

ASG-Manager Products™ Installation in OS Environments

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France	00.800.9932.5536	Sweden/Telia	009.800.9932.5536
Germany	00.800.9932.5536	Switzerland	00.800.9932.5536
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Preface

This *ASG-Manager Products Installation in OS Environments* is one of a series describing the Manager Family of Products for use on IBM System/370 Architecture and plug compatible computers.

Within the Manager Family of Program Products (excluding ASG-MethodManager, herein called MethodManager), ASG-ControlManager (herein called ControlManager) and ASG-DictionaryManager (herein called DictionaryManager) are Co-Requirements of each other. Both are Environmental Prerequisites (EPR) in as much as they must be at the latest Version and Release Level for each and every other ASG-Manager Product to execute correctly. This EPR rule applies to ASG-Manager Products (herein called Manager Products) in both Mainframe Environments (MFE) and Programmable Workstation Environments (PWSE). ControlManager and DictionaryManager complement each other in providing a gateway environment to Open Systems Interconnection (OSI) across information engineering techniques and dictionaries/directories/repositories from ASG and other vendors. Thus, ControlManager and DictionaryManager enable Manager Products users to position themselves to take full advantage of the Manager Family in providing a Computer Aided Software Engineering (CASE) environment.

For Mainframe Environment (MFE) based Manager Products, ASG provides Maintenance and Updating Service in IBM OS, DOS, VM/CMS, and BS2000 environments; where the Version/Release of OS, DOS, VM/CMS, or BS2000 in use is defined in an Appendix of the appropriate Manager Products Installation manual in the table column headed "Compatible Version/Release Level." (DOS and BS2000 support is *not* currently available for MethodManager.) Particular Manager Products selectable units interface with certain IBM and/or Siemens program products that run within OS and/or DOS and/or VM/CMS and/or BS2000 environments and/or with other vendor program products: the Compatible Version/Release Levels at which these products interface with Manager Products is documented in an Appendix of the appropriate Manager Products Installation manual. Throughout Manager Products documentation, the terms OS, DOS, and VM/CMS respectively cover all those variants of OS and of DOS and of VM/CMS for which ASG has defined a Compatible Release Level.

The workstations currently supported by Manager Products are defined in an Appendix of the installation manuals referenced above.

For Programmable Workstation Environment (PWSE) based Manager Products, Windows environments, where the Version/Release of Windows in use is defined in the *ASG-ManagerView User's Installation and Environmental Tailoring* manual.

The hardware devices currently supported by the Manager Products Programmable Workstation Family are defined in the *ASG-ManagerView User's Installation and Environmental Tailoring* manual. The original concept of the data dictionary, on which the dictionary element of the Manager Family of Program Products was based, has expanded significantly. Different vendors have concentrated on different aspects of the functionality now attached to the data dictionary concept. These vendors have introduced different terms to differentiate their *dictionary* products from those of other vendors. Thus there is now available in the market place a range of different vendor products, using terms such as catalog, directory, encyclopedia, knowledge base, lexicon, or repository. Manager Products has consistently remained in the forefront of this expanding technology, providing the full range of functionality in a Corporate Dictionary/Repository which can peacefully coexist with the more specialized and focussed dictionary products of other vendors. Throughout Manager Products documentation, for reasons of brevity, reference is made to the Manager Products Corporate Dictionary/Repository as the dictionary. ASG has chosen to use dictionary as still most aptly describing the broad functionality Manager Products provides, and the environment which the Manager Family creates.

This publication relates to the latest release of these products:

- MethodManager
- ControlManager
- DataManager
- DesignManager
- DictionaryManager

This publication is intended for the Systems Administrator, the dictionary Controllers, and those members of the Operations and/or Systems Programming departments who are responsible for installing and running your Manager Products.

There are separate installation manuals for DOS, CMS, and BS2000 environments.

Note: _____

Throughout this manual, the term disk is intended to cover any direct access storage device supported by the operating system in use.

About this Publication

This publication consists of these chapters:

- [Chapter 1, "Overview of Installation,"](#) gives you an introductory overview of basic methods of installation for Manager Products.
- [Chapter 2, "Installing an Initial Manager Products Environment,"](#) describes how an initial installation can be set up in an OS environment.
- [Chapter 3, "Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code,"](#) details the steps used to copy datasets to disk and optionally reconfigure/optimize the Manager Products program code.
- [Chapter 4, "Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE,"](#) explains how to tailor your Manager Products software to your installation's own requirements using various macros.
- [Chapter 5, "Set Up an MP-AID,"](#) describes how to create an MP-AID.
- [Chapter 6, "Set Up Dictionaries,"](#) explains how to create a dictionary.
- [Chapter 7, "Satisfy Concurrent Usage Requirements,"](#) discusses the capabilities provided to allow concurrent access, while preventing dictionary and/or MP-AID corruption.
- [Chapter 8, "Linking External Software to Manager Products Software,"](#) details how to link external software to Manager Products.
- [Chapter 9, "Running Manager Products in Batch Mode,"](#) shows the job control statements required to run Manager Products in an OS batch environment.
- [Chapter 10, "Installing Manager Products in an Interactive Environment,"](#) describes the interactive environments in which Manager Products may be run and their respective commands required under OS.
- [Chapter 11, "Introduction to Installing MethodManager,"](#) explains how to set up an MethodManager installation.
- [Chapter 12, "Installing an Initial MethodManager Installation,"](#) provides the details of setting up an initial MethodManager installation.
- [Chapter 13, "Installing an Operational MethodManager Environment,"](#) provides a summary of the tasks required to set up an MethodManager operational installation.
- [Chapter 14, "Setting Up a Separate MethodManager Installation,"](#) provides a summary of the tasks required to transfer the contents of an existing Manager Products MP-AID and/or repositories to a separate MethodManager installation.

Publication Conventions

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

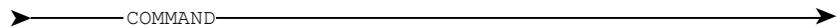
Diagrams are read from left to right along a continuous line (the "main path"). Keywords and variables appear on, above, or below the main path.

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:



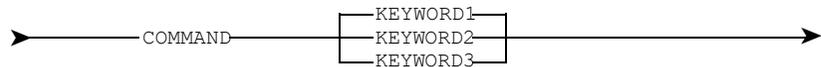
A required keyword appears on the main path:



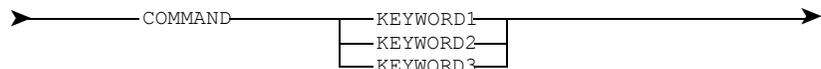
An optional keyword appears below the main path:



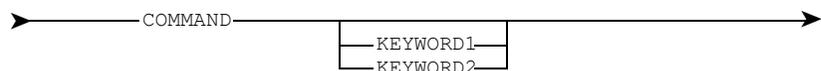
Where there is a choice of required keywords, the keywords appear in a vertical list; one of them is on the main path:



or



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



1

Overview of Installation

This chapter includes these sections:

Introduction	1
Setting Up a Manager Products Installation	2
The Architecture of a Manager Products Installation	3
Installing from the ASG-supplied Tapes	3
Tailoring Manager Products Software	4
The Manager Products Administration and Information Dataset (MP-AID)	4
Manager Products Dictionaries	5
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Loading the Supplied Job Control Members from the Release Tape	10
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Tailoring the ADW/IEW Integration Facility	11

Introduction

Manager Products all have the same basic method of installation. Thus, when you purchase Manager Products, ASG supplies a magnetic tape or cartridge containing all the Manager Products software purchased. This software contains not only the Manager Products Nuclei, but also any optional additional facilities (for example Manager Products Integrators).

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*.

ControlManager provides via its Integrated Dialog Director the Gateway for users to use the capabilities of the installed Manager Products. Thus, ControlManager is the End User Facility for Manager Products and is a prerequisite for the use of any Manager Products.

If you are installing MethodManager then you should note that the parts of this manual dealing with Manager Products (that is, Chapters 1 to 10) are generally applicable. Any differences or additional installation requirements for MethodManager are described in [Chapter 12, "Installing an Initial MethodManager Installation," on page 159](#), [Chapter 13, "Installing an Operational MethodManager Environment," on page 167](#), or [Chapter 14, "Setting Up a Separate MethodManager Installation," on page 171](#).

Before undertaking any installation tasks you are advised to print out the contents of dataset MP.README.

This dataset contains a section describing any revisions that have taken place to the installation process subsequent to the publication of the current installation manuals.

Run the job step shown in [Figure 1](#) (with minor modifications) to print this dataset from the release tape.

Figure 1 • Job step to print MP.README dataset

```
//README EXEC PGM=IEBGENER
//SYSPRINT DD DUMMY
//SYSUT2 DD SYSOUT=*
//SYSUT1 DD DSN=MP.README, DISP=OLD,
// UNIT=TAPE, VOL=SER=??????
//SYSIN DD *
```

Setting Up a Manager Products Installation

The flexibility provided by Manager Products, together with their optional facilities, ensures that the installation requirements of your organization are achieved. In order to gain the optimum value from your Manager Products software, ASG recommends identifying and defining these categories of user:

The Systems Administrator. The Systems Administrator is responsible for setting up the environment in which all users will work in an Manager Products installation. The Systems Administrator is responsible for the overall security and smooth running of the installation, in particular for the MP-AID (see ["The Manager Products Administration and Information Dataset \(MP-AID\)" on page 4](#)). See *ASG-Manager Products Systems Administrator's Manual* for full details of the Systems Administrator's role.

The dictionary Controllers. A dictionary Controller is responsible for the administration and security of a particular Manager Products dictionary. The capabilities directly available to a Controller are effective only in a particular dictionary, whereas the Systems Administrator has capabilities available that are effective throughout an installation. See *ASG-Manager Products Controller's Manual* for full details of the Controller's role.

The general user. It is important that both the dictionary Controllers and the Systems Administrator identify the user's needs. The environment in which a particular user will work can then be set by using both the Controller's and Systems Administrator's capabilities.

The Architecture of a Manager Products Installation

Once you have identified your Systems Administrator, dictionary Controllers, and users, the next step is to establish how you can optimally utilize the capabilities available with your Manager Products software. The capabilities available will depend on the Manager Products and optional additional facilities purchased.

[Figure 2 on page 4](#) shows the architecture of a Manager Products installation in which ControlManager and one other Manager Products are installed. This figure forms the background for the following sections, which discuss the steps to be taken when installing your Manager Products software and the factors to be considered at each step.

Installing from the ASG-supplied Tapes

This publication contains separate instructions for setting up an initial Manager Products installation and setting up an operational Manager Products installation. All job control statements given in this publication are supplied as members in the dataset MP.JCL. Whether you choose to set up an initial installation or an operational installation, you must first copy dataset MP.JCL to disk in order to use the JCL members it contains. The job control statements required to do this are given in Loading the Supplied Job Control Members from the release tape.

The first step for either type of installation is to copy certain datasets to disk. In the case of an initial installation you need only copy the partitioned dataset MP.LOADLIB (which contains all the executable versions of Manager Products software) to disk. For an operational installation it will probably be necessary to copy some additional supplied partitioned datasets to disk. For a list of all partitioned datasets supplied on your Manager Products Release tape(s), please refer to [Appendix C, "Attributes of Datasets which May be Supplied on Your Release Tape" on page 195](#).

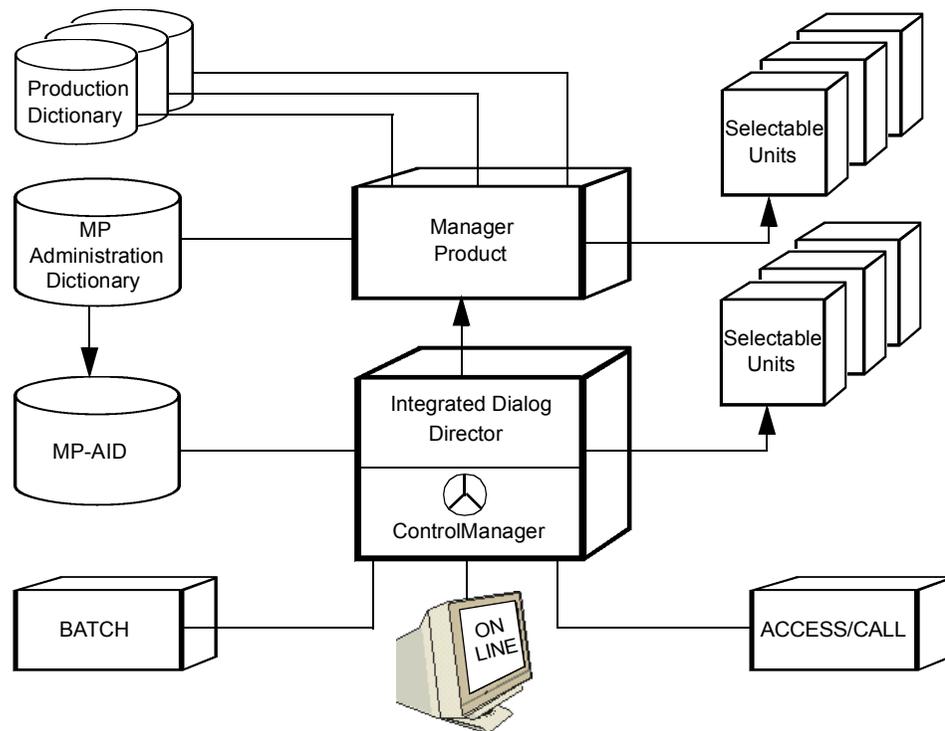
If you have purchased several Manager Products, together with the necessary Manager Products Integrators, the versions of the Manager Products installed will be automatically integrated and no further action need be taken in this regard.

Manager Products are designed for use interactively. Thus, ASG recommends that you install interactive versions of your Manager Products for general use. However, for installation purposes it is recommended that your Manager Products are used in batch mode, unless the description of the installation step states specifically that an interactive version is required.

Tailoring Manager Products Software

ASG supplies tailoring macros, which enable certain options to be fixed on installation. The tailoring of your Manager Products by use of these macros is a tailoring of the installed versions of the Manager Products (not a provision of run-time options). Thus, it provides one method by which the Systems Administrator can set up the environment for all users. Installation macros are described in [Chapter 4, "Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE," on page 27.](#)

Figure 2 • Basic Architecture of a Manager Products Installation



The Manager Products Administration and Information Dataset (MP-AID)

The MP-AID is the dataset that contains the information about your Manager Products and your dictionaries in addition to the information used to control the environment in which your Manager Products will operate. The Systems Administrator uses the MP-AID to define environmental controls that can be applied to all users, particular groups of users, or individual users.

Thus, once you have installed the batch versions of your Manager Products and performed any tailoring using the installation macros, it is recommended that you create the dataset which when loaded will become your MP-AID (see [Chapter 5, "Set Up an MP-AID," on page 69](#)). When this dataset has been created the Systems Administrator will be able to log on to ControlManager.

The Systems Administrator's first task should be to load onto the MP-AID:

- The ASG-supplied InfoBank (which provides online documentation of your Manager Products software)
- The ASG-supplied COMMAND members, Corporate Executive Routines, and User Defined Syntax Tables

If you have purchased the Corporate Dictionary/Repository Definition Export to IDD (selectable unit DYR-TE08), ASG recommends that you load the ASG-supplied Translation Rules.

Your installation's own environmental controls are first defined in a dictionary and then loaded onto the MP-AID by your Systems Administrator. ASG recommends that a separate dictionary, the Manager Products Administration Dictionary, be set up to hold the definitions that are to be loaded onto the MP-AID.

Manager Products Dictionaries

A Manager Products dictionary forms these datasets (files):

- The Source dataset
- The Data Entries dataset
- The Index dataset
- The Recovery dataset
- A Log dataset, if logging is applied to the dictionary

The Source dataset contains member definitions as input or as subsequently amended.

The Data Entries dataset contains encoded definitions generated by the dictionary management software from the definitions in the Source dataset. It contains information about a member's relationships with other members.

The Index dataset contains the name of each member in the dictionary and is designed to achieve the fastest possible retrieval of source or encoded definitions.

The Recovery dataset is used as a temporary backup file for the dictionary's automatic recovery system.

The Log dataset records all updating commands (or all commands issued, if so specified), together with any associated member definitions or amendments input. It also records the full date, time, user, status, and the number of physical I/Os that have occurred.

The Manager Products Administration Dictionary

ASG recommends that your installation set up an Manager Products Administration Dictionary (see ["Set Up Manager Products Administration Dictionary" on page 83](#)). It is envisaged that this dictionary will contain all the data required by ControlManager and will be maintained by the Systems Administrator. The Systems Administrator will then have a secure dictionary in which to develop the member definitions which are to be loaded onto the MP-AID (see ["The Manager Products Administration and Information Dataset \(MP-AID\)" on page 4](#)).

If you have purchased one or more of these optional additional facilities, ASG supplies a dictionary for your use and reference:

- With the User Defined InfoSystem facility (selectable unit CMR-UD10), ASG's InfoDictionary is supplied. (See *ASG-Manager Products User Defined InfoSystem* for full details of this dictionary.)
- With the User Defined Syntax facility (selectable unit CMR-UD1), ASG's UDS Table Dictionary is supplied. (See the *ASG-Manager Products Controller's Manual* for full details of this dictionary.)
- With the Corporate Dictionary/Repository Definition Export For IDD facility, (selectable unit DYR-TE08) a set of Translation Rules are supplied.

It is recommended that, where applicable, these ASG-supplied dictionaries be restored into your Manager Products Administration Dictionary.

If you have any of these selectable units installed, the ASG-supplied Executive Routines can be restored into your Manager Products Administration Dictionary for subsequent tailoring and/or maintenance:

- Corporate Dictionary/Repository Definition Import from DB2 (selectable unit DYR-TI12)
- Corporate Dictionary/Repository Export to DB2 (selectable unit DYR-TE12)
- Corporate Dictionary/Repository Definition Import from SQL/DS (selectable unit DYR-TI32)
- Corporate Dictionary/Repository Definition Export from SQL/DS (selectable unit DYR-TE32)
- Workstation Interface (selectable unit CMR-WS01). The Executive Routines are needed only if you wish to use the Repository Diagram Generation feature.
- ADW/IEW Integration Facility (selectable units TE14, TE15, TI14, and TI15)

The DEMO Dictionary

The DEMO Dictionary is the ASG-supplied dictionary which is designed for use with the *ASG-DataManager Example Book*. The dictionary demonstrates the features available with all your Manager Products. Therefore, ASG recommends that you install this dictionary while you are setting up your installation, so that user training can begin immediately.

The DEMO Dictionary can be retrieved and set up as described in the *ASG-Manager Products Controller's Manual*. The particular example job control requirements are given in ["Manager Products Demo Dictionary" on page 87](#).

The User Interface (POST) Dictionary

If you have purchased the User Interface Facility (selectable unit CMR-UI1) and/or the User Defined Output facility (selectable unit DYP-UD15), a dataset MP.UIDICT is included on the installation tape. This dataset contains a dictionary of the User Interface output record formats and Access Call control parameter area definitions, and information relating to User Defined Output parameter numbers. The POST dictionary can be retrieved and set up as described in the *ASG-Manager Products Controller's Manual*. The particular example job control statements are given in ["User Interface \(Post\) Dictionary" on page 87](#).

Production Dictionaries

Your Manager Products are designed to work on and be driven by dictionaries. Thus, the next step in setting up your installation is to create the dictionaries that you require. The job control requirements for dictionary creation are given in ["Creating Dictionaries" on page 78](#); the Manager Products commands required for dictionary creation are discussed in the *ASG-Manager Products Controller's Manual*.

ASG-supplied Job Control Members

ASG supplies a copy of all job control streams needed to set up both an initial and an operational installation. These job control streams are supplied in dataset MP.JCL, which is the first dataset on the installation tape. In order to use any of these job control streams you must first copy MP.JCL to disk.

Contents of Dataset MP.JCL

Dataset MP.JCL contains a copy of all job control streams needed to set up a Manager Products installation. A summary of each ASG-supplied job control stream and its function is set out in [Table 1](#).

Table 1 Contents of Dataset MP.JCL

Job Control Stream	Function
MPIJCL05	Copy dataset MP.LOADLIB to disk
MPIJCL10	Create and load a BDAM MP-AID with dataset MP.INFO.UNLOAD
MPIJCL15	Create and load a VSAM MP-AID with dataset MP.INFO.UNLOAD
MPIJCL20	Load an MP-AID (BDAM or VSAM) with dataset MP.COM.UNLOAD
MPIJCL30	Create and restore a BDAM-organized DEMO dictionary
MPIJCL35	Create and restore a VSAM-organized DEMO dictionary
MPIJCL40	Run Manager Products in batch
MPIJCL45	Manager Products CLIST to run Manager Products under TSO
MPOJCL05	Copy partitioned datasets to disk
MPOJCL07	Generate an overlaid version of load module DSR00
MPOJCL10	Tailor Manager Products
MPOJCL15	Assemble LBUF1 and relink load module DSR00
MPOJCL20	Assemble and link-edit Source Modules DMEX1, MPDX1, or MPLX1
MPOJCL25	Assemble and link-edit Source Module MPLUF with User Defined Functions
MPOJCL30	Create and load a BDAM MP-AID with dataset MP.INFO.UNLOAD
MPOJCL35	Create and load a VSAM MP-AID with dataset MP.INFO.UNLOAD
MPOJCL40	Load a BDAM or VSAM MP-AID with dataset MP.COM.UNLOAD
MPOJCL45	Create a BDAM-organized dictionary
MPOJCL50	Create a VSAM-organized dictionary
MPOJCL55	Link-edit an Access Call program
MPOJCL65	Run Manager Products in batch

Table 1 Contents of Dataset MP.JCL

Job Control Stream	Function
MPOJCL70	Manager Products CLIST to run Manager Products under TSO
MPOJCL85	Generate the CICS Interface Program (CMRZ100)
MPOJCL86	Generate the CICS User Interface Linkage Program (DMGRDMRU)
MPOJCL87	Generate the Hardcopy transaction (DMGRHCPY)
MMIJCL05	Copy dataset MP.LOADLIB to disk
MMIJCL10	Create and load a BDAM MP-AID with dataset MP.INFO.UNLOAD
MMIJCL15	Create and load a VSAM MP-AID with dataset MP.INFO.UNLOAD
MMIJCL20	Load an MP-AID (BDAM or VSAM) with dataset MP.COM.UNLOAD
MMIJCL25	Load an MP-AID (BDAM or VSAM) with dataset MP.MMR.UNLOAD
MMIJCL30	Create and restore a BDAM-organized SAMPLE repository
MMIJCL35	Create and restore a VSAM-organized SAMPLE repository
MMIJCL40	Run MethodManager under TSO
MPSFBAT	Client batch execution JCL
MPSFTSO	Client TSO execution CLIST
MPSF0010	Create a DIV MP-AID
MPSF0020	Load a DIV MP-AID
MPSF0025	Reload a DIV MP-AID
MPSF0030	Create a DIV repository
MPSF0040	Populate a DIV repository
MPSF0045	Reload a DIV repository
MPSF0050	Create a starter BDAM MP-AID
MPSF0100	Batch execution of Manager Products Server Facility

Loading the Supplied Job Control Members from the Release Tape

In order to use any of the ASG-supplied job control streams you must first copy MP.JCL to disk using IEBCOPY, the IBM dataset utility, using the job control statements shown in [Figure 3 on page 10](#),

where:

uuuu is any valid disk device type.

tttt is any valid tape device type.

vvvvvv is the serial number of the relevant disk.

ssssss is the serial number of the release tape.

manager-products-dsn is the name you want to assign to the output dataset.

Figure 3 • Copy Dataset MP.JCL to Disk

```
//MPR      JOB      , ,MSGLEVEL=(1,1) ,CLASS=A
//*        COPY MP.JCL TO DISK
//COPY     EXEC     PGM=IEBCOPY
//SYSUT3   DD      UNIT=SYSDA,SPACE=(TRK,20)
//SYSUT4   DD      UNIT=SYSDA,SPACE=(TRK,20)
//SYSPRINT DD      SYSOUT=sysout-class
//IN       DD      DISP=OLD,LABEL=4,DSN=MP.JCL,
//         VOL=SER=ssssss,UNIT=tttt
//OUT      DD      DISP=(,CATLG),UNIT=uuuu,
//         SPACE=(800,(140,10,4)),
//         VOL=SER=vvvvvv,DSN=manager-products-dsn
//         COPY  OUTDD=OUT,INDD=IN
//
```

Preparing to Run the Generic Import Example

In order to execute the Bachman Generic Import Example you need to perform these installation steps:

- Copy the dataset that forms the input to the run from the release tape to a suitable disk. The required dataset is named MP.SAMPLE.IMPORT and can be copied to disk using the IBM IEBGENER utility.
- Make available the Bachman Example Executive Routines. These are provided in status BACHMAN on the Manager Products DEMO dictionary, supplied as dataset MP.DEMO. These Executive Routines must be encoded and then constructed onto an appropriate MP-AID.
- Update your Manager Products execution job control or procedure to define the input dataset as created above. The required ddname for this dataset is DD1.

Tailoring the ADW/IEW Integration Facility

Before you can successfully execute the ADW/IEW Integration facility, you must perform some tailoring tasks. This mandatory tailoring is common to all operating environments and for this reason is documented in *ASG-Manager Products Tools Support: Integration with ADW/IEW*.

2

Installing an Initial Manager Products Environment

This chapter describes how an initial installation can be set up (i.e., without considering the effect of selectable units or installation macros) in an OS environment. This initial installation allows new users to experiment and gain a degree of familiarity with Manager Products before an operational Manager Products installation is set up. It consists of these components:

- An executable version of your Manager Products software
- The Manager Products Administration and Information Dataset (MP-AID)
- The ASG-supplied InfoBank (loaded onto the MP-AID)
- The ASG-supplied COMMAND members (loaded onto the MP-AID)
- The ASG-supplied Corporate Executive Routines (loaded onto the MP-AID)
- The Manager Products DEMO Dictionary

The setting up of an initial installation is described in this chapter in four steps:

Step 1 - Copy Dataset MP.LOADLIB to Disk	14
Step 2 - Create and Load an MP-AID.....	15
Create an MP-AID and Load Dataset MP.INFO.UNLOAD	15
Load the MP-AID with Dataset MP.COM.UNLOAD	16
Step 3 - Create and Restore a Demo Dictionary.....	17
Step 4 - Run Manager Products in Batch or Under TSO	20

After following these steps it is recommended that you use InfoBank and the DEMO Dictionary interactively to develop your knowledge of Manager Products and their usage.

Example values are given in place of variable identifiers within job control statements and Manager Products commands. Example values within the job control statements are underlined in this chapter.

InfoBank can be entered at the highest level by keying INFOBANK.

A hard-copy record of the personnel system defined in the DEMO dictionary, which includes suggested examples and demonstrations, is given in the *ASG-DataManager Example Book*.

Note: _____

At present the *ASG-DataManager Example Book* refers to the DEMO Dictionary as the Example Dictionary.

Step 1 - Copy Dataset MP.LOADLIB to Disk

MP.LOADLIB contains an executable version of the Manager Products you have ordered. This dataset must be copied to disk using IEBCOPY, the IBM dataset utility, using the job control statements given ([Figure 4](#)). An explanation of the variables required in the job control statements is given in [Chapter 3, "Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code," on page 21](#), which deals with the copying of all partitioned datasets to disk (including MP.LOADLIB).

Figure 4 • Job Control Statements for Copying Dataset MP.LOADLIB to Disk

```
//MPIJCL05 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//COPY     EXEC     PGM=IEBCOPY
//SYSUT3   DD       UNIT=SYSDA,SPACE=(TRK,20)
//SYSUT4   DD       UNIT=SYSDA,SPACE=(TRK,20)
//SYSPRINT DD       SYSOUT=A
//IN       DD       DISP=OLD,LABEL=5,DSN=MP.LOADLIB,
//          VOL=SER=M99999,UNIT=TAPE
//OP       DD       DISP=(,CATLG),DSN=MP.LOADLIB,
//          SPACE=(6144,(2200,100,80)),
//          UNIT=3380,VOL=SER=USER01
//          COPY INDD=IN,OUTDD=OP
//
```

Step 2 - Create and Load an MP-AID

Create an MP-AID and Load Dataset MP.INFO.UNLOAD

The dataset named MP.INFO.UNLOAD on the release tape contains an unloaded MP-AID which holds the ASG-supplied InfoBank. Before ControlManager can be used, an MP-AID must be built by creating an empty MP-AID and then loading the contents of MP.INFO.UNLOAD. This can be achieved using the job control statements given in [Figure 5 on page 15](#), if a BDAM-organized MP-AID is required. Definitions of the variables used can be found in "[BDAM-organized MP-AID](#)" on page 71.

The allocation of an increased size MP-AID buffer pool will enhance performance. A minimum allocation of 30 buffers is recommended.

Figure 5 • Creating and Loading a BDAM MP-AID with Dataset MP.INFO.UNLOAD

```
//MPIJCL10 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//CREATE   EXEC    PGM=MPR00
//STEPLIB DD      DSN=MP.LOADLIB,DISP=SHR
//MPOUT   DD      SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD      SYSOUT=A
//SYSUDUMP DD     SYSOUT=A
//MPIN    DD      DDNAME=SYSIN
//MPAID   DD      DISP=(NEW,CATLG),DSN=CMR.MPAID,
//        UNIT=3380,VOL=SER=USER01,SPACE=(8192,3500)
//MPAIDR  DD      DISP=OLD,DSN=MP.INFO.UNLOAD,
//        UNIT=TAPE,VOL=SER=M99999,LABEL=17
MP-AID CREATE ADMINISTRATOR SYSAD PASSWORD SAD
LOGICAL-BLOCKSIZE 1024
PHYSICAL-BLOCKSIZE 8192;
LOGON SYSAD PASSWORD SAD;
MP-AID BUFFERS 30;
MP-AID LOAD INFOBANK;
MP-AID STATUS;
LOGOFF;
//
```

If a VSAM-organized MP-AID is required, the job control statements in [Figure 6](#) are used. Definitions of the variables used can be found in "[VSAM-organized MP-AID](#)" on [page 72](#).

Figure 6 • Creating and Loading a VSAM MP-AID with Dataset MP.INFO.UNLOAD

```
//MPIJCL15 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//ALLOC EXEC      PGM=IDCAMS
//SYSPRINT DD      SYSOUT=A
DELETE (CMR.MPAID) CLUSTER
DEFINE CLUSTER (NAME (CMR.MPAID) -
  RECORDS(3500) CONTROLINTERVALSIZE(8192) -
  NUMBERED RECORDSIZE(8185 8185) -
  SHAREOPTIONS(4) VOLUMES(VSAM01))
//MPSTEP EXEC      PGM=MPR00
//STEPLIB DD      DSN=MP.LOADLIB,DISP=SHR
//MPIN DD          DDNAME=SYSIN
//MPOUT DD         SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD       SYSOUT=A
//SYSUDUMP DD      SYSOUT=A
//MPAID DD         DISP=OLD,DSN=CMR.MPAID
//MPAIDR DD        DISP=OLD,DSN=MP.INFO.UNLOAD,
//                UNIT=TAPE,VOL=SER=M99999,LABEL=17
MP-AID CREATE ADMINISTRATOR SYSAD PASSWORD SAD
LOGICAL-BLOCKSIZE 1023 VSAM;
LOGON SYSAD PASSWORD SAD;
MP-AID BUFFERS 30;
MP-AID LOAD INFOBANK;
MP-AID STATUS;
LOGOFF;
//
```

Note:

The number of blocks allocated to the MP-AID is based on the number of blocks required to install the ASG-supplied InfoSystem, COMMAND members, Corporate Executive Routines, and UDS tables, together with about 10 percent available for user storage, if required.

Load the MP-AID with Dataset MP.COM.UNLOAD

The dataset MP.COM.UNLOAD on the release tape contains ASG-supplied COMMAND members and Corporate Executive Routines needed to execute certain Manager Products functionality, together with the UDS tables DU016 and DU777.

The installation of this dataset is mandatory.

Use the job control statements shown in [Figure 7](#) to load MP.COM.UNLOAD onto either a BDAM or VSAM MP-AID.

Figure 7 • Loading either a BDAM or VSAM MP-AID with Dataset MP.COM.UNLOAD

```
//MPIJCL20 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPSTEP  EXEC     PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPIN    DD       DDNAME=SYSIN
//MPOUT   DD       SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD       SYSOUT=A
//SYSUDUMP DD      SYSOUT=A
//MPAID   DD       DISP=OLD,DSN=CMR.MPAID
//MPAIDR  DD       DISP=OLD,DSN=MP.COM.UNLOAD,
//                UNIT=TAPE,VOL=SER=M99999,LABEL=16
LOGON SYSAD PASSWORD SAD;
MP-AID BUFFERS 30;
MP-AID LOAD ALL;
MP-AID STATUS;
LOGOFF;
//
```

Step 3 - Create and Restore a Demo Dictionary

Your Manager Products release tape contains a dataset, MP.DEMO, which holds the DEMO dictionary. This dictionary can be retrieved by running ControlManager in order to create an empty dictionary and to restore the DEMO dictionary. This can be achieved using the job control statements shown in [Figure 8](#) if a BDAM-organized dictionary is required. Please refer to "[Creating BDAM-organized Dictionaries](#)" on page 78 if you require an explanation of the variables used.

Note:

Some of the Manager Products commands given for this step are only applicable if you have either the Basic Status facility (selectable unit CMR-DD2) or the Advanced Status facility (selectable unit CMR-AD21). If you do not have one of these two facilities, you should refer to the commands given in the *ASG-Manager Products Controller's Manual*.

Figure 8 • Creating and Restoring a BDAM-organized DEMO Dictionary

```
//MPIJCL30 JOB      , ,MSGLEVEL=(1,1) ,CLASS=A
//CREATE EXEC      PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPOUT DD        SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD      SYSOUT=A
//SYSUDUMP DD     SYSOUT=A
//MPIN DD         DDNAME=SYSIN
//DEMO DD        DISP=(NEW,CATLG) ,DSN=DEMO.INDEX,
//          UNIT=3380,VOL=SER=USER01,SPACE=(8192,20)
//DEM0D DD      DISP=(NEW,CATLG) ,DSN=DEMO.DATA.ENTRIES,
//          UNIT=3380,VOL=SER=USER01,SPACE=(8192,220)
//DEM0S DD      DISP=(NEW,CATLG) ,DSN=DEMO.SOURCE,
//          UNIT=3380,VOL=SER=USER01,SPACE=(4096,270)
//DEM0E DD      DISP=(NEW,CATLG) ,DSN=DEMO.RECOVER,
//          UNIT=3380,VOL=SER=USER01,SPACE=(4096,120)
//DEM0J DD      DISP=(NEW,CATLG) ,DSN=DEMO.LOG,
//          UNIT=3380,VOL=SER=USER01,SPACE=(4096,50)
//DEM0R DD      DISP=OLD,DSN=MP.DEMO,
//          UNIT=TAPE,VOL=SER=M99999,LABEL=19
//MPAID DD      DISP=SHR,DSN=CMR.MPAID
LOGON SYSAD PASSWORD SAD;
CREATE DEMO MASTER CON
ILB 2046 SLB 314 DLB 360
IPB 8192 SPB 4096 DPB 8192
RPB 4096 LPB 4096
WITH 18 STATUSES AND LOG;
DICTIONARY DEMO;
AUTHORITY CON;
RESTORE ALL;
LOGOFF;
//
```

If a VSAM-organized dictionary is required, use the following job control statements ([Figure 9 on page 19](#)). Find definitions of the variables used in "[Creating VSAM-organized Dictionaries](#)" on page 80.

Figure 9 • Creating and Restoring a VSAM-organized DEMO Dictionary

```
//MPIJCL35 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//ALLOC   EXEC     PGM=IDCAMS
//SYSPRINT DD      SYSOUT=A
DELETE (DEMO.INDEX) CLUSTER
DELETE (DEMO.DATA.ENTRIES) CLUSTER
DELETE (DEMO.SOURCE) CLUSTER
DELETE (DEMO.RECOVER) CLUSTER
DELETE (DEMO.LOG) CLUSTER
DEFINE CLUSTER (NAME (DEMO.INDEX) -
  RECORDS (20)          CONTROLINTERVALSIZE (8192) -
  NUMBERED              RECORDSIZE (8185 8185) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (DEMO.DATA.ENTRIES) -
  RECORDS (220)        CONTROLINTERVALSIZE (8192) -
  NUMBERED              RECORDSIZE (8185 8185) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (DEMO.SOURCE) -
  RECORDS (270)        CONTROLINTERVALSIZE (4096) -
  NUMBERED              RECORDSIZE (4089 4089) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (DEMO.RECOVER) -
  RECORDS (120)        CONTROLINTERVALSIZE (4096) -
  NUMBERED              RECORDSIZE (4089 4089) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (DEMO.LOG) -
  RECORDS (50)         CONTROLINTERVALSIZE (4096) -
  NUMBERED              RECORDSIZE (4089 4089) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
//MPSTEP   EXEC     PGM=MPR00
//STEPLIB  DD       DISP=SHR, DSN=MP.LOADLIB
//MPIN     DD       DDNAME=SYSIN
//MPOUT    DD       SYSOUT=A, DCB=(LRECL=137, BLKSIZE=1370)
//MPRDIAG  DD       SYSOUT=A
//SYSUDUMP DD       SYSOUT=A
//DEMO     DD       DISP=OLD, DSN=DEMO.INDEX
//DEM0D    DD       DISP=OLD, DSN=DEMO.DATA.ENTRIES
//DEM0S    DD       DISP=OLD, DSN=DEMO.SOURCE
//DEM0E    DD       DISP=OLD, DSN=DEMO.RECOVER
//DEM0J    DD       DISP=OLD, DSN=DEMO.LOG
//DEM0R    DD       DISP=OLD, DSN=MP.DEMO,
//          UNIT=TAPE, VOL=SER=M99999, LABEL=19
//MPAID    DD       DISP=SHR, DSN=CMR.MPAID
LOGON SYSAD PASSWORD SAD;
CREATE DEMO MASTER CON
  ILB 2046 SLB 314 DLB 360
  VSAM WITH 18 STATUSES AND LOG;
  DICTIONARY DEMO;
  AUTHORITY CON;
  RESTORE ALL;
  LOGOFF;
//
```

Step 4 - Run Manager Products in Batch or Under TSO

The job control statements given in [Figure 10](#) allow you to run ControlManager and DataManager in batch so that both the MP-AID and a created dictionary (in this case the DEMO dictionary) can be accessed. Refer to [Chapter 9, "Running Manager Products in Batch Mode," on page 101](#) if you require an explanation of the variables used.

If you have the ControlManager OS/TSO Interface facility (CMR-TP7) you may run Manager Products interactively under TSO. The control statements given in [Figure 11](#) allow you to run ControlManager and DataManager interactively under TSO so that the MP-AID and a created dictionary (in this case the DEMO dictionary), can be accessed. Refer to ["Installing Manager Products under TSO" on page 110](#) if you require an explanation of the variables used.

Figure 10 • Running Manager Products in Batch Mode

```
//MPIJCL40 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPSTEP  EXEC     PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPIN    DD       DDNAME=SYSIN
//MPOUT   DD       SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD       SYSOUT=A
//SYSUDUMP DD      SYSOUT=A
//MPAID   DD       DISP=SHR,DSN=CMR.MPAID
//DEMO    DD       DISP=SHR,DSN=DEMO.INDEX
//DEMOMD DD       DISP=SHR,DSN=DEMO.DATA.ENTRIES
//DEMOS   DD       DISP=SHR,DSN=DEMO.SOURCE
//DEMOE   DD       DISP=SHR,DSN=DEMO.RECOVER
//DEMOJ   DD       DISP=SHR,DSN=DEMO.LOG
MANAGER Products commands
.
.
.
//
```

Figure 11 • Running Manager Products under TSO

```
/* MANAGER Products CLIST (MPIJCL45) */
ALLOC FILE (MPIN) DSN (*)
ALLOC FILE (MPRDIAG) SYSOUT (A)
ALLOC FILE (MPOUT) DSN (*)
ALLOC FILE (MPAID) DSN (CMR.MPAID) SHR
ALLOC FILE (DEMO) DSN (DEMO.INDEX) SHR
ALLOC FILE (DEMOMD) DSN (DEMO.DATA.ENTRIES) SHR
ALLOC FILE (DEMOS) DSN (DEMO.SOURCE) SHR
ALLOC FILE (DEMOE) DSN (DEMO.RECOVER) SHR
ALLOC FILE (DEMOJ) DSN (DEMO.LOG) SHR
CALL 'MP.LOADLIB(MPR00)'
FREE FILE (MPIN,MPOUT,MPRDIAG,MPAID,DEMO,DEMOMD,DEMOS,DEMOE,DEMOJ)
```

3

Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code

This chapter includes these sections:

Copy Partitioned Datasets to Disk	22
Reconfigure the Manager Products Load Library (MP.LOADLIB) (Optional) ..	24
Generating an Overlaid Version of the DesignManager Executable Module DSR00 ..	24
Optimizing Usage of the Manager Products Program Code (Optional)	25
Introduction	25
Selecting the Programs	26

Manager Products software is always supplied on tape or cartridge. The datasets supplied are dependent upon the Manager Products and selectable units which have been ordered.

You should copy all the ASG-supplied datasets you require, as described in ["Copy Partitioned Datasets to Disk" on page 22](#).

Information regarding all the available datasets can be found in [Appendix C, "Attributes of Datasets which May be Supplied on Your Release Tape" on page 195](#).

Once you have copied the datasets to disk, ASG-DesignManager (herein called DesignManager) users may wish to reconfigure the Manager Products load library, MP.LOADLIB. This is discussed in ["Reconfigure the Manager Products Load Library \(MP.LOADLIB\) \(Optional\)" on page 24](#).

Consideration should also be given at this stage to optimizing the usage of the Manager Products program code. This is discussed in ["Optimizing Usage of the Manager Products Program Code \(Optional\)" on page 25](#).

Copy Partitioned Datasets to Disk

All the ASG-supplied partitioned datasets you require must be copied to disk using IEBCOPY, the IBM dataset utility, using the job control statements shown in [Figure 12 on page 23](#),

where:

uuuu is any valid disk device type.

tttt is any valid tape device type.

vvvvvv is the serial number of the relevant disk.

sssss is the serial number of the supplied release tape.

manager-products-dsn (dataset name) is the name you want to assign to the output dataset.

The ASG-supplied load library MP.LOADLIB is blocked at 6K (6144 bytes). This blocksize is suitable for all the device types in current use. However, performance can be enhanced and program retrieval time reduced considerably by re-blocking the load library to a blocksize specifically geared towards the device type in use at your installation. For example, for half-track blocking on a 3390 device, you should use a blocksize of 27998 bytes.

Re-blocking of the load library can be achieved by replacing the statement:

```
COPY INDD=IN01,OUTDD=OP01
```

given in [Figure 12 on page 23](#) with the statement:

```
COPYMOD INDD=IN01,OUTDD=OP01,MAXBLK=nnnnn
```

where *nnnnn* is the new blocksize for the library.

It is optional whether you copy the ASG-supplied sequential datasets to disk. If you choose to do so you should use the IBM dataset utility, IEBGENER.

Figure 12 • Copying Partitioned Datasets to Disk

		Notes
//MPOJCL05	JOB , ,MSGLEVEL=(1,1),CLASS=A	
//COPY	EXEC PGM=IEBCOPY	
//SYSUT3	DD UNIT=SYSDA,SPACE=(TRK,20)	
//SYSUT4	DD UNIT=SYSDA,SPACE=(TRK,20)	
//SYSPRINT	DD SYSOUT=sysout-class	
//IN01	DD DISP=OLD,LABEL=5,DSN=MP.LOADLIB,	1
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP01	DD DISP=(,CATLG),SPACE=(6144,(2200,100,80)),	1
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN02	DD DISP=OLD,LABEL=6,DSN=MP.SOURCE,	1
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP02	DD DISP=(,CATLG),SPACE=(0800,(2700,100,10)),	1
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN03	DD DISP=OLD,LABEL=7,DSN=MP.ISPPLIB,	2
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP03	DD DISP=(,CATLG),SPACE=(3120,(0210,010,25)),	2
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN04	DD DISP=OLD,LABEL=8,DSN=MP.ISPCLIB,	2
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP04	DD DISP=(,CATLG),SPACE=(3120,(0110,010,10)),	2
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN05	DD DISP=OLD,LABEL=9,DSN=MP.ISPSLIB,	2
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP05	DD DISP=(,CATLG),SPACE=(3120,(0060,005,10)),	2
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN06	DD DISP=OLD,LABEL=10,DSN=MP.ISPMLIB,	2
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP06	DD DISP=(,CATLG),SPACE=(3120,(0020,005,05)),	2
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN07	DD DISP=OLD,LABEL=11,DSN=MP.IMS,	3
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP07	DD DISP=(,CATLG),SPACE=(3120,(0040,005,05)),	3
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN08	DD DISP=OLD,LABEL=12,DSN=MP.UIBAL,	4
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP08	DD DISP=(,CATLG),SPACE=(0800,(3800,100,10)),	4
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN09	DD DISP=OLD,LABEL=13,DSN=MP.UICOB,	4
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP09	DD DISP=(,CATLG),SPACE=(0800,(4200,100,10)),	4
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN10	DD DISP=OLD,LABEL=14,DSN=MP.UIPLI,	4
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP10	DD DISP=(,CATLG),SPACE=(0800,(5000,100,10)),	4
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
//IN11	DD DISP=OLD,LABEL=15,DSN=MP.UIMIV,	4
//	VOL=(,RETAIN,SER=ssssss),UNIT=tttt	
//OP11	DD DISP=(,CATLG),SPACE=(0800,(2400,100,10)),	4
//	UNIT=uuuu,VOL=SER=vvvvvv,DSN=manager-products-dsn	
COPY	INDD=IN01,OUTDD=OP01	1
COPY	INDD=IN02,OUTDD=OP02	1
COPY	INDD=IN03,OUTDD=OP03	2
COPY	INDD=IN04,OUTDD=OP04	2
COPY	INDD=IN05,OUTDD=OP05	2
COPY	INDD=IN06,OUTDD=OP06	2
COPY	INDD=IN07,OUTDD=OP07	3
COPY	INDD=IN08,OUTDD=OP08	4
COPY	INDD=IN09,OUTDD=OP09	4
COPY	INDD=IN10,OUTDD=OP10	4
COPY	INDD=IN11,OUTDD=OP11	4
//		

Notes

- 1** This control statement is always required.
- 2** This control statement is only required if you are installing the ControlManager TSO/ISPF Interface facility (selectable unit CMR-FE70).
- 3** This control statement is only required if you are installing the ControlManager IMS/DC Interface facility (selectable unit CMR-TP4).
- 4** This control statement is only required if you are installing the ControlManager User Interface facility (selectable unit CMR-UI1).

Reconfigure the Manager Products Load Library (MP.LOADLIB) (Optional)

Once you have successfully installed the Manager Products load library (MP.LOADLIB) from the release tape, you may begin to execute Manager Products.

However, DesignManager users may wish to consider use of a reconfiguration option which provides for the generation of an overlaid version of the DesignManager executable module, DSR00.

Generating an Overlaid Version of the DesignManager Executable Module DSR00

The ASG-supplied version of the DesignManager executable load module DSR00 requires approximately 1300K of virtual storage when loaded by ControlManager. Those DesignManager users constrained by virtual storage limitations can reduce the virtual storage requirement for DSR00 to a maximum of 800K, by re-linking the load module DSR00 as an overlay program.

The member MPOJCL07 ([Figure 13](#)), contained in dataset MP.JCL, contains sample JCL that can be used as the basis for re-linking DesignManager.

SYSLIN input to the linkage-editor comes from the member DSROVLY, supplied as a member of dataset MP.SOURCE.

Figure 13 • Generating an Overlaid Version of Load Module DSR00

```
//MPOJCL07 JOB      ,MSGLEVEL=(1,1),CLASS=A
//LINKDSR EXEC PGM=IEWL,
//          PARM='LET,OVLV,NCAL,LIST,MAP,SIZE=(512K,128K)'
//SYSPRINT DD      SYSOUT=sysout-class
//SYSUT1   DD      UNIT=SYSDA,SPACE=(1024,(200,20))
//SYSLIN   DD      DISP=SHR,DSN=MP.SOURCE(DSROVLY)
//SYSLMOD  DD      DISP=SHR,DSN=MP.LOADLIB
//
```

Optimizing Usage of the Manager Products Program Code (Optional)

Introduction

The Manager Products Program Library, dataset MP.LOADLIB, once installed is ready for immediate execution. In most operating environments, such as batch or TSO/ISPF, a separate copy of the program code will be loaded for each Manager Products user. In some environments, such as CICS, the program code will be automatically shared by all users.

In MVS or OS/390 environments, program code will be loaded into both 24- and 31-bit virtual storage (below and above the 16MB line).

However, significant performance benefits and savings in both real and virtual storage requirements can be achieved by placing certain Manager Products programs (load modules) into commonly addressable storage.

MVS or OS/390 programs residing in 24-bit storage can be added to the Pageable Link Pack Area (PLPA) and programs residing in 31-bit storage can be added to the Extended Pageable Link Pack Area (EPLPA).

All users can share the selected programs thus eliminating code duplication and the associated storage overheads.

All Manager Products programs to be shared *must* be re-entrant.

You should consult your Systems Programming Group for advice and assistance if you want to implement Manager Products code sharing.

Selecting the Programs

The majority of the programs in the Manager Products Program Library are re-entrant and as such are eligible to be shared. However, many of these programs will be used on an infrequent basis and the benefits of sharing will be minimal.

Prime candidates for sharing are those heavily used programs which are always used during Manager Products execution. The principal programs used are the code segments MPR00 to MPR82. As a starting point, the Manager Products Nuclei MPR00, MPR01, and MPR02 should be selected. These three segments together are about 510K in size.

Other segments will be loaded during execution depending upon the functionality used. You can use the QUERY SEGMENTS command to display the segments currently loaded and use this output to select additional segments to be shared.

In addition to executable program segments, many other modules can be loaded during Manager Products execution. These modules are in the form of message blocks, tailoring option blocks, exits, system control blocks, and syntax tables. You can use the QUERY LOADLIST command to display details of loaded modules. Candidates for sharing here are large or frequently loaded modules.

Refer to [Appendix I, "Content and Attributes of the Load Library MP.LOADLIB" on page 223](#) for full details of the contents of the Manager Products Program Library. This appendix gives for each load module details of size, shareability attribute, and usage information.

You should also refer to *ASG-Manager Products Performance Tuning* for further hints and tips on code optimization.

4

Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE

The dataset MP.SOURCE is supplied by ASG and contains a number of members used in the installation and configuration of a Manager Products environment. The contents of MP.SOURCE are summarized in the following table together with a reference where further information may be found. In most cases further details of the SOURCE members can be found in this chapter; but in some cases further details can be found elsewhere, as it is considered that the SOURCE members are best described within the context of general installation details of the corresponding facilities. The SOURCE members on MP.SOURCE have been divided in this chapter into these categories:

Installation Macros	32
How to Tailor the Manager Products Software Using Installation Macros	32
Manager Products Installation Macros	33
CICS Interface Installation Macros	45
DataManager Installation Macros	45
DesignManager Installation Macros	59
Tailoring Source Modules	63
DesignManager Format Members	65
DictionaryManager Command-stream Members	67

Table 2 Contents of Dataset MP.SOURCE

Member Name	Description	Selectable Unit/Product	Generated Load Module	Page Reference
CMRHC	CICS Command Level hardcopy module	CMR-TP2	DMGRHCPY	117
CMROS	ControlManager link-edit stream	CMR-TP6	MPR00	150
DB2PLT	FORMAT member	DSR-UD30, DSR-PH02	-	65
DB2PRV	FORMAT member	DSR-UD30, DSR-PH02	-	65
DB2REP	FORMAT member	DSR-UD30, DSR-PH02	-	65
DB2VIEW1	DB2 import views	DYR-TI12	-	99
DB2VIEW2	DB2 import views	DYR-TI12	-	99

Table 2 Contents of Dataset MP.SOURCE

Member Name	Description	Selectable Unit/Product	Generated Load Module	Page Reference
DB2VIEW3	DB2 import views	DYR-TI12	-	99
DB2VIEW4	DB2 import views	DYR-TI12	-	99
DB2VIEW5	DB2 import views	DYR-TI12	-	99
DB2VIEW6	DB2 import views	DYR-TI12	-	99
DCA	Macro used in CICS source module assemblies	CMR-TP2	-	-
DCHAR	Tailoring macro	Manager Products	DM195	33
DCONV	Tailoring macro	DMR-AS1, DMR-AS2	DFU07	DMR-ASU App. 1
DCUST	Tailoring macro	Manager Products	DMU09	33
DCX01	CICS Command Level Interface module	CMR-TP2	CMRZ100	117
DDS2K	Tailoring macro	DMR-SL9	DYD99	DMR-S2K App. 1.2
DGADA	Tailoring macro	DMR-SL6	DFU16	DMR-ADA App. 1
DGBAL	Tailoring macro	DMR-SL3, DMR-SL5, DMR-SL6, DMR-SL9	DFU10	45
DGCOB	Tailoring macro	DMR-SL1, DMR-SL5, DMR-SL6, DMR-SL9, DMR-SL10	DFU11	45
DGDBD	Tailoring macro	DMR-SL5	DIL88	DMR-IMS App. 1.2
DGMIV	Tailoring macro	DMR-SL7	DFU15	DMR-MKIV App. 1
DGPLI	Tailoring macro	DMR-SL5	DFU12	45
DGPSB	Tailoring macro	DMR-SL5	DIL89	DMR-IMS App. 1.2
DGREC	Tailoring macro	DMR-SL1, DMR-SL2, DMR-SL3	DFU14	45
DGSBAL	Tailoring macro	DMR-SL5	DIL97	DMR-IMS App. 1.3
DGSCOB	Tailoring macro	DMR-SL5	DIL99	DMR-IMS App. 1.3

4 Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE

Table 2 Contents of Dataset MP.SOURCE

Member Name	Description	Selectable Unit/Product	Generated Load Module	Page Reference
DGSPLI	Tailoring macro	DMR-SL5	DIL98	DMR-IMS App. 1.3
DGSREC	Tailoring macro	DMR-SL5	DIL96	DMR-IMS App. 1.3
DGS2K	Tailoring macro	DMR-SL9	DYD11	DMR-S2K App. 1.3
DGTOT	Tailoring macro	DMR-SL4	DFU13	DMR-T0T App. 1
DLOG	Tailoring macro	Manager Products	DML99	33
DMEX1	Input User Exit	CMR-UI1	DMEX1	63
DRX02	ROSCOE Monitor routine module	CMR-TP6	RSSCDMR0	63
DSA	Macro used in CICS source module assemblies	CMR-TP2	-	-
DSRLINK	DesignManager link-edit stream (non-overlay version)	DSR-DS01	DSR00	59
DSROVLY	DesignManager link-edit stream (overlay version)	DSR-DS01	DSR00	59
DTIME	Inner macro of DCUST macro	Manager Products	-	-
DUC01	CICS Command Level Access Call module	CMR-TP2	DMGRDMRU	63
DYRCOM1	COMMAND-STREAM member	DYR-TE08	-	67
DYRCOM2	COMMAND-STREAM member	DYR-TE08	-	67
DYRCOM3	COMMAND-STREAM member	DYR-TE08	-	67
DYRCOM4	COMMAND-STREAM member	DYR-TE08	-	67
DYRCOM5	COMMAND-STREAM member	DYR-TE08	-	67
EFABBAL	Argument block for BAL functions	CMR-UD05, DYR-TE00	-	MPR-PROCL
EFABCOB	Argument block for COBOL functions	CMR-UD05, DYR-TE00	-	MPR-PROCL
EFABPLI	Argument block for PLI functions	CMR-UD05, DYR-TE00	-	MPR-PROCL

Table 2 Contents of Dataset MP.SOURCE

Member Name	Description	Selectable Unit/Product	Generated Load Module	Page Reference
FMTAD	FORMAT member	DSR-UD30	-	65
FMTAS	FORMAT member	DSR-UD30	-	65
FMTB	FORMAT member	DSR-UD30, DSR-PH02	-	65
FMTDD	FORMAT member	DSR-UD30	-	65
FMTDS	FORMAT member	DSR-UD30	-	65
FMTED	FORMAT member	DSR-UD30, DSR-EM10	-	65
FMTENT	FORMAT member	DSR-UD30	-	65
FMTES	FORMAT member	DSR-UD30, DSR-EM10	-	65
FMTFD	FORMAT member	DSR-UD30, DSR-PH10	-	65
FMTFS	FORMAT member	DSR-UD30, DSR-PH10	-	65
FMTID	FORMAT member	DSR-UD30	-	65
FMTIS	FORMAT member	DSR-UD30	-	65
FMTLD	FORMAT member	DSR-UD30	-	65
FMTLS	FORMAT member	DSR-UD30	-	65
FMTND	FORMAT member	DSR-UD30, DSR-UD31	-	65
FMTNS	FORMAT member	DSR-UD30, DSR-UD31	-	65
FMTPD	FORMAT member	DSR-UD30, DSR-UD31	-	65
FMTPS	FORMAT member	DSR-UD30, DSR-UD31	-	65
FMTQ	FORMAT member	DSR-UD30, DSR-PH01	-	65
FMTRD	FORMAT member	DSR-UD30	-	65
FMTRS	FORMAT member	DSR-UD30	-	65
FMTUD	FORMAT member	DSR-UD30	-	65
FMTUS	FORMAT member	DSR-UD30	-	65
FMTUSE	FORMAT member	DSR-UD30	-	65

4 Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE

Table 2 Contents of Dataset MP.SOURCE

Member Name	Description	Selectable Unit/ Product	Generated Load Module	Page Reference
FMTVD	FORMAT member	DSR-UD30	-	65
FMTVS	FORMAT member	DSR-UD30	-	65
LBUF1	Tailoring macro	DesignManager	DSR00	59
LOPT1	Tailoring macro	DesignManager	DSR99	59
MPDB2	Database request module	DYR-TI12	-	99
MPDX1	DictionaryManager source module	DictionaryManager	MPDX1	63
MPLX1	Logon Exit source module	CMR-SC05	MPLX1	63
MPLFD	Macro used to define User Defined Functions	CMR-UD05, DYR-TE00	-	63 , 97
MPLUF	User Defined Function source module	CMR-UD05, DYR-TE00	MPLUF	-
MPRFCT	CICS table generation macro	CMR-TP2	-	117
MPRPCT	CICS table generation macro	CMR-TP2	-	117
MPRPPT	CICS table generation macro	CMR-TP2	-	117
OR7xxx	Used with Oracle import	DYR-TI62	-	-
SCT	Source module	CMR- FE70	VDMCFM	MPR-ISPFU
SMFEXIT	ROSCOE source module	CMR-TP6	-	150
SMRLOAD	Installation CLIST	SourceManager	-	161
SQLPLT	Format member	DSR-UD30, DSR-PH01	-	65
SQLPRV	Format member	DSR-UD30, DSR-PH01	-	65
SQLREP	Format member	DSR-UD30, DSR-PH01	-	65

Installation Macros

How to Tailor the Manager Products Software Using Installation Macros

A number of macros are supplied which allow you to tailor your Manager Products software to your installation's own requirements. These macros are supplied in the MP-SOURCE dataset on the installation tape. MP.SOURCE must be copied to disk (as described in [Chapter 3, "Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code," on page 21](#)) for tailoring to take place.

The tailoring of your Manager Products by use of these macros has a global effect on all users and should not therefore be undertaken except on the express instructions of the Systems Administrator.

For any macros, if the supplied default values of all the keywords listed in the macro's specifications are acceptable, no action need be taken in respect of the macro subsequent to installation. If any values are to be changed, the macro must be submitted to the Assembler, with required values declared for those keywords whose values are to be changed; it is not necessary to declare any keywords whose default values are acceptable. Keywords with their new values can be declared in any order. The Assembler output must then be link-edited to produce a load module.

You can use the example job control statements given in [Figure 14 on page 33](#) to tailor your Manager Products,

where:

module-name is the name of the Manager Products' load module as stated in the macro's specifications in the table at the beginning of ["Manager Products Installation Macros" on page 33](#), ["DataManager Installation Macros" on page 45](#), and ["DesignManager Installation Macros" on page 59](#).

macro is the name of the macro whose keyword values are to be changed.

keyword is any keyword from the list in the macro's specifications.

value is any of the alternative values permitted for the keyword. Where expressly stated in the specification of a keyword, value can alternatively be declared as a sublist of values, in which case the declaration is made thus:

```
keyword =(value<,value>...)
```

The sublist must not exceed 255 characters, including the parentheses and commas. If the macro declaration covers more than one line then the standard rules for coding Assembler statements apply; that is, the continuation character '*' must be in column 72 and continuation lines must start in column 16.

You can re-tailor the resulting Manager Products module at any time, by submitting a job as described in this section. If the module is re-tailored, the tailoring is again of the module as supplied, not of the module as last tailored. The re-tailored load module overwrites the previous version, so that any changes incorporated by the previous tailoring and not repeated in the re-tailoring are lost.

Figure 14 • Tailoring Manager Products

```
//MPOJCL10 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPASM     EXEC  ASMHCL, PARM.C='LOAD,NODECK',
//          PARM.L='RENT,XREF,LIST,MAP'
//C.SYSLIB  DD    DSN=MP.SOURCE, DISP=SHR
           macro keyword=value<,keyword=value...>
           END
//L.SYSLMOD DD    DSN=MP.LOADLIB(module-name), DISP=SHR
//
```

Manager Products Installation Macros

Table 3 Installation Macros Available with Manager Products

Macro Name	Purpose	Module Generated	Relevant Selectable Unit
DCHAR	Enables the character set for all Manager Products output to be altered to conform to an installation's particular requirements.	DMI95	Any
DCUST	Enables these items to be tailored: <ul style="list-style-type: none"> • Number of lines per printed page of printed output (keyword PAGE) • Number of buffers to be allocated to the buffer pool for the dictionary (keywords IBUF, SBUF, DBUF, IBUFC, SBUFC, DBUFC) and the MP-AID (keywords MBUF and MBUFC) • The use of Manager Products updating commands (keywords UPMPAID and UPDICT). The input and output formats for date and time elements • Certain system parameters for running Manager Products in OS and DOS environments 	DMU09	Any

Table 3 Installation Macros Available with Manager Products

Macro Name	Purpose	Module Generated	Relevant Selectable Unit
	<ul style="list-style-type: none"> • Certain system parameters for running Manager Products under the IBM CICS teleprocessing monitor • Serialization Q-name used when writing to a Partitioned dataset • Parameters controlling the execution of Manager Products on non-IBM platforms • Manager Products server name • Manager Products server security options 		
DLOG	Enables the logging facility to be tailored.	DML99	Any
MPLFD	Enables User Defined Functions to be defined.	MPLUF	CMR-UD05, DYR-TE00

DCHAR

The macro DCHAR enables the character set for all Manager Products output to be altered to conform to an installation’s particular requirements. Output is translated according to a 256-byte translation table. Each byte in the table is the character to be output for a byte whose value is equivalent to the displacement of this character from the beginning of the table. The default translation table (which contains the PL/I 60-character set) is shown here:

Default Translation Table for Macro DCHAR (A Matrix Giving Hexadecimal Displacement of Characters)																
Character Position (a)	Character Position (b)															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0																
1																
2																
3																
4												.	<	(+	!
5	&										!	£	*)	;	¬
6	-	/										,	%	_	>	?
7											:	#	@	'	=	"

8		a	b	c	d	e	f	g	h	i						
9		j	k	l	m	n	o	p	q	r						
A			s	t	u	v	w	x	y	z						
B																
C		A	B	C	D	E	F	G	H	I						
D		J	K	L	M	N	O	P	Q	R						
E			S	T	U	V	W	X	Y	Z						
F	0	1	2	3	4	5	6	7	8	9						

where:

a is the first digit in the 2-digit hexadecimal displacement (see MODIFY below).

b is the second digit in the 2-digit hexadecimal displacement.

Any character not present in this table is translated to a space. If the default table is acceptable, no action need be taken in respect of DCHAR.

The hatched areas in the table represent hexadecimal codes for which the character output will depend on the hardware and software which you are using at your installation.

The macro DCHAR has three keywords, LOWER, MODIFY, and MODIFY2. The purpose of the LOWER keyword is to indicate how lower case alphabetic characters are to be handled. The alternatives are:

LOWER=NO	Translate lower case characters to spaces.
LOWER=YES	Translate lower case characters to lower case characters (that is, print them unchanged).
LOWER=UPPER	Translate lower case characters to corresponding upper case characters.

The default value for LOWER is YES.

The MODIFY keyword allows individual characters in the default translation table to be changed. It has the form:

MODIFY (*abyy*[, *abyy*] . . .)

where *ab* is the 2-digit hexadecimal displacement in the table at which the character, whose 2-digit hexadecimal representation is *yy*, is to be placed. The parentheses can be omitted if there is only one entry in the MODIFY sublist.

The sublist for the MODIFY keyword must not exceed 255 characters, including the parentheses and commas. If this is not sufficient to make the required changes to the character set, you may use the MODIFY2 keyword to create an additional sublist of up to 255 characters.

To change the character set for Manager Products output, the procedure described in ["How to Tailor the Manager Products Software Using Installation Macros" on page 32](#) must be followed for DCHAR, specifying the required values for the three keywords as required.

To translate lower case alphabetic characters to the corresponding upper characters and to include square brackets in the set of printable characters, the macro call is:

```
DCHAR LOWER=UPPER, MODIFY= (ADAD, BDBD)
```

To remove the logical not character from the set of printable characters, the macro call is:

```
DCHAR MODIFY=5F40
```

The declared keywords can be in any order.

The printable character set can be re-tailored at any time, by submitting a job as in the foregoing tables. If the set is re-tailored, the tailoring is again of the set as supplied, not of the set as last altered.

The System Administrator's SET CHARACTER-TRANSLATION OUTPUT command allows the values in the Default Output Translation Table to be temporarily modified during a Manager Products run. It also allows translation of hexadecimal codes to be different for printed output and screen output.

Note: _____

The System Administrator can also enable translation of input hexadecimal codes using the SET CHARACTER-TRANSLATION INPUT command.

DCUST

Table 4 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
AUTORW	Whether or not READ/WRITE access to the MP-AID via Auto Logon is allowed.	NO	YES
DBUF	The number of buffers to be allocated to the Data Entries dataset buffer pool in a non-CICS environment (see note 1).	4	2 to 32,000
HANGUL	Specifies a default HANGUL environment.	NO	YES

Table 4 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
IBUF	The number of buffers to be allocated to the Index dataset buffer pool in a non-CICS environment (see note 1).	4	2 to 32,000
IOTYPE	Applicable in DOS environments only (see note 10).		
KANJI	Specifies a default KANJI environment. The KANJI environment can subsequently be changed by the Systems Administrator's SET KANJI-MODE command.	none	IBM, HIT, or FUJ (see note 12)
LOGEXIT	Whether the LOGON EXIT is to be invoked in all environments or restricted to use in full screen interactive environments only.	ALL	ONLINE
MAXLOG	The maximum number of logon attempts permitted in a full screen interactive environment. A value of 0 specifies no limit.	0	1 to 30,000
MBUF	The number of buffers to be allocated to the MP-AID buffer pool in a non-CICS environment (see note 1).	3	2 to 32,000
MPSFSEC	Security mechanism to be used by Manager Products server clients when allocating a conversation.	none	Refer to <i>ASG-Manager Products Server Facility User's Guide</i>
PAGE	The number of lines per page of printed output.	60	2 to 255
PARSE	Whether mixed case commands/definitions and translation to upper case of repository names is permitted.	YES	NO
PCBXREF	Selects cross reference integrity checking during the encoding of any INS Program Communication Block (PCB) member types.	YES	NO - if the resource requirements of the checks is found to be restrictive, in which case you take responsibility for the correct selection end sequence of segments included in the PCB.
PDSQNAM	Applicable in OS environments only.		
SBUF	The number of buffers to be allocated to the Source dataset buffer pool in a non-CICS environment (see note 1).	2	2 to 32,000

Table 4 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
SERVER	Name of Manager Products server to be invoked for all Manager Products executions.	none	Refer to <i>ASG-Manager Products Server Facility User's Guide</i>
SYSxxxx	Applicable in DOS environments only.		(see note 10)
UPDICT	Whether dictionary updating commands are to be accepted (see note 2).	YES	NO
UPMPAID	Whether MP-AID updating commands are to be accepted (see note 3).	YES	NO
XSYSSVR	Whether access to the Manager Products server from multiple OS/390 images is required.	NO	YES

Parameters limiting the number of blocks preformatted when creating or reloading a dictionary or an MP-AID using Manager Products commands (see [note 11](#)):

DNUM	For the Data Entries dataset.	0	An integer of not more than 9 digits.
INUM	For the Index dataset.	0	An integer of not more than 9 digits.
LNUM	For the Log dataset.	0	An integer of not more than 9 digits.
MNUM	For the MP-AID.	0	An integer of not more than 9 digits.
RNUM	For the Recovery dataset.	0	An integer of not more than 9 digits.
SNUM	For the Source dataset.	0	An integer of not more than 9 digits.

These keywords are for use in CICS environments only:

DBUFC
 IBUFC
 ITRAN
 MBUFC
 RETRY
 RTRAN
 SBUFC
 TEMPST
 TSKEY

Table 4 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
Parameters controlling date and time formats:			
DISEP	Whether a separator character is to be used between date elements on input.	YES	NO
DOSEP	Whether a separator character is to be used between date elements on output and, if so, what that character is to be.	' ' (space)	Empty or required separator character. If the required character is a space or a comma, it should be enclosed by single quotes (' ').
IDATE	The order in which Day (<i>D</i>), Month (<i>M</i>), and Year (<i>Y</i>) are to be input.	DMY	Required order of <i>D</i> , <i>M</i> , and <i>Y</i> . <i>M</i> is optional (see note 5).
IDAYL	Fixed length of day field for input when separator not specified.	none	2 or 3 (see note 7)
IDM1 through IDM12	Name (or names) to be used on input for the month indicated by the numeric portion of the parameter.	(see note 9)	Any undelimited character string of not more than 20 characters identifying the month, or a sublist of such strings (see note 8).
IMONL	Fixed length of month field for input when separator not specified.	none	2 (see note 7)
ITIME	The order in which Hour (<i>H</i>), Minute (<i>M</i>), Second (<i>S</i>), and AM/PM (<i>X</i>) are to be input.	HMS	Required order of <i>H</i> , <i>N</i> , <i>S</i> , and <i>X</i> . <i>S</i> and <i>X</i> are optional (see note 4).
IYRL	Fixed length of year field for input when separator not specified.	none	2 or 4 (see note 7)
MAX2000	For input dates, specifies the maximum value, for a year entered as 2 digits <i>xx</i> , to be converted to a 4 digit year in the form 20 <i>xx</i> . 2 digit years entered above this value are converted as 19 <i>xx</i> .	49	10 to 90
ODATE	The order in which Day (<i>D</i>), Month (<i>M</i>) or Literal (<i>L</i>), and Year (<i>Y</i>) are to be output.	DLY	Required order of <i>D</i> , <i>M</i> or <i>L</i> , and <i>Y</i> . <i>M</i> and <i>L</i> are mutually exclusive (see note 5 and note 6).
ODAYL	Length of the day field for output.	2	3

Table 4 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
ODM1	Name to be used on output for the month indicated by the numeric portion of the parameter.	JAN	Any undelimited character string identifying the month, or empty. If empty, the month number is used.
ODM2		FEB	
ODM3		MAR	
ODM4		APR	
ODM5		MAY	
ODM6		JUN	
ODM7		JUL	
ODM8		AUG	
ODM9		SEP	
ODM10		OCT	
ODM11		NOV	
ODM12		DEC	
OMONL	Length of month field for output.	0 (see note 6)	2
OTIME	The order in which Hour (<i>H</i>), Minute (<i>M</i>), Second (<i>S</i>), and AM/PM (<i>X</i>) are to be output.	HMS	Required order of <i>H</i> , <i>M</i> , <i>S</i> , and <i>X</i> . <i>S</i> and <i>X</i> are optional (see note 4).
OYRL	Length of year field for output.	4	2
TISEP	Whether a separator character is to be used between time elements on input.	YES	NO
TOSEP	Whether a separator character is to be used between time values on output and, if so, what that character is to be.	. (period)	Empty or required separator character. If the required character is a space or a comma it should be enclosed by ''.
Parameters controlling execution on non-IBM platforms:			
ISPF	Whether interfacing to ISPF is available.	YES	NO

Table 4 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
EXTCPU	Whether extraction of CPU usage from MVS control blocks is allowed.	YES	NO
SETXA	Whether Manager Products is to force extended addressing (AMODE=31).	NO	YES
SUBTASK	Manager Products Subtasking mode: YES=standard IBM attach code HIT=HITACHI attach code NO=disable Subtasking.	YES	NO HIT

Notes

- 1 The keywords IBUF, DBUF, and SBUF can be overridden in any particular run by including the clauses IBUF *n*, DBUF *n* and SBUF *n* respectively in the DICTONARY command, where *n* is the number of buffers to be allocated to the dataset buffer pool. At least two buffers must be specified for each of these three datasets.

The number of buffers allocated to the MP-AID buffer pool can be re-specified at any time by issuing the command MP-AID BUFFERS *n* where *n* is the number of buffers required. At least 2 buffers must be specified for the MP-AID.

Very large buffer pools can be allocated in MVS/XA and MVS/ESA environments, subject to the availability of sufficient virtual storage. In these environments the buffer pools are allocated in extended storage (that is, storage above the 16M byte line). By default the maximum amount of storage that can be allocated from extended storage is 32 MB. This value can be increased, if required, by specifying the required value in the IBM installation user exit IEFUSI. You should consult your systems programming group for further information.

A buffer is defined as an area of virtual storage into which physical blocks from a given dataset are read. A separate buffer pool is created for each of the Index, Source, and Data Entries datasets and the MP-AID, and must consist of at least two buffers. For the effects of varying the size of a buffer pool, see *ASG-Manager Products Performance Tuning*.

The keywords discussed here are applicable only to repositories or MPAIDs created using the BDAM or VSAM access methods and are ignored for a Data-in-Virtual (DIV) created repository or MPAID.

- 2** If the value of UPDICT is YES, the DICTONARY command opens a dictionary to allow updating. If NO is declared, the DICTONARY command opens a dictionary for read-only access. This provides global control over an entire installation. If you have the Systems Administrator's Environmental Control Facility (CMR-SCO5) installed then the Systems Administrator may override the value of UPDICT by using the SET DICTONARY-UPDATES command during a Manager Products run.

If logging of non-updating commands and/or messages is to be applied to a dictionary, then updating of the dictionary must be allowed.

- 3** If the value of UPMPAID is set to NO then all MP-AID updates are inhibited. If you have the Systems Administrator's Environmental Control Facility (CMR-SCO5) installed then the Systems Administrator may override the value of UPMPAID by using the SET MPAID-UPDATES command during a Manager Products run.

- 4** If *X* is specified for ITIME or OTIME, hours input or output respectively will be in the form of 1 to 12; otherwise the 24-hour clock will be used.

- 5** If *M* is omitted from IDATE, or *M* and *L* are both omitted from ODATE, the relevant date will be assumed to be in Julian format; that is, *DDD*. In this case if separators are not required, the value of IDAYL must be 3.

- 6** If *M* is specified as the value assigned to ODATE, then no literals can be output. In this case the value assigned to OMONL must be 2; the values assigned to ODM1 thru ODM12 will be ignored and the month numbers used.

If *L* is specified in the value assigned to ODATE, then literals can be output. If literals are to be output, the value assigned to ODM1 thru ODM12 must contain the character strings required.

- 7** A value must be specified for this parameter when DISEP=NO.
- 8** For IDM1 to IDM12 any number of character strings may be specified for each month, within an overall limit of 255 characters for the sublist, including parentheses and separators.
- 9** The default value of an IDM_{*n*} parameter is the same value as the specified or default assigned to the corresponding ODM_{*n*} parameter.
- 10** This parameter must not be coded in OS environments.
- 11** These parameters are not normally used except in special environments such as VSPCC where it is not otherwise possible to limit the number of physical blocks formatted by Manager Products.

- 12** The KANJI keyword is used to define one of three Kanji Modes where a Kanji Mode represents a Kanji supporting hardware/software environment.

If KANJI is set to IBM then the Kanji Mode is defined as IBM.

If KANJI is set to HIT then the Kanji Mode is defined as HITACHI.

If KANJI is set to FUJ then the Kanji Mode is defined as FUJITSU.

Each Kanji Mode supported by Manager Products recognizes a different set of Shift-Out (SO) and Shift-In (SI) characters.

Once a Kanji Mode is set, Kanji character strings, enclosed within SO and SI characters, may be input within delimited character strings.

Examples

```
DCUST PAGE=50,IBUF=10,DBUF=20
DCUST IDM1=(JAN,'01',JANUARY)
DCUST IDM1=JANUARY
```

DLOG

Table 5 The Macro DLOG: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
COMTYPE	Whether the updating commands or all commands are to be logged.	UPDATE	ALL (note 1)
MSGLEV	Severity levels of Manager Products messages that are to be logged.	None (note 4)	(note 1 and 2)
MSGNO	Identifying numbers of Manager Products messages that are to be logged.	None (note 4)	(note 1 and 2)
MAXEXCP	The number of input/output accesses needed for a full roll forward, at which a warning message is issued when a dictionary is opened.	50000 (note 7)	Up to 16777215

Notes

- Alternative values for this parameter have no effect if the ControlManager Audit and Security facility (selectable unit CMR-DD3) is not installed.
- This value can be declared as one of the letters I, W, E, S, or C, or as a sublist of any combination of those letters. Any message output by a Manager Products with an alphabetic suffix to its identifying number that corresponds to a letter declared in this value is logged. (For the significance of these alphabetic suffixes see *ASG-Manager Products Messages*.)

- 3 This value can be the identifying number of a Manager Products message, or a sublist of such numbers. Message numbers can be declared with or without leading zeros. If a sublist is declared, it must not exceed 255 characters including parentheses and commas.
- 4 If no values for the keywords MSGLEV and MSGNO are declared, no messages are logged.
- 5 Certain commands are not logged; for example, AUDIT commands.
- 6 Messages arising from non-loggable commands are not logged.
- 7 For a DIV repository, where no physical I/O is performed by MPSF clients, the default value or the value specified represents logical access to the shared buffer. You should specify a significantly larger value than you normally would specify for a BDAM or VSAM repository. For example, the default value of 50,000 should be increased to a value of no less than 2,000,000.

MPLFD

Table 6 The Macro MPLFD: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
TYPE	The type of entry to be made to source module MPLUF.	None (note 1)	INITIAL, ENTRY, FINAL (note 1)
NAME	The name of the User-defined Function you wish to define.	None (note 2)	(note 2)
EP	The name or entry point of a module if this differs from that of the User-defined Function as specified in the NAME keyword.	None (note 3)	(note 3)

Notes

- 1 TYPE=INITIAL and TYPE=FINAL define the beginning and end of the list of function names. These two entries are supplied in source module MPLUF and do not therefore need to be specified by the user.

A TYPE=ENTRY statement is required for each User Defined Function you wish to define.
- 2 A name must be specified for each User Defined Function you wish to use and can be up to eight characters long.
- 3 Entry Point (EP) is an optional additional operand. The name specified can be up to eight characters long.

CICS Interface Installation Macros

The MPRFCT, MPRPCT, and MPRPPT installation macros are supplied for installing Manager Products under CICS. For further information see ["Installing and Running Manager Products under CICS" on page 117](#) which deals with running Manager Products under CICS.

DataManager Installation Macros

Introduction

Various DataManager installation macros are supplied. Further details can be found in the publications referred to in [Table 7](#).

Table 7 DataManager Installation Macros

Macro Name	Module Generated	Documented in Manual Entitled	Relevant Selectable Unit
DCONV	DFU07	Automation of Set Up	DMR-AS1, DMR-AS2
DGCOB	DFU11	This publication (see below)	DMR-SL1, DMR-SL5, DMR-SL6, DMR-SL9
DGPLI	DFU12	This publication (see below)	DMR-SL2, DMR-SL5, DMR-SL6, DMR-SL9
DGBAL	DFU10	This publication (see below)	DMR-SL3, DMR-SL5, DMR-SL6, DMR-SL9
DGREC	DFU14	This publication (see below)	DMR-SL1, DMR-SL2, DMR-SL3
DGADA	DFU16	ADABAS Interface	DMR-SL6
DGDBD	DIL88	IMS (DL/I) Interface	DMR-SL5
DGPSB	DIL89	IMS (DL/I) Interface	DMR-SL5
DGSCOB	DIL99	IMS (DL/I) Interface	DMR-SL5
DGSPLI	DIL98	IMS (DL/I) Interface	DMR-SL5
DGSBAL	DIL97	IMS (DL/I) Interface	DMR-SL5
DGSREC	DIL96	IMS (DL/I) Interface	DMR-SL5
DDS2K	DYD99	SYSTEM 2000/80 Interface	DMR-SL9
DGS2K	DYD11	SYSTEM 2000/80 Interface	DMR-SL9
DGTOT	DFU13	TOTAL Interface	DMR-SL4
DGMIV	DFU15	MARK IV Interface	DMR-SL7

Source Language Generation Macros

The installation macros DGCOB, DGPLI, DGBAL, and DGREC allow the Controller to tailor output formats and options to suit a particular installation's requirements.

DGCOB can be used to tailor the generation of COBOL source language data descriptions and of record layouts generated in association with COBOL source language descriptions.

DGPLI can be used to tailor the generation of PL/I source language data descriptions and of record layouts generated in association with PL/I source language data descriptions.

DGBAL can be used to tailor the generation of Basic Assembler Language source language data descriptions and of record layouts generated in association with Basic Assembler Language source language data descriptions.

DGREC can be used to tailor the generation of record layouts, when no associated source language data descriptions are being generated.

DGCOB

[Table 8](#) defines the keywords of the macro DGCOB. The macro assembles as module DFU11.

Table 8 The Macro DGCOB: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
ACHAR	The hexadecimal values of any additional characters that are to be accepted for output in names produced by the Source Language Generation facility, to enable characters not in the standard source language character set to be output (see note 1).	None	Any valid hexadecimal value, or a sublist of such values.
ACHAR2	As for ACHAR (above) to allow additional valid values (see note 7).	None	As for ACHAR (above).
ACSMETH	The type of file generated by PRODUCE.	BPAM	DSAM
ALIAS	Whether COBOL specific aliases are to be generated instead of member names.	NO	YES (see note 2)
ATRUNK	The character part of an ALPHABETIC ITEM FILLER name.	ALPHA-FILLER	name (see note 3)
AUTOCHK	Check for and convert fillers.	YES	NO
BINSIGN	Whether items defined as BINARY (COBOL COMP) are to be signed implicitly in the PICTURE clause.	YES	NO
BTRUNK	The character part of a BINARY ITEM FILLER name.	BIN- FILLER	name (see note 3)

Table 8 The Macro DGCOB: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
COBOL2	Whether COBOL II is to be generated instead of VS COBOL.	NO	YES
COL01	Starting column for 01 level number.	8	Up to 99
COL2ND	Starting column for second level number.	12	Up to 99
COLCOND	Whether level 88 statements generated from CONDITION-NAME clauses are to be output in a fixed position or in a position relative to the generated conditional variable.	OFFSET	FIXED
COLCPOS	The offset of CONDITIONAL (level 88) clauses (if COLCOND set to OFFSET).	1	0 to 10
COLCPOS	The starting column for CONDITIONAL (level 88) clauses (if COLCOND set to FIXED).	15	12 to 40
COLMAIN	Starting column of PICTURE clause and VALUE clause.	41	Up to 99
COLNOTE	Starting column for NOTES and DESCRIPTIONs that are printed as comments (column 7 always contains '*').	12	8 to 11 13 to 72
COLSEQ	Starting column of line sequence number.	1	Up to 99
COLSUBS	Starting column of statement elements after PICTURE clause (for example, SYNC).	56	Up to 99
COMP	Whether BINARY items are to be generated as COMPUTATIONAL instead of BINARY and/or PACKED-DECIMAL items are to be generated as COMPUTATIONAL-3 instead of PACKED-DECIMAL (applies only if COBOL2=YES).	YES	NO
CONCARD	Whether a control card is to be produced.	YES	NO
COND88	Whether level 88 statements are to be generated from CONDITION-NAME clauses (with associated RANGE or IS clauses) found in ITEM data definition.	YES	NO
DDNAME	Default library name.	GENLIB	name
DECOMMA	Whether decimal comma is to be generated instead of decimal point.	NO	YES
DESC	Maximum number of character strings of DESCRIPTION clauses used to generate comments.	0	Up to 32767 or ALL
DNOTE88	Whether level 88 statements are to be found in NOTE clauses.	NO	YES

Table 8 The Macro DGC0B: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
DTRUNK	The character part of a PACKED-DECIMAL ITEM FILLER name.	DEC- FILLER	name (see note 3)
FILESUF	The suffix appended to <i>file-name</i> where 01 <i>data-name</i> is automatically generated.	-REC	suffix (see note 4)
FTRUNK	The character part of a FLOATING-POINT ITEM FILLER name.	FLOAT-FILLER	name (see note 3)
GEN	Whether both FD and 01 levels are to be generated from FILE members, or FD only, or 01 only.	ALL	FD or 01
GFNL	Length of number part of GROUP FILLER name.	5	4 to 15
GTRUNK	Value of name part of GROUP FILLER name.	GROUP-FILLER	name (see note 3)
IFNL	Length of number part of ITEM FILLER name.	5	4 to 14
INCLEV	Level number increment.	2	Up to 99
INCLEV0	Whether level numbering increments are to begin from zero or from 01. Default value gives level numbers of 01,02,04... Alternative value gives level numbers of 01,03,05...	YES	NO
INCRSEQ	Line sequence number increment.	10	Up to 32767
INITVAL	Whether VALUE clauses are to be generated from ITEM date definitions.	NO	YES
KEYABB	Whether permitted keyword abbreviation is to take place.	YES	NO
KNOWNAS	Whether local-names from KNOWN-AS clauses are to be generated instead of member names.	NO	YES (see note 2)
LENSEQ	Length of sequence number.	6	Up to 9
LIBCC	The format of the control card output as the first card of a QSAM file (unless overridden by an ONTO CLAUSE).	(see <i>ASG-Manager Products Source Language Generation</i>)	A delimited character string of 1 to 72 characters (including question mark for which a generated library name is substituted).

Table 8 The Macro DGCOB: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
MAXFILE	Maximum length of any file data structure.	1,048,575	Any value up to the limit for MAXLEN below.
MAXLEN	Maximum length of any data structure.	16,777,215	Up to 2,147,483,647
MAXSYM	Maximum number of PICTURE symbols before replacement with a repetition factor takes place.	3	From 1 to 30
MEMLEN	Maximum length of <i>library-name</i> .	8	Up to 16
NEZEROS	Whether to assume a default value for numeric edited items of ZERO (Yes) or SPACES (No). This option is only relevant where the item has a picture clause including editing symbols and no contents clause is present and initial values are required.	YES	NO
NOTE	Maximum number of character strings of NOTES clauses to be used to generate comments.	0	Up to 32767 or ALL
NTRUNK	The character part of a NUMERIC-CHARACTER ITEM FILLER name.	NC- FILLER	name (see note 3)
NUMSIGN	Whether items defined as NUMERIC (COBOL DISPLAY) are to be signed implicitly in the PICTURE clause.	NO	YES
OFFSUBS	Number of spaces between subsequent level numbers.	2	Up to 99
PCKSIGN	Whether items defined as PACKED,DECIMAL (COBOL COMP-3) are to be signed implicitly in the PICTURE clause.	YES	NO
QUOTES	Whether generated non-numeric literals are to be enclosed within double (") or single (') quotation marks.	DOUBLE	SINGLE
RECBOX	Whether boxing of record layouts printout required.	YES	NO
RECCON	Not yet implemented.		
RECMGEN	Whether the RECORD FORMAT clause is generated only for UNDEFINED blocking.	NO	YES (see note 6)
RECPGSI	Number of lines per printed page in record layouts.	SYSTEM (see note 5)	1 to 255

Table 8 The Macro DGC0B: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
RECPIC	Whether repository PICTUREs required in record layouts.	YES	NO
RECPOS	Whether start positions are to be generated (in record layouts) instead of offsets.	NO	YES
RECSP	Number of space lines between each item in record layout (applies only if RECBOX=NO).	1	Up to 255
REDFILL	Whether unequal redefining members are to be padded with fillers.	YES	NO
RNDBIN	Whether 1 and 3 byte binary items are to be rounded up.	YES	NO
RNDBIT	Whether bit string fields are generated with byte alignment (see <i>ASG-Manager Products Source Language Generation</i>).	YES	NO
SEQNO	Whether line sequence numbering required.	NO	YES
SPACING	Number of spaces between statement elements.	1	Up to 64
ULABNAM	Name generated for use in FD LABEL RECORDS clause when USER-LABELS specified.	LABEL-ABEA	name
VALUE	Whether a VALUE of SPACE(S) or ZERO(S) is to be generated if an ITEM does not have a CONTENTS clause, instead of omitting the VALUE clause.	YES	NO

Notes

- 1** The standard Source Language Generation facility output character set for COBOL data descriptions conforms to that defined for American National Standard COBOL for the data division. The character set can be extended to allow non-standard characters to be put in names, by entering the hexadecimal value of each required character as a value to ACHAR. The user should ensure that any extra characters that are added to the output character set in this way are used only in ways that are permitted by the software with which Manager Products are used.
- 2** If ALIAS=YES and KNOWNAS=YES both apply, then when a data name is generated for a member that has an ALIAS clause and is subject to a containing member's KNOWN-AS clause, the KNOWN-AS local name takes precedence.

- 3 Name defines part of a member name. It must be stated within single quotes, must not be more than 16 characters in length, and must conform to Manager Products rules for member names stated in InfoBank panel MPLANG5100. The values declared for the keywords ATRUNK, BTRUNK, FTRUNK, GTRUNK, and NTRUNK should correspond to those of the same keywords defined in association with the import from COBOL function, if that function is also used.
- 4 The value of the keyword FILESUF must be a suffix acceptable in COBOL of up to 29 characters enclosed in single quotes.
- 5 The option RECPGSI=SYSTEM means that the number of lines printed per page is the value of the PAGE keyword in the DCUST macro.
- 6 If RECMGEN=NO, RECORD FORMAT is generated only if the member is defined with a BLOCKING clause of UNDEFINED. If RECMGEN=YES, RECORD FORMAT is generated for all values of BLOCKING.
- 7 The format of ACHAR operands limits input to 127 values. The ACHAR2 keyword allows for a second set of up to 127 values to be specified, if required.

DGPLI

[Table 9](#) defines the keywords of the macro DGPLI. The macro assembles as module DFU12.

Table 9 The Macro DGPLI: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
ACHAR	The hexadecimal values of any additional characters that are to be accepted for output in names produced by the Source Language Generation facility, to enable characters not in the standard source language character set to be output (see note 1).	None	Any valid hexadecimal value, or a sublist of such values.
ACHAR2	As for ACHAR (above) to allow additional valid values (see note 6).	None	As for ACHAR (above).
ACSMETH	The type of file generated by PRODUCE.	BPAM	QSAM
ALIAS	Whether PL/I specific aliases are to be generated instead of member names.	NO	YES (see note 2)
ATRUNK	The character part of an ALPHABETIC ITEM FILLER name.	ALPHA-FILLER	name (see note 3)
AUTOCHK	Check for and convert fillers.	YES	NO
BSDSUF	Suffix for generated BASED structured names.	_BASED	suffix (see note 4)

Table 9 The Macro DGPLI: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
BTRUNK	The character part of a BINARY ITEM FILLER name.	BIN-FILLER	name (see note 3)
CHARSET	Whether the 60 or 48 character set is to be used.	60	48
COL01	Starting column for 01 level number.	2	Up to 99
COLMAIN	Starting column for attributes.	41	Up to 99
COLNOTE	Starting column for comments.	41	Up to 99
COLSEQ	Starting column for sequence number.	73	Up to 99
CONCARD	Whether a control card is to be produced.	YES	NO
CTRUNK	The character part of a CHARACTER ITEM FILLER name.	FILLER	name (see note 3)
DDNAME	Default library name.	GENLIB	name
DESC	Maximum number of character strings of DESCRIPTION clauses used to generate comments.	0	Up to 32767 or ALL
DTRUNK	The character part of a PACKED-DECIMAL ITEM FILLER name.	DEC- FILLER	name (see note 3)
FLOATYP	Whether BINARY or DECIMAL FLOAT is to be generated.	BINARY	DECIMAL
FTRUNK	The character part of a FLOATING-POINT ITEM FILLER name.	FLOAT-FILLER	name (see note 3)
GFNL	The number of digits in the number part of a GROUP FILLER name.	5	Up to 14
GTRUNK	Value of name part of GROUP FILLER name.	GROUP-FILLER	name (see note 3)
IFNL	The number of digits in the number part of an ITEM FILLER name.	5	Up to 14
INCLEV	Level number increment.	2	Up to 99
INCRSEQ	Sequence number increment.	10	Up to 32767
INITVAL	Whether INITIAL attributes are to be generated from ITEM data definitions.	NO	YES
KEYABB	Whether keyword abbreviation is required.	YES	YES
KNOWNAS	Whether local-names from KNOWN-AS clauses are to be generated instead of member names.	NO	YES (see note 2)
LENSEQ	Length of sequence number.	8	Up to 9

Table 9 The Macro DGPLI: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
LIBCC	The format of the control card output as the first card of a QSAM file (unless overridden by an ONTO CLAUSE).	(see <i>ASG-Manager Products Source Language Generation</i>)	A delimited character string of 1 to 72 characters (including question mark for which a generated library name is substituted).
MAXLEN	Maximum number of data structures.	2,147,483,647	Up to 2,147,483,647
MAXSYM	Maximum number of PICTURE symbols before replacement with a repetition factor takes place.	3	From 1 to 30
MEMLEN	Maximum length of library-name.	8	Up to 16
NOTE	Maximum number of character strings of NOTES clauses to be used to generate comments.	0	Up to 32767 or ALL
NTRUNK	The character part of a NUMERIC-CHARACTER ITEM FILLER name.	NC-FILLER	name (see note 3)
OFFSUBS	Offset for subsequent level numbers.	2	Up to 99
PNTRSUF	Suffix for generated POINTER names.	_PTR	suffix (see note 3)
RECBOX	Whether boxing of record layouts printout required.	YES	NO
RECCON	Not yet implemented.		
RECPGSI	Number of lines per printed page in record layouts.	SYSTEM (see note 5)	1 to 255
RECPIC	Whether repository PICTUREs required in record layouts.	YES	NO
RECPOS	Whether start positions are to be generated (in record layouts) instead of offsets.	NO	YES
RECSP	Number of space lines between each item in record layout (applies only if RECBOX=NO).	1	Up to 255
REFSUF	PL/I REFER option suffix.	_REFER	suffix (see note 4)
RNDBIN	Whether 1 and 3 byte binary items are to be rounded up.	NO	YES
RNDBIT	Whether bit string fields are generated with byte alignment (See <i>ASG-Manager Products Source Language Generation</i>).	NO	YES

Table 9 The Macro DGPLI: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
SEQNO	Whether line sequence numbering required.	NO	YES
SPACING	The number of spaces between keywords.	1	Up to 99
VALUE	Whether a value of SPACES or ZEROES, according to data type, is to be assigned when initialization is required and no explicit initialization requirement is found.	YES	NO

Notes

- 1** The standard Source Language Generation facility output character set for PL/I is the PL/I 60-character set. This character set can be extended to allow nonstandard characters to be output in names, by entering the hexadecimal value of each required character as a value to ACHAR. The user should ensure that any extra characters that are added to the output character set in this way are used only in ways that are permitted by the software with which Manager Products is used.
- 2** If ALIAS=YES and KNOWNAS=YES both apply, then when a data name is generated for a member that has an ALIAS clause and is subject to a containing member's KNOWN-AS clause, the KNOWN-AS local-name takes precedence.
- 3** Name defines part of a member name. It must be stated within single quotes, must not be more than 16 characters in length, and must conform to Manager Products rules for member names stated in InfoBank panel MPLANG5100. The values declared for the keywords ATRUNK, BTRUNK, CTRUNK, DTRUNK, FTRUNK, GTRUNK, and NTRUNK should correspond to those of the same keywords defined in association with the Automation of Set Up facility for the generation of members from PL/I source statements, if that facility is also used.
- 4** Suffix must be a suffix acceptable in PL/I. It must be given within single quotes.
- 5** The option RECPGSI=SYSTEM means that the number of lines printed per page is the value of the PAGE keyword in the DCUST macro.
- 6** The format of ACHAR operands limits input to 127 values. The ACHAR2 keyword allows for a second set of up to 127 values to be specified, if required.

DGBAL

The keywords of the macro DGBAL are defined in the following table. The macro assembles as module DFU10.

Table 10 The Macro DGBAL: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
ACHAR	The hexadecimal values of any additional characters that are to be accepted for output in name produced by the Source Language Generation facility, to enable characters not in the standard source language character set to be output (see note 1).	None	Any valid hexadecimal value, or a sublist of such values.
ACHAR2	As for ACHAR (above) to allow additional valid values (see note 5).	None	As for ACHAR (above).
ACSMETH	The type of file generated by PRODUCE.	BPAM	QSAM
ALIAS	Whether Assembler specific aliases are to be generated instead of member names.	NO	YES (see note 2)
ATRUNK	The character part of an ALPHABETIC ITEM FILLER name.	ALPHA-FILLER	name (see note 3)
AUTOCHK	Whether to check for and convert fillers.	YES	NO
BTRUNK	The character part of a BINARY ITEM FILLER name.	BIN- FILLER	name (see note 3)
COLMAIN	Starting column for operation code.	10	Up to 99
COLNOTE	Starting column for comments.	41	Up to 99
COLSEQ	Starting column for sequence number.	73	Up to 99
COLSUBS	Starting column for operand.	16	Up to 99
CONCARD	Whether a control card is to be generated.	YES	NO
CTRUNK	The character part of a CHARACTER ITEM FILLER name.	FILLER	name (see note 3)
DDNAME	Default library name.	GENLIB	name
DESC	Maximum number of character strings of DESCRIPTION clauses used to generate comments.	0	Up to 32767 or ALL
DTRUNK	The character part of a PACKED-DECIMAL ITEM FILLER name.	DEC-FILLER	name (see note 3)
EPATSUF	Edit pattern suffix.	EP	xx
EPPROD	Whether edit-patterns are to be generated from the PRODUCE command.	NO	YES

Table 10 The Macro DGBAL: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
EQUATE	Whether EQU statements are to be generated from CONDITION-NAME clauses (with associated IS clauses) found in ITEM data definitions.	YES	NO
FRDREQD	(Reserved for future use.)	NO	
FRECSUF	(Reserved for future use.)	FD	
FTRUNK	The character part of a FLOATING-POINT ITEM FILLER name.	FLOAT-FILLER	name (see note 3)
GFNL	The number of digits in the number part of a GROUP FILLER name.	5	Up to 14
GTRUNK	The character part of a GROUP FILLER name.	GROUP-FILLER	name (see note 3)
IFNL	The number of digits in the number part of an ITEM FILLER name.	5	Up to 14
INCRSEQ	Sequence number increment.	10	Up to 32767
INITVAL	Whether DC statements are to be generated from ITEM data definitions.	NO	YES
KNOWNAS	Whether local-names from KNOWN-AS clauses are to be generated instead of member names.	NO	YES (see note 2)
LENSEQ	Length of sequence number field.	8	Up to 9
LIBCC	The format of the control card output as the first card of a QSAM file (unless overridden by an ONTO CLAUSE).	(see <i>ASG-Manager Products Source Language Generation</i>)	A delimited character string of 1 to 72 characters (including question mark for which a generated library name is substituted).
MAXLEN	Maximum length of any data structure.	16,777,215	Up to 2,147,483,647
MEMLEN	Maximum length of library-name.	8	Up to 16
NAMEMAX	Maximum length for data names.	8	1 to 63
NOTE	Maximum number of character strings of NOTES clauses to be used to generate comments.	0	Up to 32767 or ALL
NTRUNK	The character part of a NUMERIC-CHARACTER ITEM FILLER name.	NC-FILLER	name (see note 3)
RECBOX	Whether boxing of record layouts printout required.	YES	NO

Table 10 The Macro DGBAL: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
RECCON	Not yet implemented.		
RECPGSI	Number of lines per printed page in record layouts.	SYSTEM (note 4)	1 to 255
RECPIC	Whether repository PICIUREs are required in record layouts.	YES	NO
RECPOS	Whether start positions are to be generated (in record layouts) instead of offsets.	NO	YES
RECSP	Number of space lines between each item in record layout (applies only if RECBOX=NO).	1	Up to 255
RNDBIN	Whether binary items are to be rounded up.	NO	YES
RNDBIT	Whether bit string fields are generated with byte alignment (see <i>ASG-Manager Products Source Language Generation</i>).	YES	NO
SEQNO	Whether sequence numbering required.	NO	YES

Notes

- 1** The standard Source Language Generation facility output character set for Basic Assembler Language is that defined in the IBM Basic Assembler Language specification. This character set can be extended to allow non-standard characters to be output in names by entering the hexadecimal value of each required character as a value to ACHAR. The user should ensure that any extra characters that are added to the output character set in this way are used only in ways that are permitted by the software with which Manager Products is used.
- 2** If ALIAS=YES and KNOWNAS=YES both apply, then when a data name is generated for a member that has an ALIAS clause and is subject to a containing member's KNOWN-AS clause, the KNOWN-AS local-name takes precedence.
- 3** Name defines part of a member name. It must be stated within single quotes, must not be more than 16 characters in length, and must conform to the rules for member names stated in InfoBank panel MPLANG5100. The values declared for the keywords ATRUNK, BTRUNK, CTRUNK, DTRUNK, FTRUNK, GTRUNK, and NTRUNK should correspond to those of the same keywords defined in association with the Automation of Set Up facility for the generation of members from COBOL source statements, if that facility is also used.
- 4** The option RECPGSI=SYSTEM means that the number of lines printed per page is the value of the PAGE keyword in the DCUST macro.
- 5** The format of ACHAR operands limits input to 127 values. The ACHAR2 keyword allows for a second set of up to 127 values to be specified, if required.

DGREC

[Table 11](#) defines the keywords of the macro DGREC. The macro assembles as module DFU14.

Table 11 The Macro DGREC: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
ALIAS	Whether RECORD-LAYOUTS specific aliases are to be generated instead of member names.	NO	YES (see note 1)
BASEDMT	For non-ITEMs, whether the repository member type is to be output as the TYPE literal instead of GROUP.	NO	YES
DESC	Maximum number of character strings of DESCRIPTION clauses used to generate comments.	0	Up to 32767 or ALL
KNOWNAS	Whether local-names from KNOWN-AS clauses are to be generated instead of member names.	NO	YES (see note 2)
MAXLEN	Maximum number of data structures.	2,147,483,647	Up to 2,147,483,647
NOTE	Maximum number of character strings of NOTE clauses used to generate comments.	0	Up to 32767 or ALL
RECBOX	Whether boxing of record layouts printout is required.	YES	NO
RECCON	Not yet implemented.		
REPGSI	Number of lines per printed page in record layouts.	SYSTEM (note 1)	1 to 255
RECPIC	Whether repository PICTUREs are required in record layouts.	YES	NO
RECPOS	Whether start positions are to be generated instead of offsets.	NO	YES
RECSP	Number of space lines between each item in record layouts (applies only if RECBOX=NO).	1	Up to 255
RNDBIN	Whether binary items are to be rounded up.	NO	YES
RNDBIT	Whether bit string fields are generated with byte alignment (see <i>ASG-Manager Products Source Language Generation</i>).	YES	NO
WIDEFMT	Whether a wide or a smaller record format is used.	AUTO	YES or NO (note 3)

Notes

- 1 The option RECPGSI=SYSTEM means that the number of lines printed per page is the value of the PAGE keyword in the DCUST macro.
- 2 If ALIAS=YES and KNOWNAS=YES both apply, then when a data name is generated for a member that has an ALIAS clause and is subject to a containing member's KNOWN-AS clause, the KNOWN-AS local-name takes precedence.
- 3 If WIDEFMT=YES, the wide record format is always used. If WIDEFMT=NO, the smaller format is always used. With the default setting of AUTO, the wide format is used if the record length exceeds 99,999; otherwise the smaller format is used.

DesignManager Installation Macros

Table 12 Installation Macros Available with DesignManager

Macro Name	Purpose	Module Generated	Relevant Selectable Unit
LOPT1	Allows the tailoring of default values assigned to those DesignManager keywords that do not alter the overall size of the DesignManager load module.	DSR99	DSR-DS01
LBUF1	Allows the sizes of various buffers and work areas to be altered. Larger work areas and buffers may be needed for larger logical designs, while smaller areas can be used to reduce virtual storage requirements. Once assembled, LBUF1 must be link-edited with DSR00 using the job control statements given in note 15 .	DSR00	DSR-DS01

Figure 15 • Assembling LBUF1 and Re-linking the Load Module DSR00

```

//MPOJCL15      JOB      , ,MSGLEVEL=(1,1),CLASS=A
//DSR           EXEC    ASMHCL, PARM.C='LOAD,NODECK'
//             PARM.L='LET,XREF,MAP,LIST,SIZE=(512K,128K)'
//C.SYSLIB      DD      DSN=MP.SOURCE,DISP=SHR
                LBUF1 keyword=value<,keyword=value...>
                END
//L.SYSLIN      DD
//             DD      DSN=MP.SOURCE(DSRLINK),DISP=SHR
//SYSLMOD      DD      DSN=MP.LOADLIB,DISP=SHR
//

```

Note:

Specify the OVLY parameter in the PARM.L statement if DesignManager is to be re-linked as an overlay module. Change the member name DSRLINK to DSROVLY when specifying an overlaid version. For details of generating an overlaid version of load module DSR00, refer to ["Generating an Overlaid Version of the DesignManager Executable Module DSR00" on page 24](#).

LOPT1

Table 13 The Macro LOPT1: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
ASOPT1	The rules DesignManager uses to decide whether to generate an assumed record (see note 1).	YES	NO
RHSPNM	The prefix name to be used for an assumed data element, generated on the workbench for inclusion as the non-prime data element in an assumed record (see note 2).	ASSUMED	A string of up to 28 characters.
SEPSTR	The characters to be recognized as separators when name reduction takes place in the PREVIEW, DB2 PREVIEW, POPULATE, and DB2 POPULATE commands (see note 3).	- (hyphen) and _ (underscore)	A string and of up to 8 characters.
Parameters applicable only if the Enterprise Modeling facility, selectable unit DSR-EM10 is installed:			
LHSPRE	The character used to cause generation of a single default identifier name for an attribute of an entity.	!	Any single character.
RHSPRE	The character used to cause generation of a default identifier name for an attribute of an entity.	@	Any single character.
Parameters applicable only if the SQL/DS Database Design - First Cut Model facility (selectable unit DSR-PH01) or the DB2 Database Design - First Cut Model facility (selectable unit DSR-PH02) is installed:			
SQLCON	The DB2 or SQL/DS continuation character which is required in the output resulting from the PRODUCE SQL or PRODUCE DB2 command.	(hyphen)	Any continuation character permitted by DB2 or SQL/DS.
XTRACT	The common clause which contains the SQL/DS or DB2 column type within data-element definitions (see note 4).	COMMENT LINE 1	A string of up to 80 characters which should consist of a clause name, optionally followed by LINE and a line number.

Notes

- 1 If ASOPT1 is set to YES, assumed records are generated according to the rules described in InfoBank panel DSRNET1300, and MVDs (multivalued dependencies) are represented in a network schema ONLY by multivalued associations and/or secondary key associations, as described in InfoBank panels DSRNET1700 and DSRNET1800.

If ASOPT1 is set to NO, the same rules apply with the following exception.

An assumed record is *not* generated for the right-hand side of the MVD, and the MVD is represented by a hierarchical-m association instead of a multivalued association if (and only if) an MVD satisfies both of these conditions:

- The set of data elements comprising the reduced left-hand side of the MVD is the key of an FD-record or assumed record already present in the Workbench Design Area (WBDA).
- The set of data elements formed by combining the reduced left-hand side and the reduced right-hand side of the MVD is the key of an FD-record or assumed record also present in the WBDA.

If no value is entered for ASOPT1, a default value of YES is assumed.

- 2 The remainder of the name consists of the assumed record's workbench number.
- 3 A space character is always recognized and does not have to be specified. The terminator characters is a period (.) and semi-colon (;) cannot be used as separators.
- 4 The effect of the XTRACT keyword is nullified if you have the User Formatted Output facility (selectable unit DSR-UD30) and you use the EXTRACT 1 DATA ELEMENTS clause in a FORMAT member to specify the common clause containing the column type.

LBUF1

Table 14 The Macro LBUF1: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
MTTMAX	The maximum number of entries in the internal member type table (see note 1).	80	Any unsigned integer (see note 1).
WBSIZE	The size of the workbench design area in full words.	64000	Any unsigned integer (see note 2).
Parameters applicable only if the User Formatted Output facility, DSR-UD30, is installed:			
FMSIZE	The maximum size of the format area in full words (see note 3).	2500	Any unsigned integer.

Notes

- 1 The internal member type table identifies those member types which may be referenced by DesignManager.

These are the member types:

- VIEWSET
- ENTITY
- ITEM
- COMMAND
- STREAM
- USERVIEW
- FORMAT
- GROUP
- Any relevant User Defined Syntax member types

The default value of 80, assigned to the MTTMAX keyword, only needs to be changed if you have:

- The ControlManager User Defined Syntax facility (selectable unit CMR-UD1) and
- More than 73 relevant User Defined Syntax member types

- 2** This work area is used by DesignManager to perform logical database designs. The default size of 64000 full words is large enough to handle most database designs. The percentage utilization of the workbench design area can be ascertained at any time during a DesignManager run by the input of a SNAPSHOT command. It gives a good indication of whether a larger workbench design area is necessary. It is advisable not to work extensively at a high percentage utilization (above about 90 percent) as this may increase execution time.
- 3** Users with the User Formatted Output optional additional facility (selectable unit DSR-UD30) who have very large formats in their FORMAT members may have to increase the value of the parameter FMSIZE. This value must be large enough to accommodate the largest format member that will be processed.

Note: _____

When a format line is loaded into DesignManager, all spaces except those contained within character strings are removed.

Tailoring Source Modules

This section provides information on installing the source modules supplied on dataset MP.SOURCE. For some modules, installation details are either given elsewhere in this manual or in another manual. This is because it is considered that the information is best included with other general installation information relating to a particular facility.

The appropriate member on dataset MP. SOURCE should be updated, and then reassembled and link-edited using the job control statements given in [Figure 16 on page 64](#) (or [Figure 17 on page 65](#) if the member is MPLUF).

Table 15 Source Modules

Member Name	Purpose	Module Generated	Relevant Selectable Unit
CMRHC	The CICS Command Level Hardcopy module. Details of installing this module are given in "Installing and Running Manager Products under CICS" on page 117 .	DMGRHCPY	CMR-TP2
DCX01	The CICS Command Level Interface module. Details of installing this module are given in "Installing and Running Manager Products under CICS" on page 117 .	CMRZ100	CMR-TP2
DMEX1	Input User Exit. If the User Interface facility (CMR-UI1) is installed, ControlManager calls the DMEX1 module before processing each input line. If the user wishes to validate input lines before passing them back to ControlManager (or rejecting them), the supplied version of DMEX1 must be updated, assembled, and link-edited. This replaces the supplied version by the user defined version.	DMEX1	CMR-UI1
DRX02	ROSCOE Monitor Routine source module. Details of installing this module are given in "Installing Manager Products under ROSCOE" on page 150 .	RSSCDMRO	CMR-TP6
DUC01	CICS Command Level Access Call Interface module. Details of installing this module are given in "Installing and Running Manager Products under CICS" on page 117 .	DMGRDMRU	CMR-TP2

Table 15 Source Modules

Member Name	Purpose	Module Generated	Relevant Selectable Unit
MPDX1	DictionaryManager User Exit. The module MPDX1 is called during translation rule processing when running DictionaryManager. As supplied, it contains coding specific to the translation of a DataManager ITEM PICTURE into the corresponding IDD picture. MPDX1 is supplied as source to allow you to add your own functions or to modify the supplied code to your own needs, in which case the supplied version of MPDX1 must be updated, assembled, and link-edited. This replaces the supplied version by the user defined version.	MPDX1	DYR-DY01
MPLUF	Procedures Language Source module. The module allows you to specify User Defined Functions. For further details, refer to Chapter 8. "Linking External Software to Manager Products Software," on page 95.	MPLUF	CMR-UD05, DYR-TE00
MPLX1	LOGON EXIT source module (MPLX1). The Logon Exit facility allows the Systems Administrator to modify the standard ControlManager Logon procedure. As supplied, MPLX1 will invoke the standard ControlManager Logon procedure.	MPLX1	CMR-SC05
SCT	TSO/ISPF Interface source module. Details of installing this module are given in the <i>ASG-Manager Products TSO/ISPF Interface Installation</i> manual.	VDMCFM	CMR-FE70
SMFEXIT	ROSCOE source module. Details of installing this module are given in "Installing Manager Products under ROSCOE" on page 150.	—	CMR-TP6

Figure 16 • Assembling and Link-Editing Source Modules DMEX1, MPDX1, or MPLX1

```

//MPOJCL20 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPASM    EXEC    ASMHCL,PARM.C='LOAD,NODECK'
//        PARM.L='RENT,MAP,LIST,XREF'
//C.SYSIN  DD      DSN=MP.SOURCE(source-module-name),
//        DISP=SHR
//L.SYSLIN DD
//        DD      *
NAME      source-module-name(R)

```

```
//SYSLMOD DD DSN=MP.LOADLIB,DISP=SHR
//
```

Figure 17 • Assembling and Link-Editing Source Module MPLUF

```
//MPOJCL25 JOB , ,MSGLEVEL=(1,1),CLASS=A
//MPLUF EXEC ASMHCL, PARM.C='LOAD,NODECK',
// PARM.L='RENT,MAP,LIST,XREF'
//C.SYSLIB DD DSN=MP.SOURCE,DISP=SHR
//SYSIN DD DSN=MP.SOURCE(MPLUF),DISP=SHR
//L.SYSLIN DD
// DD *
INCLUDE SYSLIB(user-function-module)
.
.
.
ENTRY MPLUF
NAME MPLUF(R)
//SYSLMOD DD DSN=MP.LOADLIB,DISP=SHR
//SYSLIB DD DSN=user-function-library,DISP=SHR
//
```

DesignManager Format Members

The User Formatted Output facility (selectable unit DSR-UD30), is documented in *ASG-DesignManager User Formatted Output*. If the User Formatted Output facility is to be installed, no additional installation job control statements are required. However, it is recommended that you use the special set of FORMAT members until you are sufficiently familiar with the facility to set up your own FORMAT members.

The source definitions for these members are held as members of the partitioned dataset MP.SOURCE. In order to use them it is necessary to add them to the dictionary as required.

Note: _____

Each member is prefixed by the command:

```
REPLACE member-name;
```

where *member-name* is as given in [Table 16](#). [Table 16](#) shows the FORMAT members supplied.

Table 16 FORMAT Members Supplied for the User Formatted Output Facility

Report Type	FORMAT Member Name for Detail Report	FORMAT Member Name for Summary Report
Data Element Usage Analysis Report	FMTDD	FMTDS
Data-view Report	FMVD	FMTVS
Design Audit	FMTAD	FMTAS
Intersecting Data Element Report	FMTID	FMTIS
Logical Schema Report	FMTLD	FMTLS
Network Schema Report	FMTRD	FMTRS
Preview/Populate Entity Definitions	FMTENT (see note)	
Preview/Populate Userview Definitions	FMTUSE (see note)	
Userview Report	FMTUD	FMTUS
Members only applicable if the Enterprise Modeling facility, selectable unit DSR-EN10, is installed:		
Entity Report	FMTED	FMTES
Members only applicable if the User Printer Graphics facility, selectable unit DSR-UD31, is installed:		
Logical Schema Cluster Plot	FMTPD	FMTPS
Network Cluster Plot	FMTND	FMTNS
Members only applicable if the Load Factor Calculation facility (selectable unit DSR-PH10) is installed:		
Load Factor Analysis Report	FMTFD	FMTFS
Members only applicable if the DB2 Database Design - First Cut Model facility (selectable unit DSRPH02) is installed:		
DB2 Cluster Plot	DB2PLT (see note)	
DB2 Table Report	DB2REP (see note)	
Preview/Populate DB2 Definitions	DB2PRV (see note)	
Produce DB2 Report	FMTB (see note)	
Members only applicable if the SQL/DS Database Design - First Cut Model facility, selectable unit DSR-PH01, is installed:		
Preview/Populate SQL Definitions	SQLPRV (see note)	

Table 16 FORMAT Members Supplied for the User Formatted Output Facility

Report Type	FORMAT Member Name for Detail Report	FORMAT Member Name for Summary Report
Produce SQL Report	FMTQ (see note)	
SQL Cluster Plot	SQLPLT (see note)	
SQL Table Report	SQLREP (see note)	

Note: _____
 There is only one type of report available, which is neither a Detail nor a Summary report.

DictionaryManager Command-stream Members

If you have the DictionaryManager Corporate Dictionary Definition Export for IDD facility (selectable unit DYR-TE08) installed, you may use the DictionaryManager COMMAND-STREAM members supplied on dataset MP.SOURCE. In order to use them you need to add them to the dictionary as required.

Note: _____
 Each member is prefixed by the command:

REPLACE *member-name*;

where *member-name* is as given in [Table 17](#). [Table 17](#) shows the COMMAND-STREAM members supplied.

Table 17 DictionaryManager COMMAND-STREAM Members

Member Name	Command-stream name	Function
DYRCOM1	GEN-CONTAINED-RECORDS	To produce input for the IDD DDDL compiler from IDMS-RECORD members.
DYRCOM2	PRODUCE-IDMS-SCHEMA	To produce input for the IDMS Schema compiler from IDMS-DATABASE members with COBOL-like layouts for IDMS-RECORDS.

Table 17 DictionaryManager COMMAND-STREAM Members

Member Name	Command-stream name	Function
DYRCOM3	GEN-IDMS-SCH	To produce input for the IDMS Schema compiler from IDMS-DATABASE members.
DYRCOM4	GEN-IDMS-SUB	To produce input for the IDMS Subschema compiler from IDMS-SUBSCHEMA members.
DYRCOM5	GEN-IDMS-DMCL	To produce input for the IDMS DMCLcompiler from IDMS-SUBSCHEMA members.

5

Set Up an MP-AID

This chapter includes these sections:

Create an MP-AID and Load Dataset MP.INFO.UNLOAD	71
BDAM-organized MP-AID	71
VSAM-organized MP-AID	72
Load the MP-AID with Dataset MP.COM.UNLOAD	74

Before Manager Products can be used, an MP-AID must be created. The MP-AID is the dataset that contains the information used to control the environment in which your Manager Products will operate. A description of the MP-AID and its uses can be found in the *ASG-ControlManager User's Guide*. Manager Products supports BDAM and VSAM-organized MPAIDs.

You can also create a Data-in-Virtual (DIV) MPAID for use under the Manager Products Server Facility (MPSF). To create a DIV MPAID refer to the *ASG-Manager Products Server Facility User's Guide* for complete details.

As an alternative to creating a single MP-AID environment, you can utilize the concatenated MP-AID facility and create one or more secondary MP-AIDs, which together with a single read/write primary MP-AID can be accessed on a read-only basis by other Manager Products users.

At the simplest level, you might decide to create two MP-AIDs, one to contain the ASG-supplied members and the other to contain your installation created Corporate and user members.

For full details of this facility see *ASG-Manager Products Systems Administrator's Manual*.

In this and subsequent chapters, the creation and usage of a single MP-AID environment is assumed.

Whether a single or multiple MP-AID environment is created the basic requirement is to load up and make available for use the ASG-supplied MP-AID components.

In particular, it must be emphasized that it is essential for the successful execution of Manager Products to load up and to make available at ALL times the contents of dataset MP.COM.UNLOAD. Failure to do so will make certain Manager Products functionality inoperable.

Creation of the MP-AID is considered to be the Systems Administrator's responsibility and is achieved, using the Systems Administrator's private command MP-AID CREATE. Command specifications for Systems Administrators' commands and a description of the MP-AID are given in the *ASG-Manager Products Systems Administrator's Manual*.

Once the MP-AID has been created, these ASG-supplied datasets should be loaded onto the MP-AID from the installation tape, using the Systems Administrator's MP-AID LOAD command:

- MP.COM.UNLOAD, which contains ASG-supplied COMMAND members, Corporate Executive Routines, and UDS tables DU016 and DU777. Generally, supplied members have names that begin with the characters MC, MP, or £P. Wherever possible you should avoid using these characters when naming members on the MP-AID.
- MP.INFO.UNLOAD, which contains INFOBANK members. It should be noted that loading InfoBank is much faster if there are no existing InfoBank panels present on the MP-AID.

If you have the Corporate Dictionary/Repository Definition Export for IDD facility (selectable unit DYR-TE08), a set of pre-defined Translation Rules are also supplied on dataset MP.INFO.UNLOAD. These should also be loaded using the MP-AID LOAD command.

Having loaded all the required datasets, it is advisable to unload and then reload the MP-AID, in order to optimize directory placement and thus obtain improved response times when accessing the MP-AID. Details of unloading and reloading the MP-AID are provided in the *ASG-Manager Products Systems Administrator's Manual*.

Performance can be enhanced by increasing the size of the MP-AID buffer pool during load operations. ASG recommends a minimum of 30 buffers.

Create an MP-AID and Load Dataset MP.INFO.UNLOAD

BDAM-organized MP-AID

Creation and initial loading of a BDAM-organized MP-AID can be achieved using the job control statements given in [Figure 18 on page 72](#),

where:

uuuu is any valid disk device type.

tttt is any valid magnetic tape device type.

vvvvvv is the serial number of the relevant disk.

ppp is the logical record length for MPOUT. It must be 5 greater than the required print width.

bbbb is the physical blocksize for MPOUT. It must be at least 4 greater than *ppp*.

gggg is the required logical blocksize for the MP-AID.

ffff is the required physical blocksize for the MP-AID.

nnnn is the number of records to be allocated to the MP-AID. Allocation can also be by tracks or cylinders.

sssss is the tape serial number of the ASG-supplied tape.

xx is the number of buffers to be allocated to the MP-AID buffer pool.

To create a BDAM MP-AID you will normally need to specify a disposition of NEW in the job control. This is to protect an existing MP-AID against accidental overwriting. However, by using the Systems Administrator's SET DATASET-REUSE ON command it is possible to reCREATE (or RELOAD) an existing MP-AID without deleting and reallocating the dataset using the space management facilities of the operating system. In this situation a disposition of OLD or SHR can be specified in the job control. For further details refer to *ASG-Manager Products Systems Administrator's Manual*.

Figure 18 • Creation and Initial Loading of a BDAM MP-AID with Dataset MP.INFO.UNLOAD

```
//MPOJCL30 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPCRT  EXEC      PGM=MPR00
//STEPLIB DD        DSN=MP.LOADLIB,DISP=SHR
//MPOUT  DD        SYSOUT=sysout-class,
//          DCB=(LRECL=ppp,BLKSIZE=bbbb)
//MPRDIAG DD        SYSOUT=sysout-class
//SYSUDUMP DD       SYSOUT=sysout-class
//MPIN   DD        DDNAME=SYSIN
//MPAID  DD        DISP=(NEW,CATLG),DSN=mpaid-dsn,
//          UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(ffff,nnnn)
//MPAIDR DD        DISP=OLD,DSN=MP.INFO.UNLOAD,
//          UNIT=tttt,VOL=SER=ssssss,LABEL=17
MP-AID CREATE ADMINISTRATOR logon-id PASSWORD password
LOGICAL-BLOCKSIZE gggg PHYSICAL-BLOCKSIZE ffff ;
LOGON logon-id PASSWORD password;
MP-AID BUFFERS xx;
MP-AID LOAD INFOBANK <TRANSLATION-RULES>;
MP-AID STATUS;
LOGOFF;
//
```

When creating a large BDAM MP-AID dataset the maximum space available on a given volume may be insufficient to satisfy your requirements. You can create an MP-AID dataset to span as many volumes as required by coding a secondary quantity on the SPACE parameter and by specifying the additional volumes to be used on the VOLUME parameter of the DD statement. For each additional volume specified an allocation will be made that is equal to the secondary quantity specification. For example:

```
//MPAID DD  DISP=(NEW,CATLG),DSN=CMR.MPAID,
//          UNIT=3380,SPACE=(CYL,(300,300)),
//          VOL=SER=(PACK01,PACK02,.....)
```

If only one volume is specified on the VOLUME parameter, the secondary quantity, if specified, is ignored.

VSAM-organized MP-AID

If a VSAM-organized MP-AID is required, the job control statements given in [Figure 19 on page 74](#) should be used,

where:

uuuu is any valid disk device type.

tttt is any valid magnetic tape device type.

vvvvvv is the serial number of the relevant disk.

ppp is the logical record length for MPOUT. It must be 5 greater than the required print width.

bbbb is the physical blocksize for MPOUT. It must be at least 4 greater than *ppp*.

gggg is the required logical blocksize for the dataset

nnnn is a primary space allocation and is the number of records to be allocated for the MP-AID dataset. Allocations can alternatively be by cylinders or tracks. NO secondary allocation must be given.

sssss is the tape serial number of the ASG-supplied tape.

cccc is the required control interval size in bytes. The value specified must be a valid control interval size and must not be a value that will be rounded up by IDCAMS. Typical values are 4096, 8192, 12288, and 16384.

rrrr is the record size in bytes. It is determined by subtracting 7 from the specified control interval size. This specification is equivalent to the specification of a physical blocksize when creating a BDAM MP-AID.

xx is the number of buffers to be allocated to the MP-AID buffer pool.

If the OS message 1EC0701 104-203 or 203-204 is issued during the creation of a VSAM MP-AID it can be safely ignored.

To create a VSAM MP-AID you will normally need to use the VSAM utility IDCAMS to allocate the required VSAM cluster. However, by using the Systems Administrator's SET DATASET-REUSE ON command it is possible to reCREATE (or RELOAD) an existing MP-AID without deleting and redefining the cluster using IDCAMS. For further details refer to *ASG-Manager Products Systems Administrator's Manual*.

Figure 19 • Creation and Initial Loading of a VSAM MP-AID with Dataset MP.INFO.UNLOAD

```
//MPOJCL35      JOB          , ,MSGLEVEL=(1,1),CLASS=A
//MPALL         EXEC        PGM=IDCAMS
//SYSPRINT      DD          SYSOUT=sysout-class
DELETE (mpaid-dsn) CLUSTER
DEFINE CLUSTER (NAME (mpaid-dsn) -
  RECORDS (nnnn) CONTROLINTERVALSIZE (cccc) -
  NUMBERED          RECORDSIZE (rrrr rrrr) -
  SHAREOPTIONS (4)  VOLUMES (vvvvvv) )
//MPCRT        EXEC        PGM=MPR00
//STEPLIB      DD          DSN=MP.LOADLIB,DISP=SHR
//MPIN         DD          DDNAME=SYSIN
//MPOUT        DD          SYSOUT=sysout-class,
//              DCB=(LRECL=ppp,BLKSIZE=bbbb)
//MPRDIAG      DD          SYSOUT=sysout-class
//SYSUDUMP     DD          SYSOUT=sysout-class
//MPAID        DD          DISP=OLD,DSN=mpaid-dsn
//MPAIDR       DD          DSN=MP.INFO.UNLOAD,DISP=OLD,
//              UNIT=tttt,VOL=SER=ssssss,LABEL=17
MP-AID CREATE ADMINISTRATOR logon-id PASSWORD password
LOGICAL-BLOCKSIZE gggg VSAM;
LOGON logon-id PASSWORD password;
MP-AID BUFFERS xx;30
MP-AID LOAD INFOBANK <TRANSLATION-RULES>;
MP-AID STATUS;
LOGOFF;
//
```

Load the MP-AID with Dataset MP.COM.UNLOAD

In addition to dataset MP.INFO.UNLOAD, you must also load dataset MP.COM.UNLOAD, which contains the ASG-supplied COMMAND members, Corporate Executive Routines, and UDS tables DU016 and DU777.

The job control statements in [Figure 20 on page 75](#) should be used to load MP.COM.UNLOAD, onto either a BDAM or VSAM MP-AID,

where:

tttt is any valid tape device type.

ppp is the logical record length for MPOUT. It must be 5 greater than the required print width.

bbbb is the physical blocksize for MPOUT. It must be at least 4 greater than *ppp*.

ssssss is the tape serial number of the ASG-supplied tape.

xx is the number of buffers to be allocated to the MP-AID buffer pool.

Figure 20 • Loading a BDAM or VSAM MP-AID with Dataset MP.COM.UNLOAD

```
//MPOJCL40 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPLOAD      EXEC   PGM-MPR00
//STEPLIB     DD     DSN=MP.LOADLIB,DISP=SHR
//MPIN        DD     DDNAME=SYSIN
//MPOUT       DD     SYSOUT=sysout-class,
//            DCB=(LRECL=ppp,BLKSIZE=bbbb)
//MPRDIAG     DD     SYSOUT=sysout-class
//SYSUDUMP    DD     SYSOUT=sysout-class
//MPAID       DD     DISP=SHR,DSN=mpaid-dsn
//MPAIDR      DD     DISP=OLD,DSN=MP.COM.UNLOAD,
//            UNIT=tttt,VOL=SER=ssssss,LABEL=16
LOGON logon-id PASSWORD password;
MP-AID BUFFERS xx;
MP-AID LOAD ALL;
MP-AID STATUS;
LOGOFF;
//
```

6

Set Up Dictionaries

This chapter includes these sections:

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Creating a dictionary is considered to be the responsibility of the person who will control that dictionary, that is the dictionary Controller. Dictionary creation is achieved, therefore, using the dictionary Controller's CREATE command. A description of the CREATE command and its usage is given in *ASG-Manager Products Controller's Manual*. Manager Products supports BDAM and VSAM-organized dictionaries.

You can also create a Data-in-Virtual (DIV) dictionary for use under the Manager Products Server Facility (MPSF). To create a DIV dictionary refer to the *ASG-Manager Products Server Facility User's Guide* for complete details.

When you create a new dictionary you may, if you wish, replace the default UDS table (DU001) with UDS table DU016, which is constructed from the MethodManager Information Engineering Knowledge Base (MIEKB) Structure. UDS table DU016 is supplied in dataset MP.COM.UNLOAD, which will have been loaded from the installation tape when setting up the MP-AID. To use this UDS table on the dictionary, you should issue a CONTROL UDS command. For further details, refer to *ASG-MethodManager Dictionary/Repository Information Model*.

The dictionary definitions for this Information Model are provided as part of the Manager Products UDS dictionary supplied as dataset MP.UDS.

The ASG-supplied dictionaries are set up by creating a dictionary and restoring the required ASG-supplied datasets into it using the dictionary Controller's RESTORE command.

Users must ensure the unsupported SET # PARSING MIXED command is not used prior to restoring any ASG-supplied dictionaries using a RESTORE ALL command.

Users without the Basic or Advanced Status Selectable Units (DD2/AD21) who wish to install an ASG-supplied multi-status dictionary should issue a RESTORE SOURCE FROM *status-name* REPLACE command for each supplied status, starting with the oldest status. The restored members can then be encoded using a BULK ENCODE command, after ensuring that the appropriate UDS table for the dictionary has been enabled.

Creating Dictionaries

Creating BDAM-organized Dictionaries

Creating a BDAM-organized dictionary can be achieved using the job control illustrated in [Figure 21 on page 80](#),

where:

uuuu is any valid disk device type.

vvvvvv is the serial number of the relevant disk.

ppp is the logical record length for MPOUT. It must be 5 greater than the required print width.

bbbb is the physical blocksize for MPOUT. It must be at least 4 greater than *ppp*.

gggg is the required logical blocksize for the dictionary dataset.

ffff is the required physical blocksize for the dictionary dataset.

nnnn is the number of blocks to be allocated for a dictionary dataset.

Note: _____

The space allocation can alternatively be by tracks or cylinders.

You will normally need to specify a disposition of NEW in the job control. This is to protect an existing dictionary against accidental overwriting. However, by using the Systems Administrator's SET DATASET-REUSE ON command it is possible to reCREATE (or RELOAD) an existing dictionary without deleting and reallocating the datasets using the space management facilities of the operating system. In this situation a disposition of OLD or SHR can be specified in the job control. For further details refer to the *ASG-Manager Products Systems Administrator's Manual*.

The physical blocksize specified for the Recovery dataset must be at least as large as the largest of the logical blocksizes for the Source, Index, and Data Entries datasets.

The number of blocks needed for the Recovery dataset can be ascertained by monitoring recovery usage using the QUERY DICTIONARY command. The Recovery dataset will need to be considerably larger than for normal processing if you wish to run Logical Units of Work (LUWs) with ROLLBACK specified, since it must then be large enough to hold pre-update images of each update to be performed within the LUW. For details of LUWs, refer to panel MPRBC0060 in InfoBank.

Guidelines for dataset blocksize and buffer pool allocations are provided in *ASG-Manager Products Performance Tuning*.

The DD statement for the Log dataset should be omitted if logging is not to be applied to the dictionary.

When creating large BDAM dictionary datasets, in particular the Source and Data Entries datasets, the maximum space available on a given volume may be insufficient to satisfy your requirements. You can create a dataset to span as many volumes as required by coding a secondary quantity on the SPACE parameter and by specifying the additional volumes to be used on the VOLUME parameter of the relevant DD statement. For each additional volume specified, an allocation will be made that is equal to the secondary quantity specification, for example:

```
//DICTD DD DISP=NEW,DSN=DICT.DATA.ENTRIES,
//      UNIT=3380,SPACE=(CYL,(300,300)),
//      VOL=SER=(PACK01.PACK02.....)
```

If only one volume is specified on the VOLUME parameter, then the secondary quantity, if specified, is ignored.

The architecture of a Manager Products dictionary limits the maximum number of bytes in any dictionary dataset to 2,147,483,647. Attempting to create a larger dataset causes termination of the CREATE or RELOAD command.

The maximum number of physical blocks that can be allocated is determined by dividing the physical blocksize into 2,147,483,647. Further calculation can be done to determine the maximum number of tracks or cylinders to be allocated, but are dependent upon the physical characteristics of the disk used.

For example, assuming a 3390 disk and half-track blocking (27998 bytes), the maximum number of:

blocks = $2,147,483,647/27998=76700$

tracks = $76700/2 = 38350$

cylinders = $38350/15 = 2556$

Figure 21 • Creating a BDAM-organized Dictionary

```
//MPOJCL45 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//CREATE EXEC      PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPOUT DD        SYSOUT=sysout-class,
//              DCB=(LRECL=ppp,BLKSIZE=bbbb)
//MPRDIAG DD       SYSOUT=sysout-class
//SYSUDUMP DD      SYSOUT=sysout-class
//MPIN DD         DDNAME=SYSIN
//dict DD         DISP=(NEW,CATLG),DSN=dict-index-dsn,
//              UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(ffff,nnnn)
//dictD DD        DISP=(NEW,CATLG),DSN=dict-data-entries-dsn,
//              UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(ffff,nnnn)
//dictS DD        DISP=(NEW,CATLG),DSN=dict-source-dsn,
//              UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(ffff,nnnn)
//dictE DD        DISP=(NEW,CATLG),DSN=dict-recover-dsn,
//              UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(ffff,nnnn)
//dictJ DD        DISP=(NEW,CATLG),DSN=dict-log-dsn,
//              UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(ffff,nnnn)
//MPAID DD        DISP=SHR,DSN=mpaid-dsn
LOGON logon-id PASSWORD password;
CREATE dict MASTER authority
ILB gggg SLB gggg DLB gggg
IPB ffff SPB ffff DPB ffff RPB ffff LPB ffff
WITH n STATUSES AND LOG;
DICTIONARY dict;
AUTHORITY authority;
QUERY DICTIONARY ALL;
LOGOFF;
//
```

Creating VSAM-organized Dictionaries

Creating a VSAM-organized dictionary can be achieved using the job control illustrated in [Figure 22 on page 82](#),

where:

vvvvvv is the serial number of the relevant disk.

ppp is the logical record length for MPOUT. It must be 5 greater than the required print width.

bbbb is the physical blocksize for MPOUT. It must be at least 4 greater than *ppp*.

gggg is the required logical blocksize for the dictionary dataset.

nnnn is a primary space allocation and is the number of records to be allocated for the dictionary dataset. Allocations can alternatively be by cylinders or tracks. No secondary allocation must be given.

cccc is the required control interval size in bytes. The value specified must be a valid control interval size and must not be a value that will be rounded up by IDCAMS. Typical values are 4096, 8192, 12288, and 16384.

rrrr is the record size in bytes. It is determined by subtracting 7 from the specified control interval size. This specification is equivalent to the specification of a physical blocksize when creating a BDAM dictionary dataset.

The record size specified for the Recovery dataset must be at least as large as the largest of the logical block sizes for the Source, Index, and Data Entries datasets.

The statements relating to the log dataset should be omitted if logging is not to be applied to the dictionary.

If the OS message IEC070I 104-203 or 203-204 is issued during the creation of a VSAM dictionary it can be safely ignored. To create a VSAM dictionary you will normally need to use the VSAM utility IDCAMS to allocate the required VSAM clusters. However, by using the Systems Administrator's SET DATASET-REUSE ON command it is possible to reCREATE (or RELOAD) an existing dictionary without deleting and redefining the clusters using IDCAMS. For further details refer to *ASG-Manager Products Systems Administrator's Manual*.

The architecture of a Manager Products dictionary limits the maximum number of bytes in any dictionary dataset to 2,147,483,647. Attempting to create a larger dataset causes termination of the CREATE or RELOAD command.

The maximum number of records that can be allocated is determined by dividing the record size into 2,147,483,647. Further calculation can be done to determine the maximum number of tracks or cylinders to be allocated, but are dependent upon the physical characteristics of the disk used.

For example, the maximum number of records that can be allocated for a record size of 16377 (CI size of 16384-7) is $2,147,483,647/16377 = 131128$. When allocating the cluster this figure may need to be reduced to allow for any rounding up by IDCAMS.

Figure 22 • Creating a VSAM-organized Dictionary

```
//MPOJCL50 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//ALLOC EXEC       PGM=IDCAMS
//SYSPRINT DD      SYSOUT=sysout-class
DELETE (dict-index-dsn) CLUSTER
DELETE (dict-data-entries-dsn) CLUSTER
DELETE (dict-source-dsn) CLUSTER
DELETE (dict-recover-dsn) CLUSTER
DELETE (dict-log-dsn) CLUSTER
DEFINE CLUSTER (NAME(dict-index-dsn) -
  RECORDS(nnnn) CONTROLINTERVALSIZE(cccc) -
  NUMBEREDRECORDSIZE(rrrr rrrr) -
  SHAREOPTIONS(4) VOLUMES(vvvvvv))
DEFINE CLUSTER (NAME(dict-data-entries-dsn) -
  RECORDS(nnnn) CONTROLINTERVALSIZE(cccc) -
  NUMBEREDRECORDSIZE(rrrr rrrr) -
  SHAREOPTIONS(4) VOLUMES(vvvvvv))
DEFINE CLUSTER (NAME(dict-source-dsn) -
  RECORDS(nnnn) CONTROLINTERVALSIZE(cccc) -
  NUMBEREDRECORDSIZE(rrrr rrrr) -
  SHAREOPTIONS(4) VOLUMES(vvvvvv))
DEFINE CLUSTER (NAME(dict-recover-dsn) -
  RECORDS(nnnn) CONTROLINTERVALSIZE(cccc) -
  NUMBEREDRECORDSIZE(rrrr rrrr) -
  SHAREOPTIONS(4) VOLUMES(vvvvvv))
DEFINE CLUSTER (NAME(dict-log-dsn) -
  RECORDS(nnnn) CONTROLINTERVALSIZE(cccc) -
  NUMBEREDRECORDSIZE(rrrr rrrr) -
  SHAREOPTIONS(4) VOLUMES(vvvvvv))
//MPSTEP EXEC      PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPIN DD         DDNAME=SYSIN
//MPOUT DD        SYSOUT=sysout-class,
//              DCB=(LRECL=ppp,BLKSIZE=bbbb)
//MPRDIAG DD      SYSOUT=sysout-class
//SYSUDUMP DD     SYSOUT=sysout-class
//dict DD        DISP=OLD,DSN=dict-index-dsn
//dictD DD       DISP=OLD,DSN=dict-data-entries-dsn
//dictS DD       DISP=OLD,DSN=dict-source-dsn
//dictE DD       DISP=OLD,DSN=dict-recover-dsn
//dictJ DD       DISP=OLD,DSN=dict-log-dsn
//MPAID DD       DISP=SHR,DSN=mpaid-dsn
LOGON logon-id PASSWORD password;
CREATE dict MASTER authority
ILB gggg SLB gggg DLB gggg VSAM WITH n STATUSES AND LOG;
DICTIONARY dict;
AUTHORITY authority;
QUERY DICTIONARY ALL;
LOGOFF;
//
```

Set Up Manager Products Administration Dictionary

This section should be read in conjunction with the relevant section in *ASG-Manager Products Controller's Manual*.

As stated in [Chapter 1, "Overview of Installation," on page 1](#), ASG recommends that each installation set up its own Manager Products Administration Dictionary. The content of this dictionary will vary depending on the selectable units purchased and the needs of your organization. However, the steps to follow in setting up a Manager Products Administration Dictionary are:

- Create an empty dictionary as described in ["Creating Dictionaries" on page 78](#).
- Restore the UDS dictionary (only applicable if you have the User Defined Syntax facility, selectable unit CMR-UD1). The UDS dictionary must be the first dataset to be restored.
- Restore the ASG-supplied Corporate Executive Routines (necessary for tailoring or maintaining the Corporate Executive Routines supplied in dataset MP.COM.UNLOAD)
- Restore the ASG-supplied InfoDictionary (only applicable if you have the ControlManager User Defined Info System facility, selectable unit CMR-UD10).
- Restore the ASG-supplied Translation Rules (only applicable if you have the Corporate Dictionary/Repository Definition Export for IDD facility, selectable unit DYR-TE08).
- Begin to set up the dictionary members (for example, PROFILES) that when constructed into the MP-AID will control the environment in which your users will work. Details of how to construct members onto the MP-AID from the Manager Products Administration Dictionary are given in *ASG-Manager Products Systems Administrator's Manual*.

The above procedure outlines how to set up the single Manager Products Administration Dictionary recommended by ASG. However, certain installations may need to keep their User-defined Syntax definitions and/or INFOBANK-PANEL members and/or TRANSLATION-RULE members in separate dictionaries. You can do this by creating separate dictionaries and restoring the appropriate dataset into the required dictionary.

Restore ASG-supplied UDS Dictionary

If you have purchased the ControlManager User Defined Syntax facility (selectable unit CMR-UD1), restore the ASG-supplied UDS dictionary from the installation tape into the empty dictionary by using the dictionary Controller's RESTORE ALL command. The job control requirements for achieving this are those job control statements that are specified as being compulsory for all users in [Figure 25 on page 102](#) plus these statements:

```
//dictR DD DSN=MP.UDS,DISP=OLD,  
// UNIT=tttt,VOL=SER=ssssss,LABEL=x
```

where:

dict is the name of the empty dictionary that will become the Manager Products Administration Dictionary.

tttt is any valid magnetic tape device type.

ssssss is the serial number of the supplied magnetic tape containing your Manager Products software.

x is the position of the MP.UDS dataset on your ASG-supplied release tape; this is given in the list of datasets provided with this tape.

Restore ASG-supplied Executive Routines

You need to restore the ASG-supplied Executive Routines if you wish to tailor any of them, or if maintenance of the Executive Routines becomes necessary (since maintenance of these members is carried out in the dictionary, not on the MP-AID).

Executive Routines are restored from the installation tape into the Manager Products Administration Dictionary using the dictionary Controller's RESTORE SOURCE command. The job control requirements for achieving this are those job control statements which are specified as being compulsory for all users in [Figure 25 on page 102](#) plus these statements:

```
//dictR DD DSN=MP.CORP,DISP=OLD,  
// UNIT=tttt,VOL=SER=ssssss,LABEL=x
```

where:

dict is the name of the Manager Products Administration Dictionary.

tttt is any valid magnetic tape device type.

ssssss is the serial number of the supplied magnetic tape containing your Manager Products software.

x is the position of the MP.CORP dataset on your ASG-supplied release tape; this is given in the list of datasets provided with this tape.

Dataset MP.CORP contains a SAVE SOURCE of the ASG-supplied Executive Routines used with the:

- Corporate Dictionary/Repository Definition Import from DB2 (selectable unit DYR-TI12)
- Corporate Dictionary/Repository Definition Export to DB2 (selectable unit DYR-TE12)
- Corporate Dictionary/Repository Definition Import from SQL/DS (selectable unit DYR-TI32)
- Corporate Dictionary/Repository Definition Export to SQL/DS (selectable unit DYR-TE32)
- Workstation Interface (selectable unit CMR-WS01). The Executive Routines pertain to the Repository Diagram Generation feature.
- ADW/IEW Integration facility (selectable units TE14,TE15,TI14, and TI15)

When the ASG-supplied Executive Routines have been restored into the Manager Products Administration Dictionary, the source only of these Executive Routine members will be available.

Restore ASG-supplied InfoDictionary

If you have purchased the ControlManager User Defined InfoSystem facility (selectable unit CMR-UD10), restore the ASG-supplied InfoDictionary from the installation tape into the Manager Products Administration Dictionary by using the dictionary Controller's RESTORE SOURCE command. The job control requirements for achieving this are those job control statements which are specified as being compulsory for all users in [Figure 25 on page 102](#) plus these statements:

```
//dictR DD DSN=MP.INFO,DISP=OLD,
// UNIT=tttt,VOL=SER=sssss,LABEL=x
```

where:

dict is the name of the Manager Products Administration Dictionary.

tttt is any valid magnetic tape device type.

sssss is the serial number of the supplied magnetic tape containing your Manager Products software.

x is the position of the MP.INFO dataset on your ASG-supplied release tape; this is given in the list of datasets provided with this tape.

When the InfoDictionary has been restored into the Manager Products Administration Dictionary, the source only of the ASG-supplied INFOBANK-PANEL members will be available.

Restore ASG-supplied Translation Rules

If you have purchased the DictionaryManager Corporate Dictionary Definition Export for IDD facility (selectable unit DYP-TE08), you should restore the ASG-supplied translation rules from the installation tape into the Manager Products Administration Dictionary by using the dictionary Controller's RESTORE SOURCE command. The job control requirements for achieving this are those job control statements which are specified as being compulsory for all users in [Figure 25 on page 102](#) plus these statements:

```
//dictR DD DSN=MP.DYR.RULES,DISP=OLD,  
// UNIT=tttt,VOL=SER=sssss,LABEL=x
```

where:

dict is the name of the Manager Products Administration Dictionary.

tttt is any valid magnetic tape device type.

sssss is the serial number of the supplied magnetic tape containing your Manager Products software.

x is the position of the MP.DYR.RULES dataset on your ASG-supplied release tape; this is given in the list of datasets provided with this tape.

When the ASG-supplied Translation Rules have been restored into the Manager Products Administration Dictionary, the source only of the ASG-supplied TRANSLATION-RULE members will be available.

Manager Products Demo Dictionary

This section should be read in conjunction with the relevant section in *ASG-Manager Products Controller's Manual*.

Your Manager Products installation tape(s) contain a dataset, MP.DEMO, that constitutes the dictionary used for the Manager Products Demonstration and Training Guide. This example dictionary can be retrieved and set up as described in *ASG-Manager Products Controller's Manual*. This requires a ControlManager run to create an empty dictionary and to restore the DEMO Dictionary. The job control statements required for restoring the DEMO Dictionary are those job control statements which are specified as being compulsory for all users in [Figure 25 on page 102](#) plus these statements:

```
//dictR DD DSN=MP.DEMO,DISP=OLD,
//          UNIT=tttt,VOL=SER=sssss,LABEL=x
```

where:

dict is the name of the empty dictionary into which the DEMO Dictionary is to be restored.

tttt is any valid magnetic tape device type.

sssss is the serial number of the supplied magnetic tape that contains your Manager Products software.

x is the position of the MP.DEMO dataset on your ASG-supplied release tape; this is given in the list of datasets provided with this tape.

User Interface (Post) Dictionary

This section should be read in conjunction with the relevant section in *ASG-Manager Products Controller's Manual*.

If you have purchased the User Interface Facility (selectable unit CMR-UI1) and/or the User-defined Output facility (selectable unit DYR-UD15), a dataset MP.UIDICT is included on the installation tape. This dataset contains a dictionary of the User Interface output record formats and Access Call control parameter area definitions, and information relating to User Defined Output parameter numbers.

If you wish to make use of the POST dictionary, then it can be retrieved and set up as described in the *ASG-Manager Products Controller's Manual*. The job control requirements for restoring the POST dictionary are those job control statements which are specified as being compulsory for all users in [Figure 25 on page 102](#) plus these statements:

```
//dictR DD DSN=MP.UIDICT,DISP=OLD,  
//          UNIT=tttt,VOL=SER=ssssss,LABEL=x
```

where:

dict is the name of the empty dictionary into which the POST dictionary is to be restored.

tttt is any valid magnetic tape device type.

ssssss is the serial number of the supplied magnetic tape that contains your Manager Products software.

x is the position of the MP.UIDICT dataset on your ASG-supplied release tape; this is given in the list of datasets provided with this tape.

7

Satisfy Concurrent Usage Requirements

This chapter includes these sections:

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Enqueueing	93
Shared DASD	93
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More than one user can execute ControlManager (and therefore all other Manager Products) concurrently accessing the same dictionary and/or MP-AID.

The following sections discuss the capabilities provided to allow concurrent access, while preventing dictionary and/or MP-AID corruption, for DBAM/VSAM dictionaries and MP-AIDs. For DIV dictionaries and MPAIDs executing under Manager Products Server Facility (MPSF), refer to the *ASG-Manager Products Server Facility User's Guide*.

Your Manager Products have an enqueueing capability that controls the use of dictionaries and the MP-AID. This capability is provided for a single processor by utilizing the ENQ and DEQ system macros. In normal use, if the dictionary/MP-AID is being used by an update command then no other command can use it. However, any number of interrogation commands can use the same dictionary/MP-AID simultaneously. These are the major queue names (*q-names*):

- DATAMNGR
- DATAMNLR
- DATAMNSR
- DATAMNRR (only if reserve is set on: see ["Enqueueing" on page 90](#))
- DATAMNCR (in CICS environments only)
- MPAID (for the MP-AID only)

For each dictionary, the minor queue name (*r-name*) used is either the 44-character DSN name of the dictionary's Index dataset, or the name specified by the dictionary Controller using the CONTROL ENQ-NAME command (see *ASG-Manager Products Controller's Manual* for a full command specification). For the MP-AID, the name used is the 44-character DSN name of the MP-AID dataset. In addition, Manager Products also provides protection against simultaneous updating when writing to a Partitioned dataset (PDS). See ["Concurrent Usage of Partitioned Datasets" on page 94](#) for further details.

The protection of a dictionary/MP-AID, provided by your Manager Products software, covers use by one central processor at a time. The scope of ENQueues issued by Manager Products software is SYSTEM only.

However, ASG recognizes that in certain installations a dictionary/MP-AID will be resident on a shared DASD volume, and will therefore be accessible by more than one central processor. ASG addresses this problem by providing commands that extend the effect of ENQueues issued: this is achieved by setting a reserve on the volume holding the dictionary/MP-AID.

Certain installations may choose to utilize proprietary software (for example, IBM's program product Global Resource Serialization) that extend the range of ENQueue to cover multiple central processors, but ASG accepts no responsibility for their use.

Concurrent Dictionary Usage

More than one user can execute ControlManager concurrently, accessing the same dictionary, if DISP=SHR is specified for all four or five of the dictionary's datasets.

Enqueueing

When the standard Manager Products enqueueing capability is set on, all commands are ENQueued. This means that when the enqueue capability is utilized as supplied, these conditions apply:

- If an update command is using the dictionary, then no other command, whether an interrogation or an update, can use the dictionary concurrently. Thus, any commands submitted subsequent to the update command are put into a wait state and are queued according to order of submission.
- If an interrogation command is using the dictionary, then:
 - If the next command submitted is an interrogation command, then the interrogation command is allowed concurrent usage of the dictionary. Any number of interrogation commands can be processed simultaneously.
 - If the next command submitted is an update command, then the update command is put into a wait state. Any commands, whether interrogation or update, that are submitted after the update command are put into a wait state, and are queued behind the update command in order of submission.

Alternative Usage

The Systems Administrator's command, SET INTERROGATE-ENQ (see *ASG-Manager Products System Administrator's Guide*), provides an alternative enqueueing procedure whereby normal enqueues used with interrogation commands are released to allow updates to take place. This can greatly improve response times for all users.

When the alternative enqueue mode is used these conditions apply:

- If an update command is using the dictionary, no other command, whether an interrogation or an update, can access the dictionary at the same time. Thus, any commands submitted after the update command are put into a wait state and are queued in order of submission.
- If only interrogation commands are using the dictionary, one update command is allowed concurrent usage of the dictionary. However, as soon as an update command gains access to the dictionary, no subsequent commands, whether update or interrogation, can gain access until the update has ended. Subsequent commands are put into a wait state as described above.

Thus, if the alternative enqueue mode is in operation, it is possible for one or more interrogation commands and one update command to be processed simultaneously. This means that update commands do not have to wait until long interrogations are completed. However, certain commands cannot be processed simultaneously with other Manager Products commands. See *ASG-Manager Products System Administrator's Guide* for details.

If an update command starts while an interrogation command is in progress, it is possible for the interrogation command to access an area of the dictionary that has been updated. Thus, information may be read that was not current at the start of the interrogation command. When this situation occurs, an interrogation command is suspended and an I/O flush takes place. A diagnostic message is issued each time an I/O flush occurs.

An I/O flush comprises this sequence of actions:

- A shared enqueue is issued, to ensure that the update command has completed.
- If the update command failed to complete, the dictionary is recovered to the state it was in before the update command began.
- The buffer pools for the Index, Source, and Data Entries datasets are flushed.
- The shared enqueue is released.
- The interrogation command is reactivated from the point at which it was interrupted.

There is no limit to the number of I/O flushes that can be performed, unless a limit is specifically set by the System Administrator. The I/O flush limit is set using the System Administrator's command, SET IO-FLUSH-LIMIT.

If you do set a limit, an interrogation command is terminated once the limit is reached. You could, therefore, prevent an interrogation command from accessing data that has been updated while the interrogation command was active, by setting the I/O flush limit to one. In this case, any interrogation command is terminated at the first occurrence of an I/O flush.

Shared DASD

In an environment where two or more central processors share direct access storage, you must take action to prevent concurrent updating of your dictionary from different processors. Manager Products software does not recognize that update commands can be processed simultaneously from different central processors. If such simultaneous updates occur, they can corrupt your dictionary.

Two further problems can arise in shared direct access storage environments:

- If one central processor is executing an interrogation command while another is executing an updating command, the answer to the interrogation may be changed in the middle of execution. This can cause problems ranging from misleading results to program failure.
- If one central processor is executing an updating command and another issues a read-only command, the latter recognizes that the update lock is set and so initiates an automatic recovery, which in this circumstance corrupts the dictionary. To avoid this danger, the central processor that issues the read-only command must open the dictionary in read-only mode. This gives read-only access to the Index, Source, and Data Entries datasets and, since the Recovery dataset is not open, recovery cannot take place.

If you use dictionaries in a shared DASD environment, your Manager Products software allows you to prevent concurrent access of any dictionary. This is achieved using the dictionary Controller's CONTROL RESERVE command (see the *ASG-Manager Products Controller's Manual* for details). The CONTROL RESERVE command sets an indicator in the dictionary that is currently open. Once this indicator has been set, whenever a central processor accesses the dictionary, a reserve is set on the volume holding that dictionary. If a RESERVE is set on a volume by one central processor, then access to the volume (and therefore to the dictionary) is limited to one central processor at a time.

Thus, to prevent concurrent updating on a particular dictionary, a job must be run containing the Controller's command, CONTROL RESERVE with the control indicator set ON.

If the indicator is not in use, users should confine the use of Manager Products to one central processor at a time.

Concurrent MP-AID Usage

More than one user can execute ControlManager concurrently, accessing a single MP-AID, if DISP=SHR is specified for that MP-AID.

Enqueueing

The standard Manager Products enqueueing capability is in operation when accessing the MP-AID so that all commands are ENQueued. Consequently these conditions apply:

- If an update command is using the MP-AID, then no other command, whether an interrogation or an update, can use the MP-AID concurrently. Thus, any commands submitted subsequent to the update command are put into a wait state and are queued according to order of submission.
- If an interrogation command is using the MP-AID, then:
 - If the next command submitted is an interrogation command, the interrogation command is allowed concurrent usage of the MP-AID. Any number of interrogation commands can be processed simultaneously.
 - If the next command submitted is an update command, the update command is put into a wait state. Any commands, whether interrogation or update, that are submitted after the update command are put into a wait state, and are queued behind the update command in order of submission.

Shared DASD

In an environment of two or more central processors with shared direct access storage, you must prevent concurrent updating of your MP-AID from different processors. Manager Products as supplied does not recognize that update commands may be processed simultaneously from different central processors. If such simultaneous updates occur, they can corrupt your MP-AID.

Furthermore, if one central processor is executing an interrogation command, and the other an updating command, then the answer to the interrogation command may be changed in the middle of execution. This can cause anything from misleading results to program failure.

To prevent concurrent access of any dictionary, issue the System Administrator's MP-AID CONTROL RESERVE command. This command causes a reserve indicator to be set in the control record of the MP-AID which extends the range of the ENQ issued to provide protection when users compete for access to the MP-AID from more than one processor. A hardware switch is consequently set on which acts to reserve control of the volume containing the MP-AID for users of one of the single central processors. Only when the switch is off can users from another processor gain access to the MP-AID. The MP-AID CONTROL RESERVE command only operates in OS environments (but not under ROSCOE).

Successful execution of the command requires specifying DISP=OLD in the JCL for running Manager Products.

Concurrent Usage of Partitioned Datasets

Certain Manager Products commands, for example, the PRODUCE and SENDF commands, can add or replace members to a Partitioned dataset (PDS).

In order to prevent simultaneous update to a PDS, by Manager Products and possibly non-Manager Products users, an exclusive enqueue is issued for the duration of the update.

The default major queue name (*q-name*) used is MPRDSN and the minor queue name (*r-name*) used is the 44-character DSN of the PDS.

It is possible to change the *q-name* used by Manager Products. This may be required if software external to Manager Products is also used concurrently to update the PDS. The *q-name* used by such software is likely to be inconsistent with that used by Manager Products. The keyword PDSQNAM of the DCUST tailoring macro can be used to specify the required *q-name*.

By default, the enqueue is issued with a scope of SYSTEM. The enqueue will be extended to reserve the volume holding the PDS if and when Manager Products detects the scope of the enqueues issued for the currently open primary MP-AID are also extended (that is, the MP-AID has been subject to use of an MP-AID CONTROL RESERVE ON; command).

8

Linking External Software to Manager Products Software

These are the three modes of communication between Manager Products software and external software:

- The Access Call facility, which allows you to run Manager Products from a user program. It is available with the User Interface facility (selectable unit CMR-UI1).
- The User Defined Function facility, which allows User Defined Functions to be written in languages such as BAL, COBOL, or PLI and referenced within an Executive Routine. This is available with the User Defined Commands (selectable unit CMR-UD05) or Translation and Transfer Engine (selectable unit DYR-TE00) facilities.
- The DB2 Import facility, which allows you to access DB2 environments. This is available with the Corporate Dictionary/Repository Definition Import for DB2 facility (selectable unit DYR-TI12).

Details of how to link external software to Manager Products are provided in these sections:

Link-editing Access Call Programs with the ASG-supplied Interface Module (DMRUS)	96
Link-editing User Defined Functions to Manager Products Software	97
Step 1 - Defining User Defined Functions	97
Step 2 - Assembling Source Module MPLUF and Link-editing with User Defined Functions	98
Accessing DB2 Environments from Manager Products	99
Step 1 - Set Up an Application Plan using the BIND Subcommand of the DSN Command	99
Step 2 - Define the Required Manager Products DB2 Import Views to DB2 using the DB2 SPUFI Command	100
Step 3 - Modify MP-AID EXECUTIVE Member MPDY42DFLT	100

Link-editing Access Call Programs with the ASG-supplied Interface Module (DMRUS)

This is only applicable if:

- You have the User Interface facility installed (selectable unit CMR-UI1)
- You wish to run Manager Products from a user program using the User Interface Access Call facility

The ASG-supplied interface module named DMRUS must be link-edited with each user program. DMRUS is a member of the MP.LOADLIB load library.

[Figure 23 on page 96](#) gives example job control statements required to link-edit a user program,

where:

user-module is the name of the object (or load) output from the compilation stage.

user-program-library is the name of the library containing the executable program.

user-program is the name of the user program to be executed.

user-module-library is the name of the library containing the object output from compilation.

Figure 23 • Link-Editing an Access Call Program

```
//MPOJCL55      JOB      , ,MSGLEVEL=(1,1),CLASS=A
//LINK          EXEC     PGM=IEWL, PARM='LET,LIST,MAP,XREF'
//SYSPRINT      DD       SYSOUT=sysout-class
//SYSUT1        DD       UNIT=SYSDA,SPACE=(1024,(200,20))
//SYSLMOD       DD       DSN=user-program-library,DISP=SHR
//USERLIB       DD       DSN=user-module-library,DISP=SHR
//MPRLIB        DD       DSN=MP.LOADLIB,DISP=SHR
//SYSLIN        DD       *
                INCLUDE  USERLIB(user-module)
                INCLUDE  MPRLIB(DMRUS)
                NAME     user-program(R)
//
```

If the entry point of the *user-program* cannot be determined by the linkage editor, an ENTRY statement must be inserted after the INCLUDE statements.

Details of executing Manager Products in batch mode or under TSO using the Access Call facility can be found in [Chapter 9, "Running Manager Products in Batch Mode," on page 101](#) and [Chapter 10, "Installing Manager Products in an Interactive Environment," on page 109](#).

Link-editing User Defined Functions to Manager Products Software

If you have the User Defined Commands (selectable unit CMR-UD05) or the Translation and Transfer Engine (selectable unit DYR-TE00) facilities, you may set up User Defined Functions in any language capable of handling the argument table passed by the Manager Products Procedures Language. These functions may then be invoked in a Manager Products environment from within an Executive Routine.

Before you can invoke a User Defined Function, carry out these steps:

- Step 1 -** Specify the User Defined Function by adding a function definition to the source module MPLUF.
- Step 2 -** Assemble MPLUF and link-edit the generated output with the relevant User Defined Functions program code.

Step 1 - Defining User Defined Functions

Before you can invoke a User Defined Function it must first be specified by adding a function definition to the source module MPLUF. MPLUF is supplied as a member of dataset MP.SOURCE.

The name of each User Defined Function is specified within MPLUF using the macro MPLFD (also supplied as a member of dataset MP.SOURCE). For each User Defined Function you need to specify an entry of the form:

```
MPLFD TYPE=ENTRY, NAME=function-name
```

where *function-name* is the name of a function referred to from within an Executive Routine.

When specifying a function, there is an optional additional operand, EP (Entry Point) you can use, which allows you to link the function to a module whose name differs from the function name. For example:

```
MPLFD TYPE=ENTRY, NAME=SORTR, EP=KLHJY42
```

The operands for NAME and EP can be up to 8 characters in length.

You may add more function names to source module MPLUF at any time. Further entries add to the table and do not overwrite function names already present. Entries are deleted by removing the function name from the table.

Step 2 - Assembling Source Module MPLUF and Link-editing with User Defined Functions

When you have defined all the User Defined Functions you intend using, you must then assemble source module MPLUF and link-edit the generated output with the compiled or assembled code of your User Defined Functions, in order to generate a load module MPLUF. When you subsequently wish to invoke a function, the generated load module MPLUF is dynamically loaded and control is passed to the appropriate function.

Use the JCL shown in [Figure 24](#) to assemble and link-edit source module MPLUF with your User Defined Function code,

where:

user-function-module is the name of the member containing the object code for a User Defined Function.

user-function-library is the name of the partitioned dataset containing your User Defined Functions' object code.

Figure 24 • Assembling and Link-Editing Source Module MPLUF with User Defined Functions

```
//MPOJCL25 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPLUF   EXEC     ASMHCL,PARM.C='LOAD,NODECK',
//        PARM.L='RENT,MAP,LIST,XREF'
//C.SYSLIB DD      DSN=MP.SOURCE,DISP=SHR
//SYSIN   DD      DSN=MP.SOURCE(MPLUF),DISP=SHR
//L.SYSLIN DD
//        DD      *
//        INCLUDE SYSLIB(user-function-module)
//        .
//        .
//        .
//        ENTRY  MPLUF
//        NAME   MPLUF(R)
//SYSLMOD DD      DSN=MP.LOADLIB,DISP=SHR
//SYSLIB  DD      DSN=user-function-library,DISP=SHR
//
```

You must assemble source module MPLUF and run a new link-edit each time the table of definitions is changed, in order to generate a replacement MPLUF load module.

Accessing DB2 Environments from Manager Products

The Corporate Dictionary/Repository Translation and Transfer Engine (selectable unit DYR-TE00) and the Corporate Dictionary/Repository Definition Import for DB2 facility (selectable unit DYR-TI12) enable you to use the Dynamic SQL Services feature and the EXTRACT DB2 command respectively, either when running Manager Products in batch or interactively.

Perform these steps to access DB2 environments from Manager Products:

Step 1 - Set up an application plan using the BIND subcommand of the DSN command.

Step 2 - Define the required Manager Products DB2 Import views to DB2.

Step 3 - Modify MP-AID EXECUTIVE member MPDY42DFLT.

In order to carry out steps 1 and 2 you must have access to the DB2 environment with these privileges:

- The system privilege BINDADD
- A table privilege to use SELECT statements on the system catalog tables

Step 1 - Set Up an Application Plan using the BIND Subcommand of the DSN Command

To enable Manager Products to access the DB2 environment, an application plan needs to be built. The Database Request Module (DBRM) to be included in the application plan is supplied as member MPDB2 in dataset MP.SOURCE. These CLIST can be used to achieve this and uses the BIND subcommand of the DSN command with the options indicated:

```

DSN SYS(db2-subsystem-id)
  BIND PLAN(MPDB2) -
    MEMBER(MPDB2) -
    LIBRARY('MP.SOURCE') -
    ACTION(REPLACE) -
    VALIDATE(BIND)
    ISOLATION(CS) -
    ACQUIRE(USE) -
    RELEASE(COMMIT) -
    EXPLAIN(NO)
END

```

where *db2-subsystem-id* is the required DB2 sub-system.

You need to run this step for every DB2 sub-system that is to be accessed.

Further information concerning the BIND subcommand of the DSN command can be found in the *IBM DATABASE 2 Command and Utility Reference* manual.

Step 2 - Define the Required Manager Products DB2 Import Views to DB2 using the DB2 SPUFI Command

You must create the required Manager Products views in DB2 using the SPUFI option of the DB2I command before using the DB2 Import facility. Manager Products provides a number of views as members in dataset MP.SOURCE. If you have DB2 Version 2 you should use member DB2VIEW2, for Version 3 you should use member DB2VIEW3, for Version 4 you should use member DB2VIEW4, for Version 5 you should use member DB2VIEW5, and for Version 6 you should use member DB2VIEW6.

Dataset MP.SOURCE and the appropriate member name should be specified as input parameters on the SPUFI input panel.

As supplied, the name of each view includes a prefix (MP_VIEW_) which is preceded by a variable, *owner-id*. Before creating your views, you need to replace the variable with an actual owner identification. ASG recommends using the TSO logon ID of your System Administrator. To insert an owner identification, use the EDIT INPUT option of the DB2 SPUFI utility and issue this change command:

```
C 'owner-id' 'SYSAD' ALL
```

You should be sure that you use the correct DB2 sub-system identifier.

Once the selected view has been processed by the SPUFI utility you should check that all returned SQLCODES are 0.

You need to run this step for every DB2 sub-system that is to be accessed.

Step 3 - Modify MP-AID EXECUTIVE Member MPDY42DFLT

A source version of the MP-AID EXECUTIVE members MPDY42DFLT and MPDY12PROF are supplied as an EXECUTIVE-ROUTINE member in dataset MP.CORP. Details of how to install ASG-supplied Executive Routines for tailoring are supplied in [Chapter 6, "Set Up Dictionaries," on page 77](#).

Source member MPDY42DFLT contains a SET EXT_PREFIX statement in which you need to provide a value for the variable *owner-id*. You should insert the same owner identification as that designated at the time the views were created. As stated in the preceding section, ASG recommends that the owner identification should be the TSO logon ID of your System Administrator, for example:

```
SET EXT_PREFIX :SYSAD.MP_VIEW_  
MPDY_DB2SSN = :db2-subsystem:  
MPDY_PLANNAME = :plan:
```

Once you have provided a suitable owner ID, replace the ASG-supplied version on the MP-AID with the new version using the CONSTRUCT command.

9

Running Manager Products in Batch Mode

[Figure 25 on page 102](#) shows the job control statements required to run Manager Products in standard mode in an OS batch environment. For execution in MPSF mode refer to the *ASG-Manager Products Server Facility User's Guide*.

These assumptions have been made:

- The MP-AID and the dictionaries to be used have already been created.
- The MP-AID and dictionary datasets were cataloged when they were created.

These are the definitions of some variables frequently used in [Figure 25 on page 102](#):

Variable	Definition
<i>uuuu</i>	Is any valid magnetic tape or disk type.
<i>vvvvvv</i>	Is the serial number of the relevant magnetic tape or disk.
<i>dict</i>	Is the dictionary name as known to users.
<i>nnnn</i>	Is the primary or secondary space allocation. Allocation can be by tracks, cylinders, or records.
<i>ddname</i>	For output datasets is any name up to a maximum of 8 characters except any of these: <ul style="list-style-type: none">• MPAID, MPAIDR, MPAIDV• MPRDIAG• MPRPOST (except for POST/MAIL, where MPRPOST is the default output dataset name)• The name of the dictionary, or the dictionary name suffixed by D, E, G, H, J, M, N, R, S, or V• The name of any secondary MP-AID

Figure 25 • Running Manager Products in Batch Mode

	REQUIREMENT	NOTE
//MPOJCL65 JOB , ,MSGLEVEL=(1,1),CLASS=A		
/*		
/* COMPULSORY STATEMENTS FOR ALL USERS		
/*		
//MPSTEP EXEC PGM=MPR00	Always	
//STEPLIB DD DSN=MP.LOADLIB,DISP=SHR	Always	1
//MPIN DD DDNAME=SYSIN	Always (Primary Input Device)	
//MPOUT DD SYSOUT=sysout-class,	Always (Primary Output Device)	2
// DCB=(LRECL=ppp,BLKSIZE=bbbb)		
//MPRDIAG DD SYSOUT=sysout-class	Always (Formatted Dump Output)	
//SYSUDUMP DD SYSOUT=sysout-class		
//MPAID DD DISP=SHR,DSN=primary-mpaid-dsn	Always (Enables use of MP-AID)	
//dict DD DISP=SHR,DSN=dict-index-dsn	Any dictionary access	3
//dictD DD DISP=SHR,DSN=dict-data-entries-dsn	Any dictionary access	3
//dictS DD DISP=SHR,DSN=dict-source-dsn	Any dictionary access	3
//dictE DD DISP=SHR,DSN=dict-recover-dsn	Any dictionary access	3
//dictJ DD DISP=SHR,DSN=dict-log-dsn	Any dictionary access (if logging active)	3
/*		
/* OPTIONAL STATEMENTS FOR ALL USERS		
/*		
//ddname DD DISP=SHR,DSN=secondary-mpaid-dsn	Concatenated MP-AID	21
//ddname DD DISP=(NEW,KEEP),DSN=output-dsn,	DesignManager (output dataset for the	4
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))	PRODUCE command)	
//ddname DD DISP=(NEW,KEEP),DSN=output-dsn,	DictionaryManager (output dataset for the	5
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))	TRANSFER command)	
//ddname DD SYSOUT=sysout-class,	Alternative ouput dataset for the	2.6
// DCB=(LRECL=ppp,BLKSIZE=bbbb)	SWITCH OUTPUT command)	
//ddname DD DISP=OLD,DSN=input-dsn,	Automation of Set Up (DMR-AS1 and DMR-AS2)	7
// UNIT=uuuu,VOL=SER=vvvvvv	input dataset	
//ddname DD DISP=(NEW,KEEP),DSN=output-dsn,	Source Language Generation (DMR-SL1 to DMR-SL9)	8
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))	output dataset	
//ddname DD DISP=(NEW,KEEP),DSN=output-dsn,	Procedures Language (DMR-UD05, DTR-TE00)	9
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))	ouput from SENDF	
//OBJECT DD DISP=OLD,DSN=input-dsn,	ADW/IEW Import facility	23
// UNIT=uuuu,VOL=SER=vvvvvv		
//ASSOC DD DISP=OLD,DSN=input-dsn,	ADW/IEW Import facility	23
// UNIT=uuuu,VOL=SER=vvvvvv		
//TEXT DD DISP=OLD,DSN=input-dsn,	ADW/IEW Import facility	23
// UNIT=uuuu,VOL=SER=vvvvvv	ADW/IEW Import facility	23
//PROP DD DISP=OLD,DSN=input-dsn,		
// UNIT=uuuu,VOL=SER=vvvvvv		
//IEWXOI DD DISP=(NEW,KEEP),DSN=output-dsn,	ADW/IEW Export facility	23
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//IEWXAI DD DISP=(NEW,KEEP),DSN=output-dsn,	ADW/IEW Export facility	23
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//IEWXTI DD DISP=(NEW,KEEP),DSN=output-dsn,	ADW/IEW Export facility	23
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//IEWXPI DD DISP=(NEW,KEEP),DSN=output-dsn,	ADW/IEW Export facility	23
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//ddname DD DISP=OLD,DSN=input-dsn,	Generic Import facility	24
// UNIT=uuuu,VOL=SER=vvvvvv		
//MPRPOST DD DISP=(NEW,KEEP),DSN=output-dsn,	User Interface (CMR-UI1)	10
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//ddname DD DISP=(NEW,KEEP),DSN=output-dsn,	Procedures Language trace output	25
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))	default ddname MPTRACE)	
/*		
/* OPTIONAL STATEMENTS FOR DICTIONARY CONTOLLERS		
/* OR MASTER OPERATORS		
/*		
//dictV DD DISP=(NEW,KEEP),DSN=output-dsn,	SAVE/UNLOAD output dataset	12
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//dictR DD DISP=OLD,DSN=input-dsn,	RESTORE/RELOAD input dataset	13
// UNIT=uuuu,VOL=SER=vvvvvv		
//dictG DD DISP=OLD,DSN=input-dsn,	RELOAD/ROLL-FORWARD archived input dataset	14
// UNIT=uuuu,VOL=SER=vvvvvv		
//dictH DD DISP=(NEW,KEEP),DSN=output-dsn,	LOG ARCHIVE output datase dataset	5.16
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//dictG DD DISP=OLD,DSN=input-dsn,	LOG ARCHIVE input dataset	5.17
// UNIT=uuuu,VOL=SER=vvvvvv		
//dictG DD DISP=OLD,DSN=input-dsn,	LOG ANALYSIS/AUDIT	18
// UNIT=uuuu,VOL=SER=vvvvvv	when input from archive dataset	
//ddname DD DISP=(NEW,KEEP),DSN=output-dsn,	AUDIT ONTO dataset	22
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
/*		
/* OPTIONAL STATEMENTS FOR SYSTEMS ADMINISTRATORS		
/*		
//MPAIDV DD DISP=(NEW,KEEP),DSN=output-dsn,	MP-AID UNLOAD output dataset	19
// UNIT=uuuu,VOL=SER=vvvvvv,SPACE=(TRK,(nnnn,nnnn))		
//MPAIDR DD DISP=OLD,DSN=input-dsn,	MP-AID LOAD/MP-AID RELOAD input dataset	20
// UNIT=uuuu,VOL=SER=vvvvvv		
/*		
/* MANAGER Products INPUT FOLLOWS		
/*		
MANAGER Products Input		
//		

Notes

- 1 **Concatenating a DB2 Load Library.** If you require access to a DB2 sub-system from Manager Products, then you must concatenate a DB2 load library containing the interface modules DSNALI and DSNHLI2 with the Manager Products load library MP.LOADLIB.

- 2 **Primary (MPOUT) and Alternative Output Dataset.**

pppp is the primary or alternative output device's logical record length, which must be 5 greater than the required print line width. If `LRECL=pppp` is omitted from the primary or alternative dataset control statement a default of 137 (the minimum permitted value) is taken for *pppp*, giving a print line width of 132 character positions. The maximum value that may be specified is 255. A default of 137 is taken if an illegal value is specified. The dataset record format (RECEM) is VBA and may not be altered by the user.

bbbb is the primary or alternative output device's blocksize, which must be at least 4 greater than *pppp*.

- 3 **Dictionary Datasets.** The dictionary comprises four or five datasets, each of which must be declared to the operating system.

The *ddname* variable *dict* represents the name of the dictionary as known by users. The suffixes indicated for the data entries, source, index, and error recovery are compulsory. The DD statement for the log dataset can be omitted from the job control if logging is not applied to the dictionary.

Any other dictionaries accessed in the same job step, must have additional DD statements for the 4 or 5 datasets constituting the dictionary.

- 4 **DesignManager PRODUCE Dataset.** This additional DD statement is required to define a sequential source library dataset for output from the DesignManager PRODUCE command. There is no default *ddname*. It must be specified via the ONTO clause of the PRODUCE command.

- 5 **DictionaryManager Datasets.** This additional DD statement is required to define a partitioned or sequential source library dataset for output from the TRANSFER command, where *ddname* must be the same as that specified via the ONTO clause of the TRANSFER command.

There is no default *ddname* for this dataset.

- 6 Alternative Output Dataset.** If SWITCH OUTPUT commands are to be used during the Manager Products run to switch output to an alternative output dataset then the additional DD statement is required to define the output dataset. Any valid name may be used as the ddname. The specified ddname is declared using the SWITCH OUTPUT command.
- 7 Automation of Set Up Datasets.** Under OS, input for the Automation of Set Up facility's CONVERT command must be from a partitioned dataset containing COBOL or PL/I source statements in card image format. To run ControlManager when the Automation of Set Up command CONVERT is to be used, the additional DD statement is required to define the input dataset, where *ddname* is the logical file name of the dataset from which the input source statements are to be read. It is the name that can be stated in the SYSNAME clause of the CONVERT command.

If the SYSNAME clause is omitted from the CONVERT command, then the ddname assumed is:

- COBLIB for COBOL conversions
- PLILIB for PL/I conversions

Therefore, if the CONVERT command is to be used without the SYSNAME clause, the ddname specified must be either COBLIB or PLILIB as applicable.

You do not need any additional DD statements for the Automation of Set Up MERGE command.

- 8 Source Language Generation Datasets.** This additional DD statement is required to define a partitioned or sequential source library dataset for output from the PRODUCE command. The ddname used for the output source library dataset can be declared as the value of the parameter DDNAME in the relevant installation macro. The supplied default value of this parameter is GENLIB. If this name is acceptable, the DDNAME parameter of the relevant macro need not be tailored, and GENLIB can be declared as the ddname in the DD statement. Otherwise, the relevant installation macro should be tailored to ensure that the name declared as the value of the parameter DDNAME is the same as the name normally used in the DD statement. The value declared or defaulted for the parameter DDNAME can, however, be overridden at run-time by including an ONTO file-name clause in the PRODUCE command (see *ASG-Manager Products Source Language Generation*).

Thus, the ddname used in the DD statement must be one of these options:

- The ddname declared in the ONTO clause of the PRODUCE command that initiates the source language generation, if the PRODUCE command includes an ONTO clause
- The name declared as the value of the parameter DDNAME when the relevant installation macro was tailored, if a value was declared for DDNAME
- GENLIB

9 Procedures Language SENDF Output Dataset. This additional DD statement is required if the Executive Command SENDF, specifying partitioned or sequential output, is to be used.

10 User Interface Optional Output POST Dataset. This additional DD statement is required when POST or MAIL commands are to be issued.

The default ddname established at logon to Manager Products is MPRPOST. This can be changed by using the command:

```
POST <NORMAL> ONTO ddname ;
```

11 Executing an Access Call Program. The program library containing the access call program must be concatenated with dataset MP.LOADLIB. Note that the blocksize of MP.LOADLIB is 6144, unless it has been re-blocked (as described in ["Copy Partitioned Datasets to Disk" on page 22](#)).

The EXEC statement must invoke the access call program rather than MPR00.

Before executing an access call program it is necessary to link-edit your user program with the ASG-supplied access call interface module (DMRUS). This is described in [Chapter 8, "Linking External Software to Manager Products Software," on page 95](#).

12 SAVE/UNLOAD Datasets. If a SAVE or UNLOAD command is to be issued in the course of a run, then an additional DD statement is needed to define the output dataset. The specified ddname must be the name of the dictionary from which it is output, with the suffix V.

13 RESTORE/RELOAD Datasets. If a RESTORE command or a RELOAD command is to be issued in the course of a run, then the additional DD statement is needed to define the input dataset.

The ddname of the dataset input to a RESTORE or RELOAD command must be the name of the dictionary to which it is input, with the suffix R. For a RELOAD command the job control requirements for a BDAM dictionary are as for a CREATE command (see [Chapter 6, "Set Up Dictionaries," on page 77](#)), except that:

- The log dataset must be allocated as NEW if the RELOAD command includes the keyword LOG, or
- The old log dataset must be allocated as OLD if the RELOAD command does not include the keyword LOG. The old log dataset may then be used if a roll-forward of the dictionary is necessary.

For a VSAM dictionary, the RELOAD command requirements for job control are:

- As for the CREATE command if the keyword LOG is included in the RELOAD command, or
- As for the CREATE command, except that the PURGE and DEFINE CLUSTER statement for the log dataset must be omitted if the RELOAD command does not include the keyword LOG. The old log dataset may then be used if a roll-forward of the dictionary is necessary.

- 14 RELOAD and ROLL-FORWARD LOG-ARCHIVE Dataset.** For both BDAM and VSAM dictionaries, the RELOAD command can invoke roll-forward either automatically or by inclusion of the keyword ROLL-FORWARD. If roll-forward requires input from a log archive dataset, then the additional DD statement is needed to define the input dataset.

The ddname of the input log archive dataset must be the name of the dictionary with the suffix G.

- 15 LOG ARCHIVE General Information.** The LOG ARCHIVE command archives the log dataset to disk or tape. Log archiving works in a cyclical manner. A log archiving cycle commences whenever an UNLOAD command or a LOG BACKUP-DETAILS command is accepted. When the first LOG ARCHIVE command following one of these commands is processed, a new log archive dataset is created. Subsequent LOG ARCHIVE commands up to the time the next UNLOAD command or LOG BACKUP-DETAILS command is accepted require the dataset output from the previous log archiving run as input. This dataset is merged with transactions from the dictionary's log dataset to produce the output log archive dataset.

- 16 LOG ARCHIVE Output Dataset.** For any Manager Products run that includes the LOG ARCHIVE command, the additional DD statement is required to define the output log archive dataset.

The ddname of the output log archive dataset must be the name of the dictionary with the suffix H.

17 LOG ARCHIVE Optional Input Dataset. The ddname of any input log archive dataset must be the name of the dictionary with the suffix G. The additional DD statement is required in respect of this dataset for every log archiving run except the first in each cycle.

18 LOG ANALYSIS and AUDIT Datasets. This additional DD statement is required if a Manager Products run includes either:

- A LOG ANALYSIS command, or
- An AUDIT command, to operate on a log archive dataset (if the Audit and Security facility, selectable unit CMR-DD3, is installed).

The ddname of the input log archive dataset must be the name of the log dictionary with the suffix G. Concatenated input log archive datasets are not permissible.

19 MP-AID UNLOAD Datasets. If an MP-AID UNLOAD command is to be issued in the course of a run, then the additional DD statement is needed to define the output dataset. The specified ddname must be MPAIDV.

20 MP-AID LOAD and MP-AID RELOAD Datasets. If an MP-AID LOAD or MP-AID RELOAD command is to be issued in the course of a run, the additional DD statement is needed to define the input dataset.

The specified ddname must be MPAIDR. You should also note that a Manager Products run containing the MP-AID RELOAD command also requires a specification of DISP=NEW in the DD statement for the MP-AID.

21 Concatenated MP-AID. An additional DD statement is required for each secondary read-only MP-AID that is to be accessed.

The ddname specified must be the same as that given on the MP-AID CONCATENATION command used to establish the required concatenation. Full details of the commands required to implement the concatenated MP-AID are given in the *ASG-Manager Products Systems Administrator's Manual*.

22 AUDIT ONTO Output Dataset. If an AUDIT ONTO command is to be issued in the course of a run, then an additional DD statement is needed to define the output dataset.

There is no default ddname assumed. The required ddname is provided as part of the command specification.

23 ADW/IEW Import/Export Datasets. A number of additional DD statements must be provided when executing the ADW/IEW Import/Export facility. The ddnames shown are the defaults and may be tailored by the user.

You should refer to *ASG-Manager Products Tools Support: Integration with ADW/IEW* for full details of user tailoring.

- 24 Generic Import Input Dataset.** An additional DD statement is required to define a sequential or partitioned dataset used as the input to the extract stage of Generic Import.

No default ddname is assumed. The required ddname is specified using the EXTERNAL-FILE clause of the EXTRACT command.

- 25 Procedures Language Trace Dataset.** An additional DD statement is required if Procedures Language trace output is to be written to a dataset on disk. The default DDNAME for this dataset is MPTRACE but it may be varied by use of the SET TRACE command.

10

Installing Manager Products in an Interactive Environment

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Introduction

Manager Products may be run in these interactive environments under OS:

- TSO (see ["Installing Manager Products under TSO" on page 110](#))
- CICS (see ["Installing and Running Manager Products under CICS" on page 117](#))
- TSO/ISPF (see ["Installing Manager Products under TSO/ISPF" on page 150](#))
- ROSCOE (see ["Installing Manager Products under ROSCOE" on page 150](#))
- IMS/DC (see ["Installing Manager Products under IMS/DC" on page 156](#))

Installing Manager Products under TSO

[Figure 26 on page 112](#) shows the TSO commands required to run Manager Products in standard mode in a TSO environment. For execution in MPSF mode refer to the *ASG-Manager Product Server Facility User's Guide*.

These assumptions have been made:

- The MP-AID and the dictionaries to be used have already been created. It is not recommended that a dictionary or an MP-AID be created under TSO, because of the amount of processing involved in formatting the datasets when creation takes place.
- The MP-AID and dictionary datasets were cataloged when created.

Definitions of some variables frequently used in [Figure 26 on page 112](#) are:

Variable	Definition
<i>dict</i>	Is the dictionary name as known to users.
<i>nn</i>	Is the primary or secondary space allocation. Allocation can be by tracks, cylinders, or blocks.
<i>ddname</i>	For output datasets is any name up to a maximum of 8 characters except these: <ul style="list-style-type: none">• MPRACWF• MPAID, MPAIDR, MPAIDV• MPRDIAG• MPRPOST (except for POST/MAIL, where MPRPOST is the default output dataset name)• The name of the dictionary, or the dictionary name suffixed by D, E, G, H, J, M, N, R, S, or V• The name of any secondary MP-AID

In order to gain optimum advantage of the full screen interactive capabilities available with ControlManager, the primary input device and the primary output device must be allocated to a terminal capable of operating in full screen mode. The main terminal types supported are 3270 and 3270-compatible terminals, models 2, 3, 4, and 5.

In the case of input/output devices that operate in line mode (for example, teletype devices), a range of these devices is supported. However, the very nature of these devices inhibits usage of full screen interactive capabilities.

When running under TSO, Manager Products can detect any use of the terminal's BREAK or INTERRUPT key (or equivalent).

If the BREAK or INTERRUPT key is depressed once while the user is entering a data definition or an amendment associated with an updating command, processing is not interrupted.

If the BREAK or INTERRUPT key is depressed several times in rapid succession, ControlManager is effectively abnormally ended. The Manager Products automatic recovery system ensures that the dictionary's integrity is preserved if this happens.

A TSO job can be concurrent with batch jobs or with other TSO jobs accessing the same dictionary or MP-AID.

Figure 26 • Running Manager Products under TSO

/*	/*	REQUIREMENT	NOTE
/*	MANAGER Products CLIST (MPOJCL70)	/*	/*
/*	/*	/*	/*
ALLOC FILE (MPIN)	DSN (*)	Always (Primary input device)	
ALLOC FILE (MPOUT)	DSN (*)	Always (Primary output device)	
ALLOC FILE (MPRDIAG)	SYSOUT (sysout-class)	Always (Formatted dump output)	
ALLOC FILE (MPAID)	DSN (primary-mpaid-dsn)	Always (enable use of MP-AID)	
ALLOC FILE (dict)	DSN (dict-index-dsn)	Any dictionary access	1
ALLOC FILE (dictD)	DSN (dict-data-entries-dsn)	Any dictionary access	1
ALLOC FILE (dictS)	DSN (dict-source-dsn)	Any dictionary access	1
ALLOC FILE (dictE)	DSN (dict-recover-dsn)	Any dictionary access	1
ALLOC FILE (dictJ)	DSN (dict-log-dsn)	Any dictionary access (if logging active)	1
/*	/*	/*	/*
/*	OPTIONAL STATEMENTS FOR ALL USERS	/*	/*
/*	/*	/*	/*
ALLOC FILE (ddname)	DSN (secondary-mpaid-dsn)	Concatenated MP-AID	20
ALLOC FILE (ddname)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	DesignManager (output dataset for PRODUCE command)	2
ALLOC FILE (ddname)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	DictionaryManager (output dataset for TRANSFER command)	2
ALLOC FILE (ddname)	SYSOUT (sysout-class)	Alternative output dataset (for SWITCH OUTPUT command)	4
ALLOC FILE (ddname)	DSN (input-dsn) OLD	Automation of Set Up (DMR-AS1, DMR-AS2) output dataset	4
ALLOC FILE (ddname)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	Source Language Generation (DMR-SL1 to DMR-SL9)	6
ALLOC FILE (ddname)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	Procedures Language output dataset	7
ALLOC FILE (OBJECT)	DSN (input-dsn) OLD	ADW/IEW Import facility	21
ALLOC FILE (ASSOC)	DSN (input-dsn) OLD	ADW/IEW Import facility	21
ALLOC FILE (TEXT)	DSN (input-dsn) OLD	ADW/IEW Import facility	21
ALLOC FILE (PROP)	DSN (input-dsn) OLD	ADW/IEW Import facility	21
ALLOC FILE (IEWXOI)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	ADW/IEW Export facility	21
ALLOC FILE (IEWXAI)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	ADW/IEW Export facility	21
ALLOC FILE (IEWXTI)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	ADW/IEW Export facility	21
ALLOC FILE (IEWXPI)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	ADW/IEW Export facility	21
ALLOC FILE (ddname)	DSN (input-dsn) OLD	Generic Import facility	22
ALLOC FILE (MPRPOST)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	User Interface (CMR-UI1) output POST dataset	8
ALLOC FILE (ddname)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	Procedures Language trace output (default ddname MPTRACE)	24
ALLOC FILE (MPRECORD)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	Replay facility	25
ALLOC FILE (MPRESULT)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	Replay facility	25
ALLOC FILE (MPSPRINT)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	Replay facility	25
/*	/*	/*	/*
/*	OPTIONAL STATEMENTS FOR DICTIONARY	/*	/*
/*	CONTROLLERS OR MASTER OPERATORS	/*	/*
/*	/*	/*	/*
ALLOC FILE (dictV)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	SAVE/UNLOAD output dataset	10
ALLOC FILE (dictR)	DSN (input-dsn) OLD	RESTORE/RELOAD input dataset	11
ALLOC FILE (dictG)	DSN (input-dsn) OLD	RELOAD/ROLL-FORWARD archived input transactions	12
ALLOC FILE (dictH)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	LOG ARCHIVE output dataset	13, 14
ALLOC FILE (dictG)	DSN (input-dsn) OLD	LOG ARCHIVE input dataset	13, 15
ALLOC FILE (dictG)	DSN (input-dsn) OLD	LOG ANALYSIS/AUDIT when input from archive dataset	16
ALLOC FILE (ddname)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	AUDIT ONTO output dataset	23
/*	/*	/*	/*
/*	OPTIONAL STATEMENTS FOR SYSTEMS ADMINISTRATORS	/*	/*
/*	/*	/*	/*
ALLOC FILE (MPAIDV)	DSN (output-dsn) NEW SPACE (nn,nn) TRACKS	MP-AID UNLOAD	17
ALLOC FILE (MPAIDR)	DSN (input-dsn) OLD	MP-AID LOAD/MP-AID RELOAD	18
/*	/*	/*	/*
/*	COMPULSORY STATEMENTS FOR ALL USERS	/*	/*
/*	/*	/*	/*
CALL 'MP.LOADLIB (MPR00) '		Always	19
FREE FILE (MPIN,MPOUT,MPRDIAG,MPAID,dict,dictD,dictS,dictE,dictJ)		Always	
/*	/*	/*	/*
/*	OPTIONAL STATEMENTS FOR ALL USERS	/*	/*
/*	OR MASTERS OPERATORS	/*	/*
/*	/*	/*	/*
FREE FILE (ddname,ddname,ddname,ddname,ddname,ddname,ddname)			
FREE FILE (OBJECT,ASSOC,TEXT,PROP)			
FREE FILE (IEWXOI,IEWXAI,IEWXTI,IEWXPI)			
FREE FILE (ddname,MPRPOST,MPRACWF)			
FREE FILE (ddname,MPRECORD,MPRESULT,MPSPRINT)			
/*	/*	/*	/*
/*	OPTIONAL STATEMENTS FOR DICTIONARY CONTROLLERS	/*	/*
/*	OR MASTERS OPERATORS	/*	/*
/*	/*	/*	/*
FREE FILE (dictV,dictR,dictG,dictH,dictG,dictG)			
FREE FILE (ddname)			
/*	/*	/*	/*
/*	OPTIONAL STATEMENTS FOR SYSTEMS ADMINISTRATORS	/*	/*
/*	/*	/*	/*
FREE FILE (MPAIDV,MPAIDR)			

Notes

- 1 Dictionary Datasets.** The dictionary comprises four or five datasets, each of which must be declared to the operating system.

The *ddname* variable *dict* represents the name of the dictionary as known by users. The suffixes indicated for the data entries, source, index, and recovery datasets are compulsory. The ALLOC statement for the log dataset can be omitted from the job control if logging is not applied to the dictionary.

Any other dictionaries accessed in the same job step must have additional ALLOC statements for the four or five datasets constituting the dictionary.

- 2 DesignManager PRODUCE Dataset.** This additional ALLOC statement is required to define a sequential source library dataset for output from the DesignManager PRODUCE command.

There is no default *ddname*. It must be specified via the ONTO clause of the PRODUCE command.

- 3 DictionaryManager Datasets.** This additional ALLOC statement is required to define a partitioned or sequential source library dataset for output from the TRANSFER command, where *ddname* must be the same as that specified via the ONTO clause of the TRANSFER command.

There is no default *ddname* for this dataset.

- 4 Alternative Output Dataset.** If SWITCH OUTPUT commands are to be used during the Manager Products run to switch output to an alternative output dataset, then the additional ALLOC statement is required to define the output dataset. Any valid name may be used as the *ddname*. The specified *ddname* is declared using the SWITCH OUTPUT command.

- 5 Automation of Set Up Datasets.** Under OS, input for the Automation of Set Up facility's CONVERT command must be from a partitioned dataset containing COBOL or PL/I source statements in card image format. To run ControlManager when the Automation of Set Up command CONVERT is to be used, the additional ALLOC statement is required to define the input dataset, where *ddname* is the logical file name of the dataset from which the input source statements are to be read. It is the name that can be stated in the SYSNAME clause of the CONVERT command.

If the SYSNAME clause is omitted from the CONVERT command, then these ddnames are assumed:

- COBLIB for COBOL conversions
- PLILIB for PL/I conversions

Therefore, if the CONVERT command is to be used without the SYSNAME clause, the ddname specified must be either COBLIB or PLILIB, as applicable.

You do not need any additional ALLOC statements for the Automation of Set Up MERGE command.

- 6 Source Language Generation Datasets.** This additional ALLOC statement is required to define a partitioned or sequential source library dataset for output from the PRODUCE command.

The ddname to be used for the output source library dataset can be declared as the value of the parameter DDNAME in the relevant installation macro. The supplied default value of this parameter is GENLIB. If this name is acceptable, the DDNAME parameter of the relevant macro need not be tailored, and GENLIB can be declared as the ddname in the ALLOC statement. Otherwise, the relevant installation macro should be tailored to ensure that the name declared as the value of the parameter DDNAME is the same as the name normally used in the ALLOC statement. The default or declared value for the parameter DDNAME can, however, be overridden at run-time by including an ONTO file-name clause in the PRODUCE command (see *ASG-Manager Products Source Language Generation*). Thus, the ddname used in the ALLOC statement must be one of these:

- The ddname declared in the ONTO clause of the PRODUCE command that initiates the source language generation, if the PRODUCE command includes an ONTO clause
- The name declared as the value of the parameter DDNAME when the relevant installation macro was tailored, if a value was declared for DDNAME
- GENLIB

- 7 Procedures Language SENDF Output Dataset.** This additional ALLOC statement is required when the Executive Command SENDF, specifying partitioned or sequential output, is to be used.

- 8 User Interface Optional Output POST Dataset.** This additional ALLOC statement is required when POST or MAIL commands are to be issued.

The default ddname established at logon to Manager Products is MPRPOST. This can be changed by use of the command:

```
POST <NORMAL> ONTO ddname;
```

- 9 Executing an Access Call Program.** The CALL command must be changed to invoke the user program, for example:

```
CALL 'MPR.AC.LOADLIB (ACCPROG1) '
```

When running a user Access Call program, the Manager Products library (MP.LOADLIB) must also be available. The blocksize of MP.LOADLIB is 6144 bytes, unless it has been re-blocked (as described in ["Copy Partitioned Datasets to Disk" on page 22](#)).

Before executing an Access Call program it is necessary to link-edit your user program with the ASG-supplied Access Call interface module (DMRUS). This is described in [Chapter 8, "Linking External Software to Manager Products Software," on page 95](#).

- 10 SAVE UNLOAD Datasets.** If a SAVE or UNLOAD command is to be issued in the course of a run, the additional ALLOC statement is needed to define the output dataset. The specified ddname must be the name of the dictionary from which it is output, with the suffix V.
- 11 RESTORE/RELOAD Datasets.** If a RESTORE command or a RELOAD command is to be issued in the course of a run, then the additional ALLOC statement is needed to define the input dataset. The ddname of the dataset input to a RESTORE command must be the name of the dictionary to which it is input, with the suffix R. We recommend that you submit RELOAD commands in batch mode (see [Chapter 9, "Running Manager Products in Batch Mode," on page 101](#)).
- 12 RELOAD and ROLL-FORWARD LOG-ARCHIVE Dataset.** For both BDAM and VSAM dictionaries, the RELOAD command can invoke roll-forward either automatically or by inclusion of the keyword ROLL-FORWARD. Roll-forward requires input from a log archive dataset, then the additional ALLOC statement is needed to define the input dataset.

The ddname of the input log archive dataset must be the name of the dictionary with the suffix G.

- 13 LOG ARCHIVE General Information.** The LOG ARCHIVE command archives the log dataset to disk or tape. Log archiving works in a cyclical manner. A log archiving cycle commences whenever an UNLOAD command or a LOG BACKUP-DETAILS command is accepted. When the first LOG ARCHIVE command following one of these commands is processed, a new log archive dataset is created. Subsequent LOG ARCHIVE commands up to the time the next UNLOAD command or LOG BACKUP-DETAILS command is accepted require the dataset output from the previous log archiving run as input. This dataset is merged with transactions from the dictionary's log dataset to produce the output log archive dataset.

- 14 LOG ARCHIVE Output Dataset.** For any Manager Products run that includes the LOG ARCHIVE command, the additional ALLOC statement is required to define the output log archive dataset.

The ddname of the output log archive dataset must be the name of the dictionary with the suffix H.

- 15 LOG ARCHIVE Optional Input Dataset.** The ddname of any input log archive dataset must be the name of the dictionary with the suffix 0. The additional ALLOC statement is required in respect of this dataset for every log archiving run except the first in each cycle.

- 16 LOG ANALYSIS and AUDIT Datasets.** This additional ALLOC statement is required if a Manager Products run includes either:

- A LOG ANALYSIS command
- An AUDIT command, to operate on a log archive dataset (if the Audit and Security facility, selectable unit CMR-DD3, is installed)

The ddname of the input log archive dataset must be the name of the log dictionary with the suffix G. Concatenated input log archive datasets are not permissible.

- 17 MP-AID UNLOAD Datasets.** If an MP-AID UNLOAD command is to be issued in the course of a run, then the additional ALLOC statement is needed to define the output dataset. The specified ddname must be MPAIDV.

- 18 MP-AID LOAD and MP-AID RELOAD Datasets.** If an MP-AID LOAD or MP-AID RELOAD command is to be issued in the course of a run, the additional ALLOC statement is needed to define the input dataset. The specified ddname must be MPAIDR.

ASG recommends that you submit MP-AID RELOAD commands in batch mode (see [Chapter 9, "Running Manager Products in Batch Mode," on page 101](#)).

- 19 Providing a DB2 Load Library.** If you require to access a DB2 sub-system from Manager Products then you must make available a DB2 load library containing the interface modules DSNALI and DSNHLI2.

You should make this library available as part of your ISPF ISPLLIB concatenation or TSO STEPLIB concatenation.

- 20 Concatenated MP-AID.** An additional ALLOC statement is required for each secondary read-only MP-AID that is to be accessed.

The ddname specified must be the same as that given on the MP-AID CONCATENATION command used to establish the required concatenation. Full details of the commands required to implement the concatenated MP-AID are given in the *ASG-Manager Products Systems Administrator's Manual*.

- 21 ADW/IEW Import/Export Datasets.** A number of additional ALLOC statements must be provided when executing the ADW/IEW Import/Export facility. The ddnames shown are the defaults and may be tailored by the user.

You should refer to *ASG-Manager Products Tools Support: Integration with ADW/IEW* for full details of user tailoring.

- 22 Generic Import Dataset.** An additional ALLOC statement is required to define a sequential or partitioned dataset used as the input to the extract stage of Generic Import.

No default ddname is assumed. The required ddname is specified using the EXTERNAL-FILE clause of the EXTRACT command.

- 23 AUDIT ONTO Output Dataset.** If an AUDIT ONTO command is to be issued in the course of a run, then an additional ALLOC statement is needed to define the output dataset.

There is no default ddname assumed. The required ddname is provided as part of the command specification.

- 24 Procedures Language Trace Dataset.** An additional ALLOC statement is required if Procedures Language trace output is to be written to a dataset on disk. The default ddname for this dataset is MPTRACE but it may be varied by use of the SET TRACE command.

- 25 REPLAY Datasets.** Additional ALLOC statements are required if the REPLAY facility is to be utilized. The ALLOC for ddname MPSPRINT is only needed when the PRINT parameter is used.

Installing and Running Manager Products under CICS

After installation and any tailoring of batch versions of your Manager Products have been completed (see [Chapter 3, "Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code," on page 21](#) and [Chapter 4, "Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE," on page 27](#)), Manager Products can be installed for use under CICS.

The ControlManager CICS Interface facility (selectable unit CMR-TP2) provides the Gateway for running Manager Products under CICS. The user runs the CICS interface program (CMRZ100) which invokes other Manager Products programs automatically as required.

You should note these factors regarding the usage and position of the Manager Products program code when installing under CICS:

- The Manager Products CICS Interface Program (CMRZ100) should be defined as a resident program. This program is used for every Manager Products transaction invoked.
- The Manager Products Nuclei program code segments MPR00, MPR01, and MPR02 should also be defined as resident programs. These segments are heavily used during Manager Products execution. Response times can be significantly improved by making these segments resident. Other code segments will be loaded into the CICS dynamic sub-pool as required depending on the functionality requested.
- In MVS/XA and ESA environments program code is loaded into both 24- and 31-bit virtual storage (below and above the 16MB line).
- A considerable reduction in the usage of the CICS dynamic sub-pool can be achieved by placing selected portions of the Manager Products program code in the (Extended) Pageable Link Pack Area. This code can then also be shared by other Manager Products users executing in a non-CICS environment (for example, batch or TSO/ISPF). Refer to ["Optimizing Usage of the Manager Products Program Code \(Optional\)" on page 25](#) for further details of how this can be achieved.

Details of how to install Manager Products under CICS are given in the following sections. The particular installation steps involved are:

- Step 1** - Generate the CICS Interface program CMRZ100; the required Manager Products macros and source modules are contained in MP.SOURCE on your ASG-supplied release tape (see ["Step 1 - Generating the CICS Interface Program \(CMRZ100\)" on page 119](#)).
- Step 2** - (Optional): Use the DCUST installation macro to tailor Manager Products to your installation's CICS-specific requirements (see ["Step 2 - Tailor Macro DCUST to Your Installation's CICS Specific Requirements \(Optional\)" on page 121](#)).
- Step 3** - (Optional): If the Access Call capability of ControlManager's User Interface Facility (selectable unit CMR-UI1) is to be used, generate the CICS User Interface linkage program DMGRDMRU (see ["Step 3 - Generating the CICS Access Call Linkage Program DMGRDMRU \(Optional\)" on page 123](#)).

Step 4 - Update the CICS system tables; Processing Program Table (PPT), Program Control Table (PCT), File Control Table (FCT), and Destination Control Table (DCT). To simplify these table updates, ASG supplies three table generation macros in dataset MP.SOURCE. These are:

- Macro MPRPPT for the PPT
- Macro MPRPCT for the PCT
- Macro MPRFCT for the FCT

See ["Step 4: Updating CICS System Tables" on page 124](#) for further details.

Step 5 - Satisfy any requirements for Alternate Screen Size Support (see ["Step 5 - Satisfy Any Requirements for Alternate Screen Size Support \(Optional\)" on page 139](#)).

Step 6 - Satisfy other CICS Requirements (see ["Step 6 - Satisfy Other CICS Requirements" on page 140](#)).

Step 7 - (Optional): Install Hard Copy Feature (see ["Step 7 - Install Hard Copy Feature \(Optional\)" on page 142](#)).

Step 8 - Run Manager Products under CICS (see ["Step 8 - Run Manager Products under CICS" on page 144](#)).

Step 1 - Generating the CICS Interface Program (CMRZ100)

The CICS Interface program (selectable unit CMRZ100) must be generated at your installation in order to allow for any possible differences that may exist between different CICS releases. The CICS Command Level Interface source module (selectable unit DCX01) is supplied as a member of dataset MP.SOURCE and forms the input to the generation. The generation of CMRZ100 consists of these steps:

Step 3A - Execution of the CICS assembler translator. The input to the translator is the DCX01 source module.

Step 3B - Assembly of the output from the translator. A four character SYSPARM value must be passed to the assembler. These are the permitted values:

- First character - 0 only
- O specifies that generation of code for the OS/CICS environment is required
- Second character—M or U. M specifies mixed case terminal input mode. Possible translation of terminal input characters to upper case by CICS are suppressed. U specifies upper case terminal input mode. Possible translation of terminal input characters to upper case by CICS will not be suppressed.
- Third and fourth characters - a 2-digit number specifying the CICS version/release that Manager Products is to execute under.

Permitted values are: 16, 17, 21, 22, 31, 32, 33, and 41

Step 1C: Link-edit of the output object code from the assembly into the Manager Products load library as module CMRZ100.

The IBM supplied DFHEITAL procedure should be used to perform steps 1A, 1B, and 1C above. Your installation CICS macro and load libraries must be available together with dataset MP.SOURCE which contains the Manager Products source modules and macros.

Any messages (of severity 4) output by the translator and any MNOTE statements output from the assembly can be ignored. The job control given in [Figure 27](#) is suggested, where:

cics-load-library-name is the name of your installation CICS load library.

cics-macro-library-name is the name of your installation CICS macro library.

x is the second character of the SYSPARM string as described above.

vr is the CICS version/release as described above.

Figure 27 • Generating the CICS Interface Program (CMRZ100)

```
//MPOJCL85      JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPDCX01      EXEC      DFHEITAL, PARM.ASM='DECK,NOBJECT,SYSPARM(0xvr)',
//              LNKPARM='LIST,XREF,RENT'
//TRN.STEPLIB  DD      DISP=SHR, DSN=cics-load-library-name
//TRN.SYSIN    DD      DISP=SHR, DSN=MP.SOURCE(DCX01)
//ASM.SYSLIB   DD      DISP=SHR, DSN=cics-macro-library-name
//              DD      DISP=SHR, DSN=MP.SOURCE
//LKED.SYSLIB  DD      DISP=SHR, DSN=cics-load-library-name
//LKED.SYSLMOD DD      DISP=SHR, DSN=MP.LOADLIB
//LKED.SYSIN   DD      *
              NAME CMRZ100(R)
//
```

Step 2 - Tailor Macro DCUST to Your Installation's CICS Specific Requirements (Optional)

This section provides details of those keywords supplied with the DCUST installation macro which are relevant only to running Manager Products under CICS. Details of all other keywords supplied with the DCUST installation macro are given in "[Manager Products Installation Macros](#)" on page 33.

Table 18 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
Parameters for use in CICS environments only:			
DBUFC	The number of buffers to be allocated to the Data Entries dataset buffer pool in a CICS environment (see Note 1).	3	2 to 32000
IBUFC	The number of buffers to be allocated to the Index dataset buffer pool in a CICS environment (see Note 1).	3	2 to 32000
ITRAN	ControlManager transaction identification if ControlManager is to be initiated from a user transaction and/or the timeout feature (defined via the TMOUT keyword) is to be utilized.	none	A 1 to 4 character transaction identifier.
MBUFC	The number of buffers to be allocated to the MP-AID buffer pool in a CICS environment (see Note 1).		2 to 32000
RETRY	The maximum number of times that a Manager Products is to attempt to get control of the dictionary before informing the user that the dictionary is in use in another partition/region.	5	2 to 255
RTRAN	Transaction identification of the transaction to be initiated when ControlManager terminates, if ControlManager is to initiate another transaction.	none	A 1 to 4 character transaction identifier.
SBUFC	The number of buffers to be allocated to the Source dataset buffer pool in a CICS environment (see Note 1).	2	2 to 32000

Table 18 The Macro DCUST: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
TEMPST	Whether temporary storage records are to be written to auxiliary storage or maintained in main storage.	MAIN	AUX
TMOUT	A time-out period. When exceeded a new Manager Products environment is established (see Note 2).	none	An integer between 2 and 255 representing the timeout period in minutes.
TSKEY	The first two characters used to build temporary storage identifiers.	DM	Any two characters.

Notes

- 1 The keywords IBUFC, DBUFC, and SBUFC can be overridden in any particular run by including the clauses IBUF *n*, DBUF *n*, and SBUF *n* respectively in the DICTONARY command, where *n* is the number of buffers to be allocated to the dataset buffer pool. At least two buffers must be specified for each of these datasets.

The number of buffers allocated to the MP-AID buffer pool can be re-specified at any time by issuing the command MP-AID BUFFERS *n*, where *n* is the number of buffers required. At least two buffers must be specified for the MP-AID.

A buffer is defined as an area of virtual storage into which physical blocks from a given dataset are read. A separate buffer pool is created for each of the Index, Source, and Data Entries datasets, and must consist of at least two buffers. For the effects of varying the size of a buffer pool, see *ASG-Manager Products Performance Tuning*. In non-XA/ESA environments the maximum size of any buffer pool under CICS is 384K.

- 2 The principal use of TMOUT is as a security feature. If no input is received from a terminal logged on to Manager Products within the time specified by TMOUT, that terminal is automatically logged off Manager Products. Automatic logging off does not alter the display on the screen of the terminal concerned, but any subsequent use of enter or PF keys results in the display of a Manager Products sign-on panel (unless suppressed by use of the Logon Exit facility).

Some installations may make use of time-out facilities external to Manager Products. It may also be possible at some installations to switch terminals out of Manager Products without the necessity of entering a Manager Products LOGOFF command. In either of these cases, ASG strongly recommends that a TMOUT value is specified. Failure to do this will result in:

- Gradual degradation of CICS leading ultimately to a CICS Short-on-Storage condition, as storage areas obtained by Manager Products for use throughout a session, and only released by a LOGOFF command, accumulate.
- The symbolic terminal identifier (though not necessarily the physical terminal) continuing to be associated by Manager Products with a session in progress. This session may inadvertently be re-entered by someone logging on to Manager Products at a later time, which will cause confusion and may breach security.

You must specify the ControlManager transaction identification (using the ITRAN keyword) in order to successfully implement the timeout feature.

Failure to do so may result in a Manager Products transaction abend.

Step 3 - Generating the CICS Access Call Linkage Program DMGRDMRU (Optional)

The CICS Access Call Linkage Program (DMGRDMRU) must be generated at your installation in order to allow for any possible differences that may exist between different CICS releases. The CICS Command Level Access Call Interface source module (DUC01) is supplied as a member of dataset MP.SOURCE and forms the input to the generation. The generation of DMGRDMRU consists of these three steps:

Step 3A - Execution of the CICS assembler translator. The input to the translator is the DUC01 source module.

Step 3B - Assembly of the output from the translator.

Step 3C - Link edit of the output object code from the assembly into the Manager Products load library as module DMGRDMRU.

The IBM-supplied DFHEITAL procedure should be used to perform steps 3A, 3B, and 3C above. Your installation CICS macro and load libraries must be available together with dataset MP.SOURCE which contains the Manager Products source modules and macros.

The job control given in [Figure 28](#) is suggested,

where:

cics-load-library-name is the name of your installation CICS load library.

cics-macro-library-name is the name of your installation CICS macro library.

Figure 28 • Generating the CICS User Interface Linkage Program DMGRDMRU

```
//MPOJCL86      JOB      ,,MSGLEVEL=(1,1),CLASS=A
//MPDUC01      EXEC      DFHEITAL, PARM.ASM='DECK,NOOBJECT',
//              LNKPARM='LIST,XREF,RENT'
//TRN.STEPLIB  DD      DISP=SHR,DSN=cics-load-library-name
//TRN.SYSIN    DD      DISP=SHR,DSN=MP.SOURCE(DUC01)
//ASM.SYSLIB   DD      DISP=SHR,DSN=cics-macro-library-name
//              DD      DISP=SHR,DSN=MP.SOURCE
//LKED.SYSLIB  DD      DISP=SHR,DSN=cics-load-library-name
//LKED.SYSLMOD DD      DISP=SHR,DSN=MP.LOADLIB
//LKED.SYSIN   DD      *
              NAME  DMGRDMRU (R)
//
```

Before program DMGRDMRU can be used, an entry must be provided for it in your CICS Processing Program Table (PPT). This entry can be generated automatically by the ASG-supplied macro MPRPPT.

When Manager Products installation under CICS has been completed, you can initiate an Access Call under CICS by CALLING program DMGRDMRU from your user program (see *ASG-Manager Products User Interface Facility*).

Step 4: Updating CICS System Tables

Resources to be used under CICS must be defined in the appropriate CICS System Table. Therefore, your CICS System Tables must be updated to take account of the requirements of Manager Products. To simplify the process of updating your CICS System Tables, there are three table generation macros in dataset MP.SOURCE.

The following sections describe the required updates to particular CICS System Tables and how to use the ASG-supplied table generation macros to simplify the updating process.

Updating the Processing Program Table (PPT)

In the Processing Program Table (PPT), entries for Manager Products must be specified. This can be achieved by specifying entries as described in this section, or by using the ASG-supplied macro MPRPPT as described in ["The MPRPPT Macro" on page 132](#).

The following entries must be made in the PPT.

The entries in which RES=YES are coded will make the specified program resident in the CICS region. Otherwise the programs will be loaded into the CICS dynamic sub-pool as required. It is recommended but not compulsory that the RES=YES keyword be coded in the entries indicated below. The keyword RELOAD=YES MUST be coded where indicated in these entries:

```
DFHPPT TYPE=ENTRY, PROGRAM=CMRZ100, RES=YES
DFHPPT TYPE=ENTRY, PROGRAM=MPR00, RES=YES
DFHPPT TYPE=ENTRY, PROGRAM=MPR01, RES=YES
DFHPPT TYPE=ENTRY, PROGRAM=MPR02, RES=YES
DFHPPT TYPE=ENTRY, PROGRAM=MPR03
DFHPPT TYPE=ENTRY, PROGRAM=MPR04
DFHPPT TYPE=ENTRY, PROGRAM=MPR05
DFHPPT TYPE=ENTRY, PROGRAM=MPR06
DFHPPT TYPE=ENTRY, PROGRAM=MPR07
DFHPPT TYPE=ENTRY, PROGRAM=MPR08
DFHPPT TYPE=ENTRY, PROGRAM=MPR09
DFHPPT TYPE=ENTRY, PROGRAM=MPR10
DFHPPT TYPE=ENTRY, PROGRAM=MPR11
DFHPPT TYPE=ENTRY, PROGRAM=MPR12
DFHPPT TYPE=ENTRY, PROGRAM=MPR13
DFHPPT TYPE=ENTRY, PROGRAM=MPR14
DFHPPT TYPE=ENTRY, PROGRAM=MPR15
DFHPPT TYPE=ENTRY, PROGRAM=MPR16
DFHPPT TYPE=ENTRY, PROGRAM=MPR17
DFHPPT TYPE=ENTRY, PROGRAM=MPR18
DFHPPT TYPE=ENTRY, PROGRAM=MPR19
DFHPPT TYPE=ENTRY, PROGRAM=MPR20
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DFHPPT TYPE=ENTRY, PROGRAM=MPR23
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DFHPPT TYPE=ENTRY, PROGRAM=MPR28
DFHPPT TYPE=ENTRY, PROGRAM=MPR29
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DFHPPT TYPE=ENTRY, PROGRAM=MPR31
DFHPPT TYPE=ENTRY, PROGRAM=MPR32
DFHPPT TYPE=ENTRY, PROGRAM=MPR33
DFHPPT TYPE=ENTRY, PROGRAM=MPR34
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DFHPPT TYPE=ENTRY, PROGRAM=MPR36
DFHPPT TYPE=ENTRY, PROGRAM=MPR37
DFHPPT TYPE=ENTRY, PROGRAM=MPR38
DFHPPT TYPE=ENTRY, PROGRAM=MPR39
DFHPPT TYPE=ENTRY, PROGRAM=MPR40
DFHPPT TYPE=ENTRY, PROGRAM=MPR41
DFHPPT TYPE=ENTRY, PROGRAM=MPR42
DFHPPT TYPE=ENTRY, PROGRAM=MPR43
```

```
DFHPPT TYPE=ENTRY, PROGRAM=MPR44
DFHPPT TYPE=ENTRY, PROGRAM=MPR45
DFHPPT TYPE=ENTRY, PROGRAM=MPR46
DFHPPT TYPE=ENTRY, PROGRAM=MPR47
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DFHPPT TYPE=ENTRY, PROGRAM=MPR49
DFHPPT TYPE=ENTRY, PROGRAM=MPR50
DFHPPT TYPE=ENTRY, PROGRAM=MPR51
DFHPPT TYPE=ENTRY, PROGRAM=MPR52
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DFHPPT TYPE=ENTRY, PROGRAM=MPR78
DFHPPT TYPE=ENTRY, PROGRAM=MPR79
DFHPPT TYPE=ENTRY, PROGRAM=MPR80
DFHPPT TYPE=ENTRY, PROGRAM=MPR81
DFHPPT TYPE=ENTRY, PROGRAM=MPR82
DFHPPT TYPE=ENTRY, PROGRAM=MPR83
DFHPPT TYPE=ENTRY, PROGRAM=AAA04
```

DFHPPT TYPE=ENTRY, PROGRAM=CCRDG
DFHPPT TYPE=ENTRY, PROGRAM=CMR91, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR92, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR93, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR94, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR95, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR96, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR97, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR98, RELOAD=YES
DFHPPT TYPE=ENTRY, PROGRAM=CMR99, RELOAD=YES
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DFHPPT TYPE=ENTRY, PROGRAM=DCT02
DFHPPT TYPE=ENTRY, PROGRAM=DCT03
DFHPPT TYPE=ENTRY, PROGRAM=DCT04
DFHPPT TYPE=ENTRY, PROGRAM=DCT05
DFHPPT TYPE=ENTRY, PROGRAM=DCT06
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DFHPPT TYPE=ENTRY, PROGRAM=DFT12
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DFHPPT TYPE=ENTRY, PROGRAM=DIT42
DFHPPT TYPE=ENTRY, PROGRAM=DIT88
DFHPPT TYPE=ENTRY, PROGRAM=DIT89
DFHPPT TYPE=ENTRY, PROGRAM=DIT96
DFHPPT TYPE=ENTRY, PROGRAM=DIT97
DFHPPT TYPE=ENTRY, PROGRAM=DIT98
DFHPPT TYPE=ENTRY, PROGRAM=DIT99
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DFHPPT TYPE=ENTRY, PROGRAM=DJT09
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DFHPPT TYPE=ENTRY, PROGRAM=DMG02

```
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DFHPPT TYPE=ENTRY, PROGRAM=DMM25
DFHPPT TYPE=ENTRY, PROGRAM=DMM40
DFHPPT TYPE=ENTRY, PROGRAM=DMM99
DFHPPT TYPE=ENTRY, PROGRAM=DMT01, RELOAD=YES
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DFHPPT TYPE=ENTRY, PROGRAM=DMT07
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```

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DFHPPT TYPE=ENTRY, PROGRAM=DST12
DFHPPT TYPE=ENTRY, PROGRAM=DST13
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DFHPPT TYPE=ENTRY, PROGRAM=DUFO2
DFHPPT TYPE=ENTRY, PROGRAM=DUG02
DFHPPT TYPE=ENTRY, PROGRAM=DUH02
DFHPPT TYPE=ENTRY, PROGRAM=DUI02
DFHPPT TYPE=ENTRY, PROGRAM=DUK02
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DFHPPT TYPE=ENTRY, PROGRAM=DUS02
DFHPPT TYPE=ENTRY, PROGRAM=DUT01
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DFHPPT TYPE=ENTRY, PROGRAM=DUT03
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DFHPPT TYPE=ENTRY, PROGRAM=DUT05
DFHPPT TYPE=ENTRY, PROGRAM=DUT06
DFHPPT TYPE=ENTRY, PROGRAM=DUT07
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DFHPPT TYPE=ENTRY, PROGRAM=DUT13

DFHPPT TYPE=ENTRY, PROGRAM=DUT14
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DFHPPT TYPE=ENTRY, PROGRAM=DUT18
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DFHPPT TYPE=ENTRY, PROGRAM=DUO07
DFHPPT TYPE=ENTRY, PROGRAM=DUO12
DFHPPT TYPE=ENTRY, PROGRAM=DYD99
DFHPPT TYPE=ENTRY, PROGRAM=DYL11
DFHPPT TYPE=ENTRY, PROGRAM=DYT01
DFHPPT TYPE=ENTRY, PROGRAM=DYT02
DFHPPT TYPE=ENTRY, PROGRAM=DYT11
DFHPPT TYPE=ENTRY, PROGRAM=IDC99
DFHPPT TYPE=ENTRY, PROGRAM=IDT01
DFHPPT TYPE=ENTRY, PROGRAM=MPASORT
DFHPPT TYPE=ENTRY, PROGRAM=MPABR
DFHPPT TYPE=ENTRY, PROGRAM=MPBAF
DFHPPT TYPE=ENTRY, PROGRAM=MPCDX
DFHPPT TYPE=ENTRY, PROGRAM=MPCMD
DFHPPT TYPE=ENTRY, PROGRAM=MPCMP
DFHPPT TYPE=ENTRY, PROGRAM=MPCRB
DFHPPT TYPE=ENTRY, PROGRAM=MPCTE01
DFHPPT TYPE=ENTRY, PROGRAM=MPDX1
DFHPPT TYPE=ENTRY, PROGRAM=MPGEN
DFHPPT TYPE=ENTRY, PROGRAM=MPIND
DFHPPT TYPE=ENTRY, PROGRAM=NPJUS
DFHPPT TYPE=ENTRY, PROGRAM=MPLMF
DFHPPT TYPE=ENTRY, PROGRAM=MPLUF
DFHPPT TYPE=ENTRY, PROGRAM=MPLX1
DFHPPT TYPE=ENTRY, PROGRAM=MPMST
DFHPPT TYPE=ENTRY, PROGRAM=MPRAF
DFHPPT TYPE=ENTRY, PROGRAM=MPRAF2
DFHPPT TYPE=ENTRY, PROGRAM=MPRCC
DFHPPT TYPE=ENTRY, PROGRAM=MPRDP
DFHPPT TYPE=ENTRY, PROGRAM=MPRDX
DFHPPT TYPE=ENTRY, PROGRAM=MPSCI
DFHPPT TYPE=ENTRY, PROGRAM=MPSDT
DFHPPT TYPE=ENTRY, PROGRAM=MPSPI
DFHPPT TYPE=ENTRY, PROGRAM=MPSREAD
DFHPPT TYPE=ENTRY, PROGRAM=MPSRT

```
DFHPPT TYPE=ENTRY, PROGRAM=MPSTR
DFHPPT TYPE=ENTRY, PROGRAM=MPTAF
DFHPPT TYPE=ENTRY, PROGRAM=MPZAP
DFHPPT TYPE=ENTRY, PROGRAM=MPZDE
DFHPPT TYPE=ENTRY, PROGRAM=MPZEN
DFHPPT TYPE=ENTRY, PROGRAM=UFC10
DFHPPT TYPE=ENTRY, PROGRAM=UFT01
DFHPPT TYPE=ENTRY, PROGRAM=UFT02
DFHPPT TYPE=ENTRY, PROGRAM=UFT03
DFHPPT TYPE=ENTRY, PROGRAM=UFT04
DFHPPT TYPE=ENTRY, PROGRAM=UFT98
DFHPPT TYPE=ENTRY, PROGRAM=UFT99
```

You should make an entry in the PPT for each natural Language UDS Table to be used as indicated:

```
DFHPPT TYPE=ENTRY, PROGRAM=DUE02      Spanish
DFHPPT TYPE=ENTRY, PROGRAM=DUF02      French
DFHPPT TYPE=ENTRY, PROGRAM=DUG02      German
DFHPPT TYPE=ENTRY, PROGRAM=DUH02      Dutch
DFHPPT TYPE=ENTRY, PROGRAM=DUI02      Italian
DFHPPT TYPE=ENTRY, PROGRAM=DUK02      Danish
DFHPPT TYPE=ENTRY, PROGRAM=DUN02      Norwegian
DFHPPT TYPE=ENTRY, PROGRAM=DUS02      Swedish
DFHPPT TYPE=ENTRY, PROGRAM=DUU02      Finnish
```

This entry should be made in the PPT if you will be using the ControlManager CICS Access Call Interface linkage program DMGRDMRU:

```
DFHPPT TYPE=ENTRY, PROGRAM=DMGRDMRU
```

See ["Step 3 - Generating the CICS Access Call Linkage Program DMGRDMRU \(Optional\)" on page 123](#) for further details of DMGRDMRU.

The MPRPPT Macro

The MPRPPT macro has these parameters:

Keyword	Default Value	Alternative Value
ACALL	NO	YES
UDS	none	uds-module-name

If you are using a natural language UDS table, then a PPT entry for each UDS table will be generated automatically if you specify UDS=uds-module-name on your PPT entry. For example, if you will be using the German language UDS table DUG02 then the required entry will be:

```
MPRPPT UDS=DUG02
```

If you wish to use more than one natural UDS table, then you must set up a sub-list of UDS module names separated with commas and enclosed in parentheses. For example, if you will be using the German, Dutch, and Danish language UDS tables (DUG02, DUH02, and DUK02 respectively) then the required entry will be:

```
MPRPCT UDS=(DUG02,DUH02,DUK02)
```

If ACALL=YES is specified then an entry for the Access Call Linkage Program (DMGRDMRU) is generated.

Updating the Program Control Table (PCT)

An entry is required for the ControlManager program CMRZ100 in your CICS Program Control Table (PCT). This entry should take this form:

```
DFHPCT TYPE=ENTRY,          *
        TRANSID=xxxx,       *
        PROGRAM=CMRZ100,    *
        SPURGE=YES,         *
        SCRNSZE=ALTERNATE
```

where `xxxx` is any unique 1 to 4 character transaction ID identifying ControlManager (for example, CMR).

The parameter `SCRNSZE=ALTERNATE` is required only if ControlManager/DataManager transactions are to be run in alternate screen size mode. A standard screen size is defined as having 24 rows and 80 columns. Details of the alternate screen sizes currently supported by the ControlManager CICS Interface facility are given in ["Step 5 - Satisfy Any Requirements for Alternate Screen Size Support \(Optional\)" on page 139](#).

The MPRPCT Macro

The MPRPCT macro has these parameters:

Keyword	Default Value	Alternative Value
TRANSID	MPR	1 to 4 character transaction identifier.
ALT	NO	YES (Note 1)

Note

- 1 The parameter `ALT=YES` is only required if Manager Products transactions are to be run in alternate screen size mode. A standard screen size is defined as having 24 rows and 80 columns. Details of the alternate screen sizes are given in ["Step 5 - Satisfy Any Requirements for Alternate Screen Size Support \(Optional\)" on page 139](#).

Examples:

If you are running in standard screen size mode and wish to use the name MPR as the ControlManager/CICS transaction identification, then your PCT entry is simply:

```
MPRPCT
```

If you require alternate screen size mode and a transaction identification of MPC I then your PCT entry is:

```
MPRPCT ALT=YES, TRANSID=MPCI
```

Updating the File Control Table (FCT)

Entries are required in your CICS File Control Table (FCT) for the primary MP-AID, any secondary MP-AIDSs, and each dictionary that will be used under CICS. You should note that an entry for the primary MP-AID is mandatory for any ControlManager run.

For each BDAM dataset (either dictionary or MP-AID), an FCT entry of the this form is required:

```
DFHFCT TYPE=FILE, *
        ACCMETH=BDAM, *
        SERVREQ=UPDATE, *
        LRECL=nnnn, *
        BLKSIZE=nnnn, *
        FILSTAT= (ENABLED, OPEN) , *
        VERIFY=ppp, *
        RELTYPE=BLK, *
        RECFORM= (FIXED, UNBLOCKED) , *
        FILE=xxxxxxx
```

where:

nnnn is the physical blocksize in bytes of the particular dataset to which this entry refers.

ppp is either:

- YES, if you require CICS WRITE verification
- NO, if you do not require CICS WRITE verification: this will improve performance by savings in input/output time

xxxxxxx is the ddname of the dataset. The ddname for the primary read/write MP-AID must be MP-AID. The ddname for any secondary read-only MP-AID is the name as specified on the 'MP-AID CONCATENATION' command used to establish the required concatenation. The ddnames for a dictionary's Source, Data Entries, Recovery, and Log datasets are the dictionary's name with the suffixes M, N, E, and J respectively. The ddname of the Index dataset is the dictionary name with no suffix.

For each VSAM dataset (either dictionary or MP-AID), an FCT entry of this form is required:

```
DFHFCT TYPE=FILE, *
        ACCMETH=(VSAM,RRDS), *
        SERVREQ=UPDATE, *
        FILSTAT=(ENABLED,OPEN), *
        STRNO=2, *
        BUFND=3, *
        RECFORM=(FIXED,UNBLOCKED), *
        FILE=xxxxxxx
```

where xxxxxx is the ddname of the dataset.

The ddname for the primary read/write MP-AID must be MPAID. The ddname for any secondary read-only MP-AID is the name as specified on the MP-AID CONCATENATION command used to establish the required concatenation. The ddnames for a dictionary's Source, Data Entries, Recovery, and Log datasets are the dictionary's name with the suffixes M, N, E, and J respectively. The ddname of the Index dataset is the dictionary name with no suffix.

For both BDAM and VSAM dictionaries with no Log, the FCT entry for the Log dataset must be omitted.

For both BDAM and VSAM datasets, the FILSTAT keyword for the DFHFCT entries will normally be set to (ENABLED,OPENED) as indicated, but they may be changed if it is required to restrict the usage of a particular dictionary.

Where users are running versions of CICS not supporting TYPE=FILE or FILE=xxxxxxx operands, these should be specified as TYPE=DATASET and DATASET=xxxxxxx.

The MPRFCT Macro

To simplify the task of producing these DFHFCT entries, we supply the MPRFCT macro which generates DFHFCT entries automatically when inserted in your CICS File Control Table. Separate MPRFCT entries are required for each primary/secondary MP-AID and for each dictionary to be used under CICS.

Examples of usage of the MPRFCT macro are given below: the full specification of the macro being given in the table at the end of this section. It is assumed that CICS Release 3.1 (the default release) is in use.

Examples:

For a primary BDAM MP-AID with a physical blocksize of 16384 bytes and for which CICS WRITE VERIFICATION is not required, use this MPRFCT specification:

```
MPRFCT MPAID=YES, MBLK=16384
```

For a secondary VSAM MP-AID accessed with a ddname of MPINFO use this MPRFCT specification:

```
MPRFCT MPAID=YES, IOMODE=VSAM, MPNAME=MPINFO
```

For a BDAM dictionary named DDICT, having Index, Source, and Data Entries datasets with a physical blocksize of 8192 bytes and having a Recovery and Log datasets with a blocksize of 4096 bytes and for which CICS WRITE verification is required, use this MPRFCT specification:

```
MPRFCT DICT=DDICT, IND=8192, SOU=8192, DAT=8192, *  
ERR=4096, LOG=4096, VERIFY=YES
```

For a VSAM dictionary named DPOOL that has a Log, use this MPRFCT specification:

```
MPRFCT DICT=DPOOL, IOMODE=VSAM, LOG=YES
```

Table 19 The Macro MPRFCT: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
CICSREL	The release number of the CICS software in use.	3.1	1.6, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1
DICT	The name of the dictionary to which this entry applies.	none	Any valid dictionary name.
IOMODE	Whether the MP-AID or dictionary is held on BDAM or VSAM datasets.	BDAM	VSAM

Table 19 The Macro MPRFCT: Keywords Specifiable on Installation

Keyword	Specifies	Default Value	Alternative Values
LOG	Whether the named dictionary has a Log dataset.	none	For BDAM: the blocksize of the Log dataset.
MPAID	If this entry is for an MP-AID.	NO	YES
MPNAME	The ddname of a primary/secondary MP-AID.	MPAID	For a secondary MP-AID only: any valid ddname.
OPEN	Whether the dictionary and MP-AID datasets are to be opened at CICS initialization.	YES	NO
Parameters applying to BDAM datasets only:			
DAT	The physical blocksize of the dictionary's Data Entries dataset as returned at creation time.	none	Any valid Data Entries blocksize.
ERR	The physical blocksize of the dictionary's Recovery dataset as returned at creation time.	none	Any valid Recovery blocksize.
IND	The physical blocksize of the dictionary's Index dataset as returned at creation time.	none	Any valid Index blocksize.
MBLK	The physical blocksize of the MP-AID dataset as returned at creation time.	8192	Any valid MP-AID blocksize.
SOU	The physical blocksize of the dictionary's Source dataset as returned at creation time.	none	Any valid Source blocksize.
VERIFY	Whether CICS WRITE verification checking is to be performed.	NO	YES

Destination Control Table (DCT)

Destination Control Table (DCT) entries are required if you are using Manager Products capabilities that utilize Extrapartition datasets. These capabilities and the DCT entries required for their use are described in the following paragraphs.

You should note that Extrapartition datasets are not opened or closed by Manager Products. Additionally, care should be taken to ensure that, at any one time, each particular output destination is used by one terminal only.

The ControlManager SWITCH OUTPUT command (see *ASG-ControlManager User's Guide* for specification) can be used to switch command output to an Extrapartition dataset. The output will be in the form of 121 byte records containing ASA printer control characters: in the case of records over 121 bytes in length, bytes 122 and on are printed on the next line. Output can be blocked as required (see DCT entry below), and can be printed via any suitable utility, such as IEBGENER.

For each destination that is to receive output from the SWITCH command, these DCT entries are required:

```
DFHDCCT TYPE=SDSCI, *
        BLKSIZE=nnnnn, *
        RECSIZE=121, *
        RECFORM=FIXBLK, *
        TYPEFLE=OUTPUT, *
        DSCNAME=yyyyyyyyy

DFHDCCT TYPE=EXTRA, *
        DESTID=xxxx, *
        DSCNAME=yyyyyyyyy
```

where:

`xxxx` is any 4 character destination identification.

`nnnnn` is any multiple of 121.

`yyyyyyyyy` is any 1 to 8 character dataset control name. This name must be used as the ddname on the DD statement for the particular Extrapartition dataset.

If the DataManager Source Language Generation facility is to be use under CICS, the following entries are required for each Extrapartition dataset that is to receive generated output from a PRODUCE command:

```
DFHDCCT TYPE=SDSCI, *
        BLKSIZE=nnnnn, *
        RECSIZE=80, *
        RECFORM=FIXBLK, *
        TYPEFLE=OUTPUT, *
        DSCNAME=yyyyyyyyy

DFHDCCT TYPE=EXTRA, *
        DESTID=xxxx, *
        DSCNAME=yyyyyyyyy
```

where:

xxxx is any 4 character destination identification.

nnnnn is any multiple of 80.

yyyyyyyy is any 1 to 8 character dataset control name. This name must be used as the ddname on the DD statement for the particular Extrapartition dataset.

If the ControlManager User Interface facility's POST or MAIL command is to be used under CICS, these entries are required for each Extrapartition dataset that is to receive output from a POST or MAIL command:

```
DFHDCT TYPE=SDSCI, *
        BLKSIZE=nnnnn, *
        RECSIZE=700, *
        RECFORM=VARBLK, *
        TYPEFLE=OUTPUT, *
        DSCNAME=yyyyyyyy
DFHDCT TYPE=EXTRA, *
        DESTID=xxxx, *
        DSCNAME=yyyyyyyy
```

where:

xxxx is any 4 character destination identification.

nnnnn is any valid blocksize.

yyyyyyyy is any 1 to 8 character dataset control name. This name must be used as the ddname on the DD statement for the particular Extrapartition dataset.

You should note that DFHDCT entries having TYPE=SDSCI must precede all DFHDCT entries having TYPE=EXTRA.

Step 5 - Satisfy Any Requirements for Alternate Screen Size Support (Optional)

Manager Products support certain 3270 type terminals that can use an alternate buffer size which is larger than the default 1920 (24 row, 80 column) character buffer. These are example terminals:

- The 3278 model 3 with an alternate buffer size of 2560 characters
- The 3278 model 4 with an alternate buffer size of 3440 characters
- The 3278 model 5 with an alternate buffer size of 3564 characters

Transactions that utilize the alternate buffer size are said to execute in alternate screen size mode.

In order to use alternate screen size mode, you must perform these changes to your CICS System Tables:

- The Program Control Table entry (see ["The MPRPCT Macro" on page 133](#)) must be generated correctly by utilizing the ALT=YES operand in the MPRPCT installation macro.
- For each terminal from which Manager Products is to be executed in alternate screen size mode, a Terminal Control Table entry (DFHTCT TYPE=TERMINAL entry) for that terminal must be coded with the appropriate ALTSCRN=(xx,yy) operand. For a 3278 model 3 this would normally be coded as ALTSCRN=(32,80), for a 3278 model 4 as ALTSCRN=(43,80), and for a 3278 model 5 as ALTSCRN=(27,132).

Step 6 - Satisfy Other CICS Requirements

The following paragraphs detail the CICS requirements that must be fulfilled when using Manager Products.

File Control Program

These options of the CICS File Control Program are utilized:

INDA, DAUPD, DAADD, and HEXAD

Additionally, these options are required if VSAM datasets are used for the MP-AID and/or the dictionary:

INVS, and VSUPD

Other File Control Program options are not needed.

Dynamic Open/Close Program

Manager Products do not make use of the CICS Dynamic Open/Close Program, but expect all MP-AID and dictionary datasets to be opened by CICS system initialization before execution begins.

This procedure is adopted so that you can restrict Manager Products execution easily for certain periods during general CICS execution.

Transient Data

Transient data is used with the Manager Products commands given below.

Use of the SWITCH OUTPUT command is dependent on Extrapartition datasets being available to receive the command output. Details of the CICS requirements for utilizing the SWITCH OUTPUT command are given in ["Step 7 - Install Hard Copy Feature \(Optional\)" on page 142](#).

If you have the DataManager Source Language Generation facility installed, then, under CICS, output from the PRODUCE command is directed normally to one or more CICS Extrapartition datasets.

If you have the ControlManager User Interface facility installed, then, under CICS, output from the POST or MAIL command is directed normally to one or more CICS Extrapartition datasets. However, if the Hard Copy Feature is used (see ["Step 7 - Install Hard Copy Feature \(Optional\)" on page 142](#)), then output is directed to one or more Intrapartition datasets.

Temporary Storage

Temporary storage is used to hold certain Manager Products records for the duration of an interactive session. These records consist of information that must be preserved across transactions: for example, PF key settings and KEPT-DATA lists.

All temporary storage records are written to main storage, unless the value of the TEMPST keyword of the DCUST macro is changed to AUX, in which case they are written to auxiliary storage.

(You must ensure that the CONTROLINTERVALSIZE is specified as not less than 4096 when allocating the temporary storage dataset via IDCAMS.)

The temporary storage records have 8-byte identifiers, which take this form:

- The first two bytes are formed from the value of the TSKEY keyword in the DCUST macro: the default value is DM.
- Bytes 3 thru 6 contain the terminal identification.
- The final two bytes take a value dependent on the type of temporary storage record held. The types of temporary storage record and their values are given in [Table 20](#).

Table 20 Temporary Storage Block-Identifications: Hexadecimal Values Equivalent to Record Type

Record Type	Value
Master Record	FFE3 and FFE2
Terminal Input Control	2774
Message Switching Control Blocks	27D8
PF Keys	283C
InfoBank Control	28A0
TRANSIENT Member Table	2904
Command RECALL Buffer	2968
InfoBank Retrace Table	29CC
User Defined Output FORMAT Control	2A30

Table 20 Temporary Storage Block-Identifications: Hexadecimal Values Equivalent to Record Type

Record Type	Value
Storage Recovery Control Record	2A94
Translation Tables	2AF8
Primary Command Table	2B5C
Status Control Record	2BC0
KEPT-DATA Control Record	4E20
KEPT-DATA Lists	5014 upwards

Step 7 - Install Hard Copy Feature (Optional)

If you have installed the ControlManager User Interface facility (selectable unit CMR-UI1), a hard copy feature is available. Output from a ControlManager POST (or MAIL) <AND> command is directed to an Intrapartition dataset, which initiates automatically a transaction to read from the Intrapartition dataset and print to a local hard copy printer.

Implementation of this feature requires that the Hardcopy Transaction Program (DMGRHCPY) be generated at your installation in order to allow for any possible differences that may exist between different CICS releases. The CICS Command Level Hardcopy Transaction source module (CMRHC) is supplied as a member of dataset MP.SOURCE and forms the input to the generation. The generation of DMGRHCPY consists of these steps:

Step 3A - Execution of the CICS assembler translator. The input to the translator is the CMRHC source module.

Step 3B - Assembly of the output from the translator.

Step 3C - Link edit of the output object code from the assembly into the Manager Products load library as module DMGRHCPY.

The IBM-supplied DFHEITAL procedure should be used to perform steps 7A, 7B, and 7C above. Your installation CICS macro and load libraries must be available together with dataset MP.SOURCE which contains the Manager Products source modules and macros.

The job control given in [Figure 29](#) is suggested,

where:

cics-load-library-name is the name of your installation CICS load library.

cics-macro-library-name is the name of your installation CICS macro library.

Figure 29 • Generating the Hardcopy Transaction DMGRHCPY

```
//MPOJCL87      JOB      ,,MSGLEVEL=(1,1),CLASS=A
//MPCMRHC      EXEC     DFHEITL,PARM.ASM='DECK,NOOBJECT',
//              LNKPARM='LIST,XREF,RENT'
//TRN.STEPLIB  DD      DISP=SHR,DSN=cics-load-library-name
//TRN.SYSIN    DD      DISP=SHR,DSN=MP.SOURCE(CMRHC)
//ASM.SYSLIB   DD      DISP=SHR,DSN=cics-macro-library-name
//              DD      DISP=SHR,DSN=MP.SOURCE
//LKED.SYSLIB  DD      DISP=SHR,DSN=cics-load-library-name
//LKED.SYSLMOD DD      DISP=SHR,DSN=MP.LOADLIB
//LKED.SYSIN   DD      *
//              NAME  DMGRHCPY(R)
//
```

Before Hardcopy Transaction DMGRHCPY can be used, it is necessary to make these changes to your CICS System Tables:

- For each hard copy printer to be supported this entry is required in your Destination Control Table (DCT):

```
DFHDCT TYPE=INTRA,DESTID=tttt,TRIGLEV=1,*
        TRANSID=tran
```

where:

tttt is the terminal identity of the printer as defined in the Terminal Control Table entry.

tran is the name of the Program Control Table (PCT) entry specifying the print transaction (see below for the PCT entry).

- For each printer DFHTCT entry in the Terminal Control Table (TCT), ensure that FEATURE=PRINT and TRMSTAT=TRANSCEIVE are present.
- A new entry for the printer transaction should be added to the Program Control Table (PCT):

```
DFHPCT TYPE=ENTRY,TRANSID=tran,TWASIZE=10,*
        PROGRAM=DMGRHCPY
```

where *tran* is the same as declared for the TRANSID parameter in the DCT entry (see above).

- A new entry for the printer program should be added to the Program Processing Table (PPT) as follows:

```
DFHPPT TYPE=ENTRY, PROGRAM=DMGRHCPY
```

The hard copy feature is activated by issuing the command:

```
➤ [ POST ] [ MAIL ] [ NORMAL ] ONTO tttt [ ; ] [ ] ➤
```

where *tttt* is an Intrapartition destination that has been declared in the Destination Control Table.

The output from any Manager Products command then can be directed to the printer by entering:

```
➤ [ POST ] [ MAIL ] [ command ] [ AND ] [ ; ] [ ] ➤
```

Each POSTed record will be printed, but records longer than 131 bytes will be truncated. (Bytes 132 onwards will not be printed on a separate line.)

The NORMAL keyword can be used in the POST (or MAIL) ONTO command to give printed output in normal format rather than in standard POST or MAIL format.

More than one user can use the hard copy feature concurrently.

When formatting the Intrapartition dataset with IDCAMS, you must specify a CONTROLINTERVALSIZE of at least 1024.

Step 8 - Run Manager Products under CICS

Before you can run Manager Products under CICS, you must have created your primary MP-AID and any dictionaries that are to be accessed. For use under CICS, the MP-AID and dictionaries are normally created in a batch environment.

To run Manager Products under CICS, job control statements similar to the example statements given in [Figure 30](#) should be added to your CICS start-up deck, where *xxxxxx* is the dictionary name, which must be the same as that specified in your CICS File Control Table (see ["Updating the File Control Table \(FCT\)" on page 134](#)).

You should note that one statement only is required for the primary MP-AID; however, job control statements are needed for the individual datasets of each dictionary that is to be used.

If one or more secondary concatenated MP-AIDs are to be accessed, then add this statement for each secondary MP-AID:

```
// ddname DDDSN=secondary-cmr-mpaid, DISP=SHR
```

where *ddname* is the name as specified on the MP-AID CONCATENATION command used to establish the concatenation. An entry is also required in the CICS File Control Table (see ["Updating the File Control Table \(FCT\)" on page 134](#)).

The statement for the Log dataset should be omitted for each dictionary that does not have a Log.

If:

- The ControlManager SWITCH OUTPUT command, and/or
- The PRODUCE command of the DataManager Source Language Generation facility, and/or
- The POST or MAIL command of the ControlManager User Interface facility

are to be used, these statements must be added in respect of each output dataset used (unless output is to an Intrapartition dataset):

```
//yyyyyyyyyDD DSN=output-data-set-name,  
//          DISP=OLD, UNIT=uuuu, VOL=SER=vvvvvv
```

where:

yyyyyyyyy is the DSCNAME as defined in the corresponding DCT entry for the particular Extrapartition dataset (see ["Destination Control Table \(DCT\)" on page 137](#)).

uuuu is any valid disk device type.

vvvvvv is the serial number of the relevant disk.

When using either the SWITCH OUTPUT or PRODUCE command to output to an Extrapartition dataset, the Destination Identification is the first four characters of the ddname specified in the TO or ONTO clause respectively. Thus, if the ONTO clause of a PRODUCE command specifies ddname GENLIB, then the Destination Identification is GENL.

Figure 30 • Job Control Statements for Running ControlManager under CICS

```
//MPAID      DD      DSN=primary-cmr-mpaid,DISP=SHR
//xxxxxx    DD      DSN=index-data-set-name,DISP=SHR
//xxxxxxM   DD      DSN=source-data-set-name,DISP=SHR
//xxxxxxN   DD      DSN=data-entries-data-set-name,DISP=SHR
//xxxxxxE   DD      DSN=recovery-data-set-name,DISP=SHR
//xxxxxxJ   DD      DSN=log-data-set-name,DISP=SHR
```

Details of Manager Products Commands which Cannot be Executed under CICS

These Manager Products commands cannot be executed under CICS:

- All DesignManager commands
- All commands available with the DataManager Siemens UDS Generation (DMR-SL10) and SESAM Generation (DMR-SL11) selectable units
- The CONVERT command available with the Automation of Set Up facility (DMR-AS1 and DMR-AS2)
- All commands available with the DictionaryManager Corporate Dictionary/Repository Import from DB2 facility (selectable unit DYR-TI12)
- All commands available with the DictionaryManager Corporate Dictionary/Repository Import from SQL/DS facility (selectable unit DYR-TI32)
- The Dynamic SQL Services feature available with the DictionaryManager Translation and Transfer Engine facility (selectable unit DYR-TE00)
- All commands available with the ADW/IEW Integration Facility
- The SENDF command to define an output sequential or partitioned dataset destination
- The EXTRACT command when the source is an external dataset
- The Systems Administrator's SET FREE-POOL command
- The ControlManager Replay facility

- The READ and WRITE commands
- The Subtasking facility
- Dictionary Controller commands that use an external dataset or involve dictionary dataset formatting:
 - AUDIT
 - CREATE
 - LOG ARCHIVE
 - LOG ANALYSIS
 - RESTORE
 - RELOAD
 - ROLL FORWARD
 - SAVE
 - UNLOAD
 - VCREATE

Note: _____

The LOG ANALYSIS and AUDIT commands may not necessarily require the use of an external dataset, in which case they may be used under CICS.

- System Administrator commands that use an external dataset or involve MP-AID dataset formatting:
 - MP-AID CREATE
 - MP-AID UNLOAD
 - MP-AID LOAD
 - MP-AID RELOAD

Abnormal Termination of CICS Commands

During processing of Manager Products commands, certain conditions can arise that cause abnormal termination of the command; that is, a transaction abend.

In certain circumstances a transaction abend during the processing of a command means that control of the dictionary or MP-AID is not released. In order to ensure that control is released, you must log on again to the same dictionary/MP-AID using the same terminal as that used when the transaction abend occurred. Failure to do this could result in the dictionary or MP-AID remaining unavailable in other partitions.

A unique dump code is associated with each error (abend) condition. The codes and associated error conditions are shown in [Table 21](#).

Table 21 Dump Codes for Error Conditions under CICS

Dump Code	Component Identity	Meaning	Required Action
X001	FCU01	Temporary storage error.	Obtain transaction dump and contact the ASG Service Desk.
X002	FCZ01	CICS is unable to obtain requested storage.	Probably a user problem. Try to increase the amount of virtual storage available for use under CICS. If the problem persists, obtain a transaction dump and contact the ASG Service Desk.
X003	FES01	The MP-AID release number is incompatible with the software in use.	Ensure that the MP-AID specified in the job control statements for running Manager Products under CICS is correct for the release of the Manager Products software that you wish to execute. Also ensure that the MP-AID has been correctly migrated to the new release.
X004	FEC01	The Manager Products CICS Command Level Interface module (DCX01) is not compatible with the version of the Manager Products software being executed.	Regenerate the CICS Interface module DCX01 and/or use the correct version of Manager Products software.
X005	DCU99	KEPT-DATA list temporary storage error.	Obtain transaction dump and contact the ASG Service Desk.
X006	DCX01	A serious logic error has been detected in Manager Products from which there is no possible recovery.	Obtain transaction dump and contact the ASG Service Desk.
X007	DMGRHCPY	Abnormal response to reading a transient data record as part of the hard copy transaction.	Obtain transaction dump and contact the ASG Service Desk.
X008	DCX01	Segment loading failure (missing PPT entry).	Ensure CICS PPT correctly updated with required Manager Products entries.

Table 21 Dump Codes for Error Conditions under CICS

Dump Code	Component Identity	Meaning	Required Action
X009	FCZ01	Segment loading logic error.	Obtain transaction dump and contact the ASG Service Desk.
X010	DCX01	The ControlManager installation options table DMU09 (generated from the DCUST macro) cannot be located/loaded.	Ensure that a complete Manager Products program library available to CICS.
X011	FCZ01	Dynamic storage request exceeds permitted maximum.	Obtain transaction dump and contact the ASG Service Desk.
X012	FCZ01	Dynamic storage chaining error.	Obtain transaction dump and contact the ASG Service Desk.
XUI1	DMGRDMRU	User failed to define a Transaction Work Area of sufficient size.	Define a TWA of the correct size.
XUI2	DMGRDMRU	Error detected when processing temporary storage.	Obtain transaction dump and contact the ASG Service Desk.
XUI3	DMGRDMRU	Error detected when reading a Manager Products buffer.	Obtain transaction dump and contact the ASG Service Desk.

CICS Response Codes

The EIBRCODE field in the CICS EXEC Interface Block (EIB) contains the CICS response code returned after a function requested by the last CICS command to be issued by the Manager Products software has terminated. For a normal response, this field is set to zero. You should refer to the *IBM CICS Application Programmer's Reference Manual* (Command Level) for details of the significance of all response codes.

Installing Manager Products under TSO/ISPF

If you have the ControlManager TSO/ISPF Interface facility (CMR-FE70) you may install Manager Products to run under TSO/ISPF. Full details of the installation procedure are given in *ASG-Manager Products TSO/ISPF Interface Installation*.

Installing Manager Products under ROSCOE

After installation and any tailoring of batch versions of your Manager Products have been completed (see [Chapter 3, "Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code," on page 21](#) and [Chapter 4, "Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE," on page 27](#)), Manager Products can be installed for use under ROSCOE.

The ControlManager ROSCOE Interface facility provides the Gateway for running Manager Products under ROSCOE.

When installing the ControlManager ROSCOE Interface facility, you must perform these additional steps:

- Step 1 -** Add the ROSCOE Interface module DRX01 to the ControlManager load module MPR00 (see ["Step 1 - Add the ROSCOE Interface Module DRX01 to the ControlManager Load Module MPR00" on page 150](#)).
- Step 2 -** Assemble and link-edit the ROSCOE Monitor Routine module DRX02 (see ["Step 2 - Assemble and Link Edit the ROSCOE Monitor Routine Module DRX02" on page 151](#)).
- Step 3 -** Install the ASG0-supplied exit—SMFEXIT (see ["Step 3 - Install the ASG-supplied Exit - SMFEXIT" on page 153](#)).
- Step 4 -** Update your ROSCOE job control to allow for execution of Manager Products (see ["Step 4 - Update Your ROSCOE Job Control to Allow for Execution of Manager Products" on page 154](#)).

Step 1 - Add the ROSCOE Interface Module DRX01 to the ControlManager Load Module MPR00

Job control similar to this must be used to re-link the supplied Manager Products software to include the ROSCOE Interface module DRX01:

```
//LINK1          EXEC  LKED, PARM.LKED='RENT, LIST, XREF'  
//LKED.SYSLIN    DD    DSN=MP.SOURCE(CMROS), DISP=SHR  
//LKED.SYSLMOD   DD    DSN=MP.LOADLIB, DISP=OLD
```

Step 2 - Assemble and Link Edit the ROSCOE Monitor Routine Module DRX02

Before assembling the ROSCOE Monitor Routine module (DRX02), you may tailor certain system parameters in accordance with your installation's requirements. The module DRX02 is supplied as a member of dataset MP.SOURCE and the parameters that you may change can be identified by the labels given in the table in ["Table of Specifiable Variables" on page 151](#).

You must assemble DRX02 at your installation to ensure compatibility between your Manager Products software and your release of ROSCOE. Each time you install a new release of either Manager Products or ROSCOE, the module DRX02 must be available for assembly, together with the IBM OS System Macro Library.

The ROSCOE Monitor Routine module (DRX02) is link-edited as the load module RSSCDMR0. The resultant load module is the ROSCOE Monitor Routine that acts as the link between ROSCOE and ControlManager.

Table of Specifiable Variables

By altering (in member DRX02 of dataset MP.SOURCE) the values of the equates identified by the labels given in [Table 22](#), you may tailor certain system parameters to your installation's requirements.

Table 22 ROSCOE Monitor Routine Module (DRX02): Variables that may be Tailored before Installation

Variable Label	Default Value	Specifies
EQUATTN	?	The character used to identify simulated PF keys from terminals without physical PF keys (see Note 1).
EQUBAC	PF8	The PF key used to scroll backwards by one page.
EQUBACH	PF11	The PF key used to scroll backwards by half of one page.
EQUBOT	PF12	The PF key used to scroll directly to the bottom of Manager Products output.
EQUCAN	PA2	The key used to cancel ControlManager execution.
EQUCORE	3	The number of 1K blocks of core to be allocated for storage of Manager Products output. The minimum number of blocks that can be specified is two (see Note 2).
EQUEND	PF3	The PF key used to generate the ControlManager command LOGOFF.
EQUFOR	PF7	The PF key used to scroll forward by one page.
EQUFORH	PF10	The PF key used to scroll forward by half of one page.

Table 22 ROSCOE Monitor Routine Module (DRX02): Variables that may be Tailored before Installation

Variable Label	Default Value	Specifies
EQULINE	10	The number of lines that must be sent to teletype terminals before the user can enter new commands or use PF keys. (This is equivalent to the ROSCOE command BREAK <i>n</i> .)
EQUOUTP	T	Specifies whether a page of information is to be output initially from the top of the screen (if value is T) or, alternatively, from the bottom of the screen (if value is B).
EQUSPEC	#	The character used identify special interface routine commands (see Note 3).
EQU TOP	PF9	The PF key used to scroll directly to the top of Manager Products output.
EQUUSER X	SCBUSER 1	The full word that is to be user-reserved during ControlManager execution under ROSCOE (see Note 4).

Notes

- 1** When you are using a terminal that does not have physical PF keys, you can simulate a PF key by entering the identifying character followed by the EBCDIC value for the AID byte that is generated from 3270 terminals. Thus, if the default value is retained, you may simulate PF3 by entering ?3.

- 2** If you are working with AWS input and AWS output (that is, using the DMR-D, DMRD, or DMRE ROSCOE commands) and EQU CORE has been tailored to too small a value, then input lines held in the AWS will be overwritten by output lines. This can be overcome by:
 - Specifying a larger value for the buffer defined by EQU CORE, or
 - Writing the input onto a ROSCOE library member before running Manager Products. You can then work safely with AWS input and AWS output by entering:


```
RUN DMRE, member-name
```

or

```
V DMRE, member-name
```

You should note that you cannot run DMRE from a member unless either of the keywords RUN or V is present.

- 3** The special interface routine commands available are given in *ASG-Manager Products ROSCOE Interface*.

- 4 ASG recommends that you specify one of the values SCBUSER1, SCBUSER2, SCUBUSER3, or SCBUSER4 for EQUUSERX. The value you specify must be contained within the SCB but must not be USERWD_x, since this field is set to zeros by ROSCOE at the start of a monitor routine.

Installation of the Monitor Routine

Install the ROSCOE Monitor Routine (RSSCDMR0) using the job control given in [Figure 31](#).

Initial execution of the monitor routine causes the Manager Products code segments to be loaded.

Figure 31 • Installation of the ROSCOE Monitor Routine

```
//DRX02      EXEC      ASMHCL, PARM.L='RENT,MAP,LIST'  
//C.SYSLIB   DD        DSN=SYS1.MACLIB, DISP=SHR  
//          DD        DSN=MP.SOURCE, DISP=SHR  
//          DD        DSN=ROSCOE.MACLIB, DISP=SHR  
//C.SYSIN    DD        DSN=MP.SOURCE(DRX02), DISP=SHR  
//L.SYSLIN   DD  
//          DD        *  
          ENTRY      RSSCDMR0  
          NAME        RSSCDMR0 (R)  
//L.SYSLMOD  DD        DSN=MP.LOADLIB, DISP=OLD
```

Step 3 - Install the ASG-supplied Exit - SMFEXIT

ASG supplies an exit, SMFEXIT, which is supplied as a member of dataset MP.SOURCE. You should ensure that it is installed so as to avoid the possible retention of virtual storage and allocated subtasks when logging off after using the ROSCOE DMRE command. You should consult the Systems Programmers at your installation for details on how to assemble and link-edit SMFEXIT.

You should consider these points before implementing SMFEXIT:

- If you have ROSCOE version 5.4 installed, SMFEXIT will only be activated if you have either:
 - A ROSCOE session file allocated to your ROSCOE Start JCL
 - The parameter SMF=YES specified in the ROSCOE SYSIN-stream

If neither is the case in your installation, you must define a session file (it may be as small as one track) and allocate it to the ROSCOE Start Up JCL. For more detailed information please refer to the appropriate ADR ROSCOE literature.

- If you have ROSCOE version 5.5 installed, SMFEXIT will only be activated if you have a ROSCOE accounting file allocated and the parameters:
ACCTROS=ON, ACCREL=OFF, ACCTSMF=OFF specified in the ROSCOE SYSIN-stream.
- You should be aware that when the accounting datasets become full, logon to ROSCOE is no longer possible until the datasets have been UNLOADED. Thus the space allocated to the accounting datasets should be sufficient for the length of session you require. For further information, please refer to the appropriate ROSCOE system reference manual.
- SMFEXIT, as supplied, will not write to your session file or to the SMF (see the appropriate ADR ROSCOE Extended Facilities System Programmers' manual) as a return code of 4 will be issued on return to ROSCOE in all possible cases.
- If you simply wish to write to the session file or to the SMF, then all branch instructions to label RELOAD4 in the exit, should instead refer to label RELOAD0.
- If you already have an SMFEXIT, the code in the supplied SMFEXIT should be inserted into it as appropriate (contact your ROSCOE Systems Programmer).

Step 4 - Update Your ROSCOE Job Control to Allow for Execution of Manager Products

Requirements

After you have completed the procedures described in "[Step 1 - Add the ROSCOE Interface Module DRX01 to the ControlManager Load Module MPR00](#)" on page 150, "[Step 2 - Assemble and Link Edit the ROSCOE Monitor Routine Module DRX02](#)" on page 151, and "[Step 3 - Install the ASG-supplied Exit - SMFEXIT](#)" on page 153, Manager Products is available for use in a ROSCOE environment.

You must inform ROSCOE that ControlManager is available; you achieve this by:

- Making the Manager Products load library, MP.LOADLIB, available to ROSCOE and increasing the allocated region size
- Making the MP-AID and dictionary datasets available to ROSCOE
- Making the program RSSCDMR0 (see "[Step 2 - Assemble and Link Edit the ROSCOE Monitor Routine Module DRX02](#)" on page 151) available for execution via the ROSCOE Monitor command DMR

These steps are described in the following sections.

Manager Products Load Library MP.LOADLIB

The load library MP.LOADLIB contains all the Manager Products load modules that you require. It is recommended that you make this library available on a system wide basis. To this end:

- For those systems that support the authorized library concept, you should make MP.LOADLIB an authorized library, and should add it to the SYS1.PARMLIB dataset as part of SYS1.LINKLIB.
- For systems that do not support the authorized library concept, you should copy MP.LOADLIB into SYS1.LINKLIB or a ROSCOE load library that already exists.

You should not make ControlManager available to ROSCOE by updating the ROSCOE invocation job control to include either a STEPLIB or a JOBLIB DD statement pointing to MP.LOADLIB. This method can introduce authorized library problems if certain load modules that are attached to ROSCOE are from authorized libraries but others are not; it also makes ControlManager unnecessarily difficult to locate.

In MVS systems, you should increase the REGION parameter in the EXEC card of the ROSCOE invocation JCL to allow for the main storage required to load your Manager Products software.

You can make selected parts of the Manager Products program code available to both ROSCOE and/or batch/TSO users by placing them into the (Extended) Pageable Link Pack Area. See ["Optimizing Usage of the Manager Products Program Code \(Optional\)" on page 25](#) for further details of how to achieve this.

Manager Products Datasets

You must add DD statements to the ROSCOE invocation job control for the MP-AID dataset and for each of the four or five datasets required for each dictionary that DataManager can access. You must also add DD statements representing the datasets required by any Controller's or Systems Administrator's commands or optional facilities used: for example, the Source Language Generation, the Concatenated MP-AID, and the User Interface facilities.

Thus, DD statements are required for:

```
//MPAID  
//dictionary-name  
//dictionary-nameS  
//dictionary-nameD  
//dictionary-nameE  
//dictionary-nameJ (if the dictionary was created with a log dataset)
```

and may be required for:

```
//dictionary-nameV  
//dictionary-nameR  
//dictionary-nameP  
//GENLIB or user-specified file-name  
//COBLIB  
//PLILIB
```

Running Under ROSCOE

Having performed all the previous steps, you need to enable ROSCOE so that ControlManager is invoked via the ROSCOE Monitor command DMR. You can achieve this by including a RUN=(DMR(X)) statement in the SYSIN dataset. This tells ROSCOE that a program named RSSCDMR0 is available. This program is effectively a ROSCOE Monitor Routine.

If you require that all lower case characters are to be translated to upper case when they are transferred to the ROSCOE Monitor routine, you should instead include a RUN=(DMR) statement in the SYSIN dataset.

Before any lower case characters can be accepted by ROSCOE, issue this ROSCOE command:

```
SET MODE X
```

Additionally, if you require that lower case characters can be stored in dictionary or MP-AID members, issue this ControlManager command:

```
SET UPPER-CASE OFF ;
```

Installing Manager Products under IMS/DC

If you have the ControlManager IMS/DC Interface facility (CMR-TP4) than you may install Manager Products to run under IMS/DC. Full details of the installation procedure are given in the *ASG-DataManager IMS/DC Interface* manual.

11

Introduction to Installing MethodManager

MethodManager is the tailorable Repository-driven Application Development Environment for enabling AD/Cycle. It draws upon all existing Manager Products software. In general, MethodManager has been designed specifically for interactive use; however, ToolSet SERVICES (apart from rules 100, 110, and 120) and LifeCycle SERVICES can be enabled in batch as well as interactively.

If you are a new user (that is, you do not already have Manager Products installed) or you are an existing Manager Products user who wishes to set up a completely independent and unrelated MethodManager installation then you should refer to [Chapter 12, "Installing an Initial MethodManager Installation," on page 159](#) and [Chapter 13, "Installing an Operational MethodManager Environment," on page 167](#).

[Chapter 12, "Installing an Initial MethodManager Installation," on page 159](#) provides the equivalent details of setting up an initial MethodManager installation to that already given in [Chapter 2, "Installing an Initial Manager Products Environment," on page 13](#) for setting up an initial Manager Products environment.

[Chapter 13, "Installing an Operational MethodManager Environment," on page 167](#) provides a summary of the tasks required to set up a MethodManager operational installation. In general, the tasks are the same as those described to set up a Manager Products operational installation; any differences are highlighted in this chapter.

If you are an existing Manager Products user who wishes to transfer the contents of an existing Manager Products MP-AID and/or repositories to a separate MethodManager installation then you should also refer to [Chapter 14, "Setting Up a Separate MethodManager Installation," on page 171](#) for a summary of the tasks required to achieve this.

Before following the instructions given in these chapters, it is recommended that you become familiar with earlier chapters of this manual which are in general also applicable to MethodManager. Refer to *ASG-MethodManager Administration* for more information.

12

Installing an Initial MethodManager Installation

This chapter describes how an initial MethodManager installation can be set up (that is, without considering the effect of functional units or installation macros) in an OS environment. This initial installation enables new users to experiment and gain a degree of familiarity with MethodManager before an operational MethodManager installation is set up. It consists of these components:

- An executable version of your Manager Products software (supplied in dataset MP.LOADLIB)
- The Manager Products Administration and Information dataset (MP-AID)
- The ASG-supplied InfoBank (supplied in dataset MP.INFO.UNLOAD and loaded onto the MP-AID)
- The ASG-supplied MethodManager software (supplied in dataset MP.MMR.UNLOAD and loaded onto the MP-AID)
- The ASG-supplied COMMAND members (supplied in dataset MP.COM.UNLOAD and loaded onto the MP-AID)
- The MethodManager SAMPLE Repository (supplied in dataset MP.MMR.SAMPLE)

The setting up of an initial installation is described in six steps:

Step 1 - Copy Dataset MP.LOADLIB to Disk	160
Step 2 - Set Up an MP-AID	161
Create an MP-AID and Load Dataset MP.INFO.UNLOAD	161
Load Dataset MP.COM.UNLOAD onto the MP-AID	162
Load Dataset MP.MMR.UNLOAD onto the MP-AID	163
Step 3 - Create and Restore a Sample Repository	164
Step 4 - Run MethodManager under MVS/TSO	166
Step 5 - Set Up Mainframe Support for Your PWS Graphical Workbench	166
Step 6 - Install Your PWS Graphical Workbench	166

After following these steps ASG recommends that you use the MethodManager SAMPLE repository interactively to develop your knowledge of MethodManager and its usage.

Example values are given in place of variable identifiers within JCL and Manager Products commands. Example values within the JCL statements are underlined in this chapter.

Step 1 - Copy Dataset MP.LOADLIB to Disk

MP.LOADLIB contains an executable version of the Manager Products software you have ordered. This dataset must be copied to disk using IEBCOPY, the IBM dataset utility, using the job control statements given in [Figure 32](#). An explanation of the variables required in the job control statements is given in [Chapter 3, "Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code," on page 21](#), which deals with the copying of all partitioned datasets to disk (including MP.LOADLIB).

Figure 32 • Job Control Statements for Copying Dataset MP.LOADLIB to Disk

```
//MMIJCL05    JOB      , ,MSGLEVEL=(1,1),CLASS=A
//COPY       EXEC     PGM=IEBCOPY
//SYSUT3     DD       UNIT=SYSDA,SPACE=(TRK,20)
//SYSUT4     DD       UNIT=SYSDA,SPACE=(TRK,20)
//SYSPRINT   DD       SYSOUT=A
//IN         DD       DISP=OLD,LABEL=5,DSN=MP.LOADLIB,
//           VOL=SER=M99999,UNIT=TAPE
//OP         DD       DISP=(,CATLG),DSN=MP.LOADLIB,
//           SPACE=(6144,(2200,100,80)),
//           UNIT=3380,VOL=SER=USER01
//           COPY INDD=IN,OUTDD=OP
//
```

Step 2 - Set Up an MP-AID

Create an MP-AID and Load Dataset MP.INFO.UNLOAD

The dataset named MP.INFO.UNLOAD on the release tape contains an unloaded MP-AID which holds the ASG-supplied InfoBank. Before MethodManager can be used, an MP-AID must be built by creating an empty MP-AID and then loading the contents of MP.INFO.UNLOAD. This can be achieved using the job control statements given in [Figure 33](#), if a BDAM-organized MP-AID is required. Definitions of the variables used can be found in ["BDAM-organized MP-AID" on page 71](#).

The allocation of an increased size MP-AID buffer pool will enhance performance. A minimum allocation of 30 buffers is recommended.

Figure 33 • Creating and Loading a BDAM MP-AID with Dataset MP.INFO.UNLOAD

```

//MMIJCL10 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//CREATE EXEC      PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPOUT DD        SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD       SYSOUT=A
//SYSUDUMP DD      SYSOUT=A
//MPIN DD         DDNAME=SYSIN
//MPAID DD        DISP=(NEW,CATLG),DSN=MMR.MPAID,
//              UNIT=3380,VOL=SER=USER01,SPACE=(8192,6800)
//MPAIDR DD       DISP=OLD,DSN=MP.INFO.UNLOAD,
//              UNIT=TAPE,VOL=SER=M99999,LABEL=17
MP-AID CREATE ADMINISTRATOR SYSAD PASSWORD SAD
PHYSICAL-BLOCKSIZE 8192
LOGICAL-BLOCKSIZE 1024;
LOGON SYSAD PASSWORD SAD;
MP-AID BUFFERS 30;
MP-AID LOAD INFOBANK;
MP-AID STATUS;
LOGOFF;
//

```

If a VSAM-organized MP-AID is required, the job control statements in [Figure 34 on page 162](#) should be used. Definitions of the variables used can be found in ["VSAM-organized MP-AID" on page 72](#).

Figure 34 • Creating and Loading a VSAM MP-AID with Dataset MP.INFO.UNLOAD

```
//MMIJCL15    JOB      , ,MSGLEVEL=(1,1),CLASS=A
//ALLOC      EXEC     PGM=IDCAMS
//SYSPRINT   DD       SYSOUT=A
DELETE (MMR.MPAID) CLUSTER
DEFINE CLUSTER (NAME (MMR.MPAID) -
  RECORDS (6800) CONTROLINTERVALSIZE (8192) -
  NUMBERED          RECORDSIZE (8185 8185) -
  SHAREOPTIONS (4)  VOLUMES (VSAM01))
//MPSTEP     EXEC     PGM=MPR00
//STEPLIB    DD       DSN=MP.LOADLIB, DISP=SHR
//MPIN       DD       DDNAME=SYSIN
//MPOUT      DD       SYSOUT=A, DCB=(LRECL=137, BLKSIZE=1370)
//MPRDIAG    DD       SYSOUT=A
//SYSUDUMP   DD       SYSOUT=A
//MPAID      DD       DISP=OLD, DSN=MMR.MPAID
//MPAIDR     DD       DISP=OLD, DSN=MP.INFO.UNLOAD,
//           UNIT=TAPE, VOL=SER=M99999, LABEL=17
MP-AID CREATE ADMINISTRATOR SYSAD PASSWORD SAD
LOGICAL-BLOCKSIZE 1023 VSAM;
LOGON SYSAD PASSWORD SAD;
MP-AID BUFFERS 30;
MP-AID LOAD INFOBANK;
MP-AID STATUS;
LOGOFF;
//
```

Note:

The number of blocks allocated to the MP-AID is based on the number of blocks required to install the ASG-supplied Info System, COMMAND members, Corporate Executive Routines, and UDS tables together with about 10 percent available for user storage, if required.

Load Dataset MP.COM.UNLOAD onto the MP-AID

The dataset MP.COM.UNLOAD on the release tape contains some essential software used by MethodManager.

The installation of this dataset is mandatory.

[Figure 35 on page 163](#) shows the job control statements used to load MP.COM.UNLOAD onto either a BDAM or VSAM MP-AID.

Figure 35 • Job Control Statements for Loading either a BDAM or VSAM MP-AID with Dataset MP.COM.UNLOAD

```
//MMIJCL20 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPSTEP EXEC      PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPIN DD         DDNAME=SYSIN
//MPOUT DD        SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD      SYSOUT=A
//SYSUDUMP DD     SYSOUT=A
//MPAID DD        DISP=OLD,DSN=MMR.MPAID
//MPAIDR DD       DISP=OLD,DSN=MP.COM.UNLOAD,
//              UNIT=TAPE,VOL=SER=M99999,LABEL=16
LOGON SYSAD PASSWORD SAD;
MP-AID BUFFERS 30;
MP-AID LOAD ALL;
MP-AID STATUS;
LOGOFF;
//
```

Load Dataset MP.MMR.UNLOAD onto the MP-AID

The dataset MP.MMR.UNLOAD on the release tape contains the default ToolSet SERVICES, LifeCycle SERVICES, and Strategic Information Planning software.

The installation of this dataset is mandatory.

[Figure 36](#) shows the job control statements used to load MP.MMR.UNLOAD onto either a BDAM or VSAM MP-AID.

Figure 36 • Loading either a BDAM or VSAM MP-AID with Dataset MP.MMR.UNLOAD

```
//MMIJCL25 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//MPSTEP EXEC      PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPIN DD         DDNAME=SYSIN
//MPOUT DD        SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD      SYSOUT=A
//SYSUDUMP DD     SYSOUT=A
//MPAID DD        DISP=OLD,DSN=MMR.MPAID
//MPAIDR DD       DISP=OLD,DSN=MP.MMR.UNLOAD,
//              UNIT=TAPE,VOL=SER=M99999,LABEL=30
LOGON SYSAD PASSWORD SAD;
MP-AID BUFFERS 30;
MP-AID LOAD ALL REPLACE;
MP-AID STATUS;
LOGOFF;
//
```

Step 3 - Create and Restore a Sample Repository

Your MethodManager release tape contains a dataset, MP.MMR.SAMPLE, which holds the SAMPLE repository. This repository can be retrieved by running ControlManager in order to create an empty repository and to restore the SAMPLE repository. This can be achieved using the job control statements shown in [Figure 37](#), if a BDAM-organized repository is required. Please refer to "[Creating BDAM-organized Dictionaries](#)" on [page 78](#) if you require an explanation of the variables used.

Figure 37 • Creating and Restoring a BDAM-organized SAMPLE Repository

```
//MMIJCL30 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//CREATE EXEC      PGM=MPR00
//STEPLIB DD       DSN=MP.LOADLIB,DISP=SHR
//MPOUT DD        SYSOUT=A,DCB=(LRECL=137,BLKSIZE=1370)
//MPRDIAG DD       SYSOUT=A
//SYSUDUMP DD      SYSOUT=A
//MPIN DD         DDNAME=SYSIN
//SAMPLE DD       DISP=(NEW,CATLG),DSN=SAMPLE.INDEX,
//          UNIT=3380,VOL=SER=USER01,SPACE=(8192,15)
//SAMPLED DD      DISP=(NEW,CATLG),DSN=SAMPLE.DATA.ENTRIES,
//          UNIT=3380,VOL=SER=USER01,SPACE=(8192,300)
//SAMPLES DD      DISP=(NEW,CATLG),DSN=SAMPLE.SOURCE,
//          UNIT=3380,VOL=SER=USER01,SPACE=(4096,500)
//SAMPLEE DD      DISP=(NEW,CATLG),DSN=SAMPLE.RECOVER,
//          UNIT=3380,VOL=SER=USER01,SPACE=(4096,50)
//SAMPLEJ DD      DISP=(NEW,CATLG),DSN=SAMPLE.LOG,
//          UNIT=3380,VOL=SER=USER01,SPACE=(4096,50)
//SAMPLER DD      DISP=OLD,DSN=MP.MMR.SAMPLE,
//          UNIT=TAPE,VOL=SER=M99999,LABEL=29
//MPAID DD        DISP=SHR,DSN=MMR.MPAID
LOGON SYSAD PASSWORD SAD;
CREATE SAMPLe MASTER CON
ILB 2046 SLB 314 DLB 372
IPB 8192 SPB 4096 DPB 8192
RPB 4096 LPB 4096
WITH 7 STATUSES AND LOG;
DICTIONARY SAMPLe;
AUTHORITY CON;
RESTORE ALL;
LOGOFF;
//
```

Use the job control statements shown in [Figure 38 on page 165](#), if a VSAM-organized repository is required. Definitions of the variables used can be found in "[Creating VSAM-organized Dictionaries](#)" on [page 80](#).

Figure 38 • Creating and Restoring a VSAM-organized SAMPLE Repository

```

//MMIJCL35 JOB      , ,MSGLEVEL=(1,1),CLASS=A
//ALLOC EXEC       PGM=IDCAMS
//SYSPRINT DD      SYSOUT=A
DELETE (SAMPLE.INDEX) CLUSTER
DELETE (SAMPLE.DATA.ENTRIES) CLUSTER
DELETE (SAMPLE.SOURCE) CLUSTER
DELETE (SAMPLE.RECOVER) CLUSTER
DELETE (SAMPLE.LOG) CLUSTER
DEFINE CLUSTER (NAME (SAMPLE.INDEX) -
  RECORDS (15)          CONTROLINTERVALSIZE (8192) -
  NUMBERED              RECORDSIZE (8185 8185) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (SAMPLE.DATA.ENTRIES) -
  RECORDS (300)        CONTROLINTERVALSIZE (8192) -
  NUMBERED              RECORDSIZE (8185 8185) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (SAMPLE.SOURCE) -
  RECORDS (500)        CONTROLINTERVALSIZE (4096) -
  NUMBERED              RECORDSIZE (4089 4089) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (SAMPLE.RECOVER) -
  RECORDS (50)         CONTROLINTERVALSIZE (4096) -
  NUMBERED              RECORDSIZE (4089 4089) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
DEFINE CLUSTER (NAME (SAMPLE.LOG) -
  RECORDS (50)         CONTROLINTERVALSIZE (4096) -
  NUMBERED              RECORDSIZE (4089 4089) -
  SHAREOPTIONS (4)     VOLUMES (VSAM01) )
//MPSTEP EXEC      PGM=MPR00
//STEPLIB DD       DISP=SHR, DSN=MP.LOADLIB
//MPIN DD          DDNAME=SYSIN
//MPOUT DD         SYSOUT=A, DCB=(LRECL=137, BLKSIZE=1370)
//MPRDIAG DD       SYSOUT=A
//SYSUDUMP DD      SYSOUT=A
//SAMPLE DD        DISP=OLD, DSN=SAMPLE.INDEX
//SAMPLED DD       DISP=OLD, DSN=SAMPLE.DATA.ENTRIES
//SAMPLES DD       DISP=OLD, DSN=SAMPLE.SOURCE
//SAMPLEE DD       DISP=OLD, DSN=SAMPLE.RECOVER
//SAMPLEJ DD       DISP=OLD, DSN=SAMPLE.LOG
//SAMPLER DD       DISP=OLD, DSN=MP.MMR.SAMPLE,
//                  UNIT=TAPE, VOL=SER=M99999, LABEL=29
//MPAID DD         DISP=SHR, DSN=MMR.MPAID
LOGON SYSAD PASSWORD SAD;
CREATE SAMPLE MASTER CON
ILB 2046 SLB 314 DLB 372
VSAM WITH 7 STATUSES AND LOG;
DICTIONARY SAMPLE;
AUTHORITY CON;
RESTORE ALL;
LOGOFF;
//

```

Step 4 - Run MethodManager under MVS/TSO

The control statements given in [Figure 39](#) enable you to run MethodManager interactively under MVS/TSO so that the MP-AID and a created repository (in this case the SAMPLE repository), can be accessed. Please refer to ["Installing Manager Products under TSO" on page 110](#) if you require an explanation of the variables used.

Figure 39 • Job Control Statements for Running MethodManager under MVS/TSO

```
/* MANAGER Products CLIST (MMIJCL40) */
ALLOC FILE (MPIN) DSN (*)
ALLOC FILE (MPOUT) DSN (*)
ALLOC FILE (MPRDIAG) SYSOUT (A)
ALLOC FILE (MPRT) SYSOUT (A)
ALLOC FILE (MPAID) DSN (MMR.MPAID) SHR
ALLOC FILE (SAMPLE) DSN (SAMPLE.INDEX) SHR
ALLOC FILE (SAMPLED) DSN (SAMPLE.DATA.ENTRIES) SHR
ALLOC FILE (SAMPLES) DSN (SAMPLE.SOURCE) SHR
ALLOC FILE (SAMPLEE) DSN (SAMPLE.RECOVER) SHR
ALLOC FILE (SAMPLEJ) DSN (SAMPLE.LOG) SHR
CALL 'MP.LOADLIB(MPROO) '
FREE FILE (MPIN,MPOUT,MPRDIAG,MPAID,MPRT)
FREE FILE (SAMPLE,SAMPLED,SAMPLES,SAMPLEE,SAMPLEJ)
```

Step 5 - Set Up Mainframe Support for Your PWS Graphical Workbench

To set up the mainframe Executive Routines that support your PWS Graphical Workbench, in the correct form, enter this command once:

```
MVW-GEN INSTALL;
====>
```

If support has already been installed, this message display:

```
MVW-GEN INSTALL NOT REQUIRED FOR THIS RELEASE
```

Step 6 - Install Your PWS Graphical Workbench

Please refer to the *ASG-ManagerView User's Installation and Environmental Tailoring* for details of this installation step.

13

Installing an Operational MethodManager Environment

General Requirements

[Table 23](#) shows the steps required to create an operational MethodManager installation in an OS environment. You should note that the step numbers are consistent with those used in earlier chapters.

Table 23 Steps Required to Create an Operational MethodManager Installation

Step Number	Step Name	References	Notes
1	Copy datasets to disk and reconfigure/optimize program code.	Chapter 3, "Copy Datasets to Disk—Reconfigure/Optimize the Manager Products Program Code," on page 21.	-
2	Tailor Manager Products using the installation macros and modules in dataset MP.SOURCE.	Chapter 4, "Tailoring Installation Macros and Modules Supplied in Dataset MP.SOURCE," on page 27.	-
3	Create and load an MP-AID.	Chapter 5, "Set Up an MP-AID," on page 69.	-
A	Create an MP-AID and load dataset MP.INFO.UNLOAD.	Chapter 5, "Set Up an MP-AID," on page 69.	The presence of InfoBank is mandatory for the successful functioning and on going integrity of MethodManager.
B	Load the MP-AID with dataset MP.COM.UNLOAD.	Chapter 5, "Set Up an MP-AID," on page 69.	-
C	Load the MP-AID with dataset MP.MMR.UNLOAD.		The JCL shown in Figure 20 on page 75 may be used suitably amended.

Table 23 Steps Required to Create an Operational MethodManager Installation

Step Number	Step Name	References	Notes
4	Set up repositories.	Chapter 6, "Set Up Dictionaries," on page 77.	-
	A Set up Administration repository.	"MethodManager Administration Repository" on page 169.	-
5	Satisfy concurrent usage requirements.	Chapter 7, "Satisfy Concurrent Usage Requirements," on page 89.	-
6	Link external software to Manager Products software.	Chapter 8, "Linking External Software to Manager Products Software," on page 95.	-
7	Run MethodManager in batch.	Chapter 9, "Running Manager Products in Batch Mode," on page 101.	-
8	Run MethodManager interactively under MVS/TSO.	Chapter 10, "Installing Manager Products in an Interactive Environment," on page 109.	It is necessary to specify a ddname of MPRT with the job control statement required for the alternative output dataset.
9	Set up mainframe support for your PWS Graphical Workbench.	-	Enter this command once only: <code>MVW-GEN INSTALL:</code>
10	Install your PWS Graphical Workbench.	<i>ASG-ManagerView User's Installation and Environmental Tailoring.</i>	

MethodManager Administration Repository

To set up an Administration repository for use with MethodManager

- 1 Create an empty repository in the same way as any other Manager Products repository.
- 2 Restore the ASG-supplied repository MP.MMR.ADMIN from the installation tape into the empty repository by using the Controller's RESTORE ALL command. The job control requirements for achieving this are those job control statements that are specified as being compulsory for all users in [Figure 25 on page 102](#) plus these statements:

```
//dictR      DD      DSN=MP.MMR.ADMIN, DISP=OLD,
//           UNIT=tttt, VOL=SER=sssss, LABEL=x
```

where:

dict is the name of the MethodManager Administration Repository.

tttt is any valid magnetic tape device type.

sssss is the serial number of the supplied magnetic tape containing your Manager Products software.

x is the position of the MP.MMR.ADMIN dataset on your ASG-supplied release tape; this is given in the list of the datasets provided with this tape.

The dataset MP.MMR.ADMIN is a SAVE ALL of the MethodManager software. It contains six frozen statuses named MDRIM2400, ADMIN2400, MDRIM2500, ADMIN2500, MDRIM2510, and ADMIN2510.

The statuses MDRIM*vvvv* contain the repository definitions for the MethodManager Information Models DU016 and DU777.

The statuses ADMIN*vvvv* contain the ToolSet SERVICES (TSS) and LifeCycle SERVICES (LCS) tailorable software.

- 3 You also need to restore the ASG-supplied Executive Routines (supplied in dataset MP.CORP). See ["Restore ASG-supplied Executive Routines" on page 84](#) for further details.
- 4 You may wish to restore the ASG-supplied SAVED source of InfoBank (supplied in dataset MP.INFO). See ["Restore ASG-supplied InfoDictionary" on page 85](#) for further details.

See [Appendix C, "Attributes of Datasets which May be Supplied on Your Release Tape" on page 195](#) for attributes of all ASG-supplied datasets.

See [Appendix D, "Attributes of ASG-supplied Dictionaries" on page 199](#) for attributes of ASG-supplied repositories.

Installing the MethodManager Strategic Information Planning LifeCycle

In order to utilize the MethodManager Strategic Information Planning (SIP) LifeCycle you need to restore and encode the members which comprise the LifeCycle into the root of your production repository.

The SIP LifeCycle is supplied in status LIFE-CYCLE of the dataset MP.MMR.SAMPLE and can be restored using this command:

```
RESTORE SOURCE FROM LIFE-CYCLE;
```

After encoding the restored members the SIP LifeCycle can be activated. For further details refer to *ASG-MethodManager Strategic Information Planning—MANAGER Method*.

14

Setting Up a Separate MethodManager Installation

If you have already set up a Manager Products installation then you may wish to set up a separate MethodManager installation which uses repositories and an MP-AID from your existing Manager Products installation. You may, with the same MP-AID, have some repositories configured for use with Manager Products, MethodManager ToolSet SERVICES, or MethodManager LifeCycle SERVICES, and some repositories configured for use under MethodManager Strategic Information Planning. The RIM (that is, UDS table) needs to be changed to DU016 for each repository which is to be converted for use with MethodManager Strategic Information Planning.

MethodManager ToolSet SERVICES will operate with any RIM providing that ToolSet SERVICES have been set up as described in *ASG-MethodManager Administration*.

MethodManager LifeCycle SERVICES operates with any RIM providing that you incorporate the member type groups supplied in the MethodManager Administration Repository into your RIM structure.

Perform these steps:

- Install the new version of the Manager Products software containing MethodManager supplied in dataset MP.LOADLIB.
- Load an UNLOADED copy of your MP-AID into a newly created MP-AID.
- Load dataset MP.MMR.UNLOAD onto the MP-AID from the release tape.
- Load a SAVED copy of each of your repositories into newly created repositories.
- For each Manager Products repository to be used with MethodManager Strategic Information Planning you need to convert to RIM DU016.
- Set up a MethodManager Administration Repository as described in ["MethodManager Administration Repository" on page 169](#).

Appendix A

The Master Operator

A dictionary Controller may choose to delegate some of his or her functions to a member of the Operations department. The functions that can be delegated are those that are concerned with the physical back-up and recovery of the dictionary; they do not involve any reorganization of or access to the contents of the dictionary. The person to whom these functions are delegated is known in ASG terminology as the Master Operator.

The Master Operator is allocated a special password by the Controller. This password can be quoted in `AUTHORITY` commands, in `RELOAD` and `ROLL-FORWARD` commands, and in free-standing versions of `LOG ANALYSIS` and `LOG STATUS` command. All of these commands include a dictionary name and password; your Manager Products check that the password quoted is the Controller's password or the Master Operator's password for the dictionary named in the command.

These are the commands available to the Master Operator:

- LOGON
- AUTHORITY
- ENABLE
- RELOAD
- LOGOFF
- LOG ANALYSIS
- LOG
BACKUP-DETAILS
- LOG SWITCH
- DICTIONARY
- DISABLE
- UNLOAD
- ROLL-FORWARD
- JOURNAL
- LOG ARCHIVE
- LOG STATUS

Except when free-standing commands (those that include a dictionary name and password in the command itself) are being used, the Master Operator first opens the dictionary by a DICTONARY command, then issues an AUTHORITY command, quoting the specially allocated password. Once this is accepted, the Master Operator can issue any of the other commands listed above.

The Master Operator should receive specific job instructions from the Controller for the use of the available commands, in accordance with the security and operational standards in force at the particular installation.

Appendix B

Environments Supported by Manager Products

Particular Manager Products interface with certain IBM program products, and/or Siemens program products, and/or other vendor program products that run within one or more of these operating system environments:

- IBM OS
- IBM DOS
- IBM VM/CMS
- SIEMENS BS2000
- MS-DOS
- PC-DOS
- OS/2

Host Support

Manager Products host-based software may run on IBM System/370, IBM System/390, or plug-compatible computers that support the operating systems described in this Appendix.

For Mainframe Environment (MFE)-based Manager Products, ASG provides Maintenance and Updating service in IBM OS, DOS, VM/CMS, and Siemens BS2000 environments. ASG provides Maintenance and Updating Service for MFE-based elements of MethodManager in IBM OS and VM/CMS environments (DOS and BS2000 support is yet to be announced for MethodManager).

ASG's Maintenance and Updating Service for a particular MFE OS, DOS VM/CMS, or BS2000 environment (compatible Version/Release Level) will continue for a period equal to or greater than the IBM or Siemens support for that environment.

The tables given later in this Appendix show the Manager Products that support a particular environment/product: the Compatible Release Level(s) at which the products operate with the relevant Manager Products are also shown:

Tables/Notes	Page
1) Host Environments in which Manager Products may be Used	178
2) Host Environments - Environments in which MethodManager may be Used	179
3) PWS Environments - Third Party Environmental Operating Requirements:	
MethodManager - PWS/Host Connectivity	181
ManagerView - PWS/Host Connectivity	181
4) Notes (for tables on pages 178 - 181)	181
5) System and Language Support - Systems and Languages with which Manager Products may be Interfaced	183
6) System and Language Support - Systems and Languages with which MethodManager may be Interfaced	185
7) Notes (for tables on pages 183 - 185)	186
8) The MMR Order for a PWS Package - Attachment 1:	
PWS Software Environmental Prerequisite Configurations	187
PWS Hardware Environmental Prerequisite Configurations	187
PWS Host Connectivity	188
9) The IWSE Order for an ASG-IWSE Package - Attachment 1:	
ASG Definitions & Environmental Operating Prerequisites (Variables) for ManagerView	190
10) The IWSE Order for an ASG-IWSE Package - Attachment 2:	
PWS Software Environmental Prerequisite Configurations	192
PWS Hardware Environmental Prerequisite Configurations	192
PWS Host Connectivity	192

ControlManager and DictionaryManager are co-requisites of each other within the ASG-Manager Family of Program Products (excluding MethodManager). Both are Environmental Prerequisites (EPR) as much as they must be at the latest ASG 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 Programmable Workstation Environments (PWSE). PWSE is also known as 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/repositories from ASG and other vendors.

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

You should consult the appropriate ASG technical publications for further details of the nature and extent of Manager Products functional support provided.

It is possible that the release support and/or the functionality provided for a given environment/Program Product may be dependent on or enhanced by the presence of one or more selectable units and/or another Manager Products, for example:

- Use of the ControlManager Extended Interactive Facility (CMR-FE01) is dependent on the presence of the CICS Interface (CMR-TP2) or the OS/TSO Interface (CMR-TP7) or the VM/CMS Interface (CMR/TP8), or the Siemens Time Sharing Interface (CMR-TP11).
- The functionality offered by User Defined Commands (CMR-UD05) is considerably enhanced if the Extended Interactive Facility (CMR-FE01) is also installed.

Host Terminals Supported

IBM 31xx and 327x and compatible terminals, and Siemens 8160 and compatible terminals, are supported. If IBM or Siemens introduces any other non-programmable terminals (NPTs) subsequent to the date of publication of this Appendix, you should contact the ASG Service Desk to verify support for such NPT.

PWS Support

Manager Products PWS-based software may be run on IBM plug-compatible programmable workstations that support the operating environments described in this Appendix. For Programmable Workstation Environment (PWSE)-based Manager Products, ASG provides Maintenance Subscription and Updating Service in Windows 95 and Windows NT environments. The tables given later in this Appendix show the Manager Products that support a particular environment product: The Compatible Release Level(s) at which the products operate with the relevant Manager Products are also shown.

The functionality of ASG-ManagerView (herein called ManagerView) is available:

- As part of the Programmable Workstation (PWS) Product within MethodManager
- As part of the Intelligent Workstation Environment (IWSE) Package and Host Connectivity within the ASG-Manager Family of Program Products.

For a definition of the complete PWS Package, please refer to the current (or any updates subsequently published by ASG) Terms and Conditions of the MethodManager Order.

For a definition of the IWSE Package see ["The IWSE Order for an ASG-IWSE Package—Attachment 1" on page 190.](#)

For hardware and software prerequisites of the PWS Package please refer to the current (or any updates subsequently published by ASG) ["The MMR Order for a PWS Package—Attachment 1" on page 187.](#)

For hardware and software prerequisites of the IWSE Package please refer to the current (or any updates subsequently published by ASG) ["The IWSE Order for an ASG-IWSE Package—Attachment 2" on page 192.](#)

Host Environments

Table 24 Environments in which Manager Products may be Used (for MethodManager see separate table on page 179)

Host Environment		Manager Products				
Name (note 5)	Compatible Version/Release Level	CMR Version 02 Release 5.0	DMR Version 02 Release 5.0	DSR Version 02 Release 5.0	DYR Version 02 Release 5.0	MVW CMR (note 3)
Under OS						
MVS/SP batch	All	Yes	Yes	Yes	Yes	No
MVS/ESA batch	All	Yes	Yes	Yes	Yes	No
MVS/XA batch	All	Yes	Yes	Yes	Yes	No
OS/390 batch	All	Yes	Yes	Yes	Yes	No
CICS/VS	1.6 to 4.1	Yes	Yes (note 1)	No	Yes	Yes
CMS (note 4)	All	Yes	Yes	Yes	Yes	Yes
IMS/DC	1.1.4 to 1.3, (2.0), (4.1)	Yes	Yes (note 1)	No	Yes	No
ISPF (TSO)	All	Yes	Yes	Yes	Yes	note 2 and note 9
ROSCOE (note 6)	5.4 to 5.6	Yes	Yes	Yes	Yes	No
TSO	All	Yes	Yes	Yes	Yes	Yes
TSO/E	All	Yes	Yes	Yes	Yes	Yes

Table 24 Environments in which Manager Products may be Used (for MethodManager see separate table on page 179)

Host Environment		Manager Products				
Under DOS						
VSE batch	All	NYA	NYA	NYA	NYA	No
VSE/SP batch	All	NYA	NYA	NYA	NYA	No
SSX/VSE batch	(All)	NYA	NYA	NYA	NYA	No
CICS/VS	1.6, 1.7	NYA	NYA	NYA	NYA	Yes
CMS (note 4)	All	NYA	NYA	NYA	NYA	Yes
ICCF	(All)	NYA	NYA	NYA	NYA	No
Under VM (native)						
CMS (note 4)	(All)	NYA	NYA	NYA	NYA	Yes
Under Siemens						
BS2000 batch	To be supplied	NYA	NYA	NYA	NYA	No
Siemens Timesharing Monitor (note 5)	See BS2000	NYA	NYA	NYA	NYA	NYA (note 8)

Note:

NYA=Not Yet Available
For notes see page [181](#)

Table 25 Environments in which MethodManager may be Used

Host Environment	MethodManager Version 02 Release 5.0		
Name (note 5)	Compatible Version/Release Level	PWS Resident Component	Host Resident Component
Under OS			
MVS/SP batch	All	N/A	Yes
MVS/ESA batch	All	N/A	Yes
MVS/XA batch	All	N/A	Yes
OS/390 batch	All	N/A	Yes
CICS/VS	1.6 to 4.1	NYA	NYA
CMS (note 4)	All	Yes	Yes
IMS/DC	1.1.4 to 1.3, (2.0), (4.1)	No	No

Table 25 Environments in which MethodManager may be Used

Host Environment		MethodManager Version 02 Release 5.0	
ISPF (TSO)	All	note 2	note 2
ROSCOE	5.4 to 5.6	No	No (note 7)
TSO	All	Yes	Yes
TSO/E	All	Yes	Yes
Under DOS			
VSE batch	All	N/A	NYA
VSE/SP batch	All	N/A	NYA
SSX/VSE batch	(All)	N/A	NYA
CICS/VS	1.6, 1.7	NYA	NYA
CMS (note 4)	All	NYA	NYA
ICCF	(All)	No	No
Under VM (native)			
CMS (note 4)	(All)	NYA	NYA
Under Siemens			
BS2000 batch	To be supplied	No	NYA
Siemens Timesharing Monitor (note 5)	See BS2000	NYA	NYA

Note: _____

NYA=Not Yet Available

N/A=Not Applicable

For notes see page [181](#)

PWS/IWSE Environments: Third Party Environmental Operating Requirements

Table 26 MethodManager Version 02 Release 5.0 - PWS/Host Compatibility

PWS Environment		Compatible Host Environment				
Name		OS/TSO and OS/TSO/E	OS/CICS	VM/CMS	DOS/CICS	Siemens Timesharing Monitor
	Compatible Version/Release Level	Any	1.6 to 4.1	Any	1.6, 1.7	To be supplied
PC-DOS or MS-DOS plus Microsoft Windows	Version 3.1 and subsequent Versions 3.1 and 3.11	Yes	NYA	Yes	NYA	NYA
OS/2 (utilizing OS/2 Windows support)	Release 2.1	Yes	NYA	Yes	NYA	NYA

Table 27 ManagerView Version 01 Release 5.0 - IWSE/Host Compatibility

IWSE Environment		Compatible Host Environment				
Name		OS/TSO and OS/TSO/E	OS/CICS	VM/CMS	DOS/CICS	Siemens Timesharing Monitor
	Compatible Version/Release Level	Any	1.6 to 4.1	Any	1.6, 1.7	To be supplied
Microsoft Windows 95 or later Microsoft NT 3.51 or later		Yes	Yes	Yes	Yes	NYA

Note:

NYA = Not Yet Available

For notes see page [181](#)

Notes for the Tables on Pages [178](#) to [181](#)

- 1 Product Releases of other vendor Program Products that are shown in parentheses () have yet to be tested fully for compatibility with Manager Products; however, ASG expects at a future time to confirm support.

- 2 Where All is specified, all Releases of the relevant other vendor Program Products that are available and supported by the vendor at the Date of Publication of this Appendix are compatible with the stated Manager Products Releases. ASG will not necessarily automatically support new Releases issued by the other vendor between the Date of Publication of this Appendix and its next update.
- 3 Between the date of this publication and its next update ASG may:
 - Introduce support for environments that were not available or were not supported by ASG at the date of publication
 - Withdraw support for environments that were available or were supported by ASG on the date of publication.

To verify the most up-to-date situation, contact the ASG Service Desk.

- 4 The Manager Products listed do not necessarily support every feature of every version of other vendor Program Products.
- 5 In environments that support 31-bit addressing, such as MVS or OS/390, the Manager Products program code will be loaded into both 24 and 31-bit virtual storage. Dynamically allocated storage is obtained mainly from 31-bit virtual storage. The addressing mode of Manager Products is therefore both 24 and 31-bit.

Environment-specific Notes

- 1 The Siemens UDS Generation (DMR-SL10) and the SESAM Generation (DMR-SL11) selectable units are not available for use under CICS/VS or IMS/DC.
- 2 This Program Product can be invoked using ISPF services (under TSO); however it does not utilize ISPF's interactive capabilities.
- 3 This represents ManagerView Version 02 Release 5.0, coupled with ControlManager Version 02 Release 5.0 through the ControlManager Workstation Interface - PC and Mainframe Tailoring (selectable unit CMR-WS01).
- 4 When executing Manager Products under CMS, only functions of native VM and CMS are utilized: this is true whether or not OS or DOS systems are also running on the machine on which VM is installed. All Releases of CMS available and supported by IBM at the Date of Publication of this Appendix are compatible with the stated Manager Products Releases.
- 5 The Siemens Timesharing Monitor interface also supports TOMTI Releases 2.0, 2.2B, and 2.2C. (Not yet confirmed at the date of publication.)
- 6 ROSCOE users who wish to run ManagerView may do so by using the ROSCOE ETSO facility, which effectively provides a TSO interface.

- 7 ROSCOE ETSO users have the alternative of ordering and using the OS/TSO Interface (CMR-TP7).
- 8 ManagerView, when used in conjunction with the host Siemens Timesharing Monitor, currently links through ManagerView Import/Export rather than through host connectivity.
- 9 ManagerView supports the ISPF interface (CMR-FE70) from ControlManager Version 02 Release 2.0 and later.

Key

N/A	Not Applicable
NYA	Not Yet Available
CMR	ControlManager
DMR	DataManager
DSR	DesignManager
DYR	DictionaryManager
MMR	MethodManager
MVW	ManagerView

System and Language Support

Table 28 Systems and Languages with which Manager Products may be Interfaced (for MethodManager see separate table on page [185](#))

System or Language		Manager Products				
Name	Compatible Version/Release Level	CMR Version 02 Release 5.0	DMR Version 02 Release 5.0	DSR Version 02 Release 5.0	DYR Version 02 Release 5.0	MVW CMR (note 6)
Program Language Compilers						
Assembler	All	N/A	Yes	N/A	No	N/A
COBOL	All	N/A	Yes	N/A	No	N/A
MARK IV	Up to 7.0	N/A	Yes	N/A	No	N/A
PL/I	All	N/A	N/A	No	No	
Third Party Vendor Platforms						
IEW	From 5.0	Yes	Yes	N/A	Yes	N/A
ADW	From 1.5	Yes	Yes	N/A	Yes	N/A
Database Management Systems						
ADABAS	Up to 4.1	N/A	Yes	No	Yes	N/A
DB2	Up to 6.0	N/A	Yes	Yes	Yes	N/A
DOS DL/I	1.4 to 1.7	N/A	Yes	Yes	Yes	N/A

Table 28 Systems and Languages with which Manager Products may be Interfaced (for MethodManager see separate table on page [185](#))

System or Language		Manager Products				
IDMS/R and IDD	10.0 3.0, 10.0	N/A	Yes	No	Yes	N/A
IMS/VS(DL/I)	1.1.4 to 1.3, (2.0 to 5.1)	N/A	Yes	Yes	Yes	N/A
SESAM	To be supplied	N/A	NYA (note 5)	No	NYA	N/A
Siemens UDS	To be supplied	N/A	NYA (note 5)	No	NYA	N/A
SQL/DS	V02 Rel 1.0 and Rel 2.0	N/A	Yes	Yes	Yes	N/A
System 2000/80	2.9.0	N/A	N/A	Yes	No	N/A
TOTAL/8	All	N/A	Yes	No	Yes	N/A
Program Library Systems						
VSE/SSL	All	N/A	Yes	N/A	Yes	N/A
VSE/LIBR	All	N/A	Yes	N/A	Yes	N/A
The Librarian	All	N/A	Yes	N/A	Yes	N/A
OS/PDS	All	N/A	Yes	N/A	Yes	N/A
PANVALET	All	N/A	Yes	N/A	Yes	N/A

Note:

N/A=Not Applicable
 NYA=Not Yet Available
 For notes see page [186](#)

Table 29 Systems and Languages with which MethodManager may be Interfaced

System or Language		MethodManager
Name	Compatible Version/Release Level	Version 02 Release 5.0
Program Language Compilers		
Assembler	All	Yes
COBOL	All	Yes
MARKIV	Up to 7.0	Yes
PL/I	All	Yes
Third Party Vendor Platforms		
IEW	From 5.0	Yes
ADW	From 1.5	Yes
Database Management Systems		
ADABAS	Up to 4.1	note 7
DB2	V01 Rel 3.0 V02 Rel 1.0, 2.0, 3.0 V03 V 4.1 V5.1 V6.1	Yes
DOS DL/I	1.4 to 1.7	Yes
IDMS/R and IDD	10.0, 3.0, 10.0	note 8
IMS/VS (DL/I)	1.1.1 to 1.3 (2.0 to 5.1)	Yes
SESAM	To be supplied	note 7
Siemens UDS	To be supplied	note 7
SQL/DS	V02 Rel 1.0 and Rel 2.0	Yes
System 2000/80	2.9.0	note 8
TOTAL/8	All	note 8
Program Library Systems		
VSE/SSL	All	Yes
VSE/LIBR	All	Yes

Table 29 Systems and Languages with which MethodManager may be Interfaced

System or Language		MethodManager
The Librarian	All	Yes
OS/PDS	All	Yes
PANVALET	All	Yes

Note:

For notes see page [186](#).

Notes for the Tables on pages [183](#) and [185](#)

- 1 Product Releases of other vendor Program Products that are shown in parentheses () have yet to be tested fully for compatibility with Manager Products; however, ASG expects at a future time to confirm support.
- 2 Where All is specified, all Releases of the relevant other vendor Program Products that are available and supported by the vendor at the date of publication of this Appendix are compatible with the stated Manager Products Releases. ASG will *not* necessarily automatically support new Releases issued by the other vendor between the date of publication of this Appendix and its next update.
- 3 Between the date of this publication and its next update ASG may:
 - Introduce support for environments that were not available or were not supported by ASG at the Date of Publication
 - Withdraw support for environments that were available or were supported by ASG on the Date of Publication

To verify the most up-to-date situation, contact the ASG Service Desk.

- 4 The Manager Products listed do not necessarily support every feature of every version of other vendor Program Products.

Environment-specific Notes:

- 5 The Siemens UDS Generation (DMR-SL10) and the SESAM Generation (DMR-SL11) selectable units are not available for use under CICS/VS or IMS/DC.
- 6 This represents ManagerView Version 01 Release 5.0, coupled with ControlManager Version 02 Release 5.0 through the ControlManager Workstation Interface - PC and Mainframe Tailoring (selectable unit CMR-WS01).

- 7 This interface is **ALIGNED**; that is, its functionality, though not yet migrated into MethodManager, is expected to be provided in a future MethodManager Version/Release. Meanwhile, the corresponding interfaces through DataManager and/or ControlManager may be attached to MethodManager to satisfy this requirement.
- 8 This interface is **UNADOPTED**; that is, ASG does not presently intend to migrate its functionality into MethodManager. However, the corresponding interfaces through DataManager and/or ControlManager may be attached to MethodManager to satisfy this requirement.

Key

N/A	Not Applicable
NYA	Not Yet Available
CMR	ControlManager
DMR	DataManager
DSR	DesignManager
DYR	DictionaryManager
MMR	MethodManager
MVW	ManagerView

The MMR Order for a PWS Package—Attachment 1

3rd Party Environmental Operating Requirements

Use of the PWS/IWSE Package requires that one of the mandatory prerequisite hardware configurations of the following 3rd Party Vendors be met:

Table 30 PWS/IWSE Software Environmental Prerequisite Configurations (see note 9)

Operating Environment:

Microsoft Windows NT 3.51 or later

Microsoft Windows 95 or later

Table 31 PWS/IWSE Hardware Environmental Prerequisite Configurations

Component	Windows
Processor	80486(80386 preferred)
Minimum RAM	16 MB
Display	any supported by Windows

Table 31 PWS/IWSE Hardware Environmental Prerequisite Configurations

Component	Windows
Disks	Hard disk (see note 8) high-density 3.5
Mouse	any supported by Windows
Host Connectivity	see Table 30

Table 32 PWS/IWSE Host Connectivity

3270 Emulation Product (see note 7)	Minimum Version
1 Attachmate EXTRA! for Windows	Version 4.1.0
2 Banyan Vines Extended SNA Gateway	Version 1.3
3 Attachmate IRMA WorkStation for Windows	Version 3.0
4 IBM Personal Communications/3270 for Windows	Version 4.0.0
5 IBM Communications Manager/2 (OS/2)	Version 1.11
6 Novell Netware 3270 LAN Workstation	Version 1.1
7 Wall Data Rumba for Mainframe	Version 4.0.0

Notes of Explanation

- 1 The Programmable Workstation (PWS), Intelligent Workstation Environment (IWSE), and Personal Computer (PC) Industries currently lack consistent standards. Program Products, Programmable Workstations, Intelligent Workstations, Personal Computers, and add-on hardware options vary tremendously. For these reasons, ASG cannot and does not represent that its Program Products will be compatible with any combination of non-ASG products you choose to use them with. While your ASG Product Supplier may be able to help, you must determine for yourself the compatibility in any particular instance of ASG Program Product(s) and your hardware/software environment.
- 2 Your attention is drawn to [Table 30](#), PWS/IWSE Host Connectivity. The products listed may themselves have certain 3rd Party Host prerequisites. Your ability to utilize your 3270 Emulation Product must be verified with your Systems Programming Department who should be requested to review all the relevant documentation.
- 3 The tables shown represent ideal Prerequisite Configurations that can be modified by you at your discretion provided you maintain 100 percent compatibility. Your major concern should be to ensure that your installation conforms to the definition of the 3rd Party Software and 3rd Party Hardware that provides the Host Connectivity.

- 4 Between the date of this publication and its next update ASG may:
 - Introduce support for environments that were not available or were not supported by ASG at the date of publication
 - Withdraw support for environments that were available or were supported by ASG on the date of publication.

To verify the most up-to-date situation, contact the ASG Service Desk.

- 5 ASG acknowledges that certain proprietary products or services or programs mentioned within this publication or within other ASG publications are distributed under Trademarks or Registered Trademarks of the vendors who own and/or distribute the products or services or programs in the country in question.
- 6 The information contained herein is subject to change without notice.
- 7 [Table 30](#) lists certain 3270 Emulation products which provide HLLAPI and/or LLAPI programming interfaces. The ASG PWS/IWSE Packages, MethodManager PWS Graphical Workbench (PGW) and ManagerView (MVW), communicate through these programming interfaces. You will require specific hardware in your PWS/IWSE which is specified by the vendor of the 3270 Emulation product you choose to use. From a PGW/MVW viewpoint the hardware you use to connect to the host may not be significant, and it is your decision to use any connection supported by the 3270 Emulation product. Typical connections include co-ax, network using a gateway, synchronous, or asynchronous using modems, etc.
- 8 A minimum of 5MB of hard disk space is required to install and execute the PWS/IWSE Package; however it is recommended that 10 MB of space be available to provide sufficient expansion for application use of the product.
- 9 Local Area Networks (LANs):

ASG PWS/IWSE products, PGW and MVW, can be run on a Local Area Network as follows:

- The PWS/IWSE software can be stored on a network drive, providing a consistent version of the products to all users on the LAN
- The host connections can be routed through a network gateway
- The Local (PWS/IWSE) Dictionary can be stored on a network drive so that any user with access to the LAN (standard security arrangements permitting) can access it. It is possible for multiple users to have access to the local (PWS/IWSE) Dictionaries, but such use may result in corruption of the content.

The IWSE Order for an ASG-IWSE Package—Attachment 1

ASG Definitions & Environmental Operating Prerequisites (Variables) for ManagerView Version 01 Release 5.0

Definition 1 - The Intelligent Workstation Environment (IWSE) Package

- 1 The IWSE Package is defined as:
 - The Program in machine readable form (the IWSE Software)
 - Technical Publications and Technical Communication Material(s) (the IWSE Docuware)and subsequent updates as supplied at the sole discretion of Company.
- 2 The IWSE Package shall additionally be construed to include all copies in machine readable forms including machine output representing the IWSE Software.

Notes

- 1 The Programmable Workstation (PWS), Intelligent Workstation Environment (IWSE), and Personal Computer (PC) industries standards are not all uniform. Program Products, Programmable Workstations, Intelligent Workstation, Personal Computers, and add-on hardware options vary tremendously. For these reasons, ASG cannot and does not represent that its Program Products will be compatible with any combination of non-ASG products you choose to use them with. While your ASG Product Supplier may be able to help, you must determine for yourself the compatibility in any particular instance of ASG Program Product(s) and your hardware/software environment.
- 2 ASG acknowledges that certain proprietary products or services or programs mentioned within this publication or within other ASG publications are distributed under Trademarks or Registered Trademarks of the vendors who own and/or distribute the products or services or programs in the country in question.

Definition 2 - The COREQUISITE Package

- 1 Full usage of the IWSE Software requires the mandatory presence of the Corequisite ASG-Manager Mainframe Program Products (CMMPP) as Environmental Operating Prerequisites.
- 2 For the purpose of the IWSE Package the CMMPP is defined as the COREQUISITE Package and is:

The specified or subsequent Versions of all of these Manager Program Products:

- ASG-ControlManager Version 02 Release 5.0
- ASG-DataManager Version 02 Release 5.0
- ASG-DictionaryManager Version 02 Release 5.0

operating MVS or OS/390 (all versions) or VM (24 bit mode) or VSE (24 bit mode).

3 These are the associated minimum configurations:

ControlManager

- CMR-CM01- ControlManager Nucleus (Version 02)
- CMR-FE01- Extended Interactive Facility
- CMR-WS01- Workstation Interface - Programmable Workstation & Mainframe Tailoring
- CMR-TP7 - OS/TSO Interface
and/or
- CMR-TP8- VM/CMS Interface
and/or
- CMR-TP2- CICS Interface

DataManager

DMR-DD1- DataManager Nucleus (Version 02)

DictionaryManager

- DYR-DY01- DictionaryManager Nucleus (Version 02)
- DYR-TE00- Translation and Transfer Engine
- DYR-TE13- Corporate Dictionary/Repository Definition Export to ManagerView Local Dictionary
- DYR-TI13- Corporate Dictionary/Repository Definition Import from ManagerView Local Dictionary

The IWSE Order for an ASG-IWSE Package—Attachment 2

3rd Party Environmental Operating Requirements

Use of the PWS/IWSE Package requires that one of the mandatory prerequisite hardware configurations of the following 3rd Party Vendors be met:

Table 33 PWS/IWSE Software Environmental Prerequisite Configurations (see note 9)

Operating Environment:

Microsoft Windows NT 3.51 or later

Microsoft Windows 95 or later

Table 34 PWS/IWSE Hardware Environmental Prerequisite Configurations

Component	MSDOS & Windows
Processor	80486 or later
Minimum RAM	16Mb
Display	any supported by Windows
Disks	Hard disk (see note 8) high-density 3.5
Mouse	any supported by Windows
Host Connectivity	see Table 33

Table 35 PWS/IWSE Host Connectivity

3270 Emulation Product (see note 7)	Minimum Version
1 Attachmate EXTRA! for Windows	Version 4.1.0
2 Banyan Vines Extended SNA Gateway	Version 1.3
3 Attachmate IRMA WorkStation for Windows	Version 3.0
4 IBM Personal Communications/3270 for Windows	Version 4.0.0
5 Novell Netware 3270 LAN Workstation	Version 1.1
6 Wall Data Rumba for Mainframe	Version 4.0.0

Notes

- 1** The Programmable Workstation (PWS), Intelligent Workstation Environment (IWSE) and Personal Computer (PC) Industries currently lack consistent standards. Program Products, Programmable Workstations, Intelligent Workstations, Personal Computers, and add-on hardware options vary tremendously. For these reasons, ASG cannot and does not represent that its Program Products will be compatible with any combination of non-ASG products you choose to use them with. While your ASG Product Supplier may be able to help, you must determine for yourself the compatibility in any particular instance of ASG Program Product(s) and your hardware/software environment.
- 2** Your attention is drawn to [Table 33](#), PWS/IWSE Host Connectivity. The products listed may themselves have certain 3rd Party Host prerequisites. Your ability to utilize your 3270 Emulation Product must be verified with your Systems Programming Department who should be requested to review all the relevant documentation.
- 3** The tables shown represent ideal Prerequisite Configurations that can be modified by you at your discretion provided you maintain complete compatibility. Your major concern should be to ensure that your installation conforms to the definition of the 3rd Party Software and 3rd Party Hardware that provides the Host Connectivity.
- 4** Between the date of this publication and its next update ASG may:
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- 6** The information contained herein is subject to change without notice.

- 7 [Table 33](#) lists certain 3270 Emulation products which provide HLLAPI and/or LLAPI programming interfaces. The ASG PWS/IWSE Packages, MethodManager PWS Graphical Workbench (PGW) and ManagerView (MVW), communicate via these programming interfaces. You will require specific hardware in your PWS/IWSE which is specified by the vendor of the 3270 Emulation product you choose to use. From a PGW/MVW viewpoint the hardware you use to connect to the host may not be significant and it is your decision to use any connection supported by the 3270 Emulation product. Typical connections include co-ax, network using a gateway, synchronous, or asynchronous using modems, etc.
- 8 A minimum of 5MB of hard disk space is required to install and execute the PWS/IWSE Package, however it is recommended that 10MB of space be available to provide sufficient expansion for application use of the product.
- 9 Local Area Networks:

ASG PWS/IWSE products, PGW and MVW, can be run on a Local Area Network as follows:

- The PWS/IWSE software can be stored on a network drive, providing a consistent version of the products to all users on the LAN.
- The host connections can be routed through a network gateway.
- The Local (PWS/IWSE) Dictionary can be stored on a network drive so that any user with access to the LAN (standard security arrangements permitting) can access it. Concurrent access by multiple users will be a supported feature in a subsequent Manager Products release. Currently it is possible for multiple users to have access to the local (PWS/IWSE) Dictionaries but such use may result in corruption of the content.

Appendix C

Attributes of Datasets which May be Supplied on Your Release Tape

Please refer to the table on the following two pages. The abbreviations used are as follows:

Key

DSORG	Dataset Organization
P	Partitioned (dataset)
S	Sequential (dataset)
U	Undefined (record format)
FB	Fixed Blocked (record format)
VB	Variable Blocked (record format)
VB	Variable Blocked (with ASA control character)
VS	Variable Spanned

Notes

- 1 It may be convenient for you to copy all supplied datasets from tape to disk so that the release tape can be freed from use.
- 2 If you wish to copy a partitioned dataset to disk, the IEBCOPY utility should be used. For sequential datasets, you should use the IEBGENER utility.

3 The partitioned dataset attributes given represent attributes after they have been loaded to disk. The actual release tape attributes for all partitioned datasets are:

- Record Format VS
- Record Length 816, 3136, and 6160
- Blocksize 23000

Table 36 Attributes of Manager Products Release Datasets that may be Supplied (OS)

Name	Space Blocks (Directory Blocks)	DSORG	Record Format	Record Length	Block Size	When Needed	Tape to Disk Copy Requirement	Contents
MP.COM.FIX	20	S	FB	80	8000	To apply fixes	Recommended	Fixes for application to Manager Products and EXECUTIVE-ROUTINE members
MP.COM.UNLOAD	800	S	VB	1024	9442	Always	Optional	COMMAND, EXECUTIVE-ROUTINE and UDS Table members to be loaded onto the MP-AID
MP.CORP	200	S	VB	9438	9442	For DB2 and/or SQL, RDG and ADW/IEW Integration facility	Optional	SAVED source of Corporate Executive Routines used with DB2 Import/Export, Repository Diagram Generation and ADW/IEW Integration facility
MP.DEMO	100	S	VB	9438	9442	Always	Optional	DEMO Dictionary
MP.DYR.RULES	15	S	VB	9438	9442	Corporate Dictionary/Repository Definition Export for IDD (DYR-TE08)	Optional	SAVED source of DictionaryManager Translation Rules
MP.FIX	20	S	FB	80	8000	To apply machine code fixes	Recommended	Fixes for applications to Manager Products executable code
MP.IMS	40(5)	P	FB	80	3120	For IMS/DS (CMR-TP4)	Always	IMS/DC modules
MP.INFO	2100	S	VB	9438	9442	For User Defined InfoSystem (CMR-UD10)	Optional	SAVED copy of InfoDictionary
MP.INFO.CHANGES	300	S	VB	9438	9442	For existing User Defined InfoSystem (CMR-UD10)	Optional	SAVED copy of InfoDictionary changes
MP.INFO.UNLOAD	1500	S	VB	1024	9442	Always	Optional	InfoBank members to be loaded onto the MP-AID
MP.INSTALL.TOOL	100	S	FB	80	8160	Manager Products Installation Tool	Always	Installation CLISTs
MP.ISPCLIB	110(10)	P	FB	80	3120	For TSO/ISPF (CMR-FE70)	Always	ControlManager TSO/ISPF CLIST procedures

Appendix C - Attributes of Datasets which May be Supplied on Your Release Tape

Table 36 Attributes of Manager Products Release Datasets that may be Supplied (OS)

Name	Space Blocks (Directory Blocks)	DSORG	Record Format	Record Length	Block Size	When Needed	Tape to Disk Copy Requirement	Contents
MP.ISPMLIB	20(5)	P	FB	80	3120	For TSO/ISPF (CMR-FE70)	Always	ControlManager TSO/ISPF message definitions
MP.ISPPLIB	210(25)	P	FB	80	3120	For TSO/ISPF (CMR-FE70)	Always	ControlManager TSO/ISPF panel definitions
MP.ISPSLIB	60(10)	P	FB	80	3120	For TSO/ISPF (CMR-FE70)	Always	ControlManager TSO/ISPF skeleton definitions
MP.JCL	140(4)	P	FB	80	800	Recommended	Always	Job control statements and Manager Products commands for setting up both an initial and an operational Manager Products environment
MP.LOADLIB	2200(80)	P	U	N/A	6144	Always	Always	Executable load modules, dynamically loaded modules, tables, and maps
MP.MMR.ADMIN	1200	S	VB	9438	9442	Always for MethodManager	Optional	SAVED copy of tailorable MethodManager software and Dictionary/Repository Information Model (DU016) and Administration Repository Information Model (DU777)
MP.MMR.SAMPLE	250	S	VB	9438	9442	Always for MethodManager	Optional	MethodManager sample repository and SIP Life Cycle
MP.MMR.UNLOAD	2500	S	VB	1024	9442	Always for MethodManager	Optional	Executable MethodManager software
MP.README	140	S	VBA	137	1370	Always	Optional	READ-ME file for Manager Products latest installation/ usage information
MP.SAMPLE.IMPORT	20	S	VB	400	9442	BACHMAN Generic Import Example	Optional	Input dataset to BACHMAN Generic Import Example
MP.SOURCE	2700(15)	P	FB	80	800	When tailoring. Also for CICS (CMR-TP2) and ROSCOE (CMR-TP6)	Always	Installation macros tailoring. Source members for CICS and ROSCOE Interfaces
MP.UDS	400	S	VB	9438	9442	For User Defined Syntax (CMR-UD1)	Optional	SAVED copy of UDS Table Dictionary
MP.UIBAL	3800(10)	P	FB	80	800	For User Interface (CMR-UI1)	Always	Assembler data descriptions that can be copied into the user program
MP.UICOB	4200(10)	P	FB	80	800	For User Interface (CMR-UI1)	Always	COBOL data descriptions that can be copied into the user program

Table 36 Attributes of Manager Products Release Datasets that may be Supplied (OS)

Name	Space Blocks (Directory Blocks)	DSORG	Record Format	Record Length	Block Size	When Needed	Tape to Disk Copy Requirement	Contents
MP.UIDICT	500	S	VB	9438	9442	For User Defined Output (DYR-UD15) and User Interface (CMR-UI1)	Optional	SAVED copy of User Interface Dictionary
MP.UIMIV	2400(10)	P	FB	80	800	For User Interface (CMR-UI1)	Always	MARK IV data descriptions that can be copied into the user program
MP.UIPLI	5000(10)	P	FB	80	800	For User Interface (CMR-UI1)	Always	PL/I data descriptions that can be copied into the user program
MP.WEB.TAR	40	S	VB	1024	9442	For Web Enabler (MMR-PF90, CMR-FE90)	Always	Posix data

Appendix D

Attributes of ASG-supplied Dictionaries

This appendix provides information about those dictionaries that can be generated from the sequential SAVEd datasets which are supplied on the release tape. For details, refer to the tables on the following pages.

The space allocation figure for each dictionary dataset indicates the number of physical disk blocks required to RESTORE the dictionary. It includes a small space allowance to enable the user to expand the dictionary if required. If you wish to make large additions to the dictionary, you should increase the space allocations accordingly.

The figures given can be used directly as the SPACE parameters in the appropriate job control statements should you elect to allocate space in blocks; otherwise they must be converted to an approximate TRK or CYL value by calculating the number of blocks that fit onto a track or cylinder.

The number of physical blocks required for each dictionary dataset have been calculated using the following logical and physical block sizes.

Dataset	Logical blocksize	Physical blocksize
Index	2046	8192
Data Entries	360	8192
Source	314	4096
Recovery	-	4096
Log	-	4096

These block sizes can be used for all ASG-supplied dictionaries in any supported environment and provide reasonable utilization of DASD space. For a specific environment or disk type the block sizes and space allocations can be adjusted to suit the user's particular requirements.

Note: _____

Physical blocksize is equivalent to the control interval size in a VSAM-organized dictionary.

Further information on installing these dictionaries can be found in [Chapter 6, "Set Up Dictionaries," on page 77.](#)

Table 37 Attributes of ASG-supplied Dictionaries

Attribute	Administration Dictionary (notes 3, 4)					DEMO Dictionary	User Interface Dictionary
	MP. UDS (note 3)	MP.CORP	MP.INFO	MP.INFO. CHANGES	MP.DYR. RULES		
File Name	MP. UDS (note 3)	MP.CORP	MP.INFO	MP.INFO. CHANGES	MP.DYR. RULES	MP.DEMO	MP.UIDICT
Number of Statuses	3 (note 5)	-	-	-	-	14 (note 5)	3 (note 5)
Index Size	20	20	50	25	5	20	30
Data Entries Size	400	100	1200	250	20	220	950
Source Size	700	450	4700	750	30	270	750
Recovery Size	100	20	120	100	10	120	20
Log Size (note 1)	500	500	500	500	500	500	500
Keyword used on RESTORE	ALL (note 2)	SOURCE	SOURCE	SOURCE	SOURCE	ALL (note 2)	ALL (note 2)

Notes

- 1** The space allocation for the Log file is determined by the type of logging (updates only or all commands) and frequency of use, and is not a factor of dictionary size. A minimum value of 500 blocks of 4096 bytes each is recommended to avoid operational problems which can arise with full log situations.
- 2** If the keyword used on RESTORE is ALL the file must be RESTOREd to an empty dictionary.
- 3** If you restore the Administration dictionary, file MP.UDS must be loaded first.
- 4** For the Administration dictionary, the number of blocks required for the Index, Data Entries, Source, and Recovery files will vary according to which and how many ASG-supplied dictionaries/files you RESTORE.
- 5** This number represents the minimum statuses that must be defined at dictionary creation time in order to RESTORE ALL successfully from the input SAVE ALL file. You must allow for any additional user statuses and increase the value accordingly.

Table 38 Attributes of ASG-supplied Repositories (for MethodManager)

Attribute	MethodManager ADMINISTRATION Repository	MethodManager SAMPLE Repository
Dataset Name	MP.MMR.ADMIN	MP.MMR.SAMPLE
Number of Statuses	6 (note 3)	5 (note 3)
Index Size	50	15
Data Entries Size	1100	300
Source Size	3200	500
Recovery Size	100	50
Log Size (note 1)	500	500
Keyword used on RESTORE	ALL (note 2)	ALL (note 2)

Notes

- 1** The space allocation for the Log dataset is determined by the type of logging (updates only, or all commands) and frequency of use, and is not a factor of repository size. ASG recommends a minimum value of 500 blocks of 4096 bytes each to avoid operational problems which can arise with full log situations.
- 2** If the keyword used on RESTORE is ALL, the dataset must be RESTORED to an empty repository.
- 3** This number represents the minimum statuses that must be defined at repository creation time in order to RESTORE ALL successfully from the input SAVE ALL dataset. You must allow for any additional user statuses required and increase the value accordingly.

Appendix E

Storage Requirements for Running Manager Products

The minimum region size required to execute Manager Products can be ascertained by adding together:

- The virtual storage for the Manager Products program code (see "[Virtual Storage Requirements for the Manager Products Program Code](#)" on page 203)
- The requirement for dynamically allocated virtual storage (see "[Requirements for Dynamically Allocated Virtual Storage](#)" on page 205)
- The requirement for running Access Call programs if relevant (see "[Additional Storage Requirements](#)" on page 208)

In MVS and OS/390 environments, where extensive use is made of 31-bit virtual storage, for most users a region size of 1MB will be sufficient.

However, if MethodManager or DesignManager are to be utilized then a minimum region size of 3MB is recommended.

If both are to be used, then a minimum region size of 4MB is recommended.

Virtual Storage Requirements for the Manager Products Program Code

Virtual storage requirements for the Manager Products program code are given in the following table.

In MVS and OS/390 environments program code is loaded into both 24 and 31-bit virtual storage.

Table 39 Manager Products Program Code Virtual Storage Requirements

Manager Products Components	Execution Mode	Executable Program Name	Primary Load Module Name(s)	Usage Attributes	24-bit Virtual Storage Requirements (KB)	31-bit Virtual Storage Requirements (KB)
ControlManager/ DataManager/ DictionaryManager	Non-overlay	MPR00	MPR00-MPR82	Re-entrant (note 1)	100-200 (note 2)	500-2000 (note 2)
DesignManager	Non-overlay	-	DSR00	Non re-entrant	1280 (notes 3, 4)	-
DesignManager	Overlay	-	DSR00	Non re-entrant	760 (notes 3, 4)	-
MethodManager	Overlay	-	MMWKB MRSYN MGA01 MGA02 MGA03	Non re-entrant	200 minimum 700 maximum (note 2)	-
CICS Interface module	Non-overlay	-	CMRZ100	Re-entrant (note 1)	6	-
ROSCOE Interface module	Non-overlay	-	DRX01	Re-entrant (note 1)	1	-
ROSCOE Monitor Routine module	Non-overlay	-	DRX02	Re-entrant (note 1)	2	-
TSO/ISPF Interface module	Non-overlay	-	VDMCEI VDMCET VDMCFM VDMGMI VDMSIL	Non re-entrant	25	-

Notes

1 All re-entrant load modules can be utilized from the Pageable Link Pack Area (PLPA) or the Extended Pageable Link Pack Area (EPLPA). This will dramatically reduce the real and virtual storage utilization when there are several users executing Manager Products. For further details refer to ["Optimizing Usage of the Manager Products Program Code \(Optional\)" on page 25](#).

2 The virtual storage required is dependent upon the Manager Products functionality invoked. As new functionality is invoked, additional code segments will be loaded and the virtual storage requirement will increase until a point is reached where the loading of new segments is no longer required.

If necessary, you can minimize the virtual storage required for code segments by loading them in OVERLAY mode. For further information refer to *ASG-Manager Products Performance Tuning*.

3 The DesignManager code will not be loaded until the first DesignManager command is issued.

- 4 The storage value given is for DesignManager as supplied by ASG. It assumes that no tailoring of buffer sizes has taken place using the LBUF1 installation macro. The default values for DesignManager are given in [Table 40](#).

Table 40 Default DesignManager Virtual Storage Requirements

Storage Area	Size (in K bytes)	
	Non-overlay	Overlay
DesignManager program storage excluding buffers	1000	480
Workbench design area (WBSIZE)	250	250
Format area (FMSIZE)	10	10
Member type table (MTTMAX)	20	20
Total virtual storage requirement	1280	760

Note:

WBSIZE, FMSIZE, and MTTMAX are the LBUF1 keywords which are used to tailor the workbench design area, the format area, and the member type table respectively. If these buffers are tailored using LBUF1 then the DesignManager storage requirement must be adjusted accordingly. See "[DesignManager Installation Macros](#)" on page 59 for details of the LBUF1 installation macro.

- 5 In a CICS environment, the Manager Products program code will be shared by all terminals executing Manager Products commands.

Requirements for Dynamically Allocated Virtual Storage

In MVS or OS/390 environments, dynamic storage allocations are made from both 24 and 31-bit virtual storage. The majority of allocations are made from 31-bit storage.

Allow up to 100K to cover Manager Products requirements for dynamically allocated 24-bit virtual storage. This is sufficient in most cases, although certain commands (for example REPORT HIERARCHY and PRODUCE) that operate along reference paths with a large number of members can exceed this figure.

The QUERY VIRTUAL command can be used at any time during a ControlManager run to ascertain the maximum amount of dynamically allocated storage that has been used and the amount that is currently retained.

Virtual Storage Requirement for Input/Output Buffers

A buffer or buffer pool is allocated for each Manager Products dataset to be used. The basic requirements are:

- At least two buffers for each of the dictionary's source, index, and data entries buffer pools
- At least two buffers for the primary MP-AID buffer pool
- At least two buffers for each secondary MP-AID to be accessed
- One buffer for the dictionary's recovery dataset
- If logging is active, one buffer for the dictionary's log dataset

The size of the dictionary and MP-AID buffer pools may be re-specified by tailoring the DCUST macro or via a Manager Products command. Dictionary values may re-specified via the DICTONARY command; MP-AID values may be re-specified via the MP-AID BUFFERS command.

Buffer pools are only allocated for a dictionary or MP-AID created using the BDAM or VSAM access methods. For a dictionary or MP-AID created using the DIV access method, a single buffer is allocated and shared by all the users of the dictionary or MP-AID. See the *ASG-Manager Products Server Facility User's Guide* for more information.

In MVS or OS/390 environments, the MP-AID and dictionary buffer pools are allocated in extended virtual storage (that is, storage above the 16 MB byte line). The MP-AID and dictionary buffer pools are the principal allocations in extended virtual storage, but other large dynamic areas will also be allocated.

Specification of additional buffers can lead to a considerable reduction in dataset input/output activity, resulting in greatly improved command response times. The use of extended virtual storage allows much larger buffer pools to be allocated (up to 32,000 if there is sufficient virtual storage available), which can lead to further improvements in performance and response times.

For full details of the effects of specifying additional buffers, refer to *ASG-Manager Products Performance Tuning*.

The standard ASG-supplied buffer allocations are provided in ["Manager Products Installation Macros" on page 33](#) for non-CICS environments, and in ["Step 2 - Tailor Macro DCUST to Your Installation's CICS Specific Requirements \(Optional\)" on page 121](#) for CICS environments.

The amount of virtual storage required for each buffer is equal to the physical blocksize of the relevant dataset. The blocksize for the MP-AID is determined by the Systems Administrator when the MP-AID is created (see [Chapter 5, "Set Up an MP-AID," on page 69](#)). Blocksizes for the dictionary datasets are defined by the Controller when the dictionary is created (see [Chapter 6, "Set Up Dictionaries," on page 77](#)). The size of a given buffer pool is thus derived by multiplying the dataset physical blocksize by the number of buffers to be allocated to the buffer pool.

If two or more dictionaries are to be used in a job, only one will be open at any one time.

The buffer size for each further dataset declared in a DD statement in the job control statements must also be added: that is, the buffer size of dataset MPIN (for the primary input device) and of dataset MPOUT (for the primary output device).

Total virtual storage requirements for input/output buffers may be ascertained by adding together the buffer or buffer pool sizes of these datasets:

- For the dictionary:
 - Index dataset
 - Source dataset
 - Data Entries dataset
 - Recovery dataset
 - Log dataset
- The primary MP-AID dataset
- Each secondary MP-AID
- The MPIN dataset
- The MPOUT dataset

Additional Storage Requirements

For Input/Output Buffers

Certain Manager Products (e.g., DesignManager) and certain optional additional facilities (e.g., User Interface facility) require additional input or output datasets. The buffer sizes of these additional datasets must be added to the virtual storage requirements when these products/facilities are being used. The usage of these additional datasets can be found in [Chapter 9, "Running Manager Products in Batch Mode," on page 101](#) and [Chapter 10, "Installing Manager Products in an Interactive Environment," on page 109](#). Double buffering is used for all input and output sequential datasets. Default block sizes for these datasets can be found in [Appendix F, "Attributes of Manager Products Input Datasets" on page 209](#) and [Appendix G, "Attributes of Manager Products Output Datasets" on page 211](#).

Some Controller's and Systems Administrator's commands also require additional datasets (see [Chapter 9, "Running Manager Products in Batch Mode," on page 101](#) and [Chapter 10, "Installing Manager Products in an Interactive Environment," on page 109](#)); if any of these commands are to be used during a run, an allowance must be added for the buffers of the datasets they use.

When Running Access Call Programs

When running Access Call programs, additional storage will be required for:

- The user program storage requirement
- The ASG-supplied interface module (DMRUS)—approximately 1K bytes
- The Access Call buffer and work file buffers, if used (see *ASG-Manager Products User Interface Facility*)

When using ControlManager with PL/I Optimizer user programs, the run-time parameter ISASIZE should specify the partition/region size less the amount of virtual storage required for running Manager Products.

Appendix F

Attributes of Manager Products Input Datasets

Table 41 Attributes of Manager Products Input Datasets

Purpose	Dataset Organization	Record Format	Record Length	Blocksize
For Automation of Set Up (DMR-AS1, DMR-A52)	Partitioned	FB	80	Any
For RESTORE commands	Sequential	VB	9438	Any
For RELOAD commands	Sequential	VB	Any (note 1)	Any
For RELOAD or ROLL FORWARD commands	Sequential	VB	9438	Any
For LOG ARCHIVE commands (optional)	Sequential	VB	9438	Any
For LOG ANALYSIS or AUDIT commands (optional)	Sequential	VB	9438	Any
For MP-AID LOAD or MP-AID RELOAD commands	Sequential	VB	Any (note 1)	Any
For Generic Import	Sequential Partitioned	FB/VB FB/VB	Any Any	Any Any

Notes

- 1 The record length is determined when the dataset is created.

Appendix G

Attributes of Manager Products Output Datasets

Table 42 Attributes of Manager Products Output Datasets

Purpose	Dataset Organization	Record Format	Record Length	Blocksize
For DictionaryManager TRANSFER command	Sequential	FB	80	400 (Note 1)
For Source Language Generation (DMR-SL1 to DMR-SL9) facility	Sequential	FB	80	400 (Note 1)
	Partitioned	FB/VB	(Note 4)	(Note 4)
For User Interface (CMR-UI1) facility	Sequential	VB	700	9442 (notes 1 , 2)
For SAVE command	Sequential	VB	9438	9442 (notes 1 , 2)
For UNLOAD command	Sequential	VB	(Note 3)	9442 (notes 1 , 2)
For LOG ARCHIVE command	Sequential	VB	9438	9442 (notes 1 , 2)
For AUDIT ONTO command	Sequential	VB	9438	9442 (notes 1 , 2)
For MP-AID UNLOAD command	Sequential	VB	MP-AID blocksize	9442 (notes 1 , 2)
For SENDF Executive command	Sequential	FB/VB	Min 1 Max 32760	Min 1 Max 32760
	Partitioned	FB/VB	(Note 4)	(Note 4)
For REPLAY facility				
MPRECORD	Sequential	VB	4096	9442 (notes 1 , 2)

Table 42 Attributes of Manager Products Output Datasets

Purpose	Dataset Organization	Record Format	Record Length	Blocksize
MPRESULT	Sequential	VB	4096	9442 (notes 1 , 2)
MPSPRINT	Sequential	VBA	137	9442 (notes 1 , 2)
For TRACE output	Sequential	VB	137	9442 (notes 1 , 2)

Notes

- 1** The DCB=BLKSIZE parameter can be used in order to vary the default blocksize if required.
- 2** Any specified blocksize must be at least four bytes greater than the record length.
- 3** The record length will be the largest blocksize of the Index, Source, and Data Entries datasets for the relevant dictionary.
- 4** The record length and blocksize are determined when the partitioned dataset is created.

Appendix H

Applying Fixes to Manager Products Software

This appendix provides the information necessary for the correct and successful application of software fixes which have been made available using these sources:

- A Manager Products Release Notes
- The ASG Service Desk

We may also supply you with fixes using the following three sources where in each case the appropriate fix installation information is included in that source:

- In dataset MP.FIX (which may be supplied on the Release tape)
- In dataset MP.COM.FIX (which may be supplied on the Release tape)
- On a floppy disk

The fixes to be applied fall into these categories:

- Manager Products fixes
- Product-specific fixes

Fixes can be applied to Manager Products:

- Machine code, using the OS service program, IMASPZAP
- COMMAND members, using the MZAP command
- Dictionary source of MP-AID EXECUTIVE members, using the MODIFY command

Manager Products Fixes

Manager Products fixes should be applied by all users, irrespective of Products and selectable units installed. The fix identifier for Manager Products fix items takes the form:

CMR/vvv/RELrrr/nnn

where:

vv is the version number of the Manager Products

rrr is the Release number of the Manager Products.

nnn is the fix number within the Release.

The fix may have to be applied to the ControlManager program or the DataManager program.

Product-specific Fixes

When a fix item from a Software Notice is not designated as Manager Products, any associated fix need only be applied by users of the specific Product or Product selectable unit. The fix item will identify the relevant area. The fix identifier takes the form:

ppp/vvv/RELrrr/nnn

where:

ppp is the Manager Products name:

- DYR for DictionaryManager
- DMR for DataManager
- DSR for DesignManager
- MMR for MethodManager

vv is the version number of the Manager Products.

rrr is the Release number of the Manager Products.

nnn is the fix number within the Release.

Applying Fixes

ASG applies these fixes:

- As Procedures Language updates, for application to COMMAND members on the MP-AID and/or the dictionary source of MP-AID EXECUTIVE members
- As machine code fixes for application to the Manager Products program code

Fixes provided by ASG for application to COMMAND members should be applied using the MZAP command, details of which are supplied in ["Applying Fixes to ASG-supplied Command Members Using the MZAP Command" on page 216](#).

Fixes provided by us for application to the source version of EXECUTIVE-ROUTINE members (supplied in dataset MP.CORP or MP.MMRADMIN) should be applied using the MODIFY command, details of which are supplied in ["Applying Fixes to the ASG-supplied Executive Members Using the MODIFY Command" on page 222](#).

ASG-supplied machine code fixes are normally in a form suitable for processing by the OS service program, IMASPZAP.

The application of a fix is divided into two areas:

- The application of the actual fix
- The recording of that application

A display of recorded fixes can be produced using the ENVIRONMENT command. The output from the ENVIRONMENT command will be required by ASG if you should ever encounter a problem with Manager Products software. In some cases, recording applied fixes can be as important as applying the fix itself, particularly in a problem-solving situation.

You should register the application of a fix in a central recording table called MPFID. It is important that fixes are only registered after they have been applied to all installed versions of your Manager Products software to avoid the possibility of receiving misleading output from the ENVIRONMENT command.

The required fix control statements should be input to the IMASPZAP service program. The SYSLIB DD statement defines the Manager Products Load Library, normally known as MP.LOADLIB. The PARM=IGNIDRFULL operand should be used in order to avoid IDR record full problems

Applying Fixes to ASG-supplied Command Members Using the MZAP Command

ASG supplies some software functionality in the form of COMMAND members in datasets MP.COM.UNLOAD and MP.MMR.UNLOAD. These COMMAND members are intended to be loaded onto the MP-AID at installation time. From time to time, ASG may supply you with details of fixes to be applied to these COMMAND members. ASG supplies a special Systems Administrator command, called MZAP, to facilitate the application of these fixes.

There are six variants of the MZAP command. Four of these variants must be issued for each COMMAND member to be fixed in the sequence given here:

Step 1 - Issue the MZAP XSELECT variant.

Step 2 - For each line to be modified within a COMMAND member, issue the MZAP VERIFY variant followed by the MZAP REPLACE variant.

Step 3 - Issue the MZAP APPLY variant.

The two remaining variants are only required in occasional circumstances, generally in error situations. Here are the variants:

- MZAP HISTORY
- MZAP CANCEL

The clauses used with each variant are described in more detail below followed by details of messages which may be encountered.

Step 1 - Issue the XSELECT Clause

Syntax:

```
MZAP XSELECT member-name;
```

where *member-name* is the name of the MP-AID COMMAND member to be fixed.

This clause checks for the existence of the specified COMMAND member on the MP-AID. If it exists, it:

- Brings a copy into virtual storage
- Issues message number MZ0000

Note: _____

If the selected member is not found on the primary MP-AID, then, if the member is present on a secondary concatenated MP-AID, the member is copied from the secondary to the primary MP-AID.

Secondary MP-AIDs are searched in the order specified by the MP-AID CONCATENATION command. The member is copied from the first occurrence found. Message MZ0000 is replaced by message MZ0013.

Step 2 - Modify the COMMAND Member

Issue the VERIFY Clause

Syntax:

```
MZAP VERIFY line-number hexadecimal-verify-strings;
```

This clause attempts to match the specified strings against the contents of the line (identified by the specified line-number) in the virtual storage copy of the COMMAND member.

This is intended to ensure that any subsequent modification using the MZAP REPLACE variant is made to the correct line. Up to eight strings may be specified in any MZAP VERIFY statement. The specified strings are concatenated to form the verification text for the specified line.

If the verification is successful then message number MZ0014 is issued.

The MZAP VERIFY and MZAP REPLACE variants must be issued for each line in the COMMAND member which is to be modified.

Issue the REPLACE Clause

Syntax:

```
MZAP REPLACE line-number hexadecimal-replace-strings;
```

This clause replaces the contents of the line (identified by the specified line-number) with the specified strings. MZAP REPLACE can only be issued after successfully issuing the MZAP VERIFY variant. Up to eight strings may be specified in any MZAP REPLACE statement. The specified strings are concatenated to form the replacement text for the specified line.

If the replacement is successful then message number MZ0019 is issued.

The MZAP VERIFY and MZAP REPLACE variants must be issued for each line in the COMMAND member which is to be modified.

Step 3 - Issue the APPLY Clause

Syntax:

```
MZAP APPLY checksum;
```

This clause replaces the original version of the COMMAND member on the primary MP-AID with the modified version set up in virtual storage and terminates processing of the selected COMMAND member.

An 8 or 11-digit hexadecimal *checksum* must be entered and ensures that the previously entered VERIFY and REPLACE strings have been entered correctly.

In addition to replacing the updated COMMAND member on the primary MP-AID the COMMAND member £PCMMZHIST is updated with details relating to the current update and thus provides an audit trail of updates applied to all COMMAND members on the MP-AID. The MZAP HISTORY command is used to display the contents of this member.

If the application is successful then message number MZ0001 is issued.

The CANCEL Clause

Syntax:

```
MZAP CANCEL;
```

This clause allows you to cancel MZAP processing at any stage between entering the MZAP XSELECT variant and the MZAP APPLY variant. It will cause the virtual storage copy to be erased. If the member to be updated was copied from a secondary concatenated MP-AID, then the copied member is also deleted from the primary MP-AID.

The HISTORY Clause

Syntax:

```
MZAP HISTORY;
```

This clause provides an audit trail of fixes applied to all COMMAND members present on the primary MP-AID.

For each successful MZAP executed an entry is made consisting of the COMMAND member name, fix date and time, Manager Products fix number, and checksum information.

Note: _____

Entries for fixes issued on a provisional basis, that is, without an authorized ASG fix number, contain the string ??? in place of the fix number.

The MZAP HISTORY variant will generally only be needed in the event of failure of the MZAP VERIFY variant to successfully verify a particular line in the virtual storage copy of a COMMAND member. The MZAP HISTORY variant can be used to establish whether the correct number of previous modifications have been applied to that COMMAND member.

MZAP Output Messages

A number of messages may be output when using the MZAP command. These are the messages:

```
MZ000 MEMBER member-name HAS BEEN SELECTED
```

This message indicates that the COMMAND member specified with the MZAP XSELECT variant exists and has been copied into virtual storage. You should now issue the MZAP VERIFY and MZAP REPLACE variants for each line to be modified.

```
MZ0001 MEMBER member-name updated, MZAP PROCESSING ENDED
```

This message is issued if the MZAP APPLY variant has been successfully processed, that is, the original MP-AID copy of the COMMAND member has been overwritten by the updated virtual storage copy. The history COMMAND member £PCMMZHIST has also been updated.

```
MZ0002 MZAP PROCESSING TERMINATED
```

This message is issued as the result of the MZAP CANCEL variant to confirm that MZAP processing for a particular COMMAND member has terminated.

```
MZ0003 NO VALID KEYWORD FOUND
```

This message indicates that you have issued the MZAP command without a valid keyword.

MZ0004 ERROR CODE *message-number* RETURNED FROM MZAP

This message indicates that a standard Manager Products message identified by the specified message number was generated by the MZAP command. You should refer to the *ASG-Manager Products Messages*, or, alternatively, issue a PANEL command followed by the indicated message number to access the appropriate InfoBank panel for further details of this particular message.

MZ0005 MEMBER NAME OMITTED

This message indicates that you have not supplied the name of a COMMAND member when required with a particular MZAP command.

MZ0007 NO CHANGES MADE, APPLY NOT ACTIONED, MZAP PROCESSING ENDED

This message indicates that no lines have yet been changed in the copy of the COMMAND member in virtual storage so that there is no purpose in the MZAP APPLY variant just issued being executed.

MZ0008 INVALID LINE NUMBER SPECIFICATION

This message indicates that a non-numeric line number was specified with either the MZAP VERIFY or the MZAP REPLACE variants.

MZ0009 LINE NUMBER OUTSIDE RANGE

This message indicates that a line number was specified with either the MZAP VERIFY or MZAP REPLACE variants which was greater than the total number of lines in the COMMAND member.

MZ00010 NO MEMBER CURRENTLY SELECTED

This message indicates that any of the following MZAP keywords has erroneously been entered without having previously selected a COMMAND member using the MZAP XSELECT variant:

- VERIFY
- REPLACE
- APPLY
- CANCEL

MZ0011 INVALID KEYWORD *keyword* COMMAND IGNORED

This message indicates that you have entered the specified invalid keyword with the MZAP command.

MZ0012 TOO MANY VERIFY/REPLACE STRINGS SPECIFIED

The number of strings specified in the MZAP VERIFY/REPLACE variant exceeds the maximum number of eight.

MZ0013 MEMBER *member-name* HAS BEEN COPIED AND SELECTED

This message indicates that the COMMAND member specified with the MZAP XSELECT variant has been copied from a secondary to the primary MP-AID and made available in virtual storage. The MZAP VERIFY and REPLACE variants can now be issued.

MZ0014 VERIFY ACCEPTED

This message indicates that the MZAP VERIFY variant has successfully verified the contents of the specified line in the virtual storage copy of the selected COMMAND member.

MZ0015 VERIFY STRING NOT FOUND AT LINE *line-number*

MZ0016 VERIFY DATA FOLLOWS

hexadecimal verify data

MZ0017 ACTUAL DATA FOLLOWS

hexadecimal member data

These three messages indicate that the MZAP VERIFY variant did not process successfully because the verification string did not match the current contents of the line specified with the MZAP VERIFY variant.

MZ0018 LINE NOT PREVIOUSLY VERIFIED

This message indicates that an attempt has been made to change a line in the virtual storage copy of a selected COMMAND member using the MZAP REPLACE variant, where that line has not been previously verified using the MZAP VERIFY variant.

MZ0019 REPLACE ACCEPTED

This message indicates that the MZAP REPLACE variant has been successfully processed and that the specified change has been made to the copy of the selected COMMAND member in virtual storage.

MZ0020 CHECKSUM OMITTED OR INVALID

This message indicates that the mandatory checksum specified with the MZAP APPLY variant has either been omitted or is incorrect for the previously entered MZAP VERIFY and REPLACE variants.

The correct checksum must be specified or any incorrectly specified MZAP VERIFY/REPLACE statements must be corrected and the MZAP rerun.

MZ0024 MPAID IN READ-ONLY MODE, MZAP PROCESSING ENDED

The MP-AID is currently open in read-only mode. The MZAP command requires access to a read/write MP-AID.

Applying Fixes to the ASG-supplied Executive Members Using the MODIFY Command

ASG supplies some functionality in the form of EXECUTIVE members in datasets MP.COM.UNLOAD and MP.MMR.UNLOAD. These EXECUTIVE members are intended to be loaded onto the MP-AID at installation time. Source versions of these members are supplied as dictionary EXECUTIVE-ROUTINE members in datasets MP.CORP and MP.MMR. ADMIN. This allows user modification of MP-AID EXECUTIVE members by:

- Modifying the dictionary EXECUTIVE-ROUTINE members
- Constructing the modified version onto the MP-AID to replace the equivalent EXECUTIVE member on the MP-AID

From time to time, ASG may supply details of fixes to be applied to the dictionary EXECUTIVE-ROUTINE members for subsequent constructing.

The supplied fixes take no account of any user modifications that may have been made to an EXECUTIVE-ROUTINE member. Thus, when applying a fix to a particular EXECUTIVE-ROUTINE member, it is important that you make allowances for any user modifications that have been implemented.

Appendix I

Content and Attributes of the Load Library MP.LOADLIB

This appendix provides details of the modules contained in the Manager Products load library MP.LOADLIB as supplied by ASG. Attributes of certain load modules may be altered as a result of any user tailoring applied to the library.

A description in the USAGE column is not given where the load module provides basic Manager Products functionality, but is provided as a guide to module usage for optional facilities.

The characters used in the ATTR column have these meanings:

Character Meaning

R	Re-entrant module, can be placed in the Pageable Link Pack Area
E	Re-entrant module, can be placed in the Extended Pageable Link Pack Area
N	Non re-entrant module, will be loaded into user private virtual storage

MEMBER	SIZE(K)	ATTR	USAGE
AAA04	7	R	
ACTSO	3	R	
CCRDG	99	R	Repository Diagram Generation
CMR91	2	N	Execution under CICS
CMR92	4	N	Execution under CICS
CMR93	8	N	Execution under CICS
CMR94	16	N	Execution under CICS
CMR95	32	N	Execution under CICS
CMR96	64	N	Execution under CICS
CMR97	128	N	Execution under CICS

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MEMBER	SIZE(K)	ATTR	USAGE
CMR98	256	N	Execution under CICS
CMR99	384	N	Execution under CICS
DCT01	8	E	
DCT02	5	E	
DCT03	11	E	
DCT04	6	E	
DCT05	2	E	
DCT06	1	E	
DCT07	6	E	
DCT08	1	E	
DCT09	7	E	
DCT10	6	E	
DCT11	6	E	
DCT12	6	E	
DCT13	7	E	
DCT14	7	E	
DCT15	6	E	
DCT16	6	E	
DCT17	6	E	
DCT18	6	E	
DCT19	6	E	
DCT20	1	E	
DCT21	2	E	
DCT22	2	E	
DCT23	2	E	
DCT24	4	E	
DCT25	3	E	
DCT26	2	E	
DCT27	4	E	
DCT28	6	E	

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
DCT29	6	E	
DCT30	6	E	
DCT31	6	E	
DCT32	7	E	
DCT40	1	E	
DFI98	1	R	
DFI99	1	R	
DFT10	1	R	
DFT11	2	R	
DFT12	1	R	
DFT13	1	R	
DFT14	1	R	
DFT15	1	R	
DFT16	1	R	
DFU07	1	R	
DFU10	1	R	
DFU11	1	R	
DFU12	1	R	
DFU13	1	R	
DFU14	1	R	
DFU15	1	R	
DFU16	1	R	
DID96	1	R	
DID98	1	R	
DID99	1	R	
DIL88	1	R	
DIL89	1	R	
DIL96	1	R	
DIL97	1	R	
DIL98	1	R	

ASG-Manager Products Installation in OS Environments

MEMBER	SIZE(K)	ATTR	USAGE
DIL99	1	R	
DIT03	3	E	
DIT04	3	E	
DIT05	5	E	
DIT06	5	E	
DIT07	7	E	
DIT08	3	E	
DIT09	1	E	
DIT21	10	E	
DIT26	1	E	
DIT27	5	E	
DIT36	6	E	
DIT37	2	E	
DIT38	2	E	
DIT42	3	E	
DIT88	1	R	
DIT89	1	R	
DIT96	1	R	
DIT97	1	R	
DIT98	1	R	
DIT99	1	R	
DJL99	1	R	
DJT01	3	E	
DJT02	3	E	
DJT03	7	E	
DJT04	9	E	
DJT05	17	E	
DJT06	1	E	
DJT07	3	E	
DJT08	19	E	

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
DJT09	7	E	
DMEX1	1	E	
DMG01	7	E	
DMG02	10	E	
DMG03	7	E	
DMG04	8	E	
DMG05	7	E	
DMG06	8	E	
DMG07	6	E	
DMG08	25	E	
DMG24	1	E	
DMG25	4	E	
DMG40	14	E	
DMG50	1	E	
DMG99	1	E	
DMI80	1	R	
DMI81	1	R	
DMI95	1	R	
DMI96	1	R	
DMI97	1	R	
DMI98	1	R	
DMI99	1	R	
DML99	1	R	
DMM01	11	E	
DMM02	10	E	
DMM03	7	E	
DMM04	8	E	
DMM05	7	E	
DMM06	7	E	
DMM07	6	E	

ASG-Manager Products Installation in OS Environments

MEMBER	SIZE(K)	ATTR	USAGE
DMM08	24	E	
DMM24	1	E	
DMM25	4	E	
DMM40	13	E	
DMM50	7	E	
DMM99	24	E	
DMRUS	1	R	
DMRUS31	1	E	
DMR01MSP	19	N	IMS/DC Interface
DMT01	1	N	
DMT02	5	E	
DMT03	16	E	
DMT04	18	E	
DMT05	11	E	
DMT06	3	E	
DMT07	19	E	
DMT08	19	E	
DMT09	8	E	
DMT10	17	E	
DMT20	6	E	
DMT21	2	E	
DMT22	6	E	
DMT23	1	E	
DMT30	4	E	
DMT31	7	E	
DMT32	11	E	
DMT33	7	E	
DMT34	4	E	
DMT35	1	E	
DMT36	14	E	

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
DMT37	2	E	
DMT38	6	E	
DMT39	7	E	
DMT40	1	E	
DMT41	2	E	
DMT42	5	E	
DMT43	2	E	
DMT44	3	E	
DMT45	1	E	
DMT46	6	E	
DMT47	1	E	
DMT48	1	E	
DMT49	1	E	
DMT50	15	E	
DMT51	6	E	
DMT52	1	E	
DMT53	3	E	
DMT54	2	E	
DMT55	4	E	
DMT56	4	E	
DMU06	1	R	
DMU09	1	R	
DMU10	52	R	
DSNCOPY	8	E	
DSR00	1283	N	DesignManager
DSR99	1	E	
DST01	2	E	
DST02	2	E	
DST03	8	E	
DST04	1	E	

MEMBER	SIZE(K)	ATTR	USAGE
DST05	1	E	
DST06	7	E	
DST07	1	E	
DST08	9	E	
DST09	2	E	
DST10	4	E	
DST11	7	E	
DST12	2	E	
DST13	1	E	
DUE02	11	N	Natural language UDS
DUF02	11	N	Natural language UDS
DUG02	11	N	Natural language UDS
DUH02	11	N	Natural language UDS
DUI02	11	N	Natural language UDS
DUK02	12	N	Natural language UDS
DUN02	12	N	Natural language UDS
DUS02	11	N	Natural language UDS
DUT01	2	E	
DUT02	7	E	
DUT03	2	E	
DUT04	4	E	
DUT05	11	E	
DUT06	1	E	
DUT07	5	E	
DUT08	6	E	
DUT09	4	E	
DUT10	3	E	
DUT11	4	E	
DUT12	5	E	
DUT13	2	E	

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
DUT14	16	E	
DUT15	3	E	
DUT16	3	E	
DUT17	3	E	
DUT18	2	E	
DUT19	2	E	
DUT20	2	E	
DUT21	4	E	
DUT97	2	E	
DUT98	2	E	
DUT99	2	E	
DUU02	12	N	Natural language UDS
DUO01	10	N	
DUO02	11	N	
DUO03	10	N	
DUO04	11	N	
DUO06	11	N	
DUO07	2	N	
DU012	13	N	
DYD99	1	R	
DYL11	1	R	
DYT01	8	E	
DYT02	6	E	
DYT11	1	R	
FORMAT	8	N	MethodManager
FORM10	62	N	MethodManager
IDC99	11	R	
IDT01	4	R	
IKJDMRUS	1	E	REXX Interface
IKJMSPCT	2	R	REXX Interface

ASG-Manager Products Installation in OS Environments

MEMBER	SIZE(K)	ATTR	USAGE
IKJMSPWD	1	R	REXX Interface
IRXTSMSP	1	E	REXX Interface
MGA01	59	N	MethodManager
MGA02	34	N	MethodManager
MGA03	57	N	MethodManager
MGF00	9	N	MethodManager
MMCVU	8	N	MethodManager SIP
MMIND	59	N	MethodManager SIP
MMRCS	61	N	MethodManager SIP
MMRGL	71	N	MethodManager SIP
MMRST	3	N	MethodManager SIP
MMRSY	167	N	MethodManager SIP
MMVAH	45	N	MethodManager SIP
MMWKB	376	N	MethodManager SIP
MPABR	1	E	
MPACI	3	R	
MPALC	3	E	
MPASORT	5	E	
MPAST	4	E	
MPAVF	3	E	
MPCDSR2	64	R	
MPBAF	3	R	
MPCDX	77	E	
MPCMD	23	R	
MPCMP	4	R	
MPCRB	3	E	MethodManager
MPCTE01	118	E	
MPDB2	10	E	Access to DB2
MPDX1	1	R	
MPDYN	17	N	

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
MPGEN	13	E	
MPIND	3	E	
MPISPVAR	10	N	
MPI90	1	R	
MFI91	1	R	
MPI92	1	R	
MPJAVA	120	E	
MPJUS	5	E	
MPLMF	64	E	
MPLOCK	3	E	
MPLUF	1	E	
MPLXWRD	6	E	
MPLX1	1	R	
MPMST	7	E	
MPPROCL	109	E	
MPPRS	425	N	
MPRAF	4	R	
MPRAF2	3	R	
MPRCC	3	R	
MPRDP	5	E	
MPRDX	3	R	
MPRISPF	8	N	
MPRSI	2	R	
MPRSV	3	N	
MPRXX	17	E	
MPR00	83	R	
MPR01	143	E	
MPR02	277	E	
MPR03	9	E	
MPR04	19	E	

ASG-Manager Products Installation in OS Environments

MEMBER	SIZE(K)	ATTR	USAGE
MPR05	14	E	
MPR06	58	E	
MPR07	9	E	
MPR08	3	E	
MPR09	1	E	
MPR10	38	E	
MPR11	20	E	
MPR12	14	E	
MPR13	4	E	
MPR14	14	E	
MPR15	31	E	
MPR16	19	E	
MPR17	7	E	
MPR18	8	E	
MPR19	10	E	
MPR20	6	E	
MPR21	7	E	
MPR22	30	E	
MPR23	7	E	
MPR24	63	E	
MPR25	6	E	
MPR26	10	E	
MPR27	4	E	
MPR28	9	E	
MPR29	10	E	
MPR30	10	E	
MPR31	23	E	
MPR32	29	E	
MPR33	15	E	
MPR34	15	E	

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
MPR35	2	E	
MPR36	72	E	
MPR37	8	E	
MPR38	37	E	
MPR39	12	E	
MPR40	5	E	
MPR41	11	E	
MPR42	62	E	
MPR43	22	E	
MPR44	3	E	
MPR45	12	E	
MPR46	14	E	
MPR47	9	E	
MPR48	10	E	
MPR49	7	E	
MPR50	14	E	
MPR51	8	E	
MPR52	8	E	
MPR53	9	E	
MPR54	10	E	
MPR55	5	E	
MPR56	14	E	
MPR57	6	E	
MPR58	8	E	
MPR59	11	E	
MPR60	35	E	
MPR61	19	E	
MPR62	9	E	
MPR63	8	E	
MPR64	12	E	

ASG-Manager Products Installation in OS Environments

MEMBER	SIZE(K)	ATTR	USAGE
MPR65	40	E	
MPR66	63	E	
MPR67	15	E	
MPR68	8	E	
MPR69	21	E	
MPR70	4	E	
MPR71	22	E	
MPR72	6	E	
MPR73	53	E	
MPR74	10	E	
MPR75	31	E	
MPR76	8	E	
MPR77	11	E	
MPR78	26	E	
MPR79	30	E	
MPR80	13	E	
MPR81	6	E	
MPR82	30	E	
MPR83	30	E	
MPSCI	3	R	
MPSCX	78	N	Import Solutions
MPSASM	10	N	Import Solutions
MPSC	2	N	Import Solutions
MPSCOB	19	R	Import Solutions
MPSCST	1	N	Import Solutions
MPSDBD	8	N	Import Solutions
MPSDVG	11	N	Import Solutions
MPSGCU	14	N	Import Solutions
MPSHTM	2	N	Import Solutions
MPSI	1	E	

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
MPSJCL	4	N	Import Solutions
MPSJSC	1	N	Import Solutions
MPSPLI	2	N	Import Solutions
MPSSQA	6	N	Import Solutions
MPSSQC	6	N	Import Solutions
MPSSQL	6	N	Import Solutions
MPSSQP	6	N	Import Solutions
MPSXML	4	N	Import Solutions
MPSDT	3	E	
MPSPI	12	N	
MPSREAD	3	E	
MPSRT	4	E	
MPSTR	2	R	
MPTAF	4	E	
MPVAR	3	E	
MPVIEWX	154	E	
MPVSM	3	E	
MPXML	216	E	
MPZAP	3	R	
MPZDE	3	R	
MPZEN	3	R	
MTIOT	2	N	
MWAIT	2	E	
PDAUD	7	R	DesignManager
PDB2D	4	R	DesignManager
PDDAT	8	R	DesignManager
PDDAV	6	R	DesignManager
PDB2P	4	R	DesignManager
PDDDB2R	6	R	DesignManager
PDENT	6	R	DesignManager

ASG-Manager Products Installation in OS Environments

MEMBER	SIZE(K)	ATTR	USAGE
PDINT	4	R	DesignManager
PDLFA	4	R	DesignManager
PDLOG	6	R	DesignManager
PDPLO	4	R	DesignManager
PDPNE	8	R	DesignManager
PDREC	6	R	DesignManager
PDSQLP	4	R	DesignManager
PDSQLR	6	R	DesignManager
PDUSE	6	R	DesignManager
PENTD	5	R	DesignManager
PSAUD	5	R	DesignManager
PSDAT	4	R	DesignManager
PSDAV	5	R	DesignManager
PSDB2	3	R	DesignManager
PSENT	5	R	DesignManager
PSINT	4	R	DesignManager
PSLFA	4	R	DesignManager
PSLOG	4	R	DesignManager
PSPLO	4	R	DesignManager
PSPNE	7	R	DesignManager
PSQLD	4	R	DesignManager
PSREC	4	R	DesignManager
PSSEG	4	R	DesignManager
PSSIA	3	R	DesignManager
PSSQL	3	R	DesignManager
PSUSE	5	R	DesignManager
PUSED	4	R	DesignManager
REXXMSPA	60	E	REXX Interface
REXXMSPE	60	E	REXX Interface
REXXMSPF	60	E	REXX Interface

Appendix I - Content and Attributes of the Load Library MP.LOADLIB

MEMBER	SIZE(K)	ATTR	USAGE
REXXMSPI	60	E	REXX Interface
REXXMSPQ	60	E	REXX Interface
REXXMSPX	60	N	REXX Interface
REXXMSPY	60	E	REXX Interface
SMR00	101	N	SourceManager
TSOIK	22	R	Kanji full-screen environments
UDCREAD	12	N	MethodManager SIP
UDCWRITE	12	N	MethodManager SIP
UFC10	6	R	
UFT01	2	R	
UFT02	3	R	
UFT03	3	R	
UFT04	3	R	
UFT98	4	R	
UFT99	2	R	
VDMCEI	3	N	FE70 interface
VDMCET	1	N	FE70 interface
VDMCFM	18	N	FE70 interface
VDMGMI	2	N	FE70 interface
VDMSIL	1	N	FE70 interface

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