Program Directory for
IBM Management Console for IMS and DB2 for z/OS

V01.01.00
Program Number 5655-TAC
FMID HDYW110
for Use with
z/OS

Document Date: May 2019
Before using this information and the product it supports, be sure to read the general information under 7.0, “Notices” on page 24.
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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 Management Console for IMS and DB2 for z/OS. This publication refers to IBM Management Console for IMS and DB2 for z/OS as Management Console for IMS and DB2.

The Program Directory contains the following sections:

- **2.0, “Program Materials” on page 4** identifies the basic program materials and documentation for Management Console for IMS and DB2.
- **3.0, “Program Support” on page 7** describes the IBM support available for Management Console for IMS and DB2.
- **4.0, “Program and Service Level Information” on page 9** lists the APARs (program level) and PTFs (service level) that have been incorporated into Management Console for IMS and DB2.
- **5.0, “Installation Requirements and Considerations” on page 10** identifies the resources and considerations that are required for installing and using Management Console for IMS and DB2.
- **6.0, “Installation Instructions” on page 17** provides detailed installation instructions for Management Console for IMS and DB2. It also describes the procedures for activating the functions of Management Console for IMS and DB2, or refers to appropriate publications.

Before installing Management Console for IMS and DB2, read the **CBPDO Memo To Users** and the **CBPDO Memo To Users Extension** that are supplied with this program in softcopy format and this program directory; then keep them for future reference. Section 3.2, “Preventive Service Planning” on page 7 tells you how to find any updates to the information and procedures in this program directory.

Management Console for IMS and DB2 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 Management Console for IMS and DB2 are included on the CBPDO tape.

Do not use this program directory if you install Management Console for IMS and DB2 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 Management Console for IMS and DB2 Description

**IBM MANAGEMENT CONSOLE FOR IMS AND DB2 FOR Z/OS, V1.1 (5655-TAC)** is a lightweight web server that consolidates and simplifies information from IMS and DB2 for z/OS into a single, holistic, web-based interface that is accessible from a standard web browser.

Features of the lightweight web server include:
• Requires only a single installation for any number of IMS and DB2 subsystems
• Includes support for installation on:
  – Microsoft Windows
  – IBM z/OS (running as a started task)
• Provides a zero-install experience for the end users through support for standard browsers
• Supports TLS or SSL to facilitate secure web communication
• Has single sign-on support through the secure storage of remote logon information
• Is an optional alternative to SMP/E for a simplified online update process through a secure IBM connection to IBM Electronic Fix Distribution (EFD)

Features of the base Management Console client interface:
• A single, unified interface for viewing and managing the overall health of IMS and DB2 for z/OS subsystems across the enterprise.
• The ability to progressively drill down from the enterprise or system level down to individual objects. You can view, understand, and access identified IMS and DB2 for z/OS symptoms and recommended actions.
• Individual resource dashboards that consolidate information from a variety of sources and tools. These dashboards include:
  – DB2 data sharing group
  – DB2 subsystem
  – DB2 database
  – DB2 tablespace
  – DB2 tablespace partition
  – DB2 indexspace
  – DB2 indexspace partition
  – IMSplex
  – IMS subsystem
  – IMS connect
  – IMS database (full function or Fast Path)
  – IMS transaction
  – IMS program
  – IMS routing code
• Several navigational views for navigating to the desired IMS or DB2 resource, including:
  – An integrated hierarchical view of sysplexes, IMSplexes, IMS subsystems, DB2 data sharing groups, and DB2 subsystems
  – An auto-complete search for navigating directly to an individual resource
  – An enterprise-wide view displaying the resources with the highest severity symptoms and exceptions and the ability to navigate directly to those resources
  – A view for creating custom groups of IMS databases with summary information about the members in the group
• Embedded help throughout the interface for educating users with IMS and DB2 for z/OS details and concepts, helping to reduce the learning curve and building the essential foundation for new IMS and DB2 for z/OS System Programmers and DBAs
• Support for setting up DB2 real-time statistics (RTS) snapshot job profiles and scheduling them through the DB2 administrative task scheduler to regularly collect RTS
• Graphical charts and graphs showing historical DB2 RTS and IMS sensor data statistics, allowing users to validate autonomic symptoms and recommendations and identify overall trends
• Support for viewing, filtering, and searching IMS Tools reports that are stored within IMS Tools Knowledge Base repositories
• Graphical calendaring support for defining and optionally scheduling active autonomic maintenance windows to automatically perform recommended actions
• Query building and formatting support for ad-hoc IMS Type 2 commands against an IMS subsystem or IMSplex

1.2 Management Console for IMS and DB2 FMID

Management Console for IMS and DB2 consists of the following FMID:

   HDYW110
2.0 Program Materials

An IBM program is identified by a program number. The program number for Management Console for IMS and DB2 is 5655-TAC.

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 Management Console for IMS and DB2. 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 Management Console for IMS and DB2 in the CBPDO Memo To Users Extension.

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>O</th>
<th>R</th>
<th>G</th>
<th>E</th>
<th>C</th>
<th>L</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMPMCS</td>
<td>SEQ</td>
<td>FB</td>
<td>80</td>
<td>6400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.HDYW110.F1</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.HDYW110.F2</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>6144</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.HDYW110.F3</td>
<td>PDSE</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for Management Console for IMS and DB2.
2.3 Program Publications

The following sections identify the basic publications for Management Console for IMS and DB2.

Figure 2 on page 5 identifies the basic unlicensed publications for Management Console for IMS and DB2. Those that are in softcopy format publications can be obtained from the IBM Publications Center website at:

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Management Console for IMS and DB2 for z/OS License Information</td>
<td>GC27-6715</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 Management Console for IMS and DB2.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for Management Console for IMS and DB2.

2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 3 during the installation of Management Console for IMS and DB2.

<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>GA22-7770</td>
<td><a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a></td>
</tr>
<tr>
<td>Publication Title</td>
<td>Form Number</td>
<td>Media Format</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
</tbody>
</table>
3.0 Program Support

This section describes the IBM support available for Management Console for IMS and DB2.

3.1 Program Services

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

3.2 Preventive Service Planning

Before you install Management Console for IMS and DB2, 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 FIXCAT(IBM.ProductInstall-RequiredService) operand on the APPLY CHECK command. See 6.1.9, “Perform SMP/E APPLY” on page 20 for a sample APPLY command.

If you obtained Management Console for IMS and DB2 as part of a CBPDO, HOLDDATA is included.

If the CBPDO for Management Console for IMS and DB2 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 Management Console for IMS and DB2 are included in Figure 4.

<table>
<thead>
<tr>
<th>UPGRADE</th>
<th>SUBSET</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655TAC</td>
<td>HDYW110</td>
<td>IBM Management Console</td>
</tr>
</tbody>
</table>
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 8 identifies the component IDs (COMPID) for Management Console for IMS and DB2.

<table>
<thead>
<tr>
<th>FMID</th>
<th>COMPID</th>
<th>Component Name</th>
<th>RETAIN</th>
<th>Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDYW110</td>
<td>5655TAC00</td>
<td>Management Console for IMS and DB2</td>
<td></td>
<td>110</td>
</tr>
</tbody>
</table>
4.0 Program and Service Level Information

This section identifies the program and relevant service levels of Management Console for IMS and DB2. 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 Management Console for IMS and DB2.

4.2 Service Level Information

No PTFs against this release of Management Console for IMS and DB2 have been incorporated into the product package.

Frequently check the Management Console for IMS and DB2 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 Management Console for IMS and DB2. 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 Management Console for IMS and DB2.

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 Management Console for IMS and DB2.

Management Console for IMS and DB2 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.

Management Console for IMS and DB2 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.
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.

Management Console for IMS and DB2 has no mandatory operational requisites.

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.

---

**Figure 7. Target System Conditional Installation Requisites**

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name</th>
<th>Minimum VRM</th>
<th>Minimum Svc Lvl to satisfy these APARs</th>
<th>Function</th>
<th>Included in the shipped product?</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-IMZ</td>
<td>IBM Installation Manager</td>
<td>V01.04.00 or higher</td>
<td>PI19104</td>
<td>For activating Management Console for IMS and DB2 on the z/OS platform</td>
<td>No</td>
</tr>
</tbody>
</table>

**Figure 8. Target System Conditional Operational Requisites**

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5605-DB2</td>
<td>IBM DB2 for z/OS V10.01.00</td>
<td></td>
</tr>
<tr>
<td>5697-P31</td>
<td>IBM DB2 for z/OS Value Unit Edition V10.01.00</td>
<td></td>
</tr>
<tr>
<td>5615-DB2</td>
<td>IBM DB2 for z/OS V11.01.00</td>
<td></td>
</tr>
<tr>
<td>5697-P43</td>
<td>IBM DB2 for z/OS Value Unit Edition V11.01.00</td>
<td></td>
</tr>
<tr>
<td>5635-A03</td>
<td>IMS V12.01.00</td>
<td></td>
</tr>
<tr>
<td>5655-DSQ</td>
<td>IBM IMS Database Value Unit Edition V12.01.00 with PTF UK93908</td>
<td></td>
</tr>
<tr>
<td>5655-TM1</td>
<td>IBM IMS Transaction Manager Value Unit Edition V12.01.00</td>
<td></td>
</tr>
<tr>
<td>5635-A04</td>
<td>IBM IMS V13.01.00</td>
<td></td>
</tr>
<tr>
<td>5655-DSM</td>
<td>IBM IMS Database Value Unit Edition V13.01.00</td>
<td></td>
</tr>
<tr>
<td>5655-TM2</td>
<td>IBM IMS Transaction Manager Value Unit Edition V13.01.00</td>
<td></td>
</tr>
<tr>
<td>IBM JAVA JRE 7.1 or later, 64-bit</td>
<td></td>
<td>Program Library</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.

Management Console for IMS and DB2 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.

Management Console for IMS and DB2 has no negative requisites.

5.2.3 DASD Storage Requirements

Management Console for IMS and DB2 libraries can reside on all supported DASD types.

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

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Total Space Required in 3390 Trks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>8260 tracks</td>
</tr>
<tr>
<td>Distribution</td>
<td>8260 tracks</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 6.1.7, “Allocate SMP/E Target and Distribution Libraries” on page 20.

3. 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.

4. 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.

5. 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.
   - These data sets are not required to be APF-authorized.
   - Management Console for IMS and DB2 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 required to install Management Console for IMS and DB2. The storage requirements of Management Console for IMS and DB2 must be added to the storage required by other programs that have data in the same library.

**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.

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>Member Type</th>
<th>Target Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDYWBASE Sample</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

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.
5.3 FMIDs Deleted

Installing Management Console for IMS and DB2 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 Management Console for IMS and DB2 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:

Management Console for IMS and DB2 uses the "partitioned data set extended" or PDSE format for the SDYWBIN target library. 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 the SDYWBIN data set 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 the SDYWBIN data set, 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 Management Console for IMS and DB2.

Please note the following points:

- If you want to install Management Console for IMS and DB2 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 Management Console for IMS and DB2

6.1.1 SMP/E Considerations for Installing Management Console for IMS and DB2

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of Management Console for IMS and DB2.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 12. 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 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install Management Console for IMS and DB2:
You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.6, “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 13 on page 17 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=*

//TAPEIN DD DSN=IBM.HDYW110.F1,UNIT=tunit,
//* VOL=SER=volser,LABEL=(x,SL),
//* DISP=(OLD,KEEP)

//FILEIN DD DSN=IBM.HDYW110.F1,UNIT=SYSALLDA,DISP=SHR,
```

### Figure 13. Sample Installation Jobs

<table>
<thead>
<tr>
<th>Job Name</th>
<th>Job Type</th>
<th>Description</th>
<th>RELFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DYWALA</td>
<td>SMP/E</td>
<td>Sample job to allocate and initialize a new SMP/E CSI data set <em>(Optional)</em></td>
<td>IBM.HDYW110.F1</td>
</tr>
<tr>
<td>DYWALB</td>
<td>SMP/E</td>
<td>Sample job to allocate SMP/E data sets <em>(Optional)</em></td>
<td>IBM.HDYW110.F1</td>
</tr>
<tr>
<td>DYWRECEV</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job</td>
<td>IBM.HDYW110.F1</td>
</tr>
<tr>
<td>DYWALLOC</td>
<td>ALLOCATE</td>
<td>Sample job to allocate target and distribution libraries</td>
<td>IBM.HDYW110.F1</td>
</tr>
<tr>
<td>DYWDDEDEF</td>
<td>DDDEF</td>
<td>Sample job to define SMP/E DDDEFS</td>
<td>IBM.HDYW110.F1</td>
</tr>
<tr>
<td>DYWAPPLY</td>
<td>APPLY</td>
<td>Sample APPLY job</td>
<td>IBM.HDYW110.F1</td>
</tr>
<tr>
<td>DYWACCEP</td>
<td>ACCEPT</td>
<td>Sample ACCEPT job</td>
<td>IBM.HDYW110.F1</td>
</tr>
</tbody>
</table>
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.HDYW110.F1 on the tape.

**FILEIN:**
- `filevol` is the volume serial of the DASD device where the downloaded files reside.

**OUT:**
- `jcl-library-name` is the name of the output data set where the sample jobs are stored.
- `dasdvol` is the volume serial of the DASD device where the output data set resides.

**SYSIN:**
- `xxxxIN` is either TAPEIN or FILEIN depending on your input DD statement.

### 6.1.4 Allocate SMP/E 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 DYWALA to allocate the SMP/E data set for Management Console for IMS and DB2. 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.

### 6.1.5 Initialize CSI zones (Optional)

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

Edit and submit sample job DYWALB to initialize SMP/E zones for Management Console for IMS and DB2. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.
6.1.6 Perform SMP/E RECEIVE

If you have obtained Management Console for IMS and DB2 as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the Management Console for IMS and DB2 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 DYWRECEV to perform the SMP/E RECEIVE for Management Console for IMS and DB2. 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 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job DYWALLOC to allocate the SMP/E target and distribution libraries for Management Console for IMS and DB2. 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 Create DDDEF Entries

Edit and submit sample job DYWDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for Management Console for IMS and DB2. 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 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job DYWAPPLY to perform an SMP/E APPLY CHECK for Management Console for IMS and DB2. 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/holddata/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 ERRSYSMmods 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), HOLDFIXCAT).
```

This method is the quicker, but requires subsequent review of the Exception SYSMOD report produced by the REPORT ERRSYSMmods 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.

6.1.10 Perform SMP/E ACCEPT

Edit and submit sample job DYWACCEP to perform an SMP/E ACCEPT CHECK for Management Console for IMS and DB2. 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.
6.1.11 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 Management Console for IMS and DB2, 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 Product Customization

The publication *IBM Management Console for IMS and DB2 for z/OS User’s Guide* (SC27-6714) contains the necessary information to customize and use Management Console for IMS and DB2.
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