

MANAGING CEO® WORD
PROCESSING -- INDEPENDENT

093-000271-02

| For the latest enhancements, cautions, documentation changes, and |
| other information about this product, please see the Release Notice |
| (085-series) supplied with the software. |

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MANAGING CEO[®] WORD PROCESSING -- INDEPENDENT

093-000271

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| A vertical bar or an asterisk in the margin of a page indicates |
| substantive technical change or deletion, respectively, from the |
| previous release. |

PREFACE

This manual describes how to manage CEO® Word Processing — Independent, Data General's word processing system.

Who Should Read This Manual?

This manual is for the person or persons who will supervise CEO Word Processing — Independent. The tasks that must be performed fall into two general categories: managing the software and managing the office. Taking care of the software (installing and maintaining it) requires a working knowledge of the operating system, directory structure, and related software. Managing the office tasks, however, requires an understanding of day-to-day office operations (and little, if any, computer background).

Your site may have a single manager; or you may divide the tasks among a group of managers, at least one of whom must know how to manage the software.

It will be helpful if you know how to use CEO Word Processing — Independent, although it is not absolutely necessary that you do.

How This Manual Is Organized

We have organized the manual as follows:

- | | | |
|-----------|---|--|
| Chapter 1 | Describes managerial responsibilities and gives an overview of the CEO Word Processing — Independent system: its software components and directory structure. | |
| Chapter 2 | Shows how to start up and shut down the CEO word processor. | |
| Chapter 3 | Describes routine maintenance procedures, including the preparation of archival and backup tapes or diskettes. | |
| Chapter 4 | Explains how to recover from program crashes, and how to restore files and documents from backup. | |
| Chapter 5 | Describes the CEO document and related files. | |
| Chapter 6 | Describes the queue manager program, and the closing, formatter, and spelling queues. | |

Chapter 7	Explains how to start up and control the printers, and how to create and modify the files the printers need.
Chapter 8	Explains the CEO office manager functions.
Appendix A	Describes what a CEO Word Processing — Independent user's PREDITOR profile must contain.
Appendix B	Explains the security features the CEO Word Processing — Independent system provides.
Appendix C	Describes how to run the CEO file conversion utility.
Appendix D	Explains the CEO Word Processing — Independent system error messages.
Appendix E	Explains how to prepare a Software Trouble Report.
Appendix F	Lists the CEO Word Processing — Independent system's Limitations
Appendix G	Place the CEO Word Processing — Independent Release Notice here.

Related Manuals

"Using CEO[®] Word Processing — Independent" (093-000220) explains in detail how to use the CEO Word Processing — Independent system. The CEO word processing system supplements the user's manual with an extensive on-line help facility.

You'll also need the following templates, which label the DASHER[®] terminal function keys:

093-000300	For model D200, D400, D450, and G300 keyboards
093-000303	For model D2 keyboards
093-000346	For model D210, D211, D410, and D460 keyboards

Finally, the following manuals provide necessary background information about the CEO Word Processing — Independent software:

For the Advanced Operating System (AOS):

- * "Introduction to the Advanced Operating System" (069-000016)
- * "Learning to Use Your Advanced Operating System" (069-000018)
- * "AOS Operator's Guide" (093-000194)
- * "Managing AOS" (093-000217)
- * "Using AOS on DESKTOP GENERATION[™] Systems" (069-000058)

For the Advanced Operating System/Virtual Storage (AOS/VS):

- * "Learning to Use AOS/VS" (069-000031)
- * "How to Generate and Run AOS/VS on Your ECLIPSE® MV/Family Computer" (093-000243)

For either AOS or AOS/VS:

- * "Command Line Interpreter (CLI) User's Manual (AOS and AOS/VS)" (093-000122)

Reader, Please Note

We use the following conventions in this manual.

1. Chapter headings (and, in Chapter 8, menu titles) are centered at the top of the page. Within a chapter, major headings appear at the left margin, double-underlined; minor headings appear at the left margin, single-underlined; and subheadings appear indented, single-underlined.

For example:

The Printer Major heading

Starting a Draft Printer Minor heading

Aligning Paper in a Draft Printer Subheading

2. To highlight CEO menu prompts, we use the same convention that appears in the on-line help messages. Sets of three angle brackets surround the prompt. For example:

>>> Office manager privileges? <<<

3. When describing an entry that you make, we use the accent symbol (`) to represent the NEW LINE key. So, if we tell you to enter the command

QMA START `

you should type the words QMA and START, then press the NEW LINE key.

4. In this manual we are limited to 72 characters per line. To show what appears on an 80-character-wide terminal screen, we've had to make minor changes. Consequently, boxed figures representing screens may not exactly duplicate the actual display.
5. All numbers are decimal unless we indicate otherwise.

Contacting Data General

- * If you have comments on this manual, please use the prepaid Remarks Form that appears after the Index. We want to know what you like and dislike about this manual.
- * If you need additional manuals, please use the enclosed TIPS order form (USA only) or contact your Data General sales representative.
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End of Preface

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CHAPTER 1

INTRODUCTION

This chapter explains your managerial responsibilities and gives you an overview of the CEO[®] Word Processing — Independent software and directory structure. CEO Word Processing — Independent runs under the Advanced Operating System (AOS) and the Advanced Operating System/Virtual Storage (AOS/VS).

Responsibilities of the CEO Manager

Managing the CEO Word Processing — Independent system includes a number of system management tasks (software and hardware), and some office management tasks.

To manage the CEO word processor, you need to have a working knowledge of the operating system, the directory and file structure, and the hardware. You also need to understand how the CEO Word Processing — Independent system software fits together, and how to perform the tasks related to setting up and maintaining it. You will perform most of these tasks at the system console, using the Command Line Interpreter (CLI). Chapters 1 through 7 explain these tasks.

You perform the office management tasks from the CEO Independent Word Processor's menu structure. Therefore, though you will need to have an understanding of office operations, you do not need to have much knowledge about computers. In fact, you may choose to delegate the office management tasks to others. Chapter 8 describes the office management functions.

What the CEO Word Processing — Independent System Programs Do

CEO Word Processing — Independent comprises a group of programs that interact to produce a unified, menu-driven word processing system. These programs include

- * The word processor
- * The queue manager
- * CEO Word Processing — Independent utility programs
- * Optional CEO Spelling

Figure 1-1 diagrams the CEO Word Processing — Independent system and shows the relationships among the main programs. Refer to this figure as we describe these programs.

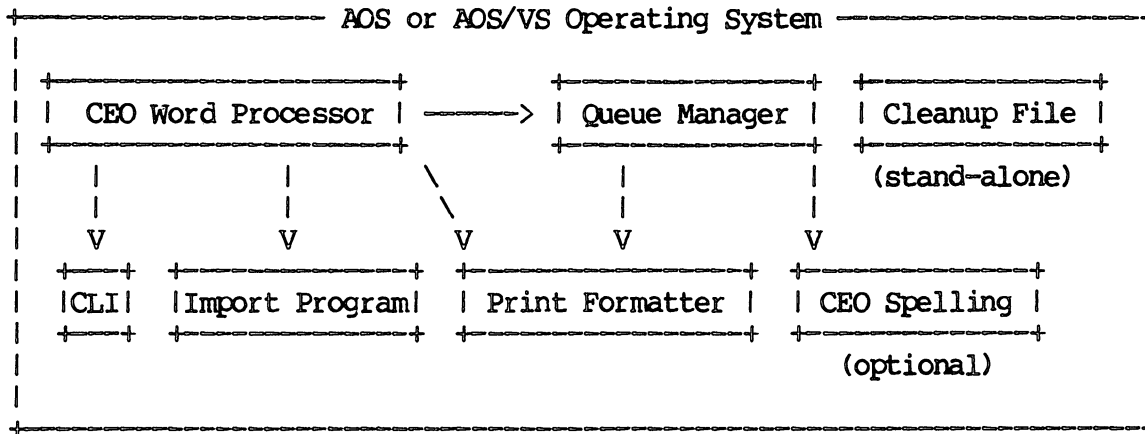


Figure 1-1. The CEO Word Processing — Independent System Programs

The Word Processor Program

When a user logs on, the word processor program (CEO_WP.PR) starts up to handle that user's requests. The word processor program generates menus, allows the user to edit a document, or calls one of the other programs, depending on the operations the user performs. The word processor program also interacts with the operating system. For example, the operating system takes care of filing on behalf of the user.

The Queue Manager Program

The queue manager program (CEO_QMA.PR) controls the print formatter, the document rebuilding utility, the CEO Spelling program, and the closing, formatter, and spelling queues. These queues hold requests for document requests.

The CEO Word Processing — Independent Utility Programs

There are a number of CEO Word Processing — Independent utility programs, which include

- * The cleanup file program (CEO_CLEANUP_FILE.PR), which builds a file of printing specifications for the letter-quality printer.
- * The file conversion utility programs (CEO_FILE_CONVERT.PR and CEO_CONVERT.PR), which convert pre-Revision 1.50 documents so that the Revision 1.50 software can access them.
- * The print formatter program (CEO_FORMATTER.PR), which formats CEO documents for printing, and which moves documents into the AOS or AOS/VS directory structure. In the latter case, the user can choose to convert documents into TXT files.
- * The import program (CEO_IMPORT.PR), which lets users move external files into the word processing system. The import program converts AOS or AOS/VS files (both UDF and TXT files) and AZ-TEXT™ files (file type WRD) to CEO files (also file type WRD) when it moves them, but leaves the original file where it was. If the original file is already a CEO file, the import program simply duplicates it.
- * The document rebuilding utility (CEO_REBUILD.PR), which closes documents in the closing (AFT) queue, and which corrects internal document errors (CEO_REBUILD.PR replaces CEO_VERIFY.PR).

The CEO Spelling Program

The optional spelling program (CEO_SPELL.PR) lets users check the spelling in a document. The program compares words in the document with words in two dictionaries. One of these is an in-house dictionary, which you can edit (see Chapter 8). The other is a large standard dictionary. Words not found in either dictionary are flagged as possible errors, which the user can correct with the word processor.

The Directory Structure

CEO Independent Word Processing requires a specific directory structure. The system program files require a fixed pair of directories — CEO_DIR and WP_FILES. We show these directories in Figure 1-2. Users' word processing files also require a specific directory structure: Figures 1-3 and 1-4 show two possible directory trees. Examine these figures as you read about the directories and what they contain.

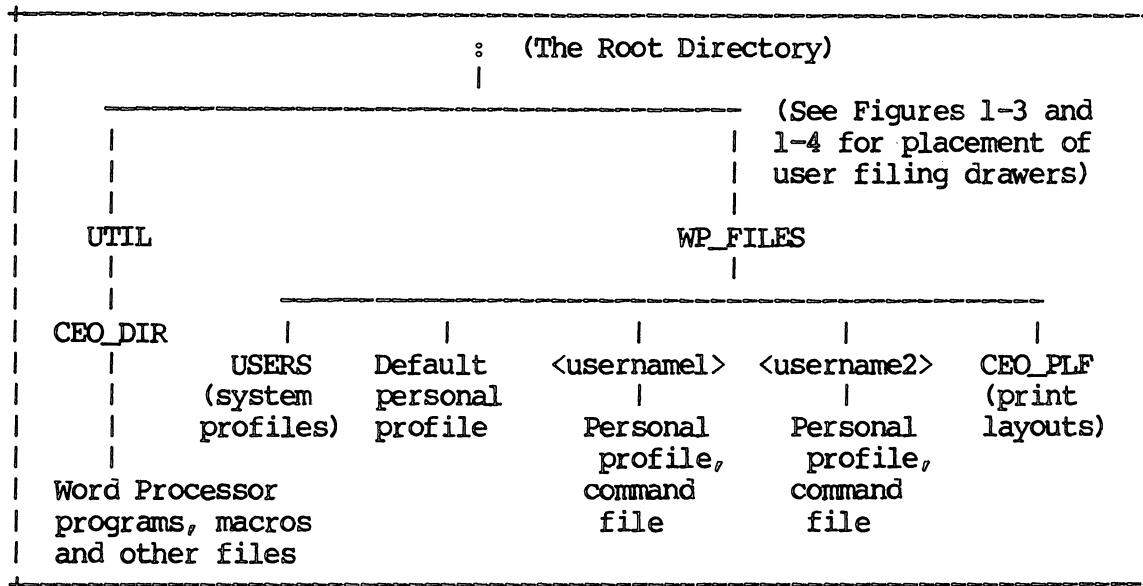


Figure 1-2. An Overview of the CEO Word Processing — Independent Directory Structure

The CEO_DIR Directory

The CEO_DIR directory contains programs, macros, and other resource files that the CEO Independent Word Processing system uses.

The WP_FILES Directory

The WP_FILES directory contains both directories and files:

- * USERS is a directory of user system profiles that control access to the word processing system. Only users with office manager privileges can change these profiles. See Chapter 8 for more information.
- * The word processor uses the default personal profile (WP_DEFAULT_PROFILE) for users who have not created their own personal profile.
- * For each user who has created a personal profile or a command file, there is a directory that contains these files.
- * CEO_PLF is a file containing the print layouts users have defined.

The User Drawers

Each CEO Independent Word Processing user has one directory, called a drawer, which lists up to 100 subdirectories, called folders. (Each folder, in turn, can list up to 100 WRD files, called documents.) You specify where to place a user's drawer when you create his or her system profile (see Chapter 8). One of the following structures should help your users best organize their working files and documents.

If the CLI Is the Primary System Interface

If users usually log on in the Command Line Interpreter (CLI.PR), you may want to place each user's drawer beneath his or her initial working directory. We show this type of directory structure in Figure 1-3.

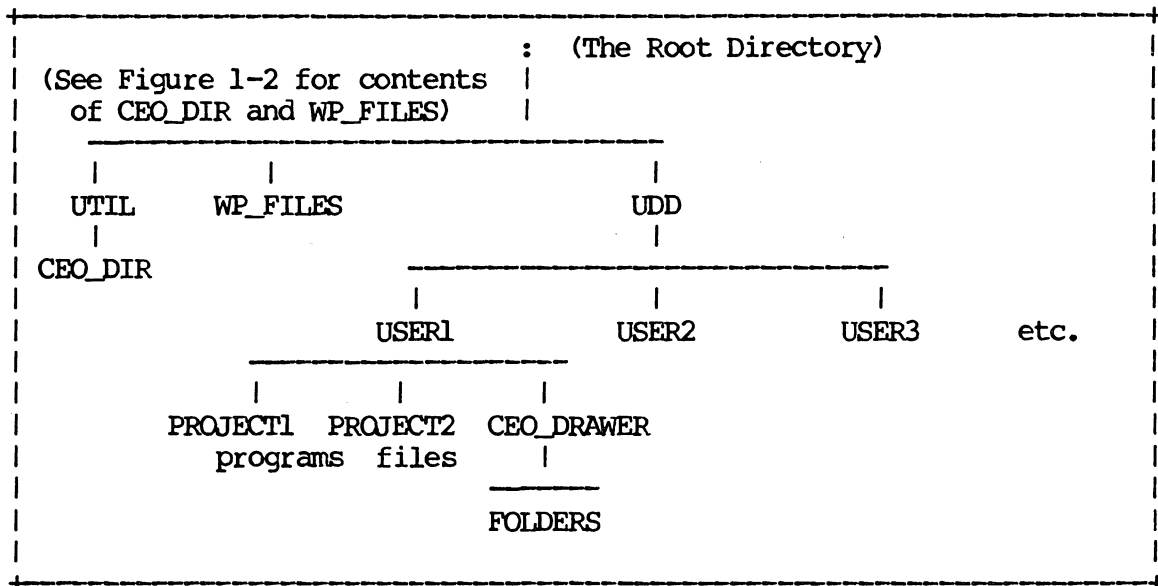


Figure 1-3. Placement of User Drawer if User Logs On in CLI.PR

Figure 1-3 shows that USER1's initial working directory (USER1) contains three subdirectories: PROJECT1, PROJECT2, and CEO_DRAWER. CEO_DRAWER is this user's CEO filing directory. It contains folders, which contain documents, and may also contain programs, text files, and other files. USER1 can display the contents of CEO_DRAWER — WRD documents and all files — by using the CLI FILESTATUS command. From the word processor's filing menu, the user will see only the CEO documents in the drawer.

If Users Will Do Word Processing Most of the Time

If users will do word processing most of the time, they can log on in CEO_WP.PR. In this case, you may wish to create a directory for word processing only. Figure 1-4 shows such a directory structure. Each user has his or her own personal drawer, and all users can share a common drawer. Anyone can import, export, duplicate, or move documents to (and from) this common drawer. This directory structure also eases backing up documents. Since all documents are in one place (directory CEO_DRAWER), it is easy to dump them to tape.

To have users log on in CEO_WP.PR, edit each user's PREDITOR profile. See Chapter 2 and Appendix A for more information about this.

To allow everyone access to a common directory (:CEO_DRAWER:COMMON), give it an ACL of +,WARE.

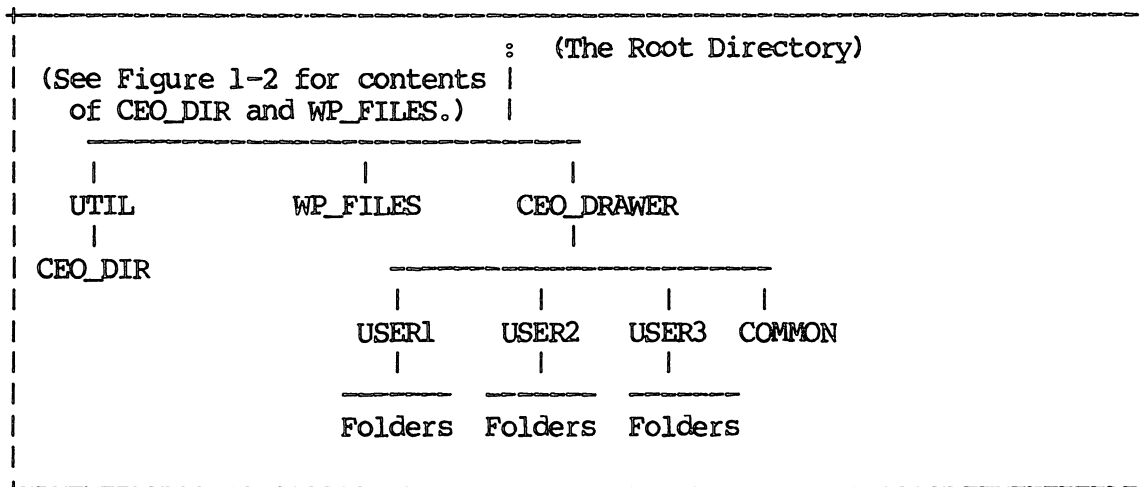


Figure 1-4. Placement of User Drawers if Users Log On in CEO_WP.PR

Non-CEO Files

You should be aware that users can import non-CEO files into their drawers, and also export documents, thus creating external files. These features allow importing into the CEO word processing system WRD documents as well as TXT or UDF files, without having to recreate them through the word processor.

End of Chapter

CHAPTER 2

STARTING UP THE CEO WORD PROCESSOR

This chapter explains starting up the CEO Word Processor. We show you how to bring up CEO Word Processing if you are running it for the first time or if you are updating a previous revision of the word processor. We also show how to edit your system's UP macro so that it starts up CEO when you bring up the operating system and other software.

The procedures we explain apply to any ECLIPSE® computers other than desktop systems. "Using AOS on DESKTOP GENERATION™ Systems" describes the procedure to follow for those systems. If you have a desktop system, you will want to see Chapter 8 of this manual for the dialog for creating CEO Word Processor profiles.

Procedures for Starting Up the CEO Word Processor

The following list of general procedures should help you start up the CEO word processor. We explain the details in the pages that follow.

If you are loading and installing the CEO Word Processor for the first time, start with step 1. If you are updating your word processing system, perform steps 3 through 5. Once you have CEO Revision 1.50 up and running, you can restart it by performing step 5. You will probably want to modify your system's UP macro to start up CEO Word Processing — Independent. See "Editing the System UP Macro to Start Up the CEO Word Processor" at the end of this chapter.

1. Define new specifications or override the default specifications for the size of the swap file (AOS) or swap directory (AOS/VS). Then create the EXEC process and start the printers.
2. Build a PREDITOR profile for at least one CEO user.
3. Load the CEO word processor files from tape or diskette into the computer.
4. Install the CEO system using the CEO.WP.INSTALLATION macro.
5. Start the queue manager program by typing CEO.QMA START.
6. As OP, log on to the CEO word processor at a user terminal in order to build a CEO word processor profile for the user mentioned in step 2.

1. Before loading the CEO Software

If you are generating a new operating system

- * Under AOS, when running the AOSGEN program, increase the size of the swap file from 2000 blocks (the default) to at least 6000 blocks. See "Managing AOS."
- * Under AOS/VS, when running the VSGEN program, set the swap directory to a reasonable size, as explained in "How to Generate and Run AOS/VS on Your ECLIPSE MV/Family Computer."

If you are bringing up an existing operating system, override the default specs when prompted to do so, and respecify appropriate swap file or swap directory sizes.

Then, bring up the EXEC process and start the printers. "Managing AOS" and "How to Generate and Run AOS/VS on Your ECLIPSE MV/Family Computer" explain how to create the EXEC process and start the printers. See also Chapter 7 in this manual for information about the printers.

2. Build a PREDITOR Profile For at Least One CEO User

At first, the CEO word processing system recognizes only one user, OP. Use the PREDITOR program to build profiles allowing other users to log on the computer. Create at least one other user profile now.

PREDITOR is explained in "Managing AOS" and in "How to Generate and Run AOS/VS on Your ECLIPSE MV/Family Computer." Refer to Appendix A, which gives the privileges necessary for using the CEO word processor. You may also wish to see Appendix B, which explains how the PREDITOR and CEO Word Processor profiles ensure system security.

3. Load the CEO Word Processor Software

1. If you are already running CEO word processing, notify users that you are upgrading the CEO system and have them log off. Type

```
) BROADCAST CEO SYSTEM COMING DOWN IN 5 MINUTES. PLEASE LOG OFF. `
```
2. You must load the CEO word processor files from the root directory. Type the following CLI commands to make the root directory (:) your working directory:

```
) SUPERUSER ON `
```

```
*) DIRECTORY : `
```

3. Now load the files for CEO Word Processing. If you have bought CEO Spelling or CEO LDP/12 software, load that as well.

If you are loading from a magnetic tape, mount the tape, and type

*) LOAD/V/DEL @MTXn:0 `

where X is A, B, or C, depending on the type of tape drive, and "n" is the tape drive unit number.

If you are loading from diskettes, insert the diskettes one at a time into the slot, and type

*) LOAD/V/DEL @DPXn:0 `

where X is D or I, depending on the type of diskette drive, and "n" is the diskette drive unit number.

4. Install the CEO Word Processor

The installation macro, CEO.WP.INSTALLATION.CLI, installs CEO Word Processing — Independent, Revision 1.50. When installing the word processor for the first time, the macro creates the directory :WP_FILES and initializes it. If you are already running the CEO Word Processor, it must be either Revision 1.20 or 1.21. If your word processor is older than either of these, you must interrupt the macro when prompted to do so, and install Revision 1.20 of the word processor.

When it runs, the macro saves disk space by deleting .ST files. To save additional disk space, the macro moves the SORT files from :UTIL:CEO_DIR to :UTIL and deletes the SORT program files from :UTIL:CEO_DIR.

Documents must be converted to a Revision 1.50 format before they can be edited or printed. The installation macro starts the document conversion program in batch to convert all documents in user directories under :UDD. We suggest that you back up all documents in :UDD before beginning the conversion. Because documents should not be edited during conversion and because conversion takes time, you may wish to start the installation macro at night. When it has finished converting documents, the conversion program sends a message to the system console and also reports any errors to the disk file :UDD:OP:CEO_CONVERSION_ERRORS.

To begin installing the CEO Word Processing — Independent system, type

*) CEO.WP.INSTALLATION `

5. Start the Queue Manager Program

You are now ready to start the queue manager program. This program must be running in order for users to format and print documents.

To start the queue manager program, enter the following command at the system console (PID 2):

```
) CEO.QMA START `
```

To start the queue manager program whenever you bring up the operating system, include the CEO.QMA START command in your system's UP.CLI macro.

6. Log on to CEO and Build a CEO Profile for An Office Manager

CEO Word Processing has a profile for one user, OP. Start the word processor by going to a user terminal other than the system console and log on as OP.

To start the CEO word processor at your terminal, type

```
) CEO.WP `
```

The CEO.WP.CLI macro adds : to the system search list. So, if you get the message TOO MANY DIRECTORIES IN SEARCH LIST, it means that the search list, which can have no more than eight directories in it, has become too long. Remove one or more entries from the search list and type CEO.WP again.

You are now ready to create a CEO Word Processing — Independent profile for the user for whom you have created a PREDITOR profile. You will give that user office manager privileges so that this user can create CEO word processor user profiles, which we explain fully in Chapter 8.

To make creating a profile for an office manager easier, we give here brief instructions. Chapter 8 explains the dialog questions in detail. After the CEO Word Processing — Independent Main Menu comes up on your screen:

1. Type the number 6 and press NEW LINE to call up the Utility Functions menu.
2. Type the number 7 and press NEW LINE to select the Office Manager option.
3. Type the number 1 and press the NEW LINE key to select the User Profiles option.
4. Type the number 1 and press the NEW LINE key to select the Create option.
5. Fill in the user ID (the name the user types to log on) of the user whose PREDITOR profile you created in step 2, and then press the NEW LINE key.
6. Type in the pathname to this user's personal drawer — we'll call it :UDD:USERNAME:CEO_DRAWER — and press the NEW LINE key.
7. You are asked if you want this drawer (the directory we've just named CEO_DRAWER) to be created as a Control Point Directory. Type Y and press the NEW LINE key.
8. You are asked to set the maximum size, in blocks, that you want this directory to grow to. Type 5000 and press the NEW LINE key.
9. You are asked if you want to allow this user to access documents by specifying a pathname. Type Y and press the NEW LINE key.
10. You are asked if you want this user to be allowed to use the CLI. Type Y and press the NEW LINE key.
11. You are asked if you want to grant this user office manager privileges. Type Y and press the NEW LINE key.
12. Finally, type Y and press the NEW LINE key in response to the "EXECUTE?" question. You will receive a message, on the bottom of your screen, saying that the profile has been created. Then the menu will clear, and the cursor will return to the first field.

You can now define another profile or, if you are done, press the CANCEL/EXIT function key (function key 11). Pressing CANCEL/EXIT when the cursor is in the first field of a menu always returns you to the previous menu. In this way you can return to the Main Menu. If you press CANCEL/EXIT from the Main Menu, you will be asked if you want to exit from CEO.

Editing the System UP Macro to Start Up the CEO Word Processor

If you want to bring up the CEO Word Processor whenever the operating system is started, you can edit your system's UP.CLI macro. There are two ways to do this. You can edit the UP.CLI macro using SED or SPEED, or, if you do not have a text editor on your system, you can create an UP.CLI macro by using the CLI CREATE command. Type

```
) CREATE/INSERT filename.CLI `
```

and the system prompts you with two right parentheses:

```
)
```

Type CLI commands or the names of other macros after the prompt. You can type one command or macro on a line, then press the NEW LINE key. When you are done, type a right parenthesis to close the macro file:

```
)))
```

In the UP macro, you should start the printer or printers before starting the queue manager program.

If you want, you can include the UP.CEO.WP.CLI macro. This macro starts the letter-quality printer, assuming you have only one, using the default cleanup file, and then starts the queue manager process.

Some users on your system will want to log on in the CEO Word Processor program rather than the CLI. Set this in the user's PREDITOR profile.

End of Chapter

CHAPTER 3

ROUTINE MAINTENANCE PROCEDURES

This chapter discusses the following routine maintenance procedures:

- * Monitoring disk space usage
- * "Archiving" CEO documents
- * Backing up the system

All system programs and files, and user data and documents, are stored on the hard disk. The fuller the disk, the slower the system will be. It makes good sense, therefore, to keep on disk only what the system and users really need. This chapter explains how to monitor disk space. With this information, you can take appropriate action if the disk has become full. You may simply ask users to clean up their own files and documents, or you may dump to archival tapes or diskettes material that is not needed now. This chapter also explains backing up your CEO files and documents. Be sure to do this regularly, since restoring files and documents is possible only if you have been keeping careful backup copies.

Monitoring Disk Space Use

There are two types of directories, control point directories (type CPD) and regular directories (type DIR). You can monitor disk space only in CPDs. (Many system directories, such as :UDD, are CPDs.) You can create a CEO Word Processing user's filing drawer as a CPD. (If you have users whose filing directories were created as type DIR directories, you can create CPD directories for them. By moving users' files and documents into these directories, you will be able to monitor space for each CEO Word Processing user on your system.)

When you create a user's filing directory, you can determine the maximum size to which it can grow. By using the CLI SPACE command, you can see the number of blocks of disk space allotted, used so far, and remaining for future use. Where you use the SPACE command depends on how you have set up users' filing drawers.

For example, suppose there is a user named Sandy on your system, and Sandy's filing drawer is :UDD:SANDY:CEO_DRAWER. To monitor the amount of disk space Sandy has used, type the following CLI commands:

```
) SUPERUSER ON `
*) DIR :UDD:SANDY `
*) SPACE/V CEO_DRAWER `
```

The system might display

```
=CEO_DRAWER      MAX 10000, CUR 7500, REM 2500
```

This shows that Sandy has used 7,500 of the 10,000 allotted disk blocks, leaving 2,500 blocks free for use.

To display the amount of space allotted, used so far, and remaining for all users on your system, type

```
) SUPERUSER ON `
*) DIR :UDD `
*) SPACE/V + `
```

Creating a Control Point Directory for Current Users

You can create a CPD filing directory for a user whose filing directory was created as a DIR (non-CPD) directory, and move the user's files and documents into it. Follow these steps:

1. Dump to tape or diskette the documents in the user's drawer.
For example:

```
*) DIRECTORY :UDD:JONATHAN:CEO_DRAWER `
*) DUMP/V/NACL @MTBO:0 # `
. . .
```

2. Delete the user's CEO system profile and the user's drawers and folders.

3. Create a new profile, establishing this user's drawer as a CPD.

4. Have the user log on; this creates the user's drawer.

5. Load the user's documents from tape or diskette.

"Archiving" CEO Documents

Storing or "archiving" CEO documents in a tape or diskette archives protects important data files and reduces the amount of data on a hard disk.

To best use available storage space, most CEO sites will need a procedure for storing archival documents. If you need to keep a copy of a document, but do not need that copy on-line and immediately available, you should store it in a tape or diskette archives.

To store documents in an orderly way, you can create a special non-CEO directory to handle the flow of documents. Then, follow the general procedures outlined in Figure 3-1.

- | |
|--|
| <ol style="list-style-type: none">1. Export the document from the CEO Independent Word Processing system into the external archives directory. Choose option 5, "Export file," from the Utility Functions menu. When you are asked whether the file is to be an AOS file, answer N.2. Dump the files to be archived onto magnetic tape or diskette. In the case of desktop systems, follow the procedures described in "Using AOS on DESKTOP GENERATION™ Systems".3. Record the names of the documents and the date on the label. If you are using diskettes as your storage medium, write on the diskette envelope only with a felt-tipped pen so as not to damage the diskette's surface.4. Delete the disk copies of the document. |
|--|

Figure 3-1. How to Store CEO Documents

If a CEO user needs a stored document, locate the appropriate magnetic tape or diskette, mount the tape or place the diskette in the correct slot, and reload the file into the archives directory. After the file is loaded, the CEO user can import it.

Backing Up the System

The only way to recover following the loss of the disk is to restore the system from a backup copy. You will want to backup regularly in order to prevent loss.

Before backing up the CEO system on tape or diskette, make sure that all users are logged off CEO. Mount a magnetic tape (with a write-enable ring) on the tape drive you are going to use, or insert the diskette in the proper slot. Then, at the system console enter the commands shown in Figure 3-2. (See "Using AOS on DESKTOP GENERATION Systems" for the procedures to follow for a desktop system.)

```
) DIR :UDD `
```

For a full dump:

```
) DUMP/V @MTXn # `
```

where X is A, B, or C, depending on the type of tape drive,
and "n" is the tape drive unit number.

or

```
) DUMP/V @DPXn `
```

where X is D or I, depending on the type of diskette drive,
and "n" is the diskette drive unit number.

For a partial dump:

```
) DUMP/V/AFTER/TLM=dd-mm-yy @zzzn `
```

where /AFTER/TLM means files and documents created or
modified after a date you specify, and zzz is a tape or
diskette drive, as above, and "n" is the tape or diskette
unit number.

Figure 3-2. How to Back Up the CEO Files

When the dump is complete, rewind and dismount the tape or remove the diskette. You should keep daily backup copies for at least one week. Weekly dumps should be kept for at least one month.

End of Chapter

CHAPTER 4
RECOVERY PROCEDURES

Recovery enables you to restart software that has crashed and to restore lost data, if possible. You should also be routinely backing up data that make restoring lost data possible. We describe backing up the CEO Word Processing System in Chapter 3.

Some type of recovery is usually necessary if any of the following occurs:

- * The operating system hangs or crashes.
- * The word processor hangs or crashes.
- * The queue manager process hangs or crashes.
- * A disk pack containing word processing information is lost.

If the Operating System Crashes

For the procedures to follow in order to restart the operating system, see "AOS Operator's Guide" or "How to Generate and Run AOS/VS on Your ECLIPSE MV/Family Computer."

If the word processor or queue manager hangs, terminate the process from the system console. Then, restart the queue manager program. The user restarts the word processor by typing CEO.WP.

If the Word Processing System Crashes

If CEO Word Processing terminates unexpectedly, some work may be lost. Table 4-1 summarizes these losses.

Table 4-1. Summary of Losses After a Program Crash

Program	What You Lose
Word processor	If in a menu, the information entered into the last displayed menu. If editing, all edits since the last time the document was updated.
Queue manager	Some printing and spelling requests.

If the Word Processor Hangs or Crashes

If the word processor hangs during a viewing or editing session, you can terminate the process from the system console. Or, the user can abort the word processor by pressing the CMD and BREAK keys (or the BREAK key alone), and then pressing and holding down the CTRL key while typing C and B.

If the CEO Word Processor terminates before the user views or edits a document, the user will lose the information entered in the current menu. When the user re-enters the word processor, there may be no default folder and document (the ones last used). In most cases, the loss is merely inconvenient, forcing the user to reconstruct the lost menu information.

If the word processor crashes while the user is viewing or editing a document, one of two things can happen: if the user logged on in CEO_WP.PR, he or she will be logged off; if the user logged on in the CLI, he or she will see the CLI prompt. In either case, a user can start over again by logging on.

When an editing session is aborted, all edits made in the document since the last document update can be lost. This means that the user will lose the work done during the previous 5 to 30 minutes, depending on what he or she has set as the frequency of document updating. Only a document being edited at the time of the crash will be affected.

If the word processor terminates while the user is viewing or editing a document, the system displays the message CANNOT VIEW/EDIT DOCUMENT, SERIOUS ERROR IN CEO_WP. (The system will also create a special dump file with a .BRK extension under AOS and a .BRK or .MDM extension under AOS/VS. You should include this file with your STR. See Appendix E.) To recover the document, execute the CEO_REBUILD program, which rebuilds the document, correcting any internal inconsistencies.

How to Rebuild a Document

If a user receives the message that a document cannot be edited because of a serious error from CEO, or if the document prints with missing text, or if indexing does not work as expected, it may be because the document has internal inconsistencies. The CEO_REBUILD.PR program looks at the .FME, .FMT, and .FMS files and at the closed document (described in Chapter 5) in order to rebuild an internally consistent document.

Execute CEO_REBUILD.PR from the CLI by typing

) XEQ CEO_REBUILD.PR pathname `

Pathname is a complete pathname to the document you want to rebuild. If you execute the program in the user's filing directory, you can use just the document name.

If the program cannot rebuild the document, it will display an error message on the user's terminal screen. Usually, the program will be able to produce an internally consistent document. In rebuilding a document, the program may not be able to fix every error. For example, if the program finds a damaged format ruler, it substitutes the standard format ruler. Likewise, the program may not be able to reconstruct every paragraph. The user should view or print the document to make sure that it reflects his or her intentions.

If the Queue Manager Program Hangs or Crashes

The queue manager program manages the document rebuilding utility (which closes documents), the formatter program, the optional spelling program, and their queues. If the queue manager program hangs, shut it down, then restart it. (Chapter 6 describes how to do this.) If CEO_QMA repeatedly hangs or crashes as soon as it is brought up, the problem may be a bad queue file. Delete :UTIL:CEO_DIR:CEO_QMA_SPOOL and bring up CEO_QMA again.

Following a crash, CEO Word Processing users may need to resubmit printing and spelling requests.

How to Reload the CEO System from Dump Media

If you have lost a full disk pack, after you reload the operating system, you will have to reload the CEO Word Processor programs, and user files and documents. Reload the program files from the release media, as we describe in Chapter 2.

To reload the CEO documents and their related files, as well as other files contained in users' CEO drawers and non-CEO directories, you need to reload from dump tapes or diskettes.

Reload from the last full dump, first (a full dump consists of a single file containing :UDD:#). Then, reload from the incremental dumps in chronological order, earliest to latest (an incremental dump contains only files changed since the previous full dump).

End of Chapter

CHAPTER 5

THE CEO DOCUMENT AND RELATED FILES

When a user logs on to the CEO Word Processor, the user is executing the CEO_WP.PR program. This program handles the menus the user sees as well as requests for viewing and editing a document. This chapter describes the product of the word processor, the CEO document and its related files. Read this chapter to learn about

- * CEO document creation
- * The CEO Document Files
- * The default format ruler and how to change it
- * The personal profile's word processing characteristics

CEO Document Creation

When a user creates a document, the CEO Word Processor makes a copy of the system's default document, CEO_DEFAULT.DOC, and places it in the drawer and folder the user specifies. This document does not yet contain any text, but it does contain one format ruler and a print layout (see Chapter 7). If users prefer to use a different format ruler or print layout, they can name a substitute in their personal profiles, and CEO will use that.

In naming a document or folder, the user can separate words with underscores or with spaces, which are easier to type. Later, when the word processor displays the documents a user has in a folder, the name will have underscores instead of spaces. Users must also remember to type underscores and not spaces when using pathname access.

For example, user Lori created a document called ACCOUNTS TO DATE. To access this document by its pathname, you would have to type :UDD:LORI:ACCOUNTS_TO_DATE.

Documents created with the word processor are files of type WRD.

For certain operations, the word processor builds additional files that pertain to a particular document. These files have the same root name as the document, with an extension to that name. The extension indicates the purpose of the file. For example, the file ACCOUNTS_TO_DATE.LP is a version ACCOUNTS TO DATE formatted for the draft printer.

Table 5-1 lists the document name extensions and what each means.

Table 5-1. Extensions to Document File Names

Extension	File Type	Identifies
.CED	UDF	Temporary file used for importing a document.
.CHG	UDF	File of changes made during editing.
.CTM	UDF	Temporary file used for importing a document.
.ER	UDF	File containing a formatter error message.
.FME	UDF	File correlating the document and .CHG files during editing.
.FMP	UDF	Temporary file used when printing a document.
.FMS	UDF	.FMT file renamed after editing session.
.FMT	UDF	A copy of .FME, updated during editing.
.FMV	UDF	File describing the document (during viewing).
.LP	UDF	Printer-ready document (draft printer).
.NEW	WRD	Temporary file for formatting or printing.
.QP	UDF	Printer-ready copy (letter-quality printer).
.XP	UDF	Printer-ready copy (laser printer).

The error message file (extension .ER) deserves special attention. When the formatter cannot complete a request, it builds an error message file reporting the error. CEO sends this file to the terminal from which the queue manager program was started, and also appends the file to the output file, if it is open. This file has the same name as the input document, with the .ER extension. If the error occurs in an output document, the .ER extension will have an additional extension. Figure 5-1 presents an example of an error message file BILL_OF_SALE.ER.

```

-- CEO Formatting Utility --
Input Document was -> :UDD:DAVID:BILL_OF_SALE
The reason for the error appears here.
Output File was -> :UDD:DAVID:BILL_OF_SALE
INPUT AND OUTPUT FILES MAY NOT HAVE THE SAME NAME
Last file accessed was -> :UDD:DAVID:BILL_OF_SALE

```

Figure 5-1. A Sample Formatter Error File

Sometimes, the formatter will not be able to format a file for an understandable reason. For example, the document a user wants to print is being edited by another user. Occasionally, the user won't understand why he or she cannot format the document. In such cases, either try to fix the document (see Chapter 4), or send us an STR (see Appendix E).

The Default Format Ruler

A document's format rulers determine the left and right margins, tabs, decimal tabs (which align numbers on their decimal point), and vertical spacing. They also permit choosing the number of lines per page (see Chapter 7). Unless the user's personal profile specifies another one, when the word processor creates a document, it uses the format ruler in the document CEO_DEFAULT.DOC as the default format ruler. Only someone logged on as OP can change the default format ruler.

If you have an integrated CEO system, it shares the use of this file with CEO Word Processing — Independent.

Table 5-2 lists the specifications for CEO_DEFAULT.DOC's format ruler.

Table 5-2. Default Format Ruler Specifications

Parameter	Value
Left margin	Column 1
Right margin	Column 79
Tab positions	Columns 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, and 75
Decimal tabs	None
Vertical spacing	1 (single-spaced text)
Lines per page	54; automatic pagination while editing

During an editing session, the default format ruler appears like this:

L54.t...t...t...t...t...t...t...t...t...t...t...t...t...t...t...t...t...R

Changing the System's Default Format Ruler

To change the system's default format ruler,

1. Log on CEO as OP.
2. Import CEO_DEFAULT.DOC, which is in the directory :UTIL:CEO_DIR.
3. Edit only the format ruler, but note that if you are using a DASHER® D400, D410, D450, D460, or G300 terminal and you set the right margin above 80, users of D2 and D200 terminals won't be able to edit any new documents using the default format ruler.
4. Print the document. Printing commits your edits.
5. Export the document back to :UTIL:CEO_DIR. When prompted to export the document as an AOS or a WRD file, you must choose WRD file. You will get a warning that the new document will overwrite the old one. This is what you are trying to do.
6. Log off CEO.
7. Make :UTIL:CEO_DIR your working directory by typing
) DIRECTORY :UTIL:CEO_DIR `
8. Set the ACL of CEO_DEFAULT.DOC to OP,OWARE +,RE
) ACL CEO_DEFAULT.DOC OP,OWARE +,RE `

Personal Profile Word Processing Characteristics

In each user's personal profile, a number of characteristics are set for governing the user's interactions with the word processor. Some of the characteristics merely satisfy the user's preferences, such as whether or not the edited text appears in bright or dim characters. Others deserve special attention here.

Changing the Frequency of Updating Documents

Each user can specify how often the word processor will update his or her own documents (i.e., the word processor makes a .FMT copy of the .FME file). The interval can range from 5 to 30 minutes. The default interval is 15 minutes.

Updating more frequently provides greater protection from loss, but also uses more of the computer's processing time. If many users are updating frequently, there may be a noticeable lag in the system's response to user requests.

Choosing Nonstandard Printer Forms

Certain documents, when printed, require special paper forms. Users can specify in their personal profiles that they wish to be prompted for special forms. Then, for each printing operation, the CEO system will prompt the user to specify the type of form needed. See Chapter 7 for information about creating special forms files.

Changing the Personal Default Layout

When printing a document, a CEO user chooses either the default layout for that document or specifies a particular layout. The default layout is always the one last used to print that document. If the document has never been printed, the formatter uses the default layout that the user has named in his/her personal profile. If the user has not designated a default layout, the word processor uses the layout in the file CEO_DEFAULT.DOC. See Chapter 7.

Changing the Personal Default Format Ruler

The word processor uses a default format ruler when creating a new document. The system's default format ruler is defined in the file CEO_DEFAULT.DOC.

To establish a personal default format ruler, a user must specify a document whose initial format ruler is the one that is to serve as the default ruler. If such a document does not exist, the user can create one, then construct the desired format ruler. The user enters the name of this document in his or her personal profile. Then, the word processor will use this document's first format ruler as the default whenever the user creates a new document.

End of Chapter

Chapter 6

The CEO Queue Manager Program

When a user finishes editing a document, he or she implicitly requests that CEO close the document at a later time. Users may request explicitly that CEO check spelling in documents, or they may want to format and print a document.

The queue manager program (CEO_QMA.PR) handles these user requests for closing, spelling verification, formatting, and printing. The queue manager program builds lists of these requests, called queues, so that other programs can do the work in an orderly way. Afterwards, the EXEC process directs requests for printing to its print queues, which the queue manager program does not control. See "Command Line Interpreter (CLI) User's Guide (AOS or AOS/VS)" for more information about QDISPLAY and related commands.

In addition to controlling its queues, the queue manager program also controls the document rebuilding utility (CEO_REBUILD.PR), which closes documents in the closing queue as well as rebuilding damaged documents; the formatter program (CEO_FORMATTER.PR), which formats documents for printing; and the optional spelling program (CEO_SPELL.PR).

The Closing, Formatter, and Spelling Queues

When a user finishes editing a document, the system queues a request for the document to be closed to the closing queue. The document rebuilding utility closes items in this queue at a time when few or no users are active. By default, documents are closed at 23:59, which is the time set in the file CEO_CLOSING_TIME. You can edit this file with SED and set another time for closing. (Do not edit this file with SPEED because SPEED will strip the file of necessary trailing nulls.) If you set the time to 00:00, or if there is no file, documents won't be closed until a user requests an operation that will force a closing (e.g., printing or moving). Before the new time in CEO_CLOSING_TIME can take effect, users must log off CEO and log on again and all the current items in the closing queue must have been processed. In other words, it may take a day for the new closing time to take effect.

If the queue manager program is not running at the time specified in CEO_CLOSING_TIME, documents will be closed when the queue manager program starts again. Since closing documents puts a load on any system, you should set the time in CEO_CLOSING_TIME late in the day, but after most users have logged off.

When a user wants to verify spelling for a document, the system queues the request to the spelling queue. This queue handles spelling verification reports.

When a user instructs CEO to print a document, the system queues a request for the document to be formatted and printed to the formatter queue.

The Queue Manager Commands

The CEO.QMA macro lets you control the queue manager program and its queues. To perform a specific action, append one of the command arguments listed in Table 6-1 to the macro, using this format:

```
CEO.QMA  command_argument
```

The pages that follow give specific examples of each of the possible command arguments, arranged alphabetically for your convenience.

The queue manager program displays responses to these commands at the terminal where you started the program (normally the system console).

Table 6-1. Arguments to the Queue Manager Command

Argument	Who Can Issue It	Result
CANCEL	OP or user	Cancels a queued request.
CLOSE	OP	Closes queues to new requests.
CONTINUE	OP	Restarts paused queues.
DISPLAY	OP or user	Displays the queued requests.
FINISH	OP	Terminates the queue manager program as soon as the queues are empty.
OPEN	OP	Opens the closed queues.
PAUSE	OP	Suspends the queues after processing the active requests, but leaves the queues open.
START	PID2	Starts up the queue manager program and its queues.
STATUS	OP or user	Displays the status of the queues.
STOP	OP	Terminates the queue manager program and the queues.

CANCEL
Cancels a queued request.

Format

CEO.QMA CANCEL seq-no ...

where:

seq-no is the "sequence number" of the job you want to cancel. If you enter more than one number, separate each one with a space. If you give no argument, a message asks you for the number(s).

Description

This command cancels one or more queued requests. You identify each request by its number. If you supply no argument, the message

CANCEL WHICH SEQUENCE NUMBERS (NEW LINE TO EXIT)?

appears. Enter the number(s) of the jobs you want to cancel.

To display the closing, formatting, and spelling requests in the queue, and their numbers, use the CEO.QMA DISPLAY command.

Example

```
) CEO.QMA CANCEL `
CANCEL WHICH SEQUENCE NUMBERS (NEW LINE TO EXIT) ? 452 `
FROM PID nn : (CEO_QMA) REQUEST # 452 CANCELLED
) CEO.QMA CANCEL 466 `
FROM PID nn : (CEO_QMA) REQUEST # 466 CANCELLED
)
```

CLOSE
Closes the queues to new requests.

OP only

Format

CEO.QMA CLOSE

Description

This command closes the closing, formatter, and spelling queues to new requests. Jobs that are currently in these queues are not affected.

If a user submits a formatter or spelling verification request while the queue is closed, the request is acknowledged, but since the queue is closed, the action the user wants will not take place.

To reopen the queue, use the CEO.QMA OPEN command.

Example

```
) CEO.QMA CLOSE `
FROM PID nn : (CEO_QMA) QUEUES ARE CLOSED
)
```

CONTINUE
Restarts paused queues.

OP only

Format

CEO.QMA CONTINUE

Description

This command restarts the closing, formatter, and spelling programs that the command CEO.QMA PAUSE stopped. Processing will begin for requests that are in the queues.

Example

) CEO.QMA PAUSE `

FROM PID nn : (CEO_QMA) QUEUES HAVE BEEN PAUSED

·
·
·

) CEO.QMA CONTINUE `

FROM PID nn : (CEO_QMA) QUEUES ARE READY

)

DISPLAY

Displays the queued requests.

Format

CEO.QMA DISPLAY

Description

This command displays the current status of the queues and lists the current requests, if any.

Each displayed entry lists the job number, the user ID of the person who submitted the job, and the name of the WRD file to be processed. An asterisk identifies the active jobs.

NOTE: The name of the closing queue is AFTER.

Example

```
) CEO.QMA DISPLAY `
FROM PID nn:(CEO_QMA) QUEUES ARE OPEN
FROM PID nn:(CEO_QMA) QUEUES ARE READY
FROM PID nn:(CEO_QMA) QUEUES ARE READY
FROM PID nn:(CEO_QMA) AFTER QUEUE
FROM PID nn:(CEO_QMA) 267 AFT PAM :UDD:PAM:CEO_DRAWER:FIRST_FOLDER:WORK

FROM PID nn : (CEO_QMA) FORMATTER QUEUE
FROM PID nn : (CEO_QMA) 273 * MIR :UDD:MIR:CEO_DRAWER:FIRST_FOLDER:UN.LP
FROM PID nn : (CEO_QMA) 274 VI :UDD:VI:CEO_DRAWER:FIRST_FOLDER:DOS.LP

FROM PID nn : (CEO_QMA) SPELLING QUEUE
FROM PID nn : (CEO_QMA) 271 * GABE :UDD:GABE:CEO_DRAWER:FIRST_FOLDER:3.LP
)
```

FINISH

OP only

Terminates the formatter and spelling programs.

Format

CEO.QMA FINISH

Description

This command shuts down the formatter and spelling programs as soon as the queues are empty. (To prevent users from submitting additional requests to the queues, use the CEO.QMA CLOSE command also.)

Example

```
) CEO.QMA FINISH `
FROM PID nn : (CEO_QMA) QUEUES ARE TERMINATING
)
```

OPEN

OP only

Opens the closed queues.

Format

CEO.QMA OPEN

Description

This command opens the closing, formatter, and spelling queues that were closed with the CEO.QMA CLOSE command.

Example

) CEO.QMA OPEN `

FROM PID nn : (CEO_QMA) QUEUES ARE OPEN

)

PAUSE OP only
Suspends the queues after processing the active requests.

Format

CEO.QMA PAUSE

Description

This command pauses the closing, formatter, and spelling programs and queues after the currently active jobs (if any) complete. Users can, however, still submit requests to the formatter and spelling queues.

To restart the paused programs and begin processing the queued requests, use the CEO.QMA CONTINUE command.

Example

```
) CEO.QMA PAUSE `
FROM PID nn : (CEO_QMA) QUEUES HAVE BEEN PAUSED
)
```

START

PID2 only

Starts up the queue manager program.

Format

CEO.QMA START

Description

This command starts the queue manager program and opens the closing, formatter, and spelling queues. You must enter this command from the system console (PID2). All responses to queue manager commands are then returned to that terminal.

This is the only queue manager command that you can use when the queue manager program is not running.

Example

) CEO.QMA START `

FROM PID nn : (CEO_QMA) CEO_QMA IS NOW RUNNING

)

STATUS

Displays the status of the queues.

Format

CEO.QMA STATUS

Description

This command displays the current status of the queues. The queues may be READY or PAUSED, and OPEN or CLOSED.

Example

```
) CEO.QMA STATUS `
FROM PID nn : (CEO_QMA) QUEUES ARE OPEN
FROM PID nn : (CEO_QMA) QUEUES ARE READY AND IDLE
)
```

STOP

OP only

Terminates the queue manager program and queues.

Format

CEO.QMA STOP

Description

This command terminates the queue manager program immediately after the active requests finish. All other queued jobs are suspended until the queue manager program starts up again.

To restart the queue manager program, use the CEO.QMA START command.

Example

```
) CEO.QMA STOP `
FROM PID nn : (CEO_QMA) QUEUES ARE TERMINATING
)
```

End of Chapter

CHAPTER 7

PRINTING CEO DOCUMENTS

This chapter explains how to manage the printing of CEO documents.* By printing, we mean starting up and controlling the printers, as well as creating and modifying the files the printers need in order to print users' documents. At first, you will want simply to set up a working system. Then, you will spend some time fine-tuning the printing process to suit your users. You will do some routine tasks and take care of problems that arise from time to time.

We assume that Data General Systems Engineering has set up the printers and connected them to the computer according to your initial site plans. Once the printers are set up, you or Data General Systems Engineering can use the information in this chapter to use, create, or modify command files (macros) to control the printers, and create or modify other files the printers need.

We've arranged this chapter both topically and logically. For example, you'll find what you need to know to start up a letter-quality printer in the section "Starting a Letter-Quality Printer". Or you can read the chapter straight through to understand the process that takes a document file, formats it, and produces a printed page.

Table 7-1, lists the six major topics that affect the appearance of the printed page, and also highlights your managerial tasks. After you have learned about printing, you can use this table to point to areas that need fine-tuning.

* Some of the information in this chapter does not apply to the printing of CEO messages, inventory lists, etc. because the formatter program does not process them.

Table 7-1. Topics and Tasks Related to Printing

* The CEO Document	The user creates the document.
* The Default Format Ruler	<p>You can modify the format ruler in the document CEO_DEFAULT.DOC. See Chapter 5.</p> <p>The user can override this choice for each document, or can establish a personal default format ruler by creating it and naming its document in the personal profile.</p>
* The Print Layout	<p>You can modify the print layout in the document CEO_DEFAULT.DOC, making it the system's default print layout. You can also create standard print layouts.</p> <p>The user can override the system's default print layout for each document he or she creates, or can establish a personal default print layout.</p>
* The Printer	<p>The user chooses which printer to use, based on the kind of output he or she wants and on the use of text attributes.</p> <p>You set up the print queues and can control them; start the printers; can change the type faces in a letter-quality printer; can change the printing fonts in a laser printer; may restrict the use of the printers or designate them for special purposes.</p>
* The Cleanup File	You define a cleanup file for each letter-quality and laser printer. A cleanup file gives consistency in printing for CLI and CEO users.
* Printer Forms and Printer Forms Files	<p>The user may want to use nonstandard printer forms (paper), or you may want to make a nonstandard form your standard.</p> <p>You may change forms in the printer, create or modify printer forms files, and issue commands to control the printer.</p>

The CEO Document

Below, we list the factors that help determine the appearance of the printed page. Most of these appear different on the screen than they do on the page.

* **Format rulers.** These set the following:

The maximum line length. Because of word wrapping, the actual length of the longest line under any format ruler may be shorter than that ruler.

The left and right margins while viewing or editing. The left and right margins on the printed page are determined by the physical placement of the paper in the printer and by the left margin offset and the character pitch (the Print Layout).

The tab positions for regular and decimal tabs. On a laser printer with proportionally spaced fonts, tabbed text will appear somewhat different.

Pagination. The user can set the maximum number of lines to print on a page on a format ruler basis.

Vertical spacing. The user can choose .5, 1, 1.5, 2, 2.5, and 3-spacing in the document (while editing, all lines are displayed single-spaced). At printing time, if the user has selected a draft copy, single-spacing becomes double-spacing and double-spacing becomes triple-spacing (triple-spacing remains unchanged). The type of printer also determines the vertical spacing.

* **Text.** The density of text on the printed page may be higher than it is on the screen. Factors affecting text density are: right justification (which the user may select), character pitch, and the type faces (the Print Layout, the Printer)

* **Mandatory end-of-line markers (MEOLs).**

* **Text attributes:** bold, underline, bold and underline, double underline (becomes single underline on the draft and laser printers), subscript, superscript, overstrike, and usernote.

The Default Format Ruler

The format ruler in the document CEO_DEFAULT.DOC, which is in the directory :UTIL:CEO_DIR, is the system's default format ruler. We explain how to modify the system's default format ruler in Chapter 5.

The Print Layout

Whenever a user prints a document, he or she must choose

- * The number of copies to print (1 to 99)
- * Whether to print a range of pages (2 or more), or all the pages in the document
- * Whether to print a draft copy (single-spacing becomes double-spacing and double-spacing becomes triple-spacing)

A print layout, which becomes part of the document, stores other choices that relate to formatting and printing. Some users simply accept the default print layout that is part of CEO_DEFAULT.DOC, and which you can change. Other users prefer to set up their personal profiles so that they automatically use either another document's print layout or a general print layout. (General print layouts are stored in a special file, :CEO_FILES:CEO_PLF.) All users can always specify new print layout information at printing time. In all cases, print layouts contain the following information:

- * Which printer to use -- either a draft printer, a letter-quality printer, or a laser printer. If there are more than one of each type, the user can specify a specific printing device, not just the type of printer.
- * Justification of the right margin
- * Character pitch (characters per inch, which can be 10, 12 or 15) -- for letter-quality printers only
- * Paper feeding order -- dual bin letter-quality printers only
- * Headers and/or footers:
 - with or without text
 - with or without page numbers
 - first page with or without a header and/or footer
 - first page header and/or footer same as or different from others
 - headers and/or footers for odd pages only or for even pages only
- * Left margin offset -- see also the Printer, the Cleanup File
- * Whether to print user notes
- * Whether to print the document's index
- * Whether to merge documents or use list processing

Creating a Default Layout for CEO Users

The document CEO_DEFAULT.DOC contains no text but does contain an initial format ruler, as we explained in Chapter 5. CEO_DEFAULT.DOC also contains default print layout information. Only someone logged on as OP can change the default print layout. Users do not have to accept these values; they can modify any new document's print layout before they edit by naming a print layout in their personal profile.

To modify the print layout in CEO_DEFAULT.DOC, log on CEO as OP and then import CEO_DEFAULT.DOC from :UTIL:CEO_DIR. Choose to print the document with the layout that is to become the default; printing the document commits your choices. (Printing information is stored in the document's print summary.) Then, export the document back to :UTIL:CEO_DIR. You will be asked whether you want to export the document as a WRD file or an AOS file. You must export the document as a WRD file. Finally, from the CLI set the document's ACL to OP,OWARE +,RE.

Creating Standard Print Layouts for CEO Users

You can create a variety of standard print layouts for different purposes, as the user's guide describes. For example, you might want to create standard print layouts for letter-head stationery, for memos, reports, etc. Give meaningful names to these print layouts so that users can choose from them easily.

The Printer

The CEO Word Processing system can use three types of printers: draft printers, letter-quality printers, and laser printers. The next sections describe

- * The types of printers and what each is good for
- * How to identify printers so that users can use them
- * How to restrict printers for efficiency and security
- * For each of the three types, specific procedures for starting the printers and creating their queues

Printer Types

Each printer has different capabilities.

- * A draft printer (Printer 1) is good for fast, inexpensive copies. It cannot print subscripts or superscripts, and prints double underlining as single underlining. The printer allows 1, 2, and 3-spacing.
- * A letter-quality printer (Printer 2) produces high-quality output. You can change type faces by mounting different print wheels or thimbles. The user can select 10, 12 or 15 pitch. The printer can handle all text attributes, and allows vertical spacing from half- to triple-spacing in half-spaced increments.

A model 4518 letter-quality printer, with the proper attachments, allows the user to change paper-feed order, which permits mixing paper types (e.g., color, letter-head, or plain paper) or alternatively printing letters and envelopes.

- * Data General's LDP/12 laser printer (Printer 3) produces the highest quality output. It also allows you to choose from a variety of fonts, including monospaced and proportionally spaced fonts. You can load two different fonts at the same time, in addition to the landscape font (the font used when the paper is printed sideways). The printer can handle all text attributes (but changes double underlining to single underlining), and 1, 1-1/2, 2, and 3-spacing. The laser printer cannot overstrike.

Identifying Printers

When a user wants to print a document, the CEO system asks

>>> Which printer? <<<

Draft printers are numbered 1, 1A, 1B, etc. Letter-quality printers are numbered 2, 2A, 2B, etc. Laser printers are numbered 3, 3A, 3B, etc. Be sure to let your users know to which printing device each of these numbers refers.

If the user answers 1, the document is sent to queue LPT; if the user enters 1A, the draft printer attached to queue LPT1 is used, etc.

If the user answers 2, the document is sent to queue LQP; if the user enters 2A, the letter-quality printer attached to queue LQP1 is used, etc.

If the user answers 3, the document is sent to queue LDP; if the user enters 3A, the laser printer attached to queue LDP1 is used, etc.

Table 7-2 lists the valid queue names and the associated printer codes.

Table 7-2. Queue Names and Printer Codes

Draft Printers		Letter-Quality Printers		Laser Printers	
Queue Name	Code	Queue Name	Code	Queue Name	Code
LPT	1	LQP	2	LDP	3
LPT1	1A	LQP1	2A	LDP1	3A
LPT2	1B	LQP2	2B	LDP2	3B
LPT3	1C	LQP3	2C	LDP3	3C
LPT4	1D	LQP4	2D	LDP4	3D
LPT5	1E	LQP5	2E	LDP5	3E
LPT6	1F	LQP6	2F	LDP6	3F
LPT7	1G	LQP7	2G	LDP7	3G
.	
LPT26	1Z	LQP26	2Z	LDP26	3Z

(Draft printers are associated with a particular printer device code such as @LPB, @LPB1, @LPB2, etc. Each letter-quality printer is associated with a particular console number, such as @CON34. Laser printers, like draft printers, are associated with a particular device code such as @LPD, @LPD1, @LPD2, etc.)

Restricting Printers

You may choose to restrict printers in several ways. For example, you may set up office procedures so that only certain groups of users are allowed to use a particular printer. Or you can place a printer in a secure area. Or you may restrict printers by the type of documents to be printed. Table 7-3 shows an example of one site's choices.

Table 7-3. Sample List of Company Printers

PRINTERS: CEO ACCESS CODES, LOCATIONS, AND RESTRICTIONS		
DRAFT PRINTERS:		
Code	Location	Comments
1	Computer room	For general use, wide paper.
1A	Computer room	For general use, narrow paper.
1B	Room 32 (Locked)	For Company Confidential material, narrow paper.
LETTER-QUALITY PRINTERS:		
Code	Location	Comments
2	Room 10	For general use — 10 pages maximum.
2A	Room 12	For general use — cut-sheet paper.
2B	Room 12	For general use — envelope feeder.
LASER PRINTERS:		
Code	Location	Comments
3	Room 9	For Advertising Department only.
3A	Room 34 (Locked)	For Company Confidential material.

Starting a Draft Printer

To start a draft printer, a print queue for it must first exist. If one does not, you need to create a print queue for it now. Go to the system console (PID2) and type the commands shown in Table 7-4.

Table 7-4. Creating a Print Queue for a Draft Printer

CONTROL @EXEC CREATE PRINT LPTx
CONTROL @EXEC OPEN LPTx
CONTROL @EXEC START LPTx @LPBn
CONTROL @EXEC CONTINUE @LPBn
where:
@LPBn is device name @LPB, @LPB1, @LPB2, etc., as appropriate
LPTx is queue LPT, LPT1, LPT2 . . . LPT7

A data channel line connects each draft printer to the computer. The printer connected to the first line is @LPB, the next printer is @LPB1, and so on through @LPB7.

For a second printer, substitute LPT1 for LPT, and so on for additional printers. See Table 7-2 for valid queue names and printer codes.

You may wish to include the lines below in your system's UP.CLI macro. That way, the draft printer will start up with the rest of the system.

```
CONTROL @EXEC START LPTx @LPBn
```

```
CONTROL @EXEC CONTINUE @LPBn
```

where:

@LPBn is device name @LPB, @LPB1, @LPB2, etc., as appropriate
LPTx is queue LPT, LPT1, LPT2 . . . LPT7

Include these lines after the CLI PROCESS command that creates the EXEC process and before starting CEO and enabling user terminals.

Aligning Paper in a Draft Printer

You must adjust the paper in the draft printer so that the printing hammers line up with the top line on the page.

By default, the CLI QPRINT command starts printing on the fourth line of the page and prints to the last line. (These are the default top-of-form and bottom-of-form settings; see Table 7-8). Some CLI users, who do not know how to change the default settings, adjust the paper to permit a bottom margin of one or two lines. If they do, the draft printer will not be properly aligned for CEO users.

Changing Supplies or Settings

If the printer has run out of paper

1. Open the gate and change the paper (see the hardware manual for the details).
2. Align the paper and shut the gate.
3. Press the POWER ON--ALARM/CLEAR button.
4. Press the READY--ON/OFF LINE button.

Printing should now resume.

If you want to change the paper or the ribbon, first pause the printer to allow the current printing job to finish. Then you can change the paper or the ribbon.

To pause the printer, log on as OP and type

```
) CONTROL @EXEC PAUSE @LPBn `
```

where: @LPBn is device name @LPB, @LPB1, @LPB2, etc., as appropriate.

Then, change the paper or the ribbon. When you are done, type

```
) CONTROL @EXEC CONTINUE @LPBn `
```

Starting a Letter-Quality Printer

Before you start a letter-quality printer,

1. The printer must have been properly designated as a console during the system generation procedure. You can test to see if it was by using the CLI COPY command with a short file, such as a macro, as an argument. If the file prints, you know that the console was properly designated in the system generation procedure. You also know that the switches on the printer are set correctly and that the electrical cable and power cord are connected.

For example, you would type at the OP console

```
COPY @CONnn filename
```

where: @CONnn is the letter-quality printer, designated as a user terminal.
filename is any (preferably short) UDF or TXT file.

2. You must either define a forms-control file for the letter-quality printer or use the default forms file QP.DEF.FORM). See "Printer Forms and Printer Forms Files" later in this chapter.
3. Make sure that you also have the proper cleanup file for the letter-quality printer. See "Defining a Cleanup File" later in this chapter.
4. Place paper in the printer and then turn the device on. (See the hardware manual for the details). The printer will self-test, or you can test it.
5. You are now ready to execute the CEO.IQP macro.

The CEO.IQP macro lets you start, or restart, a letter-quality printer. The macro creates a print queue, if one does not already exist, and then opens it. Then, the macro starts the printer with a special version of the printing program (LQP_XLPT.PR) that has been modified for CEO.

You also use CEO.IQP to

- * Check the status of the printer
- * Stop the printer to prevent its use or to change printing thimbles or ribbons, or to add paper
- * Recover in the event that the system has crashed while the macro was executing

Table 7-5 shows the CEO.LQP macro, which you can type at any terminal if you are logged on as OP.

Table 7-5. The CEO.LQP Macro

CEO.LQP	command	console	cleanupfile	queue_no
where:				
command	is START, STATUS, STOP, or RECOVER.			
	START allows the printer to begin printing requests in the printing program queue. Start also creates the queue if it does not already exist.			
	STATUS (requires only the console number) returns such information as the name of the queue connected to this printer.			
	STOP (requires only the console number) pauses the printer after the current job finishes. Use STOP before changing printer supplies.			
	RECOVER (requires no arguments). Only use this if the system crashes while CEO.LQP START was executing.			
console	is the console number of the letter-quality printer. To get the console number, add two to the number of the line connecting the letter-quality printer to the computer. For example, @CON34 is the device name of the letter-quality printer attached to line 32.			
cleanupfile	is the name of the cleanup file (the default cleanup file, CLEANUP.LQP, is in :UTIL:CEO_DIR).			
queue_no	is the number appended to the name LQP. For example, you would specify 3 for LQP3. This is an optional argument: if you omit it, the default is LQP.			

For example, the command

```
) CEO.LQP START 34 QP.CLEANUP 3`
```

first creates the queue LQP3, and then starts the letter-quality printer named @CON34 at that queue. The command assigns a cleanup file named QP.CLEANUP to the device. (A letter-quality printer needs a cleanup file to set certain values. If we had not named this file, we would have accepted the default cleanup file, CLEANUP.LQP. See "The Cleanup File" later in this chapter.)

When CEO.LQP starts a letter-quality printer, it uses a special version of the printing program, XLPT.PR: LQP_XLPT.PR. This version is modified for use with the CEO system. The substitution happens automatically.

You may wish to include the CEO.LQP macro in your system's UP.CLI macro. If you wanted to include the last example in your UP.CLI macro, you would use SED or SPEED to add the following lines to the UP macro:

```
:UTIL:CEO_DIR:CEO.LQP RECOVER  
:UTIL:CEO_DIR:CEO.LQP START 34 QP.CLEANUP 3
```

Place the lines after the CLI PROCESS command that creates the EXEC process.

If recovery is not necessary, the first line has no effect.

You will need to use CEO.LQP START whenever you restart the system or the printer.

NOTE: On a DESKTOP GENERATION system, the UP.CEO macro starts the letter-quality printer with the default cleanup file. You should therefore modify the default cleanup file rather than create other files if you want the UP.CEO macro to start the letter-quality printer.

Aligning Paper in a 55-cps Cut-Sheet Feeder

There are two ways to adjust the length of forms if your 55-cps letter-quality printer has a cut-sheet feeder attachment. You must consider both the actual length of the paper and the extra rotation (1 inch) required between sheets of paper. On the side of the letter-quality printer there is a sliding forms-length adjustment. Set this to the length of the form, plus one inch. For a 14-inch form, for example, set the adjustment to 15. Then, multiply this setting by the lines per inch (LPI), and use the resulting number to set the forms-length thimble setting. If you are using 14-inch paper and printing at 6 lines per inch, you would get $15 \times 6 = 90$ for the thimble setting. Note that the forms control file's LPP setting would be 14×6 or 84. See "Printer Forms and Print Forms Files" later in this chapter.

Starting a Laser Printer

Before you start a laser printer,

1. The laser printer must have been designated as an LPD device during the system generation procedure.
2. You must either define a forms control file for the laser printer or use the default forms file LDP.DEF.FORM). See "Printer Forms and Print Forms Files" later in this chapter.
3. Make sure that you also have the proper cleanup file for the laser printer. See "Defining a Cleanup File for a Laser Printer" later in this chapter.
4. Load the paper trays and then turn the device on. (The directions are on the printer.) The printer will print an initial status sheet.
5. When the printer is ready, the printer status lights will show "01..00". Once this happens, you may execute the CEO.LDP.CLI macro.

The CEO.LDP macro lets you start, or restart, a laser printer. The macro creates a print queue, if one does not already exist, and then opens it. Then, the macro starts the printer with a special version of the printing program (LQP_XLPT.PR) that has been modified for CEO.

You also use CEO.LDP to

- * Check the status of the printer
- * Stop the printer to prevent its use or to add toner or paper
- * Load new fonts without stopping and restarting the printer
- * Recover in the event that the system has crashed while the CEO.LDP macro was executing

Table 7-6 shows the CEO.LDP macro, which you can type at any terminal if you are logged on as OP.

Table 7-6. The CEO.LDP Macro

CEO.LDP	command	queue_no	default_font	bold_font
where:				
command	is	START, STATUS, STOP, FONIS, or RECOVER.		
		START allows the printer to begin printing requests in the printing program queue. START also creates the queue if it does not already exist.		
		STATUS (requires only the queue_no argument) returns such information as the name of the queue connected to this printer.		
		STOP (requires only the queue_no argument) pauses the printer after the current job finishes.		
		FONIS loads two fonts at a time from the :UTIL:FONIS directory into the printer, without stopping and restarting the printer.		
		RECOVER (requires no arguments). Only use this if the system crashes while CEO.LDP START was executing.		
queue_no	is	the number appended to the name LDP, the system name for a queue to a laser printer. This is an optional argument. If omitted, the default is LDP. You can have up to eight queues, LDP through LDP7.		
default_font	is	the name of a default (normal) font. If you omit it, you will load KOSMOS10_P.		
bold_font	is	the name of a bold font. If you omit it, you will load KOSMOS10B_P.		
	NOTE:	Load only portrait-mode fonts. You can display the names of available fonts by using the CLI FILESTATUS command in the directory :UTIL:FONIS:DLL. Portrait-mode fonts end with _P. Landscape-mode fonts end with _L. The printer displays a status of "LF" when the fonts are being loaded, and prints additional sheets when it is done.		

For example, the command

```
) CEO.LDP START 3 KOSMOS10_P KOSMOS10B_P `
```

first creates the queue LDP3, if it does not already exist; then loads from :UTIL:FONTIS the default font, KOSMOS10_P, and the bold font, KOSMOS10B_P, into the laser printer connected to LDP3; and then starts the printer.

You may wish to include the CEO.LDP macro in your system's UP.CLI macro. If you wanted to include the last example in your UP.CLI macro, you would use SED or SPEED to add the following lines to the UP macro:

```
:UTIL:CEO_DIR:CEO.LDP RECOVER  
:UTIL:CEO_DIR:CEO.LDP START 3 KOSMOS10_P KOSMOS10B_P
```

Place the lines after the CLI PROCESS command that creates the EXEC process. If recovery is not necessary, the first line has no effect.

Fonts for a Laser Printer

The LDP/12 printer provides a variety of font styles and sizes, some of which are proportionally spaced. In a proportionally spaced font, the letter "m" when printed is three times wider than the letter "i". On the screen, however, all characters are monospaced; that is, "m" and "i" use the same amount of horizontal space. The difference between screen display and appearance on the page will make it difficult to align columnar material, especially if spaces separate columns. If a user's document does not have columns in it, proportional spacing should not cause printing problems.

Users can avoid the problem of aligning columnar material entirely if you load a monospaced font, such as TITAN10_P and TITAN10B_P, included with the LDP/12 software. If they do use a proportionally-spaced font, they can minimize alignment problems by removing extra tab stops. For example, a user wanting columns at 20, 35, and 50, should not have intermediate tab stops at 25, 30, 40, and 45.

When you load fonts, be sure that the height of characters in the second (bold) character set is at least as tall as that of characters in the first (normal) character set. If it is not, the document's pagination will be affected. (Height, specified in points, is part of the font name. For example, KOSMOS12B_P (12 point type) is taller than KOSMOS10B_P.)

The directory :UTIL:FONTS:DLL stores fonts which you can load into the printer. Font character-width tables (used by the formatter to calculate characters that fit on a line) are stored in :UTIL:FONTS and have the extension .FT. Font name files, also stored in this directory, have a .FN extension. The CEO formatter requires that both the font.FT and font.FN files exist and are valid in order to correctly format a document in that font.

The Cleanup File

CEO can share printers with CLI users, who use the CLI QPRINT command. CEO and CLI differ in the way they use the letter-quality and laser printers, however. In order to give consistency in printing for both sets of users, CEO uses a cleanup file, so called because it resets the specifications at the end of a printing job.

A cleanup file for a letter-quality printer -- not the same as a cleanup file for a laser printer -- contains this information:

- * Left margin
A CEO document's format rulers are offset from this left margin. For example, if you set this number to 5 and a format ruler's left margin is also set to 5, the left margin of the printed page will be offset 10 spaces from the left edge of the paper. Users may also set a left margin by specifying a left margin offset in a document's print layout.
- * Right margin
The sum of the left margin plus the right margin must be 122 or less. CEO ignores this value because a document's format rulers set the right margin. The printer will beep if any line in a document exceeds this value.
- * Pitch (10 or 12)
CEO ignores this value since the print layout establishes it.
- * Lines per Inch (6 or 8)
Sets the number of lines per vertical inch. If you choose 8, you must also change the Lines Per Page setting in the print forms for the device.
- * Will you be using special paper feeding options? (Dual-sheet feeding or envelope feeding?)
If you answer Y (Yes), CEO keeps track of the primary bin, which is important where the two bins hold different kinds of paper. Do not answer yes if you do not have the hardware option.

Defining a Cleanup File for a Letter-Quality Printer

Each letter-quality printer requires a cleanup file. The name of the default cleanup file is CLEANUP.LQP. Create additional cleanup files if you are using different printing thimbles or sizes of paper.

To create or modify a cleanup file, use the CEO_CLEANUP_FILE.PR program. Since CEO.LQP START expects the cleanup file to be in the directory :UTIL:FORMS, you must

1. Execute CEO_CLEANUP_FILE.PR in the :UTIL:FORMS directory, or
2. Specify a pathname starting with :UTIL:FORMS when you name the file, or
3. Move the file to :UTIL:FORMS.

If you are modifying a cleanup file that the printer is using, first stop the printer before running the program; LQP_XLPT.PR exclusively opens the cleanup file, and you won't be able to modify the cleanup file.

To create or modify a cleanup file for a letter-quality printer, log on as OP and issue the following commands:

```
) DIRECTORY :UTIL:FORMS `
) SUPERUSER ON `
*) XEQ CEO_CLEANUP_FILE `
```

After you execute the CEO_CLEANUP_FILE program, the Cleanup File Generation menu will appear. Table 7-7 shows a sample menu.

Table 7-7. The CEO Cleanup File Generation Menu

CEO WP LQP Cleanup File Generation	
Cleanup File Name (maximum of 28 characters)	_____
Left Margin (characters offset from absolute left margin)	_____
Right Margin (character offset from Left margin)	_____
Pitch (10 or 12)	_____
Lines per Inch (6 or 8)	_____
Will you be using special paper feeding options? (Dual-sheet feeding or envelope feeding) (Y/N)	_____

The menu prompts you to enter the name of a cleanup file.

>>> Cleanup File Name <<<

Enter the name for the new cleanup file (or the name of an existing file that you want to change). The name cannot exceed 28 characters.

If the file does not exist, the menu prompts you

>>> Create New File (EXECUTE or CANCEL) ? <<<

To create the file, press the EXECUTE function key; if you do not want to create the file, press the CANCEL/EXIT function key. If you create the file, its name appears on the screen.

Next, the menu prompts you

>>> Left Margin <<<

If the left margin will not be at the left edge of the paper, specify how many positions to the right you want to set it. For a new file, the default value is 0, the left edge of the paper. Press the NEW LINE key if you want to use the displayed value. If you want to change the displayed value, type the new value and press the NEW LINE key.

>>> Right Margin <<<

For a new file, the default value is 122. The sum of the left margin value plus the right margin value must be less than or equal to 122. If the displayed value is acceptable, press the NEW LINE key; if it is unacceptable, type the appropriate value.

>>> Pitch <<<

For a new file, the default value is 10 (characters per inch). If the displayed value is acceptable, press the NEW LINE key; if it is not, type either 10 or 12 and press the NEW LINE key.

>>> Lines per Inch <<<

For a new file, the default value is six lines per vertical inch. If the displayed value is acceptable, press the NEW LINE key; otherwise, enter 6 or 8 and press the NEW LINE key.

>>> Will you be using special paper feeding options?
(Dual-sheet feeding or envelope feeding) (Y/N) <<<

For a new file, the default value is N. If you have a Model 4518 (35 cps) letter-quality printer with an attached dual-sheet or envelope feeder, type Y and press the NEW LINE key.

After you respond to the final question on the menu, the program builds or modifies the cleanup file according to your specifications.

NOTE: Any new files you create as OP will have an access control list (ACL) of OP,CWARE. Be sure to change the access control list for a new file to OP,CWARE +,RE. For example, type

```
) ACL cleanupfile_name OP,CWARE +,RE `
```

Defining a Cleanup File for a Laser Printer

The LDP/12 laser printer requires a cleanup file that is different from the one for a letter-quality printer. The cleanup file supplied with the LDP/12 software is CLEANUP.LDP. The CEO.LDP.INSTALLATION macro makes a copy of CLEANUP.LDP and places it in the directory :UTIL:FORMS with an ACL of OP,CWARE +,RE.

For an additional laser printer, you must make a copy of the first cleanup file and assign a specific name to it. You must not use CEO_CLEANUP_FILE.PR, previously described, to modify this file or to create a new file. (There are no user options in the cleanup file for the laser printer.) Because a cleanup file is exclusively opened, you must first stop the laser printer before you can proceed with making a copy of the cleanup file.

To create a cleanup file for a second laser printer, log on as OP and type the following commands:

```
) CEO.LDP STOP queue_no `  
) DIR :UTIL:FORMS `  
) COPY CLEANUP.LDP1 CLEANUP.LDP `
```

For a queue named LDP1, you must name the cleanup file CLEANUP.LDP1;
for a queue named LDP2, you must name the cleanup file CLEANUP.LDP2;
etc.

Restart the first laser printer according to your usual procedure, and then start additional laser printers.

Printer Forms and Printer Forms Files

Both the printing program (CEO_XLPT.PR) and the formatter program (CEO_FORMATTER.PR) must know the size of the printer forms (paper) in a printer. If you use standard 8 1/2 by 11-inch paper, read this page to learn all you need to know about printer forms. If, however, a user wants to use a nonstandard printer form or if you want to make a nonstandard form your standard, read the following sections, which tell you what you need to know in order to control use of printer forms.

You can communicate with the printing program by using special CONTROL @EXEC commands, which we explain later in this chapter. If you do not use these commands, you accept the default, which is the standard 8 1/2 by 11-inch paper.

You use printer forms files to communicate with the formatter program about the size of printer forms. The default printer forms files are compatible with standard 8 1/2 by 11-inch paper. Table 7-8 shows the default printer form specifications for these files, which were loaded into the directory :UTIL:FORMS when the CEO software was installed. These files have an ACL of OP,OWARE +,RE.

Table 7-8. Default Printer Form Specifications

Forms Files:	LPT.DEF.FORM (for a draft printer)
	QP.DEF.FORM (for a letter-quality printer)
	LDP.DEF.FORM (for a laser printer)
Characters per line:	80
Tab stop positions:	8, 16, 24, 32, 40, 48, 56, 64, 72
Form length in lines per page:	66
Top of form (channel 1) line number:	4
Bottom of form (channel 12) line number:	66

Let's now take a closer look at a print forms file before explaining how to

- * Check the compatibility between a printer form and its associated printer forms file
- * Create or modify printer forms files
- * Print on nonstandard forms

Contents of a Printer Forms File

Table 7-9 shows what a printer forms file must have. CEO and CLI can share this file, which is why there are five values in the file even though CEO uses only two of them: form width (CPL) and length (LPP). The printing program checks these values against the CPL and LPP settings for the device. If there is a discrepancy, it sends the user a message that the forms do not match.

Table 7-9. The Contents of a Printer Forms File

* Characters per Line (CPL)	The number of characters per line must be less than or equal to the CPL setting of the device. Since a laser printer can use proportionally spaced fonts, convert the form width in inches to CPL, figuring 1/10 inch per character.
* Tab Stops	CEO ignores these settings since format rulers set tab stops.
* Form Length in Lines Per Page (LPP)	The form length must match the actual length of the paper in the printer. Since a laser printer can use fonts that vary in height, convert the length of the paper in inches to LPP, figuring 6 lines per inch.
* Top of Form Line Number (TOF)	For CLI users, this number is set to 4 by default so that there will be a top margin. CEO overwrites TOF with 1 so that it can print on the first line of any page. CEO users can use blank headers if they want a top margin.
* Bottom of Form Line Number (BOF)	Both CLI and CEO set this value to the LPP value. CEO does this so that it can print on the last line on a page. CEO users can use blank footers if they want a bottom margin.

Checking Printer Forms/Printer Forms File Compatibility

The CPL and LPP settings in a printer forms file must be compatible with the device settings (see Table 7-9). This section shows you how to check the current device settings. To ensure compatibility between a printer forms file and a device, use care when creating or modifying printer forms files. We explain how to create or modify printer forms files in the next section.

To find the current CPL and LPP settings for the devices on your system, log on as OP and type

```
) CONTROL @EXEC SPOOLSTATUS `
```

The system would then display status information like this:

```
)  
From Pid 3: (EXEC) @CON34 PROCESSING LQP  
From Pid 3: CPL=80, LPP=66, HEADERS=0, TRAILERS=0  
From Pid 3: EVEN PAGINATION DISABLED, BINARY MODE ENABLED  
From Pid 3: BIAS FACTOR=0, PTYPE=SWAPPABLE, PRIORITY=3  
From Pid 3: DEFAULT FORMS ON @CON34, QP.DEF.FORM  
From Pid 3: (EXEC) @LPB PROCESSING: BATCH_OUTPUT, BATCH_LIST, LPT  
From Pid 3: CPL=80, LPP=66, HEADERS=0, TRAILERS=0  
From Pid 3: EVEN PAGINATION ENABLED, BINARY MODE DISABLED  
From Pid 3: BIAS FACTOR=0, PTYPE=SWAPPABLE, PRIORITY=3  
From Pid 3: (EXEC) 15:32:07
```

In this example, both the letter-quality printer (@CON34) and the draft printer (@LPB) have a CPL setting of 80 and an LPP setting of 66. These are the default settings. You would encounter different settings where someone had chosen different values via the CONTROL @EXEC commands CPL, LPP, FORMS, or DEFAULTFORMS. We explain using these commands later in this chapter.

Creating or Modifying a Printer Forms File

The Forms Control Utility (FCU) allows you to create or modify printer forms file information. FCU does not itself create a file; it writes into an area in the file called the UDA (user data area). For this reason, to create a new printer forms file, first create the file with the CLI CREATE command. Don't use the CLI COPY command since it does not copy a file's UDA. Also, since the UDA does not add to a file's length, don't be surprised to see that print forms files have a length of 0.

A printer forms file must reside in the :UTIL:FORMS directory for the CEO system to use it. Log as OP in order to have access to this directory, and make sure that any files you create or modify have an ACL of OP,OWARE +,RE.

In the following sample FCU session we want to create a print forms file to support wide documents. We'll log on as OP, create the file, then execute FCU to create the forms information. We type the following commands:

```
) DIRECTORY :UTIL:FORMS `
) CREATE LPT1.WIDE.FORM `
) ACL LPT1.WIDE.FORM OP,OWARE +,RE `
```

Now, we execute the Forms Control Utility by typing

```
) XEQ FCU `
```

The FCU displays the following message on the screen:

```
AOS/VS Forms Control Utility  Revision xx.xx           date           time
Type 'Help' for instructions
Command ?
```

You can type H (Help) for a list of all the commands, but all you will need are C (Create) for a new file, E (Edit) for an old file, T (Type) to display the parameters of an existing file, and B (Bye) to end the FCU session.

If you enter the C or E commands, FCU returns with an interactive question/answer dialog. FCU encloses default values or current settings in square brackets, and you can select them simply by pressing the NEW LINE key. When you change certain parameters, FCU gives dependent parameters values default values. For example, when you change the line length, FCU makes a corresponding change in the tab stops.

You must answer ten questions to create or edit a printer forms file. To go back and change an answer, press the uparrow key. To go to the next question, press the NEW LINE key.

1. Command ?

Type C if the file has no forms control specifications. Type E to edit a file's existing forms control specifications. We type C because WIDE is a new file with no forms control specifications.

2. Pathname ?

Type the pathname or filename of the file whose forms control specifications you are creating or editing. We type WIDE and press the NEW LINE key.

3. Characters per Line (16-255)
[80]

Type the maximum number of characters you want on each line.

NOTE: At printing time, this number must be less than or equal to the line length of the form in the printer. For a laser printer, convert the width of the paper in inches to CPL, figuring 1/10 inch per character.

We type 132 and press NEW LINE. Because we selected a number larger than 80, FCU makes corresponding changes to the following question.

4. Tab Stops (2-131 OR STANDARD)
[8,16,24,32,40,48,56,64,72,80,88,96,104,112,120,128]

Even though CEO ignores these settings, we'll accept them by pressing the NEW LINE key. CLI users will now be able to use this file.

5. Form Length in Lines Per Page (6-144)
[66]

For a draft or a letter-quality printer, form length must match the actual length of the paper in the printer or the document will not be aligned properly. (For a laser printer, convert the length of the paper in inches to lines per page, figuring 6 lines per inch. For example, a standard 11-inch page equals 66 lines. If you want to print on only 10 inches of the page, answer 60 lines [60 lines = 10 inches]). We press the NEW LINE key.

6. Top of Form (Channel 1) Line Number (1-66)
[4]

To allow the CLI to begin printing on line 4, we accept this value by pressing the NEW LINE key. (To make CLI and CEO printing consistent, type 1 and press the NEW LINE key.)

7. Bottom of Form (Channel 12) Line Number (4-66)
[66]

We accept this value by pressing the NEW LINE key.

8. VFU Tape (Line numbers 4-66, Channels 2-11, OR STANDARD)
[]

We won't be using this feature, so we press the NEW LINE key.

9. Output to Pathname
[:UTIL:FORMS:WIDE] ?

We press the NEW LINE key to commit our choices.

10. Command ?

We press B because we are done.

Printing on Nonstandard Forms

The next sections show the commands needed to print on nonstandard forms temporarily or to make a nonstandard form your standard.

Printing on Nonstandard Forms Temporarily

If a user wants to use wide paper, probably the most usual nonstandard form, you would do the following:

1. Make sure that there is a file in :UTIL:FORMS called WIDE, or some other name indicating its purpose. The characteristics of this file are 132 characters per line and 66 lines per page. We show how to create a nonstandard print forms file in the last section.
2. Make sure that information in the document's print layout (or the print layout specified in the personal profile) matches the values in the nonstandard forms file.
3. From the OP console type

```
) CONTROL @EXEC PAUSE @LPB `
) CONTROL @EXEC FORMS @LPB WIDE `
```

Change the paper to the 132-column form, and type

```
) CONTROL @EXEC CONTINUE @LPB `
```

The user's documents will now be printed. Afterwards, type

```
) CONTROL @EXEC PAUSE @LPB `
) CONTROL @EXEC FORMS `
```

Change the paper and type

```
) CONTROL @EXEC CONTINUE @LPB `
```

Making a Nonstandard Form Your Standard

If you want to use a nonstandard form on a printer as your standard, the easiest way is to add the following command to the UP.CLI macro:

```
CONTROL @EXEC DEFAULTFORMS @devicename formname
```

where:

devicename is the name of a spooled device; it must begin with @.

formname is the name of a file containing formatting commands for printed output. The file is in the :UTIL:FORMS directory.

In the example we've been using, this would be

```
CONTROL @EXEC DEFAULTFORMS @LPB WIDE
```

The CONTROL @EXEC command DEFAULTFORMS allows users to print on a form without having to specify that form in their personal profiles.

NOTE: If users want to print documents with another nonstandard form, you will have to load a matching forms file. See previous page.

End of Chapter

CHAPTER 8

OFFICE MANAGER FUNCTIONS

Most of the manager functions described so far deal with the word processing system and how it relates to other software and hardware. This chapter describes management functions that you perform from the CEO Word Processing — Independent system's menus. Only office managers can perform these functions.

Who Is the Office Manager?

The office manager is anyone whose word-processing-system User Profile grants office manager privileges. Chapter 2 explained briefly how to build a system User Profile for an office manager. This manager then creates system User Profiles for other users, which can include office manager privileges.

An office manager does not have to be a computer expert, but must be someone who understands the day-to-day operations of the office. The office manager's task is to adapt the word processing system so that it suits the needs of the office.

An office manager has two main functions:

- * Creating, changing, and deleting CEO Word Processing — Independent system User Profiles
- * Creating and updating an in-house dictionary of nonstandard words that are commonly used in your office (only for systems that include CEO Spelling)

Sharing Office Manager Privileges

For security reasons, office manager privileges should be granted only when necessary, and only to responsible individuals. A single user can easily carry out all the office manager's duties. You may, however, want to have more than one office manager so that someone is always available to perform office manager tasks. By restricting the number of office managers, you can protect CEO Word Processing from accidental or malicious damage.

Using the Office Manager Functions

The office manager functions are available through a special menu. To display this menu, select the "Utility" option from the CEO Word Processing — Independent Main Menu. The Utility Functions menu then appears. If you have office manager privileges, an extra option appears on this menu: "Office manager functions." Figure 8-1 illustrates the Utility Functions menu.

```
+-----+
|                                         UTILITY FUNCTIONS
|
|  1. Other printing activity (Inventory print, print layouts)
|  2. Spell                   (Check spelling within a document)
|  3. Change profile         (Change your personal profile)
|  4. Import file           (Convert to a word processor document)
|  5. Export document       (Convert a document to an AOS file)
|  6. User commands         (Create, change, delete user commands)
| ->7. Office manager functions
|
|  Enter choice: 7`
|
|To return to previous menu, press the CANCEL/EXIT key.
|If you need assistance press the HELP key.
+-----+
```

Figure 8-1. Selecting the "Office Manager Functions" Option

Select the "Office manager functions" option by typing 7 and pressing the NEW LINE key. The word processing system then displays the Office Manager Functions menu (see Figure 8-2).

The Office Manager Functions Menu

The Office Manager Functions menu, shown in Figure 8-2, allows you to perform the office management tasks within the CEO Independent Word Processing system. The rest of this chapter describes each of these tasks in detail.

```

+-----+
|                                     |
|                   OFFICE MANAGER  |
|                   FUNCTIONS        |
|                                     |
| -> 1. User profiles      (Add, change, delete user information) |
|    2. Dictionary maint. (Confirm, add, delete site dictionary words) |
|                                     |
| Enter choice: 1`          |
|                                     |
|                                     |
|                                     |
| To return to the previous menu, press the CANCEL/EXIT key. |
| If you need assistance, press the HELP key. |
|                                     |
+-----+

```

Figure 8-2. The Office Manager Functions Menu

USER PROFILES

The CEO word processing system must recognize a user before that person can log on. The User Profile gives the word processing system general information about the user. You must build a User Profile for each user in your system.

What the User Profile Describes

The User Profile provides a general description of the word processing user and the privileges the user has. It defines

- * The user's operating system user ID (the name used to log on).
- * The pathname to the user's personal drawer, whether it is a CPD, and, if so, the maximum size of the directory.
- * Whether the user can access documents in other directories.
- * Whether or not the user can use the CLI command to enter the CLI environment during a word processing session.
- * Whether or not the user has office manager privileges.

User IDs

Each computer user has a unique name, called a user ID, that allows him/her to log on. This prevents unauthorized access. The system manager assigns the user ID when building a PREDITOR profile for a new user. (For more information about the PREDITOR utility, see the appropriate system manager's guide -- AOS or AOS/VS.)

CEO Independent Word Processing users require certain privileges that must be included in their PREDITOR profile. Appendix A outlines these requirements.

Each User Profile includes the user ID. Before creating a CEO Word Processing profile, be sure that the user has a PREDITOR profile and that you know the assigned user ID.

Special Privileges

The User Profile determines whether or not the user is allowed to use certain special features of the CEO Word Processing system. You assign these privileges when creating the profile, and you can change them at any time.

The first privilege allows a user to gain access to a document by specifying its pathname. Note that this privilege does not guarantee access: the document's author must first make it available. ("Using CEO Word Processing — Independent," explains how.) This privilege is primarily useful for users who must frequently view or edit documents in others' drawers.

The CLI privilege allows users to enter the Command Line Interpreter environment during a word processing session. In this case, the CLI command is available to that user. To enter the CLI, the user presses the COMMAND function key, then types CLI when prompted for a command. The user then enters the CLI, and the CLI prompt appears. To return to the word processing session, the user types BYE. This privilege should be given only to those users who are familiar with the CLI and have a need to use it.

Office manager privileges allow a user to do the same things you do. To protect your system, you should grant these privileges only when necessary and only to a knowledgeable and responsible user.

What You Can Do

There are three operations you can perform through the User Profiles menu:

- * Create a User Profile for a new user.
- * Change a User Profile for an existing user.
- * Delete a User Profile for a former user.

When you select the "User profiles" option, the User Profiles menu appears on your screen. This menu lists all current CEO Word Processing users alphabetically by user ID. Each entry has an associated number, which you use to refer to a particular entry.

Figure 8-3 illustrates a sample User Profiles menu.

```

                                USER PROFILES
                                -----
User #      User ID
  1         ABBOTT
  2         BETSY
  3         BROOKE
  4         CEOTEST
  5         JANE
  6         JONATHAN
  7         LIBBY
  8         KW
  9         OP
 10         PAM
 11         PETER
 12         SULLY
 13         TOM
 14         WIN

Pick one: (1. Create, 2. Change, 3. Delete) 1`

```

Figure 8-3. A Sample User Profiles Menu

The User Profiles menu prompts you to choose the operation you want to perform.

>>> Pick one: (1. Create, 2. Change, 3. Delete) <<<

Type 1 to create a new profile, 2 to change a profile, or 3 to delete one. The default response is "Create," so you can simply press the NEW LINE key to choose this option.

A description of each operation follows.

How to Create a User Profile

You choose the "Create" option from the User Profiles menu. The User's System Profile menu, shown in Figure 8-4, then appears on your screen.

```

+-----+
|                                     |
|                               USER'S SYSTEM PROFILE |
|                                     |
| AOS User ID: |
| Pathname to this user's personal drawer: |
|   xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |
| Do you want this to be a Control Point Directory? (Y/N) N |
|                                     |
| Allow user to access documents by specifying pathname? (Y/N) N |
|                                     |
| Allow use of CLI? (Y/N) N |
| Office manager privileges? (Y/N) N |
| Execute? (Y/N) _ |
|                                     |
+-----+

```

Figure 8-4. The User's System Profile Menu

>>> AOS User ID: <<<

Enter the person's AOS or AOS/VS user ID, which is the name this person types to log on. (If the user does not have a PREDITOR profile, or if you do not know the correct user ID, see your system manager.)

Next, the cursor moves under the words

>>> Pathname to this user's personal drawer: <<<

Type in the pathname to this user's personal drawer, and then press the NEW LINE key. This is the initial user directory (or drawer) that will hold this user's folders.

If the drawer does not already exist, the word processor creates this directory when the user first logs on, and creates a folder (directory) in this drawer, naming it FIRST_FOLDER.

If the drawer does exist, the word processor expects to find a folder (directory) named FIRST_FOLDER in it. The user can type over that name with the name of a folder, so long as it exists.

>>> Do you want this to be a Control Point Directory? <<<

A Control Point Directory (CPD) is a directory whose maximum space you specify (in 512-byte blocks) when you create it. Note that if the drawer will be in :UDD:USERNAME, the user's disk quota, given in the PREDITOR profile, supersedes any value you can assign.

If you want the drawer to be a CPD, type Y and press the NEW LINE key. Otherwise, type N and press the NEW LINE key. If you choose to make this a CPD, you must also specify its maximum size.

| If the drawer already exists, your answer is ignored.

>>> Maximum size of directory: <<<

Specify the maximum size, in blocks, that you want this directory to grow to, and then press NEW LINE. If the size is 1000 blocks or larger, do not enter the comma.

| If the drawer already exists, your answer is ignored.

>>> Allow user to access documents by specifying pathname? <<<

* Pathname access gives a user direct access to a document. Pathname access does not guarantee access: the document's author must first make it available.

If you want this user to have this privilege, type Y and press the NEW LINE key. Otherwise, type N and press the NEW LINE key.

>>> Allow use of CLI? <<<

To allow this user to enter the CLI environment during a CEO session, type Y and press the NEW LINE key. The CLI command will be available to this user.

To deny this user the CLI command, simply press the NEW LINE key (the default response is N).

>>> Office manager privileges? <<<

To allow this user to act as a CEO office manager, type Y and press the NEW LINE key. In this case, the "Office manager functions" option appears on this user's Utility Functions menu. Assign these privileges only when necessary.

To deny office manager privileges to this user, simply press the NEW LINE key (the default response is N).

>>> Execute? <<<

When you are satisfied with the information you provided in this menu, either press the EXECUTE function key, or type Y and press the NEW LINE key.

To change a response, use the BACK FIELD function key and the NEW LINE key to position the cursor at the field. Or, to return immediately to the first field, type N and press the NEW LINE key in response to the "Execute" question.

To change an entry, simply type over it (and erase any extra characters with the space bar or the ERASE EOL key).

If at any time you want to start over completely, press the CANCEL/EXIT function key. All your entries disappear and the cursor returns to the first field.

What Next?

After you complete the new User Profile, the menu clears and allows you to define another new user. To return to the previous menu, press the CANCEL/EXIT function key.

How to Change a User Profile

You choose the "Change" option from the User Profiles menu. This function lets you modify the definition of an existing user.

The menu then prompts you to enter

```
>>> User number(s): <<<
```

A number appears to the left of each user ID. Enter the number or numbers that correspond to the profiles you want to change. To change profiles 6 through 9, for example, you would type

```
User number(s): 6-9`
```

After you respond, the User's System Profile menu appears, displaying the current information for the first profile you specified. Figure 8-5 shows an example.

```
+-----+
|                                     |
|                               USER'S SYSTEM PROFILE |
|                                     |
| AOS User ID: JONATHAN`           |
| Pathname to this user's personal drawer: |
|   :UDD:JONATHAN:CEO_DRAWER`       |
|                                     |
| Allow user to access documents by specifying pathname? (Y/N) Y` |
|                                     |
| Allow use of CLI? (Y/N) Y`       |
| Office manager privileges? (Y/N) Y` |
| Execute? (Y/N) Y`               |
|                                     |
+-----+
```

Figure 8-5. A Sample User's System Profile Menu

You can change any entry other than the user ID or the designation of this drawer as a CPD. If the user ID is incorrect, delete the profile, then build a new one for the correct user ID.

If the user's drawer is not a CPD, but you want it to be, follow the procedure explained in Chapter 4.

>>> Execute? <<<

If you are satisfied with the information you provided in this menu, either press the EXECUTE function key, or type Y and press the NEW LINE key.

To change a response, use the BACK FIELD function key and the NEW LINE key to position the cursor at the field. Or, to return immediately to the first field, type N and press the NEW LINE key in response to the "Execute" question.

To change an entry, simply type over it (and erase any extra characters with the space bar or the ERASE EOL key).

If at any time you want to start over completely, press the CANCEL/EXIT function key. All your entries disappear and the cursor returns to the first field.

What Next?

If you indicated that you want to change more than one User Profile, as soon as you finish with one profile, the next appears. After you complete changes to the last profile, the User Profiles menu reappears. You can choose to create, change, or delete other User Profiles.

How to Delete a User Profile

You choose the "Delete" option from the User Profiles menu. This lets you remove a profile for a user who is no longer using the word processing system. Before you can do this, however, you must clean out that user's filing drawer. If there are any documents that belong to this user, the word processing system sends you an error message when you try to delete the user's profile. Note that the Documents menu does not display non-CEO files. So, if the user has imported any AOS or AOS/VS files into his or her drawer, you or the system manager must delete (or archive and delete) those files first. Only then can you delete the user's drawer, folders, and profile.

When you select the "Delete" option, the menu asks you to enter

```
>>> User number(s): <<<
```

A number appears to the left of each user ID. Enter the number or numbers that correspond to the profiles you want to delete. For example:

```
User number(s): 12`
```

After you respond, the Delete User ID menu appears, displaying the user ID of the first profile you specified. Figure 8-6 shows a sample menu.

```
+-----+
|                                     |
|                               DELETE USER ID                               |
|                                     |
| User ID to be deleted: MICHAEL`                                         |
| Execute? (Y/N) Y`                                                         |
+-----+
```

Figure 8-6. The Delete User ID Menu

>>> Execute? <<<

If you are satisfied with the information you provided in this menu, either press the EXECUTE function key, or type Y and press the NEW LINE key.

To change a response, use the BACK FIELD function key and the NEW LINE key to position the cursor at the field. Or, to return immediately to the first field, type N and press the NEW LINE key in response to the "Execute" question.

To change an entry, simply type over it (and erase any extra characters with the space bar or the ERASE EOL key).

If at any time you want to start over completely, press the CANCEL/EXIT function key. All your entries disappear and the cursor returns to the first field.

What Next?

If you are deleting more than one User Profile, the Delete User ID menu will display the next user ID. After you have finished with the last profile, the User Profiles menu reappears, prompting you to create, change, or delete additional profiles. To return to the previous menu, press the CANCEL/EXIT function key.

To completely remove a user ID from the system, use the PREDITOR utility, which is described in the system manager's guide for your operating system.

DICTIONARY MAINTENANCE

OFFICE MANAGER FUNCTIONS

- 1. User profiles (Add, change, delete user information)
- 2. Dictionary maint. (Confirm, add, delete site dictionary words)

Enter choice: 2`

|To return to the previous menu, press the CANCEL/EXIT key.
|If you need assistance, press the HELP key.

About the In-House Dictionary

The optional CEO Spelling software provides a quick and convenient way of checking for spelling errors within a document. To do this, the CEO Independent Word Processing system uses two dictionaries: a standard dictionary of the English language and an in-house or site dictionary.

The in-house dictionary contains the 8500 most frequently used English words. You can add to this dictionary to include any nonstandard words that are commonly used in your office. Such words can be proper names, acronyms, or jargon. If these words are in the in-house dictionary, CEO Spelling will not flag them as possible misspellings.

The in-house dictionary can hold about 10,000 words. This means that you can add up to 1500 words to it. If you need to add more, you can delete any of the 8500 commonly used words; these words still appear in the standard dictionary.

As office manager, you are responsible for maintaining the in-house dictionary. (The standard dictionary is updated through new revisions to the CEO Spelling software.)

Gathering Words for the Dictionary

When building the dictionary for the first time, you need to gather in-house words from your users. You can use CEO Spelling with a set of typical documents to see which acronyms and company-specific words the system picks up as misspellings. You can also request that users send you any word that they think should appear in the in-house dictionary.

What You Can Do

When you select the "Dictionary maintenance" option from the Office Manager Functions menu, the Dictionary Maintenance menu appears. Figure 8-7 illustrates this menu.

```

+-----+
|                                     |
|                                     |
|          DICTIONARY MAINTENANCE    |
|                                     |
|      -> 1. Add word                 |
|          2. Delete word            |
|          3. Print the contents of  |
|          the Site Dictionary       |
|                                     |
|      Enter choice: 1`             |
|                                     |
+-----+

```

Figure 8-7. The Dictionary Maintenance Menu

There are three operations you can perform through this menu:

- * Add a word to the in-house dictionary.
- * Delete a word from the in-house dictionary.
- * Print the contents of the in-house dictionary.

Type 1 to add a word to the dictionary, 2 to remove a word from the dictionary, or 3 to print the contents of the dictionary. The default response is "Add word," so you can simply press the NEW LINE key to choose this option.

You can perform any number of additions or deletions within a single session. Once you have finished all maintenance operations, answer Y to the "Done?" question. Only then does CEO Word Processing perform the maintenance operations you requested.

You can cancel the current requests by pressing the CANCEL/EXIT function key when the menu prompts you to select an operation.

A site dictionary maintenance report summarizes the additions and deletions that you specified in this session. After you answer Y to the "Done?" question, the menu prompts you to select a printer for the maintenance report.

Figure 8-8 illustrates a sample Dictionary Maintenance Status Report.

Site Dictionary Maintenance Report		
Word	Action	Status
ENTERPRISE	Delete	Deleted
CEO	Add	Added
FHP	Delete	Word did not exist
DESKTOP	Add	Added
PRESENT	Add	Already exists

Figure 8-8. A Sample Site Dictionary Maintenance Report

A description of each dictionary maintenance operation appears in the pages that follow.

How to Add a Word to the In-House Dictionary

You choose the "Add word" option from the Dictionary Maintenance menu. The menu prompts you to

>>> Enter word: <<<

Type the word that you want to add to the dictionary. The word can be up to 19 characters long, and can include . (period), - (hyphen), and ' (apostrophe). O'Hare, etc., and in-house are permissible words. You cannot include embedded spaces between words (e.g., user ID). Enter the word in upper- or lowercase; it makes no difference. Complete your entry by pressing the NEW LINE key.

If you press the CANCEL/EXIT function key instead, the menu skips the add operation and prompts you to choose another function (add, delete, or print).

Figure 8-9 shows an example of adding a word to the dictionary.

```

+-----+
|                                     |
|                               DICTIONARY MAINTENANCE                       |
|                                     |
|                               -> 1. Add word                               |
|                                   2. Delete word                           |
|                                   3. Print the contents of the Site Dictionary |
|                                     |
|                               Enter choice: 1`                             |
|                                     |
|                               Enter word: DESKTOP`                         |
|                                     Done? (Y/N)                           |
|                                     |
+-----+

```

Figure 8-9. Adding a Word to the In-House Dictionary

>>> Done? <<<

If you want to perform another operation, type N and press the NEW LINE key. Then you can choose again from the add, delete, or print options.

To finish this session, type Y and press the NEW LINE key. The word processing system then updates the in-house dictionary and prints a status report, which lists what you have done.

When you type Y, the menu prompts you:

>>> Onto which printer do you wish to print the Dictionary Maintenance
status report? <<<

Identify the printing device where you want the status report printed.
Draft printers are numbered 1, 1A, 1B, etc.; letter-quality printers
are numbered 2, 2A, 2B, etc.; laser printers are numbered 3, 3A, 3B,
etc.

What Next?

After you choose a printer for the status report, you return to the
Office Manager Functions menu.

You will return to the Office Manager Functions menu if you choose a
printer for the status report or if you instead press the CANCEL/EXIT
key to end the session. If you end the current session by pressing the
CANCEL/EXIT key, you will discard all the maintenance operations that
you have made. |

How to Delete A Word from the In-House Dictionary

You choose the "Delete word" option from the Dictionary Maintenance menu. The menu prompts you to

>>> Enter word: <<<

Type the word that you want to remove from the dictionary. No word in the dictionary is longer than 19 characters. Complete your entry by pressing the NEW LINE key.

If you press the CANCEL/EXIT function key instead, the menu skips the delete operation and prompts you to choose another operation.

Figure 8-10 shows an example of deleting a word from the dictionary.

```

+-----+
|                                     |
|              DICTIONARY MAINTENANCE |
|                                     |
|          1. Add word                 |
|    -> 2. Delete word                 |
|          3. Print the contents of   |
|             the Site Dictionary     |
|                                     |
|    Enter choice: 2`                 |
|                                     |
|    Enter word: ENTERPRISE`           |
|                                     |
|                                Done? (Y/N) |
|                                     |
+-----+

```

Figure 8-10. Deleting a Word from the In-House Dictionary

>>> Done? <<<

If you want to perform another operation, type N and press the NEW LINE key. Then you can choose again from the add, delete, or print options.

To finish this session, type Y and press the NEW LINE key. The word processing system then updates the in-house dictionary and prints a status report, which lists what you have done.

When you type Y, the menu prompts you:

>>> Onto which printer do you wish to print the Dictionary Maintenance
status report? <<<

Identify the printing device where you want the status report printed.
Draft printers are numbered 1, 1A, 1B, etc.; letter-quality printers
are numbered 2, 2A, 2B, etc.; laser printers are numbered 3, 3A, 3B,
etc.

What Next?

After you choose a printer for the status report, you return to the
Office Manager Functions menu.

You will return to the Office Manager Functions menu if you choose a
printer for the status report or if you instead press the CANCEL/EXIT
key to end the session. If you end the current session by pressing the
CANCEL/EXIT key, you will discard all the maintenance operations that
you have made. |
|
|
|

How to Print the Contents of the In-House Dictionary

You chose the "Print" option from the Dictionary Maintenance menu. The menu prompts you

>>> Which printer: <<<

Identify the printing device where you want the contents of the in-house dictionary printed. Draft printers are numbered 1, 1A, 1B, etc.; letter-quality printers are numbered 2, 2A, 2B, etc. Laser printers are numbered 3, 3A, 3B, etc.

>>> How many copies: <<<

Enter the number of copies of the dictionary that you want printed.

Figure 8-11 shows an example of the menu when you choose the "Print" option.

```

+-----+
|                                     |
|          DICTIONARY MAINTENANCE    |
|                                     |
|          1. Add word                |
|          2. Delete word            |
|      -> 3. Print the contents of the |
|          Site Dictionary            |
|                                     |
|      Enter choice: 3`              |
|                                     |
|                                     |
|          Done? (Y/N) _             |
|                                     |
|                                     |
|      Which printer: __             |
|          How many copies: __       |
|                                     |
+-----+

```

Figure 8-11. Printing the In-House Dictionary

>>> Done? <<<

If you want to perform another operation, type N and press the NEW LINE key. Then you can choose again from the add, delete, or print options.

To finish this session, type Y and press the NEW LINE key. The word processing system then updates the in-house dictionary and prints a status report, which lists what you have done.

When you type Y, the menu prompts you:

```
>>>  Onto which printer do you wish to print the Dictionary Maintenance
      status report?  <<<
```

Identify the printing device where you want the status report printed. Draft printers are numbered 1, 1A, 1B, etc.; letter-quality printers are numbered 2, 2A, 2B, etc. Laser printers are numbered 3, 3A, 3B, etc.

What Next?

After you choose a printer for the status report, you return to the Office Manager Functions menu.

You will return to the Office Manager Functions menu if you choose a printer for the status report or if you instead press the CANCEL/EXIT key to end the session. If you end the current session by pressing the CANCEL/EXIT key, you will discard all the maintenance operations that you have made.

End of Chapter

APPENDIX A

THE CEO WORD PROCESSING -- INDEPENDENT USER'S PREDITOR PROFILE

The PREDITOR profile must grant certain minimum privileges to let the user log on to the word processor. Users who need access to other system resources will require additional privileges.

This appendix shows only those prompts that apply to the privileges necessary to use the word processor. For complete directions on running the PREDITOR program, see the system manager's guide for your operating system.

When you see this prompt:

Choose your response as follows:

USERNAME

This is the name you enter in the user's CEO Word Processing -- Independent profile as the user's ID.

PROGRAM [:CLI.PR] CHANGE?

If you want this user to enter the CLI environment upon logging on, press the NEW LINE key only.

If you want this user to enter the CEO Word Processor directly, type Y and press the NEW LINE key.

NEW (2-63 CHARS):

If you responded Y to the last question, enter the pathname of the CEO Word Processor -- Independent program, which should be :UTIL:CEO_DIR:CEO_WP.PR. (This question does not appear if you took the default response for the previous question.)

USE IPC [NO]?

Type Y and press the NEW LINE key.

UNLIMITED SONS?

Type Y and press the NEW LINE key. (To import and export documents, the user must have unlimited sons. If you want to disallow the user from the CLI, make CEO_WP.PR the log-on program and do not give the CLI privilege in the CEO Word Processing -- Independent User Profile.)

DISK QUOTA [500] CHANGE?

If this user will not have access to the CLI and his/her drawer is not in :UDD:USERNAME, press the NEW LINE key only. Users who are not limited to the word processor or whose drawer is in their :UDD:USERNAME directory may require a larger quota. We suggest a minimum of 10,000 blocks. Do not, however, enter the comma.

End of Appendix

APPENDIX B

SECURITY IN THE CEO WORD PROCESSING -- INDEPENDENT SYSTEM

The CEO Word Processing -- Independent system provides a high level of security. It prevents unauthorized users from gaining access to the system and safeguards the privacy of each CEO Word Processing -- Independent user.

System Security

The word processor runs under the operating system. Use of the word processor is restricted to only those users who have a CEO Word Processing -- Independent User System Profile. An office manager must build a profile for a new word processing user.

The user's PREDITOR profile determines the process that the user enters when logging on. The PREDITOR profile can specify that a user logs on directly to the word processor. Certain users may need access to other software. In this case, the PREDITOR profile may start the user in the CLI environment.

The user's CEO Word Processor User Profile can grant access to the CLI from within a word processing session. Again, an office manager determines whether or not the user has the CLI privilege. Users who have this privilege can enter the CLI environment by using the command CLI.

Users who have no need to use the CLI and who lack the necessary background can therefore be confined to the word processor.

Only an office manager can assign office manager privileges to another word processor user. After initialization, the word processing system has only one user, OP, who receives office manager privileges automatically. The "Office manager functions" option does not appear on an unauthorized user's menu.

IMPORTANT: To further protect the word processing system (and the overall system) from harm, restrict the superuser and superprocess privileges to responsible users. These privileges, and the ability to change user name, allow a person to circumvent many of the built-in safeguards of your system.

Filing Drawer Security

Each user has exclusive access to his or her own drawer and folders. (The default ACL is USERNAME,OWARE. You can, however, change the default ACL.) If you want users to have common access to certain documents, we suggest that you create a common drawer, and give it an ACL of +,WARE. Then, users can move or export documents to that drawer. (Moving or exporting a document gives it an ACL of +,OWARE.) Other users can then import documents from this common drawer, even if they do not have the privilege to gain access to documents by specifying pathnames.

Document Security

A user cannot delete filed documents accidentally by trying to delete the folder the documents are stored in. The word processing system allows a user to delete a folder only if it is empty.

Only one user can edit a document at a time. If a user is editing a document, other users can only view the document, and only if they have ACL access and the pathname access privilege. (They will see the document as it existed prior to the editing session.)

End of Appendix

APPENDIX C

THE CEO FILE CONVERSION UTILITY

Documents created by a revision of CEO prior to Revision 1.50 must be converted before the word processor or the formatter programs can work with them. If a document has not been converted, the word processor will ask the user if he or she wants to convert the document. The formatter will not print an unconverted document. Instead, the formatter will issue a message telling the user to convert it. Once a document has been converted, it cannot be converted back to Revision 1.20 format.

It saves user and system time to convert large numbers of documents when no one is using the system. For this reason, the installation macro will convert documents that are on the hard disk. But if you have a number of unconverted documents (on tape, for example), you can load them into a directory and convert them as a group.

CEO.FILE.CONVERT.CLI is an interactive macro that executes the CEO file conversion utility. The macro first prompts you to

- * Name a file that will list documents that could not be converted.
- * Name a file that will list why documents could not be converted.
- * Name a log file that will list all of the files processed.
- * Choose whether to execute the file conversion utility in the current directory, or to give a pathname of the directory to start in. The conversion utility processes documents in the directory you name, as well as documents in all directories below that directory.

To execute the macro, type

```
) CEO.FILE.CONVERT `
```

When the program is finished, it will produce the list and log files that you asked it to create. If the conversion utility is not successful, you can correct the errors in the documents it could not convert (such as ACL errors), and resubmit the file containing the names of the documents you have fixed. You don't have to fix all of the documents in the list of documents that were not converted. When the macro executes the program using the file with the names of unconverted documents, it produces a new list of documents it could not convert.

If you wish to convert one document, type

```
) XEQ CEO_CONVERT <pathname> `
```

End of Appendix

APPENDIX D

CEO WORD PROCESSING -- INDEPENDENT ERROR MESSAGES

This appendix lists and explains error messages that may require your attention. Messages that provide information or are otherwise self-explanatory do not appear in this listing. We present the messages in alphabetical order for your convenience.

Some error messages ask you to prepare a Software Trouble Report (STR). If you receive one of these messages, dump to tape all the relevant files (documents, break files, etc.) before you retry the procedure that resulted in the error message. If you still cannot fix the problem, please submit an STR, which we explain how to do in Appendix E.

Empty brackets [] indicate that additional text may appear at that place in the message. If the brackets surround text, that text may or may not appear.

Numeric error codes are represented in this way: nnnn.

Many of these error messages are followed by the instructions "See your CEO manager."

Error Messages

AOS error.

The output formatter (CEO_FORMATTER.PR) has been unable to process a document. Copy the document designated for an STR (see Appendix E). Then retry the operation, or try to run CEO_REBUILD.PR, described in Chapter 4.

AOS error nnnn [].

The specified system error occurred. Check the AOS or AOS/VS documentation for an explanation of the code.

Buffer, 'STR' exceeded.

You should submit the document and any break files in an STR (see Appendix E). Retry the operation that caused the problem. If the document is a wide document, try making the format ruler equal to or less than 132 columns.

Cannot access content file -- AOS error nnnn.

The content file for this document is unavailable. Check the AOS or AOS/VS documentation for an interpretation of the error code.

Cannot create your user command file.

To manually create a user command file, use the CLI COPY command to copy the file :UTIL:CEO_DIR:EMPTY_AO_CMD_FL to WP_CMD_FL in the user's directory, :WP_FILES:USERNAME.

Cannot find any files.

Check the CEO directory structure to ensure that all CEO directories and files exist.

Cannot find default forms on :UTIL:FORMS.

Either the directory :UTIL:FORMS does not exist, or the default forms files (LDP.DEF.FORM, LPT.DEF.FORM, and QP.DEF.FORM) do not exist or have the wrong ACLs (ACLs should be OP,OWARE +,RE).

Cannot open file to be imported.

The specified file is currently in use. Try again later.

Cannot print -- AOS error nnnn.

An error occurred when the CEO system tried to process this print request. Check the AOS or AOS/VS documentation for an explanation of the code.

Cannot start CLI [-- AOS error nnnn.]

The user could not create a CLI process. Make sure that the user's PREDITOR profile allows unlimited sons. If an error code appears, check the AOS or AOS/VS documentation for an explanation.

CEO program error -- improperly constructed variable field.

One or more user-supplied values are inappropriate.

CEO program error -- name field is blank.

The CEO system expected a name, but none was supplied.

CEO program error -- output buffer is full.

A buffer overflow condition has occurred.

CEO program error -- zero field length.

The CEO system expected a value, but none was supplied.

CEO program error -- zero resolution mask.

No files correspond to the information that you supplied.

CEO program error. Call your DG representative.

An internal programming error occurred. Dump the contents of memory and forward a copy with an STR to your Data General representative.

Contains documents; cannot be deleted.

The user tried to delete a folder that is not empty. It may contain non-WRD type files.

Document is unprintable. Try to use the READ key to read it into a new document.

The document has basic format flaws introduced by the editor or the formatter. You may be able to correct the problem by inserting the document into a new document by using the READ function key (or command). You should also submit an STR.

Document name expected but none found.

A document name is required to complete this request. The user did not supply one, or the specified document no longer exists.

Duplicate name.

All names must be unique. This one is already assigned.

Electronic manual is unavailable - AOS error nnnn.

The on-line help information (:UTIL:CEO_DIR:WP_MANUAL) cannot be found. Check the AOS or AOS/VS documentation for an explanation of the code.

End of file.

The formatter cannot process the document. Run CEO_REBUILD.PR, described in Chapter 4, on the document, or add two blank lines to the end of the document. |
|
|

Error nnnn []

The specified system error occurred. Check the AOS or AOS/VS documentation for an explanation of the code.

Export facility not available.

The export program (CEO_IMPORT.PR) cannot be found or started;
no exporting is currently possible.

File to be imported is unreadable.

The specified file does not have the expected format. Make sure
that it is a file whose type is WRD, TXT, or UDF.

File unavailable -- AOS error nnnn.

The specified file does not exist or cannot be found. Check the
AOS or AOS/VS documentation for an explanation of the error code.

Folder name expected but none found.

A folder name is required to complete this request. The user did
not supply one, or the specified folder no longer exists.

HELP text is unavailable -- error code nnnn.

The CEO help information file (CEO_WP_HLP_FL) does not exist or is
not in the :UTIL:CEO_FILES directory. Check the AOS or AOS/VS
documentation for an explanation of the error code.

Immediate help is not available.

| Check that the immediate help file (CEO_WP_HLP_FL) is available
| in :UTIL:CEO_DIR, has the proper ACL (OP,OWARE +,RE), and that
| the search list includes :UTIL:CEO_DIR.

Imported file is unavailable -- AOS error nnnn.

The specified file does not exist or is already in use. Check the
AOS or AOS/VS documentation for an explanation of the error code.

Indexing error.

| The document's index is damaged. Run CEO_REBUILD.PR, described
| in Chapter 4, to fix the index entries.

Invalid forms UDA in forms file.

| Forms files have an "invisible" UDA (user data area), which is
| necessary for proper printing. Copying a forms file will not copy
| the UDA. Recreate the forms file in question with FCU, which is
| documented in Chapter 7.

Link and document name differ.

A user has apparently created a link name to a document. The word processor does not allow this.

Page error. Please see your CEO manager. Reformat document to fix errors.

An error occurred in trying to GO TO a page. Printing the document should correct the problem.

System error nnnn.

The specified system error occurred. Check the AOS or AOS/VS documentation for an explanation of the error code.

Unable to access the specified document.

Make sure that the document exists or that its pathname is correct.

Valid printer names are 1,1A,1B,1C,etc, 2,2A,2B,2C,etc, and 3,3A,3B,3C.

Draft printers are numbered 1, 1A, etc. through 1G; letter-quality printers are numbered 2, 2A, etc.; laser printers are numbered 3, 3A, etc.

You cannot get immediate help during this edit session.

Check that the immediate help file (CEO_WP_HLP_FL) is available in :UTIL:CEO_DIR and has the proper ACL (OP,OWARE +,RE), and that the search list includes :UTIL:CEO_DIR.

You cannot use another menu until you complete some work.

You have called too many menus without performing an operation. Choose one of the displayed options, or press the CANCEL/EXIT function key.

You do not have the privileges necessary to do this.

Your profile does not allow you to perform that operation.

You have too many layers of user commands within user commands.

You have user commands which include other user commands. This command has become too complex. Try to simplify it.

You must recover the WRD file before importing it.

| The document cannot be imported in its current state. Execute
| CEO_REBUILD.PR on the document (see Chapter 4).

End of Appendix

APPENDIX E

HOW TO PREPARE A SOFTWARE TROUBLE REPORT

You will help us improve CEO by sending us a Software Trouble Report (STR) if a problem involving the software occurs. Before you send in an STR, check the Release Notices (which we suggest you insert after Appendix G) to see if we already know of the problem. If the problem is not mentioned, please prepare an STR.

What you should include in an STR depends on the type of problem. STRs fall into two classes:

1. Problems that cause some software component to terminate abnormally or require abnormal termination, such as an infinite loop.
2. Problems that cause an incorrect or undesirable result but that allow processing to continue.

In (1), where a program has failed, the operating system will produce a break file in the user's personal drawer, as specified in the user's system profile. The break file name will end with .BRK (under AOS/VS, breakfiles sometimes end with .MDM). Please include the break file as well as the following files:

Program which terminated:	Send these files
CEO_QMA	:UTIL:CEO_DIR:CEO_QMA_SPOOL
CEO_IMPORT	The document or file which would not import properly.
CEO_WP	?_CEO_WP_ERROR_AT_nnnnn.BRK*
CEO_FORMATTER	:UDD:<USER>:<DRAWER>:<FOLDER>:<DOCUMENT> Any .LP, .QP, .XP or .ER files generated when this document is printed.

* This is actually a dump file containing the document, all related files, and CEO_WP.PR.

CEO_QMA exclusively opens the files it processes. You will therefore have to halt CEO.QMA by typing the CEO.QMA STOP command in order to dump them.

You will need to send the document and its related files only if the formatter program fails.

For example, if the document pathname is

```
:UDD:JONATHAN:CEO_DRAWER:FIRST_FOLDER:DOCUMENT
```

include :UDD:JONATHAN:CEO_DRAWER:FIRST_FOLDER:DOCUMENT+ in the dump.

Dump the document as soon as possible after the problem is noted. You may mask the cause of the problem if you edit or print the document, or use CEO_REBUILD.PR to fix the document.

In (2), send us the file(s) associated with the problem, if you can identify them. For example:

Type of problem	Files to include
User-defined commands Editing, viewing, printing, or exporting a document	:WP_FILES:<USER>:CEO_CMD_FL The document that seems to cause the problem

In all STRs, please include

1. The user ID of the person who experienced the problem.
2. The type of terminal in use (D2, D200, D210, D211, D400, D410, D450, D460, G300).
3. The names of relevant drawers, folders, documents, print layouts, commands, etc.
4. How the relevant documents, print layouts, commands, etc. were created.
5. The sequence of events leading up to the problem.
6. The revision numbers of the operating system and CEO system.

End of Appendix

APPENDIX F

CEO WORD PROCESSING SYSTEM LIMITATIONS

The following limitations on the storage and display of certain CEO Word Processing items apply in Revision 1.50.

Item	Number Displayed	Notes
Other Limitations		
Folders	100 per drawer	
Documents	100 per folder	See note 1
Keywords per document	11	
Keywords per system	unlimited	
Keywords displayed per user	200	
Misspelled words on a screen	25	
User commands	100	See note 2

1. CPD size limits the number of documents stored.
2. Users may create more than 100 commands, but only 100 will be displayed.

End of Appendix

APPENDIX G

THE CEO RELEASE NOTICES

We suggest that you print the Release Notice(s), punch them with a 3-hole punch, and insert them after this page for easy reference.

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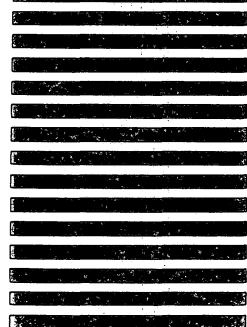
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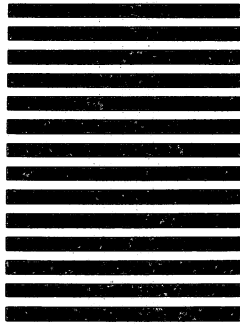
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