



Program Directory for IBM Container Hosting Foundation for z/OS

Version 1 Release 0

Program Number 5655-HZ1

FMID HHZ1100

for Use with
z/OS V2.4 and higher

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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 21.

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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 Container Hosting Foundation for z/OS Version 1 Release 0. This publication refers to IBM Container Hosting Foundation for z/OS Version 1 Release 0 as IBM Container Hosting Foundation for z/OS.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic program materials and documentation for IBM Container Hosting Foundation for z/OS.
- 3.0, “Program Support” on page 5 describes the IBM support available for IBM Container Hosting Foundation for z/OS.
- 4.0, “Program and Service Level Information” on page 7 lists the APARs (program level) and PTFs (service level) that have been incorporated into IBM Container Hosting Foundation for z/OS.
- 5.0, “Installation Requirements and Considerations” on page 9 identifies the resources and considerations that are required for installing and using IBM Container Hosting Foundation for z/OS.
- 6.0, “Installation Instructions” on page 15 provides detailed installation instructions for IBM Container Hosting Foundation for z/OS. It also describes the procedures for activating the functions of IBM Container Hosting Foundation for z/OS, or refers to appropriate publications.

Before installing IBM Container Hosting Foundation for z/OS, 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 5 tells you how to find any updates to the information and procedures in this program directory.

IBM Container Hosting Foundation for z/OS is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The program directory that is provided in softcopy format on the CBPDO is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for IBM Container Hosting Foundation for z/OS are included on the CBPDO.

Do not use this program directory if you install IBM Container Hosting Foundation for z/OS 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 IBM Container Hosting Foundation for z/OS Description

IBM Container Hosting Foundation for z/OS provides a sample product registration services parmlib member (IFAPRDxx), GLZPRDHF, to enable IBM Container Hosting Foundation for z/OS Version 1 Release 0 on the z/OS system.

IBM Container Hosting Foundation for z/OS delivers a new attractive product and pricing model to satisfy the requirement for the existing Z hardware feature code 0104.

1.2 IBM Container Hosting Foundation for z/OS FMIDs

IBM Container Hosting Foundation for z/OS consists of the following FMIDs:

HHZ1100

2.0 Program Materials

An IBM program is identified by a program number. The program number for IBM Container Hosting Foundation for z/OS is 5655-HZ1.

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 IBM Container Hosting Foundation for z/OS. 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 15 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for IBM Container Hosting Foundation for z/OS in the *CBPDO Memo To Users Extension*.

2.2 Program Publications

No publications are provided for IBM Container Hosting Foundation for z/OS.

2.3 Program Source Materials

No program source materials or viewable program listings are provided for IBM Container Hosting Foundation for z/OS.

2.4 Publications Useful During Installation

You might want to use the publications listed in Figure 1 during the installation of IBM Container Hosting Foundation for z/OS.

<i>Figure 1 (Page 1 of 2). Publications Useful During Installation</i>	
Publication Title	Form Number
<i>IBM SMP/E for z/OS User's Guide</i>	SA23-2277

Figure 1 (Page 2 of 2). Publications Useful During Installation

Publication Title	Form Number
<i>IBM SMP/E for z/OS Commands</i>	SA23-2275
<i>IBM SMP/E for z/OS Reference</i>	SA23-2276
<i>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</i>	GA32-0883

Note: IBM Publications Center <https://www.ibm.com/resources/publications>
IBM Knowledge Center <https://www.ibm.com/support/knowledgecenter>

3.0 Program Support

This section describes the IBM support available for IBM Container Hosting Foundation for z/OS.

3.1 Program Services

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

3.2 Preventive Service Planning

Before you install IBM Container Hosting Foundation for z/OS, 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 6.1.7, “Perform SMP/E APPLY” on page 16 for a sample APPLY command.

If you obtained IBM Container Hosting Foundation for z/OS as part of a CBPDO, HOLDDATA is included.

If the CBPDO for IBM Container Hosting Foundation for z/OS 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 IBM Container Hosting Foundation for z/OS are included in Figure 2.

Figure 2. PSP Upgrade and Subset ID

UPGRADE	SUBSET	Description
ZOSCHF	HHZ1100	IBM Container Hosting Foundation for z/OS

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 3 on page 6 identifies the component IDs (COMPID) for IBM Container Hosting Foundation for z/OS.

<i>Figure 3. Component IDs</i>			
F MID	COMPID	Component Name	RETAIN Release
HHZ1100	5752SCCON	z/OS Container Extensions Virtualization	100

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of IBM Container Hosting Foundation for z/OS. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

4.1 Program Level Information

The following APAR fixes against previous releases of IBM Container Hosting Foundation for z/OS have been incorporated into this release. They are listed by FMID.

- FMID HHZ1100

No APARs have been incorporated at this time.

4.2 Service Level Information

No PTFs against this release of IBM Container Hosting Foundation for z/OS have been incorporated into the product package.

Frequently check the IBM Container Hosting Foundation for z/OS 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.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating IBM Container Hosting Foundation for z/OS. 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 IBM Container Hosting Foundation for z/OS.

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 4. 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	02.03.00	N/A	No

Note: SMP/E is a requirement for Installation and is an element of z/OS.

Note: Installation might require migration to new z/OS releases to be service supported. See <https://www.ibm.com/support/lifecycle/>

5.2 Target System Requirements

This section describes the environment of the target system required to install and use IBM Container Hosting Foundation for z/OS.

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.

Figure 5. Target System Mandatory Installation Requisites

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5650-ZOS	z/OS	V2.4 or higher	N/A	No

Note: Installation might require migration to new releases to obtain support. See <https://www.ibm.com/support/lifecycle/>

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

IBM Container Hosting Foundation for z/OS 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 6. Target System Mandatory Operational Requisites</i>	
Program Number	Product Name and Minimum VRM/Service Level
5650-ZOS	z/OS V2R4 with PTF for zCX APAR OA60823, or later
5650-ZOS	z/OS V2R4 with PTF for SCRT APAR OA60919, or later

Note: Installation might require migration to new releases to obtain support. See <https://www.ibm.com/support/lifecycle/>

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

IBM Container Hosting Foundation for z/OS has no conditional operational requisites.

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.

IBM Container Hosting Foundation for z/OS 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.

IBM Container Hosting Foundation for z/OS has no negative requisites.

5.2.3 DASD Storage Requirements

IBM Container Hosting Foundation for z/OS libraries can reside on all supported DASD types.

Figure 7 on page 12 lists the total space that is required for each type of library.

Library Type	Total Space Required in 3390 Trks
Target	2
Distribution	2
File System(s)	0

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.

For more information about the names and sizes of the required data sets, see 6.1.4, “Allocate SMP/E Target and Distribution Libraries” on page 16.

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 data set should be placed in the LPA, see the Special Considerations section below.
- These data sets can be in the LNKLST. If so, see the Special Considerations section below.
- These data sets are not required to be APF-authorized, with some exceptions. If the data set must be APF-authorized, see the Special Considerations section below.

The following figures describe the target and distribution libraries and file system paths required to install IBM Container Hosting Foundation for z/OS. The storage requirements of IBM Container Hosting Foundation for z/OS 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 8. Storage Requirements for IBM Container Hosting Foundation for z/OS Target Libraries

Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C M	L R E C L	No. of 3390 Trks	No. of DIR Blks
SAMPLIB	Sample	Tvol2	E	PDS	FB	80	2	2

Figure 9. Storage Requirements for IBM Container Hosting Foundation for z/OS Distribution Libraries

Library DDNAME	T Y P E	O R G	R E C M	L R E C L	No. of 3390 Trks	No. of DIR Blks
ASAMPLIB	E	PDS	FB	80	2	2

No file system paths for IBM Container Hosting Foundation for z/OS.

5.3 FMIDs Deleted

No FMIDs are deleted by this product.

5.4 Special Considerations

IBM Container Hosting Foundation for z/OS has no special considerations for the target system.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of IBM Container Hosting Foundation for z/OS.

Please note the following points:

- If you want to install IBM Container Hosting Foundation for z/OS 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 IBM Container Hosting Foundation for z/OS

6.1.1 SMP/E Considerations for Installing IBM Container Hosting Foundation for z/OS

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of IBM Container Hosting Foundation for z/OS.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 10. 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.

<i>Figure 10. SMP/E Options Subentry Values</i>		
Subentry	Value	Comment
DSSPACE	6200,1500,2600	
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

6.1.3 Perform SMP/E RECEIVE

If you have obtained IBM Container Hosting Foundation for z/OS as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the IBM Container Hosting Foundation for z/OS FMID, service, and HOLDDATA that are included on the CBPDO package. For more information, see the documentation that is included in the CBPDO. You will receive a return code of 0 if this job runs correctly.

6.1.4 Allocate SMP/E Target and Distribution Libraries

All data sets used by IBM Container Hosting Foundation for z/OS are allocated by other products, so no new allocations are required.

6.1.5 Allocate File System Paths

The product does not install in the file system.

6.1.6 Create DDDEF Entries

All DDDEFs used by IBM Container Hosting Foundation for z/OS are created by other products, so no new DDDEFs are required.

6.1.7 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample APPLY CHECK job shown in Figure 11 on page 18 to perform an SMP/E APPLY CHECK for IBM Container Hosting Foundation for z/OS. 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.

Figure 11 on page 18 shows a sample job that you can use to perform an SMP/E APPLY CHECK for IBM Container Hosting Foundation for z/OS.

```

//HHZAPLY JOB <job parameters>
//STEP1 EXEC PGM=GIMSMP,REGION=0M,TIME=NOLIMIT
//SMPCSI DD DSN=csiname,DISP=SHR
//SMPCNTL DD *
  SET BOUNDARY(targetzone) .
  APPLY CHECK XZREQ
  FORFMID(HHZ1100)
  SELECT(HHZ1100)
  GROUPEXTEND(NOAPARS,NOUSERMODS)
  FIXCAT(IBM.ProductInstall-RequiredService)
  BYPASS(HOLDSYSTEM,
  HOLDUSER,HOLDCLASS(UCLREL,ERREL,HIPER))
  COMPRESS(ALL) .
/*

```

Figure 11. Sample SMP/E APPLY Job

Required Updates:

1. Update the job parameters.
2. Replace csiname on the SMPCSI DD statement with the CSI name.
3. Replace targetzone with the target zone name.

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.

6.1.8 Perform SMP/E ACCEPT

Perform an SMP/E ACCEPT CHECK for IBM Container Hosting Foundation for z/OS. A sample ACCEPT CHECK job is shown in Figure 12 on page 19. 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 *errors* but not *warnings* (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).

After you take actions that are indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

Figure 12 on page 19 shows a sample job that you can use to perform an SMP/E ACCEPT CHECK for IBM Container Hosting Foundation for z/OS.

```
//HHZACPT JOB <job parameters>
//STEP1 EXEC PGM=GIMSMP,REGION=0M,TIME=NOLIMIT
//SMPCSI DD DSN=csiname,DISP=SHR
//SMPCNTL DD *
  SET BOUNDARY(dlibzone).
  ACCEPT CHECK XZREQ
  FORFMID(HHZ1100)
  SELECT(HHZ1100)
  GROUPEXTEND(NOAPARS,NOUSERMODS)
  FIXCAT(IBM.ProductInstall-RequiredService)
  BYPASS(HOLDSYSTEM,
  HOLDUSER,HOLDCLASS(UCLREL,ERREL,HIPER))
  COMPRESS(ALL) .
/*
```

Figure 12. Sample SMP/E ACCEPT Job

Required Updates:

1. Update the job parameters.
2. Replace csiname on the SMPCSI DD statement with the CSI name.
3. Replace dlibzone with the distribution zone name.

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.

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

6.1.9 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 IBM Container Hosting Foundation for z/OS, 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 IBM Container Hosting Foundation for z/OS

Activating IBM Container Hosting Foundation for z/OS is a simple process that does not require assistance from IBM.

Use the following steps to enable your IBM Container Hosting Foundation for z/OS which will allow licensed usage of z/OS Container Extensions (zCX).

Edit the dynamic element parmlib member:

1. Create a copy of IFAPRD00 or your currently active IFAPRDxx member to enable IBM Container Hosting Foundation for z/OS.
2. Find the sys1.samplib(GLZPRDHF) member on your system.
3. Copy the following section from the sys1.samplib(GLZPRDHF) member into the IFAPRDxx member.

```
PRODUCT OWNER('IBM CORP')
  NAME('z/OS CHF')
  ID(5655-HZ1)
  VERSION(*)
  RELEASE(*)
  MOD(*)
  FEATURENAME('ContainerHostFnd')
  STATE(ENABLED)
```

4. Issue the SET PROD command to specify the new member as active on the system.
5. Update IEASYSxx to point to the new member.

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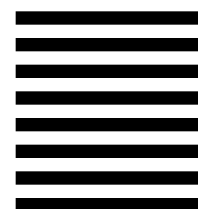
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