IBM

Program Directory for

IBM DB2 Universal Database for z/OS

z/OS Application Connectivity to DB2 for z/OS

V8.01.00

Program Number 5625-DB2
FMID HDDA210

for Use with
z/OS

Document Date: August, 2004

GI10-8585-01

> **Note!**
>
> Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 20.

Contents

Figures

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 Universal Database DB2 for z/OS. This publication refers to IBM Universal Database DB2 for z/OS as z/OS Application Connectivity to DB2 for z/OS.

The Program Directory contains the following sections:

- 2.0, "Program Materials" on page 3 identifies the basic and optional program materials and documentation for z/OS Application Connectivity to DB2 for z/OS.

- 3.0, "Program Support" on page 6 describes the IBM support available for z/OS Application Connectivity to DB2 for z/OS.

- 4.0, "Program and Service Level Information" on page 8 lists the APARs (program level) and PTFs (service level) incorporated into z/OS Application Connectivity to DB2 for z/OS.

- 5.0, "Installation Requirements and Considerations" on page 9 identifies the resources and considerations required for installing and using z/OS Application Connectivity to DB2 for z/OS.

- 6.0, "Installation Instructions" on page 15 provides detailed installation instructions for z/OS Application Connectivity to DB2 for z/OS. It also describes the procedures for activating the functions of z/OS Application Connectivity to DB2 for z/OS, or refers to appropriate publications.

Before installing z/OS Application Connectivity to DB2 for z/OS, 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.

z/OS Application Connectivity to DB2 for z/OS 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 z/OS Application Connectivity to DB2 for z/OS are included on the CBPDO tape.

Do not use this Program Directory if you are installing z/OS Application Connectivity to DB2 for z/OS 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.

1.1 z/OS Application Connectivity to DB2 for z/OS Description

The purpose of this product is to give connectivity to remote DB2 systems for 390 and z/OS systems (LPARs) that do not have DB2 for z/OS installed.

For example; it allows an application server, such as WebSphere, to talk to a remote DB2 that is behind a firewall.

While this product can be installed on a system that **does** have DB2 installed, you may already have the same connectivity installed with DB2 (if you have installed JDBC/FMID JDB8812).

Note: If you are using the JDBC installed with DB2 you **must not** use this product in the same JVM (Java Virtual Machine).

Many new features and enhancements have been made for DB2 for z/OS. Among these changes is a new JDBC driver architecture known as the IBM DB2 JDBC Universal Driver. The Universal Driver is architected as an abstract JDBC processor that is independent of driver-type connectivity or target platform (see below for a definition of the four JDBC driver connectivity types). The IBM DB2 JDBC Universal Driver is an architecture-neutral JDBC driver for distributed and local DB2 access.

Since the Universal Driver has a unique architecture as an abstract JDBC state machine, it does not fall into the conventional driver-type categories as defined by Sun. For the Universal Driver as an abstract machine, driver types become connectivity types.

This abstract JDBC machine architecture is independent of any particular JDBC driver-type connectivity or target platform, allowing for both all-Java connectivity (Type 4) or JNI-based connectivity (Type 2) in a single driver. A single universal driver instance is loaded by the driver manager for both Type 4 and Type 2 implementations. Type 2 and 4 connections may be made (simultaneously if desired) using this single driver instance. A common driver reduces behavioral differences when switching between the various connectivity types.

Platform specifics are abstracted to the lowest layers, so differences between the various DB2 operating system platforms are also minimized.

This release of the Universal JDBC Driver implements JDBC 3.0 and supports all-Java remote connectivity (Type 4) including XA Distributed Transactions via the JTA (Java Transaction API) for DB2 V8 z/OS and DB2 V7 390, which is based on open distributed protocol known as Distributed Relational Database Architecture (DRDA) for cross-platform access to DB2.

1.2 z/OS Application Connectivity to DB2 for z/OS FMID

z/OS Application Connectivity to DB2 for z/OS consists of the following FMID:

    HDDA210

2.0 Program Materials

An IBM program is identified by a program number. The program number for z/OS Application Connectivity to DB2 for z/OS is 5625-DB2.

An IBM program is identified by a program number and a feature number. The program number for z/OS Application Connectivity to DB2 for z/OS is 5625-DB2 and its feature number is 6027.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature number, 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 z/OS Application Connectivity to DB2 for z/OS. Ask your IBM representative for this information if you have not already received a copy.

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 z/OS Application Connectivity to DB2 for z/OS can be found in the *CBPDO Memo To Users Extension*.

Figure 1 describes the physical tape.

NOTE!

If z/OS Application Connectivity to DB2 for z/OS was shipped to you in a CBPDO, you will need to reference the CBPDO Memo To Users Extension for the physical tape layout of the Basic Machine-Readable Materials.

Figure 2 on page 4 describes the file content.

Figure 1 (Page 1 of 2). Basic Material: Program Tape				
Medium	**Feature Number**	**Physical Volume**	**External Label**	**VOLSER**
3480 cart.	6027	1 of 1	z/OS T4 JDBC Driver	DDA210

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Figure 1 (Page 2 of 2). Basic Material: Program Tape				
Medium	**Feature Number**	**Physical Volume**	**External Label**	**VOLSER**
4mm cart.	6028	1 of 1	z/OS T4 JDBC Driver	DDA210

Figure 2 describes the program file content for z/OS Application Connectivity to DB2 for z/OS.

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 2. Program File Content				
Name	**ORG**	**RECFM**	**LRECL**	**BLK SIZE**
SMPMCS	SEQ	FB	80	6400
IBM.HDDA210.F1	PS	VS	8816	8820
IBM.HDDA210.F2	PS	VS	6122	6126
IBM.HDDA210.F3	PS	VS	6122	6126

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for z/OS Application Connectivity to DB2 for z/OS.

2.3 Program Publications

The following section identifies the optional publication for z/OS Application Connectivity to DB2 for z/OS.

Figure 3 identifies the basic unlicensed or licensed publication that is not available in hardcopy form, but is available through the internet or other media for z/OS Application Connectivity to DB2 for z/OS.

Figure 3. Basic Material: Other Unlicensed or Licensed Publications		
Publication Title	**Form Number**	**How Available**
Application Programming Guide & Reference for Java V8	SC18-7414	Internet (see **Note** below)

Note: http://www.ibm.com/software/data/db2/zos/v8books.html

2.3.1 Optional Program Publications

No optional publications are provided for z/OS Application Connectivity to DB2 for z/OS.

2.4 Program Source Materials

No program source materials or viewable program listings are provided
 for z/OS Application Connectivity to DB2 for z/OS.

2.5 Publications Useful During Installation

The publications listed in Figure 4 may be useful during the installation of z/OS Application Connectivity to DB2 for z/OS. 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**
IBM SMP/E for z/OS and OS/390 User's Guide	SA22-7773
IBM SMP/E for z/OS and OS/390 Commands	SA22-7771
IBM SMP/E for z/OS and OS/390 Reference	SA22-7772
IBM SMP/E for z/OS and OS/390 Messages, Codes, and Diagnosis	GA22-7770

3.0 Program Support

This section describes the IBM support available for z/OS Application Connectivity to DB2 for z/OS.

3.1 Program Services

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

3.2 Preventive Service Planning

Before installing z/OS Application Connectivity to DB2 for z/OS, you should review the current Preventive Service Planning (PSP) information. If you obtained z/OS Application Connectivity to DB2 for z/OS as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO.

If the CBPDO for z/OS Application Connectivity to DB2 for z/OS is more than two weeks old when you install it, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

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 z/OS Application Connectivity to DB2 for z/OS are:

Figure 5. PSP Upgrade and Subset ID		
UPGRADE	**SUBSET**	**Description**
DB2810	HDDA210	z/OS Application Connectivity to DB2 z/OS

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 z/OS Application Connectivity to DB2 for z/OS.

Figure 6. Component IDs			
FMID	**COMPID**	**Component Name**	**RETAIN Release**
HDDA210	5740XYR08	z/OS Application Connectivity to DB2 for z/OS	210

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of z/OS Application Connectivity to DB2 for z/OS. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs incorporated into the program.

4.1 Program Level Information

No APARs have been incorporated into z/OS Application Connectivity to DB2 for z/OS.

4.2 Service Level Information

No PTFs against this release of z/OS Application Connectivity to DB2 for z/OS have been incorporated into the product tape.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating z/OS Application Connectivity to DB2 for z/OS. 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.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install z/OS Application Connectivity to DB2 for z/OS.

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	
Program Number	**Product Name and Minimum VRM/Service Level**
Any **one** of the following:	
5647-A01	OS/390 V2.10.0
5694-A01	z/OS V1.01.0 or later
5655-G44	IBM SMP/E for z/OS and OS/390 V3.02.0 or later

5.2 Target System Requirements

This section describes the environment of the target system required to install and use z/OS Application Connectivity to DB2 for z/OS.

z/OS Application Connectivity to DB2 for z/OS installs in the DBS (P115) 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.

z/OS Application Connectivity to DB2 for z/OS has no mandatory installation requisites.

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.

z/OS Application Connectivity to DB2 for z/OS 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 a product which is 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.

Figure 8. Mandatory Operational Requisites	
Program Number	**Product Name and Minimum VRM/Service Level**
5655-D35	IBM Developer Kit for OS/390, Java 2 Technology Edition SDK 1.3.1 or later (for Java runtime)

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.

Figure 9. Conditional Operational Requisites		
Program Number	**Product Name and Minimum VRM/Service Level**	**Function**
5675-DB2	DB2 UDB for z/OS and OS/390 V07.01.00 or later (plus APAR PQ72453)	Connectivity to DB2 for z/OS and OS/390

Note: For a complete list of DB2s to which connectivity is supported, please review the README file found at:

```
/usr/lpp/jcct4/samples/README
```

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.

z/OS Application Connectivity to DB2 for z/OS 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.

z/OS Application Connectivity to DB2 for z/OS has no negative requisites.

5.2.3 DASD Storage Requirements

z/OS Application Connectivity to DB2 for z/OS libraries can reside on all supported DASD types.

Figure 10 on page 11 lists the total space required for each type of library.

Figure 10. Total DASD Space Required by z/OS Application Connectivity to DB2 for z/OS	
Library Type	**Total Space Required**
Target	162
Distribution	49362
HFS	6000 K bytes

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 6.1.5, "Allocate SMP/E Target and Distribution Libraries" on page 17.

3. Abbreviations used for the HFS Path type are:

   N   New path, created by this product.
   X   Path created by this product, but may already exist from a previous release.
   P   Previously existing path, created by another product.

4. 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.

5. 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.

6. 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 and HFS paths required to install z/OS Application Connectivity to DB2 for z/OS. The storage requirements of z/OS Application Connectivity to DB2 for z/OS must be added to the storage required by other programs having data in the same library or path.

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 11. Storage Requirements for z/OS Application Connectivity to DB2 for z/OS 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
SDDABASE	sample	Any	U	PDS	FB	80	28	30

Figure 12. z/OS Application Connectivity to DB2 for z/OS HFS Paths		
DDNAME	T Y P E	Path Name
SDDABIN	N	/usr/lpp/jcct4/bin/IBM
SDDACLAS	N	/usr/lpp/jcct4/classes/IBM
SDDASAMP	N	/usr/lpp/jcct4/samples/IBM

Figure 13. Storage Requirements for z/OS Application Connectivity to DB2 for z/OS 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
ADDABASE	PO	PDS	FB	80	28	30
ADDACLAS	PO	PDS	VB	255	788	10
ADDABIN	PO	PDS	VB	255	31	8
ADDASAMP	PO	PDS	VB	255	11	31

5.3 FMIDs Deleted

Installing z/OS Application Connectivity to DB2 for z/OS 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 z/OS Application Connectivity to DB2 for z/OS 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

You can install z/OS Application Connectivity to DB2 for z/OS on an LPAR that has DB2 for z/OS and OS/390 but you cannot **use** z/OS Application Connectivity to DB2 for z/OS and the JDBC/SQLJ feature of DB2 for z/OS and OS/390 (FMID JDB8812) simultaneously.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of z/OS Application Connectivity to DB2 for z/OS.

Please note the following:

- If you want to install z/OS Application Connectivity to DB2 for z/OS into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI 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 z/OS Application Connectivity to DB2 for z/OS

6.1.1 SMP/E Considerations for Installing z/OS Application Connectivity to DB2 for z/OS

This release of z/OS Application Connectivity to DB2 for z/OS 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 14 on page 15. 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
Figure 14. SMP/E Options Subentry Values		
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 z/OS Application Connectivity to DB2 for z/OS:

Job Name	Job Type	Description	RELFILE
DDARECEV	RECEIVE	Sample RECEIVE job	IBM.HDDA210.F1
DDAALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HDDA210.F1
DDAALA	SMP/E	Sample job to allocate and initialize new SMP/e CSI data sets <Optional>	IBM.HDDA210.F1
DDAALB	SMP/E	Sample job to allocate SMP/e data sets, define zones and DDDEF entries <Optional>	IBM.HDDA210.F1
DDAISMKD	MKDIR	Sample job to invoke the supplied DDAMKDIR EXEC to allocate HFS paths	IBM.HDDA210.F1
DDADDDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HDDA210.F1
DDAAPPLY	APPLY	Sample APPLY job	IBM.HDDA210.F1
DDAACCEP	ACCEPT	Sample ACCEPT job	IBM.HDDA210.F1

Figure 15. Sample Installation Jobs

You may 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.HDDA210.F1,UNIT=tunit,
//         VOL=SER=volser,LABEL=(x,SL),
//         DISP=(OLD,KEEP)
//FILEIN   DD DSN=IBM.HDDA210.F1,UNIT=SYSALLDA,DISP=SHR,
//         VOL=SER=filevol
//OUT      DD DSNAME=jcl-library-name,
//         DISP=(NEW,CATLG,DELETE),
//         VOL=SER=dasdvol,UNIT=SYSALLDA,
//         SPACE=(TRK,(20,10,10))
//SYSUT3   DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//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.

volser is the volume serial matching the product tape.

x is the tape file number where the data set name is on the tape.

Refer to the documentation provided by CBPDO to see where IBM.HDDA210.F1 is on the tape.

If using FILEIN

filevol is the volume serial of the DASD device where 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.

You can also 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 15 to find the appropriate relfile data set.

6.1.4 Perform SMP/E RECEIVE

Having obtained z/OS Application Connectivity to DB2 for z/OS as part of a CBPDO, use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the z/OS Application Connectivity to DB2 for z/OS 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 DDARECEV to perform the SMP/E RECEIVE for z/OS Application Connectivity to DB2 for z/OS. Consult the instructions in the sample job for more information.

6.1.5 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job DDAALLOC to allocate the SMP/E target and distribution libraries for z/OS Application Connectivity to DB2 for z/OS. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.1.6 Allocate HFS Paths

Edit and submit sample job DDAISMKD to allocate the HFS paths for z/OS Application Connectivity to DB2 for z/OS. Consult the instructions in the sample job for more information.

If you plan to create a new HFS for this product, you should consider updating the BPXPRMxx PARMLIB member to mount the new HFS at IPL time. This may be helpful if an IPL occurs before the installation is complete.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.1.7 Create DDDEF Entries

Edit and submit sample job DDADDDEF to create DDDEF entries for the SMP/E target and distribution libraries for z/OS Application Connectivity to DB2 for z/OS. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will get a condition code of 0 if the job runs correctly.

6.1.8 Perform SMP/E APPLY

Edit and submit sample job DDAAPPLY to perform an SMP/E APPLY CHECK for z/OS Application Connectivity to DB2 for z/OS. 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).

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 get a condition code of 0 if the job runs correctly.

Expected Return Codes and Messages from APPLY: You will get a condition code of 0 if the job runs correctly.

6.1.9 Perform SMP/E ACCEPT

Edit and submit sample job DDAACCEP to perform an SMP/E ACCEPT CHECK for z/OS Application Connectivity to DB2 for z/OS. 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 get a condition code of 0 if the job runs correctly.

Expected Return Codes and Messages from ACCEPT: You will get a condition code of 0 if the 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.

6.1.10 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command will identify requisites defined for products that have been installed in separate zones. This command will also create APPLY and ACCEPT commands in the SMPPUNCH data set which you can use to install those cross-zone requisites it identifies.

After you have installed z/OS Application Connectivity to DB2 for z/OS, it is recommended that you run REPORT CROSSZONE against the new or updated target and distribution zones. REPORT CROSSZONE requires a global zone with ZONEINDEX entries describing all the target and distribution libraries to be reported on.

For more information on REPORT CROSSZONE, see the SMP/E manuals.

6.2 Activating z/OS Application Connectivity to DB2 for z/OS

6.2.1 HFS Execution

If you choose to have the HFS in which you have installed z/OS Application Connectivity to DB2 for z/OS mounted in read-only mode during execution, then no further tasks are required to accomplish this.

The publication *Application Programming Guide and Reference for Java V8, SC18-7414*, contains the step-by-step procedures to activate the functions of z/OS Application Connectivity to DB2 for z/OS. This publication is located at:

    http://www.ibm.com/software/data/db2/zos/v8books.html

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 ┌── RATING SCALE ──────────────────────────────────────────────────────┐
 │    very                              very         not                 │
 │  satisfied  <====================>  dissatisfied  applicable          │
 │     1       2       3       4        5            N                   │
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	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

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__ Independent
__ Other

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Were the people who did the installation experienced with the installation of z/OS products?

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