



Program Directory for IBM IMS Batch Terminal Simulator for z/OS

V04.01.00

Program Number 5655-BT4
FMID H22J410

for Use with
z/OS

Document Date: December 2011

GI10-8869-00

Note

Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 23.

A form for reader's comments appears at the back of this publication. When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© **Copyright International Business Machines Corporation 1982, 2011. All rights reserved.**

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

Contents

1.0 Introduction	1
1.1 IMS Batch Terminal Simulator Description	2
1.2 IMS Batch Terminal Simulator FMIDs	3
2.0 Program Materials	4
2.1 Basic Machine-Readable Material	4
2.2 Optional Machine-Readable Material	5
2.3 Program Publications	5
2.3.1 Basic Program Publications	5
2.3.2 Optional Program Publications	5
2.4 Program Source Materials	5
2.5 Publications Useful During Installation	6
3.0 Program Support	7
3.1 Program Services	7
3.2 Preventive Service Planning	7
3.3 Statement of Support Procedures	8
4.0 Program and Service Level Information	9
4.1 Program Level Information	9
4.2 Service Level Information	9
5.0 Installation Requirements and Considerations	10
5.1 Driving System Requirements	10
5.1.1 Machine Requirements	10
5.1.2 Programming Requirements	10
5.2 Target System Requirements	11
5.2.1 Machine Requirements	11
5.2.2 Programming Requirements	11
5.2.2.1 Installation Requisites	11
5.2.2.2 Operational Requisites	12
5.2.2.3 Toleration/Coexistence Requisites	12
5.2.2.4 Incompatibility (Negative) Requisites	13
5.2.3 DASD Storage Requirements	13
5.3 FMIDs Deleted	15
5.4 Special Considerations	15
6.0 Installation Instructions	16
6.1 Installing IMS Batch Terminal Simulator	16
6.1.1 SMP/E Considerations for Installing IMS Batch Terminal Simulator	16
6.1.2 SMP/E Options Subentry Values	16
6.1.3 Sample Jobs	16

6.1.4 Allocate SMP/E data sets (Optional)	18
6.1.5 Initialize SMP/E data sets (Optional)	18
6.1.6 Perform SMP/E RECEIVE	19
6.1.7 Allocate SMP/E Target and Distribution Libraries	19
6.1.8 Create DDDEF Entries	19
6.1.9 Perform SMP/E APPLY	19
6.1.10 Execute Installation Verification Program for IMS Batch Terminal Simulator	21
6.1.11 Perform SMP/E ACCEPT	21
6.1.12 Run REPORT CROSSZONE	22
6.2 Activating IMS Batch Terminal Simulator	22
7.0 Notices	23
7.1 Trademarks	24
Reader's Comments	25

Figures

1. Program File Content IMS Batch Terminal Simulator	4
2. Basic Material: Unlicensed Publications	5
3. Basic Material: Other Unlicensed or Licensed Publications	5
4. Publications Useful During Installation	6
5. PSP Upgrade and Subset ID	7
6. Component IDs	8
7. Driving System Software Requirements	11
8. Target System Mandatory Operational Requisites	12
9. Target System Conditional Operational Requisites	12
10. Total DASD Space Required by IMS Batch Terminal Simulator	13
11. Storage Requirements for IMS Batch Terminal Simulator Target Libraries	14
12. Storage Requirements for IMS Batch Terminal Simulator Distribution Libraries	15
13. SMP/E Options Subentry Values	16
14. Sample Installation Jobs	17

1.0 Introduction

This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of IBM IMS Batch Terminal Simulator for z/OS. This publication refers to IBM IMS Batch Terminal Simulator for z/OS as IMS Batch Terminal Simulator.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 4 identifies the basic and optional program materials and documentation for IMS Batch Terminal Simulator.
- 3.0, “Program Support” on page 7 describes the IBM support available for IMS Batch Terminal Simulator.
- 4.0, “Program and Service Level Information” on page 9 lists the APARs (program level) and PTFs (service level) that have been incorporated into IMS Batch Terminal Simulator.
- 5.0, “Installation Requirements and Considerations” on page 10 identifies the resources and considerations that are required for installing and using IMS Batch Terminal Simulator.
- 6.0, “Installation Instructions” on page 16 provides detailed installation instructions for IMS Batch Terminal Simulator. It also describes the procedures for activating the functions of IMS Batch Terminal Simulator, or refers to appropriate publications.

Before installing IMS Batch Terminal Simulator, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that are supplied with this program in softcopy format and this Program Directory; then keep them for future reference. Section 3.2, “Preventive Service Planning” on page 7 tells you how to find any updates to the information and procedures in this Program Directory.

IMS Batch Terminal Simulator is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The Program Directory that is provided in softcopy format on the CBPDO tape is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for IMS Batch Terminal Simulator are included on the CBPDO tape.

Do not use this program directory if you install IMS Batch Terminal Simulator with a SystemPac or ServerPac. When you use one of those offerings, use the jobs and documentation supplied with the offering. The offering will point you to specific sections of this program directory as needed.

1.1 IMS Batch Terminal Simulator Description

IBM IMS Batch Terminal Simulator for z/OS, V4.1 (5655-BT4) is a comprehensive testing and debugging tool that helps you verify the operation of IMS applications that access IMS Database, DB2, and WebSphere MQ. It simulates the behavior of applications and generates reports containing detailed information of processed transactions. With these powerful features, IMS Batch Terminal Simulator assists you in improving your application programming and testing productivity and efficiency in a cost and time saving manner.

IMS Batch Terminal Simulator for z/OS:

- Enhances application programmer productivity by providing a comprehensive way to test and debug IMS application and database activity.
- Enables you to test your IMS application logic, your IMS application interfaces, teleprocessing activities, 3270 format control blocks, and database activities.
- Helps to reduce cost and MIPS consumption by providing a lightweight testing environment compared to testing with full IMS resources.
- Simulates operation of IMS applications in time sharing option (TSO) and batch environments without having to modify your applications.
- Interacts with an application during testing and produces information that is not available from an online execution.
- Provides a stable online system in both test and production environments where you can test your applications before they are put online.
- Operates transparently to the applications, requiring no changes to IMS code, control blocks, libraries, or application load modules.
- Provides a comprehensive report showing all activities such as IMS DLI call trace, DB2 call trace, WebSphere MQ call trace, LU6.2 (APPC), ETO Status code and more during program execution.
- Offers flexible application test periods for easier scheduling and operation.
- Supports regression testing modifications to applications as well as modifications to the system, including new releases.
- Works as a tool for training personnel in the internal and external operation of an application.
- Simulates transaction processing in batch mode and generates listings containing screen images of transactions including data, user identification information, and timestamp through an audit report program.

IMS Batch Terminal Simulator for z/OS, V4.1 provides the following new features and functions further extending the product's capabilities and usability:

- Distributed application development support:

More and more customers are writing distributed web based front ends to IMS applications with messages coming in through IMS Connect. IMS Batch Terminal Simulator now provides the ability to

accept and process the Connect input further extending the capabilities of IMS Batch Terminal Simulator and providing a truly comprehensive way to test and debug IMS applications. You can now develop and test the client applications with low cost host simulation.

- Eclipse based graphical interface for improved usability delivered with IBM Tools Base for z/OS, V1.3 (5655-V93):

IMS Batch Terminal Simulator can now be used with IBM Rational Developer for z and IBM Debug Tools for z/OS, V11.1 (5655-W45) for simplified and seamless development, test, and debugging of applications. The front end can operate standalone or as a plugin to the Rational development platform. This drastically reduces the amount of z/OS specific knowledge an IMS application developer needs in order to develop and test IMS applications.

- New reporting features for improved analysis and prediction of performance behavior:
 - Improved and expanded display of application results for fast checking
 - Performance projections included to provided the elapsed time of the database, DB2 and WebSphere MQ calls issued by the application program helping programmers better predict performance impacts before moving into production
 - Summary results to better facilitate IMS Batch Terminal Simulator use as a regression test analysis tool
- Variable and variable-block formats as IMS Batch Terminal Simulator input for simulating messages coming in through IMS Connect are now supported.

1.2 IMS Batch Terminal Simulator FMIDs

IMS Batch Terminal Simulator consists of the following FMID:

H22J410

2.0 Program Materials

An IBM program is identified by a program number. The program number for IMS Batch Terminal Simulator is 5655-BT4.

An IBM program is identified by a program number and a feature number. The program number for IMS Batch Terminal Simulator is 5655-BT4 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 IMS Batch Terminal Simulator. 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. This program is in SMP/E RELFILE format and is installed by using SMP/E. See 6.0, "Installation Instructions" on page 16 for more information about how to install the program.

You can find information about the physical tape for the basic machine-readable materials for IMS Batch Terminal Simulator in the *CBPDO Memo To Users Extension*.

Figure 1 describes the program file content for IMS Batch Terminal Simulator.

Notes:

1. The data set attributes in this table must be used in the JCL of jobs that read the data sets. However, because the data sets are in IEBCOPY unloaded format, their actual attributes might be different.
2. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

Figure 1. Program File Content IMS Batch Terminal Simulator

Name	O R G	R E C F M	L R E C L	BLK SIZE
SMPMCS	SEQ	FB	80	6400
IBM.H22J410.F1	PDS	FB	80	8800
IBM.H22J410.F2	PDS	FB	80	8800
IBM.H22J410.F3	PDS	U	0	6144

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for IMS Batch Terminal Simulator.

2.3 Program Publications

The following sections identify the basic and optional publications for IMS Batch Terminal Simulator.

2.3.1 Basic Program Publications

Figure 2 identifies the basic unlicensed program publications for IMS Batch Terminal Simulator. One copy of each of these publications is included when you order the basic materials for IMS Batch Terminal Simulator. Additional copies can be obtained from the IBM Publications Website at URL: <http://www.ibm.com/shop/publications/order/> Contact your IBM representative for further assistance.

<i>Figure 2. Basic Material: Unlicensed Publications</i>	
Publication Title	Form Number
IBM IMS Batch Terminal Simulator for z/OS License Information	GC19-3231

Figure 3 identifies the basic unlicensed or licensed publications that are not available in hardcopy format, but are available through the internet or other media for IMS Batch Terminal Simulator.

<i>Figure 3. Basic Material: Other Unlicensed or Licensed Publications</i>		
Publication Title	Form Number	Media Format
IBM IMS Batch Terminal Simulator for z/OS User's Guide	SC19-3230	http://www.ibm.com/software/data/db2imstools/library.html

2.3.2 Optional Program Publications

No optional publications are provided for IMS Batch Terminal Simulator.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for IMS Batch Terminal Simulator.

2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 4 on page 6 during the installation of IMS Batch Terminal Simulator. To order copies, contact your IBM representative or visit the IBM Publications Center 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 User's Guide</i>	SA22-7773
<i>IBM SMP/E for z/OS Commands</i>	SA22-7771
<i>IBM SMP/E for z/OS Reference</i>	SA22-7772
<i>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</i>	GA22-7770

3.0 Program Support

This section describes the IBM support available for IMS Batch Terminal Simulator.

3.1 Program Services

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

3.2 Preventive Service Planning

Before you install IMS Batch Terminal Simulator, make sure that you have reviewed the current Preventive Service Planning (PSP) information. The PSP Buckets maintain current lists (which have been identified since the package was created) of any recommended or required service for the installation of this package. This service includes software PSP information that contains HIPER and required PTFs against the base release.

If you obtained IMS Batch Terminal Simulator as part of a CBPDO, HOLDDATA is included.

If the CBPDO for IMS Batch Terminal Simulator is older than two weeks by the time you install the product materials, you should obtain the latest PSP Bucket information by going to the following website:

<http://www14.software.ibm.com/webapp/set2/psearch/search?domain=psp>

You can also use S/390 SoftwareXcel or contact the IBM Support Center to obtain the latest PSP Bucket information.

For program support, access the Software Support Website at <http://www-01.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 IMS Batch Terminal Simulator are shown as follows:

Figure 5. PSP Upgrade and Subset ID

UPGRADE	SUBSET	Description
5655BT4	H22J410	IMS Batch Terminal Simulator

3.3 Statement of Support Procedures

Report any problems which you feel might be an error in the product materials to your IBM Support Center. You may be asked to gather and submit additional diagnostics to assist the IBM Support Center in their analysis.

Figure 6 on page 8 identifies the component IDs (COMPID) for IMS Batch Terminal Simulator.

<i>Figure 6. Component IDs</i>			
FMID	COMPID	Component Name	RETAIN Release
H22J410	5655A1400	IMS Batch Terminal Simulator	410

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of IMS Batch Terminal Simulator. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

4.1 Program Level Information

The following APAR fixes against previous releases of IMS Batch Terminal Simulator have been incorporated into this release. They are listed by FMID.

- FMID H22J310

PQ69034	PQ94051	PK55663
PQ71465	PQ95919	PK62536
PQ71630	PK03594	PK65009
PQ76182	PK04070	PK74260
PQ78210	PK06700	PK75941
PQ78405	PK11051	PK96435
PQ80182	PK16305	PM01726
PQ80705	PK28998	PM21925
PQ84054	PK33113	PM27543
PQ85416	PK51383	PM30617
PQ90257	PK52118	PM46204
PQ92591	PK53729	

4.2 Service Level Information

PTFs containing APAR fixes against this release of IMS Batch Terminal Simulator have been incorporated into this product tape. For a list of included PTFs, examine the ++VER statement in the product's SMPMCS.

It is highly recommended that you frequently check the IMS Batch Terminal Simulator PSP Bucket for HIPER and SPECIAL Attention PTFs against all FMIDs that you must install.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating IMS Batch Terminal Simulator. The following terminology is used:

- *Driving system*: the system on which SMP/E is executed to install the program.
The program might have specific operating system or product level requirements for using processes, such as binder or assembly utilities during the installation.
- *Target system*: the system on which the program is configured and run.
The program might have specific product level requirements, such as needing access to the library of another product for link-edits. These requirements, either mandatory or optional, might directly affect the element during the installation or in its basic or enhanced operation.

In many cases, you can use a system as both a driving system and a target system. However, you can make a separate IPL-able clone of the running system to use as a target system. The clone must 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.

Use separate driving and target systems in the following situations:

- When you install a new level of a product that is already installed, the new level of the product will replace the old one. By installing the new level onto a separate target system, you can test the new level and keep the old one in production at the same time.
- When you install a product that shares libraries or load modules with other products, the installation can disrupt the other products. By installing the product onto a separate target system, you can 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 IMS Batch Terminal Simulator.

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	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in this product's shipment?
Any one of the following:				
5694-A01	z/OS	V01.11.00	N/A	No
5655-G44	IBM SMP/E for z/OS	V03.05.00	N/A	No

Note: Installation might require migration to new z/OS releases to be service supported. See http://www-03.ibm.com/systems/z/os/zos/support/zos_eos_dates.html.

5.2 Target System Requirements

This section describes the environment of the target system required to install and use IMS Batch Terminal Simulator.

IMS Batch Terminal Simulator 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

Installation requisites identify products that are required and *must* be present on the system or products that are not required by but *should* be present on the system for the successful installation of this product.

Mandatory installation requisites identify products that are required on the system for the successful installation of this product. These products are specified as PREs or REQs.

IMS Batch Terminal Simulator has no mandatory installation requisites.

Note: Installation may require migration to new z/OS releases to be service supported. See http://www-03.ibm.com/systems/z/os/zos/support/zos_eos_dates.html.

Conditional installation requisites identify products that are *not* required for successful installation of this product but can resolve such things as certain warning messages at installation time. These products are specified as IF REQs.

IMS Batch Terminal Simulator has no conditional installation requisites.

5.2.2.2 Operational Requisites

Operational requisites are products that are required and *must* be present on the system or products that are not required but *should* be present on the system for this product to operate all or part of its functions.

Mandatory operational requisites identify products that are required for this product to operate its basic functions. These products are specified as PREs or REQs.

<i>Figure 8. Target System Mandatory Operational Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
Any one of the following:	
5635-A01	IMS V10.01.00
5635-A02	IMS V11.01.00
5635-A03	IMS V12.01.00

Conditional operational requisites identify products that are *not* required for this product to operate its basic functions but are required at run time for this product to operate specific functions. These products are specified as IF REQs.

<i>Figure 9. Target System Conditional Operational Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Function
5694-A01	z/OS V01.11.00 or higher -- DFSORT (included) or a functionally equivalent sort program	Playback Utility
5655-V93	IBM Tools Base for z/OS V01.03.00 or higher	For providing common services and for an Eclipse based front-end offering improved usability
5724-J08	WebSphere Application Server V07.00.00	Resource adapter

5.2.2.3 Toleration/Coexistence Requisites

Toleration/coexistence requisites identify products that must be present on sharing systems. 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 environment at different time intervals.

IMS Batch Terminal Simulator has no toleration/coexistence requisites.

5.2.2.4 Incompatibility (Negative) Requisites

Negative requisites identify products that must *not* be installed on the same system as this product.

IMS Batch Terminal Simulator has no negative requisites.

5.2.3 DASD Storage Requirements

IMS Batch Terminal Simulator libraries can reside on all supported DASD types.

Figure 10 lists the total space that is required for each type of library.

Library Type	Total Space Required in 3390 Trks
Target	46 tracks
Distribution	72 tracks

Notes:

1. For non-RECFM U data sets, IBM recommends using system-determined block sizes for efficient DASD utilization. For RECFM U data sets, IBM recommends using a block size of 32760, which is most efficient from the performance and DASD utilization perspective.
2. Abbreviations used for data set types are shown as follows.
 - U** Unique data set, allocated by this product and used by only this product. This table provides all the required information to determine the correct storage for this data set. You do not need to refer to other tables or program directories for the data set size.
 - S** Shared data set, allocated by this product and used by this product and other products. To determine the correct storage needed for this data set, add the storage size given in this table to those given in 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 other products. This data set is *not* allocated by this product. To determine the correct storage for this data set, add the storage size given in this table to those given in 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 release and reclaim the space that was used by the old release and any service that had been installed. You can determine whether 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 about the names and sizes of the required data sets, see 6.1.7, "Allocate SMP/E Target and Distribution Libraries" on page 19.

3. Abbreviations used for the file system path type are as follows.

- N** New path, created by this product.
- X** Path created by this product, but might 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 can be changed.
- The default block size of the data set can be changed.
- The data set can be merged with another data set that has equivalent characteristics.
- The data set can be either a PDS or a PDSE.

5. All target libraries listed have the following attributes:

- These data sets can be SMS-managed, but they are not required to be SMS-managed.
- These data sets are not required to reside on the IPL volume.
- The values in the "Member Type" column are not necessarily the actual SMP/E element types that are identified in the SMPMCS.

6. All target libraries that are listed and contain load modules have the following attributes:

- These data sets can be in the LPA, but they are not required to be in the LPA.
- These data sets can be in the LNKLIST.
- These data sets are not required to be APF-authorized.

The following figures describe the target and distribution libraries and file system paths required to install IMS Batch Terminal Simulator. The storage requirements of IMS Batch Terminal Simulator must be added to the storage required by other programs that have data in the same library or path.

Note: Use the data in these tables to determine 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 IMS Batch Terminal Simulator Target Libraries

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C O R D S	L R E C O R D S	No. of 3390 Trks	No. of DIR Blks
SBTSJCL0	Sample	Any	U	PDS	FB	80	10	4
SBTSMAC0	Macro	Any	U	PDS	FB	80	2	2
SBTSLMD0	Module	Any	U	PDS	U	0	30	6
SBTSCMD0	Module	Any	U	PDS	U	0	4	2

Figure 12. Storage Requirements for IMS Batch Terminal Simulator 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
ABTSJCL0	U	PDS	FB	80	10	4
ABTSMAC0	U	PDS	FB	80	2	2
ABTSMOD0	U	PDS	U	0	60	40

5.3 FMIDs Deleted

Installing IMS Batch Terminal Simulator might result in the deletion of other FMIDs. To see which FMIDs will be deleted, examine the ++VER statement in the SMPMCS of the product.

If you do not want to delete these FMIDs at this time, install IMS Batch Terminal Simulator into separate SMP/E target and distribution zones.

Note: These FMIDs are not automatically deleted from the Global Zone. If you want to delete these FMIDs from the Global Zone, see the SMP/E manuals for instructions.

5.4 Special Considerations

1. The PSP Bucket has the most current information and must be reviewed before installation.
2. For data set directory blocks and space requirements refer to the "DASD Space Required" table and to the distribution and target library requirements sections specified in applicable program directories.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of IMS Batch Terminal Simulator.

Please note the following:

- If you want to install IMS Batch Terminal Simulator 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.
- You can use the sample jobs that are provided to perform part or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries that are required for SMP/E execution have been defined in appropriate zones.
- You can use the SMP/E dialogs instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing IMS Batch Terminal Simulator

6.1.1 SMP/E Considerations for Installing IMS Batch Terminal Simulator

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of IMS Batch Terminal Simulator.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 13. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

Figure 13. SMP/E Options Subentry Values

Subentry	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 IMS Batch Terminal Simulator:

Figure 14. Sample Installation Jobs

Job Name	Job Type	Description	RELFILE
BTSCSIDA	SMP/E	Sample job to allocate new SMP/E data sets (Optional)	IBM.H22J410.F1
BTSCSIDD	SMP/E	Sample job to define SMP/E zones and DDDEFs (Optional)	IBM.H22J410.F1
BTSRECVF	RECEIVE	Sample RECEIVE job	IBM.H22J410.F1
BTSALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.H22J410.F1
BTSDDDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.H22J410.F1
BTSAPPLY	APPLY	Sample APPLY job	IBM.H22J410.F1
BTSACCP	ACCEPT	Sample ACCEPT job	IBM.H22J410.F1

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 14 on page 16 to find the appropriate relfile data set.

You can also copy the sample installation jobs from the tape or product files by submitting the following job. Depending on your distribution medium, use either the //TAPEIN or the //FILEIN DD statement and comment out or delete the other statement. Before you submit the job, add a job card and change the lowercase parameters to uppercase values to meet the requirements of your site.

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//*****
//* Make the //TAPEIN DD statement below active if you install *
//* from a CBPDO tape by uncommenting the DD statement below. *
//*****
//*TAPEIN DD DSN=IBM.H22J410.F1,UNIT=tunit,
//* VOL=SER=volser,LABEL=(x,SL),
//* DISP=(OLD,KEEP)
//*****
//* Make the //FILEIN DD statement below active for *
//* downloaded DASD files. *
//*****
//*FILEIN DD DSN=IBM.H22J410.F1,UNIT=SYSALLDA,DISP=SHR,
//* VOL=SER=filevol
//*****
//* Make the //TAPEIN DD statement below active if you install *
//* from a product tape received outside the CBPDO process *
//* (using the optional SMP/E RECEIVE job) by uncommenting *
//* the DD statement below. *
//*****
//*TAPEIN DD DSN=IBM.H22J410.F1,UNIT=tunit,
//* VOL=SER=22J410,LABEL=(2,SL),
```

```

//*          DISP=(OLD,KEEP)
//OUT       DD DSNAME=jcl-library-name,
//          DISP=(NEW,CATLG,DELETE),
//          VOL=SER=dasdvol,UNIT=SYSALLDA,
//          SPACE=(TRK,(30,15,15))
//SYSUT3    DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN     DD *
            COPY INDD=xxxxIN,OUTDD=OUT
/*

```

See the following information to update the statements in the previous sample:

TAPEIN:

tunit is the unit value that matches the product tape.

volser is the volume serial that matches the product tape.

x is the tape file number that indicates the location of the data set name on the tape.

See the documentation that is provided by CBPDO for the location of IBM.H22J410.F1 on the tape.

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 are stored.

dasdvol is the volume serial of the DASD device where the output data set resides.

SYSIN:

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

6.1.4 Allocate SMP/E data sets (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 BTSCSIDA to allocate the SMP/E data set for IMS Batch Terminal Simulator.

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

6.1.5 Initialize SMP/E data sets (Optional)

Edit and submit sample job BTSCSIDD to initialize SMP/E zones for IMS Batch Terminal Simulator.

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

If you have obtained IMS Batch Terminal Simulator as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the IMS Batch Terminal Simulator FMIDs, service, and HOLDDATA that are included on the CBPDO tape. For more information, see the documentation that is included in the CBPDO.

You can also choose to edit and submit sample job BTSRECVE to perform the SMP/E RECEIVE for IMS Batch Terminal Simulator. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages for BTSRECVE: 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 BTSALLOC to allocate the SMP/E target and distribution libraries for IMS Batch Terminal Simulator. Consult the instructions in the sample job for more information.

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

6.1.8 Create DDDEF Entries

Edit and submit sample job BTSDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for IMS Batch Terminal Simulator. Consult the instructions in the sample job for more information.

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

6.1.9 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job BTSAPPLY to perform an SMP/E APPLY CHECK for IMS Batch Terminal Simulator. Consult the instructions in the sample job for more information.

HOLDDATA introduces ERROR HOLDS against FMIDs for HIPER APARs. Before the installation, ensure that you have the latest HOLDDATA, which is available through several different portals, including <http://service.software.ibm.com/holdata/390holddata.html>. Install the FMIDs regardless of the status of unresolved HIPERs. However, do not deploy the software until the unresolved HIPERs are analyzed to determine applicability.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the PRE, ID, REQ, and IFREQ on the APPLY CHECK. The SMP/E root cause analysis identifies the cause only of *errors* and not of *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings, instead of errors).

Here is a sample to install FMIDs when ++HOLDS for HIPERs exist for the FMIDs that you install:

- a. To ensure that all recommended and critical service is installed with the FMIDs, if you have received the latest HOLDDATA, add the FIXCAT operand to the APPLY command as shown below.

```
APPLY S(fmid,fmid,...)
FORFMID(fmid,fmid,...)
SOURCEID(RSU*)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND .
```

Some HIPER APARs might not have PTFs available yet. You have to analyze the symptom flags to determine if you want to bypass the specific ERROR HOLDS and continue the installation of the FMIDs.

This method requires more initial research, but can provide resolution for all HIPERs that have fixes available and are not in a PE chain. Unresolved PEs or HIPERs might still exist and require the use of BYPASS.

- b. To install the FMIDs without regard for the HIPERs, you can add a BYPASS(HOLDCLASS(HIPER)) operand to the APPLY command. In this way, you can install FMIDs even though HIPER ERROR HOLDS against them still exist. Only the HIPER ERROR HOLDS are bypassed. After the FMIDs are installed, run the SMP/E REPORT ERRSYSMODS command to identify missing HIPER maintenance.

```
APPLY S(fmid,fmid,...)
FORFMID(fmid,fmid,...)
SOURCEID(RSU*)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER)) .
..any other parameters documented in the program directory
```

This method is the quicker of the two, but requires subsequent review of the REPORT ERRSYSMODS to investigate any HIPERs. If you have received the latest HOLDDATA, you can also choose to run REPORT MISSINGFIX for Fix Category IBM.ProductInstall-RequiredService to investigate missing recommended service.

If you bypass HOLDS during the installation of the FMIDs because PTFs are not yet available, you can be notified when the PTFs are available by using the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink.

2. After you take actions that are 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 applies 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 Execute Installation Verification Program for IMS Batch Terminal Simulator

Edit and submit the IVP job **BTSIVP** in the **SBTSJCL0** library to run the IVP for IMS Batch Terminal Simulator. Consult the instructions in the job for more information.

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

6.1.11 Perform SMP/E ACCEPT

Edit and submit sample job **BTSACCEPT** to perform an SMP/E ACCEPT CHECK for IMS Batch Terminal Simulator. 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 PRE, ID, REQ, and IFREQ on the ACCEPT CHECK. The SMP/E root cause analysis identifies the cause of only *errors* but not *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).

Before you use SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. In this way, you can save the entries that are produced from JCLIN in the distribution zone whenever a SYSMOD that contains inline JCLIN is accepted. For more information about the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

After you take actions that are 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 accepts 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 that contain replacement modules are accepted, SMP/E ACCEPT processing will link-edit or bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue messages that indicate unresolved external references, which will result in a return code of 4 during the ACCEPT phase. You can ignore these messages, because the distribution libraries are not executable and the unresolved external references do not affect the executable system libraries.

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

6.1.12 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command identifies requisites for products that are installed in separate zones. This command also creates APPLY and ACCEPT commands in the SMPPUNCH data set. You can use the APPLY and ACCEPT commands to install those cross-zone requisites that the SMP/E REPORT CROSSZONE command identifies.

After you install IMS Batch Terminal Simulator, 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 that describe all the target and distribution libraries to be reported on.

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

6.2 Activating IMS Batch Terminal Simulator

The publication *IMS Batch Terminal Simulator for z/OS User's Guide, SC19-3230* contains the necessary information to customize and use IMS Batch Terminal Simulator.

To utilize the IMS Batch Terminal Simulator Eclipse interface (delivered with IBM Tools Base for z/OS, V1.3 (5655-V93)), any one of the following is required:

- IBM Rational Developer for System z V8.0.1 and its prerequisites
- Eclipse V3.6.2 environment or greater with the WTP plug-in that is available from <http://www.eclipse.org>

7.0 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 or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

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

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, New York 10504-1785
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.

7.1 Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Reader's Comments

Program Directory for IBM IMS Batch Terminal Simulator for z/OS, December 2011

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 satisfied	<----->				very dissatisfied	not 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?

- 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 z/OS 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 IBM IMS Batch Terminal Simulator for z/OS Development group):

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

E-Mail: comments@us.ibm.com



Printed in USA

G110-8869-00

