



# **Program Directory for IBM Migration Utility for z/OS**

V03.01.00

Program Number 5697-N44

FMIDs HMGU310

for Use with  
z/OS

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GI10-3374-00

**Note!**

Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 21.

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## 1.0 Introduction

This Program Directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of IBM Migration Utility for z/OS. This publication refers to IBM Migration Utility for z/OS as Migration Utility.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic and optional program materials and documentation for Migration Utility.
- 3.0, “Program Support” on page 6 describes the IBM support available for Migration Utility.
- 4.0, “Program and Service Level Information” on page 8 lists the APARs (program level) and PTFs (service level) incorporated into Migration Utility.
- 5.0, “Installation Requirements and Considerations” on page 9 identifies the resources and considerations required for installing and using Migration Utility.
- 6.0, “Installation Instructions” on page 15 provides detailed installation instructions for Migration Utility. It also describes the procedures for activating the functions of Migration Utility, or refers to appropriate publications.

Before installing Migration Utility, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that were supplied with this program in softcopy form as well as this Program Directory and then keep them for future reference. Section 3.2, “Preventive Service Planning” on page 6 tells you how to find any updates to the information and procedures in this Program Directory.

Migration Utility is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The Program Directory is provided in softcopy form on the CBPDO tape which is identical to the hardcopy form provided with your order. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for Migration Utility are included on the CBPDO tape.

Do not use this Program Directory if you are installing Migration Utility with a SystemPac or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the Program Directory as required.

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### 1.1 Migration Utility Description

The Migration Utility for z/OS and OS/390 enables customers to create reports using the language of CA-Easytrieve Plus from Computer Associates without the need for CA-Easytrieve Plus to be installed, by creating IBM COBOL applications in place of the Easytrieve run-time interpreter.

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## 1.2 Migration Utility FMIDs

Migration Utility consists of the following FMIDs:

HMGU310

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## 2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for Migration Utility is 5697-N44 and its feature number is 5802.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature numbers, and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature numbers, and are not required for the product to function.

The program announcement material describes the features supported by Migration Utility. Ask your IBM representative for this information if you have not already received a copy.

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### 2.1 Basic Machine-Readable Material

The distribution medium for this program is magnetic tape or downloadable files. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 15 for more information about how to install the program.

Information about the physical tape for the Basic Machine-Readable Materials for Migration Utility can be found in the *CBPDO Memo To Users Extension*.

#### Non-CBPDO Customers

If you receive the product tape and program directory outside the CBPDO process, refer to 6.1.3, "Sample Jobs" on page 15 for details (media volser, file name, tape file number) and how to proceed.

You can refer to the *CBPDO Memo To Users Extension* to see where the files reside on the tape.

#### Notes:

1. The data set attributes in this table should be used in the JCL of jobs reading the data sets, but since the data sets are in IEBCOPY unloaded format, their actual attributes may be different.
2. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

Figure 1 (Page 1 of 2). Program File Content

Name	ORG	RECFM	LEN	BLK SIZE
SMPMCS	SEQ	FB	80	6160
IBM.HMGU310.F1	PDS	FB	80	27920

Figure 1 (Page 2 of 2). Program File Content

<b>Name</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>BLK SIZE</b>
IBM.HMGU310.F2	PDS	FB	80	27920
IBM.HMGU310.F3	PDS	U	0	6144
IBM.HMGU310.F4	PDS	FB	80	27920
IBM.HMGU310.F5	PDS	FB	80	27920
IBM.HMGU310.F6	PDS	FB	80	27920
IBM.HMGU310.F7	PDS	FB	80	27920
IBM.HMGU310.F8	PDS	FB	80	27920
IBM.HMGU310.F9	PDS	FB	256	27998

## 2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for Migration Utility.

## 2.3 Program Publications

The following sections identify the basic and optional publications for Migration Utility.

### 2.3.1 Basic Program Publications

Figure 2 identifies the basic unlicensed program publications for Migration Utility. One copy of each of these publications is included when you order the basic materials for Migration Utility. For additional copies, contact your IBM representative.

Figure 2. Basic Material: Unlicensed Publications

<b>Publication Title</b>	<b>Form Number</b>
Migration Utility for z/OS License Information	GI10-3373

Figure 3 identifies the basic unlicensed or licensed publications that are not available in hardcopy form, but are available through the internet or other media for Migration Utility.



Figure 3. Basic Material: Other Unlicensed or Licensed Publications

Publication Title	Form Number	How Available
Migration Utility for z/OS User's Guide and Reference	SC31-6935	<a href="http://www.ibm.com/software/awdtools/migration/">http://www.ibm.com/software/awdtools/migration/</a>

Publications are available in PDF and BookManager formats on CD-ROM on the next release of software product libraries:

- *z/OS Software Products Collection, SK3T-4270*

### 2.3.2 Optional Program Publications

No optional publications are provided for Migration Utility.

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## 2.4 Program Source Materials

No program source materials or viewable program listings are provided for Migration Utility.

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## 2.5 Publications Useful During Installation

The publications listed in Figure 4 may be useful during the installation of Migration Utility. To order copies, contact your IBM representative or visit the IBM Publications Center on the World Wide Web at: <http://www.ibm.com/shop/publications/order>

Figure 4. Publications Useful During Installation

Publication Title	Form Number
<i>IBM SMP/E for z/OS and OS/390 User's Guide</i>	SA22-7773
<i>IBM SMP/E for z/OS and OS/390 Commands</i>	SA22-7771
<i>IBM SMP/E for z/OS and OS/390 Reference</i>	SA22-7772
<i>IBM SMP/E for z/OS and OS/390 Messages, Codes, and Diagnosis</i>	GA22-7770

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## 3.0 Program Support

This section describes the IBM support available for Migration Utility.

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### 3.1 Program Services

Contact your IBM representative for specific information about available program services.

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### 3.2 Preventive Service Planning

Before installing Migration Utility, you should review the current Preventive Service Planning (PSP) information. If you obtained Migration Utility as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO.

If the CBPDO for Migration Utility is more than two weeks old when you install it, you should contact the IBM Support Center, use S/390 SoftwareXcel to obtain the current "PSP Bucket" or obtain the current PSP from the web at <https://techsupport.services.ibm.com/server/390.psp390>

For program support, access the Software Support web site at <http://www-3.ibm.com/software/support/>

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for Migration Utility are:

*Figure 5. PSP Upgrade and Subset ID*

UPGRADE	SUBSET	Description
IBMMIGUTIL	HMGU310	IBM Migration Utility for z/OS 3.1.0

For additional Service related information, visit <http://www.ibm.com/software/awdtools/migration>

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### 3.3 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 6 identifies the component IDs (COMPID) for Migration Utility.

<i>Figure 6. Component IDs</i>			
<b>FMID</b>	<b>COMPID</b>	<b>Component Name</b>	<b>RETAIN Release</b>
HMGU310	5697N4400	IBM Migration Utility	310

---

## 4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of Migration Utility. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs incorporated into the program.

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### 4.1 Program Level Information

The following APAR fixes against previous releases of Migration Utility have been incorporated into this release:-

PQ97492  
PQ96549

PQ91900  
PQ88196

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## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating Migration Utility. The following terminology is used:

- *Driving system*: the system used to install the program.
- *Target system*: the system on which the program is installed.

In many cases, the same system can be used as both a driving system and a target system. However, you may want to set up a clone of your system to use as a target system by making a separate IPL-able copy of the running system. The clone should include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Some cases where two systems should be used include the following:

- When installing a new level of a product that is already installed, the new product will delete the old one. By installing onto a separate target system, you can test the new product while still keeping the old one in production.
- When installing a product that shares libraries or load modules with other products, the installation can disrupt the other products. Installing onto a test system or clone will allow you to assess these impacts without disrupting your production system.

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### 5.1 Driving System Requirements

This section describes the environment of the driving system required to install Migration Utility.

#### 5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

#### 5.1.2 Programming Requirements

*Figure 7. Driving System Software Requirements*

<b>Program Number</b>	<b>Product Name and Minimum VRM/Service Level</b>
Any <b>one</b> of the following:	
5694-A01	z/OS V01.04.00 or later
5655-G44	IBM SMP/E for z/OS and OS/390 V03.01.00 or later

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## 5.2 Target System Requirements

This section describes the environment of the target system required to install and use Migration Utility.

Migration Utility installs in the z/OS (Z038) SREL.

### 5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

### 5.2.2 Programming Requirements

**5.2.2.1 Installation Requisites:** An installation requisite is defined as a product that is required and **must** be present or one that is not required but **should** be present on the system for the successful installation of this product.

A mandatory installation requisite identifies products that are required, without exception, or this product **will not install** on your system. This includes products specified as PREs or REQs.

*Figure 8. Mandatory Installation Requisites*

Program Number	Product Name and Minimum VRM/Service Level
5694-A01	z/OS V01.04.00 or later

A conditional installation requisite identifies products that are **not** required for successful install but may resolve such things as certain warning messages at installation time. They include products that are specified as IF REQs.

Migration Utility has no conditional installation requisites.

**5.2.2.2 Operational Requisites:** An operational requisite is defined as a product that is required and **must** be present or a product that is not required but **should** be present on the system in order for this product to operate all or some of its functions.

A mandatory operational requisite identifies products that are required, without exception, or this product **will not operate** its basic function unless the requisite is met. This includes products specified as PREs or REQs.

Migration Utility has no mandatory operational requisites.

A conditional operational requisite identifies products that are **not required** for the basic function but are needed at run time for this product to utilize specific functions. They may include products specified as IF REQs.

Migration Utility has no conditional operational requisites.

**5.2.2.3 Toleration/Coexistence Requisites:** A toleration/coexistence requisite is defined as a product which must be present on a sharing system. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD at different time intervals.

Migration Utility has no toleration/coexistence requisites.

**5.2.2.4 Incompatibility (Negative) Requisites:** A negative requisite identifies products which must *not* be installed on the same system as this product.

Migration Utility has no negative requisites.

### 5.2.3 DASD Storage Requirements

Migration Utility libraries can reside on all supported DASD types. The values below are for 3390 DASD.

Figure 9 lists the total space required for each type of library.

Library Type	Total Space Required
Target	321 tracks
Distribution	321 tracks

#### Notes:

1. IBM recommends use of system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, IBM recommends a block size of 32760, which is the most efficient from a performance and DASD utilization perspective.
2. Abbreviations used for the data set type are:
  - U** Unique data set, allocated by this product and used only by this product. To determine the correct storage needed for this data set, this table provides all required information; no other tables (or Program Directories) need to be referenced for the data set size.
  - S** Shared data set, allocated by this product and used by this product and others. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other Program Directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.
  - E** Existing shared data set, used by this product and others. This data set is NOT allocated by this product. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). This

existing data set must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information on the names and sizes of the required data sets, please refer to 6.1.7, "Allocate SMP/E Target and Distribution Libraries" on page 17.

3. All target and distribution libraries listed have the following attributes:

- The default name of the data set may be changed.
- The default block size of the data set may be changed.
- The data set may be merged with another data set that has equivalent characteristics.
- The data set may be either a PDS or a PDSE.

4. All target libraries listed have the following attributes:

- The data set may be SMS-managed.
- It is not required for the data set to be SMS-managed.
- It is not required for the data set to reside on the IPL volume.
- The values in the "Member Type" column are not necessarily the actual SMP/E element types identified in the SMPMCS.

5. All target libraries listed which contain load modules have the following attributes:

- The data set may be in the LPA.
- It is not required for the data set to be in the LPA.
- The data set may be in the LNKLST.
- It is not required for the data set to be APF-authorized.

The following figures describe the target and distribution libraries required to install Migration Utility. The storage requirements of Migration Utility must be added to the storage required by other programs having data in the same library.

**Note:** The data in these tables should be used when determining which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

Figure 10 (Page 1 of 2). Storage Requirements for Migration Utility Target Libraries

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SFSYCCLM	Macro	ANY	U	PDS	FB	80	26	10



Figure 10 (Page 2 of 2). Storage Requirements for Migration Utility Target Libraries

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SFSYFJCC	Macro	ANY	U	PDS	FB	80	134	20
SFSYLOAD	LMOD	ANY	U	PDS	U	0	95	40
SFSYSMCD	Sample	ANY	U	PDS	FB	80	3	3
SFSYJCLS	Sample	ANY	U	PDS	FB	80	34	10
SFSYEZTS	Sample	ANY	U	PDS	FB	80	17	10
SFSYEZTC	Data	ANY	U	PDS	FB	80	4	5
SFSYCCLC	Data	ANY	U	PDS	FB	80	4	5
SFSYDOCS	Data	ANY	U	PDS	VB	256	4	7

Figure 11. Storage Requirements for Migration Utility Distribution Libraries

Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
AFSYCCLM	U	PDS	FB	80	26	10
AFSYFJCC	U	PDS	FB	80	134	20
AFSYLOAD	U	PDS	U	0	95	40
AFSYSMCD	U	PDS	FB	80	3	3
AFSYJCLS	U	PDS	FB	80	34	10
AFSYEZTS	U	PDS	FB	80	17	10
AFSYEZTC	U	PDS	FB	80	4	5
AFSYCCLC	U	PDS	FB	80	4	5
AFSYDOCS	U	PDS	VB	256	4	7

### 5.3 FMIDs Deleted

Installing Migration Utility may result in the deletion of other FMIDs. To see what FMIDs will be deleted, examine the ++VER statement in the product's SMPMCS.

If you do not wish to delete these FMIDs at this time, you must install Migration Utility into separate SMP/E target and distribution zones.

**Note:** These FMIDs will not automatically be deleted from the Global Zone. Consult the SMP/E manuals for instructions on how to do this.

---

## 5.4 Special Considerations

Migration Utility has no special considerations for the target system.

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## 6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of Migration Utility.

Please note the following:

- If you want to install Migration Utility into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMP/CSI and the SMP/E control data sets.
- Sample jobs have been provided to help perform some or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries required for SMP/E execution have been defined in the appropriate zones.
- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation steps.

---

### 6.1 Installing Migration Utility

#### 6.1.1 SMP/E Considerations for Installing Migration Utility

This release of Migration Utility is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

#### 6.1.2 SMP/E Options Subentry Values

The recommended values for some SMP/E CSI subentries are shown in Figure 12. Use of values lower than these may result in failures in the installation process. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. Refer to the SMP/E manuals for instructions on updating the global zone.

SUB-ENTRY	Value	Comment
DSSPACE	(200,200,500)	3390 DASD tracks
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

#### 6.1.3 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install Migration Utility:

Figure 13. Sample Installation Jobs

Job Name	Job Type	Description	RELFILE
FSYALA	SMP/E	Sample job to allocate and initialize a new SMP/E CSI data set <b>(Optional)</b>	IBM.HMGU310.F4
FSYALB	SMP/E	Sample job to allocate SMP/E data sets <b>(Optional)</b>	IBM.HMGU310.F4
FSYREC1	RECEIVE	Sample RECEIVE job for IBM Migration Utility	IBM.HMGU310.F4
FSYALLOC	ALLOCATE	Sample job to allocate target and distribution libraries for IBM Migration Utility	IBM.HMGU310.F4
FSYDDDEF	DDDEF	Sample job to define SMP/E DDDEFs for IBM Migration Utility	IBM.HMGU310.F4
FSYAPPLY	APPLY	Sample APPLY job	IBM.HMGU310.F4
FSYACCEP	ACCEPT	Sample ACCEPT job	IBM.HMGU310.F4

You can access the sample installation jobs by performing an SMP/E RECEIVE and then copying the jobs from the relfiles to a work data set for editing and submission. See Figure 13 on page 15 to find the appropriate relfile data set.

You may also choose to copy the jobs from the tape or product files by submitting the job below. Use either the //TAPEIN or the //FILEIN DD statement, depending on your distribution medium, and comment out or delete the other statement. Add a job card and change the lowercase parameters to uppercase values to meet your site's requirements before submitting.

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//TAPEIN DD DSN=IBM.HMGU310.F4,UNIT=tunit,
// VOL=SER=MGU310,LABEL=(5,SL),
// DISP=(OLD,KEEP)
//FILEIN DD DSN=IBM.HMGU310.F4,UNIT=SYSALLDA,DISP=SHR,
// VOL=SER=filevol
//OUT DD DSNAME=jcl-library-name,
// DISP=(NEW,CATLG,DELETE),
// VOL=SER=dasdvol,UNIT=SYSALLDA,
// SPACE=(TRK,(10,5,5))
//SYSUT3 DD UNIT=SYSALLDA,SPACE=(TRK,(10,5,5))
//SYSIN DD *
COPY INDD=xxxxIN,OUTDD=OUT
/*
```

In the sample above, update the statements as noted below:

If using TAPEIN:

**tunit** is the unit value matching the product tape.

If using FILEIN

**filevol** is the volume serial of the DASD device here the downloaded files reside.

OUT

**jcl-library-name** is the name of the output data set where the sample jobs will be stored.

**dasdvol** is the volume serial of the DASD device where the output data set will reside.

SYSIN

**xxxxIN** is either TAPEIN or FILEIN depending on your input DD statement.

### 6.1.4 Allocate SMP/E CSI (Optional)

If you are using an existing CSI, do not execute this job.

If you are allocating a new SMP/E data set for this install, edit, and submit sample job FSYALA to allocate the SMP/E data set for Migration Utility.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

### 6.1.5 Initialize CSI zones (Optional)

Edit and submit sample job FSYALB to initialize SMP/E zones for Migration Utility. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

### 6.1.6 Perform SMP/E RECEIVE

Having obtained Migration Utility as part of a CBPDO, use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the Migration Utility FMID as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.

You can also choose to edit and submit sample job FSYREC1 to perform the SMP/E RECEIVE for Migration Utility. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

### 6.1.7 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job FSYALLOC to allocate the SMP/E target and distribution libraries for Migration Utility. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

## 6.1.8 Create DDDEF Entries

Edit and submit sample job FSYDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for Migration Utility. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

## 6.1.9 Perform SMP/E APPLY

Edit and submit sample job FSYAPPLY to perform an SMP/E APPLY CHECK for Migration Utility. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Enhanced HOLDDATA introduced ERROR HOLDS against FMIDs for HIPER APARs. Prior to installing, you should ensure you have the latest Enhanced HOLDDATA (available at url <http://service.software.ibm.com/holddata/390holddata.html>). The FMID(s) should be installed regardless of the status of unresolved HIPERs, however, the software should not be deployed until the unresolved HIPERs have been analyzed to determine applicability.

There are two methods to complete an FMID installation where ++HOLDS for HIPERs exist for the FMID(s) being installed:

1. To ensure that all critical service is installed with the FMID(s), add the SOURCEIDs of PRP, and HIPER to the APPLY command. There may be PE or HIPER APARs that do not have resolving PTFs available yet. You need to analyze the symptom flags to determine if you want to BYPASS the specific ERROR HOLDS and continue the FMID installation.

```
APPLY S(fmid,fmid,...)
FORFMID(fmid,fmid,...)
SOURCEID(PRP,HIPER,...)
GROUPEXTEND .
```

This method requires more initial research, but will provide resolution for all HIPERs that have fixes available and are not in a PE chain. There may still be unresolved PEs or HIPERs which will require the use of BYPASS.

2. To install the FMID(s) as it would have been installed prior to Enhanced HOLDDATA, you can add a BYPASS(HOLDCLASS(HIPER)) operand to the APPLY command. This will allow the FMID to be installed even though there are HIPER ERROR HOLDS against it. Note that not all ERROR HOLDS were bypassed, only the HIPER ERROR HOLDS. After the FMID(s) are installed, the SMP/E REPORT ERRSYSMODS command should be run to identify any missing HIPER maintenance.

```
APPLY S(fmid,fmid,...)
BYPASS(HOLDCLASS(HIPER)).
```

This method is the quicker of the two, but requires subsequent review of the REPORT ERRSYSMODS to investigate any HIPERs.

If you bypass any HOLDs during the installation of the FMID(s) because fixing PTFs were not yet available you can use the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink to be notified when the fixing PTF is available.

Once you have taken any actions indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

**Note:** The GROUPEXTEND operand indicates that SMP/E apply all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

**Expected Return Codes and Messages from APPLY CHECK:** You will receive a return code of 0 if this job runs correctly.

**Expected Return Codes and Messages from APPLY:** You will receive a return code of 0 if this job runs correctly.

## 6.1.10 Perform SMP/E ACCEPT

Edit and submit sample job FSYACCEP to perform an SMP/E ACCEPT CHECK for Migration Utility. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Before using SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. This will cause entries produced from JCLIN to be saved in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

Once you have taken any actions indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

**Note:** The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

**Expected Return Codes and Messages from ACCEPT CHECK:** You will receive a return code of 0 if this job runs correctly.

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder may issue messages documenting unresolved external references, resulting in a return code of 4 from the

ACCEPT step. These messages can be ignored, because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

**Expected Return Codes and Messages from ACCEPT if no PTFs are being installed:** You will receive a return code of 0 if this job runs correctly.

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## 6.2 Activating Migration Utility

The publication *Migration Utility User's Guide, SC31-6935* contains the step-by-step procedures to activate the functions of Migration Utility.



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APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always contact the IBM Customer Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

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# Reader's Comments

## Program Directory for IBM Migration Utility for z/OS, February 2006

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1	2      3      4	5	N		

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of Program Directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of Program Directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Ease of getting the system into production after installation	1	2	3	4	5	N

How did you order this product?

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- CustomPac
- ServerPac
- Independent
- Other

Is this the first time your organization has installed this product?

- Yes
- No

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International Business Machines Corporation  
Reader Comments  
Department DTX/E269  
555 Bailey Avenue  
San Jose, California  
USA  
95141-9989

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