Program Directory for
IBM IMS Administration Tool for z/OS

V01.01.00
Program Number 5655-CAT

FMID HALC110

for Use with
z/OS

Document Date: December 2017
Note

Before using this information and the product it supports, be sure to read the general information under 7.0, “Notices” on page 28.
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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; then keep them for future reference. Section 3.2, “Preventive Service Planning” on page 6 tells you how to find any updates to the information and procedures in this program directory.

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.

1.1 IMS Administration Tool Description

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

Object Management
- 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

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

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

Dynamic SQL Access to IMS Data
• 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

1.2 IMS Administration Tool FMID

IMS Administration Tool consists of the following FMID:

HALC110
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.

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.

<table>
<thead>
<tr>
<th>Name</th>
<th>ORG</th>
<th>REC</th>
<th>LRE</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMPMCS</td>
<td>SEQ</td>
<td>FB</td>
<td>80</td>
<td>6400</td>
</tr>
<tr>
<td>IBM.HALC110.F1</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HALC110.F2</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HALC110.F3</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>6144</td>
</tr>
<tr>
<td>IBM.HALC110.F4</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HALC110.F5</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
</tbody>
</table>
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/

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM IMS Administration Tool for z/OS License Information</td>
<td>GI13-4332</td>
<td><a href="http://www.ibm.com/software/sla/sladb.nsf">http://www.ibm.com/software/sla/sladb.nsf</a></td>
</tr>
</tbody>
</table>

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.
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.

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</td>
<td>GA32-0883</td>
<td><a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a></td>
</tr>
</tbody>
</table>
3.0 Program Support

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

3.1 Program Services

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

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-RequiredService fix category in SMP/E to ensure you have all the recommended service installed. Use the \texttt{FIXCAT(IBM.ProductInstall-RequiredService)} operand on the \texttt{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:


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 Administration Tool are included in Figure 4.

<table>
<thead>
<tr>
<th>UPGRADE</th>
<th>SUBSET</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655CAT</td>
<td>HALC110</td>
<td>IMS Administration Tool</td>
</tr>
</tbody>
</table>

Figure 4. PSP Upgrade and Subset ID
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.

<table>
<thead>
<tr>
<th>FMID</th>
<th>COMPID</th>
<th>Component Name</th>
<th>RETAIN Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALC110</td>
<td>5655CAT00</td>
<td>IMS Administration Tool</td>
<td>110</td>
</tr>
</tbody>
</table>
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.

4.1 Program Level Information

No APARs have been incorporated into IMS Administration Tool.

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-REQUIREDSERVICE) operand on your APPLY CHECK command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.
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.

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
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.

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any one of the following:</td>
<td></td>
</tr>
<tr>
<td>5635-A03</td>
<td>IBM IMS, V12.1</td>
</tr>
<tr>
<td>5655-DSQ</td>
<td>IBM IMS Database Value Unit Edition, V12.1 with PTF UK93908</td>
</tr>
<tr>
<td>5655-TM1</td>
<td>IBM IMS Transaction Manager Value Unit Edition, V12.1</td>
</tr>
<tr>
<td>5635-A04</td>
<td>IBM IMS, V13.1</td>
</tr>
<tr>
<td>5655-DSM</td>
<td>IBM IMS Database Value Unit Edition, V13.1</td>
</tr>
<tr>
<td>5655-TM2</td>
<td>IBM IMS Transaction Manager Value Unit Edition, V13.1</td>
</tr>
<tr>
<td>5635-A05</td>
<td>IBM IMS, V14.1</td>
</tr>
<tr>
<td>5655-DSE</td>
<td>IBM IMS Database Value Unit Edition, V14.1</td>
</tr>
<tr>
<td>5655-TM3</td>
<td>IBM IMS Transaction Manager Value Unit Edition, V14.1</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-W32</td>
<td>IBM Enterprise COBOL for z/OS V5.2.0, or higher</td>
<td>required for copybook parsing</td>
</tr>
<tr>
<td>5655-IMZ</td>
<td>IBM Installation Manager for zOS v1.8.6, or higher</td>
<td>feature for installing Management Console and Administration Tool web UI</td>
</tr>
<tr>
<td>Any one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5655-U08</td>
<td>IBM IMS Library Integrity Utilities Facility for z/OS V2.2 or higher</td>
<td>for object management and Catalog catalog management functions</td>
</tr>
<tr>
<td>5655-DSP</td>
<td>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</td>
<td>for object management and Catalog catalog management functions</td>
</tr>
<tr>
<td>Any one of the following:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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](image)

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Total Space Required in 3390 Trks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>168</td>
</tr>
<tr>
<td>Distribution</td>
<td>148</td>
</tr>
<tr>
<td>File System(s)</td>
<td>150</td>
</tr>
</tbody>
</table>

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 apart from SAYTLOAD and AATYLOAD must be PDSEs.

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 LNKLST.
- SATYLOAD 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

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>T</th>
<th>R</th>
<th>L</th>
<th>No. of Trks</th>
<th>No. of Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATYBASE</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>5 5</td>
</tr>
<tr>
<td>SATYLOAD</td>
<td>LMOD</td>
<td>Any</td>
<td>U</td>
<td>PDSE</td>
<td>U</td>
<td>0 70</td>
<td>N/A</td>
</tr>
<tr>
<td>SATYMENU</td>
<td>MESSAGE</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80 8 10</td>
<td></td>
</tr>
<tr>
<td>SATYPENU</td>
<td>PANEL</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80 25 20</td>
<td></td>
</tr>
<tr>
<td>SATYTENU</td>
<td>MESSAGE</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80 5 3</td>
<td></td>
</tr>
<tr>
<td>SATYCEXE</td>
<td>EXEC</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80 55 15</td>
<td></td>
</tr>
<tr>
<td>SATYSAMP</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80 5 5</td>
<td></td>
</tr>
</tbody>
</table>

### Figure 11. IMS Administration Tool File System Paths

<table>
<thead>
<tr>
<th>DDNAME</th>
<th>Path Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATYGENU</td>
<td>/usr/lpp/InstallationManagerRepository/HALC110/IBM</td>
</tr>
</tbody>
</table>
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.

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.

<table>
<thead>
<tr>
<th>Subentry</th>
<th>Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSSPACE</td>
<td>(7500,500,200)</td>
<td>3390 DASD tracks</td>
</tr>
<tr>
<td>PEMAX</td>
<td>SMP/E Default</td>
<td>IBM recommends using the SMP/E default for PEMAX.</td>
</tr>
</tbody>
</table>
6.1.3 SMP/E CALLLIBS Processing

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

- SISPLOAD
- SCEELKED
- CSSLIB
- SDFSRESL

**Note:** CALLLIBS uses the previous DDDEFs only to resolve the link-edits 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:

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

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.

```plaintext
//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 DSNAME=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:

\textit{xxxxIN} is either TAPEIN or FILEIN depending on your input DD statement.

\subsection{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.

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

\subsection{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.

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

\subsection{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.

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

\subsection{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.

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

\subsection{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

```bash
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU/c5197)
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.

```bash
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU/c5197)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER))
```

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 the 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.

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.

6.3 Installing IMS Administration Tool Web User Interface (optional)

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following tasks can be omitted if you do not intend to use the feature for graphical user interface.</td>
</tr>
</tbody>
</table>

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)

This can be done on Windows or z/OS. Follow the corresponding sections below based on where Management Console is installed.
6.3.1 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.

6.3.2 Installing IMS Administration Tool Web User Interface on z/OS
6.3.2.1 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

6.3.2.2 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.
6.3.3 Installing IMS Administration Tool Web User Interface on Windows

6.3.3.1 Before you begin

Install IBM Installation Manager for Windows if you do not have it already installed on the machine where you will be installing IMS Administration Tool Web User Interface.

Ensure that IBM Management Console for IMS and Db2 for z/OS is already installed on the machine you will be installing IMS Administration Tool Web User Interface.

Ensure that the SMP/E installation process for IMS Administration Tool has completed successfully.

Transfer the Administration Tool Plugins repository (imsadmintool.zip) from /usr/lpp/InstallationManagerRepository/HALC110 to your preferred location using FTP or a similar file transfer utility. Ensure that you transfer the file in binary mode. The installation repository must be accessible to the Windows workstation or server that you are installing IMS Administration Tool Web User Interface on.

6.3.3.2 Installing the IMS Administration Tool Web User Interface on Windows

Ensure that any files that remain in the installation directory from a prior installation are removed.

Start Installation Manager for Windows from the Windows Start menu. You must run Installation Manager on the Windows workstation that you are installing IMS Administration Tool Web User Interface on.

In the Installation Manager for Windows interface, click File -> Preferences -> Repositories and then click Add Repository. In the Add Repository window, specify the path to the IMS Administration Tool Web User Interface installation repository that you transferred to your preferred location that is accessible to your Windows system in the first step and click OK. Close the Preferences window by clicking OK.

Click Install.

Select IBM IMS Administration Tool for z/OS and the version that you want to install, for example Version 1.1.0.0 and click Next. There may be only a single repository version shown if you only added and enabled a single repository in File -> Preferences -> Repositories.

Complete the installation by following the instructions in the Installation Manager for Windows interface. Note that the IMS Administration Tool Web User Interface will not be immediately available to a Management Console that is running. If Management Console for Windows is running users will have to stop and restart the server to access the IMS Administration Tool Web User Interface. To stop the Management Console Server for Windows, from the Windows Start menu, click IBM Management Console for IMS and Db2 for zOS -> Stop Management Console Web Server. To restart the Management Console Server for Windows, from the Windows Start menu, click IBM Management Console for IMS and Db2 for zOS -> Start Management Console Web Server.
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Reader’s Comments

Program Directory for IBM IMS Administration Tool for z/OS, December 2017

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