Program Directory for

IBM Application Delivery Foundation for z/OS

Common Components

1.11.0

Program Number 5755-AD3

FMIDs HVWR1B0, JVWR1B1

for use with
z/OS 03.01.00 or later

Document Date: October 2026

GI13-5018-00

Note

Before using this information and the product it supports, be sure to read the general information under 7.0, “Notices” on page 32.

© **Copyright International Business Machines Corporation 2013, 2017.**
© **HCL Technologies Ltd. 2017, 2026**
US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

1.0 Introduction . . . 1
1.1 ADFzCC Description . . . 2
1.2 ADFzCC FMIDs . . . 2

2.0 Program Materials . . . 3
2.1 Basic Machine-Readable Material . . . 3
2.2 Program Publications . . . 4
2.3 Program Source Materials . . . 5
2.4 Publications Useful During Installation . . . 5

3.0 Program Support . . . 6
3.1 Program Services . . . 6
3.2 Preventive Service Planning . . . 6
3.3 Statement of Support Procedures . . . 6

4.0 Program and Service Level Information . . . 7
4.1 Program Level Information . . . 7
4.2 Service Level Information . . . 7

5.0 Installation Requirements and Considerations . . . 8
5.1 Driving System Requirements . . . 8
5.1.1 Machine Requirements . . . 8
5.1.2 Programming Requirements . . . 8
5.2 Target System Requirements . . . 9
5.2.1 Machine Requirements . . . 9
5.2.2 Programming Requirements . . . 9
5.2.2.1 Installation Requisites . . . 9
5.2.2.2 Operational Requisites . . . 10
5.2.2.3 Toleration/Coexistence Requisites . . . 10
5.2.2.4 Incompatibility (Negative) Requisites . . . 10
5.2.3 DASD Storage Requirements . . . 10
5.3 FMIDs Deleted . . . 15
5.4 Special Considerations . . . 15

6.0 Installation Instructions . . . 17
6.1 Installing ADFzCC . . . 17
6.1.1 SMP/E Considerations for Installing ADFzCC . . . 17
6.1.2 SMP/E Options Subentry Values . . . 17
6.1.3 Overview of the installation steps . . . 17
6.1.4 Allocate file system to hold web download package . . . 18
6.1.5 Upload the web download package to the host . . . 20
6.1.6 Extract and expand the compressed SMPMCS and RELFILEs . . . 23

© Copyright IBM Corp. 2013, 2017

6.1.7 Sample Jobs . . . 25
6.1.8 Create SMP/E environment (optional) . . . 28
6.1.9 Perform SMP/E RECEIVE . . . 28
6.1.10 Allocate SMP/E Target and Distribution Libraries . . . 28
6.1.11 Create DDDEF Entries . . . 28
6.1.12 Perform SMP/E APPLY . . . 29
6.1.13 Perform SMP/E ACCEPT . . . 30
6.1.14 Run REPORT CROSSZONE . . . 31
6.1.15 Cleaning Up Obsolete Data Sets, Paths, and DDDEFs . . . 31
6.2 Product Customization . . . 31

7.0 Notices . . . 32
7.1 Trademarks . . . 32

Reader's Comments . . . 33

Figures

1. Program File Content -- Base . . . 3
2. Program File Content -- JPN . . . 4
3. Basic Material: Unlicensed Publications . . . 5
4. Publications Useful During Installation . . . 5
5. Component IDs . . . 6
6. Driving System Software Requirements . . . 9
7. Total DASD Space Required by ADFzCC -- Base . . . 10
8. Total DASD Space Required by ADFzCC -- JPN . . . 11
9. Storage Requirements for ADFzCC Target Libraries -- Base . . . 12
10. Storage Requirements for ADFzCC Target Libraries -- JPN . . . 13
11. Storage Requirements for ADFzCC Distribution Libraries -- Base . . . 13
12. Storage Requirements for ADFzCC Distribution Libraries -- JPN . . . 13
13. Storage Requirements for ADFzCC Web Download Data Sets -- Base . . . 14
14. Storage Requirements for ADFzCC Web Download Data Sets -- JPN . . . 14
15. SMP/E Options Subentry Values . . . 17
16. User Entered Values . . . 20
17. Sample Installation Jobs -- BASE . . . 26
18. Sample Installation Jobs -- JPN . . . 26

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 Application Delivery Foundation for z/OS Common Components. This publication refers to IBM Application Delivery Foundation for z/OS Common Components as ADFzCC.

The Program Directory contains the following sections:

- 2.0, “Program Materials” on page 3 identifies the basic program materials and documentation for ADFzCC.
- 3.0, “Program Support” on page 6 describes the IBM support available for ADFzCC.
- 4.0, “Program and Service Level Information” on page 7 lists the APARs (program level) and PTFs (service level) that have been incorporated into ADFzCC.
- 5.0, “Installation Requirements and Considerations” on page 8 identifies the resources and considerations that are required for installing and using ADFzCC.
- 6.0, “Installation Instructions” on page 17 provides detailed installation instructions for ADFzCC. It also describes the procedures for activating the functions of ADFzCC, or refers to appropriate publications.

The rest of this section only applies when ADFzCC is ordered via Shopz. It does not apply when you downloaded it from the web.
Select this link to go to the next section: 1.1, “ADFzCC Description” on page 2

Before installing ADFzCC, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that are supplied with this program in softcopy format and this program directory; after which, keep the documents for your reference. Section 3.2, “Preventive Service Planning” on page 6 tells you how to find any updates to the information and procedures in this program directory.

ADFzCC 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 ADFzCC are included on the CBPDO.

Do not use this program directory if you install ADFzCC with a z/OSMF Portable Software Instance (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.

© Copyright IBM Corp. 2013, 2017

1.1 ADFzCC Description

IBM Application Delivery Foundation for z/OS Common Components delivers common components used by some of IBM's problem determination tools for z/OS application development. ADFzCC is automatically included in your order when you obtain one of the following products:

IBM Application Performance Analyzer for z/OS
IBM Fault Analyzer for z/OS
IBM File Manager for z/OS
IBM Debug for z/OS
IBM Developer for z/OS
IBM Developer for z/OS Enterprise Edition

1.2 ADFzCC FMIDs

ADFzCC consists of the following FMIDs:

HVWR1B0
JVWR1B1

The rest of this section only applies when ADFzCC is ordered via Shopz. It does not apply when you downloaded it from the web.
Select this link to go to the next section: 2.0, "Program Materials" on page 3

You will receive the following materials:

- If you order only the base feature, you will receive the following materials:
  - ADFzCC Base (FMID HVWR1B0)
- If you order both the base and Japanese features, you will receive the following materials:
  - ADFzCC Base and JPN (FMID HVWR1B0)
  - ADFzCC JPN (FMID JVWR1B1)

2.0 Program Materials

An IBM program is identified by a program number. The program number for ADFzCC is 5755-AD3.

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 ADFzCC. 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.

The rest of this section only applies when ADFzCC is ordered via Shopz. It does not apply when you downloaded it from the web.
Select this link to go to the next section: 2.2, “Program Publications” on page 4

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

Figure 1 describes the program file content for ADFzCC.

Figure 2 on page 4 describes the program file content for ADFzCC Japanse component.

You can refer to the *CBPDO Memo To Users Extension* to see where the files reside on the image.

Notes:

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

Figure 1 (Page 1 of 2). Program File Content -- Base

Name	ORG	RECFM	LRECL	BLKSIZE
SMPMCS	SEQ	FB	80	3120
IBM.HVWR1B0.F1	PDS	FB	80	8800

© Copyright IBM Corp. 2013, 2017

Figure 1 (Page 2 of 2). Program File Content -- Base

Name	ORG	RECFM	LRECL	BLK SIZE
IBM.HVWR1B0.F2	PDS	FB	80	8800
IBM.HVWR1B0.F3	PDS	U	0	6144
IBM.HVWR1B0.F4	PDS	FB	80	8800
IBM.HVWR1B0.F5	PDS	FB	80	8800
IBM.HVWR1B0.F6	PDS	FB	80	8800
IBM.HVWR1B0.F7	PDSE	U	0	6144
IBM.HVWR1B0.F8	PDSE	U	0	6144
IBM.HVWR1B0.F9	PDS	U	0	6144

Figure 2. Program File Content -- JPN

Name	ORG	RECFM	LRECL	BLK SIZE
SMPMCS	SEQ	FB	80	3120
IBM.JVWR1B1.F1	PDS	FB	80	8800
IBM.JVWR1B1.F2	PDS	U	0	6144
IBM.JVWR1B1.F3	PDS	FB	80	8800
IBM.JVWR1B1.F4	PDS	FB	80	8800
IBM.JVWR1B1.F5	PDS	FB	80	8800
IBM.JVWR1B1.F6	PDSE	U	0	6144

2.2 Program Publications

The following sections identify the basic publications for ADFzCC.

Figure 3 identifies the basic unlicensed program publications for ADFzCC.

Figure 3. Basic Material: Unlicensed Publications	
Publication Title	**Direct Link**
IBM Application Delivery Foundation for z/OS Common Components Customization and User's Guide	See note[1]
Note:	
1. This publications can be obtained from the ADFzCC product documentation website, https://help.blueproddoc.com/adfz_common_components/welcome/index.html .	

Note: These basic unlicensed publications can be found at **IBM Products documentation** https://www.ibm.com/docs/en/products and by direct link listed in the table.

Note: Requisite information can be obtained by creating a report for the product through which you acquired ADFzCC on
https://www.ibm.com/software/reports/compatibility/clarity .

2.3 Program Source Materials

No program source materials or viewable program listings are provided for ADFzCC.

2.4 Publications Useful During Installation

You might want to use the publications listed in Figure 4 during the installation of ADFzCC, which can be found at **IBM z/OS documentation**,
https://www.ibm.com/docs/en/zos/latest?topic=zos-smpe .

Figure 4. Publications Useful During Installation
Publication
IBM SMP/E for z/OS User's Guide
IBM SMP/E for z/OS Commands
IBM SMP/E for z/OS Reference
IBM SMP/E for z/OS Messages, Codes, and Diagnosis

3.0 Program Support

This section describes the IBM support available for ADFzCC.

3.1 Program Services

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

3.2 Preventive Service Planning

Before you install ADFzCC, make sure that you review the PSP bucket information for IBM Z products document https://www.ibm.com/support/pages/node/7127792. It contains the latest information concerning the installation of IBM products, including the latest service recommendations and cross-product dependencies. This information was previously available in traditional PSP buckets, which are no longer published for IBM Z products.

For support, access the Software Support Website at https://www.ibm.com/mysupport/

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 identifies the component IDs (COMPID) for ADFzCC.

Figure 5. Component IDs

FMID	COMPID	Component Name	Release
HVWR1B0	5655IPV00	ADFzCC -- Base	1B0
JVWR1B1	5655IPV00	ADFzCC -- JPN	1B1

© Copyright IBM Corp. 2013, 2017

4.0 Program and Service Level Information

This section identifies the program and relevant service levels of ADFzCC. 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 ADFzCC have been incorporated into this release. They are listed by FMID.

- FMID HVWR1B0

PH64352	PH66372	PH66863	PH68361	PH70609
PH65322	PH66405	PH67273	PH69147	PH70906
PH65444	PH66529	PH67973	PH70125	PH70975
PH65892				

4.2 Service Level Information

No PTFs against this release of ADFzCC have been incorporated into the product package.

Frequently check
https://www.ibm.com/support/pages/latest-adfz-common-components-service-information
for the full list of PTFs available for this product.

Note: Applying a PTF can increase the modification level reported by ADFzCC, causing a mismatch between the ordered release (1.11.0) and the reported release (1.11.x).

© Copyright IBM Corp. 2013, 2017

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating ADFzCC. 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 ADFzCC.

5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.2 Programming Requirements

© Copyright IBM Corp. 2013, 2017

Figure 6. Driving System Software Requirements

Program Number	Product Name	Minimum VRM	Minimum Service Level will satisfy these APARs	Included in the shipped product?
5655-ZOS	z/OS	03.01.00 or higher	N/A	No

Note: The minimum z/OS level is either what is listed in the table, or the currently minimum supported OS level, whichever is the most recent.

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 ADFzCC.

ADFzCC installs in the z/OS (Z038) 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. These products are specified as PREs or REQs.

ADFzCC 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. These products are specified as IF REQs.

ADFzCC 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.

ADFzCC 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. These products are specified as IF REQs.

ADFzCC 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.

ADFzCC 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.

ADFzCC has no negative requisites.

5.2.3 DASD Storage Requirements

ADFzCC libraries can reside on all supported DASD types.

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

Figure 7. Total DASD Space Required by ADFzCC -- Base

Library Type	Total Space Required in 3390 Trks	Description
Target	750 Tracks	
Distribution	750 Tracks	
Web Download	705 Tracks	This row only applies when ADFzCC is downloaded from the web. It does not apply when you ordered it via Shopz. These are temporary data sets, which can be removed after the SMP/E install.

Figure 8. Total DASD Space Required by ADFzCC -- JPN

Library Type	Total Space Required in 3390 Trks	Description
Target	45 Tracks	
Distribution	45 Tracks	
Web Download	133 Tracks	This row only applies when ADFzCC is downloaded from the web. It does not apply when you ordered it via Shopz. These are temporary data sets, which can be removed after the SMP/E install.

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 6.1.10, “Allocate SMP/E Target and Distribution Libraries” on page 28.

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, with some exceptions. The exceptions are listed after the table.

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 not be in the LPA, with some exceptions. If the value in the "Member Type" column specifies "LPA", it is advised to place the data set in the LPA.
   - These data sets can be in the LNKLST.
   - These data sets are not required to be APF-authorized, with some exceptions. The exceptions are listed after the table.
   - Check your SMPLTS allocation if the table indicates that a load library ("RECFM" column specifies U) must be a PDSE ("DIR Blks" column specifies N/A). If you have an existing SMPLTS, and it is a PDS, you must allocate a new PDSE and copy your SMPLTS into it; 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 ADFzCC. The storage requirements of ADFzCC 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.

Figure 9. Storage Requirements for ADFzCC Target Libraries -- Base

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SIPVLPA1	LMOD	ANY	U	PDS	U	0	45	2
SIPVMENU	Message	ANY	U	PDS	FB	80	15	5
SIPVMODA	LMOD	ANY	U	PDSE	U	0	600	N/A
SIPVMOD1	LMOD	ANY	U	PDSE	U	0	45	N/A
SIPVPENU	Panel	ANY	U	PDS	FB	80	15	5
SIPVSAM1	Sample	ANY	U	PDS	FB	80	15	5
SIPVTENU	Table	ANY	U	PDS	FB	80	15	2

- SIPVLPA1 must be a PDS.
- SIPVMODA must be a PDSE.
- SIPVMOD1 must be a PDSE.

- SIPVMODA must be APF authorized.

Figure 10. Storage Requirements for ADFzCC Target Libraries -- JPN

Library DDNAME	Member Type	Target Volume	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
SIPVMJPN	Message	ANY	U	PDS	FB	80	15	5
SIPVPJPN	Panel	ANY	U	PDS	FB	80	15	5
SIPVTJPN	Table	ANY	U	PDS	FB	80	15	2

Figure 11. Storage Requirements for ADFzCC Distribution Libraries -- Base

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
AIPVLPA1	U	PDS	U	0	45	2
AIPVMENU	U	PDS	FB	80	15	5
AIPVMODA	U	PDSE	U	0	600	N/A
AIPVMOD1	U	PDSE	U	0	45	N/A
AIPVPENU	U	PDS	FB	80	15	5
AIPVSAM1	U	PDS	FB	80	15	5
AIPVTENU	U	PDS	FB	80	15	2

- AIPVLPA1 must be a PDS.
- AIPVMODA must be a PDSE.
- AIPVMOD1 must be a PDSE.

Figure 12. Storage Requirements for ADFzCC Distribution Libraries -- JPN

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
AIPVMJPN	U	PDS	FB	80	15	5
AIPVPJPN	U	PDS	FB	80	15	5
AIPVTJPN	U	PDS	FB	80	15	2

The rest of this section only applies when ADFzCC is downloaded from the web. It does not apply when you ordered it via Shopz.
Select this link to go to the next section: 5.3, "FMIDs Deleted" on page 15

The following figures list data sets that are not used by ADFzCC, but are required as input for SMP/E.

Figure 13. Storage Requirements for ADFzCC Web Download Data Sets -- Base

Data Set Name	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
hlq.IBM.HVWR1B0.F1	U	PDS	FB	80	15	5
hlq.IBM.HVWR1B0.F2	U	PDS	FB	80	15	16
hlq.IBM.HVWR1B0.F3	U	PDS	U	0	15	10
hlq.IBM.HVWR1B0.F4	U	PDS	FB	80	15	120
hlq.IBM.HVWR1B0.F5	U	PDS	FB	80	15	13
hlq.IBM.HVWR1B0.F6	U	PDS	FB	80	15	6
hlq.IBM.HVWR1B0.F7	U	PDSE	U	0	30	N/A
hlq.IBM.HVWR1B0.F8	U	PDSE	U	0	150	N/A
hlq.IBM.HVWR1B0.F9	U	PDS	U	0	30	2
hlq.IBM.HVWR1B0.SMPMCS	U	SEQ	FB	80	15	N/A
z/OS UNIX file system	U	zFS	N/A	N/A	390	N/A

Note: These are temporary data sets, which can be removed after the SMP/E install.

- hlq.IBM.HVWR1B0.F3, and hlq.IBM.HVWR1B0.F9 must be a PDS.
- hlq.IBM.HVWR1B0.F7, and hlq.IBM.HVWR1B0.F8 must be a PDSE.

Figure 14 (Page 1 of 2). Storage Requirements for ADFzCC Web Download Data Sets -- JPN

Data Set Name	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
hlq.IBM.JVWR1B1.F1	U	PDS	FB	80	15	5
hlq.IBM.JVWR1B1.F2	U	PDS	U	0	15	10
hlq.IBM.JVWR1B1.F3	U	PDS	FB	80	15	120
hlq.IBM.JVWR1B1.F4	U	PDS	FB	80	15	13
hlq.IBM.JVWR1B1.F5	U	PDS	FB	80	15	6

Figure 14 (Page 2 of 2). Storage Requirements for ADFzCC Web Download Data Sets -- JPN

Data Set Name	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks
hlq.IBM.JVWR1B1.F6	U	PDSE	6144	0	15	N/A
hlq.IBM.JVWR1B1.SMPMCS	U	SEQ	FB	80	15	N/A
z/OS UNIX file system	U	zFS	N/A	N/A	18	N/A

Note: These are temporary data sets, which can be removed after the SMP/E install.

- hlq.IBM.JVWR1B1.F2 must be a PDS.
- hlq.IBM.JVWR1B1.F6 must be a PDSE.

5.3 FMIDs Deleted

Installing ADFzCC 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 ADFzCC 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:

ADFzCC uses the "partitioned data set extended" or PDSE format for its 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 the libraries 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 libraries,
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 ADFzCC.

Please note the following points:

- If you want to install ADFzCC 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 ADFzCC

6.1.1 SMP/E Considerations for Installing ADFzCC

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

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 15. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

Figure 15. SMP/E Options Subentry Values

Subentry	Value	Comment
DSSPACE	(1200,1200,1400)	Space allocation
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

6.1.3 Overview of the installation steps

Overview of steps required to install IBM Application Delivery Foundation for z/OS Common Components.

1. Allocate file system to hold web download package
   (only applicable for web download, not Shopz orders)
2. Upload the web download package to the host

© Copyright IBM Corp. 2013, 2017

(only applicable for web download, not Shopz orders)

3. Extract and expand the compressed SMPMCS and RELFILEs
   (only applicable for web download, not Shopz orders)

   Select this link to skip the web download specific steps: 6.1.7, "Sample Jobs" on page 25
4. Create SMP/E environment (optional)
5. Perform SMP/E RECEIVE
6. Allocate SMP/E target and distribution libraries
7. Create DDDEF entries
8. Perform SMP/E APPLY
9. Enable/Register ADFzCC
10. Remove old registrations
11. Run the Installation Verification Programs (IVPs)
12. Verify the ADFzCC Utilities Setup Utility Function
13. Perform SMP/E ACCEPT
14. Run REPORT CROSSZONE

6.1.4 Allocate file system to hold web download package

This section only applies when ADFzCC is downloaded from the web. It does not apply when it is ordered via Shopz.
Select this link to skip the web download specific steps: 6.1.7, "Sample Jobs" on page 25

The SMP/E input data sets to install IBM Application Delivery Foundation for z/OS Common Components are provided as compressed files in archives HVWR1B0.pax.Z and JVWR1B1.pax.Z, which must be uploaded to z/OS as a z/OS UNIX file. You can either create a new z/OS UNIX file system (zFS) or create a new directory in an existing file system to place the download package.

You can use the following sample JCL to create a new file system, and directory, for the download package. The sample assumes that you will upload only the base feature (FMID HVWR1B0). The size of the file system must be increased if you also include other features:

- Base feature, provided in HVWR1B0.pax.Z: 390 tracks
- Japanese feature, provided in JVWR1B1.pax.Z: 18 tracks

```
//FILESYS  JOB <job information>
//*
//* - Provide valid job card information
//* - Change:
//*   @zfs_path@
//*   ----+----1----+----2----+----3----+----4----+----5
//*              - To the absolute z/OS UNIX path for the download
//*                package (starting with /)
//*              - Maximum length is 50 characters
//*              - Do not include a trailing /
//*   @zfs_dsn@
//*              - To your file system data set name
//*
//* Your userid MUST be defined as a SUPERUSER to successfully
//* run this job
//*
//CREATE   EXEC PGM=IDCAMS,REGION=0M,COND=(0,LT)
//SYSPRINT DD SYSOUT=*
//SYSIN    DD *
  DEFINE CLUSTER ( -
         NAME(@zfs_dsn@) -
         TRK(390 10) -
         LINEAR -
         SHAREOPTIONS(3) -
         )
//*
//         SET ZFSDSN='@zfs_dsn@'
//FORMAT   EXEC PGM=IOEAGFMT,REGION=0M,COND=(0,LT),
//            PARM='-aggregate &ZFSDSN. -compat'
//*STEPLIB  DD DISP=SHR,DSN=IOE.SIOELMOD        before z/OS 1.13
//*STEPLIB  DD DISP=SHR,DSN=SYS1.SIEALNKE       from z/OS 1.13
//SYSPRINT DD SYSOUT=*
//*
//MOUNT    EXEC PGM=IKJEFT01,REGION=0M,COND=(0,LT)
//SYSEXEC  DD DISP=SHR,DSN=SYS1.SBPXEXEC
//SYSTSPRT DD SYSOUT=*
//SYSTSIN  DD *
  PROFILE MSGID WTPMSG
  oshell umask 0022; +
    mkdir -p @zfs_path@
  MOUNT +
    FILESYSTEM('@zfs_dsn@') +
    MOUNTPOINT('@zfs_path@') +
    MODE(RDWR) TYPE(ZFS) PARM('AGGRGROW')
//*
```

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

6.1.5 Upload the web download package to the host

This section only applies when ADFzCC is downloaded from the web. It does not apply when it is ordered via Shopz.
Select this link to skip the web download specific steps: 6.1.7, “Sample Jobs” on page 25

Upload the HVWR1B0.readme.txt file, and JVWR1B1.readme.txt if required, in text format and the HVWR1B0.pax.Z file, and JVWR1B1.pax.Z if required, in binary format from your workstation to the z/OS UNIX file system.

In the following sample dialog, we use FTP from a Microsoft Windows command line to do the transfer. Commands or other information entered by the user are in bold, and the following values are assumed:

Figure 16. User Entered Values

User enters:	Values
mvsaddr	TCP/IP address or hostname of the z/OS system
tsouid	Your TSO user ID
tsopw	Your TSO password
C:\Users\your_name\Desktop	Location of the downloaded files (Microsoft Windows)
/Users/your_name/Desktop	Location of the downloaded files (Apple macOS)
@zfs_path@	z/OS UNIX path where to store the files. This matches the @zfs_path@ variable you specified in the previous step.

Issue these commands to upload the ADFzCC Base:

```
C:\Users\your_name\Desktop\>ftp mvsaddr
Connected to mvsaddr.
220-FTPD1 IBM FTP CS %version% at mvsaddr, %time% on %date%.
220 Connection will close if idle for more than 5 minutes.
User (mvsaddr:(none)): tsouid
331 Send password please.
Password: tsopw
230 tsouid is logged on.  Working directory is "tsouid.".
ftp> cd @zfs_path@
250 HFS directory @zfs_path@ is the current working directory
ftp> ascii
200 Representation type is Ascii NonPrint
ftp> put C:\Users\your_name\Desktop\HVWR1B0.readme.txt
200 Port request OK.
125 Storing data set @zfs_path@/HVWR1B0.readme.txt
250 Transfer completed successfully.
ftp: 10472 bytes sent in 0.01 sec. (1366.67 Kb/s)
ftp> binary
200 Representation type is Image
```

```
ftp> put C:\Users\your_name\Desktop\HVWR1B0.pax.Z
200 Port request OK.
125 Storing data set @zfs_path@/HVWR1B0.pax.Z
250 Transfer completed successfully.
ftp: 5515776 bytes sent in 1.26 sec. (1040.52 Kb/s)
ftp> quit
221 Quit command received. Goodbye.
```

Issue these commands to upload the ADFzCC Japanese feature:

```
C:\Users\your_name\Desktop\>ftp mvsaddr
Connected to mvsaddr.
220-FTPD1 IBM FTP CS %version% at mvsaddr, %time% on %date%.
220 Connection will close if idle for more than 5 minutes.
User (mvsaddr:(none)): tsouid
331 Send password please.
Password: tsopw
230 tsouid is logged on.  Working directory is "tsouid.".
ftp> cd @zfs_path@
250 HFS directory @zfs_path@ is the current working directory
ftp> ascii
200 Representation type is Ascii NonPrint
ftp> put C:\Users\your_name\Desktop\JVWR1B1.readme.txt
200 Port request OK.
125 Storing data set @zfs_path@/JVWR1B1.readme.txt
250 Transfer completed successfully.
ftp: 10247 bytes sent in 0.01 sec. (1323.80 Kb/s)
ftp> binary
200 Representation type is Image
ftp> put C:\Users\your_name\Desktop\JVWR1B1.pax.Z
200 Port request OK.
125 Storing data set @zfs_path@/JVWR1B1.pax.Z
250 Transfer completed successfully.
ftp: 96768 bytes sent in 1.26 sec. (1115.22 Kb/s)
ftp> quit
221 Quit command received. Goodbye.
```

In the following sample dialog, we use sftp from an Apple macOS command line to do the transfer. As with the previous example, the values described in Figure 16 on page 20 are used, and commands or other information entered by the user are in bold.

Note: sftp Always transfers data in binary mode, so after the file transfer you must convert the text file to EBCDIC or you must ensure your system sets environment variable **_BPXK_AUTOCVT="ON"**.

Issue these commands to upload the ADFzCC Base:

```
your_name >sftp tsouid@mvsaddr
tsouid@mvsaddr's password:
tsopw
Connected to mvsaddr.
sftp> cd @zfs_path@
sftp> put /Users/your_name/Desktop/HVWR1B0.readme.txt
Uploading HVWR1B0.readme.txt to @zfs_path@/HVWR1B0.readme.txt
HVWR1B0.readme.txt                100% 10KB 13.6MB/s   00:01
sftp> put /Users/your_name/Desktop/HVWR1B0.pax.Z
Uploading HVWR1B0.pax.Z to @zfs_path@/HVWR1B0.pax.Z
HVWR1B0.pax.Z                     100% 5MB 10.4MB/s   00:01
sftp> quit

your_name >ssh tsouid@mvsaddr
tsouid@mvsaddr's password:
tsopw
Connected to mvsaddr.
tsouid> cd @zfs_path@
tsouid> mv HVWR1B0.readme.txt ascii
tsouid> iconv -t IBM-1047 -f ISO08859-1 ascii > HVWR1B0.readme.txt
tsouid> chtag -tc IBM-1047 HVWR1B0.readme.txt
tsouid> exit
```

Issue these commands to upload the ADFzCC Japanese feature:

```
your_name >sftp tsouid@mvsaddr
tsouid@mvsaddr's password:
tsopw
Connected to mvsaddr.
sftp> cd @zfs_path@
sftp> put /Users/your_name/Desktop/JVWR1B1.readme.txt
Uploading JVWR1B1.readme.txt to @zfs_path@/JVWR1B1.readme.txt
JVWR1B1.readme.txt                100% 10KB 13.6MB/s   00:01
sftp> put /Users/your_name/Desktop/JVWR1B1.pax.Z
Uploading JVWR1B1.pax.Z to @zfs_path@/JVWR1B1.pax.Z
JVWR1B1.pax.Z                     100% 0MB 10.4MB/s   00:01
sftp> quit

your_name >ssh tsouid@mvsaddr
tsouid@mvsaddr's password:
tsopw
Connected to mvsaddr.
tsouid> cd @zfs_path@
tsouid> mv JVWR1B1.readme.txt ascii
tsouid> iconv -t IBM-1047 -f ISO08859-1 ascii > JVWR1B1.readme.txt
tsouid> chtag -tc IBM-1047 JVWR1B1.readme.txt
tsouid> exit
```

6.1.6 Extract and expand the compressed SMPMCS and RELFILEs

This section only applies when ADFzCC is downloaded from the web. It does not apply when it is ordered via Shopz.
Select this link to skip the web download specific steps: 6.1.7, “Sample Jobs” on page 25

The HVWR1B0.readme.txt and JVWR1B1.readme.txt files uploaded in the previous step each hold a sample JCL to expand the compressed SMPMCS and RELFILEs from the uploaded HVWR1B0.pax.Z and JVWR1B1.pax.Z files into data sets for use by the SMP/E RECEIVE job. The JCLs are repeated here for your convenience.

- @zfs_path@ matches the variable you specified in the previous step.
- If the 'oshell' command gets a RC=256 and message "pax: checksum error on tape (got ee2e, expected 0)", then the archive file was not uploaded to the host in binary format.
- GIMUNZIP allocates data sets to match the definitions of the original data sets. You may encounter errors if your SMS ACS routines alter the attributes used by GIMUNZIP. If this occurs, specify a non-SMS managed volume for the GIMUNZIP allocation of the data sets. For example:
  <ARCHDEF archid="..." storclas="storage_class" volume="data_set_volume" newname="..."/>

Customize and submit this JCL to expand the ADFzCC Base:

```
//EXTRACT  JOB <job information>
//*
//*   - Provide valid job card information
//*   - Change:
//*       @PREFIX@
//*       ----+----1----+----2----+
//*                   - To your desired data set name prefix
//*                   - Maximum length is 25 characters
//*                   - This value is used for the names of the
//*                     data sets extracted from the download-package
//*       @zfs_path@
//*       ----+----1----+----2----+----3----+----4----+----5
//*                   - To the absolute z/OS UNIX path for the
//*                     download-package (starting with /)
//*                   - Maximum length is 50 characters
//*                   - Do not include a trailing /
//*
//UNPAX    EXEC PGM=IKJEFT01,REGION=0M,COND=(0,LT)
//SYSEXEC  DD DISP=SHR,DSN=SYS1.SBPXEXEC
//SYSTSPRT DD SYSOUT=*
//SYSTSIN  DD *
```

```
  oshell cd @zfs_path@/ ; +
    pax -rvf HVWR1B0.pax.Z
//*
//GIMUNZIP EXEC PGM=GIMUNZIP,REGION=0M,COND=(0,LT)
//*STEPLIB  DD DISP=SHR,DSN=SYS1.MIGLIB
//SYSUT3   DD UNIT=SYSALLDA,SPACE=(CYL,(50,10))
//SYSUT4   DD UNIT=SYSALLDA,SPACE=(CYL,(25,5))
//SMPOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SMPDIR   DD PATHDISP=KEEP,
// PATH='@zfs_path@/'
//SYSIN    DD *
<GIMUNZIP>
<ARCHDEF archid="IBM.HVWR1B0.SMPMCS"
         newname="@PREFIX@.IBM.HVWR1B0.SMPMCS"/>
<ARCHDEF archid="IBM.HVWR1B0.F1"
         newname="@PREFIX@.IBM.HVWR1B0.F1"/>
<ARCHDEF archid="IBM.HVWR1B0.F2"
         newname="@PREFIX@.IBM.HVWR1B0.F2"/>
<ARCHDEF archid="IBM.HVWR1B0.F3"
         newname="@PREFIX@.IBM.HVWR1B0.F3"/>
<ARCHDEF archid="IBM.HVWR1B0.F4"
         newname="@PREFIX@.IBM.HVWR1B0.F4"/>
<ARCHDEF archid="IBM.HVWR1B0.F5"
         newname="@PREFIX@.IBM.HVWR1B0.F5"/>
<ARCHDEF archid="IBM.HVWR1B0.F6"
         newname="@PREFIX@.IBM.HVWR1B0.F6"/>
<ARCHDEF archid="IBM.HVWR1B0.F7"
         newname="@PREFIX@.IBM.HVWR1B0.F7"/>
<ARCHDEF archid="IBM.HVWR1B0.F8"
         newname="@PREFIX@.IBM.HVWR1B0.F8"/>
<ARCHDEF archid="IBM.HVWR1B0.F9"
         newname="@PREFIX@.IBM.HVWR1B0.F9"/>
</GIMUNZIP>
//*
```

Customize and submit this JCL to expand the ADFzCC Japanese feature:

```
//EXTRACT  JOB <job information>
//*
//*   - Provide valid job card information
//*   - Change:
//*       @PREFIX@
//*       ----+----1----+----2----+
//*                   - To your desired data set name prefix
//*                   - Maximum length is 25 characters
//*                   - This value is used for the names of the
//*                     data sets extracted from the download-package
//*       @zfs_path@
```

```
//*       ----+----1----+----2----+----3----+----4----+----5
//*                   - To the absolute z/OS UNIX path for the
//*                     download-package (starting with /)
//*                   - Maximum length is 50 characters
//*                   - Do not include a trailing /
//*
//UNPAX    EXEC PGM=IKJEFT01,REGION=0M,COND=(0,LT)
//SYSEXEC  DD DISP=SHR,DSN=SYS1.SBPXEXEC
//SYSTSPRT DD SYSOUT=*
//SYSTSIN  DD *
  oshell cd @zfs_path@/ ; +
    pax -rvf JVWR1B1.pax.Z
//*
//GIMUNZIP EXEC PGM=GIMUNZIP,REGION=0M,COND=(0,LT)
//*STEPLIB  DD DISP=SHR,DSN=SYS1.MIGLIB
//SYSUT3   DD UNIT=SYSALLDA,SPACE=(CYL,(50,10))
//SYSUT4   DD UNIT=SYSALLDA,SPACE=(CYL,(25,5))
//SMPOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SMPDIR   DD PATHDISP=KEEP,
// PATH='@zfs_path@/'
//SYSIN    DD *
```

```
<GIMUNZIP>
<ARCHDEF archid="IBM.JVWR1B1.SMPMCS"
         newname="@PREFIX@.IBM.JVWR1B1.SMPMCS"/>
<ARCHDEF archid="IBM.JVWR1B1.F1"
         newname="@PREFIX@.IBM.JVWR1B1.F1"/>
<ARCHDEF archid="IBM.JVWR1B1.F2"
         newname="@PREFIX@.IBM.JVWR1B1.F2"/>
<ARCHDEF archid="IBM.JVWR1B1.F3"
         newname="@PREFIX@.IBM.JVWR1B1.F3"/>
<ARCHDEF archid="IBM.JVWR1B1.F4"
         newname="@PREFIX@.IBM.JVWR1B1.F4"/>
<ARCHDEF archid="IBM.JVWR1B1.F5"
         newname="@PREFIX@.IBM.JVWR1B1.F5"/>
<ARCHDEF archid="IBM.JVWR1B1.F6"
         newname="@PREFIX@.IBM.JVWR1B1.F6"/>
</GIMUNZIP>
//*
```

6.1.7 Sample Jobs

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

Figure 17. Sample Installation Jobs -- BASE

Job Name	Job Type	Description	SMPTLIB Data Set
IPVWSMPE	SMP/E	Sample job to create an SMP/E environment (optional)	IBM.HVWR1B0.F2
IPVWRECV	RECEIVE	Sample SMP/E RECEIVE job	IBM.HVWR1B0.F2
IPVWALOC	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HVWR1B0.F2
IPVWDDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HVWR1B0.F2
IPVWAPLY	APPLY	Sample SMP/E APPLY job	IBM.HVWR1B0.F2
IPVWACPT	ACCEPT	Sample SMP/E ACCEPT job	IBM.HVWR1B0.F2

Note: When ADFzCC is downloaded from the web, the RELFILE data set name will be prefixed by your chosen high level qualifier, as documented in section 6.1.6, "Extract and expand the compressed SMPMCS and RELFILEs" on page 23.

Figure 18. Sample Installation Jobs -- JPN

Job Name	Job Type	Description	SMPTLIB Data Set
IPVWRCVJ	RECEIVE	Sample SMP/E RECEIVE job	IBM.HVWR1B0.F2
IPVWALOJ	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HVWR1B0.F2
IPVWDDFJ	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HVWR1B0.F2
IPVWAPLJ	APPLY	Sample SMP/E APPLY job	IBM.HVWR1B0.F2
IPVWACPJ	ACCEPT	Sample SMP/E ACCEPT job	IBM.HVWR1B0.F2

Note: When ADFzCC is downloaded from the web, the RELFILE data set name will be prefixed by your chosen high level qualifier, as documented in section 6.1.6, "Extract and expand the compressed SMPMCS and RELFILEs" on page 23.

The rest of this section only applies when ADFzCC is ordered via Shopz. It does not apply when you downloaded it from the web.
Select this link to go to the next section: 6.1.8, "Create SMP/E environment (optional)" on page 28

You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.9, "Perform SMP/E RECEIVE" on page 28) then copy the jobs from the SMPTLIB data sets to a work data set for editing and submission. See Figure 17 on page 25 to find the appropriate data set.

You can also copy the sample installation jobs from the product files by submitting the following job. Before you submit the job, add a job card and change the lowercase parameters to uppercase values to meet the requirements of your site.

To copy the sample jobs for ADFzCC Base, use this JCL:

```
//STEP1    EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//IN       DD DSN=IBM.HVWR1B0.F2,
//            DISP=SHR,
//*           VOL=SER=filevol,
//            UNIT=SYSALLDA
//OUT      DD DSNAME=jcl-library-name,
//            DISP=(NEW,CATLG,DELETE),
//            SPACE=(TRK,(5,5,5)),
//*           VOL=SER=dasdvol,
//            UNIT=SYSALLDA
//SYSUT3   DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN    DD *
    COPY INDD=IN,OUTDD=OUT
    SELECT MEMBER=(IPVWSMPE,IPVWRECV,IPVWALOC)
    SELECT MEMBER=(IPVWDDEF,IPVWAPLY,IPVWACPT)
/*
```

To copy the sample jobs for ADFzCC JPN feature, use this JCL:

```
//STEP1    EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//IN       DD DSN=IBM.HVWR1B0.F2,
//            DISP=SHR,
//*           VOL=SER=filevol,
//            UNIT=SYSALLDA
//OUT      DD DSNAME=jcl-library-name,
//            DISP=(NEW,CATLG,DELETE),
//            SPACE=(TRK,(5,5,5)),
//*           VOL=SER=dasdvol,
//            UNIT=SYSALLDA
//SYSUT3   DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN    DD *
    COPY INDD=IN,OUTDD=OUT
    SELECT MEMBER=(IPVWRCVJ,IPVWALOJ)
    SELECT MEMBER=(IPVWDDFJ,IPVWAPLJ,IPVWACPJ)
/*
```

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

IN:

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. Uncomment the statment if a volume serial must be provided.

6.1.8 Create SMP/E environment (optional)

If you are using an existing CSI, do not run the sample job IPVWSMPE.

If you choose to create a new SMP/E environment for this install, a sample job is provided or you may choose to use your own JCL. If you choose to use the sample job provided, edit and submit IPVWSMPE. 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 RECEIVE

If you have obtained ADFzCC as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the ADFzCC 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 IPVWRECV to perform the SMP/E RECEIVE for ADFzCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWRCVJ to perform the SMP/E RECEIVE for that 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 SMP/E Target and Distribution Libraries

Edit and submit sample job IPVWALOC to allocate the SMP/E target and distribution libraries for ADFzCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWALOJ to allocate the SMP/E target and distribution libraries for that 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.

6.1.11 Create DDDEF Entries

Edit and submit sample job IPVWDDEF to create DDDEF entries for the SMP/E target and distribution libraries for ADFzCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWDDFJ to create DDDEF entries for the SMP/E target and distribution libraries for that 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.

6.1.12 Perform SMP/E APPLY

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

   If your order contains the Japanese feature, edit and submit sample job IPVWAPLJ to perform an SMP/E APPLY CHECK for that feature. Consult the instructions in the sample job for more information.

   The latest HOLDDATA is available through several different portals, including https://public.dhe.ibm.com/s390/assigns/ or https://www.ibm.com/support/pages/enhanced-holddata-zos for usage instructions. The latest HOLDDATA may identify HIPER and FIXCAT APARs for the FMIDs you will be installing. An APPLY CHECK will help you determine if any HIPER or FIXCAT APARs are applicable to the FMIDs you are installing. If there are any applicable HIPER or FIXCAT APARs, the APPLY CHECK will also identify fixing PTFs that will resolve the APARs, if a fixing PTF is available.

   You should install the FMIDs regardless of the status of unresolved HIPER or FIXCAT APARs. However, do not deploy the software until the unresolved HIPER and FIXCAT APARs have been analyzed to determine their applicability. That is, before deploying the software either ensure fixing PTFs are applied to resolve all HIPER or FIXCAT APARs, or ensure the problems reported by all HIPER or FIXCAT APARs are not applicable to your environment.

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

   Here are sample APPLY commands:

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

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

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

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

   b. To install the FMIDs without regard for unresolved HIPER APARs, you can add the BYPASS(HOLDCLASS(HIPER)) operand to the APPLY CHECK command. This will allow you to install FMIDs even though one or more unresolved HIPER APARs exist. After the FMIDs are

installed, use the SMP/E REPORT ERRSYSMODS command to identify unresolved HIPER APARs and any fixing PTFs.

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

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

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

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

   Note: The GROUPEXTEND operand indicates that SMP/E applies all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

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

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

6.1.13 Perform SMP/E ACCEPT

Edit and submit sample job IPVWACPT to perform an SMP/E ACCEPT CHECK for ADFzCC. Consult the instructions in the sample job for more information.

If your order contains the Japanese feature, edit and submit sample job IPVWACPJ to perform an SMP/E ACCEPT CHECK for that feature. 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).

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 ADFzCC, 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.

6.1.15 Cleaning Up Obsolete Data Sets, Paths, and DDDEFs

The web download data sets listed in Figure 13 on page 14 (section 5.2.3, “DASD Storage Requirements” on page 10) are temporary data sets. You can delete these data sets after you complete the SMP/E install.

6.2 Product Customization

The publication *IBM Application Delivery Foundation for z/OS Common Components Customization and User's Guide* contains the necessary information to customize and use ADFzCC.

7.0 Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always refer to the instructions in the **Service Recommendation Summary and Service Recommendations** and **Cross Product Dependencies** sections of the **PSP bucket information for IBM Z products** at https://www.ibm.com/support/pages/node/7127792, to ensure you have all required service.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the

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

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan, Ltd.
19-21, Nihonbashi-Hakozakicho, Chuo-ku
Tokyo 103-8510, Japan

7.1 Trademarks

IBM, the IBM logo, and other IBM trademark listed on the IBM Trademarks List are trademarks or registered trademarks of International Business Machines Corporation, in the United States and/or other countries. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on ibm.com/trademark.

© Copyright IBM Corp. 2013, 2017

Reader's Comments

Program Directory for IBM Application Delivery Foundation for z/OS Common Components, October 2026

We appreciate your input on this publication. Feel free to comment on the clarity, accuracy, and completeness of the information or give us any other feedback that you might have.

Send your comments by emailing us at ibmdocs@us.ibm.com, and include the following information:

1. Your name and address
2. Your email address
3. Your telephone or fax number
4. The publication title and order number
5. The topic and page number related to your comment
6. The text of your comment

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

IBM or any other organizations will only use the personal information that you supply to contact you about the issues that you submit.

Thank you for your participation. above.

Printed in Ireland

GI13-5018-00