MOSN - 207

TO: Distribution

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SUBJECT: On-line Processing of Multics "FDUMP"s

This MOSN obsoletes MOSN-205

I. Copying a Dump into the Hierarchy

A user ring interface has been added to facilitate the processing of dumps placed on secondary storage by the BOS FDUMP command. These dumps are placed into the DUMP partition and should be copied into the Multics hierarchy if they are to be processed. Although multiple dumps may be stored in the Multics hierarchy, only one dump can exist in the DUMP partition at any one time. If the system crashes before a dump can be copied, the new dump is either not placed on secondary storage or it overwrites the old dump when told to do so by the operator. To copy a dump out of the DUMP partition, the operator either issues the following initializer command:

```
exec copy_dump
```

or he issues the following command from command level on one of the SysDaemon consoles:

```
copy_dump
```

Both of these commands will copy a valid dump from the DUMP partition into one or more segments residing in the directory ">dumps". These segments have names with the following format:

```
date.time.n.erf#
```

where n is 0, 1, 2, ...

II. Listing Previously Copied Dumps

To list the contents of the ">dumps" directory the following may be typed from any console except the intializer's:

```
ls -p >dumps
```

example: Segments = 2, Records = 126

```
rewa 02  051371.1850.1.852
rewa 04  051371.1850.0.852
```

III. Changing the ERF # of the Next Dump

To set the erf# of the next dump to be taken the following may be typed on the initializer:

```
exec set_fdump erf#
```

or from a SysDaemon process:

```
copy_dump$set_fdump_number erf#
or      copy_dump$sfdn erf#
```

This will cause the dump resulting from the next crash to be numbered "erf#" and is useful in case an ERF was used without a fast dump being taken. Note that this procedure will refuse to renumber a dump that has not yet been copied.

IV. Printing a Dump

To process the dump, login on either an Operator or a SysDaemon process and issue the following command:

```
online_dump erf# -prtb40-
```

if the optional argument "prtb40" is not given, the dump will be printed on prtb34.

V. Deleting Dumps which have been Processed

After the dump has been processed and it has been dumped on the incremental tapes the dump can be deleted. (The processing of ">dumps" by Backup should begin after the dump is copied and should be completed before deleting the dump.) To delete the segments for a particular dump, the following command may be used:

```
delete >dumps>*.*.*.erf#
```

VI. Notes

The processing of the dump will take about two hours of time on the printer. Therefore, it would be unwise to start the processing when there is less than two hours to the next scheduled use of the printer (development machine usage requiring a printer, or running two I/O Daemons.) Note also that development machine usage and PM don't always require a printer. The first implementation of the dump printer does not have the ability to restart the dump in the middle, so if it gets interrupted the dump must be started from the beginning again.