To: Distribution

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Subject: Extension to the backup system

ORGANIZATION

This document is divided into three major parts. The first
part provides an overview of the proposed changes and additions
to the present system. The second part discusses changes to
existing programs and part three describes the additions.

PURPOSE

The backup system currently in operation prints out a list
of the entries which it was unable to access for backup, but
makes no attempt to notify the owner of those data sets. The
proposed extension to the backup system would notify a user via
his mailbox or a printout that the named entries were not backed
up and why. It also has the flexability of enabling the user to
forgo such notification upon request.
In this way, those entries which were intended to be backed
up can be changed by the user to allow the backup system access
to them.

PART I

This extension to the backup system will be accomplished
with very little change to existing programs. Only start_dump
and backup_cleanup will have any changes at all, and those will
be minor.
The two new programs will be called from command level and
not from any existing programs. Therefore, their use is
optional, and the installation of these programs cannot interfere
with the presently operating system.

PART II

Start_dump and backup_cleanup will be changed to copy the backup error file into a holding directory with the path name >udd>SysDaemon>error_file. This will be done with the insertion of a call to copy_seg_ before the dprint_ for the error file. In the program start_dump, a test will be made prior to the copy_seg_ to see if the debug option is in effect. If it is, the copy operation will be bypassed.

PART III

Two new programs will take the copy of the error file stored in the holding directory by start_dump or backup_cleanup and divide it into segments by user/project. Each segment will have a header, the name(s) of those directory entries which were not backed up, the specific message relevant to that entry and the full path name of the entry.
Any lines appearing in the error file which do not have a path name beginning with >udd> will be stored in a special segment which can be dprinted for somone in the systems group to examine.
For the standard segment, an attempt will be made to mail the segment to the appropriate user. If there is no mailbox, the segment will be dprinted with a heading of user and a destination of project. If the sending process (presumably "notifications.SysDaemon") is denied access to the users mailbox it will be assumed that the user does not wish to know about any un-backed up entries, and the segment with the list of such entries will be deleted from the holding directory.

CONCLUSION

This extension will be a useful addition to the backup system as it will provide a greater degree of security for user data.