Note that numbered lists on each begin at one.	P (CR)
11.	Page forward again. The system responds by saying you are at the end of the file.	P (CR)
12.	Wrap to the beginning of the the work file. All of the files have now been reviewed.	W (CR)
13.	You do not want to save file number 8. Erase it from the screen.	8 (CR)

DESCRIPTION	INPUT
14. You do not want to save file numbers 3, 4, and 36. Erase them from the screen.	3,4,36 (CR)
15. Erase file numbers 28 through 35 from the screen.	28-35 (CR)
16. Erase file numbers 13 and 19 from the screen.	13 19 (CR)
17. Restart the review of the current page. The screen will be displayed as it was before any erasures.	R (CR)
18. Erase file numbers 2 through 34.	2-34 (CR)
19. Page forward to the rest of the file.	P (CR)
20. Erase all files on this page.	A (CR)
21. Restart the review of the current page.	R (CR)
22. Erase file numbers 1 through 3 from the screen.	1-3 (CR)
23. Wrap to the beginning of the file. Note that all remaining file names have been relisted and renumbered.	W (CR)
24. Save all files listed on the screen. Note the response as each file is processed.	E (CR)
25. The system asks if you wish to save more files. Answer "N" for no. You will then be returned to SCOPE.	N (CR)

To check to see that the files were saved, perform a LIBR XYZ. The program source text files should now be saved on your logical unit as Basic files.

As a result of this walk-through, you have built 40 source text files and saved four of them as Basic files. To avoid confusion in other User's Guides, use the Utility Interface Module U.KILL to delete all 44 files.

III. THE HELP FACILITY

There are two help summaries in the U.SAVE program. The help facility may be invoked in U.SAVE by entering "?", causing the appropriate help module to be displayed on the screen.

The first help summary guides the user through a selection of file parameters. It explains each parameter, gives the result of an omitted entry (default), and offers an illustrative example of a completed set of selection criteria.

The second help summary contains a detailed explanation of the screen modification commands. This screen aids in the final determination of those files to be loaded and saved.

To exit either help module press 'return'. The user is returned to the point where the help facility was invoked.

IV. CONCEPTS

LOAD/SAVE

Program source text files are not executable until they have been passed through the Basic interpreter. The interpreter transforms a text file into its equivalent object code, which is then operable as a program. This interpretation from written program statements to functional machine code constitutes the "load" process, which results in the creation of a Basic program. The Basic program which corresponds to the original source text program must then be assigned a name and saved. All of these functions are initiated when the 'execute' command is performed in U.SAVE.

U.SAVE is a front end (utility interface module) for the SAVE processor. It provides an efficient means of saving files by initiating a job stream for the SAVE processor. Note that U.SAVE processes only those files that have been reviewed by the user after initialization. Files listed on pages that the user does not review in the latest pass are not saved when the 'execute' command is performed.

Program source text files processed by U.SAVE will oversave existing files of the same name.

FILES

U.SAVE uses two temporary storage areas (work files) to accumulate lists of specified file names for saving. The lists in one storage area are modified by the user and written to the other storage area for subsequent changes.

Each user has exclusive access to a unique pair of files. This is insured by incorporating the port number into the work file names (represented by "nnn" below). The U.SAVE work files are:

File Name	Description
EDITSV0nnn	Edit save file -- Used as the output file from the LIBR function of the selection criteria entry, and as the input file during the first work file screen modification.
EDITWKAnnn	Edit work file "A" -- Used as output file for the first work file screen modification, and as the input scratch file for every even-numbered pass through the file.

<u>NAMING CONVENTIONS</u>

U.SAVE assumes that the user has established a convention for naming associated source text files and Basic program files. The recommended naming convention for program source text files is to add a prefix of "T." to the name. U.SAVE truncates the first two characters of the source text file name when saving the file as a Basic program. For example, a source text file "T.ABCD" is saved as a Basic program named "ABCD".

V. COMMAND SUMMARY

Syntax   Command Function

A   A - 'All' erases all file names on the current screen.
                None of the files erased from the screen will be
                saved.

E   E - 'Execute' initiates the save function by invoking
                the SAVE processor. U.SAVE will transfer to the
                SAVE processor all those file names that were left
                on the screen after the last pass through the
                work file. The files will then be processed in turn.

P   P - 'Page' stores for later saving the file names
                left on the screen, and then displays the next 36
                selected filenames (if present).

R   R - 'Restart' re-displays the current screen as it was
                before any erasures. Filenames previously erased
                from the screen may then be left on the screen for
                processing.

W   W - 'Wrap' stores the file names left on the screen for
                subsequent processing, and restarts the selection
                process with the first 36 remaining file names.

nn   nn - 'nn' (where nn = the number of a file name) erases
                file name 'nn' from the screen. Files erased from
                the screen will not be saved. Two numbers
                separated by a hyphen erase the corresponding
                range of files. Several numbers may be entered at
                once if they are separated by commas and/or spaces
                (for example, "5,9,12-14 33 35,2" erases file
                numbers 5, 9, 12, 13, 14, 33, 35 and 2).