



**Program Directory for  
IBM IMS Administration Tool for z/OS**

V01.01.00

Program Number 5655-CAT

FMID HALC110

for Use with  
z/OS

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**Note**

Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 27.

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# Contents

<b>1.0 Introduction</b>	1
1.1 IMS Administration Tool Description	1
1.2 IMS Administration Tool FMID	2
<b>2.0 Program Materials</b>	3
2.1 Basic Machine-Readable Material	3
2.2 Optional Machine-Readable Material	4
2.3 Program Publications	4
2.3.1 Optional Program Publications	4
2.4 Program Source Materials	4
2.5 Publications Useful During Installation	5
<b>3.0 Program Support</b>	6
3.1 Program Services	6
3.2 Preventive Service Planning	6
3.3 Statement of Support Procedures	7
<b>4.0 Program and Service Level Information</b>	8
4.1 Program Level Information	8
4.2 Service Level Information	8
<b>5.0 Installation Requirements and Considerations</b>	9
5.1 Driving System Requirements	9
5.1.1 Machine Requirements	9
5.1.2 Programming Requirements	9
5.2 Target System Requirements	10
5.2.1 Machine Requirements	10
5.2.2 Programming Requirements	10
5.2.2.1 Installation Requisites	10
5.2.2.2 Operational Requisites	11
5.2.2.3 Toleration/Coexistence Requisites	12
5.2.2.4 Incompatibility (Negative) Requisites	12
5.2.3 DASD Storage Requirements	12
5.3 FMIDs Deleted	15
5.4 Special Considerations	16
<b>6.0 Installation Instructions</b>	17
6.1 Installing Products for IMS Administration Tool	17
6.1.1 SMP/E Considerations for Installing IMS Administration Tool	17
6.1.2 SMP/E Options Subentry Values	17
6.1.3 SMP/E CALLLIBS Processing	18
6.1.4 Sample Jobs	18

6.1.5 Allocate SMP/E CSI (Optional)	20
6.1.6 Initialize CSI zones (Optional)	20
6.1.7 Perform SMP/E RECEIVE	20
6.1.8 Allocate SMP/E Target and Distribution Libraries	20
6.1.9 Allocate, create and mount zFS Files (Optional)	20
6.1.10 Allocate File system Paths	21
6.1.11 Create DDDEF Entries	21
6.1.12 Perform SMP/E APPLY	21
6.1.13 Perform SMP/E ACCEPT	23
6.1.14 Run REPORT CROSSZONE	24
6.2 Activating IMS Administration Tool	24
6.2.1 Product Customization	24
6.3 Installing IMS Administration Tool Web User Interface (optional)	24
6.3.1 Installing IMS Administration Tool web user interface to be used with Management Console	24
6.3.1.1 Considerations before installing IMS Administration Tool to be used with Management Console	25
6.3.1.2 Mount the IMS Administration Tool Web User Interface to be used with Management Console product repository	26
6.3.1.3 Install the IMS Administration Tool Web User Interface to be used with Management Console z/OS product code	26
<b>7.0 Notices</b>	<b>27</b>
7.1 Trademarks	27
<b>Reader's Comments</b>	<b>28</b>

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## Figures

1. Program File Content IMS Administration Tool	3
2. Basic Material: Unlicensed Publications	4
3. Publications Useful During Installation	5
4. PSP Upgrade and Subset ID	6
5. Component IDs	7
6. Driving System Software Requirements	10
7. Target System Mandatory Operational Requisites	11
8. Target System Conditional Operational Requisites	11
9. Total DASD Space Required by IMS Administration Tool	13
10. Storage Requirements for IMS Administration Tool Target Libraries	14
11. IMS Administration Tool File System Paths	15
12. Storage Requirements for IMS Administration Tool Distribution Libraries	15
13. SMP/E Options Subentry Values	17
14. Sample Installation Jobs	18

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## 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 Administration Tool for z/OS. This publication refers to IBM IMS Administration Tool for z/OS as IMS Administration Tool.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic program materials and documentation for IMS Administration Tool.
- 3.0, “Program Support” on page 6 describes the IBM support available for IMS Administration Tool.
- 4.0, “Program and Service Level Information” on page 8 lists the APARs (program level) and PTFs (service level) that have been incorporated into IMS Administration Tool.
- 5.0, “Installation Requirements and Considerations” on page 9 identifies the resources and considerations that are required for installing and using IMS Administration Tool.
- 6.0, “Installation Instructions” on page 17 provides detailed installation instructions for IMS Administration Tool. It also describes the procedures for activating the functions of IMS Administration Tool, or refers to appropriate publications.

Before installing IMS Administration Tool, 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; after which, keep the documents for your reference. Section 3.2, “Preventive Service Planning” on page 6 tells you how to find any updates to the information and procedures in this program directory.

IMS Administration Tool 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 Administration Tool are included on the CBPDO tape.

Do not use this program directory if you install IMS Administration Tool 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.

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### 1.1 IMS Administration Tool Description

IBM IMS Administration Tool for z/OS, V1.1 (5655-CAT) provides the following:

Database and Application Administration

- Provides the ability to view, add, change IMS Database (DBD) and Application (PSB) definitions
- Supports importing of schema from copybooks into IMS Database (DBD) definitions

- Enables comprehensive reporting and validation of IMS DBD and PSB definitions

#### IMS Catalog Management

- Monitors IMS Catalog usage and alerts on problems
- Supports bulk import of DBD and PSB definitions along with schema from copybooks into the IMS Catalog
- Provides summary reporting of objects stored in the IMS Catalog and overall Catalog state
- Enables replacing of unused or unwanted IMS DBD and PSB definitions
- Compares different versions of IMS DBD and PSB definitions in the IMS Catalog with the active version in the IMS ACBLIB

#### IMS Utility JCL Generation

- Provides a facility to quickly generate task-based JCL for IBM IMS Tools
- Generates JCL needed for a database reorganization to implement DBD changes

#### IMS SQL

- Offers SPUFI for IMS to issue SQL statements interactively against IMS databases
- Provides batch capabilities to issue SQL statements against IMS databases

#### IMS Command Capabilities

- Allows for issuing IMS Type 1 and Type 2 commands and viewing response
- Get complete audit log of IMS commands and DBA functions with browse and search capabilities
- Provides a store-forward capability to make sure IMS commands are in effect for all IMS systems in an IMSPLEX regardless if the IMS system is down at the time the command(s) are initially entered

#### User Interfaces

- Offers ISPF interface and Web UI via IBM IMS management Console

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## 1.2 IMS Administration Tool FMID

IMS Administration Tool consists of the following FMID:

HALC110

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## 2.0 Program Materials

An IBM program is identified by a program number. The program number for IMS Administration Tool is 5655-CAT.

Basic Machine-Readable Materials are materials that are supplied under the base license and are required for the use of the product.

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

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### 2.1 Basic Machine-Readable Material

The distribution medium for this program is physical media 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 17 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for IMS Administration Tool in the *CBPDO Memo To Users Extension*.

The following figures describe the program file content for IMS Administration Tool. You can refer to the *CBPDO Memo To Users Extension* to see where the files reside on the tape.

#### Notes:

1. The data set attributes in this table 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 (Page 1 of 2). Program File Content IMS Administration Tool*

<b>Name</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>BLK SIZE</b>
SMPMCS	SEQ	FB	80	6400
IBM.HALC110.F1	PDS	FB	80	8800
IBM.HALC110.F2	PDS	FB	80	8800
IBM.HALC110.F3	PDSE	U	0	6144
IBM.HALC110.F4	PDS	FB	80	8800
IBM.HALC110.F5	PDS	FB	80	8800

Figure 1 (Page 2 of 2). Program File Content IMS Administration Tool

<b>Name</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>BLK SIZE</b>
IBM.HALC110.F6	PDS	FB	80	8800
IBM.HALC110.F7	PDS	FB	80	8800
IBM.HALC110.F7	PDS	FB	80	8800
IBM.HALC110.F8	PDS	FB	255	27998
IBM.HALC110.F9	PDS	VB	80	8800

## 2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for IMS Administration Tool.

## 2.3 Program Publications

The following sections identify the basic publications for IMS Administration Tool.

Figure 2 identifies the basic unlicensed publications for IMS Administration Tool. Those that are in softcopy format publications can be obtained from the IBM Publications Center website at <http://www.ibm.com/shop/publications/order/>.

Figure 2. Basic Material: Unlicensed Publications

<b>Publication Title</b>	<b>Form Number</b>	<b>Media Format</b>
IBM IMS Administration Tool for z/OS License Information	G113-4332	<a href="http://www.ibm.com/software/sla/sladb.nsf">http://www.ibm.com/software/sla/sladb.nsf</a>
IBM IMS Administration Tool for z/OS User's Guide	SC27-9011	<a href="http://www.ibm.com/support/docview.wss?uid=swg27020942">http://www.ibm.com/support/docview.wss?uid=swg27020942</a>

### 2.3.1 Optional Program Publications

No optional publications are provided for IMS Administration Tool.

## 2.4 Program Source Materials

No program source materials or viewable program listings are provided for IMS Administration Tool.



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## 2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 3 on page 5 during the installation of IMS Administration Tool.

<i>Figure 3. Publications Useful During Installation</i>		
<b>Publication Title</b>	<b>Form Number</b>	<b>Media Format</b>
<i>IBM SMP/E for z/OS User's Guide</i>	SA23-2277	<a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a>
<i>IBM SMP/E for z/OS Commands</i>	SA23-2275	<a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a>
<i>IBM SMP/E for z/OS Reference</i>	SA23-2276	<a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a>
<i>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</i>	GA32-0883	<a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a>

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## 3.0 Program Support

This section describes the IBM support available for IMS Administration Tool.

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### 3.1 Program Services

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

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### 3.2 Preventive Service Planning

Before you install IMS Administration Tool, make sure that you have reviewed the current Preventive Service Planning (PSP) information. Review the PSP Bucket for General Information, Installation Documentation, and the Cross Product Dependencies sections. For the Recommended Service section, instead of reviewing the PSP Bucket, it is recommended you use the IBM.PRODUCTINSTALL-REQUIRESERVICE fix category in SMP/E to ensure you have all the recommended service installed. Use the **FIXCAT(IBM.PRODUCTINSTALL-REQUIRESERVICE)** operand on the **APPLY CHECK** command. See 6.1.12, “Perform SMP/E APPLY” on page 21 for a sample APPLY command

If you obtained IMS Administration Tool as part of a CBPDO, HOLDDATA is included.

If the CBPDO for IMS Administration Tool is older than two weeks by the time you install the product materials, you can 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.ibm.com/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 Administration Tool are included in Figure 4.

<b>UPGRADE</b>	<b>SUBSET</b>	<b>Description</b>
5655CAT	HALC110	IMS Administration Tool

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### 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 5 on page 7 identifies the component IDs (COMPID) for IMS Administration Tool.

<i>Figure 5. Component IDs</i>			
<b>FMID</b>	<b>COMPID</b>	<b>Component Name</b>	<b>RETAIN Release</b>
HALC110	5655CAT00	IMS Administration Tool	110

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## 4.0 Program and Service Level Information

This section identifies the program and relevant service levels of IMS Administration Tool. 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.

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### 4.1 Program Level Information

No APARs have been incorporated into IMS Administration Tool.

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### 4.2 Service Level Information

No PTFs against this release of IMS Administration Tool have been incorporated into the product package.

Frequently check the IMS Administration Tool PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then add the **FIXCAT(IBM.PRODUCTINSTALL-REQUIRESERVICE)** operand on your **APPLY CHECK** command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.

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## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating IMS Administration Tool. 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.

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### 5.1 Driving System Requirements

This section describes the environment of the driving system required to install IMS Administration 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 6. Driving System Software Requirements

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5650-ZOS	z/OS	V02.01.00 or higher	N/A	No

**Note:** SMP/E is a requirement for Installation and is an element of z/OS but can also be ordered as a separate product, 5655-G44, minimally V03.06.00.

**Note:** Installation might require migration to new z/OS releases to be service supported. See [https://www-01.ibm.com/software/support/lifecycle/index\\_z.html](https://www-01.ibm.com/software/support/lifecycle/index_z.html).

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## 5.2 Target System Requirements

This section describes the environment of the target system required to install and use IMS Administration Tool.

IMS Administration Tool 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 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.

IMS Administration Tool has no mandatory installation requisites.

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.

IMS Administration Tool 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.

<i>Figure 7. Target System Mandatory Operational Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
Any <b>one</b> of the following:	
5635-A05	IBM IMS, V14.1
5655-DSE	IBM IMS Database Value Unit Edition, V14.1
5655-TM3	IBM IMS Transaction Manager Value Unit Edition, V14.1
5635-A06	IBM IMS, V15.1, or later
5655-DS5	IBM IMS Database Value Unit Edition, V15.1, or later
5655-TM4	IBM IMS Transaction Manager Value Unit Edition, V15.1, or later
5655-V93	IBM Tools Base for z/OS, V1.6 with APARs PI85264, PI80007, and PI76011

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.

<i>Figure 8 (Page 1 of 2). Target System Conditional Operational Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Function
5655-W32	IBM Enterprise COBOL for z/OS V5.2.0, or higher	required for IMS SQL COBOL and COBOL copybook parsing
5655-W67	IBM Enterprise PL/I for z/OS V4.5, or higher	required for PL/I copybook parsing
5655-W43 (32bit) or 5655-W44 (64bit)	IBM SDK for z/OS, Java Technology Edition V7.1, or higher	required for IMS SQL Java
5655-IMZ	IBM Installation Manager for zOS v1.8.6, or higher	feature for installing Management Console and Administration Tool web UI
5655-TAC	IBM Management Console for IMS and DB2 for z/OS V1.1 with APAR PI80284, or higher	feature for graphical and simplified web access to Administration Tool functions
Any <b>one</b> of the following:		

Figure 8 (Page 2 of 2). Target System Conditional Operational Requisites

Program Number	Product Name and Minimum VRM/Service Level	Function
5655-U08	IBM IMS Library Integrity Utilities Facility for z/OS V2.2 or higher	for Database and Application Administration, IMS Catalog Management, and IMS SQL functions
5655-DSP	IMS Database Solution Pack for z/OS V2.2.0 or higher which includes IBM IMS Library Integrity Utilities Facility for z/OS as one of its components	for object management and Catalog catalog management functions
5698-DUL	IMS Database Utility Solution for z/OS V2.1.0 or higher which includes IBM IMS Library Integrity Utilities Facility for z/OS as one of its components	for Database and Application Administration, IMS Catalog Management, and SQL functions
5655-W14	IMS Fast Path Solution Pack for z/OS, V1.3 which includes IBM IMS Library Integrity Utilities Facility for z/OS as one of its components	for Database and Application Administration, IMS Catalog Management, and SQL functions
5698-FPP	IMS Fast Path Solution Pack for z/OS, V2.1 which includes IBM IMS Library Integrity Utilities Facility for z/OS for z/OS as one of its components	for Database and Application Administration, IMS Catalog Management, and SQL functions

### 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 Administration Tool 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 Administration Tool has no negative requisites.

## 5.2.3 DASD Storage Requirements

IMS Administration Tool libraries can reside on all supported DASD types.

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



Figure 9. Total DASD Space Required by IMS Administration Tool

Library Type	Total Space Required in 3390 Trks
Target	168
Distribution	148
File System(s)	150

**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 6.1.8, “Allocate SMP/E Target and Distribution Libraries” on page 20.

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, with some exceptions. If the value in the "ORG" column specifies "PDS", the data set must be a PDS. If the value in "DIR Blks" column specifies "N/A", the data set must be 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 not be in the LPA, with some exceptions. If the value in the "Member Type" column specifies "LPA", it is advised to place the data set in the LPA.
- These data sets can be in the LNKLST.
- These data sets are not required to be APF-authorized, with some exceptions. If the value in the "Member Type" column specifies "APF", the data set must be APF-authorized.

7. IMS Administration Tool requires that the SMPLTS data set must be a PDSE. If your existing SMPLTS is a PDS, you will need to allocate a new PDSE and copy your existing SMPLTS into it and then change the SMPLTS DDDEF entry to indicate the new PDSE data set.

The following figures describe the target and distribution libraries and file system paths required to install IMS Administration Tool. The storage requirements of IMS Administration Tool 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 10. Storage Requirements for IMS Administration Tool Target Libraries

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C O M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SATYBASE	SAMP	Any	U	PDS	FB	80	5	5
SATYBIN	BINARY	Any	U	PDSE	U	0	5	N/A
SATYLOAD	LMOD	Any	U	PDSE	U	0	70	N/A
SATYMENU	MESSAGE	Any	U	PDS	FB	80	8	10
SATYPENU	PANEL	Any	U	PDS	FB	80	25	20
SATYTENU	MESSAGE	Any	U	PDS	FB	80	5	3
SATYCEXE	EXEC	Any	U	PDS	FB	80	55	15
SATYSAMP	SAMP	Any	U	PDS	FB	80	5	5

Figure 11. IMS Administration Tool File System Paths

DDNAME	T Y P E	Path Name
SATYGENU	N	/usr/lpp/InstallationManagerRepository/HALC110/IBM

Figure 12. Storage Requirements for IMS Administration Tool 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
AATYBASE	U	PDS	FB	80	5	5
AATYBIN	U	PDSE	U	0	5	N/A
AATYLOAD	U	PDSE	U	0	50	N/A
AATYMENU	U	PDS	FB	80	8	10
AATYPENU	U	PDS	FB	80	25	20
AATYTENU	U	PDS	FB	80	5	3
AATYCEXE	U	PDS	FB	80	55	15
AATYSAMP	U	PDS	FB	80	5	5
AATYGENU	U	PDS	VB	255	40	3

### 5.3 FMIDs Deleted

Installing IMS Administration Tool 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 Administration Tool 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, use the SMP/E REJECT NOFMID DELETEFMID command. See the SMP/E Commands book for details.

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## 5.4 Special Considerations

### PDSE Considerations:

IMS Administration Tool uses the "partitioned data set extended" or PDSE format for some target libraries. There are some operational differences between PDS and PDSE data sets. The PDS format may be shared by more than one z/OS system and no special precautions are necessary. However the PDSE format may only be shared by z/OS systems which are part of a sysplex or which are connected using Global Resource Serialization (are in a GRS complex). If z/OS systems share use of a PDSE data set outside of a sysplex or GRS environment, you may experience severe problems when the data set is updated. This is due to the fact that PDSE directory information is cached in storage, and when the data set is updated from one system the other system(s) have no knowledge of the update, and their cached directory information will be incorrect.

You must take care not to share those data sets that are PDSEs between z/OS systems unless they are in a sysplex or are connected in a GRS complex. If you need to share the content of these PDSE data sets, a separate copy must be created for each z/OS 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 IMS Administration Tool.

Please note the following points:

- If you want to install IMS Administration 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.
- 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 Products for IMS Administration Tool

#### 6.1.1 SMP/E Considerations for Installing IMS Administration Tool

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of IMS Administration Tool.

#### 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.

<b>Subentry</b>	<b>Value</b>	<b>Comment</b>
DSSPACE	(7500,500,200)	3390 DASD tracks
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

### 6.1.3 SMP/E CALLLIBS Processing

IMS Administration Tool uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When IMS Administration Tool is installed, ensure that DDDEFs exist for the following libraries:

- SISPLD
- SCEELKED
- CSSLIB
- SDFSRESL

**Note:** CALLLIBS uses the previous DDDEFs only to resolve the link-edit for IMS Administration Tool. These data sets are not updated during the installation of IMS Administration Tool.

### 6.1.4 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install the IMS Administration Tool:

<i>Figure 14. Sample Installation Jobs</i>			
<b>Job Name</b>	<b>Job Type</b>	<b>Description</b>	<b>RELFILE</b>
ATYALA	SMP/E	Sample job to allocate and initialize a new SMP/E CSI data set <b>(Optional)</b>	IBM.HALC110.F2
ATYALB	SMP/E	Sample job to allocate SMP/E data sets <b>(Optional)</b>	IBM.HALC110.F2
ATYRECEV	RECEIVE	Sample RECEIVE job for IMS Administration Tool	IBM.HALC110.F2
ATYALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HALC110.F2
ATYZFS	ALLOCATE ZFS	Sample job to allocate, create mountpoint, & mount zFS data sets	IBM.HALC110.F2
ATYISMKD	MKDIR	Sample job to invoke the supplied ATYMKDIR EXEC to allocate file system paths	IBM.HALC110.F2
ATYDDDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HALC110.F2
ATYAPPLY	APPLY	Sample APPLY job	IBM.HALC110.F2
ATYACCEP	ACCEPT	Sample ACCEPT job	IBM.HALC110.F2

You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.7, “Perform SMP/E RECEIVE” on page 20) then copy the jobs from the RELFILES to a work data set for editing and submission. See Figure 14 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.HALC110.F2,UNIT=tunit,
//* VOL=SER=volser,LABEL=(x,SL),
//* DISP=(OLD,KEEP)
//*****
//* 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.HALC110.F2,UNIT=tunit,
//* VOL=SER=ALC110,LABEL=(3,SL),
//* DISP=(OLD,KEEP)
//*****
//* Make the //FILEIN DD statement below active for *
//* downloaded DASD files. *
//*****
//*FILEIN DD DSN=IBM.HALC110.F2,UNIT=SYSALLDA,DISP=SHR,
//* VOL=SER=filevol
//OUT DD DSN=jcl-library-name,
// DISP=(NEW,CATLG,DELETE),
// VOL=SER=dasdvol,UNIT=SYSALLDA,
// SPACE=(TRK,(20,10,5))
//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 package.

**volser** is the volume serial that matches the product package.

**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.HALC110.F2 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.

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

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

If you are allocating a new SMP/E data set for this install, edit and submit sample job ATYALA to allocate the SMP/E data set for the IMS Administration Tool. 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 Initialize CSI zones (Optional)

Edit and submit sample job ATYALB to initialize SMP/E zones for the IMS Administration Tool. Consult the instructions in the sample job for more information.

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

### 6.1.7 Perform SMP/E RECEIVE

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

You can also choose to edit and submit sample job ATYRECEV to perform the SMP/E RECEIVE for IMS Administration Tool. Consult the instructions in the sample job for more information.

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

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

Edit and submit sample job ATYALLOC to allocate the SMP/E target and distribution libraries for the IMS Administration Tool. Consult the instructions in the sample job for more information.

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

### 6.1.9 Allocate, create and mount zFS Files (Optional)

If you are allocating a new zFS data set for this install, edit, and submit sample job ATYZFS to allocate, format and mount a zFS file system for the IMS Administration Tool feature.

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

### 6.1.10 Allocate File system Paths

Mount the file system data set of the target system on the driving system when you run the sample ATYISMKD job because the job will create paths in the file system.

Before you run the sample job to create the paths in the file system, ensure that OMVS is active on the driving system and that the file system of the target system is mounted to the driving system. If you install the IMS Administration Tool into a zSeries file system (zFS), zFS must be active on the driving system.

If you plan to install the IMS Administration Tool into a new file system, create the mountpoint and mount the new file system to the driving system. For IMS Administration Tool, the recommended mountpoint is /usr/lpp/InstallationManagerRepository/HALC110/.

Edit and submit sample job ATYISMKD to allocate the file system for the IMS Administration Tool. Consult the instructions in the sample job for more information.

If you create a new file system for this product, consider updating the BPXPRMxx PARMLIB member to mount the new file system at IPL time. This action can be helpful if an IPL occurs before the installation is completed.

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

### 6.1.11 Create DDDEF Entries

Edit and submit sample job ATYDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for the IMS Administration Tool. 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.

### 6.1.12 Perform SMP/E APPLY

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

The latest HOLDDATA is available through several different portals, including <http://service.software.ibm.com/holdata/390holddata.html>. The latest HOLDDATA may identify HIPER and FIXCAT APARs for the FMIDs you will be installing. An APPLY CHECK will help you determine if any HIPER or FIXCAT APARs are applicable to the FMIDs you are installing. If there are any applicable HIPER or FIXCAT APARs, the APPLY CHECK will also identify fixing PTFs that will resolve the APARs, if a fixing PTF is available.

You should install the FMIDs regardless of the status of unresolved HIPER or FIXCAT APARs. However, do not deploy the software until the unresolved HIPER and FIXCAT APARs have been analyzed to determine their applicability. That is, before deploying the software either ensure fixing

PTFs are applied to resolve all HIPER or FIXCAT APARs, or ensure the problems reported by all HIPER or FIXCAT APARs are not applicable to your environment.

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 are sample APPLY commands:

- a. To ensure that all recommended and critical service is installed with the FMIDs, receive the latest HOLDDATA and use the APPLY CHECK command as follows

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

Some HIPER APARs might not have fixing PTFs available yet. You should analyze the symptom flags for the unresolved HIPER APARs to determine if the reported problem is applicable to your environment and if you should bypass the specific ERROR HOLDS in order to continue the installation of the FMIDs.

This method requires more initial research, but can provide resolution for all HIPERs that have fixing PTFs 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 unresolved HIPER APARs, you can add the BYPASS(HOLDCLASS(HIPER)) operand to the APPLY CHECK command. This will allow you to install FMIDs even though one or more unresolved HIPER APARs exist. After the FMIDs are installed, use the SMP/E REPORT ERRSYSMODS command to identify unresolved HIPER APARs and any fixing PTFs.

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

This method is quicker, but requires subsequent review of the Exception SYSMOD report produced by the REPORT ERRSYSMODS command to investigate any unresolved HIPERs. If you have received the latest HOLDDATA, you can also choose to use the REPORT MISSINGFIX command and specify Fix Category IBM.PRODUCTINSTALL-REQUIREDSERVICE to investigate missing recommended service.

If you bypass HOLDS during the installation of the FMIDs because fixing PTFs are not yet available, you can be notified when the fixing 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.

### 6.1.13 Perform SMP/E ACCEPT

Edit and submit sample job ATYACCEP to perform an SMP/E ACCEPT CHECK for the IMS Administration Tool. 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 Commands book for details.

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.

## 6.1.14 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 Administration Tool, 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.

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## 6.2 Activating IMS Administration Tool

### 6.2.1 Product Customization

For customization and use of IMS Administration Tool refer to IBM IMS Administration Tool for z/OS User's Guide, SC27-9011.

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## 6.3 Installing IMS Administration Tool Web User Interface (optional)

### Note

The following tasks can be omitted if you do not intend to use the feature for graphical user interface.

If you use the feature for graphical user interface, you must install Administration Tool web user interface by using IBM Installation Manager for z/OS. This is intended as a post SMP/E activity. The IMS Administration Tool web user interface is an add-on feature to the IBM Management Console for IMS and DB2 for z/OS V1.1.

Before installing Administration Tool web user interface, you must first install the following product:

- IBM Management Console for IMS and DB2 for z/OS, V1.1 (5655-TAC)

### 6.3.1 Installing IMS Administration Tool web user interface to be used with Management Console

### 6.3.1.1 Considerations before installing IMS Administration Tool to be used with Management Console

IBM Management Console for IMS and Db2 for z/OS, V1.1 (5655-TAC) must be installed via IBM Installation Manager before installing IMS Administration Tool web user interface for Management Console. While you customize Management Console, make sure that you install the Management Console feature that includes capabilities for managing IMS environments. This feature is installed by the following parameter or option during installation:

- For z/OS: `imsbase.feature` parameter on the install command
- For Windows: Management Console for IMS Management Base Feature option

IMS Administration Tool Web User Interface to be used with IBM Management Console for IMS and DB2 for z/OS is installed in the custom installation path for Management Console. The default path name is:

```
/usr/lpp/IBM/mgmtconsole/v110
```

Refer to the following publications for more information about how to install the IBM Management Console for IMS and Db2 for z/OS:

- *Program Directory for IBM Management Console for IMS and DB2 for z/OS, GI10-9007*
- *IBM Management Console for IMS and Db2 for z/OS User's Guide, SC27-6714*
- *Program Directory for IBM Installation Manager for z/OS, GI13-3016*

The following conditions must be satisfied to run the installation JOB:

- The required privileges of user ID depend on the Installation Manager mode that is being used:
  - If you are using administrator mode, the user ID must be a superuser.
  - If you are using nonadministrator mode, the user ID must be the one that owns the instance of Installation Manager that you are using. The user ID must also have read permission to the Installation Manager package and write permission to the installation directory of Management Console.
  - If you are using group mode, you must run the ATYIMINS job under a user ID that belongs to the UNIX System Services group that is associated with Installation Manager. The user ID must also have read permission to the Installation Manager package and write permission to the installation directory of Management Console.
- The user ID must have access to the SAF profiles that are specified in the Installation Manager sample job GIN2ADMN.
- The user ID must be capable of running a job that requires more than 600 MB region size.

### 6.3.1.2 Mount the IMS Administration Tool Web User Interface to be used with Management Console product repository

The `/usr/lpp/InstallationManagerRepository/HALC110` file system now contains the Installation Manager repository files for the IMS Administration Tool web user interface for IBM Management Console for IMS and DB2 for z/OS.

Unmount the `/usr/lpp/InstallationManagerRepository/HALC110` file system and remount it read-only at a location of your choice. The recommended location is:

```
/usr/lpp/InstallationManagerRepository/HALC110
```

You must also mount the Management Console filesystem, which contains the installation directory of IBM Management Console for IMS and DB2 for z/OS read/write, at the mountpoint at which it was originally installed with IBM Installation Manager. Consult the instructions in the installation jobs for more information. The default mount point is:

```
/usr/lpp/InstallationManagerRepository/HDYW110
```

### 6.3.1.3 Install the IMS Administration Tool Web User Interface to be used with Management Console z/OS product code

Edit and submit sample job `ATYIMINS` in `SATYBASE` to install the IMS Administration Tool web user interface to be used with IBM Management Console for IMS and DB2 for z/OS.

IBM Installation Manager is used to install the IMS Administration Tool web user interface into the same filesystem that contains IBM Management Console for IMS and DB2 for z/OS V1.1. You must use the same IBM Installation Manager that was used to install Management Console.

`/usr/lpp/IBM/mgmtconsole/v110` is the default installation directory for Management Console. If you installed Management Console in a different directory, replace the installation directory with the directory where Management Console is installed.

You must also mount the Management Console filesystem, which contains the installation directory of IBM Management Console for IMS and Db2 for z/OS, read/write, at the mountpoint at which it was originally installed with IBM Installation Manager. Consult the instructions in the installation jobs for more information.

If the Management Console server is started, you must stop the started task `DYWZSRV` before running installation `JOB`.

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

When the installation is complete, unmount the product file system and remount it on your target system at the location at which it is to be accessed. Then start Management Console server by running the started task `DYWZSRV`.

---

## 7.0 Notices

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

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## Reader's Comments

### Program Directory for IBM IMS Administration Tool for z/OS, April 2020

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