

**Program Directory
for use with
Interactive System Productivity Facility Version 3
with National Language Support
for
VM
5684-043
Release 2, Modification Level 0**

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This Program Directory is delivered with program number 5684-043 for the following feature number(s):

**5093/5094/5095/5121/5122/5123/5200/5201/5202, 5203/5204/5205/5206/5207/5208/5209/5210/5211,
5215/5216/5217/5218/5219/5220/5870/5871/5872, 5874/5933/5934/5935/5936/5937/5938/5939/5941**

This directory contains information concerning the material and procedures associated with the installation of this program.

You should read all of it before installing the program, and then keep it for future reference.

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Preface

This document is intended for the system programmer responsible for program installation and maintenance. This document contains the following sections:

- Program Materials

This section identifies the basic and optional program materials and documentation for ISPF 3.2.0 for VM.

- Program Support

This section describes the IBM support available for ISPF 3.2.0 for VM.

- Program and Service Level Information

This section lists the APARs (program level) and PTFs (service level) integrated into ISPF 3.2.0 for VM.

- Installation Requirements and Considerations

This section identifies the resources and considerations for the installation and use of ISPF 3.2.0 for VM.

Note: The fix for ISPF 3.2.0 NLS APAR VM43115 must be installed in order to use the National Language Support (NLS) feature of ISPF 3.2.0.

- Installation Instructions

This section provides detailed installation instructions for ISPF 3.2.0 for VM.

It also describes the procedures for activating the functions of ISPF 3.2.0 for VM.

- Customizing Options

This section lists options for modifying the distributed release of ISPF.

- Appendix A. Installation EXEC Error Messages

This appendix lists messages that may be displayed during the installation of ISPF 3.2.0 for VM and outlines corrective actions for each error message.

- Appendix B. ISPSAVE EXEC Error Messages

This Appendix lists messages that may be displayed when executing the ISPSAVE EXEC and outlines corrective actions for each error message.

- Appendix C. Console Display of Installation Procedure

This appendix displays the actual steps and system responses during the ISPF installation procedure.

- Appendix D. ISPF Installation Tape Files

This appendix lists the files that are on the ISPF installation tape.

- Appendix E. ISPDCCS Command

This appendix shows the syntax and use of the ISPF installation tape.

- Appendix F. ISPSTART EXEC

This appendix describes the use and syntax of the ISPF Dialog Manager Invocation Exec - ISPSTART EXEC.

Before installing ISPF 3.2.0 for VM, read the section 3.2, “Preventive Service Planning” on page 5. This section tells you how to find any updates to the information and procedures in this Program Directory.

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1.0 Introduction

This Program Directory describes the installation of the Interactive System Productivity Facility Version 3, Release 2, Modification Level 0 for VM.

This version of ISPF is for the VM/SP6 and VM/XA SP2 environments and provides full support of the addressing capabilities of VM/XA. Users migrating from previous releases of ISPF and from SPF should refer to the *ISPF and ISPF/PDF Planning and Customizing* manual, SC34-4271, for migration information.

This release includes National Language Support (NLS). National Language Support (NLS) gives countries whose national language is not English the option of translating commands and keywords so that users can enter them in the country's national language. In addition, display screens, messages, and literals are shipped with the product in the non-English languages. Languages supported by ISPF 3.2.0 for VM are Brazilian-Portuguese, Danish, German, Japanese (Kanji), Spanish, Simplified Chinese, Swiss German, and Traditional Chinese. ISPF 3.2.0 for VM provides only terminal and keyboard support for Korean, French, and Italian.

ISPF provides the following additional National Language Support:

- KANA and NOKANA keywords for message definitions
- Default session national language
- Session national language default override.

ISPF 3.2.0 for VM provides support for double-byte character sets (DBCS) in the VM environment. Each DBCS character is represented by two 8-bit bytes. Japanese (Kanji) is an example of double-byte character format.

ISPF supports double-byte character sets (DBCS) within the restrictions of the host operating system. (VM/SP Release 6 and VM/XA SP2 requires that CMS FULLSCREEN mode be set to ON to support DBCS.)

For execution of ISPF 3.2 for VM with VM/XA SP2, the PTFs for ISPF APARs VM34761 and VM41184 must be installed.

VM34761

- UM90048 - VM/XA SP Release 2.0

VM41184

- UM14839 - VM/XA SP Release 2.1
- UM14840 - VM/XA SP Release 2.0

2.0 Program Materials

An IBM program is identified by a program number and a feature code. The program number for ISPF 3.2.0 for VM is 5684-043. You can find a description of the features supported by ISPF 3.2.0 for VM in the program announcement material. See your IBM marketing representative for this information.

2.1 Basic Machine Readable Material (MRM)

The distribution medium for this program is a 9-track magnetic tape, written at either 1600 or 6250 BPI, a 3480 tape cartridge, or a 9346 tape cartridge. The ISPF installation EXEC for ISPF 3.2.0 for VM is I5684043 EXEC. See 6.0, "Installation Instructions" on page 11, for more information about installing the program. Table 1 describes the distribution media. Table 2 describes the file content of the program tapes or cartridge.

Table 1. Basic Material - Program Tapes

Track/Density or Device	Feature	Language	Reel	External Tape Label
9/1600	5870	US English	1	Basic + NLS
	5203	German	1	
	5200	Danish	1	
	5209	Spanish	1	
	5093	Braz. Portuguese	1	
	5206	Japanese	1	
	5121	SW-German	1	
	5215	Trad. Chinese	1	
	5218	Simp. Chinese	1	
9/6250	5871	US English	1	Basic + NLS
	5204	German	1	
	5201	Danish	1	
	5210	Spanish	1	
	5094	Braz. Portuguese	1	
	5207	Japanese	1	
	5122	SW-German	1	
	5216	Trad. Chinese	1	
	5219	Simp. Chinese	1	
3480	5872	US English	1	Basic + NLS
	5205	German	1	
	5202	Danish	1	
	5211	Spanish	1	
	5095	Braz. Portuguese	1	
	5208	Japanese	1	
	5123	SW-German	1	
	5217	Trad. Chinese	1	
	5220	Simp. Chinese	1	
9346	5874	US English	1	Basic + NLS
	5933	German	1	
	5937	Danish	1	
	5935	Spanish	1	
	5936	Braz. Portuguese	1	
	5934	Japanese	1	
	5941	SW-German	1	
	5939	Trad. Chinese	1	
	5938	Simp. Chinese	1	

Table 2. Program Tapes - File Content

File	Name	Description
1	I5684043 032012 I5684043 EXEC	Product Identifier File Installation Exec
2	I5684043 MEMO	Memo to Users
3		All ISPF Product files except Panels, Messages, Tables, and GML
4	ENGLISH Files	Panels, Messages, Tables and GML
5	DANISH Files	Panels, Messages, Tables and GML
6	GERMAN Files	Panels, Messages, Tables and GML
7	JAPANESE Files	Panels, Messages, Tables and GML
8	BRAZ.-PORTUGUESE Files	Panels, Messages, Tables and GML
9	SPANISH Files	Panels, Messages, Tables and GML
10	SWISS-GERMAN Files	Panels, Messages, Tables and GML
11	SIMPLIFIED CHINESE Files	Panels, Messages, Tables and GML
12	TRADITIONAL CHINESE Files	Panels, Messages, Tables and GML

2.2 Program Publications

The following sections identify the basic program publications for ISPF 3.2.0 for VM, and other publications useful during installation.

2.2.1 Basic Program Publications

Table 3 identifies the basic program publications for ISPF 3.2.0 for VM. One copy of each of these publications is included when you order the basic materials for ISPF 3.2.0 for VM. For additional copies, contact your IBM marketing representative.

Table 3. Basic Material - Program Publications

Publication Title	Order/Form Number
<i>ISPF Licensed Program Specification</i>	GC34-4268
<i>ISPF Dialog Management Guide and Reference</i>	SC34-4273
<i>ISPF Dialog Management Examples</i>	SC34-4265
<i>ISPF Dialog Tag Language Guide and Reference</i>	SC34-4267
<i>ISPF and ISPF/PDF Reference Summary</i>	SC34-4297
<i>ISPF and ISPF/PDF General Information</i>	GC34-4261
<i>ISPF and ISPF/PDF Planning and Customizing</i>	SC34-4271
<i>ISPF and ISPF/PDF Primer</i>	SC34-4270
<i>ISPF and ISPF/PDF Master Index</i>	SC34-4282

Table 4 identifies the publications available in German.

Table 4. Publications Available in German

Publication Title	Order/Form Number
<i>ISPF and ISPF/PDF General Information</i>	GC12-2001
<i>ISPF and ISPF/PDF Primer</i>	SC12-2002

Table 5 identifies the publications available in Traditional Chinese.

Table 5. Publications Available in Traditional Chinese

Publication Title	Order/Form Number
<i>ISPF and ISPF/PDF General Information</i>	GC40-1247
<i>ISPF and ISPF/PDF Primer</i>	SC40-1239

2.2.2 Publications Useful During Installation

The publications listed in Table 6 may be useful during the installation of ISPF 3.2.0 for VM. To order copies, contact your IBM representative.

Table 6. Publications Useful During Installation

Publication Title	Order/Form Number
<i>VM System Product Release 6: CP Command Reference (General User)</i>	SC24-5401
<i>VM System Product Release 6: Installation Guide</i>	SC24-5237
<i>VM System Product Release 6: CMS Command Reference</i>	SC19-6205
<i>VM/XA SP2 Release 2.0: CP Command Reference</i>	SC23-0358
<i>VM/XA SP2 Release 2.0: Installation Service</i>	SC23-0364
<i>VM/XA SP2 Release 2.0: CMS Command Reference</i>	SC23-0354

3.0 Program Support

This section describes the IBM support available for ISPF 3.2.0 for VM.

3.1 Program Services

This program is classified as a Licensed Program. Contact your IBM marketing representative or Systems Engineer (SE) for specific information about available program services.

3.2 Preventive Service Planning

Before installing ISPF 3.2.0 for VM, you should also check with your IBM Support Center or use either Information/Access or IBMLink(ServiceLink) to see whether there is any additional Preventive Service Planning (PSP) information of which you should be aware. To obtain this information, specify the following UPGRADE and SUBSET values:

Table 7. PSPI/UPGRADE and SUBSET ID

Upgrade	Subset	Description
ISPF320	VM202	ISPF Base Code and English Language
ISPF320	VM211	Swiss German
ISPF320	VM214	Kanji
ISPF320	VM215	German
ISPF320	VM218	Spanish
ISPF320	VM219	Danish
ISPF320	VM221	Braz. - Portuguese
ISPF320	VM230	Trad. Chinese
ISPF320	VM240	Simp. Chinese

3.3 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will ensure that it is created and assist in getting any documentation sent to the proper location. This Licensed Program will be maintained through the distribution of Program Temporary Fixes (PTFs). PUT tapes containing PTFs will be sent on request to all licensed users of this program.

4.0 Program and Service Level Information

This section identifies the program and service levels of ISPF 3.2.0 for VM. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated.

4.1 Program Level Information

The following APAR fixes have been incorporated into ISPF 3.2.0 for VM.

VM19390	VM22542	VM24807	VM28259
VM19469	VM22558	VM25017	VM28351
VM19470	VM22559	VM25070	VM28374
VM19585	VM22600	VM25657	VM28582
VM19664	VM22633	VM25680	VM28636
VM19673	VM22680	VM25701	VM28657
VM19722	VM22892	VM25704	VM28691
VM20135	VM23365	VM25810	VM28925
VM20211	VM23489	VM25845	VM29105
VM20598	VM23638	VM25867	VM29110
VM20626	VM23662	VM25877	VM29179
VM20797	VM23668	VM25918	VM29220
VM20955	VM23693	VM25974	VM29336
VM21030	VM23694	VM25989	VM29369
VM21032	VM23708	VM26046	VM29447
VM21063	VM23771	VM26128	VM29914
VM21130	VM23798	VM26245	VM29995
VM21164	VM23809	VM26260	VM30049
VM21509	VM23810	VM26276	VM30897
VM21594	VM23992	VM26434	VM30619
VM21646	VM24062	VM26529	VM30713
VM21679	VM24068	VM26602	VM30762
VM21691	VM24077	VM26662	VM31477
VM21733	VM24095	VM26679	VM31529
VM21771	VM24098	VM26804	VM31611
VM21787	VM24182	VM26958	VM32147
VM21828	VM24244	VM26980	VM32168
VM21829	VM24282	VM27030	VM32300
VM21843	VM24344	VM27038	VM32389
VM21848	VM24345	VM27042	VM32390
VM21891	VM24385	VM27447	VM32481
VM21896	VM24387	VM27470	VM32724
VM21957	VM24450	VM27473	VM32725
VM21984	VM24499	VM27624	VM32777
VM21985	VM24510	VM27627	VM32779
VM21988	VM24588	VM27680	VM32802
VM22015	VM24612	VM27682	VM32992
VM22016	VM24632	VM27851	VM33458
VM22052	VM24645	VM27928	VM33472
VM22097	VM24655	VM28058	VM33517
VM22279	VM24657	VM28200	VM33561
VM22448	VM24734	VM28256	VM33732

VM33826	VM37695	VM38652	VM39475
VM33901	VM37738	VM38653	VM39744
VM34042	VM37770	VM38662	VM39769
VM34812	VM37771	VM38668	VM39771
VM34813	VM37894	VM38673	VM39776
VM35042	VM37962	VM38723	VM39777
VM35182	VM37966	VM38732	VM39841
VM35217	VM38019	VM38737	VM39854
VM35489	VM38020	VM38751	VM39855
VM35519	VM38021	VM38799	VM39865
VM35553	VM38039	VM38838	VM39951
VM35554	VM38040	VM38911	VM40009
VM35555	VM38041	VM38926	VM40097
VM35556	VM38053	VM39117	VM40343
VM35671	VM38146	VM39118	VM40355
VM35752	VM38154	VM39119	VM40587
VM35956	VM38251	VM39208	VM40590
VM36686	VM38368	VM39256	VM40606
VM36704	VM38369	VM39259	VM40787
VM37156	VM38383	VM39323	VM40942
VM37235	VM38454	VM39391	VM41047
VM37390	VM38605	VM39396	
VM37669	VM38628	VM39432	

4.2 Service Level Information

The following PTFs have been incorporated into ISPF 3.2.0 for VM.

UM03134	UM08200	UM11128	UV20639
UM03135	UM09176	UM11152	UV20800
UM03232	UM09177	UM11362	UV20850
UM03358	UM09292	UM12670	UV20884
UM03394	UM09293	UM12751	UV20992
UM03429	UM09419	UM12752	UV21050
UM03435	UM09422	UM12781	UV21231
UM03558	UM09465	UM12782	UV21268
UM03560	UM09466	UM13152	UV21269
UM03840	UM09536	UM13153	UV21308
UM03955	UM09716	UM13154	UV21647
UM04068	UM10148	UM13494	UV21660
UM04163	UM10212	UM13155	UV21744
UM04466	UM10390	UM13562	UV21769
UM04467	UM10294	UM13791	UV21816
UM04468	UM10470	UM14218	UV21888
UM04469	UM10471	UM14310	UV22169
UM04470	UM10472	UM14385	UV22172
UM04471	UM10473	UM14387	UV22173
UM04472	UM10474	UM14427	UV22261
UM04473	UM10573	UM14547	UV22401
UM04477	UM10698	UM14564	UV22402
UM04932	UM10729	UM14573	UV22511
UM06548	UM10731	UM14579	UV22514
UM06895	UM10732	UM14610	UV22902
UM07354	UM10908	UM14676	UV22995
UM07779	UM10995	UM14639	UV23065
UM08020	UM11117	UV20470	UV23230

UV23595	UV26654	UV30923	UV40466
UV23598	UV26673	UV31132	UV40467
UV23601	UV26686	UV31357	UV40468
UV23872	UV26767	UV31902	UV40469
UV23901	UV26769	UV31956	UV40470
UV23915	UV26797	UV32323	UV40471
UV24237	UV27360	UV32915	UV40472
UV24288	UV28137	UV33058	UV40473
UV24454	UV28162	UV33194	UV40917
UV24591	UV28640	UV33195	UV40918
UV24635	UV28709	UV33196	UV40919
UV24711	UV28817	UV33197	UV41119
UV25031	UV29021	UV33198	UV41490
UV25032	UV29075	UV33199	UV41501
UV25033	UV29081	UV33200	UV42243
UV25034	UV29183	UV33201	UV42965
UV25035	UV29505	UV33249	UV43049
UV25036	UV29638	UV33365	UV43056
UV25037	UV29639	UV33436	UV44160
UV25038	UV29640	UV33500	UV44286
UV25041	UV29641	UV34130	UV44426
UV25322	UV29642	UV34586	UV44658
UV25379	UV29643	UV34787	UV44659
UV25400	UV29644	UV34854	UV45514
UV25415	UV29679	UV35852	UV46819
UV25440	UV29783	UV36129	UV47201
UV25521	UV29872	UV36262	UV47275
UV25713	UV30030	UV36295	UV47546
UV25756	UV30064	UV36230	UV48426
UV25783	UV30142	UV36940	UV48939
UV25844	UV30143	UV37770	UV49363
UV26323	UV30497	UV38356	UV49507
UV26326	UV30524	UV38684	UV49516
UV26503	UV30525	UV40457	UV90215
UV26504	UV30526	UV40458	UV90216
UV26505	UV30527	UV40459	UV90217
UV26506	UV30528	UV40460	UV90218
UV26507	UV30529	UV40461	UV90219
UV26508	UV30530	UV40462	UV90220
UV26509	UV30531	UV40463	UV90221
UV26510	UV30535	UV40464	UV90222
UV26524	UV30796	UV40465	UV90223

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating ISPF 3.2.0 for VM.

5.1 Programming Systems

The following sections identify the resources and materials required to install ISPF 3.2.0 for VM.

5.1.1 Operating System Requirements

The VM/SP Release 6 with Conversational Monitor System (CMS) Release 6 or VM/XA with CMS Release 5.5 must be used to install and run ISPF Version 3.2.0 for VM. ISPF Version 3.2.0 for VM operates as a CMS command processor under VM/SP with CMS Release 6 or VM/XA with CMS Release 5.5.

For execution of ISPF 3.2 for VM with VM/XA SP2, the PTFs for ISPF APARs VM34761 and VM41184 must be installed.

VM34761

- UM90048 - VM/XA SP Release 2.0

VM41184

- UM14839 - VM/XA SP Release 2.1
- UM14840 - VM/XA SP Release 2.0

5.2 Hardware Requirements

The following sections identify the resources and materials required to install ISPF 3.2.0 for VM.

5.2.1 Machine Requirements

The minimum machine configuration for ISPF 3.2.0 for VM is the same as the minimum machine configuration for the VM/SP Release 6 operating system or the VM/XA operating system.

ISPF 3.2.0 for VM requires a full screen display terminal with at least 24 lines of interactive usage. The following IBM display terminals are supported:

3178, 3179, 3179G
3180 ¹
3191, 3192, 3192G, 3193
3275 Model 2
3275 Model 12 (using VM/VCNA)
3276 Models 2, 3, or 4
3276 Models 12, 13, or 14 (using VM/VCNA)

¹ All operating modes (2 through 9) of the 3180 are supported. Features of the various modes of the 3180 correspond to those of four models of a 3278. Therefore, those features of a 3278 (models 2-5) that are indicated by ISPF in response to a device query are supported.

3277 Model 2 (local or remote attachment)
 3278 Models 2, 3, 4, or 5 (local or remote attachment)
 3279 Models 2A, 3A, 2B, 3B, S3G, or 3X (local or remote)
 3290 Information Panel
 IBM PS/55 as 3270

Any other IBM terminal that is data stream compatible with those listed.

ISPF 3.2.0 for VM does not require a display device if it is operated only in batch mode.

5.2.2 DASD Storage Requirements

The ISPF 3.2.0 for VM specific disk space requirements are shown below in Table 8 and will vary according to what is installed in a particular location. For example, approximately 25 cylinders of IBM 3380 disk space are required for ISPF 3.2.0 for VM, if the product is installed as a set of MACLIBs, and with only English installed. An equivalent amount of space is required for other device types. Table 8 shows the disk space required if additional languages are installed.

Table 8. 3380 DASD Space Requirements

Product Files and files for one National Language	Cylinders Required
GMLs, Panels, Messages, Tables	
MACLIB Format	3
Flat File Format	6
All Other Product Files	
EXECs, Text, etc.	8

6.0 Installation Instructions

This section contains the steps to install and activate the functions of ISPF 3.2.0 for VM. The *ISPF and ISPF/PDF Planning and Customizing* manual contains the step-by-step procedures to plan and customize the functions of ISPF 3.2.0 for VM.

If you are converting from SPF to ISPF 3.2.0 for VM or migrating from a previous release of ISPF, refer to the *ISPF and ISPF/PDF Planning and Customizing* manual, SC34-4271, for migration information.

The IBM component code for ISPF is *ISP*. All ISPF system filenames begin with these three characters.

The name of the ISPF Version 3 Release 2 Modification 0 for VM installation EXEC is I5684043 EXEC and is referred to throughout this manual as the ISPF installation EXEC.

6.1 Installation Considerations

- The ISPF installation tape is in VMFPLC2 format.
- The default name of the ISPF disconnected virtual machine is ISPVM.
- Installation files (first two tape files) may be loaded on any read/write accessed minidisk you specify.
- The ISPF system files (EXECs, TEXTs, MODULEs) may be loaded on a different minidisk than the ISPF language files (PANELs, MESSAGEs, TABLEs, and GML). If all ISPF product files are loaded on one minidisk, it is referred to as the *ISPF product minidisk*. However, if separate minidisks are used, the minidisk where the ISPF system files are loaded is referred to as the *ISPF system minidisk*, and the minidisk where the ISPF language files are loaded is referred to as the *ISPF language minidisk*.
- We recommend that you use ISPVM as the userid for the ISPF disconnected virtual machine. We also recommend that you use the ISPVM 192 minidisk as the ISPF product minidisk.
- You must be LINKed to both the ISPF product disk(s) and to the ISPF virtual machine's (ISPVM) 191 disk in write mode, and they must have been previously formatted before running the ISPF installation EXEC.
- You must provide the virtual device address(es) of the ISPF product disk(s) and the ISPVM 191 minidisk to the ISPF installation exec.
- If you are installing to existing minidisks, be sure to back them up prior to installing ISPF. The ISPF installation EXEC will overlay any like-named ISPF files already on the minidisk. Pay particular attention to local customizations made to panels so that those files are not lost. It is recommended that you keep service and modifications on a separate minidisk to prevent accidental loss.
- ISPF does not support installation on or execution from the Shared File System (SFS).

After installation is complete, change or remove any default passwords for security purposes.

6.2 Checklist of ISPF 3.2.0 for VM Installation Steps

The following is a checklist of the major steps to install the ISPF 3.2.0 for VM tape. Each step is described in detail on the following pages.

1. Define the ISPVM Virtual Machine and ISPF Product Minidisk(s)
 - Create the ISPVM Virtual Machine Directory
 - Set Up the AUTOLOG Statement
 - Format the ISPF Minidisks
2. Define the ISPF DCSS Area
3. Load the ISPF Product from the Installation Tape and Build the DCSS
 - Attach ISPF Installation Tape and Establish Write Links to ISPVM
 - Load the Installation Files from the Installation Tape
 - Execute the ISPF Installation EXEC
 - Tailor the PROFILE EXEC on the ISPVM A-disk
 - Installation of Program Temporary Fixes (PTFs)
 - Run the ISPSAVE EXEC
 - Start the ISPF Disconnected Machine.
4. Check Network Machine ID
 - Change the Variable &ZNETMID
5. ISPF File Naming Conventions
 - Use Appropriate FILEDEF Names to Perform Concatenation of Files
 - Change the ISPSTART EXEC
 - Include the Appropriate FILEDEFs in the User PROFILE EXEC
6. Verifying the installation of ISPF 3.2.0 for VM

If you are migrating from SPF, note that if you have modified or extended the previous SPF menus, you must convert them to the ISPF panel format. Refer to the *ISPF and ISPF/PDF Planning and Customizing* manual for more information.

If you have IPF (Installation Productivity Facility) formatted tables, you must convert them to ISPF format. The conversion utility runs in VM under ISPF. Refer to Appendix G for more information.

The following sections contain the six detailed steps to install ISPF.

6.3 Step 1 - Define the ISPVM Virtual Machine and ISPF Product Minidisk

The ISPVM virtual machine is required to run ISPF. It uses the Virtual Machine Communication Facility (VMCF) to communicate with the user's virtual machine. ISPVM is intended to be run in the disconnected state, and should be AUTOLOGed when VM/SP or VM/XA is IPLed by putting the AUTOLOG command in the PROFILE EXEC of the AUTOLOG1 virtual machine. Since ISPVM serves as a serial resource for all ISPF users, it should be given a dispatching priority higher than that of general users.

ISPVM requires the DEVINFO directory option in VM/SP Release 6, or Class E privilege in VM/XA to execute a CP DIAGNOSE instruction. If ISPVM is to be used to build a DCSS, then the appropriate privilege classes will be required. Only the system programmer should be allowed to log on to ISPVM. *Do not give the password to anyone else.*

Note: Only one ISPF disconnected machine can be used on a system. If you do not use the same disconnected virtual machine, an integrity exposure will occur when users attempt multiwrite access of the same minidisk. The ISPVM MODULE shipped with this release is required for VM/SP Release 6 and for VM/XA.

If you are converting from SPF to ISPF 3.2.0, after you set up ISPVM, copy the entire A-disk from the old disconnected machine, SPFVM, to the ISPVM A-disk. Use the ISPSTART EXEC in place of the SPF EXEC to bring up the ISPF product.

6.3.1 Step 1A - Create the ISPVM Virtual Machine Directory

The ISPVM virtual machine directory entry should contain the following for VM/SP Release 6:

```
USER ISPVM pw 1M 16M G
OPTION DEVINFO
:
MDISK 191 3380 cylr cyls volser MR rpw wpw mpw
MDISK 192 3380 cylr 007 volser MR rpw wpw mpw
```

Figure 1. Directory Entry for VM/SP

where:

- ISPVM** is the userid of the ISPVM virtual machine.
- pw** is the password of the ISPVM virtual machine.
- 1M** is the recommended virtual machine size (See note 1).
- 16M** is the maximum virtual machine size (Installation option).
- G** is the execution privilege class required (See note 2).
- OPTION DEVINFO** is required to execute a CP DIAGNOSE instruction (See note 2).
- MDISK 191** is the ISPVM A-disk (See note 3 for A-disk size information).
- MDISK 192** is the assumed ISPF product minidisk where the ISPF product files are loaded at installation time (see note 4).

rpw wpw mpw

are the read, write and multi passwords to the ISPVM minidisks.

The ISPVM virtual machine directory entry should contain the following for VM/XA:

```
USER ISPVM pw 1M 16M EG
AUTOLOG AUTOLOG1
MACHINE 370
:
MDISK 191 3380 cylr cyls volser MR rpw wpw mpw
MDISK 192 3380 cylr 007 volser MR rpw wpw mpw
```

Figure 2. Directory Entry for VM/XA

where:

ISPVM is the user ID of the ISPVM virtual machine.

pw is the password of the ISPVM virtual machine.

1M is the recommended minimum virtual machine size (See note 1).

16M is the maximum virtual machine size (Installation option).

EG are the privilege classes required (See note 2).

AUTOLOG AUTOLOG1

defines AUTOLOG1 as the user ID authorized to AUTOLOG ISPVM (See Step 1B).

MACHINE 370

defines this virtual machine as a 370-mode machine

MDISK 191 is the ISPVM A-disk (See note 3 for A-disk size information)

MDISK 192 is the default ISPF product minidisk where the ISPF product files are loaded at installation time (See note 4).

rpw wpw mpw

are the read, write and multi passwords to the ISPVM minidisks, as defined by your installation.

Notes:

1. The virtual machine size indicated is a recommended minimum size. You may need to increase this size depending on your applications. For example, if many users are reading data from a shared minidisk, serialization contention may occur and Enqueue/Dequeue or Storage errors could be received by users. If this occurs, the size of the ISPVM virtual machine should be increased to eliminate the storage errors.
2. ISPVM will execute as a class G userid. The DEVINFO directory option is required in VM/SP Release 6 to execute a CP DIAGNOSE instruction. To execute a CP DIAGNOSE instruction in VM/XA privilege Class E is required. If ISPVM is to build a DCSS, then the appropriate privileges will be required.
3. The ISPVM virtual machine generates and maintains the following information on its A-disk:
 - A file named EQUATE SPFTABLE maintains information about all specified ISPF libraries on the ISPVM A-disk. The EQUATE SPFTABLE will be dynamically converted to accommodate 4-digit device addresses during the initial start up of the ISPF disconnected machine. The converted EQUATE SPFTABLE will not work on releases prior to ISPF Version 2 Release 2 Modification 1 for VM/SP Release 6.

- If you had the SPF licensed program installed, the following additional files were maintained but are no longer used:
 - For each SPF Release 2 user, ISPVM maintained a CMS file for the user profile. These files all have a filetype of SPFPARMS. The filename is the same as the user ID unless the user ID is not a valid filename, in which case the filename is of the form SPFxxxxP. Each file consisted of a single record that normally does not exceed 6000 bytes. A file was automatically created for each user the first time the user invokes ISPF. ISPF now saves profile data in each user's profile table, instead of on the ISPVM A-disk.
 - Another filename, PARMS SPFTABLE, was maintained to provide a correspondence between user IDs and filenames for SPFPARMS.
 - Only the system programmer should have read or write access to the ISPVM A-disk. The A-disk should be backed up regularly.

- To calculate sufficient A-disk space for ISPVM files and data, based on a 3380 disk with 1K-byte blocks, the approximate number of tracks required for the ISPVM A-disk is:

$$((\text{Max ISPF users} / 1.66) + (\text{Max ISPF libraries} / 168)) * 0.71$$

For example, to support 65 ISPF users and 350 ISPF libraries,

$$((65 / 1.66) + (350 / 168)) * 0.71 = 29.28 \text{ tracks (2 cylinders)}$$

In addition, if you use the ISPVM userid to save the DCSS, you will need approximately 360 unused 1K-byte blocks on the ISPVM A-disk for the load map.

4. It is recommended that you backup any data you want from the ISPVM 192 disk prior to the installation of ISPF. The ISPF installation EXEC overlays any like-named ISPF files already on this disk. It is also recommended that you use a different disk to keep any customization changes.

The ISPF disconnected virtual machine (ISPVM) links to the ISPF product minidisk(s) to obtain access to the ISPVM MODULE file, loaded during installation. Make sure you delete all old copies of this file from the search order of the ISPF disconnected virtual machine's minidisks.

All ISPF users must have read access to the ISPF system minidisk in order to run the product.

Define the ISPF product minidisk(s) on a disk pack different from where the disconnected virtual machine's A-disk resides, if possible, to help improve performance.

An ISPVM 192 minidisk of ten 3380 cylinders is large enough to hold the ISPF system files, and one language file (in MACLIB format). Table 8 on page 10 indicates 3380 DASD space required for the ISPF product files. Cylinder sizes are rounded up to the next nearest cylinder. Use appropriate conversion formulas to calculate cylinders for other device types.

Note: National Language Support (NLS) language sizes are for EACH national language. Calculate the amount of space needed based on the number of national languages you will install.

While these numbers provide some extra space for possible changes, they may not provide sufficient space for compressing large MACLIBs such as ISPLIB. The estimated space requirements are provided for planning purposes only. We recommend that you use a different minidisk for customization modifications, preprocessed panels and maintenance.

6.3.2 Step 1B - Set Up the Autolog Statement

To autolog the ISPVN virtual machine each time VM/SP is IPLed, insert the following command in the PROFILE EXEC of your AUTOLOG1 virtual machine:

```
AUTOLOG      | ISPVN pw
```

where

ISPVN is the userid of the ISPVN virtual machine.

pw is the password of the ISPVN userid.

Note: Once installation of ISPF is complete, the ISPVN userid should be autologged. (See section 6.5.7)

To autolog the ISPVN virtual machine each time that VM/XA is IPLed, insert the following command in the PROFILE EXEC of your AUTOLOG1 virtual machine:

```
AUTOLOG      | ISPVN
```

where

ISPVN is the user ID of the ISPVN virtual machine.

Note: You must add an AUTOLOG statement in the directory entry for ISPVN (See Step 1A)

6.3.3 Step 1C - Format the ISPF Minidisks

Link to the ISPF disconnected virtual machine's 191 and 192 minidisks in write mode. If the minidisks are new, they have to be formatted. If you are loading to existing minidisks, you do not have to format the minidisks.

6.4 Step 2 - Define the ISPF DCSS Area

ISPF is designed to run from a discontinuous shared segment (DCSS) area. To create the ISPF DCSS, see the sample DMSKNT entry shown in -- Fig 'DMSKNT' unknown --.

Generate an entry in the DMSKNT system name table for the ISPF DCSS area. The suggested SYSNAME is ISPDCSS and the starting address is (X'7E0000') shown in Table 9 on page 17. This operation requires an assembly of DMSKNT. For VM/SP, a SYSGEN of the CP nucleus and a re-IPL of the VM/SP system is also required.

Note: For VM/SP, if you are also installing PDF, you should define the ISPF/PDF DCSS to your DMSKNT file, before re-gen of the CP nucleus. Refer to the ISPF/PDF Program Directory document for instructions to define the PDF DCSS.

The method of defining and loading a DCSS for VM/XA is different from the way a DCSS is defined under VM/SP. In VM/XA, a DCSS is defined using a CP command and it resides in a spool file. If you need to rebuild an existing DCSS, you must first redefine it, or an error occurs. You do not have to rebuild your CP system as you did in VM/SP. It allows you to build a DCSS while the system is operational.

Note: For VM/XA, if you plan to install the ISPF/PDF product, you must define both DCSSs below the 16Mb line or both DCSSs above the 16Mb line. Results are unpredictable if one DCSS is defined above the 16Mb line and the other is defined below the 16Mb line.

The example below shows the CP command to define the ISPF DCSS to VM/XA.

```
DEFSEG ISPDCSS B00-BFF SR
```

This is only an example. Your address and DCSS name can be different. Refer to the appropriate VM publication for further information.

Notes:

1. For VM/XA, as illustrated in the above example, when specifying the address of your DCSS, you must specify only the starting through ending hexadecimal page numbers (B00-BFF), rather than the entire storage address (00B00000-00BFFFFF).

Note: You should use caution when defining the location of the ISPF DCSS. See note 2 and the notes under Step 3F for more information.

2. For VM/XA, before each rebuild of the ISPF DCSS, you must redefine the ISPF DCSS to VM/XA. (You must redefine the ISPF DCSS to VM/XA before running the ISPSAVE EXEC.)

The sample DMKSNT entry shown below contains a SYSSIZE large enough for the ISPF product, including only the English language files.

For a complete description of DMKSNT, see "Preparing the System Table File" in the VM/SP or the VM/SP HPO Planning Guide and Reference, SC19-8201.

Table 9. Sample DMKSNT Entry for the ISPF DCSS

ISPDCSS	NAMESYS	SYSNAME=ISPDCSS, SYSVOL=volser, SYSSTRT=(ccc,ppp), SYSPGM=(2016-2255), SYSPGCT=240, SYSSHRSG=(126-140), SYSSIZE=960K, VSYSRES=, SYSCYL=, VSYSADR=IGNORE	('SHARED SEGMENT NAME') (VOLSER <PER INSTALLATION>) (START CYLINDER, PAGE ADDRESS <PER INST>) (ASSUMING X'7E0000' ORIGIN) (STARTPGNM = ORIGIN/4K<bytes/PG>) (-> x'7E0000'/x'1000'=x'7E0'=2016) (ENDPGNM = STARTPGNM + SYSPGCT-1) (-> 2016 + 240 - 1 = 2255) (SYSSIZE <BYTES>/4K<BYTES/PG>=SYSPGCT) (960K / 4K = 240 PAGES) (ASSUME SAME ORIGIN&64K SEGMENTS) (STARTSEG = ORIGIN/64K<BYTES/SEG>) (-> x'7E0000'/x'10000'=x'7E'=126) (15_SEGS = SYSSIZE/64K) (-> 960K / 64K = 15 SEGMENTS) (ENDSEG = STARTSEG + NUM_SEGS - 1) (-> 126 + 15 - 1 = 140) (CURRENT DCSS SIZE) (NULL FOR VSYSADR=IGNORE) (NULL FOR COUNT-KEY/FIXED-BLOCK) (MUST BE IGNORE FOR A DCSS)
---------	---------	--	---

When defining the ISPF DCSS close to the beginning of the CMS nucleus or close to the top of the virtual machine you should consider the following:

In VM/SP, the DCSS segment size is 64K. The ISPF product including only the English language files, occupies 960K bytes of the segment. The following table indicates the additional DCSS storage required if you choose to install languages other than English.

Table 10. ISPF DCSS Storage Requirements for National Language Files

National Language	Int. Abbr.	Bytes (Hex)	Bytes (Dec)	Size (K)
Danish	DAN	3970	014704	15K
English	ENU	4648	017992	18K
German	DEU	2298	008856	9K
Japanese (Kanji)	JPN	1A50	006736	7K
Portuguese	PTB	3970	014704	15K
Spanish	ESP	3970	014704	15K
Swiss German	DES	26E0	009952	10K
Simplified Chinese	CHS	1408	005128	6K
Traditional Chinese	CHT	1408	005128	6K
Korean	KOR	1950	006480	7K
Italian	ITA	2F28	012072	13K
French	FRA	3970	014074	15K

Since CMS allocates free storage from the high end of the virtual machine downward, you should always define your virtual machine size at least 1Mb greater than the ending address of the DCSS to avoid storage conflicts when saving the DCSS. For example, a DCSS defined at 11Mb (B00-BFF) requires a 13Mb minimum virtual machine size to save the DCSS.

If the CMS nucleus resides within any portion of the top megabyte of your virtual machine storage and ends at the top or outside of your virtual machine, then you must allow for at least one additional megabyte of storage between the end of your DCSS and the start of the CMS nucleus for CMS to use for free storage. For example, if you have a 16Mb virtual machine and the CMS nucleus begins at 14Mb (and ends at 16Mb), then the storage between 13Mb-14Mb should not be used to save a DCSS.

Appropriate planning should be done when defining the location of the CMS nucleus and a program product's DCSS.

6.5 Step 3 - Load the ISPF Product from the Installation Tape and Build the DCSS

In this step, all files you select from the ISPF installation tape are loaded to disk by the ISPF installation EXEC. The ISPF installation EXEC allows you to place the ISPF system files on one disk and the language files on another disk, or you can put them both on the same disk. If all the ISPF product files are loaded on the ISPVM 192 minidisk, it is referred to as the "ISPF product minidisk"

Note: ISPF does not support installation on or execution from the Shared File System (SFS).

The files installed from the installation tape are determined by the responses you give to the prompts from the ISPF installation EXEC. All ISPF system files are always loaded; however, you can choose which languages you want to install. Only selected language files will be installed. ISPF language files consist of Panel, Message, and Table files. They reside on the installation tape as MACLIBs only, but each can be loaded as either MACLIBs, CMS files, or as both.

Do not install the ISPF product on the ISPVM 191 disk. Users linking to this disk while it is being updated by the disconnected virtual machine can receive unpredictable results.

Note: You can enter *QUIT* at any prompt to quit the ISPF installation EXEC.

6.5.1 Step 3A - Attach ISPF Installation Tape and Establish Write Links to ISPVM

Attach the ISPF installation tape to your userid as 181.

Establish a write link to the ISPVM 191 minidisk so that the PROFILE EXEC can be copied here by the ISPF installation EXEC.

Establish a write link to the ISPF product minidisk(s) (ISPVM 192). Ensure that the product minidisk(s) have been previously formatted prior to running the ISPF installation EXEC, so that they can be successfully accessed by the installation EXEC.

6.5.2 Step 3B - Load the Installation Files from the Installation Tape

Load the installation EXEC, product identification file, and Memo to Users from the first two tape files using the following command:

```
VMFPLC2 LOAD * * m (EOF 2
```

where:

m is the mode of any write accessed minidisk

6.5.3 Step 3C - Execute the ISPF Installation EXEC

Run the ISPF installation EXEC for ISPF 3.2.0 for VM by issuing the command I5684043. This EXEC prompts you for the following information:

- The minidisk virtual device address where the ISPF system files will reside (ISPF system minidisk). These files include TEXTs, MODULEs, EXECs.
- The minidisk virtual device address where the languages will reside (ISPF language minidisk). These files include Panels, Messages, Tables and GML.
- The installation option (whether you want the messages, panels, tables and GML to reside as MACLIBs, CMS files, or both).
- Languages to be loaded.
- The minidisk virtual device address where the ISPVM PROFILE EXEC will reside.

ISPF system files, except those necessary for user reference, are loaded with a filemode of m0. This increases the performance of the CMS search sequence for the general users because m0 files are excluded from the CMS file directory when linked as read-only.

Refer to Appendix D for the exact sequence of files on the installation tape.

Notes:

1. Install ISPF system files that are required for product installation with a filemode of m0, where m is the mode you specify. ISPF system files necessary for user reference install with a filemode of m2. For example, ISPLINK TEXT and ISPLNK TEXT install on the ISPF product minidisk(s) with a filemode of m2. When a user accesses this minidisk by a read-only link, the performance of the CMS search sequence is improved, since m0 files are not in the file directory of the minidisk.

To see a file of mode m0, you must link and access the minidisk in WRITE mode.

2. The ISPLINK TEXT and ISPLNK TEXT files must remain on the ISPF product minidisk(s) that your users can always access by a read-only link. These two files should have a filemode of m2. All ISPF users must have read access to the ISPF product minidisk(s).
3. xxx is a 3-character language abbreviation. See -- Fig 'LANGSIZ' unknown -- for a list of the abbreviations. National language files reside on the ISPF installation tape in consecutive tape files. Each file is separated by one tape mark. The files are in the following order on the tape: English, Danish, German, Japanese (Kanji), Portuguese, Spanish, Swiss German, Simplified Chinese and Traditional Chinese.
4. Two Literals modules and one set of terminal translate tables are loaded onto the ISPF system disk for each language, including English. When you build the DCSS, however, only the Literals modules and terminal translate tables for the languages you specify to the ISPSAVE EXEC are loaded into the DCSS.

6.5.4 Step 3D - Tailor the PROFILE EXEC on the ISPVM A-disk

The following PROFILE EXEC is copied to the ISPVM 191 disk from the ISPF system minidisk by the ISPF installation EXEC.

```
/* ISPVM Profile (Rexx) Exec */
Trace off
'cp spool console start'
'release 192'
'access 192 b/a'      /* ISPF system minidisk */
'ispvm'               /* invoke ISPVM disc. machine module */
Exit
```

Figure 3. PROFILE EXEC

where:

192 is the address of the ISPF system minidisk where the ISPVM MODULE file resides. It is assumed to be the ISPVM 192 minidisk.

b/a is the access mode of the ISPF system minidisk.

Note: If you do not use ISPVM 192 as the ISPF system minidisk during installation, do the following:

- Edit the profile EXEC on the ISPVM 191 disk.
- Add a LINK statement to the new system minidisk, if it is not defined in the directory, and update the RELEASE and ACCESS statements for the new system minidisk.

The ISPF installation EXEC dynamically creates the ISPVM PROFILE EXEC. The ISPF disconnected virtual machine accesses the ISPF system minidisk in this profile exec to allow access to the ISPVM MODULE file. Make sure there are no *OLD* copies of the ISPVM MODULE on the disconnected virtual machine's search order.

6.5.5 Step 3E - Installation of Program Temporary Fixes (PTFs)

Install any program temporary fixes (PTFs) that you require.

If you are installing a program temporary fix (PTF) to any ISPV* Text files, you need to run the ISPVMGEN EXEC to create a new ISPVM MODULE. You should then restart the ISPF disconnected machine in order to invoke the new ISPVM MODULE file.

If you are installing a program temporary fix (PTF) to the ISPDSCS TEXT file, you need to run the ISPDSCGN EXEC to create a new ISPDSCS MODULE.

Note: The ISPDSCS MODULE must be created on CMS to obtain the proper AMODE and relocation information in the MODULE file.

If you are installing a program temporary fix (PTF) to the ISPQRY TEXT file, you need to run the ISPQRYGN EXEC to create a new ISPQRY MODULE.

Note: The ISPQRY MODULE must be created on CMS to obtain the proper AMODE and relocation information in the MODULE file.

6.5.6 Step 3F - Run the ISPSAVE EXEC

Use the ISPSAVE EXEC to save the ISPF DCSS. Establish write access to the ISPF system minidisk prior to running the ISPSAVE EXEC. The format of the ISPSAVE EXEC is:

```
ISPSAVE      [ sysname ]  
              [ISPDCSS]
```

Where sysname is the DCSS name you selected for the ISPF shared segment. If null input is specified, the default name (ISPDCSS) is used.

Notes:

1. The userid from which the ISPSAVE EXEC will be executed must have class E privilege in order to save the shared segment.
2. Before executing the ISPSAVE EXEC, virtual storage must be defined to include the DCSS area in the virtual machine.
3. The ISPSAVE EXEC finds the address of the DCSS you previously defined and loads ISPF there. If

the specified DCSS does not exist, an error message is issued and a prompt is displayed to enter the name again or quit.

4. For VM/XA, if you defined the ISPF DCSS close to the beginning of the CMS nucleus and cannot obtain storage to load the ISPF TEXT files, try IPLing CMS before saving the DCSS. If storage still cannot be obtained, then redefine the ISPF DCSS in a location further away from the CMS nucleus.
5. If you change the default DCSS name, you must also change this name in the ISPSTART EXEC (ISPF, and PDF EXECs if PDF is installed). Refer to Appendix E, "ISPDCS Command" on page 44 for a description of the ISPDCS command. Refer to Appendix F, "ISPSTART EXEC" on page 45 for a copy of the ISPSTART EXEC.
6. The ISPSAVE EXEC prompts you for the languages you want to install. The appropriate TEXT files for each language are saved in the DCSS.
7. The ISPSAVE EXEC explicitly loads each ISPF CSECT in order to optimize the code page references. This operation causes many loader warning messages in the load map, but they are resolved by the end of the load.
8. When the LOAD command is trying to resolve references, it looks for TEXT files in your minidisk search sequence. Make sure that none of the predecessor disks in your search order contains any TEXT file whose name is the same as any of the ISPF TEXT files.
9. The ISPSAVE EXEC saves the load map on your A disk in a file named 'sysname MAP' where sysname is the ISPF DCSS name. The load map occupies up to 360 1K-byte blocks of disk space. Make sure your A disk has sufficient space for the load map. You can refer to this load map when you must identify and report ISPF problems.

6.5.7 Step 3G - Start the ISPF Disconnected Machine

Autolog the ISPVM userid prior to invoking ISPF.

6.6 Step 4 - Check Network Machine ID

ISPF 3.2.0 for VM provides interfaces to the Remote Spooling Communications Subsystem (RSCS) Networking Program Product, 5748-XP1. This program product supports spooling of output to remote nodes and links on an RSCS network. If you wish to use this interface, check the network machine ID variable (&ZNETMID) to be sure that it is compatible with the one at your installation. The default network virtual machine userid is RSCS.

If necessary, change the variable &ZNETMID on appropriate panels to match your network machine ID.

6.6.1 Step 4A - Change the Variable &ZNETMID

To change the network machine ID for ISPF, add the following statement in the)PROC section in the following panels: ISPOPT2, ISPPFT01, ISPPFT02, ISPPFT03 (These panels are located in the ISPLIB MACLIB):

&ZNETMID = yournet

where:

yournet is your network ID.

6.7 Step 5 - ISPF File Naming Conventions

ISPF files exist in three formats: as MACLIBs, as CMS files, and as a combination of MACLIBs and CMS files.

Your users have the option of using CMS files and/or MACLIBs for ISPF system and application files. The ISPF files are listed in Table 11.

Table 11. ISPF Files and Their Names

File Contents	MACLIB	CMS Filename/Filetype
ISPF English messages (non-English)	ISPMLIB ISPMLxxx	(message ID) MESSAGE (message ID) MSGxxx
ISPF English panels (non-English)	ISPPLIB ISPPLxxx	(panel ID) PANEL (panel ID) PANELxxx
ISPF English tables (non-English)	ISPTLIB ISPTLxxx	(table name) TABLE (table name) TABLExxx
ISPF user profile	user assigned name	user assigned name

where

xxx is a 3 character language abbreviation

See -- Fig 'LANGSIZ' unknown -- for the language abbreviations.

The users must have read access to the ISPF system minidisk before they can invoke ISPF. ISPF is normally invoked by the ISPSTART EXEC. Before invoking this exec, the user must issue filedefs for any additional panel, message, skeleton and/or table files which they plan to use. In addition, a filedef must be issued for ISPPROF if they wish the profile data to be kept in a MACLIB. For CMS files, however, a filedef is optional. If they don't specify a filedef for ISPPROF, ISPF will default to a file named ISPPROF ISPPROF A.

If you are installing multiple languages, your users must have a separate private profile table for each national language they will run.

- If your installation uses MACLIBs or does NOT use CMS file defaults for ISPPROF, copy the user's current profile MACLIB or CMS files (once for each additional national language) and modify the ISPPROF FILEDEF for each language's setup EXEC.
- If your installation uses the defaults for ISPPROF (no FILEDEFS for ISPPROF in the setup exec), each additional language will require FILEDEFS for ISPPROF in the setup EXEC.

Note: Using the same private profile tables for multiple languages can cause unexpected results.

If you have installed CMS files and wish to use them instead of maclibs, then you may delete the filedefs for those maclibs and include the following:

```
FILEDEF ISPPLIB DISK ISPNULL PANEL * (PERM CONCAT
FILEDEF ISPMLIB DISK ISPNULL MESSAGE * (PERM CONCAT
FILEDEF ISPTLIB DISK ISPNULL TABLE * (PERM CONCAT
```

6.7.1 Step 5A - Use Appropriate FILEDEF Names to Perform Concatenation of Files

To execute dialogs (including PDF), additional files may have to be concatenated ahead of the ISPF system files. Use the ISPMLIB, ISPPLIB, ISPSLIB, and ISPTLIB FILEDEF names to perform the concatenation. For example, if the user wanted to concatenate a private panel library called TSTPANLS MACLIB with the ISPF panel file, ISPPLIB MACLIB, the FILEDEF statement would look like this:

For English

```
FILEDEF ISPPLIB DISK TSTPANLS MACLIB A (PERM CONCAT
FILEDEF ISPPLIB DISK ISPPLIB MACLIB * (PERM CONCAT
```

For NLS

```
FILEDEF ISPPLIB DISK TSTPANLS MACLIB A (PERM CONCAT
FILEDEF ISPPLIB DISK ISPPLxxx MACLIB * (PERM CONCAT
```

Note: Concatenating private files ahead of system files causes the private files to be searched ahead of the system files.

For more information, see the *ISPF Dialog Management Guide and Reference*.

6.7.2 Step 5B - Change the ISPSTART EXEC

ISPF is normally invoked by the ISPSTART EXEC. If you change the default FILEDEFS, use a system name other than ISPD CSS or use a disconnected machine name other than ISPV M, you must change the ISPD CS command in the ISPSTART EXEC accordingly. Refer to Appendix E, "ISPD CS Command" on page 44 for a description of the ISPD CS command. Refer to Appendix F, "ISPSTART EXEC" on page 45 for a copy of the ISPSTART EXEC.

6.7.3 Step 5C - Include the Appropriate FILEDEFS in the User PROFILE EXEC

You can include the FILEDEFS in the user's PROFILE EXEC, or you can generate an ISPF setup EXEC that includes the FILEDEFS. If you wish, the setup EXEC can issue the ISPSTART EXEC, provided the setup EXEC is written in either EXEC2 or REXX. We recommend that you create a separate EXEC containing all the appropriate file definitions for each language you are supporting. The EXEC should contain all the appropriate file definitions for that language. For more information, see Appendix E, "ISPD CS Command" on page 44. Refer to Appendix F, "ISPSTART EXEC" on page 45 for a description of the ISPSTART EXEC.

6.8 Step 6 - Verifying the Installation of ISPF 3.2.0 for VM

Re-IPL CMS before invoking ISPF. Be sure to have virtual storage defined below the start of the ISPF DCSS.

To activate the function of ISPF 3.2.0 for VM, link to the ISPF system disk in read mode, access it, and then execute the ISPSTART EXEC. The EXEC has executed successfully if the ISPF master application panel is displayed.

To tailor the ISPF program product to suit the particular needs of your installation, refer to the *ISPF and ISPF/PDF Planning and Customizing* manual.

7.0 Customizing Options

You can use the following options to modify the distributed release of ISPF to suit the particular needs of your installation.

- Preallocation of list/log files using the CMS FILEDEF command
- Overriding commands in the ISPF command table
- Preprocessed panel utility
- Selection panel update utility
- Creating ISPF translate tables
- SPF parameters (user profile data) convert utility
- ISPF-to-APL2 terminal type mappings
- Tailoring ISPF defaults
- ISPF installation exits
- ISPF national language support
- Load APL2 workspace
- ISPDSCS command

These customizing options are described in detail in the *ISPF and ISPF/PDF Planning and Customizing* manual.

Appendix A. Installation EXEC Error Messages

The following error messages may be displayed during the installation of ISPF.

MESSAGE

```
*****
*** Error occurred while performing LISTFILE command
*** on the Product Identifier file
*** Return code from LISTFILE command = < rc >
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation The Product Identifier file - I5684043 032012 could not be found on the read/write disk.

User Action Ensure you have the minidisk containing the Product Identifier file accessed in write mode. If the Product Identifier file does not exist on any minidisk, read it in from the first two tape files of the installation tape by issuing: VMFPLC2 LOAD * * m (EOF 2, where m is the mode of any write accessed minidisk. This will position the tape at tape file #3, where it should be prior to running the Installation EXEC.

Return Code 12 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** An ERROR occurred while attempting to access your
*** < vaddr > disk as < fm >.
*** The return code from the ACCESS command = < rc >
*** ISPF Installation terminated abnormally
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation A disk could not be accessed during the installation procedure.

User Action Consult the *CMS Command and Macro Reference* manual for an explanation of the ACCESS return code. Correct the problem and re-execute the Installation EXEC.

Return Code 16 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** < ISPF > Installation terminated abnormally.
*** Virtual address 181 is missing or invalid.
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation The tape is not attached to the virtual machine as 181.

User Action Attach the tape to the virtual machine as 181 and re-execute the Installation EXEC.

Return Code 20 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** An ERROR occurred while loading the < ISPF >
*** System files to your < vaddr > as < fm >
*** The return code from the VMFPLC2 command = < rc >
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation The disk may be full or a tape error has occurred.

User Action Consult the *CMS Command and Macro Reference* manual for an explanation of the VMFPLC2 return code. Define more disk space or correct the tape error and re-execute the Installation EXEC.

Return Code 25 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** An ERROR occurred during a MOVEFILE operation on the
*** ISPF language minidisk (your < vaddr >) disk.
*** The return code from the MOVEFILE command = < rc >
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation The panels, messages, tables or GML were requested to be loaded as either MACLIBS or CMS files, or as both MACLIBs and CMS files. Since they reside on tape as MACLIBs only, MOVEFILE is performed to create the CMS files. It is most likely that the disk is full.

User Action Consult the *CMS Command and Macro Reference* manual for an explanation of the MOVEFILE return code. Correct the problem and re-execute the Installation EXEC.

Return Code 28 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** Error forward spacing the tape when skipping over
*** the product files.
*** The tape position is UNKNOWN.
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation A tape error has occurred. Probable cause: tape medium error.

User Action Correct the tape error if possible and re-execute the Installation EXEC.

Return Code 20 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** An error occurred while loading the ISPF
*** Language files for languages < current language > on the
*** ISPF language minidisk (your < vaddr >) disk.
*** The return code from the VMFPLC2 command = < rc >
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation The disk may be full or a tape error has occurred.

User Action Consult the *CMS Command and Macro Reference* manual for an explanation of the VMFPLC2 return code. Define more disk space or correct the tape error and re-execute the Installation EXEC.

Return Code 25 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** The number of tape files specified by the Product
*** Identifier file is NON-numeric
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation The Product Identifier file was found to have non-numeric characters in the filetype field. The filetype should be "032012".

User Action The Product Identifier file resides on the installation tape in the first tape file. Make sure it has been loaded onto disk and not renamed. Correct the problem and re-execute the Installation EXEC.

Return Code 12 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** Error in product tape. <filename> EXEC not found.
*** Mount the correct tape and restart installation.
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation The installation exec file was not found on the first tape file. An incorrect tape was probably mounted.

User Action Mount the correct tape and re-execute the installation EXEC.

Return Code 32 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** Error forward spacing the tape to the end of the
*** <ISPF> product. The tape position is UNKNOWN.
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation A tape error has occurred. Probable cause: tape medium error.

User Action Correct the tape error if possible and re-execute the Installation EXEC.

Return Code 20 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** Error forward spacing the tape when skipping over
*** the language: < language > .
*** The tape position is UNKNOWN.
*** Exiting from 5684-043 Installation EXEC
*****
```

Explanation A tape error has occurred. Probable cause: tape medium error.

User Action Correct the tape error if possible and re-execute the Installation EXEC.

Return Code 20 from I5684043 Installation EXEC.

MESSAGE

```
*****
*** Error occurred while copying the ISPVM profile from
*** the < ISPF > system minidisk (your < vaddr > disk)
*** to the ISPVM A-disk (your < ispvms_vaddr > disk.
*** The return code from the COPYFILE command = < rc >
*****
```

Explanation It is likely that the file could not be found, or could not be written to the target disk.

User Action Consult the *CMS Command and Macro Reference* manual for an explanation of the COPYFILE return code. Attempt to perform the copy manually. DO NOT attempt to re-install the product if all files were loaded successfully.

Return Code 28 from I5684043 Installation EXEC.

Appendix B. ISPSAVE EXEC Error Messages

The following error messages may be displayed when executing the ISPSAVE EXEC.

MESSAGE

```
*****  
*** Only the DCSS name is a valid parameter  
*****
```

Explanation	The only parameter allowed is the system name. If no DCSS name is given, the default DCSS name ISPDCCS is used.
User Action	Re-execute the ISPSAVE EXEC with the system name as the only parameter, or re-execute the ISPSAVE EXEC with no parameters to get the default system name, ISPDCCS.
Return Code	1024 from ISPSAVE EXEC.

MESSAGE

```
*****  
*** Unexpected return code from SEGMENT RESERVE.  
*** SEGMENT RESERVE return code was <return code>  
*** Save of ISPF aborted  
*****
```

Explanation	An unrecoverable error occurred in the SEGMENT RESERVE command.
User Action	Consult the <i>System Programmer's Guide</i> for an explanation of the SEGMENT RESERVE return code.
Return Code	1064 from ISPSAVE EXEC.

MESSAGE

```
*****
*** Either not enough virtual storage to load ISPF
*** or the storage required to load the DCSS is
*** already in use.
*** Save of ISPF aborted
*****
```

Explanation Either the virtual machine does not have enough virtual storage to include the entire DCSS area, or the storage required to load the DCSS is already in use.

User Action Re-define the virtual machine size to increase virtual storage.

Return Code 1104 from ISPSAVE EXEC.

MESSAGE

```
*****
*** The < DCSSname > DCSS is too small to hold ISPF
*** ISPF code ends at address < address > .
*** The < DCSSname > DCSS is defined between
*** <start-addr> and <end-addr> . Redefine
*** the DCSS to the appropriate size.
*** Save of ISPF is aborted
*****
```

Explanation The ISPF DCSS was not defined large enough to contain the ISPF product.

User Action Redefine the ISPF DCSS area large enough to contain the ISPF product.

Return Code 1088 from ISPSAVE EXEC.

MESSAGE

```
*****
*** ERROR using CP < SAVESYS > command.
*** Return code from <SAVESYS > = < rc > .
*** The ISPF DCSS < DCSSname > has not been saved.
*****
```

Explanation An error occurred issuing the CP SAVESYS command. The return code = 1000 plus the SAVESYS return code.

User Action Consult the *CP Command Reference* manual for an explanation of the SAVESYS (370) return code.

Return Code 1xxx from ISPSAVE EXEC

MESSAGE

```
*****
*** Error loading < include_file >. Return code = < rc >
*** Save of ISPF is aborted
*****
```

Explanation An error occurred attempting to CMS LOAD a file or INCLUDE a file. The virtual machine storage may be too small. The return code is 1000 plus the LOAD/INCLUDE return code.

User Action Re-define the virtual machine size to insure that the virtual machine has enough virtual storage to include the entire DCSS area, or change the location of the DCSS.

Return Code 1xxx from ISPSAVE EXEC.

MESSAGE

```
*****
*** Error encountered loading the ISPF TEXT files.
*** One or more TEXT files were not found. Verify
*** the ISPF System Disk is accessed in WRITE mode.
*** Check the LOAD MAP for undefined TEXT files.
*** The ISPF DCSS < DCSSname > has not been saved.
*****
```

Explanation An error occurred attempting to CMS LOAD a file or INCLUDE a file. One or more TEXT files were not found; the LOAD MAP indicates which TEXT files were missing.

User Action Verify that the System Disk is accessed in WRITE mode.

Return Code 1004 from ISPSAVE EXEC

MESSAGE

```
*****
*** Save of ISPF is aborted
*****
```

Explanation You elected to abort the load and save of the ISPF DCSS.

Return Code 1000 from ISPSAVE EXEC.

Appendix C. Console Display of Installation Procedure

The following is a commented console recording of the installation for ISPF 3.2.0 for VM. This is only an example, showing only the installation of English, and does not show every step of the installation. Your installation may vary from what is shown below. In the installation shown below, ISPF 3.2.0 for VM is installed from the MAINT userid. Commands entered from the terminal are shown in italics.

*** Link to ISPVM's 191 and 192 Minidisks with Write Access

Link to ISPVM 191 as 691 mr

Enter mult password:

XXXXXXXXXX

Ready;

Link to ISPVM 192 as 692 mr

Enter mult password:

XXXXXXXXXX

Ready;

*** Format the ISPF Minidisks

Format 691 m

DMSFOR603R FORMAT will erase all files on disk A(191). Do you wish to continue?

Enter 1 (YES) or 0 (NO).

1

DMSFOR605R Enter disk label:

ISP191

DMSFOR733I Formatting disk M

DMSFOR732I 2 cylinders formatted on M(691)

Ready;

Format 692 N

DMSFOR603R FORMAT will erase all files on disk N(692). Do you wish to continue?

Enter 1 (YES) or 0 (NO).

1

DMSFOR605R Enter disk label:

ISP192

DMSFOR733I Formatting disk N

DMSFOR732I 60 cylinders formatted on N(192)

Ready;

*** Attach the ISPF Installation Tape

msg operator please mount tape XXXX and attach to me as 181 without ring.

TAPE 0580 ATTACHED TO MAINT 0181

Ready;

*** Load the Installation Files from the Installation Tape

*vmfplc2 load * * a (eof 2*

LOADING.....

I5684043 032012 A0

I5684043 EXEC A0

END-OF-FILE OR END-OF-TAPE

I5684043 MEMO A0

END-OF-FILE OR END-OF-TAPE

Ready;

```
*****
***
*** Execute the ISPF Installation Exec
***
*****
```

I5684043

```
*****
*** 5684-043 --- Interactive System Productivity Facility --- 5684-043
***      Version 3 Release 2 Modification 0 for VM
***      Installation Exec
***
***      Contains restricted material of IBM
***      Copyright (C) I B M Corporation 1990
***      Licensed Materials - Property of I B M
***      Refer to Copyright instructions: Form G120-2083
*****

*** Do you want to install this product now? (Y|N)
Y
*** Was ISPF Version 3 Release 2 Modification 0 previously installed? (Y/N)
N
```

```
*****
*** ----- Installation Options for ISPF System minidisk -----
***      (EXECs, TEXTs, MODULEs)
***
***      Enter the virtual device address of the minidisk where
***      you want to load the ISPF System files:
***
***
*** Note: The minidisk MUST be LINKed in WRITE mode. == > 692
```

<ENTER>

```
*****
***      The minidisk selected to load System files on is your 692 disk.
***      Is this selection correct? (Y|N) == >
Y
```

```
*****
*** ----- Installation Options for ISPF Language minidisk -----
***                (Panels, Messages, Tables, GML)
***
***      Enter the virtual device address of the minidisk where
***      you want to load the ISPF Language files:
***
***
*** Note: The minidisk MUST be LINKed in WRITE mode. == => 692
```

<ENTER>

```
*****
*** The minidisk selected to load Language files on is your 692 disk.
*** Is this selection correct? (Y|N) == =>
Y
```

```
*****
***      Installation Options for ISPF Language files
***
***      Panels, Messages, Tables & GML can EACH be loaded
***      as Maclibs, CMS files or BOTH (Maclibs & CMS files).
***
***      For EACH of the following, Enter:
***
***      M to install as MACLIBS,
***      C to install as CMS files,
***      - OR - B to install as BOTH Maclibs & CMS files
***
***      Enter selection for PANELS    == =>
M
***      Enter selection for MESSAGES == =>
M
***      Enter selection for TABLES  == =>
M
***      Enter selection for GML      == =>
M
```

*** Installation Options for ISPF Language files

*** Panels, Messages, Tables & GML can EACH be loaded
*** as Maclibs, CMS files or BOTH (Maclibs & CMS files).

*** For EACH of the following, Enter:

*** M to install as MACLIBS,

*** C to install as CMS files,

*** - OR - B to install as BOTH Maclibs & CMS files

*** Enter selection for PANELS ==> M

*** Enter selection for MESSAGES ==> M

*** Enter selection for TABLES ==> M

*** Enter selection for GML ==> M

*** Are these selections correct? (Y|N) ==>

Y

*** Installation Options for National Language Support

*** ISPF Version 3 Release 2 Modification 0 supports the following
*** National Languages:

*** - ENGLISH

*** - DANISH

*** - GERMAN

*** - JAPANESE

*** - PORTUGUESE

*** - SPANISH

*** - SWISS_GERMAN

*** - SIMPLIFIED_CHINESE

*** - TRADITIONAL_CHINESE

*** Which languages do you want to install?

*** Enter "ALL" to load all the languages,

*** Enter "ENGLISH" to load just English,

*** or ENTER (null) for a selection menu ==>

ENGLISH

```

*****
***      Installation Options for National Language Support
***
***      For each language listed, reply (Y | N)
***

*** Do you want to install  ENGLISH           ==> Y
*** Do you want to install  DANISH            ==> N
*** Do you want to install  GERMAN            ==> N
*** Do you want to install  JAPANESE          ==> N
*** Do you want to install  PORTUGUESE        ==> N
*** Do you want to install  SPANISH           ==> N
*** Do you want to install  SWISS_GERMAN      ==> N
*** Do you want to install  SIMPLIFIED_CHINESE ==> N
*** Do you want to install  TRADITIONAL_CHINESE ==> N

***
***
***
***      Are these selections correct? (Y|N) == >
Y
*****~*****
***      ISPF System files will be loaded on your 692 disk
***
***      ISPF Language files will be loaded on your 692 disk
***
***
***      Do you wish to continue with this installation?
***
***      (Reply Y to continue or N to cancel installation) == >
Y
*****
***      Now loading ISPF System files to your 692 disk...
***      (This process takes a few moments)
*****

***      Load of ISPF System files completed successfully

***      Now loading ISPF Language files to your 692 disk...

***      Installing:  ENGLISH
***      Installing:  DANISH
***      Installing:  GERMAN
***      Installing:  JAPANESE
***      Installing:  PORTUGUESE
***      Installing:  SPANISH
***      Installing:  SWISS_GERMAN

```


*** Installing: SIMPLIFIED_CHINESE

*** Installing: TRADITIONAL_CHINESE

*** Load of ISPF Language files completed successfully

*** Press ENTER to continue...

<ENTER>

*** ----- Installation Options for ISPVM A-disk -----

*** Enter the virtual device address of the ISPVM 191 minidisk
*** so the PROFILE EXEC can be copied to it.

*** Note: The minidisk MUST be LINKed in WRITE mode. == > 691

<ENTER>

*** The minidisk selected to load ISPVM files on is your 691 disk.
*** Is this selection correct? (Y|N) == >

Y

*** Now copying the ISPVM PROFILE EXEC to your 691 minidisk.....

*** ISPVM PROFILE EXEC copied successfully

*** All ISPF Product files have been loaded successfully.
*** The ISPD CSS must be manually saved.
*** Refer to the Program Directory for
*** information on saving the DCSS (ISPSAVE EXEC).

***Exiting from 5684-043 Installation Exec.

***Press ENTER to exit ...

<ENTER>

Ready;

```
*****
***
*** Run the ISPSAVE EXEC
***
*****
```

ISPSAVE ISPDCCS

```
*****
*** ISPF DCSS Name : < ISPDCCS >
*** Starting address : < 007E0000 >
*** Ending address : < 008DFFFF >
*****
```

*** Do you wish to continue? (Y|N) == =>

Y

```
*****
```

*** ISPF 3.2 supports the following National Languages:

- *** 1 - ENGLISH
- *** 2 - DANISH
- *** 3 - GERMAN
- *** 4 - JAPANESE
- *** 5 - PORTUGUESE
- *** 6 - SPANISH
- *** 7 - SWISS_GERMAN
- *** 8 - SIMPLIFIED_CHINESE
- *** 9 - TRADITIONAL_CHINESE
- *** 10 - FRENCH
- *** 11 - KOREAN
- *** 12 - ITALIAN

*** Which language do you want for the default language?

*** Enter the NUMBER of the default language (1 - 12)

1

*** ISPF 3.2 supports the following National Languages:

***	- ENGLISH	- SWISS GERMAN
***	- DANISH	- SIMPLIFIED CHINESE
***	- GERMAN	- TRADITIONAL CHINESE
***	- JAPANESE	- FRENCH
***	- PORTUGUESE	- KOREAN
***	- SPANISH	- ITALIAN

*** You have selected ENGLISH for the default language.

*** Which other languages do you want to install?

*** Enter "ALL" to load all the languages,
 *** Enter "NONE" to load no other languages,
 *** or ENTER (null) for a selection menu == =>

ALL

*** For each language listed, reply (Y | N)

***	Do you want to install ENGLISH	====> Y
***	Do you want to install DANISH	====> N
***	Do you want to install GERMAN	====> N
***	Do you want to install JAPANESE	====> N
***	Do you want to install PORTUGUESE	====> N
***	Do you want to install SPANISH	====> N
***	Do you want to install SWISS_GERMAN	====> N
***	Do you want to install SIMPLIFIED_CHINESE	====> N
***	Do you want to install TRADITIONAL_CHINESE	====> N
***	Do you want to install FRENCH	====> N
***	Do you want to install KOREAN	====> N
***	Do you want to install ITALIAN	====> N

*** Default Language: ENGLISH

*** Are these selections correct? (Y|N) == =>

Y

*** The Language Options Selected are:

***	ENGLISH	==> Y
***	DANISH	==> N
***	GERMAN	==> N
***	JAPANESE	==> N
***	PORTUGUESE	==> N
***	SPANISH	==> N
***	SWISS_GERMAN	==> N
***	SIMPLIFIED_CHINESE	==> N
***	TRADITIONAL_CHINESE	==> N
***	FRENCH	==> N
***	KOREAN	==> N
***	ITALIAN	==> N

*** ISPF DCSS Name : < ISPDCSS >

*** Starting address : < 007E0000 >

*** Ending address : < 008DFFFF >

*** Do you wish to continue? (Y|N) = = = >

Y

*** Loading ISPF DCSS < ISPDCSS > at address < 007E0000 >.

SYSTEM SAVED

*** ISPF DCSS < ISPDCSS > Saved at Address < 007E0000 >.

*** Return Code = < 0 >.

*** DCSS MAP Saved in ISPDCSS MAP A

Ready;

Appendix D. ISPF Installation Tape Files

The following is a list of files on the ISPF installation tape.

TAPE FILE 1 - Installation Product ID and EXEC

TAPE FILE 2 - Installation Memo to Users

TAPE FILE 3 - ISPF Product Files

TAPE FILE 4 - ENGLISH LIBRARIES

TAPE FILE 5 - DANISH LIBRARIES

DANISH

TAPE FILE 6 - GERMAN LIBRARIES

GERMAN

TAPE FILE 7 - JAPANESE LIBRARIES

JAPANESE

TAPE FILE 8 - PORTUGUESE LIBRARIES

PORTUGUESE

TAPE FILE 9 - SPANISH LIBRARIES

SPANISH

TAPE FILE 10 - SWISS GERMAN LIBRARIES

SWISS GERMAN

TAPE FILE 11 - SIMPLIFIED CHINESE LIBRARIES

SIMPLIFIED CHINESE

TAPE FILE 12 - TRADITIONAL CHINESE LIBRARIES

TRADITIONAL CHINESE

Appendix E. ISPDCS Command

If your installation uses an ISPF disconnected virtual machine ID other than ISPVMM, or an ISPF DCSS name other than ISPDCCS, alter the ISPDCS statement accordingly.

The ISPDCS statement is found in the ISPSTART EXEC for ISPF invocation, and the ISPF EXEC and PDF EXEC for ISPF/PDF invocation. The syntax of the ISPDCS command is:

```
ISPDCS      | {dmseg} {vmid} [PDFDCSS { (pdfseg)} ] [options]
```

where:

dmseg The name of the DCSS where ISPF resides. The suggested DCSS name is ISPDCCS.

vmid The user ID of the ISPF disconnected virtual machine.

PDFDCSS (pdfseg)

The name of the DCSS where PDF resides. The default PDF segment name is ISRDCSS.

Note: PDFDCSS is an optional parameter used when the ISPF/PDF licensed program is to be invoked.

Options:

Any valid ISPF parameters, as described in the *ISPF Dialog Management Guide and Reference*., form SC34-4273.

See Appendix F, "ISPSTART EXEC" on page 45 for an example of the ISPSTART EXEC.

Appendix F. ISPSTART EXEC

A copy of the ISPSTART EXEC follows. This EXEC sets up the FILEDEFS necessary to run the ISPF product and then invoke ISPF. The syntax of the ISPSTART EXEC is:

ISPSTART | [options]

where:

options Any valid ISPF parameters, as described in the *ISPF Dialog Management Guide and Reference.*, form SC34-4273.

```

/*****
/*      INTERACTIVE SYSTEM PRODUCTIVITY FACILITY      */
/*      VERSION 3 RELEASE 2 MODIFICATION 0 FOR VM      5684-043  */
/*      CONTAINS RESTRICTED MATERIAL OF IBM            */
/*      COPYRIGHT (C) I B M CORPORATION 1990          */
/*      LICENSED MATERIALS - PROPERTY OF I B M        */
/*      REFER TO COPYRIGHT INSTRUCTIONS: FORM G120-2083  C0@6IA*/
/*****
/*
/*      ISPF Version 3 Release 2 Modification 0
/*      Invocation Exec                                C0@6IA*/
/*
/*****
/*
/*      PROGRAM NAME: ISPSTART EXEC                    LGK@P1A*/
/*
/*      DESCRIPTIVE NAME:                              LGK@P1A*/
/*      Interactive System Productivity Facility Invocation Exec */
/*
/*      STATUS: Version 3, Release 2, Modification 0 for VM.    C0@6IC*/
/*
/*      FUNCTION: This is the ISPF/Dialog Manager invocation exec. LGK@P1C*/
/*
/*      NOTES:                                              LGK@P1A*/
/*
/*      DEPENDENCIES:                                       LGK@P1A*/
/*
/*      - Before invoking this exec you must issue filedefs LGK@P1C*/
/*      for any additional Panel, Message, Skeleton and/or    */
/*      Table files which you plan to use. In addition, a     */
/*      filedef must be issued for ISPPROF if you wish the    */
/*      the profile data to be kept in a MACLIB. For CMS      */
/*      files, however, a filedef is optional. If you don't  */
/*      specify a filedef for ISPPROF, ISPF will default to a */
/*      file named ISPPROF ISPPROF A.                        */
/*

```

Figure 4 (Part 1 of 2). ISPF Dialog Manager Invocation Exec (ISPSTART EXEC)

```

/*      - If you have installed CMS files and wish to use them      */
/*      instead of maclibs then you may delete the filedefs        */
/*      for those maclibs and include the following:                */
/*                                                                    */
/*      'filedef isplib disk ispnul panel  * (perm concat'         */
/*      'filedef isplib disk ispnul message * (perm concat'        */
/*      'filedef isplib disk ispnul table  * (perm concat'         */
/*                                                                    */
/*      - For performance reasons you should change all '*'s to     */
/*      a specific filemode when you know the residing minidisk.    */
/*      Refer to the Program Directory for details.                 */
/*                                                                    */
/*      RESTRICTIONS:                                                LGK@P1A*/
/*      - See Dependencies above.                                    LGK@P1A*/
/*                                                                    */
/*      ERROR MESSAGES: NONE                                         LGK@P1A*/
/*                                                                    */
/*      ENTRY CONDITIONS: No Parameters                               LGK@P1A*/
/*                                                                    */
/*      NORMAL EXIT CONDITIONS: ISPF is invoked.                     LGK@P1A*/
/*                                                                    */
/*      ERROR EXIT CONDITIONS: ISPF is not invoked (non-zero RC).    LGK@P1A*/
/*                                                                    */
/*      OPERATION: See Function above.                                LGK@P1A*/
/*                                                                    */
/*      CHANGE ACTIVITY:                                             LGK@P1A*/
/*                                                                    */
/*      ?SPFCHG(P1,00000627,DMCMS6,880722,ASDLGK, Rexx Coding Standards); */
/*      ?SPFCHG(6I,C0,DMCMS7,800504,CFK,PTM 961 - Add copyright info and */
/*      update version/release); */
/*      *****/
Trace Error
/*                                                                    */
argstring = ''
If arg() > 0 Then arg argstring
/*                                                                    */
'filedef isplib disk isplib maclib * (perm concat'
'filedef isplib disk isplib maclib * (perm concat'
'filedef isplib disk isplib maclib * (perm concat'
/*                                                                    */
'ISPDCS ISPDSS ISPM 'argstring
exit

```

Figure 4 (Part 2 of 2). ISPF Dialog Manager Invocation Exec (ISPSTART EXEC)

Appendix G. IPF-to-ISPF Table Conversion

If your installation has IPF formatted tables, they must be converted to the ISPF table format. The table conversion utility is an ISPF dialog that runs in the VM environment under ISPF.

Invocation

The IPF table conversion is invoked as an EXEC named ISPITTDH, in any of the ways listed below:

Directly from the host system:

```
ISPSTART CMD(ISPITTDH)
```

From within ISPF on any command line:

```
CMS ISPITTDH
```

From a selection panel:

```
&ZSEL = 'CMD(ISPITTDH)'
```

From an EXEC invoked under ISPF:

```
ISPEXEC SELECT CMD(ISPITTDH)
```

Table Conversion Input

The user is requested to give the filename and filemode of the input IPF table. The input table must be a single CMS file with a filetype of DRTABLE.

Table Conversion Output

The table output library must be a MACLIB that was defined (using FILEDEF) to the ddname ISPTABL prior to the invocation of the IPF-table-to-ISPF-table conversion. Each converted table is then placed as a member in this MACLIB.

Return Codes The table conversion displays one of the return codes shown below:

Return Code	Description
0	Normal completion
8	A column name(s) begins with a 'Z'.
11	A column name(s) does not begin with an alphabetic character.
12	The table name does not begin with an alphabetic character.
13	The input file was not found.
14	The I/O error was encountered on the input file.
15	An invalid character was found in the file ID.
16	An invalid column count was found in an input record.
17	The output table is in use.
18	The table already exists.
19	An invalid row exists in the input table.
20	A severe error was encountered with an ISPF service.
21	A severe error was encountered with an FS macro.
22	Duplicate keys were found in the input table.
23	No end-of-file record was found in the input table.

Log Messages

A message is written to the log file for each error encountered. Upon termination, a message is displayed on the input panel indicating whether the conversion completed successfully. The messages are located in the ISPF library that was defined (using FILEDEF) to the ddname ISPMLIB.

Reader's Comment Form

ISPF 3.2.0 for VM
Program Directory Response Form

To better enable us to reflect your needs in future program directories, please complete the following table, entering a number in the range of one (for very poor or very low) to five (for very good or very high).

Completeness

Accuracy

Clarity

Format

Usefulness

Please provide specific comments below. Attach additional sheets if necessary.

After completing the evaluation, detach this page and send via first class mail to:

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