ASG
Software Solutions

# ASG-ControlManager™
# User's Guide

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# Preface

This *ASG-ControlManager User's Guide* is one of a series describing the ASG-Manager Family of Program Products developed by ASG for use on IBM System/370, 30xx, and 4300 series, and plug compatible machines. The publication is intended for all users of ASG-ControlManager (herein called ControlManager). It gives an introduction to ControlManager, and describes the capabilities provided by the ControlManager Nucleus, the Basic Interactive facilities, and the Extended Interactive Facility.

Allen Systems Group, Inc. (ASG) provides professional support to resolve any questions or concerns regarding the installation or use of any ASG product. Telephone technical support is available around the world, 24 hours a day, 7 days a week.

ASG welcomes your comments, as a preferred or prospective customer, on this publication or on any ASG product.

## About this Publication

This publications consists of these chapters:

- Chapter 1, "Introduction to ControlManager," gives an introductory overview of the basic capabilities of ControlManager.
- Chapter 2, "ControlManager Capabilities and Environments Supported," details the capabilities provided and environments supported by ControlManager.
- Chapter 3, "Language and Coding," describes general points about language and the rules involved in coding.
- Chapter 4, "Logging On and Off," provides details on different ways to log on to ControlManager.
- Chapter 5, "ControlManager Screens," describes the ControlManager screens in fully interactive environments.
- Chapter 6, "The Extended Interactive Facility," details additional features and capabilities of the Extended Interactive Facility.
- Chapter 7, "Tailoring and Checking Your Environment," describes how environments can be tailored using SET and QUERY commands.

- Chapter 8, "InfoSystem," provides many commands available to access, leave, and re-enter InfoSystem, and to move around InfoBank; and Contents lists and Indexes to help find information.
- Chapter 9, "The MP-AID," details capabilities provided by the Manager Products Administration and Information Dataset.
- Chapter 10, "Commands," provides the ControlManager commands available in all environments, those available with the Basic Interactive facilities, and those available with the Extended Interactive Facility.
- Chapter 11, "Selectable Units Available with ControlManager," documents the selectable units provided in this publication.
- Chapter 12, "Record and Play Facility," describes the basic options of the Record and Play facility.

# Publication Conventions

The following conventions apply to syntax diagrams that appear in this publication.

Diagrams are read from left to right along a continuous line (the "main path"). Keywords and variables appear on, above, or below the main path.

| Convention | Represents |
|---|---|
| ➤➤ | at the beginning of a line indicates the start of a statement. |
| ➤ | at the end of a line indicates the end of a statement. |
| ——➤ | at the end of a line indicates that the statement continues on the line below. |
| ➤—— | at the beginning of a line indicates that the statement continues from the line above. |

Keywords are in upper-case characters. Keywords and any required punctuation characters or symbols are highlighted. Permitted truncations are not indicated.

Variables are in lower-case characters.

Statement identifiers appear on the main path of the diagram:

```
➤———COMMAND———————————————————————————————➤
```

A required keyword appears on the main path:

```
➤———COMMAND —— KEYWORD———————————————————➤
```

An optional keyword appears below the main path:

| Convention | Represents |
|---|---|

```
➤──────COMMAND──┬──────────────────────────────────────────────►
                └──KEYWORD──┘
```

Where there is a choice of required keywords, the keywords appear in a vertical list; one of them is on the main path:

```
                ┌──KEYWORD1──┐
➤──────COMMAND──┼──KEYWORD2──┼──────────────────────────────►
                └──KEYWORD3──┘
```

or

```
                  ┌──KEYWORD1──┐
➤──────COMMAND────┼──KEYWORD2──┼──────────────────────────►
                  └──KEYWORD3──┘
```

Where there is a choice of optional keywords, the keywords appear in a vertical list, below the main path:

```
                  ┌──────────────┐
➤──────COMMAND────┼──KEYWORD1────┼──────────────────────────►
                  └──KEYWORD2────┘
```

The repeat symbol, <<<<<<, above a keyword or variable, or above a whole clause, indicates that the keyword, variable, or clause may be specified more than once:

```
                    <<<<<<<<
➤──────COMMAND ────  KEYWORD ──────────────────────────────►
```

A repeat symbol broken by a comma indicates that if the keyword, variable, or clause is specified more than once, a comma must separate each instance of the keyword, variable, or clause:

```
                    <<< , <<
➤──────COMMAND ────  KEYWORD ──────────────────────────────►
```

The repeat symbol above a list of keywords (one of which appears on the main path) indicates that any one or more of the keywords may be specified; at least one must be specified:

```
                    <<<<<<<<<<<<<<<<
➤──────COMMAND────┬──KEYWORD1────────────────────────────►
                  └──KEYWORD2────┘
```

The repeat symbol above a list of keywords (all of which are below the main path) indicates that any one or more of the keywords maybe specified, but they are all optional:

```
                    <<<<<<<<<<<<<<<<
➤──────COMMAND────┬──────────────┬──────────────────────────►
                  ├──KEYWORD1────┤
                  └──KEYWORD2────┘
```

Allen Systems Group, Inc. uses these conventions in technical publications:

| Convention | Represents |
|---|---|
| ALL CAPITALS | Directory, path, file, dataset, member, database, program, command, and parameter names. |
| Initial Capitals on Each Word | Window, field, field group, check box, button, panel (or screen), option names, and names of keys. A plus sign (+) is inserted for key combinations (e.g., Alt+Tab). |
| *`lowercase italic monospace`* | Information that you provide according to your particular situation. For example, you would replace *`filename`* with the actual name of the file. |
| `Monospace` | Characters you must type exactly as they are shown. Code, JCL, file listings, or command/statement syntax.<br>Also used for denoting brief examples in a paragraph. |
| Vertical Separator Bar ( \| ) with underline | Options available with the default value underlined (e.g., Y\|N). |

# 1 Introduction to ControlManager

This chapter includes these sections:

**Summary** . . . . . 1

**ControlManager Capabilities** . . . . . 2

**Manager Products Users** . . . . . 3

**The Integrated Dialog Director** . . . . . 4

**The MP-AID** . . . . . 4

**The Full Screen Editor** . . . . . 5

**Online Documentation and Help** . . . . . 5

**Tailoring the Environment** . . . . . 6

**Personal Storage and User Executive Routines** . . . . . 6

## Summary

ControlManager is supplied to all users of ASG-Manager Products (herein called Manager Products). It provides:

- The software that supports the use of Manager Products at your installation
- A friendly and easy-to-use interface between you and Manager Products (including the Dialog Director which handles all your command input)
- Basic dictionary management software (BDMS), that is, the software required to create, maintain, and use a dictionary.

This publication documents the interface between you and Manager Products.

**Note:**

You can execute Manager Products in either a client/server (MPSF) mode or a non-client/server (standard) mode. This publication assumes the use of standard mode and only documents minor differences between the two modes. When executing under MPSF you can create repositories and MPAIDs using the Data-in-Virtual (DIV) access method. The DIV access method and significant MPSF installation and usage differences are documented in the *ASG-Manager Products Server Facility User's Guide*.

For details of the installation of Manager Products refer to your Manager Products Installation manual.

Within the ASG-Manager Family of Program Products, ControlManager and ASG-DictionaryManager (herein called DictionaryManager) are Co-requisites for each other. Both are Environmental Prerequisites (EPR) inasmuch as they must be at the latest Version and Release Level for each and every other Manager Products to execute correctly. This EPR rule applies to Manager Products in both Mainframe Environments (MFE) and Intelligent Workstation Environments (IWSE).

ControlManager and DictionaryManager complement each other in providing a gateway environment to OSI (Open Systems Interconnection) across information engineering techniques and dictionaries/directories from ASG and other vendors.

Thus ControlManager and DictionaryManager enable Manager Products users to position themselves to take full advantage of the ASG-Manager Family in providing a CASE (Computer Aided Systems Engineering) environment.

## ControlManager Capabilities

As well as giving access to Manager Products and to the capabilities that each provides, ControlManager has many capabilities of its own. The basic capabilities are provided by the Nucleus, and many additional capabilities are provided by selectable units. Your organization can decide which capabilities they require and install the selectable unit(s) that provide(s) those capabilities.

The capabilities provided by the Nucleus, the Basic Interactive facilities, and the Extended Interactive Facility are:

- Logging on and off
- Batch processing
- Interactive processing
- A full screen editor
- A comprehensive online documentation and help system
- Tailoring the environment
- Executive Routines
- Local language commands and messages
- Panel Driven Processing (PDP)
- Personal storage

The above capabilities are documented in this publication. The facilities and capabilities provided by ControlManager selectable units are documented elsewhere, although an introduction is given in Chapter 11, "Selectable Units Available with ControlManager," on page 249.

## Manager Products Users

A user is any of these categories:

**General user.** Any user of Manager Products.

**Dictionary Controller.** A user responsible for one or more Manager Products dictionaries: controlling access to a dictionary, tailoring the dictionary environment, and enforcing standards. As well as the commands available to general users, a number of additional, restricted, commands are available to the dictionary Controller.

**Systems Administrator.** A user responsible for the overall security and smooth running of a Manager Products installation and, in particular, for the MP-AID (the Manager Products Administrative and Information Dataset). As well as the commands available to general users, a number of additional, restricted, commands are available to the Systems Administrator.

**Note:**

A Systems Administrator may also be a dictionary Controller and so use those commands restricted to dictionary Controllers.

# The Integrated Dialog Director

The interface between ControlManager and the various Manager Products is the Integrated Dialog Director (IDD), and this handles all your command input.

As a rule, each Manager Products command applies to only one product: the Integrated Dialog Director recognizes which product a command applies to and routes it accordingly. However, if ASG-DesignManager (herein called DesignManager) is installed, there are several commands which can apply either to the Workbench Design Area (WBDA) or to the dictionary, and you may have to instruct the Integrated Dialog Director to target a command to the WBDA or to the dictionary, as you require.

Refer to "MODE and QUERY MODE" on page 156 for details of Targeting Mode.

# The MP-AID

The Manager Products Administrative and Information Dataset (MP-AID) is a dataset which holds and processes information relating to the control and operation of all the Manager Products dictionaries at your installation. It is maintained by the Systems Administrator using a private dictionary - the Manager Products Administration Dictionary.

Many of the capabilities provided by ControlManager are via the MP-AID. These include:

- Logon capabilities and controls
- InfoSystem (the online help and documentation system)
- Executive languages
- User-definable dictionary member types
- User-definable commands
- User-definable output from dictionary REPORT commands

Refer to Chapter 9, "The MP-AID," on page 101 for details of the MP-AID.

Refer to Chapter 8, "InfoSystem," on page 79 for details of InfoBank panels.

See "Tailoring the Environment" on page 6 for an introduction to Logon and Global Profiles.

Refer to Chapter 11, "Selectable Units Available with ControlManager," on page 249 for an introduction to Corporate Executive Routines (described as part of the User Defined Commands Facility), and User Defined Syntax.

# The Full Screen Editor

ControlManager provides a powerful editor for creating and amending members in a dictionary or on the MP-AID. Using the Full Screen Editor you can:

- Move text in a buffer
- Insert, amend, and delete lines in a buffer
- Copy and move text
- Create a dictionary member and certain types of MP-AID member

Refer to Chapter 6, "The Extended Interactive Facility," on page 47 for details of the Full Screen Editor.

# Online Documentation and Help

InfoSystem, Manager Products online information system, is designed to give you immediate access to help information and comprehensive technical documentation concerning Manager Products.

Information/documentation is held in discrete panels of text. These panels form a hierarchical structure, and various commands are provided for moving through this structure.

With User Defined InfoSystem installed you can tailor InfoBank to suit your own installation, and create your own online documentation.

Refer to Chapter 8, "InfoSystem," on page 79 for details of InfoSystem.

Refer to "User Defined InfoSystem" on page 255 for details of User Defined InfoSystem.

# Tailoring the Environment

The Manager Products environment can be tailored to suit the needs of individuals or groups of users. For example:

- Commands can be restricted, disabled, or modified
- Commands can be renamed and so entered in your natural language
- Update or read-only access to a dictionary and/or MP-AID can be specified
- Character translation can help overcome difficulties caused when characters appear on the keyboard but not on the terminal or printer, and vice versa
- Kanji characters can be entered and processed
- Error messages can be output in different languages
- Different screen layouts can be specified

This tailoring can be done via profiles which are executed when a user logs on.

Some tailoring is also possible via Installation macros. This is documented in your Installation manual.

# Personal Storage and User Executive Routines

The Extended Interactive Facility provides two members on the MP-AID for personal storage: USER-MEMBERs and TRANSIENTs. These members can be listed, printed, or deleted only by the user who created them, or by the Systems Administrator.

If the User Defined Commands Facility is installed you can place commands in USER-MEMBERs and TRANSIENTs and so create Executive Routines; the commands in such a routine can be executed simply by entering the name of the routine as a command.

Refer to "USER-MEMBERs and TRANSIENT Members" on page 114 for details of USER-MEMBERs and TRANSIENTs.

# 2 ControlManager Capabilities and Environments Supported

This chapter includes these sections:

**Capabilities Provided by ControlManager. . . . . .7**

**Environments Supported by ControlManager . . . . . .8**

## Capabilities Provided by ControlManager

The ControlManager Nucleus provides commands:

- To start and end a Manager Products session
- To access InfoSystem and move around InfoBank
- To tailor your environment
- To query the current tailoring of your environment
- To interrogate the MP-AID.

The Basic Interactive facilities are supplied with the Nucleus and provide:

- The ability to set PF keys to execute commands
- The ability to RECALL previous commands you've executed
- Additional tailoring commands
- Commands to scroll text on the screen.

With the Extended Interactive Facility installed, then as well as the commands provided by the Nucleus and the Basic Interactive facilities, you have many more commands and capabilities:

- The Full Screen Editor
- Additional tailoring commands
- User storage facilities on the MP-AID
- Additional commands to interrogate the MP-AID
- Panel Driven Processing

Refer to Chapter 6, "The Extended Interactive Facility," on page 47 for details of the Extended Interactive Facility.

The ControlManager Nucleus has one operating mode, Command Mode, and this means you have a single buffer: the Command Buffer. The Extended Interactive Facility gives you another three operating Modes: Edit, Update, and Lookaside. Each of these can have a number of buffers.

Capabilities provided by other optional facilities (selectable units) are documented in the relevant Facility manuals. However, where the presence of another selectable unit enhances the functionality available with the Basic Interactive facilities or the Extended Interactive Facility, then that enhanced functionality is also described in this publication.

Refer to Chapter 11, "Selectable Units Available with ControlManager," on page 249 for an overview of the ControlManager selectable units.

# Environments Supported by ControlManager

ASG defines three types of environment in which Manager Products may be run:

- Fully interactive
- Pseudo-interactive
- Batch

*Fully interactive* environments are those where ControlManager is fully in control of the interaction between the user and the Manager Products software. These environments are:

- CICS
- CMS
- Siemens Time Sharing Interface
- TSO

In these environments the non-interactive, Basic Interactive, and Extended Interactive capabilities of ControlManager are fully supported.

*Pseudo-interactive* environments are those where ControlManager is NOT fully in control of the interaction between the user and the Manager Products software. In these environments, some of the screen responses may differ from those indicated in this publication; for example, long output lines may wrap around on the screen, or PF keys may not be available. The pseudo-interactive environments are:

- ICCF
- IMS/DC
- ROSCOE
- TSO/ISPF

In these environments the non-interactive capabilities of ControlManager are fully supported, and some interactive capabilities similar to those provided by ControlManager may be provided by the Teleprocessing environment.

*Batch environments* are defined as those where there is no direct interaction between the user and the Manager Products software. In these environments the non-interactive capabilities of ControlManager are fully supported. These environments are:

- Access Call
- Batch execution under OS, DOS, and BS2000

Access Call programs (available with the ControlManager User Interface facility) may be used in pseudo-interactive or batch environments.

InfoSystem is available in all three environments: interactive, pseudo-interactive, and batch.

# 3 Language and Coding

This chapter includes these sections:

**Introduction . . . . . 11**

**Statements and their Formats . . . . . 12**
Introduction . . . . . 12
Statement Identifiers . . . . . 13
Statement Bodies . . . . . 13
Statement Terminators . . . . . 14

**Amendment Lines (in ALTER and MODIFY Commands) . . . . . 16**

**Spaces in Statements . . . . . 17**

**Keywords in Statements . . . . . 17**

**Variables in Statements . . . . . 19**
Names . . . . . 19
Character Strings . . . . . 22
Integers . . . . . 26
Decimal Numbers . . . . . 26
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## Introduction

Manager Products language has been designed to offer the maximum possible flexibility in coding, so that statements are to a high degree free form. The language includes:

- Command statements
- Member definition statements
- Amendment lines (in ALTER and MODIFY commands)
- Executive languages
- Reusable Sourcelanguage and Inline Data Descriptions
- Formatting capabilities

This chapter is concerned with general points about language (the structure of statements and amendments), and the rules involved in coding (how the statements and amendments are entered).

Language and coding are affected by the environment in which you are working (batch, pseudo-interactive, or interactive). The differences caused by these different environments are noted in the text.

Refer to Chapter 2, "ControlManager Capabilities and Environments Supported," on page 7 for details of the environments.

Executive languages are provided by the User Defined Commands facility.

Reusable Sourcelanguage and the coding of Inline Data Descriptions are documented in the *ASG-SourceManager User's Guide*.

The formatting of output from the REPORT command is provided by the DictionaryManager User Defined Output facility, and the formatting of output from the Workbench Design Area is provided by the DesignManager User Formatted Output facility.

# Statements and their Formats

## Introduction

Manager Products language includes two types of statement: command statements and member definition statements. A statement has three parts:

- The identifier (a keyword which controls the body)
- The body (a number of input records or lines consisting of keywords, variables, and punctuation symbols)
- The terminator (a semicolon or a period).

For example, in the command statement:

```
WHICH INFOBANK-PANELS HAVE AUTHOR EQ '2274';
```

*`WHICH`* is the identifier, *`INFOBANK-PANELS HAVE AUTHOR EQ '2274'`* is the body, and `;` is the terminator.

In the member definition statement:

```
ITEM
DEFAULT      CHARACTER 6
ENTERED-AS   NUMERIC 6
HELD-AS      PACKED 6
REPORTED-AS  PICTURE  'ZZZZZ9'
```

*`ITEM`* is the identifier, `;` is the terminator, and the body consists of four input records.

For the format of particular statements refer to the syntax for the individual commands and member types in InfoBank, or in the *ASG-Manager Products Quick Reference*.

## Statement Identifiers

The keyword which controls the body of a command statement is called a *command* identifier (a command name); for example, LIST or PRINT. The keyword which controls the body of a member definition statement is called a *member type* identifier, for example, ITEM or GROUP.

A command identifier can be preceded by a *Prefix Command* identifier. For example, in the command:

```
KEEP LIST ONLY SYNTAX ;
```

*`KEEP`* is the prefix command identifier, *`LIST`* is the command identifier, *`ONLY SYNTAX`* is the statement body, and `;` is the terminator.

## Statement Bodies

The body consists of keywords and/or variables, and any punctuation symbols required or permitted by the command or member definition specification. Individual keywords (including identifiers), variables, and terminators are called *elements*. Within the body, a keyword which controls a subordinate keyword and/or variable, together with its subordinate keyword and/or variable, is called a *clause*.

The body can continue over any number of input records (lines) with each record containing a maximum of 248 characters. What constitutes an input record depends on the input device. For example, it can be:

- Input from a visual display terminal
- Records from tape or disk
- Lines passed to Manager Products from an Access Call program.

In *OS environments*, input records can be fixed length, variable length, or undefined, and may be blocked or unblocked.

In *DOS environments*, input records must be fixed length 80 bytes and unblocked.

However, in *interactive environments*, a command statement must be wholly contained in one input record.

In interactive environments, the Command Area (by default) appears as two lines at the bottom of the screen.

**Note:**

Although the Command Area appears as two lines on screen, it is considered as one input line (one input record).

As a general rule an element can start in any character position of an input record provided it is wholly contained in that record. An exception to this is the terminator of a member definition statement which must be placed in the first character position of the record.

## Statement Terminators

A terminator is used to indicate the end of a command statement or member definition statement. It can be either a semicolon or a period (full stop).

In a *command statement*, unless it is in the last character position of the input record, the terminator should be followed by a space. If it is not, then the result is unpredictable:

- If the terminator is a period, the system may try to treat it as an element within the command. A diagnostic message may be output, and the command rejected in whole or part.
- If the terminator is a semicolon, the command is usually accepted.

In a *member definition statement*, a period or semicolon is recognized as a terminator only when it is in the first character position of an input record:

- The period must be followed immediately by a space. This is because a period (or decimal point) can occur as the first character of an element within the definition of a dictionary member. If a record begins with a period which is not followed by a space, then it is treated as part of the member definition.
- The semicolon need not be followed immediately by a space.

In the record containing the terminator (the terminator record), any characters after the terminator are ignored. The terminator record of a command statement is normally printed, so any characters after a recognized terminator can be regarded as comment. The terminator record of a member definition statement is not printed, so any characters after the terminator are lost.

## Interactive Environments

When entering multiple commands in the Command Area, terminators are optional except when a member definition statement is followed by another command; then the member definition statement must be followed by a terminator.

Refer to "Multiple Commands in a Single Command Line" on page 77 for details of the multiple input of commands.

When *not* entering multiple commands in the Command Area, you *must* place a terminator at the end of a member definition statement, in the first character position of the record. (You do not place a terminator at the end of each input record, only at the end of the whole statement.) A terminator is *optional* at the end of a command statement and, if omitted, one is provided by the software itself.

You can execute a sequence of Manager Products commands that have been set up in an Edit Buffer:

- You can enter the RUN command in the Command Area while in the Edit Buffer
- You can file the commands in a USER-MEMBER and then enter the name of that USER-MEMBER as a command. (This is available if you have the User Defined Commands facility installed.)
- You can set up the commands in a User Defined Profile, and they will then be executed when you log on. (This is available if you have the Systems Administrator's Environmental Control facility installed.)

Within the buffer the rules for terminators are the same as those for batch and pseudo-interactive environments (see "Batch and Pseudo-interactive Environments" on page 15).

You can use an Update Buffer to create a new dictionary member. Within the buffer, terminators are used only with COMMAND-STREAM members. Commands within a COMMAND-STREAM must have terminators.

When using an ADD, INSERT, MODIFY, ALTER, or REPLACE command within a COMMAND-STREAM to create or amend a dictionary member, you will have to use an *escape character*. Where an input record would contain a terminator in the first character position, then the escape character must be entered in its place and the terminator moved to the second character position.

## Batch and Pseudo-interactive Environments

In batch and pseudo-interactive environments there must be a terminator:

- At the end of a command statement
- At the end of a member definition statement, in the first character position of the record. (There isn't a terminator at the end of each input record, only at the end of the complete statement.)

# Amendment Lines (in ALTER and MODIFY Commands)

A member definition amendment is made up of:

- An ALTER or MODIFY command statement
- One or more input records (amendment lines) to amend an existing member definition
- A terminator (a semicolon or a period) to indicate the end of the amendment.

**Note:**

Instead of a semicolon or period, the amendment lines ACCEPT, QUIT, or END can be used as amendment terminators.

Refer to the *ASG-Manager Products Dictionary/Repository User's Guide* for details.

Example of a member definition amendment:

```
MODIFY EMPLOYEE-CODE;
CHANGE ALL '4' TO '6'
;
```

`MODIFY EMPLOYEE-CODE;` is the command statement. This is followed by an amendment line to change all occurrences of 4 to 6, and a terminator `;` to indicate the end of the amendment.

For the format of particular amendment lines, refer to the syntax of the ALTER and MODIFY commands in InfoBank or in the *ASG-Manager Products Quick Reference*.

The rules which apply to the coding of command statements and member definition statements also apply as general rules to the coding of member definition amendments. Rules which apply specifically to amendments are as follows:

- An amendment line must be wholly contained in one input record - it cannot continue onto the following record
- There must be a terminator to indicate the end of the amendment. (There is not a terminator at the end of each input record, only at the end of the complete amendment.)
- A period is recognized as a terminator only when immediately followed by a space, whereas a semicolon is recognized as a terminator whether or not it is immediately followed by a space
- If the amendment has a string which is a single period or which starts with a semicolon, then the period or semicolon must not be in the first character position of the input line. (A period or semicolon in such a position is interpreted as a terminator.)

# Spaces in Statements

As a general rule, the elements in a statement must be separated from each other by one or more spaces. Exceptions to this rule are described below.

In a command statement, spaces between the terminator and the preceding element are optional. For example:

```
LIST member-name;
```

and

```
LIST member-name ;
```

are both accepted.

In a list of variables separated by commas, spaces before or after the commas are optional. There is no comma after the last variable in a list. For example:

```
PRINT member-name-1, member-name-2, member-name-3 ;
```

In a list of keywords, a comma may sometimes be needed between each; the command specifications show where. Spaces before or after the comma are optional. There is no comma after the last keyword in a list.

If an element ends in the last character position of an input record, the next element can (but need not) start in the first character position of the next record.

# Keywords in Statements

Keywords form the statement identifiers and may also appear within statement bodies. Within the body, a keyword which controls a subordinate keyword and/or variable, together with its subordinate keyword and/or variable, is called a clause.

There are no 'reserved' words in the Manager Products language. The language is so designed that a variable cannot be mistaken for a keyword if you enter the syntax as documented in InfoBank or Manager Products technical publications. For example, words which elsewhere in context would be keywords can be used as member names.

Most keywords can be truncated. Some can be truncated to different extents in different statements, depending on what other keywords could appear in that position. Truncation limits for keywords are given in the *ASG-Manager Products Quick Reference*.

**Note:**

Truncation limits for statement identifiers cannot be given since this depends on:

- The environment (batch, pseudo-interactive, interactive)
- The Manager Products and/or selectable units installed
- The commands that have been disabled, renamed, or added
- The user-defined member types
- The user class (general user, Controller, Systems Administrator)

If a keyword is truncated beyond a certain limit it may become ambiguous. For example (unless affected by User Defined Commands), the command identifier RENAME can be truncated to RENAM, RENA, or REN and still be recognized, but if truncated to RE then it becomes ambiguous: RE could mean RENAME, REMOVE, REPLACE, or REPORT.

If you enter an ambiguous Primary Command, then the result will depend on the AMBIGUITY-ASSUMPTION setting.

Refer to "ControlManager Commands" on page 129 for details of QUERY PRIMARY-COMMANDS and SET and QUERY AMBIGUITY-ASSUMPTION.

ASG supplies a number of abbreviated forms of Primary Commands. For example, QUERY can also be entered as Q or QU. But note that these are abbreviated forms not truncations.

If you enter an ambiguous keyword other than a Primary Command, then ControlManager makes an assumption as to the intended keyword (if it is reasonable to do so in the particular context). However, you should not rely on this as it may not give the result you expect.

If an enhancement to Manager Products results in new keywords that may be included in a member definition statement, truncation limits for old keywords in that statement could change from one release to the next. ASG will try to ensure that keywords truncated to the maximum permissible extent will give the same result across Manager Products releases, but no guarantee can be given that this will always be achieved. If truncation limits of keywords are extended in a later release, then a warning message will be output when the statement is processed by the later release.

To minimize the possibility of unexpected results from an ambiguity assumption, or warning messages from later releases, ASG recommends that truncated forms of keywords should not be used in member definition statements or in any stored commands (that is, commands stored in COMMAND-STREAMs, Executive Routines, and Profiles).

The abbreviated forms of Primary Commands can be used without risk of unintended results or warning messages.

# Variables in Statements

## Names

### Character Sets for Names

The standard character set for names is as follows:

- The letters A through Z
- The numerals 0 through 9
- Hyphens
- Underscores (as separate characters and not as underscores of other characters)
- # symbols
- @ symbols
- Local currency symbol with the internal code hexadecimal 5B.

An *extended* character set is also available. Names containing any of these characters *must* be delimited:

- Space characters (hexadecimal 40)
- Characters with the internal code hexadecimal A1, C0, D0, and E0
- Characters whose hexadecimal codes are in any of the following ranges:
  - 4A through 50
  - 5A through 61
  - 6A through 6F
  - 79 through 7F

### Dictionary Names

A dictionary name can be a maximum of 6 characters in length. It can consist of the letters of the alphabet and the numerals 0 to 9. It must commence with a letter.

## Status Names, Dictionary Members, and MP-AID Member Names

Status names and dictionary member names can be a maximum of 32 characters in length. The maximum length of an MP-AID member name is 10 characters.

Whether a status, dictionary member, or MP-AID member name needs to be delimited is determined by the character set from which the name is formed. The rules for the character sets are:

- Names made up of characters from the *standard* character set need not be delimited unless the name contains only numeric characters, or the first character of the name is a hyphen or underscore
- Names containing characters from the *extended* character set must be delimited.

A status, dictionary member, or MP-AID member name must be delimited when it could appear at the same point in a command statement as a keyword, or the abbreviation of a keyword, with which it is ambiguous.

Delimited status, dictionary member, and MP-AID member names are governed by the rules for delimited character strings with the restriction that non-printable characters must not be used.

### Restrictions on Dictionary Member Names

In FILE, GROUP, and ITEM member definition statements, the following restrictions apply to dictionary member names declared in the comparand position within an IF clause:

- A name commencing with numerals and having the same format as a floating point literal, is interpreted as a floating point literal
- A delimited name is interpreted as a delimited character string literal.

### Restrictions on ENTITY and Data Element Names

For users who have the optional Enterprise Modeling facility installed, the following constraints should be observed:

- ENTITY names should not exceed 31 characters
- Neither ENTITY names nor data element names should start with either of the prefix characters reserved for creating default data element names from ENTITY names during processing of a MERGE command.

If these constraints are not observed, conflicts may occur when entities are merged into the Workbench Design Area if they are already present during processing of the MERGE command.

For further information on prefix characters in default data elements refer to your Manager Products Installation manual under the LHSPRE and RHSPRE parameters of the LOPT1 Macro.

## Aliases, Catalog Classifications, and KEPT-DATA List Names

Catalog classifications and KEPT-DATA list names can be a maximum of 79 characters in length.

Aliases can be a maximum of 79 characters in length unless specified otherwise using the CONTROL NEW-ALIASES command (see the *ASG-Manager Products Controller's Manual*).

Aliases and catalog classifications *must* be enclosed within delimiters when entered in ALIAS or CATALOG common clauses in member definition statements. Aliases and catalog classifications appearing within WHAT IS commands must obey the rules for delimiters which apply to dictionary member names.

Whether an alias, catalog classification or KEPT-DATA list name needs to be delimited when it appears in any command statement other than the above is dependent on the character set from which it is formed. The rules for the character sets are as follows:

- Aliases, catalog classifications, and KEPT-DATA list names made up of characters from the *standard* character set need not be delimited
- Aliases, catalog classifications, and KEPT-DATA list names containing characters from the *extended* character set must be delimited.

An alias, catalog classification, and KEPT-DATA list name must be delimited when it could appear at the same point in a command statement as a keyword, or the abbreviation of a keyword, with which it is ambiguous.

Delimited aliases, catalog classifications, and KEPT-DATA list names are governed by the rules for delimited character strings with the restriction that non-printable characters must not be used.

## Owner Names and User Names

Owner names and user names can be a maximum of 32 characters in length.

Owner names must be delimited when they appear in the Controller's commands OWNER ADD and OWNER DELETE.

Whether an owner name or user name requires to be delimited when it appears in any command statement other than those mentioned above depends on the character set from which it is formed. The rules for the character sets are:

- Owner names and user names made up of characters from the *standard* character set need not be delimited
- Owner names and user names containing characters from the *extended* character set must be delimited.

An owner name or user name must be delimited when it could appear at the same point in a command statement as a keyword, or the abbreviation of a keyword, with which it is ambiguous.

Delimited owner names and user names are governed by the rules for delimited character strings with the restriction that non-printable characters must not be used.

### POST/MAIL Dataset File Names and Destination Identifications

POST/MAIL Sequential Output dataset file names can be a maximum of either 7 characters in length under DOS or 8 characters in length under OS.

POST/MAIL Extrapartition dataset destination identifications can be a maximum of 7 characters in length but are truncated from the right to four characters when declared in the POST/MAIL command.

Both file names and destination identifications may only contain characters from the *standard* character set and must not be delimited. The following restrictions also apply:

- The first character must not be an underscore or hyphen
- They must not contain only numeric characters.

### Representation of Names in Manager Products Syntax

To avoid complicating the syntax for statements, the alternative way of declaring status names, dictionary member names, MP-AID member names, KEPT-DATA list names, owner names, user names, aliases, and catalog classifications within delimiters is not shown except where the circumstances require that they must be delimited. Wherever any of these names appear undelimited in statement syntax it should be interpreted as offering the choice:

```
──┬─name──────┬──
  └─'name'────┘
```

## Character Strings

### Introduction

Dictionary member definitions and commands may include character strings: these are delimited or undelimited strings or printable and/or non-printable characters.

When a dictionary member is encoded, a string is held differently depending on whether or not it is delimited, and whether or not it is entered in a text attribute.

## Delimited Character Strings

A delimited character string is a character string of printable and/or non-printable characters, enclosed within delimiters.

The delimiters supplied as a default are the single quote ' and the double quote " characters, but the Systems Administrator can specify certain additional characters. To display the current delimiters, enter:

```
QUERY STRING-DELIMITER ;
```

Each string must have the same character as its opening and closing delimiter, and this character must not appear within the string.

A string can be entered as a series of consecutive delimited character strings. Each delimited string must be wholly contained in one input record, but one input record can contain more than one delimited string. The delimiter character need not be the same for every string.

## Concatenation of Delimited Character Strings

When a member is encoded, consecutive delimited character strings are *concatenated* (joined together) to form a single character string.

**Note:**

If the strings are separated by commas then they are not concatenated but are output on separate lines.

For example, if the source record of an InfoBank panel contains the clause:

```
INDEX-TERMS 'ONE: First term', 'TWO: Second', 'THREE: Third'
     'term'
```

then a GLOSSARY giving INDEX-TERMS would output from the encoded record:

```
INDEX-TERMS
 ONE: First term
 TWO: Second
 THREE: Third term
```

Each term is on a separate line, and the third is concatenated.

There are at least two instances when you must divide a character string into two or more delimited strings for concatenation:

- If a character string is to contain both single and double quote characters, and an additional delimiter character has not been specified by your Systems Administrator
- If a character string cannot be wholly contained on an input line.

The following example shows how to enter a character string which contains single quote and double quote characters. The sentence:

```
A string can be delimited by single quotes 'thus' or by double
quotes "thus".
```

could be entered as:

```
'A STRING CAN BE DELIMITED BY SINGLE '
"QUOTES 'THUS' OR"' BY DOUBLE QUOTES "THUS".'
```

**Note:**

Strings within text attributes (text strings) are not concatenated.

## Delimited Character Strings within Text Attributes

Certain text attributes can contain delimited character strings (text strings); for example, the common clauses DESCRIPTION and NOTE. There can be up to 32,767 delimited strings in a text attribute.

When a member is encoded, consecutive delimited text strings are *not* concatenated, but are output on separate lines. For example, if the source record of an InfoBank panel contains the clause:

```
DESCRIPTION 'This is an example of a ''DESCRIPTION clause.'
     'There is no concatenation.'
```

then a GLOSSARY giving DESCRIPTION would output from the encoded record:

```
DESCRIPTION
     This is an example of a
     DESCRIPTION clause.
     There is no concatenation.
```

## Undelimited Character Strings

An undelimited character string is a string of any printable characters. (A space is not a printable character in this context, because it is identified as an element separator.)

For example, in the selection clause of an INFOBANK-PANEL, the selection string is an undelimited character string:

```
SELECT string panel-name
```

where *`string`* is an undelimited character string.

If a period, semicolon, comma, or right parenthesis appear in an undelimited string, it must be in the first character position of the string. If it appeared elsewhere it would produce undefined results.

If a member definition statement has an undelimited character string which is a single period (full stop) or which starts with a semicolon, then the period or semicolon must *not* be in the first character position of the input record because this would be interpreted as a terminator.

## Free Form Text Attributes

A free form text attribute is one which can contain any text and which displays this text exactly as it was entered; for example, the CONTENTS clause of an InfoBank panel.

A free form text attribute may contain stored commands; for example, the CONTENTS clause of a COMMAND-STREAM. If the statement has an undelimited character string which is a single period (full stop) or which starts with a semicolon, then the period or semicolon must not be in the first character position of the input record because this would be interpreted as a terminator.

## Length of Character Strings

The maximum length of character strings and text strings are as follows.

| Type of String | Length | |
|---|---|---|
| Delimited character string | 256 | * |
| Undelimited character string | 248 | |
| Text string | 246 | # |

* After concatenation (if applicable). However, there are some character string attributes that have a lower permitted maximum length of string. For example, strings in a CATALOG clause can have a maximum of only 79 characters, and the member will not encode if the concatenated string would be greater than this.

The maximum length of string is stated in the specification of the particular attribute.

# 248 minus two for the delimiters.

## Reporting and Interrogating Strings

The encoded record of a member is processed when you report the member (using GLOSSARY or REPORT commands) or interrogate the dictionary (for example, using WHAT or WHICH).

The rules regarding how a string may be interrogated depend on whether it appears within:

- A text attribute
- A value attribute
- A clause with subordinate text or value attributes.

These rules are documented with the WHICH command.

For details of the WHICH command, refer to the *ASG-Manager Products Dictionary/Repository User's Guide*.

## Integers

An integer can have a maximum of 19 characters:

- A maximum of 18 digits (0 to 9)
- An optional leading sign (either + or -)

Examples:

```
+123456789123456789
```

```
123
```

For the definition of a particular integer, please refer to the syntax as defined in InfoBank or in Manager Products technical publications.

## Decimal Numbers

A decimal number consists of an integer, optionally preceded by a sign, and optionally followed by a decimal point and decimal digits. It can have a maximum of 20 characters:

- An optional leading sign (either + or -)
- A maximum of 18 digits (0 to 9)
- An optional decimal point

The decimal point must not be the last character.

Examples:

```
+123456789.123456789
```

```
-1.234
```

```
123
```

## Floating Point Numbers

A floating point number consists of:

- The mantissa
- Optionally the letter E and the exponent.

The mantissa is a decimal number of up to 16 digits (0 to 9), and the exponent an integer of up to two digits. Both can have a leading sign (either + or -).

A floating point number can have a maximum of 21 characters, and must lie in the range:

$5.4 \times 10^{-79}$ to $.72 \times 10^{+76}$

Examples:

+123456789. 123456E-12

123.45

-123E9

# 4 Logging On and Off

This chapter includes these sections:

**Logging On . . . . . 29**
The LOGON Command and the Logon Panel . . . . . 30
Autolog . . . . . 32
Logon Exit. . . . . 32
Reconnection after Abnormal Session Termination . . . . . 33

**Logging Off . . . . . 34**

## Logging On

To start a session you invoke Manager Products and then log on to ControlManager. You can log on:

- Using the LOGON command (possibly via the Logon Panel)
- Invoking Autolog
- Automatically using the Logon Exit

The availability of different log-on procedures in different environments can be summarized as follows:

**Table 1 The Availability of Different Log-on Procedures in Different Environments**

| Environment | Autolog | LOGON Command | Logon Exit | Logon Panel |
|---|---|---|---|---|
| Access Call | X | X | X | - |
| Batch | X | X | X | - |
| CICS | - | - | X | X |
| CMS | - | - | X | X |
| ICCF | X | X | X | - |
| IMS/DC | X | - | X | - |
| ROSCOE | X | X | X | - |
| Siemens Timesharing Interface | - | - | X | X |
| TSO | - | - | X | X |
| TSO/ISPF | X | - | X | X |

KEY
X = the procedure is available in this environment
- = the procedure is not available in this environment

## The LOGON Command and the Logon Panel

In all environments except IMS/DC, the Systems Administrator assigns you a Logon Identifier and password to be used when you log on.

Where log on is via the LOGON command, you enter the command:

`LOGON` *`logon-identifier`* `PASSWORD` *`password`*

Where log on is via the Logon Panel, a formatted panel is automatically displayed and you need only enter your Logon Identifier and password.

**Note:**

The password does not display for security reasons.

**Figure 1 • The ControlManager Logon Panel**

```
ASG-Manager Products(TM) - LOGON SCREEN     (hit any PF key to exit)

          ********************    ************************************
        *****            *****  ******                *****
       *********************   ****************   *****       ******
      *****            *****               ******  *****       **  **
     *****           ************************    ****************

ASG-Manager Products are :

(c) Copyright 1975-2000 Allen Systems Group, Inc. All Rights Reserved.

Warning: Restricted Rights - May only be used in accordance with License
Agreement/Government Contract.

Further Restrictions apply to usage rights and User obligations.

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their respective owners. For full details of ASG and Vendor Ownership
enter the COPYRIGHT command at any time after logon.









                        LOGON:            PASSWORD:
```

Each Logon Identifier has associated with it a Logon Profile. This can contain a number of commands to tailor your environment. Commands common to two or more Logon Profiles can be included in a Global Profile, and the Global Profile invoked from a Logon Profile. If your Logon Identifier and password are accepted, ControlManager will execute the commands in your Logon Profile, and any output from these commands will be displayed.

Refer to "PROFILE Members" on page 108 for details of profiles.

## Autolog

Autolog is available in the following environments:

- Access Call
- Batch
- ICCF
- IMS/DC
- ROSCOE
- TSO/ISPF

In TSO/ISPF environments you can log on via the Logon Panel (where you need to enter your Logon Identifier and password) or via Autolog.

In the other environments, if the first command you enter is not the LOGON command then, unless it is:

- The ENVIRONMENT command
- A valid LOGOFF command
- A variant of the MP-AID command

the Autolog procedure is automatically executed.

When you log on via Autolog, then the commands set up by the Systems Administrator in GLOBAL0000 and GLOBALAUTO are executed. These Global Profiles tailor your environment; for example, they can restrict you to read-only access to Manager Products dictionaries, or stop you from using Manager Products unless you have entered an acceptable LOGON command.

## Logon Exit

The Logon Exit is available in all Manager Products environments. The Logon Exit can be tailored by the Systems Administrator to provide additional log-on processing such as further validation. In full-screen interactive environments, that is:

- CICS
- CMS
- Siemens Timesharing Interface
- TSO

Logon Exits can also be tailored so that:

- The Logon Panel is displayed and you need only enter your Logon identifier and password to log on
- The Logon Panel is bypassed and you log on automatically (the log-on information being provided by the exit)
- The Manager Products run is terminated

The Logon Exit is only available if the Systems Administrator's Environmental Facility is installed.

## Reconnection after Abnormal Session Termination

If an online Manager Products session terminates abnormally with, for example, an abend, a subsequent logon under the same Logon Identifier will fail if the Logon Profile is exclusive (see "PROFILE Members" on page 108). This is because the Logon Profile is set to *in use*, precluding access by another user.

To log on in these circumstances, enter the keyword RECONNECT after the password in the LOGON command:

```
LOGON logon-identifier PASSWORD password RECONNECT;
```

You will then be logged on to Manager Products in the usual way.

If you use the RECONNECT keyword when the previous session had not terminated abnormally, it will be ignored and you will be logged on.

If you have an exclusive Logon Profile, take care not to share your log-on details with other users. The availability of the RECONNECT option means that other users could log on with your log-on details, overriding the normal security on exclusive Logon Profiles.

Abnormal session termination also means that users will be prevented from accessing any USER-MEMBERs being updated when termination occurred. See "MP-AID RESET USER-MEMBER" on page 167 for information on how to reset such members.

# Logging Off

To end a Manager Products run, enter:

```
LOGOFF ;
```

or:

```
END ;
```

Both commands invoke shut-down procedures (closing any dictionaries currently open, deleting TRANSIENT members on the MP-AID, etc.), and then return you from ControlManager to your operating environment.

In interactive environments, LOGOFF and END are only valid in Command Mode.

In interactive environments, to log off from the Logon Screen (that is, without logging on first) simply press any PF key.

# 5 ControlManager Screens

This chapter includes these sections:

**Introduction** . . . . . **35**

**Screen Areas** . . . . . **36**

**Screen Formats** . . . . . **37**
General Purpose Screen: Heading Area . . . . . 37
General Purpose Screen: Data Area . . . . . 41
General Purpose Screen: Line Command Area . . . . . 41
General Purpose Screen: Command Area . . . . . 42
InfoBank Screen: Heading Area . . . . . 43
InfoBank Screen: Data Area . . . . . 44
InfoBank Screen: Line Command Area . . . . . 45
InfoBank Screen: Command Area . . . . . 45

## Introduction

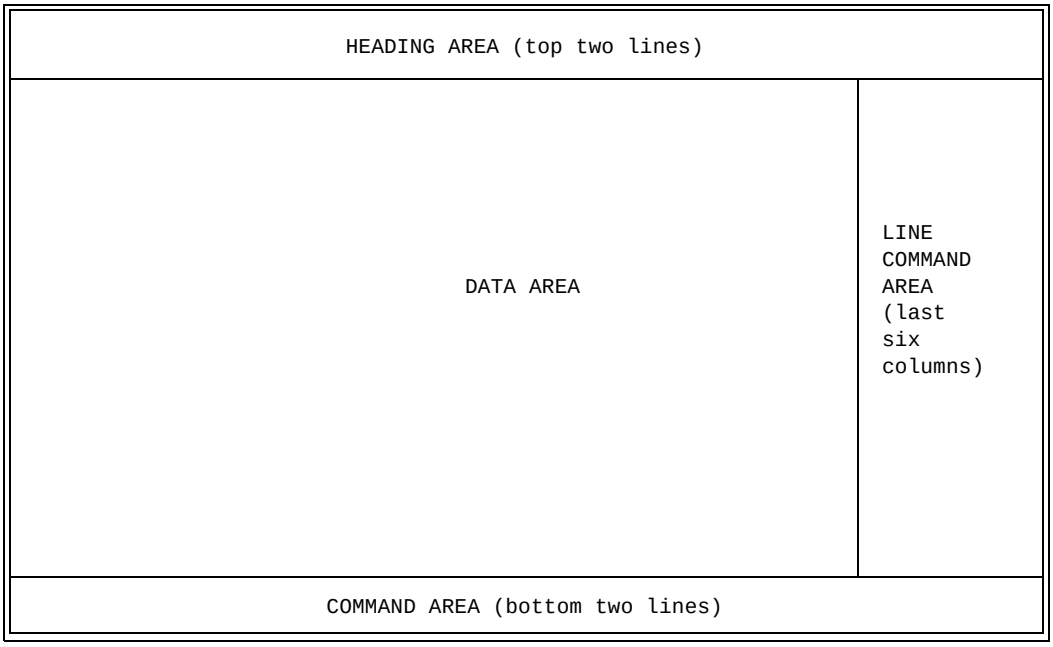
This chapter describes the ControlManager screens in fully interactive environments. For details of these environments refer to Chapter 2, "ControlManager Capabilities and Environments Supported," on page 7.

# Screen Areas

ControlManager divides the screen into four areas:

- The Heading Area
- The Data Area
- The Line Command Area
- The Command Area

**Figure 2 • ControlManager Screen Areas**




The *Heading Area* is the top two lines of the screen.

The *Data Area* is the area between the Heading Area and the Command Area minus the Line Command Area. A line in the Data Area is designated as the Current Line. At present this is the top line of the Data Area as displayed on the screen. There is always a Current Line in the data being processed, even when that data is not being displayed on the screen (as can occur when the contents of a buffer are being processed by a User Executive or Corporate Executive Routine).

The ASG-supplied default has the *Line Command Area* as the last six columns (RIGHT) of the screen, between the Heading Area and the Command Area. However, you can set the area to the first six columns (LEFT) or set it OFF if you wish.

Refer to "SET and QUERY LINE-AREA" on page 214 for details of SET LINE-AREA.

If the Extended Interactive Facility is installed, the Line Command Area can be used for entering Line Commands.

The ASG-supplied default has the *Command Area* as the bottom two lines of the screen. However, you can set the first of these lines to the top of the screen, below the Heading Area, if you wish.

Refer to "SET and QUERY COMMAND-LINE" on page 199 for details of SET COMMAND-LINE.

**Note:**

The first column of each area is reserved for system use and is always blank.

# Screen Formats

There are two ControlManager screen formats:

- The General Purpose Screen
- The InfoBank Screen

## General Purpose Screen: Heading Area

The Heading Area is the top two lines of the screen, and displays screen usage information.

### The First Line of the Heading Area

The first line contains the following screen features:

- Mode Indicator (may be extended)
- First Line Indicator
- Line Counter
- Activity Indicator

**Mode Indicator.** Displays the mode in which ControlManager is operating, and may be one of:

```
COMMAND MODE:
DICTIONARY UPDATE:
MP-AID EDIT:
LOOKASIDE:
```

Command Mode is the basic ControlManager operating mode. Update, Edit, and Lookaside Modes are the operating modes of the Extended Interactive Facility.

For details of operating modes refer to Chapter 6, "The Extended Interactive Facility," on page 47.

When a dictionary member or MP-AID member is displayed in Update or Edit Modes, the Mode Indicator is extended to include the member-name. For example:

```
DICTIONARY UPDATE: EMP-CODE
```

It is also extended when you use any of the commands ALTER, MODIFY, REPLACE, INSERT, or ADD in Command or Lookaside Modes. The first three letters of the command and the full name of the member are displayed after the mode. For example:

```
LOOKASIDE: MOD EMP-CODE
```

**First Line Indicator.** Displays the number, in the buffer, of the first line being displayed in the Data Area.

**Line Counter.** Displays the current number of lines in the buffer. If it's being refreshed at an appropriate interval, the Line Counter will change while output is being generated. When all output has been generated the Line Counter shows the total number of lines stored in the buffer.

**Activity Indicator.** Shows the state of the Manager Products system. It may be either RUNNING or WAITING. RUNNING means that your last command is being processed; a further command cannot yet be accepted. WAITING means that the system is ready to accept your next command.

## The Second Line of the Heading Area

If SCALE is set ON, then the second line may contain:

- Scale
- Left and/or Right Data Extension Indicators

If SCALE is set OFF, then the second line may contain:

- Column Range Indicator
- Dictionary Name (and Status Name if applicable)
- Right Data Extension Indicator

**Scale.** Shows columns across the screen.

**Data Extension Indicator.** Displays to the left and/or to the right of the line.

The Left Data Extension Indicator <<<< displays when the contents of the Data Area extend beyond the left of the screen. (This occurs if the RIGHT command has been used.)

**Note:**

The Left Data Extension Indicator is not displayed if a Dictionary Name and Status Name display.

The Right Data Extension Indicator >>>> displays when the contents of the Data Area extend beyond the right of the screen.

**Column Range Indicator.** Displays to the right of the line, and shows which columns are being displayed. For example:

```
VIEW: 001 TO 073
```

If you use the LEFT and RIGHT commands, this view will change. For example, if you enter `RIGHT 10` the view in the above example would change to:

```
VIEW: 011 TO 083
```

**Dictionary Name.** Displays if an active dictionary is in use. For example:

```
DICTIONARY: DEMO
```

**Status Name.** Displays if:

- An active dictionary is in use
- Either of the Status facilities is installed
- There is a named Status in the active dictionary

For example:

```
DICTIONARY: DEMO  STATUS: UDS
```

**Figure 3 • ControlManager General Purpose Screen with Scale Set Off**

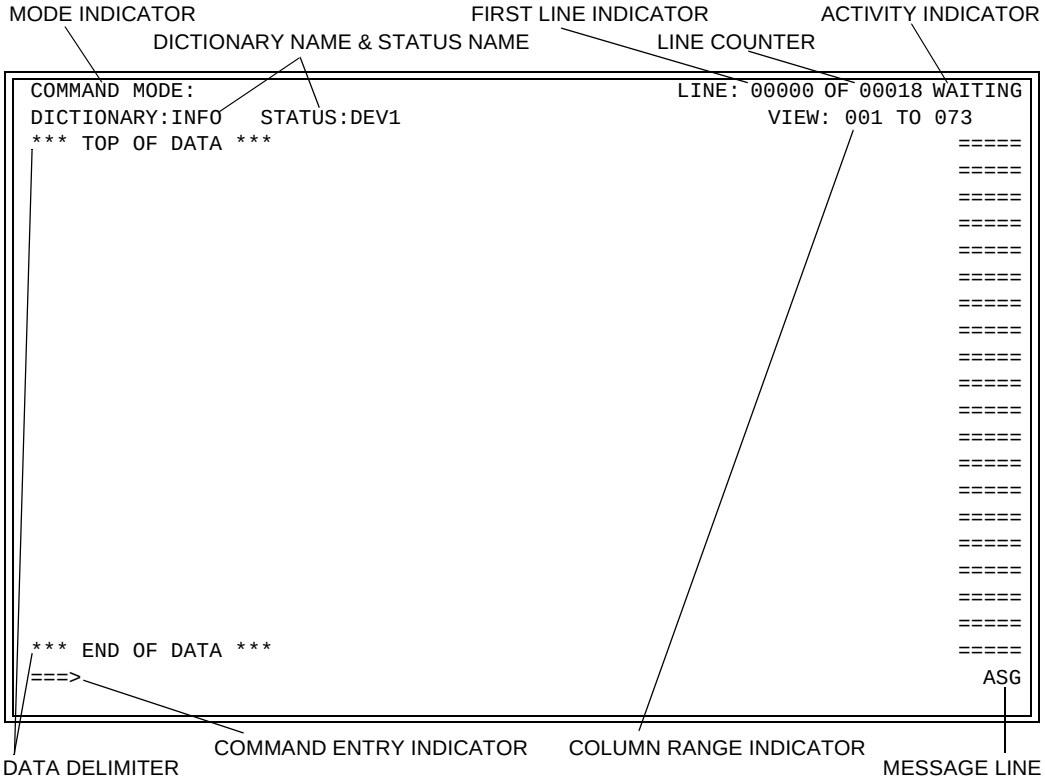
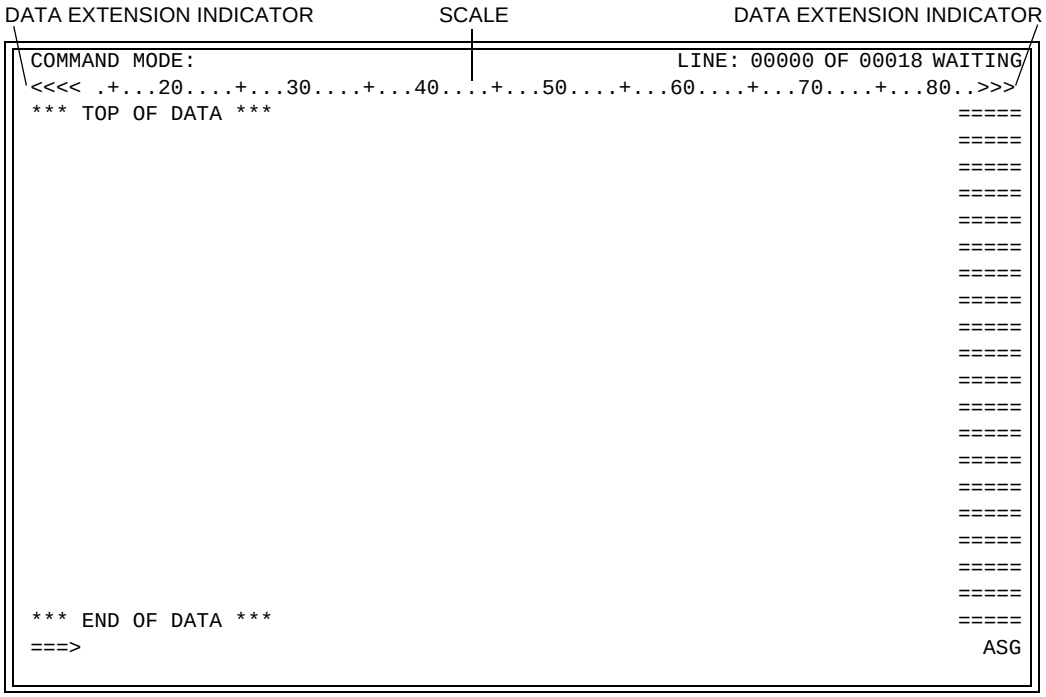



**Figure 4 • ControlManager General Purpose Screen with Scale Set On**



## General Purpose Screen: Data Area

The Data Area is the area between the Heading Area and the Command Area, excluding the Line Command Area. The first column of the Data Area is reserved for system use and is always blank.

The contents of the buffer currently being viewed (output from commands, or member text) are displayed in the Data Area. The Data Area acts as a window on the buffer contents, the contents may be wider and longer than the Data Area.

The first data line of the buffer contents is preceded by the Data Delimiter:

```
*** TOP OF DATA ***
```

and the last line is followed by the Data Delimiter:

```
*** END OF DATA ***
```

These Data Delimiters appear on the screen when the Data Area window is positioned at the top or at the bottom of the buffer respectively.

## General Purpose Screen: Line Command Area

The Line Command Area is the first or last six columns of the screen between the Heading Area and the Command Area. The area is made up of one blank column reserved for systems use followed by five columns containing equals (=) signs. These columns are excluded from the Column Range Indicator.

Refer to "General Purpose Screen: Heading Area" on page 37 for details of the Column Range Indicator.

If the Extended Interactive Facility is installed, the Line Command Area can be used for entering Line Commands.

Refer to Chapter 6, "The Extended Interactive Facility," on page 47 for details of Line Commands.

You can set the Line Command Area to the last six columns (RIGHT), or to the first six columns (LEFT), or set it OFF if you wish.

Refer to "SET and QUERY LINE-AREA" on page 214 for details of SET LINE-AREA.

**Note:**

The Line Command Area is not shown when InfoBank panels are being used, although it is still present.

## General Purpose Screen: Command Area

The ASG-supplied default has the Command Area as the bottom two lines of the screen. However, you can set the first line to the top of the screen, below the Heading Area, if you wish.

Refer to "SET and QUERY COMMAND-LINE" on page 199 for details of SET COMMAND-LINE. The Command Area contains:

- The Command Entry Indicator
- The Message Line

You enter Primary Commands in the *Command Area*.

**Command Entry Indicator ( = = => ).** Displays in the first line of the Command Area; you enter Primary Commands after this indicator.

**Note:**

The first column after the indicator is reserved for system use and is always blank.

**Message Line.** The second line of the Command Area contains the word ASG. When a single Manager Products message or line is generated, it displays in this line. However, when two or more messages or lines are generated they display in the Data Area.

With both lines of the command area at the *bottom* of the screen, you can enter commands in the second (the message line) as well as the first if there is no message already displayed there. With the first line at the *top* of the screen, you cannot enter commands in the second.

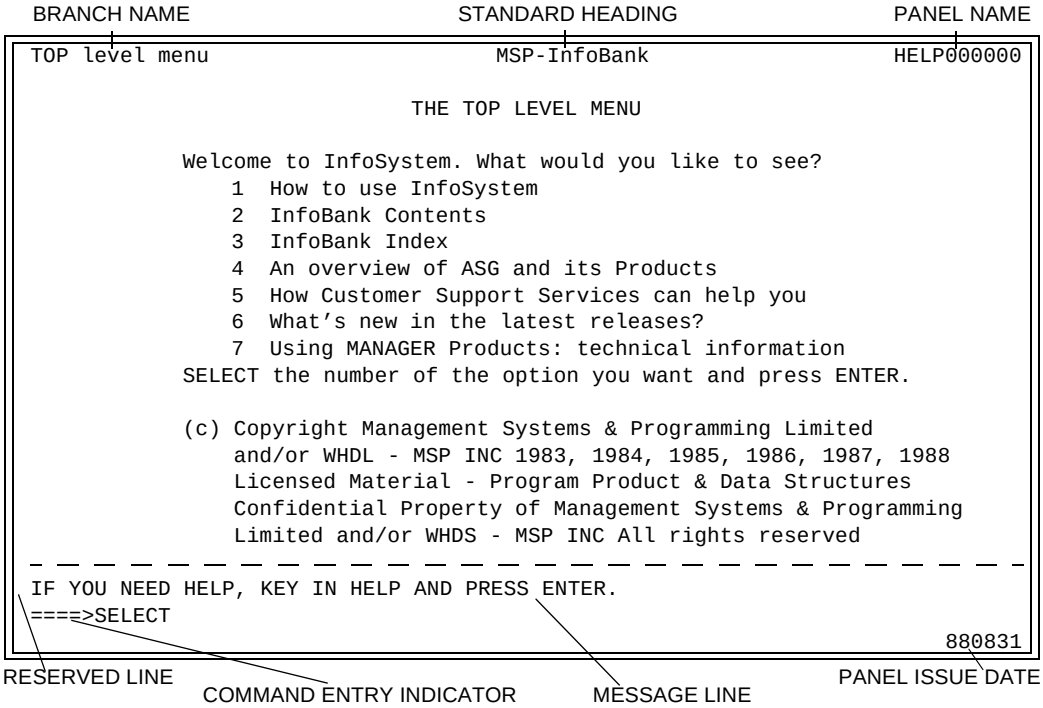
You cannot overwrite the word ASG.

# InfoBank Screen: Heading Area

## The First Line of the Heading Area

The first line shows the Branch Name, Standard Heading, and Panel Name or Activity Indicator.

**Figure 5 • InfoBank Screen**




**Branch Name.** Displays to the left of the line and shows the name of the branch in InfoBank that contains the panel. When the response to a RETRACE DISPLAY command issued from an InfoBank panel is displayed, RETRACE PANEL DISPLAY appears in the Branch Name position.

**Standard Heading.** InfoBank displays for every InfoBank screen.

**Panel Name.** Displays to the right of the line and shows the name of the InfoBank panel. When a RETRACE PANEL DISPLAY screen is displayed, the Panel Name is left blank.

The Panel Name can be used in PANEL commands to access the panel directly (without going through menus of retrace paths).

**Activity Indicator.** Replaces the Panel Name when a command is being performed while an InfoBank panel is displayed. While the command is being performed, RUNNING displays in this position.

### The Second Line of the Heading Area

The second line shows Data Extension Indicator and/or Panel Extension Indicators.

**Data Extension Indicator.** Displays to the left and/or to the right of the line.

The Left Data Extension Indicator <<<< displays when the contents of the Data Area extends beyond the left of the screen. (This occurs if the RIGHT command has been used.) The Right Data Extension Indicator >>>> displays when the contents of the Data Area extends beyond the right of the screen.

**Panel Extension Indicator (<<<<MORE).** Displays to the left of the line when there is more text for the panel preceding the text currently displayed.

When the contents of the Data Area extend beyond the left of the screen AND there is more text for the panel preceding the text currently displayed, then a Left Data Extension Indicator is displayed rather than a Panel Extension Indicator. However, it is generally apparent from the text when this circumstance has arisen.

## InfoBank Screen: Data Area

The text of an InfoBank panel is displayed in the *Data Area*.

On the bottom line of the Data Area, below a dotted line, is the *Reserved InfoBank Line*. As supplied by ASG, this reads:

```
IF YOU NEED HELP, KEY IN HELP AND PRESS ENTER.
```

However, if the User Defined InfoSystem facility is installed, the Systems Administrator can change this.

**Panel Extension Indicator (MORE>>>> ).** Displays to the right of the Reserved InfoBank Line when there is more text for the panel following the text currently displayed.

**Note:**

The dotted line and the Reserved InfoBank Line extend into the Line Command Area.

## InfoBank Screen: Line Command Area

To help make the panels easier to read, the Line Command Area is not shown on an InfoBank Screen. However, the area is there and, if the Extended Interactive Facility is installed, can be used for entering Line Commands.

For details of Line Commands refer to Chapter 6, "The Extended Interactive Facility," on page 47.

If Panel Driven Processing (PDP) is installed, you can use the Line Command Area to display any panel shown in an InfoBank Index panel. Simply key in PAN against the index entry you want and press Enter; that panel is then displayed.

## InfoBank Screen: Command Area

The ASG-supplied default has the Command Area as the bottom two lines of the screen. However, you can set the first line to the top of the screen, below the Heading Area, if you wish.

Refer to "ControlManager Commands" on page 129 for details of SET COMMAND-AREA.

The Command Area contains:

- The Command Entry Indicator
- The word SELECT (by default)
- The Message Line
- The Panel Issue Date

You enter Primary Commands in the *Command Area*.

**Command Entry Indicator ( = = => ).** Displays in the first line of the Command Area. As supplied by ASG, the indicator is followed by the word SELECT. However, you can suppress this display of SELECT if you wish.

Refer to "SET and QUERY INFOBANK-SELECT" on page 213 for details of SET INFOBANK-SELECT.

**Note:**

The first column after the indicator is reserved for system use and is always blank.

**Message Line.** Is the second line of the Command Area and contains the Panel Issue Date. When a single Manager Products message or line is generated, it displays in this line. However, when two or more messages or lines are generated they are displayed in the Data Area.

With both lines of the Command Area at the *bottom* of the screen, you can enter commands in the second as well as the first (if there is no message already displayed there). With the first line at the *top* of the screen, you cannot enter commands in the second.

**Panel Issue Date.** Displays to the right of the Message Line, and shows the date of the Infobank Release in which the panel was first issued or last constructed. The date is expressed as a six-digit number. For example, if the panel was last constructed on 30th September 1987 then the Panel Issue Date would be 870930. You cannot overwrite the Panel Issue Date.

# 6 The Extended Interactive Facility

This chapter includes these sections:

**Overview of the Extended Interactive Facility . . . . . 48**

**Modes, Buffers, and Lookaside . . . . . 48**
Modes . . . . . 48
Buffers . . . . . 50

**The Full Screen Editor . . . . . 56**
Primary and Line Commands . . . . . 58
The Scratchpad . . . . . 58
The Current Line . . . . . 59

**Entering, Leaving, and Abandoning an Edit . . . . . 59**

**Scrolling the Text on the Screen . . . . . 60**

**Deleting, Inserting, and Overtyping Characters . . . . . 61**

**Adding and Deleting Lines . . . . . 62**

**Copying and Moving Text . . . . . 62**
Summary . . . . . 62
Primary Commands . . . . . 63
Line Commands . . . . . 63

# Overview of the Extended Interactive Facility

The Extended Interactive Facility is only available in CICS, CMS, TSO, and Siemens Time Sharing Interface environments; in each of these environments, the relevant ControlManager interface facility must be installed. The Extended Interactive Facility provides the following additional features and capabilities:

- Lookaside
- Panel Driven Processing
- Full Screen Editor
- User storage facilities on the MP-AID
- Executing the contents of the Edit Buffer
- Real time Input/Output monitoring
- User defined Panel Driven Processing
- Facilities for tailoring the user environment
- User Defined Profiles

Refer to "User Defined Profiles" on page 111 for details of User Defined Profiles.

The other features and capabilities are described in this chapter and the next.

# Modes, Buffers, and Lookaside

## *Modes*

When you log on to ControlManager, you automatically enter Command Mode. Command Mode is the basic operating mode for ControlManager and is the only mode available if the Extended Interactive Facility is not installed. If the Extended Interactive Facility is installed, there are three additional modes:

- Edit
- Update
- Lookaside

Edit Mode is used for creating and editing MP-AID USER-MEMBERs using the Full Screen Editor, and for setting up the contents of an Edit Buffer so that they can be executed using the RUN command.

Refer to "RUN" on page 192 for details of RUN.

Update Mode is used for creating and updating a dictionary member using the Full Screen Editor.

Lookaside Mode is used to interrupt an activity to display and view output on the screen; for example, if you enter InfoSystem the InfoBank panels are displayed in a Lookaside Buffer.

The name of the mode you are in is displayed at the top left hand corner of the screen, except when you are viewing an InfoBank panel.

Refer to Figure 6 on page 52 for the display of mode.

All DataManager and ControlManager commands are available in each mode with the following exceptions:

| Mode | Commands Not Available |
|---|---|
| Command | Full Screen Editor commands to add, delete, or move text FILE, RFILE, SFILE, QUIT, and XQUIT<br>RUN |
| Edit Update | LOGOFF<br>RUN<br>SET NUMBERS<br>LOGOFF |
| Lookaside | Full Screen Editor commands to add, delete, or move text FILE, RFILE, and SFILE<br>LOGOFF |

**Note:**

In Command and Lookaside Modes, you can use the Full Screen Editor commands to copy text: the Line Commands C, CC, K, and KK, and the Primary Commands PUT and KPUT. You can also use all the scrolling commands: those available with the Basic Interactive Facilities, and the /Line Command and DOWN, NEXT, UP, FIND, and LOCATE Primary Commands available with the Extended Interactive Facility.

Refer to "ControlManager Commands" on page 129 for details of these commands.

Refer to "The Full Screen Editor" on page 56 for details of the Full Screen Editor.

# Buffers

Command Mode has associated with it a single buffer. (A buffer is an output storage area.) The other modes can have one or more buffers up to a total limit set by the Systems Administrator. For example, if the limit is five buffers, there can be a total of five buffers including the Command Mode Buffer. You can find out what the buffer limit is by giving the command:

```
QUERY BUFFER-LIMIT ;
```

If you exceed the buffer limit, you will be told by the system. In that case you have to close at least one buffer in order to be able to continue using the system.

The maximum size of each buffer is 65,000 lines.

## Buffer Stacking

The system of buffers allows you to have several layers of display to the screen stored and available for viewing. For example, if you are updating a member MEMBER-A, you can open a second Update Buffer containing MEMBER-B by giving the command:

```
UPDATE MEMBER-B ;
```

When you close the Update Buffer of MEMBER-B, you are automatically returned to the Update Buffer containing MEMBER-A. You can then resume the update of MEMBER-A at the point where you left off.

Similarly if during an update or edit you issue a command such as LIST or PRINT or enter InfoSystem, the output is displayed in a Lookaside Buffer. Having examined the output, you can return to the interrupted update or edit by giving the QUIT command.

See Figure 6 on page 52 for a diagram of buffer structure, and "Example of Buffer Stacking" on page 54 for examples of buffer stacking.

When you open two or more buffers, the buffers are stacked. For example, assume that you have opened four buffers:

- Lookaside Buffer
- Update Buffer 2
- Update Buffer 1
- Command Mode Buffer

and you are currently in the Lookaside Buffer. There are two ways to return to Update Buffer 1.

The first is to return to and then close Update Buffer 2. The stack is then as shown:

- Update Buffer 1
- Command Mode Buffer

The second is to enter the command:

```
UPDATE buffer-name-1 ;
```

The Lookaside Buffer is automatically closed, and you return to Update Buffer 1. The positions in the stack of Update Buffer 1 and Update Buffer 2 are reversed, and the stack is then as shown:

- Update Buffer 1
- Update Buffer 2
- Command Mode Buffer

The SET LOOKASIDE-RETENTION command enables you to retain Lookaside Buffers despite subsequent EDIT AND UPDATE commands.

Refer to "SET and QUERY LOOKASIDE-RETENTION" on page 218 for details of SET LOOKASIDE-RETENTION.

You can find out what buffers are present in the stack by giving the command:

```
QUERY ACTIVE-BUFFERS ;
```

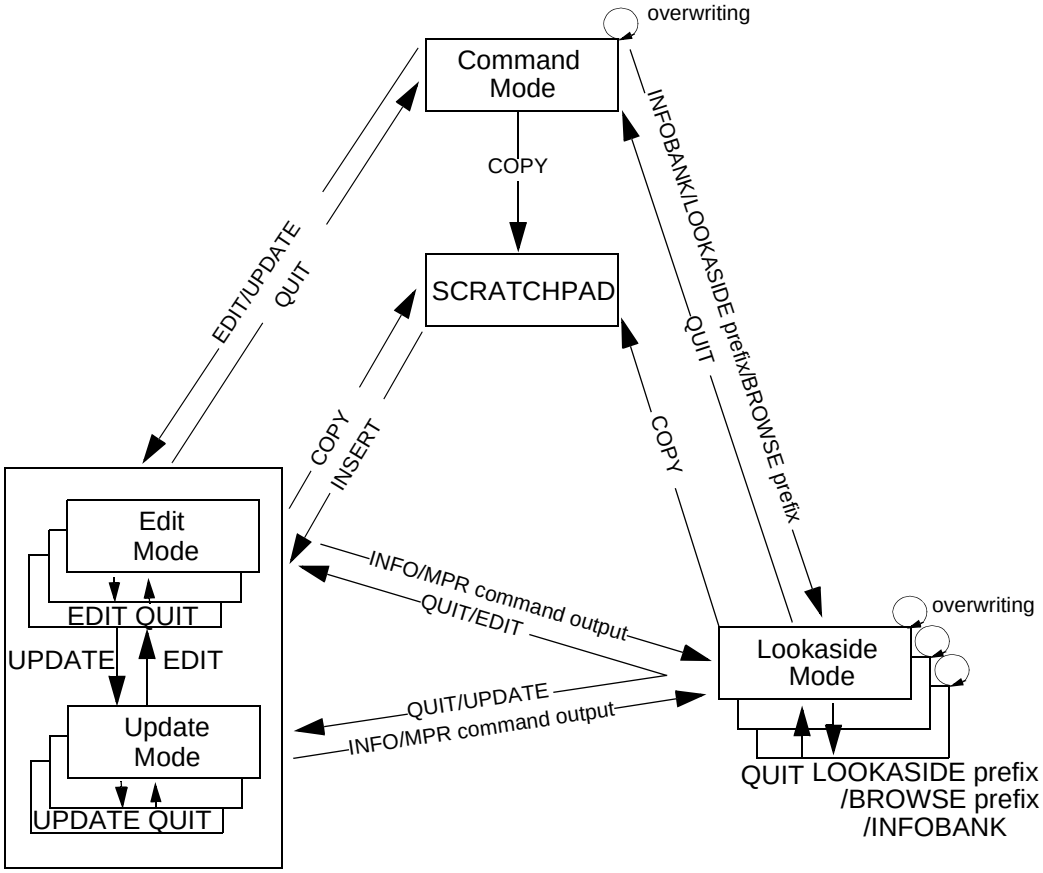
For example, details of the four buffers mentioned above would display as shown:

```
     DISPLAY OF ACTIVE BUFFERS
MODE                    NAME
LOOKASIDE               ****
DICTIONARY UPDATE       BUFFER-NAME-2
DICTIONARY UPDATE       BUFFER-NAME-1
COMMAND                 ****
```

**Note:**

To log off from ControlManager you have to return through the stack to Command Mode.

**Figure 6 • Buffer Structure**



## Buffer Commands

There are various ways in which a new buffer can be opened:

| Buffer | Opened by |
|---|---|
| **Command** | Logging on to ControlManager. |
| **Edit** | Entering an EDIT command. |
| **Update** | Entering an UPDATE command. |
| **Lookaside** | Entering a command that generates output while in Edit or Update Mode, or<br>Prefixing a command that generates output with the BROWSE or LOOKASIDE Prefix Command. |

**Note:**

If you give a command in Command or Lookaside Mode that generates output, the current contents of the Command Mode or Lookaside Buffer are overwritten by the generated output unless:

- The command is prefixed by the BROWSE or LOOKASIDE command, in which case the output is displayed in a new Lookaside Buffer, or
- The SET SCROLL-LIMIT command has been given. This command lets you specify that, if the current Command Mode Buffer is overwritten, a number of lines should be taken from the end of the buffer for display at the beginning of the new Command Mode Buffer, or
- Only one line of output is generated, or
- You enter InfoSystem.

Refer to "SET and QUERY SCROLL-LIMIT" on page 229 for details of SET SCROLL-LIMIT.

There are various ways in which a buffer can be closed:

| Buffer | Closed by |
|---|---|
| Command | Entering a LOGOFF command. |
| Edit | Entering a QUIT, XQUIT, or FILE command. |
| Update | Entering a QUIT, XQUIT, FILE, RFILE, or SFILE command. |
| Lookaside | Entering a QUIT or XQUIT command. |

If you give the EDIT or UPDATE command, any Lookaside Buffers are automatically closed unless LOOKASIDE-RETENTION is SET on.

Refer to Figure 6 on page 52 for the system of modes and buffers and their associated commands.

The Systems Administrator can limit the number of lines that can be held in a Command Mode or Lookaside Buffer. You can find out what this limit is by giving the command:

```
QUERY OUTPUT-LINE-LIMIT ;
```

If a command is given which generates more lines than the Output Line Limit, execution of the command is terminated but the buffer contains the output up to the specified limit.

You can clear the contents of any buffer by entering:

```
CLEAR ;
```

The current contents of the buffer are deleted but the buffer remains open.

## Example of Buffer Stacking

The following example illustrates further how the buffer stacking feature operates. The task in the example is to copy lines from one dictionary member called XYZ999, into another dictionary member, called ABC999. In Command Mode you enter:

```
UPDATE ABC999
```

The dictionary member ABC999 is displayed in Update Mode. The lines to be copied are in a member called XYZ999. Enter:

```
UPDATE XYZ999
```

The member is displayed in a second Update Buffer. The active buffers are structured as shown in Figure 7 on page 55.

To check the copying commands, you refer to InfoBank by entering:

```
PANEL EDIT6000
```

A Lookaside Buffer containing an InfoBank panel has now been created in addition to the three existing buffers. The active buffers are structured as shown in Figure 8 on page 55.

After reading the InfoBank panel you return to the last Update Buffer by entering:

```
QUIT
```

The Lookaside Buffer containing the InfoBank panel is deleted and the buffer containing the dictionary member XYZ999 is re-displayed; the active buffers are now stacked as shown in Figure 7 on page 55.

To copy lines from XYZ999 to ABC999 you use the Full Screen Editor commands, making use of the Scratchpad feature (described in "The Scratchpad" on page 58). You then use the QUIT command to delete the Update Buffer containing XYZ999; the active buffers are now stacked as shown in Figure 9 on page 56.

You insert the lines copied from XYZ999 into ABC999 and FILE the edited member; the member encodes successfully, the buffer containing ABC999 is deleted, and the only remaining buffer is the Command Buffer.

## Buffer Scrolling Commands

Refer to "Scrolling the Text on the Screen" on page 60 for details of scrolling commands.

**Figure 7 • Current Active Buffers: Stages 1 and 3**

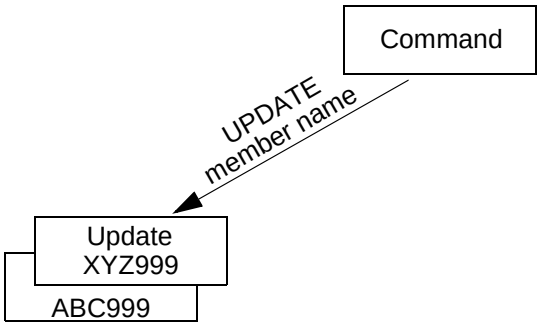



**Figure 8 • Current Active Buffers: Stage 2**

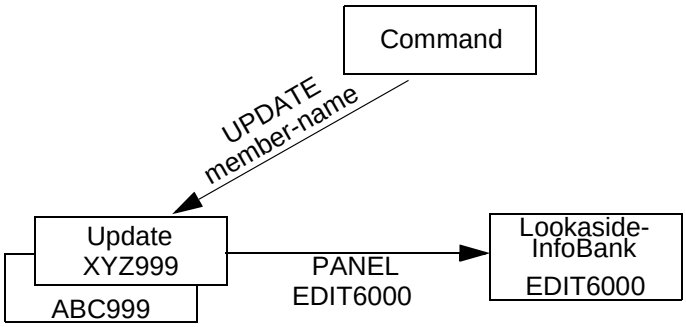
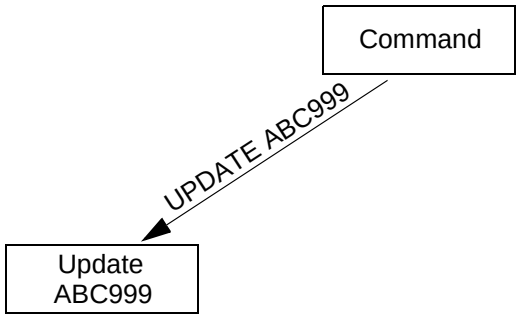


**Figure 9 • Current Active Buffers: Stage 4**




# The Full Screen Editor

ControlManager provides a powerful editor, the Full Screen Editor, for creating and amending members of the dictionary or MP-AID in interactive environments. To create or amend dictionary members you use the UPDATE command; to create or amend MP-AID members you use the EDIT command.

When you create a new member, you open an empty UPDATE or EDIT Buffer and build up the source record. When you amend an existing member, the source record of that member is automatically copied into an UPDATE or EDIT Buffer.

Using the editor you can move (scroll) forwards or backwards, left or right in the buffer, inserting, amending, or deleting lines as required. And you can incorporate all or part of the source of another member of the dictionary or MP-AID into the buffer: for example, you can copy a skeleton member into an empty buffer to form the basis for a new definition.

When creation or amendment is finished, you can file the buffer:

- Add the contents of the Update Buffer to the dictionary
- Add the contents of the Edit Buffer to the MP-AID

When you file a dictionary member there are three commands you can use: FILE, SFILE, and RFILE. When you file an MP-AID member you can only use the command FILE.

Each of these Editor commands generates an internal dictionary management command that updates the dictionary:

| Editor Command | Dictionary Management Command |
|---|---|
| `FILE` | ADD (a new member)<br>MODIFY (an existing member) |
| `SFILE` | INSERT (a new member)<br>ALTER (an existing member) |
| `RFILE` | REPLACE |

The Editor commands themselves are not logged, but the dictionary management commands generated from these Editor commands are.

Refer to the *ASG-Manager Products Controller's Manual* for details of logging.

## FILE

When you FILE an Update Buffer containing a new member, the contents are added to the index dataset and the source dataset, and an encoded record is generated from the source record and added to the data entries dataset. (The data entries dataset contains the encoded definition of the member.) When you FILE an Update Buffer containing an existing member, the source dataset is amended, and an encoded record is generated from the source record and added to the data entries dataset.

If errors are found during encoding, then the source of the member, together with the error messages, is displayed in a Lookaside Buffer. You can note the errors, QUIT back to the Update buffer, correct the errors, and then re-enter the FILE command.

## SFILE

When you SFILE an Update Buffer containing a new member, the contents are added to the index dataset and the source dataset, but no encoded record is generated. When you SFILE an Update Buffer containing an existing member, the source dataset is amended, but again no encoded record is generated.

## RFILE

You cannot FILE a new member with the same name as an existing member, but you can RFILE it.

If the existing member is in the current status, then the contents of the old member are replaced by the new. The source dataset is amended, and an encoded record is generated from the source record and added to the data entries dataset.

If the existing member is in another status, then the new member is FILEd in the current status. The contents are added to the index dataset and the source dataset, and an encoded record is generated from the source record and added to the data entries dataset. There are now two members with the same name but with different contents in different statuses.

## Primary and Line Commands

There are two types of commands available with the Full Screen Editor: Primary and Line Commands.

Primary Commands can be executed in one of two ways: keying the command in the Command Area and pressing ENTER, or pressing a Program Function key (PF key) which has been set to the command. Except for EDIT, UPDATE, and the scrolling commands, Editor Primary Commands can only be given in Edit or Update Mode.

Line Commands are executed by keying in the command in the Line Command Area of a line and pressing ENTER. The Line Command Area is the first or last six column positions displayed on the screen and contains = = = = = except when an InfoBank panel is displayed, in which case the area is blank. Most Line Commands can only be given in Edit or Update Mode but the I, C, CC, K, and KK Line Commands can also be given in Command and Lookaside Modes. You can set the Line Command Area to the first or last six columns as you wish or you can set it off altogether. If the area is set off, no Line Commands can be given.

## The Scratchpad

The Scratchpad is a data storage area to which text can be copied or moved. You can transfer all or part of any output buffer displayed on the screen to the Scratchpad, including output displayed in Command or Lookaside Modes or an InfoBank panel.

The contents of the Scratchpad can be inserted in an Edit or Update Buffer. When you copy the Scratchpad into a buffer, the contents of the Scratchpad are not affected. You can therefore make further copies if you want. The contents of the Scratchpad are automatically deleted when you log off.

### Example

Assume you are creating a member MEMBER-A in Update Mode. You find that there is a section in another member, MEMBER-B, that you want to copy into MEMBER-A. To do this:

1. Key in UPDATE MEMBER-B.

2. You can copy the section as a block in the Line Command Area, key in `CC` against the first line to be copied and `CC` against the last line to be copied.

   **Or**

Specify a number of lines in the Line Command Area, key in `C`*n* against the first line to be copied (where *n* is the number of lines you want to copy).

3 Press Enter; the lines are copied to the Scratchpad.

4 Key in `QUIT` and press enter; this returns you to the buffer containing MEMBER-A.

5 You can insert the contents of the Scratchpad after any line in the buffer in the Line Command Area, key in `I` against the appropriate line.

**Or**

Insert the contents of the Scratchpad after the Current Line (that is, the top line of the Data Area) key in the primary command `GET-SCRATCHPAD`.

6 Press Enter; the contents of the Scratchpad is inserted.

The `CC` or `C`*n* commands overwrite the current contents of the Scratchpad with the new. However, you may wish to copy to the Scratchpad without overwriting the current contents. This is done using the `KK` or `K`*n* commands instead of `CC` or `C`*n*.

### The Current Line

In this release of ControlManager the Current Line is the first line displayed in the Data Area. The concept of the Current Line is important because many editing functions take place in relation to the Current Line. For example, DELETE *n* deletes *n* lines beginning with the Current Line; and the GET commands insert text following the Current Line.

## Entering, Leaving, and Abandoning an Edit

These commands are available for entering, leaving, and abandoning an edit.

| Command | Function |
|---|---|
| `EDIT` | Opens an Edit Buffer. |
| `UPDATE` | Opens an Update Buffer. |
| `FILE` | Files the contents of an Edit Buffer as a USER-MEMBER of the MP-AID or files and encodes the contents of an Update Buffer as a member of the dictionary currently open. |
| `RFILE` | Files and encodes the contents of an Update Buffer as a member of the dictionary currently open. RFILE is used when the name of the new member is the same as that of an existing one. |

| Command | Function |
|---|---|
| SFILE | Files the contents of an Update Buffer as a source member of the dictionary currently open. The member is not encoded. |
| QUIT | Abandons an edit. This command cannot be used if the Edit or Update Buffer has been changed. |
| XQUIT | Abandons an edit. This command must be used if the Edit or Update Buffer has been changed. |

# Scrolling the Text on the Screen

You can move, or *scroll*, the text on the screen up, down, left, or right by giving any of these commands.

| | Command | Function |
|---|---|---|
| | FORWARD | Displays the next screen (if any) in the buffer. |
| | BACKWARD | Displays the previous screen (if any) in the buffer. |
| | TOP | Displays the first screen in the buffer. |
| | BOTTOM | Displays the last screen in the buffer. |
| | LEFT *n* | Moves the window on the text *n* columns to the left. |
| | RIGHT *n* | Moves the window on the text *n* columns to the right. |
| | UP *n* | Moves the window on the text up *n* lines. |
| | DOWN *n* | Moves the window on the text down *n* lines. |
| | NEXT *n* | Moves the window on the text down *n* lines. |
| * | LOCATE *string* | Searches the current buffer, beginning with the line following the Current Line, for the named *string*. If found, the line containing the string becomes the Current Line. |
| * | FIND *string* | Searches the current buffer, beginning with the line following the Current Line, for the named *string*. The string must begin in column 1 of the search zone. If found, the line containing the string becomes the Current Line. |
| | / | When entered in the Line Command Area of a line, moves the line up so that it becomes the Current Line. |

* The ZONE command enables you to define the columns between which the FIND and LOCATE commands are to search.

Refer to "ZONE" on page 247 for details of ZONE.

FORWARD, BACKWARD, TOP, BOTTOM, LEFT, and RIGHT are provided by the Basic Interactive Facilities; UP, DOWN, NEXT, LOCATE, FIND, and / are provided by the Extended Interactive Facility.

## Deleting, Inserting, and Overtyping Characters

Characters can be deleted, inserted, and overtyped using the keyboard features available at your terminal. Lines up to 255 columns wide may be keyed in. Use the LEFT and RIGHT commands to scroll the text on the screen left and right.

**Note:**

You cannot input text in the Line Command Area.

Text inserted using the Full Screen Editor is held in the Data Area exactly as it was entered. The only exceptions are:

- If UPPER-CASE is set ON, all lower case alphabetic characters will be translated to upper case
- If you use software tabs the text will be formatted

The CHANGE command can be used to replace all or specified occurrences of a character string with another string, and also to delete all or specified occurrences of a string. The format of the command is:

```
CHANGE /old/new/ mm nn ;
```

*old* is the character string to be changed or deleted.

*new* is the character string to be inserted.

*mm* is the number of lines (starting from and including the Current Line) on which the string is to be changed or deleted.

*nn* is the number of occurrences of the string which are to be changed or deleted on each line.

The ZONE command enables you to define the columns between which the CHANGE command will work.

Refer to "ZONE" on page 247 for details of ZONE.

# Adding and Deleting Lines

The Full Screen Editor provides Primary Commands and Line Commands to add lines to, or delete lines from, an Update or Edit Buffer.

| Primary Commands | Function |
|---|---|
| LADD[*n*] | Inserts one or more blank lines after the Current Line. |
| DELETE[*n*] | Deletes one or more lines starting with the Current Line. |

| Line Commands | Function |
|---|---|
| A[*n*] | Inserts one or more blank lines after the line on which the command is entered. |
| D[*n*] or DD | Deletes one or more lines starting with the line on which the command is entered. |

# Copying and Moving Text

## Summary

ControlManager provides Primary Commands and Line Commands to copy and move text between and within members:

- You can *copy* text to the Scratchpad (without removing it from the current buffer) or *move* text to the Scratchpad (removing it from the current buffer)
- You can *copy/move* text (overwriting the existing contents of the Scratchpad) or *also copy/also move* text (adding it to the existing contents of the Scratchpad).

The essential difference between Primary and Line Commands is that Primary Commands use the Current Line as the axis for copying and moving text whereas Line Commands enable you to copy or move any lines in a buffer.

## Primary Commands

| Command | Function |
|---|---|
| GETD | Inserts a copy of a dictionary member after the Current Line. |
| GETE | Inserts a copy of an EXECUTIVE member of the MP-AID after the Current Line. |
| GETS | Inserts copies of the Scratchpad after the Current Line. |
| GETT | Inserts a copy of a TRANSIENT member of the MP-AID after the Current Line. |
| GETU | Inserts a copy of a USER-MEMBER of the MP-AID after the Current Line. |
| KPUT | Copies lines to the Scratchpad without overwriting the contents of the Scratchpad. |
| MOVE | Removes lines from an EDIT or UPDATE buffer and copies them to the Scratchpad. |
| PUT | Copies lines to the Scratchpad without removing them from the current buffer. |
| SMOVE | Removes lines from an EDIT or UPDATE buffer, and copies them to the Scratchpad without overwriting the contents of the Scratchpad. |
| WIPE | Clears the contents of the Scratchpad. |
| ZONE | Sets column limits for string-searches. |

## Line Commands

| Command | Function |
|---|---|
| C[*n*] or CC | Copies one or more lines to the Scratchpad and deletes the existing contents of the Scratchpad. |
| K[*n*] or KK | Copies one or more lines to the end of the Scratchpad. |
| M[*n*] or MM | Moves one or more lines to the Scratchpad and deletes the existing contents of the Scratchpad. |
| S[*n*] or SS | Moves one or more lines to the end of the Scratchpad. |

| Command | Function |
|---|---|
| `F`[*n*] or `I`[*n*] | Inserts one or more copies of the Scratchpad following the line on which the command is entered. |
| `P`[*n*] | Inserts one or more copies of the Scratchpad before the line on which the command is entered. |
| `"`[*n*] | Copies the line on which the command is entered and inserts the new line immediately after the copied line. |

# 7 Tailoring and Checking Your Environment

This chapter includes these sections:

**Introduction** . . . . . **65**

**Commands That Affect Command Syntax and Availability** . . . . . **67**

**Commands That Affect Language and the Keyboard** . . . . . **68**
Introduction to the 'Soft' Keyboard . . . . . 68

**Commands That Affect the Format of Screens and Output** . . . . . **73**

**Commands That Affect Timing and Processing** . . . . . **75**

**Commands That Affect InfoView** . . . . . **76**

**Commands That Should Be Used under ASG Direction** . . . . . **76**

**QUERY Commands Which Have No Corresponding SET Command** . . . **77**

**Multiple Commands in a Single Command Line** . . . . . **77**
Examples . . . . . 78

## Introduction

There are many SET commands that can be used to tailor the environment:

- Commands that affect command syntax and availability
- Commands that affect language and the keyboard
- Commands that affect the format of screens and output
- Commands that affect timing and processing
- Commands that affect InfoView
- Commands that should be used under ASG direction

Most of these commands are available to all users, however some are available only to the Systems Administrator.

Each SET command has a corresponding QUERY command, and this is available to all users. And there are also QUERY commands which have no corresponding SET command.

SET commands can be entered in the Command Area, or in Batch, or placed in USER-MEMBERs, Executive Routines, or Command Streams. When executed in these ways, the commands are effective for the current session only; when you log off, no record is kept of these settings, and when you next log on, the settings will be those of the default.

**Note:**

When you place a Manager Products SET command in an Executive Routine, it must be prefixed by the MPR directive. For example:

```
MPR SET EXEC-WRITE OFF ;
```

If not prefixed by MPR, the SET command would be interpreted as a SET directive.

The default settings can be changed by including SET commands in Profiles. The commands are then executed each time you log on and so become the effective default for each session. If the Systems Administrator's Environmental Control Facility is installed, the Systems Administrator can change the default for individuals/groups of users via a Logon Profile or a Global Profile. If the Extended Interactive Control Facility is also installed, you can change the default to suit your own needs via a User Defined Profile.

In a Logon Profile or Global Profile, the Systems Administrator can include any SET command. In a User Defined Profile, you can only include those SET commands that are normally available to you.

Manager Products can also be tailored by means of installation macros. Please refer to the *ASG-Manager Products Controller's Manual* for a summary of these macros and a list of the publications describing the installation of Manager Products in different environments.

# Commands That Affect Command Syntax and Availability

| Command | Function |
|---|---|
| `SET ESCAPE-CHARACTER` | Sets the escape character. For use in the CONTENTS clause of COMMAND-STREAMs, LOGON-PROFILEs, GLOBAL-PROFILEs, and EXECUTIVE-ROUTINEs. Where a line of input would normally contain a terminator in the first character position, an escape character must be entered in its place, and the terminator moved to the second character position. |
| `SET LINE-END-CHARACTER` | Sets the Line-End-Character (used as a logical line end). |
| `SET PERFORM-CHARACTER` | Sets the Perform-Character (used in the PERFORM command). |

For each of these SET commands there is a corresponding QUERY command. There are also QUERY commands that correspond to SET commands available to the Systems Administrator only:

| Command | Function |
|---|---|
| `QUERY AMBIGUITY-ASSUMPTION` | Displays the action that will be taken when an ambiguous Primary Command is entered. |
| `QUERY LINE-COMMANDS` | Displays a list of the Line Commands. |
| `QUERY PRIMARY-COMMANDS` | Displays a list of the Primary Commands. |
| `QUERY STRING-DELIMITER` | Displays the characters set up as string delimiters. |

There is also a QUERY command for which there is no SET command:

| | |
|---|---|
| `QUERY MODE` | Displays the current Mode. |

# Commands That Affect Language and the Keyboard

| Command | Function |
|---|---|
| `SET PF`*n* | Sets a PF key to a command. |
| `SET TAB-CHARACTER` | Sets the software tab character. |

For each of these SET commands there is a corresponding QUERY command. There are also QUERY commands that correspond to SET commands available to the Systems Administrator only:

| Command | Function |
|---|---|
| `QUERY CHARACTER-TRANSLATION` | Displays any Character-Translation which is active. |
| `QUERY KANJI-MODE` | Displays the Kanji-Mode setting. |
| `QUERY KANJI-STRING-DELIMITER` | Displays the character used as the Kanji String Delimiter. |
| `QUERY MESSAGE-LANGUAGE` | Displays the language in which Manager Products messages are output. |

## *Introduction to the 'Soft' Keyboard*

### *Character Translation*

This feature is designed to enable users in non-English-speaking countries to overcome national language, character, and keyboard problems. It may also be of use in environments where incompatible hardware and software configurations cause similar problems. The feature enables you to:

- Redefine the input made by your keyboard (so that the backslash operates as an o-umlaut key, for example)
- Utilize all characters supported by your keyboards, terminals, and printers
- Perform non-standard case translation

## How It Works

When upper case translation is not applied the hexadecimal representation (hex code) of all characters input in a Manager Products Full Screen Interactive session are passed unaltered (unless the Input Translation Tables have been modified using the character translation facilities described in this panel). When upper case translation is applied, the hex code of any character input in lower case is translated to upper case in the standard manner; that is, by ORing the input hex code with X'40'. After translation, if any, has occurred, the resultant hex codes are stored internally for subsequent processing.

(Upper case translation is applied to all input via the Command Area and the Line Command Area. Upper case translation is not applied to all other input unless UPPER-CASE has been set on.)

When output, all hex codes for which no coded support is provided in the Output Translation Tables are translated to spaces (X'40'). Consequently, if you input a character for which no coded support is provided in the Output Translation Tables, it will be translated to a space character when output to your terminal and/or printer(s).

The Output Translation Tables are generated from the installation macro DCHAR. For details of the initial configuration of these tables and how they may be modified via DCHAR, refer to the Manager Products installation manual relevant to your installation.

The SET CHARACTER TRANSLATION command has two variants:

- SET CHARACTER-TRANSLATION INPUT
- SET CHARACTER-TRANSLATION OUTPUT.

Both forms of the command are restricted to use by the Systems Administrator.

SET CHARACTER TRANSLATION INPUT enables you to modify the Input Translation Tables so that specified hexadecimal codes are translated, on input, as you require. This form of the command is available in Full Screen Interactive environments; that is, when Manager Products are running under CICS, TSO, CMS, or Siemens Timesharing Interface.

SET CHARACTER TRANSLATION OUTPUT enables you to modify the Output Translation Tables so that the hexadecimal codes passed unaltered or translated by the Input Translation Tables, and held internally by Manager Products, are translated, as required, when output to your terminals and/or printer(s). (In order for any character to be output, by a terminal or printer, as it is entered, the terminal or printer must receive the hexadecimal code to which it is configured for that character.)

The OUTPUT variant of the command is available in all environments. In Full Screen Interactive environments a different output translation may be specified for your terminals and for your printers. In all other environments the translation specified for output to the printer will also be applied to output to a terminal; separate translation of output to terminals cannot be accomplished.

Similarly, when the Output Translation Tables are modified via the DCHAR macro, only one translation may be specified for each hex code and applies to output for your terminals and printer(s) alike.

**Note:**

Manager Products also provide support for the Kanji character set. If you are working in a Kanji environment you may need to use the SET CHARACTER-TRANSLATION command if your keyboard does not have a key that inputs the shift-out and shift-in codes, required by the Manager Products Kanji Mode you are using.

## Using the INPUT and OUTPUT Variant

The circumstances under which you may need to use the SET CHARACTER-TRANSLATION command and the appropriate variant for each, are described in the following paragraphs.

Use the OUTPUT variant when you want to use a character supported by your keyboard, but not by your terminal and/or printer(s); that is, the character is displayed/printed as some other character or is not displayed/printed at all.

The command enables you to alter the Output Translation Tables so that the character you input is translated to the hexadecimal code required in order that your terminals and/or printer(s) display/print the character required.

Use the INPUT variant when you want to use a character supported by your terminal and/or printer(s), but not by your keyboard.

The command enables you to alter the Input Translation tables so that the character you input is translated to the hexadecimal code required in order that your terminals and/or printer(s) display/print the character you want.

However, if the hexadecimal code required by your terminals and/or printer(s), for the character you want to use, is not one of the codes supported by the Output Translation Tables, you must also use the OUTPUT variant of the command.

Use the INPUT and the OUTPUT variants when you want to use a character that is supported by your terminal/printer but not by your keyboard or by Manager Products Output Translation Tables.

The INPUT variant is used to modify the Input Translation Tables so that the hexadecimal representation of a keyboard character is translated, stored internally, and subsequently processed as another hex code.

The OUTPUT variant must also be used if a hex code to which input is translated, via the Input Translation Tables, is either:

- Not supported by the Output Translation Tables and therefore translated to a space (X'40') when output to your terminals and/or printer(s)
- Not the hex code required by your terminals and/or printer(s) to print the desired character.

In both cases the OUTPUT variant is used so that a hex code held internally, is translated to another hex code when output.

## Example 1

European users who want to use the pound sterling symbol may be prevented from doing so because their keyboard does not have a key for that character. This problem can be overcome by selecting a redundant keyboard character and modifying the Input Translation Tables so that input from the selected key, is translated to the hexadecimal value coded in the Output Translation Tables, for the pound sterling symbol (5B as supplied by ASG). For example:

```
SET CHARACTER-TRANSLATION INPUT E0 5B 5B ;
```

where `E0` is the hex code specified by the selected keyboard character (the upper case character on a numeric key, perhaps). Provided that your terminals and/or printers are configured to display/print the pound sterling character for 5B the redundant key becomes (effectively) a pound sterling character key. If not, you must also modify the Output Translation Tables using a SET CHARACTER-TRANSLATION OUTPUT command.

## Example 2

Scandinavian users have a problem with the alphabetical sorting of names beginning with certain characters. Although a standard European keyboard has the required characters, those characters occur in a different position in the Scandinavian alphabet when compared with the alphabet used in other European countries. Consequently, names input using the standard keyboard are output in an order that reflects the standard European alphabet. This may be changed by modifying the Input Translation Tables.

For example, to have names beginning with the character x appearing at the top of output from Manager Products commands such as LIST, enter the following commands:

```
SET CHARACTER-TRANSLATION INPUT  A7 7C 7C ;
SET CHARACTER-TRANSLATION OUTPUT 7C A7 A7 ;
```

where `7C` is the hex code for the @ character and `A7` the hex code for x.

As a result, all names beginning with x will be stored in the dictionary and subsequently processed as if they begin with @, although they still display/print as names beginning with x.

**Note:**

The translation of input from x to @ (in the above example) would only affect the processing of names input while the specified translation for input is effective. Names added at any other time would be processed in the standard way.

## Manager Products Support for Kanji

The SET KANJI-MODE command enables you to establish a Manager Products environment in which kanji characters may be input and processed successfully when present in delimited character strings. Three Kanji Modes, corresponding to the three major types of Kanji-supporting hardware/software, are supported:

- IBM
- HITACHI
- FUJITSU

The required Kanji Mode is established using the above mentioned SET command or by adjusting the KANJI operand in the installation macro DCUST. For details of DCUST refer to the Manager Products installation manual relevant to your installation.

Once a Kanji Mode is set, kanji character strings, enclosed within Shift-Out (SO) and Shift-In (SI) characters, may be input within delimited character strings. For example:

```
DESCRIPTION
'SO-character kanji-character-string SI-character'
```

The Shift-Out and Shift-In characters used must specify the hexadecimal codes recognized in your hardware/software configuration, as indicating a shift-out to Kanji Mode and a shift-in to EBCDIC Mode. Since these codes differ in IBM, HITACHI, and FUJITSU environments, each Kanji Mode supported by Manager Products recognizes a different set of shift-out and shift-in codes.

All characters, including delimiters and terminators, entered between a Shift-Out character and a Shift-In character are treated as kanji characters and are not validated by Manager Products.

You must specify the Shift-Out and Shift-In characters when you are interrogating the dictionary or searching for kanji strings in member definitions. If you want to specify partial strings, that is, to interrogate for a sub-string within a kanji string, you must delimit the search string with a special Kanji String Delimiter character. This character is defined using the SET KANJI-STRING-DELIMITER command. When a Kanji String Delimiter is used, Shift-Out and Shift-In characters are not included as part of the search string.

**Note:**

The standard Manager Products string delimiter may be adjusted using the SET STRING-DELIMITER command.

Manager Products Kanji support is available in all environments.

# Commands That Affect the Format of Screens and Output

| Command | Function |
|---|---|
| `SET AUTOSKIP` | Makes the line on which the first Linear Command is entered the Current Line. |
| `SET BLANK-LINE-DISPLAY` | Sets whether blank lines are suppressed or displayed in output to the screen. |
| `SET COMMAND-LINE` | Specifies the position on the screen of the first line of the Command Area. |
| `SET COUNTER` | Sets the increment at which the Line Counter changes. |
| `SET CURSOR-HOLD` | Specifies whether the cursor is returned to the Command Area after execution of a command. |
| `SET ECHO` | Displays commands executed by an Executive Routine or DataManager ALTER/ MODIFY command as part of the output. |
| `SET EXEC-WRITE` | Specifies whether output from Level 2 Executive Routines is deferred. |
| `SET EXCP-MONITOR` | Causes the number of Input/Output operations to each DataManager dataset and the MP-AID to be displayed. |
| `SET FORMAT` | Sets the default format for output from the REPORT or BULK REPORT commands. |
| `SET FORMAT-TITLE` | Specifies a character-string which can be included in user-formatted DesignManager output. |

| Command | Function |
|---|---|
| SET LINE-AREA | Sets the Line Command Area to the right, to the left, or off. |
| SET LINEAR-RETENTION | Specifies whether a line command is retained after execution. |
| SET LINE-END-CHARACTER | Sets the Line-End-Character (used as a logical line end). |
| SET LIST-SHIFT | Shifts output from a LIST command. |
| SET LOOKASIDE-RETENTION | Specifies whether to retain lookaside buffers. |
| SET NUMBERS | Puts source line numbering during an update of a dictionary member under user control. |
| SET OUTPUT-EDIT | Determines the buffer in which editor commands are to be actioned. |
| SET PRINT-DELIMITER | Sets whether output from the PRINT and MP-AID PRINT commands is to be delimited. |
| SET PRINT-SHIFT | Shifts output from a PRINT or BULK PRINT command. |
| SET SCALE | Sets a scale of column positions on the second line of the screen. |
| SET SCREEN-REFRESH | Refreshes the screen with output as it is being generated. |
| SET SCROLL-LIMIT | Sets the Scroll Limit to retain a number of lines. When output is generated in a Command Mode Buffer, the retained lines from the previous Command Mode Buffer are inserted above the Current Line. |
| SET TAB-CHARACTER | Sets the software tab character. |
| SET TABS | Sets the software tab positions. |
| SET UPDATE-OUTPUT | Optionally suppresses output from a dictionary update. |
| SET UPPER-CASE | Causes all lower case alphabetic characters input at the terminal to be translated to upper case. |

For each of these SET commands there is a corresponding QUERY command.

# Commands That Affect Timing and Processing

| Command | Function |
|---|---|
| SET ALERT | Sets the audible alert at the terminal. |
| SET DIRECTLY-ASSUMPTION | Specifies whether subsequent WHAT, WHICH, DOES, and GLOSSARY commands report only direct references, or direct and indirect references to selected dictionary members. |

For each of these SET commands there is a corresponding QUERY command. There are also QUERY commands that correspond to SET commands available to the Systems Administrator only:

| Command | Function |
|---|---|
| QUERY BUFFER-LIMIT | Displays the limit on the total number of buffers. |
| QUERY DICTIONARY-UPDATES | Displays whether you have update or read-only access to Manager Products dictionaries. |
| QUERY EXCP-LIMIT | Displays the limit on the maximum number of Input-Output operations resulting from the execution of a single command. |
| QUERY FREE-POOL | Displays the number of K bytes of free virtual storage retained by Manager Products for subsequent usage. |
| QUERY INTERROGATE-ENQUEUE | Displays whether the standard or alternative enqueuing procedure is active. |
| QUERY IO-FLUSH-LIMIT | Displays whether a limit has been set on the number of permissible I/O flushes and, if so, what that limit is. |
| QUERY MPAID-UPDATES | Displays whether you have update or read-only access to the MP-AID. |
| QUERY OUTPUT-LINE-LIMIT | Displays the limit on the number of lines that can be held in a Command or Lookaside Buffer. |
| QUERY USER-BLOCKS | Displays the number of blocks of the MP-AID occupied by USER-MEMBERs owned by your Logon-id and any restrictions on the number of blocks that can be occupied. |

There is also a SET command for which there is no QUERY:

| Command | Function |
|---|---|
| SET DOCUWARE | Enables you to examine (for evaluation) InfoBank panels relating to products or selectable units not available at your installation. |

# Commands That Affect InfoView

| Command | Function |
|---|---|
| SET INFOBANK-SELECT | Specifies whether the word SELECT is suppressed or displayed. |
| SET REVISION-BARS | Specifies whether Revision Bars are displayed. |

For each of the above SET commands there is a corresponding QUERY command. There are also QUERY commands that correspond to SET commands available to the Systems Administrator only:

| Command | Function |
|---|---|
| QUERY HELP-ENTRY | Displays the name of the panel which will be displayed when you give the HELP command. |
| QUERY INDEX-PANEL | Displays the name of the Index-Panel. |
| QUERY INFOBANK-ENTRY | Displays the name of the panel which will be displayed when you give the INFOBANK command. |
| QUERY RESERVED-INFOBANK-LINE | Displays the contents of the Reserved Line on screens displaying InfoBank panels. |
| QUERY TOP-MENU-ENTRY | Displays the Top Level Entry Panel. |

# Commands That Should Be Used under ASG Direction

The following SET commands should only be used under ASG direction. For each of these commands there is a corresponding QUERY command.

| Command | Function |
|---|---|
| SET ENQUEUE-TRACE | To provide a report of enqueuing and dequeuing activity during the execution of a Manager Products command. |
| SET SOS-DUMP | To initiate a dump. This may help to indicate how a shortage of storage occurred. |
| SET VERIFY | To be used under ASG direction. |

# QUERY Commands Which Have No Corresponding SET Command

| Command | Function |
|---|---|
| `QUERY ACTIVE-BUFFERS` | Displays what buffers are in the buffer. |
| `QUERY ALL` | Displays complete details of the current user environment. |
| `QUERY DICTIONARY` | Displays details of your dictionary environment. |
| `QUERY KEPT` | Displays any KEPT-DATA lists you have created. |
| `QUERY LOGON-ID` | Displays the Logon-id with which you are logged on. |
| `QUERY ONLINE-USERS` | Displays the Logon-ids of users logged on to Manager Products. |
| `QUERY STORAGE` | Displays details of the amount of virtual storage you have used and are currently using. |
| `QUERY VIRTUAL` | Displays details of the amount of virtual storage you have used and are currently using. |

# Multiple Commands in a Single Command Line

ControlManager provides a feature that enables you to enter multiple Manager Products commands in the Command Area. This means that several commands can be executed with one press of the ENTER key, and the generated output displayed in a single output buffer.

In order to use this feature, you must first define a LINE-END-CHARACTER; this is done with the SET LINE-END-CHARACTER command. Each command statement or member definition statement in the Command Area is separated from the next by the LINE-END-CHARACTER, for example:

```
PRINT A;/REPORT A;/QUERY PRIMARY-COMMANDS;
```

where `/` has been set to the line-end-character.

Multiple input of commands is available with any Manager Products commands except:

- Full Screen Editor commands
- Commands for clearing and scrolling a buffer.

Multiple input of commands is available when invoking Executive Routines, but is not available:

- Within Executive Routines
- Within Command Streams

A terminator `;` is optional except when a source updating command is followed by another command; then a terminator must be included between two line-end-characters, for example:

```
ALTER A/100 ITEM/200 HELD-AS-CHARACTER 1/;/PRINT B/REPORT B
```

## Examples

In the following examples, the LINE-END-CHARACTER is `/`.

```
PRINT A;/REPORT A;
ALTER A/100 ITEM/200 HELD-AS CHARACTER 1/;
PRINT A/REPORT A/ALTER B/100 ITEM/200 HELD-AS-CHARACTER 1/;
ALTER C/100 ITEM/200 HELD-AS-CHARACTER 1/;/ALTER D/100 ITEM/;
```

**Note:**

ASG does not supply a default for the LINE-END-CHARACTER; however one may have been set by the Systems Administrator.

If an optional terminator is omitted, a terminator is provided by the software itself.

# 8 InfoSystem

This chapter includes these sections:

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The Structure of InfoBank . . . . . 80

**InfoSystem in Different Environments . . . . . 81**

**How to Access, Leave, and Re-enter InfoSystem . . . . . 82**
How to Access InfoSystem . . . . . 82
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# Introduction to InfoSystem

The ControlManager Nucleus includes an online documentation system called InfoSystem; this consists of InfoBank (the panels of text), and InfoView (the software you use to move around InfoBank). There are many commands available to access, leave, and re-enter InfoSystem, and to move around InfoBank; and Contents lists and Indexes to help you find what you want.

## The Structure of InfoBank

Some panels are menus; they give a choice of other panels and you SELECT the one you want. InfoBank has a tree structure of menus. At the top is the Top Level Menu from which you can select one of the following branches:

- How to Use InfoSystem
- InfoBank Contents
- InfoBank Index
- How Customer Support Services Can Help You
- What's New in the Latest Releases
- Using Manager Products: Technical Information

Each of these branches contains another menu which lists the sub-branches within that branch. For example "How Customer Support Services Can Help You" consists of:

- Query resolution
- User training and education
- Manager Products documentation

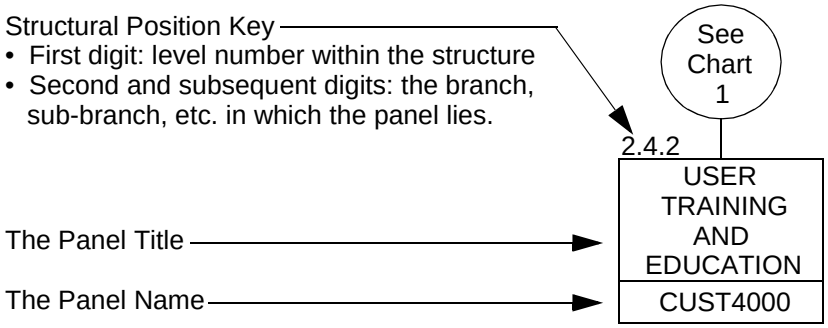
Selection from menus continues until the information you want displays.

If the User Defined InfoSystem facility is installed, you can tailor InfoBank by adding, changing, and deleting panels. Please refer to the User Defined InfoSystem manual for further details.

**Note:**

InfoBank panels display in any environment, but only in CMS, CICS, Siemens Time Sharing Interface, and TSO are these displays formatted.

The structure of InfoBank is shown in Figure 10 on page 88 through Figure 22 on page 100. Each box represents a panel, and each circle represents a link from one chart to another. For example:




# InfoSystem in Different Environments

In fully interactive environments (TSO, CMS, CICS, and Siemens Time Sharing Monitor) all the features of InfoSystem are available.

In batch environments, and pseudo-interactive environments (ICCF, IMS/DC, TSO/ISPF, and ROSCOE), all the commands for accessing Info System and moving around InfoBank are available, but note the following differences compared with fully interactive environments:

- You can't use the ENTER key to output or display the next logical panel. Instead, you must use the command:

  ```
  SELECT NEXT ;
  ```

- Output from any InfoSystem command is not formatted but is generated line by line. There is no Command Area or Reserved InfoBank Line, and no highlighting of text.
- When making a selection from a menu or panel, you must key in the SELECT keyword as well as your selection.

# How to Access, Leave, and Re-enter InfoSystem

## How to Access InfoSystem

You can access InfoSystem with a number of different commands. These can be split into two groups.

In the *first* group, the panel to be displayed has been pre-set by ASG.

| Command | Displays | Panel |
|---|---|---|
| `HELP` | Top Level Menu. | * HELP0000000 |
| `HELP INDEX` | Index of subjects available in Help branch. | * HELP-INDEX |
| `HELP PF` | List of default PF key settings. | HELP0030 |
| `INFOBANK` | Top Level Entry Panel. | * INFO000000 |
| `SELECT TOP-MENU` | Top Level Menu. | * HELP000000 |

* If the User Defined InfoSystem is installed, the panel displayed by this command may have been changed by your Systems Administrator. You can find out which panel is displayed by using the appropriate QUERY command:

- QUERY HELP-ENTRY (HELP)
- QUERY INDEX-PANEL (HELP INDEX)
- QUERY INFOBANK-ENTRY (INFOBANK)
- QUERY TOP-MENU-ENTRY (SELECT TOP-MENU).

In the *second* group, you specify the panel to be displayed.

| Command | Displays |
|---|---|
| `HELP` *`command-name`* | Panel describing *`command-name`*. |
| `HELP` *`command-name-S`* | Panel giving syntax of *`command-name`*. |
| `HELP` *`member-type-name`* | Panel describing *`member-type-name`*. |
| `HELP` *`topic`* | Panel describing *`topic`*. |
| `HELP` *`x`* | Index of terms starting with the letter *`x`*. |
| `PANEL` *`panel-name`* | *`panel-name`* panel. |
| `PANEL` *`message-id`* | Panel describing *`message-id`*. |

## How to Leave InfoSystem

In any environment, you leave InfoSystem automatically when you enter any valid Manager Products command (other than those to access or move around InfoSystem).

If the Extended Interactive Facility is installed, you can also leave InfoSystem if you enter:

```
QUIT ;
```

## How to Re-enter InfoSystem

There are two commands for re-entering InfoSystem: RETRACE and SELECT.

RETRACE will take you back to the InfoBank panel or menu you saw last in your current Manager Products session.

| Command | Re-enter InfoSystem At |
|---|---|
| `RETRACE` | The panel or menu you saw last. |
| `RETRACE PANEL` | The panel you saw last. |
| `RETRACE MENU` | The menu you saw last. |

The SELECT commands use the NEXT-PANEL, LAST-PANEL, and LAST-MENU clauses of the panel you saw last.

| Command | Re-enter InfoSystem At |
|---|---|
| `SELECT NEXT-PANEL` | The next panel in that branch. |
| `SELECT LAST-PANEL` | The previous panel in that branch. |
| `SELECT MENU` | The menu for that branch. |

# Moving Around InfoBank

You move around InfoBank by:

- Using any of the commands for accessing InfoSystem
- Using the PF keys
- Looking up a panel name in an Index
- Pressing ENTER
- Making a SELECT from a panel or menu
- Retracing your steps

Refer to "How to Access, Leave, and Re-enter InfoSystem" on page 82 for the commands for accessing InfoSystem, "PF Key Settings" on page 85 for the default PF key settings, and "Looking Up a Panel Name" on page 86 for how to look up a panel in an Index.

## Pressing Enter

If you don't key anything in the Command Area and just press Enter, you get the next screen of information in the current panel or, if there are no more screens in the current panel, the first screen of the next panel. The simplest way of reading about a topic is to page through it by pressing Enter.

## Making a SELECT from a Panel or Menu

| Command | Displays |
|---|---|
| `SELECT NEXT-PANEL` | The next panel in the current branch. |
| `SELECT LAST-PANEL` | The previous panel in the current branch. |
| `SELECT MENU` | The menu you saw last. |
| `SELECT` *n* | The panel identified by the number *n*. |

Every INFOBANK-PANEL supplied by ASG has one or more SELECT clauses in its member definition statement and this causes the SELECT 'prompt' to be displayed in the Command Area when the panel is displayed. This means you need only enter your selection and press ENTER to be routed to the information you want. However, it also means that to enter a command (not a selection) you must first overtype the SELECT 'prompt'.

For details of how to suppress this display of the SELECT prompt, refer to SET INFOBANK-SELECT in "SET and QUERY INFOBANK-SELECT" on page 213.

If further information is contained in another panel, you are asked to SELECT a number, for example:

```
SELECT 2 for full details of the InfoBank screen lay out.
```

To follow up the cross-reference, key in the number indicated and press Enter. Always use the RETRACE command to return to the panel from which you made the selection.

### Retracing Your Steps

| Command | Displays |
|---|---|
| `RETRACE` | The panel or menu you saw last. |
| `RETRACE PANEL` | The panel you saw last. |
| `RETRACE MENU` | The menu you saw last. |
| `RETRACE DISPLAY` | A list of the InfoBank panels and menus you've seen since you logged on. |

## PF Key Settings

The default PF key settings supplied by ASG with the Basic Interactive Facilities are set out below.

You can change these settings to suit your own requirements, and they can also be changed by the Systems Administrator. To find out the current settings, enter:

```
QUERY PFKEYS ;
```

| Default PF Key Settings | |
|---|---|
| PF1 | Displays the first panel in the Help Branch of InfoBank. |
| PF2 | Displays the InfoBank Index. |
| PF3 | Quit (in Extended Interactive Facility environments). |
| PF4 | Displays the first menu of Panel Driven Processing (PDP). |
| PF5 | Displays the panel you saw last. |
| PF6 | Displays the menu you saw last. |
| PF7 | Displays the previous screen (if any) in the current panel. |
| PF8 | Displays the next screen (if any) in the current panel. |

| Default PF Key Settings | |
|---|---|
| PF9 | Displays the Top Level Entry Panel. |
| PF10 | Scrolls left 20 columns. |
| PF11 | Scrolls right 20 columns. |
| PF12 | Displays the last command executed on the Command Line. |
| PF19 | Displays the first screen in the current panel. |
| PF20 | Displays the last screen in the current panel. |
| PF22 | Scrolls left 59 columns. |
| PF23 | Scrolls right 59 columns. |

# Looking Up a Panel Name

Each panel in InfoBank has a name. In interactive environments, the name is displayed in the top right corner of the screen.

If you know a panel's name, you can display it by entering:

```
PANEL panel-name ;
```

If you don't know a panel's name, the easiest way to find out is to look it up in the index. To access the index, enter:

```
HELP x ;
```

or

```
PANEL INDEXx ;
```

where *x* is the first letter of the term you want to look up.

For example, if you want to find the panel describing ControlManager, first enter:

```
HELP C ;
```

This displays the index of topics starting with `C`. Page through the index until you find the topic ControlManager and hence the panel-name.

***To display this panel***

▶ Enter `PANEL` *`panel-name`* or if Panel Driven Processing is installed (PDP) you can position the cursor against the panel-name (in the Line Command Area), key in `PAN`, and press Enter.

# Revision Bars and Deleted Lines Indicators

Whenever an InfoBank panel is updated by ASG, the changed or inserted text is flagged in the INFOBANK-PANEL member in the InfoDictionary. The flag takes the form of a vertical bar, the Revision Bar, placed in column one of the CONTENTS clause against those lines that have been changed or inserted. This is to assist you in locating the changes to previously issued panels, to determine whether your previous tailoring of the InfoSystem is affected. The Revision Bar is blanked out by the InfoView software when the constructed panel is displayed, unless the user has SET REVISION-BARS ON.

If lines are deleted, and neither the line immediately before nor the line immediately after the deleted lines is changed or new (that is, is flagged with a Revision Bar), then the position from which the lines were deleted is flagged by a Deleted Lines Indicator. This takes the form of an underscore character placed in column one on the immediately preceding line. The Deleted Lines Indicator is also blanked out by InfoView when the constructed panel is displayed, unless a SET REVISION-BARS ON command has been issued.

# Error Notification

If ASG becomes aware of any errors on InfoBank panels, users will be told about them in Manager Products Software Notices. A command is provided by which the Systems Administrator can flag any panels that are in error, acting on the information contained in the Software Notice. The flag appears on the Message Line as:

`INFOBANK PANEL IN ERROR - REFER TO` *`change-reference`*

where *`change-reference`* is a string of up to 32 characters inserted by the Systems Administrator to tell you where to find the correct information.

Fix tapes are not issued for InfoBank.

If User Defined InfoSystem is installed, the Systems Administrator can incorporate the corrected information into the InfoBank panels, without waiting for the next release.

Another Systems Administrator's command is provided to remove a flag from an InfoBank panel.

**Figure 10 • InfoBank Structure: Top Levels**

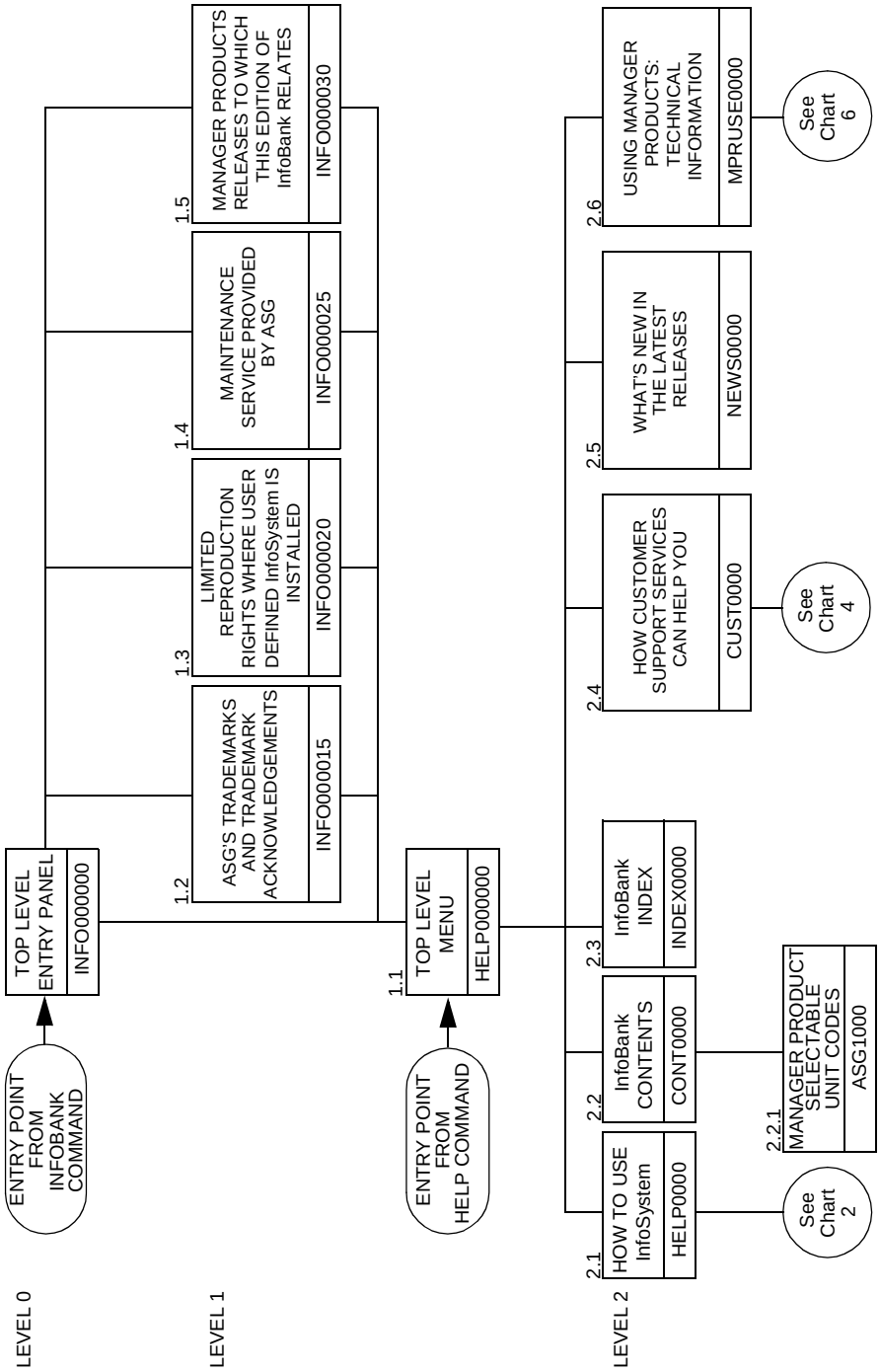


**Figure 11 • InfoBank Structure: How to Use InfoSystem**

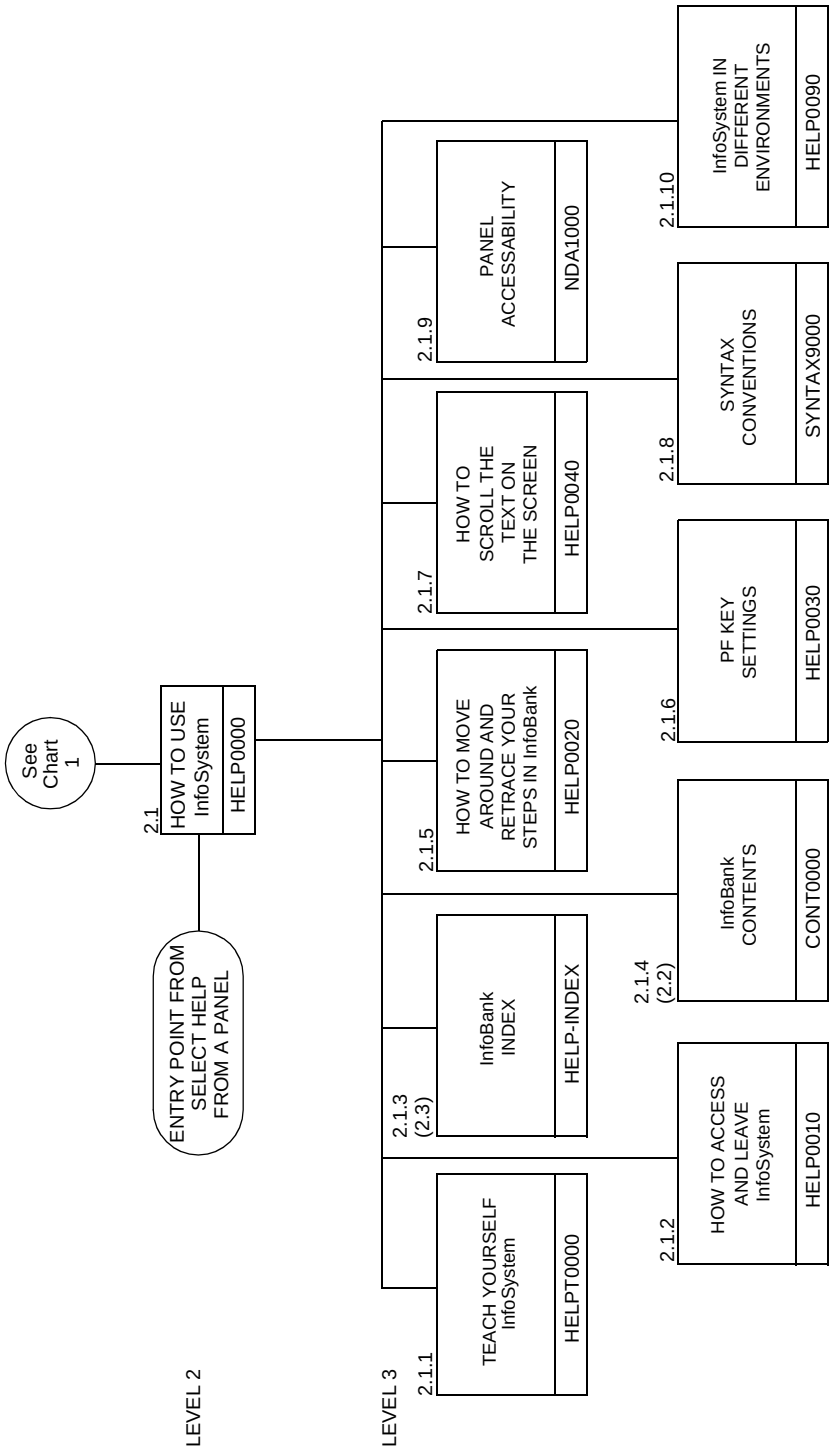


**Figure 12 • InfoBank Structure: How Customer Support Services Can Help You**

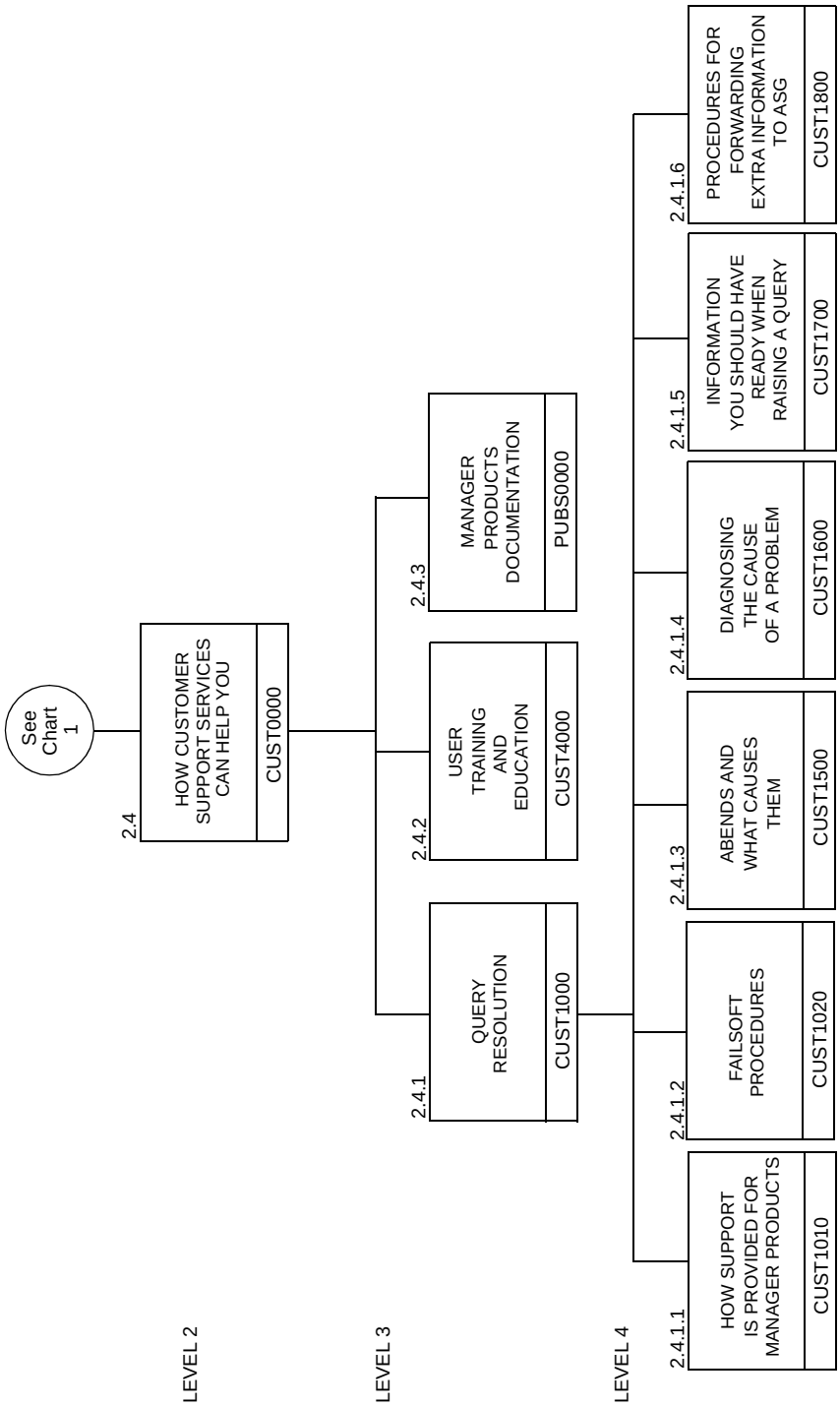


**Figure 13 • InfoBank Structure: Using Manager Products: Technical Information**

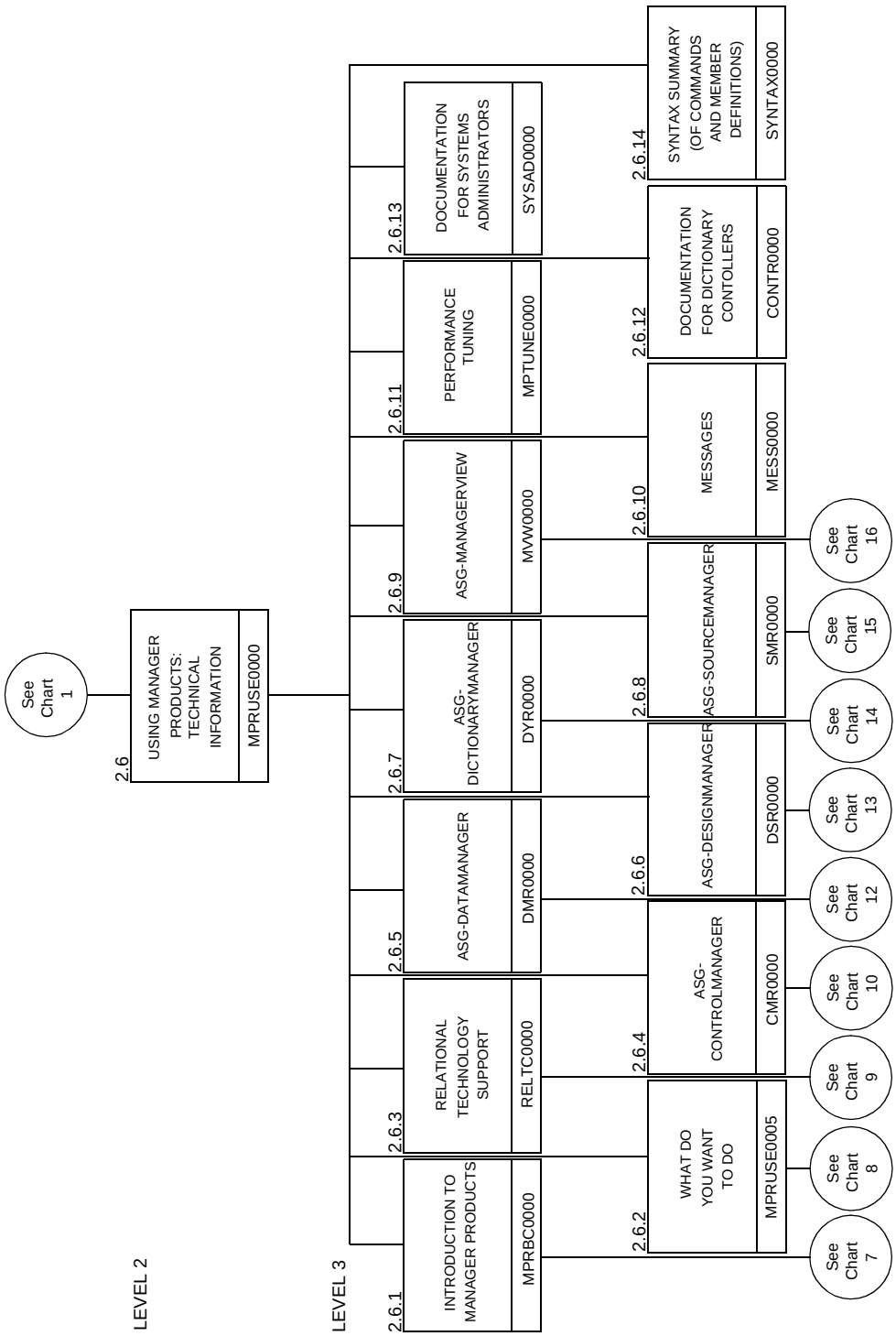


**Figure 14 • InfoBank Structure: Introduction to Manager Products**

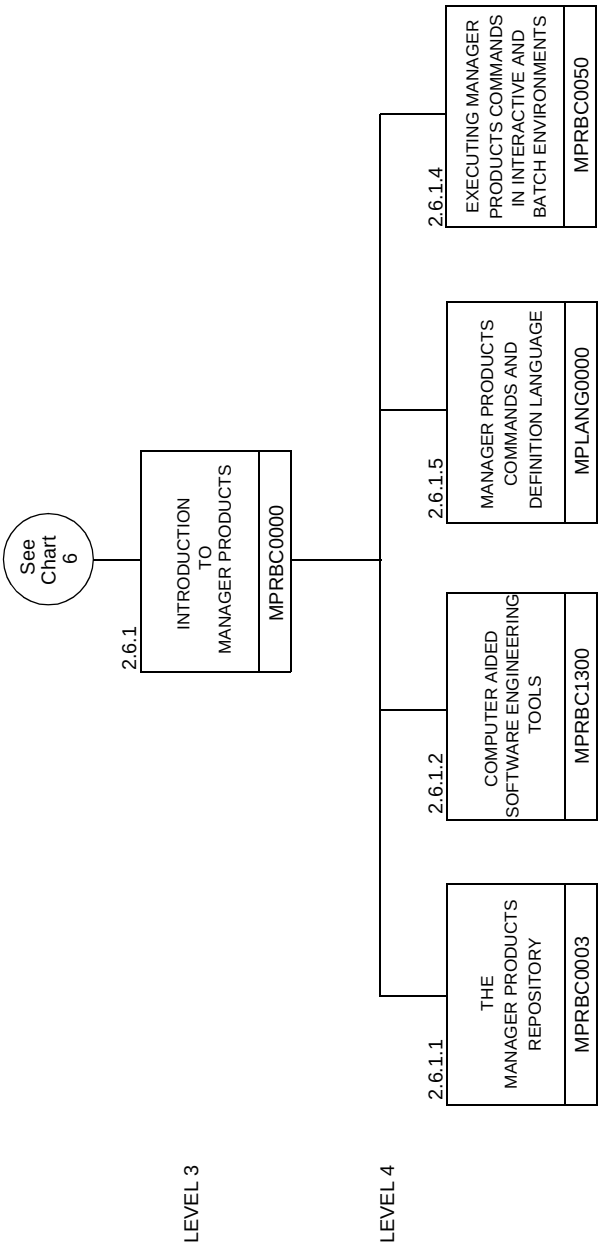


**Figure 15 • : InfoBank Structure: What Do You Want To Do?**

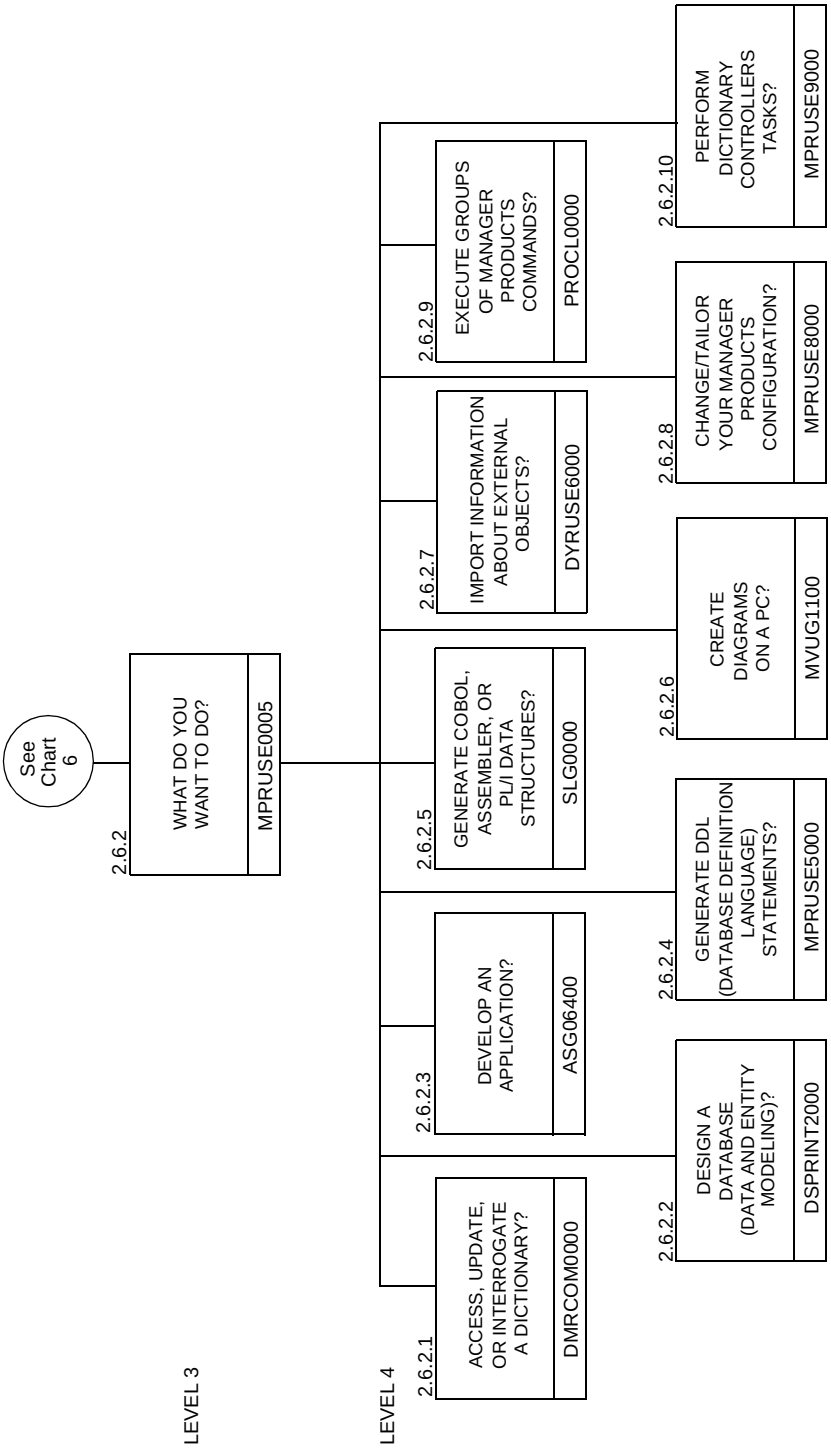
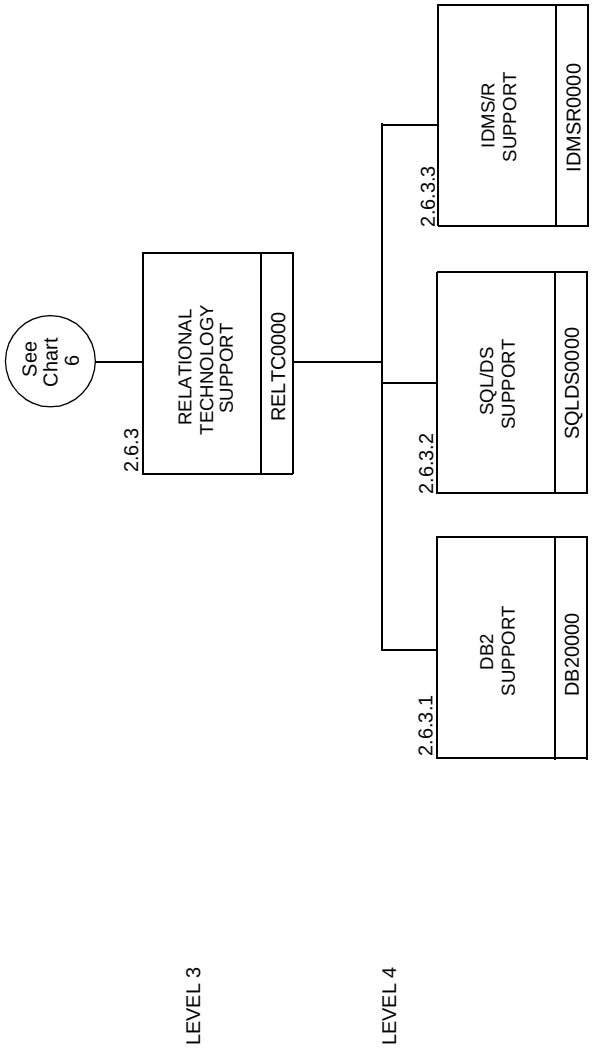


**Figure 16 • InfoBank Structure: Relational Technology Support**



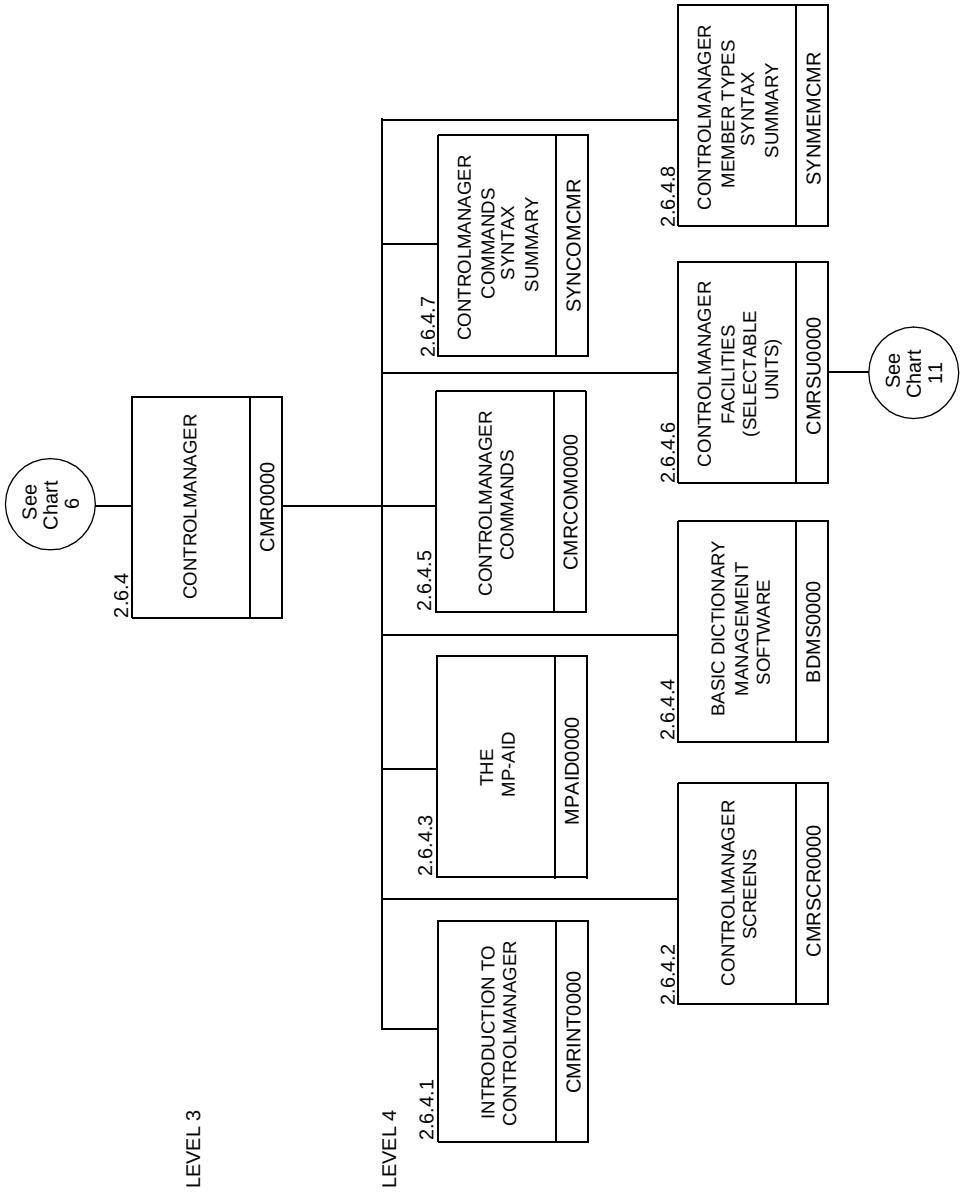



**Figure 17 • InfoBank Structure: ControlManager**

**Figure 18 • InfoBank Structure: ControlManager Facilities**

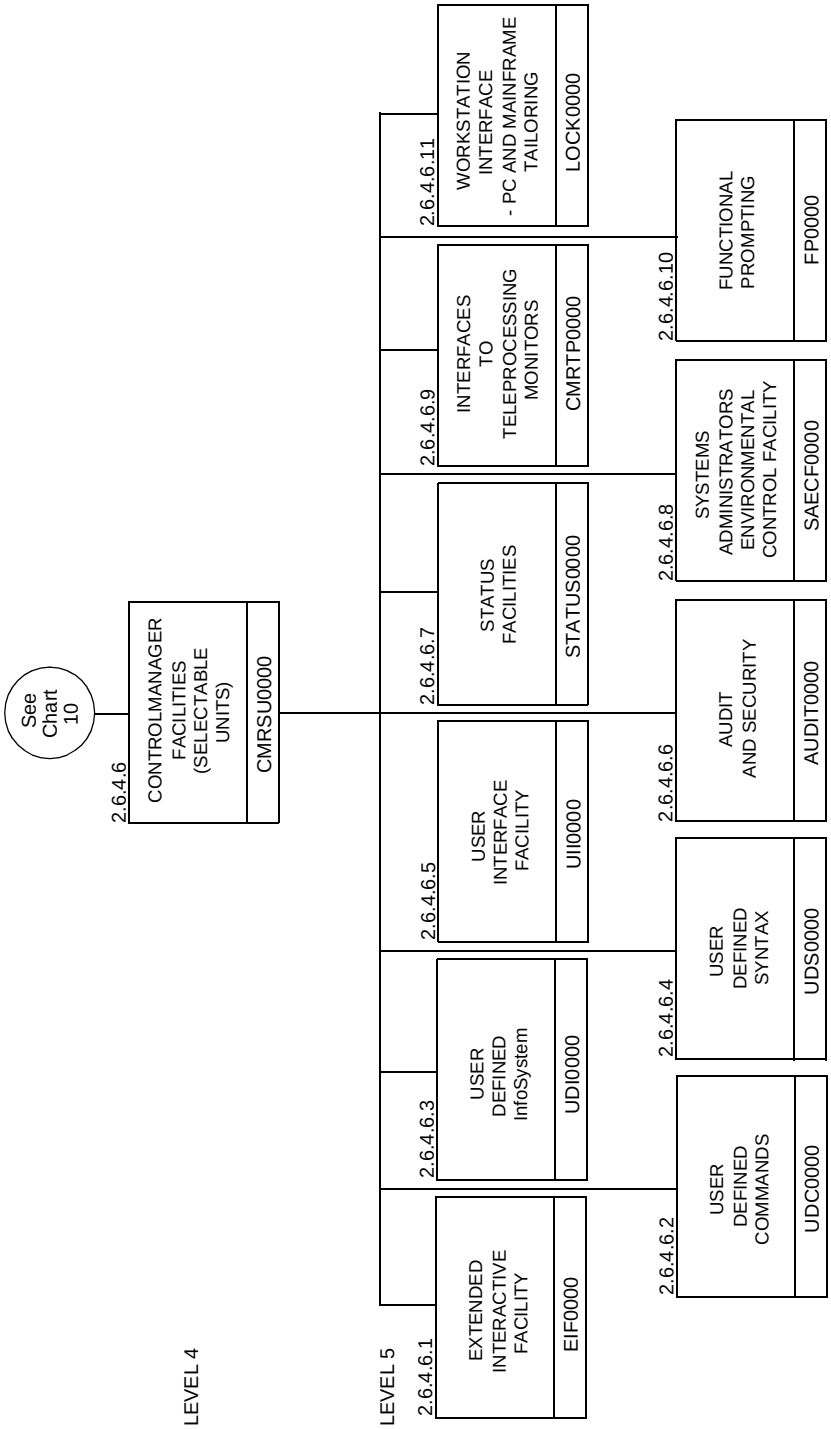
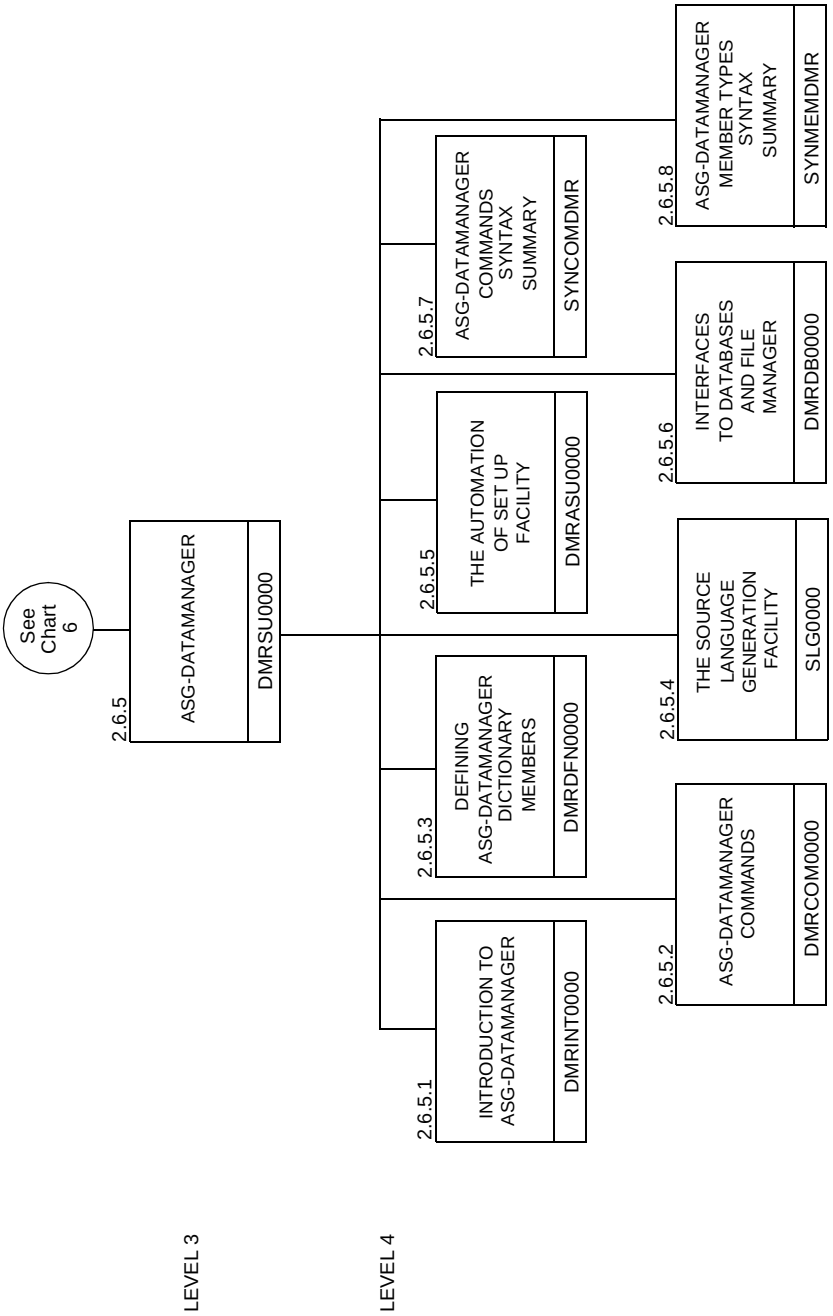


**Figure 19 • InfoBank Structure: DataManager**



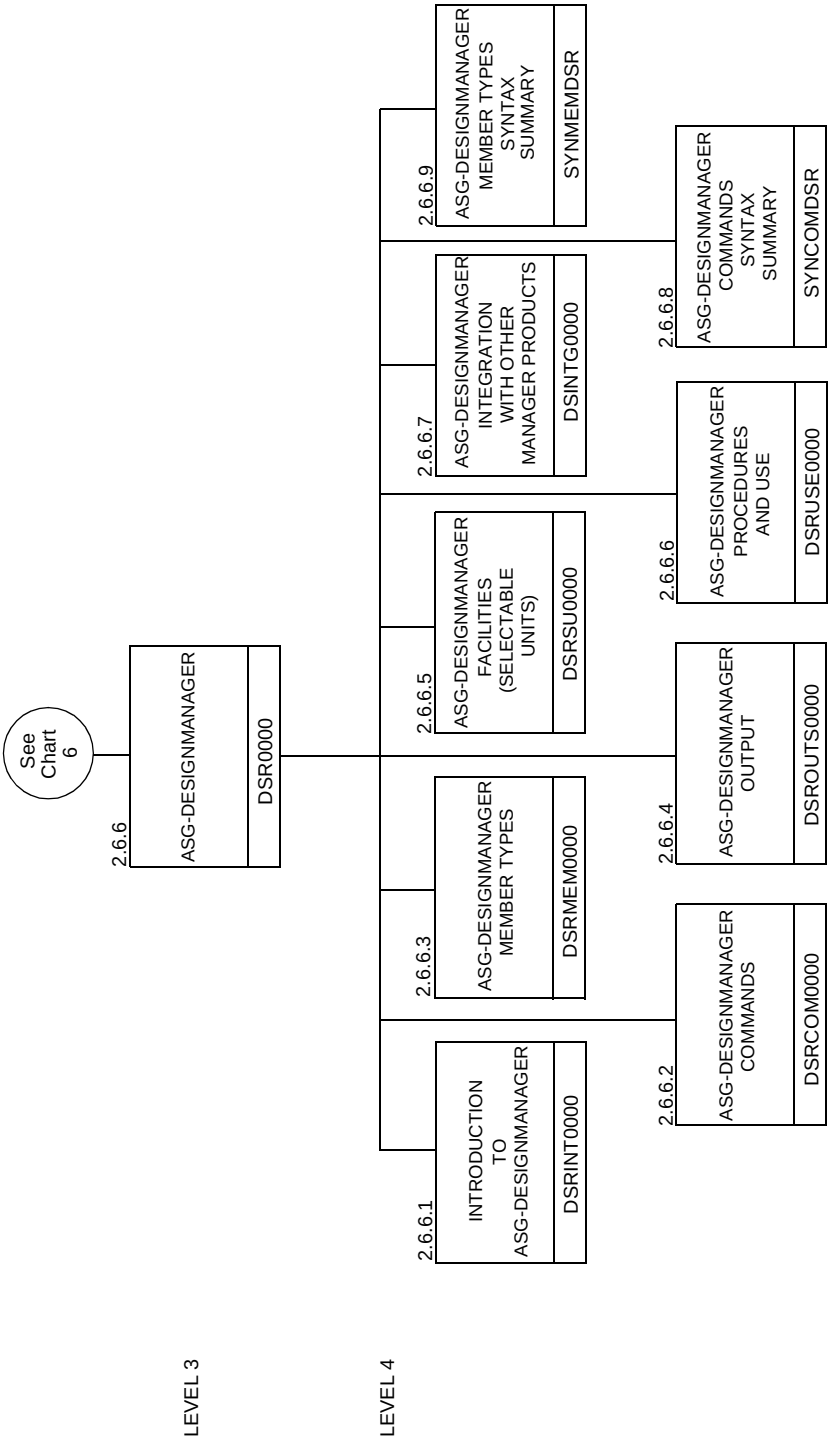



**Figure 20 • InfoBank Structure: DesignManager**

**Figure 21 • InfoBank Structure: DictionaryManager**

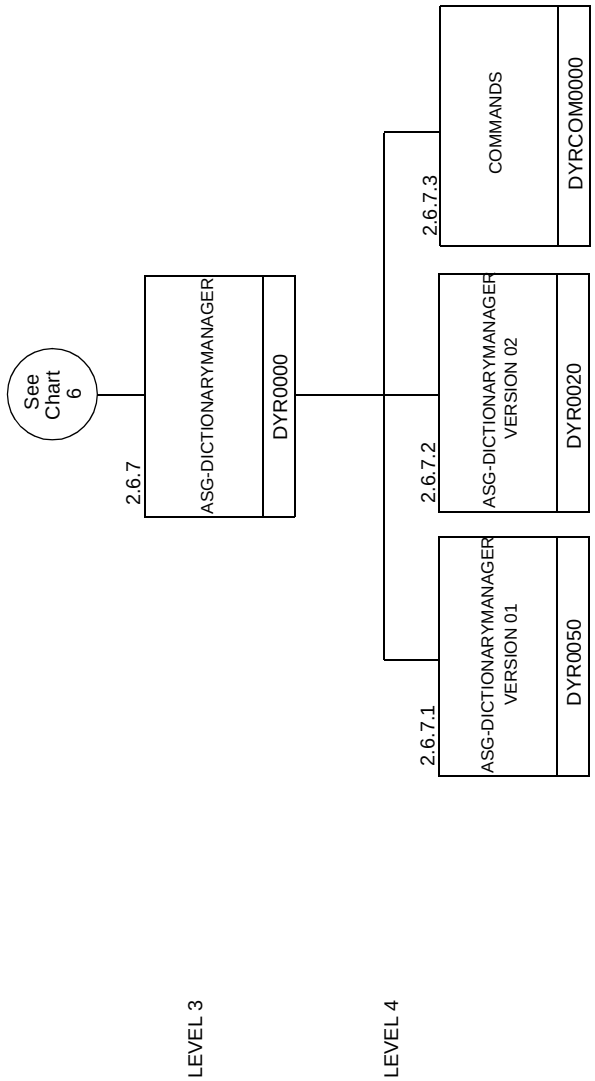
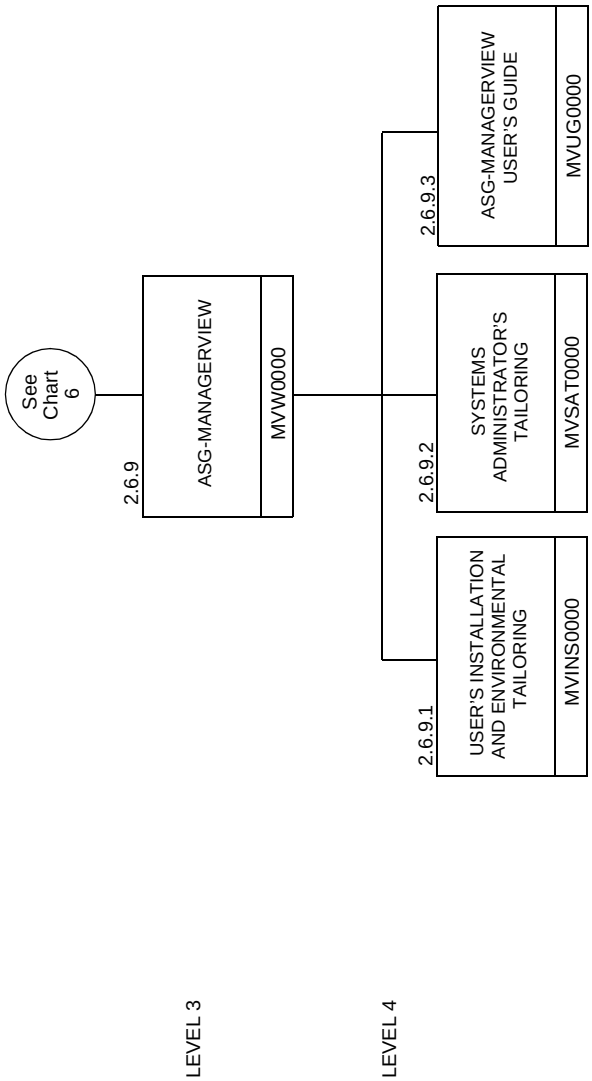


**Figure 22 • InfoBank Structure: ManagerView**



# 9 The MP-AID

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# Introduction

## The MP-AID

ControlManager provides a central dataset called the Manager Products Administration and Information Dataset (the MP-AID). This dataset holds information relating to the control and operation of all the Manager Products and related dictionaries you have installed. For example, *Logon Profiles* are set up by the Systems Administrator on the MP-AID and used to control users' access to Manager Products.

These capabilities are provided using information stored on the MP-AID:

- Log on capabilities and controls
- InfoSystem (the online help and documentation system supplied to all Manager Products users)
- Corporate Executive Routines
- User-definable dictionary member types
- User-definable commands
- User-definable output from dictionary REPORT commands
- The ability to translate members from a Manager Products dictionary into source input statements for another vendor's dictionary
- Profiling capabilities to tailor the Manager Products environment at several levels (individual, group, installation)
- The ability to store the output from most commands over different Manager Products sessions
- Personal storage capabilities

Although the MP-AID itself is supplied as part of the ControlManager Nucleus, some of the capabilities provided via the MP-AID are only available with other products and/or selectable units installed.

Refer to "MP-AID Related Facilities" on page 105 for details of MP-AID related facilities.

Information is stored on the MP-AID in the form of *members*. Each member has a name consisting of up to 10 characters; its type depends on the function it is to perform. There are a number of different member types each supporting a particular function. For example, KEPT-DATA members are used to store KEPT-DATA lists over Manager Products sessions.

A Manager Products dictionary consists of four or five datasets, and a dictionary member can have records in each one. The MP-AID consists of a single dataset, and an MP-AID member has records only in this one dataset. Dictionary members are subject to syntactical validation: MP-AID members are not.

A number of commands to interrogate, manipulate, and report from the MP-AID are available to all users.

Extended variants of the commands available to all users, and additional commands provided for use in maintenance of the MP-AID are restricted to use by the Systems Administrator and, in some instances, to use by Host and Guest Controllers.

## MP-AID Member Types

There are several different MP-AID member types each supporting a different capability. For example, KEPT-DATA members are used to store KEPT-DATA lists over Manager Products sessions whereas LOGON-PROFILEs are used to provide user access to Manager Products.

Some are available with ControlManager Nucleus but may have additional functionality when a particular Product and/or selectable unit is installed. Others are only available if a particular product and/or selectable unit is installed. For example: LOGON-PROFILEs are available with ControlManager Nucleus but have additional use if the Systems Administrators Environmental Control Facility is installed; KEPT-DATA members may only be created if DataManager is installed (since they are used to store KEPT-DATA lists which may only be created using DataManager).

Some member types may be added directly to the MP-AID by any user. These member types support what may be called *personal* capabilities, that is, they are for the user's personal use. For example, USER-MEMBERs provide a personal storage capability for all users.

Some member types must first be defined as dictionary members in the Manager Products Administration Dictionary, and then constructed onto the MP-AID by the Systems Administrator. These member types support what may be called *corporate* capabilities, that is, they provide facilities or implement environmental conditions that apply to all users, but are defined by the Systems Administrator. For example, a GLOBAL-PROFILE can be used to set certain environmental conditions for all Manager Products users at an installation.

The ASG-supplied InfoBank members and the Panel Driven Processing (PDP) EXECUTIVE members are not constructed onto the MP-AID in this way. They are loaded onto the MP-AID from an ASG-supplied dataset as part of the Manager Products installation procedure.

# Access to MP-AID Members

An MP-AID member can be public, private, or restricted.

This determines who can copy, delete, edit, list, or print it.

A *public* MP-AID member can be added to the MP-AID by any user, and can be listed, printed, and copied by other users if they specify the Logon Identifier of the user who added it.

For example you could enter:

```
MP LIST USER-MEMBERS BILL ;
```

where `BILL` is the Logon Identifier of another user. The command would produce a list of USER-MEMBERs added to the MP-AID by user BILL who at the time of adding each USER-MEMBER specified that it was PUBLIC.

A *private* MP-AID member can be added to the MP-AID (using FILE or HOLD) by the currently logged-on user, or by another user sharing the same Logon Identifier. It can be listed, printed, edited, copied, or deleted only by a user with that Logon Identifier. That is, each user can list, print, edit, copy, or delete their own private MP-AID members.

*Restricted* MP-AID members can be added to the MP-AID only by the Systems Administrator and, apart from the following exceptions, can be processed only by the Systems Administrator:

- EXECUTIVE members can be listed, printed, or copied by any user. However, if the Systems Administrators Environmental Control Facility is installed, access to some EXECUTIVE members may be restricted.
- FORMAT and TRANSLATION-RULE members can be listed by any user
- UDS-TABLEs and UDS-COMPARISON-TABLES can be listed by dictionary Controllers and Guest Controllers.

**Note:**

The Systems Administrator can delete, list, print, or copy any MP-AID member (private, public, or restricted), but cannot edit another user's PRIVATE members.

# MP-AID Related Facilities

The ControlManager Nucleus is available in all environments, and includes the following MP-AID facilities:

- MP-AID creation, housekeeping, and interrogation
- Basic LOGON capabilities
- Control of the global environments
- InfoSystem (the screen based help/information system containing comprehensive technical documentation of Manager Products)

ControlManager selectable units that provide additional functionality via the MP-AID, are:

- The Extended Interactive Facility
- User Defined Commands
- User Defined InfoSystem
- User Defined Syntax
- The Systems Administrator's Environmental Control Facility

DictionaryManager also provides additional functionality via the MP-AID.

With the *Nucleus* you can translate the format of ASG dictionary member types to that of another vendor's dictionary member types; the TRANSLATION-RULES and the output from such a translation are held as members on the MP-AID. With the *Corporate Dictionary Definition Export for IDD* installed, the output can be exported to the target dictionary.

With *User Defined Output* installed, output from REPORT commands can be tailored.

DesignManager also provides additional functionality via the MP-AID. With the *Nucleus* you can STORE the contents of a WORKBENCH on the MP-AID.

**Table 2 Access to MP-AID Member Types**

| MP-AID Member Type | Access | Notes |
|---|---|---|
| EXECUTIVE | Restricted | Any user may list, print, and copy executive members. |
| FORMAT | Restricted | Any user may list format members. |
| INFOBANK | Restricted | |
| KEPT-DATA | Private | |
| PROFILE | Restricted | |

**Table 2 Access to MP-AID Member Types**

| MP-AID Member Type | Access | Notes |
|---|---|---|
| TRANSIENT | Private | |
| TRANSLATION-RULE | Restricted | Any user may list TRANSLATION-RULE members. |
| UDS-COMPARISON-TABLE | Restricted | Controllers/Guest Controllers. |
| UDS-TABLE | Restricted | Controllers/Guest Controllers. |
| USER-MEMBERS | Private or Public | Public user members may be listed, printed, and subsequently copied by any user who specifies the Logon Identifier. |
| VARIABLE-POOL | Restricted | May be listed or deleted by Systems Administrators. |
| WORKBENCH | Public | |

# MP-AID Member Types

## *EXECUTIVE Members*

If ControlManager's User Defined Commands facility is installed, the Systems Administrator can create *Corporate Executive Routines*. A series of commands and/or directives are placed in an EXECUTIVE-ROUTINE member of the Manager Products Administration Dictionary. The Systems Administrator then constructs this onto the MP-AID to form an EXECUTIVE member.

The Systems Administrator can designate users to define EXECUTIVE-ROUTINE members in the dictionary, but only the Systems Administrator can construct them onto the MP-AID.

All users can execute Corporate Executive Routines containing the following commands:

- All Manager Products commands normally available to them
- Any non-restricted Manager Products commands which have been disabled
- Any SET commands normally restricted to the Systems Administrator

**Note:**

When you place a Manager Products SET command in an Executive Routine, it must be prefixed by the MPR directive. For example:

```
MPR SET EXEC-WRITE OFF ;
```

If not prefixed by MPR, the SET command would be interpreted as a SET directive.

You can nest EXECUTIVEs by naming any other EXECUTIVE member as one of the commands in a given EXECUTIVE. In this way, they can be nested to any depth.

You can execute the commands of an EXECUTIVE member by entering the member name, optionally prefixed by the command keyword CORPORATE-EXECUTIVE. In addition any necessary parameters must also be specified.

If the Systems Administrator's Environmental Control Facility is installed, the Systems Administrator can assign Access Control levels to an EXECUTIVE member and so control which users can use it.

## FORMAT Members

If DictionaryManager's User Defined Output facility is installed, the Systems Administrator can tailor the format of output from the REPORT command. The desired output format is specified in a FORMAT member of the Manager Products Administration Dictionary. The Systems Administrator then constructs this onto the MP-AID.

The Systems Administrator can designate users to define FORMAT members in the dictionary, but only the Systems Administrator can construct them onto the MP-AID. Users can also enter FORMAT members in their own dictionaries and use them directly.

## INFOBANK Members

An MP-AID INFOBANK member is an InfoBank Panel, that is, a set of one or more screens in the ASG help or information system *InfoSystem*.

InfoSystem is a menu-driven online documentation system consisting of:

- InfoView, the software which displays the panels of text
- InfoBank, the panels themselves

InfoSystem is designed to help you use Manager Products; it provides detailed information to help you use each specific product, and general information about ASG and its products.

In the installation procedure, the basic INFOBANK members are loaded directly onto the MP-AID from an ASG-supplied dataset.

If the *User Defined InfoSystem* facility is installed, the ASG-supplied panels can be installed as INFOBANK-PANEL dictionary members in the Manager Products Administration Dictionary (the InfoDictionary). The Systems Administrator then constructs these INFOBANK-PANEL dictionary members onto the MP-AID to form InfoBank panels. Since these panels are members in the Administration dictionary, they can be modified as required, and new panels added.

## KEPT-DATA Members

You can use the DataManager STORE command to store a KEPT-DATA list as a KEPT-DATA member on the MP-AID. This member is retained over Manager Products sessions, and can be retrieved at any time using the DataManager FETCH command.

KEPT-DATA members are *private*: they belong to the user who created them and, apart from the Systems Administrator, only users with the same Logon Identifier can list, print, or delete them.

Any number of these members can be created on the MP-AID. However, if the Systems Administrator's Environmental Control Facility is installed, the Systems Administrator can specify the maximum space allowed on the MP-AID for each user.

## PROFILE Members

### Summary

There are two types of MP-AID PROFILE member: Logon PROFILEs and Global PROFILEs. Both types are defined as members of the Manager Products Administration dictionary and subsequently constructed onto the MP-AID by the Systems Administrator.

To log on to Manager Products using the LOGON command, the Logon Panel, or Logon Exit, you must enter a *Logon Identifier* and *password*. For all users, except the Systems Administrator, the Logon Identifier and password are assigned, by the Systems Administrator, who creates a Logon Profile for that purpose. The Logon Identifier entered by a user must match, exactly, the name of such a Logon Profile and the password must match the password specified in that Profile. When the Logon Identifier is entered it invokes the Logon Profile with that name.

The Logon Profile establishes your credentials and may also include commands to tailor your environment:

- Specifying the setting of PF keys
- Giving an additional level of security by disabling certain commands and restricting access to dictionaries and/or statuses
- Giving different levels of online help to suit the needs of different users
- Routing a user directly into Panel Driven Processing
- Specifying user class (for example, CONTROLLER)

Such commands are executed automatically when the Logon Profile is invoked, by entry of the correct Logon Identifier and password, if the Systems Administrators Environmental Control Facility is installed.

Commands which would be common to two or more Logon Profiles can be included in a *Global Profile* rather than being repeated in each user's Logon Profile. Typical uses of a Global Profile are:

- To establish a common environment for a group of users (for example, the members of a department)
- To route users to a particular dictionary/status in a multiple dictionary/status environment
- To limit the commands available to certain classes of user
- To establish default settings in interactive environments (for example PF keys)

**Note:**

The use of Profiles for Systems Administrators is different to that for other users.

## LOGON-PROFILE Members

Logon Profiles are defined as LOGON-PROFILE members in the Manager Products Administration Dictionary and then constructed onto the MP-AID as PROFILE members.

The name of a Logon Profile is used as the Logon Identifier. When the Logon Identifier is entered, the Logon Profile with that name is invoked - providing it exists on the MP-AID.

As a minimum requirement, a Logon Profile will establish a user's credentials to log on to Manager Products, that is, the Logon Identifier and password. In addition, the Logon Profile may also specify:

- The name under which the Logon Profile is to be stored on the MP-AID (if different from the name of the LOGON-PROFILE member in the dictionary)
- Whether the Logon Profile is to be *shared* or *exclusive* (only in fully interactive environments, that is, CICS, CMS, TSO, and Siemens Time Sharing Interface)
- Whether a user logging on with these credentials is a Designated Controller

A *shared* Logon Profile allows a number of users to be logged on at one time using this Logon Identifier and password; a Logon counter is incremented by one when each logs on. An *exclusive* Logon Profile allows only one user to be logged on at one time using this Logon Identifier and password; a Logon flag is set when it is in use.

The Systems Administrator can establish a user as a *Designated Controller* by including the keyword CONTROLLER in the Logon Profile. This will enable the user to execute a subset of restricted User Defined Syntax related commands and to read all InfoBank panels normally restricted to dictionary Controllers.

A number of additional options can be specified in a Logon Profile and, if the Systems Administrator's Environmental Control Facility is installed, these options will be effective:

- The profile can include commands which establish a unique environment for a user. Commands normally available to the user and SET commands restricted to the Systems Administrator can both be included.
- Separate GLOBAL-PROFILE members may be invoked which (depending on the operational mode) perform functions specific to an online or batch environment
- Access Control levels can be specified which control the user's ability to execute any MP-AID EXECUTIVE members which have been assigned a specific access level. For this capability, the User Defined Commands facility must also be installed.

## GLOBAL-PROFILE Members

Global Profiles are defined as GLOBAL-PROFILE members in the Manager Products Administration dictionary and then constructed onto the MP-AID as PROFILE members. They can contain any of the commands permitted in Logon Profiles.

If the Systems Administrator has created a Global Profile called GLOBAL0000 then this is invoked automatically whenever you log on. GLOBAL0000 is known as the Universal Global Profile. It is invoked when any user logs on (except for the Systems Administrator who may use a NO-PROFILE option when logging on).

If the Systems Administrator has created a Global Profile called GLOBALAUTO, it is invoked, automatically, during the Autolog procedure.

Refer to "Autolog" on page 32 for details of Autolog.

A Logon Profile may also specify one or more other Global Profiles which may, if the Systems Administrators Environmental Control Facility is installed, be invoked as follows:

- As a COMMON-GLOBAL invoked whenever you log on
- As an ONLINE-GLOBAL invoked when you log on interactively
- A BATCH-GLOBAL invoked when you log on in batch

Thus one Logon Profile can establish different environments depending on how you log on.

**Note:**

COMMON-GLOBAL, ONLINE-GLOBAL, and BATCH-GLOBAL are keywords to be specified within a Logon Profile and followed by the name of a Global Profile; they are not member type identifiers.

Any number of Global Profiles may be created but each Logon Profile can, in addition to GLOBAL0000, invoke a maximum of three: one of each type listed above.

If the LOGON command is contained in an Access Call from a User Interface program the execution of ONLINE-GLOBALs and BATCH-GLOBALs depends on whether the User Interface program is in online or batch mode.

Refer to the appropriate User Interface Manual for details of User Interface programs.

## User Defined Profiles

If the Extended Interactive Facility and the Systems Administrator's Environmental Control Facility are installed you can create your own *User Defined Profile* and so tailor the environment to suit your own needs.

You create a User Defined Profile as a series of commands in a USER-MEMBER on the MP-AID. The name of the USER-MEMBER must be the same as your Logon-Identifier; when you log on, that USER-MEMBER will be invoked and the commands in it executed.

## Sequence of Execution of Profiles

When you log on using the LOGON command, the Logon Panel, or the Logon Exit, the different types of Profile, if present, are processed in the following sequence:

- The Universal Global Profile GLOBAL0000
- The Global Profile invoked as COMMON-GLOBAL
- The Global Profile invoked as ONLINE-GLOBAL or BATCH-GLOBAL
- The commands contained in the Logon Profile
- The User Defined Profile

A setting defined by a command executed in one Profile may be redefined by a command executed in a another Profile that is executed subsequently during the Logon process. For example, if your *Logon Profile* contains the command:

```
SET PF12 HELP ;
```

and your *User Defined Profile* contains the command:

```
SET PF12 RECALL ;
```

then when the logon process is complete, PF 12 will be set to RECALL.

## TRANSLATION-RULE Members

TRANSLATION-RULES can be supplied as an ASG dataset and loaded directly onto the MP-AID, or they can be defined in the Administration dictionary and constructed onto the MP-AID.

If DictionaryManager is installed, the Systems Administrator can define rules by which a dictionary member type, such as GROUP, is translated from the format of a Manager Products dictionary to that of another vendor's dictionary.

If you have been given access to the Manager Products Administration dictionary, you can build translation rules as members of that dictionary; these are then CONSTRUCTed onto the MP-AID by the Systems Administrator.

The TRANSLATION-RULE can be used by subsequent TRANSLATE commands to translate the ASG-supplied format to that of the target dictionary, and/or, if required, to another Manager Products dictionary.

## UDS-TABLE Members

If the User Defined Syntax facility is installed, dictionary Controllers can define their own hierarchically related dictionary member types and their attributes. The syntax they define is organized in table form (the UDS table). A UDS table may be stored on the MP-AID or be present as an ASG-supplied module in the Manager Products Program Library.

If UDS is installed, you can store UDS tables on the MP-AID as *primary* UDS-TABLE members. This is done in each case by defining a HIERARCHY member, together with a set of members defining the member types and attributes for the target dictionary, in the Manager Products Administration Dictionary and constructing it onto the MP-AID.

A *secondary* UDS-TABLE member is added to the MP-AID whenever a CONTROL UDS command is entered. The CONTROL UDS command causes a currently opened dictionary to be assigned a specified UDS table, and this is recorded in the secondary UDS table. The secondary UDS table does not contain a copy of the UDS table itself; this may be stored either as a primary UDS-TABLE member of the MP-AID (one which has been defined by a user) or as an ASG-supplied module.

A secondary UDS-TABLE member will also be added or replaced on the MP-AID when a valid CREATE or RELOAD command is processed.

A secondary UDS member may only be created by a Host Controller since only a Host Controller has the authority to enter a CONTROL UDS, CREATE, or RELOAD command.

Details of the CONTROL UDS command and other UDS-related Controller activities can be found in the *ASG-Manager Products Controller's Manual*.

## UDS-COMPARISON-TABLE Members

A UDS-COMPARISON-TABLE member is added or replaced on the MP-AID whenever a COMPARE UDS command, specifying two UDS tables, is executed.

A UDS table may be stored on the MP-AID or be present as an ASG-supplied module in the Manager Products Program Library.

The COMPARE UDS command may be entered by a Designated Controller when acting as a Guest Controller in another dictionary, or by any other Controller when his or her dictionary is open (that is, by a 'Host' Controller).

## USER-MEMBERs and TRANSIENT Members

If the Extended Interactive Facility is installed, any user can add USER-MEMBERs and TRANSIENTs to the MP-AID: using EDIT, and then FILE (USER-MEMBERs) or HOLD (TRANSIENTs).

USER-MEMBERs and TRANSIENTs are private: they belong to the user who created them and, apart from the Systems Administrator, only users with the same Logon Identifier can list, print, or delete them. This means you have the ability to create a personalized filing system.

USER-MEMBERs are retained over Manager Products sessions; TRANSIENTs are automatically deleted when the originating user logs off.

If the User Defined Commands facility is also installed, you can place commands in USER-MEMBERs and TRANSIENTs and so create *User Executive Routines* and *Transient Executive Routines*.

As a general rule, the commands in an Executive Routine can be executed simply by entering the name of the routine followed by any required parameters. However, it may be necessary to use a prefix command.

Unlike Corporate Executive Routines, User Executive Routines and Transient Executive Routines can only contain Manager Products commands and User Defined Command directives; they cannot contain any Manager Products commands that have been disabled or any SET commands normally restricted to the Systems Administrator.

User Executive Routines and Transient Executive Routines can only be executed by the user who created them, or another user having the same Logon Identifier. They can be nested to any depth.

If DataManager is installed, User Executive Routines and Transient Executive Routines may contain one or more PERFORM commands, and these can be nested to any depth.

If the Systems Administrator's Environmental Control Facility is installed, you can set up a *User Defined Profile*. This is a User Executive Routine whose name is the same as your Logon Identifier; when you log on, the commands in the routine are automatically executed.

If DictionaryManager is installed, the output produced by the TRANSLATE command is created as a USER-MEMBER or *public* USER-MEMBER on the MP-AID. (The name of the member is specified in the TRANSLATE command.) A USER-MEMBER is normally accessible only to the user who created it. A public USER-MEMBER is accessible to any user specifying the Logon Identifier of the one who created it; this means you can print, copy, and list a public USER-MEMBER, but cannot delete or edit it.

Any number of USER-MEMBERs and TRANSIENTs can be created on the MP-AID. However, if the Systems Administrator's Environmental Control Facility is installed, the Systems Administrator can specify the maximum space allowed on the MP-AID for each user.

## VARIABLE-POOL Members

VARIABLE-POOL members are used by the Manager Products software to store between sessions, the value of any PROFILE variables allocated by a Procedures Language executive routine.

VARIABLE-POOL members are created automatically at logoff from the Manager Products session if PROFILE variables have been allocated during the session, provided that:

- The user has read/write access to the primary MP-AID
- The user either is logged on under an Exclusive Logon Profile or is the Systems Administrator.

When the user next logs on, the PROFILE variables are automatically retrieved from the MP-AID.

VARIABLE-POOL members are available if selectable unit TE000 and/or the ControlManager User Defined Commands facility are installed.

VARIABLE-POOL members are effectively private, since they are associated with the Manager Products logon id under which they were created, but no user other than the Systems Administrator can access them directly. The Systems Administrator can use the MP-AID DELETE, EXEC-LIST, and LIST commands with VARIABLE-POOL members.

## WORKBENCH Members

You can use the DesignManager STORE command to store the current contents of a Workbench Design Area as a WORKBENCH member on the MP-AID. This member is retained over Manager Products sessions, and can be retrieved at any time using the DesignManager FETCH command.

WORKBENCH members are private: they belong to the user who created them and, apart from the Systems Administrator, only users with the same Logon Identifier can list or delete them.

Any number of these members can be created on the MP-AID. However, if the Systems Administrator's Environmental Control Facility is installed, the Systems Administrator can specify the maximum space allowed on the MP-AID for each user.

# Output from an MP-AID LIST Command

Output from an MP-AID LIST command consists of a list of MP-AID member names and columns of information about each listed member. The output varies when a particular member type is specified in the command. These columns are always output:

| Column Title | Description |
|---|---|
| **NAME** | The name of the member. |
| **TYPE** | The type of member.<br>In output from an MP-AID LIST USER-MEMBERs command, the letter *P* against this column indicates a *public* USER-MEMBER. |
| **DATE** | The date the member was added to the MP-AID or (if it has been updated since it was added) the date it was last updated. |
| **TIME** | The time the member was added to the MP-AID or (if it has been updated since it was added) the time it was last updated. |
| **BLOCKS** | The number of blocks of space occupied by the MP-AID member. |

Depending upon the member type you specify in the MP-AID LIST command (if any) the following additional information may be output:

| Column Title | Description |
|---|---|
| **RECORDS** | The number of lines in the member. |
| **LOGON-ID** | The user's Logon Identifier. |
| **SEC-LEV** | The Access Control Level. |
| **USAGE** | How a Workbench is used.<br>For example, for a DesignManager Workbench this column would contain WBDA (which stands for Workbench Design Area). |

Output for USER-MEMBER, TRANSIENT, and KEPT-DATA member types has two additional columns: RECORDS and LOGON-ID.

Output for EXECUTIVE member types has two additional columns: RECORDS and SEC-LEV.

Output for WORKBENCH member types has two additional columns showing USAGE and LOGON-ID.

For FORMAT and TRANSLATION-RULE member types no additional columns are output.

The following is an example of the output produced in response to an MP-AID LIST FORMATs command:

| Name | Type | Date | Time | Blocks |
|---|---|---|---|---|
| BOX-ONE | FORM | 11 AUG 1987 | 16.13.56 | 2 |
| BOX-TWO | FORM | 27 AUG 1987 | 12.02.03 | 1 |

There are two FORMAT members: BOX-ONE and BOX-TWO. BOX-ONE was added/last updated on 11th August 1987 at about 4.15 pm, and occupies two blocks of space on the MP-AID; BOX-TWO was added/last updated on 27th August 1987 at midday, and occupies one block.

**Table 3 MP-AID Member: Listing**

| Member/User Category | All Users | Designated or Host Controller | Systems Administrator |
|---|---|---|---|
| EXECUTIVE | Yes* | Yes* | Yes |
| FORMAT | Yes | Yes | Yes |
| INFOBANK | No | No | Yes |
| KEPT-DATA | Yes | Yes | Yes |
| PROFILE | No | No | Yes |
| TRANSIENT | Yes# | Yes# | Yes |
| TRANSLATION-RULE | Yes | Yes | Yes |
| UDS-COMPARISON-TABLE | No | Yes | Yes |
| UDS-TABLE | No | Yes | Yes |
| USER-MEMBER | Yes# | Yes# | Yes |
| VARIABLE-POOL | No | No | Yes |
| WORKBENCH | Yes | Yes | Yes |

* Only those members for which the user has been assigned the appropriate Access Control Levels, when the Systems Administrator's Environmental Control Facility is installed.

\# Only those members which were added by the user who is logged on or by another user who shares the same Logon Identifier.

**Table 4 MP-AID Member: Printing**

| Member/User Category | All Users | Designated or Host Controller | Systems Administrator |
|---|---|---|---|
| EXECUTIVE | Yes* | Yes* | Yes |
| FORMAT | No | No | No |
| INFOBANK | No | No | No |
| KEPT-DATA | Yes# | Yes# | Yes |
| PROFILE | No | No | Yes |
| TRANSIENT | Yes# | Yes# | Yes |
| TRANSLATION-RULE | No | No | No |
| UDS-COMPARISON-TABLE | No | No | No |
| UDS-TABLE | No | No | No |
| USER-MEMBER | Yes# | Yes# | Yes |
| VARIABLE-POOL | NO | NO | NO |
| WORKBENCH | No | No | No |

* Only those members for which the user has been assigned the appropriate Access Control Levels, when the Systems Administrator's Environmental Control Facility is installed.

\# Only those members which were added by the user who is logged on or by another user who shares the same Logon Identifier.

# 10 Commands

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# Introduction

This chapter contains the ControlManager commands available in all environments, those available with the Basic Interactive facilities, and those available with the Extended Interactive Facility.

The commands are arranged alphabetically and documented fully in "ControlManager Commands" on page 129. However, lists of these commands, arranged according to environment and facility, are given in the following sections.

# Submitting Batch Jobs

Manager Products can be run in batch by setting up a job stream containing the necessary JCL (as detailed in the Manager Products installation manual relevant to your environment) and the Manager Products commands to be executed in the batch run. This job stream can then be submitted to the batch processor using the command(s) appropriate to your installation.

Most Manager Products commands can be included in a batch job. The most notable exceptions are the commands provided by the Full Screen Editor: UPDATE, BACKWARD, CHANGE, LADD, PUT, MM, etc.

Refer to Chapter 6, "The Extended Interactive Facility," on page 47 for details of the Full Screen Editor commands.

# Commands Available in All Environments

The ControlManager commands available in all environments can be grouped as follows:

- Nucleus commands
- SET and QUERY commands
- InfoSystem commands.

## Nucleus Commands

| | |
|---|---|
| CLOSE | MP-AID PRINT |
| DMS | NOPRINT |
| ENVIRONMENT | SKIP |
| FREE | SPACE |
| LOGOFF | SWITCH MESSAGES |
| LOGON | SWITCH NAME-CONCATENATION |
| MODE | SWITCH OUTPUT |
| MP-AID DELETE | TEXT |
| MP-AID LIST | WBDA |
| MP-AID PASSWORD | |

## SET and QUERY Commands

QUERY ALL

QUERY AMBIGUITY-ASSUMPTION

QUERY CHARACTER-TRANSLATION

QUERY DICTIONARY

QUERY DICTIONARY-UPDATES

SET and QUERY DIRECTLY-ASSUMPTION

QUERY DOCUWARE

SET and QUERY ECHO

QUERY ENQUEUE-TRACE

SET and QUERY ESCAPE-CHARACTER

SET and QUERY FORMAT

SET and QUERY FGRMAT-TITLE

QUERY FREEPOOL

QUERY HELP-ENTRY

QUERY INDEX-PANEL

QUERY INFOBANK-ENTRY

QUERY INTERROGATE-ENQUEUE

QUERY IO-FLUSH-LIMIT

QUERY KANJI-MODE

QUERY KANJI-STRING-DELIMITER

QUERY KEPT

SET and QUERY LIST-SHIFT

QUERY LOGON-ID

QUERY MESSAGE-LANGUAGE

QUERY MODE

QUERY MPAID-UPDATES

QUERY ONLINE-USERS

SET and QUERY PERFORM-CHARACTER

QUERY PRIMARY-COMMANDS

SET and QUERY PRINT-DELIMITERS

SET and QUERY PRINT-SHIFT

QUERY RESERVED-INFOBANK-LINE

SET and QUERY REVISION-BARS

QUERY SOS-DUMP

QUERY STORAGE

QUERY STRING-DELIMITER

QUERY TOP-MENU-ENTRY

SET and QUERY TRANSLATION

QUERY USERBLOCKS

SET and QUERY VERIFY

QUERY VIRTUAL

## InfoSystem commands

HELP

INFOBANK

PANEL *panel-name*

QUERY HELP-ENTRY

QUERY INDEX-PANEL

QUERY INFOBANK-ENTRY

QUERY RESERVED-INFOBANK-LINE

RETRACE

SELECT

# Commands Available with the Basic Interactive Facilities

The ControlManager commands available with the Basic Interactive facilities can be grouped as follows:

- SET and QUERY commands
- Commands other than SET and QUERY.

**Note:**

These commands are in addition to those available in all environments.

## *SET and QUERY Commands*

`SET` and `QUERY AUTOSKIP`

`SET` and `QUERY BLANK-LINE-DISPLAY`

`SET` and `QUERY COMMAND-LINE`

`SET` and `QUERY COUNTER`

`SET` and `QUERY CURSOR-HOLD`

`QUERY EXCP-LIMIT`

`SET` and `QUERY INFOBANK-SELECT`

`SET` and `QUERY LINE-AREA`

`SET` and `QUERY LINE-END-CHARACTER`

`QUERY OUTPUT-LINE-LIMIT`

`QUERY PFKEYS` and `SET PF`

`SET AND QUERY SCALE`

`SET` and `QUERY UPPER-CASE`

### Commands Other Than SET and QUERY

```
BACKWARD
BOTTOM
CLEAR
FORWARD
LEFT
RIGHT
TOP
```

## Commands Available with the Extended Interactive Facility

The ControlManager commands available with the Extended Interactive facility can be grouped as follows:

- Prefix and Primary Commands
- Editor Line Commands
- SET and QUERY commands

**Note:**

These commands are in addition to those available in all environments and those available with the Basic Interactive facilities.

### Prefix and Primary Commands

```
BROWSE                  LOOKASIDE
CHANGE                  MOVE
DELETE                  MP-AID EXEC-LIST
DOWN                    NEXT
EDIT                    PUT
FILE                    QUIT
FIND                    REFILE
GET-DICTIONARY/GETD     RUN
GET-EXECUTIVE/GETE      SMOVE
```

| | |
|---|---|
| GET-SCRATCHPAD/GETS | SOURCE-FILE/SFILE |
| GET-TRANSIENT/GETT | UP |
| GET-USER/GETU | UPDATE |
| HOLD | WIPE |
| KPUT | XQUIT |
| LADD | ZONE |
| LOCATE | |

## Editor Line Commands

| | |
|---|---|
| / | Current Line Pointer. |
| "[*n*] | Duplicate the line (*n* times). |
| A[*n*] | Add (*n*) blank line(s). |
| C[*n*] | Copy (*n*) line(s). |
| CC | Copy block. |
| D[*n*] | Delete (*n*) line(s). |
| DD | Delete block. |
| F[*n*] | Follow (*n* copies). |
| I[*n*] | Insert (*n* copies). |
| K[*n*] | Also copy (*n*) line(s). |
| KK | Also copy block. |
| M[*n*] | Move (*n*) line(s). |
| MM | Move block. |
| P[*n*] | Precede (*n* copies). |
| S[*n*] | Also move (*n*) line(s). |
| SS | Also move block. |

### SET and QUERY Commands

`QUERY ACTIVE-BUFFERS`

`SET` and `QUERY ALERT`

`QUERY BUFFER-LIMIT`

`SET` and `QUERY EXCP-MONITOR`

`QUERY LINE-COMMANDS`

`SET` and `QUERY LOOKASIDE-RETENTION`

`SET` and `QUERY NUMBERS`

`SET` and `QUERY SCREEN-REFRESH`

`SET` and `QUERY SCROLL-LIMIT`

`SET` and `QUERY TAB-CHARACTER`

`SET` and `QUERY TABS`

`SET` and `QUERY UPDATE-OUTPUT`

## ControlManager Commands

This section contains the ControlManager commands available in all environments, those available with the Basic Interactive facilities, and those available with the Extended Interactive Facility.

### / (Current Line Pointer)

The / (Current Line Pointer) command makes this line the Current Line.

If you key `/` in the Line Command Area of a line and press Enter, that line becomes the Current Line; that is, the text is scrolled forward, and that line becomes the top line in the Data Area.

`/` is available with the Extended Interactive Facility and can be used in Command, Edit, Lookaside, and Update Modes, and in InfoSystem.

#### / (Current Line Pointer) Syntax

```
/
```

## " (Duplicate Line Command)

The " (Duplicate Line Command) duplicates a line.

To duplicate a line, enter " in the Line Command Area and press Enter. To duplicate a line *n* times, enter "*n* in the Line Command Area and press Enter. *n* can be any number from 1 to 9999, subject to the overall limit on your allocation of virtual storage.

After execution, the cursor is placed in column one of the first duplicated line.

" is available with the Extended Interactive Facility.

### " (Duplicate Line Command)Syntax

"

## A and LADD

The A and LADD command adds one or more blank lines to an Edit or Update Buffer.

The commands are described in the following sub-sections, for each of which the name of the corresponding InfoBank panel is given.

- A - Add Line Command CMRCOM3215
- LADD - Add Primary Command CMRCOM3126

### A - Add Line Command

To add one blank line to an Edit or Update Buffer, enter:

A

in the Line Command Area and press ENTER.

To add *n* blank lines, enter:

A*n*

in the Line Command Area and press ENTER. *n* can be any number from 1 to 9999, subject to the overall limit on your allocation of virtual storage.

The blank lines are added after the line in which the command was entered, and the cursor is placed in column one of the first added line.

A is available with the Extended Interactive Facility.

## LADD - Add Primary Command

To add one blank line to an Edit or Update Buffer, immediately after the Current Line, enter:

```
LADD ;
```

To add *n* blank lines, enter:

```
LADD n ;
```

*n* can be any number from 1 to 9999, subject to the overall limit on your allocation of virtual storage.

When the LADD command is executed, the cursor is placed in column one of the first added line.

LADD is available with the Extended Interactive Facility.

## A and LADD command Syntax

The syntax of the add line command is:

```
A[n]
```

The syntax of the add primary command is:

```
LADD [n] { ; }
         { . }
```

# BACKWARD and FORWARD

The BACKWARD and FORWARD command displays the previous or next screen in the current buffer.

To display the previous screen in the current buffer, enter:

```
BACKWARD ;
```

When the Current Line is the TOP OF DATA delimiter then you can’t go any further backwards.

To display the next screen in the current buffer, enter:

```
FORWARD ;
```

When the Current Line is the last line in the buffer then you can’t go any further forwards.

BACKWARD and FORWARD are available with the Basic Interactive Facilities, and can be used in Command, Edit, Lookaside, and Update Modes. and in InfoSystem.

### BACKWARD and FORWARD Syntax

```
BACKWARD {;}
         {.}

FORWARD  {;}
         {.}
```

## BOTTOM and TOP

The BOTTOM and TOP command displays the last or first screen in the current buffer.

To display the last screen in the current buffer, enter:

```
BOTTOM ;
```

This displays the last full screen of output; the last line does not become the Current Line.

To display the first screen in the current buffer, enter:

```
TOP ;
```

The TOP OF DATA delimiter then becomes the Current Line.

TOP and BOTTOM are available with the Basic Interactive Facilities, and can be used in Command, Edit, Lookaside, and Update Modes, and in InfoSystem.

### TOP and BOTTOM Syntax

```
{BOTTOM} {;}
{B     } {.}

{TOP} {;}
{T  } {.}
```

## BROWSE and LOOKASIDE

The BROWSE and LOOKASIDE command displays output in a new Lookaside Buffer.

Output from a command issued in Command or Lookaside Mode overwrites the current contents of the Command Mode or Lookaside Buffer unless the command is prefixed by the BROWSE or LOOKASIDE command. If the command is prefixed by BROWSE or LOOKASIDE, the output is displayed in a new Lookaside Buffer. For example, if you enter:

```
BROWSE PRINT FILE-EMP-MASTER ;
```

The contents of the member FILE-EMP-MASTER are displayed in a new Lookaside Buffer.

BROWSE and LOOKASIDE have the same effect.

BROWSE and LOOKASIDE are available with the Extended Interactive Facility.

### BROWSE and LOOKASIDE Syntax

```
{BROWSE   } command {;}
{LOOKASIDE}         {.}
```

## C/CC and PUT

The C/CC and PUT command copies lines to the Scratchpad without deleting them from the current buffer. The current contents of the Scratchpad are overwritten.

The commands are described in the following sub-sections, for each of which the name of the corresponding InfoBank panel is given.

- C/CC - Copy Line Command CMRCOM3220
- PUT - Copy Primary Command CMRCOM3138

### C/CC - Copy Line Command

To copy *one* line to the Scratchpad without deleting it from the current buffer, enter `C` in the Line Command Area and press Enter.

The line containing `C` is copied from the current buffer and overwrites the contents of the Scratchpad.

To copy a *number* of lines to the Scratchpad without deleting them from the current buffer, enter C*n* in the Line Command Area and press Enter. *n* is the number of lines you wish to copy and can be from 1 to 9999.

The specified number of lines, starting with the line containing `C`*n*, are copied from the current buffer and overwrite the contents of the Scratchpad.

To copy a *block* of lines to the Scratchpad without deleting them from the current buffer, enter `CC` in the Line Command Area in the first and last lines of the block to be copied, and press Enter. The block can extend over more than one screen if you wish.

The specified block of lines is copied from the current buffer and overwrites the contents of the Scratchpad.

`C` and `CC` are available with the Extended Interactive Facility, and can be used in Command, Lookaside, Edit, and Update Modes, and in InfoSystem.

## PUT - Copy Primary Command

To copy the Current Line to the Scratchpad without deleting it from the current buffer, enter:

```
PUT ;
```

The Current Line is copied from the current buffer and overwrites the contents of the Scratchpad.

To copy lines to the Scratchpad without deleting them from the current buffer, enter:

```
PUT n ;
```

where *n* is the number of lines you wish to copy.

The specified number of lines, beginning with the Current Line, are copied from the current buffer and overwrite the contents of the Scratchpad.

PUT is available with the Extended Interactive Facility, and can be used in Command, Lookaside, Edit, and Update Modes, and in InfoSystem.

## C/CC and PUT Syntax

The syntax of the copy line command is:

```
C[n]

CC
```

The syntax of the copy primary command is:

```
PUT [n] { ; }
        { . }
```

# CHANGE

The change command replaces all or specified occurrences of one character string by another.

Use CHANGE to change one character string to another or to delete a character string. You can change or delete all occurrences of the string, or specify which occurrences are to be changed or deleted.

To change a character string, enter:

```
CHANGE /old/new/ mm nn ;
```

To delete a character string, enter:

```
CHANGE /old// mm nn ;
```

where:

> `/` is the delimiter character. Any non-alphanumeric character can be used, but note that the same character must be used throughout the command, and that character must not occur in either string.
>
> *`old`* is the character string to be changed or deleted.
>
> *`new`* is the character string to be inserted.
>
> *`mm`* is the number of lines (starting from and including the Current Line) on which the string is to be changed or deleted. Enter * to change or delete the string on *all* lines.
>
> *`nn`* is the number of occurrences of the string which are to be changed or deleted on each line. Enter * to change or delete *all* occurrences.

If the *`old`* string is found, a message is displayed:

```
DM08822I nn OCCURRENCES CHANGED ON mm LINES
```

If the *`old`* string is not found, a message is displayed:

```
DM08823E STRING NOT FOUND
```

The ZONE command enables you to define the columns between which the CHANGE command will work.

Refer to "ZONE" on page 247 for details of ZONE.

## Examples

To change *all* occurrences of A to B on *all* lines, enter:

```
CHANGE /A/B/ * * ;
```

To change *all* occurrences on *15* lines, enter:

```
CHANGE /A/B/ 15 * ;
```

To change the first *two* occurrences on *all* lines, enter:

```
CHANGE /A/B/ * 2 ;
```

To change the first *four* occurrences on *ten* lines, enter:

```
CHANGE /A/B/ 10 4 ;
```

Remember, the number of lines to be changed starts from (and includes) the Current Line.

CHANGE is available with the Extended Interactive Facility, and can only be used in an Edit or Update Buffer.

### CHANGE Syntax

```
CHANGE /old/new/ {mm} {nn} {;}
                 {*}  {*}  {.}
```

where:

*mm* is a number of lines starting with the Current Line

*nn* is a number of occurrences of old to be changed per line

`*` denotes all.

## CLEAR

The CLEAR command clears the contents of the buffer displayed on the screen.

To clear the contents of the current buffer, enter:

```
CLEAR ;
```

CLEAR is available with the Basic Interactive Facilities, and can be used in Command, Edit, Lookaside, and Update Modes, and in InfoSystem.

### CLEAR Syntax

```
CLEAR {;}
      {.}
```

## D/DD and DELETE

The D/DD and DELETE command deletes one or more lines from an Edit or Update Buffer.

The commands are described in the following sub-sections, for each of which the name of the corresponding InfoBank panel is given.

- D/DD - Delete Line Command CMRCOM3230
- DELETE - Delete Primary Command CMRCOM3 106

## D/DD - Delete Line Command

To delete one line from an Edit or Update Buffer, enter:

```
D
```

in the Line Command Area and press ENTER.

To delete *n* lines, enter:

```
Dn
```

in the Line Command Area of the first line to be deleted and press ENTER. *n* can be any number from 1 to 9999.

If you specify more lines than exist in the buffer, all following lines are deleted up to, but not including, the End of Data Delimiter.

To delete a *block* of lines, enter:

```
DD
```

in the Line Command Area of the first and last lines to be deleted and press ENTER.

The number of lines to be deleted can extend over more than one screen.

**Note:**
It is not possible to delete the Top of Data and End of Data Delimiters.

`D` and `DD` are available with the Extended Interactive Facility.

## DELETE - Delete Primary Command

To delete the Current Line of an Edit or Update Buffer, enter:

```
DELETE
```

To delete *n* lines starting with the Current Line, enter:

```
DELETE n ;
```

*n* can be any number from 1 to 9999.

If *n* is greater than the number of subsequent lines in the buffer, the rest of the buffer is deleted and the line that was before the Current Line becomes the new Current Line.

**Note:**
It is not possible to delete the Top of Data and End of Data Delimiters.

DELETE is available with the Extended Interactive Facility.

### DELETE Syntax

The syntax of the delete line command is:

```
D[n]

DD
```

The syntax of the delete primary command is:

```
DELETE [n] { ; }
           { . }
```

## DOWN and NEXT

The DOWN and NEXT command moves the window on the text displayed down *n* lines.

To scroll forward one line in a buffer, enter:

```
DOWN ;
```

or

```
NEXT ;
```

To scroll forward *n* lines in a buffer, enter:

```
DOWN n ;
```

or

```
NEXT n ;
```

If *n* is greater than the number of subsequent lines in the buffer, the text is scrolled so that the last line in the buffer becomes the Current Line.

DOWN and NEXT are available with the Extended Interactive Facility, and can be used in Command, Edit, Lookaside, and Update Modes, and in InfoSystem.

### DOWN and NEXT Syntax

```
{DOWN} [n] { ; }
{DO  }     { . }
{D   }

{NEXT} [n] { ; }
{N   }     { . }
```

# EDIT

The EDIT command enters EDIT mode and opens an EDIT Buffer, or used to edit an existing MP-AID member.

You can use the Full Screen Editor to create new MP-AID USER-MEMBERs or to edit existing ones.

To create a new MP-AID USER-MEMBER, enter:

```
EDIT ;
```

This opens a buffer in Edit Mode into which you insert text.

To edit an existing USER-MEMBER, enter:

```
EDIT mpaid-user-member-name ;
```

This opens a buffer in Edit Mode containing a copy of the named MP-AID member, you can then edit this.

If LOOKASIDE-RETENTION is set off and you enter an EDIT command, any Lookaside Buffers currently open will be closed. If LOOKASIDE-RETENTION is set on and you enter an EDIT command, any Lookaside Buffers currently open will be retained (up to the maximum buffer count).

To add the contents of the buffer to the MP-AID use FILE. To abandon the edit without adding the contents to the MP-AID use QUIT or XQUIT.

EDIT is available with the Extended Interactive Facility.

## EDIT Syntax

```
EDIT [mp-aid-member-name] { ; }
                          { . }
```

# ENVIRONMENT

The ENVIRONMENT command gives details of the Manager Products at your installation. There are two versions of the command:

```
ENVIRONMENT ;
ENVIRONMENT ALL ;
```

In fully interactive environments, you must log on before you can issue either of the commands. In batch and pseudo-interactive environments, you can issue the command ENVIRONMENT before you log on, but not the command ENVIRONMENT ALL.

Output from ENVIRONMENT gives:

- The current Manager Products release number and fix level
- A list of all user-applied fixes.

Output from ENVIRONMENT ALL gives:

- The name and address of your installation
- The machine, model, and operating system
- The number of the Manager Products release tape and the production date
- The Manager Products installed, release numbers, and release dates
- The current Manager Products release number and fix level
- A list of all user-applied fixes
- The settings of all features that can be tailored.

ENVIRONMENT and ENVIRONMENT ALL are intended as diagnostic aids: you can check the output from these commands against the current Software Notices to find out if all relevant fixes have been applied. The ENVIRONMENT command may also be useful in a User Interface Access Call environment to identify the Manager Products release numbers to the program.

**Note:**

There may be times when you have to contact your local ASG Product Support office with a problem in a Manager Products. If you do, you will be asked for the output from an ENVIRONMENT ALL command, so it is best to get this output before you contact the office.

### ENVIRONMENT Syntax

```
ENVIRONMENT [ALL] { ; }
                  { . }
```

## F and I (Follow and Insert Line Commands)

The F and I command inserts *n* copies of the Scratchpad after this line.

To insert the contents of the Scratchpad into an Edit or Update Buffer, enter `F` or `I` in the Line Command Area and press Enter. The contents of the Scratchpad are inserted after the line containing the `F` or `I`.

To insert *n* copies of the contents of the Scratchpad, enter `F`*n* or `I`*n*. The contents of the Scratchpad are unchanged after the command has been given.

Both commands can be inserted in the line containing the Top of Data Delimiter, but not in the line containing the End of Data Delimiter.

`F` and `I` are available with the Extended Interactive Facility, and can be used in Edit and Update Modes.

### F and I Syntax

`F[n]`

`I[n]`

## FILE

The FILE command files the contents of an Edit Buffer on the MP-AID, or to add or amend the source record of a dictionary member by writing the contents of an Update Buffer and to attempt to encode it.

Use FILE:

- To enter the contents of an Update Buffer into the dictionary and generate an encoded record
- To enter the contents of an Edit Buffer onto the MP-AID

If you have updated or edited an existing member, enter:

```
FILE ;
```

When you FILE an Update Buffer your changes are made to the existing records in the source dataset of the dictionary. An encoded record is generated from the records in the source dataset, and added to the data entries dataset. This encoded record will replace any existing encoded record for the member (if the encode is successful).

When you FILE an *Edit* Buffer your changes are made to the existing member on the MP-AID.

If you have created a new member, enter:

`FILE` *`dictionary-member-name`* `;`

or

`FILE` *`mpaid-user-member-name`* `;`

When you FILE an *Update* Buffer, records for this new member are added to the index dataset and source dataset, and an encoded record is generated and added to the data entries dataset. The *`dictionary-member-name`* can have a maximum of 32 characters.

You cannot FILE a new member giving it the name of an existing member, but you can RFILE it.

Refer to "RFILE" on page 192 for details of RFILE.

When you FILE an Edit Buffer this new member is added to the MP-AID. The *mpaid-user-member-name* can have a maximum of 10 characters. It must not be the same as that of any other USER-MEMBER owned by your Logon-Id.

## Error and Warning Messages

If you FILE an Update Buffer and an error message is generated, the member will not be encoded. Instead, the source of the member, together with the error message, is displayed in a Lookaside Buffer: you can note the errors, QUIT to return to the Update buffer, correct the errors, and then re-enter the FILE command.

If you FILE an Update Buffer and a warning message is generated, the member may or may not be encoded.

The source of the member can be displayed in a Lookaside Buffer:

- Whenever FILE is executed
- Only when FILE generates warnings or errors
- Only when FILE generates errors.

Refer to "SET and QUERY UPDATE-OUTPUT" on page 232 for details of SET UPDATE-OUTPUT.

If you FILE an Edit Buffer and an error or warning message is generated, then this is displayed in the message line.

FILE is available with the Extended Interactive Facility.

## FILE Syntax

```
FILE [member-name]{;}
                  {.}
```

## FIND and LOCATE

The FIND and LOCATE command finds a string and scrolls the text on the screen so that the line with the string in it becomes the Current Line. If the string is not found, the Current Line remains unchanged.

To locate a string, enter:

`LOCATE string ;`

or

`LOCATE /string/ ;`

To find a string beginning in column 1 of a line, enter:

`FIND string ;`

or

`FIND /string/ ;`

where *string* is a string of characters, and must be entered exactly as it appears in the line. For example, to locate or find the string King, you must enter King and not KING, king, etc.

The search begins with the line following the Current Line. If the string is found, the text is scrolled forward and the line containing the string becomes the Current Line. If the string is not found, the message:

`STRING NOT FOUND`

is displayed and the text is not scrolled.

The ZONE command enables you to define the columns between which the CHANGE command will work.

Refer to "ZONE" on page 247 for details of ZONE.

LOCATE and FIND are available with the Extended Interactive Facility. Both commands can be used in Command, Edit, Lookaside, and Update Modes, and in InfoSystem.

### FIND and LOCATE Syntax

```
{FIND}  {string   }  {;}
{FI  }  {/string/}  {.}
{F   }

{LOCATE}  {string   }  {;}
{LO    }  {/string/}  {.}
{L     }
```

## FREE

The FREE command terminates a currently active DesignManager environment and deletes the appropriate Product's program code from virtual storage. This may be necessary if you encounter space problems when running several Manager Products together.

**Note:**

DesignManager is terminated and the product code removed from virtual storage if any command that closes the currently open dictionary, or a CONTROL UDS command, is executed.

### FREE Syntax

```
>──FREE──┬──DESIGNMANAGER──┬──┬──;──┬──>
         └──DSR────────────┘  └──.──┘
```

The keywords DSR and DesignManager are synonymous.

## GET-DICTIONARY, GET-EXECUTIVE, GET-TRANSIENT, and GET-USER

The GET-DICTIONARY, GET-EXECUTIVE, GET-TRANSIENT, and GET-USER command inserts a copy of an MP-AID member or repository member into an Edit or Update Buffer, immediately after the Current Line.

The commands are described in these items:

- GETD: inserting a repository member
- GETE: inserting an EXECUTIVE member
- GETT: inserting a TRANSIENT member
- GETU: inserting a USER-MEMBER

Refer to "GET-DICTIONARY, GET-EXECUTIVE, GET-TRANSIENT, and GET-USER Syntax" on page 146 for the syntax of the GETD, GETE, GETT, and GETU commands.

## GET-DICTIONARY/GETD

To copy a repository member into the current buffer, enter:

```
GET-DICTIONARY ;
```

or

```
GETD member-name ;
```

The member must be present in the current status of the repository.

## GET-EXECUTIVE/GETE

To copy an EXECUTIVE member held on the primary MP-AID into the current buffer, enter:

```
GET-EXECUTIVE executive-name ;
```

or

```
GETE executive-name ;
```

To copy an EXECUTIVE member from a specific secondary MP-AID, enter:

```
GET-EXECUTIVE executive-name CONCATENATION mpaid-name ;
```

or

```
GETE executive-name CONCATENATION mpaid-name ;
```

where *mpaid-name* is the logical name of a secondary MP-AID.

To copy an EXECUTIVE member from any secondary MP-AID which you can access, enter:

```
GET-EXECUTIVE executive-name ANY-CONCATENATION ;
```

or

```
GETE executive-name ANY-CONCATENATION ;
```

## GET-TRANSIENT/GETT

To copy a TRANSIENT member (owned by your Logon Identifier) into the current buffer, enter:

```
GET-TRANSIENT transient-name ;
```

or

```
GETT transient-name ;
```

## GET-USER/GETU

To copy a USER-MEMBER (owned by your Logon Identifier) into the current buffer, enter:

```
GET-USER user-member ;
```

or

```
GETU user-member ;
```

The Systems administrator can copy a USER-MEMBER owned by another user into the current buffer, by entering:

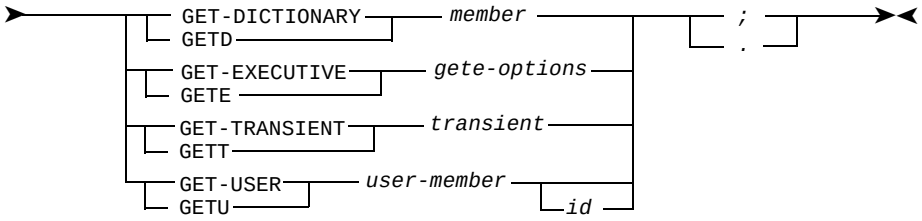
```
GET-USER user-member logon-id ;
```

or

```
GETU user-member logon-id ;
```

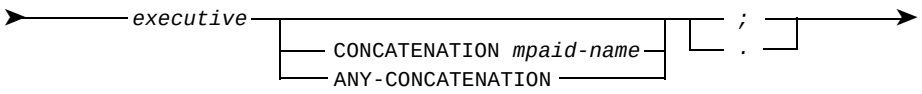
where *logon-id* is the Logon Identifier of the user who created the member.

## GET-DICTIONARY, GET-EXECUTIVE, GET-TRANSIENT, and GET-USER Syntax




where *member* is the name of a repository member.

*gete-options* are:



where:

*executive* is the name of an EXECUTIVE member on the MP-AID

*mpaid-name* is the logical name of a secondary MP-AID.

*transient* is the name of a TRANSIENT member on the MP-AID

*user-member* is the name of a USER-MEMBER on the MP-AID

*id* is the Logon Identifier of a user owning a specified USER-MEMBER.

## GET-SCRATCHPAD

The GET-SCRATCHPAD command inserts the contents of the Scratchpad into the current Edit or Update buffer.

To insert the contents of the Scratchpad into the current Edit or Update buffer, enter:

```
GETS ;
```

or

```
GET-SCRATCHPAD ;
```

To insert multiple copies of the Scratchpad, enter:

```
GETS nn ;
```

or

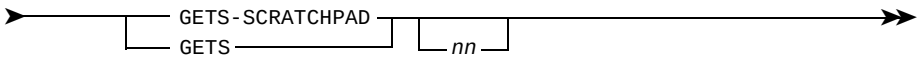
```
GET-SCRATCHPAD nn ;
```

where *nn* is the number of copies you wish to insert.

The contents are inserted after the current line.

GETS and GET-SCRATCHPAD are available with the Extended Interactive Facility.

### GET-SCRATCHPAD Syntax




where *nn* is the number of copies you wish to insert.

# HELP

The HELP command displays the InfoBank Top Level Menu, or the InfoBank's Index or Help Index, or to request online help on a particular topic.

To see the Help Entry Panel, enter:

```
HELP ;
```

In InfoSystem as supplied by ASG, the Help Entry Panel is the Top Level Menu in InfoBank, HELP000000.

To obtain help with a Manager Products command, enter:

```
HELP command-name ;
```

**Note:**

If a command-name consists of two or more keywords, you should key in only the first keyword.

To see the syntax of a Manager Products command, enter:

```
HELP command-name-S ;
```

To obtain help with a member type, enter:

```
HELP member-type-name ;
```

To obtain help with any other topic documented in InfoBank, enter:

```
HELP topic ;
```

To display a list of the command names, member types, and other topics which can be parameters to the HELP command, enter:

```
HELP INDEX ;
```

To display an index of terms in InfoBank beginning with a given letter of the alphabet, enter:

```
HELP x ;
```

where *x* is any letter of the alphabet.

To display a list of the default PF key settings supplied by ASG, enter:

```
HELP PF ;
```

**Note:**

The settings may have been changed at your installation.

## HELP Syntax

```
HELP [ { command-name      } ] { ; }
       { command-name-S    }   { . }
       { INDEX             }
       { member-type-name  }
       { PF                }
       { topic             }
       { x                 }
```

# HOLD

The HOLD command stores the contents of the current buffer as a TRANSIENT member of the MP-AID.

To store the contents of the current buffer as a TRANSIENT member of the MP-AID, enter the command:

```
HOLD mpaid-transient-member-name ;
```

The name must be different from the name of any other TRANSIENT owned by your Logon-Id.

See Chapter 9, "The MP-AID," on page 101 for details of the rules for MP-AID names.

The command can be given in any mode and is a convenient way of storing output displayed at the screen.

When HOLD is issued against a non-formatted screen, the entire content of the buffer is written as a TRANSIENT member. However, when HOLD is issued against a MethodManager formatted screen, only the lines which are currently displayed are written as a TRANSIENT; those sections accessible through scrolling are not written.

When you log off, TRANSIENT members are automatically deleted from the MP-AID. However, if the session terminates abnormally, for example because of an abend, TRANSIENT members may remain. Such members are deleted at the subsequent logon provided that the Logon Profile is exclusive and that the MP-AID can be updated. Otherwise, the TRANSIENT members cannot be deleted and a subsequent attempt to create a TRANSIENT of the same name will fail.

### *To store the member permanently*

1. Enter the EDIT command to open an Edit Buffer.
2. Enter the GETT command to copy the TRANSIENT into the current buffer.
3. Enter the FILE command to file the contents of the buffer as a USER-MEMBER of the MP-AID.

HOLD is available with the Extended Interactive Facility.

## HOLD Syntax

```
>>-------- HOLD mp-aid-transient-member-name ---+-;-+--><<
                                               '-.-'
```

# INFOBANK

The INFOBANK command takes you into InfoBank at the Top Level Entry Panel.

To display the InfoBank Entry Panel, give the command:

```
INFOBANK ;
```

or:

```
INFO-BANK ;
```

In InfoSystem as released by ASG, the InfoBank Entry Panel is the Top Level Entry Panel INFO000000.

## INFOBANK Syntax

```
>>-+-------- INFOBANK -+------------------------+-;-+--><<
   '-------- INFO-BANK-'                         '-.-'
```

# K/KK and KPUT

The K/KK and KPUT command copies lines to the Scratchpad without deleting them from the current buffer. The current contents of the Scratchpad are NOT overwritten.

The commands are described in the following sub-sections, for each of which the name of the corresponding InfoBank panel is given.

- K/KK - Also Copy Line Command CMRCOM3250
- KPUT - Also Copy Primary Command CMRCOM3125

## K/KK - Also Copy Line Command

To copy *one* line to the Scratchpad without deleting it from the current buffer and without overwriting the contents of the Scratchpad, enter:

```
K
```

in the Line Command Area and press Enter.

The line containing K is copied from the current buffer and added to the end of the existing contents of the Scratchpad.

To copy a *number* of lines to the Scratchpad without deleting them from the current buffer and without overwriting the contents of the Scratchpad, enter:

K*n*

in the Line Command Area and press Enter. *n* is the number of lines you wish to copy and can be from 1 to 9999.

The specified number of lines, starting with the line containing Kn, are copied from the current buffer and added to the end of the existing contents of the Scratchpad.

To copy a *block* of lines to the Scratchpad without deleting them from the current buffer and without overwriting the contents of the Scratchpad, enter:

```
KK
```

in the Line Command Area in the first and last lines of the block to be copied, and press Enter. The block can extend over more than one screen if you wish.

The specified block of lines is copied from the current buffer and added to the end of the existing contents of the Scratchpad.

K and KK are available with the Extended Interactive Facility, and can be used in Command, Lookaside, Edit, and Update Modes, and in InfoSystem.

## KPUT - Also Copy Primary Command

To copy the Current Line to the Scratchpad without deleting it from the current buffer and without overwriting the contents of the Scratchpad, enter:

```
KPUT ;
```

To copy lines to the Scratchpad without deleting them from the current buffer and without overwriting the contents of the Scratchpad, enter:

KPUT *n* ;

where *n* is the number of lines you wish to copy.

The specified number of lines, beginning with the current line, will be copied to the end of the Scratchpad.

KPUT is available with the Extended Interactive Facility, and can be used in Command, Lookaside, Edit, and Update Modes, and in InfoSystem.

### KPUT Syntax

The syntax of the also copy line command is:

```
K[n]

KK
```

The syntax of the also copy primary command is:

```
KPUT [n] { ; }
         { . }
```

## LEFT and RIGHT

The LEFT and RIGHT command displays text to the left or right of the text currently displayed.

Although output to the terminal can be up to 255 columns wide, most terminals can only display 80 columns. To see text to the right or left of the current display, you must use the RIGHT or LEFT commands.

To move RIGHT or LEFT by one column, enter:

```
LEFT ;
```

or

```
RIGHT ;
```

To move RIGHT or LEFT by *n* columns, enter:

```
LEFT n ;
```

or

```
RIGHT n ;
```

RIGHT and LEFT are available with the Basic Interactive Facilities, and can be used in Command, Edit, Lookaside, and Update Modes, and in InfoSystem.

### LEFT and RIGHT Syntax

```
LEFT [n] { ; }
         { . }

RIGHT [n] { ; }
          { . }
```

## LOGOFF

The LOGOFF command terminates a Manager Products run.

To end a Manager Products run, enter:

```
LOGOFF ;
```

or

```
END ;
```

Both commands invoke shut-down procedures (closing any dictionaries currently open, deleting TRANSIENT members on the MP-AID, etc.), and then return you from ControlManager to your operating environment.

In interactive environments, LOGOFF and END are only valid in Command Mode.

In interactive environments, to log off from the Logon Screen (that is, without logging on first) simply press any PF key.

### LOGOFF Syntax

```
{LOGOFF} { ; }
{END   } { . }
```

## LOGON

The LOGON command logs on to Manager Products.

To log on to ControlManager, enter the command:

LOGON *logon-identifier* PASSWORD *password* ;

where *logon-identifier* and *password* are the character strings assigned to you by the Systems Administrator.

The LOGON command is available in all environments (including Batch and User Interface) except IMS/DC.

In interactive environments (CICS, CMS, TSO, and Siemens Time Sharing Interface) and TSO/ISPF environments, you can log on via a formatted Logon Panel, and need only enter your *Logon Identifier* and *password*.

**Note:**

For security reasons, your password is not displayed.

If your Logon Identifier and password are accepted, ControlManager will execute any commands in your Logon Profile, and any output from these commands is displayed on screen.

For details of Logon Profiles refer to Chapter 9, "The MP-AID," on page 101.

If you enter an invalid *logon-identifier* then an error message is displayed:

```
DM08002E LOGON ID logon-identifier NOT IN MP-AID DIRECTORY
```

If you enter an invalid *password* then an error message is displayed:

```
DM08003E PASSWORD INCORRECT FOR LOGON ID logon-identifier
```

In either event, check your Logon Identifier or password and enter them again.

The log on may fail for other reasons; for example, the Logon Identifier may already be in use, or the MP-AID may be disabled. If it fails, any messages displayed can be checked in the *ASG-Manager Products Messages* manual.

Other versions of the LOGON command are available only to the Systems Administrator or Dictionary Controller.

## LOGON Syntax

```
LOGON logon-id PASSWORD password { ; }
                                 { . }
```

## M/MM and MOVE

The M/MM and MOVE command removes lines from an Edit or Update Buffer and puts them into the Scratchpad. The current contents of the Scratchpad are overwritten.

The commands are described in these sub-sections, for each of which the name of the corresponding InfoBank panel is given.

- M/MM - Move Line Command CMRCOM3260
- MOVE - Move Primary Command CMRCOM3 130

## M/MM - Move Line Command

To move *one* line to the Scratchpad, enter:

```
M
```

in the Line Command Area and press ENTER.

The line containing `M` is removed from the current buffer and overwrites the contents of the Scratchpad.

To move a *number* of lines from the current buffer to the Scratchpad, enter:

`M`*n*

in the Line Command Area and press ENTER. *n* is the number of lines you wish to copy and can be from 1 to 9999.

The specified number of lines, starting with the line containing `M`*n*, are removed from the current buffer and overwrite the contents of the Scratchpad.

To move a block of lines from the current buffer to the Scratchpad, enter:

```
MM
```

in the Line Command Area in the first and last lines of the block to be copied, and press ENTER. The block can extend over more than one screen if you wish.

The specified block of lines is removed from the current buffer and overwrites the contents of the Scratchpad.

`M` and `MM` are available with the Extended Interactive Facility, and can be used in Edit and Update Modes.

**Note:**

The moved lines will be lost if they are overwritten by another entry to the Scratchpad before they have been inserted elsewhere.

## MOVE - Move Primary Command

To move the Current Line to the Scratchpad, enter:

```
MOVE ;
```

The Current Line is removed from the current buffer and overwrites the contents of the Scratchpad.

To move lines from the current buffer to the Scratchpad, enter:

```
MOVE n ;
```

where *n* is the number of lines you wish to move.

The specified number of lines, beginning with the current line, is removed from the current buffer and overwrites the contents of the Scratchpad.

MOVE is available with the Extended Interactive Facility, and can be used in Edit and Update Modes.

**Note:**

The moved lines will be lost if they are overwritten by another entry to the Scratchpad before they have been inserted elsewhere.

### MOVE Syntax

The syntax of the move line command is:

```
M[n]

MM
```

The syntax of the move primary command is:

```
MOVE [n] { ; }
         { . }
```

## MODE and QUERY MODE

If DesignManager is installed, the following commands may be applied either to the currently open dictionary, or to the current Workbench Design Area (WBDA):

- LIST
- REPORT
- MERGE

You must instruct the Integrated Dialogue Director to target the above commands at the WBDA or at the dictionary, as you require. To do so you must specify the Targeting Mode in which you want to work:

- DMS (to work with the dictionary)
- WBDA (to work with the Workbench Design Area)

When the Targeting Mode is DMS (DICTIONARY-MANAGEMENT-SOFTWARE) the above mentioned commands are applied to the currently open dictionary. When the Targeting Mode is WBDA (DESIGN-AREA) they are applied to the Workbench Design Area. As supplied by ASG the *default Targeting Mode is DMS*.

The MODE command is used to define the Targeting Mode during the current session or (when it is placed in Executive Routines or in Logon, Global, or User Defined Profiles) as a default.

Targeting Prefix commands (DMS and WBDA) are also provided for those occasions when you wish to override the current Targeting Mode without actually changing it.

Targeting Mode and Targeting prefix commands relate only to those commands (as above) which may be applied to the Workbench Design Area or to the dictionary.

The MODE command is used to define the Targeting Mode during the current session or (when it is placed in Executive Routines or in Logon, Global, or User Defined Profiles) as a default. To define DICTIONARY-MANAGEMENT-SOFTWARE as the Targeting Mode, enter:

```
MODE DMS ;
```

or

```
MODE DICTIONARY-MANAGEMENT-SOFTWARE ;
```

To define DESIGN-AREA as the Targeting Mode, enter:

```
MODE WBDA ;
```

or

```
MODE DESIGN-AREA ;
```

To find out the current Targeting Mode, enter:

```
QUERY MODE ;
```

If, for a particular command, you want to override the current Targeting mode without actually changing it, simply prefix the command with one of the following prefix commands:

- DMS (to apply the command to the current dictionary)
- WBDA (to apply the command to the Workbench Design Area).

If a Targeting Prefix is used with a command that does not require one or actually duplicates the current Targeting Mode, it will be ignored and will not prevent the command input being executed.

The *default* Targeting mode, as supplied by ASG, is DICTIONARY-MANAGEMENT-SOFFTWARE.

### MODE Syntax

```
>>---MODE---+-DICTIONARY-MANAGEMENT-SOFTWARE-+---+-;-+---><
            |-DMS-----------------------------|   |-.-|
            |-DESIGN-AREA-----------------------|
            |-WBDA------------------------------|
>---QUERY MODE---+-;-+-----------------------------------><
                 |-.-|
```

## MP-AID CONCATENATION LIST

The MP-AID CONCATENATION LIST command lists all secondary MP-AIDs accessible from the current (primary) MP-AID.

To display the currently active MP-AID concatenation, enter either:

```
MP-AID CONCATENATION LIST ;
```

or

```
MP-AID CONCATENATION ;
```

A table is displayed, giving for each MP-AID, the:

- Search order (starting from 1)
- Access mode (UPDATE or READ-ONLY)
- Logical name (as specified in the MP-AID CONCATENATION command)
- The physical dataset name.

For further details of concatenation, refer to the *ASG-Manager Products Systems Administrator's Manual*.

### MP-AID CONCATENATION LIST Syntax

```
>---+-MP-AID-+---CONCATENATION LIST---+-;-+---><
    |-MPAID-|                        |-.-|
```

## MP-AID DELETE

The MP-AID DELETE command deletes a member on the MP-AID owned by your Logon Identifier.

To delete a KEPT-DATA member owned by your Logon Identifier, enter:

```
MP-AID DELETE KEPT-DATA-LIST mpaid-member-name ;
```

To delete a PUBLIC-USER-MEMBER owned by your Logon Identifier, enter:

```
MP-AID DELETE USER-MEMBER mpaid-member-name ;
```

TRANSIENTs are automatically deleted when you log off. If you want to delete a TRANSIENT owned by your Logon Identifier before you end the session, enter:

```
MP-AID DELETE TRANSIENT mpaid-member-name ;
```

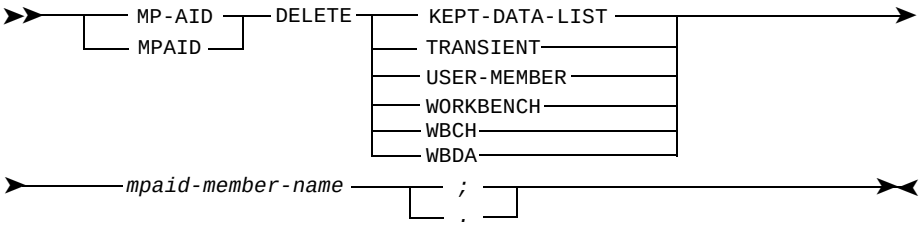
To delete a USER-MEMBER owned by your Logon Identifier, enter:

```
MP-AID DELETE USER-MEMBER mpaid-member name ;
```

To delete WORKBENCH members owned by your Logon Identifier, enter:

```
MP-AID DELETE WORKBENCH mpaid-member-name ;
```

### MP-AID DELETE Syntax




## MP-AID EXEC-LIST

The MP-AID EXEC-LIST command performs a given operation on several MP-AID members at the same time.

The output of the MP-AID EXEC-LIST command is a stripped down and parameterized version of the output from an equivalent MP-AID LIST command. You save this output in an Executive Routine, and execute it with appropriate parameters.

The command provides a list of names of all MP-AID members of the specified category. That is, one of the following:

- All MP-AID members available to the user
- All members of a specified type available to the user
- All members of a specified type and associated with a specified Logon Identifier (available only to the Systems Administrator)

Each name is prefixed by the three parameters &PO, &P1, and &P2, and is followed by the parameters &P3, &P4, and &P5.

For example, the command:

```
MP-AID EXEC-LIST EXECUTIVES ;
```

might produce the following output:

&P0 &P1 &P2 EXEC1 &P3 &P4 &P5;

&P0 &P1 &P2 EXEC2 &P3 &P4 &P5;

&P0 &P1 &P2 EXEC3 &P3 &P4 &P5;

You can save the output from the MP-AID EXEC-LIST command in a USER-MEMBER or a TRANSIENT member. For example, to save output in a TRANSIENT member MYEXEC, enter:

```
HOLD MYEXEC ;
```

You can then, for example, print the three members using the command:

```
TRANSIENT-EXECUTIVE MYEXEC MP-AID PRINT EXECUTIVE ;
```

To run the MP-AID EXEC-LIST command on a secondary MP-AID, use the CONCATENATION keyword, followed by the logical name of the secondary MP-AID. The output then includes two extra parameters &P6 and &P7, and the output member name is repositioned between parameters &P4 and &P5.

For example, to produce output for all EXECUTIVE members on the secondary MP-AID named M2120, enter:

```
MP-AID EXEC-LIST CONCATENATION M2120 EXECUTIVES ;
```

## MP-AID EXEC-LIST Syntax

```
>>─┬─ MP-AID ─┬─ EXEC-LIST ─┬──────────────────────────────────┬──>
   └─ MPAID ──┘             └─ CONCATENATION mpaid-name ───────┘

>──┬──────────────┬──┬──────────────┬──┬──────────────┬──────────>
   └─ DATE-ORDER ─┘  └─ member-type ─┘  └─ selection ──┘

>──┬─ ; ─┬──────────────────────────────────────────────────────><
   └─ . ─┘
```

where *mpaid-name* is the logical name of a secondary MP-AID.

*member-type* is:

```
>──┬─ EXECUTIVES ──────────────────────────────────────────────>
   │─ COMMAND ──────────────────────────────────────────────────
   │─ CMND ─────────────────────────────────────────────────────
   │─ FORMATS ──────────────────────────────────────────────────
   │─ INFOBANK-PANELS ──────────────────────────────────────────
   │─ KEPT-DATA-LISTS───────────────────────────────────────────
   │──────────────────PUBLIC-USER-MEMBERS───────────────────────
   │   └─ ALL ─┘
   │─ PUBLIC-USER-MEMBERS─┬──────────────┬──────────────────────
   │                      └─ logon id ───┘
   │─ TRANSIENTS────────────────────────────────────────────────
   │─ TRANSLATION-RULES─────────────────────────────────────────
   │─ TR-RULES──────────────────────────────────────────────────
   │─ TRUL──────────────────────────────────────────────────────
   │─ USER-MEMBERS──────────────────────────────────────────────
   │─ WORKBENCHES───────────────────────────────────────────────
   │─ WBCH──────────────────────────────────────────────────────
   └─ WBDA ─────────────────────────────────────────────────────
```

where *logon-id* is the logon identifier of a specific user.

*selection* is:

```
>──┬──────────────────────────────────────────────────────────>
   │─┬──────────────┬─┬──────────────┬──────────────────────────
   │ └─ FROM string-1 ─┘ └─ TO string-2 ─┘
   └─ ONLY string──────────────────────────────────────────────
```

where *string*-1, *string*-2, and *string* represent the range of the MP-AID members to be selected, and can be from 1 to 10 characters long.

## MP-AID LIST

The MP-AID LIST command lists members held on a primary or secondary MP-AID.

Refer to "MP-AID LIST Syntax" on page 163 for the syntax of the MP-AID LIST command.

To list all the members of all types held on the primary MP-AID, enter:

```
MP-AID LIST ;
```

You can also use the MP-AID LIST command to list:

- Selected member types
- Members in date order
- Members selected by name
- Members contained on a secondary MP-AID

## Listing Selected Member Types

To list members of a selected type, enter:

```
MP-AID LIST member-type ;
```

where *member-type* is either EXECUTIVES, FORMATS, KEPT-DATA-LISTS, PUBLIC-USER-MEMBERS, TRANSIENTS, TRANSLATION-RULES, USER-MEMBERS, or WORKBENCHES.

**Note:**

To list the above member types, you need the functions allowing you to create these member types.

## Listing Members in Order of Update/Creation Date

To list MP-AID members in date order, with the most recently created / updated members listed first, enter:

```
MP-AID LIST DATE-ORDER ;
```

For example, to list all your USER-MEMBERs in date order, enter:

```
MP-AID LIST DATE-ORDER USER-MEMBERS ;
```

## Listing Members within a Given Alphanumeric Range

To list the member names for all member types beginning with a specified string, enter:

```
MP-AID LIST ONLY string ;
```

For example, to list all MP-AID members for the current Logon Identifier beginning with characters RE, enter:

```
MP-AID LIST ONLY RE ;
```

Alternatively, to select the member names to be listed for all member types in a specified range, enter:

```
MP-AID LIST FROM string1 TO string2 ;
```

for example, to output all members in the range G to TEST inclusive, enter:

```
MP-AID LIST FROM G TO TEST ;
```

**Note:**

In the above example:

- Members GROUP-A and TESTBOOK would be included, but members FETCH and TRAIL would be excluded
- If you omit FROM G, all members up to and including TEST are selected
- If you omit TO TEST, all members from G onwards are selected.

## Listing Members on a Secondary MP-AID

To list members contained on a secondary (concatenated) MP-AID, in the same way as on your primary MP-AID, enter:

```
MP-AID LIST CONCATENATION mpaid-name ;
```

where *mpaid-name* is the logical name of the secondary MP-AID from which the members are to be listed.

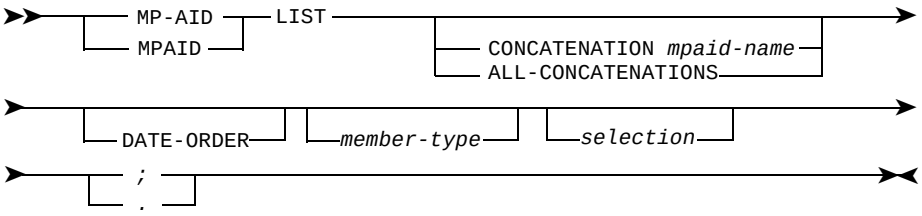
To list members held on all secondary MP-AIDs, enter:

```
MP-AID LIST ALL-CONCATENATIONS ;
```

**Note:**

You can only use the above facilities if the systems administrator has concatenated the relevant MP-AID(s). To list which MP-AIDs are available to you via concatenation, use the MP-AID CONCATENATION LIST command.

## MP-AID LIST Syntax




where *mpaid-name* is the logical name of a secondary MP-AID.

*member-type* is:

```
➤──┬── EXECUTIVES ──────────────────────────────────────────────────────➤
   ├── FORMATS ─────────────────────────────────────────────────────────
   ├── KEPT-DATA-LISTS ─────────────────────────────────────────────────
   ├──────────────────────PUBLIC-USER-MEMBERS──────────────────────────
   │   └──ALL──┘
   ├── PUBLIC-USER-MEMBERS──┬──────────────────────────────────────────
   │                        └──logon id──┘
   ├── TRANSIENTS ──────────────────────────────────────────────────────
   ├──────┬── TRANSLATION-RULES ──┬──────────────────────────────────
   │      ├── TR-RULES ───────────┤
   │      └── TRUL ──────────────┘
   ├── USER-MEMBERS ────────────────────────────────────────────────────
   ├──────┬── WORKBENCHES ──┬──────────────────────────────────────────
   │      ├── WBCH ─────────┤
   │      └── WBDA ─────────┘
```

where *logon-id* is the logon identifier of a specific user.

*selection* is:

```
➤──┬──┬──────────────────────────────────────────────────────────────────➤
   │  └──FROM string-1──┘  └──TO string-2──┘
   └──ONLY string──────────────────────────────────────────────────────
```

where *string*-1, *string*-2, and *string* specify the range of MP-AID members to be selected and can be from 1 to 10 characters.

## MP-AID PASSWORD

The MP-AID PASSWORD command changes the password that you use (in conjunction with your Logon-Id) to log on to Manager Products.

To change the password that you use (in conjunction with your Logon-Id) to log on to Manager Products, enter:

MP-AID PASSWORD *old-password new-password* ;

where *old-password* is the password that you used to log on to the current session, and *new-password* is the password you wish to use when you log on subsequently; the password may be a a maximum of eight characters in length.

When you next Logon, your password entry will be tested against this new-password entry.

If your Logon Profile is updated by the systems administrator, your password will revert to its original value (unless a new value is specified by the systems administrator).

## Notes

- You must have update access to the MP-AID to change your password
- Miskeying your intended new password may result in your being unable to Logon successfully. If you encounter this, or other problems, when trying to Logon to Manager Products, contact your systems administrator.

### MP-AID PASSWORD Syntax

```
>>─┬─ MP-AID ─┬─ PASSWORD old-password new-password ──────────────>
   └─ MPAID ──┘
>──┬─ ; ─┬──────────────────────────────────────────────────────><
   └─ . ─┘
```

where:

*old-password* is the password used to log on to the current session

*new-password* is the password to be used when logging on subsequently; the password may be a maximum of eight characters in length.

## MP-AID PRINT

The MP-AID PRINT command displays the contents of EXECUTIVE, KEPT-DATA-LIST, USER-MEMBER, or TRANSIENT members held on the primary MP-AID or a secondary MP-AID.

Refer to"MP-AID PRINT Syntax" on page 166 for the syntax of the MP-AID PRINT command.

### Printing Members Held on the Primary MP-AID

To print an EXECUTIVE member to which you have access, enter:

```
MP-AID PRINT EXECUTIVE member-name ;
```

where *member-name* is the name of a member (in this case, an EXECUTIVE member) held on the MP-AID.

To print a KEPT-DATA member owned by your Logon Identifier, enter:

```
MP-AID PRINT KEPT-DATA-LIST member-name ;
```

To print a private USER-MEMBER (belonging to your Logon Identifier), enter:

```
MP-AID PRINT USER-MEMBER member-name ;
```

To print a public USER-MEMBER (created by another user), enter:

```
MP-AID PRINT USER-MEMBER member-name logon-id ;
```

where *logon-id* is the Logon Identifier of the relevant user.

To print a TRANSIENT owned by your Logon Identifier, enter:

```
MP-AID PRINT TRANSIENT member-name ;
```

## Printing Members held on a Secondary MP-AID

To print a member contained on a secondary (concatenated) MP-AID, enter:

```
MP-AID PRINT CONCATENATION mpaid-name member-type member-name ;
```

where:

*mpaid-name* is the logical name of a secondary MP-AID.

*member-name* is the name of an EXECUTIVE, KEPT-DATA-LIST, TRANSIENT member or USER-MEMBER on the secondary MP-AID.

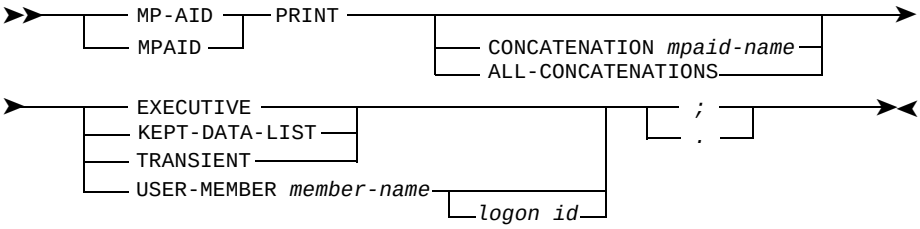
To print a member held on any MP-AID, primary or secondary, enter:

```
MP-AID PRINT ANY-CONCATENATION member-type member-name ;
```

If members on different MP-AIDs have the same name, then the member on the MP-AID occurring first in the search sequence is printed. The search sequence is defined by the systems administrator when concatenation is established.

To find out which MP-AIDs (if any) you can access via concatenation, use the MP-AID CONCATENATION LIST command.

## MP-AID PRINT Syntax




where:

*mpaid-name* is the logical name of a secondary MP-AID

*member-name* is the name of a member on the MP-AID

*logon-id* is the name of a user's Logon Identifier. This is only relevant when printing public USER-MEMBERs.

## MP-AID RESET USER-MEMBER

The MP-AID RESET USER-MEMBER command resets the update-in-progress flag for an MP-AID USER-MEMBER created under the ownership of an exclusive Logon Profile, after an abnormal termination of a Manager Products session, so that the USER-MEMBER can be used again.

If the Extended Interactive Facility is installed, users can create and update their own MP-AID USER-MEMBERs.

While an MP-AID USER-MEMBER is being updated, no other user has update access to the member. This is achieved via an update-in-progress flag which is set for the USER-MEMBER when it is being edited. The flag is normally unset when the user issues a FILE or XQUIT command. However, if a Manager Products session terminates abnormally, for example because of an abend, the update-in-progress flag remains set and the user cannot access it subsequently.

The MP-AID RESET USER-MEMBER command enables users who log on with an exclusive Logon Profile to unset the update-in-progress flag and subsequently gain update access to their USER-MEMBER.

Users with exclusive Logon Profiles should take care not to share their log-on details with other users. The availability of the RESET facility means that other users could override the normal security on exclusive Logon Profiles.

Users who log on with a shared Logon Profile must contact their Systems Administrator in order to reset the update-in-progress flag.

### MP-AID RESET USER-MEMBER Syntax

```
>>──MP-AID RESET USER-MEMBER mpaid-member-name──┬─;─┬──><
                                                └─.─┘
```

where *mpaid-member-name* is the name of an MP-AID member.

## NOPRINT

The NOPRINT command suppresses output from a Manager Products command.

This command can be placed in front of any Manager Products command. The command is be executed as normal but any output which is normally generated is suppressed. NOPRINT only suppresses output for the single Manager Products command which follows it. For example `NOPRINT SET LINE-AREA-RIGHT ;` and `NOPRINT FILE ;` suppresses the output of any messages or lines resulting from the execution of the SET LINE-AREA RIGHT and the FILE command respectively.

If you have the User Defined Commands facility installed, the NOPRINT command is of particular value when used to prefix Manager Products commands within Executive Routines. The Executive Routine can then issue messages as appropriate if required.

The Executive Language System Variables which supply information concerning previous messages generated by Manager Products (that is, &MSNO, &MSTV, &MSLV, &CCOD, &SCOD, and &ECOD) will continue to be updated even if display of that message is suppressed by NOPRINT.

### NOPRINT Syntax

```
NO PRINT command { ; }
                 { . }
```

## P (Precede Line Command)

The P command inserts *n* copies of the Scratchpad before this line.

To insert the contents of the Scratchpad into an Edit or Update Buffer, enter:

P

in the Line Command Area and press ENTER. The contents of the Scratchpad are inserted *before* the line containing the P.

To insert *n* copies of the contents of the Scratchpad, enter:

P*n*

The contents of the Scratchpad are unchanged after the command has been given.

The command can be inserted in the line containing the End of Data Delimiter, but not in the line containing the Top of Data Delimiter.

P is available with the Extended Interactive Facility, and can be used in Edit and Update Modes.

### P Syntax

P[*n*]

## PANEL

The PANEL command displays the InfoBank panel indicated by panel-name or message identifier.

To display a particular InfoBank panel, enter:

```
PANEL panel-name ;
```

where *panel-name* is the name of the panel you want to see. For example:

```
PANEL INDEX0000 ;
```

You can look up the names of the panels in the InfoBank Contents or Index.

To display the panel describing a message-identifier, enter:

```
PANEL message-identifier ;
```

where *message-identifier* is the string which precedes any Manager Products message, including the prefix "DM" but excluding the severity level suffix. For example, if the message DM08100I is displayed, issue the following command to display the explanatory panel:

```
PANEL DM08100 ;
```

### PANEL Syntax

```
>>──PANEL──┬─panel-name──────────────┬──┬─;─┬──>><
           └─message-identifier──────┘  └─.─┘
```

## QUERY ACTIVE-BUFFERS

The QUERY ACITIVE-BUFFERS command find outs which Command Mode, Update, Edit, and Lookaside Buffers you currently have open and, in the case of Edit and Update Buffers, which members are contained in the buffers.

To find out which Command Mode, Update, Edit, and Lookaside Buffers you are using and, in the case of Edit and Update Buffers, which members are contained in the buffers, give the command:

```
QUERY ACTIVE-BUFFERS ;
```

### QUERY ACITIVE-BUFFERS Syntax

```
>>──QUERY ACTIVE-BUFFERS──┬─;─┬──>><
                          └─.─┘
```

In the syntax, QUERY may be abbreviated to QU or Q, and ACTIVE-BUFFERS may be abbreviated down to AC.

# QUERY ALL

The QUERY ALL command obtains a complete description of the current user environment.

To obtain a complete description of the current user environment, such as the PF key settings and the dictionary you are in, enter the command:

```
QUERY ALL ;
```

## QUERY ALL Syntax

```
{QUERY} ALL {;}
{QU   }     {.}
{Q    }
```

# QUERY AMBIGUITY-ASSUMPTION

The QUERY AMBIGUITY-ASSUMPTION command finds out whether the command ambiguity assumption feature is set on or off.

To find out whether AMBIGUTY-ASSUMPTION is set on or off, enter:

```
QUERY AMBIGUITY-ASSUMPTION ;
```

If AMBIGUITY-ASSUMPTION is set ON and you enter an ambiguous Primary Command, the system makes an assumption as to the intended command (if it is reasonable to do so in the particular context).

The assumption is always the safest alternative: for example, RE would be assumed to mean REPORT rather than REMOVE, RENAME, or REPLACE. If there is no safe alternative then a warning message is output, for example:

```
DM00128W  RE AMBIGUOUS KEYWORD
```

and the command is not executed.

If AMBIGUITY-ASSUMPTION is set OFF and you enter an ambiguous Primary Command, a warning message is output, for example:

```
DM00128W  RE AMBIGUOUS KEYWORD
```

and the command is not executed.

Only the Systems Administrator can set AMBIGUITY-ASSUMPTION on or off.

### QUERY AMBIGUITY-ASSUMPTION Syntax

```
{QUERY} AMBIGUITY-ASSUMPTION {;}
{QU   }                      {.}
{Q    }
```

## QUERY BUFFER-LIMIT

The QUERY BUFFER-LIMIT command finds out the limit on the number of buffers available.

There are four types of ControlManager output buffer:

- Command Mode
- Edit
- Update
- Lookaside

There is always one Command Mode Buffer and there can be several Edit, Update, and Lookaside Buffers. The limit on the total number of buffers including the Command Mode Buffer is set by the Systems Administrator. You can find out what this limit is by entering the command:

```
QUERY BUFFER-LIMIT ;
```

### QUERY BUFFER-LIMIT Syntax

```
{QUERY} BUFFER-LIMIT {;}
{QU   }              {.}
{Q    }
```

## QUERY CHARACTER-TRANSLATION

The QUERY CHARACTER-TRANSLATION command displays the character translation implemented via the SET CHARACTER-TRANSLATION command.

Use this command to find out which characters are being translated by Manager Products Input and/or Output Translation Tables as the result of modification, using the SET CHARACTER-TRANSLATION command, by the Systems Administrator:

```
QUERY CHARACTER-TRANSLATION ;
```

The output produced is in the following format:

```
USER CHARACTER-TRANSLATION ACTIVE
EBCDIC LOWER UPPER TERM PRINT
Cl     C2    C3    C4   C5
```

`c1` is either:

- The hexadecimal representation of a keyboard character that the Input Translation Tables are translating to;
  - — `c2` when upper case translation is not applied
  - — `c3` when upper case translation is applied

or

- A hexadecimal code that the Output Translation Tables are translating to;
  - — `c4` when it is output to your terminals
  - — `c5` when it is output to your printer(s)

Upper case translation is applied to all input via the Command Area and the Line Command Area. Upper case translation is not applied to all other input unless UPPER-CASE has been set on.

### QUERY CHARACTER-TRANSLATION Syntax

```
{QUERY} CHARACTER-TRANSLATION {;}
{QU   }                       {.}
{Q    }
```

## QUERY DICTIONARY

The QUERY DICTIONARY command obtains details of the current repository.

Refer to "QUERY DICTIONARY Syntax" on page 177 for the syntax of the QUERY DICTIONARY command.

Enter `QUERY DICTIONARY ;` to obtain general details and dataset utilizations.

Enter `QUERY DICTIONARY ALL ;` to obtain general details, dataset utilizations, amd buffer usage statistics

To obtain buffer usage statistics only, enter:

```
QUERY DICTIONARY BUFFERS ;
```

General details include these:

- Repository name
- Repository access method (i.e., VSAM, BDAM, DIV, or VIRT)
- Repository creation date and time
- Repository version and release
- Open mode (i.e., READ-ONLY or UPDATE)
- Whether or not the repository has been disabled by the Controller
- The name of the current UDS table
- Buffer flush count
- Recovery dataset usage
- Status information
- Object count
- Details of shared usage support, using ENQUEUE, RESERVE, or LOCK Services
- The number of updates performed on the repository

Buffer Flush Count provides a count of the number of times that the dictionary buffer pool has been flushed in response to updates by other Manager Products users since the dictionary was opened by this user. Excessive buffer flushing can degrade performance and may indicate that updating of the dictionary should be restricted to certain periods of the day. Buffer flushing does not occur with a DIV dictionary as a single buffer is shared by all users.

Object Count provides a count of the number of index entries present in the dictionary. An index entry is one of - MEMBER, CATALOG, ALIAS, or ATTRIBUTE.

## Recovery Dataset Usage

The information on Recovery dataset usage is as follows:

- Recovery usage
- Rollback recovery usage
- Global Recovery Write Rate (GRWR)
- Local Recovery Write Rate (LRWR)

The recovery usage is the maximum used percentage of the Recovery dataset during update without using Logical Units of Work.

The rollback recovery usage is the maximum used percentage of the Recovery dataset during update using Logical Units of Work with the ROLLBACK option.

The Global Recovery Write Rate (GRWR) is the average number of data writes per update command to the Recovery dataset for the life of the repository. The optimum GRWR is 1. If the GRWR is high, say greater than 2, then the Controller should consider increasing buffer pool sizes for all users of the repository. If the GRWR is still high then the Controller should consider increasing the block size of the Recovery dataset.

The Local Recovery Write Rate (LRWR) is the same as the GRWR, except that it is the average for the current session only. If the LRWR is high, say greater than 2, but the GRWR is not high, then you should consider increasing your buffer pool sizes, for this session only.

For further details of how buffer pool sizes affect the number of Recovery dataset writes refer, to the *ASG-Manager Products Performance Tuning* manual.

## Buffer Usage Statistics

The buffer usage statistics consist of these:

- The size of the buffer pools
- The maximum number of buffers used during the current session
- Information on the number of logical and physical reads and writes

Such information is useful when monitoring repository performance.

Access to a DIV repository is through a single buffer shared by all users, the size of which is fixed at open time. No physical I/O is performed by users of the repository. Updated records are written to permanent storage by a Resource Processing Task (RPT) of ASG-Manager Products Server Facility (MPSF).

Below is an example of buffer usage statistics.

**Table 5 Dictionary Demo Buffer Usage Statistics On 18 Oct. 1989 At 07.38.22**

| Dataset Identification | Index | Source | Data | Totals |
|---|---|---|---|---|
| BUFFERS ALLOCATED: | 8 | 4 | 30 | 42 |
| MAXIMUM BUFFERS USED: | 8 | 4 | 30 | 42 |
| BUFFER POOL SIZE (K): | 164 | 82 | 614 | 860 |
| READ-ONLY BUFFER STEALS: | 1 | 3 | 58 | 62 |
| MODIFIED BUFFER STEALS: | 0 | 0 | 0 | 0 |
| BUFFER POOL HIT RATE: | 83% | 98% | 99% | 98% |
| DATASET LOGICAL READS: | 1160 | 6139 | 30379 | 37678 |
| DATASET PHYSICAL READS: | 225 | 75 | 156 | 456 |

**Table 5 Dictionary Demo Buffer Usage Statistics On 18 Oct. 1989 At 07.38.22**

| Dataset Identification | Index | Source | Data | Totals |
|---|---|---|---|---|
| DATASET LOGICAL WRITES: | 204 | 204 | 1960 | 2368 |
| DATASET PHYSICAL WRITES: | 204 | 204 | 668 | 1076 |

END OF BUFFER STATISTICS

The statistics consist of 10 lines of figures. These are described below.

### BUFFERS ALLOCATED

The number of buffers allocated to the Index, Source, and Data Entries dataset buffer pools. For a DIV repository sufficient buffers are automatically allocated at open time to accommodate the entire repository.

### MAXIMUM BUFFERS USED

The number of buffers used for each dataset since the repository was opened during the current session. Data in each buffer pool is only overwritten when all available buffers are full. For a DIV repository this value is the same as the number of buffers allocated.

### BUFFER POOL SIZE

The size, in K bytes, of the buffer pool for each dataset. This is the number of bytes per buffer, multiplied by the number of buffers allocated to each dataset. The number of bytes per buffer for a dataset is equal to the physical blocksize for that dataset.

### READ ONLY and MODIFIED BUFFER STEALS

If, when processing a command, the buffer pool for a dataset becomes full and additional buffer space is required to read in more data, the least recently used buffer is overwritten. If, as processing of the command continues, data from a previously overwritten buffer is again required, it must be read back in, causing additional physical I/O to take place. The process of overwriting data that subsequently needs to be read back into the buffer pool is called a buffer steal and may have been avoided if a larger buffer pool had been allocated.

If the overwritten data was not updated before it was overwritten, a READ-ONLY buffer steal has occurred. READ-ONLY buffer steals incur additional dataset physical reads, since overwritten data must subsequently be read back into the buffer pool.

If data in the buffer was updated before it was overwritten, a MODIFIED buffer steal has occurred. MODIFIED buffer steals incur additional physical reads and writes, since updated records are written out to disk before overwriting takes place and then read back into the buffer pool when required again.

The number of buffer steals is only recorded and reported if you specify the optional keyword MONITOR in the DICTIONARY command, otherwise a row of asterisks is displayed for these Fields.

For a DIV repository these values are always zero. Buffer steals do not occur.

### BUFFER POOL HIT RATE

When a command is run, any requests for data that are not met by data already held in the buffer pool must be satisfied by reading in more data from disk.

The BUFFER POOL HIT RATE is the percentage of requests for data that have been satisfied by data directly available from the buffer pool. It is based on the number of physical reads that were needed to transfer the relevant blocks into the buffer pool and the number of logical reads needed to access the required data.

The buffer pool hit rate is calculated by dividing the number of logical reads that have occurred since the repository was opened, by the total number of logical and physical reads that have taken place, and multiplying the result by 100. For example, if 255 physical blocks have been read into the buffer pool and within these physical blocks 1160 logical records have been accessed, this would give a buffer pool hit rate of 83%, calculated as follows:

$$\frac{1160}{1160 + 225} \times 100$$

An acceptable buffer pool hit rate would be over 70%.

Increasing the size of the buffer pool will generally increase the buffer pool hit rate, since fewer physical I/Os are necessary when more data is held in the buffer pool.

For a DIV repository the percentage is always 100.

### DATASET PHYSICAL READS

The number of physical blocks read into the buffer pool for each dataset.

For a DIV repository this number is always zero.

### DATASET LOGICAL READS

The number of logical reads that have taken place. A logical read is the process of identifying and locating those logical blocks present in the buffer pool that contain data required to satisfy a data request, without having to carry out a further physical I/O.

### DATASET PHYSICAL WRITES

The number of physical blocks written out from the buffer pool for each dataset.

For a DIV repository this number is always zero.

### DATASET LOGICAL WRITES

The number of logical blocks that have been modified. Modified logical blocks are written back to disk when updating is complete.

The number of reads and writes is cumulative for the period the repository is open. The next time the repository is opened, a new set of statistics are recorded.

### QUERY DICTIONARY Syntax

```
>>──┬─QUERY─┬──DICTIONARY──┬──────────┬──┬─;─┬──><
    ├─QU────┤              ├─ALL─────┤  └─.─┘
    └─Q─────┘              └─BUFFERS──┘
```

## QUERY DICTIONARY-UPDATES

The QUERY DICTIONARY-UPDATES command finds out whether or not you can open dictionaries in update or read-only mode, enter:

```
QUERY DICTIONARY-UPDATES ;
```

Output from this command relates to any dictionary opened subsequently. To find out the mode of the dictionary currently open, enter:

```
QUERY DICTIONARY ;
```

### QUERY DICTIONARY-UPDATES Syntax

```
>>──┬─QUERY─┬──DICTIONARY-UPDATES──┬─;─┬──><
    ├─QU────┤                      └─.─┘
    └─Q─────┘
```

## QUERY EXCP-LIMIT

The QUERY EXCP-LIMIT command finds out the maximum number of Input/Output operations permitted during the execution of a single command. When a DIV MPAID or repository is in use no physical I/Os are performed and an EXCP is considered to be a logical access to the shared buffer of the DIV resource.

Thc Systems Administrator can put a limit on the maximum number of Input/Output operations resulting from the execution of a single command. To find out what the limit is, give the command:

```
QUERY EXCP-LIMIT ;
```

### QUERY EXCP-LIMIT Syntax

```
{QUERY} EXCP-LIMIT {;}
{QU   }            {.}
{Q    }
```

## QUERY FREE-POOL

The QUERY FREE-POOL command finds the maximum amount of virtual storage that can be retained for Manager Products, and the amount currently retained.

Use the QUERY FREE-POOL command to find out the maximum amount of virtual storage space that can be reserved for Manager Products, and the amount currently reserved.

To find out these values, enter:

```
QUERY FREE-POOL ;
```

or

```
QUERY FREEPOOL ;
```

### QUERY FREE-POOL Syntax

```
{QUERY} {FREE-POOL} {;}
{QU   } {FREEPOOL } {.}
{Q    }
```

## QUERY HELP-ENTRY

The QUERY HELP-ENTRY command finds out the name of the panel accessed by a HELP command. (The ASG-supplied default is HELP000000.)

The command HELP takes you into InfoBank. By default, HELP takes you to the top of the Help Branch. However, if the User Defined InfoSystem facility is installed the Systems Administrator can change this entry point to another panel.

To find out the name of the panel which will be displayed when you give the HELP command, enter:

```
QUERY HELP-ENTRY ;
```

### QUERY HELP-ENTRY Syntax

```
{QUERY} HELP-ENTRY {;}
{QU   }            {.}
{Q    }
```

## QUERY INDEX-PANEL

The QUERY INDEX-PANEL command finds out the name of the panel accessed by a HELP INDEX command. (The ASG-supplied default is HELP-INDEX.)

If you give the command HELP member-type-name or HELP command-name, the InfoBank panel describing the member or command is displayed. The system finds the panel by taking the member-type-name or command-name specified in the command and looking it up in a table known as the Index-Panel. You can find out the name of the Index-Panel by giving the command:

```
QUERY INDEX-PANEL ;
```

### QUERY INDEX-PANEL Syntax

```
{QUERY} INDEX-PANEL {;}
{QU   }             {.}
{Q    }
```

## QUERY INFOBANK-ENTRY

The QUERY INFOBANK-ENTRY command finds out the name of the panel accessed by an INFOBANK command. (The ASG-supplied default is INFO000000.)

The command INFOBANK takes you into InfoBank. By default, the command takes you to the Top Level Entry Panel. However, if the User Defined InfoSystem facility is installed the Systems Administrator can change this entry point to another panel.

To find out the name of the panel which will be displayed when you give the INFOBANK command, enter:

```
QUERY INFOBANK-ENTRY ;
```

### QUERY INFOBANK-ENTRY Syntax

```
{QUERY} INFOBANK-ENTRY {;}
{QU   }                {.}
{Q    }
```

## QUERY INTERROGATE-ENQUEUE

The QUERY INTERROGATE-ENQUEUE command finds out whether the standard or alternative enqueuing procedure for Manager Products dictionaries is active. (The SET option is restricted to the Systems Administrator.)

There are two enqueuing procedures: standard and alternative.

The *standard* enqueuing procedure: during processing of an interrogation command, only other interrogation commands are allowed access to the dictionary.

The *alternative* enqueuing procedure: during processing of an interrogation command, one dictionary update command (at a time) as well as other interrogation commands are allowed access to the dictionary.

When INTERROGATE-ENQUEUE is set ON, the standard enqueuing procedure is active. When INTERROGATE-ENQUEUE is set OFF, the alternative enqueuing procedure is active.

To find out whether INTERROGATE-ENQUEUE is set ON or OFF, enter:

```
QUERY INTERROGATE-ENQUEUE ;
```

### QUERY INTERROGATE-ENQUEUE Syntax

```
{QUERY} INTERROGATE-ENQUEUE {;}
{QU   }                     {.}
{Q    }
```

## QUERY IO-FLUSH-LIMIT

Use the QUERY IO-FLUSH-LIMIT command to find out whether a limit has been set on the number of permissible I/O flushes and, if so, what the limit value is. (The SET option is restricted to the Systems Administrator.)

The syntax of the command is:

```
QUERY IO-FLUSH-LIMIT ;
```

### QUERY IO-FLUSH-LIMIT Syntax

```
{QUERY} IO-FLUSH-LIMIT {;}
{QU   }                {.}
{Q    }
```

## QUERY KANJI-MODE

The QUERY KANJI-MODE command finds out which Kanji Mode is set.

To find out which KANJI-MODE is current, enter:

```
QUERY KANJI-MODE ;
```

Any of these Kanji Modes supported by ASG:

- IBM
- HITACHI
- FUJITSU

may be established by the Systems Administrator. The ASG-supplied default is OFF.

### QUERY KANJI-MODE Syntax

```
{QUERY} KANJI-MODE {;}
{QU   }            {.}
{Q    }
```

## QUERY KANJI-STRING-DELIMITER

The QUERY KANJI-STRING-DELIMITER command finds out the character that is set as the Kanji String Delimiter.

To find out the current setting, enter:

```
QUERY KANJI-STRING-DELIMITER ;
```

The ASG-supplied default is OFF, that is, no Kanji String Delimiter is defined.

### QUERY KANJI-STRING-DELIMITER Syntax

```
{QUERY} KANJI-STRING-DELIMITER {;}
{QU   }                        {.}
{Q    }
```

## QUERY KEPT

The QUERY KEPT command finds out what KEPT-DATA lists, if any, that you have created.

To list any KEPT-DATA lists, enter:

```
QUERY KEPT ALL ;
```

To list an unnamed KEPT-DATA list, enter:

```
QUERY KEPT ;
```

or

```
QUERY KEPT UNNAMED ;
```

To list a named KEPT-DATA list, enter:

QUERY KEPT LIST *list-name* ;

or

QUERY KEPT LISTS *list-name1*, *list-name2*... ;

where *list-name*, *list-name1*, and *list-name2* are the names of specific KEPT-DATA lists.

To list an *unnamed* KEPT-DATA list and *named* KEPT-DATA lists, enter:

```
QUERY KEPT UNNAMED AND LISTS list-name1, list-name2... ;
```

To list the KEPT-DATA lists which contain a specific member, you can include CONTAINING *member-name* as part of any of the above commands. For example:

```
QUERY KEPT ALL CONTAINING member-name ;
```

or

```
QUERY KEPT UNNAMED AND LIST list-name CONTAINING member-name ;
```

where *member-name* is the name of a specific member and *list-name* is the name of a KEPT-DATA list.

**Note:**

You can have a maximum of 32,768 named KEPT-DATA lists.

## QUERY KEPT Syntax

```
QUERY KEPT [ { UNNAMED [AND LISTS list-name [, list-name]...] } ]
             { LISTS list-name [, list-name...]                }
             { ALL                                             }

             [CONTAINING member-name] { ; }
                                      { . }
```

## QUERY LINE-COMMANDS

The QUERY LINE-COMMAND displays a list of the Line Commands.

Line Commands are Full Screen Editor commands typed in the Line Command Area; for example, the A or D command. If the User Defined Commands facility is installed, the Systems Administrator can change the names of the Line Commands.

To display a list of the Line Commands, and to find out whether any have been renamed, enter:

```
QUERY LINE-COMMANDS ;
```

or

```
QUERY PREFIX-COMMANDS ;
```

### QUERY LINE-COMMAND Syntax

```
{QUERY} {LINE-COMMANDS   } {;}
{QU   } {PREFIX-COMMANDS} {.}
{Q    }
```

## QUERY LOGON-ID

The QUERY LOGON-ID command finds out the Logon Identifier with which you are logged on. To find out the Logon-Id with which you are logged on, give the command:

```
QUERY  LOGON-ID ;
```

### QUERY LOGON-ID Syntax

```
{QUERY} LOGON-ID {;}
{QU   }          {.}
{Q    }
```

## QUERY MESSAGE-LANGUAGE

The QUERY MESSAGE-LANGUAGE command queries the language in which Manager Products messages are output.

To find out the current setting, enter:

```
QUERY MESSAGE-LANGUAGE ;
```

The ASG-supplied default is ENGLISH. However, this may have been changed by the Systems Administrator via your Logon Profile or a Global Profile.

**Note:**

Only the Systems Administrator can alter the language in which messages are output.

### QUERY MESSAGE-LANGUAGE Syntax

```
{QUERY} MESSAGE-LANGUAGE {;}
{QU   }                  {.}
{Q    }
```

## QUERY MPAID-UPDATES

The QUERY MPAID-UPDATES command finds out if the MP-AID is open in update or read-only mode.

To find out the current setting, enter:

```
QUERY MPAID-UPDATES ;
```

### QUERY MPAID-UPDATES Syntax

```
{QUERY} MPAID-UPDATES {;}
{QU   }               {.}
{Q    }
```

## QUERY ONLINE-USERS

The QUERY ONLINE-USERS command finds out which users are logged on to Manager Products, excluding batch users.

To find out which users are logged on to Manager Products, enter the command:

```
QUERY ONLINE-USERS ;
```

The output displays the Logon-Ids of all users logged on to Manager Products except batch users and indicates whether the Logon-Ids are exclusive to one user or shared by several users.

### QUERY ONLINE-USERS Syntax

```
{QUERY} ONLINE-USERS {;}
{QU   }              {.}
{Q    }
```

## QUERY OUTPUT-LINE-LIMIT

The QUERY OUTPUT-LINE-LIMIT finds out the limit on the maximum number of output lines.

The Systems Administrator can limit the number of lines that can be held in each Command Mode and Lookaside Buffer. To find out the limit on the number of lines, enter the command:

```
QUERY OUTPUT-LINE-LIMIT ;
```

If output from a command is to be displayed on the screen, the output that is generated is limited by the number of lines that can be held in the buffer.

### QUERY OUTPUT-LINE-LIMIT Syntax

```
{QUERY} OUTPUT-LINE-LIMIT {;}
{QU   }                   {.}
{Q    }
```

## QUERY PRIMARY-COMMANDS

The QUERY PRIMARY-COMMANDS lists the names of the primary commands available to you, and finds out which of these (if any) your Systems Administrator has renamed, disabled, or modified so that they run an Executive Routine in place of the primary command. If no primary commands have been modified, the message PRIMARY COMMANDS UNCHANGED is displayed at the bottom of the list.

The syntax of the command is:

```
QUERY PRIMARY-COMMANDS ;
```

Output from the command is displayed in five columns and shows:

- The product to which a command belongs
- The name of the command as supplied by ASG (with synonymous commands marked by equals signs and executive commands marked by "E")
- The name of the command as changed by your Systems Administrator
- Whether or not the command is disabled (with asterisks to mark renamed or disabled commands)
- The name of the Executive Routine which will be run in place of the command.

Example of output:

| PRD | STANDARD COMMAND | CHANGED COMMAND | DSB | EXEC NAME |
|---|---|---|---|---|
| DSR | IMS | IMS | N | |
| CMR | DMS | DMS | Y* | |
| DMR | DOES | DS | N* | |
| CMR | = D | D | N | |
| CMR | = DO | DO | N | |
| CMR | = DOWN | DOWN | N | |
| CMR | DROP | DROP | N | |
| CMR | RESERVE | RESERVE | N | |
| CMR | E REPORT | REPORT | N | UREPORT |

In this example the changes are to the DMS command, which has been disabled; to the DOES command, which has been renamed; and to the REPORT command which, when issued, will invoke the Executive Routine UREPORT.

### QUERY PRIMARY-COMMANDS Syntax

```
>>──QUERY──PRIMARY-COMMANDS──┬─;─┬──><
                             └─.─┘
```

In the syntax, QUERY may be abbreviated to QU or Q, and PRIMARY-COMMANDS may be abbreviated down to PRIM.

## QUERY RECALL-BUFFER

The QUERY RECALL-BUFFER command displays a list of commands issued previously in the current Manager Products session.

This command is useful for viewing the sequence of commands issued earlier in the Manager Products session.

For security reasons, the AUTHORITY command is suppressed from the QUERY RECALL-BUFFER display.

See also the SET PF command which enables you to assign a PF key such that, when pressed, the last command issued is redisplayed in the command area.

The QUERY RECALL-BUFFER command is available in full-screen interactive environments only.

### QUERY RECALL-BUFFER Syntax

```
>>──QUERY RECALL-BUFFERS──┬─;─┬──><
                          └─.─┘
```

In the syntax, QUERY may be abbreviated down to QU or Q, and RECALL-BUFFER may be abbreviated down to REC.

## QUERY RESERVED-INFOBANK-LINE

The QUERY RESERVED-INFOBANK-LINE command finds out the text currently specified for the Reserved InfoBank Line.

When an InfoBank panel displays, a line of text displays at the bottom of the screen. In InfoBank as released, this line reads:

```
IF YOU NEED HELP, KEY IN HELP AND PRES5 ENTER.
```

If the User Defined InfoSystem facility is installed at your site, the Systems Administrator can change this line of text. You can find out what the line is set to by giving the command:

```
QUERY RESERVED-INFOBANK-LINE ;
```

### QUERY RESERVED-INFOBANK-LINE Syntax

```
>>──QUERY──RESERVED-INFOBANK-LINE──┬─;─┬──><
                                   └─.─┘
```

In the syntax, QUERY may be abbreviated to QU or Q, and RESERVED-INFOBANK-LINE may be abbreviated down to RES.

## QUERY RETAINED-EXECUTIVES

The QUERY RETAINED-EXECUTIVES command finds out which executive routines are retained in virtual storage. To find out which executive routines are retained in virtual storage, enter:

```
QUERY RETAINED-EXECUTIVES ;
```

For each retained executive routine the following is given:

- The name of the executive routine (MEMBER NAME)
- The type of executive routine (TYPE)
- The number of times the executive routine has been called (USAGE)
- The length in bytes of the executive routine

If the CPUTIME keyword was included in the SET EXECUTIVE-RETENTION command that switched executive-retention on, then the following extra information is given for each retained executive routine:

- CPU time for directives (MPL-TIME)
- CPU time for executive routines called directly or indirectly (MPE-TIME)
- CPU time for Manager Products commands (MPR-TIME)

The CPU time information can be used for monitoring performance improvements to executive routines.

For further details of retained executive routines, refer to the SET EXECUTIVE-RETENTION command.

For details of performance improvements, refer to the *ASG-Manager Products Performance Tuning* manual.

### QUERY RETAINED-EXECUTIVES Syntax

```
>>──┬─QUERY─┬──RETAINED-EXECUTIVES──┬─;─┬──><
    ├─QU────┤                       └─.─┘
    └─Q─────┘
```

## QUERY STORAGE and VIRTUAL

The QUERY STORAGE and VIRTUAL command finds out the current Virtual Storage usage.

To obtain details of the amount of virtual storage you are taking up (that is, the workspace excluding program code), enter the command:

```
QUERY STORAGE ;
```

or

```
QUERY VIRTUAL ;
```

This displays the amount of virtual storage you have USED (the maximum amount acquired during the current session) and the amount of virtual storage CURRENT (the amount actually in use when the command was entered).

The amounts are given in K bytes.

### QUERY STORAGE and VIRTUAL Syntax

```
{QUERY} {STORAGE} {;}
{QU   } {VIRTUAL} {.}
{Q    }
```

## QUERY STRING-DELIMITER

The QUERY STRING-DELIMITER finds out which characters may be used to delimit strings.

By default, a character string in ControlManager or DataManager is delimited by the character ' or ". The Systems Administrator can specify additional characters which can alternatively be used as delimiters. You can find out if such characters have been specified and, if so, what they are, by entering:

```
QUERY STRING-DELIMITER ;
```

### QUERY STRING-DELIMITER Syntax

```
{QUERY} STRING-DELIMITER {;}
{QU   }                  {.}
{Q    }
```

## QUERY TOP-MENU-ENTRY

The QUERY TOP-MENU-ENTRY command finds out which panel displayed when you enter the SELECT top-menu command.

To find out the current setting, enter:

```
QUERY TOP-MENU-ENTRY ;
```

The ASG-supplied default is INFO000000. However, this may have been changed by the Systems Administrator via your Logon Profile or a Global Profile.

**Note:**

Only the Systems Administrator can alter the Top Menu Entry Panel.

### QUERY TOP-MENU-ENTRY Syntax

```
{QUERY} TOP-MENU-ENTRY {;}
{QU   }                {.}
{Q    }
```

## QUERY USER-BLOCKS

The QUERY USER-BLOCKS command finds out the number of blocks on the MP-AID occupied by USER-MEMBERs owned by your Logon-Identifier.

To find out the number of blocks of the MP-AID occupied by USER-MEMBERs owned by your Logon-Id, enter:

```
QUERY USER-BLOCKS ;
```

If the Systems Administrator's Environmental Control Facility is installed, the Systems Administrator can set a limit to the number of blocks which can be occupied by your USER-MEMBERs. If this has been done, the limit will also be displayed when you give the QUERY USER-BLOCKS command.

### QUERY USER-BLOCKS Syntax

```
{QUERY} USER-BLOCKS {;}
{QU   }             {.}
{Q    }
```

# QUIT

The QUIT command closes and deletes a Lookaside Buffer, or an Update or Edit Buffer which has not been amended.

To leave a Lookaside Buffer, or an Update or Edit Buffer which has not been updated, enter:

```
QUIT ;
```

The buffer is then deleted.

If the Update or Edit Buffer has been changed and you enter QUIT, a message is displayed asking you to enter either XQUIT or FILE.

QUIT is available with the Extended Interactive Facility.

## QUIT Syntax

```
QUIT {;}
     {.}
```

# RETRACE

The RETRACE command displays InfoBank panels you have previously seen, or to display a list of the InfoBank panels you have seen.

To display the InfoBank panel or menu you saw last, enter:

```
RETRACE ;
```

To display the InfoBank panel you saw last, enter:

```
RETRACE PANEL ;
```

To display the InfoBank menu you saw last, enter:

```
RETRACE MENU ;
```

To display a list of the InfoBank panels and menus you have seen since you logged on, enter:

```
RETRACE DISPLAY ;
```

Up to a maximum of 45 panel names and titles are displayed. The list is in reverse order, that is, the panel you saw last is at the top of the list. Panels displayed as the result of RETRACE commands are not added to the list.

The current panel is indicated by an arrow '. All panels RETRACEd from are dropped out of RETRACE processing, but remain in the RETRACE DISPLAY; these panels are flagged by an asterisk *. A RETRACE MENU command causes all panels between the current one and the menu you saw last to be flagged by an asterisk.

To display a panel in the list, enter:

```
PANEL panel-name ;
```

in the Command Area. Alternatively, if Panel Driven Processing (PDP) is installed, position the cursor in the Line Command Area of the line containing the name of the panel you want to look up, and enter:

```
PAN ;
```

You can use the RETRACE command at any time during a Manager Products session.

RETRACE will take you back to the InfoBank panel or menu you saw last in your current Manager Products session, whether or not you are in InfoSystem when you issue the command. If you have not seen any InfoBank panels during the current session, then the message 'INFOSYSTEM NOT INITIATED' will be displayed.

If User Defined InfoSystem is installed, the RETRACE command can be specified in NEXT-PANEL, LAST-PANEL, LAST-MENU, and SELECT clauses of INFOBANK-PANEL dictionary members. This is useful for panels that are accessed from any of a number of others, for you can then be returned to the one you came from.

**Note:**

ControlManager retains a list of the last 45 panels you have accessed in the current session (except for those accessed using the RETRACE command). If successive RETRACE commands take you back to the first panel in the list, then further RETRACE is not possible; this is indicated by the message RETRACE PATH EXHAUSTED.

## RETRACE Syntax

```
RETRACE [{PANEL  } ] {;}
         {MENU   }   {.}
         {DISPLAY}
```

# RFILE

The RFILE command replaces the source record of a member with the contents of the Update Buffer, and attempt to encode it.

The RFILE command is for use in circumstances when the contents of an Update Buffer cannot be successfully FILEd, because the member name being used, is the name of a member that already exists in the dictionary. To file a member in this circumstance, enter:

```
RFILE member-name ;
```

The RFILE command provides the same facility, in Full Screen Interactive environments where the Extended Interactive facility is installed, as is provided by the REPLACE command in other interactive and batch environments.

## RFILE Syntax

```
RFILE [dictionary-member-name] { ; }
                               { . }
```

# RUN

The RUN command executes permitted Manager Products commands from an Edit Buffer.

You can execute one or more permitted Manager Products commands in the Edit Buffer by typing `RUN` in the Command Area and pressing Enter. When the commands have been executed, the output is displayed in a Lookaside Buffer.

The buffer may contain any Manager Products command which you are permitted to give with the following exceptions:

- EDIT and UPDATE
- All editor commands
- All scrolling commands
- FILE, RFILE, SFILE, QUIT, and XQUIT
- RUN

RUN is available with the Extended Interactive Facility.

## RUN Syntax

```
RUN { ; }
    { . }
```

# S/SS and SMOVE

The S/SS and SMOVE command removes lines from an Edit or Update Buffer and put them into the Scratchpad. The current contents of the Scratchpad are NOT overwritten.

The commands are described in the following sub-sections, for each of which the name of the corresponding InfoBank panel is given.

- S/SS - Also Move Line CommandCMRCOM3275
- SMOVE - Also Move Primary CommandCMRCOM3143

## S/SS - Also Move Line Command

To move a *number* of lines from the current buffer to the Scratchpad without overwriting the contents of the Scratchpad, enter:

`S`*n*

in the Line Command Area and press ENTER. *n* is the number of lines you wish to copy and can be from 1 to 9999.

The specified number of lines, starting with the line containing `S`*n*, are removed from the current buffer and added to the end of the existing contents of the Scratchpad.

To move a *block* of lines from the current buffer to the Scratchpad without overwriting the contents of the Scratchpad, enter:

`SS`

in the Line Command Area in the first and last lines of the block to be moved, and press ENTER. The block can extend over more than one screen if you wish.

`S` and `SS` are available with the Extended Interactive Facility, and can be used in Edit and Update Modes.

**Note:**

The moved lines will be lost if they are overwritten by another entry to the Scratchpad before they have been inserted elsewhere.

## SMOVE - Also Move Primary Command

To move lines from the current buffer to the Scratchpad, without overwriting the contents of the Scratchpad, enter:

`SMOVE` *n* `;`

where *n* is the number of lines you wish to move.

The specified number of lines, beginning with the current line, will be removed from the current buffer and added to the end of the Scratchpad.

SMOVE is available with the Extended Interactive Facility, and can be used in Edit and Update Modes.

**Note:**

The moved lines will be lost if they are overwritten by another entry to the Scratchpad before they have been inserted elsewhere.

### S/SS and SMOVE Syntax

The syntax of the also move line command is:

```
S[n]
```

```
SS
```

The syntax of the also move primary command is:

```
SMOVE [n] { ; }
          { . }
```

## SELECT

The SELECT command displays an InfoBank panel chosen from the panel you are viewing.

To display the menu for the current branch, enter:

```
SELECT MENU ;
```

**Note:**

If you entered the current branch by a selection from another branch, the menu for the current branch may be different from the menu you saw last.

To display the next panel in the current branch, enter:

```
SELECT NEXT-PANEL ;
```

To display the previous panel in the current branch, enter:

```
SELECT LAST-PANEL ;
```

**Note:**

If you entered the current branch by a selection from another branch, the previous panel for the current branch may be different from the panel you saw last.

To make a selection from a panel or menu, enter:

```
SELECT n ;
```

where *n* is the number or character-string beside the item you want to select. To see the Top Level Menu in InfoBank, enter:

```
SELECT TOP-MENU ;
```

Every INFOBANK-PANEL supplied by ASG has one or more SELECT clauses in its member definition statement and this causes the SELECT prompt to be displayed in the Command Area when the panel is displayed. This means you need only enter your selection and press ENTER to be routed to the information you want. However, it also means that to enter a command (not a selection) you must first overtype the SELECT prompt.

For details of how to suppress this display of the SELECT prompt, refer to SET INFOBANK-SELECT in "SET and QUERY INFOBANK-SELECT" on page 213.

Users with the User Defined InfoSystem facility installed should note that if there are no SELECT clauses in an INFOBANK-PANEL, then no SELECT prompt will appear in the Command Area when that panel is displayed.

## SELECT Syntax

```
SELECT {NEXT-PANEL} {;}
       {LAST-PANEL} {.}
       {MENU      }
       {TOP-MENU  }
       {n         }
```

where *n* is an alphanumeric character.

## SET and QUERY ALERT

The SET and QUERY ALERT command sets the audible alert on or off (SET), and finds out the current setting (QUERY).

The alert is the warning sound given when a Manager Products error message is output. You can set the alert on by giving the command:

```
SET ALERT ON ;
```

and set it off by giving the command:

```
SET ALERT OFF ;
```

To find out whether the alert is set on or off, give the command:

```
QUERY ALERT ;
```

**Note:**

Some terminals are not fitted with an alert so the SET command sometimes has no effect.

The SET ALERT command is available with the Extended Interactive Facility.

### SET ALERT Syntax

```
SET ALERT {ON } {;}
          {OFF} {.}

{QUERY} ALERT {;}
{QU   }       {.}
{Q    }
```

## SET and QUERY AUTOSKIP

The SET and QUERY AUTOSKIP command sets the Autoskip feature on or off (SET), and finds out the current setting (QUERY).

The Autoskip feature is available with the Basic Interactive Facilities provided that the User Defined Commands facility is installed at your site.

Autoskip is used in conjunction with Linear Commands. (See the *User Defined Commands* manual for full details of these Commands.)

If the feature is set on and a Linear Command is executed, the line in which the command was entered becomes the Current Line. If two or more Linear Commands are executed at the same time, the line containing the last Linear Command becomes the Current Line.

If the feature is set off, the buffer is redisplayed exactly as it was when the command was given.

You can set the feature on by entering the command:

```
SET AUTOSKIP ON ;
```

You can set it off by entering the command:

```
SET AUTOSKIP OFF ;
```

You can find out whether it is set off or on by entering the command:

```
QUERY AUTOSKIP ;
```

### SET and QUERY AUTOSKIP Syntax

```
SET AUTOSKIP {ON } { ; }
             {OFF} { . }

{QUERY} AUTOSKIP { ; }
{QU   }          { . }
{Q    }
```

## SET and QUERY BLANK-LINE-DISPLAY

Use the SET BLANK-LINE-DISPLAY command to suppress or display blank lines in output to the screen. Valid forms of the command are:

```
SET BLANK-LINE-DISPLAY ON ;
```

or

```
SET SPACE-LINE-DISPLAY ON ;
```

which cause the display of blank lines.

```
SET BLANK-LINE-DISPLAY OFF ;
```

or

```
SET SPACE-LINE-DISPLAY OFF ;
```

which cause the suppression of blank lines.

To find out the current setting, enter:

```
QUERY BLANK-LINE-DISPLAY ;
```

or

```
QUERY SPACE-LINE-DISPLAY ;
```

An InfoBank panel displayed on the screen will always include blank lines, if present.

When using the PRINT command:

- If source line numbers are output, then blank lines are always included
- If source line numbers are suppressed, then blank lines can be suppressed.

Blank lines are always included in hard copy output.

The ASG-supplied default is OFF.

### SET BLANK-LINE-DISPLAY Syntax

```
>>──SET──┬─BLANK-LINE-DISPLAY─┬─┬─ON──┬──────────┬─;─┬──><
         └─SPACE-LINE-DISPLAY─┘ └─OFF─┘          └─.─┘

>>──┬─QUERY─┬─┬─BLANK-LINE-DISPLAY─┬──────────┬─;─┬──><
    ├─QU────┤ └─SPACE-LINE-DISPLAY─┘          └─.─┘
    └─Q─────┘
```

## SET and QUERY CHECK-CHARACTER

The SET and QUERY CHECK-CHARACTER command specifies the check-character (SET), and finds out the current setting (QUERY).

The check-character is displayed against members marked as check-needed when you list members. It is given immediately after:

- SCE ENC, for an encoded member
- DUM, for a dummy member

To specify the check-character, enter:

```
SET CHECK-CHARACTER character ;
```

where *character* is any delimited or undelimited character except a space.

To set the check-character off, enter:

```
SET CHECK-CHARACTER OFF ;
```

The check-character is by default set off.

To find out the current check-character, enter:

```
QUERY CHECK-CHARACTER ;
```

Refer to the LIST command for an example of the use of the check-character.

### SET and QUERY CHECK-CHARACTER Syntax

```
>>──SET CHECK-CHARACTER──┬─x───┬──┬─;─┬──><
                         └─OFF─┘  └─.─┘
```

where *x* is any delimited or undelimited character except a space.

```
>>──┬─QUERY─┬──CHECK-CHARACTER──┬─;─┬──><
   ├─QU────┤                   └─.─┘
   └─Q─────┘
```

## SET and QUERY COMMAND-LINE

Use the SET COMMAND-LINE command to control the position of the Command Area. Valid forms of the command are:

```
SET COMMAND-LINE TOP ;
```

which sets the Command Area to the top of the screen.

```
SET COMMAND-LINE BOTTOM ;
```

which sets the Command Area to the bottom of the screen.

To find out the current position of the Command Area, enter:

```
QUERY COMMAND-LINE ;
```

If the Command Area is set to the *bottom* of the screen there are *two lines* available for entering commands. If the Command Area is set to the *top* of the screen there is only *one line* available for entering commands.

The ASG-supplied default is BOTTOM.

**Note:**

The RECALL buffer is emptied whenever SET COMMAND-LINE TOP or SET COMMAND-LINE BOTTOM is entered. Therefore commands entered when the Command Area was at the bottom of the screen cannot be recalled if the Command Area has since been set to the top of the screen; and vice versa.

### SET COMMAND-LINE Syntax

```
>>-----SET----+-COMMAND-LINE-+---+-TOP----+-----------+-;-+-----><
              +-COMMAND-LINE-+   +-BOTTOM-+           +-.-+
>>-----+-QUERY-+-----COMMAND-LINE-----------------------+-;-+-----><
       +-QU----+                                       +-.-+
       +-Q-----+
```

## SET and QUERY COUNTER

The SET and QUERY COUNTER defines the increment for the Line Counter (SET), and to find out the current setting (QUERY).

At the top right hand corner of any screen other than an InfoBank panel are the words LINE: *aaaaa* OF *bbbbb*.

*aaaaa* is the number of the Current Line. *bbbbb* is the total number of lines in the output being viewed and is known as the Line Counter.

The Line Counter is incremented as lines of output are being generated. You can change the increment by entering the command:

```
SET COUNTER n ;
```

where *n* is the increment at which the Line Counter is to change.

For example, if the increment is set to 20 and the output contains 56 lines, the Line Counter will be 00000 until 20 lines of output are built up, 00020 when 20 and not more than 40 lines are built up, then 00040 and finally 00056 when the complete display is ready.

You can find out the increment at which the Line Counter changes by entering the command:

```
QUERY COUNTER ;
```

The ASG-supplied default is 25. You can enhance performance by setting the increment to a relatively high value when executing under MPSF and/or generating large amounts of output.

The SET COUNTER command is available with the Basic Interactive Facilities.

### SET and QUERY COUNTER Syntax

```
SET COUNTER integer { ; }
                    { . }

{ QUERY } COUNTER { ; }
{ QU    }         { . }
{ Q     }
```

## SET and QUERY CURSOR-HOLD

The SET and QUERY CURSOR-HOLD command specifies whether the cursor is to be retained in its current position on the screen when Enter is pressed in Edit Mode or Update Mode (SET), and finds out the current setting (QUERY).

Use when you key or overkey characters in an EDIT or UPDATE buffer and press ENTER, then after execution the cursor can be:

- Held in its original position
- Returned to the Command Area

Use the SET CURSORHOLD command to specify one of these options. Valid forms of the command are as follows:

```
SET CURSOR-HOLD ON ;
```

When you first press Enter, the cursor will be held in its original position. To return to the Command Area you must press Enter a second time.

```
SET CURSOR-HOLD OFF ;
```

When you press Enter the cursor is returned to the Command Area. To find out the current setting, enter:

```
QUERY CURSOR-HOLD ;
```

The ASG-supplied default is OFF.

The SET CURSOR-HOLD command is available with the Basic Interactive Facilities.

### SET and QUERY CURSOR-HOLD Syntax

```
SET CURSOR-HOLD {ON } { ; }
                {OFF} { . }

{QUERY} CURSOR-HOLD { ; }
{QU   }             { . }
{Q    }
```

## SET and QUERY DIRECTLY-ASSUMPTION

The SET DIRECTLY-ASSUMPTION command specifies whether subsequent WHAT, WHICH, DOES, and GLOSSARY commands report only direct references to selected members, or direct and indirect references, unless otherwise specified. (For GLOSSARY, this applies only when the keywords USAGES or REFERENCES are used.) Valid forms of the command are:

```
SET DIRECTLY-ASSUMPTION ON ;
```

which causes subsequent commands to report direct references only, unless INDIRECTLY (WHAT, WHICH, and DOES) or INDIRECT (GLOSSARY) is specified.

```
SET DIRECTLY-ASSUMPTION OFF ;
```

which causes subsequent commands to report direct and indirect references unless DIRECTLY (WHAT, WHICH, and DOES) or DIRECT (GLOSSARY) is specified.

To find out the current setting, enter:

```
QUERY DIRECTLY-ASSUMPTION ;
```

The current setting is ignored whenever INDIRECTLY/INDIRECT or DIRECTLY/DIRECT is specified.

If, while the assumption is set ON, you want a particular command to report indirect and direct references, specify INDIRECTLY/INDIRECT in that command. For example:

```
WHAT INDIRECTLY USES EMP-CODE ;
```

If, while the assumption is set OFF, you want a particular command to report direct references only, specify DIRECTLY/DIRECT in that command. For example:

```
GLOSSARY KEPT GIVING DIRECT USAGE ;
```

The ASG-supplied default is OFF.

The SET DIRECTLY-ASSUMPTION command is available in all environments.

## SET DIRECTLY-ASSUMPTION Syntax

```
SET DIRECTLY-ASSUMPTION {ON } {;}
                        {OFF} {.}

{QUERY} DIRECTLY-ASSUMPTION {;}
{QU   }                     {.}
{Q    }
```

**Table 6 Options Available with QUERY DIRECTLY-ASSUMPTION**

| SET: | Reports: | OPTIONS: | |
|---|---|---|---|
| | | WHAT/WHICH/DOES | GLOSSARY |
| ON | Direct references only | Specify INDIRECTLY to report Indirect as well as Direct | Specify INDIRECT to report Indirect as well as Direct |
| OFF | Direct and Indirect references | Specify DIRECTLY to report Direct only | Specify DIRECT to report Direct only |

## SET DOCUWARE

The SET DOCUWARE command enables you to examine InfoBank panels relating to Product Nuclei or selectable units that are not included in your Manager Products installation, subject to the terms of a Non-Disclosure Agreement.

In order to maintain the CONFIDENTIAL nature of information contained in InfoBank, InfoView does not permit you to see panels relating to Product Nuclei or selectable units that are not included in your Manager Products installation, except under the conditions described below.

You may examine such documentation for evaluation purposes under the terms of a Non-Disclosure Agreement. The documentation is made available to you when you issue the following command:

```
SET DOCUWARE selectable-unit-code ON ;
```

*Issuing this command implies that you have entered into a Non-Disclosure Agreement with your Manager Products Supplier.*

The *selectable-unit-code* you enter in the SET DOCUWARE command is the code for the selectable unit or Product Nucleus you want to read about. Only one such code must be included in a SET DOCUWARE command; but you may enter as many SET DOCUWARE commands as you require for your evaluation. For example, if you do not have DesignManager installed, but are interested in Enterprise Modeling, you could enter:

```
SET DOCUWARE DSR-DS01 ON;
SET DOCUWARE DSR-EM10 ON;
```

The SET DOCUWARE .... ON command operates only for the duration of the run in which it was issued. As you will probably require access to the information in successive runs over several weeks, you could include this command in your User Defined Profile, if the Systems Administrator's Environmental Control Facility is installed; or otherwise ask your Systems Administrator to include it in your Logon Profile.

The period during which you may examine documentation under a Non-Disclosure Agreement lasts for thirteen weeks, unless it is extended by agreement with your Manager Products Supplier. You should therefore remember to remove any SET DOCUWARE commands from your Logon or User Defined Profile on expiry of this period. Whenever a SET DOCUWARE command is processed, a warning is displayed to remind you of this.

### SET DOCUWARE Syntax

```
SET DOCUWARE selectable-unit-code {ON} {;}
                                  {OFF} {.}
```

## SET and QUERY ECHO

The SET and QUERY ECHO command sets the Command Echo capability on or off (SET), and finds out the current setting (QUERY).

To cause every Manager Products command executed by an Executive Routine to be displayed as part of the output, enter the command:

```
SET ECHO ON ;
```

You can set the echo off by giving the command:

```
SET ECHO OFF ;
```

To find out what the setting is, give the command:

```
QUERY ECHO ;
```

The SET ECHO command is available in all environments.

### SET and QUERY ECHO Syntax

```
SET ECHO {ON } {;}
         {OFF} {.}

{QUERY} ECHO {;}
{QU   }      {.}
{Q    }
```

## SET and QUERY ENQUEUE-TRACE

The SET and QUERY ENQUEUE-TRACE command provides a report of enqueueing and dequeuing activity during the execution of subsequent commands (SET), and to find out the current setting (QUERY). The SET command should only be used under ASG supervision. Valid forms of the command are:

```
SET ENQUEUE-TRACE ON ;
```

which provides a report of enqueuing and dequeuing activity during the execution of subsequent commands.

```
SET ENQUEUE-TRACE OFF ;
```

which sets the ENQUEUE-TRACE command off.

To find out the current setting, enter:

```
QUERY ENQUEUE-TRACE ;
```

The ASG-supplied default is OFF.

The SET ENQUEUE-TRACE command is available in all environments.

### SET and QUERY ENQUEUE-TRACE Syntax

```
SET ENQUEUE-TRACE {ON } {;}
                  {OFF} {.}

{QUERY} ENQUEUE-TRACE {;}
{QU   }               {.}
{Q    }
```

## SET and QUERY ESCAPE-CHARACTER

The SET and QUERY ESCAPE-CHARACTER command specifies the escape character (SET), and finds out the current setting (QUERY).

When a line of input in the CONTENTS clause of a COMMAND-STREAM, LOGON-PROFILE, GLOBAL-PROFILE, or EXECUTIVE-ROUTINE would normally contain a terminator in the first column position, that line must begin with an escape character. The default escape character is %, for example:

```
COMMAND-STREAM
CONTENTS
ALTER *;
LOCATE 'CATALOG'
LOCATE NEXT 'TRIAL'
CHANGE LINE 'TRIAL' TO 'ACCEPTED'
%;
;
```

You can change this default character to another by entering:

```
SET ESCAPE-CHARACTER x ;
```

where *x* is a delimited or undelimited character.

To find out what character is being used as the escape character, give the command:

```
QUERY ESCAPE-CHARACTER ;
```

The SET ESCAPE-CHARACTER command is available in all environments.

### SET ESCAPE-CHARACTER Syntax

```
SET ESCAPE-CHARACTER character { ; }
                               { . }

{ QUERY } ESCAPE-CHARACTER { ; }
{ QU    }                  { . }
{ Q     }
```

## SET and QUERY EXCP-MONITOR

The SET and QUERY EXCP-MONITOR command sets a display of the number of input/output operations on the dictionary and MP-AID to a particular integer value or turns off the display (SET), and finds out the current setting (QUERY).

The Excp Monitor records the number of input and output operations for each of your dictionary's datasets and the MP-AID for each command. If you enter the SET EXCP-MONITOR command, a message similar to that below is displayed on the message line while each command is executed:

```
MP-AID 00002 INDEX 00002 SOURCE 00006 DATA 00002
   ERROR 00000 LOG 00000
```

This message indicates that there have been two I/O operations to the MP-AID, two to the Index Dataset, and so on.

The syntax of the SET EXCP-MONITOR command is:

```
SET EXCP-MONITOR n ;
```

The display on the screen is updated every *n* I/O operations. For example, if *n* is 50, the display is updated every fifty I/O operations.

When executing Manager Products under MPSF with DIV repositories and MPAIDs, no physical I/O operations are performed by users accessing DIV resources. In this situation an EXCP is considered to be a logical access to the shared buffer containing the resource. When using SET EXCP-MONITOR you need to use a value significantly larger than the value used for non-DIV access. If for example, a non-DIV value of 1000 is used, then a reasonable DIV value would be 50,000.

To set the monitor and the display to the screen off, enter the command:

```
SET EXCP-MONITOR OFF ;
```

To find out whether the monitor is set on or off, enter the command:

```
QUERY EXCP-MONITOR ;
```

The SET EXCP-MONITOR command is available with the Extended Interactive Facility.

### SET EXCP-MONITOR Syntax

```
SET EXCP-MONITOR {integer} {;}
                 {OFF    } {.}

{QUERY} EXCP-MONITOR {;}
{QU   }              {.}
{Q    }
```

## SET and QUERY EXEC-WRITE

The SET and QUERY EXEC-WRITE command permits or suppresses output to the terminal while an Executive Routine is executing (SET), and finds out the current setting (QUERY).

The SET EXEC-WRITE will generally only be used within Executive Routines. Valid forms of the command are:

```
SET EXEC-WRITE ON ;

SET EXEC-WRITE OFF ;
```

If switched OFF, any output to the terminal is suppressed until execution of the Executive Routine is complete.

EXEC-WRITE is commonly set to OFF if OUTPUT-EDIT is set to ON, to enable an output buffer being built by an Executive Routine to be completed and possibly amended before being output to the screen.

To find out the current setting, enter:

```
QUERY EXEC-WRITE ;
```

The ASG-supplied default is ON.

The SET EXEC-WRITE command is available with the User Defined Commands Facility.

### SET EXEC-WRITE Syntax

```
SET EXEC-WRITE {ON } { ; }
               {OFF} { . }

{QUERY} EXEC-WRITE { ; }
{QU   }            { . }
{Q    }
```

## SET and QUERY EXECUTIVE-RETENTION

The SET EXECUTIVE-RETENTION command allows retention of executive routines in virtual storage (SET) and finds out the current setting (QUERY).

If an executive routine is retained in virtual storage, it is only loaded once, no matter how many times it is called, whereas if it is not retained it is loaded every time it is called. For an executive routine that is called many times, retention can lead to a significant improvement in performance.

To retain an executive routine:

- Executive-retention must be on
- The executive routine must execute the RETAIN directive

To switch executive-retention on, enter:

```
SET EXECUTIVE-RETENTION ON ;
```

To switch executive-retention off, enter:

```
SET EXECUTIVE-RETENTION OFF ;
```

By default executive-retention is set off.

Use the QUERY RETAINED-EXECUTIVES command to find out which executive routines have been retained.

If you include the CPUTIME keyword then the output from the QUERY RETAINED-EXECUTIVES command includes figures on CPU usage. Refer to "QUERY RETAINED-EXECUTIVES" on page 187 for full details of these figures.

If you alter a retained executive routine's MP-AID member, the alteration is not reflected in the retained executive routine until it is retained again.

The SET EXECUTIVE-RETENTION command is available to any user, but is not available when executing Manager Products under CICS.

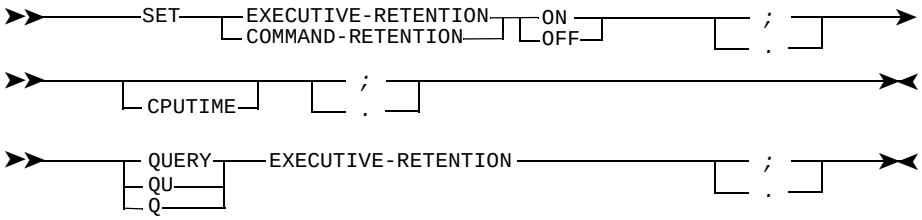
The COMMAND-RETENTION keyword is a synonym for the EXECUTIVE-RETENTION keyword.

Refer to the *ASG-Manager Products Procedures Language* manual for details of the RETAIN directive.

To find out the current executive-retention setting (ON or OFF), enter:

```
QUERY EXECUTIVE-RETENTION ;
```

### SET EXECUTIVE-RETENTION Syntax




## SET and QUERY FORMAT

The SET FORMAT command sets the format of reports of members to a preferred set format, a user defined format, or back to the standard ASG format (SET), and finds out the current setting (QUERY).

Output from the REPORT command can be formatted in one of these ways:

- In the standard format issued by ASG
- In one of the preferred set of alternative formats issued with DictionaryManager
- If the DictionaryManager User Defined Output facility is installed, in one of the user defined formats defined at your site

If you want to use one of the preferred set of alternative formats or a user defined format, you can:

- Give the FORMAT command
- Give the SET FORMAT command

The FORMAT command is a DictionaryManager Prefix Command. The format specified applies to output from the prefixed REPORT or BULK REPORT command. (See the *ASG-DictionaryManager User's Guide* for details.)

The format specified in the SET FORMAT command applies to output from all following REPORT or BULK REPORT commands for the member types specified in the command unless some other format is invoked for a particular command by the FORMAT Prefix Command.

To set a preferred set format, enter the command:

```
SET FORMAT FOR REPORT OF member-type
   AS preferred-set-format ;
```

where:

> *member-type* may be ITEMS, GROUPS, CONVENTIONAL-FILES, MODULES, PROGRAMS, or SYSTEMS, or any user defined member type based on any of these member types.
>
> *preferred-set-format* can be any of the following: PSR-ITEM, PSR-GROUP, PSR-FILE, PSR-MODULE, PSR-PROGRAM, PSR-SYSTEM, PSR-SUMMARY, or PSR-DETAILS. Except for PSR-SUMMARY, reports based on these formats contain all the details that appear in a standard report, laid out in columns. PSR-SUMMARY contains the common clauses only.

To set a user defined format held in the MP-AID, enter the command:

```
SET FORMAT FOR REPORT OF member-type
   TO MP-AID user-format ;
```

To set a user defined format held in a dictionary, enter the command:

```
SET FORMAT FOR REPORT OF member-type
   TO DICTIONARY user-format ;
```

If the ControlManager User Defined Syntax facility is installed, the member type in the SET FORMAT command can optionally be preceded by the word GENERIC, in which case, the command will apply to the specified member type and all member types based on that member type.

Two or more member types can optionally be specified in a SET FORMAT command separated by commas, for example:

```
SET FORMAT FOR REPORT OF PROGRAMS, GENERIC MODULES
   TO MP-AID UD05 ;
```

To set the format back to the standard ASG format for REPORT output, enter:

```
SET FORMAT FOR REPORT OF member-type
   [, member-type ]... OFF ;
```

To find out whether any of the preferred set of alternative formats will be applied to output from the REPORT command, enter the command:

```
QUERY FORMAT ;
```

A dictionary must be open for a SET or QUERY FORMAT command to be accepted. If you close a dictionary, any user defined formats held in a dictionary are automatically set off.

The SET FORMAT command is available in all environments.

## SET FORMAT Syntax

```
SET FORMAT [FOR] REPORT

  OF {[GENERIC] basic-member-type}...
     {member-type                }

     {AS preferred-set-format-name          } {;}
     {TO MP-AID mp-aid-format-name          } {.}
     {TO DICTIONARY dictionary-format-name  }
     {OFF                                   }
```

where *basic-member-type* is:

```
     {ITEMS              }
     {GROUPS             }
     {CONVENTIONAL-FILES }
     {MODULES            }
     {PROGRAMS           }
     {SYSTEMS            }

{QUERY} FORMAT {;}
{QU   }        {.}
{Q    }
```

## SET and QUERY FORMAT-TITLE

The SET and QUERY FORMAT-TITLE command specifies a printable character string which can be included in User Formatted Output (SET), and finds out the current setting (QUERY).

**Note:**

Any characters are taken as part of the string, including Manager Products terminators.

Use the SET FORMAT-TITLE command to specify a character string that can be included in user-formatted output; this is available if the DesignManager User Formatted Output facility is installed. Valid forms of the command are:

```
SET FORMAT-TITLE string
```

where *`string`* is a string of printable characters up to a maximum of 80 characters long. If a string in excess of 80 characters is specified, then it is truncated to 80.

The *`string`* is assigned to global parameter number ten (P10), and overwrites any existing value for this parameter. Whenever P10 is included in the FORMAT member used to specify the output layout, then the string is included in the output.

To cancel a character string setting and have no string specified, enter one of the following:

```
SET FORMAT-TITLE;
```

```
SET FORMAT-TITLE.
```

**Note:**

There must be no spaces between FORMAT-TITLE and the terminator. To find out the current setting, enter:

```
QUERY FORMAT-TITLE ;
```

The ASG-supplied *default* does not specify a string.

The SET FORMAT-TITLE command is available in all environments.

**Note:**

See the *ASG-DesignManager User Formatted Output* manual for details of global parameters.

### SET FORMAT-TITLE Syntax

```
SET FORMAT-TITLE string { ; }
                        { . }

{ QUERY } FORMAT-TITLE { ; }
{ QU    }              { . }
{ Q     }
```

## SET and QUERY INFOBANK-SELECT

The SET INFOBANK-SELECT command controls the display of the command keyword SELECT in the command area of an InfoBank panel (SET), and finds out the current setting (QUERY).

Use the SET INFOBANK-SELECT command to display or suppress the word SELECT in the Command Area of the InfoBank Screen. Valid forms of the command are:

```
SET INFOBANK-SELECT ON ;
```

which causes the display of the word SELECT.

```
SET INFOBANK-SELECT OFF ;
```

which causes the suppression of the word SELECT.

To find out the current setting, enter:

```
QUERY INFOBANK-SELECT ;
```

The ASG-supplied *default* is ON. This is to make it as easy as possible to use InfoBank. With SELECT set ON, you need only enter a number and press ENTER to be routed to the panel you want; with SELECT set OFF you must enter the word SELECT as well as the number.

The SET INFOBANK-SELECT command is available with the Basic Interactive facilities.

### SET INFOBANK-SELECT Syntax

```
SET INFOBANK-SELECT { ON  } { ; }
                    { OFF }
                    { . }

{ QUERY } INFOBANK-SELECT { ; }
{ QU    }                 { . }
{ Q     }
```

## SET and QUERY LINE-AREA

The SET LINE-AREA command controls the position of the Line Command Area on the screen (SET) and finds out the current setting (QUERY).

Use the SET LINE-AREA command to specify the position of the Line Command Area on the screen. Valid forms of the command are:

```
SET LINE-AREA LEFT ;
```

```
SET PREFIX-AREA LEFT ;
```

which positions the Line Command Area on the left of the screen.

```
SET LINE-AREA RIGHT ;
```

```
SET PREFIX-AREA RIGHT ;
```

which positions the Line Command Area on the right of the screen.

```
SET LINE-AREA OFF ;
```

```
SET PREFIX-AREA OFF ;
```

which removes the Line Command Area from the screen.

To find out the current setting, enter:

```
QUERY LINE-AREA ;
```

```
QUERY PREFIX-AREA ;
```

The ASG-supplied *default* is RIGHT.

The SET LINE-AREA command is available with the Basic Interactive Facilities.

**Note:**

If the Line Command Area is removed:

- The features that depend upon it will NOT be available. These include:
  - Full Screen Editor Line commands
  - User Defined Linear commands
  - Certain PDP capabilities.
- The width of the Data Area on the screen is increased by six characters.

### SET LINE-AREA Syntax

```
SET {LINE-AREA   } {LEFT  } {;}
    {PREFIX-AREA} {RIGHT} {.}
                  {OFF  }

{QUERY} {LINE-AREA   } {;}
{QU   } {PREFIX-AREA} {.}
{Q    }
```

## SET and QUERY LINE-END-CHARACTER

The SET LINE-END-CHARACTER command sets the Line End Character to a user-chosen character (SET), and finds out the current setting (QUERY).

Use the SET LINE-END-CHARACTER command in full-screen interactive environments to specify the character that represents a logical line end. This enables you to enter multiple Manager Products commands in the Command Area with each command statement or member definition statement separated from the next by the LINE-END-CHARACTER. Valid forms of the command are:

```
SET LINE-END-CHARACTER x ;
```

where *x* is any single character with the exception of the Manager Products terminators.

```
SET LINE-END-CHARACTER OFF ;
```

which cancels a previously set LINE-END-CHARACTER, and disables the multiple input of commands.

To find out the current setting, enter:

```
QUERY LINE-END-CHARACTER ;
```

The ASG-supplied *default* is OFF; that is, no LINE-END-CHARACTER is set.

The SET LINE-END-CHARACTER command is available with the Basic Interactive Facilities.

### Example

First set the line-end-character.

```
SET LINE-END-CHARACTER / ;
```

Then enter the following:

```
DICTIONARY DEMO / AUTHORITY MIC / STATUS LIVE
```

The three commands are executed when you press ENTER.

### Notes

- You must select a LINE-END-CHARACTER with care. Using an alphabetic character as a LINE-END-CHARACTER can cause a problem: if that character also occurs in a command, then it is read as the LINE-END-CHARACTER, the command is not recognized and processing is terminated. ASG recommends using a character such as / or & rather than an alphabetic character; that is, a character that is not normally used in any command input.
- Multiple input of commands is possible only if a LINE-END-CHARACTER has been defined.

### SET LINE-END-CHARACTER Syntax

```
SET LINE-END-CHARACTER {x   } { ; }
                       {OFF} { . }

{QUERY} LINE-END-CHARACTER { ; }
{QU   }                    { . }
{Q    }
```

## SET and QUERY LINEAR-RETENTION

The SET LINEAR-RETENTION command sets the Linear Retention capability on or off (SET), and to find out the current setting (QUERY).

Use the SET LINEAR-RETENTION command to retain a line command in the Line Command Area, after it has been executed. Valid forms of the command are:

```
SET LINEAR-RETENTION ON ;
```

which causes subsequent line commands to be retained, and a terminator to be inserted to show that it has been executed. The cursor is positioned under the last line command executed; press ENTER to return it to the Command Area.

```
SET LINEAR-RETENTION OFF ;
```

which causes subsequent line commands to be automatically deleted from the Line Command Area after execution.

To find out the current setting, enter:

```
QUERY LINEAR-RETENTION ;
```

The ASG-supplied *default* is OFF.

The SET LINEAR-RETENTION command is available with the User Defined Commands Facility.

**Note:**

SET LINEAR-RETENTION ON will not affect Full Screen Editor line commands; these are always deleted from the Line Command Area after execution.

### SET LINEAR-RETENTION Syntax

```
SET LINEAR-RETENTION {ON } {;}
                     {OFF} {.}

 {QUERY} LINEAR-RETENTION {;}
 {QU   }                  {.}
 {Q    }
```

## SET and QUERY LIST-SHIFT

The SET LIST-SHIFT command specifies whether the display of member names in output from a LIST command is to be shifted left (SET), and finds out the current setting (QUERY).

Use the SET LIST-SHIFT command to shift the display of member names in output from a LIST command.

Member names which have special characters, for example space characters, must be delimited if they are to be processed by Linear commands. The LIST-SHIFT command is used when additional space is required to insert the delimiters. Valid forms of the command are:

```
SET LIST-SHIFT OFF ;
```

In subsequent lists, the member names are indented two spaces to the right of the heading LIST OF MEMBERS.

```
SET LIST-SHIFT ON ;
```

In subsequent lists, the member names are aligned with the heading LIST OF MEMBERS. This shift to the left creates another two spaces between the MEMBER NAME and the TYPE.

To find out the current setting, enter:

```
QUERY LIST-SHIFT ;
```

The ASG-supplied *default* is OFF.

The SET LIST-SHIFT command is available in all environments.

### Example

```
LIST OF MEMBERS
  MEMBER NAMETYPE
  EMPLOYEE-TELEPHONE-NUMBERS LIST1ITEM
```

Because the member name contains a space (before LIST1), it must be delimited in order to be processed by Linear commands.

Delimiters can be added to the names in a list by the SWITCH NAME-CONCATENATION command. However, if the name is 31 or 32 characters long, it is truncated when the delimiters are added.

```
LIST OF MEMBERS
  MEMBER NAMETYPE
  'EMPLOYEE-TELEPHONE-NUMBERS LIS'ITEM
```

With SET LIST-SHIFT ON, the member names are shifted to the left, and the name is not truncated when the delimiters are added.

```
LIST OF MEMBERS
  MEMBER NAMETYPE
  'EMPLOYEE-TELEPHONE-NUMBERS  LIST1'ITEM
```

### SET LIST-SHIFT Syntax

```
SET LIST-SHIFT {ON } { ; }
               {OFF} { . }

{QUERY} LIST-SHIFT { ; }
{QU   }            { . }
{Q    }
```

## SET and QUERY LOOKASIDE-RETENTION

The SET LOOKASIDE-RETENTION command specifies whether Lookaside Buffers are to be retained up to the maximum buffer count despite subsequent EDIT or UPDATE commands (SET), and finds out the current setting (QUERY).

Use the SET LOOKASIDE-RETENTION command to retain lookaside buffers. Valid forms of the command are:

```
SET LOOKASIDE-RETENTION ON ;

SET BROWSE-RETENTION ON ;

SET LA-RETENTION ON ;
```

which cause any current lookaside buffers to be retained (up to the maximum buffer count) when you enter an EDIT or UPDATE buffer.

```
SET LOOKASIDE-RETENTION OFF ;

SET BROWSE-RETENTION OFF ;

SET LA-RETENTION OFF ;
```

which cause any current lookaside buffers to be automatically deleted when you enter an EDIT or an UPDATE command.

To find out the current setting, enter:

```
QUERY LOOKASIDE-RETENTION ;

QUERY BROWSE-RETENTION ;

QUERY LA-RETENTION ;
```

The ASG-supplied *default* is OFF.

The SET LOOKASIDE-RETENTION command is available with the Extended Interactive Facility.

### SET LOOKASIDE-RETENTION Syntax

```
SET {LOOKASIDE-RETENTION} {ON} {;}
    {BROWSE-RETENTION    } {OFF} {.}
    {LA-RETENTION        }

{QUERY} {LOOKASIDE-RETENTION} {;}
{QU   } {BROWSE-RETENTION   } {.}
{Q    } {LA-RETENTION       }
```

## SET and QUERY NUMBERS

The SET NUMBERS command sets the Numbers feature for source lines of dictionary members on or off (SET), and finds out the current setting (QUERY).

If the Numbers feature is set off, the source line numbers of a dictionary member during update are not displayed and are managed automatically. If the Numbers feature is set on and you update an existing dictionary member, an eight digit line number is displayed preceding each line in the Update Buffer. The management of source line numbers is entirely under user control. When the updated member is filed, the lines in the member are resequenced into line number order.

To set the feature on, enter the command:

```
SET NUMBERS ON ;
```

To set the feature off, enter the command:

```
SET NUMBERS OFF ;
```

To find out whether the feature is set on or off, give the command:

```
QUERY NUMBERS ;
```

**Note:**

The following effects if the Numbers feature is set on:

- If you are creating a new dictionary member, line numbers are not displayed. Source lines are automatically incremented by 100.
- If you are updating an existing member and insert one or more new lines with the A Line Command or the LADD command, 00000... is inserted before each inserted line. The source line number must be typed in before the updated member is filed.
- If you copy or move lines, the source line numbers are also copied or moved. When the lines are inserted, you should update the source line numbers. If there are two lines with the same line number, the first is overwritten by the second.

The ASG-supplied *default* is OFF.

The SET NUMBERS command is available with the Extended Interactive Facility.

## SET NUMBERS Syntax

```
SET NUMBERS {ON } {;}
            {OFF} {.}

{QUERY} NUMBERS {;}
{QU   }         {.}
{Q    }
```

# SET and QUERY OUTPUT-EDIT

The SET OUTPUT-EDIT command determines the buffer which is to be addressed by an Executive Routine (SET), and finds out the current setting (QUERY).

The editor sub-commands (such as FIND and DELETE) and other Manager Products commands (such as HOLD and CLEAR) operate by referencing a ControlManager buffer. Additionally, some executive language System Variables (such as &BUFN, &COLO, &CURL, &LINC, and &LINO) are assigned using certain attributes of this ControlManager buffer. If these commands and System Variables are to be used within an Executive Routine there are two alternative buffers which may be addressed, that is:

- The buffer which was current before the Executive Routine was invoked, or
- The buffer which holds any output generated from within the Executive Routine.

You may choose which buffer is to be addressed by using the SET OUTPUT-EDIT command. Valid forms of the command are:

```
SET OUTPUT-EDIT ON ;

SET BROWSE-EDIT ON ;

SET OUTPUT-EDIT OFF ;

SET BROWSE-EDIT OFF ;
```

If OUTPUT-EDIT is set to OFF then the buffer which was current before the Executive Routine was invoked will be addressed.

If OUTPUT-EDIT is set to ON then the buffer which holds any output generated by the Executive Routine will be addressed.

If OUTPUT-EDIT is set to ON then you may use the ControlManager editor commands to manipulate the contents of the buffer even if the buffer is of a type which is normally protected from user modification (that is, Command Buffers, Lookaside Buffers, and InfoBank Buffers).

If OUTPUT-EDIT is set to ON then any commands which create additional buffers, such as EDIT and UPDATE will be rejected.

To find out the current setting, enter:

```
QUERY OUTPUT-EDIT ;

QUERY BROWSE-EDIT ;
```

The default value of SET OUTPUT-EDIT is OFF.

The SET OUTPUT-EDIT command is available with the User Defined Commands Facility.

### SET OUTPUT-EDIT Syntax

```
SET {OUTPUT-EDIT} {ON } {;}
    {BROWSE-EDIT} {OFF} {.}

{QUERY} {OUTPUT-EDIT} {;}
{QU   } {BROWSE-EDIT} {.}
{Q    }
```

## SET and QUERY PERFORM-CHARACTER

The SET PERFORM-CHARACTER command sets the Perform Character for PERFORM commands and COMMAND-STREAM members (SET), and finds out the current setting (QUERY).

By default an asterisk (*) is used to indicate that the PERFORM command is to apply to each member in a specified list. For example:

```
PERFORM 'PRINT *' ONLY COM-CUST ;
```

prints the contents of every member in the dictionary whose name begins with the characters CON-CUST. In this case * acts as the Perform Character. The Perform Character can also appear in COMMAND-STREAM members.

You can change the * character to another character by entering the command:

```
SET PERFORM-CHARACTER x ;
```

where *x* is a delimited or undelimited character.

To find out what character is currently specified, enter:

```
QUERY PERFORM-CHARACTER ;
```

The SET PERFORM-CHARACTER command is available in all environments.

### SET PERFORM-CHARACTER Syntax

```
SET PERFORM-CHARACTER character {;}
                                {.}

{QUERY} PERFORM-CHARACTER {;}
{QU   }                   {.}
{Q    }
```

## SET and QUERY PF KEYS

The SET PF KEYS command sets a PF Key to a command (SET), and finds out the current settings (QUERY).

You can set the Program Function (PF) keys of your terminal so that pressing one of the keys has the same effect as entering a command. For example:

```
SET PFnn command ;
```

where *nn* is the number of the key to be set and *command* is the command it is to perform.

The `SET PFnn` command is available with the Basic Interactive Facilities.

### Immediate and Delayed Execution

You can specify the keyword IMMEDIATE, in which case the command to be performed is executed immediately. For example:

```
SET PFnn IMMEDIATE command ;
```

Alternatively, you can specify DELAY, in which case the command to be performed is not executed immediately. Instead, it is displayed in the Command Area, and you execute it by pressing ENTER. This means you can edit the command before you execute it. For example:

```
SET PFnn DELAY command ;
```

If neither DELAY nor IMMEDIATE is specified, the command to be performed is executed immediately; that is, the default is IMMEDIATE.

### Recalling Last Command Issued

If you give the command:

```
SET PFnn RECALL ;
```

pressing PF key *nn* causes the last command to be redisplayed in the Command Area. If the key is pressed again, the command before that is redisplayed, and so on. The exception is the AUTHORITY command which, for security reasons, is suppressed. This facility is very useful when a sequence of commands has to be given several times or to correct errors. (See also "QUERY RECALL-BUFFER" on page 186.)

### Passing Values to the PF Key Setting

If you wish to pass values to the PF key setting from the Command Area, enter:

```
SET PFnn SUBSTITUTE command * ;
```

The command to be performed is executed immediately you press the PF key.

The SUBSTITUTE keyword allows you to modify a command associated with a given PF key without having to change the PF key setting. If you specify a substitution character (*) when setting the PF key, any data you subsequently enter in the Command Area is substituted at the point indicated by the substitution character.

For example, if you want to vary the number of lines you scroll your text upwards, enter:

```
SET PF2 SUBST UP * ;
```

The numeric value you subsequently key in the Command Area is passed to the PF key setting when you press PF2 and the screen scrolls up that number of lines.

If you do not specify an asterisk in a PF key setting that uses the SUBST keyword, any data you enter in the Command Area is ignored when you press the PF key and the command to which the PF key is set is processed instead, using default values for command variables. For example, if you fail to specify an asterisk for the number of lines to scroll in the above example, the default setting for the UP command is one. Thus, text scrolls up one line when you press PF2, regardless of what you enter in the Command Area.

## Querying PF Key Settings

To find out the settings of your PF keys, enter:

```
QUERY PFKEYS ;
```

## SET PF KEYS Syntax

```
>>──── SET PFnn ──┬──────────────┬──command──┬──┬─ ; ─┬──────────────>><
                  ├── DELAY ─────┤           │  └─ . ─┘
                  ├── IMMEDIATE ─┘           │
                  ├── SUBSTITUTE command * ──┤
                  └── RECALL ────────────────┘
>>──── QUERY ──── PFKEYS ──────────────────────────┬─ ; ─┬──────────>><
                                                   └─ . ─┘
```

In the syntax, DELAY and IMMEDIATE may be abbreviated down to three characters; SUBSTITUTE may be abbreviated to SUBST; QUERY may be abbreviated to QU or Q; and PFKEYS may be abbreviated down to PF.

## SET and QUERY PRINT-DELIMITERS

The SET QUERY PRINT-DELIMITERS command sets the PRINT OF ... / END OF PRINT delimiters for prints of dictionary and MP-AID members on or off (SET), and finds out the current setting (QUERY).

If the Print Delimiter feature is set on, output from the PRINT, BULK PRINT, and MP-AID PRINT commands is preceded by the delimiter:

```
PRINT OF ...
```

and followed by the delimiter:

```
END OF PRINT
```

If the feature is set off, these delimiters are not output.

To set the feature on, enter the command:

```
SET PRINT-DELIMITERS ON ;
```

To set it off enter the command:

```
SET PRINT-DELIMITERS OFF ;
```

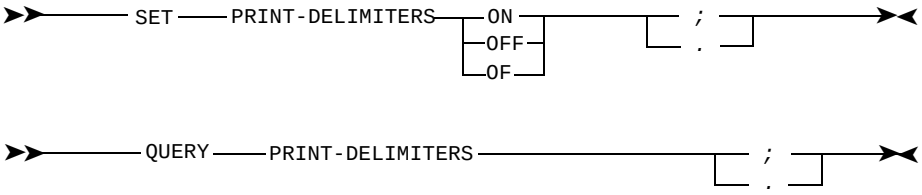
To find out whether the feature is on or off, enter the command:

```
QUERY PRINT-DELIMITERS ;
```

The ASG-supplied *default* is ON.

The SET PRINT-DELIMITERS command is available in all environments.

### SET PRINT-DELIMITERS Syntax




In the syntax, QUERY may be abbreviated to QU or Q, and PRINT-DELIMITERS may be abbreviated down to PRINT-D.

# SET and QUERY PRINT-SHIFT

The SET PRINT-SHIFT command sets the output from PRINT and BULK PRINT commands so that leading spaces and/or source line numbers can be displayed or suppressed (SET), and finds out the current setting (QUERY).

Use the SET PRINT-SHIFT command to control the position on the screen of output from PRINT and BULK PRINT commands. Valid forms of the command are:

```
SET PRINT-SHIFT OFF ;
```

which causes output from subsequent PRINT and BULK PRINT commands to contain leading spaces and source line numbers.

```
SET PRINT-SHIFT ON ;
```

which causes output from subsequent PRINT and BULK PRINT commands to have leading spaces removed.

```
SET PRINT-SHIFT NOSEQ ;
```

which causes output from subsequent PRINT and BULK PRINT commands to have leading spaces and source line numbers removed.

To find out the current setting, enter:

```
QUERY PRINT-SHIFT ;
```

The ASG-supplied *default* is OFF.

The SET PRINT-SHIFT command is available in all environments.

## SET PRINT-SHIFT Syntax

```
SET PRINT-SHIFT { ON    } { ; }
                { OFF   } { . }
                { NOSEQ }

{ QUERY } PRINT-SHIFT { ; }
{ QU    }             { . }
{ Q     }
```

## SET and QUERY REVISION-BARS

The SET REVISION-BARS command displays or suppresses the indication of changes to the text of an InfoBank panel by means of a Revision Bar or a Deleted Line Indicator in the left-hand column (SET), and finds out the current setting (QUERY).

As supplied by ASG, InfoBank Panel members have a Revision Bar (|) or Deleted Lines Indicator (_) in column one to show a change made since the previous release of InfoBank. However, you can use the SET REVISION-BARS command to display or suppress Revision Bars and Deleted Lines Indicators. Valid forms of the command are:

```
SET REVISION-BARS ON ;
```

which causes the display of Revision Bars and Deleted Lines Indicators in subsequent InfoBank panels.

```
SET REVISION-BARS OFF ;
```

which causes the suppression of Revision Bars and Deleted Lines Indicators in subsequent InfoBank panels.

To find out the current setting, enter:

```
QUERY REVISION-BARS ;
```

The ASG-supplied *default* is OFF.

The SET REVISION-BARS command is available in all environments.

If User Defined InfoSystem is installed you can record the changes you make to InfoBank panels by placing Revision Bars and Deleted Lines Indicators in your INFOBANK-PANEL members before they are constructed to the MP-AID.

### SET REVISION-BARS Syntax

```
SET REVISION-BARS {ON } { ; }
                  {OFF} { . }

{QUERY} REVISION-BARS { ; }
{QU   }               { . }
{Q    }
```

## SET and QUERY SCALE

The SET SCALE command sets the Scale feature of the General Purpose Screen on or off (SET), and finds out the current setting (QUERY).

If you give the command:

```
SET SCALE ON ;
```

a scale of column positions is displayed at the top of the screen.

If you give the command:

```
SET SCALE OFF ;
```

details of the current dictionary, status (if either of the ControlManager Status facilities is installed) and the numbers of the first and last columns being viewed are displayed.

To find out whether the scale is on or off, enter:

```
QUERY SCALE ;
```

The SET SCALE command is available with the Basic Interactive Facilities.

### SET SCALE Syntax

```
SET SCALE {ON } { ; }
          {OFF} { . }

{QUERY} SCALE { ; }
{QU   }       { . }
{Q    }
```

## SET and QUERY SCREEN-REFRESH

The SET SCREEN-REFRESH command sets the Screen Refresh capability to scroll continuously through output as it is being generated, or sets it off (SET), and finds out the current setting (QUERY).

When output from a command exceeds the capacity of your screen, only the first screenful is displayed; you can see the rest of the output by scrolling after completion of the command.

The SET SCREEN-REFRESH command initiates the automatic scrolling of output as it is generated, the screen being continuously refreshed after a specified number of lines have been generated.

```
SET SCREEN-REFRESH OFF ;
```

which causes only the first screenful of output to be displayed.

```
SET SCREEN-REFRESH n ;
```

where *n* is a number of lines. This specifies that for every *n* lines generated, the screen is automatically refreshed to display the latest output. The minimum value that can be specified is 2. If 1 is specified, then 2 is assumed.

To find out the current selling, enter:

```
QUERY SCREEN-REFRESH ;
```

The ASG-supplied *default* is OFF.

The SET SCREEN-REFRESH command is available with the Extended Interactive Facility.

### SET SCREEN-REFRESH Syntax

```
SET SCREEN-REFRESH {n   } { ; }
                   {OFF}  { . }

{QUERY} SCREEN-REFRESH { ; }
{QU   }                { . }
{Q    }
```

## SET and QUERY SCROLL-LIMIT

The SET SCROLL-LIMIT command sets a value for the Scroll Limit capability (retention of lines in Command Mode Buffer), or sets it off (SET), and finds out the current setting (QUERY).

By default, output from a command entered in Command Mode overwrites the previous Command Mode Buffer unless the command is prefixed by the BROWSE or LOOKASIDE commands. However, you can cause *n* lines of the previous Command Mode Buffer to be retained and inserted into the new buffer followed by the output from the new command. To set this feature on, enter the command:

```
SET SCROLL-LIMIT n ;
```

where *n* is any number, subject to the limits on your allocation of virtual storage. The new Command Mode Buffer is displayed from the start of the new output.

**Note:**

The Output Line Limit feature limits the total size of the buffer including lines included in the buffer by virtue of the Scroll Limit feature.

For details refer to QUERY OUTPUT-LINE-LIMIT.

You can set the Scroll Limit feature off by entering the command:

```
SET SCROLL-LIMIT OFF ;
```

To find out whether the feature is set on or off, and, if set on, the limit set, enter:

```
QUERY SCROLL-LIMIT ;
```

The SET SCROLL-LIMIT command is available with the Extended Interactive Facility.

### SET SCROLL-LIMIT Syntax

```
SET SCROLL-LIMIT {n   } {;}
                 {OFF} {.}

{QUERY} SCROLL-LIMIT {;}
{QU   }              {.}
{Q    }
```

## SET and QUERY SOS-DUMP

The SET SOS-DUMP command initiates a dump (SET), and finds out the current setting (QUERY). The SET command should only be used under ASG direction.

If ControlManager becomes Short On Storage (SOS) during a Manager Products session, then the command currently processing is terminated and a message displays. You can use the SOS-DUMP command to initiate a dump; this may help to indicate how the shortage occurred. Valid forms of the command are:

```
SET SOS-DUMP ON ;
```

which initiates a dump.

```
SET SOS-DUMP OFF ;
```

which sets the SOS-DUMP command off.

To find out the current setting, enter:

```
QUERY SOS-DUMP ;
```

### SOS-DUMP Syntax

```
SET SOS-DUMP {ON } {;}
             {OFF} {.}

{QUERY} SOS-DUMP {;}
{QU   }          {.}
{Q    }
```

## SET and QUERY TABS
## SET and QUERY TAB-CHARACTER

The SET TABS command specifies tab positions (SET), and finds out the current settings (QUERY). The SET TAB-CHARACTER specifies the tab character (SET), and finds out the current setting (QUERY).

Text inserted in an Edit or Update Buffer is normally accepted unchanged. However you can format the text by using software tabs.

For example, assume that you want to enter the following text:

```
Member-nameType
XBFH0000 USER
TYPO0000 INFO
GLOWBAL  INFO
```

You can format the text into columns by using tabs.

First you need to set the tab positions - that is, the number of the column in which the first character of each column of text is to appear. In the example the tab positions would be set by entering:

```
SET TABS 6 20
```

The tab positions can be any numbers in the range 1 through to 255. Each number must be separated from the next by at least one space. Other separators such as commas are not permitted. The numbers must be in ascending order. You can find out what the current tab positions are by entering the command:

```
QUERY TABS
```

Then you key in the text. Instead of inserting spaces between each column entry, key in the tab character. Assuming that + is the tab character, the first line of the example would be keyed in as follows:

```
+Member-name+Type
```

When you press ENTER, the system will automatically move the text across so that it appears in the correct column positions on the screen. The tab character itself is omitted.

ASG does not supply a default tab character. If you want to set one, enter:

```
SET TAB-CHARACTER x
```

where *x* is any character. You can find out what the tab character is by entering the command:

```
QUERY TAB-CHARACTER
```

**Note:**

If the number of the first column displayed on screen is greater than a tab setting, then that tab setting is ignored. For example, if the first column displayed on screen is column 10 and you enter:

```
SET TABS 5 15
```

the first tab position will be ignored, and the text will be aligned in column 15.

The command:

```
SET SCALE ON
```

sets a scale at the top of the screen to help you work out column positions.

The SET TABS and SET TAB-CHARACTER commands are available with the Extended Interactive Facility.

### SET TABS and SET TAB-CHARACTER Syntax

```
SET TABS [nn] [nn]... { ; }
                      { . }

SET TAB-CHARACTER x { ; }
                    { . }

{ QUERY } TABS { ; }
{ QU    }      { . }
{ Q     }

{ QUERY } TAB-CHARACTER { ; }
{ QU    }               { . }
{ Q     }
```

## SET and QUERY UPDATE-OUTPUT

The SET UPDATE-OUTPUT command specifies whether the updated/altered source record of a dictionary member and any messages relating to it are displayed in a Lookaside Buffer when a FILE, RFILE, or SFILE command is entered (SET), and finds out the current setting (QUERY).

When you FILE or RFILE an existing dictionary member, the updated source record and any messages relating to it may be displayed in a Lookaside Buffer. Using the SET UPDATE-OUTPUT command you can decide when this output is to be displayed.

There are three options:

```
SET UPDATE-OUTPUT LONG ;

SET UPDATE-OUTPUT WARN ;

SET UPDATE-OUTPUT ERROR ;
```

Depending on the setting, the source record and any relevant messages are displayed:

- Whenever the command is executed (LONG)
- Only when execution generates warnings or errors (WARN)
- Only when execution generates errors (ERROR).

When you SFILE an existing dictionary member, the altered source record and any messages relating to it are displayed in a Lookaside Buffer only when UPDATE-OUTPUT is set to LONG. (The output from the insertion of a new member would be displayed in the message line.)

To find out what the setting is, enter:

```
QUERY UPDATE-OUTPUT ;
```

The ASG-supplied *default* is WARN.

The SET UPDATE-OUTPUT command is available with the Extended Interactive Facility.

### SET UPDATE-OUTPUT Syntax

```
SET UPDATE-OUTPUT {LONG  } { ; }
                  {WARN  } { . }
                  {ERROR }

{QUERY} UPDATE-OUTPUT { ; }
{QU   }               { . }
{Q    }
```

## SET and QUERY UPPER-CASE

The SET UPPER-CASE command sets the Upper Case capability (conversion of lower case alphabetic characters) on or off (SET), and finds out the current setting (QUERY).

You can cause all lower case alphabetic characters entered at the terminal to be translated to upper case characters by entering the command:

```
SET UPPER-CASE ON ;
```

You can set this feature off by giving the command:

```
SET UPPER-CASE OFF ;
```

**Note:**

If you accidentally set the Upper Case feature on and convert all lower case characters to upper case, you cannot convert the characters back again simply by setting the feature off.

You can find out whether this feature has been set on or off by giving the command:

```
QUERY UPPER-CASE ;
```

The SET UPPER-CASE command is available with the Basic Interactive Facility.

The ASG-supplied *default* is OFF.

### SET UPPER-CASE Syntax

```
SET UPPER-CASE {ON } { ; }
               {OFF} { . }

{QUERY} UPPER-CASE { ; }
{QU   }            { . }
{Q    }
```

## SET and QUERY VERIFY

The SET VERIFY command must only be used under direction of ASG Support staff. Valid forms of the command are:

```
SET VERIFY ON ;

SET VERIFY OFF ;
```

To find out what the current setting is, enter:

```
QUERY VERIFY ;
```

The ASG-supplied *default* is OFF.

### SET VERIFY Syntax

```
SET VERIFY {ON } { ; }
           {OFF} { . }

{QUERY} VERIFY { ; }
{QU   }        { . }
{Q    }
```

# SFILE

The SFILE command adds or amends the source record of a dictionary member without attempting to encode it.

Use SOURCE-FILE to enter the contents of an Update Buffer into the dictionary without generating an encoded record.

If you have updated an existing member, enter:

```
SOURCE-FILE ;
```

or

```
SFILE ;
```

Your changes are then applied to the member's source record in the dictionary. However, the encoded record of the member (if there is one) in the data entries dataset is not changed.

If you have created a new member, enter:

```
SOURCE-FILE dictionary-member-name ;
```

or

```
SFILE dictionary-member-name ;
```

Records for this new member are then added to the source dataset of the dictionary. No encoded record is generated.

The *dictionary-member-name* can have a maximum of 32 characters. It must not be the same as that of any other member of the current dictionary.

If an error or warning message is generated, then this is displayed in the message line.

You can tailor the environment so that the source of the member is displayed in a Lookaside Buffer when you successfully enter SFILE.

Refer to "SET and QUERY UPDATE-OUTPUT" on page 232 for details of SET UPDATE OUTPUT.

SFILE is available with the Extended Interactive Facility.

## SFILE Syntax

```
{SOURCE-FILE} [dictionary-member-name] {;}
{SFILE       }                         {.}
```

## SKIP

The SKIP command causes the next line of printed output, if directed to a line printer, to be printed at the head of a new page.

To cause output to a line printer to skip to the top of a new page, enter:

```
SKIP ;
```

The line of output following the SKIP command is printed at the top of the next page.

Output may be to magnetic tape or disk. If this is then output to a line printer, SKIP will work as described above unless the print program determines otherwise.

If output is to a terminal then SKIP has no effect.

### SKIP Syntax

```
SKIP { ; }
     { . }
```

## SPACE

The SPACE command causes the next line of printed output, if directed to a line printer, to be printed after a stated number of blank lines.

To insert *n* blank lines into output to a line printer, enter:

```
SPACE n ;
```

where *n* is an unsigned integer in the range 1 to 99; if you don't specify *n* then a default value of one is assumed.

The next line of output is printed:

- After *n* blank lines
- At the top of a new page

whichever involves the least paper movement.

Output may be to tape or disk. If this output is then output to a line printer, SPACE will work as described above unless the print program determines otherwise.

If output is to a terminal then SPACE has no effect.

If the SPACE command is used as a free standing command, it is first displayed or printed as input on the primary output device; then the blank lines are inserted.

SPACE is intended to be used only when incorporated into:

- A DataManager PERFORM command
- A ControlManager POST or MAIL command

### DataManager PERFORM Command

The SPACE command itself is not printed unless the keyword PRINT is specified.

### ControlManager POST or MAIL command

If AND is specified in the POST or MAIL command, the SPACE command is first output on the primary output device; then the blank lines are inserted.

**Note:**

The SPACE command has no effect on the POST/MAIL output file.

If AND is not specified in the POST or MAIL command, the SPACE command has no effect.

### SPACE Syntax

```
SPACE [n] { ; }
          { . }
```

## SWITCH MESSAGES

The SWITCH MESSAGES command enables the output of all or selected informatory and/or warning messages to be switched off and on.

There are five types of messages issued by Manager Products:

| | |
|---|---|
| **I** | Informatory |
| **W** | Warning |
| **E** | Error |
| **C** | Critical |
| **S** | Severe |

The last character in the message-id indicates the type of message; for example:

```
DM01896W
```

is a Warning message.

If you want, you can suppress the display of Informatory and Warning messages. You can switch off:

- All messages
- Only informatory messages
- Only warning messages
- A particular message
- All messages in a particular range
- All messages except particular ones

You can't switch off Error, Critical, or Severe messages.

## Examples

To switch off all Informatory and Warning messages, enter:

```
SWITCH OFF MESSAGES ;
```

To switch off all Warning messages, enter:

```
SWITCH OFF MESSAGES LEVELS W ;
```

To switch off all Informatory messages, enter:

```
SWITCH OFF MESSAGES LEVELS I ;
```

You can switch off a particular message by including the message number in the command. For example, to switch off the Warning message DMOlS96W, enter:

```
SWITCH OFF MESSAGE LEVEL W NUMBER 1896 ;
```

And you can switch off all the messages in a particular range:

```
SWITCH OFF MESSAGES LEVEL W NUMBERS m TO n ;
```

where *m* and *n* are unsigned integers in the range 1 to 32767, and *n* must be greater than *m*.

For example, to switch off all Warning messages DM00100W through DM00200W, and DM00500W through DM00700W, and all Informatory messages DM00800I through DM00900I, enter:

```
SWITCH OFF MESSAGES LEVEL W NUMBERS 100 TO 200, 500 TO 700
LEVELS I NUMBERS 800 TO 900 ;
```

To switch off all messages (both Informatory and Warning) 100 through 200, and 500 through 700, but only Informatory messages 800 through 900, enter:

```
SWITCH OFF MESSAGES NUMBERS 100 TO 200, 500 TO 700
LEVELS I NUMBERS 800 TO 900 ;
```

If Warning messages have already been switched off, and you also want to switch off Informatory messages DM00200I through DM00500I, enter:

```
SWITCH OFF MESSAGES ALSO LEVELS I NUMBERS 200 TO 500 ;
```

If you don't specify ALSO, then this command will override the previous one (to switch off all Warning messages): all Warning messages will be switched back on and only the Informatory messages DM00200I through DM00500I will be switched off.

You can switch off all Warning and/or Informatory messages except a particular one. For example, to switch off all Warning messages except DM00097W, enter the two commands:

```
SWITCH OFF MESSAGES LEVEL W ;

SWITCH ON MESSAGE NUMBER 97 ;
```

You can switch on all the messages which have been switched off:

```
SWITCH ON MESSAGES ;
```

and you can switch on a particular level, number or range of messages, for example:

```
SWITCH ON MESSAGES LEVELS W ;

SWITCH ON MESSAGE LEVEL W NUMBER 1896 ;

SWITCH ON MESSAGES LEVEL W NUMBERS 100 TO 200, 500 TO 700
LEVEL I NUMBERS 800 TO 900 ;
```

**Note:**

A SWITCH MESSAGES command is accepted whether or not a dictionary is open.

The effect of a SWITCH MESSAGES command is not changed by any subsequent DICTIONARY command.

## SWITCH MESSAGES Syntax

```
SWITCH {OFF} MESSAGES [ALSO] [LEVELS {I [,W]} ]
       {ON}                          {W [,I]}

          [NUMBERS m [TO n] [,m [TO n]]...]]... {;}
                                                {.}
```

## SWITCH NAME-CONCATENATION

The SWITCH NAME-CONCATENTATION command enables alternative ways of identifying members in output to be switched on and off.

In output from any of the following Manager Products commands, members are usually identified by their NAME:

- DOES
- GLOSSARY
- LIST
- REPORT
- WHAT (except WHAT IS)
- WHICH
- WHOSE

However, using SWITCH NAME-CONCATENATION you can identify members by their NAME, ALIAS, and all or part of their DESCRIPTION or NOTE clause. If you specify two or more of these *identification-elements* (NAME, ALIAS, DESCRIPTION, and NOTE) you can also specify whether the elements are concatenated or separated; and if separated you can specify what character is used as the separator. And you can delimit the identification-element(s).

The NAME identification-element is taken from the member's source data entries record, whereas the ALIAS, DESCRIPTION, and NOTE identification-elements are taken from the member's data entries record. Non-encoded members have a source data entries record but no data entries record, and so are always identified by NAME.

If you do not specify SEPARATOR c or NO-SEPARATOR, then a space is assumed as the separator.

If you specify a delimiter then the identification is delimited, and so are:

- Aliases and catalog classifications in the output
- User defined indexed attributes in output from LIST. This is available if the User Defined Syntax facility is installed

If the identification is longer than 32 characters (including separators and delimiters), then it is truncated to 32 characters by the removal of characters from the right hand end (excluding the closing delimiter).

If an alias, catalog classification or user indexed attribute (including delimiters) is longer than 79 characters, then it is truncated to 79 characters by the removal of characters from the right hand end (excluding the delimiter).

If any identification-elements specified in a SELECT clause are not available they are omitted from the member's identification. However, if none of the identification-elements are available, then the identification defaults to the member name.

To switch off the NAME-CONCATENATION, enter:

```
SWITCH OFF NAME-CONCATENATION;
```

The settings which previously applied are not lost, and can be applied again if you enter:

```
SWITCH ON NAME-CONCATENATION ;
```

However, if a new SWITCH NAME-CONCATENATION command with a SELECT clause is entered, any previous settings are lost.

## Examples

To identify members by their alias, enter:

```
SWITCH ON NAME-CONCATENATION SELECT ALIAS ;
```

To identify members by the contents of the first delimited string of the DESCRIPTION clause, enter:

```
SWITCH ON NAME-CONCATENATION SELECT DESCRIPTION LINE 1 ;
```

To identify members by the contents of the third delimited string of the NOTE clause, enter:

```
SWITCH ON NAME-CONCATENATION SELECT NOTE LINE 3 ;
```

To identify members by their COBOL alias, enter:

```
SWITCH ON NAME-CONCATENATION SELECT ALIAS COBOL ;
```

Any member that does not have a COBOL alias or is not encoded, will continue to be identified by its member name.

To identify members by the first line of their description, their name and first alias, and to separate each of these with / and delimit them with * enter:

```
SWITCH ON NAME-CONCATENATION
   SELECT DESCRIPTION LINE 1, NAME, ALIAS 1
   SEPARATOR / DELIMITER * ;
```

Then the members would be identified by:

*`description-first-string/member-name/first-alias`*

For any member without a DESCRIPTION clause or ALIAS clause, the relevant identification-element would be omitted from the identification. Thus members with neither of these clauses would be identified by:

*member-name*

Any aliases and catalog classifications appearing in output would also be delimited by asterisks.

**Note:**

A SWITCH NAME-CONCATENATION command is accepted only if a dictionary is open.

The effect of a SWITCH NAME-CONCATENATION command is not changed by any subsequent DICTIONARY command.

## SWITCH NAME-CONCATENATION Syntax

```
SWITCH {ON NAME-CONCATENATION [SELECT identification-element  } {;}
        {                      [,identification-element]...  } {.}
        {                      [{NO-SEPARATOR}]              }
        {                      [{SEPARATOR c }               }
        {                      [{DELIMITED}d]]               }
        {                      [{DELIMITER}                  }
        {OFF NAME-CONCATENATION                              }
```

where identification-element is:

```
{NAME                                  }
{ALIAS {alias-type}                    }
{      {number    }                    }
{{DESCRIPTION}   [LINE string-number]  }
{{NOTE       }                         }
```

## SWITCH OUTPUT

The SWITCH OUTPUT command enables output to be switched to an additional or alternative dataset.

To switch output from one device to another, enter:

```
SWITCH OUTPUT TO ddname [AND ddname] ;
```

SWITCH OUTPUT can only be used in CICS, CMS, TSO, Siemens Time Sharing Interface, and OS batch environments.

In CMS, TSO, Siemens Time Sharing Interface, and OS batch environments, *ddname* is the logical name used in OS job control statements to indicate the name of the external dataset (the physical file) to which output is to be written.

In CICS environments, *ddname* is any 4 character destination identification. If two output files are specified, one must be MPOUT. For example:

```
SWITCH OUTPUT TO MPRT AND MPOUT ;
```

This would cause output to be written to MPRT as well as the primary output device.

The effect of a SWITCH OUTPUT command is not changed by any subsequent DICTIONARY command.

For details of the SWITCH OUTPUT command in CICS environments, refer either to the *ASG-Manager Products Installation in DOS Environments* manual or to the *ASG-Manager Products Installation in OS Environments* manual.

## SWITCH OUTPUT Syntax

```
SWITCH OUTPUT TO ddname [AND ddname] { ; }
                                     { . }
```

# TEXT

The TEXT command outputs user-supplied text in the context of an Executive Routine, a PERFORM command, or a POST or MAIL command.

To insert text in output, enter:

```
TEXT 'text' [,'text']... ;
```

where *text* is a character string of not more than 255 characters. If a string is longer than 255 characters (after concatenation if appropriate), then that string and any following ones in that TEXT command are *not* output; instead an error message is output.

The delimiters round the strings are not output.

The text can be coded as a series of delimited character strings to be concatenated (joined together) when processed. For example:

```
TEXT 'This'' is'' an example';
```

would be output as:

```
This is an example
```

If a delimited string is preceded by a comma, then that string will start in the next print line or output record. For example:

```
TEXT 'This is another',' example';
```

would be output as:

```
This is another
example
```

If the TEXT command is used as a free standing command, it is first displayed or printed as input on the primary output device; then the text is displayed or printed.

TEXT is intended to be used only when incorporated into:

- A ControlManager EXECUTIVE
- A DataManager PERFORM command or COMMAND-STREAM member
- A ControlManager POST or MAIL command.

## ControlManager EXECUTIVE

The TEXT command enables user-specified text to be included in the output from the executed commands; the TEXT command itself is not printed unless ECHO is set on.

## DataManager PERFORM Command or COMMAND-STREAM Member

The TEXT command enables user-specified headings or text to be included in the output from the performed commands; the TEXT command itself is not printed unless the keyword PRINT is specified.

## ControlManager POST or MAIL Command

The TEXT command enables user-specified text or markers to be output as separate records to the POST/MAIL output file. Refer to the ControlManager User interface Facility manual for details.

## Example

Suppose that for each FILE defined in the dictionary we want to output:

- A standard ControlManager REPORT
- A list of all the programs that refer to that file
- The COBOL data description of that file

And we want headings before the list of programs and the COBOL descriptions. To do this, enter:

```
PERFORM 'REPORT *;',
   'TEXT"PROGRAMS REFERRING TO FILE *";',
   'WHICH PROGRAMS USE *;',
   'TEXT "COBOL DESCRIPTION OF FILE *";',
   'PRODUCE COBOL FROM * NOGEN PRINT;'
FILES;
```

**Note:**

The PRODUCE COBOL command is available only if the DataManager Source Language Generation facility is installed.

## TEXT Syntax

```
TEXT 'text' [,'text']... { ; }
                         { . }
```

# UP

The UP command moves the window on the text displayed on the screen up *n* lines.

To scroll backward one line, enter:

```
UP ;
```

To scroll backward *n* lines, enter:

```
UP n ;
```

If the Top of Data Delimiter is displayed as the top line in the Data Area, the command has no effect.

UP is available with the Extended Interactive Facility, and can be used in Command, Edit, Lookaside, and Update Modes, and in InfoSystem.

## UP Syntax

```
{UP} [n] { ; }
{U }     { . }
```

# UPDATE

The UPDATE command enters Update Mode and opens an Update Buffer, or updates an existing dictionary member.

You can use the Full Screen Editor to create new dictionary members and to update existing ones.

To create a new dictionary member, enter:

```
UPDATE ;
```

This opens a buffer in Update Mode into which you insert text. To update an existing dictionary member, enter:

```
UPDATE dictionary-member-name ;
```

This opens a buffer in Update Mode containing a copy of the source record of the named dictionary member; you can then update this.

If LOOKASIDE-RETENTION is set *off* and you enter an UPDATE command, any Lookaside Buffers currently open will be closed. If LOOKASIDE-RETENTION is set *on* and you enter an UPDATE command, any Lookaside Buffers currently open will be retained (up to the maximum buffer count).

To add the contents of the buffer to the dictionary use FILE, RFILE, or SFILE. To abandon the update without adding the contents to the dictionary use QUIT or XQUIT.

UPDATE is available with the Extended Interactive Facility.

### UPDATE Syntax

```
UPDATE [dictionary-member-name] { ; }
                                { . }
```

## WIPE

The WIPE command enables you to clear the current contents of the Scratchpad.

To clear the contents, enter:

```
WIPE ;
```

### WIPE Syntax

```
WIPE { ; }
     { . }
```

## XQUIT

The XQUIT command closes and deletes an Update or Edit Buffer which has been amended, without filing the amended member.

To leave an Update or Edit Buffer which has been changed in some way, enter:

```
XQUIT ;
```

The buffer is then deleted: if it contained a new member, this is not added to the dictionary or MP-AID; if it contained an existing member, the changes are not applied.

If you want to keep the changes, you must file the contents of the buffer.

XQUIT is available with the Extended Interactive Facility.

### XQUIT Syntax

```
XQUIT { ; }
      { . }
```

## ZONE

The ZONE command enables you to define the columns on the screen between which FIND, LOCATE, and CHANGE commands are to operate.

To define the ZONE, enter:

```
ZONE mm nn ;
```

where *mm* is the first column and *nn* is the last column of the zone. The ZONE setting is effective until it is re-set or you LOGOFF.

The ASG-supplied *default* is column 1 to column 255.

### ZONE Syntax

```
ZONE mm nn { ; }
           { . }
```

# 11 Selectable Units Available with ControlManager

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## ControlManager Selectable Units

The basic ControlManager capabilities are provided by the ControlManager Nucleus. Additional capabilities are provided by selectable units. These can be incorporated into the Nucleus to provide just those capabilities that your installation needs.

ControlManager itself provides a number of selectable units. The following are documented in this publication:

| Code | Facility Name | Other Facilities Required |
|---|---|---|
| CMR-FE01 | Extended Interactive Facility | CMR-CM01 and any of CMR-TP2, CMR-TP7, CMR-TP8, or CMR-TP11 |

A brief introduction to each of the following is given in this chapter:

| Code | Facility Name | Other Facilities Required |
|---|---|---|
| CMR-FE70 | TSO/ISPF Interface | CMR-CM01 |
| CMR-FE90 | Web Enabler | CMR-CM01, CMR-SF01 |
| CMR-FP30 | Functional Prompting | CMR-CM01, DSR-DS01 |
| CMR-SC05 | Systems Administrator's Environmental Control Facility | CMR-CM01 |
| CMR-SF01 | Manager Products Server Facility (MPSF) | CMR-CM01 |
| CMR-TP2 | CICS Interface | CMR-CM01 |
| CMR-TP4 | IMS/DC Interface | CMR-CM01 (OS) |
| CMR-TP6 | ROSCOE Interface | CMR-CM01 (OS) |
| CMR-TP7 | OS/TSO Interface | CMR-CM01 (OS) |
| CMR-TP8 | VM/CMS Interface | CMR-CM01 (CMS) |
| CMR-TP10 | DOS/VSE ICCF Interface | CMR-CM01 (DOS) |
| CMR-TP11 | Siemens Timesharing Interface | CMR-CM01 (Siemens) |
| CMR-UD05 | User Defined Commands | CMR-CM01 |
| CMR-UD10 | User Defined InfoSystem | CMR-CM01 |
| CMR-UI1 | User Interface | CMR-CM01 |
| CMR-WS01 | Workstation Interface | CMR-CM01, MVW-AD10, CMR-FE01, CMR-TP7 or CMR-TP8, DYR-DY01, DYR-TE00, DYR-TE13, DYR-TI00, DYR-TI13, DMR-DD1 |
| CMR-WS02 | Workstation Interface | CMR-CM01, MVW-EX10, CMR-FE01, CMR-TP7 or CMR-TP8, DYR-DY01, DMR-DD1 |

# Functional Prompting

The ControlManager Functional Prompting facility provides additional ease of use for DesignManager users in interactive environments (TSO or CMS).

If you issue an incomplete DesignManager command interactively, ControlManager will prompt you by outputting the word EXPECTING followed by a list of all the acceptable options for the next keyword or argument.

For example, if you enter the command identifier PLOT by itself, ControlManager prompts you with the options for the next acceptable keyword:

```
EXPECTING -
L.OGICAL-SCHEMA
R.ELATIONAL-SCHEMA
N.ETWORK-SCHEMA
```

where the period or full stop (.) in each keyword indicates the minimum unambiguous abbreviation of the keyword.

If you then enter `N` in response to the prompt, you are further prompted:

```
EXPECTING -
CL.USTER
CO.NSOLIDATED
U.SING
D.ETAILS
S.UMMARY
TERMINATOR
```

ControlManager will continue to prompt until the command is complete and can be processed.

# The Systems Administrator's Environmental Control Facility

With the Systems Administrator's Environmental Control Facility installed, the Systems Administrator can tailor the Manager Products environment and so:

- Provide a user-friendly environment to work in
- Enhance security
- Regulate usage of resources

This tailoring can start at the logon process. One of several logon conditions can be set when the facility is installed. For example, Logon Exit. This can be used (for example) to allow users logged on to CMS to access Manager Products without logging on again; the Logon Screen is bypassed, the Logon Identifier and password being provided by the exit.

When a user logs on, one or more profiles may be invoked. These profiles are used to tailor the environment that the user will operate in.

Global Profiles are usually applied to groups of users to establish, for example:

- That some commands are not available to certain groups
- Default PF key settings
- Default Report Formats for dictionary members

Once the Global Profiles (if any) are invoked, the user's Logon Profile (associated with the user's Logon Identifier) is invoked. As well as controlling access, the Logon Profile can be used to tailor the environment to suit a user's needs (or the Systems Administrator's). The Logon Profile can be used to:

- Tailor the environment by executing SET commands. Any Manager Products SET command may be included in the Profile including those normally restricted to the Systems Administrator.
- Invoke help levels (available with the User Defined InfoSystem installed)
- Select alternative output formats for dictionary members (available with the User Defined Output facility installed)
- Route into Panel Driven Processing

If the Extended Interactive Facility is also installed, users can be allowed to define their own profile: a User Defined Profile. The user may decide, for example, to reset some of the PF key functions, or to use further SET commands. The User Defined Profile is created as a USER-MEMBER on the MP-AID, and is the last profile executed when the user logs on.

The Systems Administrator can restrict the amount of space that USER-MEMBERs can take up on the MP-AID; this restriction might be included in a user's Logon Profile.

If the User Defined Commands facility is also installed, the Systems Administrator can set up Corporate Executive Routines. A Corporate Executive Routine is created as a series of commands and/or directives in an EXECUTIVE-ROUTINE member of the Manager Products Administration Dictionary, and then constructed onto the MP-AID as an EXECUTIVE member. Users can execute the commands and/or directives in the routine simply by entering the name of the EXECUTIVE member. A Corporate Executive Routine can contain commands normally restricted to Systems Administrators and Controllers.

The Systems Administrator can specify Access Control Levels and so control which users can execute any particular routine.

## Teleprocessing Interfaces

The following Teleprocessing Interface selectable units are provided by ControlManager:

- CICS Interface (CMR-TP2)
- IMS/DC Interface (CMR-TP4)
- Roscoe Interface (DMR-TP6)
- TSO Interface (CMR-TP7)
- CMS Interface (CMR-TP8)
- DOS/VSE ICCF Interface (CMR-TP10)
- Siemens Time Sharing Interface (CMR-TP11)
- TSO/ISPF Interface (CMR-FE70)

# User Defined Commands

The User Defined Commands facility has two main benefits: it allows you to store a sequence of instructions in an Executive Routine and then execute these instructions simply by entering the name of that routine as a command; and it enables the Systems Administrator to rename and disable Manager Products Primary commands.

A *Corporate Executive* Routine is one that can be executed by all users. (The Systems Administrator can specify who can execute a particular Routine by assigning it an Access Control Level.) It can contain:

- All Manager Products commands normally available to you
- Any User Defined Command directives (DO... END, GOTO, IF... THEN, etc.) These provide standard programming capabilities which can be used, for example, to control the sequence in which the commands in the Executive Routine are executed.
- Any non-restricted Manager Products commands which have been disabled
- Any SET commands normally restricted to the Systems Administrator.

With the Extended Interactive Facility installed you can create your own Executive Routines: *User Executive* and *Transient Executive* Routines. Unlike Corporate Executive Routines, these can only contain Manager Products commands and User Defined Command directives.

The Extended Interactive Facility also gives you the ability to execute the Routine as a Linear Command (by entering the name of the Routine in the Line Command Area), or as a Cursor Spatial Command (usually by assigning a PF key to the name of the Routine).

By renaming commands, the Systems Administrator can tailor Manager Products to suit your installation. For example, in non-English speaking countries, commands can be renamed so that they can be entered in your natural language. Commands can also be disabled, and thus restricted to certain users.

# User Defined InfoSystem

InfoSystem is supplied as part of the ControlManager Nucleus, for use both in interactive and batch environments. InfoSystem comprises InfoView, the software that runs InfoSystem, and InfoBank, the bank of information held in InfoSystem. The information is stored as INFOBANK members in the MP-AID, to which they are loaded from an MP-AID LOAD dataset on the installation tape. Each INFOBANK member is one panel that displays on your screen. A panel may be a single screen or several screens long.

When the User Defined InfoSystem facility is installed, InfoBank is additionally supplied as a saved source dataset of the ASG InfoDictionary. In the InfoDictionary, information is stored as INFOBANK-PANEL members. You can interrogate and update an INFOBANK-PANEL member the same as any other dictionary member, and you can create new ones. (To help you create new members there is a model INFOBANK-PANEL member.) This means you can tailor InfoSystem to suit your installation. You can:

- Change ASG-supplied panels to reflect your organization’s own terminology
- Rewrite the text in another language
- Remove panels that are not relevant to your installation
- Add panels to document your organization’s standards and particular use of Manager Products
- Add new branches to document other areas of interest to your organization

And you can tailor InfoSystem to suit different users.

Each panel may contain one of the Restriction Level keywords:

- SYSTEMS-ADMINISTRATOR
- CONTROLLER
- MASTER-OPERATOR

A panel with such a keyword cannot be displayed by any user below the defined level.

The commands HELP, HELP-INDEX, INFOBANK, and SELECT TOP-MENU each route the user to an InfoBank panel pre-set by ASG:

- HELP routes to HELP000000
- HELP-INDEX routes to HELP-INDEX
- INFOBANK routes to INFO000000
- SELECT TOP-MENU routes to HELP000000.

The Systems Administrator can change these entry points and so provide different levels and complexity of information for different levels of user.

# The User Interface Facility

The User Interface facility provides a means by which Manager Products can be interfaced with user-written software, or with other proprietary software, for which a specific interface is not supplied.

Three forms of interface are provided:

- A POST or MAIL command prefaced to any other Manager Products command writes the output from that command to a sequential file on disk or magnetic tape. This file can then be processed in a user program.
- An Access Call capability enables Manager Products to be invoked dynamically by CALLs from user programs. By this capability, any Manager Products command can be given directly from a user program: the output from the command is placed in a specifiable area of main storage, from where it can be processed by the user program.
- An input user exit in the Manager Products program calls a user-written module after each input line is read, before the line is processed. Return codes from the user-written module instruct Manager Products to accept the input line or to reject it with an error message.

The facility is documented in the appropriate User Interface Facility manual.

# Workstation Interfaces

The ControlManager Workstation Interface is a pre-requisite for connectivity to Manager Products Mainframe Technology and PC and Mainframe Environmental Tailoring (MVW-AD10).

The ControlManager Workstation Interface, selectable unit CMR-W502, is a pre-requisite for connectivity to ASG-Manager Products Mainframe Technology and PC Environmental Tailoring (MVW-EX10).

# ASG-Web Enabler

Web Enabler is a graphical user interface (GUI) that allows end-user access to a remote repository. Users can graphically search, report, list, analyze, update, delete, and create repository objects. Previous object selections can be saved for future use, or combined with other selections to support more elaborate searches. Users can view specific pre-generated repository content diagrams, and the import and export of repository content is supported. An Expert mode is provided so that experienced users can enter lines of repository command syntax for specific processing requirements without leaving the web browser.

Most standard web browsers, such as Microsoft Internet Explorer (Version 4.0 or later) and Netscape Navigator (Version 4.0 or later), work with Web Enabler.

No installation is necessary for the end-user; all content and functionality is supplied by Web Enabler components that reside on the web server and the repository.

# ASG-Manager Products Server Facility (MPSF)

Manager Products Server Facility (MPSF) is a multi-tasking, multi-user environment that provides a separate and persistent Manager Products environment for each client. It works as an APPC/MVS server supporting access to Manager Products from various client environments, including TCP/IP clients.

A typical environment is an MVS mainframe running TSO and batch jobs along with access via the internet with a web browser. Multiple servers are permitted, but each must be uniquely named and separately defined to APPC/VTAM.

These are some of the functions performed by MPSF:

- Registers and de-registers as an APPC/MVS server
- Connects to/terminates the TCP/IP interface
- Receives requests for new client conversations
- Creates and starts a Client Processing Task (CPT) for each new conversation
- Terminates client conversations
- Manages timeouts

# 12 Record and Play Facility

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## Introduction

The Record and Play facility enables you to record and play back Manager Products online interactive sessions. It is available in the FE01 environment under TSO and VM only.

The principal use of Record and Play is in quality assurance and regression testing; sessions can be recorded in one Manager Products release and then replayed in a later or modified release. The resulting outputs can be compared and any differences investigated.

Other possible uses include:

- Documentation in user environments of problems which are difficult to describe in words, for submission to ASG for investigation
- Production of hard copy Manager Products screens in environments where the PWS is not available
- Demos and prototypes; a recorded session can be replayed without installing the software which was used to record the session. Instead, recorded input commands and output screens simulate the Manager Products interactive session.

There are two stages in operating this facility: recording a session, and replaying. Replay can be executed in one of three modes:

- Non-automatic play mode, which requires user intervention to continue execution each time a new screen is displayed
- Automatic play mode, in which execution is continuous and no intervention is required from the user
- Demo mode, in which no Manager Products software is executed to generate the screen contents during playback. By default, demo playback requires user intervention, but it can be made continuous.

# Recording a Session

An interactive session is recorded by executing the Manager Products code and passing a parm of RECORD. See "Example Invocation" on page 264 for an example invocation.

The following output sequential variable length datasets are created:

MPRECORDThe ddname used to collect all input from the screen.

MPRESULTThe ddname used to collect all output written to the screen.

These datasets have a record format of VB and a record length of 4096. Any suitable blocksize can be defined, with a minimum of4100. The default is 9442.

Once invoked, recording continues until the session is ended, normally by use of the LOGOFF command.

# Replaying a Session: Non-Automatic PLAY Mode

## Overview

A session may be played back in a manner which requires user intervention to continue between screens, by executing the Manager Products code and passing a parm of PLAY. See "Example Invocation" on page 264 for an example invocation. The commands and input that have been recorded in the MPRECORD dataset are then re-executed against the software that is currently invoked. The output screens generated are again written to the MPRESULT dataset. If a comparison of output from more than one Manager Products version or release is required, a different physical dataset name must be allocated from that used during the previous record/playback run.

As each input is fetched from the MPRECORD dataset, it is displayed on the screen as if it had just been entered by the user. Continuation, and therefore execution of the input, requires intervention by the user (by pressing the ENTER key or any PF key except PF3). The user can thus control of the speed of the playback.

## Breaking Into a Session During Replay

A PLAY mode session can be broken into at any of the points at which the software waits for intervention by the user. The PF3 key causes Manager Products to:

- Interrupt the current PLAY mode
- Discard the input currently queued
- Clear the command input area(s)
- Wait for the next input to be entered by the user.

The user is then in a standard Manager Products session.

PLAY mode can be resumed at any time by issuing the SET REPLAY ON command. Since input queued at the time of a break-in is lost, it must be re-entered by the user if required before PLAY mode is resumed. If, however, the queued input is a LOGOFF and thus the last record of the MPRECORD, the LOGOFF command is re-displayed and subsequently executed to end the session.

Since any MPRESULT dataset created with a break-in is incomplete and possibly truncated, it is unsuitable for use as input to a DEMO mode session, or for comparison with another MPRESULT dataset created from the same MPRECORD dataset.

# Replaying a Session: Automatic PLAY Mode

## Overview

A session may be played back without requiring user intervention by executing the Manager Products code and passing parms of PLAY and AUTO. See "Example Invocation" on page 264 for an example invocation. Re-execution of the MPRECORD dataset is then continuous.

As with non-automatic PLAY mode, all output screens are written to the MPRESULT dataset.

## Varying the Speed of Replay

After each input has been displayed on the screen, execution is delayed for a defined waiting period. By default, the waiting period is 1 second, but the user can define a different wait time via a third parm. The value of the wait time may be 0 (no delay) or an integer between 2 and 99 (seconds' delay). Since a wait time of 0 gives no delay, it can be specified to give optimum performance when running regression tests, whose primary objective is to produce an MPRESULT dataset for comparison purposes.

## Repeated Playback

The LOOP keyword may be used with automatic PLAY mode to allow for the repetition of commands in the MPRECORD dataset. The number of iterations to be performed is controlled by specifying the required value as a parameter of LOOP. If omitted, a default value of 9999999 applies and the commands will repeat indefinitely. The first and last records of the MPRECORD dataset are skipped after their initial execution, since these are normally LOGON and LOGOFF records which should not be re-executed. Output to the MPRESULT dataset is suppressed.

LOOP can be used, for example, in testing Manager Products software in the areas of concurrent updating and the detection of illegal virtual storage retention across commands.

# Replaying a Session: DEMO Mode

## Overview

A session may be played back in demo mode by passing a parm of DEMO. See "Example Invocation" on page 264 for an example invocation. This mode differs from PLAY mode in that no Manager Products software is executed to generate the contents of the output screens. Although input comes from the MPRECORD dataset, the output screens are derived from an existing MPRESULT dataset.

By default, playback speed is user-controlled as in non-automatic PLAY mode. However, it can be made automatic by using a second parm of AUTO, and in this case playback is continuous with a waiting period of 1 second. The user can again define a waiting period of 0 or 2-99 seconds. For further information, refer to automatic and non-automatic play mode, above.

### Production of Hardcopy Output

Demo mode allows for the creation of an MPSPRINT hardcopy dataset, a sequential VBA listing dataset containing captured screens that can be output to any suitable printer. This is achieved by using the parm PRINT.

Each input from or output to the screen results in the generation of a screen image in the hardcopy dataset. By default, additional information, such as screen co-ordinates, is written with each screen. However, this may be suppressed by using the ASIS parm which is used with the PRINT parm in invoking hardcopy dataset creation.

## Notes

### Date and Time Settings

Since date and time problems can arise when comparing MPRESULT datasets, all record and playback runs are executed with the date and time set to 31 DECEMBER 1999 at 23.59.59. These are the date and time used when updating dates and/or times in the dictionary/repository or MP-AID.

### Mode Identification and Attention-Key Usage

During recording, the identifier <Rec> appears in the lower right of the screen to indicate the mode of operation.

During playback in PLAY or DEMO modes, an identifier is displayed in the lower right of the screen to indicate the current mode of operation and the key used during recording to signal attention to the host. This sets the next screen display in context, as the user will see which key was pressed during recording. The identifiers are as follows:

In PLAY mode:<Ent> or <Pfnn>

In DEMO mode:*Ent> or *Pfnn>

For example, if the PF8 key had been pressed during recording, the identifier <PF8> (in PLAY mode) or *PF8> (in DEMO mode) would be displayed during playback. The user can then put into context the next screen displayed.

## Truncation of Parameters

All specified parameters can be truncated to two characters. In TSO and VM Option 1 environments, parameters are separated by a comma. In VM Option 2 or 3 environments, parameters are separated by one or more spaces. For further information on these environments, refer to the Manager Products Installation manuals.

## Example Invocation

An example invocation in TSO is:

```
CALL 'MPR.REL2210.LOADLIB(MPR00)' 'DEMO,AUTO,0,PRINT,ASIS'
```

This invokes demo mode, running continuously with no delay between screens. Each screen image is written to the hardcopy dataset, but no additional information is written.

An example invocation in VM Option 3 is:

```
LOADM MPR00
START * PLAY AUTO 2 LOOP 10
```

This invokes Manager Products in automatic play mode, in which no intervention is required during playback. A delay of 2 seconds is set between screens, and the commands in MPRECORD are repeated 10 times.

All invalid or conflicting parameters are discarded. No error messages are output.

## Shortening Printed Output

If an MPSPRINT dataset is to be created and subsequently printed, the amount of output generated can be reduced by issuing the command:

```
SET #RUNNING OFF
```

This command suppresses the change of the Manager Products status indicator from WAITING to RUNNING, and thus avoids the generation of additional screens in the print dataset.

## Replay Mode: Supported Terminals

Support for the replay facility is currently limited to 3270 Model 2 (80 x 24). Attempted use on other terminals will be ignored.

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