

```
ALLOC F(ADMGDF) DA('GDDM.SADMGDF') SHR REU
ALLOC F(ADMSYMBL) DA('GDDM.SADMSYM') SHR REU
```

2. Type the command EXEC 'GDDM.SADMSAM(ERXMODEL)' from a terminal that can display graphics.
3. Press **ENTER**.
A picture is displayed, with the large characters "GDDM-REXX" near the top of the screen.
4. Press **ENTER** again or press the PF3 key to return to TSO.

8.6.5.2.4 Testing GDDM under CICS

This section describes how to verify the installation of GDDM under the CICS subsystem.

To test GDDM under CICS, you must have allocated the required GDDM VSAM data sets, defined them to CICS, and included them in the CICS startup JCL. You must also have defined GDDM to CICS in your CICS tables or CSD.

8.6.5.2.4.1 Testing GDDM/MVS Base under CICS

Before performing the installation verification procedures, ensure the default User Control key is set. The default User Control key is PA3. If your keyboard does not have a PA3 key, or the PA3 key is already used by another application, set the User Control key to another value. To do this, add the following nickname user default specification to the external defaults file, or external defaults module:

```
ADMMNICK FAM=1,PROCOPT=((CTLKEY,type,value))
```

where type defines the type of key selected for entering User Control (1=PF.key, 4=PA key) and value defines the number of the PF or PA key to be used. The line must start with a space in column 1.

For more information about nicknames and supplying user-default specifications, see [GDDM System Customization and Administration](#).

For more information about User Control, see the [GDDM User's Guide](#).

This is how to test GDDM/MVS has been installed successfully for use under the CICS subsystem:

1. Type the transaction name for the GDDM/MVS installation verification program: ADMA.
2. Press **ENTER**

A picture should be displayed that shows the words "Welcome to GDDM Version 3.2". This picture is the ADMTEST ADMGDF, which is stored in the ADMF data set.

3. Go into GDDM User Control by pressing the User Control key.

The User Control panel should now be superimposed on the bottom of the display, using the language specified by the NATLANG external default.

While you are in this panel, you can also test the GDDM print utility if you have already customized it. For information about the print utility, see [GDDM System Customization and Administration](#). To create a print file for testing the GDDM print utility using GDDM User Control:

- a. Press **PF4** for the User Control output panel.
- b. Type the terminal ID of the printer to which you want to send the output, as defined in your TCT.

- c. Press **PF4** to send the file to be printed.

A highlighted message is displayed when the print has completed successfully.

4. Press **PF3** until you have left the transaction.

This completes the test of the graphic and alphanumeric functions of GDDM/MVS under CICS.

8.6.5.2.4.2 Testing GDDM-PGF under CICS

This is how to test GDDM-PGF has been installed successfully for use under the CICS subsystem:

1. Type the transaction name for the ICU: ADMC
2. Press **ENTER**.

The Home Panel of the ICU is displayed in the language specified in the NATLANG external default. For information about using the ICU, you can access the built-in help facility by pressing the **PF1** key; you can also find more information in [GDDM-PGF Interactive Chart Utility](#).

3. This is what you do:
 - a. Type 0 to move to the Chart by Example panel.
 - b. Type 1 on the Chart by Example panel to get data headings and titles for your chart.
 - c. Type any number from 1 through 7 on the Chart by Example - Data panel to get the sample data supplied with the ICU.
 - d. Display the data by pressing **PF5**, the Display key.
 - e. Return to the Home panel by pressing **PF12**
 - f. Exit the ICU by pressing **PF9** twice.

This tests the graphic and alphanumeric functions of GDDM-PGF under CICS.

8.6.5.2.4.3 Testing the Print Utility ADMOPUC under CICS

To test the GDDM print utility ADMOPUC, use the tests in [8.6.5.2.4.1, "Testing GDDM/MVS Base under CICS"](#) on page 216.

For information about setting up the print utility and how to select particular printers, see [GDDM System Customization and Administration](#).

8.6.5.2.5 Testing GDDM under IMS: This section describes how to verify the installation of GDDM under the IMS subsystem.

8.6.5.2.5.1 Testing GDDM/MVS Base under IMS

1. Type the transaction name for the Image Symbol Editor: ADM ISSE
2. Press **ENTER**.

If you are not familiar with the Image Symbol Editor, there is a help facility you can view by pressing the **PF1** key. You can also find more information in [GDDM Using the Image Symbol Editor](#).

When you start the transaction, the first panel of the Image Symbol Editor is displayed. It is called Step Selection.

This is what you do:

- a. Type the symbol set name ADMDHII. (note the final period), and choose option 2, Edit Symbol Set.

- b. Press **ENTER**.

The next panel, Symbol Selection, is displayed.

- c. Press **PF6**.

A different set of characters should be displayed on the same panel. (If GDDM message ADM0824 or ADM0825 is displayed, and some of the characters are displayed as "?", this does not invalidate the test).

- d. Move the cursor to a nonblank character in the set of characters (not one in reverse-video).

- e. Press **ENTER**

The display should change to the Symbol Definition panel, and the pixel pattern of the chosen symbol should be displayed at the left of the screen. (If message ADM0824 or ADM0825 was displayed earlier, the symbol is the one that could not be displayed and not the "?" chosen).

- f. Leave the cursor where it is, and type the command TEST ON

- g. Press **ENTER**

If your device supports programmed symbols (PS), a small copy of the character should be displayed below and to the right of the pixel pattern. Otherwise, GDDM message ADM0861 is displayed, but this does not invalidate the test.

- h. Exit the Image Symbol Editor by pressing **PF3** three times.

This tests both the graphic and alphanumeric functions of GDDM.

If your workstation is capable of showing graphics, but does not have PS support, you can test the graphic functions of GDDM/MVS by running one of the sample programs, described in the [GDDM Base Application Programming Reference](#).

8.6.5.2.5.2 Testing GDDM-PGF under IMS

This is how to test GDDM-PGF has been installed successfully for IMS:

1. Type the transaction name for the ICU: ADM CHART

2. Press **ENTER**.

The Home Panel of the ICU is displayed in the language specified by the NATLANG external default. For information about using the ICU, you can access the built-in help facility by pressing the **PF1** key; you can also find more information in [GDDM-PGF Interactive Chart Utility](#).

3. This is what you do:

- a. Type 0 to move to the Chart by Example panel.

- b. Type 1 on the Chart by Example panel to get data headings and titles for your chart.
- c. Type any number from 1 through 7 on the Chart by Example - Data panel to get the sample data supplied with the ICU.
- d. Display the data by pressing **PF5**, the Display key.
- e. If you have a printer, create a print file so you can later test the GDDM print utility (see [8.6.5.2.5.3, "Testing the Print Utility ADMOPUI under IMS"](#)):
 - 1) Press **PF4**, the Print key.
 - 2) Type the LTERM name of the printer.
 - 3) Press **ENTER**.The message CHART SUCCESSFULLY OUTPUT is displayed.
- f. Return to the Home panel by pressing **PF12**.
- g. Exit the ICU by pressing **PF9** twice.

This completes the tests of the graphic and alphanumeric functions of GDDM-PGF under IMS.

8.6.5.2.5.3 Testing the Print Utility ADMOPUI under IMS

This is how to test the print utility ADMOPUI has been installed successfully for IMS. However, before you can start, you must have a GDDM file for it to print. If GDDM-PGF has been ENABLED, you can use the ICU to produce one; see [8.6.5.2.5.2, "Testing GDDM-PGF under IMS" on page 218](#).

If GDDM-PGF has not been installed, you can create a print file using the IMS version of the sample program ADMUSP1. The source for this program is called ADMUSP1I.

Find the program in the sample library SADMSAM, and compile and link-edit it as described in [GDDM Base Application Programming Guide](#).

- 1. Give the LTERM name on the transaction invocation.
- 2. Assign the ADMPRINT transaction to a suitable class, and start it.

After you have created a print file, the print utility prints it asynchronously.

Suggested name: CHART

```
/* INTERACTIVE CHART UTILITY */
ALLOC F(ADMCDATA) DA(ADMCDATA) SHR REU
ALLOC F(ADMCDDEF) DA(ADMCDDEF) SHR REU
ALLOC F(ADMCFORM) DA(ADMCFORM) SHR REU
ALLOC F(ADMGDF) DA(ADMGDF) SHR REU
ALLOC F(ADMSYMBL) DA(ADMSYMBL 'GDDM.SADMSYM') SHR REU
CALL *(ADMCHART)
FREE F(ADMCDATA)
FREE F(ADMCDDEF)
FREE F(ADMCFORM)
FREE F(ADMGDF)
FREE F(ADMSYMBL)
```

Figure 56. Suggested CLIST for Using the ICU

The ADMSYMBL allocation must not have concatenated data sets if you want to save symbol sets. Concatenated partitioned data sets cannot be accessed read/write.

You are advised to make both the system and the user's own symbol sets available to users of the ICU. This gives the users a wide choice of type faces from the system sets, and special symbols from their own.

8.6.5.2.6 What to Do If Any of the Installation Tests Fail

If any of the tests fail, the first thing you may see is an error message displayed on your screen. On the other hand, you may find that graphics are not displayed on your screen.

If you receive an error message, look it up in [GDDM Messages](#). If it is a GDDM-OS/2 Link message, you can also use the online help.

If graphics cannot be shown on one or more of the terminals when you test GDDM or the telecommunication network, see [GDDM Diagnosis](#).

If you cannot quickly identify the cause of the error, you may find it useful to read [GDDM Diagnosis](#), which contains detailed information about diagnosing problems with GDDM and its components. Information about detailed diagnosis and the procedure for reporting errors can be found in [GDDM Diagnosis](#).

8.6.5.3 Run the ICKDSF Installation Verification Procedure: SYS1.SAMPLIB(ICKVER) contains the ICKDSF Installation Verification Procedure. Copy ICKVER to a work data set. Edit and submit ICKVER to verify the installation of ICKDSF. The job may be executed against any **offline** device that is supported; it will not alter the volume in any way. Note that ICKDSF was placed in SYS1.LINKLIB by SMP/E. Note that ccuu specifies the address (in hexadecimal) of the device to be analyzed.

The following information messages will appear in the SYSPRINT data set due to the execution of the above job. The contents of these messages may vary slightly due to variations on your particular pack.

- VERIFY HEADER ON OUTPUT

```

ICKDSF - MVS/ESA DEVICE SUPPORT FACILITIES 17.0
ANALYZE UNIT(ccuu) NODRIVE SCAN CYLR(1,2)
ICK00700I DEVICE INFORMATION FOR ccuu IS CURRENTLY AS FOLLOWS:
PHYSICAL DEVICE = xxxx
STORAGE CONTROLLER = xxxx
STORAGE CONTROL DESCRIPTOR = xx
DEVICE DESCRIPTOR = xx
ADDITIONAL DEVICE INFORMATION = xxxxxxxx
TRKS/CYL = xx, # PRIMARY CYLS = xxxxx
ICK04000I DEVICE IS IN SIMPLEX STATE
ICK00091I ccuu NED= xxxx.xxx.xxx.xx.xxxxxxxxxxxxxx
ICK03091I EXISTING VOLUME SERIAL READ = xxxxxx
ICK01400I ccuu ANALYZE STARTED
ICK01408I ccuu DATA VERIFICATION TEST STARTED
ICK01405I ccuu ALL DATA 'MACHINE READABLE' WITHOUT ERRORS
ICK01406I ccuu ANALYZE ENDED
ICK00001I FUNCTION COMPLETED, HIGHEST CONDITION CODE WAS 0
hh:mm:ss dd/mm/yy

```

The [Device Support Facilities \(ICKDSF\) User's Guide and Reference](#) has more information about using ICKDSF.

8.6.5.4 Run the z/OS Data Gatherer Installation Verification Procedure: If the z/OS Advanced Data Gatherer feature has been enabled (see [8.5.2.3, "IFAPRDxx considerations" on page 140](#)), verify that the z/OS Data Gatherer has been installed properly by performing the following steps:

- Test the new element level by issuing the START command for procedure RMF with PARMLIB member ERBRMF02 and reply with the desired options or GO.
- Modify procedure RMF to start a Monitor III data gatherer session, using member ERBRMF04.

Monitor I and Monitor III gatherer will run without further attention until the sessions are over or until the next IPL.

For more information on starting the RMF procedure and available options, see [z/OS Data Gatherer User's Guide](#).

8.6.6 IVP jobs for Wave 1D

There are currently no installation verification procedures for the following elements in Wave 1D:

- Cryptographic Services
 - PKI Services

8.6.6.1 Run the Security Server (RACF) Installation Verification Procedures

If Security Server (RACF) has been enabled (see [8.5.2.3, “IFAPRDxx considerations” on page 140](#)), verify it has been installed properly by IPLing z/OS V2R5. If you receive message ICH520I stating z/OS SECURITY SERVER (RACF HRF77D0) IS ACTIVE, RACF will have been installed and initialized successfully.

8.6.7 IVP jobs for Wave 1E

The following sections describe installation verification procedures for Wave 1E.

8.6.7.1 Run the Runtime Library Extensions Installation Verification Procedures

There is one IVP job you should run to ensure the Runtime Library Extensions was properly installed. The JCL can be found in your SCLBJCL library. Refer to the JCL for instructions and expected output.

Figure 57. IVP for Runtime Library Extensions

Job name	Job Description
CLB3JIV1	Verify the IO Streams Class Library and Complex Class Library installation

8.6.7.2 Run the Common Information Model (CIM) Installation Verification

Procedure: To verify Common Information Model (CIM) is installed, run sample job, CFZIVP. The IVP job CFZIVP can be found in library SAMPLIB. Before you run the CIM IVP job, ensure that you have created and mounted a file system at the /var/wbem directory. For information about creating and mounting a file system at the /var/wbem directory, see [z/OS Common Information Model User's Guide](#).

8.6.7.3 Run the RMF Installation Verification Procedure: If RMF has been enabled (see [8.5.2.3, “IFAPRDxx considerations” on page 140](#)), verify RMF has been installed properly by performing the following steps:

- Modify procedure RMF to start one or more Monitor II background sessions, using member ERBRMF03. This member tests all Monitor II reports.
- Start a Monitor III data reporter session and request several reports on the Monitor III report screen to verify these functions are working.

For more information on RMF sessions, see [z/OS RMF User's Guide](#).

8.6.7.4 Run the XL C/C++ Installation Verification Procedures

If XL C/C++ has been enabled (see [8.5.2.3, “IFAPRDxx considerations” on page 140](#)), verify the following C/C++ components have been installed properly:

- XL C/C++ Base Compiler
- C/C++ Host Performance Analyzer

Notes:

1. As of z/OS V1R8, the IPA Link step of the z/OS XL C/C++ compiler uses 64-bit virtual memory, which requires sufficient storage above the 2 GB bar (2 GB address line). You can set the MEMLIMIT system parameter to provide the required virtual storage above the 2 GB bar. Use the following checklist to ensure that sufficient storage above the 2 GB bar is available:

- Increase the default size of the MEMLIMIT system parameter in the SMFPRMxx PARMLIB member to 3 GB.
- Increase the MEMLIMIT value for z/OS UNIX System Services users through the RACF OMVS segment to 3 GB.
- If you use the IEFUSI exit routine, ensure that the MEMLIMIT value is more than 3 GB.

For additional information about the MEMLIMIT system parameter, see [z/OS MVS Programming: Extended Addressability Guide](#).

2. The CCNJIV1 and CCNJIV2 IVP jobs allocate one of the temporary data sets as a PDSE data set. You cannot allocate a PDSE data set to a VIO device type or to multiple volumes. Before you run these two IVP jobs, check the storage and data classes that allocate temporary data sets to verify if you can allocate temporary datasets as PDSE data sets. You can check the class by viewing the dataclas attributes in the panel that is displayed for option 4 of ISMF.

If you cannot allocate temporary data sets as PDSE data sets due to system configuration; for example, the device type is VIO or the volume count of SMS-managed data sets is greater than one, add the following code to the DFSMS DATACLAS routines:

```
FILTLIST CCPGM                /* IPALINK Note                */
INCLUDE(CCN*)                 /* Desc: Bypass CCN* Programs */
IF
  ((&DATACLAS = '') &&
  (&PGM EQ &CCPGM)) THEN      /* Bypass CCN* C/C++ Programs */
DO                             /* Example: CCNDRVR          */
  SET &DATACLAS = ''          /* Bypass Dataclas          */
  WRITE 'DC IS BLANKED OUT'    /* Write out a Message       */
  EXIT CODE(0)                /* Exit Routine              */
END
```

8.6.7.4.1 Run the XL C/C++ Installation Verification Procedure

There are two IVP jobs you should run to ensure the C/C++ compilers were properly installed. The JCL can be found in your SCCNJCL library. Refer to the JCL for instructions and expected output.

Figure 58. IVPs for XL C/C++ Compilers

Job name	Job Description
CCNJIV1	Verify the XL C Compiler Installation
CCNJIV2	Verify the XL C++ Compiler Installation

8.6.7.4.2 Run the C/C++ Host Performance Analyzer Installation Verification Procedure

There is one IVP job you should run to ensure the C/C++ Host Performance Analyzer is properly installed (see [Figure 59 on page 224](#)). The JCL can be found in your SCTVJCL library. Refer to the JCL for instructions and expected output. Ensure the following service has been applied to the C/C++ Host Performance Analyzer:

UQ07576 UQ07577 UQ08624 UQ16061 UQ16062 UQ23233
UQ23234 UQ35263 UQ47678 UQ58554 UQ78078 UQ78229

Figure 59. IVPs for C/C++ Host Performance Analyzer

Job name	Job Description
PROFFUNC	Sample JCL For Function Level Trace

8.6.8 IVP jobs for Wave 1F

There are currently no installation verification procedures for the following elements in Wave 1F:

- BDT
- HCM
- IBM Knowledge Center for z/OS

Note: The ISPF installation verification procedures are described in [8.6.2.2, “Run the BCP and ISPF Installation Verification Procedure” on page 190](#).

8.6.8.1 Run the DFSORT Installation Verification Procedures: Once you have completed your configuration, you should review, modify, and run the following sample jobs to verify DFSORT is installed correctly.

- ICEJCLJ, to invoke DFSORT directly. Sorts and copies a data set.
- ICEINVJ, to invoke DFSORT from an assembler program. Sorts and copies a data set.
- ICETOOLJ, to invoke ICETOOL directly. Performs multiple operations which include listing your installation defaults, copying and sorting data sets, displaying statistics and printing reports.
- ICECSRTJ, if you use Locale Processing at your site, to verify data is sorted correctly using the Danish locale (LOCALE=DA_DK). To run this job, you must have the Language Environment element installed, and have the SCEERUN library available for the job to use.
- ICEGENJ, to invoke ICEGENER directly. Copies a data set.

8.6.8.1.1 ICEJCLJ and ICEINVJ verification

Verify the ICEJCLJ and ICEINVJ jobs each ran correctly by:

1. Checking the condition code for each step is 0.
2. Comparing the SORTOUT output of step PRTAFTER to [Figure 60 on page 225](#), which shows what the first 20 records and last 10 records of the 360 output records look like.

```

*****000001*****ABCDEFGHIJKLMN*****
*****000037*****ABCDEFGHIJKLMN*****
*****000073*****ABCDEFGHIJKLMN*****
*****000109*****ABCDEFGHIJKLMN*****
*****000145*****ABCDEFGHIJKLMN*****
*****000181*****ABCDEFGHIJKLMN*****
*****000217*****ABCDEFGHIJKLMN*****
*****000253*****ABCDEFGHIJKLMN*****
*****000289*****ABCDEFGHIJKLMN*****
*****000325*****ABCDEFGHIJKLMN*****
*****000002*****BCDEFGHIJKLMNO*****
*****000038*****BCDEFGHIJKLMNO*****
*****000074*****BCDEFGHIJKLMNO*****
*****000110*****BCDEFGHIJKLMNO*****
*****000146*****BCDEFGHIJKLMNO*****
*****000182*****BCDEFGHIJKLMNO*****
*****000218*****BCDEFGHIJKLMNO*****
*****000254*****BCDEFGHIJKLMNO*****
*****000290*****BCDEFGHIJKLMNO*****
*****000326*****BCDEFGHIJKLMNO*****
.
.
.
*****000036*****9ABCDEFGHIJKLMNO*****
*****000072*****9ABCDEFGHIJKLMNO*****
*****000108*****9ABCDEFGHIJKLMNO*****
*****000144*****9ABCDEFGHIJKLMNO*****
*****000180*****9ABCDEFGHIJKLMNO*****
*****000216*****9ABCDEFGHIJKLMNO*****
*****000252*****9ABCDEFGHIJKLMNO*****
*****000288*****9ABCDEFGHIJKLMNO*****
*****000324*****9ABCDEFGHIJKLMNO*****
*****000360*****9ABCDEFGHIJKLMNO*****

```

Figure 60. Expected PRTAFTER SORTOUT Output from ICEJCLJ and ICEINVJ

8.6.8.1.2 ICETOOLJ verification: To verify that the ICETOOLJ job ran correctly, follow these steps:

1. Check that the condition code for each step is 0.
2. Check that “DFSORT V2R4” is shown in the heading of the DFLTS output of step TOOLRUN. See [z/OS DFSORT Installation and Customization](#) for an example of how the complete DFLTS output will look if you have not changed any DFSORT installation options. If you have changed DFSORT installation options, the output should reflect the options you selected. In either case, dates in your listing will differ from those in the example output.
3. Compare the DEPTSP output of step TOOLRUN to [Figure 61 on page 226](#).

JOHN	BURT	IS IN DEPARTMENT J69
ANDY	GELLAI	IS IN DEPARTMENT J82
PAUL	LEE	IS IN DEPARTMENT J69
MIGUEL	MADRID	IS IN DEPARTMENT J69
JANICE	MEAD	IS IN DEPARTMENT J69
LEE	TOWNSEND	IS IN DEPARTMENT J82
WILLIAM	WARREN	IS IN DEPARTMENT J82
FRANK	YAEGER	IS IN DEPARTMENT J69
HOLLY	YAMAMOTO-SMITH	IS IN DEPARTMENT J69

Figure 61. Expected TOOLRUN DEPTSP Output from ICETOOLJ

4. Compare the LIST1 output of step TOOLRUN to Figure 62. (Carriage control characters are shown in position 1; do not be concerned if you do not see them.)

KEY	PD_TOTAL	ZD_TOTAL
-----	-----	-----
ABCDXYZ123	1041	579
BCDXYZ123A	-42	290
CDXYZ123AB	142	314
DXYZ123ABC	326	338
XYZ123ABCD	-615	363
YZ123ABCDX	-339	399
Z123ABCDXY	-63	435
123ABCDXYZ	213	471
23ABCDXYZ1	489	507
3ABCDXYZ12	765	543
MINIMUM	-615	290

Figure 62. Expected TOOLRUN LIST1 Output from ICETOOLJ

5. Compare the DEPTOT output of step TOOLRUN to Figure 63. (Carriage control characters are shown in position 1; do not be concerned if you do not see them.)

1(45,3,CH)	VALUE COUNT
J62	0000000000000001
J69	0000000000000006
J82	0000000000000003
L92	0000000000000005

Figure 63. TOOLMSG Output

Note: The TOOLMSG output of step TOOLRUN shows the result of each ICETOOL operation requested.

8.6.8.1.3 ICECSRTJ verification: Verify the ICECSRTJ job ran correctly by:

1. Checking the condition code for each step is 0.
2. Comparing the SORTOUT output of step CSORT to [Figure 64 on page 227](#).

Notes:

1. The ICECSRTJ sample job can be found in the SICESAMP target library.
2. The SCEERUN library (the Language Environment run-time library) must be in the link list or concatenated to STEPLIB to run the ICECSRTJ sample job.

a
A
b
B
c
C
d
D
e
E

Figure 64. Expected CSORT SORTOUT Output from ICECSRTJ

8.6.8.1.4 ICEGENER verification: You can use the sample job ICEGENJ supplied with the licensed program to verify the installation of the ICEGENER facility. Before performing the verification, you should review the comments in the sample job.

Examine the results of each step in the verification job to ensure the data has been copied correctly and the SYSOUT output was produced by the appropriate program (DFSORT copy or the IEBGENER utility).

If message ICE054I appears, showing a nonzero number of records in and records out, DFSORT did perform a copy application. You should be able to recognize the difference between the output produced by IEBGENER and any output produced by DFSORT because there is a distinct difference in the style between the two types of output.

The following steps each exercise a function of copying. Each step copies from the generated data set to a printed output (JES spool) file. If you see the data printed, you know a copy function was performed.

1. The job step called GEN creates (using the IEBDG utility program) the data to be copied by the rest of the steps.
2. The GCOPY1 step copies and prints the data created by GEN. Because the EXEC statement specifies PGM=ICEGENER, the ICEGENER facility is used and it selects DFSORT copy to perform the copy application. If the application runs correctly, the DFSORT messages will indicate DFSORT copied 360 records.

3. The BCOPY1 step copies and prints the data in a different manner to verify the different invocation path works. Because the EXEC statement specifies IEBGENER, the method used to perform the copy application depends on how you have installed the ICEGENER facility:
 - If you chose selective use of ICEGENER, the IEBGENER utility performs the copy application.
 - If you chose automatic use of ICEGENER, the ICEGENER facility selects DFSORT copy to perform the copy application.
4. The GCOPY2 step also copies and prints the data. Because the EXEC statement specifies PGM=ICEGENER, the ICEGENER facility is used. Because the SYSIN data set contains IEBGENER control statements, ICEGENER selects the IEBGENER utility to perform the copy application.

The following result indicates that the ICEGENER facility was not installed correctly:

- You receive an ABEND 163 and message ICE163A. Ensure that you use GENER=IEBGENR, the default. If you have an alias of IEBGENR for the ICEGENER facility, remove it.

If you later decide to discontinue automatic use of ICEGENER, see [z/OS DFSORT Installation and Customization](#) for information on how to do that.

The DFSORT SVC is called to write SMF records and to process data sets on cached DASD devices. If the SVC is not properly installed, a DFSORT application might result in:

- A system abend (56D or Fnn) when writing an SMF type-16 record.
- Degraded performance when using data sets on cached DASD devices.

In either case, message ICE187I is issued if the SVC is installed at the wrong level. If you are using a cached DASD device, message ICE191I is issued as a warning that performance might be degraded. However, the run continues successfully if there are no other errors. You can specify a SORTDIAG DD statement to cause an additional message, ICE816I, to be issued. This message shows the abend code resulting from an attempted SVC call.

You can use the abend code in ICE816I or the abend code resulting from the attempt to write an SMF type-16 record to determine the reason DFSORT failed to call the SVC correctly.

8.6.8.2 Run the High Level Assembler Toolkit Installation Verification Program: A sample job, ASMWTVIP from library SASMSAM2 is provided to verify the feature has installed correctly. Note that, in the following example, the high-level qualifier for library SASMSAM2 is the high-level qualifier for the sample target library, in which the High-Level Assembler Toolkit has been installed.

This job performs the following functions:

- Assembles test sample ASMTSAMP from library SASMSAM2.
- Link edits test sample ASMTSAMP from library SASMSAM2.
- Disassembles test module ASMTSAMP.
- Creates language extraction file.

ASMWTVIP uses TSO Batch to carry out its functions.

8.6.9 IVP jobs for Wave 1G

This section describes various installation verification procedures for Wave 1G.

8.6.9.1 Run the z/OS File System Installation Verification Procedures

To ensure the installation of the z/OS File System completed successfully, do the following:

1. If the BPXPRMxx entry for zFS was made, determine if zFS is started. To do this, view SYSLOG and look for the following message:

IOEZ00055I ZFS kernel: Initialization Complete.

The following message in SYSLOG indicates a possible error:

nn BPXF032D FILESYSTYPE ZFS Terminated. Reply 'R' when
ready to restart. Reply 'I' to ignore.

The possible cause is the started task could not initialize; contact the IBM Support Center for help.

Note: If a problem is detected during the installation verification, ensure that all of the installation steps for the z/OS File System have been completed. It may be helpful to review the installation and post installation steps that are summarized in the publication referenced for the post installation customization work described below.

To use the zFS support, refer to [z/OS File System Administration](#) to define zFS aggregates and file systems.

8.6.9.2 Run the Infoprint Server Installation Verification Procedures

If Infoprint Server has been enabled (see [Figure 41 on page 130](#)), verify Infoprint Server has been installed properly by performing the steps described in this section. This installation verification procedure (IVP) assumes the customization described in [8.5.5.9.2, “Infoprint Server Customization Considerations” on page 179](#) has been completed, and the logon proc is set up as described in [8.5.4, “z/OS V2R5 ISPF setup considerations” on page 149](#) so you have access to the Infoprint Server ISPF panels. The IVP described in this section verifies the Printer Inventory Manager and Print Interface components of Infoprint Server. No IVP is provided for the NetSpool or IP PrintWay components. You can perform a simple verification test by printing a file using the **lp** command.

1. Start the Printer Inventory Manager. See [z/OS Infoprint Server Operation and Administration](#).
2. Define one or more printers using the Infoprint Server ISPF panels.

For detailed information on defining printers, refer to [z/OS Infoprint Server Operation and Administration](#).

3. Ensure your PATH environment variable is correctly set with /usr/lpp/Printsrv/bin concatenated **ahead of** /bin before you attempt to enter the **lp** command.
4. Print a sample file to the printer you just defined. You can print the sample configuration file provided with InfoPrint Server (Print Interface and IP PrintWay extended mode) by entering one of these commands:

- Run a batch job specifying:

```
//STEP0001 EXEC AOPPRINT,PRINTER='printer_name'
//SYSIN DD PATH='/etc/Printsrv/aopd.conf',PATHOPTS=ORDONLY
```

- From within z/OS UNIX System Services:

```
lp -d printer_name /etc/Printsrv/aopd.conf
```

Note:

- printer_name* is the name of the printer that you defined in Step [2 on page 229](#).
- The **lp** command will place the file on the JES spool. Either IP PrintWay or PSF must be configured, depending on the type of printer you defined, to send the file to the physical printer.

8.6.9.3 Run the Network File System Installation Verification Procedures

This installation verification procedure (IVP) assumes the customization described in the [z/OS Network File System Guide and Reference](#) has been completed. This includes the installation of the **mvslogin**, **mvslogout** (or **mvslogut**), and **showattr** commands on the clients which enable the client users to access the MVS system and to display system attributes. For the clients with PCNFSD support, the PCNFSD protocol enables the clients to access the MVS system without issuing the mvslogin and mvslogout commands. For details, refer to the same manual (section on "Installing the Client Enabling Commands" and appendix on "Using the PCNFSD Protocol").

In this step, you manually verify your system is installed correctly. Before you begin, perform the following sequence of steps:

1. Have the Network Controller (for example, IBM 3172 Controller) attached to your system.
2. Ensure the following have started correctly:
 - z/OS UNIX
 - Communications Server IP Services
 - PORTMAPPER, or RPCBIND if using IPv6
 - Network File System Server

For the server, the operator's console should display the following GFSA348I message:

```
GFSA348I (MVS NFS) z/OS NETWORK FILE SYSTEM SERVER
(HDZ225N, HDZ225N) STARTED.
```

For the client, the operator's console should display the following GFSC700I message:

```
GFSC700I z/OS NETWORK FILE SYSTEM CLIENT
(HDZ225N) STARTED.
```

Use any of the Network File System clients to verify the operation of the server. This section contains an example of using the AIX® client to verify the server is operational. See [z/OS Network File System Guide and Reference](#) for information about the supported Network File System clients.

8.6.9.3.1 Network File System Client Command sequence examples

[Figure 65 on page 231](#) illustrates the command sequences used by an AIX Network File System client and the expected confirmation of operation. In the example, the following parameters are used:

<i>mvshost</i>	Specifies the nickname of the remote host where the Network File System is running.
<i>user01</i>	Specifies the MVS login user ID. See z/OS Security Server RACF Security Administrator's Guide for information on how to define a RACF user ID for the Network File System client user in order to access the Network File System.
<i>nfstest</i>	Specifies the MVS data set's high-level qualifier or is an alias of a user catalog. Usually, MVS data sets are RACF protected, unless RACF is not used at your site at all. Also <i>nfstest</i> should be specified in the EXPORTS file before the Network File System Server is started. Refer to the z/OS Network File System Guide and Reference (section on "Allocating and Modifying the Exports Data Set" and appendix on "Sample Exports Data Set"), for information on how to update the EXPORTS file.

```
$ mkdir /mvmdir
$ su
Password:
# mount mvshost:nfstest /mvmdir
# <enter "control and D" to exit super user mode>
$ mvslogin mvshost user01
Password required
GFS973A Enter MVS password for USER01:
GFS955I USER01 logged in ok.
$ cat > "/mvmdir/testfile"
This is a string of text entered.
<enter "control and D" keys to finish entering the data>
$ cat "/mvmdir/testfile"
This is a string of text entered.
$
```

Figure 65. Example of AIX Client Command Sequence

8.6.10 IVP jobs for Wave 2

The SDSF element provides an IVP job that is described in the following section.

8.6.10.1 Run the installation verification procedure for SDSF: If SDSF has been enabled (see [8.5.2.3, "IFAPRDxx considerations" on page 140](#)), verify SDSF has been installed properly. To do so, you might want to access SDSF once through ISPF and once through TSO.

- If you made changes to your TSO logon procedure, log off the system and then log on again to execute the modified procedure. If you made changes to your ISPF initialization CLIST, exit ISPF and then reaccess it.
- Access SDSF

1. **Accessing SDSF from ISPF:**

If you used the ISPF sample panels to enable SDSF, select Option 13 from the ISPF Primary Options Menu, and Option 14 on the z/OS Applications panel. The SDSF Menu should be displayed. You can display the panel name by entering PANELID on the COMMAND INPUT line. The panel name should be ISFPCU41.

If you did not use the ISPF sample panels, select the SDSF option from the ISPF panel you added it to. The SDSF Menu should be displayed. If message ISF922E is displayed, check your modifications to the ISPF panel and correct the problems before continuing. If the panel is not displayed, has only options LOG, DA, O, and H, or is garbled, check the modifications to the ISPF panel that the SDSF option was added and correct the problems before continuing.

2. **Accessing SDSF from TSO:**

From TSO, enter SDSF or ISF. The SDSF Menu should be displayed.

8.6.11 Activate functions of JES2 and JES3

To activate specific functions of JES2, see the following books:

1. z/OS Planning for Installation
2. z/OS Introduction and Release Guide
3. z/OS JES2 Initialization and Tuning Guide
4. z/OS JES2 Initialization and Tuning Reference
5. z/OS JES2 Commands

To activate specific functions of JES3, see the following books:

1. z/OS Introduction and Release Guide
2. z/OS JES3 Initialization and Tuning Guide
3. z/OS JES3 Commands

8.7 Step 7: ACCEPT Wave 0, Wave 1 and Wave 2

The following sections contain detailed information about the ACCEPT process for Wave 0, Wave 1 and Wave 2.

8.7.1 Select which z/OS V2R5 Wave 0 and Wave 1 FMIDs to install

Select which z/OS V2R5 Wave 0 and Wave 1 FMIDs to ACCEPT by choosing the appropriate FMIDSETs that were defined in [6.5.3, “Elements in each Wave, Ripple, and FMIDSET” on page 35](#). The example shows the FMIDSETs being installed one at a time and must be repeated for each ripple by changing WAVE n to WAVE0, WAVE1A, WAVE1AL, WAVE1B, WAVE1C, and so forth. If desired, multiple ripples can be combined, but they must be run in order.

8.7.2 Do an SMP/E ACCEPT CHECK for Wave 0 and Wave 1 FMIDs and Service

Run an ACCEPT CHECK to identify any requisite service and additional holds (for example, HOLDSYS(DOC,EC)) that may need to be resolved before ACCEPT processing. Resolve any holds and RECEIVE and APPLY any requisite service identified by ACCEPT CHECK before the next step.

Figure 66 shows a sample of an ACCEPT CHECK for the functions specified in the SELECT operand, plus all the APPLY'd PTFs that are applicable only to FMIDs listed in the FMIDSET of the FORFMID.

```
//CHECK JOB <job parameters>
//STEP1 EXEC PGM=GIMSMP,REGION=0M,TIME=NOLIMIT
//STEPLIB DD DSN=SYS1.MIGLIB,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//          DD DSN=ASM.SASMOD1,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//SMPCSI DD DSN=zosv2r5.global.csi,DISP=SHR
//SMPCNTL DD *
  SET BOUNDARY(dlibzone)
  OPTIONS(ZOSOPT) .
  ACCEPT CHECK XZREQ
    FORFMID(ZV25Wn)
    SELECT(WAVE $n$ )
    GROUPEXTEND(NOAPARS,NOUSERMODS)
    SOURCEID(ZOSV2R5,RSU*)
    FIXCAT(IBM.ProductInstall-RequiredService)
    BYPASS(HOLDSYSTEM,
    HOLDUSER,HOLDCLASS(UCLREL,ERREL,HIPER)) .
/*
```

Figure 66. SMP/E ACCEPT CHECK (All FMIDs and Service for z/OS V2R5 Wave 0 and Wave 1)

Note: ZOSOPT is the option name for z/OS.

Required Updates

1. Update the *job parameters*.
2. Update the v2r5vol1 with the volume serial number for the MIGLIB and SASMMOD1 libraries that are the targets of the Wave 0 installation. This will allow you to access the z/OS V2R5 level of the Wave 0 elements using the STEPLIB DD statements.
3. Replace the CSI name on the SMPCSI DD statement with your CSI name.
4. Update *dlibzone* to your dlib zone name.
5. Update WAVE*n* to change *n* to 0, 1A, 1AL, 1B, 1C, 1D, 1E, 1F or 1G. If you choose to perform the DUMMY DELETE option to remove the FMIDs of prior releases, you must ACCEPT Wave 1A and Wave 1C concurrently and then Wave 0 and Wave 1B concurrently because of the prereq requirements. Then continue with the ACCEPT of Wave 1AL, 1D, 1E, 1F, and 1G.
6. Update ZV25W*n* to change *n* to 0, 1A, 1AL, 1B, 1C, 1D, 1E, 1F or 1G. This FMIDSET includes FMIDs for all elements within the specific ripple.
7. The XZREQ operand only needs to be specified when cross-zone processing is required.

Note that if you BYPASS(HOLDCLASS(HIPER)), you should run the SMP/E REPORT ERRSYSMODS command to identify missing HIPER HOLDS before putting your system into production.

Any messages other than those listed in [6.7, "Step 6: Review General Installation Notes" on page 43](#) or those listed in the following sections need to be investigated.

Notes:

1. Adding the FMIDSET(ZV25W*n*) in the FORFMID operand ensures the PTF service for all FMIDs (new, changed, and unchanged) will get accepted at the same time as the ripple for the new FMIDs is installed.
2. The XZREQ operand only needs to be specified when cross-zone processing is required. If this operand is specified when there is no zone group set up, the following messages will be received and are acceptable:

GIM50810W THE XZREQ OPERAND WAS SPECIFIED ON THE ACCEPT
COMMAND BUT SINCE NO ZONES WERE APPLICABLE FOR CROSS-ZONE
REQUISITE CHECKING, THE XZREQ OPERAND WILL BE IGNORED.

GIM20501I ACCEPT PROCESSING IS COMPLETE. THE HIGHEST RETURN
CODE WAS 04.
3. While ACCEPTing this wave, there may be PTFs identified through ++ IF REQs which must also be ACCEPTed. It is possible that these PTFs, which must be installed, are for FMIDs which will be deleted in a subsequent ripple. In this case, you may have to add BYPASS(APPLYCHECK) in order to have the IF REQ'd PTFs ACCEPTed since the PTFs' FMIDs are no longer applicable in the target zone.

8.7.2.1 Additional messages expected during Wave 0 ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 0 returns a condition code of 0 or 4.

8.7.2.1.1 Messages expected during Binder ACCEPT CHECK: During the ACCEPT CHECK of the Binder, the following messages may be received; they are acceptable if they are the only reasons for the condition code 4.

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD
HPM77D0 BECAUSE IT IS NOT IN THE dlib ZONE
```

In the message text, xxxxxxxx will be one of the following LMODs. If these are the only cause of the condition code 4, it is acceptable.

```
AKJLKL01 AMBLIST HEWLD      HEWLKED IEWBFDAT IEWBIND
IEWBLINK IEWBXEP
```

8.7.2.2 Additional messages expected during Wave 1A ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1A returns a condition code of 4.

8.7.2.2.1 Messages expected during BCP ACCEPT CHECK

You might receive the following message, which is acceptable:

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD HBB77D0
BECAUSE xxxxxxxx IS NOT IN THE dlib ZONE
```

In the message text, xxxxxxxx is one of the modules listed below:

```
AMDPRFMT ANTKINIT ATBINPVT IEAIPLO4 IEANUC11
IEFITJT  IEFW21SD IWM02CMD
```

Successful ACCEPT CHECK processing returns a condition code of 4.

8.7.2.2.2 Messages expected during Communications Server IP Services ACCEPT CHECK

During the ACCEPT CHECK of Communications Server IP Services, the following messages are received, which are acceptable:

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD HIP6250
BECAUSE xxxxxxxx IS NOT IN THE dlib ZONE
```

In the message text, xxxxxxxx will be one of the following modules:

```
EZAADMLR EZAFTSRV EZAISLNL EZAPPRT  EZAPPSST GXDEM01
GXDEM02  GXDEM03  GXDEM04  GXDEM04A GXDEM05  GXDEM06
```

8.7.2.3 Additional messages expected during Wave 1AL ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1AL returns a condition code of 0 or 4.

8.7.2.4 Additional messages expected during Wave 1B ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1B returns a condition code of 4.

8.7.2.4.1 Messages expected during DFSMS ACCEPT CHECK

The following messages may be received during DFSMS ACCEPT CHECK processing:

```
GIM61903W LMOD yyyyyyyy WAS NOT DELETED BY HDZ2250 BECAUSE  
IT IS NOT IN THE dlib ZONE.
```

In the message, yyyyyyyy will be one of the following modules and dlib is the name of the distribution zone.

```
ARCZCUC  ARCZDLC  ARCZPUT  EDGCXTRC  EMODVOL1  IDA019BL  
OMODVOL1
```

Successful ACCEPT CHECK processing returns a condition code of 4.

8.7.2.5 Additional messages expected during Wave 1C ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1C returns a condition code of 0.

8.7.2.5.1 Message expected during EREP ACCEPT CHECK

You may expect to receive the following message.

```
GIM61903W LMOD IFCILG04 WAS NOT DELETED BY SYSMOD EER3500  
BECAUSE IT IS NOT IN THE dlib ZONE
```

8.7.2.5.2 Messages expected during TSO/E ACCEPT CHECK

You might receive the following message, which is acceptable.

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD HTE77D0  
BECAUSE IT IS NOT IN THE dlib ZONE
```

In the message text, xxxxxxxx is one of the following aliases for SYSMOD HTE77D0:

```
IGC0006A IKJEFT02 IKJEFT09 IKJEGDRP IRXAPPC TEST
```

Successful ACCEPT CHECK processing returns a condition code of 4.

8.7.2.6 Additional messages expected during Wave 1D ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1D returns a condition code of 0 or 4.

8.7.2.7 Additional messages expected during Wave 1E ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1E returns a condition code of 0 or 4.

8.7.2.8 Additional messages expected during Wave 1F ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1F returns a condition code of 0.

8.7.2.9 Additional messages expected during Wave 1G ACCEPT CHECK

Successful ACCEPT CHECK processing of Wave 1G returns a condition code of 0 or 4. Successful ACCEPT CHECK processing of Wave 1G returns a condition code of 4 when the expected messages documented in the following section are issued.

8.7.2.9.1 Messages expected during Network File System ACCEPT CHECK

During the ACCEPT CHECK of Network File System, the following messages might be received. This message is acceptable if it is the only cause of the return code 4.

```
GIM61903W LMOD yyyyyyyy WAS NOT DELETED BY SYSMOD HDZ225N
BECAUSE yyyyyyyy IS NOT IN THE xxxx ZONE
```

In the message text, yyyyyyyy will be one of the following modules and xxxx is the name of the distribution zone.

```
GFSAMAIN  GFSCMAIN  GFSATCPL  GFSATPNL  GFSATPRL  GFSAXOUT
GFSAXPRT  GFSAXSRB  GFSAXTIN  GSAHFST  GSALEGT  GSAXEPL
```

8.7.2.9.2 Messages expected during z/OS File System ACCEPT CHECK

During the ACCEPT CHECK of z/OS File System, the following message might be received. This message is acceptable if it is the only cause of the return code 4.

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD yyyyyy
BECAUSE IT IS NOT IN THE dlib ZONE
```

In the message text, yyyyyy is HZFS450 and xxxxxxxx will be one of the following modules:

For HZFS450 IOEZM004, IOEZM006, IOEZM007

8.7.3 Do an SMP/E ACCEPT for Wave 0 and Wave 1 FMIDs and service

Be certain all the exception conditions have been satisfied before adding a BYPASS(HOLDSYSTEM) during the SMP/E ACCEPT step.

[Figure 67 on page 238](#) shows a sample of an ACCEPT for the functions specified in the SELECT operand, plus all the APPLY'd PTFs that are applicable only to FMIDs listed in the FMIDSET of the FORFMID.

```

//ACCEPT JOB <job parameters>
//STEP1 EXEC PGM=GIMSMP,REGION=0M,TIME=NOLIMIT
//STEPLIB DD DSN=SYS1.MIGLIB,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//          DD DSN=ASM.SASMMOD1,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//SMPCSI DD DSN=zosv2r5.global.csi,DISP=SHR
//SMPCNTL DD *
  SET BOUNDARY(dlibzone)
  OPTIONS(ZOSOPT) .
  ACCEPT XZREQ
  FORFMID(ZV25Wn)
  SELECT(WAVEn)
  GROUPEXTEND(NOAPARS,NOUSERMODS)
  SOURCEID(ZOSV2R5,RSU*)
  FIXCAT(IBM.ProductInstall-RequiredService)
  BYPASS(HOLDSYSTEM,HOLDUSER,
  HOLDCLASS(UCLREL,ERREL,HIPER))
  COMPRESS(ALL) .
/*

```

Figure 67. SMP/E ACCEPT (All FMIDs and Service for z/OS V2R5 Wave 0 and wave 1)

Note: ZOSOPT is now the option name for z/OS.

Required Updates

1. Update the *job parameters*.
2. Update the v2r5vol1 with the volume serial number for the MIGLIB and SASMMOD1 libraries that are the targets of the Wave 0 installation. By doing so, you can access the z/OS V2R5 level of Wave 0 elements using the STEPLIB DD statements.
3. Replace the CSI name on the SMPCSI DD statement with your CSI name.
4. Update *dlibzone* to your dlib zone name.
5. Update WAVE*n* to change *n* to 0, 1A, 1AL, 1B, 1C, 1D, 1E, 1F, or 1G. If you choose to perform the DUMMY DELETE option to remove the FMIDs of prior releases, you must ACCEPT Wave 1A and Wave 1C concurrently and then Wave 0 and Wave 1B concurrently because of the prereq requirements. Then, continue with the ACCEPT of WAVE 1AL, 1D, 1E, 1F, and 1G.
6. Update ZV25W*n* to change *n* to 0, 1A, 1AL, 1B, 1C, 1D, 1E, 1F, or 1G. This FMIDSET includes FMIDs for all elements within the specific ripple.
7. The XZREQ operand only needs to be specified when cross-zone processing is required.

Note that if you BYPASS(HOLDCLASS(HIPER)), you should run the SMP/E REPORT ERRSYSMODS command to identify missing HIPER HOLDS before putting your system into production.

If you do not `BYPASS(HOLDCLASS(HIPER))`, the FMIDs may not be installed if any of the HIPER maintenance is unavailable.

Any messages other than in [6.7, “Step 6: Review General Installation Notes” on page 43](#) or those listed in the following sections need to be investigated.

Notes:

1. Adding the `FMIDSET(ZV25Wn)` in the `FORFMID` operand ensures that the PTF service for all FMIDs (new, changed, unchanged) will get accepted at the same time as the ripple for the new FMIDs is installed.
2. The `XZREQ` operand only needs to be specified when cross-zone processing is required. If this operand is specified when there is no zone group set up, the following messages will be received, which are acceptable:

```
GIM50810W THE XZREQ OPERAND WAS SPECIFIED ON THE ACCEPT  
COMMAND BUT SINCE NO ZONES WERE APPLICABLE FOR CROSS-ZONE  
REQUISITE CHECKING, THE XZREQ OPERAND WILL BE IGNORED.
```

```
GIM20501I ACCEPT PROCESSING IS COMPLETE. THE HIGHEST RETURN  
CODE WAS 04.
```

8.7.3.1 Additional messages expected during Wave 0 ACCEPT

Successful ACCEPT processing returns a condition code of 0 or 4.

8.7.3.1.1 Messages expected During Binder ACCEPT

During the ACCEPT of the Binder, the following messages may be received and are acceptable if they are the only reasons for the condition code 4.

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED  
BY SYSMOD HPM77D0 BECAUSE IT IS NOT IN THE dlib ZONE
```

In the message text, `xxxxxxx` will be one of the following LMODs. If these are the only cause of the condition code 4, it is acceptable.

```
AKJLKL01 AMBLIST HEWLD HEWLKED IEWBFDAT IEWBIND  
IEWBLINK IEWBXEP
```

8.7.3.2 Additional messages expected during Wave 1A ACCEPT

Successful ACCEPT processing of Wave 1A returns a condition code of 4.

8.7.3.2.1 Messages expected during BCP ACCEPT

You might receive the following messages, which are acceptable.

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD HBB77D0  
BECAUSE IT IS NOT IN THE dlib ZONE.
```


In the message, xxxxxxx is one of the following modules:

AMDPRFMT ATBINPVT IEAIPLO4 IEANUC11 IEFITJT IEFW21SD
IWM02CMD

Successful ACCEPT processing returns a condition code of 4.

8.7.3.2.2 Messages expected during Communications Server IP Services ACCEPT

During the ACCEPT of Communications Server IP Services, the following messages are received and are acceptable:

GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD HIP6250
BECAUSE IT IS NOT IN THE dlib ZONE.

In the message, xxxxxxx will be one of the following modules:

EZAADMLR EZAFTSRV EZAISLN EZAPPRT EZAPPSST GXDEM01
GXDEM02 GXDEM03 GXDEM04 GXDEM04A GXDEM05 GXDEM06

The following MOD entries in the Communications Server IP Services FMID are superseded by MOD entries in feature FMIDs. Therefore, these MOD entries might be flagged as “NOT SEL” during the ACCEPT.

- MAC EZACDIRB
- MAC EZAODIRB
- MOD EZACXADE
- MOD EZACXAEN
- MOD EZACX3DE
- MOD EZACX3EN
- MOD EZACX3FR
- MOD EZACX3HD
- MOD EZACX3HE
- MOD EZACX3IK
- MOD EZAPX3CC
- MOD EZBISXGM
- MOD EZBISXES

8.7.3.3 Additional messages expected during Wave 1AL ACCEPT

Successful ACCEPT processing of Wave 1AL returns a condition code of 0 or 4.

8.7.3.4 Additional messages expected during Wave 1B ACCEPT

Successful ACCEPT processing of Wave 1B returns a condition code of 4.

8.7.3.4.1 Messages expected during DFSMS ACCEPT

The following messages may be received during ACCEPT processing of DFSMS.

GIM61903W LMOD yyyyyyyy WAS NOT DELETED BY HDZ2250 BECAUSE IT IS NOT IN THE dlib ZONE.

In the message, yyyyyyyy will be one of the following modules and xxxx is the name of the distribution zone.

ARCZCUC ARCZDLC ARCZPUT EDGCXTRC EMODVOL1 IDA019BL
OMODVOL1

Successful ACCEPT processing returns a condition code of 4.

8.7.3.5 Additional messages expected during Wave 1C ACCEPT

Successful ACCEPT processing of Wave 1C returns a condition code of 4.

8.7.3.5.1 Message expected during EREP ACCEPT

GIM61903W LMOD IFCILG04 WAS NOT DELETED BY SYSMOD EER3500
BECAUSE IT IS NOT IN THE dlib ZONE

8.7.3.5.2 Messages expected during TSO/E ACCEPT

You might receive the following message, which is acceptable.

GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD HTE77D0
BECAUSE IT IS NOT IN THE dlib ZONE

In the message text, xxxxxxxx is one of the following LMODs for SYSMOD HTE77D0:

IGC0006A IKJEFT02 IKJEFT09 IKJEGDRP IRXAPPC TEST

Successful ACCEPT processing returns a condition code of 4.

8.7.3.6 Additional messages expected during Wave 1D ACCEPT

Successful ACCEPT processing of Wave 1D returns a condition code of 0 or 4.

8.7.3.7 Additional messages expected during Wave 1E ACCEPT

Successful ACCEPT processing of Wave 1E returns a condition code of 0.

8.7.3.8 Additional messages expected during Wave 1F ACCEPT

Successful ACCEPT processing of Wave 1F returns a condition code of 0 or 4.

8.7.3.8.1 Messages expected during DFSORT ACCEPT

IEW2454W messages can be ignored if they are issued for symbols starting with “CEE,” such as: CEEINT, CEESTART, CEEBETBL, CEETREC, CEESETL, CEEQRYL, CEEARLU, CEESTXF, and CEESCOL. (Other unlisted symbols starting with “CEE” can also be ignored.) These are typical

messages from the Binder during steps that store modules into distribution libraries when you ACCEPT DFSORT FMIDs and PTFs at the same time. Any other messages should be investigated.

8.7.3.9 Additional messages expected during Wave 1G ACCEPT

Successful ACCEPT processing of Wave 1G returns a condition code of 0 or 4. Successful ACCEPT processing of Wave 1G returns a condition code of 4 when the expected messages documented in the following section are issued.

8.7.3.9.1 Messages expected during Network File System ACCEPT

During the ACCEPT of Network File System, the following message might be received. This message is acceptable if it is the only cause of the return code 4.

```
GIM61903W LMOD yyyyyyyy WAS NOT DELETED BY SYSMOD HDZ225N  
BECAUSE yyyyyyyy IS NOT IN THE xxxx ZONE
```

In the message text, yyyyyyyy will be one of the following modules and xxxx is the name of the distribution zone.

```
GFSAMAIN GFSMAIN GFSATCPL GFSATPNL GFSATPRL GFSAXOUT  
GFSAXPRT GFSAXSRB GFSAXTIN GSAHFST GSALEGT GSAXEPL
```

8.7.3.9.2 Messages expected during z/OS File System ACCEPT

During the ACCEPT of z/OS File System, the following messages might be received. These messages are acceptable if they are the only cause of the return code 4.

```
GIM61903W LMOD xxxxxxxx WAS NOT DELETED BY SYSMOD yyyyyyy  
BECAUSE IT IS NOT IN THE xxxx ZONE
```

In the message text, yyyyyyy is HZFS450, xxxxxxxx is one of the following modules, and xxxx is the name of the distribution zone.

For HZFS450 IOEZM004, IOEZM006, IOEZM007

8.7.4 Do an SMP/E ACCEPT CHECK for Wave 2

Run an ACCEPT CHECK to identify any requisite service, and additional holds (for example, HOLDSYS(DOC)), that may need to be resolved before ACCEPT processing. Resolve any holds and receive any requisite service identified by the ACCEPT CHECK before the next step.

[Figure 68 on page 243](#) shows a sample ACCEPT CHECK for the functions specified in the SELECT operand, plus APPLIED PTFs that are applicable only to the FMIDs listed in the FORFMID.

```

//CHECK JOB <job parameters>
//STEP1 EXEC PGM=GIMSMP,REGION=0M,TIME=NOLIMIT
//STEPLIB DD DSN=SYS1.MIGLIB,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//          DD DSN=ASM.SASMMOD1,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//SMPCSI DD DSN=zosv2r5.global.csi,DISP=SHR
//SMPCNTL DD *
  SET BOUNDARY(dlibzone)
  OPTIONS(ZOSOPT) .
  ACCEPT CHECK XZREQ
    FORFMID(HJE77D0,HQX77D0,HJS77D0,
      JJE77DJ) /* If not ordered, remove */
    SELECT(HJE77D0,HQX77D0,HJS77D0,
      JJE77DJ) /* If not ordered, remove */
  SOURCEID(ZOSV2R5,RSU*)
  FIXCAT(IBM.ProductInstall-RequiredService)
  GROUPEXTEND(NOAPARS,NOUSERMODS)
  BYPASS(HOLDSYSTEM,HOLDUSER,
    HOLDCLASS(ERREL,UCLREL,HIPER)) .
/*

```

Figure 68. SMP/E ACCEPT CHECK for Wave 2 (All FMIDs and All Service)

Note: ZOSOPT is now the option name for z/OS.

Required Updates

1. Update the *job parameters*.
2. Update the v2r5vol1 with the volume serial number for the MIGLIB and SASMMOD1 libraries that are the targets of the Wave 0 installation. By doing so, you can access the z/OS V2R5 level of Wave 0 elements using the STEPLIB DD statements.
3. Replace the CSI name on the SMPCSI DD statement with your CSI name.
4. Update *dlibzone* to your dlib zone name.
5. The XZREQ operand only needs to be specified when cross-zone processing is required.
6. If you plan to use JES2 and SDSF, and did not order JES3, remove the JES3 FMID HJS77D0 from the FORFMID and SELECT operands in the sample job before running the job.

Note that if you BYPASS(HOLDCLASS(HIPER)), you should run the SMP/E REPORT ERRSYSMODS command to identify missing HIPER HOLDS before putting your system into production.

If you do not BYPASS(HOLDCLASS(HIPER)), the FMIDs may not be installed if any of the HIPER maintenance is unavailable.

Any messages other than those listed in [6.7, “Step 6: Review General Installation Notes” on page 43](#) or those listed below should be investigated.

Notes:

1. The XZREQ operand only needs to be specified when cross-zone processing is required. If this operand is specified when there is no zone group set up, the following messages will be received, which are acceptable:

```
GIM50810W THE XZREQ OPERAND WAS SPECIFIED ON THE ACCEPT CHECK
COMMAND BUT SINCE NO ZONES WERE APPLICABLE FOR CROSS-ZONE
REQUISITE CHECKING, THE XZREQ OPERAND WILL BE IGNORED.
```

```
GIM20501I ACCEPT PROCESSING IS COMPLETE. THE HIGHEST RETURN
CODE WAS 04.
```

Successful ACCEPT CHECK processing for JES2 and SDSF returns a condition code of 0.

8.7.4.1 Messages expected during ACCEPT CHECK Processing for JES3: During the installation of the JES3 component you can expect to receive the following messages:

```
GIM61903W LMOD IATUX86 WAS NOT DELETED BY SYSMOD HJS77D0
BECAUSE IT IS NOT IN THE dlib ZONE.
```

```
GIM61903W LMOD IATIMDL WAS NOT DELETED BY SYSMOD HJS77D0
BECAUSE IT IS NOT IN THE dlib ZONE.
```

A condition code of 4 is expected during ACCEPT CHECK processing.

8.7.5 Do an SMP/E ACCEPT for Wave 2

Do not specify ASSEM on the ACCEPT command for JES2, JES3, and SDSF. The specification of ASSEM on the ACCEPT command can cause serviceability problems.

[Figure 69 on page 245](#) shows a sample ACCEPT for the functions specified in the SELECT operand, plus APPLY'd PTFs that are applicable only to the FMIDs listed in the FORFMID.

```

//ACCEPT JOB <job parameters>
//STEP1 EXEC PGM=GIMSMP,REGION=0M,TIME=NOLIMIT
//STEPLIB DD DSN=SYS1.MIGLIB,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//          DD DSN=ASM.SASMMOD1,DISP=SHR,
//          UNIT=SYSALLDA,VOL=SER=v2r5vol1
//SMPCSI DD DSN=zosv2r5.global.csi,DISP=SHR
//SMPCNTL DD *
  SET BOUNDARY(dlibzone)
  OPTIONS(ZOSOPT) .
  ACCEPT XZREQ
    FORFMID(HJE77D0,HQX77D0,HJS77D0,
            JJE77DJ) /* If not ordered, remove */
    SELECT(HJE77D0,HQX77D0,HJS77D0,
           JJE77DJ) /* If not ordered, remove */
  SOURCEID(ZOSV2R5,RSU*)
  FIXCAT(IBM.ProductInstall-RequiredService)
  BYPASS(HOLDUSER,
  HOLDCLASS(ERREL,UCLREL,HIPER))
  GROUPEXTEND(NOAPARS,NOUSERMODS)
  COMPRESS(ALL) .
/*

```

Figure 69. SMP/E ACCEPT for Wave 2 (FMIDs and All Service)

Note: ZOSOPT is now the option name for z/OS.

Required Updates

1. Update the *job parameters*.
2. Update the v2r5vol1 with the volume serial number for the MIGLIB and SASMMOD1 libraries that are the targets of the Wave 0 installation. By doing so, you can access the z/OS V2R5 level of Wave 0 elements using the STEPLIB DD statements.
3. Replace the CSI name on the SMPCSI DD statement with your CSI name.
4. Update *dlibzone* to your dlib zone name.
5. The XZREQ operand only needs to be specified when cross-zone processing is required.
6. If you plan to use JES2 and SDSF, and did not order JES3, remove the JES3 FMID HJS77D0 from the FORFMID and SELECT operands in the sample job before running the job.

Note that if you BYPASS(HOLDCLASS(HIPER)), you should run the SMP/E REPORT ERRSYSMODS command to identify missing HIPER HOLDS before putting your system into production.

If you do not BYPASS(HOLDCLASS(HIPER)), the FMIDs may not be installed if any of the HIPER maintenance is unavailable.

Any messages other than those listed in [6.7, “Step 6: Review General Installation Notes” on page 43](#) or those listed below should be investigated.

Notes:

1. The XZREQ operand only needs to be specified when cross-zone processing is required. If this operand is specified when there is no zone group set up, the following messages will be received, which are acceptable:

```
GIM50810W THE XZREQ OPERAND WAS SPECIFIED ON THE ACCEPT COMMAND
BUT SINCE NO ZONES WERE APPLICABLE FOR CROSS-ZONE REQUISITE
CHECKING, THE XZREQ OPERAND WILL BE IGNORED.
```

```
GIM20501I ACCEPT PROCESSING IS COMPLETE. THE HIGHEST RETURN
CODE WAS 04.
```

Successful ACCEPT processing of JES2 and SDSF returns a condition code of 0.

8.7.5.1 Messages expected during ACCEPT Processing for JES3: During the installation of the JES3 component you can expect to receive the following messages:

```
GIM61903W LMOD IATUX86 WAS NOT DELETED BY SYSMOD HJS77D0
BECAUSE IT IS NOT IN THE dlib ZONE.
```

```
GIM61903W LMOD IATIMDL WAS NOT DELETED BY SYSMOD HJS77D0
BECAUSE IT IS NOT IN THE dlib ZONE.
```

A condition code of 4 is expected during ACCEPT processing for JES3.

8.8 Step 8: Clean up after Wave 1 and Wave 2

To do an optional global zone cleanup, see [Appendix D, “Additional Cleanup Jobs for z/OS V2R5” on page 317](#).

8.8.1 Do global zone cleanup for previous versions of JES2, JES3, and SDSF

Because each version of JES2, JES3, and SDSF are complete replacements for previous versions of JES2, JES3, and SDSF, you might want to delete the old FMIDs so future (unneeded) service will not be received for them, unless you plan to share the SMPPTS between z/OS V2R5 and systems having other levels of JES2, JES3, and SDSF.

The FMIDs listed as deleted in the output of the ACCEPT of the base FMIDs (HJE77D0, HJS77D0, and HQX77D0) can be deleted from the FMID list in the global zone.

8.8.1.1 Do global zone cleanup for JES2: Sample job HASIGCLN is provided by the JES2 element. You can use HASIGCLN to delete old JES2 FMIDs, the associated SYSMODS of these JES2 FMIDs, and HOLDDATA from the SMP/E global zone. To perform the deletion, copy member HASIGCLN from JES2 library SHASSAMP, modify it for your environment, and run the job.

8.8.1.2 Do global zone cleanup for JES3: Sample job IATIGCLN is provided by the JES3 element. You can use IATIGCLN to delete old JES3 FMIDs, the associated SYSMODS of these JES3 FMIDs, and HOLDDATA from the SMP/E global zone. To perform the deletion, copy member IATIGCLN from JES3 library SIATSAMP, modify it for your environment, and run the job.

8.8.1.3 Do global zone cleanup for SDSF: Sample job ISFIGCLN is provided by the SDSF element. You can use ISFIGCLN to delete old SDSF FMIDs, the associated SYSMODS of these SDSF FMIDs, and HOLDDATA from the SMP/E global zone. To perform the deletion, copy member ISFIGCLN from SDSF library SISFJCL, modify it for your environment, and run the job. This sample job completes with a return code of 4.

Refer to [z/OS Upgrade Workflow](#) for a complete list of clean up activities including:

- Delete obsolete libraries, DDDEFs and Zones
- Run SMP/E Report Crosszone

Appendix A. Component IDs for Elements in z/OS V2R5

This appendix lists each z/OS V2R5 Component ID along with its corresponding FMIDs. The table is listed by Component ID in alphanumeric order.

<i>Figure 70 (Page 1 of 11). Component IDs</i>			
FMID	COMP ID	Component Name	RETAIN Release
HOPI7D0 JOPI7DJ	5647A01OP	InfoPrint Server (Print Interface and IP PrintWay extended mode)	7D0 7DJ
HFNT140 HFNT14J	5650FNT00	z/OS Font Collection	140 14J
H24P111 J24P112	5655A4501	C/C++ Base Performance Analyzer	111 112
HIP6250 JIP625K JIP625X	5655HAL00	Communications Server for z/OS IP Services (TCP/IP / TCPIP) Communications Server Security Level 3 (TCP/IP / TCPIP) Communications Server X11R4 XWindows (TCP/IP / TCPIP)	250 25K 25X
HHAP90P	5655I3510	WebSphere® Application Server z/OS IHS Z APACHE	90P
HKCZ120	5655K2000	Knowledge Center for z/OS	120
HOS2240	5655M2301	OpenSSH for z/OS	240
HSMA25A	5655S28CA	z/OSMF Network Configuration Assistant	25A
HSMA25E	5655S28ZE	z/OSMF zERT Network Analyzer	25E
HSMA250	5655S28CU	z/OSMF Console UI	250
HSMA250	5655S28PR	z/OSMF Cloud Provisioning and Management for z/OS	250
HSMA250	5655S28RF	z/OSMF RESTFILES	250
HSMA250	5655S28RJ	z/OSMF RESTJobs (Representational State Transfer)	250
HSMA250	5655S28SM	z/OSMF Core	250
HSMA250	5655S28TS	z/OSMF TSO REST Services	250
HSMA250	5655S28WL	z/OSMF Liberty Server	250
HSMA251	5655S2801	z/OSMF ISPF	251
HSMA252	5655S2802	z/OSMF Resource Monitoring	252
HSMA253	5655S2803	z/OSMF WLM Administration	253
HSMA254	5655S2804	z/OSMF Software Deployment	254
HSMA255	5655S2805	z/OSMF Incident Log	255
HSMA256	5655S2806	z/OSMF Capacity Provisioning	256
HSMA257	5655S2807	z/OSMF Workflow	257

Figure 70 (Page 2 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HSMA250	5655S2809	z/OSMF Sysplex Management	250
HWLPED0	5655W6514	Liberty Profile on z/OS	EM0
HIF7T02 JIF7T14 JIF7T16	565504201	ISPF for z/OS - DM (Interactive System Productivity Facility)	T02 T14 T16
HIF7T02 JIF7T14 JIF7T16	565504202	ISPF for z/OS - PDF and SCLM (Interactive System Productivity Facility)	T02 T14 T16
HRSL440 JRSL44J JRSL441	565506803	Tivoli Directory Server for z/OS (TDS for z/OS / LDAP)	440 44J 441
HCPT450 JCPT45J JCPT451	565506805	System SSL System SSL Security Level 3	450 45J 451
HSWK450 JSWK45J JSWK451	565506807	Integrated Security Services Network Authentication Service Integrated Security Services Network Authentication Service Security Level 3	450 45J 451
HLB77C0 JLB77CJ	56551210A	XL C/C++ Compiler	7C0 7CJ
HTV77C0 JTV77CJ	56551210D	Runtime Library Extensions	7C0 7CJ
EER3500	565826001	EREP	500
EDU1H01	565899201	ICKDSF	H01
FDU1H07 FDU1H08 FDU1H09	565899202	ICKDSF ISMF Panels	H07 H08 H09
HTE77D0	5665IXX00	TSO/E REXX SAA (Time Sharing Option/Extensions)	7D0
HRG77D0	566527401	z/OS Data Gatherer	7D0
HRM77D0 JRM77DJ	566527404	RMF (Resource Measurement Facility)	7D0 7DJ
HTE77D0 JTE77DJ	566528501	TSO/E Edit (Time Sharing Option/Extensions)	7D0 7DJ
HTE77D0 JTE77DJ	566528502	TSO/E Scheduler (Time Sharing Option/Extensions)	7D0 7DJ
HTE77D0 JTE77DJ	566528503	TSO/E Test (Time Sharing Option/Extensions)	7D0 7DJ

Figure 70 (Page 3 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HTE77D0 JTE77DJ	566528504	TSO/E XMIT - IDTF (Time Sharing Option/Extensions - Transmit and Receive - Interactive Data Transmission Facility)	7D0 7DJ
HTE77D0 JTE77DJ	566528505	TSO/E Session Manager (Time Sharing Option/Extensions)	7D0 7DJ
JTE77DE JTE77DJ	566528506	TSO/E ICF (Time Sharing Option/Extensions - Information Center Facility)	7DE 7DJ
HTE77D0 JTE77DJ	566528508	TSO/E REXX (Time Sharing Option/Extensions)	7D0 7DJ
HIO1105	566529101	Input/Output Configuration Program (IOCP common)	105
HIO1105	566529102	Input/Output Configuration Program (IOCP MVS Control External Writer)	105
HIO1105	566529103	Input/Output Configuration Program (IOCP) Standalone	105
HBD6602 JBD6201 JBD6202	566530201	Bulk Data Transfer (BDT) including File-to-File and SNA NJE	602 201 202
HFX1112	566531101	z/OS Host - 3270 Workstation File Send/Receive	112
HQX77D0	566548801	SDSF (System Display and Search Facility)	7D0
HQX77D0	566548802	SDSF z/OSMF Plugin	7D0
HGD3201	566881201	GDDM-PGF (Graphical Data Display Manager - Presentation Graphics Feature)	201
HMP1K00 JMP1K11	566894901	SMP/E (System Modification Program Extended)	K00 K11
HSWF100	568500101	ESCON Director Support	100
HCR77D2	568505101	ICSF (Integrated Cryptographic Service Facility) - HCR77D2 Cryptographic Support for z/OS V2R5	7D2
HBB77D0	568505103	ICSF - Crypto at IPL	7D0
HLE77D0 JLE77DJ	568819801	Language Environment (LE) CEL / Common Execution Library	7D0 7DJ
HLE77D0 JLE77DJ	568819802	Language Environment (LE) COBOL Library	7D0 7DJ
HLE77D0 JLE77DJ	568819803	Language Environment (LE) PL/I Library	7D0 7DJ
HLE77D0 JLE77DJ	568819804	Language Environment (LE) Fortran Library	7D0 7DJ

Figure 70 (Page 4 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HLE77D0 JLE77DJ	568819805	Language Environment (LE) C/C++ Run Time Library (RTL)	7D0 7DJ
HLE77D0 JLE77DJ	568819806	Language Environment (LE) VA PL/I Library	7D0 7DJ
HLE77D0 JLE77DJ	568819807	Language Environment (LE) ANSI C/C++ Class Library	7D0 7DJ
HLE77D0	568819810	Automatic Binary Optimizer for z/OS Library	7D0
HLE77D0 JLE77DJ	568819812	Language Environment (LE) Enterprise COBOL Library	7D0 7DJ
HDZ2250	5695DF1VR	DFSMS-CICSVR Server Support	250
HDZ2250	5695DF100	DFSMS Installation	250
HDZ2250	5695DF101	DFSMS SMS (Storage Management Subsystem)	250
HDZ2250	5695DF102	DFSMS BAM (Base Access Methods)	250
HDZ2250	5695DF103	DFSMS AMS (Access Method Services)	250
HDZ2250	5695DF104	DFSMS Common Services	250
HDZ2250	5695DF105	DFSMS Catalog	250
HDZ2250	5695DF106	DFSMS VSAM/Media Manager	250
HDZ2250	5695DF107	DFSMS OCEOV (Open/Close/End Of Volume)	250
HDZ2250	5695DF109	DFSMS Checkpoint Restart	250
HDZ2250	5695DF110	DFSMS Device Support - BTLS/Tape	250
HDZ2250	5695DF111	DFSMS Device Support - DASD	250
HDZ2250	5695DF113	DFSMS Device Support Services	250
HDZ2250	5695DF114	DFSMS Utilities	250
HDZ2250	5695DF115	DFSMS PDSE (Partitioned Datas Set Extended) and FAMS	250
HDZ2250	5695DF116	DFSMS VMA (Volume Mount Analyzer)	250
HDZ2250	5695DF117	DFSMS SDM (System Data Mover)	250
HDZ2250	5695DF118	DFSMS Compression Services	250
HDZ2250	5695DF119	DFSMS Common Function/Reuse	250
HDZ2250	5695DF120	DFSMS Distributed File Manager (DFM)	250
HDZ225N JDZ225J	5695DF121	z/OS Network File System (NFS)	25N 25J
HDZ2250	5695DF122	DFSMS VSAM Record Level Sharing (RLS)	250

Figure 70 (Page 5 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HDZ2250 JDZ225K	5695DF123	DFSMS Navquest	250 25K
HDZ2250	5695DF124	DFSMS Cloud Data Access	250
HDZ2250	5695DF125	DFSMS z/OS Management Facility - DASD Management	250
HDZ2250	5695DF126	DFSMS Media Manager	250
HDZ2250	5695DF133	DFSMS Device Management Services (DADSM/CVAF)	250
HDZ2250	5695DF140	DFSMS CDRA (Character Data Representation Architecture)	250
HDZ2250 JDZ225K	5695DF161	DFSMS ISMF and HCD (Interactive Storage Management Facility)	250 25K
HDZ2250 JDZ225K	5695DF170	DFSMSHsm (Hierarchical Storage Management)	250 25K
HDZ2250 JDZ225K	5695DF175	DFSMSdss (Data Set Services)	250 25K
HDZ2250	5695DF180	DFSMSoam (Object Access Method)	250
HDZ2250	5695DF185	DFSMS File System	250
HDZ2250 JDZ225K	5695DF186	DFSMSrmm (Removable Media Manager)	250 25K
HPM77D0	5695PMB01	Program Management (Binder)	7D0
HOT77C0 JOT77CJ	5695SCPE1	z/OS UNIX System Services (USS) Parallel Environment	7C0 7CJ
HBB77D0 JBB77DJ	5695SCPX1	z/OS UNIX System Services (USS) Kernel and File System	7D0 7DJ
HOT77C0 JOT77CJ	5695SCPX2	z/OS UNIX System Services (USS) Shell and Utilities	7C0 7CJ
HOT77C0	5695SCPX3	z/OS UNIX System Services (USS) Debugger (DBX)	7C0
HOT77C0 JOT77CJ	5695SCPX4	z/OS UNIX System Services (USS) Application Services	7C0 7CJ
HOT77C0	5695SCPX7	z/OS UNIX System Services (USS) Compression Library	7C0
HCS77D0 JCS77DJ	5695SC1XL	HCD (Hardware Configuration Definition)	7D0 7DJ
HWJ9143 JWJ9144	569501403	Alternate Library for REXX	143 144
HNET7D0 JNET7DJ	569504002	Infoprint NetSpool	7D0 7DJ

Figure 70 (Page 6 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HMOS705 JMOS7J5	569504004	PrintWay basic mode	705 7J5
HFST101	569504402	FFST (First Failure Support Technology™)	101
HVT6250	569511701	Communications Server for z/OS SNA Services (VTAM)	250
HGD3200	569516701	GDDM (Graphical Data Display Manager)	200
JGD3219 JGD3227	569516702	GDDM National Language Support (Graphical Data Display Manager NLS)	219 227
HZFS450 JZFS45J	5696EFS00	z/OS File System (ZFS)	450 45J
HMQ4160	569623400	High Level Assembler (HLASM)	160
JMQ416A	569623401	High Level Assembler (HLASM) Toolkit	16A
HCM1I10	569711900	Hardware Configuration Manager (HCM)	I10
HSM1Q00	5740SM105	DFSORT	Q00
HBB77D0 JBB77DJ	5752BB1CS	Dynamic Device Reconfiguration (DDR)	7D0 7DJ
HBB77D0 JBB77DJ	5752BB1CT	Machine Check Handler (MCH)	7D0 7DJ
HBB77D0 JBB77DJ	5752BB131	Event Notification Facility (ENF) Dynamic output	7D0 7DJ
HBB77D0	5752BDPUT	z/OS Service	7D0
HBB77D0	5752BDTST	z/OS Preventive Service	7D0
HBB77D0	5752OS390	z/OS BCP General	7D0
HBB77D0 JBB77DJ	5752SCACB	Advanced Program-to-Program Communication (APPC)	7D0 7DJ
HBB77D0 JBB77DJ	5752SCACR	ACR (Alternate CPU Recovery)	7D0 7DJ
HBB77D0 JBB77DJ	5752SCASA	z/OS Reuse	7D0 7DJ
HBB77D0	5752SCASE	Address Space Services	7D0
HBB77D0	5752SCASR	Symptom Record (SYMREC) services	7D0
HBB77D0 JBB77DJ	5752SCAVM	Availability Manager	7D0 7DJ
HBB77D0	5752SCAXR	System REXX	7D0
HBB77D0	5752SCBBR	Component Broker	7D0
HPV77D0	5752SCCAP	Capacity Provisioning	7D0

Figure 70 (Page 7 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HSD7780	5752SCCCR	Metal C Runtime Library	780
HBB77D0	5752SCCEA	Common Event Adapter	7D0
HZDC7C0	5752SCCDE	z/OS Container Extensions Appliance	7C0
HPG77C0	5752SCCIM	CIM (Common Information Model)	7C0
HPG77C0	5752SCCM2	CIM ESERVER OS Management (Common Information Model)	7C0
HPG77C0	5752SCCM3	CIM Client for Java (Common Information Model)	7C0
HPG77C0	5752SCCM4	CIM Job Cluster Management (Common Information Model)	7C0
HPG77C0	5752SCCM5	CIM Problem Determination (Common Information Model)	7C0
HPG77C0	5752SCCM6	CIM Workload Manager (Common Information Model)	7C0
HPG77C0	5752SCCM7	CIM SMI-S	7C0
HPG77C0	5752SCCM8	CIM Performance Monitoring (Common Information Model)	7C0
HBB77D0	5752SCCON	z/OS Container Extensions Virtualization	7D0
HBB77D0 JBB77DJ	5752SCCSR	Callable Service Requests	7D0 7DJ
HBB77D0 JBB77DJ	5752SCCTX	Context Services	7D0 7DJ
HZDC7C0	5752SCCWF	z/OS Container Extensions z/OSMF Workflows	7C0
HBB77D0 JBB77DJ	5752SCDIV	Data-in-virtual (DIV)	7D0 7DJ
HBB77D0 JBB77DJ	5752SCDMP	SNAP/ABDUMP SDUMP	7D0 7DJ
HBB77D0	5752SCEZA	zAware Bulk Load Client	7D0
HBB77D0	5752SCFXE	BCP Function Registry	7D0
HBB77D0 JBB77DJ	5752SCGTZ	BCP Generic Tracker	7D0 7DJ
HBB77D0	5752SCHCW	Device Driver Manager	7D0
HBB77D0 JBB77DJ	5752SCHIS	z/OS Hardware Instrumentation	7D0 7DJ
HBB77D0 JBB77DJ	5752SCHWI	HWIBCPii - BCPii (Base Control Program Internal Interface)	7D0 7DJ
HBB77D0	5752SCHWT	WEB Enablement toolkit	7D0
HBB77D0 JBB77DJ	5752SCHZS	Health Checker	7D0 7DJ

Figure 70 (Page 8 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HBB77D0	5752SCIQP	z/OS PCIe Services	7D0
HBB77D0 JBB77DJ	5752SCIXL	Cross System Extended Services (XES)	7D0 7DJ
HBB77D0	5752SCJSC	JES Common Coupling	7D0
HBB77D0	5752SCLDR	Program Loader	7D0
HBB77D0 JBB77DJ	5752SCLOG	System logger	7D0 7DJ
HBB77D0 JBB77DJ	5752SCLWT	Loadwait/Restart	7D0 7DJ
HBB77D0 JBB77DJ	5752SCMMS	MVS message service (MMS)	7D0 7DJ
HBB77D0 JBB77DJ	5752SCOBR	Outboard recording (OBR) of SYS1.LOGREC error recording	7D0 7DJ
HBB77D0 JBB77DJ	5752SCPFA	Predictive Failure Analysis (PFA)	7D0 7DJ
HBB77D0	5752SCPX6	z/OS UNIX System Services (USS) BCP support	7D0
HBB77D0 JBB77DJ	5752SCRRS	Resource Recovery Services (RRS)	7D0 7DJ
HBB77D0	5752SCRTD	Runtime Diagnostics (RTD)	7D0
HBB77D0 JBB77DJ	5752SCRTM	Recovery Termination Manager (RTM)	7D0 7DJ
HBB77D0	5752SCRT2	Sub-Capacity Reporting Tool (z/OS SCRT - Java Version)	7D0
HBB77D0 JBB77DJ	5752SCSDS	Global Resource Serialization (GRS)	7D0 7DJ
HBB77D0 JBB77DJ	5752SCSLP	SLIP/PER	7D0 7DJ
HBB77D0 JBB77DJ	5752SCSPI	Service processor interface (SPI)	7D0 7DJ
HBB77D0 JBB77DJ	5752SCTRC	Component Trace	7D0 7DJ
HBB77D0 JBB77DJ	5752SCTTR	Transaction Trace	7D0 7DJ
HUN77D0 JUN77DJ	5752SCUNI	Support for Unicode	7D0 7DJ
HBB77D0	5752SCURP	Usage Reporting Program	7D0

Figure 70 (Page 9 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HBB77D0 JBB77DJ	5752SCVTM	Virtual Terminal Manager	7D0 7DJ
HBB77D0 JBB77DJ	5752SCWLM	Workload Manager (WLM)	7D0 7DJ
HBB77D0 JBB77DJ	5752SCXCF	Cross System Coupling Facility (XCF)	7D0 7DJ
HBB77D0	5752SCXML	XML System Services	7D0
HBB77D0 JBB77DJ	5752SCXMS	Cross Memory Services (XMS)	7D0 7DJ
HJS77D0	5752SC1BA	JES3 (Job Entry Subsystem 3)	7D0
HBB77D0	5752SC1BC	BCP Batch Container	7D0
HJE77D0 JJE77DJ	5752SC1BH	JES2 (Job Entry Subsystem 2)	7D0 7DJ
HBB77D0	5752SC1BL	Multi Leaving Workstation (MLW)	7D0
HBB77D0	5752SC1BN	System Authorization Facility (SAF)	7D0
HBB77D0 JBB77DJ	5752SC1B2	External Writer (XWTR)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1B3	Scheduler Restart	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1B4	Allocation/Unallocation	7D0 7DJ
HBB77D0	5752SC1B5	SWA Manager	7D0
HBB77D0 JBB77DJ	5752SC1B6	Initiator/Terminator	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1B8	Command processing - includes - Command processors / Master scheduler / Master trace	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1B9	Converter/Interpreter	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CH	Virtual Storage Management (VSM)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CJ	Contents Supervisor	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CK	Communications Task (COMMTASK)	7D0 7DJ
HBB77D0	5752SC1CL	Task Manager	7D0

Figure 70 (Page 10 of 11). Component IDs

FMID	COMP ID	Component Name	RETAIN Release
HBB77D0 JBB77DJ	5752SC1CM	Recovery Termination Manager (RTM)	7D0 7DJ
HBB77D0	5752SC1CP	Extended Precision Floating Point Register	7D0
HBB77D0 JBB77DJ	5752SC1CR	Real Storage Manager (RSM)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CU	Region Control Task (RCT)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CV	Timer Supervisor	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CW	Auxiliary Storage Manager (ASM)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CX	System Resource Manager (SRM)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1CZ	MP Reconfiguration	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1C3	I/O Supervisor (IOS)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1C4	Device Independent Display Operator Control (DIDOCs)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC1C5	Supervisor Control - includes Interrupt handlers / Dispatcher	7D0 7DJ
HBB77D0	5752SC1C6	Execute Channel Program (EXCP)	7D0
HBB77D0	5752SC1C8	Nucleus Initialization Program (NIP)	7D0
HBB77D0	5752SC1C9	Initial Program Loader (IPL)	7D0
EMI2220	5752SC1DF	3890 Document Processor	220
EMI2220	5752SC1DL	Optical Character Reader (OCR)	220
EMI2220	5752SC1DM	3895 Document Reader/Inscriber	220
EMI2220	5752SC1DN	3540 Diskette I/O Unit	220
EMI2220	5752SC1D5	Output Control Record	220
HBB77D0	5752SC1GC	BCP Portable Grid Container	7D0
HBB77D0	5752SC1S4	Supervisor SYSGEN	7D0
HBB77D0	5752SC1S5	Scheduler SYSGEN	7D0
ETI1106	5752SC1T3	TSO TIOC (Terminal Input/Output Controller)	106
HBB77D0 JBB77DJ	5752SC100	SMF Scheduler	7D0 7DJ

<i>Figure 70 (Page 11 of 11). Component IDs</i>			
FMID	COMP ID	Component Name	RETAIN Release
HBB77D0	5752SC101	Supervisor Mapping Macro (MAPMACS)	7D0
HBB77D0	5752SC102	System Management Facility (SMF)	7D0
HBB77D0 JBB77DJ	5752SC106	On Line Test Executive Program (OLTEP)	7D0 7DJ
HBB77D0 JBB77DJ	5752SC111	Generalized Trace Facility (GTF)	7D0 7DJ
HBB77D0	5752SC112	Super Zap (AMASPZAP) / AMATERSE	7D0
HBB77D0	5752SC115	Stand-Alone Dump (AMDSADMP)	7D0
HBB77D0	5752SC118	GTF Trace edit	7D0
HBB77D0	5752SC132	Interactive Problem Control System (IPCS)	7D0
HAL47C0 JAL47DJ	5752SC133	Future function z/OS Authorized Code Scanner JPN	7C0 7DJ
HBB77D0	5752SC141	JES Services	7D0
HBB77D0 JBB77DJ	5752SC142	System Trace	7D0 7DJ
HBB77D0 JBB77DJ	5752SC143	Auto Dump Services (DAE)	7D0 7DJ
HBB77D0	5752SC144	Allocation Services	7D0
HBB77D0 JBB77DJ	5752SC164	Virtual Lookaside Facility (VLF)	7D0 7DJ
HBB77D0	5752SYBLD	z/OS Install	7D0
HRF77D0 JRF77DJ	5752XXH00	RACF (Security Server Resource Access Control Facility)	7D0 7DJ
HKY77D0	5752XXPKI	PKI Services (Public Key Infrastructure)	7D0
HWT0500	5752SCHWT	z/OS Web Enablement Toolkit	500
HZAI250	5752SCZEN	Future Function	250

Appendix B. APARs Incorporated into Elements of z/OS V2R5

This appendix is sorted by the element name.

APARs Incorporated into HWJ9143 (Alternate Library for REXX)

PN71194 PQ00096

APARs Incorporated into JWJ9144 (Alternate Library for REXX (Japanese))

No APARs have been incorporated at this time.

APARs Incorporated into HBB77D0 (BCP)

OA55289 OA55495 OA55503 OA55515 OA55516 OA55517 OA55624 OA55640
OA55775 OA55776 OA55919 OA55935 OA55942 OA55959 OA55962 OA56015
OA56019 OA56055 OA56097 OA56101 OA56143 OA56231 OA56451 OA56574
OA56608 OA56628 OA56764 OA56774 OA56829 OA56907 OA56917 OA56924
OA56950 OA56992 OA57021 OA57029 OA57098 OA57136 OA57138 OA57146
OA57147 OA57158 OA57165 OA57169 OA57225 OA57267 OA57270 OA57293
OA57339 OA57390 OA57391 OA57501 OA57518 OA57532 OA57570 OA57589
OA57678 OA57756 OA57778 OA57809 OA57847 OA57867 OA57896 OA57941
OA57959 OA57960 OA57969 OA58047 OA58090 OA58114 OA58121 OA58124
OA58131 OA58133 OA58144 OA58231 OA58233 OA58239 OA58246 OA58273
OA58282 OA58289 OA58296 OA58297 OA58303 OA58313 OA58336 OA58346
OA58362 OA58373 OA58388 OA58405 OA58406 OA58418 OA58437 OA58438
OA58446 OA58454 OA58461 OA58471 OA58474 OA58490 OA58492 OA58507
OA58514 OA58520 OA58531 OA58539 OA58543 OA58544 OA58562 OA58572
OA58576 OA58587 OA58614 OA58634 OA58647 OA58652 OA58657 OA58666
OA58670 OA58680 OA58704 OA58706 OA58713 OA58755 OA58767 OA58768
OA58789 OA58793 OA58795 OA58808 OA58823 OA58837 OA58853 OA58874
OA58875 OA58881 OA58918 OA58940 OA58942 OA58953 OA58958 OA58969
OA58992 OA58996 OA58998 OA59002 OA59007 OA59030 OA59034 OA59059
OA59066 OA59069 OA59082 OA59084 OA59090 OA59093 OA59101 OA59111
OA59119 OA59121 OA59122 OA59134 OA59166 OA59184 OA59194 OA59239
OA59245 OA59278 OA59303 OA59306 OA59307 OA59315 OA59324 OA59325
OA59331 OA59336 OA59338 OA59347 OA59360 OA59365 OA59366 OA59399
OA59405 OA59407 OA59415 OA59432 OA59446 OA59457 OA59481 OA59494
OA59497 OA59501 OA59528 OA59529 OA59535 OA59552 OA59559 OA59561
OA59573 OA59578 OA59680 OA59723 OA59734 OA59742 OA59754 OA59763
OA59764 OA59776 OA59782 OA59787 OA59806 OA59815 OA59819 OA59864
OA59890 OA59921 OA59927 OA59948 OA59964 OA59965 OA59984 OA59990
OA60011 OA60012 OA60014 OA60025 OA60027 OA60029 OA60034 OA60051

OA60055 OA60059 OA60084 OA60110 OA60193 OA60249 OA60272 OA60300
OA60303 OA60310 OA60321 OA60479 OA60490 OA60641 OA60654 OA60663
OA60695 OA60762 OA60841 OA60875 OA60912 OA60940 OA61020 OA61144
OA61186 OA60811

APARs Incorporated into JBB77DJ

OA57371 OA57756

APARs Incorporated into HPV77D0 (BCP - Capacity Provisioning)

OA47783 OA50656 OA50844 OA53001 OA53385 OA53757 OA54614 OA55039
OA55980 OA56365 OA56422 OA56423 OA56632 OA57552 OA57553 OA59747

APARs Incorporated into HUN77D0 (BCP - Support for Unicode)

OA52686 OA52855 OA52874 OA53307 OA53732 OA53828 OA54424 OA54426
OA55214 OA55239 OA55727 OA55758 OA55795 OA55884 OA56221 OA56241
OA56511 OA56512 OA56812 OA57008 OA57214 OA58551 OA58671 OA59065
OA59506 OA59656 OA60042 OA60082 OA60359

APARs Incorporated into JUN77DJ (Unicode JPN)

No Apars were incorporated into JUN77DJ at this time.

APARs Incorporated into HPM77D0 (BCP Program Management Binder)

OA56557 OA56886 OA57081 OA57354 OA57664 OA58115 OA58170 OA58202
OA59150 OA59195 OA59518 OA59717 OA59780 OA59816 OA60161 OA60655
OA60939

APARs Incorporated into HBD6602 (BDT)

OW02466 OW02491 OW02703 OW06303 OW07581 OW08052 OW13686 OW14761
OW16558 OY00989 OY01181 OY01214 OY01465 OY01657 OY01963 OY02278
OY02507 OY02517 OY02556 OY02855 OY03037 OY03043 OY03193 OY03823
OY03900 OY04558 OY04723 OY04746 OY04757 OY04797 OY04960 OY05750
OY05860 OY05862 OY06461 OY06694 OY06854 OY07282 OY07358 OY07532
OY07737 OY07738 OY08097 OY08243 OY08520 OY08693 OY09047 OY09152
OY09208 OY09266 OY09340 OY09444 OY09724 OY09810 OY09814 OY10011
OY10450 OY10548 OY10660 OY10846 OY10938 OY11070 OY11117 OY11225
OY11226 OY11415 OY11487 OY11702 OY11739 OY12279 OY12342 OY12437
OY12637 OY13131 OY13133 OY13406 OY13591 OY14050 OY14244 OY14749
OY14959 OY15068 OY15125 OY15218 OY15466 OY15882 OY15962 OY16130
OY16264 OY16719 OY16986 OY17085 OY17238 OY17314 OY17428 OY17457
OY17584 OY17640 OY17978 OY17985 OY18308 OY18469 OY18554 OY18731
OY18908 OY19076 OY19284 OY19321 OY19388 OY19391 OY19894 OY19898

OY19902 OY19960 OY20171 OY20431 OY20784 OY20901 OY20923 OY21002
OY21460 OY21506 OY21813 OY21829 OY21841 OY21875 OY22428 OY22674
OY22782 OY23216 OY23309 OY23876 OY24777 OY25628 OY25822 OY26508
OY27326 OY27346 OY27743 OY27892 OY27898 OY27956 OY28054 OY28281
OY28729 OY29281 OY29347 OY29399 OY29778 OY29957 OY30006 OY30068
OY30079 OY30258 OY30281 OY31473 OY33022 OY33144 OY33982 OY33985
OY34270 OY35019 OY35732 OY36496 OY38230 OY39828 OY40931 OY41599
OY45904 OY47404 OY47780 OY52343 OY53129 OY54436 OY55413 OY58208
OY59355 OY60833 OY60850 OY64461 OZ96792 OZ96975 OZ97192 OZ97459
OZ97533 OZ97640 OZ97699 OZ97701 OZ97702 OZ97703 OZ97723 OZ97724
OZ97905

APARs Incorporated into JBD6201 (BDT File-to-File)

OW18026

APARs Incorporated into JBD6202 (BDT SNA NJE)

OY10539 OY11415 OY12637 OY16986 OY17978 OY18308 OY18908 OY19960
OY21506 OY26802 OY29281 OY30281 OY38230 OY54126 OY59355

APARs Incorporated into HPG77C0 (Common Information Model (CIM))

OA52978 OA53160 OA53937 OA55275 OA55278 OA55502

APARs Incorporated into HIP6250 (Communications Server IP Services)

PH08636 PH10959 PH11111 PH11119 PH11399 PH11838 PH11957 PH12034
PH12246 PH12262 PH12269 PH12777 PH13426 PH13948 PH13959 PH14012
PH14063 PH14075 PH14669 PH14774 PH14777 PH14945 PH15081 PH15086
PH15472 PH15480 PH15694 PH15722 PH15776 PH15777 PH15793 PH16065
PH16117 PH16287 PH16975 PH17315 PH17412 PH17841 PH18006 PH18184
PH18369 PH18534 PH18551 PH18656 PH18817 PH18996 PH19158 PH19226
PH19567 PH19693 PH20423 PH21449 PH21465 PH21487 PH21740 PH21743
PH21750 PH21789 PH22000 PH22156 PH22273 PH22344 PH22345 PH23526
PH23547 PH23611 PH23616 PH23985 PH24147 PH24334 PH24542 PH24551
PH24561 PH24706 PH25228 PH25427 PH25546 PH26173 PH26550 PH26593
PH27333 PH27400 PH28224 PH28229 PH30154 PH30525 PH31493 PH31971
PH32620 PH32805 PH33382 PH33393 PH33747 PH33972 PH34299 PH34409
PH35020

APARs Incorporated into HVT6250 (Communications Server for z/OS SNA Services)

OA57373 OA57559 OA57594 OA57606 OA57913 OA58106 OA58367 OA58513
OA58728 OA58811 OA59083 OA59193 OA59227 OA59479 OA59569 OA60023
OA60228 OA60329

APARs Incorporated into JIP625K (Communications Server Security Level 3)

No APARS were integrated into JIP625K.

APARs Incorporated into JIP625X (XWINDOWS)

No APARs were integrated into JIP625X.

APARs Incorporated into HKY77D0 (Cryptographic Services PKI Services)

OA58841 OA59234 OA59846 OA60903

APARs Incorporated into HCPT450 (Cryptographic Services: System SSL)

OA54725 OA57189 OA57443 OA57663 OA57936 OA58335 OA58781 OA58990
OA59074 OA59115 OA59268 OA60021 OA60105 OA60573 OA60669

APARs Incorporated into JCPT45J (Cryptographic Services: System SSL Japanese)

OA57663 OA60105

APARs Incorporated into HDZ2250 (DFSMS)

OA45091 OA51286 OA52272 OA54182 OA54501 OA54911 OA55153 OA55205
OA55254 OA55405 OA55409 OA55460 OA55463 OA55531 OA55583 OA55700
OA55712 OA55713 OA55714 OA55809 OA55841 OA55921 OA55957 OA55971
OA56020 OA56061 OA56079 OA56084 OA56085 OA56086 OA56182 OA56210
OA56274 OA56291 OA56300 OA56304 OA56309 OA56312 OA56401 OA56425
OA56438 OA56476 OA56478 OA56487 OA56500 OA56501 OA56502 OA56518
OA56529 OA56542 OA56564 OA56584 OA56622 OA56623 OA56637 OA56644
OA56649 OA56671 OA56688 OA56691 OA56735 OA56740 OA56757 OA56758
OA56796 OA56836 OA56849 OA56852 OA56863 OA56873 OA56889 OA56896
OA56900 OA56902 OA56903 OA56906 OA56921 OA56931 OA56948 OA56960
OA57013 OA57023 OA57033 OA57037 OA57051 OA57061 OA57067 OA57075
OA57076 OA57094 OA57101 OA57105 OA57111 OA57114 OA57120 OA57142
OA57143 OA57144 OA57148 OA57152 OA57170 OA57172 OA57173 OA57174
OA57175 OA57177 OA57183 OA57209 OA57216 OA57220 OA57233 OA57235
OA57245 OA57259 OA57268 OA57271 OA57277 OA57287 OA57288 OA57289
OA57291 OA57292 OA57303 OA57305 OA57306 OA57307 OA57309 OA57310
OA57311 OA57314 OA57321 OA57322 OA57330 OA57331 OA57332 OA57333
OA57336 OA57338 OA57356 OA57359 OA57360 OA57361 OA57363 OA57366
OA57367 OA57368 OA57377 OA57392 OA57395 OA57399 OA57402 OA57418
OA57419 OA57424 OA57436 OA57437 OA57444 OA57445 OA57448 OA57451
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OA57808 OA57811 OA57812 OA57820 OA57823 OA57825 OA57831 OA57833
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OA57850 OA57857 OA57861 OA57868 OA57875 OA57877 OA57898 OA57902
OA57909 OA57917 OA57942 OA57946 OA57949 OA57954 OA57958 OA57963
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OA58002 OA58003 OA58007 OA58009 OA58010 OA58019 OA58022 OA58030
OA58032 OA58037 OA58040 OA58048 OA58053 OA58054 OA58057 OA58062
OA58064 OA58065 OA58067 OA58071 OA58078 OA58086 OA58091 OA58109
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OA58149 OA58150 OA58155 OA58157 OA58165 OA58172 OA58173 OA58192
OA58212 OA58213 OA58221 OA58222 OA58223 OA58224 OA58225 OA58226
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OA58263 OA58264 OA58265 OA58271 OA58274 OA58275 OA58278 OA58279
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OA58630 OA58637 OA58643 OA58649 OA58655 OA58660 OA58665 OA58668
OA58672 OA58675 OA58676 OA58679 OA58682 OA58684 OA58686 OA58692
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OA58774 OA58778 OA58796 OA58814 OA58815 OA58818 OA58820 OA58821
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OA59010 OA59021 OA59028 OA59038 OA59045 OA59049 OA59050 OA59058
OA59060 OA59062 OA59071 OA59088 OA59095 OA59096 OA59099 OA59107
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OA59198 OA59209 OA59226 OA59229 OA59238 OA59246 OA59248 OA59253
OA59262 OA59263 OA59264 OA59279 OA59280 OA59286 OA59290 OA59291
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OA59418 OA59421 OA59430 OA59438 OA59448 OA59453 OA59456 OA59458
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OA59472 OA59474 OA59492 OA59499 OA59500 OA59504 OA59510 OA59522
OA59523 OA59530 OA59534 OA59536 OA59537 OA59538 OA59539 OA59541

OA59547 OA59549 OA59557 OA59575 OA59576 OA59589 OA59599 OA59601
OA59603 OA59609 OA59610 OA59615 OA59620 OA59628 OA59629 OA59630
OA59642 OA59646 OA59650 OA59653 OA59659 OA59664 OA59667 OA59668
OA59681 OA59682 OA59684 OA59693 OA59701 OA59706 OA59711 OA59716
OA59727 OA59728 OA59731 OA59733 OA59739 OA59743 OA59756 OA59765
OA59766 OA59767 OA59769 OA59774 OA59785 OA59789 OA59811 OA59814
OA59820 OA59822 OA59824 OA59828 OA59830 OA59834 OA59841 OA59855
OA59858 OA59859 OA59860 OA59866 OA59871 OA59881 OA59884 OA59885
OA59898 OA59900 OA59904 OA59913 OA59916 OA59919 OA59933 OA59952
OA59959 OA59970 OA59974 OA59975 OA59980 OA59997 OA60005 OA60022
OA60030 OA60041 OA60045 OA60049 OA60060 OA60066 OA60076 OA60079
OA60081 OA60089 OA60091 OA60103 OA60109 OA60113 OA60118 OA60118
OA60120 OA60122 OA60128 OA60136 OA60145 OA60146 OA60148 OA60151
OA60167 OA60174 OA60182 OA60185 OA60188 OA60189 OA60199 OA60215
OA60222 OA60231 OA60233 OA60243 OA60247 OA60261 OA60270 OA60271
OA60279 OA60302 OA60311 OA60339 OA60345 OA60346 OA60349 OA60371
OA60375 OA60407 OA60410 OA60411 OA60429 OA60451 OA60453 OA60481
OA60485 OA60488 OA60499 OA60508 OA60522 OA60532 OA60538 OA60545
OA60564 OA60567 OA60569 OA60585 OA60595 OA60596 OA60647 OA60664
OA60689 OA60723 OA60725 OA60745 OA60767 OA60794 OA60797 OA60799
OA60808 OA60812 OA60816 OA60832 OA60842 OA60901 OA60944 OA60976
OA61066

APARs Incorporated into JDZ225K (DFSMS Japanese)

No APARs have been incorporated.

APARs Incorporated into HSM1Q00 (DFSORT)

PH03207 PH08294 PH11240 PH11605 PH13265 PH13467 PH13891 PH19006
PH26015 PH26489 PH29959 PH32571 PH33133 PH33837

APARs Incorporated into EER3500 (EREP - REWORK 199105)

This is the version that was shipped since OS/390 R1.

IR80711 IR80768 IR81185 IR81370 IR81547 IR81591 IR81804 IR82451
IR82751 IR82977 IR83371 IR83723 IR83856 IR83943 IR85611 IR85611
IR85711 IR85846 IR85846 IR85931 IR86094 IR86094 IR86191 IR86533
IR86533 IR86658 IR86881 IR87037 IR87038 IR87038 IR87039 IR87040
IR87242 IR87623 IR87632 IR87733 IR87733 IR88018 IR88180 IR88291
IR88374 IR88472 IR88473 IR88596 IR88730 IR88730 IR88776 IR88841
IR88854 IR88949 IR88949 IR88991 IR89166 IR89166 IR89210 IR89296
IR89318 IR89400 IR89419 IR89539 IR89685 IR89922 IR89922 IR89966
IR90141 IR90561 IR90741 IR90770 IR90850 IR90868 IR90959 IR90959
IR91068 IR91068 IR91068 IR91215 IR91464 IR91592 IR91601 IR91836

IR91852 IR92091 IR92091 IR92091 IR92396 IR92655 IR92798 IR92852
IR93183 IR93183 IR93227 IR93460

APARs Incorporated in EER3500 (EREP-SUP'd in z/OS V1R7)

This is the version that is SUP'd in z/OS V1R7. The APARs listed in the preceding section are still in this version.

IR22107 IR22113 IR22155 IR22361 IR22450 IR22549 IR22587 IR22987
IR23340 IR23532 IR25252 IR25562 IR25718 IR25856 IR27261 IR27350
IR27351 IR27996 IR28576 IR28731 IR29301 IR29955 IR30614 IR30886
IR31012 IR31687 IR32362 IR32608 IR32927 IR32971 IR33045 IR33151
IR33211 IR34613 IR34712 IR35814 IR35816 IR36215 IR36491 IR37709
IR37835 IR38057 IR38058 IR38450 IR38641 IR38950 IR39127 IR39721
IR39722 IR40683 IR40684 IR41039 IR41115 IR41673 IR41712 IR41986
IR42026 IR42503 IR42671 IR42672 IR43043 IR43044 IR43045 IR43046
IR44590 IR44854 IR45030 IR46224 IR46582 IR47431 IR48613 IR49633
IR50051 IR50866 IR50902 IR51078 IR51695 IR53169 IR53273 IR54199
IR54657 IR93614 IR94013 IR94126 IR94181 IR94340 IR94385 IR94450
IR94783 IR94943 IR95091 IR95102 IR95192 IR95324 IR95338 IR95500
IR95588 IR95713 IR95908 IR95965 IR96031 IR96698 IR96724 IR97014
IR97218 IR97314 IR97326 IR97455 IR97631 IR97934 IR97983 IR98123
IR98372 IR98410 IR98501 IR99102 IR99109 IR99262 IR99281

APARs Incorporated into HSWF100 (ESCON Director)

No APARs have been incorporated at this time.

APARs Incorporated into HFST101 (FFST)

PN29099 PN29717 PN29718 PN31356 PN31357 PN31410 PN31484 PN31768
PN31914 PN31916 PN33190 PN34219 PN34224 PN34526 PN35401 PN35590
PN35723 PN36140 PN36526

APARs Incorporated into HGD3200 (GDDM)

PN59427 PN62024 PN62733 PN63738 PN64024 PN65404 PN65498 PN65512
PN65514 PN65681 PN65937 PN65966 PN66171 PN66450 PN66458 PN66461
PN66468 PN66474 PN66507 PN66951 PN67035 PN67882 PN68256 PN68922
PN68927 PN69043 PN69302 PN69421 PN69423 PN69592 PN69719 PN69769
PN70250 PN70433 PN70441 PN70621 PN72131 PN72461 PN72998 PN73336
PN73449 PN73542 PN73588 PN73756 PN73783 PN73970 PN74028 PN74032
PN74087 PN74186 PN74248 PN74255 PN74318 PN74817 PN75807 PN76011
PN76158 PN76418 PN76534 PN76546 PN77428 PN77824 PN78575 PN79934
PN80122 PN80374 PN80720 PN82044 PN82794

APARs Incorporated into HGD3201 (GDDM-PGF)

PN43524 PN45816 PN53932 PN62127 PN64948 PN66658 PN74910 PN79959
PN84114

APARs Incorporated into HCS77D0 (HCD)

OA56146 OA56147 OA56962 OA57192 OA57230 OA57250 OA57426 OA58145
OA58401 OA58497 OA58584 OA59314 OA59378 OA59429 OA59445 OA59482
OA59556 OA59720 OA59729 OA60235

APARs Incorporated into JCS77DJ

OA56146 OA56147 OA56962 OA57230 OA58145

APARs Incorporated into HCM1110 (HCM)

IO26966 IO27170 IO27219 IO28004 IO28215

APARs Incorporated into HMQ4160 (HLASM)

PQ88271 PQ88470 PQ89655 PQ90802 PQ91893 PQ92291 PQ92371 PQ92508
PQ92579 PQ93977 PQ95145 PQ96292 PQ98607 PQ99158 PQ99706 PK00040
PK01064 PK02523 PK02660 PK05761 PK06113 PK06652 PK07828 PK09700
PK12545 PK14299 PK15306 PK17439 PK17447 PK17728 PK18170 PK19083
PK23005 PK24143 PK25298 PK25410 PK26756 PK27282 PK27577 PK27657
PK27979 PK29624 PK31383 PK31465 PK34746 PK36579 PK37014 PK37093
PK40237 PK42535 PK43179 PK55677 PK55678 PK56245 PK56672 PK58463

APARs Incorporated into JMQ416A (HLASM Toolkit)

PQ90771 PQ91484 PQ94993 PQ96247 PQ98212 PK01063 PK01283 PK05664
PK06190 PK06707 PK07828 PK07940 PK08886 PK09261 PK10316 PK10355
PK12514 PK12866 PK13983 PK15286 PK15984 PK17443 PK19580 PK20237
PK21002 PK25270 PK26240 PK26914 PK28745 PK29714 PK30620 PK30719
PK31375 PK31469 PK39957 PK40271 PK40813 PK41381 PK42140 PK42414
PK43326 PK43386 PK45696 PK46123 PK47176 PK50735 PK56760

APARs Incorporated into H24P111 (Host Performance Analyzer)

PQ06312 PQ07631 PQ11614 PQ19762 PQ30041 PQ39109 PQ51796 PQ517796
PQ71319 PQ75940

APARs Incorporated into J24P112 (Host Performance Analyzer JPN)

PQ06312 PQ19762 PQ11614

APARs Incorporated into HHAP90P (IBM HTTP Server - Powered by Apache)

PI11659 PI21538 PI25124 PI30622 PI36674

APARs Incorporated into HRSL440 (IBM Tivoli Directory Server for z/OS Base)

OA52891 OA53058 OA53204 OA53601 OA53615 OA53894 OA54234 OA54877
OA55857 OA55982 OA56136 OA56301 OA56308 OA57349 OA57794 OA57819
OA57887 OA58276 OA58364 OA59533 OA59930 OA60074 OA60304

APARs Incorporated into JRSL44J (IBM Tivoli Directory Server for z/OS JPN)

OA53204 OA53601

APARs Incorporated into EDU1H01 (ICKDSF)

PN60520 PN60881 PN61480 PN62330 PN62342 PN62444 PN63044 PN63507
PN64655 PN64868 PN65609 PN66540 PN66541 PN67080 PN68358 PN69166
PN69797 PN70013 PN70767 PN71101 PN71972 PN72104 PN73132 PN74048
PN74223 PN76727 PN76862 PN76939 PN77249 PN79757 PN80327 PN80879
PN83877 PN84194 PN84489 PN84759 PN85067 PN85631 PN86705 PN87929
PN88014 PN89166 PN89905 PN91223 PQ00652 PQ02288 PQ03341 PQ05231
PQ07015 PQ08691 PQ10899 PQ11775 PQ11919 PQ13687 PQ18005 PQ18393
PQ20390 PQ20391 PQ23131 PQ24114 PQ24577 PQ26800 PQ29648 PQ32380
PQ37791 PQ38921 PQ42534 PQ43495 PQ44667 PQ46396 PQ47472 PQ49243
PQ50940 PQ53196 PQ53326 PQ56431 PQ62077

APARs Incorporated into FDU1H07 and FDU1H08

PL84215 PN00713 PN03938 PN09082 PN18300 PN18847 PN19767 PN20378
PN21633 PN24896 PN24903 PN38041 PN38414 PN42498 PN42602 PN50159
PN50950 PN55778 PN61073 PN61959 PN66436 PN66767 PN68866 PN73788
PN87510 PQ13447 PQ26624 PQ47107 PQ57770

APARs Incorporated into FDU1H09

PL84215 PN00713 PN03938 PN18300 PN18847 PN19767 PN20378 PN24896
PN24903 PN38414 PN50159 PN50950 PN55778 PN61073 PN61959 PN73788
PN87510 PQ13447 PQ26624 PQ47107 PQ57770

APARs Incorporated into HCR77D2 (ICSF)

OA56203 OA56837 OA56965 OA57702 OA58186 OA58246 OA58306 OA58358
OA58359 OA58377 OA58393 OA58473 OA58475 OA58476 OA58593 OA58622
OA58880 OA59020 OA59040 OA59174 OA59206 OA59236 OA59241 OA59347
OA59369 OA59443 OA59593 OA59762 OA59783 OA59896 OA59972 OA60100
OA60154 OA60165 OA60276 OA60317 OA60355 OA60365 OA60409 OA60447
OA60720 OA60775

APARs Incorporated into HNET7D0 (Infoprint Server NetSpool)

No APARs have been incorporated at this time.

APARs Incorporated into JNET7DJ

No APARs have been incorporated at this time.

APARs Incorporated into HOPI7D0 (Infoprint Server Print Interface)

OA57389 OA58592 OA58836 OA59678 OA59679 OA59784 OA60141 OA60155
OA60159 OA60368

APARs Incorporated into JOPI7DJ

OA58836

APARs Incorporated into HMOS705 (Infoprint Server IP PrintWay Basic Mode)

OW39337 OW40050 OW40901 OW41343 OW41808 OW42039 OW42727 OW44057
OW44111 OW44172 OW44216 OW44283 OW44335 OW44464 OW44603 OW44687
OW44788 OW44965 OW45138 OW45332 OW45368 OW45718 OW45762 OW45827
OW45852 OW45913 OW46013 OW46331 OW46515 OW46596 OW46688 OW46968
OW47002 OW47086 OW47479 OW47560 OW47717 OW47960 OW48211 OW48387
OW48525 OW48557 OW48955

APARs Incorporated into JMOS7J5

OW44283 OW44965 OW45368 OW46331 OW46515 OW47560 OW48387 OW48557

APARs Incorporated into HSWK450 (Integrated Security Services Network Authentication Service)

OA57171 OA57429 OA57932 OA58259 OA59758 OA60164 OA60227 OA60846

APARs Incorporated into JSWK45J (Integrated Security Services Network Authentication Service JPN)

No APARs have been incorporated at this time.

APARs Incorporated into HIO1105 (IOCP)

OY01989 OY03274 OY11391 OY13461 OY14989 OY16934 OY17169 OZ87310
OZ90023 OZ91644 OZ92967

APARs Incorporated into HIF7T02 (ISPF)

OA56316 OA56945 OA57168 OA57438 OA57450 OA57539 OA57541 OA57688
OA57689 OA57699 OA57706 OA57707 OA57708 OA57709 OA57728 OA57735

OA57736 OA57737 OA57739 OA57767 OA57814 OA57888 OA57897 OA57980
OA58061 OA58070 OA58097 OA58151 OA58201 OA58219 OA58378 OA58443
OA58607 OA58617 OA58702 OA58840 OA58847 OA58883 OA59052 OA59216
OA59244 OA59249 OA59267 OA59545 OA59938 OA59985 OA60019 OA60090
OA60219 OA60369 OA60557 OA60681 OA60707 OA60750 OA60752 OA60776
OA60820 OA60839 OA60882

APARs Incorporated into JIF7T14

No APARs have been incorporated at this time.

APARs Incorporated into JIF7T16

No APARs have been incorporated at this time.

APARs Incorporated into HJE77D0 (JES2)

OA53395 OA53771 OA53860 OA53923 OA54074 OA54188 OA55161 OA55542
OA55591 OA55792 OA55876 OA55983 OA56102 OA56130 OA56362 OA56545
OA56620 OA56707 OA56969 OA56970 OA56979 OA56986 OA57145 OA57210
OA57249 OA57344 OA57345 OA57427 OA57457 OA57469 OA57513 OA57996
OA58021 OA58119 OA58160 OA58190 OA58217 OA58343 OA58372 OA58426
OA58516 OA58595 OA58636 OA58638 OA58644 OA58646 OA58720 OA58752
OA58757 OA58860 OA58962 OA59015 OA59033 OA59156 OA59316 OA59400
OA59602 OA59625 OA59700 OA59714 OA59721 OA59800 OA59821 OA59883
OA59920 OA59967 OA60112 OA60125 OA60172 OA60184 OA60426 OA60473
OA60486 OA60523 OA60718

APARs Incorporated into JJE77DJ

No APARs have been incorporated at this time.

APARs Incorporated into HJS77D0 (JES3)

OA56838 OA57139 OA57193 OA57201 OA57206 OA57281 OA57347 OA57397
OA57964 OA58001 OA58029 OA58330 OA58337 OA58685 OA58849 OA59275
OA59351 OA59383 OA59397 OA59408 OA59428 OA59875 OA60099 OA60130
OA60254 OA60574 OA60578

APARs Incorporated into HLE77D0 (Language Environment)

PH00130 PH00864 PH03870 PH05306 PH06630 PH08927 PH10096 PH10097
PH10276 PH11691 PH12911 PH15324 PH17925 PH21074 PH24395 PH25434
PH26071 PH27025 PH28230 PH29505 PH30373 PH30804 PI81708 PI86520
PI86743 PI86921 PI88923 PI89400 PI95476 PI99763

APARs Incorporated into JLE77DJ

No APARs have been incorporated at this time.

APARs Incorporated into HKCZ120 (IBM Knowledge Center for z/OS)

PH01607 PH01924 PH04576 PH08800 PH08801 PI41359 PI45049 PI46365
PI46376 PI47286 PI47492 PI54363 PI80538 PI80640 PI80644 PI80648
PI83462 PI83636 PI84148 PI84939 PI89697 PI91506 PI92780 PI93338
PI95144 PI95243 PI96192 PI98785 PI98787

APARs Incorporated into HSD7780 (Metal C Runtime Library)

OA30396 OA34838

APARs Incorporated into EMI2220 (MICR/OCR)

Service up to, and including, PUT8605 Program Update Tape (service level) is included in this FMID.

APARs Incorporated into HDZ225N (Network File System)

OA55560 OA56224 OA56571 OA56576 OA56577 OA56578 OA57180 OA57488
OA57489 OA57493 OA57498 OA57576 OA57577 OA57716 OA57931 OA58187
OA58320 OA58370 OA58417 OA58929 OA58932 OA58975 OA59025 OA59026
OA59310 OA59483 OA59564 OA59613 OA59843 OA60208

APARs Incorporated into JDZ225J (NFS Japanese)

OA56576

APARs Incorporated into HOS2240 (OpenSSH for z/OS)

OA52511 OA52873 OA53253 OA53532 OA53808 OA54299 OA54734 OA55414
OA55708 OA55852 OA56087 OA56510 OA60095

APARs Incorporated into HRM77D0 (RMF)

No APARs have been incorporated at this time.

APARs Incorporated into JRM77DJ

No APARs have been incorporated at this time.

APARs Incorporated into HQX77D0 (SDSF)

PI88841 PI96990 PI95294 PH01113 PH01888 PH03062 PH04360

APARs Incorporated into HRF77D0 (Security Server: RACF)

OA57194 OA57380 OA57821 OA57972 OA58204 OA58619 OA58640 OA58751
OA58753 OA58882 OA58989 OA59104 OA59210 OA59252 OA59387 OA59588
OA59912 OA59946 OA59983 OA60579 OA60597 OA60717 OA60904

APARs Incorporated into JRF77DJ

No APARs have been incorporated at this time.

APARs Incorporated into HTV77C0 (Runtime Library Extensions)

PH00377 PH03048 PH24219 PH24282 PH24350 PI91446 PI91447 PI96211
PI96212 PI96214 PI99202

APARs Incorporated into JTV77CJ (Runtime Library Extensions JPN)

No APARs have been incorporated at this time.

APARs Incorporated into HMP1K00 and JMP1K11 (SMP/E)

List of APARs for HMP1K00:

IO12202 IO13385 IO13872 IO13881 IO14005 IO14063 IO14140 IO14155
IO14172 IO14229 IO14267 IO14418 IO14568 IO14693 IO14750 IO14873
IO15468 IO15654 IO16590 IO16845 IO17074 IO17536 IO17772 IO17846
IO17881 IO18034 IO18091 IO18093 IO18136 IO18269 IO18273 IO18378
IO18493 IO18592 IO18620 IO18838 IO18854 IO18879 IO18945 IO18999
IO19037 IO19179 IO19219 IO19281 IO19616 IO19713 IO19798 IO19937
IO19975 IO20023 IO20058 IO20159 IO20547 IO20566 IO20807 IO20858
IO20889 IO20906 IO20987 IO21021 IO21150 IO21231 IO21248 IO21279
IO21488 IO21669 IO21940 IO22076 IO22234 IO22289 IO22326 IO22422
IO22581 IO22704 IO22780 IO22885 IO22984 IO23035 IO23270 IO23466
IO23592 IO23838 IO24076 IO24161 IO24370 IO24440 IO24712 IO24768
IO24792 IO24810 IO24946 IO25034 IO25060 IO25081 IO25475 IO25506
IO25572 IO25595 IO25722 IO25852 IO25884 IO26161 IO26194 IO26200
IO26243 IO26275 IO26315 IO26415 IO26758 IO26787

List of APARs for JMP1K11:

IO14693 IO14873 IO15468 IO17536 IO18093 IO18838 IO20858 IO20889
IO21150 IO21279 IO22234 IO22780 IO23270 IO23466 IO24440 IO25475
IO26194

APARs Incorporated into ETI1106 (TIOC)

OZ27476 OZ28922 OZ34273 OZ36819 OZ39784 OZ42197 OZ42972 OZ43111
OZ43223 OZ43490 OZ44359 OZ44765 OZ45384 OZ46377 OZ46729 OZ48113
OZ48875 OZ49608 AZ49617 AZ50214 AZ51683 AZ56262 AZ56745 AZ57305
AZ59270 AZ61617 AZ62047

APARs Incorporated into HTE77D0 (TSO/E)

OA58697 OA59266 OA59606 OA59926 OA60700

APARs Incorporated into JTE77DE

No APARs incorporated at this time.

APARs Incorporated into JTE77DJ

No APARs incorporated at this time.

APARs Incorporated into HLB77C0 (XL C/C++)

PH00644 PH02956 PH03046 PH03047 PH03313 PH03329 PH04982 PH05185
PH18005 PH18007 PH18274 PH18814 PH22657 PH23450 PH24217 PH24218
PH24870 PH05752 PH05782 PI92813 PI95387 PI96197 PI96199 PI96200
PI96201 PI96202 PI96203 PI96204 PI96205 PI96206 PI96208 PI96209
PI96210 PI96691 PI98160 PI99141 PI99657 PI99704 PI99705

APARs Incorporated into JLB77CJ (XL C/C++ JPN)

No APARs have been incorporated at this time.

APARs Incorporated into HZDC7C0 (z/OS Container Extensions)

No APARs have been incorporated at this time.

APARs Incorporated into HRG77D0 (z/OS Data Gatherer)

OA56682 OA56683 OA56684 OA56825 OA57203 OA57282 OA57325 OA57351
OA57387 OA57818 OA57901 OA58398 OA58615 OA58725 OA58726 OA58734
OA58759 OA59304 OA59321 OA59330 OA59423 OA59455 OA59637 OA59687
OA59851 OA60173 OA60217 OA60232 OA60494 OA60957 OA60981

APARs Incorporated into HZFS450 (z/OS File System)

OA57195 OA57278 OA57508 OA57519 OA57775 OA57785 OA58034 OA58508
OA58651 OA58696 OA58834 OA58852 OA58904 OA58939 OA59145 OA59173
OA59288 OA59295 OA59335 OA59425 OA59435 OA59591 OA59632 OA59635
OA59688 OA59842 OA59918 OA60415 OA60580 OA61014 OA61016 OA61146

APARs Incorporated into JZFS45J

No APARs have been incorporated at this time.

APARs Incorporated into HFNT140 (z/OS Font Collection)

PH17670 PH17836

APARs Incorporated into HFNT14J

PH12469 PH13040

APARs Incorporated into HSMA250 (z/OSMF Core Functions)

PH10759 PH10944 PH10949 PH10955 PH11606 PH11607 PH11797 PH12143
PH12793 PH13119 PH14009 PH14509 PH14798 PH15263 PH15438 PH15554
PH15825 PH15830 PH15926 PH16021 PH16076 PH16148 PH16208 PH16513
PH17032 PH17227 PH17867 PH17871 PH17881 PH18030 PH18096 PH18776
PH19036 PH19227 PH19545 PH19887 PH19892 PH19976 PH20939 PH21773
PH22030 PH22153 PH22303 PH22664 PH22871 PH22957 PH23046 PH23622
PH23672 PH23735 PH24072 PH24088 PH24329 PH24331 PH24527 PH24579
PH24941 PH25488 PH25523 PH25644 PH25691 PH25701 PH25982 PH26103
PH27300 PH27404 PH28533 PH28631 PH28990 PH29813 PH29907 PH30367
PH30881 PH31739 PH32205 PH32360 PH32679 PH33403 PH35244 PH35930
PI93623 PI99365

APARs Incorporated into HSMA251 (z/OSMF ISPF)

PH10765 PH18358 PH21269

APARs Incorporated into HSMA252 (z/OSMF Resource Monitoring)

PH11024 PH16300

APARs Incorporated into HSMA253 (z/OSMF WLM)

PH10963 PH13185 PH13454 PH14189 PH15261 PH18148 PH20173 PH24021
PI96460 PI98413

APARs Incorporated into HSMA254 (z/OSMF Software Management)

PH10301 PH11650 PH11832 PH15051 PH15703 PH16523 PH16799 PH17916
PH18076 PH19833 PH22456 PH23276 PH24046 PH26509 PH28237 PH28412

APARs Incorporated into HSMA255 (z/OSMF Incident Log)

PH10961 PH13118 PH15297 PH15704 PH16301 PH28872

APARs Incorporated into HSMA256 (z/OSMF Capacity Provisioning)

PH11018 PH16150 PH28832

APARs Incorporated into HSMA257 (z/OSMF Workflow)

PH10832 PH13729 PH14185 PH14511 PH15059 PH16079 PH16763 PH19396
PH21135 PH21818 PH21822 PH21919 PH24190 PH25145 PH25395 PH26057
PH26428 PH26642 PH27725 PH28113 PH28451 PH28532 PH28639 PH28867
PH29427 PH29834

APARs Incorporated into HSMA25A (z/OSMF Network Configuration Assistant)

PH12023 PH13264 PH14146 PH14555 PH15147 PH16016 PH16286 PH18017
PH19367 PH22728 PH23007 PH23559 PH24062 PH24064 PH25888 PH25929
PH26370 PH26388 PH26987 PH27316 PH27922 PH28000 PH29212 PH29548

APARs Incorporated into HSMA25E (z/OSMF zERT Network Analyzer)

PH11284 PH12760 PH15972 PH18394 PH21972 PH26258 PH32603 PH33152

APARs Incorporated into JCPT451 (z/OS Security Level 3 System SSL Security Level 3)

OA57189 OA57443 OA57663 OA57936 OA58335 OA58781 OA58990 OA59074
OA59115 OA59268 OA60105 OA60573 OA60669

APARs Incorporated into JSWK451 (z/OS Security Level 3 - Network Authentication Service Security Level 3)

OA57171 OA57429

APARs Incorporated into JRSL441 (z/OS Security Level 3 IBM TDS Security Level 3)

No APARs have been incorporated at this time.

APARs Incorporated into HOT77C0 (z/OS UNIX System Services Application Services)

OA52481 OA52497 OA52897 OA53232 OA53448 OA54559 OA54620 OA55299
OA55855 OA56001

APARs Incorporated into JOT77CJ

No APARs have been incorporated at this time.

APARs Incorporated into HFX1112 (z/OS Host - 3270 Workstation File Send/Receive)

No APARs have been incorporated at this time.

APARs Incorporated into HWT0500 (z/OS Web Enablement Toolkit)

OA54901 OA54902 OA57158 OA57191 OA57228 OA57447 OA57475 OA58707
OA58708 OA58983 OA60127 OA60535

Appendix C. DASD Storage Requirements Tables

The following sections contain information about storage requirements for DASD.

C.1 Understanding the DASD Storage Requirements Tables

The DASD space requirements shown in this appendix represent the actual storage required by the FMIDs listed in [Figure 1 on page 2](#) after the product and integration-tested service are installed and the data sets are compressed, plus approximately 15%. The directory blocks have been increased by 40% for load libraries and 15% for the rest. The additional space allows for service installation. When allocating these data sets, you can specify additional storage and directory blocks to allow for future maintenance.

The storage requirements tables in this appendix reflect the data sets required if you are installing **all** base and optional elements of z/OS. They do not reflect any customization performed by the customer. For example, the PARMLIB and PROCLIB space shown is the space required for the SMP/E installation without taking into account copying members from your production PARMLIB and PROCLIB data sets.

For libraries required for IPL, libraries that cannot have secondary space allocated, data sets that cannot be partitioned data set extended (PDSE), and data sets that should have a high-level qualifier of SYS1, see the information sent with the z/OS product. For references to cataloging, see [z/OS DFSMS Managing Catalogs](#).

Sample jobs to allocate the target and distribution libraries for certain elements are provided. For descriptions and locations of these jobs, see:

- [7.2.2, “Allocate Target and Distribution Libraries for Wave 0 elements” on page 52](#)
- [8.1.7, “Allocate target and distribution libraries for Wave 1 elements” on page 83](#)
- [8.3.3, “Allocate Target and Distribution Libraries for Wave 2 Elements” on page 115](#)

You only need to run these jobs if any of the libraries do not exist on the target system.

Similarly, sample jobs for certain elements are provided to set up the zFS directories. For more information about these jobs and where to find them, see:

- [7.2.3, “Create File System Directories for Wave 0” on page 53](#)
- [8.1.8, “Create file system directories for Wave 1” on page 87](#)
- [8.3.4, “Set up File System Directories for Wave 2” on page 116](#)

Sample jobs to define DDDEF entries for the target and distribution libraries for certain elements are provided. For descriptions and locations of these jobs, see:

- [7.2.4, “Define DDDEFs for Wave 0 elements” on page 53](#)
- [8.1.9, “Define DDDEFs for Wave 1 Elements” on page 91](#)
- [8.3.5, “Define DDDEFs for Wave 2 Elements” on page 116](#)

You only need to run these jobs if any of the DDDEF entries do not exist.

Note that the DDDEFs should point to the target system data sets and not to the production data sets. To use the target PARMLIB data set to IPL, you can use the PARMLIB concatenation to isolate the new members or copy the members to the production library. Refer to [8.5.2, “PARMLIB member considerations” on page 128](#) for more information on using the target system libraries.

C.2 SMP/E Data Sets for z/OS V2R5

A complete set of SMP/E data sets is required for the installation of z/OS V2R5. See [z/OS SMP/E Reference](#) for information on the use of these data sets.

Figure 71. Storage Requirements for the SMP/E Work Data Sets

DDDEF Name	D S O R G	R E C F M	L R E C L	BLK SIZE	No. of BLKS	No. of 3390 TRKS	No. of DIR BLKS
SMPWRK1	PO	FB	80	n/a	n/a	150	300
SMPWRK2	PO	FB	80	n/a	n/a	150	300
SMPWRK3	PO	FB	80	n/a	n/a	9500	990
SMPWRK4	PO	FB	80	n/a	n/a	132	300
SMPWRK6	PO	FB	80	n/a	n/a	20000	1500
SYSUT1	--	--	--	n/a	n/a	7500	seq
SYSUT2	--	--	--	n/a	n/a	1500	seq
SYSUT3	--	--	--	n/a	n/a	960	seq
SYSUT4	--	--	--	n/a	n/a	48240	seq
Note: Space for SYSUT1 through SYSUT4 cannot be allocated in blocks (BLKS).							

Abbreviations used for the ORG field are:

HFS file system
PDS Partition Data Set
PDSE Partition Data Set Extended

Figure 72. Storage Required for SMP/E Data Sets for z/OS V2R5

DDDEF Name	O R G	N O T E	R E C F M	L R E C L	No. of 3390 TRKS	No. of DIR BLKS
SMPJHOME	HFS					
SMPLTS	PDSE		U	0	0	--
SMPMTS	PDS		FB	80	6	2
SMPPTS	PDSE		FB	80	946	--
SMPSCDS	PDS		FB	80	5	15
SMPSTS	PDS		FB	80	7	2
Note: The DDDEF SMPJHOME is required during the SMP/E installation of the product. Ensure the SMPJHOME DDDEF in the SMP/E zone in which z/OS is being installed refers to the path containing the Java Software Development Kit, Version 8.0 or later. This DDDEF will be used to find the jar command during SMP/E APPLY or RESTORE processing.						

SMPPTS Considerations

The size of the SMPPTS data set reflects the total space requirements after receiving the changed and unchanged FMIDs for z/OS V2R5. Additional space will be required for the SMPPTS based on the service received. The size of the SMPPTS shown does not include service since the total space required for the SMPPTS is dependent on the amount of service received.

C.3 Load Module Libraries References

Load module libraries (or “load libraries”), which are data sets containing load modules, have been divided into several tables. Several tables are used because load libraries with different characteristics must be managed differently. You must put some load libraries in specific places in the system-wide search order for programs, such as in the link pack area (LPA) list. Others you can add anywhere in the search order for programs; however, performance and virtual storage considerations will govern appropriate placement for each installation.

The load library tables are:

- Required LPA and optional RMODE 31 LPA-eligible libraries; see [Figure 73 on page 280](#).
- LPA-eligible RMODE 24 libraries; see [Figure 74 on page 280](#).
- Load libraries for change migration; see [Figure 75 on page 280](#).
- Load libraries for callable services; see [Figure 76 on page 281](#).

Some load libraries fall into more than one category and thus could be placed in more than one table. However, we've selected the most likely tables for these load libraries rather than listing them in multiple tables.

[Figure 73 on page 280](#) lists z/OS libraries that contain required LPA and optional RMODE 31 LPA-eligible modules. Because the only libraries listed in this category are those that contain only RMODE 31 load modules, no virtual storage below 16 MB is used when the libraries are included in the LPA list.

<i>Figure 73. Required LPA and Optional RMODE 31 LPA-eligible Load Libraries</i>			
DDDEF name	Element or feature name	Volume	Type
LPALIB	BCP, DFSMSdftp, DFSMSdss, DFSMSshsm, DFSMSrmm, DFSMSstvs, FFST, Communications Server, ISPF, Security Server RACF, TIOC, TSO/E, z/OS UNIX System Services	TVOL1	LMOD
SCEELPA	Language Environment	TVOL1	LMOD
SGRBLPA	z/OS Data Gatherer	TVOL1	LMOD

Figure 74 lists z/OS libraries that contain RMODE 24 LPA-eligible modules. All RMODE 24 modules placed in LPA are loaded below 16 MB. Placing them in LPA increases common area used below 16 MB and might decrease the private area available below 16 MB. Some of the modules in these libraries need to be placed in LPA to use a z/OS element or function. Other elements and functions can be used without having their modules placed in LPA but perform better when their modules are placed in LPA. For more information about placing modules in LPA and the effects of doing so on performance and virtual storage, see [z/OS MVS Initialization and Tuning Guide](#).

<i>Figure 74. LPA-eligible RMODE 24 Load Libraries</i>			
DDDEF name	Element or feature name	Volume	Type
SBDTLPA	BDT	TVOL1	LMOD
SEZALPA	Communications Server	TVOL1	LMOD
SIATLPA	JES3	TVOL1	LMOD
SICELPA	DFSORT	TVOL1	LMOD
SISFLPA	SDSF	TVOL1	LMOD
SISPLPA	ISPF	TVOL1	LMOD
SORTLPA	DFSORT	TVOL1	LMOD

[Figure 75 on page 280](#) lists z/OS libraries that contain load modules that are used from another system for migration purposes. These libraries are used, or might be used, during migration from one level of software to another. For example, the MIGLIB library contains load modules used by IPCS to read dumps taken on one level of z/OS on another level. Also included in this list are libraries containing WLM functions.

<i>Figure 75. Load Libraries for Change Migration</i>			
DDDEF name	Element or feature name	Volume	Type
MIGLIB	BCP, BDT, Communications Server, Cryptographic Services, DFSMSdftp, DFSMSdss, DFSMSHsm, DFSMSrmm, DFSMStvs, Security Server RACF, SMP/E, TSO/E	TVOL1	LMOD
SCBDHENU	HCD	TVOL1	LMOD
SHASMIG	JES2	TVOL1	LMOD
SIATMIG	JES3	TVOL1	LMOD

Figure 76 lists z/OS libraries that contain load modules that are used as callable services from other elements and non-z/OS products.

<i>Figure 76. Load Libraries for Callable Services</i>			
DDDEF name	Element or feature name	Volume	Type
CSSLIB	BCP, DFSMSdftp, Infoprint Server	TVOL1	LMOD
SAHFHFORT	Language Environment	TVOL1	LMOD
SCEEBIND	Language Environment	TVOL1	LMOD
SCEELKED	Language Environment	TVOL1	LMOD
SCEESPC	Language Environment	TVOL1	LMOD
SDMSSVM	DFSMSdftp	TVOL1	LMOD
SEZACMTX	Communications Server	TVOL1	LMOD
SEZADPIL	Communications Server	TVOL1	LMOD
SEZARPCL	Communications Server	TVOL1	LMOD
SIBMCAL2	Language Environment	TVOL1	LMOD
SIBMAM24	Language Environment	TVOL1	LMOD
SIBMCALL	Language Environment	TVOL1	LMOD
SIBMMATH	Language Environment	TVOL1	LMOD
SIBMTASK	Language Environment	TVOL1	LMOD
SISPLOAD	ISPF	TVOL1	LMOD

C.4 Target Libraries for z/OS V2R5

[Figure 77 on page 284](#) describes the target libraries required to install z/OS V2R5. It maps all the z/OS target libraries to either target library volume 1 (TVOL1) or target library volume 2 (TVOL2). This mapping comprises IBM's recommended system layout. Abbreviations used for Member Type for z/OS V2R5 are:

CLST CLIST

DATA	Data
EXEC	Exec
FONT	Font
HELP	Help
LMOD	Load Module
MAC	Macro
MSG	Message
PARM	Parameter
PANL	Panel
PROC	Procedure
SAMP	Sample
SKEL	Skeleton
BOOK	Book
SRCE	Source
TABL	Table
TEXT	Text

Abbreviations used for Target Volume Are:

T1	TVOL1
T2	TVOL2

Abbreviations used for the data set type field are:

U	Unique data set, allocated by this product and used only by this product. To determine the correct storage needed for this data set, this table provides all required information; no other tables (or program directories) need to be referenced for the data set size.
S	Shared data set, allocated by this product and used by this product and others. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to 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 others. This data set is NOT allocated by this product. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). This existing data set must have enough free space to accommodate the storage size given in this table.

The following abbreviations are used for the ORG field.

PDS	Partition Data Set
PDSE	Partition Data Set Extended
SEQ	Sequential Data Set

In the tables, abbreviations used for the **NOTE** column are:

1	New library introduced in z/OS V1R1.
2	New library introduced in z/OS V1R2.

3	New library introduced in z/OS V1R3.
4	New library introduced in z/OS V1R4.
5	New library introduced in z/OS V1R5.
6	New library introduced in z/OS V1R6.
7	New library introduced in z/OS V1R7.
8	New library introduced in z/OS V1R8.
9	New library introduced in z/OS V1R9.
10	New library introduced in z/OS V1R10.
11	New library introduced in z/OS V1R11.
21	New library introduced in z/OS V2R1.
22	New library introduced in z/OS V2R2.
23	New library introduced in z/OS V2R3.
24	New library introduced in z/OS V2R4.
25	New library introduced in z/OS V2R5.
N	Library used only for National Language support. This library can be empty if the language is not ordered.
*	An “*” in the NOTE column indicates that the library is empty after the z/OS release is installed.

All target libraries listed have the following attributes:

- The default name of the data set may be changed.

Note: Target IPCS data sets (data sets that start with the low level qualifier of SBLS) may be renamed. Be aware, however, if the name is different from SYS1.SBLS*, then clists in the SBLSCLI0 data set will have to be modified. In SBLSCLI0, the data set names within several clists are specified as:

- SYS1.SBLSCLI0
- SYS1.SBLSMSG0
- SYS1.SBLSKELO
- SYS1.SBLSPNLO
- SYS1.SBLSTBL0
- The default block size of the data set may be changed.
- The data set may be merged with another data set that has equivalent characteristics. You must not merge any data sets that contain like-named members or aliases. For example, SFOMOBJ and SCLBCPP are the two libraries that cannot be merged together.
- The data set may be either a PDS or a PDSE.
- The data set may be SMS managed.
- It is not required for the data set to be SMS managed.
- The data set may be in the LPA; see [Figure 73 on page 280](#) for required LPA and optional RMODE 31 LPA-eligible libraries, and [Figure 74 on page 280](#) for LPA-eligible RMODE 24 libraries.
- The data set may be in the LNKLIST.
- Some of the target libraries must be APF-authorized; see [8.5.2, “PARMLIB member considerations” on page 128](#) for information about the data sets that must be APF-authorized.
- It is not required for the data set to reside on the IPL volume.
- The values in the "Member Type" column are not necessarily the actual SMP/E element types identified in the SMPMCS.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine if 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.

Figure 77 (Page 1 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
ADFMAC1	CLST	T1	U	PDS	FB	80	2	2	
CBRDBRM	DATA	T1	U	PDS	FB	80	12	3	
CMDLIB	LMOD	T1	E	PDS	U	0	73	77	
CSSLIB	LMOD	T1	E	PDS	U	0	98	287	
DBBLIB	DATA	T1	U	PDS	VB	80	53	34	
DFQLLIB	LMOD	T1	U	PDS	U	0	6	5	
DFQMKLB	MSG	T1	U	PDS	FB	80	3	2	N
DFQMLIB	MSG	T1	U	PDS	FB	80	3	2	
DFQPKLB	PANL	T1	U	PDS	FB	80	36	17	N
DFQPLIB	PANL	T1	U	PDS	FB	80	37	18	
DGTCLIB	CLST	T1	U	PDS	FB	80	172	14	
DGTLLIB	LMOD	T1	U	PDS	U	0	211	149	
DGTMKLB	MSG	T1	U	PDS	FB	80	48	33	N
DGTMLIB	MSG	T1	U	PDS	FB	80	48	33	
DGTPKLB	PANL	T1	S	PDS	FB	80	872	394	N
DGTPLIB	PANL	T1	U	PDS	FB	80	877	393	
DGTSKLB	SKEL	T1	U	PDS	FB	80	4	2	N
DGTSLIB	SKEL	T1	U	PDS	FB	80	33	5	
DGTTLIB	TABL	T1	U	PDS	FB	80	5	6	
FONTLIB	LMOD	T2	U	PDS	VBM	12284	1216	243	21
FONTLIBB	LMOD	T2	U	PDS	VBM	12284	3402	523	21
FONT300	LMOD	T2	U	PDS	VBM	12284	3739	488	21
HELP	HELP	T1	E	PDS	FB	80	132	37	
HELPEP	HELP	T1	U	PDS	FB	80	34	10	
HLPKLB	HELP	T1	U	PDS	FB	80	4	4	N
HRFCLST	CLST	T1	U	PDS	FB	80	19	3	

Figure 77 (Page 2 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
HRFMSG	MSG	T1	U	PDS	FB	80	12	5	
HRFPANL	PANL	T1	U	PDS	FB	80	224	90	
HRFSKEL	SKEL	T1	U	PDS	FB	80	67	14	
ICQABTXT	MAC	T2	U	PDS	FB	80	5	3	
ICQCCLIB	CLST	T1	U	PDS	FB	80	165	10	
ICQILIB	MAC	T2	U	PDS	FB	80	3	2	
ICQKABTX	MAC	T2	U	PDS	FB	80	5	4	N
ICQKCLIB	CLST	T1	U	PDS	FB	80	2	2	N
ICQKILIB	MAC	T2	U	PDS	FB	80	3	3	N
ICQKMLIB	MSG	T1	U	PDS	FB	80	18	30	N
ICQKPLIB	PANL	T1	U	PDS	FB	80	342	424	N
ICQKTABL	TABL	T1	U	PDS	FB	80	7	11	N
ICQMLIB	MSG	T1	U	PDS	FB	80	17	15	
ICQPLIB	PANL	T1	U	PDS	FB	80	335	213	
ICQSLIB	SKEL	T1	U	PDS	FB	80	2	2	
ICQTABLS	TABL	T1	U	PDS	FB	80	9	6	
IGDVBS1	DATA	T1	U	PDS	VB	4100	9	2	
IMAGELIB	LMOD	T1	U	PDS	U	0	20	30	
KANLIB	LMOD	T1	U	PDS	U	0	3	5	N
KHELP	HELP	T1	E	PDS	FB	80	45	17	N
LINKLIB	LMOD	T1	E	PDS	U	0	3286	1056	
LPALIB	LMOD	T1	E	PDS	U	0	1146	446	
MACLIB	MAC	T2	E	PDS	FB	80	4433	153	
MIGLIB	LMOD	T1	E	PDS	U	0	1139	493	
MODGEN	MAC	T2	E	PDS	FB	80	661	56	
MSGENP	MSG	T2	U	PDS	VB	259	9	2	N
MSGENU	MSG	T2	U	PDS	VB	259	57	10	
MSGJPN	MSG	T2	S	PDS	VB	259	52	10	N
NFSLIBE	LMOD	T1	U	PDSE	U	0	213	-	7
NUCLEUS	LMOD	T1	E	PDS	U	0	713	153	

Figure 77 (Page 3 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
PARMLIB	PARM	T1	E	PDS	FB	80	20	9	
PROCLIB	PROC	T1	E	PDS	FB	80	7	6	
SACBCNTL	SAMP	T2	U	PDS	FB	80	30	7	
SADMCDA	DATA	T1	U	PDS	FB	400	2	2	
SADMCFO	DATA	T1	U	PDS	FB	400	2	2	
SADMDAT	DATA	T1	U	PDS	VB	255	29	2	
SADMGDF	DATA	T1	U	PDS	FB	400	9	3	
SADMIMG	DATA	T1	U	PDS	FB	400	2	2	
SADMMAP	DATA	T1	U	PDS	FB	400	20	2	
SADMMOD	LMOD	T1	U	PDS	U	0	230	100	
SADMMSG	MSG	T1	U	PDS	FB	80	2	2	
SADMOPS	SAMP	T2	U	PDS	VB	255	7	2	
SADMPCF	DATA	T2	U	PDS	FB	400	97	6	
SADMPNL	PANL	T1	U	PDS	FB	80	4	3	
SADMSAM	SAMP	T2	U	PDS	FB	80	173	13	
SADMSYM	DATA	T2	U	PDS	FB	400	198	28	
SADRYLIB	DATA	T1	U	PDS	FB	80	11	6	
SAFHFORT	LMOD	T1	U	PDS	U	0	19	69	
SAMPLIB	SAMP	T2	E	PDS	FB	80	1661	98	
SAOPEXEC	EXEC	T1	U	PDS	FB	80	3	2	
SAOPMENU	MSG	T1	U	PDS	FB	80	4	3	
SAOPMJPN	MSG	T1	U	PDS	FB	80	4	3	N
SAOPPENU	PANL	T1	U	PDS	FB	80	90	36	
SAOPPJPN	PANL	T1	U	PDS	FB	80	90	40	N
SASMMAC1	MAC	T2	U	PDS	FB	80	12	2	
SASMMAC2	MAC	T2	U	PDS	FB	80	5	2	
SASMMOD1	LMOD	T1	U	PDS	U	0	43	6	
SASMMOD2	LMOD	T1	U	PDS	U	0	55	5	
SASMPUT2	DATA	T2	U	PDS	FB	80	134	2	
SASMSAM1	SAMP	T2	U	PDS	FB	80	25	3	

Figure 77 (Page 4 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SASMSAM2	SAMP	T2	U	PDS	FB	80	12	2	
SAXREXEC	DATA	T2	U	PDS	VB	255	26	4	9
SBBLEXEC	EXEC	T1	U	PDS	VB	255	2	2	23
SBBLJCL	SAMP	T1	U	PDS	FB	80	3	2	23
SBDTCI0	CLST	T1	U	PDS	FB	80	4	2	
SBDTCMD	LMOD	T1	U	PDS	U	0	2	2	
SBDTHELP	HELP	T1	U	PDS	FB	80	3	2	
SBDTLIB	LMOD	T1	U	PDS	U	0	21	16	
SBDTLINK	LMOD	T1	U	PDS	U	0	3	2	
SBDTLPA	LMOD	T1	U	PDS	U	0	3	2	
SBDTMAC	MAC	T2	U	PDS	FB	80	117	19	
SBDTMSG	MSG	T1	U	PDS	FB	80	2	2	
SBDTPNL0	PANL	T1	U	PDS	FB	80	7	5	
SBDTSAMP	SAMP	T2	U	PDS	FB	80	11	2	
SBLSCLI0	CLST	T1	E	PDS	FB	80	327	19	
SBLSKEL0	SKEL	T1	E	PDS	FB	80	10	7	
SBLMSG0	MSG	T1	E	PDS	FB	80	10	10	
SBLSPNL0	PANL	T1	E	PDS	FB	80	378	236	
SBLSTBL0	TABL	T1	E	PDS	FB	80	6	3	
SBPNCFG	DATA	T2	U	PDS	FB	80	2	2	24
SBPNEXEC	EXEC	T1	U	PDS	FB	80	14	2	24
SBPNLOAD	LMOD	T1	U	PDS	U	0	21	4	24
SBPNPNL	PANL	T1	U	PDS	FB	80	3	2	24
SBPNPNLJ	PANL	T1	U	PDS	FB	80	2	2	25
SBPNSAMP	SAMP	T1	U	PDS	FB	80	2	2	24
SBPXEXEC	EXEC	T1	U	PDS	FB	80	43	4	
SBPXMENU	MSG	T1	U	PDS	FB	80	11	10	
SBPXMJPN	MSG	T1	U	PDS	FB	80	11	10	N
SBPXPENU	PANL	T1	U	PDS	FB	80	34	27	
SBPXPJPN	PANL	T1	U	PDS	FB	80	36	28	N

Figure 77 (Page 5 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SBPXTENU	TABL	T1	U	PDS	FB	80	2	2	
SBPXTJPN	TABL	T1	U	PDS	FB	80	2	2	N
SCBDCLST	CLST	T1	U	PDS	FB	80	3	2	
SCBDHENU	LMOD	T1	U	PDS	U	0	479	646	
SCBDHJPN	LMOD	T1	U	PDS	U	0	495	1484	N
SCBDMENU	MSG	T1	U	PDS	FB	80	28	23	
SCBDMJPN	MSG	T1	U	PDS	FB	80	28	23	N
SCBDPENU	PANL	T1	U	PDS	FB	80	90	34	
SCBDPJPN	PANL	T1	U	PDS	FB	80	90	34	N
SCBDTEMP	DATA	T1	U	PDS	FB	80	21	2	
SCBDTENU	TABL	T1	U	PDS	FB	80	2	2	
SCBDTJPN	TABL	T1	U	PDS	FB	80	2	2	N
SCCNCMP	LMOD	T1	U	PDSE	U	0	6850	-	2
SCCNDQC	BOOK	T2	U	PDS	FB	80	2	2	2
SCCNCJCL	SAMP	T2	U	PDS	FB	80	5	2	2
SCCNCM10	DATA	T1	U	PDS	FB	80	22	11	22
SCCNCM11	DATA	T1	U	PDS	FB	80	22	11	22
SCCNCM12	DATA	T1	U	PDS	FB	80	22	10	23
SCCNCM13	DATA	T1	U	PDS	FB	80	22	10	23
SCCNCN10	DATA	T1	U	PDS	FB	80	34	11	22
SCCNCN11	DATA	T1	U	PDS	FB	80	115	15	22
SCCNCN12	DATA	T1	U	PDS	FB	80	118	17	23
SCCNCN13	DATA	T1	U	PDS	FB	80	121	17	23
SCCNOBJ	DATA	T1	U	PDS	FB	80	33	5	5
SCCNPJC	PROC	T1	U	PDS	FB	80	7	5	2
SCCNSAM	SAMP	T2	U	PDS	FB	80	25	14	2
SCCNUJCL	EXEC	T1	U	PDS	FB	80	6	2	2
SCCR3BND	LMOD	T1	U	PDS	U	0	13	35	11
SCCR6BND	LMOD	T1	U	PDS	U	0	13	35	11
SCDRJTABL	DATA	T1	U	PDS	FB	80	283	2	

Figure 77 (Page 6 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SCEEBIND	LMOD	T1	U	PDSE	U	0	11	-	
SCEEBND2	DATA	T2	U	PDS	FB	80	4	7	2
SCEECICS	LMOD	T1	U	PDS	U	0	2	2	
SCEECLST	CLST	T1	U	PDS	FB	80	10	2	
SCEECMAP	DATA	T1	U	PDS	FB	80	481	11	
SCEECPP	DATA	T1	U	PDS	FB	80	18	5	
SCEEGXLT	DATA	T1	U	PDS	FB	80	127	35	
SCEEH	MAC	T2	U	PDS	FB	120	115	12	2
SCEEHARP	MAC	T2	U	PDS	FB	80	3	2	
SCEEHH	MAC	T2	U	PDS	FB	80	145	19	
SCEEHNEI	MAC	T2	U	PDS	FB	80	4	2	
SCEEHNET	MAC	T2	U	PDS	FB	80	3	2	
SCEEHSYS	MAC	T2	U	PDS	FB	80	23	6	
SCEEHT	MAC	T2	U	PDS	FB	120	19	3	2
SCEELIB	DATA	T1	U	PDS	FB	80	72	3	
SCEELKED	LMOD	T1	U	PDS	U	0	644	2732	
SCEELKEX	DATA	T1	U	PDS	FB	80	104	202	
SCEELOCL	DATA	T1	U	PDS	FB	80	74	5	
SCEELOCX	DATA	T1	U	PDS	FB	80	848	22	
SCEELPA	LMOD	T1	U	PDS	U	0	251	3	
SCEEMAC	MAC	T2	U	PDS	FB	80	76	10	
SCEEMSGP	MSG	T1	U	PDS	FB	150	2	2	N
SCEE OBJ	DATA	T1	U	PDS	FB	80	6	5	
SCEEPROC	PROC	T1	U	PDS	FB	80	4	3	
SCEERUN	LMOD	T1	U	PDS	U	0	1744	919	
SCEERUN2	LMOD	T1	U	PDSE	U	0	24487	-	
SCEESAMP	SAMP	T2	U	PDS	FB	80	133	37	
SCEESPC	LMOD	T1	U	PDS	U	0	13	77	
SCEESPCO	DATA	T1	U	PDS	FB	80	4	4	
SCLBCPP	DATA	T1	U	PDS	FB	80	86	9	

Figure 77 (Page 7 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SCLBDLL	LMOD	T1	U	PDS	U	0	19	3	
SCLBDLL2	LMOD	T1	U	PDSE	U	0	21	-	2
SCLBHH	DATA	T2	U	PDS	FB	120	10	2	
SCLBJCL	SAMP	T2	U	PDS	FB	80	6	2	
SCLBSID	DATA	T1	U	PDS	FB	80	3	2	
SCSFCLIO	CLST	T1	U	PDS	FB	80	30	3	
SCSFMOD0	LMOD	T1	U	PDS	U	0	189	177	
SCSFMOD1	LMOD	T1	U	PDS	U	0	2	2	
SCSFMSG0	MSG	T1	U	PDS	FB	80	9	4	
SCSFPNL0	PANL	T1	U	PDS	FB	80	46	17	
SCSFSKL0	SKEL	T1	U	PDS	FB	80	2	2	
SCSFSTUB	LMOD	T1	U	PDS	U	0	49	168	23
SCSFTLIB	TABL	T1	U	PDS	FB	80	2	2	
SCTVJCL	SAMP	T2	U	PDS	FB	80	3	2	
SCTVMOD	LMOD	T1	U	PDS	U	0	12	3	
SCUNHF	DATA	T2	U	PDS	VB	255	7	2	2
SCUNJCL	SAMP	T2	U	PDS	FB	80	3	2	2
SCUNLOCL	DATA	T1	U	PDS	FB	80	960	30	8
SCUNMENU	DATA	T1	U	PDS	VB	259	2	2	4
SCUNMJPN	DATA	T1	U	PDS	VB	259	2	2	N
SCUNTBL	DATA	T1	U	PDS	FB	256	43703	707	2
SDFQPKSR	DATA	T2	U	PDS	VB	255	14	3	N
SDFQPSRC	DATA	T2	U	PDS	VB	255	14	3	
SDGTPKSR	DATA	T2	U	PDS	VB	255	240	71	N
SDGTPSRC	DATA	T2	U	PDS	VB	255	258	75	
SDGTTSRC	DATA	T2	U	PDS	VB	255	3	3	
SDMSSVM	LMOD	T1	U	PDS	U	0	38	177	
SDMSSVMS	LMOD	T1	U	PDS	U	0	2	2	
SDWWDLPA	LMOD	T1	U	PDS	U	0	2	2	3
SEAGALT	LMOD	T2	U	PDS	U	0	2	3	9

Figure 77 (Page 8 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SEAGJENU	SAMP	T2	U	PDS	FB	80	4	2	9
SEAGMENU	MSG	T1	U	PDS	VB	255	2	2	9
SEAGMJPN	MSG	T1	U	PDS	VB	255	2	2	N
SEAGSAM	SAMP	T2	U	PDS	FB	80	2	2	9
SEDGEXE1	EXEC	T1	U	PDS	FB	80	107	9	
SEDGMENU	MSG	T1	U	PDS	FB	80	12	11	
SEDGMJPN	MSG	T1	U	PDS	FB	80	12	11	N
SEDGPENU	PANL	T1	U	PDS	FB	80	184	87	
SEDGPJPN	PANL	T1	U	PDS	FB	80	188	86	N
SEDGPKSR	DATA	T2	U	PDS	VB	255	86	35	N
SEDGPSRC	DATA	T2	U	PDS	VB	255	68	32	
SEEQINST	DATA	T2	U	PDS	FB	80	3177	2	
SEPWBENU	DATA	T2	U	PDS	FB	4096	6	2	N
SEPWCENU	CLST	T1	U	PDS	FB	80	3	2	
SEPWMAC1	MAC	T2	U	PDS	FB	80	2	2	N
SEPWMOD1	LMOD	T1	U	PDS	U	0	13	12	
SEPWMOD2	LMOD	T1	U	PDS	U	0	4	6	
SEPWMOD3	LMOD	T1	U	PDS	U	0	2	2	
SEPWMOD4	LMOD	T1	U	PDS	U	0	145	75	
SEPWPENU	PANL	T1	U	PDS	FB	80	3	2	
SEPWSRC1	DATA	T2	U	PDS	FB	80	6	2	
SEPWSRC2	SAMP	T2	U	PDS	FB	80	4	2	
SERBCLS	CLST	T1	U	PDS	FB	80	20	45	
SERBLNKE	LMOD	T1	U	PDSE	U	0	794	-	25
SERBMENU	MSG	T1	U	PDS	FB	80	5	45	
SERBMJPN	MSG	T1	U	PDS	FB	80	6	45	N
SERBPENU	PANL	T1	U	PDS	FB	80	330	135	
SERBPJPN	PANL	T1	U	PDS	FB	80	340	135	N
SERBPWSV	DATA	T2	U	PDS	VB	255	6000	45	
SERBT	TABL	T1	U	PDS	FB	80	20	45	

Figure 77 (Page 9 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SERBTENU	TABL	T1	U	PDS	FB	80	6	45	
SERBTJPN	TABL	T1	U	PDS	FB	80	6	45	N
SEUVFEXC	EXEC	T1	U	PDS	FB	80	2	2	
SEUVFLIB	DATA	T2	U	PDS	FB	80	7	3	N
SEUVFSAM	SAMP	T2	U	PDS	FB	80	4	2	
SEZACMAC	MAC	T2	U	PDS	FB	80	314	90	
SEZACMTX	LMOD	T1	U	PDS	U	0	38	194	
SEZADBCX	DATA	T1	U	PDS	VB	231	225	2	
SEZADBRM	DATA	T1	U	PDS	FB	80	6	2	
SEZADPIL	LMOD	T1	U	PDS	U	0	4	6	
SEZADSIL	DATA	T1	U	PDS	U	0	25	3	
SEZADSIM	DATA	T1	U	PDS	FB	80	3	3	
SEZADSIP	PARM	T1	U	PDS	FB	80	2	2	
SEZAEXEC	EXEC	T1	U	PDS	FB	80	7	2	11
SEZAINST	SAMP	T2	U	PDS	FB	80	211	52	
SEZALIBN	LMOD	T1	U	PDS	U	0	9	44	
SEZALNK2	LMOD	T1	U	PDS	U	0	13	2	
SEZALOAD	LMOD	T1	U	PDSE	U	0	2874	-	4
SEZALPA	LMOD	T1	U	PDS	U	0	3	5	4
SEZAMENU	MSG	T1	U	PDS	FB	80	4	4	
SEZANCLS	CLST	T1	U	PDS	FB	80	42	12	
SEZANMAC	MAC	T2	U	PDS	FB	80	92	6	
SEZANPNL	DATA	T1	U	PDS	FB	80	22	20	
SEZAOLDX	LMOD	T1	U	PDS	U	0	3	5	3
SEZAPENU	PANL	T1	U	PDS	FB	80	13	7	
SEZARNT1	DATA	T1	U	PDS	FB	80	115	64	
SEZARNT2	DATA	T1	U	PDS	FB	80	19	6	3
SEZARNT3	DATA	T1	U	PDS	FB	80	79	12	3
SEZARNT4	DATA	T1	U	PDS	FB	80	10	6	
SEZAROE1	DATA	T1	U	PDS	FB	80	110	60	

Figure 77 (Page 10 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SEZAROE2	DATA	T1	U	PDS	FB	80	19	6	3
SEZAROE3	DATA	T1	U	PDS	FB	80	79	12	3
SEZARPCL	LMOD	T1	U	PDS	U	0	10	40	
SEZATCP	LMOD	T1	U	PDS	U	0	97	12	
SEZATCPX	DATA	T1	U	PDS	FB	80	7	7	
SEZATELX	DATA	T1	U	PDS	FB	80	5	7	
SEZAXAWL	DATA	T1	U	PDS	U	0	14	51	3
SEZAXLD1	DATA	T1	U	PDS	F	256	2	2	
SEZAXLD2	DATA	T1	U	PDS	VB	5124	87	11	
SEZAXMLB	DATA	T1	U	PDS	U	0	52	181	3
SEZAXTLB	DATA	T1	U	PDS	U	0	20	114	3
SEZAX11L	DATA	T1	U	PDS	U	0	58	286	3
SFNTILIB	LMOD	T2	U	PDS	VBM	16124	3194	527	21
SFOMHDSR	MAC	T2	U	PDS	FB	80	19	2	
SFOMOBJ	DATA	T1	U	PDS	FB	80	68	37	
SFONDLIB	LMOD	T2	U	PDS	VBM	12284	18764	740	21
SGIMCLS0	CLST	T1	U	PDS	FB	80	2	2	
SGIMLMD0	LMOD	T1	U	PDS	U	0	78	9	
SGIMMENU	MSG	T1	U	PDS	FB	80	9	6	
SGIMMJPN	MSG	T1	U	PDS	FB	80	9	6	N
SGIMPENU	PANL	T1	U	PDS	FB	80	150	88	
SGIMPJPN	PANL	T1	U	PDS	FB	80	149	88	N
SGIMSENU	SKEL	T1	U	PDS	FB	80	14	5	
SGIMTENU	TABL	T1	U	PDS	FB	80	2	2	
SGIMTJPN	TABL	T1	U	PDS	FB	80	2	2	N
SGLDEXEC	EXEC	T1	U	PDS	FB	80	2	3	
SGLDEXPC	DATA	T2	U	PDS	FB	80	3	2	
SGLDHDRC	DATA	T2	U	PDS	FB	80	9	2	
SGLDSAMP	SAMP	T2	U	PDS	FB	80	13	3	
SGRBCLS	CLST	T1	U	PDS	FB	80	7	2	25

Figure 77 (Page 11 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SGRBLINK	LMOD	T1	U	PDS	U	0	68	35	25
SGRBLPA	LMOD	T1	U	PDS	U	0	9	14	25
SGSKSAMP	SAMP	T2	U	PDS	FB	80	4	2	
SHAPEXE3	EXEC	T1	S	PDS	VB	255	2	2	22
SHAPJCL3	SAMP	T2	S	PDS	FB	80	2	2	22
SHASLNKE	LMOD	T1	U	PDSE	U	0	122	-	7
SHASMAC	MAC	T2	U	PDS	FB	80	524	57	
SHASMENU	MSG	T1	U	PDS	VB	259	7	2	
SHASMIG	LMOD	T1	U	PDS	U	0	60	80	
SHASMJPN	MSG	T1	U	PDS	VB	259	7	2	N
SHASPARM	PARM	T1	U	PDS	FB	80	2	2	
SHASPNL0	PANL	T1	U	PDS	FB	80	18	4	
SHASSAMP	SAMP	T2	U	PDS	FB	80	91	6	
SHASSRC	SRCE	T2	U	PDS	FB	80	2310	25	
SIATCLI0	CLST	T1	U	PDS	FB	80	10	2	
SIATLIB	LMOD	T1	U	PDS	U	0	180	135	
SIATLINK	LMOD	T1	U	PDS	U	0	13	7	
SIATLPA	LMOD	T1	U	PDS	U	0	21	17	
SIATMAC	MAC	T2	U	PDS	FB	80	655	74	
SIATMIG	LMOD	T1	U	PDS	U	0	74	84	
SIATMSG0	MSG	T1	U	PDS	FB	80	2	2	
SIATPARM	PARM	T1	U	PDS	FB	80	2	2	
SIATPNL0	PANL	T1	U	PDS	FB	80	12	7	
SIATSAMP	SAMP	T2	U	PDS	FB	80	17	3	
SIATSRC	SRCE	T2	U	PDS	FB	80	3505	89	
SIATTBL0	TABL	T1	U	PDS	FB	80	2	2	
SIBMAM24	LMOD	T1	U	PDS	U	0	6	23	
SIBMCALL	LMOD	T1	U	PDS	U	0	2	2	
SIBMICAL2	LMOD	T1	U	PDS	U	0	2	2	
SIBMMATH	LMOD	T1	U	PDS	U	0	13	54	

Figure 77 (Page 12 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SIBMTASK	LMOD	T1	U	PDS	U	0	2	3	
SICELINK	LMOD	T1	U	PDS	U	0	25	13	
SICELPA	LMOD	T1	U	PDS	U	0	2	2	
SICEPROC	SAMP	T2	U	PDS	FB	80	2	2	
SICESAMP	SAMP	T2	U	PDS	FB	80	7	3	
SICESRCE	MAC	T2	U	PDS	FB	80	4	3	
SICEUSER	MAC	T2	U	PDS	FB	80	17	2	
SICHMJPN	MSG	T1	U	PDS	FB	80	11	5	N
SICHPJPN	PANL	T1	U	PDS	FB	80	230	89	N
SIEAHDR	MAC	T2	U	PDS	FB	80	282	17	
SIEAHDRV	DATA	T2	U	PDS	VB	260	28	4	6
SIEALNKE	LMOD	T1	S	PDSE	U	0	3821	-	6
SIEAMIGE	LMOD	T1	S	PDSE	U	0	18	-	7
SIEASID	DATA	T2	U	PDS	FB	80	7	4	6
SIFALIB	LMOD	T1	U	PDS	U	0	9	2	
SIOEEXEC	EXEC	T1	U	PDS	FB	80	5	2	
SIOEMJPN	MSG	T1	U	PDS	VB	255	7	2	N
SIOEPROC	PROC	T1	U	PDS	FB	80	2	2	
SIOESAMP	SAMP	T2	U	PDS	FB	80	4	2	
SISFEXEC	EXEC	T1	U	PDS	FB	80	15	2	
SISFHELP	HELP	T1	U	PDS	FB	80	2	2	4
SISFJCL	SAMP	T2	U	PDS	FB	80	14	2	
SISFLINK	LMOD	T1	U	PDS	U	0	3	2	
SISFLOAD	LMOD	T1	U	PDS	U	0	219	21	
SISFLPA	LMOD	T1	U	PDS	U	0	153	2	
SISFMAC	SRCE	T2	U	PDS	FB	80	38	3	9
SISFMIG	LMOD	T1	U	PDS	U	0	12	35	10
SISFMLIB	MSG	T1	U	PDS	FB	80	2	2	
SISFPLIB	PANL	T1	U	PDS	FB	80	66	30	
SISFSLIB	SKEL	T1	U	PDS	FB	80	7	3	

Figure 77 (Page 13 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SISFSRC	SRCE	T2	U	PDS	FB	80	3	2	
SISFTLIB	TABL	T1	U	PDS	FB	80	2	2	
SISPALIB	DATA	T2	U	PDS	FB	80	2	2	
SISPCLIB	CLST	T1	U	PDS	FB	80	19	4	
SISPEXEC	EXEC	T1	U	PDS	FB	80	106	4	
SISPGENP	DATA	T2	U	PDS	FB	80	267	190	N
SISPGENU	DATA	T2	U	PDS	FB	80	270	190	
SISPGJPN	DATA	T2	U	PDS	FB	80	271	190	N
SISPGMLI	DATA	T2	U	PDS	FB	80	170	76	
SISPHelp	HELP	T1	U	PDS	FB	80	2	2	
SISPLOAD	LMOD	T1	U	PDS	U	0	132	72	
SISPLPA	LMOD	T1	U	PDS	U	0	398	41	
SISPMACS	MAC	T2	U	PDS	FB	80	55	12	
SISPMENP	MSG	T1	U	PDS	FB	80	48	51	N
SISPMENU	MSG	T1	U	PDS	FB	80	48	51	
SISPMJPN	MSG	T1	U	PDS	FB	80	50	51	N
SISPPENP	PANL	T1	U	PDS	FB	80	473	296	N
SISPPENU	PANL	T1	U	PDS	FB	80	473	296	
SISPPJPN	PANL	T1	U	PDS	FB	80	471	297	N
SISPSAMP	SAMP	T2	U	PDS	FB	80	91	18	
SISPSENP	SKEL	T1	U	PDS	FB	80	101	72	N
SISPSENU	SKEL	T1	U	PDS	FB	80	101	72	
SISPSJPN	SKEL	T1	U	PDS	FB	80	101	72	N
SISPSLIB	SKEL	T1	U	PDS	FB	80	25	7	
SISPTENP	TABL	T1	U	PDS	FB	80	4	2	N
SISPTENU	TABL	T1	U	PDS	FB	80	4	2	
SISPTJPN	TABL	T1	U	PDS	FB	80	4	2	N
SISTCLIB	LMOD	T1	U	PDS	U	0	125	129	
SISTDAT1	DATA	T1	U	PDS	VB	6156	28	2	
SISTDAT2	DATA	T1	U	PDS	VB	259	6	2	

Figure 77 (Page 14 of 14). Storage Required for Target Libraries for z/OS V2R5

Library DDNAME	Mem Type	Tar Vol	T Y P E	Org	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	N O T E
SISTMAC1	MAC	T2	U	PDS	FB	80	17	3	
SORTLIB	LMOD	T1	U	PDS	U	0	28	41	
SORTLPA	LMOD	T1	U	PDS	U	0	34	13	
SVCLIB	LMOD	T1	U	PDS	U	0	2	2	
UADS	DATA	T1	U	PDS	FB	80	2	2	
VTAMLIB	LMOD	T1	U	PDS	U	0	260	79	

C.5 Distribution Libraries for z/OS V2R5

Figure 78 on page 298 describes the distribution libraries required to install z/OS V2R5. Abbreviations used for the data set type field are:

- U** Unique data set, allocated by this product and used only by this product. To determine the correct storage needed for this data set, this table provides all required information; no other tables (or program directories) need to be referenced for the data set size.
- S** Shared data set, allocated by this product and used by this product and others. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to 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 others. This data set is NOT allocated by this product. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). This existing data set must have enough free space to accommodate the storage size given in this table.

Abbreviations used for the ORG field are:

- PDS** Partition Data Set
- PDSE** Partition Data Set Extended
- SEQ** Sequential Data Set

In the tables, abbreviations used for the **NOTE** column are:

- 1** New library introduced in z/OS V1R1.
- 2** New library introduced in z/OS V1R2.
- 3** New library introduced in z/OS V1R3.
- 4** New library introduced in z/OS V1R4.
- 5** New library introduced in z/OS V1R5.

- 6 New library introduced in z/OS V1R6.
- 7 New library introduced in z/OS V1R7.
- 8 New library introduced in z/OS V1R8.
- 9 New library introduced in z/OS V1R9.
- 10 New library introduced in z/OS V1R10.
- 11 New library introduced in z/OS V1R11.
- 21 New library introduced in z/OS V2R1.
- 22 New library introduced in z/OS V2R2.
- 23 New library introduced in z/OS V2R3.
- 24 New library introduced in z/OS V2R4.
- 25 New library introduced in z/OS V2R5.
- N Library used only for National Language support. This library can be empty if the language is not ordered.
- * An “*” in the NOTE column indicates that the library is empty after the z/OS release is installed.

All distribution libraries listed have the following attributes:

- The default name of the data set may be changed
- The default block size of the data set may be changed
- The data set may be merged with another data set that has equivalent characteristics
- The data set may be either a PDS or a PDSE.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not 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 on the names and sizes of the required data sets, refer to [7.2.2, “Allocate Target and Distribution Libraries for Wave 0 elements” on page 52](#) and [8.1.7, “Allocate target and distribution libraries for Wave 1 elements” on page 83](#).

Figure 78 (Page 1 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AACBCNTL	-	PDS	FB	80	30	7	
AADFMAC1	-	PDS	FB	80	2	2	
AADMCDCA	-	PDS	FB	400	2	2	
AADMCFO	-	PDS	FB	400	2	2	
AADMDAT	-	PDS	VB	255	29	2	
AADMGDF	-	PDS	FB	400	9	3	
AADMIMG	-	PDS	FB	400	2	2	
AADMMAP	-	PDS	FB	400	20	2	
AADMMOD	-	PDS	U	0	368	436	

Figure 78 (Page 2 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AADMMMSG	-	PDS	FB	80	2	2	
AADMOPS	-	PDS	VB	255	7	2	
AADMPCF	-	PDS	FB	400	97	6	
AADMPNL	-	PDS	FB	80	4	3	
AADMSAM	-	PDS	FB	80	173	13	
AADMSYM	-	PDS	FB	400	198	28	
AADRLIB	-	PDS	U	0	114	91	
AADRYLIB	-	PDS	FB	80	11	6	
AAFHMOD1	-	PDS	U	0	168	709	
AAFHSRC1	-	PDS	FB	80	18	4	
AAOPEXEC	-	PDS	FB	80	3	2	
AAOPHFS	-	PDS	VB	255	2643	23	
AAOPHJPN	-	PDS	VB	255	481	7	
AAOPMENU	-	PDS	FB	80	4	3	
AAOPMJPN	-	PDS	FB	80	4	3	
AAOPMOD1	-	PDS	U	0	204	62	
AAOPPENU	-	PDS	FB	80	90	36	
AAOPPJPN	-	PDS	FB	80	90	40	
AASMMAC1	-	PDS	FB	80	12	2	
AASMMAC2	-	PDS	FB	80	5	2	
AASMMOD1	-	PDS	U	0	36	26	
AASMMOD2	-	PDS	U	0	113	111	
AASMPUT2	-	PDS	FB	80	134	2	
AASMSAM1	-	PDS	FB	80	25	3	
AASMSAM2	-	PDS	FB	80	12	2	
AAXREXEC	-	PDS	VB	255	25	4	
AAZDFFS	-	PDS	VB	256	17897	4	24
ABBLEXEC	-	PDS	VB	255	2	2	23
ABBLJCL	-	PDS	FB	80	3	2	23
ABBLLIB	-	PDS	VB	255	11745	2	23
ABDTCLI0	-	PDS	FB	80	4	2	

Figure 78 (Page 3 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
ABDTHelp	-	PDS	FB	80	3	2	
ABDTMAC	-	PDS	FB	80	117	19	
ABDTMOD	-	PDS	U	0	38	45	
ABDTMSG	-	PDS	FB	80	2	2	
ABDTPNL0	-	PDS	FB	80	7	5	
ABDTSAMP	-	PDS	FB	80	11	2	
ABLSCLI0	-	PDS	FB	80	327	19	
ABLSKELO	-	PDS	FB	80	10	7	
ABLSMSG0	-	PDS	FB	80	10	10	
ABLSPNL0	-	PDS	FB	80	378	236	
ABLSTBL0	-	PDS	FB	80	6	3	
ABMFMOD0	-	PDS	U	0	34	27	
ABPNCFG	-	PDS	FB	80	2	2	24
ABPNEXEC	-	PDS	FB	80	14	2	24
ABPNLIB	-	PDS	U	0	11	4	24
ABPNPNL	-	PDS	FB	80	3	2	24
ABPNPNLJ	-	PDS	FB	80	2	2	25
ABPNSAMP	-	PDS	FB	80	2	2	24
ABPXEXEC	-	PDS	FB	80	45	4	
ABPXMENU	-	PDS	FB	80	11	10	
ABPXMJPN	-	PDS	FB	80	11	10	
ABPXMOD1	-	PDS	U	0	350	217	
ABXPENU	-	PDS	FB	80	34	27	
ABXPJPJN	-	PDS	FB	80	36	28	
ABPXSPC	-	PDS	U	0	5	6	
ABPXTENU	-	PDS	FB	80	2	2	
ABPXTJPN	-	PDS	FB	80	2	2	
ABPXXMLS	-	PDS	VB	256	4	2	
ACBDCLST	-	PDS	FB	80	3	2	
ACBDHENU	-	PDS	U	0	478	646	
ACBDHJPN	-	PDS	U	0	495	1484	

Figure 78 (Page 4 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
ACBDMENU	-	PDS	FB	80	28	23	
ACBDMJPN	-	PDS	FB	80	28	23	
ACBDMOD1	-	PDS	U	0	348	143	
ACBDMOD2	-	PDS	U	0	6	9	
ACBDMOD3	-	PDS	U	0	6	9	
ACBDPENU	-	PDS	FB	80	90	34	
ACBDPJPN	-	PDS	FB	80	90	34	
ACBDTEMP	-	PDS	FB	80	21	2	
ACBDTENU	-	PDS	FB	80	2	2	
ACBDTJPN	-	PDS	FB	80	2	2	
ACBRDBRM	-	PDS	FB	80	12	3	
ACBRMOD0	-	PDS	U	0	180	184	
ACCNCMP	-	PDSE	U	0	6846	-	
ACCNSR1	-	PDS	FB	80	73	23	
ACCNSR2	-	PDS	FB	80	22	11	22
ACCNSR3	-	PDS	FB	80	34	11	22
ACCNSR4	-	PDS	FB	80	22	11	22
ACCNSR5	-	PDS	FB	80	115	15	22
ACCNSR6	-	PDS	FB	80	22	10	23
ACCNSR7	-	PDS	FB	80	118	17	23
ACCNSR8	-	PDS	FB	80	22	10	24
ACCNSR9	-	PDS	FB	80	121	17	24
ACCRHFS	-	PDS	VB	256	4	2	
ACCRMOD	-	PDS	U	0	26	24	
ACDMMOD0	-	PDS	U	0	58	41	
ACDRMODS	-	PDS	U	0	9	2	
ACDRTABL	-	PDS	FB	80	283	2	
ACEEMOD1	-	PDS	U	0	529	523	
ACEEMOD2	-	PDSE	U	0	24247	-	
ACEESRC1	-	PDS	FB	80	194	15	
ACEESRC2	-	PDS	FB	120	115	12	

Figure 78 (Page 5 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
ACEESRC3	-	PDS	FB	120	19	3	
ACFZHFS	-	PDS	VB	255	969	2	
ACLB DLL	-	PDS	U	0	104	5	
ACLB DLL2	-	PDSE	U	0	348	-	
ACLBHFS1	-	PDS	VB	255	6197	10	
ACLB OBJ	-	PDS	FB	80	126	10	
ACLB SR1	-	PDS	FB	120	18	3	
ACLM MOD0	-	PDS	U	0	273	191	
ACMD LIB	-	PDS	U	0	36	41	
ACSF CLI0	U	PDS	FB	80	30	3	
ACSF HFS	U	PDS	VB	255	37	2	
ACSF MOD0	U	PDS	U	0	227	202	
ACSF MOD1	U	PDS	U	0	2	2	
ACSF MSG0	U	PDS	FB	80	9	4	
ACSF PNL0	U	PDS	FB	80	46	17	
ACSF SKL0	U	PDS	FB	80	2	2	
ACSFT LIB	U	PDS	FB	80	2	2	
ACSSLIB	-	PDS	U	0	95	276	
ACTV MOD	-	PDS	U	0	12	2	
ACTV SRC	-	PDS	FB	80	3	2	
ACUN HF	-	PDS	VB	255	7	2	
ACUN JCL	-	PDS	FB	80	3	2	
ACUN LOCL	-	PDS	FB	80	960	30	
ACUN MAC	-	PDS	FB	80	96	2	
ACUN MENU	-	PDS	VB	259	2	2	
ACUN MJPN	-	PDS	VB	259	2	2	
ACUN MOD	-	PDS	U	0	83	48	
ACUN SAMP	-	PDS	FB	80	43	4	
ACUN TBL	-	PDS	FB	256	43703	707	
ADB BLIB	-	PDS	VB	80	55	34	
ADFP MOD0	-	PDS	U	0	28	20	

Figure 78 (Page 6 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
ADFQMKLB	-	PDS	FB	80	3	2	
ADFQMLIB	-	PDS	FB	80	3	2	
ADFQPKLB	-	PDS	FB	80	36	17	
ADFQPKSR	-	PDS	VB	255	14	3	
ADFQPLIB	-	PDS	FB	80	37	18	
ADFQPSRC	-	PDS	VB	255	14	3	
ADGTCLIB	-	PDS	FB	80	172	14	
ADGTLLIB	-	PDS	U	0	251	297	
ADGTMKLB	-	PDS	FB	80	48	33	
ADGTMLIB	-	PDS	FB	80	48	33	
ADGTPKLB	-	PDS	FB	80	872	394	
ADGTPKSR	-	PDS	VB	255	240	71	
ADGTPLIB	-	PDS	FB	80	877	393	
ADGTPSRC	-	PDS	VB	255	258	75	
ADGTSKLB	-	PDS	FB	80	4	2	
ADGTSLIB	-	PDS	FB	80	33	5	
ADGTTLIB	-	PDS	FB	80	5	6	
ADGTTSRC	-	PDS	VB	255	3	3	
ADMSSVM	-	PDS	U	0	38	177	
AEAGJENU	-	PDS	FB	80	4	2	
AEAGMENU	-	PDS	VB	255	2	2	
AEAGMJPN	-	PDS	VB	255	2	2	
AEAGMOD1	-	PDS	U	0	3	3	
AEAGSAM	-	PDS	FB	80	2	2	
AEDCCPP1	-	PDS	FB	80	18	5	
AEDCHFS	-	PDS	VB	255	4270	94	
AEDCMOD1	-	PDS	U	0	1418	1836	
AEDCMOD2	-	PDS	U	0	12	73	
AEDCMSEP	-	PDS	FB	150	2	2	
AEDCOBJ1	-	PDS	FB	80	9	7	
AEDCSRC6	-	PDS	FB	80	704	68	

Figure 78 (Page 7 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AEDCSRC7	-	PDS	FB	80	1091	251	
AEDGE1	-	PDS	FB	80	107	9	
AEDGHFS	-	PDS	VB	256	60	2	
AEDGMENU	-	PDS	FB	80	12	11	
AEDGMJPN	-	PDS	FB	80	12	11	
AEDGMOD1	-	PDS	U	0	56	33	
AEDGPENU	-	PDS	FB	80	184	87	
AEDGPJPN	-	PDS	FB	80	188	86	
AEDGPKSR	-	PDS	VB	255	86	35	
AEDGPSRC	-	PDS	VB	255	68	32	
AEDGSRC1	-	PDS	FB	80	19	2	
AEEQINST	-	PDS	FB	80	3177	2	
AEPWBENU	-	PDS	FB	4096	6	2	
AEPWMOD1	-	PDS	U	0	133	114	
AEPWSRC1	-	PDS	FB	80	12	3	
AERBCLS	-	PDS	FB	80	20	45	
AERBMAC1	-	PDS	FB	80	2	45	
AERBMENU	-	PDS	FB	80	5	45	
AERBMJPN	-	PDS	FB	80	6	45	N
AERBMOD2	-	PDSE	U	0	794	-	25
AERBPENU	-	PDS	FB	80	330	135	
AERBPJPN	-	PDS	FB	80	340	135	N
AERBPWSV	-	PDS	VB	255	6000	45	
AERBT	-	PDS	FB	80	20	45	
AERBTENU	-	PDS	FB	80	6	45	
AERBTJPN	-	PDS	FB	80	6	45	N
AEUVFEXC	-	PDS	FB	80	2	2	
AEUVFHFS	-	PDS	VB	255	61	3	
AEUVFLIB	-	PDS	FB	80	7	3	
AEUVFSAM	-	PDS	FB	80	4	2	
AEZADBR1	-	PDS	FB	80	6	2	

Figure 78 (Page 8 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AEZAMAC1	-	PDS	FB	80	107	13	
AEZAMAC2	-	PDS	FB	80	397	88	
AEZAMAC3	-	PDS	FB	80	140	26	
AEZAMODS	-	PDSE	U	0	3501	-	
AEZARNT1	-	PDS	FB	80	115	64	
AEZARNT2	-	PDS	FB	80	19	6	
AEZARNT3	-	PDS	FB	80	79	12	
AEZARNT4	-	PDS	FB	80	10	6	
AEZAROE1	-	PDS	FB	80	110	60	
AEZAROE2	-	PDS	FB	80	19	6	
AEZAROE3	-	PDS	FB	80	79	12	
AEZASMP1	-	PDS	FB	80	1585	107	
AEZAXLTD	-	PDS	F	256	2	2	
AEZAXLTK	-	PDS	VB	5124	103	12	
AEZAXLT1	-	PDS	FB	80	7	7	
AEZAXLT2	-	PDS	FB	80	5	7	
AEZAXLT3	-	PDS	VB	231	1338	82	
AFNTDLIB	-	PDS	VBM	12284	18764	740	21
AFNTILIB	-	PDS	VBM	16124	3194	527	21
AFNTLIB	-	PDS	VBM	12284	1233	243	21
AFNTLIBB	-	PDS	VBM	12284	3402	523	21
AFNT300	-	PDS	VBM	12284	3739	488	21
AFOMHDRS	-	PDS	FB	80	23	2	
AFOMHFS	-	PDS	VB	255	26827	157	
AFOMMOD1	-	PDS	U	0	562	45	
AFOMOBJ	-	PDS	FB	80	82	37	
AFONTHFS	-	PDS	VB	255	36524	5	21
AGDEMOD0	-	PDS	U	0	65	55	
AGENLIB	-	PDS	FB	80	6	2	
AGFTAJL1	-	PDS	FB	80	2	2	
AGFTAMD1	-	PDS	U	0	22	23	

Figure 78 (Page 9 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AGFUMOD1	-	PDS	U	0	35	24	
AGIMBIN	-	PDS	VB	255	4	3	
AGIMCLS0	-	PDS	FB	80	2	2	
AGIMMENU	-	PDS	FB	80	9	6	
AGIMMJPN	-	PDS	FB	80	9	6	
AGIMPENU	-	PDS	FB	80	150	88	
AGIMPJPN	-	PDS	FB	80	149	88	
AGIMSENU	-	PDS	FB	80	14	5	
AGIMTENU	-	PDS	FB	80	2	2	
AGIMTJPN	-	PDS	FB	80	2	2	
AGLDEXEC	-	PDS	FB	80	2	3	
AGLDEXPC	-	PDS	FB	80	3	2	
AGLDHCLI	-	PDS	VB	255	6	2	
AGLDHDCRC	-	PDS	FB	80	9	2	
AGLDHFS	-	PDS	VB	255	79	4	
AGLDHJPN	-	PDS	VB	255	3	2	
AGLDSAMP	-	PDS	FB	80	13	3	
AGRBCLS	-	PDS	FB	80	7	2	25
AGRBMAC1	-	PDS	FB	80	74	4	25
AGRBMOD1	-	PDS	U	0	74	65	25
AGSKHFS	-	PDS	VB	255	19	3	
AGSKSAMP	-	PDS	FB	80	4	2	
AHAPEXE3	-	PDS	VB	255	2	2	22
AHAPINC3	-	PDS	VB	255	358	2	22
AHAPJCL3	-	PDS	FB	80	2	2	22
AHASMAC	-	PDS	FB	80	524	57	
AHASMENU	-	PDS	VB	259	7	2	
AHASMJPN	-	PDS	VB	259	7	2	
AHASMOD	-	PDS	U	0	165	80	
AHASPARM	-	PDS	FB	80	2	2	
AHASPNO0	-	PDS	FB	80	18	4	

Figure 78 (Page 10 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AHASSAMP	-	PDS	FB	80	91	6	
AHASSRC	-	PDS	FB	80	2310	25	
AHELP	-	PDS	FB	80	130	37	
AHELPENP	-	PDS	FB	80	34	10	
AHKCKC4Z	U	PDS	VB	259	550	3	22
AHLPKLB	-	PDS	FB	80	4	4	
AIATCLI0	-	PDS	FB	80	10	2	
AIATMAC	-	PDS	FB	80	655	74	
AIATMOD	-	PDS	U	0	264	275	
AIATMSG0	-	PDS	FB	80	2	2	
AIATPARM	-	PDS	FB	80	2	2	
AIATPNL0	-	PDS	FB	80	12	7	
AIATSAMP	-	PDS	FB	80	17	3	
AIATSRC	-	PDS	FB	80	3503	89	
AIATTBLO	-	PDS	FB	80	2	2	
AIBMMOD3	-	PDS	U	0	270	489	
AIBMSRC3	-	PDS	FB	80	28	6	
AICELIB	-	PDS	U	0	91	94	
AICESAMP	-	PDS	FB	80	7	3	
AICESRCE	-	PDS	FB	80	4	3	
AICEUSER	-	PDS	FB	80	17	2	
AICHMJPN	-	PDS	FB	80	11	5	
AICHPJPN	-	PDS	FB	80	230	89	
AICQAB	-	PDS	FB	80	5	3	
AICQILIB	-	PDS	FB	80	3	2	
AICQKAB	-	PDS	FB	80	5	4	
AICQKILB	-	PDS	FB	80	3	3	
AICQKMA1	-	PDS	FB	80	342	424	
AICQKMA3	-	PDS	FB	80	18	30	
AICQKMA4	-	PDS	FB	80	7	11	
AICQKMA5	-	PDS	FB	80	2	2	

Figure 78 (Page 11 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AICQMAC1	-	PDS	FB	80	335	213	
AICQMAC2	-	PDS	FB	80	2	2	
AICQMAC3	-	PDS	FB	80	17	15	
AICQMAC4	-	PDS	FB	80	9	6	
AICQMAC5	-	PDS	FB	80	165	10	
AIEAHDR	-	PDS	FB	80	283	17	
AIEAHDRV	-	PDS	VB	260	28	4	
AIEALNKE	-	PDSE	U	0	3687	-	
AIEAMIGE	-	PDSE	U	0	15	-	
AIEASID	-	PDS	FB	80	9	4	
AIEWMOD0	-	PDS	U	0	83	54	
AIFALIB	-	PDS	U	0	10	6	
AIGDVBS1	-	PDS	VB	4100	21	2	
AIGZMOD1	-	PDS	U	0	118	254	
AIGZSRC1	-	PDS	FB	80	32	7	
AIKYHFS	-	PDS	VB	255	1277	6	
AIMAGE	-	PDS	FB	80	630	17	
AIMFMOD0	-	PDS	U	0	9	5	
AINDLMD	-	PDS	U	0	3	3	
AIOEEXEC	-	PDS	FB	80	5	2	
AIOEHLIB	-	PDS	VB	255	2	2	
AIOEMJPN	-	PDS	VB	255	7	2	
AIOEPROC	-	PDS	FB	80	2	2	
AIOESAMP	-	PDS	FB	80	4	2	
AISFEXEC	-	PDS	FB	80	15	2	
AISFHELP	-	PDS	FB	80	2	2	
AISFHFS	-	PDS	VB	255	127	2	10
AISFJCL	-	PDS	FB	80	14	2	
AISFLOAD	-	PDS	U	0	439	208	
AISFMAC	-	PDS	FB	80	38	3	
AISFMLIB	-	PDS	FB	80	2	2	

Figure 78 (Page 12 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AISFPLIB	-	PDS	FB	80	66	30	
AISFSLIB	-	PDS	FB	80	7	3	
AISFSRC	-	PDS	FB	80	3	2	
AISFTLIB	-	PDS	FB	80	2	2	
AISPALIB	-	PDS	FB	80	2	2	
AISPCLIB	-	PDS	FB	80	19	4	
AISPEXEC	-	PDS	FB	80	106	4	
AISPGENP	-	PDS	FB	80	267	190	
AISPGENU	-	PDS	FB	80	270	190	
AISPGJPN	-	PDS	FB	80	271	190	
AISPGMLI	-	PDS	FB	80	170	76	
AISPHELP	-	PDS	FB	80	2	2	
AISPMACS	-	PDS	FB	80	55	12	
AISPMENP	-	PDS	FB	80	48	51	
AISPMENU	-	PDS	FB	80	48	51	
AISPMJPN	-	PDS	FB	80	50	51	
AISPMOD1	-	PDS	U	0	535	539	
AISPPENP	-	PDS	FB	80	473	296	
AISPPENU	-	PDS	FB	80	473	296	
AISPPJPN	-	PDS	FB	80	471	297	
AISPSAMP	-	PDS	FB	80	95	19	
AISPSENP	-	PDS	FB	80	101	72	
AISPSENU	-	PDS	FB	80	101	72	
AISPSJPN	-	PDS	FB	80	101	72	
AISPSLIB	-	PDS	FB	80	25	7	
AISPTENP	-	PDS	FB	80	4	2	
AISPTENU	-	PDS	FB	80	4	2	
AISPTJPN	-	PDS	FB	80	4	2	
AISTDAT1	-	PDS	VB	6156	28	2	
AISTDAT2	-	PDS	VB	259	6	2	
AISTMAC1	-	PDS	FB	80	17	3	

Figure 78 (Page 13 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AIZUFS	-	PDSE	VB	259	4679	-	22
AKHELP	-	PDS	FB	80	45	17	
AKLIB	-	PDS	U	0	3	3	
ALINKLIB	-	PDS	U	0	232	271	
ALPALIB	-	PDS	U	0	29	37	
AMACLIB	-	PDS	FB	80	4167	138	
AMIGLIB	-	PDS	U	0	166	227	
AMODGEN	-	PDS	FB	80	663	56	
AMSGENP	-	PDS	VB	259	9	2	
AMSGENU	-	PDS	VB	259	57	10	
AMSGJPN	-	PDS	VB	259	52	10	
ANFSLIBE	-	PDSE	U	0	278	-	
ANFSTARB	-	PDS	VB	264	40	2	
ANUCLEUS	-	PDS	U	0	43	58	
AOSACB	-	PDS	U	0	110	98	
AOSA0	-	PDS	U	0	155	121	
AOSA1	-	PDS	U	0	118	84	
AOSBN	-	PDS	U	0	381	306	
AOSB0	-	PDS	U	0	3	3	
AOSB3	-	PDS	U	0	186	194	
AOSCA	-	PDS	U	0	5	5	
AOSCD	-	PDS	U	0	172	202	
AOSCE	-	PDS	U	0	9	12	
AOSC2	-	PDS	U	0	2	2	
AOSC5	-	PDS	U	0	1786	1370	
AOSC6	-	PDS	U	0	9	10	
AOSD0	-	PDS	U	0	148	173	
AOSD7	-	PDS	U	0	6	9	
AOSG0	-	PDS	U	0	2	2	
AOSJSC	-	PDS	U	0	3	3	
AOST3	-	PDS	U	0	15	23	

Figure 78 (Page 14 of 14). Storage Required for Distribution Libraries for z/OS V2R5

Library DDNAME	TYPE	ORG	RECFM	LRECL	No. of 3390 Trks	No. of DIR Blks	NOTE
AOST4	-	PDS	U	0	143	166	
AOSU0	-	PDS	U	0	408	276	
AOSXCF	-	PDS	U	0	244	160	
AOS00	-	PDS	U	0	27	20	
AOS04	-	PDS	U	0	5	6	
AOS05	-	PDS	U	0	3	2	
AOS06	-	PDS	U	0	13	17	
AOS11	-	PDS	U	0	12	13	
AOS12	-	PDS	U	0	236	143	
AOS24	-	PDS	U	0	10	7	
AOS26	-	PDS	U	0	886	958	
AOS28	-	PDS	U	0	308	265	
AOS32	-	PDS	U	0	69	104	
APARMLIB	-	PDS	FB	80	19	9	
APROCLIB	-	PDS	FB	80	9	6	
ASAMPLIB	-	PDS	FB	80	988	81	
ASSFMODE	-	PDS	U	0	126	59	
ATSOMAC	-	PDS	FB	80	71	12	
AUADS	-	PDS	FB	80	2	2	
CIPLIB	-	PDS	U	0	7	9	
HHRFCLST	-	PDS	FB	80	19	3	
HHRFMSG	-	PDS	FB	80	12	5	
HHRFPANL	-	PDS	FB	80	224	90	
HHRFSKEL	-	PDS	FB	80	67	14	

C.6 File System for z/OS V2R5

Abbreviations used for the HFS or zFS Path type are:

- N** New path, created by this product.
- P** Previously existing path, created by another product.
- X** Path created by this product, but may already exist from a previous release.

Abbreviations for the NOTE column are:

ZV1R1	New file system path introduced in z/OS V1R1
ZV1R2	New file system path introduced in z/OS V1R2
ZV1R3	New file system path introduced in z/OS V1R3
ZV1R4	New file system path introduced in z/OS V1R4
ZV1R5	New file system path introduced in z/OS V1R5
ZV1R6	New file system path introduced in z/OS V1R6
ZV1R7	New file system path introduced in z/OS V1R7
ZV1R9	New file system path introduced in z/OS V1R9
ZV1R10	New file system path introduced in z/OS V1R10
ZV1R11	New file system path introduced in z/OS V1R11
ZV1R13	New file system path introduced in z/OS V1R13
ZV2R1	New file system path introduced in z/OS V2R1
ZV2R2	New file system path introduced in z/OS V2R2
ZV2R3	New file system path introduced in z/OS V2R3
ZV2R4	New file system path introduced in z/OS V2R4
ZV2R5	New file system path introduced in z/OS V2R5
Z9X	New file system path introduced in z990 Exploitation feature
NLV	File system path for NLV

Note: The NLV directories will be empty if the NLV features are not ordered.

Figure 79 (Page 1 of 4). HFS or zFS Paths for z/OS V2R5

DDDEF Name	TYPE	PATH	Note
NFSCUTIL	X	/usr/lpp/NFS/IBM/	
SADRHFS	N	/usr/lpp/dfsms/dss/IBM/	ZV2R5
SAIEFFS	X	/usr/lpp/IBM/aie/IBM/	ZV2R5
SAOPBIN	X	/usr/lpp/Printsrv/bin/IBM/	
SAOPCLAS	X	/usr/lpp/Printsrv/classes/IBM/	
SAOPICEN	X	/usr/lpp/Printsrv/InfoprintCentral/IBM/	ZV2R2
SAOPICFB	N	/usr/lpp/Printsrv/InfoprintCentral/fba/IBM/	ZV2R5
SAOPICHE	X	/usr/lpp/Printsrv/InfoprintCentral/help/En_US/IBM/	ZV1R5
SAOPICHJ	X	/usr/lpp/Printsrv/InfoprintCentral/help/Ja_JP/IBM/	ZV1R5NLV
SAOPICIM	X	/usr/lpp/Printsrv/InfoprintCentral/Images/IBM/	ZV1R5
SAOPICSC	X	/usr/lpp/Printsrv/InfoprintCentral/Scripts/IBM/	ZV1R5
SAOPICSE	N	/usr/lpp/Printsrv/InfoprintCentral/Scripts/nls/IBM/	ZV2R4
SAOPICSJ	N	/usr/lpp/Printsrv/InfoprintCentral/Scripts/nls/ja/IBM/	ZV2R4
SAOPICSM	N	/usr/lpp/Printsrv/InfoprintCentral/samples/IBM/	ZV2R5
SAOPICXE	X	/usr/lpp/Printsrv/InfoprintCentral/xml/En_US/IBM/	ZV1R5
SAOPICXJ	X	/usr/lpp/Printsrv/InfoprintCentral/xml/Ja_JP/IBM/	ZV1R5NLV
SAOPICXM	X	/usr/lpp/Printsrv/InfoprintCentral/xml/IBM/	ZV1R5

Figure 79 (Page 2 of 4). HFS or zFS Paths for z/OS V2R5

DDDEF Name	TYPE	PATH	Note
SAOPICXS	X	/usr/lpp/Printsrv/InfoprintCentral/xsl/IBM/	ZV1R5
SAOPJAJP	X	/usr/lpp/Printsrv/Ja_JP/IBM/	NLV
SAOPLIB	X	/usr/lpp/Printsrv/lib/IBM/	
SAOPMCT1	X	/usr/lpp/Printsrv/man/C/cat1/IBM/	
SAOPMCT5	X	/usr/lpp/Printsrv/man/C/cat5/IBM/	
SAOPMCT8	X	/usr/lpp/Printsrv/man/C/cat8/IBM/	
SAOPSAM1	X	/usr/lpp/Printsrv/samples/IBM/	
SAOPUSEN	X	/usr/lpp/Printsrv/C/IBM/	
SAOPWENU	X	/usr/lpp/Printsrv/win/En_US/IBM/	
SAOPWJPN	X	/usr/lpp/Printsrv/win/Ja_JP/IBM/	NLV
SARCHFS	N	/usr/lpp/dfsms/hsm/IBM/	ZV2R5
SAZDFFS	N	/usr/lpp/zcx_zos/IBM/	ZV2R4
SBBLLIB	N	/usr/lpp/liberty_zos/IBM/	ZV2R3
SBPXXMLS	X	/usr/lib/xml_schema/IBM/	ZV1R6
SCEEI	X	/usr/include/IBM/	
SCEEIARP	X	/usr/include/arpa/IBM/	
SCEEINEI	X	/usr/include/netinet/IBM/	
SCEEINET	X	/usr/include/net/IBM/	
SCEEISYS	X	/usr/include/sys/IBM/	
SCEEMTHD	X	/usr/lib/nls/method/IBM/	ZV1R2
SCEESAMC	X	/usr/lpp/le/samples/ansic++/IBM/	ZV1R2
SCFZHFS	X	/usr/lpp/wbem/IBM/	ZV1R7
SCLBHFS1	X	/usr/lpp/cbclib/IBM/	ZV1R5
SCPOHFS	X	/usr/lpp/cpo/IBM/	ZV1R9
SCPOLIB	X	/usr/lpp/cpo/lib/IBM/	ZV1R9
SCSFHFS	X	/usr/lpp/pkcs11/IBM/	ZV1R9
SEDGHFS	X	/usr/lpp/dfsms/rmm/IBM/	ZV1R7
SERBHFS	X	/usr/lpp/gpm/IBM/	ZV1R13
SEUVFHFS	X	/usr/lpp/skrb/IBM/	ZV1R6
SEZABIN	X	/usr/lpp/tcpip/bin/IBM/	
SEZAHTCP	X	/usr/lpp/tcpip/IBM/	
SEZAMCT1	X	/usr/lpp/tcpip/man/C/cat1/IBM/	

Figure 79 (Page 3 of 4). HFS or zFS Paths for z/OS V2R5

DDDEF Name	TYPE	PATH	Note
SEZAMMSC	X	/usr/lpp/tcpip/lib/nls/msg/C/IBM/	
SEZASAMP	X	/usr/lpp/tcpip/samples/IBM/	
SEZASBIN	X	/usr/lpp/tcpip/sbin/IBM/	
SEZAXAR	X	/usr/lpp/tcpip/X11R6/lib/IBM/	
SEZAXINC	X	/usr/lpp/tcpip/X11R6/include/IBM/	
SEZXSMP	X	/usr/lpp/tcpip/X11R6/Xamples/IBM/	
SFNTWTYP	N	/usr/lpp/fonts/worldtype/IBM/	ZV2R1
SFOMBCPH	X	/usr/lpp/bcp/IBM/	ZV1R10
SFOMCEA	X	/usr/share/cea/IBM/	ZV1R10
SFOMINC	X	/usr/include/IBM/	
SFOMINCM	X	/usr/include/metal/IBM/	ZV1R9
SFOMJVCL	X	/usr/include/java_classes/IBM/	ZV1R5
SFOMJVRT	X	/usr/lib/java_runtime/IBM/	ZV1R5
SFOMJ64R	X	/usr/lib/java_runtime64/IBM/	ZV1R6
SFOMTA	X	/usr/share/lib/terminfo/a/IBM/	
SFOMTC	X	/usr/share/lib/terminfo/c/IBM/	
SFOMTD	X	/usr/share/lib/terminfo/d/IBM/	
SFOMTH	X	/usr/share/lib/terminfo/h/IBM/	
SFOMTI	X	/usr/share/lib/terminfo/i/IBM/	
SFOMTJ	X	/usr/share/lib/terminfo/j/IBM/	
SFOMTL	X	/usr/share/lib/terminfo/l/IBM/	
SFOMTL2	X	/usr/share/lib/terminfo/L/IBM/	
SFOMTV	X	/usr/share/lib/terminfo/v/IBM/	
SFOMTW	X	/usr/share/lib/terminfo/w/IBM/	
SFOMTX	X	/usr/share/lib/terminfo/x/IBM/	
SFOM1MNC	X	/usr/man/C/man1/IBM/	
SFOM1MNJ	X	/usr/man/Ja_JP/man1/IBM/	NLV
SFOTSSH	X	/usr/lib/ssh/IBM/	
SFSUMANC	X	/usr/man/C/IBM/	
SFSUMANJ	X	/usr/man/Ja_JP/IBM/	NLV
SFSUMBIN	X	/bin/IBM/	
SFSUMCHR	X	/usr/lib/nls/charmap/IBM/	

<i>Figure 79 (Page 4 of 4). HFS or zFS Paths for z/OS V2R5</i>			
DDDEF Name	TYPE	PATH	Note
SFSUMJPN	X	/usr/lib/nls/msg/Ja_JP/IBM/	NLV
SFSUMLCD	X	/usr/lib/nls/localedef/IBM/	
SFSUMLCL	X	/usr/lib/nls/locale/IBM/	
SFSUMLIB	X	/usr/lib/IBM/	
SFSUMMSC	X	/usr/lib/nls/msg/C/IBM/	
SFSUMUUC	X	/usr/lib/uucp/IBM/	
SFSUSAMP	X	/samples/IBM/	
SFSUSBIN	X	/usr/sbin/IBM/	
SGFUBIN	X	/usr/lpp/dfsms/bin/IBM/	
SGFUMSG	X	/usr/lpp/dfsms/nls/msg/C/IBM/	
SGIMDIR	X	/usr/lpp/smp/IBM/	ZV1R7
SGLDHCLI	X	/usr/lpp/ldapclient/IBM/	
SGLDHFS	X	/usr/lpp/ldap/IBM/	ZV1R4
SGLDHJPN	X	/usr/lpp/ldap/lib/nls/msg/Ja_JP/IBM/	NLV
SGSKHFS	X	/usr/lpp/gskssl/IBM/	
SHAPBIN3	N	/usr/lpp/ihsa_zos/IBM/	ZV2R2
SHKCKC4Z	N	/usr/lpp/kc4z/IBM/	ZV2R2
SHZCINC	X	/usr/lpp/hzc/include/IBM/	ZV2R1
SHZCLIB	X	/usr/lpp/hzc/lib/IBM/	ZV2R1
SIKYHFS	X	/usr/lpp/pkiserv/IBM/	ZV1R3
SIOEHLMD	X	/usr/lpp/dfs/global/bin/IBM/	
SISCRHFS	N	/usr/lpp/scrt/IBM/	ZV2R3
SISFHFS	X	/usr/lpp/sdsf/IBM/	ZV1R10
SISPZHFS	X	/usr/lpp/ispf/bin/IBM/	ZV1R10
SIZUFSD	X	/usr/lpp/zosmf/IBM/	ZV2R2
	X	/usr/man/C/cat1/IBM/	
	X	/usr/man/Ja_JP/cat1/IBM/	
	N	/usr/lpp/bcp/upgrade/	ZV2R5

For more information about creating file system directories, see [8.1.8, “Create file system directories for Wave 1” on page 87](#).

Appendix D. Additional Cleanup Jobs for z/OS V2R5

D.1 Perform global zone cleanup for deleted FMIDs

Because z/OS V2R5 is a complete replacement for previous releases of z/OS, you might want to delete the old FMIDs from the global zone so future (unneeded) service will not be received for them, unless you plan to share the global zone and SMPPTS between z/OS V2R5 and systems with older levels of z/OS.

The FMIDs listed as deleted in the output of the ACCEPT of all Wave 0, Wave 1 and 2 FMIDs may be deleted from the FMID list in the global zone. Refer to sample job CLNGLOB in your SAMPLIB data set for global zone cleanup.

D.2 Run optional cleanup sample jobs for obsolete NLVs DDDEFs, data sets, and path

Starting with z/OS V2R4, all national languages (NLVs) FMIDs except Japanese are no longer shipped in BCP, ISPF, TSO/E and UNIX System Services. If you have previously installed these NLVs, you can delete the obsolete DDDEFs, data sets, and path with the following optional sample jobs provided by the elements.

As of z/OS V2R4, Distributed File Service (FMIDs H0H2410 and J0H241J) is withdrawn. The FMIDs H0H2410 and J0H241J are deleted by z/OS File System (FMID HZFS450), and the obsolete data sets, paths, and DDDEFs in the CSI can be deleted with the cleanup sample job provided by the element listed in the following figure.

The OSA/SF element is withdrawn as of z/OS V2R4. After sample job CLNOS390 has been run to delete OSA/SF FMID H0GI400, you may run sample job CLNOSASF to delete the obsolete data sets and DDDEFs for OSA/SF in the SMP/E CSI.

The ISPF Client/Server component is withdrawn as of z/OS V2R5. You can use the sample jobs listed in the following figure to delete the obsolete DDDEFs and data sets.

As of z/OS V2R5, there are obsolete data sets that will be empty and DDDEFs for RMF that can be deleted after RMF is installed. You can run sample job ERB00CLN to remove the obsolete RMF data sets and DDDEFs after z/OS V2R5 RMF is installed.

<i>Figure 80 (Page 1 of 2). Cleanup Sample Jobs</i>			
Sample Job	Element	Comment	Job location
AOPCLNDD	Infoprint Server	Obsolete DDs	SAMPLIB
BPXCLNDD	BCP and UNIX System Services	obsolete Chinese NLV	SAMPLIB

Figure 80 (Page 2 of 2). Cleanup Sample Jobs

Sample Job	Element	Comment	Job location
ISPDDDEL ISPDSDEL ISPDSWSA	ISPF	obsolete German and Swiss German NLVs and ISPF Client/Server component	SISPSAMP
Note: ISPDDDEL is a sample job for deleting ISPF NLV and Client/Server DDDEFs in the CSI, ISPDSDEL is a sample job for deleting ISPF NLV data sets, and ISPDSWSA is a sample job for deleting ISPF Client/Server data sets.			
IKJCLNDD	TSO/E	obsolete Chinese NLV	SAMPLIB
IOECLNDD	z/OS File System	obsolete Distributed File Service	SIOESAMP
CLNOSASF	BCP	obsolete OSA/SF	SAMPLIB
ERB00CLN	RMF	obsolete DDDEFs and data sets	SAMPLIB
GFSDELET	NFS	obsolete DDDEFs and data sets for NFS	SAMPLIB