

ASG-Manager Products™ **System Administrator's Environmental Control** **Facility**

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Preface

This publication describes the *ASG-Manager Products Systems Administrator's Environmental Control Facility*, selectable unit CMR-SC05, herein called Environmental Control Facility. This publication is intended for the use of systems administrators. It is assumed that readers of this publication have also read the *ASG-ControlManager User's Guide* and the *ASG-Manager Products Systems Administrator's Manual*.

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About this Publication

This publication consists of these chapters:

- Chapter 1, "Overview," contains an overview of the Environmental Control Facility.
- Chapter 2, "Logging On and Profiles," describes the system of profiles, how to tailor the user's operating environment, and how to create profiles.
- Chapter 3, "User Space Allocation on the MP-AID," describes how to control the amount of storage space on the MP-AID available to individual users.
- Chapter 4, "Access Control to Corporate Executive Routines," describes how to restrict user access to the Corporate Executive Routines.

Publication Conventions

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

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

1

Overview

The Environmental Control Facility enables you to establish different environments for each user logging on to the system. If the facility is not installed, only one operating environment can be set up which applies to all users logging on. In addition, the facility enables you to establish different environments for the same user depending on whether the user has logged on in online or batch mode. A system of Global Profiles exists to enable you to set up operating environments for groups of users.

If other ASG-ControlManager (herein called ControlManager) selectable units are also installed, the facility has these additional capabilities:

- If the Extended Interactive Facility (selectable unit CMR-FE01) is installed, users can create their own User Defined Profiles. You can also limit the amount of space occupied by a user's USER-MEMBERS on the MP-AID. USER-MEMBERS are described in the *ASG-ControlManager User's Guide*.
- If the User Defined Commands Facility (selectable unit CMR-UD05) is also installed, you can control which users execute a Corporate Executive Routine.

2

Logging On and Profiles

Logging On Without the Systems Administrator's Environmental Control Facility

To access ControlManager in CICS, CMS, TSO, and TSO/ISPF environments, users need to key in a Logon Identifier and password on a special Logon panel. However, in these environments, users need to enter the LOGON command in full:

- Batch
- ROSCOE (selectable unit DMR-TP6)
- ICCF (selectable unit DMR-TPI0)
- Access Call (selectable unit DMR-UI1).

The LOGON command includes the user's Logon Identifier and password. In IMS/DC environments LOGON is handled by the Autolog procedure described in the *ASG-Manager Products Systems Administrator's Manual*.

A user is unable to log on unless the Logon Identifier that is given identifies a Logon Profile on the MP-AID. The Logon Profile must specify the password that is permitted with the Logon Identifier and may also indicate whether the Logon Profile is shared or exclusive and whether the user logging on is permitted to act as a Designated Controller. Full details of the clauses in a Logon Profile that are executed if the Environmental Control Facility is not installed, are given in the *ASG-Manager Products Systems Administrator's Manual*.

A Logon Profile may contain a series of commands to set up the environment in which the user will be working, such as the setting of PF keys. However, if the Environmental Control Facility is not installed, the commands in the Logon Profile itself are not executed. Instead the Systems Administrator can set up a Global Profile known as GLOBAL0000 containing the commands for tailoring the environment. Only one such profile can be set up, so only one operating environment can be established for all the users of the system. Full details of the procedure for setting up the profile GLOBAL0000 are contained in the *ASG-Manager Products Systems Administrator's Manual*.

Logging On With the Environmental Control Facility

If the Environmental Control Facility is installed, any permitted commands in the Logon Profile invoked by the user's Logon Identifier are executed. So by including commands in the Logon Profile you can tailor the environment to the particular requirements of the user or users logging on with that Logon Identifier. Possible uses of this capability would be to:

- Tailor the environment by executing SET commands
- Provide an additional level of security by preventing certain users from using certain commands and statuses
- Provide different levels of online help to suit the requirements of different users [available with the ASG-ControlManager User Defined InfoSystem facility (selectable unit CMR-UD10)]
- Select which of the alternative output formats available with the ASG-DataManager User Defined Output facility (selectable unit DMRUD15) is to be used for output from REPORT and BULK REPORT commands
- Route a user immediately into Panel Driven Processing as supplied by ASG or into a user-defined Panel Driven Processing set, without entering normal Dictionary Processing Mode first (see the *ASG-Manager Products User Defined InfoSystem*.)

ControlManager used in conjunction with Manager Products gives you unparalleled opportunities for tailoring the dictionary environment. The Environmental Control Facility allows you to tailor the user environment before the user enters ControlManager, giving enhanced security, usage control, and user-friendliness.

Global Profiles

If it exists, the Global Profile GLOBAL0000 is automatically invoked when a user logs on, whether or not the Environmental Control Facility is installed. A Logon Profile can also invoke one or more other Global Profiles. Commands common to two or more Logon Profiles can be included in a Global Profile rather than being repeated in each Logon Profile. Global Profiles would typically be used to establish a common environment for a group of users such as the members of a department.

A Global Profile may be invoked:

- As a COMMON-GLOBAL, in which case the Global Profile is executed whatever the environment in which the user logs on
- As an ONLINE-GLOBAL, in which case the commands in the profile are only executed when the user logs on in online mode; that is, in CICS, CMS, TSO, TSO/ISPF, ROSCOE, ICCF, and IMS/DC environments
- As a BATCH-GLOBAL, in which case the commands in the profile are only executed when the user logs on in batch mode.

Note that whether a Global Profile acts as a COMMON-GLOBAL, BATCH-GLOBAL, or ONLINE-GLOBAL depends on how it is invoked in the Logon Profile (see "[Setting Up Logon and Global Profiles](#)" on page 8). Any number of Global Profiles can be created, but any given Logon Profile can only invoke three Global Profiles, one of each type listed above, in addition to GLOBAL0000.

If the LOGON command is contained in an access call from a User Interface program [available with the ASG-DataManager User Interface Facility (selectable unit DMR-UI1)], whether the ONLINE-GLOBAL or BATCH-GLOBAL Profile is invoked depends on whether the User Interface program is in online or batch mode. This is under user control. For further information see the *ASG-Manager Products User Interface*.

These are some examples of how you might wish to use Global Profiles:

- To restrict a project team to one status
- To route the user to the correct dictionary in a multiple dictionary environment
- To limit the commands available to certain groups of users
- To establish interactive defaults such as PF key settings
- To limit the number of input/output operations that can occur as the result of the execution of a single command
- To disable certain commands such as BULK
- To establish default Report Formats
- To switch on Name Concatenation.

User Defined Profiles

If the Extended Interactive Facility is installed as well as the Environmental Control Facility, a user can set up a USER-MEMBER in the MP-AID containing a series of commands. If the name of the member is the same as the name of the user's Logon Identifier, the commands will be automatically executed when the user subsequently logs on. This type of member is known as a User Defined Profile.

The procedure for setting up a USER-MEMBER is described in the *ASG-ControlManager User's Guide*. User Defined Profiles created by a user may only contain commands that the user is normally allowed to give.

Sequence of Execution of Profiles

The different types of profile are processed in this order:

- Global Profile GLOBAL0000
- The Global Profile invoked as COMMON-GLOBAL by the user's Logon Profile
- The Global Profile invoked as ONLINE-GLOBAL or BATCH-GLOBAL by the user's Logon Profile
- The commands contained in the Logon Profile
- The User Defined Profile.

For example if the Logon Profile contains the command

```
SET PF12 HELP
```

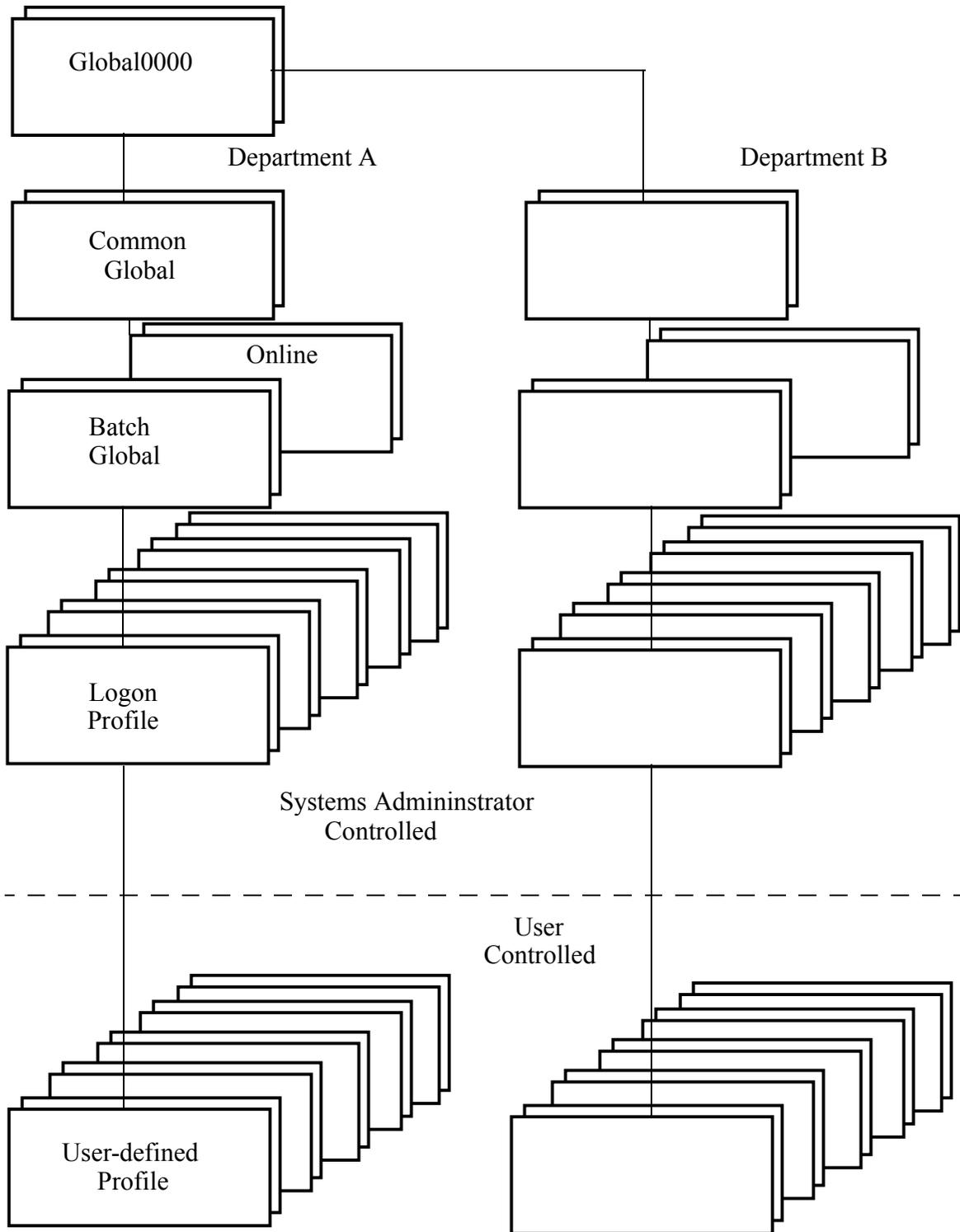
and the User Defined Profile the command

```
SET PFI2 RECALL
```

PF key 12 will be set to RECALL when the user enters ControlManager.

An illustration of the order of processing is given in [Figure 1.](#)

Figure 1.. Sequence of Execution of Profiles



Creation of Profiles

Setting Up Logon and Global Profiles

Logon and Global Profiles are created as dictionary members on the Manager Products Administration Dictionary and then transferred to the MP-AID using the CONSTRUCT command. If the ASG-DataManager Status facility is installed and other users have access to the Manager Products Administration Dictionary (for example to develop members for User Defined Syntax or User Defined InfoSystem), then for security reasons the Profile members should be protected either by using the ASG-DataManager Audit and Security facility or through security by status as described in [Chapter 4, "Access Control to Corporate Executive Routines," on page 21](#).

A LOGON-PROFILE or GLOBAL-PROFILE member is created in the same way as any other dictionary member. The full syntax of these member types is set out in ["Syntax of LOGON-PROFILES" on page 9](#) and ["Syntax of GLOBAL-PROFILES" on page 12](#). The members must encode successfully before they can be constructed onto the MP-AID.

This is the syntax of the CONSTRUCT command for transferring a Logon or Global Profile to the MP-AID:

```
CONSTRUCT PROFILE FROM profile-name [REPLACE];
```

where *profile-name* must be the name of a LOGON-PROFILE or GLOBAL-PROFILE member of the current dictionary. The REPLACE keyword is required if the profile already exists in the MP-AID in which case the new definition replaces the old.

Alternatively you can construct all changes to the set of profiles in the Manager Products Administration dictionary which were encoded since the corresponding MP-AID profiles were last updated by entering:

```
CONSTRUCT PROFILE CHANGES-ONLY;
```

Note that if a profile has been deleted from the dictionary, this command does not delete the corresponding member from the MP-AID. To delete all profiles from the MP-AID and to construct all the profiles on the Manager Products Administration Dictionary, enter:

```
CONSTRUCT PROFILES ALL;
```

Syntax of LOGON-PROFILES

This is the syntax of a LOGON-PROFILE dictionary member type:

```

LOGON-PROFILE
PASSWORD password
[IDENTITY identity-name]
[LOGON { SHARED      } ]
        { EXCLUSIVE  } ]
[CONTROLLER]
[common-clauses]
-----
[ { { EXECUTIVE-LEVEL } n          } ]
  { { EXC-LEVEL      }           }
  { { EXECUTIVE-GROUP } n [, n] ... }
  { { EXC-GROUP      }           }
[ONLINE-GLOBAL global-profile-name]
[BATCH-GLOBAL global-profile-name]
[COMMON-GLOBAL global-profile-name]
[CONTENTS
command...]
{ ; }
{ . }

```

where:

password is a string of not more than eight characters with or without delimiters. The string must be delimited unless it contains only uppercase letters, numbers, or hyphens and at least one character is a letter.

identity-name is a string of not more than ten characters with or without delimiters (see remark 4 on page 10). The string must be delimited unless it contains only uppercase letters, numbers, or hyphens and at least one character is a letter.

common-clauses are any of the following clauses, described in the *ASG-Manager Products Dictionary/Repository User's Guide*, in any order:

<u>A</u> CCESS-AUTHORITY	<u>F</u> REQUENCY
<u>A</u> DMINISTRATIVE-DATA	<u>N</u> OTE
<u>A</u> LIAS	<u>O</u> BSOLETE-DATE
<u>C</u> ATALOGUE	<u>Q</u> UERY
<u>C</u> OMMENT	<u>S</u> ECURITY-CLASSIFICATION
<u>D</u> ESCRPTION	<u>S</u> EE
<u>E</u> FFECTIVE-DATE	

n must be in the range 0 to 255.

global-profile-name is inserted in the dictionary as a dummy GLOBAL-PROFILE if it does not already exist. If the name refers to a dictionary member that is not a GLOBAL-PROFILE, an encoding error occurs.

command. . . must be a sequence of one or more commands permitted in profiles (see ["Commands that can be Included in Logon and Global Profiles" on page 13](#)). Each command must be on a separate line and terminated by a terminator. The commands must be entered in uppercase letters.

Remarks

1. Those clauses below the dotted line are effective only if the Environmental Control Facility is installed. If the facility is not installed, they may be included in the definition of a LOGON-PROFILE, but in that case they have no effect.
2. The clauses and the CONTROLLER keyword, if present, can be in any order, except that the CONTENTS clause must come last. On encoding, syntax checking stops when the CONTENTS keyword is detected.
3. The Logon Profile is invoked when a user logs on with a Logon Identifier which is the same as the name of the profile in the MP-AID. The password given when the user logs on must be the same as the password specified in the PASSWORD clause.
4. The names of members of the MP-AID are limited to ten characters whereas the names of dictionary members can be a maximum of 32 characters. If the name of the Logon Profile in the dictionary is longer than ten characters, you must specify an IDENTITY clause before the member is constructed to the MP-AID. The member is given the identity-name when it is stored in the MP-AID. When users log on, they must use the identity-name as their Logon Identifier to invoke the Logon Profile. If no IDENTITY clause is specified and the name of the dictionary member is not longer than ten characters, the profile is stored in the MP-AID with its dictionary name.
5. If LOGON SHARED is specified, two or more users can be logged on at the same time with the Logon Identifier which invokes the profile. If LOGON EXCLUSIVE is specified, only one user can be logged on at any one time with that Logon Identifier. If the LOGON clause is omitted, LOGON SHARED is assumed. The LOGON clause is only relevant in CMS, CICS, and TSO environments.
6. CONTROLLER is only relevant if the ASG-DataManager User Defined Syntax facility is installed and indicates that the person logging on with the Logon Profile is a Designated Controller. For further details see the *ASG-Manager Products Systems Administrator's Manual*.
7. The effect of the EXECUTIVE-LEVEL and EXECUTIVE-GROUP clauses permit access to User Defined Commands for which an Access Control Level has been specified. For full details see [Chapter 4, "Access Control to Corporate Executive Routines," on page 21](#).
8. ONLINE-GLOBAL causes the named Global Profile to be invoked only when the user logs on in online mode; that is, in CICS, CMS, TSO, TSO/ISPF, ROSCOE, ICCF, and IMS/DC environments.

9. BATCH-GLOBAL causes the named Global Profile to be invoked only when the user logs on in batch mode.
10. COMMON-GLOBAL causes the named Global Profile to be invoked whatever the environment in which the user logs on.
11. The CONTENTS clause contains commands which are executed when the profile is invoked.

Example

```
LOGON-PROFILE
DESCR 'LOGON PROFILE FOR DEPARTMENT A USER'
PASSWORD USA
LOGON EXCLUSIVE
EXEC-GROUP 10,20
ONLINE-GLOBAL OGLOB-AC
BATCH-GLOBAL BGLOB-A
COMMON-GLOBAL CGLOB-A
CONTENTS
STATUS TEST;
SET PRIMARY-COMMAND STATUS OFF;
SET EXCP-LIMIT 100;
SET USER-BLOCKS 100;
SET BUFFER 10;
SET OUTPUT-LINE-LIMIT 500;
SET AMBIGUITY-ASSUMPTION ON;
SET PERFORM-CHARACTER #;
;
```

Syntax of GLOBAL-PROFILES

This is the syntax of a GLOBAL-PROFILE dictionary member type:

```
GLOBAL-PROFILE
[common-clauses]
CONTENTS
command. . . { ; }
                { . }
```

where:

common-clauses are any of the following clauses described in the *ASG-Manager Products Dictionary/Repository User's Guide* in any order:

<u>ACCESS-AUTHORITY</u>	<u>FREQUENCY</u>
<u>ADMINISTRATIVE-DATA</u>	<u>NOTE</u>
<u>ALIAS</u>	<u>OBSOLETE-DATE</u>
<u>CATALOGUE</u>	<u>QUERY</u>
<u>COMMENT</u>	<u>SECURITY-CLASSIFICATION</u>
<u>DESCRIPTION</u>	<u>SEE</u>
<u>EFFECTIVE-DATE</u>	

command. . . is a sequence of one or more of the commands permitted in profiles (see ["Commands that can be Included in Logon and Global Profiles" on page 13](#)). Each command must be on a separate line and terminated by a terminator. The commands must be entered in uppercase letters.

Examples

```
GLOBAL-PROFILE
DESCRIPTION 'Example of a COMMON-GLOBAL PROFILE'
CONTENTS
SWITCH OFF MESSAGES NUMBERS 8100, 107;
SET UPPER-CASE ON;
SET NUMBERS ON;
SET TAB-CHARACTER [;
CORPORATE-EXECUTIVE STDPF;
;
```

```
GLOBAL-PROFILE
DESCRIPTION 'Example of an ONLINE-GLOBAL PROFILE'
CONTENTS
SET PRIMARY-COMMAND BULK OFF;
SET ALERT ON;
SET PFO7 CORPORATE-EXECUTIVE LIH;
SET PFO8 CORPORATE-EXECUTIVE LIST;
DICTIONARY DICT UPDATE;
AUTHORITY 'MPR';
SWITCH ON NAME SEL NAME, ALIAS COB;
;
```

```
GLOBAL-PROFILE
DESCRIPTION 'Example of a BATCH GLOBAL PROFILE'
CONTENTS
SET FORMAT FOR REPORT OF ITEMS AS PSR-ITEM;
SET FORMAT FOR REPORT OF GROUPS AS PSR-GROUP;
SET FORMAT FOR REPORT OF CONVENTIONAL-FILES AS PSR-FILE;
SET FORMAT FOR REPORT OF MODULES AS PSR-MODULE;
SET FORMAT FOR REPORT OF PROGRAMS AS PSR-PROGRAM;
SET FORMAT FOR REPORT OF SYSTEMS AS PSR-SYSTEM;
;
```

Commands that can be Included in Logon and Global Profiles

Any Manager Products command or executive created using the ASG-ControlManager User Defined Commands facility can be included in Logon and Global Profiles. However when a user logs on, only the following commands are executed:

- All commands that can be given by any user of the system except LOGON and line Commands
- If the user is logged on with the appropriate Dictionary and Authority, Dictionary Controller commands
- All SET commands that can otherwise only be given by the Systems Administrator
- Any primary command that has been set off using the User Defined Commands facility.

The SET STRING-DELIMITER command may be given only in the Global Profile GLOBAL0000.

In addition to the commands given above, a profile can also call Executives created using the ASG-ControlManager User Defined Commands facility.

Logon Exits

Introduction to the Logon Exit

The ControlManager nucleus (selectable unit CMR-CM01) allows the user to log on via the LOGON command or Autolog.

In CMS, TSO, or Siemens Timesharing Interface, a formatted Logon panel is displayed and must be completed by the user in order to log on successfully to Manager Products. In TSO/ISPF, logon is either via the Logon panel or via Autolog.

If the Environmental Control facility (selectable unit CMR-SC05) is installed, a logon exit (MPLX1) is invoked which can, if suitably amended, be used to provide additional logon processing such as further validation. In full-screen interactive environments, logon exits may also be used to automate the logon process, for example by bypassing the Logon panel. The logon exit is applicable to all environments; however, see ["Calling the Logon Exit in Non Full-screen Environments" on page 15](#).

The Logon Exit Source Module (MPLX1)

The logon exit source module is supplied as a member (MPLX1) of the Manager Products source library in the dataset MP.SOURCE on the installation tape. If you wish to amend the logon procedure being used in your installation, then MPLX1 must be updated, assembled, and link-edited into the Manager Products program library. See the appropriate Manager Products installation manual for details of how to achieve this.

In full-screen interactive environments, two calls can be made to MPLX1: before the Logon panel is displayed, and after it has been completed by the user. The second call is not made if the Logon panel is bypassed. The ASG-supplied version of MPLX1 is essentially a dummy version and when called from ControlManager at logon does not vary the standard logon procedure. The Logon panel is displayed and the logon information entered by the user is accepted for subsequent processing by ControlManager.

In non full-screen interactive environments, only one call is made to MPLX1: when a syntactically valid LOGON command is encountered as the first command of the input stream. In non full-screen interactive environments, only one call is made to MPLX1: after a LOGON command has been received. MPLX1 is not called when logon is via Autolog.

There are several alternative logon procedures which you can make available by modifying MPLX1. For example, in full-screen interactive environments you can amend MPLX1 to provide the logon identifier and password to ControlManager; causing the Logon panel display to be bypassed and thus automate the logon process.

Calling the Logon Exit

This section describes how the logon exit MPLXI is called in both full-screen and non-full-screen environments.

Calling the Logon Exit in Full-screen Interactive Environments

In full-screen interactive environments, the logon exit MPLXI is initially called from ControlManager when a user attempts to access Manager Products. This call is made prior to the display of the Logon panel. The return code set by the logon exit will cause one of these to occur:

- The Logon panel is displayed and users must enter their logon identifier and password to log on.
- The Logon panel is bypassed and the user logs on automatically (the logon information being provided by the logon exit).
- The Manager Products run is terminated.

A second call to the logon exit is made in full-screen interactive environments only if the user inputs logon information via the Logon panel. The return code set by this second call to the logon exit will cause one of these events to occur:

- The logon information is accepted and the ControlManager logon processor is invoked.
- The logon information is not accepted and the Logon panel is redisplayed; ControlManager waits for further input from the user.
- The Manager Products run is terminated.

The second call to the logon exit is not made if the Logon panel is bypassed.

Calling the Logon Exit in Non Full-screen Environments

In non full-screen environments, only one call is made to the logon exit MPLXI. This call is made when a syntactically correct LOGON command is encountered as the first command of the input stream. The logon exit is not called if logon is via Autolog.

User exit code must be written to take account of the execution environment. Do not attempt to execute code written for a CICS environment when running in batch. If you do not want the logon exit to run in batch—only in full-screen interactive environments—then the LOGEXIT keyword of the DCUST tailoring macro can be used to suppress batch execution.

To suppress batch execution, specify:

```
LOGEXIT=ONLINE
```

The Manager Products default is LOGEXIT=ALL.

The Logon Exit Interface: Fields Set by ControlManager

At installation, may choose a non-standard logon procedure for users at your installation by amending, assembling, and link-editing module MPLXI. The procedure can be changed at any time by reinstalling MPLXI.

The parameter block LX1 is passed as a parameter by ControlManager when calling the logon exit.

On entry to the logon exit these fields are always set by ControlManager:

LX1FUNC	Function code to the Logon Exit
LX1PREL (value 1)	Is set when the exit is called prior to the display of the Logon panel. Only applicable in full-screen environments.
LX1PSTL (value 2)	Is set in full-screen interactive environments when the exit is called after the user has entered logon information via the Logon panel. In non full-screen environments, this value is set when the exit is called on receipt of a LOGON command.
LX1MESS	Error message text
	ASG-ControlManager provides a default text of: <code>MANAGER PRODUCTS LOGON FAILURE</code>
LX1ONLE	Current online environment
LX1CICS (value 0)	Is set for execution under CICS.
LX1TSO (value 1)	Is set for execution under TSO.
LX1CMS (value 2)	Is set for execution under CMS.
LX1SIE (value 3)	Is set for execution under Siemens Timesharing Interface.
LX1BAT (value 4)	Is set for execution in non full-screen environments.

If LX1PSTL is set in LX1FUNC, these two fields are also set:

LX1LOGO	User provided logon identifier (padded with spaces if necessary).
LX1PASS	User provided logon password (padded with spaces if necessary).

The Logon Exit Interface - Return Codes

When LX1FUNC is set to LX1PREL (available in full-screen interactive environments only) the exit must provide a return code set in LX1RC. Depending on the return code, certain other fields may need to be set. These are the valid return codes:

LX1DISPL (value 0)	To display the normal Logon panel.
LX1BLPL (value 1)	To bypass the display of the Logon panel. The exit must provide the ControlManager logon identifier set in LX1LOGO. (If necessary, the field must be padded with spaces.) The ControlManager logon processor will omit password validation.

- LX1BLPLP** (value 2) To bypass the display of the Logon panel. The exit must provide the ControlManager logon identifier set in LX1LOGO and the password set in LX1PASS. (If necessary, both fields must be padded with spaces.)
- LX1TERM** (value 5) To deny access for that user and to terminate the session. Message 9998 is output with a severity level of C, using the text as defined in LX1MESS.

When LX1FUNC is set to LX1PSTL (available in all environments) the exit must provide a return code set in LX1RC. Valid return codes are as follows; if any other value is returned, the run will continue as if LX1ACCPY (value 3) had been returned.

- LX1BLPL** (value 1) To accept the LOGON command. The logon identification can be amended by placing the required value in LX1LOGO. Any user-provided message text, defined in LX1MESS, is output as message 9998 with a severity level of 1. The LOGON processor is then invoked but no password check is performed. Available only in non-full-screen environments.
- LX1ACCPY** (value 3) To give access for that user (with a correct logon identifier and password). The logon identifier and password set by ControlManager in LX1LOGO and LX1PASS may be overridden by the exit if required. Any user-provided message text, defined in LX1MESS, is output as message 9998 with a severity level of 1 (non-full-screen environments only). The standard LOGON processor is then invoked.
- LX1FAIL** (value 4) To deny access for that user and to redisplay the Logon panel. Message 9998 is output with a severity level of S, using the text as defined in LX1MESS. Available only in full-screen interactive environments.
- LX1TERM** (value 5) To deny access for that user and to terminate the session. Message 9998 is output with a severity level of C, using the text as defined in LX1MESS.

In the above, you can change the default text by setting it up in LX1MESS. The text can be up to 50 characters long, and must be right-padded with spaces.

The LX1 Parameter Block

This table describes the fields and their usage of the LX1 parameter block. The abbreviation CMR represents ControlManager.

Field Name	Field Value	A [†]	B [‡]	C ^{††}	Value	Remarks
LX1FUNC	Character	1	0	1	LX1PREL(1) LX1PSTL(2)	Set by CMR
LX1RC	Character	1	1	1	LX1DISPL(0) LX1BLPL(1) LX1BLPLP(2) LX1ACCP(3) LX1FAIL(4) LX1TERM(5)	Must be set by MPLX1
LX1RES1	Character	6	2	2	None	Reserved for CMR use only
LX1LOGO	Character	10	8	8	CMR Logon Identifier	Can be set by CMR or MPLX1
LX1RES2	Character	10	18	12	None	Reserved for CMR use only
LX1PASS	Character	8	28	1C	CMR Logon Password	Can be set by CMR or MPLX1
LX1RES3	Character	12	36	24	None	Reserved for CMR use only
LX1MESS	Character	50	48	30	Any required text	Initially set by CMR. Can be modified by MPLX1.
LX1ONLE	Character	1	98	62	LX1CICS(0) LX1TSO(1) LX1CMS(2) LX1SIE(3) LX1BAT(4)	Set by CMR
LX1RES4	Binary	1	99	63	None	Reserved for CMR use only
LX1SAVE	Address	4	100	64	None	Address of CMR SAVE Area
LX1WORK	Any	72	104	68	As required by MPLX1	18 full words available for use by MPLX1 at any time
LX1EXITA	Address	4	176	B0	None	MPLX1 address

† Field length in bytes
‡ Decimal offset
†† Hexadecimal offset

3

User Space Allocation on the MP-AID

If the Extended Interactive Facility is installed, users can set up their own USER-MEMBERS on the MP-AID. For full details of the procedure for setting up USER-MEMBERS, see the *ASG-ControlManager User's Guide*. By default, there is no limit on the amount of MP-AID storage that can be occupied by a user's USER-MEMBERS. However, if the Environmental Control Facility is also installed, you can limit the amount of storage that can be occupied by the USER-MEMBERS owned by a logon identifier. Just include this command in the global or logon profile executed by that logon identifier:

```
SET USER-BLOCKS nn;
```

where *nn* is an integer a maximum of 18 digits long specifying the limit on the number of blocks. If the limit imposed is less than the number of blocks already occupied by the USER-MEMBERS owned by that Logon Identifier, the existing members are unaffected, but the user will not be able to create any new USER-MEMBERS until sufficient members have been deleted to get below the set limit.

Remarks

1. The limit imposed by the command applies only to storage occupied by USER-MEMBERS. It does not also limit the storage that can be occupied by TRANSIENTS.
2. The limit applies to all USER-MEMBERS owned by the logon identifier which invokes the profile containing the command. It is not a limit on the total MP-AID storage that can be occupied by USER-MEMBERS. If the logon identifier is shared by several users, the limit applies to all the USER-MEMBERS created by any of the users logging on with that logon identifier.
3. The limit applies to the run in which the SET command is executed. The effect of the command is cancelled by normal termination of the run.

Users other than the Systems Administrators can find out the limit on the number of blocks that can be occupied by USER-MEMBERS owned by their Logon Identifier by entering the command:

```
QUERY USER-BLOCKS ;
```

The command also displays the number of blocks that have been actually used. If the systems administrator gives the QUERY USER-BLOCKS command, all the logon identifiers available on the system are listed, together with the amount of storage occupied by USER-MEMBERS owned by each of the logon identifiers.

4

Access Control to Corporate Executive Routines

If the User Defined Commands facility is installed you can set up Corporate Executive Routines—that is, MP-AID EXECUTIVE members containing a series of commands that are executed by entering the name of the member (see the publication *ASG-Manager Products User Defined Syntax*). If the Environmental Control Facility is installed, you can control who may execute the member by a system of Access Control Levels. The system works as follows:

- Each EXECUTIVE member may contain an EXECUTIVE-LEVEL clause. The clause must contain an integer in the range 0 through 255 which acts as the Access Control Level for that EXECUTIVE.
- Each LOGON-PROFILE may contain an EXECUTIVE-LEVEL or an EXECUTIVE-GROUP clause. The EXECUTIVE-LEVEL clause must contain an integer in the range 0 through 255. Users logging on with that profile are able to execute any EXECUTIVE member whose Access Control Level is equal to or less than the level specified in the profile. The EXECUTIVE-GROUP clause must contain one or more integers in the range 0 through 255. Users logging on with that profile are able to execute EXECUTIVE members whose Access Control Level is the same as any of the numbers specified in the profile. If the EXECUTIVE-LEVEL and EXECUTIVE-GROUP clauses are omitted from a profile, users logging on with that profile are not able to access any EXECUTIVE member for which an Access Control Level is specified.

Example

[Figure 2 on page 22](#) illustrates the Access Control of three users USER1, USER2, and USER3 to Corporate Executive Routines.

The logon profile of USER1 contains this clause:

```
EXECUTIVE-LEVEL 10
```

The logon profile of USER2 contains this clause:

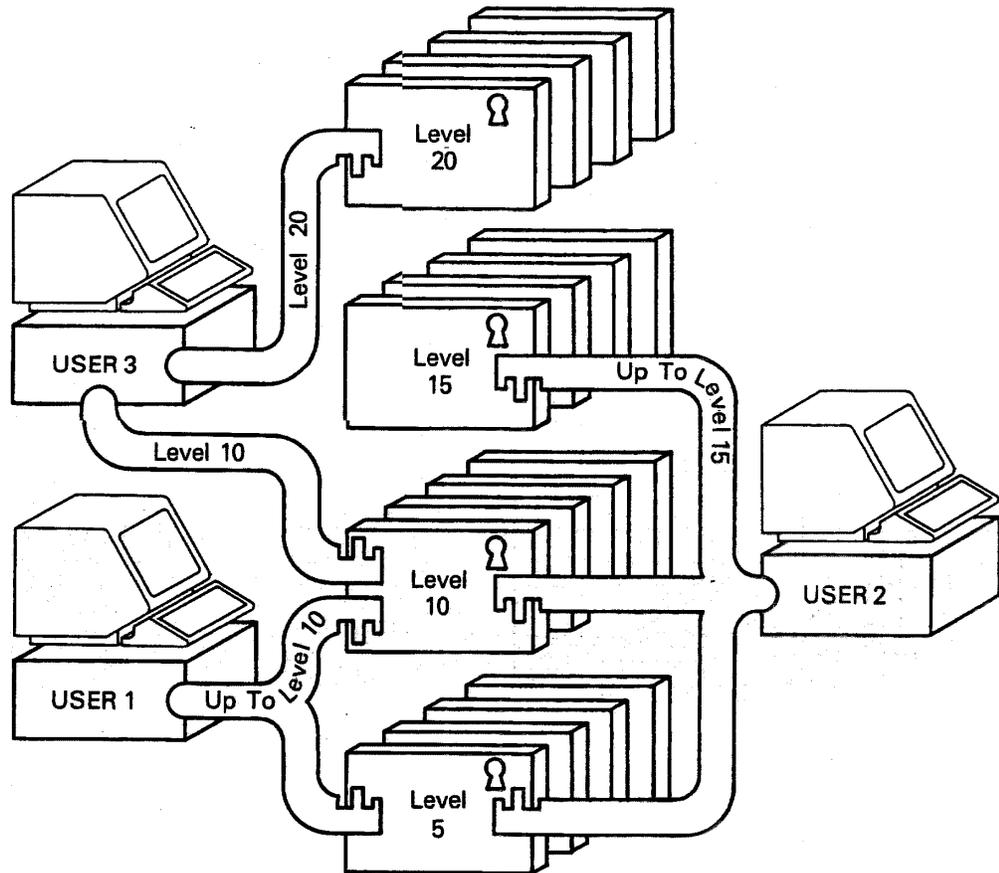
```
EXECUTIVE-LEVEL 15
```

The logon profile of USER3 contains this clause:

```
EXECUTIVE-GROUP 10,20
```

Figure 2 illustrates the access that is available for each of these users to EXECUTIVES whose Access Control Levels are 5, 10, 15, and 20.

Figure 2. Access Control to Corporate Executive Routines



Example - Security by Status

This example shows how you can provide security for the complete contents of a dictionary status if the ASG-DataManager Status Facility is installed. This capability is available if the User Defined Commands Facility and the Environmental Control Facility have both been installed.

The dictionary in the example contains three statuses: TEST, TEST2, and PRODUCTION. There are three users of the system: USER1, USER2, and USER3.

These are the different levels of security you wish to provide for the statuses:

Status	USER1	USER2	USER3
TEST	UPDATE	NO ACCESS	UPDATE
TEST2	UPDATE	UPDATE	READ-ONLY
PRODUCTION	UPDATE	READ-ONLY	NO ACCESS

For USER1, no additional security needs to be provided. For USER2 and USER3, the logon profiles that are invoked when they log on set the STATUS command off (see [Figure 3](#)).

Figure 3. Logon Profile for USER3

```
LOGON-PROFILE
DESCR 'LOGON PROFILE FOR DEPARTMENT A USER'
PASSWORD USA
LOGON EXCLUSIVE
EXEC-GROUP 10,20
ONLINE-GLOBAL OGLOB-AC
BATCH-GLOBAL BGLOB-A
COMMON-GLOBAL CGLOB-A
CONTENTS
STATUS 'TEST';
SET PRIMARY-COMMAND STATUS OFF;
SET EXCP-LIMIT 100;
SET USER-BLOCKS 100;
SET BUFFER 10;
SET OUTPUT-LINE-LIMIT 500;
SET AMBIGUITY-ASSUMPTION ON;
SET PERFORM-CHARACTER #;
SWITCH ON MESSAGES NUMBERS 95,107,8100;
```

To change statuses these users need to enter one of the Corporate Executive Routines set out in the table below.

Executive Name	Function	Access Control Level
TEST-U [†]	Enters status TEST in Update mode	20
TEST-R	Enters status TEST in Read-only mode	25
TEST2-U	Enters status TEST2 in Update mode	15
TEST2-R [‡]	Enters status TEST2 in Read-only mode	10
PROD-U	Enters status PRODUCTION in Update mode	25
PROD-R	Enters status PRODUCTION in Read-only mode	15

[†] Executive routine illustrated in [Figure 4 on page 24](#).

[‡] Executive routine illustrated in [Figure 5 on page 24](#).

By setting the Access Control Levels of the routines and the EXECUTIVE-LEVELs of the logon profiles appropriately, you can control which routines the users are able to execute (see [Figure 2 on page 22](#)). In this way you can make sure that users only access the contents of each status in the permitted mode.

Figure 4. Executive Routine for TEST-U

```
EXECUTIVE-ROUTINE
DESCRIPTION 'Enters Status TEST in Update Mode' EXEC-LEVEL 20
CONTENTS
SWITCH OFF MESSAGES NUMBERS 107,8100;
SET PRIMARY-COMMAND ADD ON;
SET PRIMARY-COMMAND ALTER ON;
SET PRIMARY-COMMAND COPY ON;
SET PRIMARY-COMMAND ENCODE ON;
SET PRIMARY-COMMAND FILE ON;
SET PRIMARY-COMMAND INSERT ON;
SET PRIMARY-COMMAND MODIFY ON;
SET PRIMARY-COMMAND REMOVE ON;
SET PRIMARY-COMMAND RENAME ON;
SET PRIMARY-COMMAND REPLACE ON;
SET PRIMARY-COMMAND SFILE ON;
SWITCH ON MESSAGES NUMBERS 107,8100;
STATUS 'TEST';
;
```

Figure 5. Executive Routine for TEST2-R

```
EXECUTIVE-ROUTINE
DESCRIPTION 'Enters Status TEST2 in Read-only mode' EXEC-LEVEL
10
CONTENTS
SWITCH OFF MESSAGES NUMSERS 107,8100;
SET PRIMARY-COMMAND ADD OFF;
SET PRIMARY-COMMAND ALTER OFF;
SET PRIMARY-COMMAND COPY OFF;
SET PRIMARY-COMMAND ENCODE OFF;
SET PRIMARY-COMMAND FILE OFF;
SET PRIMARY-COMMAND INSERT OFF;
SET PRIMARY-COMMAND MODIFY OFF;
SET PRIMARY-COMMAND REMOVE OFF;
SET PRIMARY-COMMAND RENAME OFF;
SET PRIMARY-COMMAND REPLACE OFF;
SET PRIMARY-COMMAND SFILE OFF;
SWITCH ON MESSAGES NUMBERS 107,8100;
STATUS 'TEST2';
;
```

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