IBM

Program Directory for

DB2 UDB for OS/390

DB2 Administration Tool

Volume 5 of 6

Version 06

Program Number 5645-DB2

H0IH610

for Use with
OS/390

Document Date: May 2000

GI10-8188-01

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

Contents

© Copyright IBM Corp. 1995, 1999   **iii**

Figures

Notices

References in this document to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe on any of IBM's intellectual property rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, is the user's responsibility.

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.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the

> International Business Machines Corporation
> IBM Director of Licensing
> 500 Columbus Avenue
> Thornwood, New York 10594
> USA

For online versions of this book, we authorize you to:

- Copy, modify, and print the documentation contained on the media, for use within your enterprise, provided you reproduce the copyright notice, all warning statements, and other required statements on each copy or partial copy.

- Transfer the original unaltered copy of the documentation when you transfer the related IBM product (which may be either machines you own, or programs, if the program's license terms permit a transfer). You must, at the same time, destroy all other copies of the documentation.

You are responsible for payment of any taxes, including personal property taxes, resulting from this authorization.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Your failure to comply with the terms above terminates this authorization. Upon termination, you must destroy your machine readable documentation.

Trademarks

The following terms are trademarks of the IBM Corporation in the United States or other countries or both:

CBPDO
CBIPO
IBM
MVS
DB2 (DATABASE 2)
OS/390
MVS/ESA
QMF
DataPropagator
SystemPac
ProductPac
RACF
Icing

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 **DB2 Administration Tool**. This publication refers to DB2 Administration Tool as DB2 Admin Tool. You should read all of this program directory before installing the program and then keep it for future reference.

With the delivery of DB2 UDB Server for OS/390 Version 6, additional features and their product specific materials and Program Directories are included. Please see Figure 1 on page 1 for the cross reference of Program Directory Volumes of the server features.

This program directory is volume 7 of 8. To fully install all of the features that comprise the DB2 UDB Server for OS/390 Version 6, please read each product's Program Directory carefully.

The additional features included with this delivery of DB2 UDB Server for OS/390 Version 6 may be installed and used on a trial basis (aka as a **"Try and Buy"** basis) for 90 days from the date of installation of the feature, except for QMF for Windows Feature, which may be installed and used on a trial basis for 60 days from the date of installation. These optional, priced features are shipped with DB2 UDB Server for OS/390 Version 6 so that you can install and test them to discover the value they bring to your DB2. A full-use license for each of the priced features may be obtained by ordering the appropriate billing feature number and media feature number, labeled as "Buy", for the optional priced feature, as indicated in the announcement letter for DB2 UDB Server for OS/390 Version 6.

Figure 1. DB2 UDB Server for OS/390 Program Directory Set	
Program Directory Title	**Volume in Set**
IBM Database 2 Universal Database Server for OS/390 Version 6	1 of 6
DB2 UDB for OS/390 Performance Monitor	2 of 6
DB2 UDB for OS/390 Query Management Facility	3 of 6
DB2 UDB for OS/390 Query Management Facility High Performance Option	4 of 6
DB2 UDB for OS/390 DB2 Administration Tool	5 of 6
DB2 UDB for OS/390 DB2 Buffer Pool Tool	6 of 6

The **DB2 Admin Tool** product consists of:

> The **DB2 Admin Tool 'TRY'** tape and the **DB2 Admin Tool 'BUY'** tape.

This program directory contains the following sections:

- 2.0, "Program Materials" on page 4 identifies the basic and optional program materials and documentation for DB2 Admin Tool.

- 3.0, "Program Support" on page 7 describes the IBM support available for DB2 Admin Tool.

- 4.0, "Program and Service Level Information" on page 8 lists the APARs (program level) and PTFs (service level) incorporated into DB2 Admin Tool.

- 5.0, "Installation Requirements and Considerations" on page 9 identifies the resources and considerations for installing and using DB2 Admin Tool.

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

- Appendix A, "DB2 Admin Tool Install Logic 'TRY'/'BUY'" on page 27 provides the install logic for DB2 Admin Tool 'TRY'/'BUY'.

Before installing DB2 Admin Tool, read 3.2, "Preventive Service Planning" on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

Do not use this program directory if you are installing DB2 Admin Tool with an MVS Custom-Built Installation Process Offering (CBIPO), 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.

If you are installing DB2 Admin Tool using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), use the softcopy program directory provided on the CBPDO tape. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for DB2 Admin Tool are included on the CBPDO tape.

1.1 DB2 Admin Tool Description

DB2 Administration Tool provides extensive capabilities for viewing and navigating the DB2 catalog, executing SQL statements, issuing DB2 commands, running DB2 utilities, and reverse engineering objects in the catalog.

DB2 Admin Tool 'TRY' is the fully functional product to be used for a 90 day trial basis. DB2 Admin Tool 'BUY' enables the full-use license of DB2 Admin Tool.

1.2 DB2 Admin Tool FMIDs

DB2 Admin Tool consists of the following FMIDs:

    H0IH610
    J0IH611

2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for DB2 Admin Tool is 5645-DB2.

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

The program announcement material describes the features supported by DB2 Admin Tool. 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 9-track magnetic tape (written at 6250 BPI), 3480 cartridge, 3590 cartridge, or 4mm cartridge. The tape or cartridge contains all the programs and data needed for installation. 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.

Figure 2 describes the 'TRY' tape or cartridge. Figure 3 describes the 'BUY' tape or cartridge. Figure 4 on page 5 and Figure 5 on page 5 describe the file content of the 'TRY' and 'BUY' program tapes or cartridges.

Note: If you are installing DB2 Admin Tool using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), some of the information in these figures may not be valid. Consult the CBPDO documentation for actual values.

Figure 2. Basic Material: Program Tape—DB2 Admin Tool 'TRY'				
Medium	**Feature Number**	**Physical Volume**	**External Label Identification**	**VOLSER**
3480 cart	5822	1 of 1	DB2 Admin Basic Try	ADB610
4mm cart	6270	1 of 1	DB2 Admin Basic Try	ADB610
6250 tape	5821	1 of 1	DB2 Admin Basic Try	ADB610

Figure 3 (Page 1 of 2). Basic Material: Program Tape—DB2 Admin Tool 'BUY'				
Medium	**Feature Number**	**Physical Volume**	**External Label Identification**	**VOLSER**
3480 cart	5892	1 of 1	DB2 Admin Basic Buy	ADB611
4mm cart	5514	1 of 1	DB2 Admin Basic Buy	ADB611

Figure 3 (Page 2 of 2). Basic Material: Program Tape—DB2 Admin Tool 'BUY'				
Medium	**Feature Number**	**Physical Volume**	**External Label Identification**	**VOLSER**
6250 tape	5851	1 of 1	DB2 Admin Basic Buy	ADB611

Figure 4. Program Tape: File Content—DB2 Admin Tool 'TRY'						
VOLSER	**File**	**Name**	**Dist Library**	**RECFM**	**LRECL**	**BLK SIZE**
ADB610	1	SMPMCS	n/a	FB	80	8800
	2	IBM.H0IH610.F1	n/a	FB	80	8800
	3	IBM.H0IH610.F2	AADBIJCL	FB	80	8800
	4	IBM.H0IH610.F3	AADBCLST	FB	80	27920
	5	IBM.H0IH610.F4	AADBEXEC	FB	80	27920
	6	IBM.H0IH610.F5	AADBMLIB	FB	80	6080
	7	IBM.H0IH610.F6	AADBPLIB	FB	80	6080
	8	IBM.H0IH610.F7	AADBSLIB	FB	80	6080
	9	IBM.H0IH610.F8	AADBTLIB	FB	80	6080
	10	IBM.H0IH610.F9	AADBDBRM	FB	80	6160
	11	IBM.H0IH610.F10	AADBSAMP	FB	80	6160
	12	IBM.H0IH610.F11	AADBNCAL	U	0	6144
	13	IBM.H0IH610.F12	AADBASM	FB	80	6160

Figure 5. Program Tape: File Content—DB2 Admin Tool 'BUY'						
VOLSER	**File**	**Name**	**Dist Library**	**RECFM**	**LRECL**	**BLK SIZE**
ADB611	1	SMPMCS	n/a	FB	80	8800
	2	IBM.J0IH611.F1	AADBASM	FB	80	8800

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for DB2 Admin Tool.

2.3 Program Publications

The following sections identify the basic and optional publications for DB2 Admin Tool.

2.3.1 Basic Program Publications

Figure 6 on page 6 identifies the basic unlicensed program publications for DB2 Admin Tool. One copy of each of these publications is included when you order the basic materials for DB2 Admin Tool. For additional copies, contact your IBM representative.

Figure 6. Basic Material: Unlicensed Publications	
Publication Title	**Form Number**
DB2 Admin User's Guide	SES1-2229

2.3.2 Optional Program Publications

No optional publications are provided for DB2 Admin Tool.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for DB2 Admin Tool.

2.5 Publications Useful During Installation

Figure 7. Publications Useful During Installation	
Publication Title	**Form Number**
OS/390 SMP/E User's Guide	SC28-1740
OS/390 SMP/E Reference	SC28-1806
OS/390 SMP/E Messages and Codes	SC28-1738

3.0 Program Support

This section describes the IBM support available for DB2 Admin Tool.

3.1 Program Services

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

3.2 Preventive Service Planning

Before installing DB2 Admin Tool, you should review the current Preventive Service Planning (PSP) information. If you obtained DB2 Admin Tool as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO tape.

If you obtained DB2 Admin Tool on a product tape, or if the CBPDO 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".

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 DB2 Admin Tool are:

Figure 8. PSP Upgrade and Subset ID		
UPGRADE	**SUBSET**	**Description**
DB2610	H0IH610	DB2 Admin Tool 'TRY'
DB2610	J0IH611	DB2 Admin Tool 'BUY'

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 9 identifies the component IDs (COMPID) for DB2 Admin Tool.

Figure 9. Component IDs			
FMID	**COMPID**	**Component Name**	**RETAIN Release**
H0IH610	568851500	DB2 Admin Tool 'TRY'	610
J0IH611	568851500	DB2 Admin Tool 'BUY'	611

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of DB2 Admin Tool. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

4.1 Program Level Information

No APARs have been incorporated into DB2 Admin Tool.

4.2 Service Level Information

No PTFs against this release of DB2 Admin Tool have been incorporated into the product tape.

4.3 Cumulative Service Tape

A cumulative service tape, containing PTFs not incorporated into this release, might be included with this program. Installation instructions for cumulative service tapes can be found in the SMP/E publications.

If you received this product as part of a CBPDO or a ProductPac, PTFs not incorporated into this release are provided on the tape, and a separate cumulative service tape will not be provided.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating DB2 Admin Tool. 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 DB2 Admin Tool.

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 10. Driving System Software Requirements	
Program Number	**Product Name and Minimum VRM/Service Level**
5668-949	System Modification Program/Extended (SMP/E) Release 8.1 or higher
5645-001	OS/390 Version 1 Release 3 or higher

5.1.2.1 Required Toleration PTFs In order to avoid syntax errors on the DESCRIPTION operand, introduced with OS/390 Version 2 Release 7, during the SMP/E installation of DB2 Admin Tool, you are required to install one of the following:

```
┌─ Toleration PTFs ────────────────────────────────────────────────────────────┐
│                                                                                │
│   • OS/390 Version 1 Release 3 and Version 2 Release 4:                         │
│                                                                                │
│      – PTF UR51067                                                              │
│                                                                                │
│   • OS/390 Version 2 Release 5 and Release 6:                                   │
│                                                                                │
│      – PTF UR51068                                                              │
│                                                                                │
└────────────────────────────────────────────────────────────────────────────────┘
```

5.2 Target System Requirements

This section describes the environment of the target system required to install and use DB2 Admin Tool.

5.2.1 Machine Requirements

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

5.2.2 Programming Requisites

5.2.2.1 Minimum Requisites: A minimum requisite is defined as one of the following:

1. *Installation Requisite:* A product that is required at installation time. i.e. this product **will not install** successfully unless this requisite is met. This includes products that are specified as REQs, PREs, or CALLLIBs.

2. *Run Time Requisite:* A product that is **not** required for the successful installation of this product, but **is** needed at run time in order for this product to work.

Figure 11 (Page 1 of 2). Minimum Requisites		
Program Number	**Product Name and Minimum VRM/Service Level**	**Install Req?**
5695-039	Resource Access Control Facility (RACF) Version 1 Release 9 or later	No
5685-054	ISPF Version 3 Release 3 or later	Yes
5665-402	ISPF/PDF Version 3 Release 3 or later	Yes
5655-042	ISPF Version 4	Yes
5645-DB2	DB2 Version 6 Release 1	Yes
5645-001	OS/390 MVS Assembler Version 1 Release 3 or higher	Yes
Any **one** of the following:		

Figure 11 (Page 2 of 2). Minimum Requisites		
Program Number	**Product Name and Minimum VRM/Service Level**	**Install Req?**
5668-909	OS PL/I Version 2 Release 3 Compiler, Library and Interactive Test Facility	Yes
5668-910	OS PL/I Version 2 Compiler and Library	Yes
5668-911	OS PL/I Version 2 Library Only	Yes
5688-198	LE/370 Version 1 Release 2 or subsequent releases	Yes

5.2.3 DASD Storage Requirements

DB2 Admin Tool libraries can reside on 3380 or 3390 DASD.

Figure 12 below lists the total space required for each type of library.

Figure 12. Total DASD Space Required by DB2 Admin Tool	
Library Type	**Total Space Required**
Target	209 3380 tracks or 171 3390 tracks
Distribution	201 3380 tracks or 164 3390 tracks

Special Storage Considerations

If you are using 3350 DASD or some other type of DASD that does not support a block size of 27920, make the following change before you run job **ADBALOC**:
  —Change all occurrences of 27920 to 19069.

Notes:

 1. The data set sizes specified contain 15% extra space. You may wish to revise these numbers based on your plans for adding additional function or service.

 2. IBM recommends use of system determined blocksizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, IBM recommends a blocksize of 32760, which is the most efficient from a performance and DASD utilization perspective.

    If you choose not to use system determined blocksizes, use the blocksizes and numbers of blocks specified to allocate the data sets. Data sets can be reblocked to a larger size. Please note that the maximum allowable blocksize will depend on the type of DASD on which the dataset will reside; for example, the blocksize of datasets on a 3350 DASD cannot exceed 19,069.

 3. Abbreviations used for the data set type are:

U Unique data set used by only the FMIDs listed. In order 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 used by more than the FMIDs listed. In order 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.

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.

Figure 13. Storage Requirements for SMP/E Work Data Sets									
Library DDNAME	TYPE	DSORG	RECFM	LRECL	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
SMPWRK1	S	PO	FB	80	500	3360	46	39	5
SMPWRK2	S	PO	FB	80	500	3360	46	39	5
SMPWRK3	S	PO	FB	80	500	3200	46	39	5
SMPWRK4	S	PO	FB	80	500	3200	46	39	5
SMPWRK6	S	PO	FB	80	500	3200	46	39	5
SYSUT1	U	PS	--	--	1500	1024	137	115	0
SYSUT2	U	PS	--	--	1500	1024	137	115	0
SYSUT3	U	PS	--	--	1500	1024	137	115	0
SYSUT4	U	PS	--	--	100	1024	137	115	0

The following table provides an estimate of the storage needed in the SMP/E data sets for DB2 Admin Tool'TRY'. The estimates must be added to those of any other programs and service being installed to determine the total additional storage requirements.

Figure 14 (Page 1 of 2). Storage Requirements for SMP/E Data Sets									
Library DDNAME	TYPE	DSORG	RECFM	LRECL	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
SMPLTS	S	PO	U	0	180	6144	27	23	20
SMPMTS	S	PO	FB	80	20	6160	4	3	20

Library DDNAME	T Y P E	D S O R G	R E C F M	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
Figure 14 (Page 2 of 2). Storage Requirements for SMP/E Data Sets									
SMPPTS	S	PO	FB	80	20	6160	4	3	20
SMPSCDS	S	PO	FB	80	30	6160	5	4	30
SMPSTS	S	PO	FB	80	100	6160	17	14	40

The following figures list the target and distribution libraries (data sets) and their attributes required to install DB2 Admin Tool 'TRY'. The storage requirements of DB2 Admin Tool 'TRY' must be added to the storage required by other programs having data in the same data set (library).

DB2 Admin Tool 'BUY' uses the same target and distribution libraries as .DB2 Admin Tool 'TRY'. No additional space is required for the installation of DB2 Admin Tool 'BUY'.

Library DDNAME	T Y P E	D S O R G	R E C F M	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
Figure 15. Storage Requirements for DB2 Admin Tool Target Libraries									
SADBCLST	U	PO	FB	80	24	8800	6	5	6
SADBDBRM	U	PO	FB	80	22	8800	5	4	4
SADBEXEC	U	PO	FB	80	60	8800	14	11	10
SADBIJCL	U	PO	FB	80	12	8800	4	3	6
SADBLINK	U	PO	U	0	8	6144	3	2	2
SADBLLIB	U	PO	U	0	180	6144	27	23	6
SADBMLIB	U	PO	FB	80	6	8800	3	2	5
SADBPLIB	U	PO	FB	80	475	8800	98	81	80
SADBSAMP	U	PO	FB	80	200	8800	41	34	20
SADBSLIB	U	PO	FB	80	24	8800	6	5	10
SADBTLIB	U	PO	FB	80	6	8800	3	2	4

Library DDNAME	TYPE	DSORG	RECFM	LRECL	No. of Blks	BLK SIZE	No. of 3380/9345 Trks	No. of 3390 Trks	No. of DIR Blks
AADBASM	U	PO	FB	80	10	8800	3	2	4
AADBCLST	U	PO	FB	80	24	8800	6	5	6
AADBDBRM	U	PO	FB	80	22	8800	5	4	4
AADBEXEC	U	PO	FB	80	60	8800	14	11	10
AADBIJCL	U	PO	FB	80	12	8800	4	3	6
AADBMLIB	U	PO	FB	80	6	8800	3	2	5
AADBNCAL	U	PO	U	0	150	6144	22	19	4
AADBPLIB	U	PO	FB	80	475	8800	98	81	80
AADBSAMP	U	PO	FB	80	140	8800	41	34	20
AADBSLIB	U	PO	FB	80	24	8800	6	5	10
AADBTLIB	U	PO	FB	80	6	8800	2	2	4

Figure 16. Storage Requirements for DB2 Admin Tool Distribution Libraries

5.3 FMIDs Deleted

Installing DB2 Admin Tool 'TRY' will result in the deletion of the following FMIDs:

Deleted FMID	Deleting FMID	Description
H0IH110	H0IH610	DB2 Admin Tool V1R1M0
H0IH120	H0IH610	DB2 Admin Tool V1R2M0

Figure 17. FMIDs Deleted

5.4 Special Considerations

DB2 Admin Tool has no special considerations for the target system.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of DB2 Admin Tool.

Please note the following:

- If you want to install DB2 Admin Tool 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.

- Refer to 6.1, "Installing DB2 Admin Tool 'TRY'" or 6.2, "Installing DB2 Admin Tool 'BUY'" on page 21 for the appropriate SMP/E installation instructions. Remember, DB2 Admin Tool 'TRY.' is a pre-requisite installation required before you can install DB2 Admin Tool 'BUY'.

- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation steps.

- 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 DB2 Admin Tool 'TRY'

6.1.1 SMP/E Considerations for Installing DB2 Admin Tool

This release of DB2 Admin Tool 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 Environment

All SMP/E installation jobs provided assume that all necessary DD statements for the execution of SMP/E are defined using DDDEFs.

Sample jobs are provided to assist you in installing DB2 Admin Tool 'TRY'. After the RECEIVE step has been completed, the sample jobs can be found in SMPTLIB: **IBM.H0IH610.F2**. Make a copy of these jobs in your own library and modify them to use during the installation of DB2 Admin Tool 'TRY'. The sample jobs are:

ADBSMPE   Sample job to create SMP/E environment and initialize & prime CSI (optional)

ADBALOC   Sample job to allocate the target and distribution libraries

ADBDDDF   Sample job to define SMP/E DDDEFs

ADBRECV   Sample RECEIVE job

ADBAPLY   Sample APPLY job

ADBACPT   Sample ACCEPT job

In the sample SMP/E jobs provided, the name of the SMP/E CSI is `hlqual.SMPCSI.CSI`. The global zone name in the SMP/E CSI is `GLOBAL`. The distribution zone name is `distrlb`. The target zone name is `targetl`. The sample jobs should be updated to reflect the CSI and zone names used at your installation.

6.1.3 SMP/E Options Subentry Values

The recommended values for some SMP/E CSI subentries are shown in Figure 18. 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.

Figure 18. SMP/E Options Subentry Values		
SUB-ENTRY	**Value**	**Comment**
DSSPACE	(200,200,500)	3390 DASD tracks
PEMAX	5500	The SMP/E default is larger than what can be specified here

6.1.4 SMP/E CALLLIBS Processing

DB2 Admin Tool uses the CALLLIBS function provided in SMP/E Release 8 to resolve external references during installation. When DB2 Admin Tool is installed, ensure the following:

- Verify that the SMP/E SMPLTS data set has been allocated. Refer to *SMP/E Reference* for information on allocating the SMPLTS data set.

  Note: For DB2 Admin Tool, 3 cylinders of 3380/3390 DASD space is adequate for the SMPLTS.

- Provide DDDEFs for the following libraries:

  If you are using PL/I libraries:

    – SYS1.PLIBASE (PL/I link library)
    – SYS1.SIBMBASE (PL/I link library)
    – SYS1.SISPLOAD (ISPF library containing ISPLINK, ISPEXEC, ISPQRY)
    – SYS1.SDSNLOAD (DB2 library containing DSNELI, DSNWLI)

  If you are using Language Environment (LE) libraries instead of PL/I libraries:

    – SYS1.SCEELKED (LE link library)
    – SYS1.SISPLOAD (ISPF library containing ISPLINK, ISPEXEC, ISPQRY)
    – SYS1.SDSNLOAD (DB2 library containing DSNELI, DSNWLI)

  See 6.1.8, "DDDEF Entries for Target and Distribution Libraries for DB2 Admin Tool" on page 18 for a sample job to define these DDDEFS. The sample job is set up for LE librabries.

If you are using PL/I libraries you will need to modify the sample job and remove SYS1.SCEELKED and replace it with SYS1.PLIBASE and SYS1.SIBMBASE.

Note: The DDDEFs above are used only to resolve the link-edit for DB2 Admin Tool using CALLLIBS. These data sets are not updated during the installation of DB2 Admin Tool.

6.1.5 Unload the Sample JCL from the Product Tape

Sample installation jobs are provided on the distribution tape to help you install DB2 Admin Tool 'TRY'. The following sample JCL will copy the DB2 Admin Tool 'TRY' jobs from the tape. Add a job card and modify the parameters in boldface to uppercase values to meet your site's requirements before submitting.

```
//STEP1    EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//IN       DD DSN=IBM.H0IH610.F2,UNIT=tunit,
//         VOL=SER=ADB610,LABEL=(3,SL),DISP=(OLD,KEEP)
//OUT      DD DSNAME=ADB.V610.INSTALL,
//         DISP=(NEW,CATLG,DELETE),
//         VOL=SER=dasdvol,UNIT=dunit,
//         DCB=*.STEP1.IN,SPACE=(8800,(15,5,5))
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SYSIN    DD *
   COPY INDD=IN,OUTDD=OUT
/*
```

tunit is the unit value matching the product tape or cartridge, **ADB.V610.INSTALL** is the name of the data set where the 'TRY' sample jobs will reside, **dasdvol** is the volume serial of the DASD device where the data set will reside, and **dunit** is the DASD unit type of the volume.

You can also access the 'TRY' sample installation jobs by performing an SMP/E RECEIVE for FMID H0IH610, and then copying the jobs from dataset, **IBM.H0IH610.F2** to a work dataset for editing and submission.

6.1.6 Create SMP/E Environment and Initialize & Prime CSI (Optional)

Member **ADBSMPE** contains a sample job to create the SMPE/E CSI.

Modify the job card and the following items to meet your sites requirements, before submitting the job:

```
    hlqual        - High level qualifier for SMP/E data sets.
    SYSDA         - for DASD unit. Not needed for SMS.
    volser        - for Volume-serial. Not needed for SMS.
```

Please also notice that the SMP/E initialization parameters are read from SYS1.MACLIB(GIMZPOOL) - change this if needed.

Note: If you are using High Level Assembler, change all occurrences of IEV90 to ASMA90.

6.1.7 Allocate Distribution and Target Libraries

All the installation jobs on the tape refer to private libraries. If you chose system libraries as your target libraries, you must change the installation jobs to refer to the system libraries.

Modify and run job **ADBALOC** to allocate the SMP/E target and distribution libraries for DB2 Admin Tool 'TRY'.

Note: Be sure to read the notes in the comment section of the installation job stream. Modify the job card and submit the job.

Expected Return Codes and Messages: This job should complete with return code 0.

6.1.8 DDDEF Entries for Target and Distribution Libraries for DB2 Admin Tool

Edit and run the sample job, member name **ADBDDDF** in the data set defined by the **ADB.V610.INSTALL** job, to help you define the DB2 Admin Tool 'TRY' data sets to your SMP/E system.

Note: Be sure to read the notes in the comment section of the installation job stream. Modify the job card and submit the job.

Expected Return Codes and Messages: This job should complete with return code 0.

6.1.9 Update and Execute the SMP/E RECEIVE Job

Go to the data set, **ADB.V610.INSTALL** and edit member **ADBRECV**. Make the necessary changes and run the **ADBRECV** member.

Note: Be sure to read the notes in the comment section of the installation job stream. Modify the job card and submit the job.

Expected Return Codes and Messages: This job should complete with return of 4 or less.

Note: If you are running a lower level of OS/390 Version 2 Release 7, your ADBRECV job will end with a return code of 4. The following warning message will be issued: **GIM50050W**.

6.1.10 Update and Execute the SMP/E APPLY CHECK and APPLY Job

6.1.10.1 Perform SMP/E APPLY CHECK: Edit and submit sample job **ADBAPLY** to perform an SMP/E APPLY CHECK for DB2 Admin Tool 'TRY'. Consult the instructions in the sample job for more information. For CHECK processing on APPLY, add the CHECK operand to the APPLY statement.

```
APPLY SELECT(H0IH610)
CHECK GROUPEXTEND.
```

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).

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: This job should complete with return code 4 or 0.

Note: If you receive message **GIM20501I** during this execution, this message may be ignored.

6.1.10.2 Perform SMP/E APPLY: Remove the CHECK operand from the sample job **ADBAPLY** and submit it to perform an SMP/E APPLY for DB2 Admin Tool 'TRY'. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: This job should complete with return code 4 or 0.

Note: If you receive message **GIM20501I** during this execution, this message may be ignored.

6.1.11 Update and Execute the SMP/E ACCEPT CHECK and ACCEPT Job

6.1.11.1 Perform SMP/E ACCEPT CHECK: Edit and submit sample job **ADBACPT** to perform an SMP/E ACCEPT CHECK for DB2 Admin Tool 'TRY'. Consult the instructions in the sample job for more information. For CHECK processing on ACCEPT, add the CHECK operand to the ACCEPT statement.

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).

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: This job should complete with return code 0.

6.1.11.2 Perform SMP/E ACCEPT: Remove the CHECK operand from sample job **ADBACPT** to perform an SMP/E ACCEPT for DB2 Admin Tool 'TRY'. Consult the instructions in the sample job for more information.

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.

Expected Return Codes and Messages: This job should complete with return code 0.

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.

6.1.12 Copy FB Libraries to VB (Optional)

DB2 Admin Tool is shipped with the CLIST and EXEC libraries in fixed blocked (FB 80) format (library names SADBCLST and SADBEXEC).

If your installation standard is that CLIST and EXEC libraries are variable blocked (VB) you will need to create VB versions of these libraries. Member ADBFB2VB of the SADBSAMP library contains a sample job to create VB 255 libraries of the EXEC and CLIST libraries. The data set names of the new VB libraries will be the same as the FB libraries, but will be suffixed with '.VB'.

Modify the job card and the following items to meet your sites requirements, before submitting the job:

```
ADB.V610          - High level qualifier for data sets.
VLSRNM            - for Volume-serial. Not needed for SMS.
SYSDA             - for DASD unit. Not needed for SMS.
```

6.2 Installing DB2 Admin Tool 'BUY'

6.2.1 SMP/E Considerations for Installing DB2 Admin Tool

This release of DB2 Admin Tool 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.

You must install DB2 Admin Tool 'TRY' before you can install DB2 Admin Tool 'BUY'.

6.2.2 SMP/E Environment

All SMP/E installation jobs provided assume that all necessary DD statements for the execution of SMP/E are defined using DDDEFs.

Sample jobs are provided to assist you in installing DB2 Admin Tool 'BUY'. The sample jobs should already have been installed as part of the DB2 Admin Tool 'TRY' installation. The sample jobs are:

ADBBREC   Sample RECEIVE job

ADBBAPP   Sample APPLY job

ADBBACP   Sample ACCEPT job

In the sample SMP/E jobs provided, the name of the SMP/E CSI is `hlqual.SMPCSI.GLOBAL.CSI`. The global zone name in the SMP/E CSI is `GLOBAL`. The distribution zone name is `distrlb`. The target zone name is `targetl`. The sample jobs should be updated to reflect the CSI and zone names used at your installation.

6.2.3 Update and Execute the SMP/E RECEIVE Job

Go to the data set, **ADB.V610.INSTALL** and edit member **ADBBREC**. Make the necessary changes and run the **ADBBREC** member.

Note: Be sure to read the notes in the comment section of the installation job stream. Modify the job card and submit the job.

Expected Return Codes and Messages: This job should complete with return code 0.

6.2.4 Update and Execute the SMP/E APPLY CHECK and APPLY Job

6.2.4.1 Perform SMP/E APPLY CHECK: Edit and submit sample job **ADBBAPP** to perform an SMP/E APPLY CHECK for DB2 Admin Tool 'BUY'. Consult the instructions in the sample job for more information. For CHECK processing on APPLY, add the CHECK operand to the APPLY statement.

```
APPLY SELECT(J0IH611)
CHECK GROUPEXTEND.
```

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).

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: This job should complete with return code 0.

6.2.4.2 Perform SMP/E APPLY: Remove the CHECK operand from the sample job **ADBBAPP** and submit it to perform an SMP/E APPLY for DB2 Admin Tool 'BUY'. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: This job should complete with return code 0.

6.2.5 Update and Execute the SMP/E ACCEPT CHECK and ACCEPT Job

6.2.5.1 Perform SMP/E ACCEPT CHECK: Edit and submit sample job **ADBBACP** to perform an SMP/E ACCEPT CHECK for DB2 Admin Tool 'BUY'. Consult the instructions in the sample job for more information. For CHECK processing on ACCEPT, add the CHECK operand to the ACCEPT statement.

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).

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: This job should complete with return code 0.

6.2.5.2 Perform SMP/E ACCEPT: Remove the CHECK operand from sample job **ADBBACP** to perform an SMP/E ACCEPT for DB2 Admin Tool 'BUY'. Consult the instructions in the sample job for more information.

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.

Expected Return Codes and Messages: This job should complete with return code 0.

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.

7.0 DB2 Admin Tool Customization

The customization process tailors DB2 Admin Tool to your local standards. Customization is recommended, though not mandatory. DB2 Admin Tool executes with its defaults as delivered.

Refer to *DB2 Admin User's Guide* for more information on customizing your product.

7.1 DB2 BIND

To be able to run DB2 Admin Tool you need to BIND the packages and the DB2 Admin Tool application plan. A sample job is provided in member ADBBIND in the SADBSAMP library, Run this job on each DB2 system where you want to run DB2 Admin Tool.

DB2 Admin Tool sample library jobs use the DB2 program DSNTIAD to execute GRANT and CREATE SQL statements. If the DSNTAID is not available in your installation, execute the required SQL statements in SPUFI (in DB2I).

Modify the job card and the following items to meet your sites requirements, before submitting the job:

```
ADB.V610   - High level qualifier for
             DB2 Admin Tool data sets.
SYS1.DSN   - High level qualifier for
             your DB2 libraries.
```

7.2 DB2 Admin Tool — Installation Verification

1. Make the DB2 Admin Tool ISPF and TSO libraries available to your ISPF session.

   You can do this several ways:

   a: Copy the members to your standard ISPF & TSO libraries.

   b: Before you enter ISPF concatenate the ISPF & TSO libraries to the standard allocations.

   c: Write a small CLIST that ISPF LIBDEF'es the DB2 Admin Tool ISPF libraries before you invoke DB2 Admin Tool.

   A sample CLIST can be found in member ADBL in the SADBCLST library. After modification the ADBL CLIST should be copied to your standard CLIST library.

2. Start DB2 Admin Tool. Depending on the option chosen above do the following:

   a & b: Start DB2 Admin Tool with the command: TSO %ADB

   c: Start DB2 Admin Tool with the command: TSO %ADBL

3. If there are more than one DB2 subsystem active you should now see a panel where all the DB2 subsystems are listed. Select the one you wish to use.

By now you should see the DB2 Admin Tool main menu.

4. If you get the SQL error panel, check if the application plan (ADB) and the packages (ADBMAIN, ADB2GET, ADB2CON) are bound correctly on the DB2 system you are using. Check also that you have granted EXECUTE on the application plan ADB to the userids that are running DB2 Admin Tool.

   Restart from step 2.

5. On the DB2 Admin Tool main menu select option 1 (DB2 System Catalog). Select an option and press enter. Verify that DB2 Admin Tool is able to retrieve rows from the DB2 catalog.

7.3 Making DB2 Admin Tool Available to Users

For best performance it is recommended that you either:

- copy the DB2 Admin Tool ISPF & TSO libraries to your standard libraries which have been allocated in your TSO LOGON procedure or allocated dynamically before you invoke ISPF

  OR

- allocate the DB2 Admin Tool target libraries in the TSO LOGON procedure or dynamically before you invoke ISPF.

This will eliminate the need for doing ISPF LIBDEF's each time DB2 Admin Tool is invoked and will significantly reduce the DB2 Admin Tool startup time.

Also, if possible, define the libraries that you are using for DB2 Admin Tool (and all the libraries that are allocated on the same DD cards before the ones that you are using for DB2 Admin Tool) to LLA with the FREEZE mode. This will significantly reduce the number of I/O's and the I/O time used when ISPF and TSO searches for DB2 Admin Tool members in the concatenation sequence.

Appendix A. DB2 Admin Tool Install Logic 'TRY'/'BUY'

A.1   SMP/E Modification Control Statements — H0IH610 & J0IH611

The SMP/E Modification Control Statements (SMPMCS) for DB2 Admin Tool are contained in the SMPMCS file on the installation tape. The SMPMCS for each FMID in the product will be loaded to the SMPPTS dataset, with a member name matching the FMID, when the FMID is SMP/E RECEIVEd. You may browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

A.2   SMP/E JCLIN

The JCLIN for DB2 Admin Tool is contained in the RELFILEs on the installation tape. These files will be loaded to disk by SMP/E when the product is SMP/E RECEIVEd. You may browse or print these files using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

The files containing JCLIN are:

   FMID H0IH610: IBM.H0IH610.F1(H0IH610)

Note: The high-level qualifier is the qualifier specified as the DSPREFIX in the SMP/E OPTIONS.

27

Reader's Comments

Program Directory for DB2 Administration Tool Version 06

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

```
┌─ RATING SCALE ──────────────────────────────────────────
    very                          very         not
  satisfied  <====================>  dissatisfied  applicable
     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?

___ CBIPO
___ CBPDO
___ CustomPac
___ ServerPac
___ Independent
___ Other

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

___ Yes
___ No

Were the people who did the installation experienced with the installation of MVS products?

___ Yes
___ No

If yes, how many years? ___

If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Please provide the following contact information:

_____
Name and Job Title

_____
Organization

_____

_____
Address

_____
Telephone

Thank you for your participation.

Please send the completed form to (or give to your IBM representative who will forward it to the DB2 Administration Tool Development group):

IBM Corporation
555 Bailey Avenue
San Jose, California 95141
Attn: Icing Software, Department ICE

FAX Number: (408) 463-2633

E-Mail: comments@vnet.ibm.com

IBM