

SAVETSS

I General

SAVETSS is a Fortran program for retrieving files from a TSS DISK DUMP TAPE. IT is capable of extracting files from a partial dump (e.g. one that was not successfully completed). The retrieved files may then be ~~write~~ read back into TSS by using GETTPE.

II Basic Use

A. Input Files ... ~~the dump tapes~~

1. The dump tapes

SAVETSS expects Volume 1 of the dump on ~~any~~ tape at 800BPI. The filename is TAPE3. Successive volumes are handled by incrementing the tape number.. i.e. Volume 2 \Rightarrow Tape 4. The maximum number of volumes is now 2. Note that all tapes must be requested prior to running the program.

2. The input deck

a. error and volume card

The first card of the data deck must ~~contn~~ be this card.

In col. 1 should be the number of errors after which to terminate the search. If the tape was only partially written, this should be 1, indicating that writing stopped (parity or sequence error) should be considered the end of the dump, and SAVETSS should not scan beyond that point.

col 2 is the number of volumes in the dump

b. search directives

Following the card mentioned in (a) above come the search directive. Each directive is a sequence of names, ~~ending~~ 1 name per card, ending ~~in the name~~ with a card with only an asterisk in col. 1.

The first name of each directive is looked up in ROOTD. Then, at each step, if another name remains in the directive, it is looked up ^{using} the object obtained in the previous step as the ownership directory. If no more names exist in the directive, the current object is retrieved as a file. A null directive (one with no names) terminates the program.

NOTE: The full path from RootD must be specified for each object. Objects may not be referenced through softlinks in any directory. Hard links will be found in the directory, but may not be located while scanning the tape. Therefore: REFERENCE EVERY OBJECT THROUGH OWNERSHIP ENTRIES.

c. example ..

col

1 2

80

(error & volume card)

2¹
~~2~~

(scan to 2nd error, there is only one volume)

(1st directive)

(note no * card here)

~~*****~~

PDLIST

TSS

LDR.S

DSKLIST

*

(retrieve the file corresponding to
↑ROOTD:PDLIST:TSS:LDR.S:DSKLIST)

PUBLIC

EDITOR

*

(Note: this may not work.. PDLIST:EDITOR
is a hard link!)

*

(attempting to save ROOTD signifies the
end of input data).

B OUTPUT

1. The files...

- a) The files themselves are written out on ~~TAPE1~~ the fileset named TAPE2. The ~~gettpe~~ GETTPE directory is written out on the fileset TAPE1. Thus, after running saveTSS, the following control cards will produce the DUMPTPE/GETTPE compatible tape.

Request, SAVTAPE, X. output name
Rewind, tape1.
Rewind, tape2.
Copy bf, tape1, ~~tape~~ SAVTAPE.
Copy, tape2, savtape.

2. b) Loading back into TSS

mount the tape and call
GETTPE.

The files will come into TSS as files named using bead conventions under the current user name. The file names are constructed out of the first 5-7 characters of the last name in each specifier for which an object was located.

BEWARE: This may result in duplicate names during GETTPE...

e.g.

SAVEFILE and
SAVEFILX

would both be loaded onto
SAVEFIL.

2. Printed output.

SAVETSS prints various messages.

- a) at the beginning of each scan,
the tape label is printed
- b) each name ^{in a directive} is printed in turn
~~in a dir~~ as ~~searching~~

SEARCH TO <NAME>

when any name is not found, the rest of the directive ~~on~~ which it was a part is skipped and the next directive processed. This may happen two ways:

THAT NAME NOT FOUND means the name could not be found in the current directory.

OBJECT NOT FOUND indicates that the entry was found, but that the file is not on the tape.

usually this message will be preceded by one of the following 2.

*** EOF ***

means that the end of the tape was encountered

TOD MANY ERRORS

means that the error count has been reached, the scan stops here with the EOF message following.

Parity errors produce the message

*** PARITY ERROR ***

followed by information as to what was lost.

LOST DATA BLOCK IN OBJECT nnnnnn B.

or

LOST OBJECT NUMBER nnnnn B.

RECOVERY WITH OBJECT nnnnn B.

each of the above occurrences if not following a parity error, is an error in its own right. However, if a parity error precedes either of the above two circumstances, the whole mess counts as 1 error.

Any message beginning

DIRECTORY ERROR ...

indicates either a bug or that the object currently in hand is not a directory. Check your data.

Thats about all, good luck.

ah ha!

Sample deck

Job card

Request, ~~TAPE3~~, HY. ^{800BRI!} 9657 TSS disk dump

[run save tss. RUN.
~~GO~~. CLDR. or whatever

RFL, 10000.

Rewind, TAPE 1.

Rewind, TAPE 2.

~~Request,~~

UNLOAD, TAPE 3.

Request, TAPE X. nnnn OUTPUT

copy of, tape 1, tape, 4096.

copy, tape 2, tape, 4096.

[EXIT.
DMP, 40000. just for me, thanks.

789

[whatever's right

789

21

2 errors
1 tape

[directive

[directive

*GOE