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Commands Reference



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Printing History

The following table lists the printings of this document, together with the respective release dates for each edition. The software version indicates the version of the software product at the time this document was issued. Many product releases do not require changes to the document. Therefore, do not expect a one-to-one correspondence between product releases and document editions.

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In This Book

This book provides a detailed explanation of each command in this subset of MPE/iX commands.

Chapter 1: Introduction to Command Parameters

This chapter provides introductory information on command syntax and organization.

Chapter 2: MPE/iX Commands

This chapter provides reference information for all of the primary MPE/iX commands. The commands are arranged in alphabetical order.

Related Manuals

The *Commands Reference* is the fourth book in a set of five manuals that includes the following:

Understanding Your System (B3813-90001) If you are new to computers, this is a good place to start. It provides an introduction to what computers do and how they do it.

Getting Started (B3813-90003) Familiarizes you with your computer and computer peripherals. It also explains how to get your system ready for use, how to use and maintain your tape drives and how to communicate with your system using HP Easytime/iX.

Task Reference (B3813-90009) Describes how to communicate with your system using MPE/iX commands. This book also includes a chapter on how to get more information on your system, a chapter on troubleshooting and a glossary.

New Features of MPE/iX: Using the Hierarchical File System (32650-90351) Describes the changes to MPE/iX as of Release 4.5 and 5.0, which enhanced MPE/iX to make it “POSIX compatible.” The book also describes the features of the hierarchical file system.

Note The MPE/iX operating system has been enhanced as of Release 4.5 and 5.0 to include additional features that include POSIX compatibility and the *hierarchical file system*. The *hierarchical file system* is tree structured and can contain files at many different levels. This organization provides a special kind of file called a **directory**. Instead of holding data, directories contain lists of files and pointers to those files.

For more information on *POSIX* and the *hierarchical file system*, refer to the book, *New Features of MPE/iX: Using the Hierarchical File System* (32650-90351), included in this documentation set. This book includes an overview of the following enhancements of MPE/iX as of Release 4.5 and 5.0:

- Open systems environment
 - Hierarchical file system (HFS)
 - Expanded file naming syntax
 - New and enhanced commands and utilities
-

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Introduction to Command Parameters

This chapter provides introductory information about parameters. To get help on any parameter not found in this book, use the MPE/iX online help facility described in the book, *Task Reference* (B3813-90009).

Each command in this book is presented in alphabetical order and contains the following information:

Command Name	Provides the command name at the top of each page, followed by a brief definition.
Syntax	Provides a diagram that shows how to enter the command and its parameters.
Parameters	Explains each parameter including its function, limitations, and defaults.
Operation Notes	Explains how to use the command and may also include advisory information, such as requirements, restrictions, and operating processes.
Examples	Includes examples of how to use the command.
Related Commands	Provides the names of functionally related commands.

Parameters within Syntax

MPE/iX commands instruct the system to perform a desired function. If you include parameters with the command before you enter it, the parameters specifically instruct the system how it should perform the command function.

There are three types of parameters:

- required
- optional
- positional

Required parameters

You must enter all required parameters; otherwise, MPE/iX displays an error message when you enter the command. In the syntax diagrams for each command, either braces { } or no marks surround required parameters.

In the following example, *myfile* is a required parameter because no marks surround it:

```
BUILD myfile
```

Anything italicized, such as *myfile*, is a representational name or value and must be replaced with an actual name or value.

Sometimes you must select one parameter from two or more parameters. In the following example, you must provide either a job number or a session number because braces surround these parameters:

```
ALTJOB { #Jnnn }  
       { #Snnn }
```

Optional parameters

You can either specify or ignore optional parameters, if any, depending on how you want the command to execute. In the syntax diagrams for each command, brackets [] surround optional parameters. If you ignore optional parameters, MPE/iX uses the system-defined default values for each parameter.

In the following example, [`;PASS`] is an optional parameter because brackets surround it:

```
NEWGROUP groupname [;PASS=[password]
```

In this example, `PASS` is the parameter and *password* is the parameter value. You would substitute an actual password in place of *password* to provide a value for the parameter `PASS`. The syntax diagram indicates that the value *password* is optional within the optional parameter `PASS`.

Positional parameters

The effect of a positional parameter depends on its location in the parameter list. In the syntax diagram for each command, the comma (,) separates positional parameters. If you omit a positional parameter from the list, you must provide a comma placeholder that would normally precede that parameter.

In the following example, the parameter values that follow the command are positional:

```
LIMIT 10,32
```

In the following example, a comma holds the position of the current value of the first parameter:

```
LIMIT ,32
```

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MPE/iX Commands

The commands presented in this chapter are a subset of the MPE/iX system commands and, in some instances, a subset of a command's parameters. Each command is presented in alphabetical order. To get help on any parameter not found in this chapter, use the MPE/iX online help facility described in the *Task Reference* (B3813-90009).

To get help on a command not in this book, type help and the command name next to the MPE/iX prompt. For example, to get help on LISTFILE, type:

```
:HELP LISTFILE
```

ABORTJOB/**Ctrl**A ABORTJOB

The ABORTJOB/**Ctrl**A ABORTJOB command terminates either a designated job or session. Typically, you use this command to cancel a job that you decided not to run but had already streamed. You can also use this command to terminate one or more sessions, if necessary, for system emergencies or scheduled shutdowns.

Syntax

From a terminal:

$$\text{ABORTJOB} \left\{ \begin{array}{l} \#Jnnn \\ \#Snnn \\ [jobname,]user.acct \end{array} \right\}$$

From the console:

$$\text{Ctrl A ABORTJOB} \left\{ \begin{array}{l} \#Jnnn \\ \#Snnn \\ [jobname,]user.acct \end{array} \right\}$$

Parameters

<i>#Jnnn</i>	Specifies a job number.
<i>#Snnn</i>	Specifies a session number.
<i>jobname</i>	Specifies the name of the job, as identified by the SHOWJOB command.
<i>user</i>	Specifies a user name.
<i>acct</i>	Specifies an account name.

Operation Notes

Note You need to use the SHOWJOB command to determine the job or session number of the operation you want to cancel. If you need more information on SHOWJOB, refer to the section on that command later in this chapter.

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing (Break) does not affect this command.

You must enter the (Ctrl)A ABORTJOB command from the console. You can enter the ABORTJOB command from a terminal other than the console if the JOBSECURITY command is set to LOW, or if your system administrator has used the ALLOW command, which permits you to enter this command.

■ Differences between ABORTJOB and (Ctrl)A ABORTJOB

Both of these commands function identically except that you can enter (Ctrl)A ABORTJOB only from the console. The = sign appears when you press (Ctrl)(A). Pressing these keys enables you to enter certain commands on a console from which another process (such as STORE) is currently running.

■ Recommended usage

If you use the [jobname,] user.acct form of the command when more than one job or session is executing with the same name, the system selects the job or session that it aborts. Consequently, you should use the #Jnnn or #Snnn form of the command for more precise control of jobs or sessions to be terminated. Although the job or session abnormally terminates, log records are issued, and CPU times and connect times are updated. All I/O activity terminates, such as printing, and reading or writing files.

■ Waiting and scheduled jobs

You can also use the ABORTJOB command for waiting and scheduled jobs, as well as for executing jobs. If a request is pending at the console, the command automatically terminates the request, and the following message appears on the console:

```
time/#Snnn/pin/REQUEST REQUIRING OPERATOR REPLY FOR
```

ABORTJOB/CtrlA ABORTJOB

PIN #*nn* HAS BEEN ABORTED

Refer to the Glossary for a definition of the process identification number (PIN).

Examples

- To terminate session number 139, enter:

```
:ABORTJOB #S139
```

The system responds by displaying the following logoff message on the console if the session ends successfully:

```
17:10/#S139/34/LOGOFF ON LDEV #12
```

- To terminate job number 9, enter:

```
:ABORTJOB #J9
```

The system responds by displaying the following logoff message if the executing job successfully terminates:

```
20:18/#J9/26/LOGOFF ON LDEV #10
```

This message does not appear when you terminate waiting or scheduled jobs.

- To terminate session 6, which has the following pending device allocation message, enter:

```
?17:00/#S6/23/LDEV# FOR "SCRTAPE" ON TAPE (NUM)?  
:ABORTJOB #S6
```

The system responds by displaying the following message:

```
17:10/#S6/120/REQUEST REQUIRING OPERATOR REPLY FOR  
PIN 23 HAS BEEN ABORTED  
17:10/#S6/120/LOGOFF ON LDEV #58
```

2-4 MPE/iX Commands

ABORTJOB/(Ctrl)A ABORTJOB

Related Commands

ALLOW
BREAKJOB
CONSOLE
JOBSECURITY
SHOWJOB
STREAM

ALLOW

The **ALLOW** command enables the system administrator to permit one or more users to enter one or more operator commands. The **ALLOW** command specifies which users can enter operator commands, and specifies which commands these users can enter.

Syntax

Interactive and subsystem mode:

```
ALLOW [ @.@  
        @.acct  
        user.@  
        user.acct ] ;COMMANDS=command[ ,command, ... ]
```

Program mode:

```
ALLOW FILE=formaldesignator[ ;SHOW ]
```

Parameters

<code>@.@</code>	Gives access to all users whether or not they are logged on.
<code>@.acct</code>	Gives access to all users logged on to a specific account.
<code>user.@</code>	Gives access to a specific user logged on to any account.
<code>user.acct</code>	Gives access to a specific user logged on in a specific account.
COMMANDS	Specifies the names of the console commands that the user(s) can access.
FILE	Specifies an ASCII file name, <i>formaldesignator</i> , that consists of from one to eight alphanumeric characters, beginning with an alphabetic character. The <i>formaldesignator</i> can be fully or partially qualified and can be backreferenced in a file equation.
SHOW	Lists input lines to <code>\$STDLIST</code> .

ALLOW

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** terminates subsystem mode and produces an error message, but does not affect commands already entered in subsystem mode.

This command can only be entered from the console, unless your system administrator has used the **ALLOW** command, which permits you to enter this command.

You can only allow commands to users currently logged on unless you use the **@.@** parameter. Remember, however, that this parameter allows commands to all users. An alternative would be to use the **ALLOW** command with the **@.@** parameter, then use the **DISALLOW** command to disallow commands to selected users.

Additional commands that you allow for users are valid only for the duration of their current session. When a user logs off and then back on to the system, the previously allowed commands are no longer available until they are allowed again.

■ Command modes

The **ALLOW** command enables you to enter the command in one of three modes:

- interactive
- subsystem
- program

When using interactive mode, you enter the entire command along with the desired parameters as shown in syntax and press **Return**. Subsystem mode is similar, except you just enter the **ALLOW** command and then provide the remaining parameters after the subsystem prompt (**>**) appears. The subsystem accepts command parameters until you enter the **EXIT** or **END** command.

Program mode is beneficial from an administrative perspective, because you can create a customized file granting specific permissions that you do not

ALLOW

have to alter, unless desired. When using program mode, you first create a file that:

- Identifies the users and accounts that are permitted to use operator commands.
- Lists the allowed commands.

Then you enter the **ALLOW** command, using the **SHOW** parameter to display each command line as it executes from the file.

Refer to “Examples” for examples of all three modes.

■ Console commands versus operator commands

Console commands function differently from operator commands. Console commands are not allowable, must be entered on the actual console (usually configured as LDEV 20), and must be preceded by **Ctrl A**. Some console commands have the same name as non-console commands, such as **RECALL**, which can be entered on any device.

Operator commands are generally used in the daily operation of your system and are generally allowable.

■ Allowable commands

You can allow up to 19 of the following commands at a time in interactive and subsystem modes. If you need to specify more than 19 commands, use program mode.

ABORTIO	HEADON	RESUMESPOOL
ABORTJOB	JOBFENCE	SHUTQ
ACCEPT	JOBSECURITY	STARTSPOOL
ALLOW	LDSMOUNT	STOPSPPOOL
ALTJOB	LIMIT	STREAMS
ALTSPPOOLFILE	LOG	UP
CONSOLE	MRJECONTROL	VMOUNT
DELETESPOOLFILE	OPENQ	VSCLOSE
DISALLOW	OUTFENCE	VPOPEN
DISCRPS	REFUSE	VSRELEASESYS
DOWN	REPLY	VSRESERVESYS
DOWNLOAD	RESUMEJOB	WARN
HEADOFF	SPOOLER	WELCOME

2-8 MPE/iX Commands

ALLOW

Not all of these commands are described in this chapter. For information about commands not described in this chapter, use the Help Facility.

Before allowing any users access to these commands, you should enter the `SHOWALLOW` command to determine which operator commands have already been allowed.

Examples

- In interactive mode, to allow a user named `USER.TECH` to enter the `REPLY` and `ABORTJOB` commands, enter the following command at the console:

```
: ALLOW USER.TECH;COMMANDS=REPLY,ABORTJOB
```

- In subsystem mode, to allow a user named `MGR.MANUALS` to enter the `BREAKJOB` command, enter the following command sequence at the console:

```
: ALLOW  
>MGR.MANUALS;COMMANDS=BREAKJOB  
>EXIT
```

- In program mode, to allow the users named `SUSAN.PAYROLL` and `JOHN.ACCTNG` to enter the `LIMIT` command, do the following:

1. Execute the `EDITOR` command, create a program file, and save it to `ALLOWTMP`, as shown:

```
:EDITOR  
HP32201A.07.17 EDIT/3000 WED, MAY 8, 1991, 3:02 PM  
(C) HEWLETT-PACKARD CO. 1990  
/ADD  
1 SUSAN.PAYROLL;COMMANDS=LIMIT  
2 JOHN.ACCTNG;COMMANDS=LIMIT  
3 //  
...  
/K ALLOWTMP  
/E
```

ALLOW

2. Execute the **ALLOW** command using the **SHOW** parameter, if desired, to display each command line as it executes from the file:

:ALLOW FILE=ALLOWTMP;SHOW

- You can also include a lockword for the file, if any, as shown:

:ALLOW FILE=ALLOWTMP/LOCKWORD;SHOW

- You can backreference the file with a file equation, as shown:

:FILE BACKF=ALLOWTMP

:ALLOW FILE=*BACKF;SHOW

Related Commands

CONSOLE
DISALLOW
SHOWALLOW

ALTACCT

The ALTACCT command enables a system administrator to change the parameters of an existing account.

Syntax

```
ALTACCT acctname
[ ;PASS=[ password ] ] [ ;CAP=[ capabilitylist ] ]
[ ;ACCESS=[ (fileaccess) ] ]
```

Parameters

- acctname* Specifies the name of the account that you want to alter. The name must consist of one to eight alphanumeric characters, beginning with an alphabetic character.
- PASS Specifies the account password, only used for verifying logon access. Entering the ALTACCT command without this parameter retains the current password. Entering PASS without specifying *password* removes the existing password. Entering PASS and specifying *password* changes the current password or creates one if a password did not previously exist.
- CAP Specifies the list of capabilities permitted for this account that were assigned with the NEWACCT command. Each capability is indicated by a two-letter mnemonic, separated by commas, as follows:
- SM = System manager
 - AM = Account manager
 - DI = Diagnostician
 - OP = System supervisor
 - NA = Network administrator
 - NM = Node manager
 - SF = Save files
 - ND = Access to nonshareable I/O devices
 - UV = Use volumes

ALTACCT

CV = Create volumes
CS = Use communication subsystem
PS = Programmatic sessions
LG = User logging
PH = Process handling
DS = Extra data segments
MR = Multiple RINs
PM = Privileged mode
IA = Interactive access
BA = Batch access

The defaults are AM, SF, ND, IA, and BA, for all accounts except for the SYS account. The defaults for the SYS account are SM, AM, AL, GL, DI, OP, SF, ND, PH, DS, MR, and PM. You should not alter the SYS account because it is assigned the maximum account capabilities when the system is delivered.

If you remove a capability from an account, it is unavailable to users of that account only after they log off the system and then log back on.

ACCESS

Specifies the restriction on file access pertinent to this account. Valid syntax options are as follows:

$$\left(\left[\left\{ \begin{array}{c} R \\ L \\ A \\ W \\ X \\ S \end{array} \right\} [, \dots] : \left\{ \begin{array}{c} ANY \\ AC \\ GU \\ AL \\ GL \end{array} \right\} [, \dots] \right]$$

where R, L, A, W, X, and S specify modes of access by types of users (ANY, AC, GU, AL, GL) and are defined as follows:

R = Read
L = Lock (exclusive file access)
A = Append (implies L)
W = Write (implies A and L)
X = Execute
S = Save

ALTACCT

The user types are defined as follows:

```
ANY = Any user
AC = Member of this account only
GU = Member of this group only
AL = Account librarian user only
GL = Group librarian user only
```

You can specify two or more user and/or access types if you separate them with commas.

The defaults are R,A,L,W,X:AC for all accounts except for SYS. The SYS account defaults are (R,X:ANY;A,W,L:AC).

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have system manager (SM) capability in order to use this command.

■ Altering account parameters

Basic guidelines for altering account parameters are as follows:

- You can enter multiple parameters on a single command line by using the semicolon (;) delimiter.
- When you change one capability in a capability list that contains several nondefault values, you must specify an entire new capability list.
- A parameter remains unchanged for the account if you omit a parameter and its value when entering the command.
- When you include a parameter but omit its value as in `PASS=Return`, the default value is assigned.

ALTACCT

■ Activating the changes

If you alter one or more parameters while users are logged on, the changes do not become effective until the users log off their current jobs or sessions and log back on. Since the system does not automatically generate a message informing users of changes, you should notify users before you make any account changes. This is particularly advisable when you remove a capability from an account. In this case, all account members and groups within the account are denied the capability.

■ Restrictions

You cannot remove system manager (SM) capability from the **SYS** account or account manager (AM) capability from any account. From within any account, you can remove AM capability from all but one (the last) of the users assigned the capability; however, you can remove AM capability from all users in an account if you do this from another user and account with SM capability.

Examples

- To change the password of an account named **AC2** to **GLOBALX**, enter:

```
:ALTACCT AC2;PASS=GLOBALX
```

- To add SM capability to an account named **AC2** and retain the default capabilities, enter:

```
:ALTACCT AC2;CAP=SM,AM,AL,GL,ND,SF,BA,IA
```

ALTACCT

Related Commands

ALTGROUP
ALTUSER
LISTACCT
LISTGROUP
LISTUSER
NEWACCT
NEWGROUP
NEWUSER
REPORT
RESETACCT

ALTFILE

This command changes the attributes of an existing file or directory.

SYNTAX

```
ALTFILE [ FILE= ] filename [ [ ; OWNER= ] ownername ]  
[ [ ; GROUPID= ] POSIXgroupname ]
```

PARAMETERS

- filename* The file name of the object to be altered. The filename may name a file, hierarchical directory, root, MPE group or account. Note that MPE groups or accounts can ONLY be named via HFS (Hierarchical File System) syntax. Temporary files are not recognized.
- This is a required parameter. You cannot use wildcarding to specify file names, nor can you use back-referenced file equations. This parameter cannot name a system-defined file (such as \$NULL). You can specify file names using both MPE and HFS syntaxes. MPE-syntax names may not include lockwords; the lockword for a lockworded file is not needed for this command to succeed, and if included in the *filename* results in an error.
- ownername* The name of the user who will become the owner (UID) of *filename*. This *ownername* must already exist on the system. Default is for the UID of the file to remain unchanged. Note that no qualification is done on this name; it must be fully specified. This name will be upshifted if it is NOT quoted. [Optional]
- POSIXgroupname* The name of the group (GID) that this file will belong to. This *POSIXgroupname* must already exist on the system. This parameter cannot be used to change the GID of an MPE group or account. The default is for the file to retain its previous GID. This name is upshifted when you enclose it in quotes.

Operation Notes

■ Usage

You use the **ALTFILE** command to alter a file's characteristics. You can modify the owner (UID) and POSIX group (GID) for a file, hierarchical directory, MPE group or account. You cannot alter the GID of MPE groups or accounts.

■ Required Capabilities

The user must have the appropriate privilege to change the requested attribute. To change the UID of a file, you must be one of the following:

- The file's account manager whose logon account matches the GID of the file and who has the MPE/iX account manager capability. In this case, *ownername* must specify a user belonging to the account manager's logon account.
- A system manager who has the MPE/iX system manager user capability. In this case, *ownername* may specify any user existing in the user database.

To change the GID of a file, you must be one of the following:

- The file owner (a user whose logon name matches the UID of the file). In this case, *POSIXgroupname* must specify the user's logon account.
- The file's account manager whose logon account matches the GID of the file and who has the MPE/iX account manager (AM) user capability. In this case, *POSIXgroupname* must specify the account manager's logon account.
- A system manager who has the MPE/iX system manager user capability. In this case, *POSIXgroupname* may specify any GID existing in the group database.

You can use **ALTFILE** to modify multiple attributes at the same time. If you try modifying multiple attributes, all changes must succeed for any to take effect. If you do not specify any attributes, the command has no effect on the file specified.

ALTFILE

Related Commands

ALTSEC

ALTGROUP

The ALTGROUP command changes one or more parameters of a group within an account.

Syntax

```
ALTGROUP groupname [ . acctname ]  
[ ;PASS=[ password ] ] [ ;CAP=[ capabilitylist ] ] [ ;ACCESS=[ ( fileaccess ) ] ]
```

Parameters

<i>groupname</i>	Specifies the name of the group for which you want to change parameters. The name must consist of one to eight alphanumeric characters, beginning with an alphabetic character.
<i>acctname</i>	Specifies the account in which the group resides. You must have system manager (SM) capability to use this parameter.
PASS	Specifies the group password. Entering the ALTGROUP command without this parameter retains the current password. Entering PASS without specifying <i>password</i> removes the existing password. Entering PASS and specifying <i>password</i> changes the current password or creates one if a password did not previously exist.
CAP	Specifies capability class attributes consisting of any or all of the following: BA = Batch access capability (default) DS = Permits extra data segments IA = Interactive access capability (default) MR = Permits multiple resource identification numbers (RINs) PH = Process handling capability PM = Privileged mode capability

ALTGROUP

The default is IA and BA, except for the PUB group of the SYS account. The default for PUB.SYS is PH, DS, MR, PM, IA, and BA. Typically, you should not change PUB.SYS because it is assigned the maximum group capabilities when the system is delivered. You must separate each capability class with a comma (BA,DS,IA, and so on).

ACCESS

Specifies the restriction on file access pertinent to this group. Capability options that you can change are as follows:

$$\left(\left[\left\{ \begin{array}{c} R \\ L \\ A \\ W \\ X \\ S \end{array} \right\} [, \dots] : \left\{ \begin{array}{c} ANY \\ AC \\ GU \\ AL \\ GL \end{array} \right\} [, \dots] \right]$$

where R, L, A, W, X, and S specify modes of access by types of users (ANY, AC, GU, AL, GL) and are defined as follows:

R = Read
L = Lock (exclusive file access)
A = Append (implies L)
W = Write (implies A and L)
X = Execute
S = Save

The user types are defined as follows:

ANY = Any user
AC = Member of this account only
GU = Member of this group only
AL = Account librarian user only
GL = Group librarian user only

You can specify two or more user and/or access types if you separate them with commas.

The defaults for the public group (PUB) are:

R,X:ANY;A,W,L,S:AL,GU

ALTGROUP

The default for all other groups is:

```
R,A,W,L,X,S:GU
```

Capabilities assigned to the user group for ALTGROUP cannot exceed those assigned to the account.

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have account manager (AM) or system manager (SM) capability in order to use this command.

■ Altering group parameters

Basic guidelines for altering group parameters are as follows:

- You can enter multiple parameters on a single command line by using the semicolon (;) delimiter.
- When you omit an entire parameter, the corresponding value for the group remains unchanged.
- When you include a parameter but omit its value as in `PASS=Return`, the default value is assigned.

■ Activating the changes

If you alter one or more parameters, the changes in the directory become effective immediately; however, the changes do not affect any active users with open files in the group until they log off from their current sessions and log back on to the same group. Since the system does not automatically generate a message informing users of changes, you should notify users before you make any changes to the group.

ALTGROUP

Examples

- To assign a new password, `PASS2`, to a group named `GROUPX`, enter:

```
:ALTGROUP GROUPX;PASS=PASS2
```

- To assign the same password to the same group as above and add DS and PH capabilities, enter:

```
:ALTGROUP GROUPX;PASS=PASS2;CAP=IA,BA,DS,PH
```

Related Commands

```
ALTACCT  
ALTUSER  
LISTACCT  
LISTGROUP  
LISTUSER  
NEWACCT  
NEWGROUP  
NEWUSER
```

ALTSEC

This command changes the access permissions of an object by altering the access control definition (ACD).

ACDs are the main method of controlling access to files, hierarchical directories, and devices. ACDs are automatically assigned to hierarchical directories and to files existing in hierarchical directories.

You can change access permissions for any of the following:

- files
- hierarchical directories
- devices
- device classes

You can also change file access masks with this command (only files have access masks). The file status change time stamp is updated by ALTSEC.

Note The ALTSEC command cannot be used to change access permissions for MPE groups, accounts, or the root directory.

ALTSEC

Syntax

$$\text{ALTSEC } \textit{objectname} \left[, \left\{ \begin{array}{l} \text{FILENAME} \\ \text{LDEV} \\ \text{DEVCLASS} \end{array} \right\} \right]$$
$$\left[; [\text{ACCESS=}] (\textit{fileaccess} [; [\textit{fileaccess}] [; \dots]]) \right]$$
$$\left[\left\{ \begin{array}{l} ;\text{NEWACD=} \\ ;\text{REPACD=} \\ ;\text{ADDPAIR=} \\ ;\text{REPPAIR=} \end{array} \right\} \left\{ \begin{array}{l} (\textit{acdpair} [; \textit{acdpair}] [; \dots]) \\ \sim \textit{filereference} \end{array} \right\} \right]$$
$$\left[;\text{DELPAIR=} \left\{ \begin{array}{l} (\textit{userspec} [; \textit{userspec}] [; \dots]) \\ \sim \textit{filereference} \end{array} \right\} \right]$$
$$\left[;\text{COPYACD=} \textit{objectname} \left\{ \begin{array}{l} ,\text{FILENAME} \\ ,\text{LDEV} \end{array} \right\} \right] \left[;\text{DELACD} \right] \left[;\text{MASK} \right]$$

Parameters

objectname Specifies the actual file designator, directory name, logical device number, or device class whose security provisions you want to alter.

Either MPE or hierarchical file system (HFS) file name syntax may be used for the actual file designator of the file or directory whose access permissions are to be altered.

You can only use wildcard characters with MPE syntax files that reside in a group.

A logical device number must be a numeric value configured on the system, or an @ sign, that indicates all devices on the system. A device class name must be configured on the system.

File equations are ignored during resolution of the object name to avoid having accidental file equation references cause unintentional changes to an object's access permissions.

MPE Syntax

You can include MPE file name syntax but not RFA information. If the object is an MPE syntax file, its format is:

filename[/*lockword*][.*groupname*[.*acctname*]]

You may specify file lockwords for files protected by active lockwords unless the objects are also protected by a current ACD.

In a batch job, if a lockword exists on a file, you must specify it. In a session, if a lockword exists and is omitted, MPE/iX will prompt you for it.

HFS Syntax

You must begin file designators using HFS file name syntax with either a dot (.) or a slash (/) character. The maximum length is 255 characters (including the “./” or “/”).

The *objectname* parameter is followed by one of the three *type identifiers* listed below.

FILENAME	A type identifier that indicates <i>objectname</i> refers to either a file or directory. The FILENAME type identifier is the default if a type identifier is not specified.
LDEV	A type identifier that indicates <i>objectname</i> refers to a logical device number.
DEVCLASS	A type identifier that indicates <i>objectname</i> refers to a device class.

ACCESS

Optional keyword that indicates a *fileaccess* specification follows. This option affects security at the *file* level only.

ALTSEC

fileaccess

File access mask specifications, entered as follows:

$$\left\{ \begin{array}{c} R \\ L \\ A \\ W \\ X \end{array} \right\} [, \dots] : \left\{ \begin{array}{c} ANY \\ AC \\ GU \\ AL \\ GL \\ CR \end{array} \right\} [, \dots]$$

The R, L, A, W, and X specify *modes* of access by types of users (ANY, AC, GU, AL, GL, CR) as follows:

R = READ
L = LOCK
A = APPEND
W = WRITE
X = EXECUTE

LOCK allows opening the file with dynamic locking option. APPEND implicitly specifies LOCK. WRITE implicitly specifies APPEND and LOCK.

You may specify two or more *modes* if you separate them by commas. The user types are specified as follows:

ANY = Any user
AC = Member of this account only
GU = Member of this group only
AL = Account librarian user only
GL = Group librarian user only
CR = Creator

You may specify two or more user types if you separate them by commas. The default is R,L,W,A,X:ANY. The colon (:) separating one or more *modes* from one or more user types is required punctuation in the specification of *fileaccess*.

The ACCESS keyword is optional. If the file is protected by an ACD, the ACD overrides the file access mask.

NEWACD

(Indicates “new ACD”). Use NEWACD to create a new ACD for the specified object. NEWACD is used when an ACD does not

ALTSEC

currently exist. It must be followed by valid ACD pair(s) as described below.

- REPACD** (Indicates “replace ACD”). Use **REPACD** to create a new ACD or replace an entire existing ACD for the specified object. It must be followed by valid ACD pairs as described below.
- ADDPAIR** (Indicates “add pair”). Use **ADDPAIR** to add a new ACD pair to an existing ACD. It must be followed by valid ACD pairs as described below.
- REPAIR** (Indicates “replace pair”). Use **REPAIR** to replace an existing ACD pair in an existing ACD. You must follow this with a valid ACD pair as described below. A new ACD pair will replace an existing ACD pair if it has the same user and account name.

acdpair An access control definition pair. Like the *fileaccess* parameter this consists of a *modes* part and a *userspec* part. The *modes* part is separated from the *userspec* part by a colon (:). Acceptable *modes* for files are:

- R : read file access
- W : write file access
- L : lock file access
- A : append file access
- X : execute file access
- NONE : no access
- RACD : copy or read the ACD permission

Acceptable *modes* for directories are:

- CD : create directory entries access
- DD : delete directory entries access
- RD : read directory entries access
- TD : traverse directory entries access
- NONE : no access
- RACD : copy or read the ACD permission

File ACD pairs may contain R, W, L, A, X, NONE, and RACD. Directory ACD pairs may contain CD, DD, RD, TD, NONE, and RACD.

ALTSEC

The *userspec* part consists of

- a fully qualified user name (*username.accountname*)
- the file owner represented as \$OWNER
- the file group represented as \$GROUP
- the file group mask represented as \$GROUP_MASK
- *@.accountname*, which represents all users in the account *accountname*
- *@.@*, which represents all users in the system

Note

You cannot use wildcards cannot be used in any other manner within a user specification.

A typical ACD consisting of three ACD pairs might look like this:

```
(R,W:ENGR.MFG;R,W,RACD:@.MRKT;R:@.@)
```

This ACD would allow Read and Write access to the ENGR user of the MFG account; Read and Write access to any user of the MRKT account along with the ability to read or copy the ACD; and Read access to any user in any account.

^ filereference A file containing one or more ACD pairs. ACD pairs must be separated by semi-colons and may be placed on separate lines. A single ACD pair may *not* span more than one line. The file name must be preceded by the ^ sign (caret symbol) to indicate that the designated file contains the ACD definition. This is known as an indirect file.

The ALTSEC command fails if the indirect file does not contain a syntactically correct ACD. ACD pairs may be on separate lines, but a pair may not span lines. Parentheses are optional when defining an *acdpair* within an indirect file.

The file reference may be specified using MPE or HFS file name syntax. For example:

filename[/*lockword*][. *group*[. *account*]]

If the file has an active lockword, you must specify it. ACDs override lockwords. Lockwords can only be specified in file references using MPE name syntax. Unqualified file names are relative to the current working directory.

DELPAIR (Indicates “delete pair”). Use to delete one or more ACD pairs in an existing ACD). **DELPAIR** must be followed by a valid *userspec*.

userspec Username and accountname, the same as the *userspec* described above in *acdpair*. A wildcard (@) may be used for the username or both the username and accountname together. A wildcard may *not* be specified for the accountname unless it is also specified for the username.

COPYACD (Indicates “copy ACD”). Use **COPYACD** to copy an ACD from an existing *objectname* to the specified *objectname*. ACDs can be copied only between like objects. You must specify **FILENAME** or **LDEV**. **FILENAME** is the default. You cannot copy an ACD *from* a device class (**DEVCLASS**), although you may copy *to* all devices on the system by specifying the @ sign as the target device.

DELACD (Indicates “delete ACD”). Use **DELACD** to delete all ACD pairs from the specified *objectname*. ACDs may be removed only from devices and files in MPE groups. The file access matrix controls access to a file when an ACD is deleted.

MASK (Indicates “recalculate MASK”). Use **MASK** to recalculate the ACD file group class mask (\$GROUP_MASK) access permissions.

ALTSEC

Operation Notes

You use the **ALTSEC** command to alter security provisions for files, hierarchical directories, devices, and device classes by manipulating an object's access control definition (ACD) or its access mask. All of these objects may have ACDs, but only files have access masks which can be changed using this command. An object's ACD may be altered using this command with the ACD keywords **NEWACD**, **REPACD**, **COPYACD**, **ADDPAIR**, **REPPAIR**, **DELPAIR**, **DELACD**, and **MASK**. A file's access mask may be altered using either the **ACCESS** keyword or an access specification without a keyword. Using the **ACCESS** keyword is a recommended practice to help distinguish between file access mask and ACD operations.

Only the owner of a file can use the **ALTSEC** command to change a file's access mask. Object owners and users with appropriate privilege can use this command to manipulate an object's ACD. Files and hierarchical directories have their owner's identity and a file group ID (GID) stored in their file labels. System managers have the appropriate privilege to manipulate the ACDs for all objects. Account managers for the account matching an object's GID have appropriate privilege. Devices are owned by system managers. The ability to manipulate an ACD or file mask is not affected by the object access currently granted to a user.

File ACDs override file lockwords and the file access matrix. ACDs permit more precise access control than the file access matrix by allowing access permissions to specific users. MPE/iX allows you to specify a maximum of 40 ACD pairs for a particular object. Since a large number of ACD pair specifications overflows the command line buffer, you must enter large numbers of ACD specifications may be entered through an indirect file.

The **ALTSEC** command fails if you attempt to alter the access permissions for a permanent disk file whose group's home volume set is not mounted.

File Access Matrix Examples

Note You can use **LISTFILE,4** to view the file access matrix.

ALTSEC

You have created a file named **FDATA**, and want to change its file access matrix access permissions to grant write access to only yourself. Enter:

```
ALTSEC FDATA;ACCESS=(W:CR)
```

To change file access permissions for the **FPROG** program file to allow all group users to execute programs, but only account and group librarian users to read or write to the file, enter:

```
ALTSEC FPROG;ACCESS=(X:GU;R,W:AL,GL)
```

ACD Examples

Note You can use **LISTFILE,-2** to view ACD information. This form of the **LISTFILE** command displays *only* ACD information.

You have created a file named **FDATA**, and want to assign a new ACD to **FDATA**, granting write access to a user named **FRIEND.ACCT**. Enter:

```
ALTSEC FDATA;NEWACD=(W:FRIEND.ACCT)
```

As the creator of a file, you can access the file by default, so you don't need to grant yourself access through an ACD. Users with appropriate privileges are always permitted to access files protected by ACDs.

To extend the ACD for the **FDATA** file so that all users on the system can read it, and all users within your account **ACCT** can also write to it, enter:

```
ALTSEC FDATA;ADDPAIR=(R:@.@;W,R:@.ACCT)
```

If you decide that users outside your account **ACCT** should not have read access to the file **FDATA** any longer, enter:

```
ALTSEC FDATA;DELPAIR=(@.@)
```

This does not delete all ACD pairs, only the ACD pair matching **@.@**. To delete the entire ACD, enter:

```
ALTSEC FDATA;DELACD
```

To replace the entire ACD, enter:

```
ALTSEC FDATA;REPACD=(W:FRIEND.ACCT)
```

ALTSEC

You want to copy the ACD associated with LDEV 5 to all devices in device class TERM:

```
ALTSEC TERM,DEVCLASS;COPYACD=5,LDEV
```

ACDs may be copied only between objects of the same type.

You want to grant users in account ACCT all access to directory Mydir1:

```
ALTSEC ./Mydir1;ADDPAIR=(CD,DD,RD,TD,RACD:@.ACCT)
```

You want to grant read and write access to yourself and read access for other members of your group to an HFS syntax file named a_file_of_Mine:

```
ALTSEC ./a_file_of_Mine;REPPAIR=(RACD,R,W:$OWNER;  
RACD,R:$GROUP,$GROUP_MASK;NONE:@.@)
```

To add a new ACD to file PROGRAMME allowing all users on the system to execute it, but only users in account ACCT to write to it enter:

```
ALTSEC PROGRAMME;NEWACD=(X:@.@;W,X:@.ACCT)
```

To add a new ACD pair to an ACD which already exists for file PROGRAMME which will allow the user ENGR of the LAB account to read, write, lock, append, execute and read the ACD information enter:

```
ALTSEC PROGRAMME;ADDPAIR=(R,W,X,RACD:ENGR.LAB)
```

Note that L and A (lock and append) need not be specified because they are implied with W (write).

To add an ACD that prevents any user except OPERATOR.SYS (and any user with SM capability) from accessing LDEV 7 (a tape drive), enter:

```
ALTSEC 7,LDEV;NEWACD=(R,W:OPERATOR.SYS)
```

Note in the last example that X is not used because it makes no sense to *execute* a tape drive. It also makes no sense to *lock* or *append* a tape drive but W tacitly provides L and A anyway.

To eliminate any ACD that may be in effect for device class LP, and to prevent any user except MGR of the FINANCE account from writing to a printer in device class LP, enter:

```
ALTSEC LP,DEVCLASS;DELACD  
ALTSEC LP,DEVCLASS;NEWACD=(W:MGR.FINANCE)
```

2-32 MPE/iX Commands

Related Commands

LISTF
LISTFILE
RELEASE
SECURE
SHOWDEV
and the *fileaccess* parameter for:
ALTACCT
ALTGROUP
NEWACCT
NEWGROUP

ALTUSER

The ALTUSER command changes the parameters currently defined for a user.

Syntax

```
ALTUSER username [ . acctname ]  
[ ;PASS=[ password ] ] [ ;CAP=[ capabilitylist ] ]  
[ ;HOME=[ homegroupname ] ] [ ;UID=[ uid ] ]
```

Parameters

<i>username</i>	Specifies the name of the user. The name must consist of one to eight alphanumeric characters, beginning with an alphabetic character.
<i>acctname</i>	Specifies the account in which the user resides. The name must consist of one to eight alphanumeric characters, beginning with an alphabetic character. You must have system manager (SM) capability to use this parameter from outside the account, or you must have account manager (AM) capability to use this parameter from within the account.
PASS	Specifies the user password, used for verifying logon access only. The password must consist of one to eight alphanumeric characters, beginning with an alphabetic character. The default is that no password is assigned. If you omit the parameter PASS, the existing password, if any, does not change. If you include PASS but do not provide its value <i>password</i> , the current password is removed.
CAP	Specifies the list of capabilities permitted for the user. Each capability is indicated by a two letter mnemonic, separated by commas, as follows: SM = System manager AM = Account manager AL = Account librarian

ALTUSER

GL = Group librarian
DI = Diagnostician
OP = System supervisor
NA = Network administrator
NM = Node manager
SF = Save files
ND = Access to nonshareable I/O devices
UV = Use volumes
CV = Create volumes
CS = Use communication subsystem
PS = Programmatic sessions
LG = User logging
PH = Process handling
DS = Extra data segments
MR = Multiple RINs
PM = Privileged mode
IA = Interactive access
BA = Batch access

The default is IA, BA, ND, and SF.

Note the following points about this parameter:

- Capabilities assigned to the user cannot exceed those assigned to the account.
- Any capabilities removed from the account cannot be assigned to the user.
- The user's capabilities are always verified to be a subset of the account's capabilities at logon. This prevents a user from having a capability not assigned to the account.

HOME

Specifies the name of an existing group to be assigned as the user's home group. The first user established when an account is created, by default, has PUB assigned as the home group. Subsequent new users, by default, have no home group assigned. If no home group is assigned, the user must always specify a group when logging on.

ALTUSER

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have account manager (AM) capability to enter this command. You must have system manager (SM) capability to specify a user in an account other than your own.

■ Altering user parameters

Basic guidelines for altering user parameters are as follows:

- You can enter multiple parameters on a single command line by using the semicolon (;) delimiter.
- If more than one user within an account is assigned AM capability, you can remove the capability from all but one user.
- When you omit an entire parameter, the corresponding value for the group remains unchanged.
- When you include a parameter but omit its value as in `PASS=Return`, the default value is assigned.
- You cannot remove SM capability from `MANAGER.SYS`.
- You cannot remove your own AM capability.

■ Activating the changes

If you alter one or more parameters, the changes in the directory become effective immediately, however, the changes do not affect any active users until they log off from their current sessions and log back on to the same user name and account. Since the system does not automatically generate a message informing users of changes, you should notify users before you make any changes.

ALTUSER

Examples

- To change the capability list of the user JONES from IA, BA, SF, PH, and DS to include privileged mode (PM) capability, enter:

```
:ALTUSER JONES;CAP=IA,BA,SF,PH,DS,PM
```

- To change the password and capability list of JONES, enter:

```
:ALTUSER JONES;PASS=JJ;CAP=IA,BA,SF,PH,DS,PM
```

Related Commands

ALTACCT
ALTGROUP
LISTACCT
LISTGROUP
LISTUSER
NEWACCT
NEWGROUP
NEWUSER

BREAKJOB

The **BREAKJOB** command suspends any executing job, including spooled and streamed jobs. A job using a critical system resource does not suspend until it releases the resource.

Syntax

```
BREAKJOB #Jnnn
```

Parameters

#J*nnn* Specifies a job number.

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must enter this command from the console. You can enter this command from a terminal other than the console under one of the following conditions:

- The **JOBSECURITY** command is set to **LOW** and the job is logged on to your user account. (AM users only need to match the job's account name.)
- Your system administrator has used the **ALLOW** command, which permits you to enter this command.

■ Nonshareable devices

When you enter this command for a job that controls a nonshareable device, a console message appears that lists the device(s) that the job controls. As many as ten devices may be listed. You can then decide whether to allow the job to continue running until it releases the device(s), or whether you should abort the job.

BREAKJOB

Examples

- To suspend the processing of job number 68, enter:

```
:BREAKJOB #J68
```

- To display suspended jobs, enter:

```
:SHOWJOB SUSP
JOBNUM STATE INPRI JIN JLIST INTRODUCED JOB NAME
#68     SUSP           105  LP  WED. 7:56AM TEST,USER.ACCT
```

Related Commands

```
ALTJOB
ABORTJOB
CONSOLE
JOBSECURITY
RESUMEJOB
SHOWJOB
STREAM
```

BYE

The **BYE** command terminates an interactive session and displays the following:

- CPU seconds consumed
- connect time minutes consumed
- date and time of termination

Syntax

BYE

Parameters

None.

Operation Notes

■ Usage

You can enter this command from a session, but not from a job, a program, or in break mode. Pressing **Break** does not affect this command.

■ Automatic termination

The system automatically terminates your session under the following circumstances:

- If you enter the **HELLO** command without logging off your current session, MPE terminates your current session and immediately initiates a new one.
- If you are logged on over a telephone line and you hang up before terminating your session, the system automatically issues the **BYE** command.

Example

- To terminate a session, enter:

```
:BYE  
CPU=48. CONNECT=35. FRI, MAY 4, 1990, 10:56 PM
```

BYE

The termination message shown above does not appear if you entered the BYE command before you initiated a session on the system.

Related Commands

EOJ
EXIT
HELLO

CHDIR

This command changes the process' current working directory (CWD).

Syntax

```
CHDIR [ [DIR=] dir_name ] [ ;SHOW | NOSHOW ]
```

Parameters

<i>dir_name</i>	The name of the new current directory (optional). The <i>dir_name</i> is assumed to be an MPE name. You can change to HFS-named directories if <i>dir_name</i> starts with a dot (.) or a slash (/). The <i>dir_name</i> may not end in a slash, and using wildcards is not allowed. If <i>dir_name</i> is omitted, your logon directory is used. Your logon directory is your logon group, in the form: /LOGON_ACCOUNT/LOGON_GROUP.
SHOW	Displays to \$STDLIST the absolute pathname of the “directory changed to”. SHOW is the default.
NOSHOW	Does not display the absolute pathname.

Operation Notes

You can use the CHDIR command to change the process' CWD to *dir_name*. If *dir_name* is omitted, the logon group is assumed. The user always has a logon group.

The CHDIR command changes the CWD to an MPE-named directory. This means that *dir_name* must follow all MPE naming rules, unless it is prefixed with a dot (.) or a slash (/).

You can change the CWD to any HFS directory, MPE account, or MPE group where you have the appropriate permission.

The CWD is a process-local attribute. When CHDIR is executed from the CI, the CI's CWD is changed for the life of that CI process (or until another CHDIR command is issued). When CHDIR is executed programmatically from a child

CHDIR

process of the CI (for example, HPEDIT), only that process' CWD is changed. In this case, the parent process' (for example, CI's) CWD is not affected.

The CHDIR and CHGROUP commands change their process' CWD; however, CHDIR does not post any accounting information, and CHGROUP affects the CWD of every process in the job/session structure. Connect and CPU time are still accounted to the user's logon account and logon group.

A new, read-only, predefined CI variable, HPCWD, contains the name of the current working directory in HFS syntax. At logon, HPCWD contains */account_name/logon_group_name*. The HPCWD string value cannot exceed 255 characters. If the CWD is too long, or has been removed (for example, with the .2 shell `rmdir` command), then HPCWD will not be accessible.

The CHGROUP command causes the HPCWD variable to be set to */account/group_changed_to*.

The table below summarizes the differences and similarities between the CHDIR and CHGROUP commands.

Affects	CHGROUP	CHDIR
Accumulation of CPU and Connect time	yes	no
Set of accessible files	yes	no
CWD of process	yes	yes
HPCWD variable	yes	yes
Disk space accumulation	yes	yes

Use

You can issue the CHDIR command from a job, a session, a program, or in break mode. Pressing **Break** has no effect on this command. You must have traverse directory entries (TD) permission to each directory component in *dir_name* (refer to the ALTSEC command in this chapter for more information on directory permissions.) If the CHDIR command fails, the CWD does not change..

CHDIR

Examples

The following example shows the command entry to change to the directory `dir1` in the `MYGRP` group in the `MYACCT` account.

```
CHDIR /MYACCT/MYGRP/dir1
```

The following example shows the command entry to change to the `MPE` group level (`AGROUP`) in the `MYACCT` account.

```
CHDIR /MYACCT/AGROUP
```

The following example shows the command entry to change to a directory named `My_dir`. In this example, `My_dir` is a relative pathname, that is, relative to the current working directory (`CWD`).

```
CHDIR ./My_dir
```

The following example shows the command entry to change to a directory named `john`, in the group `JONES`, in the account `MYACCT`, by specifying the full pathname.

```
CHDIR /MYACCT/JONES/john
```


CHDIR

The following example shows that a change is made to a directory named **final** by specifying the relative pathname. The variable **HPCWD** displays the current working directory after the change is made.

```
CHDIR ./es/final  
SHOWVAR HPCWD  
  
HPCWD = /MYACCT/JONES/john/es/final
```

Related Commands

- CHGROUP
- FINDDIR (UDC)
- LISTDIR (UDC)
- NEWDIR
- PURGEDIR

CHGROUP

The CHGROUP command enables you to switch from your current group to another group within your logon account.

Syntax

```
CHGROUP [ groupname [ /grouppass ] ]
```

Parameters

- groupname* Specifies the name of the group that you want to switch to. If you omit this parameter, you switch to the home group.
- grouppass* Specifies the password of the group that you want to switch to, if the group has a password. If you want to switch to your home group, you do not need to provide a password.

Operation Notes

■ Usage

You can enter this command from a session or a job, but not from a program or in break mode. Pressing **Break** does not affect this command.

■ Command interpreter preservation

This command preserves the entire command interpreter environment (temporary files, file equations, and variables).

■ Password requirements

In a batch job, you must supply a password if a password is assigned to *groupname*; otherwise, the job fails and the error message **INCORRECT PASSWORD** appears. Similarly, during a session, you must supply a password if a password is assigned to *groupname*; otherwise, the system prompts you for a password.

CHGROUP

Examples

- To switch from the current group to your home group, enter:

:CHGROUP

- To switch from the current group to the group called GROUP2, enter:

:CHGROUP GROUP2

- To switch from the current group to the group called GROUP2 with the assigned password SECRET, enter:

:CHGROUP GROUP2/SECRET

Related Commands

HELLO

COMMENT

The `COMMENT` command enables you to insert a comment into a job stream or a user command.

Syntax

```
COMMENT [text]
```

Parameters

text Consists of the comment text that includes an explanation about the purpose of commands or the logic used in creating the job. You can also use *text* to create job headings. The *text* can consist of any ASCII characters.

The default is that a record containing only the string "COMMENT" is inserted in the command stream.

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

■ Adding comment lines

To continue comment text onto the next line, use an ampersand (&) as the last nonblank character of the line. Add the ampersand for each line of text that you want to continue.

Example

- To include the comment `THIS IS A SAMPLE JOB` in the job named `JOB1`, insert the following in your text file:

```
!JOB JOB1,USER.FINANCE
!COMMENT -- THIS IS A SAMPLE JOB
!FORTGO MYPROG
!EOJ
```

COMMENT

Related Commands

None

CONSOLE

The `CONSOLE` command can display the logical device number of the current console or can move the console to another logical device.

Syntax

```
CONSOLE [ldev]
```

Parameters

ldev Specifies the logical device number of the new console terminal. If you omit this parameter, the command displays the logical device number of the current console.

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing `Break` does not affect this command.

Any user can enter this command to determine the location of the console; however, you must enter this command from the console to change its location, unless your system administrator has used the `ALLOW` command which permits you to enter this command.

■ Command process

When you enter this command, a message that shows the new logical device number appears on the new console as well as the former console. All console capabilities transfer to the new console; the former console becomes a standard session device.

■ Restrictions

Restrictions or requirements on the use of this command are as follows:

- You cannot move the console to a remote terminal, which is a terminal connected to your system through a distributed systems (DS) communications line.

CONSOLE

- You should not move the console to a terminal that uses a multipoint terminal software (MTS) line, or a packet assembly and disassembly (PAD) terminal over a modem.
- Because the console is a session device, you must have a session logged on to the console in order to enter operator commands.
- Control and maintenance processor (CMP) and diagnostic control unit (DCU) prompts and messages remain with the configured terminal, such as channel 1, device 0, for example. You cannot move this feature to another terminal.
- You can only execute console (**Ctrl**A) commands from the console.

Examples

- To determine the current location of the console, enter:

```
:CONSOLE  
CONSOLE IS CURRENTLY ASSIGNED TO LDEV 20
```

- To transfer the console from the terminal identified by the system as logical device 20 to the terminal identified as logical device 31, enter:

```
:CONSOLE 31  
CONSOLE HAS BEEN SWITCHED FROM LDEV 20 TO LDEV 31
```

Related Commands

```
ALLOW  
SHOWALLOW
```

CONTINUE

The CONTINUE command overrides a command error so that a job or user command stream continues executing. You typically insert this command in the command file line preceding any command that you suspect may cause the job or user command to abort. If an error occurs, the job or user command continues to run, and the system displays an accompanying error message.

Syntax

```
CONTINUE
```

Parameters

None.

Operation Notes

■ Usage

You can enter this command from a job, but not from a session, a program, or in break mode. Pressing **Break** does not affect this command.

Example

- To override a possible error resulting from the processing of MYPROG and enable JOB1 to continue executing, insert the following in your file:

```
!JOB JOB1,USER.FINANCE
!RUN MYPROG
!CONTINUE
!IF JCW <= WARN THEN
!  RUN MYPROG2
!ENDIF
!EOJ
```

Related Commands

JOB

COPY

Copies one file to another by creating a new file or by overwriting an existing file. This command can be used to copy files to and from HFS directories. Also, users with SM capabilities are able to copy files to MPE accounts outside of their current logon account.

Syntax

$$\text{COPY [FROM=] sourcefile} \left[\left\{ \begin{array}{l} ;\text{T0=} \\ , \end{array} \right\} \text{targetfile} \right] \left[\begin{array}{l} \text{ASK} \\ \text{YES} \\ \text{NO} \end{array} \right]$$

Parameters

- sourcefile* The name of the file that is to be copied. A file with HFS syntax must begin with a dot (.), or a slash (/).
- targetfile* The name of the file to which *sourcefile* is to be copied. If *targetfile* is omitted, the source file is copied to *sourcefile* in the user's current working directory (CWD). You may qualify *targetfile* with both file and group names, or specify only the destination *group*. If only *group* is specified, COPY puts a copy of the source file in a file called *sourcefile* in the specified group.
- Since *.groupname* can be specified as the *targetfile*, and HFS file names can also start with a dot (.), this could lead to confusion as to whether an MPE group or HFS file name is desired for the *targetfile*. If the *targetfile* is an HFS filename starting with a dot (.), then the *targetfile* must be preceded with a dot and slash (./). For example, to represent a *targetfile* .F00 in an HFS current working directory, the file must be represented as ./ .F00.
- ASK If *targetfile* already exists, COPY prompts the user to choose an action with the following prompt:

PURGE OLD *targetfile*?

COPY

Valid replies to this prompt are:

Y or YES Instructs COPY to purge the original *targetfile* and create a new *targetfile*.

N or NO Instructs COPY to terminate.

ASK is the default, except in a job or in other cases when the user is not using interactive mode. In such cases, ASK has no meaning, and YES becomes the default.

YES Instructs COPY to purge *targetfile* if it already exists. No message is displayed for the user, as would be the case with ASK. YES is the default in jobs, or at other times when the user is not using an interactive mode.

NO Instructs COPY to terminate if *targetfile* already exists.

You may not specify system-wide (\$) prefix), CM KSAM, or privileged files as *sourcefile* or *targetfile*.

Operation Notes

This command performs a fast copy of *sourcefile* to *targetfile* and leaves *sourcefile* unchanged. Both files must be nonspooled disk files residing on the host system. You may specify files that are backreferenced with a file equation (*). However, this command only supports three file equation options: the file name, the final disposition (;TEMP or ;SAVE), and the disk volume or volume class (;DEV= DISC or ;DEV=<DISC LDEV NUMBER>). All other file equation options are ignored.

The file disposition of *targetfile* defaults to that of *sourcefile*. For example, if *sourcefile* is TEMP, *targetfile* is created TEMP. If *sourcefile* is PERM, *targetfile* is created as PERM. This file disposition can be overridden by using a file equation. This is one of the three options supported for file equations.

All file access attributes of the source file, including ACDs (access control definitions) are duplicated for the target file.

If a source file has an ACD, the ACD is copied to the target file. If a file does not have an ACD, and it is copied outside an MPE group, it is automatically assigned an ACD.

COPY

Use

This command may be invoked from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command and purges the *targetfile*.

The COPY command can be invoked in break mode and does not suffer from process creation overhead.

Note The *targetfile max extent* value may not be the same as for *sourcefile*.

Note Directories cannot be copied using the COPY command. If *sourcefile* or *targetfile* is actually a directory, an error is returned.

CM files and temporary files cannot be copied to HFS directories.

Examples

To copy ABCD.*logongroup* to EFG.*logongroup*, enter:

```
COPY ABCD, EFG
```

To copy ABCD.*logongroup* to ABCD.*newgroup*, enter:

```
COPY ABCD, .newgroup
```

To copy ABCD.*grp* to ABCD.*logongroup*, enter:

```
COPY ABCD.grp
```

In the next example the file MYFILE.PUB.SYS is copied to MyFile under the current working directory (CWD). Note that the target file name has to have the dot and slash (./) prefix.

```
COPY myfile.pub.sys, ./MyFile
```

COPY

In the next example, the file `File1` under the CWD is copied to `MYFILE.PUB` in the current account.

```
COPY ./File1, myfile.pub
```

In the next example, `file1` in directory `dir0` is copied to `file2` in directory `dir1`.

```
COPY ./dir0/file1, ./dir1/file2
```

In the following example, the file `TEST` has a lockword which is the word `LOCK`. The file is copied into `file1` in the `dir0` directory.

```
COPY TEST/LOCK, ./dir0/file1
```

The following example copies the file `/a/b/file` to the CWD as “file”. For example, if your CWD is `/ACCT/GRP`, then the copied file will be named `/ACCT/GRP/file`.

```
COPY /a/b/file
```

Related Commands

FCOPY

DISCUSE (UDC)

The DISCUSE UDC executes the DISKUSE command to display disk space usage, in sectors, for one or more directories or a directory tree. This UDC is provided for those who are used to spelling disk with a “c”.

Note System-defined UDCs are not automatically available. Your System Manager must use the SETCATALOG command to make these UDCs available for your use. For example:

```
SETCATALOG HPPXUDC.PUB; SYSTEM
```

Syntax

```
DISCUSE [ [DIR=] dir_name ] [ ;USERNAME | ;TREE | ;NOTREE ]
```

Parameters

Refer to the DISKUSE command for a complete explanation of the parameters used with the DISCUSE UDC. The following parameters are supported with the DISCUSE UDC.

dir_name Directory name for which information is being listed (optional).

TREE Causes all directories below and including *dir_name* to be reported.

NOTREE Causes *dir_name* only to be reported.

USERNAME Causes DISKUSE to use *dir_name* name to decide whether or not to display multiple levels of directories.

Operation Notes

The DISCUSE UDC runs the DISKUSE command and reports disk space, in sectors, for a directory. Refer to the DISKUSE command for a complete explanation of the operation.

DISCUSE (UDC)

Use

This UDC may be issued from a session, a job, a program, or in break mode. Pressing **Break** aborts execution.

Examples

The following example illustrates the use of the DISCUSE UDC. Note that a message is printed to remind you to use the DISKUSE command.

```
DISCUSE
Please use the DISKUSE command.
      ^
      SECTORS
      TREE      LEVEL  DIRECTORY (CWD= /ACCT/GROUP/dO)
              BELOW
      2100      330   .
```

Refer to the DISKUSE command later in this chapter for additional examples.

Related Commands

```
DISKUSE
LISTFILE
REPORT
```

DISKUSE

This command displays disk space usage, in sectors, for one or more directories or a directory tree.

Syntax

```
DISKUSE [ [DIR=] dir_name ] [ ; TREE | NOTREE | USENAME ]
```

Parameters

<i>dir_name</i>	Directory name for which information is being listed (optional). The <i>dir_name</i> is assumed to be an MPE syntax name. HFS-named directories may be shown if <i>dir_name</i> starts with a dot (.) or a slash (/). If <i>dir_name</i> is an HFS name and ends in a slash, then all objects at all levels under and including <i>dir_name</i> are reported, unless the NOTREE option is specified. The use of wildcards is permitted. If <i>dir_name</i> is omitted, the process' current working directory (CWD) is assumed.
TREE	Causes all directories below and including <i>dir_name</i> to be reported. The <i>dir_name</i> may or may not end in a slash (/), with no error or warning detected. Since the MPE naming convention does not support a trailing slash (/), the TREE option is the only way to report multi-level disk space usage for an MPE-named directory in a single command.
NOTREE	Causes <i>dir_name</i> only to be reported. If <i>dir_name</i> is an HFS name and ends in a slash (/), a warning tells you that NOTREE overrides the trailing slash (/).
USENAME	Causes DISKUSE to use <i>dir_name</i> name to decide whether or not to display multiple levels of directories. If <i>dir_name</i> is an HFS name and ends in a slash (/), then it and all directories under it are shown. If <i>dir_name</i> does not end in a slash (/), then only <i>dir_name</i> is reported. The USENAME parameter only applies to HFS-named directories and is ignored for MPE-named directories. The USENAME parameter is the default.

DISKUSE

Operation Notes

You can use the `DISKUSE` command to report on disk space, in sectors, for a directory. Disk space allocated to directories themselves (including accounts and MPE groups) is counted as part of the total number of sectors. The process' CWD is shown for all relative pathnames.

The number of components in the pathname controls the level of directories being reported. If a pathname has four components, for example, `/a/b/c/d`, then only directories with four or more components contribute to the output. This also applies to the use of wildcard component names. For example, `/@/@/@/@` only counts directories with at least four components in their pathname (absolute or relative, depending on how it was specified). MPE names follow the same formula: `@.@.@` reports only MPE-named directories one level below MPE groups. (`@.@` is the same since it is qualified with the logon account name.)

Use

You must have traverse directory entries (TD) and read directory entries (RD) permissions to each directory contributing to the reported totals. TD access is needed to each directory component named in *dir_name*. (Refer to the `ALTSEC` command in this chapter for additional information on directory permissions.)

Note that the MPE syntax cannot specify a *group.account*. MPE syntax only permits *dir.group.acct* if *dir* is a valid MPE name; that is, all uppercase alphanumeric. (If *group.account* were specified, it would be interpreted as a file called *group.account.logon_account*.)

Directory errors can occur while `DISKUSE` is collecting file space information. For example, if you lack traverse directory entries (TD) access to one or more of the lower level directories, an error occurs.

If you specify `;TREE`, you will only be able to see directories that you have TD and RD access to. `DISKUSE` stops on the first error encountered. This may result in no data (other than a header) displayed, or in the case of wildcard names, some directories are seen (up to the directory where the error occurred). Even in the wildcard directory name case, once an error is encountered, `DISKUSE` terminates.

There are several ways to see all disk space used on the system:

2-60 MPE/iX Commands

DISKUSE

- To show the disk space for every directory on the system, enter:

```
DISKUSE /
```

- To show only the total system disk space in one line, enter:

```
DISKUSE /;NOTREE
```

NOTREE option overrides directory name ending in "/". (CIWARN 9041)

Note Since the *dir_name* in the above example ends in a slash, a warning is issued to tell you the NOTREE option overrides the trailing slash.

- To display disk space used by all directories directly under the root, enter:

```
DISKUSE /@
```

Examples

Figure 2-1 illustrates a hierarchical directory structure. In this figure, directory names are shown as the character **d** plus a number (for example, **d0**), and file names are shown as the character **f** plus a number (for example **f1**). All of the examples following Figure 2-1 assume the directory structure shown. For illustrative purposes, the **HPPROMPT** variable has been set to show the current working directory (**HPCWD**). For example:

```
:setvar hpprompt "!!hpcwd:"  
/ACCT/GROUP/d0:
```

DISKUSE

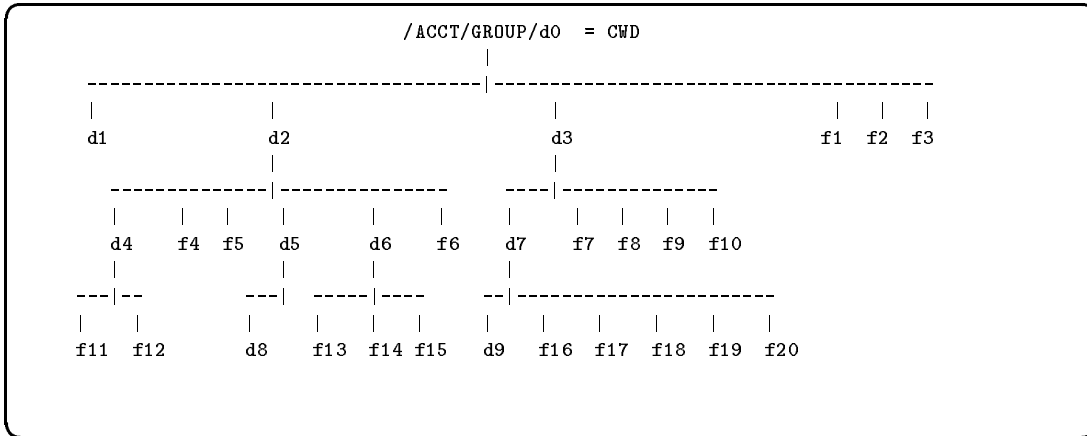


Figure 2-1. Hierarchical Directory Structure

The example shown in Figure 2-2 illustrates the format of the DISKUSE output. In this example, the TREE option is implied by the trailing slash (/).

```

/ACCT/GROUP/d0:diskuse ./
    SECTORS
TREE      LEVEL  DIRECTORY (CWD= /ACCT/GROUP/d0)
          BELOW
   64 +      0    ./d1/
   96         32   ./d2/d4/
   64         0    ./d2/d5/d8/
  128         64   ./d2/d5/
  112         48   ./d2/d6/
  448 +      240   ./d2/
   64         0    ./d3/d7/d9/
  208         144   ./d3/d7/
  336 +      128   ./d3/
   48 +       0    (files directly below specified directory)
  960         240   ./ (64 +)
/ACCT/GROUP/d0:

```

Figure 2-2. DISKUSE Output Format

Note The current working directory (CWD) relative display is shown as part of the header line. If the CWD name is long, it truncates with a dollar sign (\$).

Each of the columns contains information about the directory.

DIRECTORY (left-justified) Displays the selected directory name, in HFS-format. The directory pathname wraps around to the next line if it is longer than the field.

LEVEL BELOW (right-justified) Shows the number of sectors allocated directly to all objects immediately under the named directory. The space used by the listed directory file (container) does not contribute to this number, nor does the space used by the objects under directories under the displayed directory. The sum of the number of sectors reported by a

LISTFILE *dir_name*/@,2;NOTREE

DISKUSE

equals the number shown under the **LEVEL BELOW** column. The number in the **LEVEL BELOW** column is zero if the reported directory is empty.

TREE (right-justified) Displays the total number of sectors used by the directory listed. This includes space used by the directory itself, all files immediately under the directory, and space used by all subdirectory entries. The sum of the number of sectors seen in a

```
LISTFILE dir_name,2;TREE
```

equals the total number in the **TREE** column.

The plus signs (+) shown in the **TREE** column of Figure 2-2 refer to the directories that are one level below the target directory. When added, the sectors shown in this example equal 896. The last entry shows the total number of sectors (960) used by all subdirectories under the target directory (896) plus the sectors used by the target directory itself (64).

The next example illustrates the use of the **NOTREE** option. Only the directory name is displayed.

```
/ACCT/GROUP/d0:diskuse /ACCT/GROUP/d0 ;notree
      SECTORS
      TREE      LEVEL  DIRECTORY
                BELOW
      960        240    /ACCT/GROUP/d0/
/ACCT/GROUP/d0:
```

If the directory name parameter is omitted, the CWD is assumed, as seen in the following example:

DISKUSE

```
/ACCT/GROUP/d0:diskuse
  SECTORS
TREE      LEVEL  DIRECTORY (CWD= /ACCT/GROUP/d0)
          BELOW
  960      240    ./
```

The next example illustrates the use of the `TREE` option. Information is reported for the `dir_name` (d3) and all directories below.

```
/ACCT/GROUP/d0:diskuse ./d3/@ ;tree
  SECTORS
TREE      LEVEL  DIRECTORY (CWD= /ACCT/GROUP/d0)
          BELOW
   64      0     ./d3/d7/d9/
  208 +    144   ./d3/d7/
  208      208   ./d3/@
/ACCT/GROUP/d0:
```

You can use MPE syntax as shown in the following example (note that the `dir_name` (MYDIR) is upshifted.) This example is not based on the directory structure shown in Figure 2-1.

```
DISKUSE mydir.group.acct
  SECTORS
TREE      LEVEL  DIRECTORY
          BELOW
  2100     330   /ACCT/GROUP/MYDIR
```

DISKUSE

Note The output is presented in HFS syntax, even if the directory name is supplied in MPE syntax. If wildcards were used to specify the directory name in MPE syntax, then the final line of output is the user-supplied directory name (upshifted) in MPE format.

You can use wildcards to see a “horizontal cut” of disk space usage at an arbitrary directory depth. Wildcarding can be used in **TREE** and **NOTREE** output, as shown in the following examples.

```
/ACCT/GROUP/d0:diskuse ./@
      SECTORS
      TREE      LEVEL  DIRECTORY (CWD= /ACCT/GROUP/d0)
      BELOW
      64 +      0      ./d1/
      448 +     240     ./d2/
      336 +     128     ./d3/
      848
/ACCT/GROUP/d0:
```

Using Wildcards with NOTREE Output

DISKUSE

```
/ACCT/GROUP/d0:diskuse ./@/
  SECTORS
TREE      LEVEL  DIRECTORY (CWD= /ACCT/GROUP/d0)
          BELOW
   64 +      0    ./d1/
   96        32    ./d2/d4/
   64        0    ./d2/d5/d8/
  128        64    ./d2/d5/
  112        48    ./d2/d6/
  448 +     240    ./d2/
   64        0    ./d3/d7/d9/
  208        144   ./d3/d7/
  336 +     128   ./d3/
   848              ./@
/ACCT/GROUP/d0:
```

Using Wildcards with TREE Output

The last line of output contains the directory name and the total number of sectors (under the **TREE** column). The final **TREE** number always equals the sum of all other **TREE** numbers for directories with the same number of components as contained in the user-specified name that are designated with a plus sign (+) in the **TREE** column. For example, if you specified a pathname with three components, then the sum of the **TREE** field for all directory names with exactly three components equals the final total value.

Related Commands

LISTFILE
REPORT

EDITOR

The **EDITOR** command starts the EDIT/3000 subsystem, which enables you to create and alter ASCII text files.

Syntax

```
EDITOR
```

Parameters

None.

Operation Notes

■ Usage

You can enter this command from a session or a job. You cannot enter it from a program unless you or the program have process handling (PH) capability. You also cannot enter this command from break mode.

Pressing **Break** suspends execution of this command; entering the **RESUME** command continues execution.

Examples

Table 2-1 lists the primary EDIT/3000 commands, explains their purpose, and provides an example of each command.

Table 2-1. Primary EDIT/3000 Commands

Command	Purpose	Example
ADD	To enter lines of text into the work file or from the hold file	ADD 60, HOLD
CHANGE	To replace old text with new text	CHANGE "RECORD" TO "LINE" IN 40/70
COPY	To duplicate portions of text from one location to another in the work file	COPY 11/20 TO 80 BY .1
DELETE	To delete characters and lines from the work file	DELETE 50/75, 150(3)/155(7)
END	To terminate execution of EDIT/3000	END
FIND	To locate a point in the work file	FIND *; FIND "PROGRAM"
HOLD	To copy text from the work file into the hold file (either replacing or appending)	HOLD 100/150, APPEND; HOLD 1/10
INSERT	To insert text into the work file from the terminal and the hold file	INSERT 25(4)
JOIN	To add all or part of a file to the work file	JOIN FILE02 TO 1000 by .1
KEEP	To save all or part of the work file in a user file	KEEP FILE02
LIST	To display any part or all of the work file	LIST 10/30
MODIFY	To modify text in the work file using three operations of delete (D), insert (I), and replace (R)	MODIFY 50/100
REPLACE	To replace lines in the work file	REPLACE 10/20, HOLD, NOW

EDITOR

Table 2-1. Primary EDIT/3000 Commands (continued)

Command	Purpose	Example
TEXT	To copy the contents of a user file into the work file to be edited	TEXT FILE02
XPLAIN	To get help on one or more commands. (XPLAIN ALL provides help on all commands.)	XPLAIN TEXT

Related Commands

FCOPY
PRINT

EOJ

The **EOJ** command terminates an input file batch job and displays the CPU time and the elapsed time since the beginning of the job. This command is used in conjunction with the **JOB** command to create an input file for streaming.

Syntax

```
EOJ
```

Parameters

None.

Operation Notes

■ Usage

You can enter this command from a job, but not from a session, a program, or in break mode. Pressing **Break** does not affect this command.

■ Omitting the command

If you omit this command from an input file, the next **JOB** command terminates the current job and starts a new one. The standard end-of-job display indicates the end of the first job, and the normal job initiation display indicates the beginning of the next job.

Example

- To terminate an input file batch job, insert the following in your text file:

```
!JOB USER.PUBS
!RUN MYPROG1
!RUN MYPROG2
!EOJ
```

EOJ

Related Commands

EXIT
JOB
STREAM

FCOPY

FCOPY is a utility within the system similar to the COPY command, which enables you to copy data from one file to another file. The FCOPY command utility provides more flexibility and capabilities than the COPY command, however.

Syntax

From MPE:

```
FCOPY { FROM=sourcefile; TO= } [ targetfile ] [ ;NEW ]
```

From the FCOPY subsystem:

```
FCOPY
```

Parameters

FROM	Specifies the name of the file (<i>sourcefile</i>) to be copied.
TO	Specifies the name of the file (<i>targetfile</i>) to which <i>sourcefile</i> is to be copied. If you omit <i>targetfile</i> , <i>sourcefile</i> is copied to the \$STDLIST device.
NEW	Creates a new permanent disk file. The default is that <i>targetfile</i> must already exist.

Operation Notes

■ Usage

You can enter this command from a session, a job, or a program. Pressing **Break** suspends the execution of this command. Entering the RESUME command continues execution of the command.

If you enter this command from a program, either you or the program must have process handling (PH) capability.

■ Utility capabilities

The FCOPY command enables you to do the following tasks:

FCOPY

- Copy data from any input device to any output device.
- Create multiple copies of files.
- Create account-independent magnetic tape copies of disk files to move from one HP 3000 system to another. (The `STORE` and `RESTORE` commands, however, are recommended for moving files between systems.)
- Transfer programs or data from one medium to another (magnetic tape to disk, for example).
- Convert data from one computer code system (EBCDIC, for instance) to another (ASCII, for instance) as you copy the data.
- Copy portions of a file.

Refer to the *FCOPY Reference Manual* (32212-90003) for information on using these capabilities.

Examples

- To copy the file `TEST` to a new file named `TEMP` from the MPE command interpreter, enter:

```
:FCOPY FROM=TEST;TO=TEMP;NEW
HP32212A.03.30 FILE COPIER (C) HEWLETT-PACKARD CO. 1990
EOF FOUND IN FROMFILE AFTER RECORD 23
23 RECORDS PROCESSED *** 0 ERRORS

END OF SUBSYSTEM
:
```

FCOPY

- To copy the file TEST2 to a new file named TEMP2 from the FCOPY utility subsystem and then exit, enter:

```
:FCOPY
HP32212A.03.30 FILE COPIER (C) HEWLETT-PACKARD CO. 1990
>FROM=TEST2;TO=TEMP2;NEW
EOF FOUND IN FROMFILE AFTER RECORD 23
23 RECORDS PROCESSED *** 0 ERRORS
>EXIT

END OF SUBSYSTEM
:
```

Related Commands

COPY
RENAME

FILE

This' command enables you to create a file equation that overrides programmatic or system default file specifications.

Syntax

```
FILE formaldesignator = [ *formaldesignator ]
                        [ filereference ]
[ ; DEV = [ # ] [ device ] [ , [ outpri ] [ , numcopies ] ] ]
[ ; REC = [ resize ] [ , [ blockfactor ] [ , [ [ F ] [ , BINARY ] ]
                                                [ U ] [ , ASCII ] ] ] ] ]
[ ; ENV = envfile ] [ ; ACC = [ APPEND ] ] [ ; FORMS = formsmsg ]
[ ; FORMID = formid ] [ ; NOCCTL ]
                        [ ; CCTL ]
```

Parameters

formal- The formal file designator, interpreted according to
designator MPE-escaped semantics *formaldesignator*, can be either an MPE file (i.e., one that uses MPE syntax) or it can be a POSIX file name beginning with a dot or a slash. For example, you can use the escaped pathname /SYS/PUB/FILE since it is equivalent to the MPE name FILE.PUB.SYS.

If the file designator follows MPE syntax, it must use this format:

```
filename[.groupname][.accountname]][:envid]
```


FILE

The *filename*, *groupname* and *accountname* identifiers may each contain up to eight uppercase alphanumeric characters. The *envid* has two valid forms:

```
node[.domain[.organization]]
envelope[.domain[.organization]]
```

If *formaldesignator* is not equated to another file, the parameter specifies the name of an actual file.

**formal-
designator*

Specifies a backreference to a formal file designator defined in the **FILE** command. Note that this backreferenced form is valid only if it appears to the right of the equal sign (=).

filereference

The actual file designator of the file, interpreted according to MPE-escaped semantics. *filereference* can be either an MPE file (i.e., one that uses MPE syntax) or it can be a POSIX file name beginning with a dot or a slash. For example, you can use the escaped pathname `/SYS/PUB/FILE` since it is equivalent to the MPE name `FILE.PUB.SYS`.

If the file designator follows MPE syntax, it must use this format:

```
filename[/lockword][.groupname[.accountname]][[:envid]]
```

The *filename*, *groupname* and *accountname* identifiers may each contain up to eight uppercase alphanumeric characters. The *envid* has two valid forms:

```
node[.domain[.organization]]
envelope[.domain[.organization]]
```

If you include this command in a job and *filereference* includes a lockword that you omit from the command line, MPE/iX will not open the file. In a session, MPE/iX prompts you for a lockword as necessary.

FILE

DEV Specifies a parameter with one or more of three parameter options: *device*, *outpri*, or *numcopies*. If you use **DEV**, you must include at least one of these parameters or the **#** symbol, which specifies the default device class of **DISC**.

You can use a previously defined environment identifier for the **DEV** parameter, but you cannot use the domain and organization qualifiers.

Descriptions of the parameter options are as follows:

<i>device</i>	Specifies the logical device class name or logical device number of a device, such as a disk, tape, printer, or a terminal. The default is DISC .
<i>outpri</i>	Specifies the output priority requested for an output spool file, which can range from 1 (the lowest priority) to 13 (the highest priority).
<i>numcopies</i>	Specifies the number of copies requested for an output spool file. The maximum number is 127.

REC Specifies a parameter with the following parameter options:

resize Indicates the record size. If you do not use the **DEV** parameter, the default is **DISC** with 1023 records.

A positive number indicates words; a negative number indicates bytes. For fixed-length files, *resize* is the logical record size. For undefined-length files, *resize* is the maximum record size. For variable-length files, *resize* is the maximum logical record size if the *blockfactor* is 1.

Only this parameter option applies to **\$STDIN**, **\$STDINX**, or **\$STDLIST**. If you specify other parameter options for these files, the **FILE** command returns an error.

FILE

blockfactor Specifies the number of logical records per physical block for new files. The maximum size is 255.

F, **U**, or **V** Defines the format of the records of the file. A file can contain fixed-length records (**F**), undefined-length records (**U**), or variable-length records (**V**). The default is **F** for disk files.

BINARY or **ASCII** Specifies the type of records. **BINARY** indicates binary-coded records and is the default. **ASCII** indicates ASCII-coded records.

ENV Specifies the name of a file, *envfile*, containing printer environment information, which controls the print output formats on the printer. Not all printers support this feature of accepting environment information. The *envfile* can be an actual file designator, or it can be a formal file designator preceded by an asterisk (*).

The information in the *envfile* can contain specifications for page size, character fonts, forms, and other printer requirements to be used with the HP laser printing system. The file must be in a suitable form for downloading to the printer.

For example, to specify the environment file `ACCTENV.HPENV.SYS` to be used when printing, enter:

```
FILE ACCTLIST;DEV=ACCTPP;ENV=ACCTENV.HPENV.SYS
```

For information on creating an environment file for your printer, refer to your printer documentation.

ACC Specifies only append access to any file.

FORMS Provides an operator message requesting that certain forms be mounted. The message must appear and be replied to at the console before the output data can print on a line printer.

The message can consist of a string of 49 or fewer ASCII characters terminated by a period. You can use this parameter

FILE

to send control characters for bells and inverse video. If you attempt to send other control characters, however, blanks and the associated control character letter may appear.

FORMID

Identifies a special form to be mounted. This parameter only applies to output spool files. The parameter consists of a string of up to eight alphanumeric characters, beginning with a letter, that uniquely identifies the special form.

A message displaying the *formid* prints on the console or **\$STDLIST** of the associated user of the spooled device. The spooler process then waits for verification that the special forms are mounted before printing the file for which the *formid* was specified.

NOCCTL or CCTL

Indicates whether or not you are specifying carriage-control characters. **NOCCTL**, the default, indicates that you are not specifying carriage-control characters in writes to the file. **CCTL** indicates that you are specifying carriage-control characters in writes to the file.

Operation Notes

■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

■ Requirements

To use this command for a file, you must specify a valid, formal file designator, which is the name by which your program recognizes the file. The formal file designator enables commands and code outside your program to reference the file.

■ Command duration

The **FILE** command remains in effect for the entire job or session unless you cancel it by using the **RESET** command or you enter another **FILE** command for the same formal file designator.

Examples

- To run the program `MYPROG` that does the following:
 - references two files by the file names (*formaldesignators*) `SOURCE` and `DEST`
 - uses two existing disk files, `INX` and `OUTX`, as the actual files for the program

Enter:

```
:FILE SOURCE=INX  
:FILE DEST=OUTX  
:RUN MYPROG
```

- To send output to a new file, `FILEX`, that has 64-word fixed-length records and two records per block in ASCII code, enter:

```
:FILE DEST=FILEX,NEW;REC=64,2,F,ASCII  
:RUN MYPROG
```

Note that the file equation only modifies the specified items.

Related Commands

```
BUILD  
LISTEQ  
RESET
```

HELLO

The HELLO command initiates an interactive session.

Syntax

```
HELLO [ sessionname, ] username [ /userpass ] . acctname  
[ /acctpass ] [ , groupname [ /grouppass ] ] [ ;INPRI=inputpriority ]  
[ ;HIPRI ]
```

Parameters

<i>sessionname</i>	Specifies an arbitrary name used in conjunction with the <i>username</i> and <i>acctname</i> parameters to form a fully qualified session identity. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character. The default is no assigned session.
<i>username</i>	Specifies a user name that your system manager assigns, enabling you to log on to this account. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character.
<i>userpass</i>	Specifies a user password that your system manager optionally assigns. The password must contain from one to eight alphanumeric characters, beginning with an alphabetic character. A slash (/) must precede the user password.
<i>acctname</i>	Specifies the account name that your system manager assigns. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character. A period (.) must precede the account name.
<i>acctpass</i>	Specifies the account password that your system manager assigns. The password must contain from one to eight alphanumeric characters, beginning with an alphabetic character. A slash (/) must precede the account password.

HELLO

- groupname* Specifies the group name that your system manager assigns to be used for the local file domain and the CPU-time and connect-time charges. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character. The default is your home group if your system manager does not assign you a group name. This parameter is required if a home group is not assigned.
- grouppass* Specifies the group password that your system manager assigns, but is not required to log on to your home group. The password must contain from one to eight alphanumeric characters, beginning with an alphabetic character. A slash (/) must precede the group password.
- INPRI The value *inputpriority* determines the relative input priority of the session used in checking against access restrictions imposed by the jobfence. The value of this parameter becomes effective at the time of logon.
- The value of *inputpriority* can range from 1 (lowest priority) to 13 (highest priority). The default is 8. If you supply a value less than or equal to the current jobfence, access is denied to the session.
- HIPRI Enables you to either override the system jobfence or to override the session limit to log on. If you specify this parameter to override the jobfence, the system first determines whether or not you have system manager (SM) or system operator (OP) capability. If you have either of these capabilities, you are logged on and your input priority defaults to the system's jobfence and execution limit.
- If you do not have either capability and you specify this parameter, the following message appears:
- ```
MUST HAVE 'SM' OR 'OP' CAP. TO SPECIFY HIPRI, MAXIMUM
INPRI OF 13 IS USED (CIWARN 1460)
```

## HELLO

### Operation Notes

#### ■ Usage

You must enter this command from a terminal; you cannot use any other device to enter this command. You cannot enter this command from a job, a program, or in break mode. Pressing **Break** does not abort the execution of this command, but may prematurely terminate the printing of the welcome message.

You must supply both a valid *username* and *acctname* in your logon command, or the system rejects your logon attempt and displays an error message. If your logon attempt is accepted, the system displays specific logon information and prompts you for your next operating system command. If your system administrator has set up a welcome message, it appears after the system verification of your logon.

If you connect through a modem and do not log on within the allowable system-configured time, the line drops. You must redial and press **Return** again.

If you are already logged on and you enter the **HELLO** command, you are logged off your current session and logged on to a new session.

In addition to the user and account names, you may be required to provide a group name and one or more passwords.

#### ■ Providing a group name

The group you select at logon for your local file domain is known as your logon group. If your system administrator has associated a home group with your *username*, and if you want to use this group as your logon group, you need not specify it. The system automatically assigns the home group as your logon group when you log on; however, if you want to use another group as your logon group, you must specify the name of that group in your logon string as shown in the following example:

```
MPE XL:HELLO USER.TECH,MYGROUP
```

If your user name is not related to a home group, you must enter a group name in the **HELLO** command string, or your logon attempt fails.



HELLO

### ■ Entering passwords

Your system administrator can assign you user and group passwords to enhance the security of your account and to prevent unauthorized accumulation of charges against your account. When you specify your home group as your logon group, you need not enter a password, even if your home group has a password; however, if you want to access any other account, user name, or group that has a password, you must supply the password when you log on.

You can supply the password after the name of the protected entity, preceded by a forward slash (/). For instance, if a group named XGROUP requires the password XPASS, and if you want to access this group as your logon group, you could enter the password as shown:

```
MPE XL:HELLO USER.TECH,XGROUP/XPASS
```

For security purposes, the system also provides another method of entering passwords so that they do not appear to others in your work area. To use this method, just enter the command string without the required password(s); the system will prompt you for the password(s). The system turns off character echo so that what you type does not appear on the screen. If you enter the incorrect password, the prompt reappears and you have two more opportunities to enter the correct password. After the third incorrect entry, the message INCORRECT PASSWORD appears. You must then press **Return** to receive a new prompt, and then you must enter the HELLO command again to start a new logon process.

### ■ Access permissions and restrictions

After logging on, if the normal (default) file security provisions of the system are operative, you can access all files in your logon and home groups. You can also read files and execute programs stored in the PUB (public) group of your account and the PUB (public) group of the SYS (system) account; however, you cannot access any other files.

## HELLO

### Example

To start a session with the following names assigned to the associated parameters:

- ALPHA for the session name
- USER for the user name
- TECH for the account name
- XGROUP for the group name
- XPASS for the group password

Enter the following command string at the MPE/iX operating system prompt:

```
MPE XL: HELLO ALPHA,USER.TECH,XGROUP/XPASS
```

The system responds by displaying the following logon message:

```
HP3000 RELEASE: V.UU.FF USER VERSION: V.UU.FF WED, May 1, 1991, 10:12 AM
MPE XL HP31900 A.11.70 Copyright Hewlett-Packard 1987. All Rights Reserved.
:
```

### Related Commands

```
BYE
EXIT
JOB
JOBFENCE
LIMIT
SHOWJOB
```

## HELP

The **HELP** command provides online reference information for individual commands. You can request partial or complete information for a particular command. You can also use the **HELP** command to display the contents of a file. You can either enter the **HELP** command and the desired parameters directly, or you can access the Help Facility subsystem and enter individual **HELP** commands from the subsystem. Refer to “Operation Notes” for more information.

### Syntax

#### Direct access:

$$\text{HELP} \left\{ \begin{array}{l} \textit{commandname} \left[ \begin{array}{l} , \text{PARMS} \\ , \text{OPERATION} \\ , \text{EXAMPLE} \\ , \text{ALL} \end{array} \right] \\ \textit{filename} \\ \text{HELPSTUDY} \\ \text{SUMMARY} \\ \text{CLASS} \end{array} \right\}$$

#### Subsystem access:

$$\text{HELP} \left( \text{Return} \right) \left\{ \begin{array}{l} \textit{commandname} \left[ \begin{array}{l} , \text{PARMS} \\ , \text{OPERATION} \\ , \text{EXAMPLE} \\ , \text{ALL} \end{array} \right] \\ \text{HELPMENU} \\ \text{HELPSTUDY} \\ \text{SUMMARY} \\ \text{CLASS} \\ \text{EXIT} \end{array} \right\}$$

## HELP

### Parameters

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>command-name</i> | Specifies any command. Without additional keywords, the system displays the command name, syntax, and a brief description. Specifying the following keywords provides the information indicated:<br><br><b>PARMS</b> This keyword lists and provides a description for all parameters of the specified command.<br><br><b>OPERATION</b> This keyword describes how to use the specified command.<br><br><b>EXAMPLE</b> This keyword displays an example showing usage of the specified command.<br><br><b>ALL</b> This keyword displays the information from all of the keywords ( <b>PARMS</b> , <b>OPERATION</b> , <b>EXAMPLE</b> ).<br><br>If you want to enter a keyword with a command, you must separate the keyword from the command using a space or comma. |
| <i>filename</i>     | Specifies any existing file name. When you specify this parameter with the command, the system displays the contents of the file and a header indicating whether it is a command file or program file. You cannot specify this parameter from within the Help Facility subsystem.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>HELPMENU</b>     | Displays the main menu of the Help Facility subsystem, from which you can choose several options. This automatically appears when you invoke the subsystem, but you can also access this menu by specifying this parameter after the Help Facility prompt (>) within any portion of the facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>HELPSTUDY</b>    | Provides a tutorial designed to familiarize novice users with the fundamentals of commands and command syntax.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>SUMMARY</b>      | Provides a brief summary of operating system changes, including a quick overview of the operation of the Help Facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>CLASS</b>        | Lists commands by functional class.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**EXIT** Exits the Help Facility subsystem. Note that you cannot obtain help for the **EXIT** command within the Help Facility subsystem. You must use the direct access method instead (**HELP EXIT**).

### **Operation Notes**

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.

#### ■ Methods of access

You can get help by either entering the **HELP** command directly or by invoking the Help Facility subsystem. The direct method is recommended when you want to obtain information about one command or if you want to display the contents of a file. The subsystem method is recommended if you want to obtain information about several commands or prefer to interact with a friendlier screen-driven information source.

To access the Help Facility directly, you type the **HELP** command followed by any of the valid syntax parameters, then press **Return**. To access the Help Facility subsystem, you type the **HELP** command and press **Return**. The Help Facility subsystem menu appears, followed by a right angle bracket (>) prompt. You then type any of the valid syntax parameters and press **Return**.

## HELP

### Examples

- To directly access description and syntax information for the **ABORT** command, enter:

```
:HELP ABORT
```

The system responds by displaying:

```
ABORT

Aborts current program or operation.

Syntax

 ABORT

KEYWORDS: PARS,OPERATION,EXAMPLE
:
```

## HELP

- To access description and syntax information for the ABORT command from the Help Facility subsystem, enter:

:HELP

The system responds by displaying:

```

 This is the MPE/iX Help Facility
* Enter SUMMARY, CLASS, a commandname, or HELPSTUDY *

SUMMARY A summary of changes in MPE/iX.

CLASS Classes of Commands
 SESSIONS, JOBS, FILES, SUBSYSTEMS, ETC.

< command name > . . COMMAND entries, by name

< command name >< keyword> COMMAND entry with keyword
 PARMS, OPERATION, EXAMPLE

HELPSTUDY A beginner's introduction to Help

EXIT To leave the Help Facility

 You can use UPPERCASE or lowercase.

>>>>> The name of this screen is HELPMENU <<<<<
>
```

## HELP

Type `ABORT` at the prompt located at the bottom of the screen, as shown:

```
>ABORT
```

The system responds by displaying:

```
ABORT
```

```
Aborts current program or operation.
```

```
Syntax
```

```
 ABORT
```

```
KEYWORDS: PARS, OPERATION, EXAMPLE
```

```
:
```



## HELP

- To display a summary of the Help Facility subsystem, enter:

>SUMMARY

The system responds by displaying the following screen:

```

 SUMMARY

o Interactive -- enter HELP at the colon prompt. Then enter
 COMMANDNAME[, [KEYWORD]]. Exit by entering E or EXIT.

o Direct Access -- enter HELP COMMANDNAME[, [KEYWORD]] at the colon
 prompt. Help exits after displaying (and scrolling) the portion
 that you specified.

o This summary contains seven special topics:

FUNCTION summary of Help function
NM commands that operate in native mode
CM commands that have been enhanced for MPE/iX.
UNSUPPORTED commands that are NOT SUPPORTED in MPE/iX.
UNCHANGED commands that retained their function from MPE V/E.
XLSYNTAX discusses SYNTAX FLEXIBILITY with the NM commands.
CLASS commands by class (SESSIONS, JOBS, FILES...)

KEYWORDS: SUMMARY2, NEW, CHANGED, UNCHANGED, UNCH2, UNCH3, UNSUPPORTED,
 XLSYNTAX, XLSYNTAX2, XLSYNTAX3
```

## HELP

- To review commands listed by the functional tasks they perform, enter:

>CLASS

The system responds by displaying the following screen:

```

 COMMANDS LISTED BY CLASS

 Commands for Enter

SUBSYSTEMS SUBSYSTEMS <Return>
COMMUNICATE WITH USERS COMMUNICATE <Return>
MANAGING ACCOUNT, GROUP, ETC. MANAGE <Return>
MANAGE DEVICES DEVICES <Return>
MANAGE FILES FILES <Return>
VARIABLES (AND JCWs) VARS <Return>
MANAGE JOBS & SESSIONS JOBS <Return>
MANAGE RESOURCES RESOURCES <Return>
MANAGE THE SPOOLER SPOOLER <Return>
MANAGE SYSTEM & USER LOGGING LOGGING <Return>
MANAGE VOLUME SETS VOLUMES <Return>
SYSTEM PROGRAMMING PROGRAMMING <Return>
CREATING AND MANAGING UDCs UDC <Return>
LANGUAGES (BASIC, C, FORTRAN) LANGUAGES <Return>
DATA COMMUNICATION DATACOMM <Return>

 You may at any time enter the name of a command to find that topic.
 You may enter SUMMARY to return to that topic
KEYWORDS: SESSIONS, JOBS, MANAGE, FILES, PROGRAMS, DEVICES, UTILITY
 RESOURCES, OPERATOR, SPOOLER

>
```

## HELP

- To display the contents of a file named TEST, enter:

:HELP TEST

The system responds by displaying the following:

```
USER DEFINED COMMAND FILE: TEST.PUB.VOL
```

```
This is a test file.
```

```
Additional lines follow...
```

### Related Commands

None

---

## JOB

The **JOB** command is used in conjunction with the **STREAM** command. You can create an input job file that contains the **JOB** command. This file defines a batch job that you submit with the **STREAM** command. The **JOB** command initiates the batch processing and must be the first command line in the job file.

### Syntax

```
JOB [jobname,] username [/ userpass] . acctname [/ acctpass]
 [, groupname [/ grouppass]]
 [; INPRI = inputpriority] [; RESTART]
 [; HIPRI]
 [; OUTCLASS = [[device] [, [outputpriority] [, numcopies]]]]]]
```

### Parameters

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>jobname</i>  | Specifies an arbitrary name used with <i>username</i> and <i>acctname</i> parameters to form a job identity. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character. The default is that no job name is assigned.                                                                                                                                                                                                                          |
| <i>username</i> | Specifies your user name, established by your system administrator, that enables you to log on to this account. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character.                                                                                                                                                                                                                                                                    |
| <i>userpass</i> | Specifies your user password, optionally assigned by your system administrator. The password must contain from one to eight alphanumeric characters, beginning with an alphabetic character. If you have a password but you do not supply it in the command syntax, the <b>STREAM</b> command prompts for it if you: <ul style="list-style-type: none"><li>■ Enter the <b>STREAM</b> command from a session.</li><li>■ Do not redirect either <b>\$STDIN</b> or <b>\$STDLIST</b>.</li></ul> |

## JOB

- Do not nest the **JOB** command within a second-level **STREAM** command. (The **JOB** command is specified as a first-level **JOB** command.)

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>acctname</i>  | Specifies the account name that the system administrator establishes. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character. A period (.) must precede this parameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <i>acctpss</i>   | <p>Specifies the account password that the system administrator can optionally assign. The password must contain from one to eight alphanumeric characters, beginning with an alphabetic character. If a password exists but you do not supply it in the command syntax, the <b>STREAM</b> command prompts you for it if you:</p> <ul style="list-style-type: none"><li>■ Enter the <b>STREAM</b> command from a session.</li><li>■ Do not redirect either <b>\$STDIN</b> or <b>\$STDLIST</b>.</li><li>■ Do not nest the <b>JOB</b> command within a second-level <b>STREAM</b> command. (The <b>JOB</b> command is specified as a first-level <b>JOB</b> command.)</li></ul> |
| <i>groupname</i> | Specifies the group name to be used for the local file domain and for CPU-time charges, as established by the system administrator. The name must contain from one to eight alphanumeric characters, beginning with an alphabetic character. The default is the home group if one is assigned. This parameter is required if a home group is not assigned.                                                                                                                                                                                                                                                                                                                    |
| <i>grouppass</i> | <p>Specifies the group password that the system administrator optionally assigns. The password must contain from one to eight alphanumeric characters, beginning with an alphabetic character. You do not need the group password when you log on to your home group. You need it when you log on in any other group for which a password exists. If a password is required but you do not supply it in the command syntax, the <b>STREAM</b> command prompts you for it if you:</p> <ul style="list-style-type: none"><li>■ Enter the <b>STREAM</b> command from a session.</li><li>■ Do not redirect either <b>\$STDIN</b> or <b>\$STDLIST</b>.</li></ul>                   |

## **JOB**

- Do not nest the JOB command within a second-level STREAM command. (The JOB command is specified as a first-level JOB command.)

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INPRI    | Specifies the input priority of the job. The <i>inputpriority</i> value is the relative input priority used to check against access restrictions imposed by the jobfence. The <i>inputpriority</i> value becomes effective at logon time and must be from 1 (lowest priority) to 13 (highest priority). If you supply a value less than or equal to the current jobfence, the job is denied access. The default is 8.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| HIPRI    | <p>Overrides the system jobfence, or overrides the job limit. When using the HIPRI parameter to override the jobfence, the system first determines whether you have system manager (SM) or system operator (OP) capability. If you have either of these capabilities, you are logged on, and your INPRI defaults to the system's jobfence and execution limit. If you do not have either of these capabilities, the system attempts to log you on using INPRI=13 and succeeds if the jobfence is 12 or less, and if the job limit is not exceeded.</p> <p>You can also specify HIPRI to override the job limit, but you must have either SM or OP capability. The system does not override the job limit automatically. If you use the HIPRI parameter without SM or OP capability, the following warning message appears:</p> <pre>MUST HAVE 'SM' OR 'OP' CAP. TO SPECIFY HIPRI , MAXIMUM INPRI OF 13 IS USED (CIWARN 1460)</pre> |
| RESTART  | Restarts a spooled job that was interrupted by a system termination/restart. This parameter automatically becomes effective when the system is subsequently restarted with the START RECOVERY option. The effect is to resubmit the job in its original form. This parameter applies only to jobs initiated on spooled input devices. The default is that spooled jobs are not restarted after a system termination and restart.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| OUTCLASS | Specifies the output class with one or more of the following values:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## JOB

- device* Indicates the class name or logical device number (LDEV) of the device to receive listing output. You cannot specify a magnetic tape unit. If the value is not a valid LDEV or class name, an error occurs. The default is defined in the system configuration. You can only supply a *device* if you have nonshareable device (ND) file access capability.
- outputpriority* Indicates the output priority for the job list file, if destined for a spooled line printer. You can use *outputpriority* to select the next spooled device file (on disk) for output from among all those contending for a specific printer. This parameter applies only to output destined for spooled output devices and is ignored for other output.
- The value must range from 1 (lowest priority) to 13 (highest priority). When *outputpriority* is 1, output is always deferred. To print output from disk, use an *outputpriority* of 2 or greater. The default is 8. If spooling logging is disabled, the default is 13.
- numcopies* Indicates the number of job listing copies to be produced. The *numcopies* parameter only applies when the listing is directed to a spooled device, and it is ignored in other cases. The default value is 1. If the number of copies is less than 1, a warning appears; however, the command still executes with the default value of 1. If the number of copies is greater than 127, an error message appears, and 127 copies are printed.

## **JOB**

### **Operation Notes**

#### ■ Usage

You can enter this command only from a job file. You cannot enter it from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

#### ■ Requirements

To properly use this command, you must adhere to the following requirements:

- Terminate the **JOB** command with an **E0J** command.
- Precede the **JOB** command and **E0J** command with an appropriate substitute prompt character for the colon prompt. By default, the system expects you to use an exclamation point (!).
- Supply your *username* and *accountname*. If you omit either of these parameters or enter them incorrectly, the system rejects your job and prints error messages on the standard listing device and the console. Depending on how your system administrator has set up users on the system, you may also have to supply a logon group name as well as user, account, and/or group passwords.

#### ■ Command process

If the system accepts your job, the system displays the following information on the list device:

- job number, as assigned by the system to identify the job
- date and time

#### ■ Job number

The job number that the system assigns always uniquely identifies your job to the system and other users. The system assigns these numbers in sequential order as jobs are accepted.



**Examples**

- To create a job file and submit it for processing, do the following:

1. Enter the following command to invoke the EDIT subsystem:

```
:EDITOR
```

2. Enter the ADD command, then add job file commands, as shown:

```
/ADD
 1 !JOB SMITH,USER.TECH
 2 !COMMENT THIS JOB RUNS THE MONTHLY UPDATE PROGRAM
 3 !FILE INPUT01=TRANS.DATA.ENGR
 4 !FILE MASTER;DEV=TAPE
 5 !FILE OUTPUT=NEWFILE.PUB.TECH
 6 !RUN UPDPROG
 7 !EOJ
 8 //
```

Note that the first command is the JOB command and that an exclamation point (!) precedes each command.

3. Enter the KEEP and END commands to save your file and terminate the EDITOR subsystem:

```
/KEEP MYJOB,UNN
/END
```

4. Submit the job file for processing by using the STREAM command:

```
:STREAM MYJOB
```

Note that the file MYJOB remains on disk after you stream it. Consequently, you can stream it again at any time, if desired.

## **JOB**

### **Related Commands**

EOJ  
JOBFENCE  
LIMIT  
STREAM  
STREAMS

---

## JOBFENCE

The **JOBFENCE** command defines the minimum input priority that a job or a session must have in order to execute.

### Syntax

`JOBFENCE priorityfence`

### Parameters

*priorityfence* The number 0 allows a job or session to log on with any **INPRI** value. The number 14 prevents all jobs and sessions from logging on regardless of their **INPRI** value. The use of **HIPRI** as well as the job and session limits affects the ability of a job or session to log on.

The system does not process jobs or sessions with an input priority less than or equal to the *priorityfence* until you raise their input priority with the **ALTJOB** command or lower the jobfence.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must enter this command from the console; however, you can enter this command from your terminal if your system administrator has used the **ALLOW** command, which permits you to enter this command.

#### ■ Overriding the jobfence

If you have **SM** or **OP** capability, you can override the jobfence setting by logging on with the **HIPRI** parameter of the **JOB** or **HELLO** commands. Alternatively, you can log on with an input priority greater than the jobfence, as indicated by the **SHOWJOB** command.

## JOBFENCE

### Examples

- To defer all non-HIPRI jobs and sessions and then allow waiting jobs to log on, do the following:

1. Set the jobfence to 14:

```
:JOBFENCE 14
16:18/#J7/34/DEFERRED JOB INTRODUCED ON LDEV #10
16:18/#J8/35/DEFERRED JOB INTRODUCED ON LDEV #10
```

2. Enter the SHOWJOB command to display the effect of the new jobfence:

```
:SHOWJOB

JOBNUM STATE IPRI JIN JLIST INTRODUCED JOB NAME
#S26 EXEC 20 20 THU 4:17P OPERATOR.SYS
#J7 WAIT D 8 10S 12 THU 4:18P JOB1,FIELD.SUPT
#J8 WAIT D 8 10S 12 THU 4:18P JOB2,FIELD.SUPT
```

```
3 JOBS:
 0 INTRO
 2 WAIT; INCL 2 DEFERRED
 1 EXEC; INCL 1 SESSIONS
 0 SUSP
```

```
JOBFENCE= 14; JLIMIT= 5; SLIMIT=16
```

3. Reset the jobfence to 6 to allow waiting jobs to log on:

```
:JOBFENCE 6

16:21/#J7/34/LOGON FOR: JOB1,FIELD.SUPT ON LDEV #10
16:21/#J8/35/LOGON FOR: JOB2,FIELD.SUPT ON LDEV #10
```

## **JOBFENCE**

### **Related Commands**

ALTJOB  
HELLO  
JOB  
LIMIT  
SHOWJOB

---

## LIMIT

The **LIMIT** command limits the number of concurrently running jobs or sessions. Maximum job and session limits are established during system configuration. Within these limits, the **LIMIT** command can redefine the job and session limits.

### Syntax

$$\text{LIMIT} \left[ \left\{ \begin{array}{l} \textit{numberjobs} \\ \textit{, numbersessions} \\ \textit{numberjobs, numbersessions} \end{array} \right\} \right]$$

### Parameters

*numberjobs*      Specifies the maximum number of jobs.

*number-  
sessions*        Specifies the maximum number of sessions.

If you do not specify a parameter value, the system displays the current limits. If you specify one parameter value but not the other, the limit changes only for the specified parameter.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must enter this command from the console; however, you can enter this command from your terminal if your system administrator has used the **ALLOW** command, which permits you to enter this command.

#### ■ Priority and nonpriority jobs and sessions

Ordinarily, no new jobs or sessions can exceed the current job and session limits; however, you can override these limits by using the **HIPRI** parameter of the **JOB** and **HELLO** commands. You can specify the **HIPRI** parameter only if you have **SM** or **OP** capability.

## LIMIT

You can submit a non-HIPRI job even if the current job limit is reached, but your job waits until it can log on without exceeding the job limit.

You cannot log on as a non-HIPRI session after the session limit is reached. If you attempt to log on, the message **CAN'T INITIATE NEW SESSIONS NOW** appears.

### ■ Existing job and session execution

The number of jobs and sessions may already exceed the new limit that you specify when you enter this command, however, this does not abort currently executing jobs or sessions. They continue to execute, but no new jobs enter the executing state, and no new sessions are initiated.

### Examples

- To limit the number of sessions to 13, but retain the current job limit, enter:

```
:LIMIT,13
```

- To limit the number of jobs to 2 and the number of sessions to 15, enter:

```
:LIMIT 2,15
```

## LIMIT

The system responds as follows when you enter the `SHOWJOB` command:

| JOBNUM | STATE | IPRI  | JIN | JLIST | INTRODUCED | JOB            | NAME |
|--------|-------|-------|-----|-------|------------|----------------|------|
| #S24   | EXEC  |       | 20  | 20    | TUE 1:54A  | OPERATOR.SYS   |      |
| #S26   | EXEC  |       | 177 | 177   | TUE 5:01A  | FUNKY,RSPOOL.S |      |
| #S96   | EXEC  | QUIET | 35  | 35    | TUE 8:31A  | SLIDES.SIMON   |      |

3 JOBS:  
0 INTRO  
0 WAIT; INCL 0 DEFERRED  
3 EXC; INCL 3 SESSIONS  
0 SUSP  
JOBFENCE= 6; JLIMIT= 2; SLIMIT= 15

Note the `JLIMIT` and `SLIMIT` fields showing that the new job limit is 2 and the new session limit is 15.

## Related Commands

HELLO  
JOB  
JOBFENCE



---

## LISTACCT

The LISTACCT command displays information about one or more accounts in an ASCII format.

### Syntax

```
LISTACCT [acctset] [, listfile] [;PASS]
[;FORMAT={ SUMMARY | BRIEF | DETAIL }]
```

### Parameters

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>acctset</i>  | <p>Specifies the accounts to be listed. The default is all accounts for those with system manager (SM) capability. For all others, the default is their logon account.</p> <p>You can use wildcard characters to specify certain types of characters as follows:</p> <ul style="list-style-type: none"><li>■ # specifies a single numeric character.</li><li>■ ? specifies a single alphanumeric character.</li><li>■ @ specifies zero or more alphanumeric characters.</li></ul> <p>Each wildcard character is counted toward the eight-character limit for group, account, and file names.</p> |
| <i>listfile</i> | <p>Specifies the name of the output file. The default is \$STDLIST, a temporary file that cannot be overwritten by the BUILD command. It is automatically specified as a new ASCII file with variable-length records, closed in the temporary domain, and with user-supplied carriage-control characters (CCTL), out access mode, and EXC (exclusive access) option. All other characteristics are the same as with the FILE command default specifications.</p>                                                                                                                                 |
| PASS            | <p>Permits those with account manager (AM) and system manager (SM) capability to see the account password.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## LISTACCT

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.

#### ■ Restrictions

If you have system manager (SM) capability, you can list any account and account password on the system. If you have account manager (AM) capability, you can list only your own account and its password. If you do not have either SM or AM capability, you can only list your logon account and cannot display your password.

### Example

- To display information, including the password, for an account named HPXLII, enter:

```
:LISTACCT HPXLII;PASS

ACCOUNT: HPXLII

DISC SPACE: 754115(SECTORS) PASSWORD: ACCTPASS
CPU TIME : 3330(SECONDS) LOC ATTR: $00000000
CONNECT TIME: 102(MINUTES) SECURITY-- READ : ANY
DISC LIMIT: UNLIMITED WRITE : AC
CPU LIMIT: UNLIMITED APPEND : AC
CONNECT TIME: UNLIMITED LOCK : ANY
MAX PRI: 150 EXECUTE : ANY
GROUP UFID: $00D0001 $80001050 $00138A20 $00000008 $000001FA
USER UFID : $00D4001 $80001050 $00138C20 $00000008 $000001FB
CAP: AM,AL,GL,DI,CV,UV,LG,CS,ND,SF,IA,BA,PH,DS,MR,PM
```

## LISTACCT

### Related Commands

ALTACCT  
LISTGROUP  
LISTUSER  
NEWACCT

---

## LISTFILE

This command lists file and directory attributes through the use of options. The LISTFILE information is a superset of the LISTF command information.

### Syntax

$$\text{LISTFILE} \left[ \left[ \text{fileset=} \left\{ \begin{array}{l} \text{fileset} \\ (\text{fileset}[, \text{fileset}] \dots ) \end{array} \right\} \right] \right]$$

where *option* is:

[ [ ;FORMAT= ] *format\_opt* ]  
[ [ ;SELEQ= ] *select\_eq* ]  
          ~ *indir* ]  
[ [ ;NAME= ] *pattern* ]  
[ ;PASS ]  
[ ; { PERM } { TEMP } { PERMTEMP } ]  
[ ;USERNAME ] [ ;TREE ] [ ;NOTREE ]

### Parameters

*fileset* Specifies the set of files to be listed. The default for *fileset* is @.

The *fileset* parameter can be either in MPE or HFS syntax.

#### MPE Syntax (MPE Groups containing only MPE files)

If *fileset* does not begin with the dot or slash (indicating HFS syntax), it is parsed according to MPE syntax and has the following form:

$$\text{filename} [ . \text{groupname} [ . \text{accountname} ] ]$$

Wildcards may be used with the MPE syntax. Patterns are the same as for SHOWVAR. “[a-dq]#x” means search for all files

## LISTFILE

beginning with **a**, **b**, **c**, **d**, or **q** followed by one digit (any digit from 0 - 9), followed by **x**.

A **LISTFILE** command using MPE syntax does not display MPE files that do not follow the traditional MPE naming conventions of up to eight character names for files, groups and accounts.

If the *fileset* parameter does not specify *groupname*, all the files (with uppercase names that have up to 8 alphanumeric characters) in the current working directory (CWD) are listed irrespective of whether CWD is an MPE group or not. For example,

```
LISTFILE @.@
```

lists the files in all of the groups of the logon account; whereas:

```
LISTFILE @
```

lists all the files in the CWD (which may be different from the logon group); however, only those files whose names are valid MPE names are displayed. If the CWD is not an MPE group, the information about the file is displayed in the new format as discussed below.

### **MPE Syntax (MPE Groups containing HFS files)**

You may have an MPE group that also contains files with HFS syntax, for example, they begin with a dot (**.**), a slash (**/**), or an underscore (**\_**). To see both MPE and HFS files in a group, type,

```
LISTFILE ./@
```

This displays all file names with upper and lower case letters that reside under the current group and account. In a directory, file names can consist of 1 to 255 characters, but in a group, file names cannot have more than 16 characters.

## LISTFILE

### HFS Syntax

If the *fileset* begins with a dot (.) or a slash (/), it is parsed according to the HFS syntax. In this case, the *fileset* parameter that you type at the command line (including command name, keywords and options) can have, at most, 511 characters. It has an optional beginning slash followed by zero or more names separated by slashes.

The characters composing the name may be selected from the following set:

a-z

A-Z

0 1 2 3 4 5 6 7 8 9 - \_ .

The file names cannot begin with a hyphen (-). The following wildcards may also be used:

@ ? # [ - ]

- |     |                                                                                                                                                                                                                                                     |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| @   | matches 0 to 255 characters                                                                                                                                                                                                                         |
| ?   | matches one character                                                                                                                                                                                                                               |
| #   | matches one digit                                                                                                                                                                                                                                   |
| [ ] | matches one character specified between the brackets                                                                                                                                                                                                |
| -   | if used within brackets ([ ]), the hyphen (-) means a range of characters. For example,<br><br>[c - g]<br><br>means all the characters between c and g inclusive. The character on the left must alphabetically precede the character on the right. |
| -   | If used immediately after the left bracket ([), or just before the right bracket (]), hyphen (-) means the character '-' itself.                                                                                                                    |

## LISTFILE

For example, [a-c] means one of 'a', 'b', or 'c'. [-a-c] or [a-c-] means one of 'a', 'b', 'c', or '-'.

Note that it is illegal to specify [c-a], or [a-A] because 'c' does not alphabetically precede 'a' and uppercase 'A' comes before lowercase 'a' (in ASCII character evaluation). Also note that it is legal to specify [A-z] and any legal special characters.

The file names dot (.) and dot-dot (..) have special meaning, that is, current directory and the parent of the current directory, respectively.

If the *fileset* parameter begins with a slash (/), the pathname is assumed to be an absolute pathname; otherwise, it is considered to be CWD relative.

If *fileset* ends in a slash, it is treated as a directory name, and *pattern* is used to determine the file names that match. All the directories and files that match *fileset* are found, and searched recursively to display the files and directories that match *pattern*. For example, if *fileset* is /SYS/@/, all files and subdirectories within SYS, and all files and directories within those subdirectories are displayed. In this case @ is assumed for *pattern*.

If *fileset* does not end in a slash, all of the files that match *fileset* are displayed. For example, if *fileset* is /SYS/@, you will see a list of all files and subdirectories in the SYS directory, but not any files or directories within those subdirectories.

If you have specified TREE, a trailing slash is assumed at the end of the *fileset* (if not present).

For example,

```
LISTFILE /SYS/@;TREE
```

behaves like:

```
LISTFILE /SYS/@/
```

On the other hand, if you specify NOTREE, the trailing slash, if present at the end of a fileset, is ignored. Hence,

## LISTFILE

LISTFILE /SYS/@/;NOTREE

behaves like:

LISTFILE /SYS/@

In the above examples, it is assumed that `name=@`.

*format\_opt*

A format selection. This parameter has no effect on the files selected for display, but affects the selection of information about the files that you see. If *fileset* begins with a dot (.) or slash (/), and the CWD is different than the directory, then one of the following occurs:

- For MPE accounts, MPE groups, and HFS directories, the filename ends in a *slash*.
- The information about each file begins at column 2 (after 1 space). If the file name or pathname is long and the information cannot fit on one record of the output file, it continues from column 1 of the next record.
- MPE accounts, MPE groups, and HFS directories have file labels associated with them just like `files`; hence, `LISTFILE, 2` and `LISTFILE, 3`, and so on, display relevant information for them. For accounts, groups, and directories, however, some of the information (like *eof*) is not maintained (it is 0).



## LISTFILE

The following table displays the format options available.

### Format Options

| Option | Name    | Displayed Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -2     | ACD     | Displays the file's ACD (access control definition). System Managers can view the ACD for any file. Account Managers can view the ACD for files in that account. File creators can view the ACD for their files. Other users can view an ACD only if that ACD specifies that the user has RACD (read ACD) access. For each directory, it displays <b>PATH=absolute directory name</b> ending in a slash. Next, for each HFS file within the directory, it displays the same information as MPE, except that it displays the file name (at most 255 characters) at the end of all other information. |
| -1     | LABEL   | Shows only the file label in hexadecimal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 0      | FILES   | For each directory, this option displays <b>PATH=absolute directory name</b> ending in a slash. Next, for each HFS file within the directory, it shows only the file name. This is the default. For each file, the name of the file (at most 255 characters) is displayed in a multicolumn format.                                                                                                                                                                                                                                                                                                  |
| 1      | SUMMARY | Displays the file name, file code, record size, record format, and other file characteristics such as ASCII or binary records, carriage-control option, file type, current end-of-file location, and the maximum number of records allowed in the file.<br><br>For each directory, it displays <b>PATH=absolute directory name</b> ending in a slash. For each HFS file within the directory, it displays the same information as MPE, except that it displays the file name (at most 255 characters) at the end of all other information.                                                          |

## LISTFILE

### Format Options

| Option  | Name                  | Displayed Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2       | DISC                  | <p>Displays the file name, file code, record size, file type, current end-of-file location, and the maximum number of records allowed in the file. It also displays the blocking factor, number of sectors in use, number of extents currently allocated, and the maximum number of extents allowed.</p> <p>For each directory, it displays <b>PATH=</b><i>absolute directory name</i> ending in a slash. For each HFS file within the directory, it displays the same information as MPE except that it displays the file name (at most 255 characters) at the end of all other information.</p>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3<br>-3 | DETAIL;PASS<br>DETAIL | <p>Displays the file name, record size, extent size, number of records, access rights for the user, and other file characteristics including the date created, modified, and last accessed. The same information for MPE and HFS files is displayed except for the following differences:</p> <ul style="list-style-type: none"> <li>■ Fully qualified MPE file name is replaced by an absolute pathname.</li> <li>■ Creator field displays the fully qualified user ID (user.acct) of the file owner.</li> <li>■ The SECURITY field contains an additional field <b>SAVE</b> for MPE group entries. It is blank for entries other than MPE groups. All file access matrix fields are blank for anything other than MPE account, MPE group, and a file in an MPE group.</li> <li>■ The LOCKWORD field is omitted from the display.</li> </ul> <p>The creator, group id, and label address are omitted in <b>FORMAT=3</b>. These can be obtained by specifying -3 if you have sufficient capability (AM or SM) .</p> |

Table 2-2. Format Options

| Option  | Name              | Displayed Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4       | SECURITY          | Displays the security matrix for the file. This includes account, group and file-level security, and the access rights for the user.<br><br>For MPE groups and MPE accounts, the security matrix for group, account, and account-only are displayed. The rest of the fields of the file access matrix are blank.<br><br>For HFS directories, and files within HFS directories, all the fields of the file access matrix are blank. In addition, LISTFILE displays the message:<br><br>ACD EXISTS. |
| 5<br>-5 | DATA;PASS<br>DATA | Shows LISTFILE,3 data and all file-specific data in LISTFILE,3 type format (that is, KSAM, SPOOL, and symbolic links).                                                                                                                                                                                                                                                                                                                                                                            |
| 6       | QUALIFY           | Shows the absolute pathname of the file.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 7       | UNIQUE            | Shows all file specific data in LISTFILE,5 type format, but does not show LISTFILE,3 data (the file name is shown).                                                                                                                                                                                                                                                                                                                                                                               |

Format options 5 and 7 are “data driven” outputs that show file specific information such as KSAM keys, spooled device or symbolic links.

When you use option 5 and a file has no unique data, only the option 3 data is shown. When you use option 7 and a file has no unique data, only the file name is displayed. Default = 0 (FILES).

*select\_eq* A selection equation. Use the selection equation as a filter on *fileset*. From the set of files matching the fileset, only files that match the *select\_eq* requirements are listed. You may select file types by using the FTYPE option, or you may select object types by using the

## LISTFILE

OBJECT option. Selection equations have the following format:

```
[FTYPE = KSAMXL | SPOOL]
[OBJECT = ACCT | GROUP | FILE | DIR]
[| HFSDIR | SYMLINK]
```

Selection equations must be surrounded by square brackets.

For example:

```
LISTFILE ./@ ;SELEQ=[OBJECT=DIR]
```

You can also use your text editor to make a file that contains the OBJECT or FTYPE statement, for example [OBJECT=DIR], and save it with a filename. Thereafter, you can select this file by entering:

```
LISTFILE ./@ ;SELEQ=^FILENAME
```

In the above example, the filename represents [OBJECT=DIR].

The OBJECT option applies to HFS files, and may have any one of the following values.

|       |                                                                                     |
|-------|-------------------------------------------------------------------------------------|
| ACCT  | Lists only the MPE ACCOUNT directory.                                               |
| GROUP | Lists only the MPE GROUP directory.                                                 |
| FILE  | Lists only the files and not directories/groups/accounts.                           |
| DIR   | Lists only directories (including groups/accounts and the system root directory /). |

Synonyms may be used for these values as shown in the following table.

## LISTFILE

| Value | Synonyms                     |
|-------|------------------------------|
| ACCT  | ACCTS, ACCOUNT, ACCOUNTS     |
| GROUP | GROUPS                       |
| FILE  | FILES                        |
| DIR   | DIRS, DIRECTORY, DIRECTORIES |

The **OBJECT** option cannot be used for an MPE *fileset*. (The **LISTFILE** command displays only files for the MPE filesets.)

*pattern*

When POSIX syntax is used in the fileset, *pattern* is exactly the same as the *filename* components of *fileset* as previously described. The name parameter applies only to HFS syntax.

The **LISTFILE** command displays only those file names which match the *pattern*. For example,

```
LISTFILE /SYS/;NAME=OFF@
```

displays all the files/groups/directories under the **SYS** account that start with **OFF**, **off**, **Off**, and so on.

If *pattern* is specified within single or double quotes, it is case sensitive. For example,

```
LISTFILE /SYS/;NAME='OFF@'
```

displays all the files/groups/directories under the **SYS** account that start with **OFF**. It will not display names that start with **off**, **Off**, and so on. The default for the *pattern* parameter is **@**; that is, it matches all names without regard to case.

## LISTFILE

---

**Note** You cannot use the **NAME** parameter for an MPE *fileset*. The reason is that the *pattern* can be specified as the part of the *fileset*, for example, instead of entering:

```
LISTFILE @.@.@;NAME=@DOC
```

you should enter:

```
LISTFILE @DOC.@.@.
```

---

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PASS</b>     | The <b>PASS</b> option displays sensitive data. Using it depends on your access rights to the data; that is if you are the owner or have AM or SM capability.                                                                                                                                                                                                                                                                                                                                                     |
| <b>PERM</b>     | The <b>PERM</b> option displays permanent files only. <b>PERM</b> is the default.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>TEMP</b>     | The <b>TEMP</b> option displays temporary files only.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>PERMTEMP</b> | The <b>PERMTEMP</b> option displays both permanent and temporary files. The permanent files are listed before the temporary files.                                                                                                                                                                                                                                                                                                                                                                                |
| <b>USENAME</b>  | The <b>USENAME</b> option applies only to HFS-named filesets. This option indicates that the name is to be used to determine how many levels to display. If the fileset ends in a slash (/), then all the lower level objects (based on <i>select_eq</i> ) are to be displayed. If the name does not end in a slash (/), then only the objects at the specified level are displayed. For example, <i>/@/@/@</i> indicates that all objects at the third level are to be displayed. <b>USENAME</b> is the default. |
| <b>TREE</b>     | If the <b>TREE</b> option is specified, objects at all lower directory levels are displayed.                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>NOTREE</b>   | Indicates that only objects at the specified level are to be displayed. The <b>NOTREE</b> option overrides an HFS fileset that ends in a slash.                                                                                                                                                                                                                                                                                                                                                                   |

## Operation Notes

You can use **LISTFILE** to list descriptions of one or more disk files at the level of detail you select. You must have traverse directory (TD) entries and/or read directory (RD) entries for the directories in the pathname of the files that will be displayed by **LISTFILE**. (Refer to the **ALTSEC** command for further information on directory permissions.) For example, if the *fileset* is `./dir1/dir@/@` and `NAME=@`, you must have TD access for the CWD. Also, you must have TD and/or RD access for `dir1` and any directories in `dir1` that match the pattern `dir@`. You do not need TD access on the directories in `dir1` to display the names of the files, that is, if you use format options 0 or 6.

For format options -1, -2, -3, and -5, you must have either SM or AM capability for the file. A file description is not listed unless the file's home volume set (PV) is mounted.

## Use

This command may be issued from a session, a job, a program, or in break mode. Pressing **Break** aborts execution.

If the *fileset* is in MPE syntax, **LISTFILE** does not display file names that do not follow MPE naming syntax. For example, `LISTFILE @,2` will not display the file `am_pm`, `LISTFILE ./@,2` will display the file.

If the *fileset* is in HFS syntax, and it ends in a *slash* (or the **TREE** option is specified), first all the nodes (files and directories) are displayed that match the *fileset* parameter (horizontal cut). Those files that match the pattern of *pattern* are the ones that are displayed using the *format\_opt* specified.

If the HFS syntax *fileset* does not end in a *slash* (or the **NOTREE** option is specified), all the nodes (files and directories) that match the pattern of *fileset* (horizontal cut) and the pattern of *pattern* are displayed using the *format\_opt* specified.

In both the above cases, a final filter of *SELEQ* is applied, if present, to further restrict the names to be displayed.

## LISTFILE

### MPE Examples

```
LISTFILE @
```

```
FILENAME
```

```
FILE1
```

```
LISTFILE @.PUB.OFFICE,2
```

```
ACCOUNT= OFFICE GROUP= PUB
```

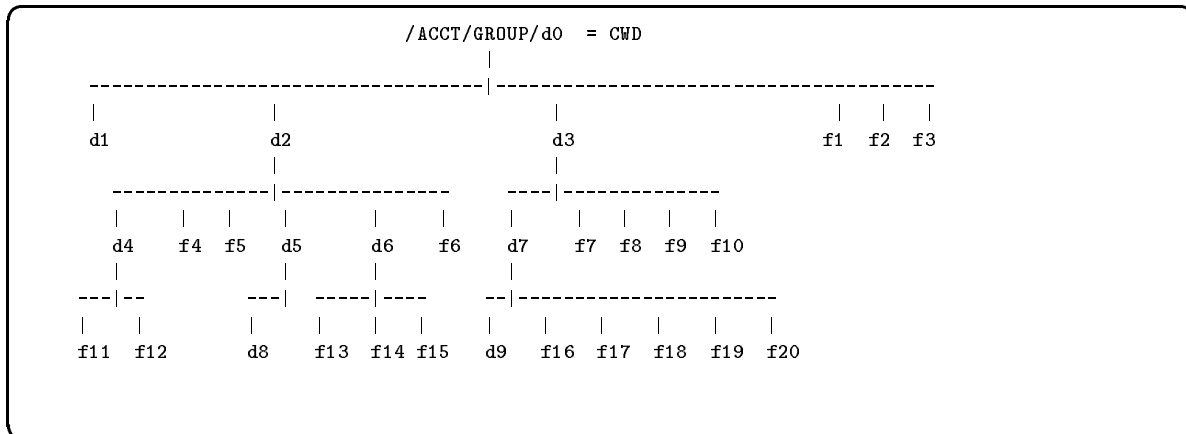
| FILENAME | CODE | -----LOGICAL RECORD----- |     |     | ----SPACE---- |     |               |
|----------|------|--------------------------|-----|-----|---------------|-----|---------------|
|          |      | SIZE                     | TYP | EOF | LIMIT         | R/B | SECTORS #X MX |
| F4       |      | 80B                      | AF  | 411 | 411           | 16  | 144 2 *       |
| F5       |      | 80B                      | AF  | 199 | 199           | 16  | 64 1 *        |

### HFS Examples

Figure 2-3 illustrates a hierarchical directory structure. In this figure, directory names are shown as the character **d** plus a number (for example, **d0**), and file names are shown as the character **f** plus a number (for example, **f1**). The examples following Figure 2-3 assume the directory structure shown. They also assume that the current working directory (CWD) is **/ACCT/GROUP/d0**.



## LISTFILE



**Figure 2-3. Example File System**

In this first example, the HPPROMPT variable has been set to show the current working directory, changes directories using the CHDIR command, and requests a listing of all files one level below the CWD.

```

:hello manager.acct,group

:setvar hpprompt "!!hpcwd:"
/ACCT/GROUP:chdir ./d0
CWD is "/ACCT/GROUP/d0".
/ACCT/GROUP/d0:listfile ./@

PATH= /ACCT/GROUP/d0/./

d1/ d2/ d3/ f1 f2 f3
/ACCT/GROUP/d0:
```

## LISTFILE

In the next example, a listing of all files one level below the CWD using **FORMAT=2** (DISC) option has been requested. Note that for each directory entry, the *absolute directory name* ending in a slash, is shown.

```
/ACCT/GROUP/d0: listfile ./@,2

PATH= /ACCT/GROUP/d0/./

CODE -----LOGICAL RECORD----- ----SPACE---- FILENAME
 SIZE TYP EOF LIMIT R/B SECTORS #X MX
 16W HBD 4 67107839 1 64 2 * d1/
 16W HBD 4 67107839 1 64 2 * d2/
 16W HBD 4 67107839 1 64 2 * d3/
 80B AF 12 12 1 16 1 1 f1
 80B AF 12 12 1 16 1 1 f2
 80B AF 12 12 1 16 1 1 f3
```

In the next example, a listing of all entries one level below the group by specifying the absolute pathname has been requested.

```
/ACCT/GROUP/d0: listfile /ACCT/GROUP/@,2

PATH= /ACCT/GROUP/

CODE -----LOGICAL RECORD----- ----SPACE---- FILENAME
 SIZE TYP EOF LIMIT R/B SECTORS #X MX
 16W HBD 4 67107839 1 64 2 * *d0/

/ACCT/GROUP/d0:
```

In the next example, the user specifies the **NAME** parameter to request a listing of all entries with names beginning with a lower case “d”. The **FORMAT=6** (QUALIFY) option is used to show the absolute pathname of all HFS entries.

## LISTFILE

```
/ACCT/GROUP/d0:listfile /;name='d@';format=6

/ACCT/GROUP/d0/
/ACCT/GROUP/d0/d1/
/ACCT/GROUP/d0/d2/
/ACCT/GROUP/d0/d2/d4/
/ACCT/GROUP/d0/d2/d5/
/ACCT/GROUP/d0/d2/d5/d8/
/ACCT/GROUP/d0/d2/d6/
/ACCT/GROUP/d0/d3/
/ACCT/GROUP/d0/d3/d7/
/ACCT/GROUP/d0/d3/d7/d9/
```

The next example illustrates the use of the OBJECT=ACCT parameter to show all accounts on the system.

```
/ACCT/GROUP/d0:listfile /@; seleq=[object=acct];format=6

/ACCT/
/SYS/
/TELESUP/
/TEST/
```

The next example illustrates the OBJECT=GROUP parameter to show all groups on the system.

## LISTFILE

```
/ACCT/GROUP/d0: listfile /@/@;seleq=[object=group];format=qualify

/ACCT/GROUP/
/ACCT/PUB/
/SYS/ALINE925/

.
.
.

/TELESUP/PUB/
/TEST/PUB/
/TEST/SPOOL/
/TEST/SPOOLSTD/
/TEST/TEMPLATE/

/ACCT/GROUP/d0:
```

The next example illustrates the use of the **OBJECT=DIR** parameter to show all directories on the system.

## LISTFILE

```
/ACCT/GROUP/d0: listfile /;seleq=[object=dir];format=qualify
/
/ACCT/
/ACCT/GROUP/
/ACCT/GROUP/d0/
/ACCT/GROUP/d0/d1/
/ACCT/GROUP/d0/d2/
/ACCT/GROUP/d0/d2/d4/
/ACCT/GROUP/d0/d2/d5/
/ACCT/GROUP/d0/d2/d5/d8/
/ACCT/GROUP/d0/d2/d6/
/ACCT/GROUP/d0/d3/
/ACCT/GROUP/d0/d3/d7/
/ACCT/GROUP/d0/d3/d7/d9/
/ACCT/PUB/
/SYS/
/SYS/ALINE925/
/SYS/ALINK925/

.
.
.

/TELESUP/PUB/
/TEST/PUB/
/TEST/SPOOL/
/TEST/SPOOLSTD/
/TEST/TEMPLATE/

/ACCT/GROUP/d0:
```

The next example illustrates a summary listing (format option 1) of all files in subdirectory d3.

## LISTFILE

```
/ACCT/GROUP/d0:listfile ./d3/@,1
PATH= /ACCT/GROUP/d0/./d3/
CODE -----LOGICAL RECORD----- FILENAME
 SIZE TYP EOF LIMIT
 16W HBD 4 67107839 d7/
 80B AF 12 12 f10
 80B AF 12 12 f7
 80B AF 12 12 f8
 80B AF 12 12 f9
/ACCT/GROUP/d0:
```

The next example illustrates a detail listing (format option 3) of all files in subdirectory d3.

## LISTFILE

```

/ACCT/GROUP/d0:listfile ./d3/@,3

FILE: /ACCT/GROUP/d0/./d3/d7/

FILE CODE : 0 FOPTIONS: DIRECTORY
BLK FACTOR: 1 OWNER : **
REC SIZE: 32(BYTES) GROUP ID: **
BLK SIZE: 32(BYTES) SECURITY--READ :
EXT SIZE: 0(SECT) WRITE :
NUM REC: 4 APPEND :
NUM SEC: 64 LOCK :
NUM EXT: 2 EXECUTE :
MAX REC: 67107839 **SECURITY IS ON
 FLAGS : NO ACCESSORS
NUM LABELS: 0 CREATED : TUE, JUL 21, 1992, 2:20 PM
MAX LABELS: 0 MODIFIED: TUE, JUL 21, 1992, 2:23 PM
DISC DEV #: 1 ACCESSED: WED, JUL 22, 1992, 12:05 PM
SEC OFFSET: 0 LABEL ADDR: **
VOLCLASS : MPEXL_SYSTEM_VOLUME_SET:DISC

.
.
.

FILE: /ACCT/GROUP/d0/./d3/f9

FILE CODE : 0 FOPTIONS: ASCII,FIXED,NOCTL,STD
BLK FACTOR: 1 OWNER : **
REC SIZE: 80(BYTES) GROUP ID: **
BLK SIZE: 80(BYTES) SECURITY--READ :
EXT SIZE: 13(SECT) WRITE :
NUM REC: 12 APPEND :
NUM SEC: 16 LOCK :
NUM EXT: 1 EXECUTE :
MAX REC: 12 **SECURITY IS ON
MAX EXT: 1 FLAGS : NO ACCESSORS
NUM LABELS: 0 CREATED : TUE, JUL 21, 1992, 2:21 PM
MAX LABELS: 0 MODIFIED: TUE, JUL 21, 1992, 2:21 PM
DISC DEV #: 2 ACCESSED: TUE, JUL 21, 1992, 2:21 PM
SEC OFFSET: 0 LABEL ADDR: **
VOLCLASS : MPEXL_SYSTEM_VOLUME_SET:DISC

/ACCT/GROUP/d0:

```

## LISTFILE

The next example illustrates the use of the `FORMAT=-3` option to show the owner. You must be the owner, or have AM or SM capability to use this option.

```
/ACCT/GROUP/d0: listfile /ACCT/GROUP/@,-3

FILE: /ACCT/GROUP/d0/

FILE CODE : 0 FOPTIONS: DIRECTORY
BLK FACTOR: 1 OWNER : MANAGER.ACCT
REC SIZE: 32(BYTES) GROUP ID: ACCT
BLK SIZE: 32(BYTES) SECURITY--READ :
EXT SIZE: 0(SECT) WRITE :
NUM REC: 4 APPEND :
NUM SEC: 64 LOCK :
NUM EXT: 2 EXECUTE :
MAX REC: 67107839 **SECURITY IS ON
 FLAGS : 1 ACCESSOR,SHARED
 CREATED : TUE, JUL 21, 1992, 1:10 PM
 MODIFIED : TUE, JUL 21, 1992, 2:16 PM
 ACCESSED : WED, JUL 22, 1992, 11:40 AM
 LABEL ADDR: $000000E1 $0009A220
VOLCLASS : MPEXL_SYSTEM_VOLUME_SET:DISC

/ACCT/GROUP/d0:
```

The next example illustrates the use of the `FORMAT=4 (SECURITY)` option to display the security matrix for all objects one level below the group (in this case, d0).



## LISTFILE

```
/ACCT/GROUP/d0: listfile /ACCT/GROUP/@,4

FILE: /ACCT/GROUP/d0/

ACCOUNT ----- READ :
 WRITE :
 APPEND :
 LOCK :
 EXECUTE :

GROUP ----- READ :
 WRITE :
 APPEND :
 LOCK :
 EXECUTE :
 SAVE :

FILE ----- READ :
 WRITE :
 APPEND :
 LOCK :
 EXECUTE :
 FCODE: 0
 **SECURITY IS ON
 ACD EXISTS

FOR MANAGER.ACCT: RACD, TD, RD, CD, DD

/ACCT/GROUP/d0:
```

The next example illustrates the use of the `FORMAT=-2 (ACD)` option to display the access control definition (ACD) for file `f4` in subdirectory `d2`. Note that all users (`@.@`) have read ACD (RACD) access for this file.

## LISTFILE

```
/ACCT/GROUP/d0:listfile ./d2/f4,-2
PATH= /ACCT/GROUP/d0/./d2/
-----ACD ENTRIES----- FILENAME
@.@ : RACD f4
/ACCT/GROUP/d0:
```

### Related Commands

```
LISTF
LISTF (UDC)
LISTFTEMP
```

---

## LISTGROUP

The LISTGROUP command displays information about one or more groups.

### Syntax

```
LISTGROUP [groupset] [,listfile] [;PASS]
```

### Parameters

*groupset* Specifies the set of groups to be listed. If you have account manager (AM) or system manager (SM) capability, the default is all (@) groups within your logon account. If you do not have either capability, the default is your logon group.

You can use wildcard characters to specify certain types of characters as follows:

- # specifies a single numeric character.
- ? specifies a single alphanumeric character.
- @ specifies zero or more alphanumeric characters.

Each wildcard character is counted toward the eight-character limit for group, account, and file names.

*listfile* Specifies the name of the output file. The default is \$STDLIST, a temporary file that cannot be overwritten by the BUILD command. It is automatically specified as a new ASCII file with variable-length records, closed in the temporary domain, and with user-supplied carriage-control characters (CCTL), out access mode, and the EXC (exclusive access) option. All other characteristics are the same as with the FILE command default specifications.

PASS Permits those with account manager (AM) and system manager (SM) capability to see the group password.

## LISTGROUP

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.

#### ■ Restrictions

If you have system manager (SM) capability, you can display any group on the system. If you have account manager (AM) capability, you can display any group in your account. If you have neither capability, you can only display your logon group.

### Example

- To display information, including the password, for a group named DEVELOP, enter:

```
:LISTGROUP DEVELOP;PASS
```

## LISTGROUP

The system responds by printing the following information on your screen:

```

GROUP: DEVELOP.HPXLII

DISC SPACE: 5752(SECTORS) PASSWORD: GROUPASS
CPU TIME : 0(SECONDS) SECURITY--READ : GU
CONNECT TIME: 0(MINUTES) WRITE : GU
DISC LIMIT: UNLIMITED APPEND : GU
CPU LIMIT : UNLIMITED LOCK : GU
CONNECT LIMIT: UNLIMITED EXECUTE : GU
PRIV VOL : n/a SAVE : GU
FILE UFID: $000D4001 $80001050 $000FF620 $00000008 $0000000A
MOUNT REF CNT: n/a
HOME VOL SET : MPE_SYS_VOL_SET
CAP: IA,BA
```

### Related Commands

```
ALTGROUP
LISTACCT
LISTUSER
NEWGROUP
```

---

## LISTSPF

The LISTSPF command produces a listing of input and output spooled files. The information reflects the status at the time you enter the command and always appears on the standard list device.

### Syntax

```
LISTSPF [[IDNAME=] { spoolid
 (spoolid [,spoolid] ...) }] [;DETAIL] [;STATUS]
```

### Parameter Definitions

**IDNAME** Specifies one or more spool file IDs. #*Innn* represents input spool files and #*O<sub>nnn</sub>* represents output spool files. The spooling subsystem assigns these IDs when the spool files are created.

Rules for use of this parameter are as follows:

- Use # optionally, but if you use it, make sure to include an I or O with the # symbol. #O is assumed if you do not specify either #I or #O.
- Use @ to specify all spool files.
- Use I@ to specify all input spool files. All input spool files reside in @.IN.HPSPool.
- Use O@ to specify all output spool files. All output spool files reside in @.OUT.HPSPool.
- You must have account manager (AM) capability when specifying O@ in order to display all output spool files created by users in the same account. Similar rules apply to I@ and @.
- You must have system manager (SM) or system supervisor (OP) capability when specifying O@ in order to display all output spool files on the system. Similar rules apply to I@ and @.

## LISTSPF

- All users without AM, SM, or OP capability are limited to displaying only files that they have created.

The default display is all of the output spool files created by the current *user.account*. The default display for the console user is all of the output spool files on the system.

|        |                                                                                                                                                                                                                                                                                                     |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DETAIL | Produces a two-line description of the specified spool file(s), rather than the default one-line description. You cannot specify the STATUS parameter with this parameter.                                                                                                                          |
| STATUS | By default, LISTSPF displays a listing of selected spool files, followed by a statistical summary of these spool files, known as the status summary. If you specify the STATUS parameter, the system only displays the status summary. You cannot specify the DETAIL parameter with this parameter. |

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.

#### ■ First line fields and description

The first line of the display for LISTSPF appears as shown in the following example:

| SPOOLID | JOBNUM | FILEDES   | PRI | COPIES | DEV  | STATE  | RSPFN | OWNER           |
|---------|--------|-----------|-----|--------|------|--------|-------|-----------------|
| #01     | J12345 | \$STDLIST | 6   | 1      | EPOC | CREATE | RSPFN | THISUSER.ACCOUN |

Descriptions of the fields are as follows:

|         |                                                                                                                                    |
|---------|------------------------------------------------------------------------------------------------------------------------------------|
| SPOOLID | Indicates the unique spool file identifier. You can display this output spool file by entering <code>PRINT 01.OUT.HPSPool</code> . |
| JOBNUM  | Indicates the job or session identifier of the job or session that created the spool file.                                         |

## LISTSPF

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FILEDES | Indicates the formal or actual file designator for the spool file. The name of a file equation becomes its formal file designator. For instance, printing to a file equation, such as <code>FILE EPOCLONG;DEV=EPOC;ENV=LP88LONG.HPENVSYS</code> , creates spool files whose formal designator is <code>EPOCLONG</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| PRI     | Indicates the input or output priority of the spool file.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| COPIES  | Indicates the total number of copies of the spool file to be printed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| DEV     | Indicates the spool file's destination as an <code>LDEV</code> , device name, or device class name. <code>LDEVs</code> intentionally appear with leading zeroes to simulate a device name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| STATE   | Indicates the current state of the spool file as described below: <ul style="list-style-type: none"><li><input type="checkbox"/> <b>CREATE:</b> An output spool file is being created; an output spooled device has been opened and is being written to, which generates an output spool file. When the device closes, the spool file enters the ready state.</li><li><input type="checkbox"/> <b>READY:</b> An output spool file is ready to be printed or an input spool file is ready to be accessed.</li><li><input type="checkbox"/> <b>ACTIVE:</b> An input spool file is being read from a stream file or a spooled device to a disk.</li><li><input type="checkbox"/> <b>OPEN:</b> A <code>JOB</code> input spool file (the <code>\$STDIN</code> for a batch job) is being accessed by the job's CI process, or a data input spool file is being accessed by a process.</li><li><input type="checkbox"/> <b>PRINT:</b> An output spool file is printing.</li><li><input type="checkbox"/> <b>DEFER:</b> An output spool file is in a deferred state.</li><li><input type="checkbox"/> <b>SPSAVE:</b> Either you specified the <code>SPSAVE</code> option when you created the spool file or when the spool file would have been deleted after its final copy printed. The final copy has printed, so the spool file is now in this state instead of being deleted.</li></ul> |



## LISTSPF

- **PROBLM:** The target device of the spool file does not match any device name or device class on the system. This usually occurs because you have restored the spool file to a system that has a different configuration from the system where you stored the spool file.
- **DELPND:** Either the spooler has printed the last copy of the output spool file and is waiting for you or others to close the spool file before purging it, or you or others have requested that the spool file be purged and the deletion is pending on file management processing to finish.
- **XFER:** The spool file has been selected for transport from one network another.

### RSPFN

The columns under these letters are defined as follows:

- **R** indicates a restartable spooled job file.
- **S** indicates that you have specified **SPSAVE** for this spool file. The spool file is saved in the **OUT.HPSPOOL** group and account after the last copy prints.
- **P** indicates that the spool file is private.
- **F** indicates that the spool file has a forms message associated with it and requires special forms on which to print. If a *formid* is present, you can show its identity by specifying the **DETAIL** parameter and looking on the second line of the display for the given spool file.
- **N** indicates that the spool file is incomplete because sufficient account-level, group-level, or system disk space was unavailable when you created the spool file, or the system aborted while you were creating the spool file.

### OWNER

Indicates the fully qualified name of the creator of the spool file.

#### ■ Second line fields and description

The optional second line of the display for **LISTSPF;DETAIL** appears as shown in the following example:

## LISTSPF

| FORMID | JOBNAME | COPSRM | SECTS | RECS | PAGES | DATE     | TIME |
|--------|---------|--------|-------|------|-------|----------|------|
|        | TESTJOB | 1      | 250   | 500  | 9     | 12/20/88 | 8:39 |

Descriptions of the fields are as follows:

- FORMID** Indicates an 8-character display, the first of which is a letter. If an F appears in the **RSPFN** column but this field is blank, the file has a forms message, but *formid* was not specified.
- JOBNAME** Indicates the job or session name of the user who created the spool file or, for a job input spool file, the name of the job that will use the input spool file as its **\$STDIN** file.
- COPSRM** Indicates the number of copies of this file that remain to be printed, including any currently printing copy.
- SECTS** Indicates the number of sectors that the spool file occupies.
- RECS** Indicates the number of records in the spool file.
- PAGES** Indicates the number of physical pages in the spool file.
- DATE** Indicates the date that the file first entered the ready state in month/day/year form (*mm/dd/yy*).
- TIME** Indicates the time that the file first entered the ready state in 24-hour form (*hh:mm*).

### ■ Status display fields and description

The status display appears as shown in the following example:

## LISTSPF

|                          |      |                      |      |          |      |
|--------------------------|------|----------------------|------|----------|------|
| INPUT SPOOL FILES        |      | OUTPUT SPOOL FILES   |      |          |      |
| ACTIVE                   | = 1; | CREATE               | = 2; | READY    | = 3; |
| OPEN                     | = 2; | DEFER                | = 1; | SELECTED | = 4; |
| READY                    | = 3; | DELPND               | = 0; | SPSAVE   | = 1; |
|                          |      | PRINT                | = 1; | XFER     | = 0; |
|                          |      | PROBLM               | = 0; |          |      |
| TOTAL IN FILES = 6;      |      | TOTAL OUTFILES = 8;  |      |          |      |
| IN SECTORS = 144;        |      | OUT SECTORS = 13090; |      |          |      |
| OUTFENCE = 6             |      |                      |      |          |      |
| OUTFENCE = 10 FOR LDEV 6 |      |                      |      |          |      |

Descriptions of the fields are as follows:

|        |                                                                                                                                                                                                                |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACTIVE | Indicates the number of input spool files being read from a stream file or a spooled device to a disk.                                                                                                         |
| OPEN   | Indicates the number of JOB input spool files (the \$STDIN for a batch job) that are being accessed by the job's CI process, or the number of data input spool files that are being accessed by a process.     |
| READY  | Indicates the number of input spool files ready to be accessed.                                                                                                                                                |
| CREATE | Indicates the number of output spool files being created.                                                                                                                                                      |
| DEFER  | Indicates the number of output spool files in a deferred state.                                                                                                                                                |
| DELPND | Indicates the number of output spool files that the spooler is waiting for you or others to close before it purges them. This can also indicate the number of spool files that you or others have requested be |

## LISTSPF

|                |                                                                                                                                                                                                                                                                                                         |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | purged, but deletion is pending on file management processing to finish.                                                                                                                                                                                                                                |
| PRINT          | Indicates the number of output spool files that are printing.                                                                                                                                                                                                                                           |
| PROBLM         | Indicates the number of spool files for which the target device does not match any device name or device class on the system.                                                                                                                                                                           |
| SELECTED       | Indicates the number of output spool files whose output priority is higher than the global outfence. This field shows the sum of files printing plus the ready files whose output priority is higher than the global outfence.                                                                          |
| SPSAVE         | Indicates the number of output spool files in this state instead of being deleted after printing. This state occurs if you specified the <b>SPSAVE</b> option of the <b>SPOOLF</b> command when you created the spool file or when the spool file would have been deleted after its final copy printed. |
| XFER           | Indicates the number of output spool files selected for transport from one network to another.                                                                                                                                                                                                          |
| TOTAL IN FILES | Indicates the total number of input spool files.                                                                                                                                                                                                                                                        |
| IN SECTORS     | Indicates the sector count for input spool files.                                                                                                                                                                                                                                                       |
| TOTAL OUTFILES | Indicates the total number of output spool files.                                                                                                                                                                                                                                                       |
| OUT SECTORS    | Indicates the sector count for output spool files.                                                                                                                                                                                                                                                      |
| OUTFENCE       | Indicates the global outfence and any device-specific outfences.                                                                                                                                                                                                                                        |

### Examples

- To display all output spool files for the current *user.account* not using the console, enter:

```
:LISTSPF
```

## LISTSPF

The system responds by producing the following display:

| SPOOLID             | JOBNUM | FILEDES   | PRI                 | COPIES   | DEV      | STATE | RSPFH | OWNER   |
|---------------------|--------|-----------|---------------------|----------|----------|-------|-------|---------|
| #0123               | J12    | SP        | 13                  | 2        | PP       | PRINT | F     | DEV.HPE |
| #0124               | S14    | LIST      | 9                   | 1        | 00000012 | READY | F     | DEV.HPE |
| #0128               | J144   | \$STDLIST | 8                   | 1        | EPOC     | READY |       | DEV.HPE |
| #01233              | S1234  | OUTLIST   | 0                   | 1        | FASTLP   | DEFER |       | DEV.HPE |
| INPUT SPOOL FILES   |        |           | OUTPUT SPOOL FILES  |          |          |       |       |         |
| ACTIVE              | = 0;   | CREATE    | = 0;                | READY    | = 2;     |       |       |         |
| OPEN                | = 0;   | DEFER     | = 1;                | SELECTED | = 3;     |       |       |         |
| READY               | = 0;   | DELPND    | = 0;                | SPSAVE   | = 0;     |       |       |         |
|                     |        | PRINT     | = 1;                | XFER     | = 0;     |       |       |         |
|                     |        | PROBLM    | = 0;                |          |          |       |       |         |
| TOTAL IN FILES = 0; |        |           | TOTAL OUTFILES = 4; |          |          |       |       |         |
| IN SECTORS = 0;     |        |           | OUT SECTORS = 5964; |          |          |       |       |         |
| OUTFENCE = 6        |        |           |                     |          |          |       |       |         |

### Single-Line Display

## LISTSPF

- To display all spool files for the current *user.account* not using the console, enter:

```
:LISTSPF @;DETAIL
```

The system responds by producing the following display:

| SPPOOLID            | JOBNUM               | FILEDES            | PRI | COPIES | DEV      | STATE | RSPFN   | OWNER    |       |
|---------------------|----------------------|--------------------|-----|--------|----------|-------|---------|----------|-------|
|                     | FORMID               | JOBNAME            |     | COPSRN | SECTS    | RECS  | PAGES   | DATE     | TIME  |
| #0123               | J12                  | SP                 | 13  | 2      | PP       | PRINT | F       | DEV.HPE  |       |
|                     |                      | TESTJOB            |     | 1      | 250      | 500   | 125     | 07/09/88 | 8:39  |
| #0124               | S14                  | LIST               | 9   | 1      | 00000012 | READY | F       | DEV.HPE  |       |
|                     | PAYCHECK             | TESTJOB            |     | 1      | 250      | 500   | ~9      | 12/20/88 | 8:39  |
| #0128               | J144                 | \$STDLIST          | 8   | 5      | EPDC     | READY |         | DEV.HPE  |       |
|                     | LPJOB                |                    |     | 3      | 250      | 127   | 21      | 12/20/88 | 22:19 |
| #01233              | S1234                | OUTLIST            | 0   | 1      | FASTLP   | DEFER | DEV.HPE |          |       |
|                     | TESTJOB              |                    |     | 1      | 250      | 500   | ~9      | 12/20/88 | 8:39  |
| #1564               | J164                 | \$STDIN            |     |        | 00000010 | READY |         | DEV.HPE  |       |
|                     | BATCHJOB             |                    |     | 17     |          | 12    |         | 2/20/88  | 22:23 |
| INPUT SPOOL FILES   |                      | OUTPUT SPOOL FILES |     |        |          |       |         |          |       |
| ACTIVE = 0;         | CREATE = 0;          | READY = 2;         |     |        |          |       |         |          |       |
| OPEN = 0;           | DEFER = 1;           | SELECTED = 3;      |     |        |          |       |         |          |       |
| READY = 1;          | DELPND = 0;          | SPSAVE = 0;        |     |        |          |       |         |          |       |
|                     | PRINT = 1;           | XFER = 0;          |     |        |          |       |         |          |       |
|                     | PROBLM = 0;          |                    |     |        |          |       |         |          |       |
| TOTAL IN FILES = 1; | TOTAL OUT FILES = 4; |                    |     |        |          |       |         |          |       |
| IN SECTORS = 17;    | OUT SECTORS = 1000;  |                    |     |        |          |       |         |          |       |
| OUTFENCE = 6        |                      |                    |     |        |          |       |         |          |       |

### Two-Line Display

## LISTSPF

- To display abbreviated information for all output spool files of the current *user.account* not using the console, enter:

```
:LISTSPF;STATUS
```

The system responds by producing the following status display:

|                     |                             |
|---------------------|-----------------------------|
| INPUT SPOOL FILES   | OUTPUT SPOOL FILES          |
| ACTIVE = 0;         | CREATE = 0;    READY = 2;   |
| OPEN = 0;           | DEFER = 1;    SELECTED = 3; |
| READY = 0;          | DELPND = 0;    SPSAVE = 0;  |
|                     | PRINT = 1;    XFER = 0;     |
|                     | PROBLM = 0;                 |
| TOTAL IN FILES = 0; | TOTAL OUTFILES = 4;         |
| IN SECTORS = 0 ;    | OUT SECTORS = 1000;         |
| OUTFENCE = 6        |                             |

**Status Display**

### Related Commands

```
LISTFILE
PRINT
SPOOLF
SHOWIN
SHOWOUT
```

---

## LISTUSER

The LISTUSER command displays information about one or more users in an ASCII format.

### Syntax

```
LISTUSER [userset] [, listfile] [;PASS]
```

### Parameters

*userset* Specifies the set of users to be listed. If you have account manager (AM) capability, the default is all users in your account. If you have system manager (SM) capability, the default is all users on the system.

You can use wildcard characters to specify certain types of characters as follows:

- # specifies a single numeric character.
- ? specifies a single alphanumeric character.
- @ specifies zero or more alphanumeric characters.

Each wildcard character is counted toward the eight character limit for group, account, and file names.

*listfile* Specifies the name of the output file. The default is \$STDLIST.

PASS Permits those with AM and SM capability to see the user password.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.



## LISTUSER

### ■ Restrictions

If you have system manager (SM) capability, you can display any user on the system. If you have account manager (AM) capability, you can display any user in your account. If you have neither capability, you can only display your logon user.

### Examples

- To display information, including the password, for a user named PETE, enter:

```
:LISTUSER PETE;PASS
```

The system responds by printing the following information on your screen:

```

USER: PETE.HPXLII

HOME GROUP: DEVELOP PASSWORD: MYPASS
MAX PRI : 150 LOC ATTR: $00000000
LOGON CNT : 1 WRITE : GU
CAP: AM,AL,GL,DI,UV,LG,CS,ND,SF,IA,BA,PH,DS,MR,PM
```

- To display all users in an account named PRACTICE, enter:

```
:LISTUSER @.PRACTICE
```

### Related Commands

```
ALTUSER
LISTACCT
LISTGROUP
NEWUSER
```

---

## NEWACCT

The **NEWACCT** command enables a system administrator to create a new account and assign one person as the manager of the account.

### Syntax

```
NEWACCT acctname, mgrname
[;PASS=[password]] [;CAP=[capabilitylist]]
[;ACCESS=[(fileaccess)]] [;GID=[(gid)]] [;UID=[(uid)]]
```

### Parameters

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>acctname</i> | Specifies the name to be assigned to the new account. This name must contain from one to eight alphanumeric characters, beginning with an alphabetic character.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <i>mgrname</i>  | <p>Specifies the name of the person to manage the account. This could be the same name as the system administrator or another user. To avoid assigning the wrong capabilities to general users, the system administrator should use this parameter for only one account manager. The system administrator should use the <b>NEWUSER</b> command to assign additional users to the account.</p> <p>The default for this user is that no password is assigned, and <i>capabilitylist</i> is the same as the account capability.</p> <p>The system administrator can later change the attributes of an account manager by using the <b>ALTUSER</b> command.</p> |
| PASS            | Specifies the account password, only used for verifying logon access. This password must contain from one to eight alphanumeric characters, beginning with an alphabetic character. The default is that no password is assigned.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CAP             | Specifies the list of capabilities permitted for this account. Each capability is indicated by a two-letter mnemonic, separated by commas, as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## NEWACCT

SM = System manager  
AM = Account manager  
AL = Account librarian  
GL = Group librarian  
DI = Diagnostician  
OP = System supervisor  
NA = Network administrator  
NM = Node manager  
SF = Save files  
ND = Access to nonshareable I/O devices  
UV = Use volumes  
CV = Create volumes  
CS = Use communication subsystem  
PS = Programmatic sessions  
LG = User logging  
PH = Process handling  
DS = Extra data segments  
MR = Multiple RINS  
PM = Privileged mode  
IA = Interactive access  
BA = Batch access

The defaults are AM, AL, GL, SF, ND, IA, and BA.

## NEWACCT

**ACCESS** Specifies the restriction on file access pertinent to this account. Valid syntax options are as follows:

$$\left\{ \begin{array}{c} R \\ L \\ A \\ W \\ X \end{array} \right\} [ , \dots ] : \left\{ \begin{array}{c} ANY \\ AC \end{array} \right\} [ , \dots ]$$

where R, L, A, W, X specify modes of access by types of users (ANY, AC, GU, AL, GL) and are defined as follows:

R = Read  
L = Lock (exclusive file access)  
A = Append (implies L)  
W = Write (implies A and L)  
X = Execute

The user types are defined as follows:

ANY = Any user  
AC = Member of this account only

The default is no security restrictions at the account level. You can specify two or more user or access types if you separate them with commas.

## Operation Notes

### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have system manager (SM) capability in order to use this command.

### ■ Creating the account structure

The system administrator creates accounts and designates someone to manage the accounts, called the *account manager*. As an account manager, you can log on and redefine your own attributes and PUB groups. You can also define new users and groups.

The capabilities and attributes that the account manager assigns to groups and users cannot exceed those assigned to the account itself by the system administrator. For example, if the system administrator does not assign the account extra data segments (DS) capability, no users in the account have DS capability, which prohibits them from linking programs that use extra data segments.

### ■ PUB group

The PUB group is initially assigned the same capability class attributes, permanent file space limit, CPU limit, and connect-time limit as the account, but without a password. Its initial security allows read (R) and execute (X) access to all users who successfully log on to the account, and append (A), write (W), lock (L), and save (S) access to the account librarian (AL) and group users (GU) only. These access provisions are as follows:

```
R,X:ANY;A,W,L,S:AL,GU
```

### ■ Parameter omissions

When you specify a parameter but omit its corresponding value (as in ACCESS= Return), the default value for the parameter is assigned (in this case, R,L,A,W,X:AC). The default is also assigned when you omit an entire parameter group (such as ACCESS=*fileaccess*).

### Example

- To create an account with the account name ACI, the account manager name MNGR, and read privileges for any user, enter:

```
:NEWACCT ACI,MNGR;ACCESS=R:ANY
```

## **NEWACCT**

### **Related Commands**

ALTACCT  
ALTUSER  
LISTACCT  
NEWGROUP  
NEWUSER

---

## NEWDIR

This command creates a directory.

### Syntax

```
NEWDIR [DIR=] dir_name [;SHOW | NOSHOW]
```

### Parameters

- dir\_name*      The name of the directory that is being created (required). The *dir\_name* is assumed to be an MPE name. HFS-named directories may be created if *dir\_name* starts with a dot (.) or a slash (/). The *dir\_name* may not end in a slash. Wildcards are not allowed. The *dir\_name* may not reference a file equation.
- SHOW            Causes the absolute pathname of the newly created directory to be echoed to \$STDLIST. SHOW is the default.
- NOSHOW         Suppresses the display of the absolute directory name.

### Operation Notes

The NEWDIR command creates a directory named *dir\_name*. All parent directories must already exist. The *dir\_name* inherits the group ID (GID) from its parent directory and the user ID (UID) from the user creating the directory. The special directory entries dot (.) and dot-dot (..) are automatically created under *dir\_name*.

By default NEWDIR creates an MPE-named directory. This means that *dir\_name* must follow all MPE naming rules, unless it is prefixed with a dot (.) or a slash (/). Since the MPE name syntax defines three levels, fully (or partially) qualified MPE-named directories can only be created under MPE groups. Unqualified MPE-named directories are created relative to the CWD. Directories do not support lockwords, file equations, or system defined file names (for example, \$NEWPASS). If *dir\_name* begins with a dot (.) or a slash (/), then HFS naming rules are enforced.

## NEWDIR

### Use

You can issue the **NEWDIR** command from a job, a session, a program, or in break mode. Pressing **Break** has no effect on this command. You must have create directory entries (**CD**) permission for the parent directory and save files (**SF**) capability. Furthermore, traverse directory entries (**TD**) access is required for each directory component named in *dir\_name*. (Refer to the **ALTSEC** command in this chapter for further information on directory permissions.)

### Examples

The following two examples create a directory called **DIR1**. In the first example, the directory is created by specifying the full pathname of the directory. In the second example, the directory is created by specifying the *dir\_name.groupname.acctname*. Note that in the second example, the *dir\_name* is shifted to uppercase.

```
NEWDIR /MYACCT/MYGRP/DIR1
```

```
NEWDIR dir1.mygroup.myacct
```

The following example creates an HFS-named directory called **john** by specifying the full pathname of the directory.

```
NEWDIR /myacct/jones/cmdf/john
```

The following example creates an MPE-named directory called **DIR1** in the current working directory (**CWD**). Note that the *dir\_name* is shifted to uppercase.

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## NEWDIR

```
NEWDIR dir1
```

The following example creates an HFS-named directory called `dir1` in the current working directory (CWD). Note that in this example, the *dir\_name* is **not** shifted to uppercase.

```
NEWDIR ./dir1
```

The next example creates an MPE-named directory called `A` in the group `B`.

```
NEWDIR a.b
```

### Related Commands

- LISTFILE
- CHDIR
- PURGEDIR
- LISTDIR (UDC)
- FINDDIR (UDC)

---

## NEWGROUP

The NEWGROUP command creates a new group within an existing account.

### Syntax

```
NEWGROUP groupname [. acctname]
[;PASS=[password]] [;CAP=[capabilitylist]] [;ACCESS=[(fileaccess)]]
```

### Parameters

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>groupname</i> | Specifies the name of the new group, which must consist of from one to eight alphanumeric characters, beginning with an alphabetic character.                                                                                                                                                                                                                                                                                                              |
| <i>acctname</i>  | Specifies the account in which the group is to reside. You must have system manager (SM) capability to use this parameter.                                                                                                                                                                                                                                                                                                                                 |
| PASS             | Specifies the group password, used for verifying logon access only. The default is that no password is assigned.                                                                                                                                                                                                                                                                                                                                           |
| CAP              | Lists capability class attributes consisting of any or all of the following:<br><br>BA = Local batch access (default)<br>DS = Extra data segments<br>IA = Interactive access (default)<br>MR = Multiple RINS<br>PH = Process handling<br>PM = Privileged mode<br><br>This list imposes a limit on program files belonging to the group. You cannot assign a capability to the group if it has not been defined for the account in which the group resides. |
| ACCESS           | Specifies the restriction on file access pertinent to this group. Valid syntax options are as follows:                                                                                                                                                                                                                                                                                                                                                     |

## NEWGROUP

$$\left\{ \begin{array}{c} R \\ L \\ A \\ W \\ X \end{array} \right\} [ , \dots ] : \left\{ \begin{array}{c} ANY \\ AC \\ GU \\ AL \\ GL \end{array} \right\} [ , \dots ]$$

where R, L, A, W, and X specify modes of access by types of users (ANY, AC, GU, AL, and GL) and are defined as follows:

R = Read  
L = Lock (exclusive file access)  
A = Append (implies L)  
W = Write (implies A and L)  
X = Execute  
S = Save

The user types are defined as follows:

ANY = Any user  
AC = Member of this account only  
GU = Member of this group only  
AL = Account librarian user only  
GL = Group librarian user only

You can specify two or more user or access types if you separate them with commas.

The defaults for the public group (PUB) are:

R,X:ANY; A,W,L,S:AL,GU

The default for all other groups is:

R,A,W,L,X,S:GU

## NEWGROUP

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have account manager (AM) or system manager (SM) capability in order to use this command.

#### ■ Creating the group structure

The system administrator creates accounts and designates someone, called the account manager, to manage the accounts. As an account manager, you can use the **NEWGROUP** command to create groups within each account and to assign attributes.

The attributes assigned to the group may not exceed those permitted for the accounts themselves (defined when the system administrator created the accounts); however, within account limits, you can redefine the group and user attributes and capabilities, as well as those of the **PUB** group.

#### ■ **PUB** group

The **PUB** group is initially assigned the same capability class attributes, permanent file space limit, CPU limit, and connect-time limit as the account, but without a password. Its initial security allows read (R) and execute (X) access to all users (ANY) who successfully log on to the account, and append (A), write (W), lock (L), and save (S) access to the account librarian (AL) and group users (GU) only.

These access provisions are as follows:

```
R,X:ANY;A,W,L,S:AL,GU
```

#### ■ Parameter omissions

When you specify a parameter but omit its corresponding value (as in **ACCESS= Return**), the default value for the parameter is assigned (in this case, R,L,A,W,X:AC). The default is also assigned when you omit an entire parameter group (such as **ACCESS=fileaccess**).

## NEWGROUP

### Examples

- To create a new group named `GROUP1` with all default capabilities, enter:

```
:NEWGROUP GROUP1
```

- To create a new group named `G2` in the account `WISDOM` and assign it process handling (PH) and multiple RINs (MR) capabilities while retaining the default capabilities, enter:

```
:NEWGROUP G2.WISDOM;CAP=PH,MR,IA,BA
```

### Related Commands

```
ALTGROUP
LISTGROUP
NEWACCT
NEWUSER
```

---

## NEWLINK

This command creates a link to a file, group, account, or directory.

### SYNTAX

```
NEWLINK [LINK=] linkname [;TO=] sourceobject [{ ;SYMBOLIC }]
```

### Parameters

*linkname* The *pathname* that points to the file, that when created, will contain the link. *linkname* must resolve to a unique name. It may not be the name of an existing symbolic link, even if that link resolves to the name of a file or directory object that does not exist.

This is a required parameter. When specifying *linkname*, you may not use wildcard characters, file equations, or name a system defined file (such as \$NULL).

*sourceobject* The path name to which a link is to be created. The *sourceobject* does not need to exist when creating symbolic links. This path must resolve to either a file, group, account, or directory name.

Security provisions of *sourceobject* do not affect the creation of symbolic link(s) to *sourceobject*.

This is a required parameter. When specifying *sourceobject*, you may not use wildcard characters, file equations, or name a system defined file (such as \$NULL).

SYMBOLIC is the default.

## NEWLINK

### Operation Notes

You can use the **NEWLINK** command to create a link to a file, group, account, or directory. You can issue the **NEWLINK** command from a session, job, program, or in **BREAK**. **NEWLINK** requires Save Files (SF) capability, Create Directory entry (CD) and Traverse Directory (TD) permissions.

When *newlink* represents a path to a symbolic link, the target of that symbolic link is used as the name of the new link that is being created.

The **NEWLINK** command fails if the path represented by *linkname* points to a file or directory that already exists.

The following table lists all the CI commands that operate on files, groups, accounts, or directories and are affected by symbolic linking. Keep in mind the following data points when using the table below:

- Typically, a symbolic link always resolves to its target name.
- The **Follow Link** column applies to the *filename* portion (last component) of an HFS path.

## NEWLINK

### CI Commands Affected by Symbolic Links

| Command Name | Follow Link | Notes                                                                                                                                                                                                    |
|--------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CHGROUP      | No          | None                                                                                                                                                                                                     |
| DISKUSE      | Yes/No      | Link is resolved before the operation is performed. If a symbolic link exists under the account that link is not resolved. Therefore disk space usage of its target is not included in the calculations. |
| LISTACCT     | No          | None                                                                                                                                                                                                     |
| LISTFILE     | No          | Link is not resolved. Therefore, operation is performed on the name specified. <b>LISTFILE</b> formats 5 and 7 may be used to determine the immediate target of a symbolic link.                         |
| LISTGROUP    | No          | None                                                                                                                                                                                                     |
| NEWLINK      | No          | The <b>LINK</b> parameter may not name a symbolic name. The <b>TO</b> parameter is not checked at all.                                                                                                   |
| PURGE        | Yes         | This behaves differently than the UNIX <b>rm</b> command.                                                                                                                                                |
| PURGEACCT    | No/No       | Link is not resolved. Therefore, operation is performed on the specified name. If a symbolic link exists under the account, that link is not resolved and its target is not removed.                     |
| PURGEDIR     | Yes/No      | Link is resolved before the operation is performed. If a symbolic link exists under the directory, that link is not resolved before it is removed. Therefore, its target is not affected.                |
| PURGEGROUP   | No/No       | Link is not resolved. Therefore, operation is performed on the specified name. If a symbolic link exists under the account that link is not resolved and its target is not removed.                      |



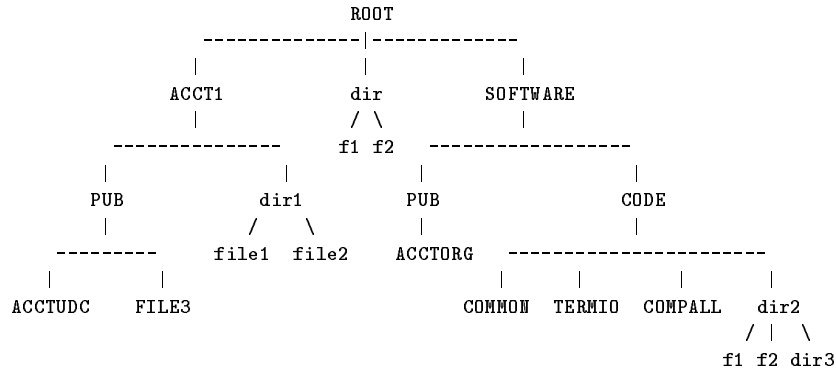
**CI Commands Affected by Symbolic Links**

| Command Name | Follow Link | Notes                                                                                                                                                                                                                                                                 |
|--------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REPORT       | No          | Link is not resolved. Therefore, operation is performed on the name specified. Note that <b>REPORT</b> treats its first parameter as a group name. Therefore, if a link name is specified, that name is treated as a group name regardless of the type of its target. |
| RESTORE      | No          | Link is not resolved. Therefore, operation is performed on the name specified.                                                                                                                                                                                        |
| STORE        | No          | Link is not resolved. Therefore, operation is performed on the name specified.                                                                                                                                                                                        |

## NEWLINK

### Examples

The following tree structure will be used to construct the examples that follow it. Assume that the CWD is /ACCT1/PUB.



To create a symbolic link named PAYCODE to the file PAYROLL.CODE.SOFTWARE, enter the following command:

```
:NEWLINK LINK=PAYCODE; TO=PAYROLL.CODE.SOFTWARE
```

or optionally use the positional parameters and enter

```
:NEWLINK PAYCODE, PAYROLL.CODE.SOFTWARE
```

In this example, the file PAYCODE.PUB.ACCT1 will be created as a symbolic link to file PAYROLL.CODE.SOFTWARE. The user now can access PAYROLL.CODE.SOFTWARE through PAYCODE. For example, the user may enter the following command:

```
:PRINT PAYCODE
```

This command will print the contents of the file PAYROLL.CODE.SOFTWARE given that this file allows read access to the user.

To create a symbolic link named FARFILE in PUB.ACCT1 that references /SOFTWARE/CODE/dir2/f1, enter the following command:

```
:NEWLINK LINK=FARFILE; TO=/SOFTWARE/CODE/dir2/f1
```

## NEWLINK

Suppose that file COMMON.CODE.SOFTWARE contains information that is used frequently. To display the contents of the file the following command has been used:

```
:PRINT COMMON.CODE.SOFTWARE
```

With the availability of the links, the following can be done from the current logon group or CWD:

```
:NEWLINK COMMON, COMMON.CODE.SOFTWARE
```

```
:PRINT COMMON
```

Suppose that a user is currently logged on as USER1 in the group PUB.SOFTWARE. To access the files in /ACCT1/dir1 directory without entering the full path name each time, USER1 may establish a link named "morecode" to that directory as following:

```
:NEWLINK LINK=./morecode; T0=/ACCT1/dir1
```

To get a list of the files under /acct1/dir1/, the user enters:

```
:LISTFILE ./morecode/
```

## NEWLINK

The following examples demonstrate the behavior of this command.

In the following examples the notation "--->" means "which points to".

### Part 1: Absolute symbolic links

```
:NEWLINK LINK=FILE3.PUB.ACCT1; TO=SOURCE1.CODE.SOFTWARE
Creates FILE3 ---> SOURCE1.CODE.SOFTWARE as a link to a nonexistent file.
Note that it is allowed to create links to objects that do not yet exist
```

```
:NEWLINK LINK=FILE4.PUB.ACCT1; TO=/SOFTWARE/CODE/dir2/f1
Creates FILE4 ---> /SOFTWARE/CODE/dir2/f1 as a link to a file
```

```
:NEWLINK LINK=/ACCT1/PUB/softPUB; TO=/SOFTWARE/PUB
Creates /ACCT1/PUB/softPUB ---> /SOFTWARE/PUB as a link to group PUB in
SOFTWARE account
```

```
:NEWLINK LINK=FILE9.PUB.ACCT1; TO=/
Creates FILE9 ---> / as a link to the root
```

### Part 2: Relative symbolic links

For these examples assume that CWD=/SOFTWARE/CODE/dir2

```
:NEWLINK LINK=../F1; TO=./f1
Creates /SOFTWARE/CODE/F1 ---> ./f1 as a link to a file
```

```
:NEWLINK LINK=F2.CODE; TO=./f2
Creates /SOFTWARE/CODE/F2 ---> ./f2 as a link to a file
```

```
:NEWLINK LINK=./dir; TO=../../../../dir
Creates /SOFTWARE/CODE/dir2/dir ---> ../../../../dir as a link to a directory
```

```
:NEWLINK LINK=FILE1.PUB.ACCT1; TO=/dir/f1
Duplicate name in directory. (CIERR 906)
```

```
Assume CWD=/SOFTWARE/CODE/dir2.
:NEWLINK LINK=./TERMI0; TO=./f1
Duplicate name in directory. (CIERR 906)
```

## **NEWLINK**

### **Related Commands**

PURGELINK  
PURGE  
LISTFILE

---

## NEWUSER

The **NEWUSER** command enables the system administrator to define a new user within an account. The administrator can also assign the user a password and capabilities, and can limit the user's use of system resources. Parameters defining these values may also be omitted from the command line; in this case, defaults are assigned to the user.

### Syntax

```
NEWUSER username [.acctname]
 [;PASS=[password]] [;CAP=[capabilitylist]]
 [;HOME=[homegroupname]] [;UID=[(uid)]]
```

### Parameters

|                 |                                                                                                                                                                                                                                                                                                                                       |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>username</i> | Specifies the name of the user. The name must consist of from one to eight alphanumeric characters, beginning with an alphabetic character.                                                                                                                                                                                           |
| <i>acctname</i> | Specifies the account in which the user is to reside. You must have account manager (AM) capability to use this parameter.                                                                                                                                                                                                            |
| PASS            | Specifies the user password, used for verifying logon access only. The password must consist of from one to eight alphanumeric characters, beginning with an alphabetic character. The default is that no password is assigned.                                                                                                       |
| CAP             | Specifies the list of capabilities permitted for the user. Each capability is indicated by a two-letter mnemonic, separated by commas, as follows:<br><br>SM = System manager<br>AM = Account manager<br>AL = Account librarian<br>GL = Group librarian<br>DI = Diagnostician<br>OP = System supervisor<br>NA = Network administrator |

## NEWUSER

NM = Node manager  
SF = Save files  
ND = Access to nonshareable I/O devices  
UV = Use volumes  
CV = Create volumes  
CS = Use communication subsystem  
PS = Programmatic sessions  
LG = User logging  
PH = Process handling  
DS = Extra data segments  
MR = Multiple RINs  
PM = Privileged mode  
IA = Interactive access  
BA = Batch access

The default is IA, BA, ND, and SF.

Note the following points about this parameter:

- Capabilities assigned to the user cannot exceed those assigned to the account.
- Any capabilities removed from the account are denied to the user.
- The user's capabilities are always verified to be a subset of the account's capabilities at logon. This prevents a user from having a capability not assigned to the account.

### HOME

Specifies the name of an existing group to be assigned as the user's home group. The first user established when an account is created, by default, has PUB assigned as the home group. Subsequent new users, by default, have no home group assigned. If no home group is assigned, the user must always specify a group when logging on.

## NEWUSER

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have account manager (AM) or system manager (SM) capability to enter this command. You must have system manager (SM) capability to specify a user in an account other than your own.

### Example

- To define a new user named LHSMITH in the account FINANCE, assign a password of SMITTY, and assign a home group of HOMEGPX, enter:

```
:NEWUSER LHSMITH.FINANCE;PASS=SMITTY;HOME=HOMEGPX
```

### Related Commands

ALTUSER  
LISTUSER  
NEWACCT  
NEWGROUP



---

## OUTFENCE

The OUTFENCE command defines the minimum priority that an output spool file must have in order to print.

### Syntax

```
OUTFENCE outputpriority [;LDEV=ldev]
```

```
[;DEV= { ldev
 devclass
 devname }]
```

### Parameters

*outputpriority* Specifies a number between 1 and 14, inclusive. Spool file printing becomes increasingly limited as the numbers become higher. For example, the number 1 limits spool file printing the least. The number 14 limits spool file printing the most.

The system prints individual spool files in the ready state only if their *outputpriority* is higher than the current outfence.

LDEV Specifies the logical device number, *ldev*, of a printer. You can use this parameter to selectively defer all output spool files except those currently being printed by the specified LDEV. (See Examples.)

DEV Consists of the following parameter values:

*ldev* Specifies the logical device number of an output device.

*devclass* Specifies a device class containing at least one printer. This parameter value must begin with a letter and consist of eight or fewer alphanumeric characters. The device class name and device name cannot be the same.

*devname* Specifies the name of the printer. This parameter value must begin with a letter

## OUTFENCE

and consist of eight or fewer alphanumeric characters. If you enter an alphanumeric character string, the command searches the device class list first, then the device name list. The device class name and device name cannot be the same.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must enter this command from the console unless your system administrator has used the **ALLOW** command, which permits you to enter this command.

#### ■ Altering print priorities

You can prevent all spool files from printing by setting the outfence to 14. You can prevent a subset of spool files from printing by setting the outfence higher than the *outputpriority* of any spool file in the group.

You can alter the printing priority of a single file without affecting the entire system by changing the output priority of the specific spool file(s) using the **ALTSPoolFILE** or **SPoolLF** command.

### Examples

- To temporarily defer all output spool files except those waiting to be printed by LDEV 6, which is usually configured as the system line printer, do the following:

1. Set the global outfence to 14 and the outfence of LDEV 6 to 7, as shown:

```
:OUTFENCE 14
:OUTFENCE 7;LDEV=6
```

This device-specific outfence takes precedence over the global outfence.

2. Display the new global *outputpriority* and the *outputpriority* of logical device 6 by entering the **LISTSPF** or **SHOWOUT** command, as shown:

## OUTFENCE

:LISTSPF

The system responds as shown:

| DEV/CL | DFID   | JOBNUM | FNAME     | STATE  | FRM | SPACE | RANK | PRI | #C |
|--------|--------|--------|-----------|--------|-----|-------|------|-----|----|
| 6      | #0999  | #J19   | \$STDLIST | OPENED |     | 512   |      | 8   | 1  |
| 6      | #01030 | #S77   | EDLIST    | OPENED |     | 512   |      | 8   | 1  |
| SLOWLP | #01029 | #S71   | OUT       | READY  |     | 232   | D    | 7   | 1  |
| 20     | #01001 | #S60   | \$STDLIST | OPENED |     |       |      |     |    |
| 11     | #01022 | #S33   | GALLIST   | READY  |     | 768   | D    | 7   | 1  |

5 FILES  
0 ACTIVE  
2 READY; INCLUDING 2 SPOOFLES, 2 DEFERRED  
3 OPENED; INCLUDING 2 SPOOFLES  
0 LOCKED; INCLUDING 0 SPOOFLES  
4 SPOOFLES 2024 SECTORS  
OUTFENCE = 14  
OUTFENCE = 7 FOR LDEV 6

The summary statistics at the bottom of the listing immediately reflect the new outfence. After all currently active spool files are finished, no files directed toward a device other than LDEV 6 can become active.

3. Reset the outfence for all output spool files, as shown:

:OUTFENCE 8

- To define an outfence of 5 for device class PP80, enter:

:OUTFENCE 5;DEV=PP80

## **OUTFENCE**

### **Related Commands**

ALTSPoolFILE  
LISTSPF  
SHOWIN  
SHOWOUT  
SPOOLER  
SPOOLF

---

## PASSWORD

The `PASSWORD` command enables you to create or change your password. You can enter this command interactively or programatically within a session.

### Syntax

```
PASSWORD
```

### Parameters

None.

### Operation Notes

- Usage

You can enter this command from a session or in break mode. You cannot use this command if you redirect `$STDIN` or `$STDLIST`.

### Example

- To change an existing password, enter:

```
:PASSWORD
```

The system responds by displaying the following prompts:

```
ENTER OLD USER PASSWORD:
ENTER NEW USER PASSWORD:
ENTER NEW USER PASSWORD AGAIN:
PASSWORD WAS CHANGED SUCCESSFULLY.
```

For security purposes, the system does not echo your input responses.

### Related Commands

None

---

## PRINT

This command displays the contents of a specified file name to the standard list device, unless you specify another destination.

### Syntax

```
PRINT [[FILE=] filename]
 [[;OUT=] outfile]
 [[;START=] m]
 [[;END=] n]
 [[;PAGE=] p]
 [; { unn/num }]
```

### Parameters

**FILE** Specifies the actual file name of the file to be printed to `STDOUTLIST`, unless you specify *outfile* as a destination. *Filename* may be given in MPE or HFS syntax and may name a symbolic link that resolves to a file name.

The following points apply to this parameter:

- You can specify a temporary or a permanent disk file with this parameter.
- File equations are ignored unless an asterisk (\*) precedes *filename*, indicating a backreference.
- The *filename* can be `STDIN` or `STDINX`, the default.
- If you do not specify a file name, `PRINT` takes its input from `STDINX` and continues to do so until you enter the `:EOD` command on a new line.
- Supports HFS file names that start with a “.” or a “/”.

**OUT** Specifies a destination other than `STDOUTLIST` for *filename*.

## PRINT

The following points apply to this parameter:

- If *filename* has embedded carriage-control characters (CCTL), PRINT inserts a blank in place of the CCTL in the *outfile*.
- New files are created as TEMP.
- File equations are ignored unless an asterisk (\*) precedes *outfile*, indicating a backreference.
- You must use a file equation to overwrite a permanent file.
- Supports HFS file names.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.

#### ■ Batch print jobs

For batch jobs in which *filename* defaults to \$STDINX, some commands such as :EOD, EOF, JOB, EOJ, and DATA do not execute as part of the original job when they follow the PRINT command.

For example, PRINT command reads all job input up to the :EOD line. At that point, the PRINT command is finished and the remaining JOB stream commands are executed.

### Examples

- To send the contents of MYFILE to the line printer, XXX, enter:

```
:FILE XXX;DEV=LP
:PRINT MYFILE, *XXX
```

The file XXX equates with the line printer. Then the file MYFILE “prints” to the file \*XXX.

- To use the PRINT command itself to create a file, enter the following lines from your terminal:

## **PRINT**

```
:PRINT $STDIN,TAILB
PARM FILE, LAST=5
PRINT !FILE; START = -!LAST
:EOD
:SAVE TAILB
```

Since the default is temporary, the **SAVE** command permanently saves the file **TAILB**.

## **Related Commands**

COPY  
EDITOR  
FCOPY



---

## PURGE

This command deletes one or more files from the system.

### Syntax

```
PURGE filereference[;TEMP]
```

### Parameters

*filereference* The actual file designator of the file to be deleted, interpreted according to MPE-escaped semantics *filereference*, can be either an MPE file (i.e., one that uses MPE syntax) or it can be a POSIX file name beginning with a dot or a slash. For example, you can use the escaped pathname `/SYS/PUB/FILE` since it is equivalent to the MPE name `FILE.PUB.SYS`.

**TEMP** Specifies that the file is a temporary file in the job/session temporary file domain. You can specify a *filename* in MPE or HFS syntax and may name a symbolic link that resolves to a *filename*. You must enter this parameter to delete a temporary file. The default is that a permanent file is assumed.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have write access to a file to delete it.

#### ■ Purging unrecognized files

If the file does not exist in the specified domain, the following message appears:

```
FILE filename NOT FOUND, NO PURGE DONE. (CIWARN 383)
```

## PURGE

### ■ Purging non-private spool files

You can purge a non-private spool file by entering `PURGE filename`. You must specify the fully qualified file name (including `.OUT.HPSPPOOL`). The `PURGE` command deletes the specified spool file and all links to the spool file directory. The spool file does not print after you purge it.

### ■ Purging files with wildcards

You can use wildcards to remove multiple files at once. You can also use the options provided to prevent accidental deletion of one or more files. Examples of the wildcard feature are listed in the Examples section below:

## Examples

- To delete a permanent file named `PFILE`, enter:

```
:PURGE PFILE
```

- To purge multiple files using wildcards

```
:PURGE /users/jeff/bin/FILES/file@
3 FILES matched
Continue PURGE? (YES/NO) yes
3 selected. 3 succeeded. 0 failed.
```

- To purge multiple files interactively using wildcards

To purge a number of files, one at a time, in an interactive mode so that you can skip a file or stop your purge, you can use the `CONFIRMALL` option.

```
:PURGE /users/jeff/bin/FILES/file@; CONFIRMALL
3 FILES matched
/users/jeff/bin/FILES/file1 ? (NO/YES/QUIT) yes
/users/jeff/bin/FILES/file2 ? (NO/YES/QUIT) no
/users/jeff/bin/FILES/file3 ? (NO/YES/QUIT) yes
2 selected. 2 succeeded. 0 failed.
```

Type “q”, “quit”, or press the **BREAK** key if you decide to stop the `PURGE` command completely.

## PURGE

- To purge log files using wildcards

The following example shows you how to purge all log files within your current working directory that start with log, followed by any number from 0 - 9 (#), followed by any number of alphanumeric characters (@).

```
:PURGE log#@
10 FILES matched
Continue PURGE? (YES/NO) yes
10 selected. 9 succeeded. 1 failed.
```

Since the PURGE command does not remove the currently opened log file, the command always returns “1 failed”.

### Related Commands

```
ALTSEC
BUILD
LISTFILE
LISTSPF
```

---

## PURGEACCT

The PURGEACCT command removes an entire account and its groups and users from the system directory. The command removes every user not currently logged on and every group or file or both not in use. If a group is in use, the account cannot be purged.

### Syntax

```
PURGEACCT acctname
```

### Parameters

*acctname* Specifies the name of the account to be deleted. This name must contain from one to eight alphanumeric characters, beginning with an alphabetic character.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have system manager (SM) capability to enter this command.

#### ■ When to purge an account

To completely purge an account, you must enter PURGEACCT when the account is inactive. If you enter the command while the account is in use, the account remains on the system and active users, groups, and files are not purged from the account.

#### ■ Purge verification

When you enter PURGEACCT during a session, the system displays the following verification prompt to ensure that you do not accidentally purge the wrong account:

```
ACCT acctname TO BE PURGED?
```

## PURGEACCT

No verification message is printed when you include the PURGEACCT command within a job.

### ■ Order of purged elements

Account elements are purged in the following order:

1. users
2. volume set definitions
3. files
4. groups
5. the account

---

**Caution** It is not advisable to purge the SYS account because you can destroy critical files by doing so.

---

### Examples

- To remove an account named EXCESS, enter:

```
:PURGEACCT EXCESS
ACCT EXCESS TO BE PURGED? (YES/NO)YES
:
```

### Related Commands

```
LISTACCT
NEWACCT
PURGEGROUP
PURGEUSER
```

---

## PURGEDIR

Purges (unlinks) one or more directories.

### Syntax

```
PURGEDIR [dir=] dir_name [; CONFIRM | NOCONFIRM]
[; TREE | NOTREE | USENAME] [; SHOW | NOSHOW]
[; SHOWERRORS | NOSHOWERRORS]
```

### Parameters

- dir\_name*      The name of the directory that is being purged (required). The *dir\_name* is assumed to be an MPE name. HFS-named directories may be purged if *dir\_name* starts with a dot (.) or a slash (/). If *dir\_name* is an HFS name and ends in a slash, then all objects at all levels under and including *dir\_name* are purged, unless the **NOTREE** option is specified. The use of wildcards is permitted. The *dir\_name* cannot name root (/), an MPE group, or an account.
- USENAME**      This default option indicates that *dir\_name* alone controls whether or not all levels of directories and files are deleted. If *dir\_name* is an HFS name and ends in a slash (/), then it, and all objects under it are deleted. If *dir\_name* does not end in a slash (/), then only *dir\_name* is purged, assuming it is empty. **USENAME** only applies to HFS-named directories, and is ignored for MPE-named directories.
- TREE**          Causes all objects below and including *dir\_name* to be purged. The *dir\_name* may or may not end in a slash (/), with no error or warning reported. Since the MPE naming convention does not support a trailing slash (/), the **TREE** option is the only way to delete a non-empty, MPE-named directory with a single command.
- NOTREE**        Causes *dir\_name* only to be purged if it is empty. If *dir\_name* is an HFS name and ends in a slash (/), a warning tells you that **NOTREE** overrides the trailing slash (/).

## PURGEDIR

|              |                                                                                                                                                                                                                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONFIRM      | Causes a prompt that asks the user to confirm the purge of the directory. A different prompt is seen depending on whether <i>dir_name</i> is to be purged with the <b>TREE</b> option or with the trailing slash feature. <b>CONFIRM</b> is the default for sessions. <b>CONFIRM</b> is ignored for jobs. |
| NOCONFIRM    | Causes the purge of <i>dir_name</i> (and all objects under it for <b>TREE</b> purges) without the need to prompt. <b>NOCONFIRM</b> is the default for jobs.                                                                                                                                               |
| SHOW         | Displays to <b>\$STDLIST</b> each file or directory under <i>dir_name</i> that was purged. Directory names are always displayed in an HFS syntax, even if the name was specified as an MPE name.                                                                                                          |
| NOSHOW       | Suppresses the display of each file and directory purged. <b>NOSHOW</b> is the default.                                                                                                                                                                                                                   |
| SHOWERRORS   | Causes each lower-level error that prevents an object below <i>dir_name</i> from being deleted, to be displayed on <b>\$STDLIST</b> . The object (file or directory) name is shown, followed by the error message. By default, lower-level errors are not displayed.                                      |
| NOSHOWERRORS | Suppresses the display of low-level errors. <b>NOSHOWERRORS</b> is the default.                                                                                                                                                                                                                           |

### Use

You can issue the **PURGEDIR** command from a job, a session, a program, or in break mode. Pressing **(Break)** terminates execution of this command. You must have **TD** access to each component in the *dir\_name* pathname, and **DD** permission to the parent directory of *dir\_name*. (Refer to the **ALTSEC** command for more information on directory access.) If wildcards are specified with *dir\_name*, then **RD** access is required to the parent directory of each wildcard component. If the purge is multilevel, then **TD**, **RD** and **DD** accesses are necessary to each directory below *dir\_name*.

You can also use wildcards with the **PURGEDIR** command. For examples of using wildcards with **PURGEDIR**, refer to the Example section.

## PURGEDIR

### Operation

The **PURGEDIR** command purges the directory *dir\_name*. The *dir\_name* cannot name an MPE account, an MPE group, a file, or root (/). Dot (.) and dot-dot (..) can be specified but cannot be purged.

By default **PURGEDIR** deletes an MPE-named directory. This means that *dir\_name* must follow all MPE naming rules, unless it is prefixed with a dot (.) or a slash (/). Since the MPE name syntax defines three levels, fully (or partially) qualified MPE-named directories can only be created under MPE groups. Unqualified MPE-named directories are created relative to the CWD. Directories do not support lockwords, file equations, or system defined file names (for example, \$NEWPASS). If *dir\_name* begins with a dot (.) or a slash (/), then HFS naming rules are enforced.

The directory referenced by *dir\_name* must be empty (except for dot (.) and dot-dot (..)) in order to be purged, unless a **TREE** purge is requested. A **TREE** purge may be requested as follows:

1. Specify the **TREE** option. (The *dir\_name* parameter does not control a multilevel purge in this case). This is the only choice available if *dir\_name* is an MPE name.
2. If *dir\_name* is an HFS name, ends in a slash (/), and the ;**NOTREE** option is *not* requested, then a **TREE** purge occurs.

The *dir\_name* parameter cannot reference root (/) because purging root is undesirable, and most likely is not what is intended.

A file or directory is not deleted if it is being accessed (opened); however, all non-accessed objects under *dir\_name* are still purged. A final "IN USE" error indicates that *dir\_name* was not deleted because one or more children objects could not be removed.

If **CONFIRM** is specified while your session is interactive, and it is legal for you to purge *dir\_name*, then you are prompted to confirm the purge of *dir\_name*. If a **NOTREE** purge is requested, the following prompt is displayed:

```
DIRECTORY dir_name TO BE PURGED? (YES/NO)_
```

Valid responses are YES, Y, NO, and N (case insensitive). If a **TREE** purge is requested, the prompt is:



## PURGEDIR

PURGE ALL FILES BELOW AND INCLUDING *dir\_name*? (ALL/NO)\_

Valid responses are ALL, NO, and N (case insensitive).

---

**Note** If *dir\_name* is long, the prompt may wrap around. If *dir\_name* is an MPE name, it is fully qualified in the prompt message. If the YES option is selected, then the purge is automatically confirmed without a prompt.

---

The SHOW option causes each purged file and directory name to be displayed on \$STDLIST. For example:

```
PURGEDIR ./mydir ;TREE ;SHOW
./mydir/abc
./mydir/dir1/dir2/file1
./mydir/dir1/dir2/file2
./mydir/dir1/dir2
./mydir/dir1/f1
./mydir/dir1/f2
./mydir/dir1
./mydir/file1
./mydir
```

The SHOWERRORS option causes any error that prevents an object from being deleted to be displayed to \$STDLIST after the object name is displayed. Object names are only displayed if an error occurs.

### Examples

The following examples purge *dir1*, which is empty.

```
PURGEDIR /MYACCT/MYGRP/dir1
```

## PURGEDIR

```
PURGEDIR /MYACCT/MYGRP/dir1;NOTREE
```

```
PURGEDIR /MYACCT/MYGRP/dir1/;NOTREE
NOTREE option overrides directory name ending in a "/". (CIWARM 9041)
```

The following examples purge `dir1` and all objects below `dir1`.

```
PURGEDIR /MYACCT/MYGRP/dir1/
```

```
PURGEDIR /MYACCT/MYGRP/dir1 ;TREE
```

The next example shows the command to purge `MYDIR`.

```
PURGEDIR mydir
```

## PURGEDIR

The next example shows the command to purge **MYDIR** and all objects below.

```
PURGEDIR mydir;TREE
```

The next example illustrates the **SHOW** and **TREE** options.

```
PURGEDIR dir;SHOW;TREE
./DIR/A
./DIR/B
./DIR/dir1/A
./DIR/dir1/B
./DIR/dir1
./DIR/C
./DIR
```

```
PURGEDIR /dir1/dir2;SHOW;TREE
/dir1/dir2/file1
/dir1/dir2/file2
/dir1/dir2
```

```
PURGEDIR ./foo/;show
./foo/dir1_below_foo/f1
./foo/dir1_below_foo/f2
./foo/dir1_below_foo
./foo
```

## **PURGEDIR**

The following command purges all empty directories under the CWD with **tmp** in their name.

```
PURGEDIR @tmp@
```

The following command purges all directories under the CWD with names beginning with **tmp**, and all objects below these directories.

```
PURGEDIR tmp@;TREE
```

The following command purges all directories under the CWD with names ending with **tmp**, and all objects below these directories.

```
PURGEDIR ./@tmp/
```

The following command purges all empty directories rooted to **/a/b**.

```
PURGEDIR /a/b/@
```

The following command purges all directories rooted to **CWD/a@/b@** and all objects below these directories.

```
PURGEDIR ./a@/b@/
```

## PURGEDIR

The following examples show how to use wildcards with PURGEDIR.

To delete a directory and the files or directories it contains using wildcards:

- Use the PURGEDIR command. For example:

```
:purgedir /MYACCT/MYGRP/@
```

This example deletes all directories rooted to /MYACCT/MYGRP.

To delete all empty directories under the CWD (Current Working Directory) with TMP in their name:

```
:purgedir @TMP@
```

To delete all directories under the CWD with names beginning with TMP, and all objects below these directories:

```
:purgedir TMP@; TREE
```

To delete all directories under the CWD with names ending with TMP, and all objects below these directories:

```
:purgedir ./@TMP/
```

When wildcards are specified with *dir\_name*, then RD access is required to the parent directory of each wildcard component. If the purge is multilevel, then TD, RD, and DD accesses are necessary to each directory below *dir\_name*.

### Related Commands

```
CHDIR
LISTFILE
NEWDIR
PURGE
PURGEACCT
PURGEGROUP
LISTDIR (UDC)
FINDDIR (UDC)
```

---

## PURGEGROUP

The PURGEGROUP command enables a system administrator or account manager to remove a group from an account. The command automatically removes all files that belong to the group that is being purged.

### Syntax

```
PURGEGROUP groupname[.acctname]
```

### Parameters

|                  |                                                                                                                                                                               |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>groupname</i> | Specifies the name of the group in the logon account to be removed. This name must contain from one to eight alphanumeric characters, beginning with an alphabetic character. |
| <i>acctname</i>  | Specifies the account where the group is located. System manager (SM) capability is required to use this parameter.                                                           |

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must have system manager (SM) or account manager (AM) capability to enter this command.

#### ■ When to purge a group

To completely purge a group, you must enter PURGEGROUP when the group and its files are inactive; otherwise, the group remains on the system and only inactive files are purged.

#### ■ Purge verification

When you enter PURGEGROUP during a session, the system displays the following verification prompt to ensure that you do not accidentally purge the wrong group:

## PURGEGROUP

GROUP *groupname* TO BE PURGED?

No verification message is printed when you include the PURGEGROUP command within a job.

### ■ Order of purged elements

Group elements are purged by files first, then the group. If no files in the group are in use, and the group itself is not in use, the PURGEGROUP command removes the entire group, otherwise, only inactive files are removed. To completely purge the group in this case, reenter the PURGEGROUP command when neither the group nor its files are in use.

---

### Caution

Do not attempt to purge the PUB group of the SYS account. You cannot completely purge the public group of the system account, PUB.SYS. If you specify this group in the *groupname* parameter, all nonsystem and inactive files are purged, which seriously impairs the proper functioning of the entire system.

---

### Example

- To purge a group named EXCESS, enter:

```
:PURGEGROUP EXCESS
GROUP EXCESS TO BE PURGED? (YES/NO)YES
:
```

### Related Commands

LISTGROUP  
NEWGROUP  
PURGEACCT  
PURGEUSER

---

## PURGELINK

This command removes a link.

### SYNTAX

```
PURGELINK [LINK=] linkname
```

### PARAMETERS

*linkname* This represents the name of a symbolic link file. All rules regarding file name specification apply to this parameter. This is a required parameter. Wildcarding is not allowed. Use of file equations in place of *linkname* is not allowed.

### OPERATION

A symbolic link is a special file that can point to a file, group, account, or directory. Links are established through the **NEWLINK** command, and they are removed through the **PURGELINK** command.

The **PURGELINK** command may be issued from a session, job, program, or in **BREAK**. **PURGELINK** requires Traverse Directory (TD) and Delete Directory entry (DD) permissions.

### EXAMPLE

For the following examples assume that a user is currently logged on as **USER1** in the group **SAFE.COMPANY**.

To remove the link **/COMPANY/SAFE/PAYROLL**, enter the following command:

```
:PUREGLINK PAYROLL
```

To remove the link **/dira/scripts**, enter the following command:

```
:PURGELINK /dira/scripts
```



## **PURGELINK**

### **Related Commands**

NEWLINK  
PURGE  
PURGEDIR  
LISTFILE

---

## PURGEUSER

The `PURGEUSER` command enables a system administrator or an account manager to remove a user from an account.

### Syntax

```
PURGEUSER user [.acctname]
```

### Parameters

|                 |                                                                                                                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>user</i>     | Specifies the name of the user to be deleted. This name must contain from one to eight alphanumeric characters, beginning with an alphabetic character.                                 |
| <i>acctname</i> | Specifies the name of the account where the user is located. The default is the logon account of the account manager. System manager (SM) capability is required to use this parameter. |

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing `Break` does not affect this command.

You must have system manager (SM) or account manager (AM) capability to enter this command.

You cannot purge a user if he or she is currently logged on. If you try to purge a user currently logged on to the system, the system responds by displaying the message `IN USE: CAN'T BE PURGED`. You cannot purge `MANAGER.SYS`.

## PURGEUSER

### ■ Purge verification

When you enter `PURGEUSER` during a session, the system displays the following verification prompt to ensure that you do not accidentally purge the wrong user:

```
USER user TO BE PURGED? (YES/NO)
```

### ■ Deleting remaining files

The files created by a purged user remain after you purge the user from the system. The following choices are available for deleting files:

- The system administrator with system manager (SM) capability can remove the files' account by entering the `PURGEACCT` command.
- Someone with account manager (AM) capability can remove the files' group by entering the `PURGEGROUP` command.
- Anyone can enter the `PURGE` command for each file to be deleted.

### Example

- To remove a user named `USER1`, enter:

```
:PURGEUSER USER1
USER1 TO BE PURGED? (YES/NO)YES
```

### Related Commands

```
LISTUSER
NEWUSER
PURGE
PURGEACCT
PURGEGROUP
```

---

## RECALL/**Ctrl**A RECALL

The RECALL/**Ctrl**A RECALL command displays all pending console resource request messages. You reply to pending resource requests by using the REPLY command.

### Syntax

**From a terminal:**

```
RECALL
```

**From the console:**

```
CtrlA RECALL
```

### Parameters

None.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You can enter the RECALL command only if your system administrator has used the ALLOW command or ASSOCIATE command which permits you to enter this command.

#### ■ Differences between RECALL and **Ctrl**A RECALL

Both of these commands function identically except that you can enter **Ctrl**A RECALL only from the console and not from a job or program. The = sign appears when you press **Ctrl**A.

Pressing these keys enables you to enter certain commands on a console from which another process (such as STORE) is currently running. You should only use the **Ctrl**A RECALL command if the RECALL command cannot be used.

## RECALL/CtrlA RECALL

### Examples

- To display all pending console messages from your terminal, enter:

:RECALL

If no requests are pending for a reply, the following message appears:

NO REPLIES PENDING (CIWARN 3020)

If a request is pending for a reply, a message similar to the following appears:

THE FOLLOWING REPLIES ARE PENDING:  
10:05/#J19/15/LDEV # FOR "L00576" ON TAPE1600 (NUM)?

- To display all pending console messages from the console, enter:

:CtrlA  
:=RECALL

If no requests are pending for a reply, the following message appears:

NO REQUESTS PENDING (SYS 15)

### Related Commands

REPLY

---

## RELEASE

This command removes security provisions from a file. Security does not resume for a released file until you enter the **SECURE** command for the file.

### Syntax

RELEASE *filereference*

### Parameters

*filereference* Specifies the actual file designator of the file whose file access matrix access control you want to disable. The *filereference* can be either in MPE or HFS syntax.

#### MPE Syntax

If the *filereference* does not begin with a dot or a slash, it is parsed according to the MPE syntax and has the form:

*filename* [/lockword] [.groupname] [.acctname]]

If the file has a lockword, you must specify it; otherwise, the system prompts you for it. If you do not specify *groupname.acctname*, the system assumes the logon group and account.

#### HFS Syntax

If the *filename* begins with a dot (.) or a slash (/), it is parsed according to HFS syntax.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You can use this command only for permanent disk files you have created. Under default system security provisions, the file must be in your logon account and must belong to your logon or home group.

## RELEASE

### ■ Checking the file status

You can enter the `LISTFILE` command to determine if a file is currently released or secured. Refer to the `LISTFILE` command for more information.

### ■ Access control definition

An access control definition (ACD) overrides file access controls whether or not you have released or secured the file.

For more information about ACDs, refer to the `ALTSEC` command in this manual.

### ■ Unaffected access controls

This command does not affect the following access controls:

|                  |                                                                                                                                                                                                                                  |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Privileged files | You cannot release privileged files.                                                                                                                                                                                             |
| Lockwords        | You cannot override lockwords.                                                                                                                                                                                                   |
| ACDs             | This command does not affect the security on files with access control definitions. However, if you remove the ACD, the file is released. Refer to the <code>ALTSEC</code> command in this book for more information about ACDs. |

## Example

- To release all security provisions for a file named `FILE1` in your logon group and account, enter:

```
:RELEASE FILE1
```

If the system fails to locate the file, the following error message appears:

```
UNABLE TO ACCESS FILE1.GROUP1.ACCT1. (CIERR 356)
```

## Related Commands

ALTSEC  
LISTF  
LISTFILE  
SECURE

---

## RENAME

The **RENAME** command changes the system identification for a file. You can use this command to change the name of a file, to move a file from one group to another, or to change the lockword.

### Syntax

```
RENAME oldfilereference,newfilereference [,TEMP]
```

### Parameters

|                          |                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>oldfile-reference</i> | Specifies the current name of the file. The form of <i>oldfilereference</i> consists of the following elements:<br><br><i>filename</i> [/lockword] [. <i>groupname</i> [. <i>acctname</i> ]]<br><br>If you specify <i>acctname</i> , the logon account must belong to you; you must be the creator of the file to rename it.                      |
| <i>newfile-reference</i> | Specifies the new name of the file in the same format as <i>oldfilereference</i> . If you specify <i>acctname</i> , the logon account must belong to you. If you specify <i>groupname</i> , you must have <b>SAVE</b> access to the group name. If you omit <i>acctname</i> and/or <i>groupname</i> , the logon account and/or group are assumed. |

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

#### ■ Requirements

To rename a file, you must be the file's creator and must have exclusive access to the file. You cannot rename files that exist in other accounts, unless you have system administrator capability. This applies to both MPE and HFS files. To copy files that exist in other accounts, use the **FCOPY** command.



## RENAME

### ■ Restrictions

You cannot use this command for compatibility mode **KSAM** files, because there are internal linkages between the key information and the data files, however, you can use this command to rename **KSAM MPE/iX** files.

### ■ Renaming spool files

The **RENAME** command renames spool files if you have access to them, but only for spool files that are not linked to the spooler print queues.

### Examples

- To change the name of a file named **OLDFILE** to a file named **NEWFILE**, enter:

```
:RENAME OLDFILE,NEWFILE
```

- To change the *lockword* of the file **FILE2** from **LOCKA** to **LOCKB**, enter:

```
:RENAME FILE2/LOCKA,FILE2/LOCKB
```

- To move a file from **GROUP1** to **GROUP2** within the same account, enter:

```
:RENAME MYFILE.GROUP1,MYFILE.GROUP2
```

To apply the command as shown above, you must have save access to the group named in the second parameter (**GROUP2**). Also, both groups must reside in the system.

### Related Commands

COPY  
LISTFILE  
LISTSPF  
PURGE

---

## REPLY/**(Ctrl)**A REPLY

The REPLY command enables you to reply to pending resource requests.

### Syntax

From a terminal:

```
REPLY pin,reply
```

From the console:

```
(Ctrl)A REPLY pin,reply
```

### Parameters

*pin* Specifies the message sender's process identification number (PIN), which always appears after the second forward slash (/) of the message. In the following example, the PIN is 43.

```
?16:15/#S25/43/LDEV# FOR "T" ON TAPE (NUM)?
```

*reply* Specifies one of three reply types shown in parentheses in the message:

(NUM) Supply a logical device number.

(Y/N) Supply YES (Y) or NO (N).

(MAX CHARS=*nn*) Supply a string expression consisting of *nn* characters or fewer. This reply type is only used for labeled tapes.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **(Break)** does not affect this command. You can enter the REPLY command only if your system administrator has used the ALLOW command or ASSOCIATE command, which permits you to enter this command.

## REPLY/**Ctrl**A REPLY

### ■ Differences between REPLY and **Ctrl**A REPLY

Both of these commands function identically except that you can enter **Ctrl**A REPLY only from the console and not from a job or program. The = sign appears when you press **Ctrl**A.

Pressing these keys enables you to enter certain commands on a console from which another process (such as STORE) is currently running. You should use the **Ctrl**A REPLY command only if the REPLY command cannot be used.

### ■ Replying to requests

Programs requesting the use of a device waiting for a reply remain suspended indefinitely and cannot be aborted until you enter the REPLY or ABORT command. If you cannot reply as requested, such as when a particular device is nonexistent, use 0 if (NUM) is requested or use N if (Y/N) is requested. This action aborts the pending resource request.

## Examples

- To respond to the following standard tape message, enter:

```
10:05/#J19/15/LDEV# FOR "NAS" OF TAPE1600 (NUM)?
:REPLY 15,7
```

or

```
CTRL A
=REPLY 15,7
```

- To reply to a standard forms request, enter:

```
16:00/#S93/22/STANDARD FORMS
?16:00/#S93/22/LDEV # FOR #S95;L ON LP (NUM)?
:REPLY 22,12
```

or

```
CTRL A
=REPLY 22,12
```

**REPLY/(Ctrl)A REPLY**

**Related Commands**

ALLOW  
ALTSPoolFILE  
ASSOCIATE  
RECALL  
SYSGEN (AUTOREPLY)

---

## REPORT

The **REPORT** command displays the total resource usage logged against accounts and groups, as well as the resource limits. Standard users can only display data for their logon group. Users with account manager (AM) capability can display all groups in their account. Users with system manager (SM) capability can display all groups in all accounts.

### Syntax

```
REPORT [groupset] [,listfile]
```

### Parameters

|                   |                                                                                                                                                                                                |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>groupset</i>   | Specifies the accounts and groups for which information is to be listed. The permissible parameter values and their capability requirements are as follows:                                    |
| <i>group</i>      | Reports on the specified group in the logon account. This is the default for standard users, who can specify only their logon group.                                                           |
| @                 | Reports on all groups in the logon account. This is the default for account managers, and only users with account manager (AM) or system manager (SM) capability can use this parameter value. |
| <i>group.acct</i> | Reports on the specified group in the specified account. This parameter value requires system manager (SM) capability.                                                                         |
| @.acct            | Reports on all groups in the specified account. This parameter requires account manager (AM) capability (if it is the logon account) or system manager (SM) capability for any account.        |

## REPORT

- @.@** Reports on all groups in all accounts. This parameter value requires system manager (SM) capability.
- group.@** Reports on a specified group in any account. This parameter value requires system manager (SM) capability.

You can use the following wildcard characters to specify a set of names:

- @** Specifies zero or more alphanumeric characters. Used by itself, @ specifies all possible combinations of such characters. Used with other characters, @ specifies all the possible names that include the specified characters. (@ABC@ translates to all names that include ABC anywhere in the name.)
- #** Specifies one numeric character. (A###@ translates to all names that begin with A followed by any three digits, followed by any combination of zero to four alphanumeric characters.)
- ?** Specifies one alphanumeric character. (A?# translates to all the three-character names that begin with A, followed by an alphanumeric, followed by a digit.)

You can use these characters as follows:

- n@** Reports on all groups starting with the character “n.”
- @n** Reports on all groups ending with the character “n.”
- n@x** Reports on all groups starting with the character “n” and ending with the character “x.”
- n## ... #** Reports on all groups starting with the character “n” containing all digits after the “n.”

## REPORT

- ?n@ Reports on all groups whose second character is “n.”
- n? Reports on all two-character groups starting with the character “n.”
- ?n Reports on all two-character groups ending with the character “n.”

You can also use these characters, when placed appropriately in the *groupset* parameter, to report on accounts.

*listfile* Specifies the file designator of the output file where the information is to be written. The default is \$STDLIST, but you can redirect output with a file equation as follows:

```
:FILE LIST1;DEV=LP
:REPORT, *LIST1
```

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts execution of this command.

You must have account manager (AM) capability to enter this command for an entire account, and you must have system manager (SM) capability to enter this command for the entire system.

## REPORT

### Example

- To obtain a report of account information for the account, SOPRM, enter:

```
:REPORT @,SOPRM
```

| ACCOUNT   | FILESPACE-SECTORS |       | CPU-SECONDS |       | CONNECT-MINUTES |       |
|-----------|-------------------|-------|-------------|-------|-----------------|-------|
|           | COUNT             | LIMIT | COUNT       | LIMIT | COUNT           | LIMIT |
| SOPRM     | 99004             | **    | 99057       | **    | 88407           | **    |
| /GLOSSARY | 1068              | **    | 542         | **    | 656             | **    |
| /PUB      | 182               | **    | 123         | **    | 1155            | **    |
| /SECT1    | 180               | **    | 85          | **    | 429             | **    |
| /SECT10   | 11779             | **    | 25271       | **    | 9716            | **    |
| /SECT2    | 390               | **    | 4123        | **    | 5302            | **    |

The information in the display shows usage counts and limits for permanent file space in sectors, CPU-time in seconds, and session connect-time in minutes. The file space usage count reflects the number of sectors used when you enter the command; however, CPU-time and connect-time usage appear as they were immediately before the beginning of the current job. Two asterisks (\*\*) under the LIMIT column indicate that no predefined limit for this resource exists.

### Related Commands

```
LISTFILE
RESETACCT
```



## RESTORE

This command returns files, that are currently stored on magnetic tape, back to the system.

### Syntax

```
RESTORE [restorefile] [;filesetlist] [;option[; ...]]
```

where *option* is:

```
[;DEV={ device }] [;SHOW[=showparmlist]]
```

```
[; { LOCAL GROUP=groupname } [; ...]]
```

```
[; { KEEP }]
```

```
[; { OLDDATE }]
```

```
[; ONERROR= { QUIT }]
```

```
[; DIRECTORY]
```

```
[; LISTDIR]
```

```
[; TREE] [; NOTREE]
```

### Parameters

*restorefile* Specifies the name of the magnetic tape file that contains the files that you want to restore to the system. You must backreference the file by using an asterisk (\*). First, you must use a file equation before entering the RESTORE command. For instance, if you want to restore files from a file called SOURCE,

## RESTORE

enter the following file equation before entering the **RESTORE** command:

FILE SOURCE;DEV=TAPE

A message appears on the console asking you to mount the tape identified by the *restorefile* parameter and to allocate the device.

*filesitelist* Specifies the set of files to be restored. The default is depends on the user's capability as shown below:

| Default | Capability                    |
|---------|-------------------------------|
| @       | None                          |
| @.@     | Account manager (AM)          |
| @.@.@   | and/or system supervisor (OP) |

The is parameter has the form shown below:

*filesetitem*[,*filesetitem*[. . .]]

where *filesetitem* can be *^indirectfile* or *fileset*.

*indirectfile* A file name that backreferences a disk file. The syntax is:

*^indirectfile*

This file may consist of *fileset(s)* and *option(s)*, but only options can appear after the first semicolon (;) on each line. An option specified on one line will operate on all files in the *filesitelist*.

*fileset* Specifies a set of files to be restored, and optionally those files to be excluded from the **RESTORE** operation. The *fileset* parameter has the form:

*filestorestore*[-*filestoexclude*[. . .]]

The system restores any file that matches *filestorestore* unless the file also matches *filestoexclude*, which specifies files to be excluded from the restore operation. You may specify an unlimited number of *filestoexclude*.

## RESTORE

Since “-” is a valid character for HFS syntax file names, a blank character must separate it from HFS file sets to obtain the special negative file set meaning.

*filestorestore*  
*filestoexclude*

Both *filestorestore* and *filestoexclude* may be entered in MPE or HFS syntax. Wildcards are permitted for both MPE as well as HFS syntax, however, MPE wildcards are not expanded in *filestoexclude*. This means that @.@.@-@.@.@ is **NOT** an empty *fileset*. It would contain all of the HFS named files on the system.

The MPE syntax is as follows:

*filename[.groupname[.accountname]]*

A lockword may be specified for files to be stored, in the form:

*filename/lockword.group.account*

The HFS syntax is as follows:

*/dir\_lev\_1/dir\_lev\_2/.../dir\_lev\_i/.../filedesig*

or

*./dir\_lev\_i/dir\_lev\_j/.../dir\_lev\_k/.../filedesig*

If the name begins with a dot (.), then it is fully qualified by replacing the dot with the current working directory (CWD).

Each of the components *dir\_lev\_i* and *filedesig* can have a maximum of 255 characters with the full path name being restricted to 1023 characters. Each of the components *dir\_lev\_i* and *filedesig* can use the following characters:

letter a to z

letter A to Z

digit 0 to 9

special characters - \_ .

## RESTORE

For HFS name syntax, the lowercase letters are treated distinctly from the uppercase letters (no upshifting).

Both MPE and HFS name components can use the characters @, #, and ? as wildcard characters. These wildcard characters have the following meaning:

|   |                                                 |
|---|-------------------------------------------------|
| @ | specifies zero or more alphanumeric characters. |
| # | specifies one numeric character.                |
| ? | specifies one alphanumeric character.           |

These wildcard characters can be used as follows

|           |                                                                                                                                  |
|-----------|----------------------------------------------------------------------------------------------------------------------------------|
| n@        | Restore all files starting with the character n.                                                                                 |
| @n        | Restore all files ending with the character n.                                                                                   |
| n## ... # | Restore all files starting with character n followed by up to seven digits (useful for restoring all EDIT/3000 temporary files). |
| n@x       | Restore all files starting with the character n and ending with the character x.                                                 |
| ?n@       | Restore all files whose second character is n.                                                                                   |
| n?        | Restore all two-character files starting with the character n.                                                                   |
| ?n        | Restore all two-character files ending with the character n.                                                                     |

Also, character sets may be specified in the following syntax:

|        |                                               |
|--------|-----------------------------------------------|
| [ct]   | specifies letter c or t.                      |
| [c-t]  | specifies any letter from range c to t.       |
| [e-g1] | specifies any letter range e to g or digit 1. |

Examples of using character sets are:

|       |                                                     |
|-------|-----------------------------------------------------|
| [A-C] | @ All files that begin with the letters A, B, or C. |
|-------|-----------------------------------------------------|

## RESTORE

`myset[e-g1]` All files that begin with the name `myset` and end in `E`, `F`, or `G`, or `1`.

`myset`  
`[d-e1-6]` All files that begin with the name `myset` and end in `D` or `E`, or `1`, `2`, `3`, `4`, `5`, or `6`.

Up to a maximum of sixteen characters may be specified for each character set and brackets are not allowed to be nested.

A character set specifies a range for only one (1) ascii character. The range `[a-d]@` gets all files that begin with the letter `a` through the letter `d`. The ranged `[ad-de]` may cause unpredictable results.

Since the hyphen (`-`) is a valid character for HFS syntax file names, it is allowed inside a character set, immediately following a left bracket (`[`) or preceding a right bracket (`]`). When specified between two characters, the hyphen implies a range of characters.

When a MPE name component is a single `@` wildcard, the `@` will be folded to include all MPE and HFS named files at that level and below. To specify only MPE-named files, use `?@` instead.

A fileset may be entered in any of the following formats and may use wildcard characters. Equivalent MPE and HFS formats are grouped together as follows.

*file.group.acct* One particular file in one particular group in one particular account.

*file.group* One particular file in one particular group in the logon account.

*file* One particular file in the logon group and account.

*@.group.acct*  
*/acct/group/* All files (MPE and HFS) in one particular group in one particular account (including the `GROUP` directory).

*?@.group.acct* All MPE name files in one particular group in one particular account.

## RESTORE

|                                  |                                                                                                                                                                         |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>@.group/log-onacct/group/</i> | All the files (MPE and HFS) in one particular group in the logon account.                                                                                               |
| <i>?@.group</i>                  | All MPE named files in one particular group in the logon account.                                                                                                       |
| <i>@.@.acct/acct/</i>            | All the files (MPE and HFS) in all the groups in one particular account (including the ACCT directory), plus all the files and directories under the specified account. |
| <i>?@.@.acct</i>                 | All MPE named files in all the groups in one particular account.                                                                                                        |
| <i>@</i>                         | All (MPE and HFS) files in the CWD.                                                                                                                                     |
| <i>@.@</i>                       | All (MPE and HFS) files in the logon account.                                                                                                                           |
| <i>?@.@.@</i>                    | All MPE named files in the system.                                                                                                                                      |
| <i>@.@.@</i>                     | All the files and directories (MPE and HFS) in the system.                                                                                                              |
| <i>thisisit.@.acct</i>           | Any MPE file named <i>thisisit</i> in all the groups in one particular account.                                                                                         |

## DEVICE

Specifies the device on which the file resides. It takes one of two forms, *devclass* or *ldn*:

|                 |                                                                                                                                                                                                                                                                                                         |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>devclass</i> | Specifies the type of device. If <i>devclass</i> is specified, the file is allocated to the home volume set (within the specified device class) of the group into which a file is being restored.                                                                                                       |
| <i>ldn</i>      | Specifies a particular logical device number <i>ldn</i> corresponding to a particular device. If <i>ldn</i> is specified, the file will be allocated to that device only if one of the volumes in the home volume set (of the group into which a file is being restored) currently occupies the device. |

Default MPE/iX attempts to restore the file on a logical device compatible with the type and subtype specified in the file's file label and with the type and subtype of the mounted home

## RESTORE

volume set (of the group into which a file is being restored). If this fails, an attempt is made to restore the file on the same device class as specified in the file's file label and that of the mounted home volume set (of the group into which a file is being restored). If this fails, an attempt is made to restore the file on any member of the home volume set (of the group into which a file is being restored). If this fails, the file is not restored.

**SHOW** Request to list names of restored files. Default is a listing of the total number of all files restored and not restored. For files not restored, the reason and the names are listed. This listing is sent to `$STDLIST` (formal designator `SYSLIST`) unless a **FILE** command is entered to send the listing to some other device. For instance,

```
FILE SYSLIST; DEV=LP
```

entered before the **RESTORE** command would send the listing to a line printer.

*showparmlist* Tells **RESTORE** what information to display for the files that are restored. If you specify `;SHOW` and omit *showparmlist*, then the default is **SHORT** if the recordsize of `SYSLIST` is less than 132 characters, or **LONG** if the recordsize is equal to or greater than 132 characters. The format for *showparmlist* is:

```
showparm [,showparm [,showparm [, . . .]]]
```

where *showparm* may be one of the options described below. If you do not specify **SHORT** or **LONG**, then the base information is **SHORT** if `SYSLIST` is less than 132 characters, or **LONG** if `SYSLIST` is 132 or more characters.

If an HFS-named file is specified in the *fileselist*, or the expansion of a wildcard includes a HFS-named file, then a HFS-style output listing will be used. This listing shows the same information as the MPE format, but puts the name of the file at the right end of the listing, to allow for longer HFS names. If a HFS name is too long to fit in the record size of the output file, it will be wrapped onto the next line. Wrapping is signified by a "\*" as the last character on the line.

## RESTORE

|                                       |                                                                                                                                                                                                                                                                                 |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>showparm</i>                       | An option that displays information for files to be restored.                                                                                                                                                                                                                   |
| <b>SHORT</b>                          | Overrides a default of <b>LONG</b> and displays file name, group name, account name, volume restrictions, file size (in sectors), file code, and reel number.                                                                                                                   |
| <b>LONG</b>                           | Overrides a default of <b>SHORT</b> and displays all the information that <b>SHORT</b> does and adds record size, blocking factor, maximum number of extents allowed, allocated, end- of-file, and file record limit. For spoolfiles, the old spoolfile name is also displayed. |
| <b>NAMESONLY</b>                      | Displays only the filename and the starting and ending media number. <b>NAMESONLY</b> is not allowed with <b>SHORT</b> or <b>LONG</b> .                                                                                                                                         |
| <b>DATES</b>                          | Displays the creation date, the last date of access, and the last date of modification.                                                                                                                                                                                         |
| <b>SECURITY</b>                       | Displays the file creator and the security matrix.                                                                                                                                                                                                                              |
| <b>PATH</b>                           | Forces all file listings to be in HFS format. The full HFS pathname is displayed instead of MPE style names.                                                                                                                                                                    |
| <b>OFFLINE</b>                        | Sends an additional copy to the device <b>OFFLINE</b> , which defaults to device <b>LP</b> .                                                                                                                                                                                    |
| <b>LOCAL</b>                          | Specifies that files will be restored regardless of the system's directory structure. The files will be stored under the user's logon group and account.                                                                                                                        |
| <b>GROUP=</b><br><i>groupname</i>     | Specifies that the files being restored will be restored to an existing group identified as <i>groupname</i> .                                                                                                                                                                  |
| <b>ACCOUNT=</b><br><i>accountname</i> | Specifies that the files being restored will be restored to an existing account identified as <i>accountname</i> . If you specify <b>LOCAL</b> , you cannot specify <i>groupname</i> or <i>accountname</i> .                                                                    |



## RESTORE

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>KEEP</b>                         | <p>If a file on the <b>RESTORE</b> tape has the same name as a file already residing on the disk, <b>KEEP</b> instructs the system to preserve the file on the disk and to skip over the file on the <b>RESTORE</b> tape. The file on tape is not restored and the file on the disk remains as it was.</p> <p>Default: If you do not specify <b>KEEP</b>, then the file on the <b>RESTORE</b> tape replaces the identically named file on the disk. The only exception is if the file on the disk is being accessed when <b>RESTORE</b> attempts to replace it. In that case, <b>RESTORE</b> preserves the file on the disk (as if you had specified <b>KEEP</b>) and skips over the file on the tape.</p> |
| <b>NOKEEP</b>                       | <p>Instructs the system to restore every file on the tape, even if it has the same name as a file already residing on the disk.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>NEWDATE</b> or<br><b>OLDDATE</b> | <p>MPE/iX stores four dates in each file's file label the creation date, modification date, last access date, and the allocation date. The allocation time is also stored in the label. <b>NEWDATE</b> changes all dates and times to the date and time that <b>RESTORE</b> was executed. <b>OLDDATE</b> retains the original modification and last access dates, but changes the creation and allocation dates to the date of the <b>RESTORE</b> procedure. Default is <b>NEWDATE</b>.</p>                                                                                                                                                                                                                |
| <b>ONERROR</b>                      | <p>Tells <b>RESTORE</b> what to do if there is a tape read error. If you omit this parameter, then the default option is <b>QUIT</b> for labeled and unlabeled tapes. <b>ONERR</b> is a synonym for <b>ONERROR</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                     | <p><b>QUIT</b>                Tells <b>RESTORE</b> to abort after a tape read error.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                     | <p><b>SKIP</b>                Tells <b>RESTORE</b> to perform a file-skip forward past a tape error, resynchronize, and resume reading from the tape.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>DIRECTORY</b>                    | <p>Instructs <b>RESTORE</b> to restore all the volume set directories on the media. You must have system supervisor (<b>OP</b>) or system manager (<b>SM</b>) capability to use this parameter.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## **RESTORE**

- LISTDIR** This option may not be specified with any other option, other than **DIRECTORY**. If specified with **DIRECTORY**, the directory is displayed. Used by itself, it displays information from the tape directory and tape label, but does not restore any files. The type of tape created, the record size, and any files that match your filesetlist are displayed. The security restrictions that apply to filesetlist apply here, too. The output goes to **SYSLIST**.
- TREE** The tree option forces every HFS syntax file set to be scanned recursively, irrespective of the slash specified or not at the end of the file set.
- NOTREE** The notree option forces every HFS syntax file set not to be scanned recursively irrespective of the slash specified or not at the end of the file set. This option yields a horizontal cut in the hierarchical directory.

## RESTORE

### Operation Notes

#### ■ Usage

You can use this command to restore data onto system disks, from a file or files previously stored by the **STORE** command. A message is shown on the system console requesting the system operator to mount the device(s) identified by the **restorefile** parameter and to allocate the device(s).

No message is displayed if **AUTOREPLY** is configured through **SYSGEN**.

If you press [Break] during a **RESTORE** operation, the operation continues while you interact with the Command Interpreter. Both **ABORT** and **RESUME** can be used within **BREAK**.

This command may be issued from a session, job, program, but not in **BREAK**. The user must have System Manager (SM), System Supervisor (OP), or Privileged Mode (PM) capability to use this command for privileged files.

#### ■ Command process

The output generated by **RESTORE** goes to a file whose formal designator is **SYSLIST**. If a disk or directory error is encountered while updating the directory, updating the Disc Free Space tables, or writing the data to the file, the error is reported to **SYSLIST** (defaults to **\$STDLIST**) and **RESTORE** will continue. Any file belonging to a group whose home volume set has not been mounted will not be restored.

Before entering **RESTORE**, you must identify **restorefile** as a magnetic tape or DDS device with a **FILE** command. If the user does not specify **restorefile**, then a default tape name will be used. The default tape name is equal to the user's logon identification and the device is **TAPE**. For example, if the user is logged on to **TOM.MGR**, then the tape request will be for **TOM**. No file equation may be used to change the default.

## **RESTORE**

### ■ **Required capabilities for restoring files**

Your capabilities determine which files you may restore. If you have system manager or system supervisor capability, you can restore any file from a **STORE** tape, assuming the account and group to which the file belongs, and the user who created the file, are defined in the system. If you have account manager capability, you can restore any file in your account. To restore files with negative file codes, you need Privileged Mode (PM), system supervisor (OP), or System Manager (SM) capability. If you have standard user capability, you can restore only those files in your logon account.

### ■ **Lockword requirements**

The system manager and system supervisor may restore lockword-protected files without specifying the lockword only when **RESTORE** is executed during a session. Users without SM or OP capability must always supply the lockword. The exception is AM. If you have AM and you are working in your own account, you do not have to supply the lockword. If **RESTORE** is executed as a job, however, all users lacking SM, OP, or AM capability must supply file lockwords.

When the **RUN** command is used, the system-defined **JCW CIERROR** will not be changed even if the **RESTORE** aborts. When invoking **RESTORE** through the Command Interpreter (for example, **RESTORE \*T;@**), the system-defined **JCW CIERROR** will be set to the value 1091 if the **RESTORE** command aborts for any reason. Check this value with the **SHOWJCW** command after **RESTORE** aborts.

### ■ **Disk space requirements**

**RESTORE** determines whether sufficient disk space remains to restore a file that already exists on the disk. If sufficient space remains, **RESTORE** writes a new copy of the file to the disk before purging the old copy of the file. The old copy of the file is purged only if the **RESTORE** operation is successful.

## RESTORE

If sufficient space is not available, **RESTORE** first purges the old copy of the file and then writes a new copy to the disk. If the **RESTORE** operation fails in this circumstance, you will receive a message on \$STDLIST informing you that there is no copy of the file on the disk:

```
WARNING OLD FILE HAS BEEN PURGED
```

### Examples

To restore all files belonging to your logon group from the *restorefile* T, enter:

```
:FILE T;DEV=TAPE
:RESTORE *T;@;KEEP;SHOW
```

In response, the system operator receives a request to mount the tape identified as T. If a file on T already exists in the system, it will not be restored because the **KEEP** parameter was specified.

To restore a file ABC without specifying a *restorefile*, no file equation need be used. For example:

```
RESTORE ;ABC.PUB.SYS;SHOW
```

```
STORE/RESTORE, VERSION A.20.03 (C) 1986 HEWLETT-PACKARD CO.
FRI, APR 12, 1989, 11:56 AM
```

```
WILL RESTORE 1 FILES; NUMBER OF FILES ON TAPE = 87
```

| FILENAME | GROUP | ACCOUNT | VOLUME RESTRICTIONS     | SECTORS | CODE   | REEL |
|----------|-------|---------|-------------------------|---------|--------|------|
| ABC      | .PUB  | .SYS    | MPEXL_SYSTEM_VOLUME_SET | 4       | NMPROG | 2    |

```
FILES RESTORED: 1
```

```
:
```

## RESTORE

If you restore all files without specifying a fileset, a warning will appear, alerting you that all files, based on your capabilities, will be restored

```
TURBO-STORE/RESTORE VERSION A.50.03 HP36398A
1986 HEWLETT-PACKARD CO.
WED, DEC 15, 1993, 7:16 PM
WARNING: YOUR DEFAULT FILESET BECOMES '@.@.' SINCE YOU HAVE OP
OR SM CAPABILITY (S/R 1911)
```

To have the list of restored files printed on a line printer, enter

```
:FILE SYSLIST;DEV=LP
:FILE T;DEV=TAPE
:RESTORE *T;@;SHOW
```

To restore only a subset of the fileset, enter

```
:RESTORE *T;@.@.-@.PUB.SYS
```

(Restores all files except those in the PUB group of the SYS account.)

## Related Commands

```
STORE
VSTORE
REPLY
RECALL
```

---

## RESUME

The **RESUME** command resumes execution of a program or subsystem command that was suspended after you pressed the **Break** key. The program resumes at the point where execution was suspended.

### Syntax

RESUME

### Parameters

None.

### Operation Notes

#### ■ Usage

You can only enter this command in break mode. You cannot enter this command from a job, a program, or a session (unless in break mode). Pressing **Break** does not affect this command.

#### ■ Entering commands other than RESUME

If you enter a program or subsystem command after pressing **Break**, the command interpreter prints the following message on your terminal: **ABORT? (YES/NO)**. If you respond **YES** to the message, the command interpreter aborts the currently suspended program. If you respond **NO** to the message, the command interpreter prints the message **COMMAND NOT ALLOWED IN BREAK** and prompts you for another command. If you now enter **RESUME**, the suspended program resumes at the point where it was interrupted.

You can enter most commands after pressing **Break**. Only the commands that create processes require you to resume or abort the interrupted program.

## **RESUME**

### **Example**

- To continue a suspended program at the point of interruption, do the following:

1. Enter the following command:

`:RESUME`

The system responds by displaying the following message:

`READ PENDING`

2. Press `(Return)` to resume the program.

### **Related Commands**

`ABORT`



---

## RESUMEJOB

The RESUMEJOB command resumes the processing of a job previously suspended with the BREAKJOB command. The job continues executing from the point where it was suspended. A message does not appear when processing resumes.

### Syntax

```
RESUMEJOB #Jnnn
```

### Parameters

#Jnnn Specifies a job number.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You must enter this command from the console. You can only enter this command from a terminal other than the console under one of the following conditions:

- The JOBSECURITY command is set to LOW and #Jnnn refers to a job logged on to your *user.account* (or *@.account* if you are the account manager).
- Your system administrator has used the ALLOW command which permits you to enter this command.

## RESUMEJOB

### Examples

- To display suspended jobs and resume processing a job, do the following:

1. Enter the following command:

```
:SHOWJOB SUSP
```

The system responds by displaying the following message:

```
JOBNUM STATE INPRI JIN JLIST INTRODUCED JOB NAME
#68 SUSP 105 LP WED. 7:56AM TEST,USER.ACCT
```

2. Enter the following command to resume processing job number 68:

```
:RESUMEJOB #J68
```

### Related Commands

```
ABORTJOB
ALLOW
BREAKJOB
JOBSECURITY
SHOWJOB
```

---

## RUN

This command executes a program file. It permits the searching of libraries to satisfy external references. Relocatable libraries (RL) are not searched.

### Syntax

```
RUN progfile [;PARM=parameternum]
 [;LIB= { G
 P
 S }] [;INFO="quotedstring"]
 [;STDIN= { *formaldesig
 fileref
 $NULL }]]
 [;STDLIST= { *formaldesig
 fileref [,NEW]
 $NULL }]]]
```

### Parameters

*progfile* Specifies the name of the program file to be executed. This is the only required parameter. If you specify any other parameters, they override the default parameters only for the current program execution. The *progfile* name may be an HFS filename.

PARM Specifies a value, *parameternum*, that you can pass to the program as a general parameter for control or other purposes. If you do not specify the parameter, the default value is zero (0).

The ;PARM= value is limited to a signed 15-bit decimal or unsigned 16-bit octal or hex value, unless you use the implied form of the RUN command. The implied form enables you to use any signed 31-bit number. Refer to "Operation Notes" for information about the implied form.

## **RUN**

**LIB** Specifies the executable libraries that you can use to load the program. The available values are as follows:

- G** Searches the program's group library first, then its public account library, and finally the system library in order to resolve the program's external references.
- P** Searches the program's public account library before the system library to resolve the program's external references.
- S** Searches only the system library to resolve the program's external references. This is the default.

The group and account libraries referenced by this parameter must be named *SL.group.account* for compatibility mode programs and *XL.group.account* for native mode programs. The group and account are the group and account where the program resides.

**INFO** Enables you to pass an ASCII string ("*quotedstring*") to the program to be run. You must delimit the string with a matching pair of quotation marks (either " or '). If you want a quotation mark to appear within the string, you must repeat it. For instance, you must type `can't` as `can''t`, and `"program"` must appear as `""program""`.

Including delimiters, the maximum length of the string is 255 characters, unless you use the implied form of the **RUN** command. The implied form enables you to use up to 512 characters in a string (less the number of characters in your other parameters). Refer to "Operation Notes" for information about the implied form.

**STDIN** Specifies the file used as `$STDIN` by the program that you want to execute. If you omit this parameter or if you do not specify anything after the equal sign (`;STDIN=Return`, for instance), then **STDIN** defaults to the standard list device for the job or session.

## RUN

The choices for this parameter are as follows:

- \*formaldesig* Indicates the formal file designator for a file previously specified in a file equation.
- fileref* Indicates the name of an existing permanent or temporary disk file.
- \$NULL** Indicates the actual file designator of a system-defined file that is always handled as an empty file. When a program reads from **\$STDIN**, which is equated to **\$NULL**, it receives an end-of-file condition.

## STDLIST

Specifies the file used as **\$STDLIST** by the program you want to execute. If you omit this parameter or if you do not specify anything after the equal sign (**;STDLIST=Return**, for instance), then **STDLIST** defaults to the standard list device for your session (terminal/screen) or job (job listing).

The choices for this parameter are as follows:

- \*formaldesig* Indicates the formal file designator for a file previously specified in a file equation.
- fileref* Indicates the name of an existing permanent or temporary disk file.
- NEW** Means that the file name cannot already exist.
- \$NULL** Indicates the actual file designator of a system-defined file that is always handled as an empty file. When referenced by a program as **\$STDLIST**, the system accepts the associated write request, but does not produce physical output; therefore, you can use **\$NULL** to discard unneeded output from an executing program.

## RUN

### Operation Notes

#### ■ Usage

You can enter this command from a session or a job. You cannot enter this command from a program unless you or the calling program have process handling (PH) capability. Pressing **Break** suspends execution of this command. Execution continues when you enter the **RESUME** command. You can stop execution via the **ABORT** command.

You cannot enter this command directly from break mode. If you do, the system prompts you to abort the previously suspended program. If you reply **NO**, the **RUN** command does not execute. If you reply **YES**, the suspended program aborts and the **RUN** command executes.

#### ■ Implied form of the command

You can use an *implied* form of the **RUN** command by omitting the command name **RUN** and entering the name of the program along with either the **INFO** or **PARM** parameters. (No other **RUN** command parameters are supported.)

The native mode parser, rather than the compatibility mode parser, is used when you enter the implied form of the command. Consequently, you can use quotes (” or ’) with the program file name and/or the **;INFO=** parameter. Quotes are not required if the parameter does not contain delimiter characters, such as a blank, a comma, a semicolon, quotemarks, or an equal sign.

### Examples

- To run the program **TESTPROG** with **STDIN** set to an old disk file named **INPUT** and **\$STDLIST** set to the line printer, enter:

```
:FILE LPFILE;DEV=LP
:RUN TESTPROG;STDIN=INPUT;STDLIST=*LPFILE
```

- To set **\$STDLIST** to a temporary disk file named **RESULTS** that the **RUN** command automatically creates, enter:

```
:RUN TESTPROG;STDLIST=RESULTS,NEW
```

## **RUN**

- To use the `INFO=` parameter to pass a string to the program, enter:

```
RUN MYPROG;INFO= "A TEST WITH ""AND"" CHARACTERS"
```

This examples shows "AND" with an extra pair of quotation marks, resulting in the following string passed to the program:

```
A TEST WITH "AND" CHARACTERS
```

- To pass the same string to the program using the implied form of the command, enter:

```
:MYPROG "A TEST WITH ""AND"" CHARACTERS"
```

or

```
:MYPROG 'A TEST WITH "AND" CHARACTERS'
```

### **Related Commands**

```
LINK
PREP
XEQ
```

---

## SECURE

This command reinstates all file security provisions that you previously suspended with the **RELEASE** command.

### Syntax

**SECURE** *filereference*

### Parameters

*filereference* Specifies the actual file designator for which you want to reinstate file access control. The *filereference* can be either in MPE or HFS syntax.

#### MPE Syntax

If the *filereference* does not begin with a dot or a slash, it is parsed according to the MPE syntax and has the form:

*filename* [/lockword] [.groupname] [.acctname]]

If the file has a lockword, you must specify it; otherwise, the system prompts you for it. If you do not specify *groupname.acctname*, the system assumes the logon group and account.

#### HFS Syntax

If the *filename* begins with a dot (.) or a slash (/), it is parsed according to HFS syntax.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

You can use this command only for permanent disk files you created. Under default system security provisions, the file must be in your logon account and must belong to your logon or home group.



## SECURE

### ■ Checking the file status

You can enter the `LISTFILE` command to determine if a file is currently released or secured. Refer to the `LISTFILE` command in this book for more information.

### ■ Access control definition

An access control definition (ACD) overrides file access controls whether or not you have released or secured the file.

### Example

- To reinstate file access control previously in effect for the file named `FILE1`, enter:

```
:SECURE FILE1
```

### Related Commands

```
ALTSEC
LISTF
LISTFILE
RELEASE
```

---

## SETCLOCK

This command alters the system time or system time zone.

### SYNTAX

$$\text{SETCLOCK} \left\{ \begin{array}{l} \text{DATE= } \textit{date spec}; \text{ TIME= } \textit{time spec} \left[ \begin{array}{l} ;\text{GRADUAL} \\ ;\text{NOW} \end{array} \right] \\ \text{CORRECTION= } \textit{correction spec} \\ \text{TIMEZONE= } \textit{time zone spec} \\ ;\text{CANCEL} \end{array} \right\}$$

### Parameters

*date spec* A specification of local date in the form *mm/dd/yy[yy]*. The year may be expressed in two or four digits. If a date is provided, a time must also be provided.

*time spec* A specification of local time in the form *hh:mm[:ss]* where seconds are optional. This specification uses a 24-hour clock; it is not permissible to specify time using A.M. or P.M. If a time is provided, a date must also be provided.

The operating system will experience problems if the system date and time are too close to the base time of midnight, January 1, 1970. Therefore, for proper system operation this command requires the date and time to be later than ten minutes past midnight on January 1, 1970.

*correction spec* An integer specifying the desired change in the system time. The units are seconds. Thus a positive correction will cause the system clock to advance by the specified number of seconds, while a negative correction will cause the system clock to slow by the specified number of seconds.

*time zone spec* A specification of the time zone in the form *hh:mm*, preceded by a required “W” or “E” to specify the Western or Eastern Hemisphere. Thus a specification of W7:00 represents a seven-hour displacement from Universal Time (GMT) with the time zone being in the Western Hemisphere.

## SETCLOCK

Providing a *time zone spec* is the only way to change the system time and maintain both local and Universal Time (GMT) accurately. See the Operation Notes section for details.

- GRADUAL** This option is meaningful only when the date and time specifications are provided. **GRADUAL** causes the system clock to speed up or slow down until the time change is completed, at which time the system clock will resume its normal pace. **GRADUAL** is the default for the Date-Time form of the command.
- NOW** This option is meaningful only when the date and time specifications are provided. **NOW** forces the change to be immediate. See the warning in the Operation Notes section about the dangers of changing the system time immediately.
- CANCEL** Cancels a current time correction. Any correction which has already taken place before the cancellation will remain; this option does not undo a correction which has already been accomplished. See the Operation Notes and Examples sections for details.

### Operation Notes

You can use the **SETCLOCK** command to change the system time or to change the system's time zone.

Changing the system time or time zone does not affect any interval timers in effect. Thus, a **PAUSE** for a given time duration will maintain that same duration regardless of how the system time is changed.

Changing the system time or time zone will cause any jobs streamed with a time specification (;AT=, ;DAY=, ;DATE= or ;IN=) to be introduced in accordance with the newly-changed system time. Thus, a job streamed with ;AT=9:00 will be introduced when the changed system time is equal to 9:00.

You can use **SETCLOCK** to set a date and time, a time correction, or a time zone. The Date-Time form, the Correction form, and the Time Zone form are mutually exclusive; for instance, the user may not provide specifications for both a time correction and a time zone in a single command.

## SETCLOCK

Use the Date-Time and Correction form of the command for slight adjustments of the system time. For example, these forms would be used to move the time forward or backward slightly in order to keep the system time synchronized with an external time source. Both local and Universal (GMT) time are adjusted.

Use the Time Zone form of the command for the larger time changes required to move the system to a new time zone, such as moving between Standard Time and Daylight Savings Time. This form of the command alters the local time without changing Universal Time.

**Date-Time:** If the Date-Time form of the command is used, the system time is adjusted to the specified date and time. This adjustment is gradual by default. It may be made immediate if ;NOW is specified and the user has System Manager (SM) capability.

**Correction:** If the Correction form of the command is used, the system time is adjusted forward or backward by the amount of the correction. This adjustment is always gradual.

**Time Zone:** If the Time Zone form is used, local time is adjusted to match that of the specified time zone. In addition, the system time zone offset is changed to reflect the new time zone.

### The Use of The Time Zone Offset

On the HP3000 Universal Time (GMT) is calculated by starting with local time and adding or subtracting a time zone offset. When changing time zones (such as moving from Standard to Daylight Savings Time and back) the local time is altered, but this change must not affect Universal Time. To prevent Universal Time from being altered, both the local time and the system time zone offset must be adjusted. **Therefore, using the Time Zone form of this command is the only way to accurately change time zones.**

If the Date-Time or Correction form of the command is used, Universal Time will drift along with local time. Thus, the Date-Time and Correction forms of this command should only be used to adjust the clock for drift, not to change time zones.

### Results of the Time Zone Form

## SETCLOCK

- If the change in time zone is to a later time (a change to Daylight Savings Time or an “Eastern” geographic movement), both local time and the time zone offset are changed immediately.

The effect is that users of local system time will see an immediate jump forward to the new time zone, while users of Universal Time will see no change.

- If the change in time zone is to an earlier time (a change from Daylight Savings to Standard Time or a “Western” geographic movement), the time zone offset is changed immediately. Then the local time slows down until the system time corresponds to the time in the new time zone.

The effect is that users of local system time will see a gradual slowdown to match the new time zone, while users of Universal Time will see an immediate forward jump, then a slowdown until the system time again matches “real” Universal Time.

This method of changing time zones ensures that no out-of-sequence time stamps will occur either in local time or in Universal Time.

### How a Gradual Time Change Works

Whether the Date-Time or a Correction form is used, the default method of changing the time is to gradually speed up or slow down the system clock until the change is achieved. Thus, even when a previous time is requested, the system clock will still move forward, although at a slower pace than real time. This slower pace will continue until the desired time “catches up” with the system clock. Because of the system clock’s forward motion, there will never be a case where two consecutive timestamps appear to be out of sequence and where system time appears to run backwards.

This change in clock speed is accomplished by establishing a system time correction which is gradually consumed. During this time the system clock speeds up or slows down as necessary. When the correction reaches zero, the system clock resumes its normal pace. The time it takes to consume the correction will be much longer than the correction itself. Thus, a correction of a negative one hour (-3600 seconds) may take several hours of wall time to complete. In general the rate of the correction depends on the load on the system. The correction rate will be slowed down by frequent timestamp

## **SETCLOCK**

requests, file accesses and frequent operating system activity such as context switches.

### **Results of the ;CANCEL Parameter**

Any time during an on-going correction, issuing this command with the ;CANCEL parameter will immediately set the correction to zero and cause the system clock to resume its normal pace. Any previous correction will remain. When this option is used, the system will report the amount of correction which was cancelled.

### **How a System Time Change Affects Accounting Information**

Changing the system time, even gradually, may cause accounting CONNECT-MINUTES to be distorted. Anyone logging on before the change and then logging off after the change is completed will have their accounting CONNECT-MINUTES data distorted; if the time change is forward, CONNECT-MINUTES will be increased by the amount of the time change, and if the time change is backward, CONNECT-MINUTES will be decreased by the amount of the time change.

### **Dangers in Using the ;NOW Parameter**

The ;NOW parameter permits immediate forward or backward time changes. However, several dangerous situations can occur:

- Any applications which rely on the forward progression of time may give inconsistent results if the time is immediately set backwards. Such applications include the processing of timestamped transactions in which the sequence of those transactions is important.
- In order to recover data in case of an unexpected hardware or software failure, some applications require that the system time must never seem to go backwards. For instance, some applications log transactions to a circular file. These transactions are timestamped, and if the transactions must be recovered, the recovery program determines the end of data by looking for timestamps which are out of sequence. If the system time is set backwards immediately, transactions which occur after the time change may not be recovered. Therefore, do not set the time backwards using the ;NOW option if there are applications which log their transactions using timestamps.
- Accounting CPU-SECONDS data may be distorted. The user whose process was active during an immediate forward or backward change might seem to

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## SETCLOCK

have a CPU-SECONDS time which is an extremely large positive or negative number.

- STORE/RESTORE, TurboSTORE/XL, or any other file archive system based on dates or times may not store or restore the files in the expected manner, since some files may have creation or access times in the future or may even have access times which precede their creation times.
- Some compilation tools like MAKE rely on the relative modification dates of the files in the compilation unit. Setting the system time backward and then modifying the main file in the compilation unit may force an unnecessary full compilation, since the main file may have an earlier modification time than the files it depends on. Setting the system time backward and then changing a file needed by the main file will cause MAKE to think that the changed file's modification time precedes that of the main file. Thus, the changed file will not be included in the recompilation.

This list is only meant to include a few of the dangers associated with an immediate time change; this list does not represent all of the problems likely to be encountered. **Therefore, if the ;NOW option must be used, it should be used only with a full knowledge of its effects on the system's workload.**

### Use

You can use this command may be issued from a session, job, program, or in BREAK. Pressing **Break** has no effect on this command.

Diagnostician (DI) and either Operator (OP) or System Manager (SM) capabilities are required to issue this command. Additionally, System Manager (SM) capability is required to use the ;NOW parameter.

### Examples of Date-Time and Correction Forms:

The following example illustrates setting the system time by providing a date and time:

```
:SETCLOCK DATE=07/04/1993;TIME=15:00
```

The following example illustrates providing a time correction to advance the system time by one hour.

```
:SETCLOCK CORRECTION= +3600
```

## SETCLOCK

or

```
:SETCLOCK CORRECTION= 3600
```

Both of the above examples cause Universal Time (GMT) to change as well as local time, and therefore while they are useful in correcting the system time for drift (time gain or loss), they are not accurate ways to change time zones.

The following example illustrates setting a time correction, executing a :SHOWCLOCK command, cancelling the correction, then again executing a :SHOWCLOCK command. Note that by the time of the first :SHOWCLOCK the correction has already begun to be consumed.

```
:SETCLOCK CORRECTION= -3600
```

```
:SHOWCLOCK
```

```
SYSTEM TIME: FRI, JUL 24, 1987, 8:47:35 AM
CURRENT TIME CORRECTION: -3568 SECONDS
TIME ZONE: 7 HOURS 0 MINUTES WESTERN HEMISPHERE
```

```
:SETCLOCK; CANCEL
```

```
CORRECTION OF -3550 SECONDS HAS BEEN CANCELLED
```

```
:SHOWCLOCK
```

```
SYSTEM TIME: FRI, JUL 24, 1987, 8:52:53 AM
CURRENT TIME CORRECTION: 0 SECONDS
TIME ZONE: 7 HOURS 0 MINUTES WESTERN HEMISPHERE
```

Note that in the example above the system clock was slower than normal for several minutes. Cancelling the correction did not undo that change; it merely prevented any further time change. Thus after this sequence of commands, the system clock is set to a slightly earlier time than if no :SETCLOCK command had been issued.



## SETCLOCK

### Examples of the Time Zone Form:

#### Moving from Standard Time to Daylight Savings Time:

The following example illustrates changing the system time zone offset from 8 hours 00 minutes in the Western Hemisphere (Pacific Standard Time) to 7 hours 00 minutes in the Western Hemisphere (Pacific Daylight Savings Time). This command will cause local time to jump forward immediately one hour. Universal Time will be unchanged.

```
:SETCLOCK TIMEZONE=W7:00
```

```
SYSTEM TIME: SUN, APR 4, 1993, 7:12:00 AM
CURRENT TIME CORRECTION: 3600 SECONDS
TIME ZONE: 7 HOURS 0 MINUTES WESTERN HEMISPHERE
```

#### Moving from Daylight Savings Time to Standard Time:

The following example illustrates changing the system time zone offset from 7 hours 00 minutes in the Western Hemisphere (Pacific Daylight Savings Time) back to 8 hours 00 minutes in the Western Hemisphere (Pacific Standard Time). This command will cause local time to slow down until it loses one hour. Users of Universal Time will see an immediate one-hour jump forward, followed by a slowdown until system Universal Time again matches real Universal Time.

```
:SETCLOCK TIMEZONE= W8:00
```

```
SYSTEM TIME: SUN, OCT 31, 1993, 06:23:14 AM
CURRENT TIME CORRECTION: -3600 SECONDS
TIME ZONE: 8 HOURS 0 MINUTES WESTERN HEMISPHERE
```

### Related Commands

```
SHOWCLOCK
SHOWTIME
```

---

## SHOWCLOCK

This command displays information about the system date and time.

### SYNTAX

```
SHOWCLOCK
```

### Parameters

None.

### Operation Notes

Use this command to print the current time, date, time correction in effect, and time zone. See the SETCLOCK command for information about time correction and time zone.

### Use

You can issue this command from a session, job, program, or in BREAK. Pressing **Break** has no effect on this command.

### Example

```
:SHOWCLOCK
```

```
SYSTEM TIME: FRI, JUL 24, 1987, 8:47:35 AM
CURRENT TIME CORRECTION: -3428 seconds
TIME ZONE: 7 HOURS 0 MINUTES WESTERN HEMISPHERE
```

### Related Commands

```
SHOWTIME
```

---

## SHOWDEV

The `SHOWDEV` command displays status information for all input and output devices on the system.

### Syntax

```
SHOWDEV [ldev
 [classname]
```

### Parameters

- ldev* Specifies the logical device number of the device for which status information is to be displayed. This number is unique for each device. Without this parameter or the *classname* parameter, the system displays status information for all devices on the system.
- classname* Specifies the class name of device(s) for which status information is to be displayed. This name can apply to several devices. Without this parameter or the *ldev* parameter, the system displays status information for all devices on the system.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.

## SHOWDEV

### ■ Command field descriptions

When you enter the SHOWDEV command, the display appears in the following format:

| LDEV | AVAIL   | OWNERSHIP      | VOLID | DEN | ASSOCIATION |
|------|---------|----------------|-------|-----|-------------|
| 1    | DISC    | 43 FILES       |       |     |             |
| 6    | SPOOLED | SPOOLER OUT    |       |     |             |
| 8    | AVAIL   |                |       |     |             |
| 20 A | UNAVAIL | #S311: 7 FILES |       |     |             |

Definitions for each of the column fields are as follows:

|         |                                                                                                          |
|---------|----------------------------------------------------------------------------------------------------------|
| LDEV    | Specifies the logical device number and can include one of the following:                                |
| J       | Accepts jobs.                                                                                            |
| D       | Accepts data.                                                                                            |
| A       | Accepts jobs and data.                                                                                   |
| AVAIL   | Lists the availability of devices and disks as follows:                                                  |
| AVAIL   | The device is available as a real, nonshareable device.                                                  |
| SPOOLED | The device is available for input or output spooling.                                                    |
| UNAVAIL | The device is unavailable; it is controlled by a job, a session, or a system process, such as a spooler. |
| DISC    | The device is a disk and is always available.                                                            |

## SHOWDEV

|                 |                                                                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| DISC (RPS)      | The device is a CS-80 disk on which rotational position sensing (RPS) has been enabled.                                                           |
| OWNERSHIP       | Specifies device ownership and can include one of the following:                                                                                  |
| SYS             | The system controls ownership. If <i>#nnn</i> appears, it specifies the process identification number (PIN) of the controlling process (program). |
| SPOOLER IN      | The input spooler controls ownership.                                                                                                             |
| SPOOLER OUT     | The output spooler controls ownership.                                                                                                            |
| <i>Jnnn</i>     | The indicated job controls ownership.                                                                                                             |
| <i>Snnn</i>     | The indicated session controls ownership.                                                                                                         |
| <i>nn</i> FILES | <i>nn</i> number of files are currently in use on a disk.                                                                                         |
| DOWN            | The device is offline as requested by the system administrator with the DOWN command.                                                             |
| DP              | The device is being taken offline. (A DOWN command operation is pending.)                                                                         |
| VOLID           | Specifies the volume identification and can include one of the following:                                                                         |
| IBM             | The named magnetic tape volume has a label written in the IBM format.                                                                             |
| ANSI            | The named magnetic tape volume has a label.                                                                                                       |
| NOLABEL         | The named magnetic tape volume has no label. This is the default.                                                                                 |

## SHOWDEV

|             |                                                                                                                         |
|-------------|-------------------------------------------------------------------------------------------------------------------------|
| DEN         | Specifies the tape density and can include one of the following:                                                        |
| 6250        | The density is 6250 bytes-per-inch (BPI).                                                                               |
| 1600        | The density is 1600 BPI, or the density of the tape is unrecognizable.                                                  |
| ASSOCIATION | Specifies the logical devices by device class that the system administrator has established with the ASSOCIATE command. |

### Examples

- To display the status of the device identified by logical device number 5, enter:

```
:SHOWDEV 5
LDEV AVAIL OWNERSHIP VALID DEN ASSOCIATION
 5 SPOOLED SPOOLER OUT
```

- To display the status of all devices of the device class CARD, enter:

```
:SHOWDEV CARD
LDEV AVAIL OWNERSHIP VALID DEN ASSOCIATION
 6 A AVAIL
```

### Related Commands

ASSOCIATE  
DOWN  
SHOWJOB  
SHOWPROC  
SPOOLER  
UP

## SHOWJOB

The SHOWJOB command displays the following information:

- number of jobs and sessions in each processing state
- current jobfence and job and session limits
- individual spooled and streamed jobs entered in the system

You can choose from three types of display formats.

### Syntax

```
SHOWJOB [[#] Snnn
 [#] Jnnn
 STATUS
 SCHED
 item[; item[; ...]]] [; *listfile]
```

### Parameters

- #Snnn** Specifies the session number (assigned by the system) of the session for which the status information is to be displayed. The information appears as described under “Operation Notes.” The default is that the status information for all jobs and sessions appears.
- #Jnnn** Specifies the job number (assigned by the system) of the job for which status information is to be displayed. The information appears as described under “Operation Notes.” The default is that the status information for all jobs and sessions appears.
- STATUS** Lists the number of jobs and sessions in each processing state and the current jobfence and job and session limits. This information appears as described under “Operation Notes.” The default is that the status information for all jobs and sessions appears.
- SCHED** Displays only the scheduled jobs. The information appears as described under “Operation Notes.”

## SHOWJOB

*item* A list of jobs and sessions whose status is displayed. The default is that the status information for all jobs and sessions is displayed. The syntax for this parameter appears below.

### Syntax for *Item*

$$\left[ \text{JOB} = \left\{ \begin{array}{l} @J \\ @S \\ @ \\ [jsname,] \text{username.acctname} \end{array} \right\} \right]$$
$$\left[ \left\{ \begin{array}{l} \text{INTRO} \\ \text{EXEC} \\ \text{SUSP} \\ \text{WAIT} \left[ \begin{array}{l} ,N \\ ,D \end{array} \right] \end{array} \right\} \right]$$

### Subparameters for *Item*

**JOB** A list of jobs and sessions for which status information is to be displayed. Use one of the following options:

@J Displays status information for all jobs.

@S Displays status information for all sessions.

@ Displays status information for all jobs and sessions. This is the default.

[*jsname*,] The *jsname* is an optional user-assigned name.

*username*.  
*acctname* The *username* is the user name that the account manager establishes.

The *acctname* is the name of the account that the system administrator establishes. You can use @ to replace the *jsname* or *username* in a specified account.

INTRO, EXEC, SUSP, or WAIT Displays the status of all jobs or sessions in a specified state.



## SHOWJOB

The **INTRO** parameter means that the job or session is being introduced.

The **EXEC\*** parameter means that the job or session is initializing.

The **EXEC** parameter means that the job or session is executing.

The **SUSP** parameter means that the **BREAKJOB** command has suspended the job or session.

The **WAIT** parameter means that no list devices are available for the job. The **WAIT** parameter has the following subparameters:

**N** Displays the status of nondeferred ready device files.

**D** Displays the status of deferred ready device files.

*\*listfile*

Specifies the formal file designator of the file on which the output listing is written. This parameter requires a backreference to a file equation.

The default characteristics of *listfile* are that it is a temporary file, has a record size of 256 bytes, is blocked one record per block, has carriage control (CCTL), and displays the date and time. You can override the default characteristics by using the **FILE** command.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts the execution of this command.

#### ■ Output format

Output appears in one of three possible formats or a combination of two of the formats.

- If you enter **SHOWJOB #Snnn** or **SHOWJOB #Jnnn**, the following format appears:

## SHOWJOB

```
JOBNUM STATE IPRI JIN JLIST INTRODUCED JOB NAME
#S16 EXEC 45 45 MON 7:08A TEST.JOB

JOBFENCE= 0; JLIMIT = 3; SLIMIT= 16
```

- If you enter SHOWJOB STATUS, the following format appears:

```
7 JOBS:
 0 INTRO
 0 WAIT; INCL 0 DEFERRED
 7 EXEC; INCL 7 SESSIONS
 0 SUSP
JOBFENCE= 0; JLIMIT= 3; SLIMIT= 16
```

- If you enter SHOWJOB SCHED, the following format appears:

```
CURRENT: 5/13/85 1600
```

```
JOBNUM STATE IPRI JIN JLIST SCHEDULED-INTRO JOB NAME
#J38 SCHED 3 10 6 5/16/91 11:24 PAPERS,JON.OSE
#J23 SCHED 8 10 PP 5/25/91 8:01 REPORT,MGR.OSE
#J25 SCHED 8 10 LP 7/12/91 18:05 TEXT,MGR.LPUE
```

```
3 JOBS (DISPLAYED)
JOBFENCE=7; JLIMIT=2; SLIMIT=20
```

In the output shown above, the STATE field shows that the job is scheduled. The SCHEDULED-INTRO field shows the time and date that the job is to be introduced to the system. Note that the scheduled jobs are listed in the order in which they are to be introduced to the system.

If you enter only the SHOWJOB command, the formatted output for jobs and sessions in the INTRO, WAIT, and EXEC states appear first, and the formatted data for jobs in the SCHED state appears last.

## SHOWJOB

### Examples

- To display all jobs and sessions in the system, enter:

```
:SHOWJOB
```

```
JOBNUM STATE IPRI JIN JLIST INTRODUCED JOB NAME
#S745 EXEC 29 29 MON 2:53P DL,SPL.ALANG
#S746 EXEC 26 26 MON 2:53P CLI.AOPSYS
```

```
2 JOBS:
```

```
 0 INTRO
```

```
 0 WAIT; INCL 0 DEFERRED
```

```
 2 EXEC; INCL 2 SESSIONS
```

```
 0 SUSP
```

```
JOBFENCE= 2; JLIMIT= 1; SLIMIT= 16
```

- To determine the number of jobs and sessions in each processing state, the current jobfence, and the job and session limits, enter:

```
:SHOWJOB STATUS
```

```
6 JOBS:
```

```
 0 INTRO
```

```
 0 WAIT; INCL 0 DEFERRED
```

```
 6 EXEC; INCL 6 SESSIONS
```

```
 0 SUSP
```

```
JOBFENCE= 0; JLIMIT= 3; SLIMIT= 16
```

- To override the default characteristics of *listfile* with the **FILE** command, and then show the output produced with the new *listfile* characteristics, enter the following sequence of commands:

## SHOWJOB

```
:FILE A;REC=40,1,F,ASCII;NOCCTL
:SHOWJOB;*A
:SAVE A
:PRINT A
```

The output appears as shown:

```
HP32212A.03.30 FILE COPIER (C) HEWLETT-PACKARD CO. 1990
```

```
MON, AUG 5, 1991, 7:54 AM
```

| JOBNUM | STATE | IPRI | JIN | JLIST | INTRODUCED | JOB NAME           |
|--------|-------|------|-----|-------|------------|--------------------|
| #S46   | EXEC  |      | 20  | 20    | MON 7:14A  | OPERATOR.SYS       |
| #S45   | EXEC  |      | 47  | 47    | MON 6:37A  | USER.PUBS          |
| #S47   | EXEC  |      | 10S | LP    | MON 7:26A  | SUPPORT.DOC        |
| #S48   | EXEC  |      | 102 | 102   | MON 7:28A  | USER.TECH          |
| #J19   | EXEC  |      | 28  | 28    | MON 6:41A  | JON.OSE            |
| #S49   | EXEC* |      | 34  | 34    | MON 7:31A  | TEXT.LPUE          |
| #J21   | EXEC  |      | 10S | LP    | MON 7:15A  | DELIVER,MAIL.MAIL  |
| #J22   | EXEC  |      | 10S | LP    | MON 7:14A  | RSP00LJ,RSP00L.SYS |

```
8 JOBS (DISPLAYED):
```

```
0 INTRO
```

```
0 WAIT; INCL 0 DEFERRED
```

```
8 EXEC; INCL 5 SESSIONS
```

```
0 SUSP
```

```
JOBFENCE= 6; JLIMIT= 4; SLIMIT= 50
```

```
EOF FOUND IN FROMFILE AFTER RECORD 17
```

```
18 RECORDS PROCESSED *** 0 ERRORS
```

```
END OF SUBSYSTEM
```

```
:
```

## **SHOWJOB**

Note that the **SHOWJOB** command reports a job or session as **EXEC\*** when it is initializing. After initialization is complete, the state changes to **EXEC**. The number of jobs and sessions shown in the **EXEC** state is the sum of the jobs and sessions in both **EXEC** and **EXEC\*** states.

### **Related Commands**

- ABORTJOB
- ALTJOB
- BREAKJOB
- JOBFENCE
- LIMIT
- RESUMEJOB
- SHOWPROC

---

## SHOWME

The **SHOWME** command displays the status of the current job or session. The major items displayed are as follows:

- session number
- logon account name
- logon group name
- user name
- release number
- product version
- user version
- current time and date
- logon time
- CPU time consumed
- connection time
- LDEV number

### Syntax

SHOWME

### Parameters

None.

### Operation Notes

- Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** aborts execution of this command.

## SHOWME

### Example

- To display the status of the current job or session, enter:

```
:SHOWME
USER: #S485,MGR.DSUSER,PUB (NOT IN BREAK)
RELEASE: A.41.00 MPE XL HP31900 A.51.07 USER VERSION: A.41.00
CURRENT: TUE, AUG 27, 1991, 3:33 PM
LOGON: TUE, AUG 27, 1991, 9:51 AM
CPU SECONDS: 6 CONNECT MINUTES: 342
$STDIN LDEV: 28 $STDLIST LDEV: 28
```

In the example above, the fields show the following information:

| FIELD        | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| USER         | Shows the job or session number, account, user, and group. The messages (IN PROGRAM), (IN BREAK), or (NOT IN BREAK) indicate whether you entered SHOWME programmatically or directly from the MPE/iX command interpreter.                                                                                                                                                                                                                                                                                                            |
| RELEASE      | Shows two version, update level, and fix ( <i>v.uu.ff</i> ) numbers. The first <i>v.uu.ff</i> is the release number that shows the operating system release identifier. This number is established by Hewlett-Packard during their build of the entire software release package and provides an identity for the release.<br><br>The second <i>v.uu.ff</i> is the product number. This number is established by Hewlett-Packard and serves as a unique identifier for service requests (SRs) submitted against the operating system. |
| USER VERSION | Shows the version, update level, and fix ( <i>v.uu.ff</i> ) assigned to your system. This can be given a value during SYSGEN and enables you to identify any of                                                                                                                                                                                                                                                                                                                                                                      |

## **SHOWME**

your software changes, such as patch level and third-party software.

**CURRENT**

Shows the current time and date.

**LOGON**

Shows the logon time.

**CPU SECONDS**

Shows the amount of central processor unit (CPU) time in seconds that this job or session has consumed.

Note that **SHOWME** calculates CPU usage by adding the local CPU usage of the current process to the accumulated total of all terminated processes. The CPU usage listed for a programmatic **SHOWME**, therefore, would rarely agree with that for a **SHOWME** entered in break mode.

**CONNECT MINUTES**

Shows the amount of time in minutes the job or session has been connected.

**\$STDIN LDEV**

Shows the logical device number of the job or session's standard input device.

**\$STDLIST LDEV**

Shows the standard list device number.

## **Related Commands**

None



## **SHOWTIME**

The **SHOWTIME** command displays the current time and date, as indicated by the system clock.

### **Syntax**

`SHOWTIME`

### **Parameters**

None.

### **Operation Notes**

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode.

### **Example**

- To display the current date and time, enter:

```
:SHOWTIME
MON, MAY 6, 1991, 8:47 AM
```

### **Related Commands**

None

---

## SPOOLER

The SPOOLER command enables you to do the following:

- Show the status of the spooling process
- Enable or disable spooling for a specified logical device, device name, or all devices of a device class
- Start, stop, suspend, and resume spooler printing processes
- Release files from the spooler process

### Syntax

$$\text{SPOOLER [DEV=] } \left\{ \begin{array}{l} \textit{ldev} \\ \textit{devclass} \\ \textit{devname} \end{array} \right\}$$

Plus one of the following options:

#### Status option:

{ ;SHOW }

#### Enable/Disable option:

{ ;OPENQ } [ ;SHOW ]  
{ ;SHUTQ }

#### Start option:

{ ;START } [ ;OPENQ ] [ ;SHUTQ ] [ ;SHOW ]

#### Stop option:

{ ;STOP } [ ;FINISH ] [ ;OPENQ ] [ ;SHUTQ ] [ ;SHOW ]  
[ ;NOW ]

## SPOOLER

### Suspend option:

```
{ ;SUSPEND } [;KEEP] [;FINISH] [;OPENQ] [;SHOW]
 [;NOKEEP] [;NOW] [;SHUTQ]
```

### Resume option:

```
{ ;RESUME } [;OPENQ] [;SHOW]
 [;SHUTQ]
```

### Release option:

```
{ ;RELEASE } [;OPENQ] [;SHOW]
 [;SHUTQ]
```

## Parameters

|                 |                                                                                                                                                                                                                                                                                                                                           |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DEV             | Specifies the spooler device in one of the following forms:                                                                                                                                                                                                                                                                               |
| <i>ldev</i>     | Specifies the logical device number of the spooled device.                                                                                                                                                                                                                                                                                |
| <i>devclass</i> | Specifies the device class name of the spooled devices. The <i>devclass</i> must begin with a letter and consist of eight or fewer alphanumeric characters.                                                                                                                                                                               |
| <i>devname</i>  | Specifies the device name of the spooled device. The <i>devname</i> must begin with a letter and consist of eight or fewer alphanumeric characters. A device class name and a device name cannot be the same. If you enter an alphanumeric character string, the command searches the device class list first, then the device name list. |

### Status option:

|      |                                                                                                                                                                                            |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SHOW | Displays the status of the spooling process(es) associated with the specified device(s). This parameter reflects the updated state of the process(es) when the command finishes executing. |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **SPOOLER**

### **Enable/Disable option:**

- OPENQ** Enables spooling for *ldev*, *devclass*, or *devname*. This enables users to generate spool files on the device(s). This parameter is the default for the **START** option.
- SHUTQ** Disables spooling for *ldev*, *devclass*, or *devname*. This prevents users from generating spool files on the device(s). This parameter is the default for the **STOP** option.
- SHOW** For information about this parameter, refer to **SHOW** for the **STATUS** option.

### **Start option:**

- START** Creates and activates a new spooler process to own and manage the device and print spool files destined for the device. If a class is specified, a spooling process is created and activated for each device in the class. If you do not specify either the **OPENQ** or **SHUTQ** option, **OPENQ** is the default.
- OPENQ** For information about this parameter, refer to **OPENQ** for the Enable/Disable option.
- SHUTQ** For information about this parameter, refer to **SHUTQ** for the Enable/Disable option.
- SHOW** For information about this parameter, refer to **SHOW** for the Status option.

### **Stop option:**

- STOP** Terminates the spooling process associated with the specified device. If you specify a class, spooling processes terminate for all devices in the specified class. When you specify this parameter, the following message appears:

**Output spooler, LDEV #ldev: Stopped.**

If you do not specify either the **FINISH** or **NOW** parameters, **NOW** is the default. If you do not specify either the **OPENQ** or **SHUTQ** parameter, **SHUTQ** is the default.

Because large amounts of data are buffered in the file system and the device, an output device may continue to print,

## SPOOLER

appearing as though the **STOP** parameter has not affected printing. This happens because the spooler stops sending data to the device when the command is received, but must wait until all buffered data has been printed before stopping. Depending on both the content of the data and the amount of buffering, this may require a significant part of a page or even several pages.

If you stop the spooler while it is printing a file, the spooler saves the page number of the last complete page that was printed. Whenever any spooler subsequently selects the file for printing, output resumes at the page number following the saved page number.

|               |                                                                                                                                   |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>FINISH</b> | Directs the spooler to finish printing the currently active spool file and then stop.                                             |
| <b>NOW</b>    | Directs the spooler to immediately stop printing the currently active spool file. This is the default for the <b>STOP</b> option. |
| <b>OPENQ</b>  | For information about this parameter, refer to <b>OPENQ</b> for the Enable/Disable option.                                        |
| <b>SHUTQ</b>  | For information about this parameter, refer to <b>SHUTQ</b> for the Enable/Disable option.                                        |
| <b>SHOW</b>   | For information about this parameter, refer to <b>SHOW</b> for the Status option.                                                 |

### Suspend option:

|                |                                                                                                                                                             |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SUSPEND</b> | Suspends output to one or more spooled devices so that the spooler devices become inactive. When you specify this parameter, the following message appears: |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|

Output spooler, LDEV *#ldev*: Suspended.

If you do not specify either the **FINISH** or **NOW** parameters, **NOW** is the default. If you do not specify either the **KEEP** or **NOKEEP** parameter, **KEEP** is the default.

Because large amounts of data are buffered in the file system and the device, an output device may continue to print, appearing as though the **SUSPEND** parameter has not affected

## **SPOOLER**

printing. This is because the spooler stops sending data to the device when the command is received, but must wait until all buffered data has been printed before stopping. Depending on both the content of the data and the amount of buffering, this may require a significant part of a page or even several pages.

If you suspend the spooler while it is printing a file and the spooler does not retain the file, the spooler saves the page number of the last complete page that was printed. Whenever any spooler subsequently selects the file for printing, output resumes at the page number following the saved page number.

### **KEEP**

Directs the device to retain ownership of the spool file that it is currently processing. This is the default. This parameter is valid only under the following conditions:

- The spooler is actively processing a file or is suspending.
- You do not specify the **FINISH** parameter.

### **NOKEEP**

Directs the spooler to close the spool file that it is currently processing. This parameter is valid only under the following conditions:

- The spooler is actively processing a file or is suspending.
- You do not specify the **FINISH** parameter.

The spooler does the following when you include the **NOKEEP** parameter:

- stops sending data after the current record
- ejects a page
- saves the last completely printed page
- prints a trailer with (**INCOMPLETE**) on it if trailers are enabled
- returns the file to the ready state

Whenever any spooler subsequently selects the file for printing, output resumes at the page number following the saved page number. The file's header and trailer include (**RESUMED**) if printing starts anywhere other than the first page.

### **FINISH**

For information about this parameter, refer to **FINISH** for the **STOP** option.

## SPOOLER

|       |                                                                                     |
|-------|-------------------------------------------------------------------------------------|
| NOW   | For information about this parameter, refer to NOW for the STOP option.             |
| OPENQ | For information about this parameter, refer to OPENQ for the Enable/Disable option. |
| SHUTQ | For information about this parameter, refer to SHUTQ for the Enable/Disable option. |
| SHOW  | For information about this parameter, refer to SHOW for the Status option.          |

### Resume option:

|        |                                                                                                                                                                |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RESUME | Resumes a suspended spooler process. In order for this parameter to function, the spooler must be in the SUSPEND state. Output resumes where it was suspended. |
| OPENQ  | For information about this parameter, refer to OPENQ for the Enable/Disable option.                                                                            |
| SHUTQ  | For information about this parameter, refer to SHUTQ for the Enable/Disable option.                                                                            |
| SHOW   | For information about this parameter, refer to SHOW for the Status option.                                                                                     |

### Release option:

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RELEASE | Directs a suspended output spooler to close (release) a currently retained spool file. The spool file was retained because you previously specified the SUSPEND;KEEP parameters.<br><br>When the spooler releases the file, the spooler saves the page number of the last complete page that was printed. Whenever any spooler subsequently selects the file for printing, output resumes at the page number following the saved page number. |
| OPENQ   | For information about this parameter, refer to OPENQ for the Enable/Disable option.                                                                                                                                                                                                                                                                                                                                                           |
| SHUTQ   | For information about this parameter, refer to SHUTQ for the Enable/Disable option.                                                                                                                                                                                                                                                                                                                                                           |

## SPOOLER

SHOW For information about this parameter, refer to SHOW for the Status option.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Except for the status option, pressing **Break** does not affect this command.

You can only enter this command from the console; however, you can enter this command from your terminal if your system administrator has used the ALLOW command to enable you to enter the command.

Anyone can use the status option; however, all other options are only available to console users or allowed users.

#### ■ Selective device errors

This command affects more than one process if applied to all devices in a class. Consequently, errors can occur for some of the devices, but not others.

For example, class LP consists of LDEVs 6, 11, and 19, and a spooler process already owns LDEV 11. The command SPOOLER LP;START would create and activate spooler processes for LDEVs 6 and 19, but would also generate the message DEVICE 11 IS ALREADY SPOOLED.

### Example

- To show the status of device name LP, enter:

```
:SPOOLER LP;SHOW
```

| LDEV | DEV    | SPSTATE  | QSTATE | OWNERSHIP   | SPOOLID |
|------|--------|----------|--------|-------------|---------|
| 6    | LDEV6  | IDLE     | OPENED | OUT SPOOLER |         |
| 14   | LDEV14 | *SUSPEND | OPENED | OUT SPOOLER | #0237   |
| 15   | LDEV15 | ACTIVE   | OPENED | OUT SPOOLER | #0264   |
| 19   | LDEV19 |          | OPENED | NO SPOOLER  |         |

The asterisk beside LDEV14 indicates that the SUSPEND state is pending.



## **SPOOLER**

### **Related Commands**

LISTSPF  
OPENQ  
SHOWDEV  
SHUTQ  
SPOOLF

---

## SPOOLF

The SPOOLF command enables you to alter, print, or delete spool files.

### Syntax

#### Alter option:

```
SPOOLF [IDNAME=] { spoolid
 (spoolid [, spoolid] ...) }
{ ;ALTER } [;DEV= { ldev
 devclass }] [;PRI=outpri] [;COPIES=numcopies]
[;SPSAVE] [;DEFER
 ;UNDEFER] [;SHOW]
```

#### Print option:

```
SPOOLF [IDNAME=] { fileset
 (fileset [, fileset] ...) }
{ ;PRINT } [;DEV= { ldev
 devclass }] [;PRI=outpri] [;COPIES=numcopies]
[;SPSAVE] [;DEFER
 ;UNDEFER] [;SHOW]
```

#### Delete option:

```
SPOOLF [IDNAME=] { spoolid
 (spoolid [, spoolid] ...) }
{ ;DELETE } [;SHOW]
```

**Parameters****Alter Option:**

**IDNAME** Specifies one or more spool file IDs, *spoolid*, in the form of *#Onnn*. The spooling subsystem assigns the IDs when the spool files are created. The *#* and the *O* are optional and are assumed if you do not supply them. As a shortcut, you can use *O@* to specify all output spool files.

If you have system manager (SM) or system supervisor (OP) capability, *O@* affects all output spool files on the system. If you have account manager (AM) capability, *O@* affects all output spool files created by users in the same account. If you do not have any of these capabilities, you are limited to alter only files that you have created.

**ALTER** Alters the characteristics of specified spool files. The **DEFER**, **DEV**, and **SPSAVE** parameters affect the **ALTER** option as follows:

- If you use **DEFER** or **DEV** for a spool file currently printing, the spooler process interrupts the printing. The spooler process saves the page number of the last complete page that was printed. The next time any spooler selects the file for printing, output resumes at the saved page number.
- Because large amounts of data are buffered in the file system and the device, an output device may continue to print, appearing as though **DEFER** and **DEV** have not affected printing. This is because the spooler stops sending data to the device when the command is received, but must wait until all buffered data has been printed before releasing the spool file. Depending on both the content of the data and the amount of buffering, this may require a significant part of a page or even several pages.
- You cannot alter the attributes of spool files in the **SPSAVE** state.

**DEV** Specifies the device, which may have one of the following values:

## SPOOLF

*ldev* Specifies the logical device number of the spool file's new destination device. If the spool file is in the print state, it returns to the ready state. It can immediately enter the print state on *ldev* if it meets all requirements.

The system interrupts spool file printing only if the newly specified target *ldev* differs from the previous target *ldev*.

*devclass* Specifies the new destination device class name for the spool file. If the spool file is in the print state, it returns to the ready state. It can immediately enter the print state on a device in *devclass* if it meets all requirements.

The *devclass* parameter must begin with a letter and consist of eight or fewer alphanumeric characters. The system does not allow the same name to be configured as a device class name and a device name.

The system interrupts spool file printing only if the newly specified target *devclass* differs from the previous target *devclass*.

*devname* Specifies the device name of the spool file's new destination device. If the spool file is in the print state, it returns to the ready state. It can immediately enter the print state on *devname* if it meets all requirements. This occurs even if *devname* is the same as the device currently printing the file.

The *devclass* parameter must begin with a letter and consist of eight or fewer alphanumeric characters. The system does not allow the same name to be configured as a device class name and a device name.

## SPOOLF

The system interrupts spool file printing only if the newly specified target *devname* differs from the previous target *devname*.

- PRI** Specifies the output priority of the designated spool files, where 0 is the lowest priority and 14 is the highest priority. You can specify an *outpri* of 14 only from the console or if you have system supervisor (OP) capability; otherwise, the highest priority is 13.
- COPIES** Specifies the number of copies, *numcopies*, of the designated spool files to be printed. The allowable range is from 1 through 65535.
- SPSAVE** Specifies that the selected spool files are not to be deleted after the last copies have printed. Instead, the spool files are retained in the **HPSPool** account in the **SPSAVE** state until you manually delete them. You cannot, however, save private spool files.
- When a file enters the **SPSAVE** state, the system sets the priority to 8 and the number of copies to 1.
- DEFER** Changes the spool file's state to **DEFER**. If the spool file is currently in the print state, its spooler is notified and printing stops. The spool file's priority remains unchanged. If you use this parameter with the **PRINT** option, the system copies the spool file to **OUT.HPSPool** and links it to the spooling system, but the state of the spool file is **DEFER**. The spool file does not print until you enter a subsequent **SPOOLF ... ;UNDEFER**.
- If you use the **DEFER** parameter for any file in the **CREATE** state (open for original creation), the spool file only enters the **DEFER** state after it is completed (closed for the last time).
- UNDEFER** Changes a spool file's state from **DEFER** to **READY** and causes a spooler to start printing the spool file if the spool file is qualified to be printed by an idle printer. The spool file's priority remains unchanged.

## **SPOOLF**

**SHOW** Displays the results of the **SPOOLF** command. When you enter a **SPOOLF** command string, all parameters process before the **SHOW** parameter.

### **Print Option:**

**IDNAME** Specifies the set of files, *fileset*, to be printed. This parameter has the following form:

*filename[/lockword[.groupname[.accountname]]]*

If the file name or set is not fully qualified, the default is the user's current logon group and account. In batch mode, if any file in the set has a lockword, you must supply it with the command; therefore, the file cannot be part of a set that contains wildcards. This restriction does not apply in interactive mode, because the system prompts you for each required lockword. If you do not provide the correct lockword for either mode, the print option fails for the file and the command continues to process the remaining files.

**PRINT** Copies the specified file sets to the **HPSPPOOL** account and links the new output spool files into the spool queues for printing. This parameter is especially useful for generating additional copies of a spool file in the **SPSAVE** state.

You must have nonshareable device (ND) capability to use the **PRINT** option. You cannot print private files using this option.

**DEV** For information about this parameter, refer to **DEV** for the **ALTER** option.

**PRI** For information about this parameter, refer to **PRI** for the **ALTER** option.

**COPIES** For information about this parameter, refer to **COPIES** for the **ALTER** option.

**SPSAVE** For information about this parameter, refer to **SPSAVE** for the **ALTER** option.

**DEFER** For information about this parameter, refer to **DEFER** for the **ALTER** option.

## SPOOLF

**UNDEFER** For information about this parameter, refer to **UNDEFER** for the **ALTER** option.

**SHOW** For information about this parameter, refer to **SHOW** for the **ALTER** option.

### Delete Option:

**IDNAME** For information about this parameter, refer to **IDNAME** for the **Alter** option.

**DELETE** Purges all specified private or nonprivate spool files that you can access from the system.

If a spool file is not in use (opened by a user, or being printed or stored), it is purged immediately. If it is in use, the system places it in the **DELPND** state. The printer spooler process is notified, and printing stops at that point.

Because large amounts of data are buffered in the file system and the device, an output device may continue to print, appearing as though the **DELETE** option has not affected printing. This is because the spooler stops sending data to the device when the command is received, but must wait until all buffered data has been printed before stopping. Depending on both the content of the data and the amount of buffering, this may require a significant part of a page or even several pages.

The **DELETE** option can delete all output spool files in the **READY**, **PRINT**, **DEFER**, **SPSAVE**, or **PROBLM** states. The **DELETE** option cannot delete **\$STDIN** files. Use the **ABORTJOB** command for these files.

**SHOW** Refer to **SHOW** for the **Alter** option for information about this parameter.

## SPOOLF

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Any user can enter this command; however the user's capabilities determine which files the user can alter, print, or delete.

#### ■ Altering private spool files

With certain limitations, you can alter private spool files. You can only use the `PRI`, `DEFER`, `UNDEFER`, and `DELETE` parameters. If you have system manager (SM) capability, you can also use the `DEV` parameter.

#### ■ Problem state spool files

You can use the `ALTER` option on problem state spool files to alter the device attribute so that the spool file becomes ready again. Generally, the spool file is in the problem state because the target device of the spool file is invalid.

### Example

- To change the priority of all output spool files to 8 and show the results, enter:

```
:SPOOLF 00;ALTER;PRI=8;SHOW
```

| SPOOLID | JOBNUM | FILEDES   | PRI | COPIES | DEV | STATE | RSPFN | OWNER      |
|---------|--------|-----------|-----|--------|-----|-------|-------|------------|
| #414    | J5     | \$STDLIST | 8   | 1      | 16  | READY |       | ALIX.MKT   |
| #416    | J7     | HOTSTUFF  | 8   | 2      | 16  | READY |       | JACK.SALES |

### Related Commands

ABORTJOB  
ALTSPoolFILE  
DELETESPoolFILE  
LISTFILE  
LISTSPF  
PRINT  
PURGE  
SPOOLER





## STORE

An option specified on one line will operate on all files in the *filesetlist*.

*fileset* Specifies a set of files to be stored and optionally those files to be excluded from the STORE operation. The *fileset* parameter has the form:

```
filestostore[-filestoexclude[-filestoexclude[- . . .]]]
```

The system stores any file that matches *filestostore* unless the file also matches *filestoexclude*, which specifies files to be excluded from the STORE operation. You may specify an unlimited number of *filestoexclude*.

Since “-” is a valid character for HFS syntax file names, a blank character must separate it from HFS file sets to obtain the special negative file set meaning.

*filestostore*  
*filestoexclude* Both *filestostore* and *filestoexclude* may be entered in MPE or HFS syntax. Wildcards are permitted for both MPE as well as HFS syntax, however, MPE wildcards are not expanded in *filestoexclude*. This means that @.@.@-@.@.@ is **NOT** an empty *fileset*. It would contain all of the HFS named files on the system.

The MPE syntax is as follows:

```
filename[.groupname[.accountname]]
```

A lockword may be specified for files to be stored, in the form:

```
filename/lockword.group.account
```

The HFS syntax is as follows:

```
/dir_lev_1/dir_lev_2/.../dir_lev_i/.../filedesig
```

or

```
./dir_lev_i/dir_lev_j/.../dir_lev_k/.../filedesig
```

If the name begins with a dot (.), then it is fully qualified by replacing the dot with the current working directory (CWD).

Each of the components *dir\_lev\_i* and *filedesig* can have a maximum of 255 characters with the full path name being

## STORE

restricted to 1023 characters. Each of the components *dir\_lev\_i* and *filedesig* can use the following characters:

letter a to z

letter A to Z

digit 0 to 9

special characters - \_ .

For HFS name syntax, the lowercase letters are treated distinctly from the uppercase letters (no upshifting).

Both MPE and HFS name components can use the characters @, #, and ? as wildcard characters. These wildcard characters have the following meaning:

@ specifies zero or more alphanumeric characters.

# specifies one numeric character.

? specifies one alphanumeric character.

These wildcard characters can be used as follows

**n@** Store all files starting with the character **n**.

**@n** Store all files ending with the character **n**.

**n## ... #** Store all files starting with character **n** followed by up to seven digits (useful for storing all EDIT/3000 temporary files).

**n@x** Store all files starting with the character **n** and ending with the character **x**.

**?n@** Store all files whose second character is **n**.

**n?** store all two-character files starting with the character **n**.

**?n** Store all two-character files ending with the character **n**.

Also, character sets may be specified in the following syntax:

**[ct]** specifies letter **c** or **t**.

## STORE

[c-t] specifies any letter from range c to t.  
[e-g1] specifies any letter range e to g or digit 1.

Examples of using character sets are:

[A-C] @ All files that begin with the letters A, B, or C.

myset[e-g1] All files that begin with the name myset and end in E, F, or G, or 1.

myset  
[d-e1-6] All files that begin with the name myset and end in D or E, or 1, 2, 3, 4, 5, or 6.

Up to a maximum of sixteen characters may be specified for each character set and brackets are not allowed to be nested.

A character set specifies a range for only one (1) ascii character. The range [a-d]@ gets all files that begin with the letter a through the letter d. The ranged [ad-de] may cause unpredictable results.

Since the hyphen (-) is a valid character for HFS syntax file names, it is allowed inside a character set, immediately following a left bracket ([]) or preceding a right bracket (]).

When specified between two characters, the hyphen implies a range of characters. When a MPE name component is a single @ wildcard, the@ will be folded to include all MPE and HFS named files at that level and below. To specify only MPE-named files, use ?@ instead.

A fileset may be entered in any of the following formats and may use wildcard characters. Equivalent MPE and HFS formats are grouped together as follows.

*file.group.acct* One particular file in one particular group in one particular account.

*file.group* One particular file in one particular group in the logon account.

*file* One particular file in the logon group and account.

## STORE

|                                             |                                                                                                                                                                                |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>@.group.acct</i><br><i>/acct/group/</i>  | All files (MPE and HFS) in one particular group in one particular account (including the <b>GROUP</b> directory).                                                              |
| <i>?@.group.acct</i>                        | All MPE name files in one particular group in one particular account.                                                                                                          |
| <i>@.group /logo-</i><br><i>acct/group/</i> | All the files (MPE and HFS) in one particular group in the logon account.                                                                                                      |
| <i>?@.group</i>                             | All MPE named files in one particular group in the logon account.                                                                                                              |
| <i>@.@.acct</i><br><i>/acct/</i>            | All the files (MPE and HFS) in all the groups in one particular account (including the <b>ACCT</b> directory), plus all the files and directories under the specified account. |
| <i>?@.@.acct</i>                            | All MPE named files in all the groups in one particular account.                                                                                                               |
| <i>@</i>                                    | All (MPE and HFS) files in the CWD.                                                                                                                                            |
| <i>@.@</i>                                  | All (MPE and HFS) files in the logon account.                                                                                                                                  |
| <i>?@.@.@</i>                               | All MPE named files in the system.                                                                                                                                             |
| <i>@.@.@</i>                                | All the files and directories (MPE and HFS) in the system.                                                                                                                     |
| <i>thisisit.@.acct</i>                      | Any MPE file named <i>thisisit</i> in all the groups in one particular account.                                                                                                |

*storefile* The name of the device to which the stored files are to be written. This may be any magnetic tape or DDS device. This file must be backreferenced, by using an asterisk (\*). You must do this by using a **FILE** equation before invoking **STORE**.

A message is displayed on the system console requesting the operator to mount the tape identified by the *storefile* parameter and to allocate the device.

**SHOW** Specifies that **STORE** is to report information for every file that is stored. If you omit the **SHOW** parameter, then only the names of the files not stored are listed, along with the number of files

## STORE

stored and the number of files not stored. This listing is sent to \$STDLIST (formal file designator SYSLIST) unless a FILE command is entered to send the listing to some other device. For instance,

```
FILE SYSLIST; DEV=LP
```

entered before the STORE command would send the listing to a line printer.

*showparmlist* Tells STORE what information to display for the files that are restored. If you specify ;SHOW and omit *showparmlist*, then the default is SHORT if the recordsize of SYSLIST is less than 132 characters, or LONG if the recordsize is equal to or greater than 132 characters. The format for showparmlist is:

```
showparm [,showparm[,showparm[,...]]]
```

where showparm may be one of the options described below. If you do not specify SHORT or LONG, then the base information is SHORT if SYSLIST is less than 132 characters, or LONG if SYSLIST is 132 or more characters.

If a HFS-named file is specified in the *fileselist*, or the expansion of a wildcard includes a HFS-named file, then a HFS-style output listing will be used. This listing shows the same information as the MPE format, but puts the name of the file at the right end of the listing, to allow for longer HFS names. If a HFS name is too long to fit in the record size of the output file, it will be wrapped onto the next line. Wrapping is signified by a "\*" as the last character on the line.

|                 |       |                                                                                                                                                                                                                     |
|-----------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>showparm</i> | SHORT | Overrides a default of LONG and displays file name, group name, account name or the fully qualified path name, volume restrictions, file size (in sectors), file code, and media number.                            |
|                 | LONG  | Overrides a default of SHORT and displays all the information that SHORT does and adds record size, blocking factor, number of extents allowed, allocated, end- of-file, and file starting and ending media number. |

## STORE

|           |                                                                                                                                                                                                                                                                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NAMESONLY | Displays only the filename and the starting and ending media number. NAMESONLY is not allowed with SHORT or LONG.                                                                                                                                                                                                                             |
| DATES     | Displays the creation date, the last date of access, and the last date of modification.                                                                                                                                                                                                                                                       |
| SECURITY  | For MPE format listing, causes SHOW to display the creator and the file access matrix for all the files which do not have an active ACD. For files with active ACDs only, the phrase *ACD EXISTS* is displayed.<br><br>For HSF format listing, the phrase ACD EXISTS* or *ACD ABSENT* is displayed, depending on whether the file has an ACD. |
| PATH      | Forces all file listings to be in HFS format. The full HFS pathname is displayed instead of MPE style names.                                                                                                                                                                                                                                  |
| OFFLINE   | Sends an additional copy to the format file designator OFFLINE, which defaults to device LP.                                                                                                                                                                                                                                                  |
| ONERROR   | Tells STORE what to do if there is a tape write error. If you omit this parameter, then the default option is REDO.<br><br>ONERR is a synonym for ONERROR.                                                                                                                                                                                    |
| QUIT      | Tells STORE to abort after a tape write error.                                                                                                                                                                                                                                                                                                |
| REDO      | STORE should perform error recovery on the tape write error. First the tape is rewound, and a bad record is written to the beginning of the tape. The tape is then unloaded, and a new tape is loaded. STORE then continues                                                                                                                   |

## STORE

rewriting the files that were on the damaged media.

*moddate or  
accdate*

Instructs **STORE** to store only selected files. A *moddate* value (indicated by  $\geq$ , equal to or greater than) limits the **STORE** to those files that were modified on or after a particular date.

An *accdate* value (indicated by  $\leq$ , less than or equal to) limits the **STORE** to those files that were accessed on or before a particular date.

The date is expressed in the form mm/dd/yy[yy]. The year may be expressed in two or four digits (for example, 87 or 1987).

This option cannot be used for files that are attached to a log set.

**PURGE**

Instructs MPE/iX to purge all the files that were successfully stored, after the **STORE** operation has ended. In an interactive session, MPE/iX prompts the user to enter any lockwords that have been omitted if the user does not have system manager, system supervisor, or account manager capabilities. In a job, if the user does not have SM, AM, or OP capability, the lockword(s) must be provided.

A file code with a negative file code can be purged only by a user who has Privileged Mode (PM) capability.

If a file cannot be purged, a file system error message is sent to the user, stating that the file was not purged.

**PROGRESS**

Instructs **STORE** to report its progress at regular intervals by displaying the message **STORE OPERATION IS nnn% COMPLETE**. For



## STORE

interactive users, this message is displayed on `$STDLIST`. For jobs, this message is sent to the system console.

- minutes* A positive number specifying the number of minutes between progress messages. The maximum is 60. The default is 1 (one) minute.
- DIRECTORY** Specifies that the file system directory plus all HFS directories are to be stored. This option requires system manager (SM) or system supervisor (OP) capability.
- If **ONVS** or **SPLITVS** is not specified, the **DIRECTORY** defaults to dumping the system directory. Otherwise, the directories of the specified volume sets are dumped. This way, operators and manager can dump or copy private volume sets in their entirety.
- TREE** Forces each fileset to be scanned recursively. This is equivalent to using the trailing slash (/) in an HFS name. The **TREE** option yields a recursive scan in the hierarchical directory. This option is mutually exclusive with the **NOTREE** and **USERNAME** options.
- NOTREE** Forces each HFS syntax fileset to not be scanned recursively. The **NOTREE** option yields a horizontal cut in the hierarchical directory. The **NOTREE** option is mutually exclusive with **TREE** and **USERNAME** options.

## STORE

### Operation Notes

#### ■ Usage

You can use this command to store one or more disk files onto magnetic tape or DDS cassettes. It will store only those files whose home volume set(s) is (are) mounted.

#### ■ Required capabilities for restoring files

If you have system manager (SM) or system supervisor (OP) capability, you can store any file in the system. If you have account manager (AM) capability, you can store any file in your account, but you cannot store files having negative file codes unless you have Privileged Mode (PM) capability.

Before entering a STORE command, you must identify storefile as a magnetic tape or DDS device by using the FILE command (creating a file equation).

#### ■ Issuing the STORE command

You can issue the STORE command with the RUN command (for example, RUN STORE.PUB.SYS). The INFO= parameter of the RUN command can be used to specify the STORE option, filesets, and keywords. If no ;INFO= parameters are specified, the STORE: prompt will appear. Acceptable responses are a complete STORE command, a complete RESTORE command, or a complete VSTORE command.

If you have purchased a Turbostore product, it will be installed as TSTORE.PUB.SYS. As long as a non-zero length TSTORE program exists in PUB.SYS, typing any CI STORE, RESTORE, or VSTORE command will invoke Turbostore instead.

If you press [Break] during a STORE operation, the operation continues while you interact with the Command Interpreter. Both ABORT and RESUME can be used within BREAK.

You can issue this command from a session, job, or program, but not in BREAK. The user must have Privileged Mode (PM) capability to execute this command for privileged files.

## STORE

### Examples

To store all files on the system (including HFS files), enter

```
:STORE /
```

or

```
:STORE @.@.@
```

To store all MPE named files (and exclude HFS files and directories), enter

```
:STORE ?@.@.@
```

To store all (MPE and HFS) files in the group GP4X in your logon account to a tape file named BACKUP, enter

```
:FILE BACKUP;DEV=TAPE
:STORE @.GP4X;*BACKUP;SHOW
```

The console operator receives a request to mount the tape identified as BACKUP. A listing of the files stored appears on your standard list device.

To store all files on the system except the MPE files in the SYS account, enter

```
:FILE TAP;DEV=TAPE
:STORE @.@.-@.@.SYS;*TAP;SHOW=SECURITY,DATES,LONG,OFFLINE
```

The console operator receives a request to mount the tape identified as TAP. A listing of the files stored appears on both standard list and at the system line printer. The listing will include all information available from STORE.

To store from indirect file INDFILE which contains

```
:FILE1,FILE2;SHOW
:FILE3,@.PUB.SYS;DATE>=6/1/87
```

enter:

## **STORE**

```
:FILE T;DEV=TAPE
:STORE ^INDFILE;*T
```

The console operator receives a request to mount the tape identified as T. Files FILE1, FILE2, FILE3, and all files in PUB.SYS will be stored if they have been modified since June 1, 1987. A listing of the files stored appears on your standard list device.

To store files from a group and account with a default *storefile*, enter

```
:STORE @.GROUP.ACCOUNT
```

or

```
:STORE
```

Note that the console operator receives a request to mount the tape identified as the user's user name.

To store files from a group and account and to purge them after the STORE, enter

```
:FILE T;DEV=TAPE
:STORE @.GROUP.ACCOUNT;PURGE
```

## **Related Commands**

```
RESTORE
VSTORE
REPLY
RECALL
```

## STREAM

The **STREAM** command submits a batch job for execution. The batch job runs independently of your session, which enables you to continue working at your terminal while the batch job is running.

You can also use this command in conjunction with the **DATA** command to submit data to the system from a device file.

### Syntax

```
STREAM [filename] [, char]
 [;AT = timespec] [;DAY = { day-of-week
 day-of-month
 days-until-month }]
 [;DATE = datespec] [;IN = [days [, [hours] [, [minutes]]]]]
```

### Parameters

*filename* Specifies the ASCII file containing the job commands. The first character of the first record is assumed to be the replacement character for the expected colon (:). You must have read (R) and lock (L) or execute (X) file access in order to specify this parameter.

*char* Identifies MPE/iX commands within the input file. It is a character that substitutes for a colon (:). When you enter the input file on a device configured to accept jobs or sessions, this character can be any ASCII non-alphanumeric character except a colon. The default is an exclamation point (!).

**AT** Specifies the absolute time of day. Execution begins in the format *HH:MM*, where *HH* is the hour of the day (0<=HH<=24) and *MM* are the minutes of the hour (0<=MM<=60). If you do not specify **DAY** and **DATE**, then:

```
timespec < NOW---> JOB LOGON TOMORROW
timespec > NOW---> JOB LOGON TODAY
```

## STREAM

*timespec* = NOW---> JOB LOGON IMMEDIATELY  
WITH EXPLANATORY MESSAGE

DAY Specifies the absolute day in one of the following forms:

*day-of-week* Indicates the day of the week. Permissible values are

SUN[DAY]  
MON[DAY]  
TUE[SDAY]  
WED[NESDAY]  
THU[RSDAY]  
FRI[DAY]  
SAT[URDAY]

*day-of-month* Indicates the calendar day of the month expressed using the integers 1 through 31. If *day-of-month* is greater than or equal to the current *day-of-month*, the current month is the default. If *day-of-month* is less than the current *day-of-month*, the *day-of-month* is deferred until the same day of the next month. An error message is generated if the *day-of-month* does not correspond to the month (for example, if you enter 31 for February). If you omit *day-of-month*, the current date is used.

*days-until-month* Indicates days until the end of the month expressed using the negative integers -31 through -1. The chosen number specifies the calendar day from the end of the specified month when the job will run. For example, a -1 value represents the last day of the month. If the specified day from the end of the month indicates a day earlier than the current day, the next month is assumed. For example, if today is the seventh day from the end of the month and you enter a -8 value, the job is

## STREAM

scheduled for the eighth day from the end of the next month.

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |                                                                                     |              |                                                                                                                                                        |                |                                                                                                                                                               |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DATE           | Specifies the absolute date in the format <i>mm/dd/yy</i> , where <i>mm</i> is the month ( $1 \leq mm \leq 12$ ), <i>dd</i> is the day ( $1 \leq dd \leq 31$ ), and <i>yy</i> is the year. If you omit this parameter, the current date is used.                                                                                                                                                                                                                                                                                                                                                                                           |             |                                                                                     |              |                                                                                                                                                        |                |                                                                                                                                                               |
| IN             | Specifies the relative date or time in one of the following forms:<br><br><table><tr><td><i>days</i></td><td>Indicates the number of days from the current date expressed as a positive integer.</td></tr><tr><td><i>hours</i></td><td>Indicates the number of hours from the current time expressed as a positive integer (<math>0 &lt; hours \leq 23</math>). If you omit this parameter, zero is used.</td></tr><tr><td><i>minutes</i></td><td>Indicates the number of minutes from the current time expressed as a positive integer (<math>0 \leq minutes \leq 59</math>). If you omit this parameter, zero is used.</td></tr></table> | <i>days</i> | Indicates the number of days from the current date expressed as a positive integer. | <i>hours</i> | Indicates the number of hours from the current time expressed as a positive integer ( $0 < hours \leq 23$ ). If you omit this parameter, zero is used. | <i>minutes</i> | Indicates the number of minutes from the current time expressed as a positive integer ( $0 \leq minutes \leq 59$ ). If you omit this parameter, zero is used. |
| <i>days</i>    | Indicates the number of days from the current date expressed as a positive integer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |                                                                                     |              |                                                                                                                                                        |                |                                                                                                                                                               |
| <i>hours</i>   | Indicates the number of hours from the current time expressed as a positive integer ( $0 < hours \leq 23$ ). If you omit this parameter, zero is used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                                                                                     |              |                                                                                                                                                        |                |                                                                                                                                                               |
| <i>minutes</i> | Indicates the number of minutes from the current time expressed as a positive integer ( $0 \leq minutes \leq 59$ ). If you omit this parameter, zero is used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |                                                                                     |              |                                                                                                                                                        |                |                                                                                                                                                               |

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** during an interactively streamed job aborts execution of the job.

#### ■ Requirements

You must have read (R) and lock (L) or execute (X) file access in order to stream jobs. The system administrator should assign general users only X access, because R and L access would allow general users to obtain security information within the file, such as passwords and lockwords.

You can initiate stream jobs only if the system administrator has enabled the stream facility by entering the **STREAMS** console command.

#### ■ Creating a job stream

To create a job file for streaming, do the following:

## STREAM

1. Enter the following command to invoke the EDIT subsystem:

```
:EDITOR
```

2. Enter the ADD command, then add job file commands, as shown:

```
/ADD
1 !JOB SMITH,USER.TECH
2 !COMMENT THIS JOB RUNS THE MONTHLY UPDATE PROGRAM
3 !FILE INPUT01=TRANS.DATA.ENGR
4 !FILE MASTER;DEV=TAPE
5 !FILE OUTPUT=NEWFILE.PUB.TECH
6 !RUN UPDPROG
7 !EOJ
8 //
```

Note that the first command is the JOB command and that an exclamation point (!) precedes each command.

3. Enter the KEEP and END commands to save your file and terminate the EDITOR subsystem:

```
/KEEP MYJOB,UNN
/END
```

### ■ Scheduling streamed jobs

When you schedule a job for future execution, it enters the SCHED state. When the specified time arrives, the job enters and remains in the WAIT state until the system allows the job to execute. You can specify the time a job is to enter the WAIT state in absolute or relative time. The differences are as follows:

|          |                                                                                                         |
|----------|---------------------------------------------------------------------------------------------------------|
| Absolute | You specify an exact time for the job using the AT parameter with or without the DAY or DATE parameter. |
| Relative | You specify a time offset from the current time using the IN parameter.                                 |

If the time that you specify is the same as the current time, your streamed job logs on immediately. If the time that you specify is earlier than the current time and you do not specify DAY and DATE, a warning message



## STREAM

is generated, and the job is scheduled for the specified time tomorrow; otherwise, you can specify any time in the current century. Because of the limited recoverability of scheduled jobs, it is recommended that you schedule jobs no more than a few days in advance.

If you specify **DAY** or **DATE** for a job, but do not specify a time, the job does not enter the **WAIT** state at midnight on the specified day. Instead, the job uses the time when the **STREAM** command executes and enters the **WAIT** state at that time on the specified day.

If the system does not detect any errors, a job ID appears on your screen. If you include more than one job in the input file, the system assigns each job a unique job ID and schedules all of the jobs at the same time.

### ■ Redirecting the listing device

If you want the job listing to appear on a device other than the standard listing device associated with the streaming device, you can specify this other device using the **JOB** command as shown:

```
!JOB USER.TECHPUBS;OUTCLASS=12
```

### ■ Terminating interactively streamed jobs

To terminate interactive job input, enter a colon (:). The system responds by displaying the command interpreter prompt:

```
>: ** Denotes end of batch job input **
```

```
: ** MPE/iX prompts for next command **
```

Pressing **Break** aborts the execution of this command and any job currently being entered through the command. Incompletely spooled disk space returns to the system.

### ■ Terminating scheduled streamed jobs

You can use the **ABORTJOB** command to terminate jobs that you have scheduled for **STREAM** execution. Refer to the **ABORTJOB** command for information on its usage.

### ■ Rescheduling system-terminated streamed jobs

If the system fails or is intentionally stopped, your stream jobs may be saved or deleted, depending on the method used to restart the system. If you have

## STREAM

scheduled a job for execution earlier than the system restart, the job enters the `WAIT` state and executes when the system parameters allow it to execute.

After the system is restarted, you should first enter the `SHOWJOB` command to display the scheduled jobs. Reschedule your stream jobs that do not appear as scheduled jobs.

## Examples

The following examples assume that the current date and time are Monday, June 10, 1991 at 12:00 pm. The examples also assume that the input file, named `JOBFILE`, contains a valid `STREAM` job.

- To introduce `JOBFILE` immediately, enter:

```
:STREAM JOBFILE
```

- To introduce `JOBFILE` at 8:00 am, Tuesday, June 11, enter:

```
:STREAM JOBFILE; AT=8:00
```

- To introduce `JOBFILE` at 8:00 pm, Monday, June 10, enter:

```
:STREAM JOBFILE; AT=20:00
```

- To introduce `JOBFILE` in eight hours, at 8:00 pm, Monday, June 10, enter:

```
:STREAM JOBFILE; IN=,8
```

- To introduce `JOBFILE` in one day plus eight hours, at 8:00 pm, Tuesday, June 11, enter:

```
:STREAM JOBFILE; IN=1,8
```

## STREAM

Sometimes you may enter a stream job intending it to be introduced at a certain time, but the system interprets your entry differently than your intentions, as illustrated in the following examples:

- |                                                        |                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>STREAM JOBFILE; DAY=MON;<br/>AT=8:00</code>      | Since the time specified (8:00 am) is earlier than the current time, <code>JOBFILE</code> will be introduced at 8:00 am, Monday, June 17.                                                                                                                                      |
| <code>STREAM JOBFILE; DAY=5</code>                     | Since the day of the month (5) is earlier than the current day (8), the next month is assumed. Since no time was specified, <code>JOBFILE</code> will be introduced on Saturday, July 6, at 12:00 pm.                                                                          |
| <code>STREAM JOBFILE; DAY=31</code>                    | Since June 31 does not exist, the next month is assumed. Since July 31 does exist, this is a legal command. <code>JOBFILE</code> will be introduced on Wednesday, July 31, at 12:00 pm. If July 31 did not exist, this command would cause an error.                           |
| <code>STREAM JOBFILE; DAY=-2</code>                    | The -2 means the second to last day of the month, and since no time was specified, the current time is used. <code>JOBFILE</code> will be introduced on Sunday, June 30, at 12:00 pm.                                                                                          |
| <code>STREAM JOBFILE; DAY=-25</code>                   | The -25 means the twenty-fifth day from the end of the month. If one assumes the current month, that implies June 6, but June 6 is earlier than the current day; therefore, the next month is assumed. <code>JOBFILE</code> will be introduced on Sunday, July 7, at 12:00 pm. |
| <code>STREAM JOBFILE;<br/>DATE=6/8/87; AT=8:00</code>  | Since the specified time is earlier than the current time, this command is not permissible, and it causes an error.                                                                                                                                                            |
| <code>STREAM JOBFILE;<br/>DATE=6/8/87; AT=20:00</code> | The specified time is later than the current time, so this command is permissible. <code>JOBFILE</code> will be introduced on Monday, June 10, at 8:00 pm.                                                                                                                     |

## **STREAM**

### **Related Commands**

ABORTJOB  
JOB  
LISTSPF  
SHOWJOB  
STREAMS

---

## STREAMS

The **STREAMS** command enables or disables the streams device, which permits or prohibits you from streaming jobs. The system administrator enters this command and **STARTSPOOL LP** after starting up the system to enable the **STREAM** command.

### Syntax

$$\text{STREAMS } \left\{ \begin{array}{l} \textit{ldev} \\ \text{OFF} \end{array} \right\}$$

### Parameters

*ldev* Specifies the logical device number of the streams device. The streams device must have an output device number or class that references logical devices of type 32. You can use any input device except the console or terminals. The input device must be configured in the **SYSGEN** dialog as capable of accepting jobs.

**OFF** Disables the streams facility.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command. You can enter this command only from the console; however, you can enter this command from your terminal if your system administrator has used the **ALLOW** command to enable you to enter the command.

## **STREAMS**

### ■ **Requirements**

The system administrator must enable the streams device every time that the system is restarted in order to enable you to stream jobs. If you attempt to stream a job when the streams facility is disabled, the following message appears:

```
STREAM FACILITY NOT ENABLED: SEE OPERATOR. (CIERR 82)
```

### ■ **Selecting the streams device**

The streams device is normally LDEV 10. Your system administrator knows the LDEV for the streams device.

## **Examples**

- To enable jobs and data streams on logical device number 10, enter:

```
:STREAMS 10
```

- To disable data streams, enter:

```
:STREAMS OFF
```

## **Related Commands**

```
ALLOW
STREAM
```

---

## SYSGEN

The **SYSGEN** command enables you to create new system configurations, modify existing configurations, or create installation tapes. This command is a utility intended for use only by someone trained in Hewlett-Packard system management tasks.

### Syntax

```
SYSGEN [basegroup] [, newgroup] [, inputfile] [, outputfile]
```

### Parameters

|                   |                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>basegroup</i>  | Specifies the name of a base configuration group in the <b>SYS</b> account. The account contains configuration data to be used with the <b>SYSGEN</b> command for changing the configuration or for creating the installation tape. If you do not include this parameter, the default is the group used to bring up the system, which is normally <b>CONFIG</b> . |
| <i>newgroup</i>   | Specifies the name of a group in the <b>SYS</b> account used as the default for keeping a new set of configuration data or a copy of the configuration data in the base configuration group. If you do not include this parameter, the default is the <i>basegroup</i> .                                                                                          |
| <i>input</i>      | Specifies the file designator of the file to be used for command input while the <b>SYSGEN</b> command is executing. You can redirect input with a file equation using the formal designator <b>SYSGIN</b> before entering the <b>SYSGEN</b> command. The default is <b>\$STDIN</b> .                                                                             |
| <i>outputfile</i> | Specifies the file designator of the file to be used for output requested while the <b>SYSGEN</b> command is executing. You can redirect output with a file equation using the formal designator <b>SYSGOUT</b> before entering the <b>SYSGEN</b> command. The default is <b>\$STDLIST</b> .                                                                      |

## **SYSGEN**

### **Operation Notes**

#### ■ Usage

You can enter this command from a session and programmatically. Pressing **Break** suspends command execution. Entering the **RESUME** command continues the execution.

#### ■ Requirements

You must have system supervisor (OP) capability to view configuration data. You must have system manager (SM) capability to make and keep configuration changes or to create an installation tape.

#### ■ Unattended backups

The system administrator may want to perform a system backup that does not require a user response to the tape request necessary for the backup. In order to perform an unattended backup, however, the tape drive must be configured with the autoreply mode. Refer to the “Examples” section for the proper command sequence to enable this mode.

### **Examples**

- To use **CONFIG.SYS** as the default *basegroup*, **NEWCONF.SYS** as the *newgroup*, and the default *inputfile* and *outputfile*, enter:

```
:SYSGEN CONFIG,NEWCONF,$STDIN,$STDLIST
```

- To include the same parameters in the example above without specifying the default values, enter:

```
:SYSGEN ,NEWCONF
```

- To specify file equations for *inputfile* and *outputfile* that redirect command input and output, enter:

```
:FILE SYSGIN=INFILE
:FILE SYSGOUT=OUTFILE
:SYSGEN ,NEWCONF
```



## **SYSGEN**

- To configure a tape drive for autoreply mode, enter:

```
:SYSGEN
SYSGEN>IO
IO>MDEV 7 MODE=AUTOREPLY
IO>HOLD
IO>EXIT
SYSGEN>KEEP
SYSGEN>EXIT
```

### **Related Commands**

```
NMMGR
SHOWDEV
VOLUTIL
```

---

## TELL

The **TELL** command enables you to send a message from your job or session to one or more currently running sessions. The message appears on the list device of the receiving session, which is usually a terminal.

### Syntax

$$\text{TELL} \left\{ \begin{array}{l} [ \# ] Snn \\ [ sessionname, ] username.acctname \\ @ \\ @.acctname \end{array} \right\} [ [ ; ] text ]$$

### Parameters

- Snn* Specifies the session number to receive the message.
- [*sessionname*,]  
*username*.  
*acctname* Specifies the name of the session or user to receive the message, and the account name to which the message is directed. This parameter is the same as the session identity entered with the **HELLO** command.
- @ Specifies all sessions.
- @.*acctname* Specifies all user names logged on to the account name.
- text* Specifies message text, preceded by a space or a semicolon (;), that consists of a string of any ASCII characters. If you do not provide message text, the system still prints a **FROM** message on the target terminal as shown:

FROM/*sessionid*

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode.

## TELL

### ■ Quiet mode

Users who enter the `SETMSG OFF` command are in quiet mode and cannot receive your messages. This also applies to a session running in quiet mode on the console. If you send a message to a session in quiet mode, the system blocks the `TELL` command and displays the following message:

```
Snnn username.acctname NOT ACCEPTING MESSAGES
```

### ■ Multiple users

If several users are running under the same session identity, the system sends the message to all of them.

### ■ Additional acceptable message media

Messages that you send with this command can include escape and control characters that invoke bells or inverse video.

### ■ Restrictions

You cannot send a message to a job or to yourself. If you attempt to send a message to a job, the following warning appears:

```
TARGET MUST BE INTERACTIVE, NO MESSAGE SENT.
(CIWARN 1627).
```

If you send a message to a terminal currently interacting with a program, the system queues the message as high as possible among the current input/output requests, but does not interrupt any read or write in progress.

## Examples

- To send an instructional message to user `FRED`, logged on in account `PAYROLL`, running a session named `FINANCES`, enter:

```
:TELL FINANCES,FRED.PAYROLL USE FILES FROM YESTERDAY'S BACKUPS
```

- To send a message asking all users logged on in account `PAYROLL` to log off, enter:

```
:TELL @.PAYROLL PLEASE LOG OFF
```

**TELL**

**Related Commands**

SETMSG  
TELLOP  
WARN

---

## TELLOP

The TELLOP command enables you to send a message to the console. The message appears on the console along with your job and session number and the time you transmitted the message.

### Syntax

```
TELLOP [text]
```

### Parameters

*text* Specifies message text, preceded by a space, that consists of any string of ASCII characters. If you omit this parameter, no message text is sent to the console; however, the console still receives FROM/*sessionid*.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command.

#### ■ Command processing

You can send a message to the console, even if a session is not currently active or if an active session is running in quiet mode. As with messages transmitted with the TELL command, a message sent using the TELLOP command prints as soon as possible without interrupting any console input or input currently in progress.

### Example

- To send a message informing the system operator that backups can begin, enter:

```
TELLOP CRITICAL PROCESSING DONE. OK TO START BACKUPS
```

**TELLOP**

**Related Commands**

TELL  
WARN

## WARN

The **WARN** command enables you to send an urgent operator message to jobs or sessions. The message interrupts any current pending read or write in progress.

### Syntax

$$\text{WARN} \left\{ \begin{array}{l} @ \\ \left[ \# \right] Jnnn \\ \left[ \# \right] Snnn \\ \left[ jsname, \right] user.acct \end{array} \right\} \left[ ; message \right]$$

### Parameters

|                                    |                                                                                                                                                                                                                                 |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>@</b>                           | Specifies that all users receive the message, including those running in quiet mode.                                                                                                                                            |
| <b>#Jnnn</b>                       | Specifies a job number assigned by the system for the job that is to receive the message. Only jobs submitted on interactive devices can receive messages.                                                                      |
| <b>#Snnn</b>                       | Specifies a session number assigned by the system for the job that is to receive the message. Only jobs submitted on interactive devices can receive messages.                                                                  |
| <i>jsname,</i><br><i>user.acct</i> | Specifies the names of the job, session, and user to receive the message, and specifies the account name under which they are running. (These names are the same as those entered with the <b>JOB</b> or <b>HELLO</b> command.) |
|                                    | If several users are running under the same job and session identity, the system sends the message to all of them.                                                                                                              |
| <i>message</i>                     | Specifies the message text, consisting of any string of ASCII characters containing no more than 67 characters. Pressing <b>Return</b> terminates the message. The default is that no message prints.                           |

## WARN

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command. You can enter this command only from the console; however, you can enter this command from your terminal if your system administrator has used the **ALLOW** command to enable you to enter the **WARN** command.

#### ■ Quiet mode

A user can run a session in quiet mode, which suppresses messages from other users; however, the **WARN** command overrides quiet mode and also overrides a block mode screen.

### Example

- To send a **WARN** message to all sessions, followed by a **WARN** message to session #S51, enter:

```
:WARN @;THE SYSTEM WILL SHUTDOWN IN 5 MINUTES. PLS LOG OFF.
:WARN #S51;LAST CHANCE TO LOG OFF GRACEFULLY.
```

### Related Commands

SETMSG  
TELL  
TELLOP



---

## WELCOME

The **WELCOME** command enables the system administrator to define a greeting message for users when they initiate jobs and sessions.

### Syntax

```
WELCOME [welcomefile]
```

### Parameters

*welcomefile* Specifies an ASCII file that contains the welcome message.

### Operation Notes

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** does not affect this command if a welcome file is used; otherwise, **Break** aborts the command and leaves the welcome message unchanged. You can only enter this command from the console; however, you can enter this command from your terminal if your system administrator has used the **ALLOW** command to enable you to enter the **WELCOME** command.

You do not have to reboot the system after entering this command.

#### ■ Creating and deleting messages

You can either create a message interactively or specify a pre-existing message file (*welcomefile*) when you enter the command. Line lengths cannot exceed 72 characters, and the total number of lines cannot exceed 26.

To delete an existing message, you enter the command and press **Return** at the **#** prompt.

## WELCOME

### Examples

- To create a multiline welcome message interactively, enter:

```
:WELCOME
#WELCOME TO THE HP 3000 COMPUTER SYSTEM.
#FILES WILL BE STORED EACH DAY BETWEEN 6AM AND 7AM.
#(Return)
```

- To use a predefined message file called MESSAGE1, enter:

```
:WELCOME MESSAGE1
```

- To delete MESSAGE1, enter:

```
:WELCOME
#(Return)
```

### Related Commands

```
HELLO
SHOWME
```

---

## XEQ

The **XEQ** command executes any command file or program file. This command is required when you want to execute a command file or program file that has the same name as an existing MPE/iX or UDC command; however, you can also use the command for any executable file.

### Syntax

The syntax for a command file is

```
XEQ filename [parameterlist]
```

The syntax for a program file is

```
XEQ filename [;INFO={ quotedstring }] [;PARM={ parmvalue }]
```

### Parameters

|                      |                                                                                                                                                                                        |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>filename</i>      | Specifies the file name of the command file or program file to be executed. The system uses the search path (HPPATH) if you do not qualify <i>filename</i> .                           |
| <i>parameterlist</i> | Lists the parameters passed to <i>filename</i> when a command file executes. The parameter list corresponds to the PARM line(s) of the command file you want to execute.               |
| INFO                 | Specifies a parameter string ( <i>quotedstring</i> ) for program files that accept an INFO string. Quotes are required if the INFO string requires delimiters, such as ;=", and so on. |
| PARM                 | Specifies a parameter value ( <i>parmvalue</i> ) for a program file to be executed.                                                                                                    |

## **XEQ**

### **Operation Notes**

#### ■ Usage

You can enter this command from a session, a job, a program, or in break mode. Pressing **Break** suspends program files and aborts command files, unless the command files use the **NOBREAK** option.

You can execute many command files in break mode; however, if a command file runs a program, the system prompts you to abort the suspended program. You cannot execute program files in break mode unless you abort the suspended program.

### **Example**

- To execute a command file named **FCOPY.PUB.MYACCT**, enter:

```
:XEQ FCOPY.PUB.MYACCT
```

### **Related Commands**

ABORT  
RESUME  
RUN

# Index

---

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