

GENERAL BACKUP INSTRUCTIONS

You must backup your system on a timely basis. We recommend that you backup your system at least once a day. You should also backup prior to running any major update programs such as any month-end or year-end updates. The system should also be backed up again any time hardware field service is to be performed on the machine, immediately prior to such service.

Backing up data files on a regular basis is the only way to prevent loss of data. In the event of hardware failure the data files may have to be restored from the backup tapes. If a data restoration from backups becomes necessary, the most recent backup tapes will be used. The data which is on those tapes will be put back onto the system. This means that if a backup has not been done for a week and if a restoration of data is necessary, all work done in the past week will be lost.

It is best to keep at least nine backup tapes for your backup. The first four tapes should be labeled 'Monday', 'Tuesday', 'Wednesday' and 'Thursday'. You would also have three tapes labeled 'Friday A', 'Friday B' and 'Friday C'. Use the Monday through Thursday tapes for the corresponding days of the week, then rotate the Friday tapes on a weekly basis. One of these Friday tapes should be kept off site.

In addition, you should keep two sets of tapes for your MONTHLY backup, one to be kept on site and one off site. Again, the tapes should be labeled sets 'MONTHLY A' and 'MONTHLY B'. At the end of each month, before running Month End Processing, run a backup using one of these sets. Alternate the sets so that one month you use the 'MONTHLY A' set and the next month you use the 'MONTHLY B' set. This will provide a backup of data and system files before any month end processing has been performed that can be restored in case of problems.

Write the date and time (we use military time) of the backup on each tape after the backup completes.

Tapes should not be exposed to extreme temperatures, especially heat. Don't take the extra set of backup tapes off the premises and leave them sitting in a car in the hot sun!! Also, the tapes should not come into contact with anything magnetic (magnets, electrical equipment, X-ray machines, etc.).

It cannot be stressed how important it is to perform daily backups of your system. Remember that your business is running on this computer, so you want to guard your data just as you would guard your business.



MANUAL BACKUP PROCEDURE

- 1. All terminals should have the login prompt displayed on the screen before you begin a backup. No one should sign on to the system while a backup is being performed. Open files may not be backed up properly.
- 2. Once all terminals have the **company!login:** prompt displayed, enter **backup** at the **company!login:** prompt. The password is usually also **backup**.

A Backup Menu will display:

BACKUP MENU

1) System Backup

2) Check Backup Mail

Selection ('return' to end):

3. Type '1' for a System Backup. The system will display Date and Time and script being run:

Wed May 09 18:20:00 PST 2001

systembu [System Backup Script]

This script will perform a backup of your system (/) To interrupt or cancel it press DEL at any time.

4. Mount the first tape (volume) in the tape drive and close the door. The next prompt displays:

Insert the first tape and press <return> when ready . . .

Once the tape is loaded and the door is closed, press **<ENTER>** to begin the backup.

- 5. The system then begins to copy the files to the drive. If a volume runs out of space, the program will request an additional tape.
- 6. When the backup is complete, the following is displayed:

The backup is complete. Remove the tape & write today's date on it. Wed May 09 18:45:00 PST 2001 Press <return> to continue.

- 7. If an error occurs please write it down. The backup should be restarted from the beginning. Your tapes could be bad, so replace the tape if errors persist. If anything unexpected occurs or if you get an error message, please call the Compusource HOTLINE.
- 8. When the Backup is completed, the system returns to the Backup menu. Hit **<ENTER>** to quit the Menu. The system will return to **company!login** prompt.



BACKUP WITH BACKUPEDGE UTILITY

- 1. The BackupEDGE utility can be used to configure backups which will run automatically on any or all days of the week at whatever time is specified. BackupEDGE can also send out a mail message to a designated user or users regarding the backup each time it is run automatically. This message contains information regarding the pass/fail status of the backup, how long it took to run, and which users were logged into the system at the time of the backup, among other things. After verification of a good backup, change the backup tape to the next tape in your backup set.
- The BackupEDGE mail message should be checked each day to be sure the system data has been reported as both backed up and verified. The subject line of the BackupEDGE mail should read "Backup_Pass/Verify_Pass" for a successful backup.
- 3. To check the status of the most recent automatic backup, enter **backup** at the **company!login**: prompt. The password is usually also **backup**. Select the menu option to "check backup mail." The system will display the standard UNIX mail interface:

```
SCO OpenServer Mail Release 5.0 Type ? for help.
"/usr/spool/mail/backup": 2 messages 1 new
>N 2 root Wed Jun 27 02:51 71/2626 BACKUP_PASS/VERIFY_PASS
1 root Tue Jun 26 02:50 66/2497 BACKUP_PASS/VERIFY_PASS
&
```

- 4. The "**&**" sign is merely your prompt, this is where you can type in commands. Note that the most recent backup is dated Jun 27 at 02:51 a.m. This is the time the backup was completed. Note that the subject of each mail message is the right most column.
- 5. After you have finished reading the message, type in "d" and **<ENTER>** to delete the message indicated by the ">" mark. If there are more than 20 messages, you will not be able to see the most recent backup messages. If the # of new messages exceeds 20, you can delete several messages at once. For example, if the top of the mail program indicates you have 300 messages, you can delete the first 290 messages with the command "d1-290" and **<ENTER>**.
- 6. To exit the mail program, type in "quit" and <ENTER>.

BackupEDGE can be used to generate a pair of Emergency Recovery Diskettes, which will be labeled as "**RecoverEDGE Boot Disk**" and "**RecoverEDGE Filesystem Disk**." If your system was staged by Compusource, one set of these RecoverEDGE disks will have been provided for you. These Emergency Recovery Diskettes are used in the event that the system needs to be reloaded from the most current, complete system backup. These diskettes should be maintained in addition to the UNIX Emergency Recovery Diskettes.

To learn more backup BackupEDGE or RecoverEDGE, please refer to the user manuals. Please contact the Compusource HOTLINE with any problems.



RECOVERY PROCEDURE

1. **DISK OF FILE RECOVERY SHOULD ONLY BE DONE UNDER THE ADVISEMENT OF A COMPUSOURCE SYSTEMS ENGINEER.** If your hard disk has been completely destroyed, the replacement disk needs to be initialized and reformatted before recovery procedure can be performed.

In order to perform a system or file recovery, the most recent backup tape will be required. With your initial system setup you should have received a set of Emergency Recovery Disks. Please keep these diskettes in a safe place. These disks, along with your latest system backup tape, will be essential in the event that your system needs to be rebuilt.

If you do not know where your current Emergency Recovery Disks are located, please call HOTLINE and ask a Compusource Systems Engineer to talk you through re-creating these disks. If you use the BackupEDGE utility to automate your backups, you will need four (4) diskettes. If you use the manual backup option, you will need two (2) diskettes.

2. In the event that you must restore files or your entire system, CALL COMPUSOURCE AND HAVE A SYSTEMS ENGINEER TALK YOU THROUGH THE PROCEDURE, or when possible have a Systems Engineer perform file recovery over the modem.