



**Program Directory for  
Advanced Communications Function (ACF)  
System Support Programs (SSP)**

Version 4 Release 7, **Service Level SMC9908**

Program Number 5655-041

FMID HSP4470

for Use with  
MVS/ESA  
OS/390

Document Date: March 1999

GI10-0989-01

**Note!**

Before using this information and the product it supports, be sure to read the general information under "Notices" on page vii.

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# Contents

<b>Notices</b> . . . . .	vii
Notice to Users of Online Versions of This Book . . . . .	viii
Trademarks . . . . .	viii
<b>1.0 Introduction</b> . . . . .	1
1.1 SSP V4R7 MVS FMID . . . . .	3
<b>2.0 Program Materials</b> . . . . .	5
2.1 Basic Machine-Readable Material . . . . .	5
2.2 Optional Machine-Readable Material . . . . .	6
2.3 Program Publications . . . . .	6
2.3.1 Basic Program Publications . . . . .	6
2.3.2 Optional Program Publications . . . . .	7
2.3.3 Softcopy Publications . . . . .	7
2.3.4 Publications Associated with SSP V4R7 MVS . . . . .	8
2.3.4.1 NCP Publications . . . . .	8
2.3.4.2 HCD Publications . . . . .	8
2.3.4.3 Publications Useful for SSP CLISTs . . . . .	8
2.4 Microfiche Support . . . . .	9
2.5 Publications Useful During Installation . . . . .	9
<b>3.0 Program Support</b> . . . . .	11
3.1 Program Services . . . . .	11
3.2 Preventive Service Planning . . . . .	11
3.3 Statement of Support Procedures . . . . .	11
<b>4.0 Program and Service Level Information</b> . . . . .	13
4.1 Program Level Information . . . . .	13
4.2 Service Level Information . . . . .	13
4.3 Cumulative Service Tape . . . . .	13
<b>5.0 Installation Requirements and Considerations</b> . . . . .	15
5.1 Driving System Requirements . . . . .	15
5.1.1 Operating System Requirements . . . . .	15
5.1.2 Machine Requirements . . . . .	15
5.1.3 Programming Requirements . . . . .	16
5.2 Target System Requirements . . . . .	16
5.2.1 Machine Requirements . . . . .	16
5.2.2 Programming Requisites . . . . .	16
5.2.2.1 Minimum Requisites . . . . .	16
5.2.2.2 Functional Requisites . . . . .	17
5.2.2.2.1 Controller-Resident Programs . . . . .	17

5.2.2.3	Compatibility Requisites	18
5.2.2.3.1	NCP	18
5.2.2.3.2	NPSI	21
5.2.2.3.3	DFSMS	21
5.2.2.4	Toleration/Coexistence Requisites	21
5.2.2.5	Incompatibility (Negative) Requisites	21
5.3	DASD Storage Requirements	21
5.3.1	Storage Requirements for SMPCSI VSAM Cluster	22
5.3.2	Storage Requirements for SMP/E Work Data Sets	22
5.4	FMIDs Deleted	24
5.5	Special Considerations	24
5.5.1	Special Considerations for the HCD Facility	24
5.5.2	Special Considerations for VTAM V4R1 (5665-289) or Later	24
<b>6.0</b>	<b>Installation Instructions</b>	<b>25</b>
6.1	Installing SSP V4R7 MVS	25
6.1.1	SMP/E Considerations for Installing SSP V4R7 MVS	25
6.1.2	SMP/E Environment	25
6.1.3	SMP/E Options Subentry Values	26
6.1.4	Unload the Sample JCL from the Product Tape	26
6.1.5	Allocate SMP/E Target and Distribution Libraries	27
6.1.6	Allocate Non-VSAM SMP/E Data Sets (Optional)	30
6.1.7	Allocate the VSAM CSI Data Sets (Optional)	30
6.1.8	Initialize the VSAM CSI Data Sets (Optional)	32
6.1.9	Create DDDEF Entries	34
6.1.10	Perform SMP/E RECEIVE	39
6.1.11	Perform SMP/E APPLY CHECK	39
6.1.12	Perform SMP/E APPLY	40
6.1.13	Perform SMP/E ACCEPT CHECK	40
6.1.14	Perform SMP/E ACCEPT	41
6.1.15	Rejecting SMPTLIBs (Optional)	42
6.2	Post-Installation Information	43
6.2.1	Sample NCP Generation Definitions	43
6.3	Post-Installation Considerations	44
6.3.1	For an NCP-Only System	44
6.3.2	For a PEP (NCP and EP) System	44
6.3.3	For an EP Standalone System	45
6.3.4	For Previous Releases of SSP	45
<b>Appendix A.</b>	<b>Install Logic</b>	<b>47</b>
A.1	SMP/E Modification Control Statements	47
<b>Appendix B.</b>	<b>APARs Incorporated into this Program</b>	<b>49</b>
B.1	PTFs and APARs Incorporated into this Service Level	49
<b>Reader's Comments</b>		<b>51</b>

---

## Figures

1.	High Level Assembler Integrated with Operating System	2
2.	Basic Material: Program Tape	5
3.	Program Tape: File Content	6
4.	Basic Material: Program Publications	6
5.	Optional Material: Licensed Program Publications	7
6.	Softcopy Publications	7
7.	NCP Publications Associated with SSP V4R7 MVS	8
8.	HCD Publications	8
9.	SSP CLISTs for NCP Dumps Publications	8
10.	Publications Useful During Installation	9
11.	PSP Information	11
12.	Program Identifier	11
13.	Operating System Software Requirements	15
14.	Driving System Software Requirements	16
15.	Minimum Requisites	16
16.	Functional Requisites	17
17.	Functional Requisites	17
18.	Functional Requisites	17
19.	Functional Requisites	17
20.	NCP APARs Required to Generate NCP with SSP NDF	18
21.	NCP APAR Required to Code a Default TCP/IP Route in NCP V7R1	18
22.	NCP APAR Required to Code RNRLIMIT	18
23.	NCP APARs Required to Code BAN Connections	18
24.	NCP APARs Required to Use ADDIFG Keyword	19
25.	NCP APARs Required to Initiate Deactivation of an Out-of-Sequence Virtual Route	19
26.	NCP APAR Required to Use Duplicate TIC Configuration for Subarea Connections	19
27.	NCP APAR Required to Generate Backup Channel Connections for NCP-NCROUTE IP Interface	19
28.	NCP APAR Required to Generate INN Connections	19
29.	NCP APAR Required to Code MAXDLCI for D-Channel	20
30.	NCP APARs Required if you code USGTIER=1, 2, 2.5, or 3	20
31.	NCP APAR Required to Include QSZALERT Function in NCP V7R5.	20
32.	NCP APARs Required for Committed Information Rate (CIR)	20
33.	NCP APAR Required for Transmission Head Buffers	21
34.	NPSI APARs Required to Generate NPSI V3R8 with NCP V7R4, NCP V7R5, or NCP V7R6	21
35.	APARs Required to Use the High Level Assembler	21
36.	Storage Requirements for SMPCSI VSAM Cluster	22
37.	Storage Requirements for SMP/E Work Data Sets	22
38.	Storage Requirements for SMP/E Data Sets	23
39.	Storage Requirements for SSP V4R7 MVS Target Libraries	23
40.	Storage Requirements for SSP V4R7 MVS Distribution Libraries	24
41.	Character String Descriptions	25

42.	Storage Requirements for SMP/E Subentries	26
43.	JCL to Unload the Installation JCL	26
44.	JCL to Allocate Target and Distribution Libraries	28
45.	JCL to Allocate Non-VSAM SMP/E Data Sets (Optional)	30
46.	JCL to Allocate the CSI Data Set (Optional)	31
47.	JCL to Add Necessary Entries and Utilities to SMP/E CSI Data Sets (Optional)	33
48.	JCL to Create DDDEF Entries	35
49.	JCL to Perform SMP/E RECEIVE	39
50.	JCL to Perform SMP/E APPLY CHECK	40
51.	JCL to Perform SMP/E APPLY	40
52.	JCL to Perform ACCEPT CHECK	41
53.	JCL to Perform SMP/E ACCEPT	41
54.	JCL to Reject SMP/E Entries and SMPTLIBs (Optional)	42
55.	Sample JCL to Print and Punch	43
56.	Sample JCL to Print an Individual Member of the ASSPSAMP Distribution Library	44
57.	Installation Logic	47
58.	Job to Print the SMP/E Modification Control Statements	48
59.	SSP V4R7 PTFs, Corresponding APARs, and Level for Service Level 9908	49

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## 1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of SSP V4R7 MVS Service Level SMC9908. You should read all of this program directory before installing the program, and then keep it for future reference.

This program directory contains the following sections:

- 2.0, "Program Materials" on page 5 identifies the basic and optional program materials and documentation for SSP V4R7 MVS.
- 3.0, "Program Support" on page 11 describes the IBM support available for SSP V4R7 MVS.
- 4.0, "Program and Service Level Information" on page 13 describes the program and service level information incorporated into SSP V4R7 MVS.
- 5.0, "Installation Requirements and Considerations" on page 15 identifies the resources and considerations for installing and using SSP V4R7 MVS.
- 6.0, "Installation Instructions" on page 25 provides detailed installation instructions for SSP V4R7 MVS.
- Appendix A, "Install Logic" on page 47 provides the installation logic for SSP V4R7 MVS.
- Appendix B, "APARs Incorporated into this Program" on page 49 provides a list of APARs incorporated into this program.

This program directory is for SSP V4R7 MVS Service Level 9908. SSP V4R7 MVS Service Level 9908 includes maintenance up to and exceeding CBPDO weekly service tape 9908. See Appendix B, "APARs Incorporated into this Program" on page 49 for a list of APARS.

The service level is a four-digit number that tells you which CBPDO weekly service tape was used to supply the integrated PTFs. The first two digits of the number indicate the year of the service tape. The last two digits indicate the week when the service tape was issued. For example, Service Level 9908 uses the CBPDO weekly service tape for week 08 of the year 1999.

Throughout this program directory, SSP V4R7 MVS Service Level 9908 is referred to as "SSP V4R7 MVS." The program FMID HSP4470 has been updated to a new service level and assigned a new SOURCEID, SMC9908.

When installing this service level of SSP V4R7 for MVS, you should also consider installing the same service level of NCP for MVS: NCP V7R7 for MVS, Service Level 9906.

Before installing SSP V4R7 MVS, read Section 3.2, "Preventive Service Planning" on page 11. This section tells you how to find any updates to the information and procedures in this program directory.

Starting with ACF/NCP V7R7, important changes have been made to the NCP generation assembler support. Beginning with ACF/SSP V4R7, the Network Definition Facility (NDF) will offer exclusive support

for the High Level Assembler (HLAS) program product, 5696-234. Prior to ACF/SSP V4R7, two different assemblers were shipped with ACF/SSP. Support for the IFZ assembler (VSE) and IHR90 assembler (MVS and VM) will be discontinued on the ACF/NCP V7R7 platform. You will now be required to use the High Level Assembler for generating NCP V7R7 load modules.

If the High Level Assembler does not come installed on your system, you will need to order it.

Figure 1 shows the operating systems and indicates whether the High Level Assembler is integrated.

*Figure 1. High Level Assembler Integrated with Operating System*

<b>Operating System</b>	<b>High Level Assembler V1R2</b>
MVS/ESA V5R1 or later	Order separately
VSE/ESA V1R4.3 or V1R4.4	Order separately
VM/ESA V2R2 or V2R3	Order separately
OS/390 R1, R2, or R3	Integrated
OS/390 R4 or R5	Integrated
VSE/ESA V2R2 and V2R3	Integrated

In addition to the High Level Assembler requirements, the APARs listed in Figure 35 on page 21 are required.

The IFZ and IHR90 assemblers will still be shipped with ACF/SSP V4R7 for use with levels of ACF/NCP prior to NCP V7R7.

IBM recommends that you use an OS/390 ServerPac to install this level of SSP. If you use a ServerPac, you get the service integrated in the product. ServerPac is available at no additional charge when you have an OS/390 license.

Do not use this program directory if you are installing SSP V4R7 MVS with an MVS Custom-Built Installation Process Offering (CBIPO), SystemPac, or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the program directory as required.

If you are installing SSP V4R7 MVS using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), use the softcopy program directory provided on the CBPDO tape. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA information for SSP V4R7 MVS is included on the CBPDO tape.

To facilitate the installation of SSP V4R7 MVS, all JCL statements that appear in this program directory are also in machine-readable format on the product tape. The JCL is contained in Relative File 4, DLIB=ASSPSAMP, MEMBER=IFWINJCL. The JCL to unload the installation JCL is in Figure 43 on page 26.

In the JCL examples shown in this program directory, all occurrences of lowercase variables must be changed to the appropriate uppercase values in order for the JCL to execute properly.

Before installing the SSP Hardware Configuration Definition (HCD) members, see Section 5.5, "Special Considerations" on page 24.

At the end of this program directory you will find a Reader's Comment Form. Please take the time to complete this form and return it to the address shown on the form. Your comments and suggestions help improve this program directory and make installation easier.

A good place to start any task regarding this program is *NCP V7R7, SSP V4R7, and EP Release 14 Library Directory*, SC30-3971. This directory introduces the enhancements for the current release and shows where these enhancements are described in the NCP library. It gives you an overview of NCP, SSP, and EP and directs you to a variety of tasks related to these programs.

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## **1.1 SSP V4R7 MVS FMID**

The FMID for SSP V4R7 MVS is HSP4470.



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## 2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for SSP V4R7 MVS is 5655-041. The feature numbers associated with this release are provided in the following sections.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature code and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature codes and are not required for the product to function.

The program announcement material describes the features supported by SSP V4R7 MVS. Ask your IBM representative for this information if you have not already received a copy.

The following sections identify:

- Basic and optional program materials available with this program
- Publications associated with this program
- Publications useful during installation

---

### 2.1 Basic Machine-Readable Material

This section describes the basic machine-readable material for SSP V4R7

The distribution medium is a 9-track magnetic tape (written at 6250 bpi), a 3480 cartridge, or a 4 mm cartridge. The tape or cartridge contains all the programs and data needed for installation. This program is installed using SMP/E, and it is in SMP/E RELFILE format. See Section 6.0, "Installation Instructions" on page 25 for more information about how to install the program.

Figure 2 describes the tape or cartridge.

**Note:** If you are installing SSP V4R7 MVS using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), some of the information in these figures may not be valid. Consult the CBPDO documentation for actual values.

*Figure 2. Basic Material: Program Tape*

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Medium	Feature Number	Physical Volume	External Label Identification	VOLSER
6250 tape	5801	1	MVSOBJ HSP4470 R	SP4470
3480 cart.	5802	1	MVSOBJ HSP4470 R	SP4470
4 mm cart.	5700	1	MVSOBJ HSP4470 R	SP4470

Figure 3 describes the file content of the program tape or cartridge.

Figure 3. Program Tape: File Content

<b>VOLSER</b>	<b>File</b>	<b>Name</b>	<b>Dist Library</b>	<b>RECFM</b>	<b>LRECL</b>	<b>BLK Size</b>
SP4470	1	SMPMCS		FB	80	6400
SP4470	2	IBM.HSP4470.F1	AMACLIB (JCLIN)	FB	80	8800
SP4470	3	IBM.HSP4470.F2	ASAMPNET	FB	80	8800
SP4470	4	IBM.HSP4470.F3	SSPOBJ	U	0	6144
SP4470	5	IBM.HSP4470.F4	ASSPSAMP ASSPCLS1 ASSPSRC1 ASSPMAC1	FB	80	8800

## 2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for this program.

## 2.3 Program Publications

The following sections identify the basic, optional, and associated publications for SSP V4R7 MVS.

### 2.3.1 Basic Program Publications

These publications and this program directory are available only when you order the basic machine-readable material.

Figure 4 identifies the basic and licensed program publications for SSP V4R7 MVS. One copy of each of these publications is included when you order the basic materials for SSP V4R7 MVS. For additional copies, see your IBM representative. A fee is charged for additional copies.

Figure 4 (Page 1 of 2). Basic Material: Program Publications

<b>Publication Title</b>	<b>Form Number</b>
Network Control Program, System Support Programs, and Emulation Program Generation and Loading Guide	SC31-6221
Network Control Program, System Support Programs, and Emulation Program Messages and Codes	SC31-6222
Licensed Program Specifications: System Support Programs Version 4 Release 7 for OS/390 and MVS	GC31-6229
Network Control Program Version 7 Release 7, System Support Programs Version 4 Release 7, and Emulation Program Release 14 Library Directory	SC30-3971

Figure 4 (Page 2 of 2). Basic Material: Program Publications

Publication Title	Form Number
Network Control Program, System Support Programs, and Emulation Program Diagnosis Guide	LY43-0033#
Network Control Program, System Support Programs, and Emulation Program Trace Analysis Handbook	LY43-0037#

**Note:** A pound sign (#) symbol beside the Form Number indicates a licensed program publication.

## 2.3.2 Optional Program Publications

Figure 5 identifies the optional licensed program publications for this program. The first copy is available at no charge to licensees of the basic material by ordering the 7xxx feature number. Order additional copies using the 8xxx feature number. A fee is charged for additional copies.

Figure 5. Optional Material: Licensed Program Publications

Publication Title	Form Number	Feature Number First Copy	Feature Number Additional Copy
Network Control Program and System Support Programs Customization Guide	LY43-0031#	7011	8011
Network Control Program and System Support Programs Customization Reference	LY43-0032#	7012	8012

**Note:** A pound sign (#) symbol beside the Form Number indicates a licensed program publication.

## 2.3.3 Softcopy Publications

All SSP V4R7 MVS manuals, licensed and unlicensed, except for *SSP Licensed Program Specifications*, are offered in displayable softcopy form on the media listed in Figure 6.

Figure 6. Softcopy Publications

Title	Form Number	Feature Number First Copy	Feature Number Additional Copy
ACF/NCP, ACF/SSP, EP, NPSI, and NTuneMON Softcopy Collection Kit (CD-ROM)	LK2T-0414#	7110	8110

**Note:** Order this collection kit under the NCP product. (It is not orderable under SSP.) A pound symbol (#) beside the Form Number indicates that it contains "Restricted Material of IBM."

## 2.3.4 Publications Associated with SSP V4R7 MVS

**2.3.4.1 NCP Publications:** Figure 7 lists publications that may be helpful when you use SSP V4R7 MVS. To order copies, contact your IBM representative. A fee is charged for these publications.

*Figure 7. NCP Publications Associated with SSP V4R7 MVS*

Publication Title	Form Number
Network Control Program Version 7 Release 7 Migration Guide	SC30-3889
Network Control Program, System Support Programs, and Emulation Program Resource Definition Guide	SC31-6223
Network Control Program, System Support Programs, and Emulation Program Resource Definition Reference	SC31-6224
Planning for NetView, NCP, and VTAM	SC31-8063
Planning for Integrated Networks	SC31-8062

**2.3.4.2 HCD Publications:** Figure 8 lists publications that may be helpful when you use the Hardware Configuration Definition function. To order copies, contact your IBM representative.

*Figure 8. HCD Publications*

Publication Title	Form Number
MVS/ESA Hardware Configuration Definition Using the Dialog	GC33-6457
MVS/ESA System Programming Library: Processor and Device Support	GC28-1617
OS/390 Hardware Configuration Definition Planning	GC28-1750
OS/390 HCD User's Guide	SC28-1848

**2.3.4.3 Publications Useful for SSP CLISTs:** Figure 9 lists publications that may be helpful when you use SSP CLISTs for NCP dumps. To order copies, contact your IBM representative.

*Figure 9. SSP CLISTs for NCP Dumps Publications*

Publication Title	Form Number
MVS/ESA IPCS User's Guide	GC28-1631
MVS/ESA IPCS Command Reference	GC28-1632
OS/390 ISPF Planning and Customization	SC28-1298
OS/390 TSO/E General Information	GC28-1964
TSO Extensions Version 2	SC28-1876
ISPF General Information	GC34-4250
ISPF Dialog Management Guide and Reference	SC34-4266
ISPF Dialog Management Examples	SC34-4313



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## 2.4 Microfiche Support

Microfiche is not provided with SSP V4R7 MVS. Customers with access to View Program Listings (VPL), such as through SoftwareXcel Extended, can access program listings formerly provided through microfiche.

Those customers without access to VPL can contact their IBM representative.

The VPL facility provides online viewing of program listings that are available to customers.

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## 2.5 Publications Useful During Installation

The publications listed in Figure 10 may be useful during installation of this program. To order copies, contact your IBM representative. A fee is charged for each publication.

*Figure 10 (Page 1 of 2). Publications Useful During Installation*

<b>Publication Title</b>	<b>Form Number</b>
MVS/ESA JCL Reference	GC28-1829
MVS/ESA JCL User's Guide	GC28-1830
MVS/ESA System Codes	GC28-1815
MVS/ESA System Messages, Volume 1	GC28-1812
MVS/ESA System Messages, Volume 2	GC28-1813
OS/390 MVS JCL Reference	GC28-1757
OS/390 MVS JCL User's Guide	GC28-1758
OS/390 MVS System Codes	GC28-1780
OS/390 MVS System Messages, Volume 1 (ABA-ASA)	GC28-1784
OS/390 MVS System Messages, Volume 2 (ASB-EWX)	GC28-1785
OS/390 MVS System Messages, Volume 3 (GDE-IEB)	GC28-1786
OS/390 MVS System Messages, Volume 4 (IEC-IFD)	GC28-1787
OS/390 MVS System Messages, Volume 5 (IGD-IZP)	GC28-1788
OS/390 SMP/E Commands	SC28-1805
OS/390 SMP/E Messages and Codes	SC28-1738
OS/390 SMP/E Reference	SC28-1806
OS/390 SMP/E User's guide	SC28-1740
SMP/E: General Information	GC23-0351
SMP/E: Messages and Codes	SC28-1108
SMP/E: Reference	SC28-1107

*Figure 10 (Page 2 of 2). Publications Useful During Installation*

<b>Publication Title</b>	<b>Form Number</b>
SMP/E: User's Guide	SC28-1302

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## 3.0 Program Support

This section describes the IBM support available for SSP V4R7 MVS.

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### 3.1 Program Services

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

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### 3.2 Preventive Service Planning

Before installing SSP V4R7 MVS, you should review the current Preventive Service Planning (PSP) information. If you obtained SSP V4R7 MVS as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO tape.

If you obtained SSP V4R7 MVS on a product tape, or if the CBPDO is more than two weeks old when you install it, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for SSP V4R7 MVS are:

Figure 11. PSP Information

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UPGRADE	SUBSET	Description
SSP470	HSP4470/9908	SSP V4R7 MVS

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### 3.3 Statement of Support Procedures

For help with problem determination and problem source identification, refer to *Network Control Program, System Support Programs, and Emulation Program Diagnosis Guide*. Report any difficulties you have using this program to your IBM Support Center.

Figure 12 identifies the component ID (COMPID) for SSP V4R7 MVS.

Figure 12. Program Identifier

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FMID	COMPID	Component Name	RETAIN Release
HSP4470	565504100	ACF/SSP V4R7 MVS	470

---



---

## **4.0 Program and Service Level Information**

This section identifies the program and service level of SSP V4R7 MVS. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated into SSP V4R7 MVS. Information about the cumulative service tape is also provided.

---

### **4.1 Program Level Information**

See Appendix B, "APARs Incorporated into this Program" on page 49 for a list of APAR fixes against previous releases of SSP incorporated into this release.

---

### **4.2 Service Level Information**

The service level refers to the PTFs integrated into the program. See B.1, "PTFs and APARs Incorporated into this Service Level" on page 49 for a list of PTFs that are incorporated into this service level and their corresponding APARs and PUT levels.

---

### **4.3 Cumulative Service Tape**

A cumulative service tape, containing PTFs not incorporated into this release, might be included with this program. Installation instructions for cumulative service tapes can be found in the SMP/E publications. If this tape is included, it will be used in Section 6.2, "Post-Installation Information" on page 43.

If you received this product as part of a CBPDO or a ProductPac, PTFs not incorporated into this release are provided on the tape, and a separate cumulative service tape will not be provided.



---

## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing SSP V4R7 MVS. The following terminology is used:

- *Driving system*: the system used to install the program.
- *Target system*: the system on which the program is installed.

In many cases, the same system can be used as both a driving system and a target system. However, you may want to set up a clone of your system to use as a target system by making a separate IPL-able copy of the running system. The clone should include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Some cases where two systems should be used include the following:

- When installing a new level of a product that is already installed, the new product will delete the old one. By installing onto a separate target system, you can test the new product while still keeping the old one in production.
- When installing a product that shares libraries or load modules with other products, the installation can disrupt the other products. Installing onto a test system or clone will allow you to assess these impacts without disrupting your production system.

---

### 5.1 Driving System Requirements

This section describes the environment of the driving system required to install SSP V4R7 MVS.

#### 5.1.1 Operating System Requirements

SSP V4R7 MVS operates in the system environments shown in Figure 13.

*Figure 13. Operating System Software Requirements*

---

5655-068 and 5655-069	MVS/ESA V5R1 or later
5647-A01	OS/390 Release 4 or later
5645-001	OS/390 Releases 1, 2, or 3

---

The SSPLIB data set for this program must be installed into an APF-authorized library.

#### 5.1.2 Machine Requirements

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

## 5.1.3 Programming Requirements

Figure 14. Driving System Software Requirements

Program Number	Product Name and Minimum VRM/Service Level
5668-949	System Modification Program/Extended (SMP/E) Release 8.1

A platform-dependent BookManager product is required to display softcopy publications on CD-ROM. Limited function DOS, Windows, and OS/2 versions of these products are available on your CD-ROM. For more information or to order full-function releases of these products, or MVS versions, refer to the IBM BookManager home page at <http://booksrv2.raleigh.ibm.com>.

## 5.2 Target System Requirements

This section describes the environment of the target system required to install and use SSP V4R7 MVS.

### 5.2.1 Machine Requirements

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

### 5.2.2 Programming Requisites

**5.2.2.1 Minimum Requisites:** A minimum requisite is defined as one of the following:

1. *Installation Requisite:* A product that is required at installation time. i.e. this product **will not install** successfully unless this requisite is met. This includes products that are specified as REQs, PREs, or CALLLIBs.
2. *Run Time Requisite:* A product that is **not** required for the successful installation of this product, but **is** needed at run time in order for this product to work.

SSP V4R7 MVS supports the following licensed programs at the function level of the version and release for as long as program services are available for the particular version and release.

Figure 15. Minimum Requisites

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5648-063	NCP V7R3 or higher	No
5668-231	NCP V6R2 or higher	No
5668-738	NCP V5R4	No
5668-854	NCP V4R3.1	No
5696-234	High Level Assembler 1.2	No



**5.2.2.2 Functional Requisites:** A functional requisite is defined as a product that is *not* required for the successful installation of this product or for the base function of the product, but *is* needed at run time for a specific function of this product to work. This includes products that are specified as IF REQs.

SSP V4R7 MVS supports the following licensed programs at the function level of the version and release for as long as program services are available for the particular version and release.

The following is required for HCD:

*Figure 16. Functional Requisites*

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5695-047 5695-048	MVS V4R2.2 or higher	No

The SSP CLISTs for NCP dumps require:

*Figure 17. Functional Requisites*

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
(5685-054)	Interactive System Productivity Facility (ISPF) Version 3 or higher for MVS	No

The IFWNET CLIST requires the following:

*Figure 18. Functional Requisites*

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5685-111	NetView Release 3, or later, with REXX support	No
5685-025	TSO/E	No

#### **5.2.2.2.1 Controller-Resident Programs:**

One or more of the following programs can reside in the controller depending upon the specific requirements of the customer installation.

*Figure 19 (Page 1 of 2). Functional Requisites*

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5735-XXB	Emulation Program R14	No
5735-XXB	Emulation Program R12	No
5735-XXB	Emulation Program R11	No
5735-XXB	Emulation Program R9	No

Figure 19 (Page 2 of 2). Functional Requisites

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5735-XXB	Emulation Program R6.1	No

### 5.2.2.3 Compatibility Requisites: The following section contains system considerations for NCP.

#### 5.2.2.3.1 NCP:

The NCP APARs shown in Figure 20 are required to generate the NCP product with the SSP NDF.

Figure 20. NCP APARs Required to Generate NCP with SSP NDF

Product Name	APAR
NCP V4R3.1	IR82746
	IR83237
	IR83303
	IR83307
	IR83826
	IR83952
	IR86790
	IR89297

The NCP APAR shown in Figure 21 is required if you want to code a default TCP/IP route in NCP V7R1.

Figure 21. NCP APAR Required to Code a Default TCP/IP Route in NCP V7R1

Product Name	APAR
NCP V7R1	IR26000

The NCP APAR listed in Figure 22 is required if you want to code RNRLIMIT on a NTRI logical GROUP definition statement in NCP V5R4.

Figure 22. NCP APAR Required to Code RNRLIMIT

Product Name	APAR
NCP V5R4	IR99583

The NCP APARs listed in Figure 23 are required if your generation definition contains frame-relay boundary access node (BAN) connections.

Figure 23. NCP APARs Required to Code BAN Connections

Product Name	APAR
NCP V7R1	IR28397
NCP V7R2	IR28239

The NCP APARs shown in Figure 24 on page 19 are required if you want to use the ADDIFG keyword to increase the inter-frame gap for IBM 3746 Model 900 frame-relay, SDLC, or X.25 physical lines.

*Figure 24. NCP APARs Required to Use ADDIFG Keyword*

<b>Product Name</b>	<b>APAR</b>
NCP V6R3	IR27091
NCP V7R1	IR27090

The NCP APAR listed in Figure 25 is required if you want NCP to initiate the deactivation of an out-of-sequence virtual route (VR).

*Figure 25. NCP APARs Required to Initiate Deactivation of an Out-of-Sequence Virtual Route*

<b>Product Name</b>	<b>APAR</b>
NCP V7R1	IR35146
NCP V7R2	IR35146
NCP V7R3	IR35146
NCP V7R4	IR35146
NCP V7R5	IR35146

The NCP APAR listed in Figure 26 is required if you want to use duplicate TIC configuration for subarea connections.

*Figure 26. NCP APAR Required to Use Duplicate TIC Configuration for Subarea Connections*

<b>Product Name</b>	<b>APAR</b>
NCP V7R5	IR35842

The NCP APAR listed in Figure 27 is required if you generate backup channel connections for the NCP-NCPROUTE IP interface.

*Figure 27. NCP APAR Required to Generate Backup Channel Connections for NCP-NCPROUTE IP Interface*

<b>Product Name</b>	<b>APAR</b>
NCP V7R5	IR33961

The NCP APAR listed in Figure 28 is required if you generate INN connections using LIC16 ISDN to ISDN TA.

*Figure 28. NCP APAR Required to Generate INN Connections*

<b>Product Name</b>	<b>APAR</b>
NCP V7R5	IR34013

The NCP APAR listed in Figure 29 on page 20 is required if you code MAXDLCI for an ISDN physical line (D-Channel).

*Figure 29. NCP APAR Required to Code MAXDLCI for D-Channel*

<b>Product Name</b>	<b>APAR</b>
NCP V7R5	IR33979

The NCP APARs listed in Figure 30 are required if you code USGTIER=1, 2, 2.5, or 3 and have only channel links defined, and you wish to take advantage of the higher limits regarding the number of channel links that can be defined.

*Figure 30. NCP APARs Required if you code USGTIER=1, 2, 2.5, or 3*

<b>Product Name</b>	<b>APAR</b>
NCP V7R1	IR34014
NCP V7R2	IR34014
NCP V7R3	IR34014
NCP V7R4	IR34014
NCP V7R5	IR34014

The NCP APAR listed in Figure 31 is required if you code QSZALERT on the BUILD statement to determine if a session or station is using an inordinate number of buffers.

*Figure 31. NCP APAR Required to Include QSZALERT Function in NCP V7R5.*

<b>Product Name</b>	<b>APAR</b>
NCP V7R5	IR36167

The NCP APARs listed in Figure 32 are required if you want to use CIR (Committed Information Rate) for bandwidth management of the 3746 Model 900 frame-relay lines.

*Figure 32. NCP APARs Required for Committed Information Rate (CIR)*

<b>Product Name</b>	<b>APAR</b>
NCP V7R3	IR36380
NCP V7R4	IR36380
NCP V7R5	IR36380
NCP V7R6	IR36484

The NCP APAR listed in Figure 33 is required if you want to code TRANSBUF to indicate the number of transmission head buffers allocated for 3745 frame-relay physical lines.

Figure 33. NCP APAR Required for Transmission Head Buffers

Product Name	APAR
NCP V7R6	IR36886

#### 5.2.2.3.2 NPSI:

The NPSI APARs shown in Figure 34 are required to generate NPSI V3R8 with NCP V7R4, NCP V7R5, or NCP V7R6.

Figure 34. NPSI APARs Required to Generate NPSI V3R8 with NCP V7R4, NCP V7R5, or NCP V7R6

Product Name	APAR
NCP NPSI V3R8	IR32271 IR37825

**5.2.2.3.3 DFSMS:** The APARS listed in Figure 35 are required to use the High Level Assembler.

Figure 35. APARs Required to Use the High Level Assembler

Product Name	APAR
DFSMS/MVS Binder	OW26738
DFSMS/MVS Linkage Editor	OW27802
VM/ESA Linkage Editor	VM61534

**5.2.2.4 Toleration/Coexistence Requisites:** No toleration/coexistence requisites are required.

**5.2.2.5 Incompatibility (Negative) Requisites:** No incompatible products are associated with this program.

---

## 5.3 DASD Storage Requirements

The following SMP/E library space requirements are designed to accommodate installation and initial maintenance of SSP V4R7 MVS.

**Note:**

1. Abbreviations used for the data set type are:

- U** Unique data set used by only the FMIDs listed. In order 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 used by more than the FMIDs listed. In order 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.

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, please refer to 6.1.5, "Allocate SMP/E Target and Distribution Libraries" on page 27.

### 5.3.1 Storage Requirements for SMPCSI VSAM Cluster

Figure 36 provides the storage requirements for the SMPCSI VSAM cluster.

Figure 36. Storage Requirements for SMPCSI VSAM Cluster

DASD	Cylinders Required for SMPCSI DATA	Cylinders Required for SMPCSI INDEX
3380/3390	(16 3)	(3 3)

### 5.3.2 Storage Requirements for SMP/E Work Data Sets

Figure 37 provides the SMP/E work data set space required for installation.

Figure 37. Storage Requirements for SMP/E Work Data Sets

Library DDNAME	T	D S R O P E	R E C F M	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ Trks	No. of 3390 Trks	No. of DIR Blks
SMPWRK1	U	PO	FB	80	2	8800	1	1	5
SMPWRK2	U	PO	FB	80	2	8800	1	1	5
SMPWRK3	U	PO	FB	80	2	3200	1	1	20
SMPWRK4	U	PO	FB	80	2	3200	1	1	5
SMPWRK6	U	PO	FB	80	9	8800	2	2	500
SYSUT1	U	PS	--	--	1575	--	225	175	0
SYSUT2	U	PS	--	--	1575	--	225	175	0
SYSUT3	U	PS	--	--	1575	--	225	175	0
SYSUT4	U	PS	--	--	1575	--	225	175	0

The following table provides an estimate of the storage needed in the SMP/E data sets for SSP V4R7 MVS. The estimates must be added to those of any other programs and service being installed to determine the total additional storage requirements.

Figure 38. Storage Requirements for SMP/E Data Sets

Library DDNAME	T Y P E	D S R G	R E F M	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
SMPHOLD	U	PS	FB	80	5	8800	1	2	0
SMPMTS	U	PO	FB	80	757	8800	152	152	512
SMPPTS	U	PO	FB	80	500	8800	100	101	250
SMPSCDS	U	PO	FB	80	157	8800	32	32	53
SMPSTS	U	PO	FB	80	150	8800	30	25	99
SMPLOG	U	PS	VB	510	300	8800	60	50	0

The following figures list the target and distribution libraries (data sets) and their attributes needed to install SSP V4R7 MVS. The storage requirements of SSP V4R7 MVS must be added to the storage required by other programs having data in the same data set (library).

Figure 39. Storage Requirements for SSP V4R7 MVS Target Libraries

Library DDNAME	T Y P E	D S R G	R E F M	L R E C L	No. of BLKS	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR BLKS
SSPLIB	U	PO	U	0	1467	6144	210	163	9
SSPCLS1	U	PO	FB	80	221	8800	45	37	7
NUCLEUS*	U	PO	U	0	5	13030	2	2	1
LINKLIB*	U	PO	U	0	6	32760**	6	6	5

**Notes:**

\* Indicates allocation for HCD modules.

\*\* A block size smaller than 32760 must be used for IBM 3350 DASD.

Figure 40. Storage Requirements for SSP V4R7 MVS Distribution Libraries

Library DDNAME	T Y P E	D S R O G	R E C F M	L R E C L	No. of BLKS	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR BLKS
ASSPMAC1	U	PO	FB	80	27	8800	6	5	1
ASAMPNET	U	PO	FB	80	78	8800	16	13	1
ASSPSAMP	U	PO	FB	80	22	8800	5	4	1
SSPOBJ	U	PO	U	0	3069	6144	439	341	408
ASSPCLS1	U	PO	FB	80	221	8800	45	37	7
ASSPSRC1	U	PO	FB	80	17	8800	4	3	1

## 5.4 FMIDs Deleted

Please see the SMPMCS file in Appendix A for the FMIDs deleted by SSP V4R7 MVS.

## 5.5 Special Considerations

This section contains the special considerations required for this program.

### 5.5.1 Special Considerations for the HCD Facility

This program includes support for the MVS HCD facility. This support dynamically defines the NCP IBM 37xx channel connection to the MVS host. MVS/SP V4R2.2, or later, is required for this support.

The installation procedure includes JCL to install the SSP members for HCD. These members are installed into SYS1.NUCLEUS and SYS1.LINKLIB, where HCD expects to find them in order to support a device type of "NCP." If you do not require SSP HCD support, you can install these members into alternate target libraries (where the members can be maintained and, optionally, integrated into your system in the future).

### 5.5.2 Special Considerations for VTAM V4R1 (5665-289) or Later

SSP V3R8, or later, is required to format buffer traces from VTAM V4R1 or later.

ACF/TAP formats new generalized trace facility (GTF) trace records for Systems Network Architecture (SNA) over TCP/IP that use the ANYNET/MVS feature of VTAM V3R4.2 or VTAM V4R2.



---

## 6.0 Installation Instructions

This section describes the installation method and the step-by-step procedures to install this SSP V4R7

---

### 6.1 Installing SSP V4R7 MVS

#### 6.1.1 SMP/E Considerations for Installing SSP V4R7 MVS

This release of SSP V4R7 MVS is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. If you want to install SSP V4R7 MVS into its own SMP/E environment, several optional sample jobs have been provided to create and initialize the SMPCSI and the SMP/E control data sets. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

#### 6.1.2 SMP/E Environment

All SMP/E installation jobs provided assume that all necessary DD statements for the execution of SMP/E are defined using DDDEFs.

Sample jobs are provided to assist you in installing SSP V4R7 MVS.

The JCL samples in this section use lowercase character strings to represent items that must be changed to the appropriate uppercase names for your specific environment. You must change these character strings to the appropriate uppercase strings in order to install this program. Figure 41 provides a description of each lowercase character string.

*Figure 41. Character String Descriptions*

<b>Character String</b>	<b>Description</b>
xxxxxx	Volume ID of the library pack
sspzzzzz	High-level qualifier for data sets
ssptgt	SMP/E target zone used for SSP
ssplib	SMP/E distribution zone used for SSP
smpe	DSPREFIX for SMPTLIBs
catalog name	Catalog for VSAM CSI data set
tape	tape unit type

### 6.1.3 SMP/E Options Subentry Values

The recommended values for some SMP/E CSI subentries are shown in Figure 42 on page 26. Use of values lower than these may result in failures in the installation process. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. Refer to the SMP/E manuals for instructions on updating the global zone.

Figure 42 provides the SMP/E subentry space parameters required for installation.

Figure 42. Storage Requirements for SMP/E Subentries

SUBENTRY	Value
DSSPACE	(500,100,500)
PEMAX	8756

### 6.1.4 Unload the Sample JCL from the Product Tape

Sample installation jobs are provided on the distribution tape to help you install SSP V4R7 MVS. The following sample JCL will copy the SSP V4R7 MVS jobs from the tape. See Figure 43 for the JCL to unload the installation JCL. The JCL is contained in Relative File 4, DLIB=ASSPSAMP. MEMBER=IFWINJCL.

```
//IFWINJCL JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//*      THIS JOB COPIES THE INSTALLATION JCL FROM THE
//*      INSTALLATION TAPE TO DISK
//**
//COPY   EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=A
//TAPEIN  DD  DSN=IBM.HSP4470.F4,VOL=SER=SP4470,
//          UNIT=tape,DISP=OLD,LABEL=(5,SL)
//DISKOUT DD  DSN=IBM.HSP4470.INSTALL.JCL,VOL=SER=xxxxxx,
//          UNIT=SYSDA,SPACE=(CYL,(1,1,3)),
//          DISP=(NEW,CATLG)
//SYSUT3  DD  UNIT=SYSDA,SPACE=(80,(15,3))
//SYSIN   DD  *
          COPY I=TAPEIN,0=DISKOUT
          SELECT MEMBER=IFWINJCL
//*
```

Figure 43. JCL to Unload the Installation JCL

#### Expected Return Codes and Messages:

IFWINJCL job ends with return code equal zero (RC=0).

You can also access the sample installation jobs after performing an SMP/E RECEIVE for FMID HSP4470, and then copying the jobs from dataset **hlq.IBM.HSP4470.F4** to a work dataset for editing and submission.

### **6.1.5 Allocate SMP/E Target and Distribution Libraries**

Edit and submit sample job LIBRARY to allocate the SMP/E target and distribution libraries for SSP V4R7 MVS. Consult the instructions in the sample job for more information. See Figure 44 on page 28 for the JCL to allocate target and distribution libraries.

```

//LIBRARY JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*
//ALLOCATE EXEC PGM=IEFBR14
//*****
/** NOTE THAT ACTUAL DATA SET SIZES HAVE BEEN INCREASED
/** SLIGHTLY TO ALLOW FOR MAINTENANCE.
//*****
/**
/** DD STATEMENTS FOR THE TARGET LIBRARIES
/**
//SSPLIB DD DSN=sspzzzzz.SSPLIB,VOL=SER=xxxxxx,
//          DCB=(RECFM=U,LRECL=0,BLKSIZE=6144),
//          UNIT=SYSDA,SPACE=(6144,(2000,200,20)),
//          DISP=(NEW,CATLG)
//
//SSPCLS1 DD DSN=sspzzzzz.SSPCLS1,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//          UNIT=SYSDA,SPACE=(8800,(325,20,10)),
//          DISP=(NEW,CATLG)
//*****
/**
/** ALTERNATE TARGET LIBRARIES FOR SSP HCD MODULES
/**
/** HCD MEMBERS WILL BE INSTALLED IN SYS1.NUCLEUS AND
/** SYS1.LINKLIB. IF YOU WANT TO INSTALL THESE MEMBERS
/** INTO ALTERNATE DATA SETS, DO THE FOLLOWING:
/**
/** - ALLOCATE THE ALTERNATE DATA SETS BY UPDATING
/** AND UNCOMMENTING THE DD STATEMENT FOR NUCLEUS
/** AND LINKLIB BELOW.
/**
/** FOR MORE INFORMATION ON HCD, PLEASE REFER TO THE
/** "SPECIAL CONSIDERATIONS FOR THE HCD FACILITY"
/** SECTION IN THE PROGRAM DIRECTORY.
/**
//*****
//*NUCLEUS DD DSN=sspzzzzz.NUCLEUS,VOL=SER=xxxxxx,
//          DCB=(RECFM=U,LRECL=0,BLKSIZE=13030),
//          UNIT=SYSDA,SPACE=(13030,(15,5,30)),
//          DISP=(NEW,CATLG)
//*LINKLIB DD DSN=sspzzzzz.LINKLIB,VOL=SER=xxxxxx,
//          DCB=(RECFM=U,LRECL=0,BLKSIZE=32760),
//          UNIT=SYSDA,SPACE=(32760,(15,5,30)),
//          DISP=(NEW,CATLG)

```

Figure 44 (Part 1 of 2). JCL to Allocate Target and Distribution Libraries

```

//*****
//***
//*** DD STATEMENTS FOR THE DISTRIBUTION LIBRARIES
//***
//ASSPMAC1 DD DSN=sspzzzzz.ASSPMAC1,VOL=SER=xxxxxx,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            UNIT=SYSDA,SPACE=(8800,(40,5,4)),
//            DISP=(NEW,CATLG)
//*
//ASAMPNET DD DSN=sspzzzzz.ASAMPNET,VOL=SER=xxxxxx,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            UNIT=SYSDA,SPACE=(8800,(115,10,7)),
//            DISP=(NEW,CATLG)
//*
//ASSPSAMP DD DSN=sspzzzzz.ASSPSAMP,VOL=SER=xxxxxx,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            UNIT=SYSDA,SPACE=(8800,(32,5,6)),
//            DISP=(NEW,CATLG)
//*
//SSPOBJ DD DSN=sspzzzzz.SSPOBJ,VOL=SER=xxxxxx,
//            DCB=(RECFM=U,LRECL=0,BLKSIZE=6144),
//            UNIT=SYSDA,SPACE=(6144,(3750,300,450)),
//            DISP=(NEW,CATLG)
//*
//ASSPCLS1 DD DSN=sspzzzzz.ASSPCLS1,VOL=SER=xxxxxx,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            UNIT=SYSDA,SPACE=(8800,(325,20,10)),
//            DISP=(NEW,CATLG)
//*
//ASSPSRC1 DD DSN=sspzzzzz.ASSPSRC1,VOL=SER=xxxxxx,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            UNIT=SYSDA,SPACE=(8800,(28,5,4)),
//            DISP=(NEW,CATLG)
//*

```

Figure 44 (Part 2 of 2). JCL to Allocate Target and Distribution Libraries

#### Expected Return Codes and Messages:

LIBRARY job ends with return code equal zero (RC=0).

## 6.1.6 Allocate Non-VSAM SMP/E Data Sets (Optional)

If you choose to create a new SMP/E environment, the following is an example of a job to allocate the non-VSAM SMP/E data sets. Sample job NONVSAM allocates the non-VSAM SMP/E data sets for SSP V4R7 MVS. See Figure 45 for the JCL to allocate non-VSAM SMP/E data sets.

```
//NONVSAM JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//*      ALLOCATE ALL NECESSARY NON-VSAM
//*      SMP DATA SETS.
//**
//ALLOCATE EXEC PGM=IEFBR14
//SMPHOLD DD DSN=sspzzzzz.SMPHOLD,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800,DSORG=PS),
//          UNIT=SYSDA,DISP=(NEW,CATLG),SPACE=(8800,(5))
//SMPMTS  DD DSN=sspzzzzz.SMPMTS,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//          UNIT=SYSDA,SPACE=(8800,(757,30,512)),
//          DISP=(NEW,CATLG)
//SMPPTS  DD DSN=sspzzzzz.SMPPTS,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//          UNIT=SYSDA,SPACE=(8800,(500,30,250)),
//          DISP=(NEW,CATLG)
//SMPSCDS DD DSN=sspzzzzz.SMPSCDS,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//          UNIT=SYSDA,SPACE=(8800,(157,10,53)),
//          DISP=(NEW,CATLG)
//SMPSTS  DD DSN=sspzzzzz.SMPSTS,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//          UNIT=SYSDA,SPACE=(8800,(150,10,99)),
//          DISP=(NEW,CATLG)
//SMPLOG  DD DSN=sspzzzzz.SMPLOG,VOL=SER=xxxxxx,
//          DCB=(RECFM=VB,LRECL=510,BLKSIZE=8800),
//          UNIT=SYSDA,SPACE=(8800,(300,30)),
//          DISP=(NEW,CATLG)
//**
```

Figure 45. JCL to Allocate Non-VSAM SMP/E Data Sets (Optional)

### Expected Return Codes and Messages:

NONVSAM job ends with return code equal zero (RC=0).

## 6.1.7 Allocate the VSAM CSI Data Sets (Optional)

If you choose to create a new SMP/E environment, the following is an example of a job to allocate the VSAM CSI data sets. Sample job CSIALLOC allocates the SMP/E Consolidated Software Inventory (CSI) data sets for SSP V4R7 MVS.

See Figure 46 on page 31 for the JCL to allocate the CSI data set.

```

//CSIALLOC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** ALLOCATE THE SMP CSI (CONSOLIDATED
/** SOFTWARE INVENTORY) DATA SET FOR SSP.
/**
//ALLOCATE EXEC PGM=IDCAMS
//ZPOOL DD DSN=SYS1.MACLIB(GIMZPOOL),DISP=SHR
//SYSPRINT DD SYSOUT=A
//SYSIN DD *
DEFINE CLUSTER(
    NAME(sspzzzzz.GLOBAL.CSI)
    FREESPACE(10,5)
    KEYS(24 0)
    RECORDSIZE(24 143)
    SHAREOPTIONS(2,3)
    UNIQUE
    VOLUMES(xxxxxx)
)
DATA(
    NAME(sspzzzzz.GLOBAL.DATA)
    CONTROLINTERVALSIZE(4096)
    CYLINDERS(1 1)
)
INDEX(
    NAME(sspzzzzz.GLOBAL.INDEX)
    CYLINDERS(1 1)
    IMBED
)
CATALOG(catalog name)
DEFINE CLUSTER(
    NAME(sspzzzzz.TZONE.CSI)
    FREESPACE(10,5)
    KEYS(24 0)
    RECORDSIZE(24 143)
    SHAREOPTIONS(2,3)
    UNIQUE
    VOLUMES(xxxxxx)
)
DATA(
    NAME(sspzzzzz.TZONE.DATA)
    CONTROLINTERVALSIZE(4096)
    CYLINDERS(10 1)
)

```

Figure 46 (Part 1 of 2). JCL to Allocate the CSI Data Set (Optional)

```

        INDEX(
            NAME(sspzzzzz.TZONE.INDEX)
            CYLINDERS(1 1)
            IMBED
        )
    CATALOG(catalog name)
DEFINE CLUSTER(
    NAME(sspzzzzz.DZONE.CSI)
    FREESPACE(10,5)
    KEYS(24 0)
    RECORDSIZE(24 143)
    SHAREOPTIONS(2,3)
    UNIQUE
    VOLUMES(xxxxxx)
)
    DATA(
        NAME(sspzzzzz.DZONE.DATA)
        CONTROLINTERVALSIZE(4096)
        CYLINDERS(5 1)
    )
    INDEX(
        NAME(sspzzzzz.DZONE.INDEX)
        CYLINDERS(1 1)
        IMBED
    )
    CATALOG(catalog name)
/*
/*      INITIALIZE THE CSI DATASETS
/*
/*
REPRO OUTDATASET(sspzzzzz.GLOBAL.CSI) INFILE(ZPOOL)
REPRO OUTDATASET(sspzzzzz.TZONE.CSI) INFILE(ZPOOL)
REPRO OUTDATASET(sspzzzzz.DZONE.CSI) INFILE(ZPOOL)
//*

```

Figure 46 (Part 2 of 2). JCL to Allocate the CSI Data Set (Optional)

#### Expected Return Codes and Messages:

CSIALLOC job ends with return code equal zero (RC=0).

### 6.1.8 Initialize the VSAM CSI Data Sets (Optional)

If you choose to create a new SMP/E environment, the following is an example of a job to initialize the VSAM CSI data sets. Sample job CSIOPTS initializes the VSAM CSI data set for SSP SSP V4R7 MVS. See Figure 47 on page 33 for the JCL to add necessary entries and utilities to SMP/E CSI data sets.



```

//CSIOPTS JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** ADD THE NECESSARY ENTRIES AND UTILITIES TO THE
/** THE SMP/E CSI DATA SETS TO BE USED FOR SSP.
/**
//INIT EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPLOG DD DSN=sspzzzzz.SMPLOG,DISP=SHR
//SMPPTS DD DSN=sspzzzzz.SMPPTS,DISP=SHR
//SMPCNTL DD *
SET BDY(GLOBAL) /* --- SETTING CSI UTILITIES AND PARAMETERS
*-----*
* FOR INFORMATION, SEE THE SMP/E REFERENCE "CSI GLOBALZONE *
* OPTIONS ENTRY". ALSO SEE "SYS1.SAMPLIB(GIMSAMPU)". *
*-----*/.
UCLIN .
ADD GLOBALZONE /* SETUP ZONE DEF ENTRY - GLOBAL ZONE */
SREL(P004) /* SREL VALUE */
OPTIONS(OPTNCP) /* DEFAULT OPTIONS ENTRY FOR NCP */
ZONEINDEX( /* ZONE INDICES */
(ssptgt,sspzzzzz.TZONE.CSI,TARGET) /* SSP TARGET ZONE*/
(sspdlib,sspzzzzz.DZONE.CSI,DLIB)) /* SSP DLIB ZONE */
ADD OPTIONS(OPTNCP) /* ADD AN OPTIONS ENTRY */
DSPREFIX(smpe) /* PREFIX FOR SMPTLIB DATA SETS */
DSSPACE(500,100,500) /*SPACE ALLOC FOR SMPTLIB DATA SETS*/
NUCID(1) /* MVS ONLY OPERAND */
PAGELEN(58) /* SETUP SMPDOUT PAGELENGTH */
PEMAX(8756) /* SET LARGE PEMAX VALUE */
NOPURGE /* RETAIN ALL SMP DATASETS */
RETRYDDN(ALL) . /* RETRY ALL COMPRESSES */
ADD UTILITY(IEWL) /* LINKAGE EDITOR UTILITY */
NAME(IEWL) /* PROGRAM NAME */
PARM(SIZE=(4096K,64K),LET,LIST,XREF,NCAL) . /* PARAMETERS*/
ADD OPTIONS(OPTNCP)
LKED(IEWL).
ADD UTILITY(IEBCOPY) /* COMPRESS UTILITY ENTRY */
NAME(IEBCOPY) . /* PROGRAM NAME */
ADD OPTIONS(OPTNCP) /* CONNECT TO OPTIONS */
COMP(IEBCOPY) . /* COMPRESS INFO NOW HERE */
ENDUCL .

```

Figure 47 (Part 1 of 2). JCL to Add Necessary Entries and Utilities to SMP/E CSI Data Sets (Optional)

```

SET BDY(ssptgt) .          /* INITIALIZE TARGET ZONE      */
UCLIN .
  ADD TARGETZONE(ssptgt) /* SETUP ZONE DEFINITION ENTRY */
  SREL(P004)             /* SREL VALUE                   */
  RELATED(sspdlib)       /* RELATED DLIB ZONE NAME       */
  OPTIONS(OPTNCP) .     /* ADD AN OPTIONS ENTRY        */
ENDUCL .
SET BDY(sspdlib) .       /* INITIALIZE DLIB ZONE        */
UCLIN .
  ADD DLIBZONE(sspdlib) /* SETUP ZONE DEFINITION ENTRY */
  SREL(P004)             /* SREL VALUE                   */
  RELATED(ssptgt)       /* RELATED TARGET ZONE NAME     */
  OPTIONS(OPTNCP) .     /* ADD AN OPTIONS ENTRY        */
ENDUCL .
SET BDY(GLOBAL) .       /* GO BACK TO GLOBAL ZONE      */
LIST ALLZONES .         /* VERIFY CSI INITIALIZATION   */
/**

```

Figure 47 (Part 2 of 2). JCL to Add Necessary Entries and Utilities to SMP/E CSI Data Sets (Optional)

#### Expected Return Codes and Messages:

CSIOPTS job ends with return code equal zero (RC=0).

### 6.1.9 Create DDDEF Entries

Edit and submit sample job DDDEF to create DDDEF entries for all of the SMP/E libraries for SSP V4R7 MVS. Note that the SMP/E control data sets are included in the sample DDDEF job. If you are using an existing SMP/E environment, all of the DDDEFs for SMP/E data sets will cause the job to end with a nonzero return code. See Figure 48 on page 35 for the JCL to create DDDEF entries.

```

//DDDEF JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* SEE COMMENTS BELOW ABOUT THE NUCLEUS AND LINKLIB DATASETS */
//*****
//*****
//* ADD THE SMP LIBRARY DD NAMES TO THE GLOBAL ZONE */
//*****
//GZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//      TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPLOG DD DSN=sspzzzzz.SMPLOG,DISP=SHR
//SMPPTS DD DSN=sspzzzzz.SMPPTS,DISP=SHR
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
  SET BDY(GLOBAL) .
  UCLIN .
  ADD DDDEF(SMPOUT) SYSOUT(A) .
  ADD DDDEF(SYSPRINT) SYSOUT(A) .
  ADD DDDEF(SYSUT1) UNIT(SYSDA) SPACE(15,5) CYL .
  ADD DDDEF(SYSUT2) UNIT(SYSDA) SPACE(15,5) CYL .
  ADD DDDEF(SYSUT3) UNIT(SYSDA) SPACE(15,5) CYL .
  ADD DDDEF(SYSUT4) UNIT(SYSDA) SPACE(15,5) CYL .

  ADD DDDEF(SMPWRK1) UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
    BLK(8800) .
  ADD DDDEF(SMPWRK2) UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
    BLK(8800) .
  ADD DDDEF(SMPWRK3) UNIT(SYSDA) SPACE(2,1) DIR(20) DELETE
    BLK(3200) .
  ADD DDDEF(SMPWRK4) UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
    BLK(3200) .
  ADD DDDEF(SMPWRK6) UNIT(SYSDA) SPACE(9,1) DIR(500) DELETE
    BLK(8800) .
  ADD DDDEF(SMPLOG) DATASET(sspzzzzz.SMPLOG) VOLUME(xxxxxx)
    UNIT(SYSDA) MOD .
  ADD DDDEF(SMPHOLD) DATASET(sspzzzzz.SMPHOLD) VOLUME(xxxxxx)
    UNIT(SYSDA) MOD .
  ADD DDDEF(SMPPTS) DATASET(sspzzzzz.SMPPTS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
  ADD DDDEF(SMPPTS) DATASET(sspzzzzz.SMPPTS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
  ADD DDDEF(SMPSCDS) DATASET(sspzzzzz.SMPSCDS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
  ADD DDDEF(SMPSTS) DATASET(sspzzzzz.SMPSTS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
  ENDUCL .
//**

```

Figure 48 (Part 1 of 4). JCL to Create DDDEF Entries

```

//*****
//*   ADD THE DISTRIBUTION LIBRARY DD NAMES TO THE   */
//*   DISTRIBUTION ZONE.                             */
//*****
//DZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//      TIME=1440
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPLOG DD DSN=sspzzzzz.SMPLOG,DISP=SHR
//SMPPTS DD DSN=sspzzzzz.SMPPTS,DISP=SHR
//SMPCNTL DD *
SET BDY(sspdlib) .
UCLIN .
ADD DDDEF(ASSPMAC1) DATASET(sspzzzzz.ASSPMAC1)
                    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASAMPNET) DATASET(sspzzzzz.ASAMPNET)
                    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASSPSAMP) DATASET(sspzzzzz.ASSPSAMP)
                    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASSPCLS1) DATASET(sspzzzzz.ASSPCLS1)
                    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASSPSRC1) DATASET(sspzzzzz.ASSPSRC1)
                    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(SSPOBJ)   DATASET(sspzzzzz.SSPOBJ)
                    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(SMPOUT)   SYSOUT(A) .
ADD DDDEF(SYSPRINT) SYSOUT(A) .
ADD DDDEF(SYSUT1)   UNIT(SYSDA) SPACE(15,5) CYL .
ADD DDDEF(SYSUT2)   UNIT(SYSDA) SPACE(15,5) CYL .
ADD DDDEF(SYSUT3)   UNIT(SYSDA) SPACE(15,5) CYL .
ADD DDDEF(SYSUT4)   UNIT(SYSDA) SPACE(15,5) CYL .

ADD DDDEF(SMPWRK1)  UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
                    BLK(8800) .
ADD DDDEF(SMPWRK2)  UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
                    BLK(8800) .
ADD DDDEF(SMPWRK3)  UNIT(SYSDA) SPACE(2,1) DIR(20) DELETE
                    BLK(3200) .
ADD DDDEF(SMPWRK4)  UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
                    BLK(3200) .
ADD DDDEF(SMPWRK6)  UNIT(SYSDA) SPACE(9,1) DIR(500) DELETE
                    BLK(8800) .
ADD DDDEF(SMPLOG)   DATASET(sspzzzzz.SMPLOG) VOLUME(xxxxxx)
                    UNIT(SYSDA) MOD .

```

Figure 48 (Part 2 of 4). JCL to Create DDDEF Entries

```

ADD DDDEF(SMPHOLD) DATASET(sspzxxxx.SMPHOLD) VOLUME(xxxxxx)
UNIT(SYSDA) SHR.
ADD DDDEF(SMPMTS) DATASET(sspzxxxx.SMPMTS) VOLUME(xxxxxx)
UNIT(SYSDA) SHR .
ADD DDDEF(SMPPTS) DATASET(sspzxxxx.SMPPTS) VOLUME(xxxxxx)
UNIT(SYSDA) SHR .
ADD DDDEF(SMPSCDS) DATASET(sspzxxxx.SMPSCDS) VOLUME(xxxxxx)
UNIT(SYSDA) SHR .
ADD DDDEF(SMPSTS) DATASET(sspzxxxx.SMPSTS) VOLUME(xxxxxx)
UNIT(SYSDA) SHR .
ADD DDDEF(SYSLIB) CONCAT(SMPMTS).
ENDUCL .
/*
/*****
/* ADD THE DISTRIBUTION LIBRARY AND TARGET LIBRARY */
/* DD NAMES TO THE TARGET ZONE. */
/*****
//TZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=sspzxxxx.GLOBAL.CSI,DISP=SHR
//SMPLOG DD DSN=sspzxxxx.SMPLLOG,DISP=SHR
//SMPPTS DD DSN=sspzxxxx.SMPPTS,DISP=SHR
//SMPCNTL DD *
SET BDY(ssptgt) .
UCLIN .
ADD DDDEF(SMPOUT) SYSOUT(A).
ADD DDDEF(SYSPRINT) SYSOUT(A).
ADD DDDEF(SYSUT1) UNIT(SYSDA) SPACE(15,5) CYL .
ADD DDDEF(SYSUT2) UNIT(SYSDA) SPACE(15,5) CYL .
ADD DDDEF(SYSUT3) UNIT(SYSDA) SPACE(15,5) CYL .
ADD DDDEF(SYSUT4) UNIT(SYSDA) SPACE(15,5) CYL .

ADD DDDEF(SMPWRK1) UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
BLK(8800).
ADD DDDEF(SMPWRK2) UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
BLK(8800).
ADD DDDEF(SMPWRK3) UNIT(SYSDA) SPACE(2,1) DIR(20) DELETE
BLK(3200).
ADD DDDEF(SMPWRK4) UNIT(SYSDA) SPACE(2,1) DIR(5) DELETE
BLK(3200).

```

Figure 48 (Part 3 of 4). JCL to Create DDDEF Entries

```

ADD DDDEF(SMPWRK6) UNIT(SYSDA) SPACE(9,1) DIR(500) DELETE
    BLK(8800).
ADD DDDEF(SMPLOG) DATASET(sspzzzzz.SMPLOG) VOLUME(xxxxxx)
    UNIT(SYSDA) MOD .
ADD DDDEF(SMPHOLD) DATASET(sspzzzzz.SMPHOLD) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR.
ADD DDDEF(SMPMTS) DATASET(sspzzzzz.SMPMTS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
ADD DDDEF(SMPPTS) DATASET(sspzzzzz.SMPPTS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
ADD DDDEF(SMPSCDS) DATASET(sspzzzzz.SMPSCDS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
ADD DDDEF(SMPSTS) DATASET(sspzzzzz.SMPSTS) VOLUME(xxxxxx)
    UNIT(SYSDA) SHR .
ADD DDDEF(SYSLIB) CONCAT(SMPMTS).
ADD DDDEF(ASSPMAC1) DATASET(sspzzzzz.ASSPMAC1)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASAMPNET) DATASET(sspzzzzz.ASAMPNET)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASSPSAMP) DATASET(sspzzzzz.ASSPSAMP)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASSPCLS1) DATASET(sspzzzzz.ASSPCLS1)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(ASSPSRC1) DATASET(sspzzzzz.ASSPSRC1)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(SSPOBJ) DATASET(sspzzzzz.SSPOBJ)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(SSPLIB) DATASET(sspzzzzz.SSPLIB)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(SSPCLS1) DATASET(sspzzzzz.SSPCLS1)
    VOLUME(xxxxxx) UNIT(SYSDA) SHR .
    /*****
    /* REMOVE THE COMMENTS FROM THE NUCLEUS AND */
    /* THE LINKLIB 'ADD' STATEMENTS BELOW IF */
    /* YOU WANT TO INSTALL HCD MEMBERS INTO */
    /* ALTERNATE DATA SETS */
    /*****
/* ADD DDDEF(NUCLEUS) DATASET(sspzzzzz.NUCLEUS) */
/* VOLUME(xxxxxx) UNIT(SYSDA) SHR . */
/* ADD DDDEF(LINKLIB) DATASET(sspzzzzz.LINKLIB) */
/* VOLUME(xxxxxx) UNIT(SYSDA) SHR . */
ENDUCL .
/**

```

Figure 48 (Part 4 of 4). JCL to Create DDDEF Entries

### Expected Return Codes and Messages:

DDDEF job ends with return code equal zero (RC=0). If any of the DDDEF entries already exist, the DDDEF job will end with a return code of 8 (RC=8). Check the output to determine the cause of the nonzero return code.

## 6.1.10 Perform SMP/E RECEIVE

Edit and submit sample job SSPREC to perform the SMP/E RECEIVE for SSP V4R7 MVS. See Figure 49 for the JCL to receive the data from the product tape.

```
//SSPREC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//* RECEIVE THE DATA FROM THE PRODUCT TAPE
//**
//RECV EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPOUT DD SYSOUT=A
//SMPPRINT DD SYSOUT=A
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPTLIB DD UNIT=SYSDA,DISP=OLD,VOL=SER=xxxxxx
//SMPPTFIN DD UNIT=tape,DISP=OLD,VOL=SER=SP4470,
// LABEL=(,SL),DSN=SMPMCS
//SMPCNTL DD *
SET BDY(GLOBAL) .
RECEIVE SELECT(HSP4470) SYSMODS LIST .
//*
```

Figure 49. JCL to Perform SMP/E RECEIVE

### Expected Return Codes and Messages:

SSPREC job ends with return code equal zero (RC=0).

**Note:** If you obtained SSP V4R7 MVS as part of a CBPDO, you can use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the SSP V4R7 MVS FMIDs as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.

## 6.1.11 Perform SMP/E APPLY CHECK

Edit and submit sample job SSPAPPK to perform an SMP/E APPLY CHECK for SSP V4R7 MVS. See Figure 50 on page 40 for the JCL to perform SMP/E APPLY CHECK.

```

//SSPAPPK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** BEFORE ACTUALLY UPDATING THE TARGET LIBRARIES CHECK
/** FOR ERRORS, THE LIBRARIES AFFECTED, AND ANY SYSMODS
/** THAT WOULD BE REGRESSED.
/**
//APPCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(ssptgt) .
APPLY SELECT(HSP4470) CHECK .
/**

```

Figure 50. JCL to Perform SMP/E APPLY CHECK

#### Expected Return Codes and Messages:

SSPAPPK job ends with return code equal zero (RC=0).

### 6.1.12 Perform SMP/E APPLY

Edit and submit sample job SSPAPP to perform an SMP/E APPLY for SSP V4R7 MVS. See Figure 51 for the JCL to perform SMP/E APPLY.

```

//SSPAPP JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** UPDATE THE TARGET LIBRARIES
/**
//APPLY EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(ssptgt) .
APPLY SELECT(HSP4470) .
/**

```

Figure 51. JCL to Perform SMP/E APPLY

#### Expected Return Codes and Messages:

SSPAPP job ends with return code equal zero (RC=0).

### 6.1.13 Perform SMP/E ACCEPT CHECK

Edit and submit sample job SSPACCK to perform an SMP/E ACCEPT CHECK for SSP V4R7 MVS. See Figure 52 on page 41 for the JCL to perform ACCEPT CHECK.



```

//SSPACCK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** BEFORE ACTUALLY UPDATING THE DISTRIBUTION LIBRARIES
/** CHECK FOR ERRORS, THE LIBRARIES AFFECTED, AND ANY
/** SYSMODS THAT WOULD BE REGRESSED.
/**
//ACCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(sspdlib) .
ACCEPT SELECT(HSP4470) CHECK .
/**

```

Figure 52. JCL to Perform ACCEPT CHECK

#### Expected Return Codes and Messages:

SSPACCK job ends with return code equal zero (RC=0).

### 6.1.14 Perform SMP/E ACCEPT

Edit and submit sample job SSPACC to perform an SMP/E ACCEPT for SSP V4R7 MVS.

Before using SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. This will cause entries produced from JCLIN to be saved in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals. See Figure 53 for the JCL to update the distribution library.

```

//SSPACC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** UPDATE THE DISTRIBUTION LIBRARIES
/**
//ACCEPT EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(sspdlib) .
ACCEPT SELECT(HSP4470) .
/**

```

Figure 53. JCL to Perform SMP/E ACCEPT

#### Expected Return Codes and Messages:

SSPACC job ends with return code equal zero (RC=0).

### 6.1.15 Rejecting SMPTLIBs (Optional)

If you kept the NOPURGE option in the sample CSIOPTS JCL (shown in Figure 47 on page 33), you can reject the SMPTLIBs using the JCL shown in Figure 54 on page 42.

```
//SSPREJ JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//*****
//*                                                                 *
//* JCL TO DELETE SSP CSI ENTRIES AND THE SMPTLIBS                *
//*                                                                 *
//* SPECIFICALLY THIS JOB WILL DELETE:                            *
//* - GLOBAL ZONE SYSMOD ENTRIES                                  *
//* - HOLDATA ENTRIES                                            *
//* - SMPPTS MCS ENTRIES                                          *
//* - ANY ASSOCIATED SMPTLIB DATA SETS                           *
//*                                                                 *
//* THIS JOB WILL GENERATE A NONZERO RETURN CODE                  *
//* IF THE SMPTLIBs HAVE BEEN PURGED FOR HSP4470.                 *
//*                                                                 *
//*****
//REJECT EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//          TIME=1440
//SMPOUT DD SYSOUT=A
//SMPPRINT DD SYSOUT=A
//SMPCSI DD DSN=sspzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
//          SET BDY(GLOBAL) .
//          REJECT SELECT(HSP4470) BYPASS(APPLYCHECK,ACCEPTCHECK) .
//**
```

Figure 54. JCL to Reject SMP/E Entries and SMPTLIBs (Optional)

#### Expected Return Codes and Messages:

SSPREJ job ends with return code equal zero (RC=0), unless the SMPTLIB data sets have been purged.

---

## 6.2 Post-Installation Information

The SSP, NCP, and controller-resident NCP-related products share post-installation procedures. After you install all products needed for the system environment, your system is ready for post-installation maintenance processing. If a PTF cumulative service tape is included with the order, install the maintenance now.

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder may issue messages documenting unresolved external references, resulting in a return code of 4 from the ACCEPT step. These messages can be ignored, because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

Ensure the latest copy of SSP is retrieved for execution when you run SSP jobs. Remove all previous copies of the utility from the link list and concatenate the SSPLIB to the link list. If the SSPLIB is not concatenated to the link list, a STEPLIB DD card must be used in all SSP jobs.

The SSPLIB data set for this program must be installed into an APF-authorized library.

### 6.2.1 Sample NCP Generation Definitions

The sample JCL shown in Figure 55 is used to print and punch the NDF sample network generation definition data sets. The sample network is described in the *NCP, SSP, and EP Resource Definition Guide*.

```
//PRMD1 JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//* PUNCH THE DATA SETS THAT CONTAIN
//* THE NCP SAMPLE NETWORK GENERATION DEFINITIONS.
//**
//NDFPRINT EXEC PGM=IEBTPCH
//SYSUT1 DD DSN=sspzzzzz.ASAMPNET,VOL=SER=xxxxxx,
// UNIT=SYSDA,DISP=SHR
//SYSUT2 DD SYSOUT=B,DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
//SYSPRINT DD SYSOUT=A
//SYSIN DD *
// PUNCH TYPORG=P0
//*
```

Figure 55. Sample JCL to Print and Punch

#### Expected Return Codes and Messages:

PRMD1 job ends with return code equal zero (RC=0).

Use the sample JCL shown in Figure 56 on page 44 to print an individual member of the distribution library ASSPSAMP.

```
//PRMD2 JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//* PRINT THE SAMPLE JCL FILES BY SPECIFYING
//* THE PROPER MEMBER NAME ON THE SYSUT1 DD STATEMENT.
//**
//NDFPRINT EXEC PGM=IEBGENER
//SYSUT1 DD DSN=sspzzzzz.ASSPSAMP(IFWMVSN),VOL=SER=xxxxxx,
// UNIT=SYSDA,DISP=SHR
//SYSUT2 DD SYSOUT=A,DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
//SYSPRINT DD SYSOUT=A
//SYSIN DD DUMMY
/*
```

Figure 56. Sample JCL to Print an Individual Member of the ASSPSAMP Distribution Library

#### **Expected Return Codes and Messages:**

PRMD2 job ends with return code equal zero (RC=0).

---

## **6.3 Post-Installation Considerations**

This section contains post-installation considerations for this program.

### **6.3.1 For an NCP-Only System**

If you are installing an NCP-only system and have not already installed NCP, refer to the NCP program directory for product information and installation instructions. If you have already installed NCP, you have completed installation for an NCP-only system, and you are ready to generate NCP.

### **6.3.2 For a PEP (NCP and EP) System**

If you are installing a PEP system and have not already installed NCP or EP, refer to the appropriate program directory for product information and installation instructions. If you have already installed both NCP and EP, you have completed installation of a PEP system, and you are ready to generate NCP and PEP.

### **6.3.3 For an EP Standalone System**

If you are installing EP for a standalone environment system and have not already installed NCP and EP, refer to the appropriate program directory for product information and installation instructions. If you have already installed NCP and EP, you have completed installation for an EP standalone system, and you are ready to generate EP.

### **6.3.4 For Previous Releases of SSP**

The SSP loader utility consists of the load modules IFLOADRN, IFLLD1P1, IFLLD1P2, IFLLD2P1, IFLLD2P2, and IFWLEVEL. If copies of these modules from an earlier SSP release are in your SYS1.LINKLIB data set, you should delete them before installing the new SSP release. By doing this, you will guard against accidentally executing an outdated version of the loader utility.

The SSP dumper utility consists of the load modules IFLH1DAS, IFLH1DIO, IFLH170X, IFWDMPT1, IFWDMPT2, IFWH1LIO, and IFWH1WRT. If copies of these modules from an earlier SSP release are in your SYS1.LINKLIB data set, you should delete them before installing the new SSP release. By doing this, you will guard against accidentally executing an outdated version of the dumper utility.



## Appendix A. Install Logic

### A.1 SMP/E Modification Control Statements

The SMP/E Modification Control Statements (SMPMCS) for SSP V4R7 MVS are contained in the SMPMCS file on the installation tape. The SMPMCS for each FMID in the product will be loaded to the SMPPTS dataset, with a member name matching the FMID, when the FMID is SMP/E RECEIVED. You can browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

This appendix contains a portion of the installation logic for this program.

If you ordered this program as an individual product (not in a CBIPO or CBPDO), the entire set of SMP/E modification control statements (MCS) for the installation can be obtained by printing the first file of the product tape.

Figure 57 provides a portion of the SMP/E installation logic for SSP V4R7 MVS.

```
++FUNCTION(HSP4470 ) FESN(0566641 ) REWORK(1999046 )
                                RFDSNPF(IBM      ) FILES(4)
/*****
/* COPYRIGHT = LICENSED MATERIALS - PROPERTY OF IBM */
/* 5655-041 (C) COPYRIGHT IBM CORP. 1984, 1998.      */
/* ALL RIGHTS RESERVED.                               */
/* U.S. GOVERNMENT USERS RESTRICTED RIGHTS -        */
/* USE, DUPLICATION OR DISCLOSURE RESTRICTED BY     */
/* GSA ADP SCHEDULE CONTRACT WITH IBM CORP.         */
/*****
.
++VER(P004) DELETE(ESP0100  ESP1200  ESP1201  ESP1300  HSP2100
                   HSP2105  HSP2200  HSP3102  HSP3202  HSP3302
                   HSP3303  HSP3402  HSP3412  HSP3502  HSP3510
                   HSP3602  HSP3702  HSP3802  HSP3902  HSP4410
                   HSP4420  HSP4430  HSP4440  HSP4450  HSP4460)
                   SUP(AR37995  AR38721  AR38807  AR38809  AR38812
                      AR38815  AR39016  AR39057  AR39060  AR39094
                      AR39098  AR39329  AR39354  AR39356  AR39476
                      AR39595  AR39652  AR39693  AR39699  AR39713
                      UR50523  UR50525  UR50527  UR50529  UR50787
                      UR50799  UR50816  UR50826  UR50832  UR50837
                      UR50868  UR50869  UR50876  UR50889  UR50895
                      UR50898  UR50899  UR50915  UR50916 ) .
++JCLIN                                RELFILE(1) .
```

Figure 57. Installation Logic

You can browse these members using TSO/E or ISPF. Figure 58 on page 48 provides a sample job to print the SMPMCS.

```
//SSPLOGIC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//* PRINT THE SMPMCS FILE FROM THE PRODUCT TAPE
//**
//GENER EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN=SMPMCS,VOL=SER=SP4470,
// UNIT=tape,DISP=OLD,LABEL=(1,SL)
//SYSUT2 DD SYSOUT=A
//SYSIN DD DUMMY
//*
```

Figure 58. Job to Print the SMP/E Modification Control Statements

**Expected Return Codes and Messages:**

SSPLOGIC job ends with return code equal zero (RC=0).



---

## Appendix B. APARs Incorporated into this Program

The following SSP V4R6 APARs are incorporated into this program:

IR34180	IR37075
IR35247	IR37087
IR36395	IR37111
IR36409	IR37114
IR36452	IR37123
IR36500	IR37162
IR36521	IR37167
IR36547	IR37179
IR36621	IR37214
IR36624	IR37244
IR36664	IR37286
IR36671	IR37371
IR36740	IR37372
IR36781	IR37433
IR36789	IR37452
IR36802	IR37456
IR36805	IR37655
IR36841	IR37692
IR36842	IR37741
IR36855	IR37752
IR36866	IR37828
IR36895	IR37852
IR36896	IR37914
IR36904	IR37918
IR37011	IR37924
IR37028	IR37964
IR37069	IR38074
IR37072	

---

### B.1 PTFs and APARs Incorporated into this Service Level

The following SSP V4R7 PTFs and their corresponding APARs are incorporated into this service level.

*Figure 59 (Page 1 of 2). SSP V4R7 PTFs, Corresponding APARs, and Level for Service Level 9908*

---

PTF	CORRESPONDING APAR(S)	LEVEL
UR50523	IR38807	RSU9812

---

Figure 59 (Page 2 of 2). SSP V4R7 PTFs, Corresponding APARs, and Level for Service Level 9908

PTF	CORRESPONDING APAR(S)	LEVEL
UR50525	IR38809	PUT9811
UR50527	IR38812	PUT9811
UR50529	IR38815	PUT9811
UR50787	IR38721	RSU9901
UR50799	IR39098	RSU9901
UR50816	IR39016	PUT9901
UR50826	IR39057	PUT9901
UR50832	IR39060	PUT9901
UR50837	IR39094, IR39476	SMCCOR
UR50868	IR39354	RSU9901
UR50869	IR39356	PUT9901
UR50876	IR39329	PUT9901
UR50889	IR39699	RSU9901
UR50895	IR37995	RSU9901
UR50898	IR39595	SMCCOR
UR50899	IR39652	SMCCOR
UR50915	IR39693	SMCCOR
UR50916	IR39713	SMCCOR

**Note:** COR-CLOSED PTFs are available for “Corrective Service” and will be placed on the next available ESO Tape (Expanded Service Option, formerly known as PUT Tapes). The following subcategories for COR-CLOSED PTFs have been provided by the Software Manufacturing Center (SMC), Poughkeepsie, NY:

**PUTyymm** COR-CLOSED PTFs that are available on an ESO Tape, where 'yymm' indicates the year and the month that the ESO tape became available.

**RSUyymm** RSU (Recommended Service Upgrade) is a preventive service philosophy for all S/390 products that are serviced by IBM for the OS/390 and MVS platforms. RSU reduces the volume of PTFs customers need to apply for preventive maintenance. RSU became available at OS/390 Release 2 GA (9/96), and is identified via an additional SOURCEID of RSUyymm, where 'yymm' indicates the year and the month the PTF was assigned this SOURCEID.

**SMCREC** COR-CLOSED PTFs that are not yet available on an ESO Tape but have been researched and recommended for installation by the Software Manufacturing Center (SMC) in Poughkeepsie, NY.

**SMCCOR** COR-CLOSED PTFs that are not yet available on an ESO Tape and have no special recommendation for installation.

# Reader's Comments

## Program Directory for System Support Programs Version 4 Release 7 for MVS, Service Level 9908

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

RATING SCALE					
very satisfied	<----->	very dissatisfied	not applicable		
1	2 3 4	5	N		

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Ease of getting the system into production after installation	1	2	3	4	5	N

What order media was this product received?

- CBIPO
- CBPDO
- Custom PAC
- Server PAC
- Independent
- Other

Is this the first time your organization has installed this product?

- Yes
- No

Were the people who did the installation experienced with the installation of MVS products?







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5801  
5802

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