



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

Version 4 Release 8, **Service Level SMC0019**

Program Number 5655-041

FMID HSP4480

for Use with
MVS/ESA
OS/390

Document Date: July, 2000

GI10-6606-01

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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APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always contact the IBM Customer Support Center.

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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 System Support Programs. This publication refers to System Support Programs as SSP V4R8 MVS Service Level SMC0019. You should read all of this program directory before installing the program and then keep it for future reference.

The program directory contains the following sections:

- 2.0, “Program Materials” on page 7 identifies the basic and optional program materials and documentation for SSP V4R8 MVS.
- 3.0, “Program Support” on page 13 describes the IBM support available for SSP V4R8 MVS.
- 4.0, “Program and Service Level Information” on page 15 lists the APARs (program level) and PTFs (service level) incorporated into SSP V4R8 MVS.
- 5.0, “Installation Requirements and Considerations” on page 17 identifies the resources and considerations for installing and using SSP V4R8 MVS.
- 6.0, “Installation Instructions” on page 31 provides detailed installation instructions for SSP V4R8 MVS.
- Appendix A, “SSP V4R8 MVS Install Logic” on page 47 provides the install logic for SSP V4R8 MVS.
- Appendix B, “APARs Incorporated into this Program” on page 51 provides a list of APARs incorporated into this program.

This program directory is for SSP V4R8 MVS Service Level 0019. SSP V4R8 MVS Service Level 0019 includes maintenance up to and exceeding CBPDO weekly service tape 0019. See Appendix B, “APARs Incorporated into this Program” on page 51 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 0019 uses the CBPDO weekly service tape for week 19 of the year 2000.

Throughout this program directory, SSP V4R8 MVS Service Level 0019 is referred to as “SSP V4R8 MVS.” The program FMID HSP4480 has been updated to a new service level and assigned a new SOURCEID, SMC0019.

When installing this service level of SSP V4R8 for MVS, you should also consider installing the same service level of NCP for MVS: NCP V7R8 for MVS, Service Level 0019

Before installing SSP V4R8 MVS, read 3.2, “Preventive Service Planning” on page 13. 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 starting with ACF/NCP V7R7. You will now be required to use the High Level Assembler for generating NCP V7R7 and later 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.

<i>Figure 1. High Level Assembler Integrated with Operating System</i>		
Operating System	High Level Assembler V1R2	High Level Assembler V1R3
MVS/ESA V5R1 and later (5655-068, 5655-069)	Order separately	Order separately
OS/390 R1, R2, R3 (5645-001)	Integrated	Order separately
OS/390 V2R4, V2R5, V2R6 (5647-A01)	Integrated	Order separately
OS/390 V2R7, V2R8 (5647-A01)	n/a	Integrated
VM/ESA V2R2, V2R3 (5654-030)	Order separately	Order separately
VM/ESA V2R4 (5654-030)	n/a	Order separately
VSE/ESA V1R4.3, V1R4.4 (5750-ACD)	Order separately	Order separately
VSE/ESA V2R2, V2R3 (5690-VSE)	Integrated	Order separately
VSE/ESA V2R4 (5690-VSE)	n/a	Integrated

In addition to the High Level Assembler requirements, the APARs listed in Figure 45 on page 27 are required.

The IFZ and IHR90 assemblers will still be shipped with SSP V4R8 MVS 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 V4R8 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 V4R8 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 for SSP V4R8 MVS are included on the CBPDO tape.

To facilitate the installation of SSP V4R8 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 1, DLIB=ASSPSAMP, MEMBER=IFWINJCL. The JCL to unload the installation JCL is in Figure 50 on page 32.

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 5.4, "Special Considerations" on page 30.

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 V7R8, SSP V4R8, and EP Release 14 Library Directory*, SC30-4025. 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.

1.1 SSP V4R8 MVS Description

ACF/SSP Version 4 provides the following functions:

- Allows generation of ACF/Network Control Program (ACF/NCP), its partitioned emulation programming (PEP) extension, and the Emulation Program (EP). Refer to the programming requirements section for a list of supported NCP and EP levels.
- Loads the IBM 3720, 3725, or 3745 Communication Controller with a specified load module.
- Dumps the storage and register contents (in formatted or unformatted mode) of the IBM 3720, 3725, or 3745 Communication Controller.
- Formats the maintenance operator subsystem (MOSS) and communication scanner processor (CSP) dump data sets of the IBM 3720, 3725, or 3745.
- Allows the EP user to: (1) obtain a dynamic dump of EP line trace table entries; (2) activate or deactivate the EP line trace function; (3) obtain a dump of the IBM 3720, 3725, or 3745 storage; (4) format MOSS and CSP dump data sets; or (5) display portions of storage at the system console.
- Assembles programs written in the communication controller assembler language.
- Provides a configuration report, that can be tailored by the user to provide meaningful and representative information on the resources and resource attributes of the user's network.
- Utilizes the ACF/Trace Analysis Program (ACF/TAP) to provide a common trace facility for use with the appropriate release of ACF/VTAM and ACF/NCP for the IBM 3720, 3725, 3745, or 3746 model 950 for SDLC, BSC, SS, X.25 NPSI, Token-Ring, frame-relay, or ISDN lines.
- Provides command lists (CLIST) to display selected NCP dump information online without formatting or printing the dump.

1.2 SSP V4R8 MVS FMID

SSP V4R8 MVS consists of FMID HSP4480.

2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for SSP V4R8 MVS is 5655-041.

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 V4R8 MVS. Ask your IBM representative for this information if you have not already received a copy.

2.1 Basic Machine-Readable Material

The distribution medium for this program is 9-track magnetic tape (written at 6250 BPI), 3480 cartridge, or 4mm cartridge. The tape or cartridge contains all the programs and data needed for installation. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 31 for more information about how to install the program.

Figure 2 describes the tape or cartridge. Figure 3 describes the file content of the program tape or cartridge.

Note: If you are installing SSP V4R8 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

Medium	Feature Number	Physical Volume	External Label Identification	VOLSER
6250 tape	5801	1	MVSOBJ HSP4480 R	SP4480
3480 cart.	5802	1	MVSOBJ HSP4480 R	SP4480
4 mm cart.	5700	1	MVSOBJ HSP4480 R	SP4480

Figure 3 (Page 1 of 2). Program Tape: File Content

VOLSER	File	Name	Dist Library	RECFM	LRECL	BLK SIZE
SP4480	1	SMPMCS		FB	80	6400

Figure 3 (Page 2 of 2). Program Tape: File Content

VOLSER	File	Name	Dist Library	RECFM	LRECL	BLK SIZE
SP4480	2	IBM.HSP4480.F1	JCLIN ASAMPNET ASSPCLS1 ASSPMAC1 ASSPSAMP ASSPSRC1	FB	80	8800
SP4480	3	IBM.HSP4480.F2	SSPOBJ	U	0	6144

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for SSP V4R8 MVS.

2.3 Program Publications

The following sections identify the basic and optional publications for SSP V4R8 MVS.

2.3.1 Basic Program Publications

Figure 4 identifies the basic unlicensed program publications for SSP V4R8 MVS. One copy of each of these publications is included when you order the basic materials for SSP V4R8 MVS. For additional copies, contact your IBM representative.

Figure 4. Basic Material: Unlicensed Publications

Publication Title	Form Number
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 8 for OS/390 and MVS	GC31-6229
Network Control Program Version 7 Release 8, System Support Programs Version 4 Release 8, and Emulation Program Release 14 Library Directory	SC30-4025
NCP and 3745/46 Today	G325-3426

Figure 5 identifies the basic licensed program publications for SSP V4R8 MVS. 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.

An asterisk (*) beside the Form Number indicates it contains “Restricted Materials of IBM.”

<i>Figure 5. Basic Material: Licensed Publications</i>		
Publication Title	Form Number	Feature Number
Network Control Program, System Support Programs, and Emulation Program Diagnosis Guide	LY43-0033*	8010
Network Control Program, System Support Programs, and Emulation Program Trace Analysis Handbook	LY43-0037*	8140

2.3.2 Optional Program Publications

No optional unlicensed publications are provided for SSP V4R8 MVS.

Figure 6 identifies the optional licensed program publications for SSP V4R8 MVS. The first copy is available at no charge to licensees of the optional material by ordering the 7xxx Feature Number. Order additional copies using the 8xxx Feature Number. A fee is charged for additional copies.

An asterisk (*) beside the Form Number indicates it contains “Restricted Materials of IBM.”

<i>Figure 6. Optional Material: Licensed Publications</i>		
Publication Title	Form Number	Feature Number
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

2.3.3 Softcopy Publications

All SSP V4R8 MVS manuals, licensed and unlicensed, except for *SSP Licensed Program Specifications*, are offered in displayable softcopy form on the media listed in Figure 7. The first copy is available at no charge to licensees of the optional material by ordering the 7xxx Feature Number. Order additional copies using the 8xxx Feature Number. A fee is charged for additional copies.

An asterisk (*) beside the Form Number indicates that it contains “Restricted Material of IBM.”

<i>Figure 7. Softcopy Publications</i>		
Title	Form Number	Feature Number
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.)		

You can read the books on the Softcopy Collection Kit CD-ROM using any of the following products:

- IBM Library Reader, a limited-function BookManager product shipped on the CD.
- The full-function IBM BookManager product, available for a variety of platforms, including MVS. For more information, or to order BookManager for your platform, refer to the IBM BookManager home page at <http://booksrv2.raleigh.ibm.com>.
- Adobe Acrobat Reader, available for downloading at <http://www.adobe.com/prodindex/acrobat/readstep.html>. The Softcopy Collection Kit CD-ROM includes Acrobat Reader (PDF) book files for NCP V7R7 and later.

2.3.4 Publications Associated with SSP V4R8 MVS

2.3.4.1 NCP Publications:

Figure 8 lists publications that may be helpful when you use SSP V4R8 MVS. To order copies, contact your IBM representative. A fee is charged for these publications.

<i>Figure 8. NCP Publications Associated with SSP V4R8 MVS</i>	
Publication Title	Form Number
Network Control Program Version 7 Release 8 Migration Guide	SC30-4024
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 9 lists publications that may be helpful when you use the Hardware Configuration Definition function. To order copies, contact your IBM representative.

<i>Figure 9. HCD Publications</i>	
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 10 lists publications that may be helpful when you use SSP CLISTs for NCP dumps. To order copies, contact your IBM representative.

<i>Figure 10. SSP CLISTs for NCP Dumps Publications</i>	
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

2.4 Program Source Materials

Customers with access to View Program Listings (VPL), such as through S/390 SoftwareXcel, can use the VPL facility for online viewing of available program listings. Those customers without access to VPL can contact their IBM representative.

2.5 Publications Useful During Installation

The publications listed in Figure 11 may be useful during the installation of SSP V4R8 MVS. To order copies, contact your IBM representative.

<i>Figure 11. Publications Useful During Installation</i>	
Publication Title	Form Number
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, Vol 1 (ABA-ASA)	GC28-1784
OS/390 MVS System Messages, Vol 2 (ASB-EWX)	GC28-1785
OS/390 MVS System Messages, Vol 3 (GDE-IEB)	GC28-1786
OS/390 MVS System Messages, Vol 4 (IEC-IFD)	GC28-1787
OS/390 MVS System Messages, Vol 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
SMP/E: User's Guide	SC28-1302

3.0 Program Support

This section describes the IBM support available for SSP V4R8 MVS.

3.1 Program Services

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

3.2 Preventive Service Planning

Before installing SSP V4R8 MVS, you should review the current Preventive Service Planning (PSP) information. If you obtained SSP V4R8 MVS as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO tape.

If you obtained SSP V4R8 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 V4R8 MVS are:

Figure 12. PSP Upgrade and Subset ID

UPGRADE	SUBSET	Description
SSP480	HSP4480/0019	SSP V4R8 MVS

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. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 13 identifies the component ID (COMPID) for SSP V4R8 MVS.

Figure 13. Component IDs

FMID	COMPID	Component Name	RETAIN Release
HSP4480	565504100	ACF/SSP V4R8 MVS	480

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of SSP V4R8 MVS. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

4.1 Program Level Information

See Appendix B, "APARs Incorporated into this Program" on page 51 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 51 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. If this tape is included, it will be used in Section 6.2, "Post-Installation Information" on page 43. Installation instructions for cumulative service tapes can be found in the SMP/E publications.

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 V4R8 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 V4R8 MVS.

5.1.1 Machine Requirements

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

5.1.2 Programming Requirements

Figure 14. Driving System Software Requirements

Program Number	Product Name and Minimum VRM/Service Level
5668-949	System Modification Program/Extended (SMP/E) R8.1 or Higher with IR40155
5647-A01	OS/390 V2R7 or Higher, or IR40155 on Prior Releases

5.2 Target System Requirements

This section describes the environment of the target system required to install and use SSP V4R8 MVS.

5.2.1 Operating System Requirements

SSP V4R8 MVS operates in the system environments shown in Figure 15.

5655-068 and 5655-069	MVS/ESA V5R1 or later
5647-A01	OS/390 V2R4 or later
5645-001	OS/390 R1, R2, or R3

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

5.2.2 Machine Requirements

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

5.2.3 Programming Requisites

5.2.3.1 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 V4R8 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.

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5648-063	NCP V7R1 or higher	No
5668-231	NCP V6R2 or higher	No
5668-738	NCP V5R4	No

<i>Figure 16 (Page 2 of 2). Minimum Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5668-854	NCP V4R3.1	No
5696-234	High Level Assembler 1.2 or higher	No

5.2.3.2 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 V4R8 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 Hardware Configuration Definition (HCD):

<i>Figure 17. Functional Requisites: HCD</i>			
Program Number	Product Name and Minimum VRM/Service Level	Function	Install Req?
5655-068 5655-069	MVS/ESA V5R1 or later	HCD	No
5647-A01	OS/390 V2R4 or later	HCD	No
5645-001	OS/390 R1, R2, or R3	HCD	No

The SSP CLISTs for NCP dumps require:

<i>Figure 18. Functional Requisites: SSP CLISTs for NCP Dumps</i>			
Program Number	Product Name and Minimum VRM/Service Level	Function	Install Req?
5647-A01	OS/390 V2R4 or later	ISPF	No
5645-001	OS/390 R1, R2, or R3	ISPF	No
5655-042	Interactive System Productivity Facility (ISPF) V4R2 or later MVS/ESA	ISPF	No

The IFWNET CLIST requires the following:

<i>Figure 19. Functional Requisites: IFWNET CLIST</i>			
Program Number	Product Name and Minimum VRM/Service Level	Function	Install Req?
5697-B82	TME 10 NetView for OS/390 R1 or later, with REXX support	NetView	No
5655-007	NetView V3R1, with REXX support	NetView	No
5685-111	NetView V2R4, with REXX support	NetView	No
5685-025	Time Sharing Options Extension (TSO/E) V2R5 or later	TSO/E	No

5.2.3.2.1 Controller-Resident Programs:

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

<i>Figure 20. Functional Requisites</i>			
Program Number	Product Name and Minimum VRM/Service Level	Function	Install Req?
5735-XXB	Emulation Program R14	Emulation Program	No
5735-XXB	Emulation Program R12	Emulation Program	No
5735-XXB	Emulation Program R11	Emulation Program	No
5735-XXB	Emulation Program R9	Emulation Program	No
5735-XXB	Emulation Program R6.1	Emulation Program	No

5.2.3.2.2 Softcopy-Enabling Programs:

See 2.3.3, "Softcopy Publications" on page 9 for a list of the programs that can access the books on the Softcopy Collection Kit CD-ROM.

5.2.3.3 Compatibility Requisites:

The following section contains system considerations for NCP, NPSI, DFSMS, and VSE.

5.2.3.3.1 NCP:

The NCP APARs listed in Figure 21 are required to generate the NCP product with the SSP NDF.

<i>Figure 21. NCP APARs Required to Generate NCP with SSP NDF</i>	
Product Name	APAR
NCP V4R3.1	IR82746
	IR83237
	IR83303
	IR83307
	IR83826
	IR83952
	IR86790
	IR89297

The NCP APAR listed in Figure 22 is required if you want to code a default TCP/IP route in NCP V7R1.

<i>Figure 22. NCP APAR Required to Code a Default TCP/IP Route in NCP V7R1</i>	
Product Name	APAR
NCP V7R1	IR26000

The NCP APAR listed in Figure 23 is required if you want to code RNRLIMIT on a NTRI logical GROUP definition statement in NCP V5R4.

<i>Figure 23. NCP APAR Required to Code RNRLIMIT</i>	
Product Name	APAR
NCP V5R4	IR99583

The NCP APARs listed in Figure 24 are required if your generation definition contains frame-relay boundary access node (BAN) connections.

<i>Figure 24. NCP APARs Required to Code BAN Connections</i>	
Product Name	APAR
NCP V7R1	IR28397
NCP V7R2	IR28239

The NCP APARs shown in Figure 25 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.

<i>Figure 25. NCP APARs Required to Use ADDIFG Keyword</i>	
Product Name	APAR
NCP V6R3	IR27091
NCP V7R1	IR27090

The NCP APARs listed in Figure 26 are required if you want NCP to initiate the deactivation of an out-of-sequence virtual route (VR).

<i>Figure 26. NCP APARs Required to Initiate Deactivation of an Out-of-Sequence Virtual Route</i>	
Product Name	APAR
NCP V7R1	IR35146
NCP V7R2	IR35146
NCP V7R3	IR35146
NCP V7R4	IR35146
NCP V7R5	IR35146

The NCP APAR listed in Figure 27 is required if you want to use duplicate TIC configuration for subarea connections.

<i>Figure 27. NCP APAR Required to Use Duplicate TIC Configuration for Subarea Connections</i>	
Product Name	APAR
NCP V7R5	IR35842

The NCP APAR listed in Figure 28 is required if you generate backup channel connections for the NCP-NCPRROUTE IP interface.

<i>Figure 28. NCP APAR Required to Generate Backup Channel Connections for NCP-NCPRROUTE IP Interface</i>	
Product Name	APAR
NCP V7R5	IR33961

The NCP APAR listed in Figure 29 is required if you generate INN connections using LIC16 ISDN to ISDN TA.

<i>Figure 29. NCP APAR Required to Generate INN Connections</i>	
Product Name	APAR
NCP V7R5	IR34013

The NCP APAR listed in Figure 30 is required if you code MAXDLCI for an ISDN physical line (D-Channel).

<i>Figure 30. NCP APAR Required to Code MAXDLCI for D-Channel</i>	
Product Name	APAR
NCP V7R5	IR33979

The NCP APARs listed in Figure 31 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.

<i>Figure 31. NCP APARs Required if you code USGTIER=1, 2, 2.5, or 3</i>	
Product Name	APAR
NCP V7R1	IR34014
NCP V7R2	IR34014
NCP V7R3	IR34014
NCP V7R4	IR34014
NCP V7R5	IR34014

The NCP APAR listed in Figure 32 is required if you code QSZALERT on the BUILD statement to determine if a session or station is using an inordinate number of buffers.

<i>Figure 32. NCP APAR Required to Include QSZALERT Function in NCP V7R5.</i>	
Product Name	APAR
NCP V7R5	IR36167

The NCP APARs listed in Figure 33 are required if you want to use CIR (Committed Information Rate) for bandwidth management of the 3746 Model 900 frame-relay lines.

<i>Figure 33. NCP APARs Required for Committed Information Rate (CIR)</i>	
Product Name	APAR
NCP V7R3	IR36380
NCP V7R4	IR36380
NCP V7R5	IR36380
NCP V7R6	IR36484

The NCP APAR listed in Figure 34 is required if you want to code TRANSBUF to indicate the number of transmission head buffers allocated for 3745 frame-relay physical lines.

<i>Figure 34. NCP APAR Required for Transmission Head Buffers</i>	
Product Name	APAR
NCP V7R6	IR36886

The NCP APARs listed in Figure 35 are required to support up to 32 ESCON stations on the 3746 Model 900.

<i>Figure 35. NCP APARs Required to Support 32 ESCON Stations</i>	
Product Name	APAR
NCP V7R7 MVS, VM	IR40131
NCP V7R6 MVS, VM	IR40131
NCP V7R7 VSE	IR40134
NCP V7R6 VSE	IR40134

The NCP APARs listed in Figure 36 are required to support 3746 Model 900 Token Ring (TIC 3) connection balancing.

<i>Figure 36. NCP APARs Required to Support TIC 3 Connection Balancing</i>	
Product Name	APAR
NCP V7R7 MVS, VM	IR40132
NCP V7R6 MVS, VM	IR40132
NCP V7R7 VSE	IR40135
NCP V7R6 VSE	IR40135

The NCP APARs listed in Figure 37 are required to support 3746 Model 900 Frame Relay BAN connection balancing.

<i>Figure 37. NCP APARs Required to Support Frame Relay BAN Connection Balancing</i>	
Product Name	APAR
NCP V7R7 MVS, VM	IR40133
NCP V7R7 VSE	IR40136

The NCP APARs listed in Figure 38 are required to generate EP R14 standalone with NCP V7R7.

<i>Figure 38. NCP APARs Required to Generate EP R14 Standalone with NCP V7R7</i>	
Product Name	APAR
NCP V7R7 MVS, VM	IR41021
NCP V7R7 VSE	IR41022

The NCP APARs listed in Figure 39 are required if you predefine a bridged Token Ring 3745 subarea route.

<i>Figure 39. NCP APARs Required to Predefine a bridged TR 3745 subarea route</i>	
Product Name	APAR
NCP V7R8 MVS, VM	IR42305
NCP V7R8 VSE	IR42306

The NCP APARs listed in Figure 40 are required if you want to validate the state of DYNPOOL control blocks when they are placed on the dispatching queue.

Figure 40. NCP APARs Required for DYNPOOL control blocks validation

Product Name	APAR
NCP V7R2 MVS	IR42308
NCP V7R3 MVS, VM	IR42308
NCP V7R4 MVS, VM	IR42308
NCP V7R4 VSE	IR42321
NCP V7R5 MVS, VM	IR42308
NCP V7R5 VSE	IR42321
NCP V7R6 MVS, VM	IR42308
NCP V7R6 VSE	IR42321
NCP V7R7 MVS, VM	IR42308
NCP V7R7 VSE	IR42321
NCP V7R8 MVS, VM	IR42308
NCP V7R8 VSE	IR42321

The NCP APARs listed in Figure 41 are required if you code PLPIGGYB or NETTYPE=3 for 3746 Model 900 X.25 lines.

Figure 41. NCP APARs Required to code PLPIGGYB or NETTYPE for 3746 Model 900 X.25

Product Name	APAR
NCP V7R8 MVS, VM	IR42600
NCP V7R8 VSE	IR42602

The NCP APARs listed in Figure 42 are required if you code the dw or dwc suboperand on the DYNWIND keyword for 3746 Model 900 Token Ring resources.

Figure 42. NCP APARs Required to use DYNWIND enhancements for 3746 Model 900 TR

Product Name	APAR
NCP V7R8 MVS, VM	IR42608
NCP V7R8 VSE	IR42611

5.2.3.3.2 EP/PEP:

The EP APAR shown in Figure 43 is required to generate EP/PEP R14 with SSP NDF.

Figure 43. EP APAR Required to Generate EP/PEP R14 with SSP NDF.

Product Name	APAR
EP/PEP R14	IR39913

5.2.3.3.3 NPSI:

The NPSI APAR shown in Figure 44 is required to generate NPSI V3R8 with NCP V7R4, NCP V7R5, or NCP V7R6.

Figure 44. NPSI APAR Required to Generate NPSI V3R8 with NCP V7R4, NCP V7R5, or NCP V7R6

Product Name	APAR
NCP NPSI V3R8	IR32271 IR37825

5.2.3.3.4 DFSMS:

The APARs listed in Figure 45 are required to use the High Level Assembler.

Figure 45. 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

5.2.3.3.5 VSE:

The APARs listed in Figure 46 are required to use SSP V4R8.

<i>Figure 46. APARs Required to Use SSP V4R8</i>	
Product Name	APAR
VSE/ESA V2	DY45166
VSE/ESA V1R4	DY45163

5.2.3.4 Toleration/Coexistence Requisites:

A toleration/coexistence requisite is defined as a product which must be present on a sharing system. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD at different time intervals.

There are no toleration/coexistence requisites required.

5.2.3.5 Incompatibility (Negative) Requisites:

A negative requisite identifies products which must *not* be installed on the same system as this product.

There are no incompatible products associated with this program.

5.2.4 DASD Storage Requirements

SSP V4R8 MVS libraries can reside on 3380 or 3390 DASD.

Figure 47 lists the total space required for each type of library.

<i>Figure 47. Total DASD Tracks Required by SSP V4R8 MVS</i>		
Library Type	3380 Tracks	3390 Tracks
Target	286	229
Distribution	571	501

Notes:

1. IBM recommends use of system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, IBM recommends a block size of 32760, which is the most efficient from a performance and DASD utilization perspective.
2. 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 34.

The following figures list the target and distribution libraries (data sets) and their attributes required to install SSP V4R8 MVS. The storage requirements of SSP V4R8 MVS must be added to the storage required by other programs having data in the same data set (library).

Figure 48. Storage Requirements for SSP V4R8 MVS Target Libraries

Library DDNAME	T Y P E	D S O R G E M E N T	R E C O R D I N G	L E N G T H	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
SSPLIB	U	PO	U	0	226	32760	226	183	9
SSPCLS1	U	PO	FB	80	92	0	53	39	7
NUCLEUS*	U	PO	U	0	1	32760	2	2	1
LINKLIB*	U	PO	U	0	6	32760	6	6	5

Note: * Indicates allocation for HCD modules.

Figure 49 (Page 1 of 2). Storage Requirements for SSP V4R8 MVS Distribution Libraries

Library DDNAME	T Y P E	D S O R G E M E N T	R E C O R D I N G	L E N G T H	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
ASSPMAC1	U	PO	FB	80	11	0	8	5	1
ASAMPNET	U	PO	FB	80	32	0	22	14	1
ASSPSAMP	U	PO	FB	80	9	0	5	4	1
SSPOBJ	U	PO	U	0	571	32760	534	501	410

Figure 49 (Page 2 of 2). Storage Requirements for SSP V4R8 MVS Distribution Libraries

Library DDNAME	T Y P E	D S R G	R E F M	L R C L	No. of Blks	BLK SIZE	No. of 3380/ Trks	No. of 3390 Trks	No. of DIR Blks
ASSPCLS1	U	PO	FB	80	92	0	53	39	7
ASSPSRC1	U	PO	FB	80	7	0	5	4	1

5.3 FMIDs Deleted

Installing SSP V4R8 MVS will result in the deletion of FMIDs. Please see the SMPMCS file in Appendix A for the FMIDs deleted by SSP V4R8 MVS.

5.4 Special Considerations

This section contains the special considerations required for this program.

5.4.1 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/ESA V5R1, 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).

5.4.2 Special Considerations for VTAM V4R2 (5665-289) or Later

SSP V3R8, or later, is required to format buffer traces from VTAM V4R2 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 or later.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install SSP V4R8 MVS.

Please note the following:

- If you want to install SSP V4R8 MVS into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets. The NCP V7R8 MVS Program Directory also contains sample jobs for creating and initializing the SMPCSI and the SMP/E control data sets.
- Sample jobs have been provided to help perform some or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries required for SMP/E execution have been defined in the appropriate zones.
- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing SSP V4R8 MVS

6.1.1 SMP/E Considerations for Installing SSP V4R8 MVS

This release of SSP V4R8 MVS is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. 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 V4R8 MVS. After the RECEIVE step has been completed, the sample jobs can be found in SMPTLIB: **IBM.HSP4480.F1**. Make a copy of these jobs in your own library and modify them to use during the installation of SSP V4R8 MVS. The sample jobs are:

SSPRECEV	Sample RECEIVE job
SSPALLOC	Sample job to allocate target and distribution libraries
SSPDDDEF	Sample job to define SMP/E DDDEFs
SSPAPPCK	Sample APPLY CHECK job
SSPAPPLY	Sample APPLY job
SSPACCCK	Sample ACCEPT CHECK job
SSPACCEP	Sample ACCEPT job

In the sample SMP/E jobs provided, the name of the SMP/E CSI is ncpzzzzz.GLOBAL.CSI. The global zone name in the SMP/E CSI is GLOBAL. The distribution zone name is ncpdlib. The target zone name is ncptgt. You should update the sample jobs to reflect the CSI and zone names used at your installation.

6.1.3 Unload the Sample JCL from the Product Tape

Sample installation jobs are provided on the distribution tape to help you install SSP V4R8 MVS. See Figure 50 for the JCL to unload the SSP V4R8 MVS sample installation JCL from the product tape.

```
//IFWINJCL JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* SAMPLE JCL TO UNLOAD THE SSP V4R8 SAMPLE INSTALLATION JCL *
//* FROM THE PRODUCT TAPE *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE tape TO THE PRODUCT TAPE OR CARTRIDGE *
//* 3. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//COPY EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//TAPEIN DD DSN=IBM.HSP4480.F1,VOL=SER=SP4480,
// UNIT=tape,DISP=OLD,LABEL=(2,SL)
//DISKOUT DD DSN=IBM.HSP4480.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 50. JCL to Unload the Sample Installation JCL from the Product Tape

Expected Return Codes and Messages:

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

The JCL is contained in Relative File 1, DLIB=ASSPSAMP, MEMBER=IFWINJCL.

You can also access the sample installation jobs by performing an SMP/E RECEIVE for FMID HSP4480, and then copying the jobs from dataset **hlq.IBM.HSP4480.F1** to a work dataset for editing and submission.

6.1.4 Perform SMP/E RECEIVE

Edit and submit sample job SSPRECEV to perform the SMP/E RECEIVE for SSP V4R8 MVS. Consult the instructions in the sample job for more information. See Figure 51 for the JCL to Receive SSP V4R8 MVS from the product tape.

```
//SSPRECEV JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* RECEIVE SSP V4R8 FROM THE PRODUCT TAPE *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
//* 3. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* 4. CHANGE tape TO THE PRODUCT TAPE OR CARTRIDGE *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//RECV EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPOUT DD SYSOUT=A
//SMPPRINT DD SYSOUT=A
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPTLIB DD UNIT=SYSDA,DISP=OLD,VOL=SER=xxxxxx
//SMPPTFIN DD UNIT=tape,DISP=OLD,VOL=SER=SP4480,
// LABEL=(,SL),DSN=SMPMCS
//SMPCNTL DD *
// SET BDY(GLOBAL) .
// RECEIVE SELECT(HSP4480) SYSMODS LIST .
//*
```

Figure 51. JCL to Receive SSP V4R8 MVS From the Product Tape

NOTE: if you obtained SSP V4R8 MVS as part of a CBPDO, you can use the RCPVDO job found in the CBPDO RIMLIB data set to RECEIVE the SSP V4R8 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.

Expected Return Codes and Messages:

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

6.1.5 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job SSPALLOC to allocate the SMP/E target and distribution libraries for SSP V4R8 MVS. Consult the instructions in Figure 52 for more information.

```
//SSPALLOC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* ALLOCATE THE SMP/E TARGET AND DISTRIBUTION LIBRARIES FOR *
//* SSP V4R8 *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE sspzxxxx TO THE HIGH LEVEL QUALIFIER FOR YOUR SSP*
//* TARGET AND DISTRIBUTION LIBRARIES *
//* 3. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* *
//* NOTE: THE ACTUAL DATA SET SIZES HAVE BEEN INCREASED *
//* SLIGHTLY TO ALLOW FOR MAINTENANCE. *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//ALLOCATE EXEC PGM=IEFBR14
//SYSPRINT DD SYSOUT=A
//*****
//* DD STATEMENTS FOR THE TARGET LIBRARIES *
//*****
//SSPLIB DD DSN=sspzzzzz.SSPLIB,VOL=SER=xxxxxx,
// DCB=(RECFM=U,LRECL=0,BLKSIZE=32760),
// UNIT=SYSALLDA,SPACE=(32760,(325,30,20)),
// DISP=(NEW,CATLG)
//*
```

Figure 52 (Part 1 of 3). JCL to Allocate the SMP/E Target and Distribution Libraries

```

//SSPCLS1 DD DSN=sspzzzzz.SSPCLS1,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//          UNIT=SYSALLDA,SPACE=(8800,(300,30,13)),
//          DISP=(NEW,CATLG)
//*****
//* ALTERNATE TARGET LIBRARIES FOR SSP HCD MODULES          *
//*                                                         *
//* THE HCD MEMBERS WILL BE INSTALLED IN SYS1.NUCLEUS AND  *
//* SYS1.LINKLIB. IF YOU WANT TO INSTALL THESE MEMBERS INTO *
//* ALTERNATE DATA SETS, REMOVE THE COMMENTS FROM THE DD  *
//* STATEMENT FOR NUCLEUS AND LINKLIB AND UPDATE APPROPRIATELY. *
//*                                                         *
//* 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=32760),
//*          UNIT=SYSALLDA,SPACE=(32760,(10,2,9)),
//*          DISP=(NEW,CATLG)
//*LINKLIB DD DSN=sspzzzzz.LINKLIB,VOL=SER=xxxxxx,
//*          DCB=(RECFM=U,LRECL=0,BLKSIZE=32760),
//*          UNIT=SYSALLDA,SPACE=(32760,(15,5,15)),
//*          DISP=(NEW,CATLG)
//*****
//* DD STATEMENTS FOR THE DISTRIBUTION LIBRARIES          *
//*****
//ASSPMAC1 DD DSN=sspzzzzz.ASSPMAC1,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//          UNIT=SYSALLDA,SPACE=(8800,(40,5,5)),
//          DISP=(NEW,CATLG)
//*
//ASAMPNET DD DSN=sspzzzzz.ASAMPNET,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//          UNIT=SYSALLDA,SPACE=(8800,(115,10,7)),
//          DISP=(NEW,CATLG)
//*
//ASSPSAMP DD DSN=sspzzzzz.ASSPSAMP,VOL=SER=xxxxxx,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//          UNIT=SYSALLDA,SPACE=(8800,(32,5,6)),
//          DISP=(NEW,CATLG)
//*

```

Figure 52 (Part 2 of 3). JCL to Allocate the SMP/E Target and Distribution Libraries

```

//SSPOBJ DD DSN=sspzzzzz.SSPOBJ,VOL=SER=xxxxxx,
//          DCB=(RECFM=U,LRECL=0,BLKSIZE=32760),
//          UNIT=SYSALLDA,SPACE=(32760,(750,75,455)),
//          DISP=(NEW,CATLG)
//*
//ASSPCLS1 DD DSN=sspzzzzz.ASSPCLS1,VOL=SER=xxxxxx,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//            UNIT=SYSALLDA,SPACE=(8800,(300,30,13)),
//            DISP=(NEW,CATLG)
//*
//ASSPSRC1 DD DSN=sspzzzzz.ASSPSRC1,VOL=SER=xxxxxx,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//            UNIT=SYSALLDA,SPACE=(8800,(28,5,4)),
//            DISP=(NEW,CATLG)
//*

```

Figure 52 (Part 3 of 3). JCL to Allocate the SMP/E Target and Distribution Libraries

Expected Return Codes and Messages:

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

6.1.6 Create DDDEF Entries

Edit and submit sample job SSPDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for SSP V4R8 MVS. Consult the instructions in Figure 53 for more information.

```
//SSPDDDEF JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
/** CREATE THE DDDEFS FOR SSP V4R8 *
/** *
/** BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
/** MODIFICATIONS: *
/** *
/** 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
/** 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
/** 3. CHANGE ncpdlib TO THE DISTRIBUTION ZONE FOR NCP *
/** 4. CHANGE sspzzzzz TO THE HIGH LEVEL QUALIFIER FOR YOUR SSP*
/** TARGET AND DISTRIBUTION LIBRARIES *
/** 5. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
/** DATA SET WILL RESIDE *
/** 6. CHANGE ncptgt TO THE TARGET ZONE FOR NCP *
/** *
/** EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
/** ZERO. IF ANY OF THE DDDEF ENTRIES ALREADY EXIST, THE JOB *
/** WILL END WITH RETURN CODE EIGHT. YOU WILL HAVE TO EXAMINE *
/** THE OUTPUT TO DETERMINE THE CAUSE OF THE NON-ZERO RETURN *
/** CODE. *
/** *****
/** ADD THE DISTRIBUTION LIBRARY DD NAMES TO THE DISTRIBUTION *
/** ZONE *
/** *****
//DZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPDOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPLOG DD DSN=ncpzzzzz.SMPLOG,DISP=SHR
//SMPPTS DD DSN=ncpzzzzz.SMPPTS,DISP=SHR
```

Figure 53 (Part 1 of 3). JCL to Create DDDEF Entries

```

//SMPCNTL DD *
  SET BDY(ncpdlib) .
  UCLIN .
  ADD DDDEF(ASSPMAC1) DATASET(sspzxxxx.ASSPMAC1)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  ADD DDDEF(ASAMPNET) DATASET(sspzxxxx.ASAMPNET)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  ADD DDDEF(ASSPSAMP) DATASET(sspzxxxx.ASSPSAMP)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  ADD DDDEF(ASSPCLS1) DATASET(sspzxxxx.ASSPCLS1)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  ADD DDDEF(ASSPSRC1) DATASET(sspzxxxx.ASSPSRC1)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  ADD DDDEF(SSPOBJ)   DATASET(sspzxxxx.SSPOBJ)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  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
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPLOG DD DSN=ncpzxxxx.SMPLOG,DISP=SHR
//SMPPTS DD DSN=ncpzxxxx.SMPPTS,DISP=SHR
//SMPCNTL DD *
  SET BDY(ncptgt) .
  UCLIN .
  ADD DDDEF(ASSPMAC1) DATASET(sspzxxxx.ASSPMAC1)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  ADD DDDEF(ASAMPNET) DATASET(sspzxxxx.ASAMPNET)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
  ADD DDDEF(ASSPSAMP) DATASET(sspzxxxx.ASSPSAMP)
                        VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .

```

Figure 53 (Part 2 of 3). JCL to Create DDDEF Entries

```

ADD DDDEF(ASSPCLS1) DATASET(sspzxxxx.ASSPCLS1)
      VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(ASSPSRC1) DATASET(sspzxxxx.ASSPSRC1)
      VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(SSPOBJ)  DATASET(sspzxxxx.SSPOBJ)
      VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(SSPLIB)  DATASET(sspzxxxx.SSPLIB)
      VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(SSPCLS1) DATASET(sspzxxxx.SSPCLS1)
      VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
/*****
/* IF YOU WANT TO INSTALL THE HCD MEMBERS INTO ALTERNATE DATA*/
/* SETS REMOVE THE COMMENTS FROM THE NUCLEUS AND THE LINKLIB */
/* ADD STATEMENTS BELOW AND UPDATE APPROPRIATELY          */
/*****
/* ADD DDDEF(NUCLEUS)  DATASET(sspzxxxx.NUCLEUS)          */
/*                   VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR . */
/* ADD DDDEF(LINKLIB)  DATASET(sspzxxxx.LINKLIB)          */
/*                   VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR . */
ENDUCL .
/**

```

Figure 53 (Part 3 of 3). JCL to Create DDDEF Entries

Expected Return Codes and Messages:

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

6.1.7 Perform SMP/E APPLY CHECK

Edit and submit sample job SSPAPPCK to perform an SMP/E APPLY CHECK for SSP V4R8 MVS. Consult the instructions in Figure 54 for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

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

```
//SSPAPPCK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
/** BEFORE UPDATING THE SSP TARGET LIBRARIES CHECK FOR ERRORS, *
/** THE LIBRARIES AFFECTED, AND ANY SYSMODS THAT WOULD BE *
/** REGRESSED *
/** *
/** BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
/** MODIFICATIONS: *
/** *
/** 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
/** 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
/** 3. CHANGE ncptgt TO THE TARGET ZONE FOR NCP *
/** *
/** EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
/** ZERO *
//*****
//APPCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
// SET BDY(ncptgt) .
// APPLY SELECT(HSP4480) CHECK .
/**
```

Figure 54. JCL to Perform SMP/E APPLY CHECK

Expected Return Codes and Messages:

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

6.1.8 Perform SMP/E APPLY

Edit and submit sample job SSPAPPLY to perform an SMP/E APPLY for SSP V4R8 MVS. Consult the instructions in Figure 55 for more information.

```
//SSPAPPLY JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* UPDATE THE SSP TARGET LIBRARIES *
//* *
/** BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
/** MODIFICATIONS: *
/** *
/** 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
/** 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
/** 3. CHANGE ncptgt TO THE TARGET ZONE FOR NCP *
/** *
/** EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
/** ZERO *
//*****
//APPLY EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
// SET BDY(ncptgt) .
// APPLY SELECT(HSP4480) .
/**
```

Figure 55. JCL to Update the SMP/E Target Libraries

Expected Return Codes and Messages:

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

6.1.9 Perform SMP/E ACCEPT CHECK

Edit and submit sample job SSPACCK to perform an SMP/E ACCEPT CHECK for SSP V4R8 MVS. Consult the instructions in the Figure 56 for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

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

```
//SSPACCK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
/** BEFORE UPDATING THE SSP DISTRIBUTION LIBRARIES CHECK FOR      *
/** ERRORS, THE LIBRARIES AFFECTED, AND ANY SYSMODS THAT WOULD  *
/** BE REGRESSED                                                *
/**                                                                *
/** BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING  *
/** MODIFICATIONS:                                             *
/**                                                                *
/** 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS    *
/** 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NC   *
/** 3. CHANGE ncpdlib TO THE DISTRIBUTION ZONE FOR NCP          *
/**                                                                *
/** EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
/** ZERO                                                         *
/*******
//ACCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//      TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
//      SET BDY(ncpdlib) .
//      ACCEPT SELECT(HSP4480) CHECK .
/**
```

Figure 56. JCL to Perform an SMP/E ACCEPT CHECK

Expected Return Codes and Messages:

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

6.1.10 Perform SMP/E ACCEPT

Edit and submit sample job SSPACCEP to perform an SMP/E ACCEPT for SSP V4R8 MVS. Consult the instructions in Figure 57 for more information.

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.

```
//SSPACCEP JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* UPDATE THE SSP DISTRIBUTION LIBRARIES *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NC *
//* 3. CHANGE ncpdlib TO THE DISTRIBUTION ZONE FOR NCP *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//ACCEPT EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
// SET BDY(ncpdlib) .
// ACCEPT SELECT(HSP4480) .
//*
```

Figure 57. JCL to Perform an SMP/E ACCEPT

Expected Return Codes and Messages:

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

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 58 is used to print and punch the NDF sample network generation definition data set. The sample network is described in the *NCP, SSP, and EP Resource Definition Guide*.

```
//PRMD1 JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* PRINT THE NCP SAMPLE NETWORK GENERATION DEFINITION DATA SETS*
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE sspzzzzz TO THE HIGH LEVEL QUALIFIER FOR YOUR SSP*
//* TARGET AND DISTRIBUTION LIBRARIES *
//* 3. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//NDFPRINT EXEC PGM=IEBPTPCH
//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 58. Sample Job 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 59 to print an individual member of the distribution library ASSPSAMP.

```
//PRMD2 JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* PRINT A SAMPLE JCL FILE *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE sspzzzzz TO THE HIGH LEVEL QUALIFIER FOR YOUR SSP*
//* TARGET AND DISTRIBUTION LIBRARIES *
//* 3. SPECIFY THE SAMPLE JCL MEMBER NAME ON THE SYSUT1 DD *
//* STATEMENT *
//* 4. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//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 59. 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.

6.3.5 PDSE Considerations

The SSP loader utility IFLOADRN offers limited support of Partitioned Dataset Extended (PDSE). The following restrictions apply.

1. The SSP loader requires that a PDSE dataset be on a system managed volume.
2. For SSP V4R6 and earlier releases, you can generate the NCP load module directly into the PDSE dataset.

For SSP V4R7 and later releases, because the High Level Assembler is a part of the NCP generation process, you cannot generate the NCP load module directly into the PDSE dataset. Instead, you need to first generate the NCP load module into a Partitioned Dataset (PDS), then use the BINDER to copy the NCP load module from the PDS into the PDSE.

3. When loading from a system managed PDSE dataset, the loader requires enough storage to build an image of the NCP into real storage.

Appendix A. SSP V4R8 MVS Install Logic

A.1 SMP/E Modification Control Statements

The SMP/E Modification Control Statements (SMPMCS) for SSP V4R8 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 may browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

Figure 60 on page 48 provides a portion of the SMP installation logic for SSP V4R8 MVS.

```

++FUNCTION(HSP4480 ) FESN(0566641 ) REWORK(2000130 )
                                RFDSNPFX(IBM      )
                                DESC( ACF/SSP ) FILES(2)
/*****
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/* 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
                   HSP4470 )
                   SUP(AR40359 AR40970 AR41397 AR41496 AR41513
                       AR41516 AR41614 AR41797 AR41803 AR41809
                       AR41931 AR42001 AR42057 AR42315 AR42337
                       AR42372 AR42373 AR42457 AR42459 AR42537
                       AR42617 AR42660 AR42661 AR42714 AR42854
                       UR51689 UR51785 UR51789 UR51795 UR51838
                       UR51899 UR51906 UR51907 UR51958 UR51991
                       UR51998 UR52000 UR52103 UR52200 UR52201
                       UR52210 UR52228 UR52230 UR52233 UR52234
                       UR52239 ) .
++IF FMID(HNC7702 ) REQ(UR52036 ) .
++IF FMID(HNC7802 )
    REQ(UR52037 UR52175 UR52178 ) .
++IF FMID(HNC7602 ) REQ(UR52035 ) .
++IF FMID(HNC7502 ) REQ(UR52034 ) .
++IF FMID(HNC7402 ) REQ(UR52033 ) .
++IF FMID(HNC7303 ) REQ(UR52032 ) .
++IF FMID(HNC7202 ) REQ(UR52031 ) .
++JCLIN                RELFILE(1) .

```

Figure 60. SMP Installation Logic

Figure 61 provides a sample job to print SMPMCS.

```
//SSPLOGIC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* PRINT THE SMPMCS FILE FROM THE SSP V4R8 PRODUCT TAPE *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE tape TO THE PRODUCT TAPE OR CARTRIDGE *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//GENER EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN=SMPMCS,VOL=SER=SP4480,
// UNIT=tape,DISP=OLD,LABEL=(1,SL)
//SYSUT2 DD SYSOUT=A
//SYSIN DD DUMMY
//*
```

Figure 61. Sample JCL to Print the SMPMCS

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 V4R7 APARs are incorporated into this program:

IR37995	IR39842
IR38721	IR39843
IR39094	IR39858
IR39098	IR39903
IR39316	IR39908
IR39329	IR39909
IR39354	IR39987
IR39356	IR40150
IR39390	IR40151
IR39476	IR40152
IR39595	IR40290
IR39652	IR40440
IR39699	IR40380
IR39713	IR40807
IR39693	IR40808
IR39747	

B.1 PTFs and APARs Incorporated into this Service Level

The following SSP V4R8 PTFs and their corresponding APARs are incorporated into this service level.

Figure 62 (Page 1 of 2). SSP V4R8 PTFs, Corresponding APARs, and Level for Service Level 0019

PTF	CORRESPONDING APAR(S)	LEVEL
UR51689	IR40970	PUT9912
UR51785	IR41614	RSU9912
UR51789	IR41496	RSU0001
UR51789	IR41513	RSU0001
UR51795	IR41516	RSU9912
UR51795	IR41797	RSU9912
UR51838	IR41803	RSU0001
UR51899	IR41931	RSU0002
UR51907	IR41397	RSU0003
UR51958	IR42057	PUT0002

Figure 62 (Page 2 of 2). SSP V4R8 PTFs, Corresponding APARs, and Level for Service Level 0019

PTF	CORRESPONDING APAR(S)	LEVEL
UR51907	IR41397	RSU0003
UR51991	IR40359	RSU0003
UR51998	IR41809	PUT0002
UR52000	IR42315	PUT0002
UR52103	IR42372	PUT0002
UR52200	IR42457	SMCCOR
UR52201	IR42459	SMCCOR
UR52210	IR42337	SMCCOR
UR52210	IR42373	SMCCOR
UR52210	IR42537	SMCCOR
UR52228	IR42617	SMCCOR
UR52230	IR42661	SMCCOR
UR52233	IR42714	SMCCOR
UR52234	IR42854	SMCCOR
UR52239	IR42660	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 sub-categories for COR-CLOSED PTFs have been provided by Software Delivery and Fulfillment (SDF), Poughkeepsie:

PUTyymm COR-CLOSED PTFs that are available on an ESO Tape, where 'yynn' 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 Software Delivery and Fulfillment (SDF) in Poughkeepsie.

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 8, Service Level SMC0019 for MVS

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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

Did you order this product as an independent product or as part of a package?

- Independent
- Package

If this product was ordered as part of a package, what type of package was ordered?

- CustomPac
 - FunctionPac
 - SystemPac
- System Delivery Offering (SDO)
- Other - Please specify type:

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 these products?

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If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

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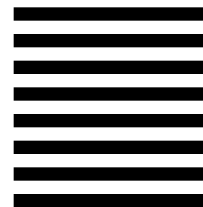
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