SH20-4083-0

Interactive Productivity Facility VSE Feature: Release 3

Program Product

User's Guide

Program Number 5748-MS1

The Interactive Productivity Facility is a tool designed to assist in the management and use of computer systems. This manual provides the information necessary to use this product in a VSE environment. The facilities of the product are described in detail. Of special interest are the dialogues which are also covered in detail.

IBM

First Edition (February 1981)

This edition describes Release 3.0 of the Interactive Productivity Facility and all subsequent releases until otherwise identified in new editions or Technical Newsletters. The function and capabilities described in this edition are subject to change.

This manual was available in machine-readable form for the Interactive Productivity Facility Release 2.0. For that reason, even though this is the first edition of the manual in this form, revision codes have been included to show changes from the prior release.

Reference in this publication to IBM products, programs, or services do not imply that IBM intends to make these available outside of the United States.

Requests for copies of IBM publications should be made to your IBM representative or to the branch office serving your locality.

A form for readers' comments has been provided at the back of this publication. If this form has been removed, please send comments concerning the contents of this publication to IBM Corporation, Dept. Z42, Bldg. 985, P.O. Box 390, Poughkeepsie, New York 12602. IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation whatever. You may, of course, continue to use the information you supply.

© Copyright International Business Machines Corporation 1981

CONTENTS

1.0 Summary of Amendments 1

2.0 The Printing of Special Characters 9

3.0 The Interactive Productivity Facility Overview 10
3.1 Log on VSE/ICCF 10
3.1.1 Steps in Logging On 10
3.2 Invoking the Interactive Productivity Facility 11
3.3 Leaving the Interactive Productivity Facility Environment . . 12
3.4 Submitting Job Streams to VSE 12
3.5 Decompress Routine: IPFDCMP 13
3.6 Log off VSE/ICCF 14
3.7 Light Pen Use 14
3.8 Program Function (PF) Key Use 15
3.9 Interactive Productivity Facility User Options File 15
3.10 Interactive Productivity Facility Naming Conventions 17
3.11 Response Time Considerations 18
3.12 Terminal Communication 20
3.13 Initialization 20
3.14 Dialogue Components 20
3.15 Menu Hierarchy Overview 21
3.16 Menu Hierarchy Detail 24

4.0 System Management Guide Checklist 28
4.1 VSE System Management Guide Flow 28
4.2 VSE System Management Guide Panel Sequence 32
4.2.1 Create System Profile 33
4.2.2 Hardware Table Update 35
4.2.3 Supervisor Assembly 36
4.2.4 ASI Tailoring 38
4.2.5 VSE/POWER Assembly 40
4.2.6 Library Update 42
4.2.7 Standard Labels 44
4.2.8 ASI Tailoring with Standard Labels 46
4.2.9 Dialogue Customization 47
4.2.10 Backup VSE/ICCF File 48
4.2.11 Install Products 50
4.2.12 Backup Libraries 53
4.2.13 Verification 54
4.2.14 Verify VSE/VSAM 55
4.2.15 Verify Batch Products 56
4.2.16 Verify On-Line Products 57
4.2.17 Verify CICS/VS 59
4.2.18 On-Line Verifies with CICS/VS 61
4.2.19 VSE/VSAM Verify Delete 63
4.2.20 System Management Guide Completion 64
4.2.21 Additional Tailoring Activities 65
4.2.22 Move Page Data Set Steps 66

4.2.23 Move VSE/POWER File Steps 67
4.2.24 Move VSE/ICCF File Steps 68

5.0 System Management 69
5.1 System Management Guide 69
5.2 Administration 70
5.2.1 System Administration 70
5.2.2 Data Base Administration 80
5.2.3 Communication Administration 84
5.3 Installing Optional Components 88
5.3.1 Introduction 88
5.3.2 Service Libraries 88
5.3.3 Data set Considerations 90
5.3.4 Installation Job Stream 91
5.3.5 Installation of System IPO/E Products Not Selected in First Time Use 93
5.4 Installation of Non-System IPO/E Products 95
5.4.1 Creation of Libraries 96
5.4.2 Creation of Copy Files 96
5.4.3 Installation 97
5.4.4 Software Product Profile Update 98
5.5 Verifying Optional Components 98
5.5.1 DASD Requirements 99
5.5.2 VSE/VSAM Considerations 100
5.5.3 Controlling Execution Sequence of Verification Job Streams 100
5.5.4 Product Considerations 100
5.5.5 Verification of CICS/VS-Dependent Components 100
5.6 Dump Analysis 102
5.7 Service 106
5.7.1 Service Dialogues 108
5.7.2 Program Update Tapes 108
5.7.3 Program Temporary Fixes 109
5.7.4 DASD File Requirements 111
5.7.5 Apply PUT 112
5.7.6 Restart PUT 116
5.7.7 Applying selective PUT libraries 117
5.7.8 Apply PTF 117
5.7.9 Applying APAR/LOCAL Corrective service 118
5.7.10 Archiving Changes 120
5.7.11 History function 121
5.7.12 JCL Comments 122
5.8 Operations 122
5.8.1 JCL Creation 122
5.8.2 Utilities 123

6.0 System Use 124
6.1 Program Development 124

7.0 First Use Tutorial 126

8.0 Product Information 128
8.1 VSE/Advanced Functions 129

8.1.1 Interactive Productivity Facility Dialogue Support . . . 129
8.1.2 Hints and Tips . . . 129
8.2 VSE/VSAM . . . 131
8.2.1 Verification Considerations . . . 131
8.2.2 Interactive Productivity Facility Dialogue Support . . . 131
8.3 VSE/POWER . . . 132
8.3.1 Interactive Productivity Facility Dialogue Support . . . 132
8.4 IPCS . . . 133
8.4.1 Interactive Productivity Facility Dialogue Support . . . 133
8.4.2 Hints and tips. . . . 133
8.5 VSE/Interactive Computing and Control Facility . . . 134
8.5.1 Interactive Productivity Facility Dialogue Support . . . 134
8.5.2 Hints and Tips . . . 135
8.6 VSE/Access Control Logging and Reporting . . . 155
8.6.1 Verification Considerations . . . 155
8.6.2 Interactive Productivity Facility Dialogue Support . . . 155
8.6.3 Hints and Tips . . . 156
8.7 Sort/Merge II . . . 157
8.7.1 Interactive Productivity Facility Dialogue Support . . . 157
8.7.2 Hints and Tips . . . 157
8.8 DOS/VS COBOL Compiler and Library . . . 158
8.8.1 Interactive Productivity Facility Dialogue Support . . . 158
8.8.2 Hints and Tips . . . 158
8.9 DOS/VS PL/I Optimizing Compiler . . . 159
8.9.1 Verification Considerations . . . 159
8.9.2 Interactive Productivity Facility Dialogue Support . . . 159
8.9.3 Hints and Tips . . . 159
8.10 RPG II . . . 160
8.10.1 Hints and Tips . . . 160
8.11 DL/I DOS/VS . . . 161
8.11.1 Installation Considerations . . . 161
8.11.2 Verification Considerations . . . 161
8.11.3 Hints and Tips . . . 166
8.12 CICS/VS . . . 167
8.12.1 Installation Considerations . . . 167
8.12.2 Verification Considerations . . . 167
8.12.3 Interactive Productivity Facility Dialogue Support . . . 171
8.13 DMS/CICS/VS . . . 172
8.13.1 Installation Considerations . . . 172
8.13.2 Verification Considerations . . . 173
8.13.3 Hints and Tips . . . 184
8.14 DB/DC Data Dictionary . . . 196
8.14.1 Installation Considerations . . . 196
8.14.2 Verification Considerations . . . 197
8.15 EP/VS . . . 206
8.15.1 Installation Considerations . . . 206
8.15.2 Verification Considerations . . . 206
8.15.3 Interactive Productivity Facility Dialogue Support . . . 206
8.15.4 Hints and Tips . . . 207
8.16 ACF/VTAM . . . 208
8.16.1 Installation Considerations . . . 208
8.17 ACF/NCP/VS . . . 209
8.17.1 Installation Considerations . . . 209

8.18 ACF/VTAME 211
8.18.1 Installation Considerations 211
8.19 BTAM/ES 212
8.19.1 Installation Considerations 212
8.20 VSE/POWER RJE 213
8.20.1 Installation Considerations 213
8.20.2 Verification Considerations 213
8.20.3 Interactive Productivity Facility Dialogue Support . . . 213
8.20.4 Hints and Tips 213
8.21 Non-System IPO/E Product Features 215
8.21.1 VSE/POWER Shared Spooling 215
8.21.2 VSE/VSAM Space Management for SAM Feature 226
8.21.3 VSE/VSAM Backup/Restore 228

A.0 Interactive Productivity Facility Panels and Dialogue Manager . 230

B.0 Sample Library Contents 233

C.0 Sample PUT Dialogue 238

D.0 Supplied CICS/VS Management Modules and Tables 288
D.1 Management Modules 288
D.2 Notes on Selection 292
D.3 Management Tables 296
D.4 Notes on Selection 300

E.0 Interactive Productivity Facility Debugging Information 301
E.1 Problem Determination 301
E.2 Error Log Record 301
E.3 ABEND Conditions 303
E.4 Interactive Productivity Facility Error Codes 306
E.5 Interactive Productivity Facility Abend Codes 311

F.0 Display Terminal Considerations 312
F.1 Introduction 312
F.2 3277/3278 Terminal Diagrams 313
F.3 Initial Steps 317

G.0 Menu and Dialogue Cross Reference 319

H.0 Product Cross Reference 327

I.0 Interactive Productivity Facility Dialogue Descriptions 329

J.0 Bibliography 468
J.1 Hardware 468
J.2 System/370 General 468
J.3 VSE System IPO/E (5750-AAA, 5750-AAB, 5750-AAC) 468
J.4 Interactive Productivity Facility (5748-MS1) 469
J.5 VSE/Advanced Functions (5746-XE9) 469
J.6 VSE/VSAM (5746-AM2) 470
J.7 VSE/POWER (5746-XE3) 471
J.8 VSE/IPCS (5746-SA1) 471

J.9 VSE/ICCF (5746-TS1) 471
J.10 VSE/Access Control Logging and Reporting (5746-XE7) 472
J.11 VSE/DITTO (5746-UT3) 472
J.12 VSE/Fast Copy (5746-AM4) 472
J.13 BTAM-ES (5746-RC5) and BTAM-SCP (5747-CG1) 472
J.14 Sort/Merge II (5746-SM2) 472
J.15 DOS/VS COBOL Compiler and Library (5746-CB1) 473
J.16 DOS PL/I Optimizing Compiler(5736-PL1, 5736-PL3, 5736-LM4, 5736-LM5) 473
J.17 RPG II (5746-RG1) 473
J.18 DL/I DOS/VS (5746-XX1) 474
J.19 CICS/DOS/VS (5746-XX3) 474
J.20 DMS/CICS/VS (5746-XC4) 475
J.21 DB/DC Data Dictionary (5746-XXC) 475
J.22 EP/VS (5747-AG1) 475
J.23 ACF/VTAM (5747-CF1, 5746-RC3) 476
J.24 ACF/NCP/VS (5735-XX1, 5735-XX3, 5747-CH1) 476
J.25 ACF/VTAME (5747-CG2, 5746-RC7) 476

K.0 User Response Report - VSE System IPO/E Release 2.1 477

1.0 SUMMARY OF AMENDMENTS

The following is a summary of the changes made for the VSE System IPO/E Release 2.1 and supported by the Interactive Productivity Facility Release 3.0. For details, see the text of this document. The changes are:

Upleveled Releases:

* CICS/VS Release 1.5

* DL/I Release 1.5 ICR2

  - Note: DL/I DOS/VS Release 1.5 ICR2 is required for DL/I DOS/VS High Level Program Interface (HLPI) support.

* ACF/NCP/VS Release 2.1

* Interactive Productivity Facility - VSE Environment Release 3.0

Product Service Level

PUT 8008 has been applied. Some of the products have service applied above the product release level and the PUT 8008 level. See the Attachment to the Memo to Users supplied with your System IPO/E order for product release levels and service applied.

Dropped Products

The following products are no longer part of the VSE System IPO/E. These products have been removed from the library sets, dialogues, panels, messages, skeleton JCL, and tables of the Interactive Productivity Facility. If these products are to be installed, they must be ordered independently from Release 2.1 of the VSE System IPO/E and installed using the procedures described under the section 'Installation of Non-System IPO/E Products'.

* VSE/PT	5796-PLQ
* CICS/VS PA II	5798-CFP
* VSE RJE Workstation	5746-RC9
* VSAPL	5748-AP1
* IIS (CICS)	5748-XX6
* DPCX HSS/SSS	
DOS/VS 3790 HSS SCP	5747-BQ1
DOS/VS SSS	5747-CC6

Added Documentation Support for Features

Documentation support for the installation of the following product features will be provided later in this manual.

* VSE/POWER Shared Spooling Feature
* VSE/VSAM Space Management for SAM Feature
* VSE/VSAM Backup/Restore Feature

SAMPLIB Changes

Those VSE/POWER reader queue entries which can be copied to the VSE/ICCF library, using the new utility aid for retrieving jobs from a SYSIN tape, have been removed from SAMPLIB. This will make more space available for the user. Installation jobstreams have been added to SAMPLIB for the following features and dropped products:

* VSE/PT
* CICS/VS PA II
* DOS/VSE RJE Workstation
* VSE/POWER Shared Spooling Feature
* VSE/VSAM Space Management for SAM Feature
* VSE/VSAM Backup/Restore Feature

Library Set Changes

* DMS and DMS-AGF have been moved from library set B to library set D.
* ACF/VTAM has been moved from library set D to library set C.
* ACF/VTAME has been moved from library set E to library set C.
* The CICS/VS primary and secondary source statement libraries are in library set B.
* The CICS/VS tertiary and macro source statement libraries are in library set E.
* The DL/I secondary source statement library is included with the DL/I primary source statement library in library set D.
* ACF/NCP/VS has been moved from library set D to library set F.
* Data Dictionary has been moved from library set E to library set D.

Service Dialogue Flowcharting

In order to better understand the job streams generated by the service dialogues, a dynamic flowchart is now optionally created concurrent with the execution of the PUT and PTF application dialogues. A comment statement after each job card contains a number that is incremented for each job. This number appears in the flowchart so the job stream and the flowchart may be cross referenced.

Enhanced Service Support for CICS/VS and DL/I Source Statement Libraries

* The CICS/VS secondary source statement library has been included with the CICS/VS primary source statement library in library set B. CICS/VS secondary library support will now be handled in the same manner as the CICS/VS primary library. The CICS/VS tertiary source statement library and the CICS/VS macro source statement are combined in library set E. Service dialogues have been enhanced to support the tertiary and macro source statement library of CICS/VS. The support of DFHGEN is included in the corrective service dialogues to reassemble CICS/VS modules.

* The DL/I secondary source statement library has been included with the DL/I primary source statement library in library set D. DL/I secondary library support will now be handled in the same manner as the DL/I primary library.

CICS/VS and DL/I: Tape and DASD Changes

The following is a summary of the CICS/VS and DL/I tapes and DASD libraries.

TAPE NAME (EXTERNAL LABEL)	TAPE CONTENT	DASD LIBRARY SET	DASD CONTENT
CICS/VS.BASE	Production CL, Production RL, Production Primary and Secondary SL	B	Production CL, Production RL, Production SL
CICS/VS.PRIM. SEC	All of CICS/VS's Primary RL and SL and Secondary SL	B	Service RL Service SL
CICS/VS.TER. MACRO	All of CICS/VS's Tertiary and Macro SL	E	Service SL
DL/I.BASE	ALL OF DL/I's CL, RL, Primary and Secondary SL	D	Production CL, Production RL, Service RL, Production SL, Service SL

Note:
CL - Core Image Library
RL - Relocatable Library
SL - Source Statement Library

Detailed tape layout information is in both the VSE System IPO/E Planning Guide and VSE System IPO/E Program Directory. General DASD information is in the VSE System IPO/E Planning Guide. Detailed DASD information is in the VSE System IPO/E Program Directory.

CICS/VS Changes

* The VSE System IPO/E DFHJCT books were modified to allow support of the Monitor Control Facility of CICS/VS Release 1.5.

* The pregenerated PCTs and PPTs for CICS/VS were updated to include additional system entries required for Release 1.5.

* With CICS/VS 1.5, the separate Facility Error Recognition System, (FERS), file is no longer required as FERS uses the Intra-Partition data set. All pregenerated DFRSIT tables were updated to allow FERS VSAM support.

* A new DFHMCT table is generated in the VSE System IPO/E for the Monitor Control Facility of CICS/VS 1.5.

* The support for VSAPL, IIS, and CICS/VS PA II in the pregenerated DFHFCT, DFHPCT, DFHPPT, DFHDCT, and DFHTCT tables was removed since those products are no longer features of the VSE System IPO/E.

* The program DFHXMOLS, which is a CICS/VS 1.5 sample transaction for Monitor Control Facility, is pregenerated in the VSE System IPO/E.

* Via ASI tailoring, the SVA-eligible CICS/VS 1.5 phases can be selectively loaded into the SVA.

Support of ICCF Options

A new dialogue provides assistance in changing one or more VSE/ICCF options. The dialogue automatically creates the stage 1 JCL to reassemble the VSE/ICCF modules that are affected by the options altered.

TTF Startup Tailoring

A tailoring dialogue, primarily for the TTF user with more than the minimum number of terminals, has been added. It provides user capability to specify which terminals are printers and which displays will be allowed master terminal status.

DTSSG Macro Support

Dialogue support has been added to allow the user to perform a limited stage 1, stage 2 generation for VSE/ICCF after the application of corrective service.

Foreground Partition Standard Labels

Support for foreground partition standard labels now is provided through the label handling dialogues. If foreground partition standard labels are specified, these labels are included in your ASI procedures.

Additional Parameter Support in ASI Tailoring

* The ZONE parameter is no longer supported as a supervisor option. The ASI tailoring dialogue now permits user specification of ZONE.

* The pageable supervisor and LOG/NOLOG parameters on the first IPL command are now supported.

NRES Parameter in Supervisor Increased

The NRES parameters in the supplied supervisors have been increased to 512 to support systems with many VSAM data sets.

IODEV Parameter in Supervisor Increased

The IODEV parameters in the supplied supervisors have been increased to values varying between 100 and 125 depending on the supervisor. This allows for the addition of more devices before reassembling a supervisor.

Utility Aids

The following aids have been added to the administration environment:

* Panel Printout Facility

  This provides the capability to print Interactive Productivity Facility panels.

* VSE SYSIN Tape Retrieval

  This provides the capability to selectively retrieve a job from a VSE SYSIN tape (for example, the VSE/POWER SYSIN tape) and place the job in the VSE/POWER punch queue. The job may then be accessed from a VSE/ICCF partition and placed on your VSE/ICCF library.

Improved DASD Space Utilization

Additional buffers have been allocated for VSE/ICCF reads and writes to the VSE/ICCF library. Interactive Productivity Facility components are now distributed on the VSE/ICCF dataset in compressed format to reduce DASD space requirements. This results in fewer input records being read during file tailoring and panel display. The implementation of the Dynamic Load Facility further reduces the core image library DASD space requirements for the Interactive Productivity Facility. IPFDCMP, a new Interactive Productivity Facility VSE/ICCF procedure, decompresses a compressed VSE/ICCF member and places the decompressed member in your primary VSE/ICCF library. This allows you to apply a local APAR fix to a Interactive Productivity Facility member in the VSE/ICCF library.

2.0 THE PRINTING OF SPECIAL CHARACTERS

Note:
This document can be ordered as a standard IBM publication, or it can be printed from the VSE System IPO/E distribution tapes. This section, "The Printing of Special Characters", applies only if this document has been printed from the distribution tapes.

Depending on the printer character set that printed this document, all printing may be in capitals instead of upper and lower case, and substitute special characters may appear intermittently or throughout.

The following list names the special characters that this document uses and shows the corresponding characters that appear in this copy.

LEFT PARENTHESIS	((((
RIGHT PARENTHESIS	))))
EQUAL SIGN	= = = =
LESS THAN	< < < <
GREATER THAN	> > > >
COMMA	, , , ,
HYPHEN	- - - -
SLASH	/ / / /
ASTERISK	* * * *
APOSTROPHE	' ' ' '
QUOTE	" " " "
NOT SYMBOL	¬ ¬ ¬ ¬
CURRENCY SIGN	$ $ $ $
QUESTION MARK	? ? ? ?
COLON	: : : :
SEMICOLON	; ; ; ;
PLUS SIGN	+ + + +
AMPERSAND	& & & &
VERTICAL LINE	| | | |
PERCENT SIGN	% % % %
AT SIGNS	@ @ @ @
NUMBER SIGN	# # # #
UNDERSCORE	_ _ _ _

3.0 THE INTERACTIVE PRODUCTIVITY FACILITY OVERVIEW

The Interactive Productivity Facility is a tool designed to assist in the management and use of computer systems. This IBM licensed program operates either under the control of the Interactive Computing and Control Facility (VSE/ICCF) on a VSE system or under the VM/370 Conversational Monitor System (VM/CMS). This document discusses the VSE implementation of the Interactive Productivity Facility.

Since the Interactive Productivity Facility operates under the control of VSE/ICCF, you must first perform a VSE/ICCF logon. This identifies you as an authorized user of the system.

If you are not familiar with the operation of your terminal, review the section, "Display Terminal Considerations," page 312, before continuing.

3.1 LOG ON VSE/ICCF

In order to log on to VSE/ICCF, you must have a preassigned:

1. USERID

   A one to four character unique ID. The system administrator should use AAAA.

2. PASSWORD

   A one to six character password associated with the USERID. The supplied password for AAAA is ICCF. See the section on "VSE/Interactive Computing and Control Facility" for instructions on changing the supplied password for security.

3.1.1 STEPS IN LOGGING ON

1. Turn on the terminal.
2. Adjust the brightness.
3. Clear the screen.

4. Enter: **ICCF.**

5. Press the ENTER key.

   A VSE/ICCF screen will be displayed, asking you to log on.

6. Enter: **/LOGON "userid".**

   (where **"userid"** is your unique ID).

7. Press the ENTER key.

   The words *ENTER 6 CHAR PASSWORD will appear on the screen if your ID is in the user directory. If it is not, contact your System Administrator.

8. Enter **"password".**

   This is the unique password assigned for your ID. The password will not display on your screen.

9. Press the ENTER key.

Unless you are logging on as the system administrator (AAAA), at this point, you should get a screen displaying the VSE/ICCF logo, indicating you have successfully logged on to VSE/ICCF. If you get a message PASSWORD INCORRECT, repeat the above two steps. If you still get PASSWORD INCORRECT, contact your System Administrator.

3.2 INVOKING THE INTERACTIVE PRODUCTIVITY FACILITY

Once you have logged on to VSE/ICCF, the next step is to invoke the Interactive Productivity Facility.

1. Enter: **@IPF** (at sign IPF).

2. Press the ENTER key.

   An Interactive Productivity Facility menu panel will be displayed. If this is the first time you have used the Interactive Productivity Facility, it will be the menu panel, DTR$. You should now select FIRST USE TUTORIAL. Otherwise, it will be the menu panel you were working with the last time you used the system, and you are ready to proceed with your work.

3.3 LEAVING THE INTERACTIVE PRODUCTIVITY FACILITY ENVIRONMENT

To leave the Interactive Productivity Facility environment, you must have concluded an activity. In other words, you must have a menu panel displayed on your terminal, one which is requesting you to select a new activity, not a data entry panel, which is prompting you for input. If the panel you are looking at does not have the word ICCF at the bottom of it, you are in the middle of an activity, and must conclude it. You may either complete your current activity, or leave it immediately by doing any of the following:

1. Probing the word **CANCEL** at the bottom of the screen with a light pen

2. Typing the word **CANCEL** on the input line at the bottom of the screen, and pressing the ENTER key

3. Pressing the PF3 key

If you do any of these things, a menu panel will be displayed with **ICCF** as one of the selections on the service line at the bottom of the screen.

You may now leave the Interactive Productivity Facility environment by doing any of the following:

1. Probing the **ICCF** selection at the bottom of the screen with a light pen

2. Typing the word **ICCF** on the input line at the bottom of the screen, and pressing the ENTER key

3. Pressing the PF4 key

When you have done any of these things, the ICCF command screen will be displayed, and you can proceed to use any of the facilities of that system.

3.4 SUBMITTING JOB STREAMS TO VSE

The output of most dialogues is one or more VSE job streams in the form of VSE/POWER jobs. A default VSE/POWER job name is established during the execution of the dialogue. This is also the name under which the job stream is filed as a member of your VSE/ICCF library. You may change the name if you wish. In some cases, you may also change the VSE/POWER job class, priority, disposition, and accounting fields.

After the job is filed on your library, select the ICCF option from the service line at the bottom of the panel. View the job with the VSE/ICCF Editor, if you wish, and make any desired changes. Then submit the job to VSE, using the VSE/ICCF procedure IPFSUB with the job name.

The IPFSUB procedure submits job streams directly to the VSE/POWER queue without overriding any JCL statements.

After the job has been submitted, use the VSE/ICCF command /STATUSP to determine if the job is awaiting execution, executing, or completed. If you specified the RETURN option on your IPFSUB command, you may look at the output from the job with the /LISTP command. Refer to the VSE/ICCF Terminal User's Guide (SC33-6068) for details on the use of these commands.

3.5 DECOMPRESS ROUTINE: IPFDCMP

All the Interactive Productivity Facility members in the VSE/ICCF libraries 51 through 58 are shipped in a compressed format. Therefore, if any modifications to Interactive Productivity Facility members have to be applied, the following steps must be performed:

1. From your VSE/ICCF terminal enter :

       IPFDCMP member-name

   When the member is found, the following message will appear :

    THE MEMBER nnnnnnnn HAS BEEN FOUND IN LIBRARY xx
    PRESS ENTER TO CONTINUE.

   nnnnnnnn is the member name, and xx is the library number where it was located. Note this library number, you will need it later.

   When this VSE/ICCF procedure is complete, the member in decompressed format will be in your own library as defined in your profile record.

2. Update the member.

3. Test this update while the member is in your own library.

4. /SWitch x where x is the library number where the member was originally found during step 1.

5. /PURge member-name

| 6. /CONNect y where y is your library.

| 7. Execute the copyfile macro to place the updated member in the
| VSE/ICCF library.

| @COPYFILE member-name member-name

| 8. /SWitch RESET

| 9. /PURge member-name

| Remarks:

| 1. If the member is not in a compressed format, it will be copied into
| your library without decompressing.

| 2. If the member is found in your own library (as defined in your
| profile record), the following warning message will appear:
| THE FILE xxxxxxxx IS IN YOUR PRIMARY LIBRARY. IF THIS
| PROCEDURE IS EXECUTED, IT WILL BE REPLACED BY A FILE
| IN A NONCOMPRESSED FORMAT.
| ENTER: "EXIT" TO TERMINATE OR "REPLACE" TO REPLACE IT.

| If REPLACE is entered, a copy of the target member will be saved with
| the name SAV@@@@@. This is done to prevent losing data if an abnormal
| shutdown occurs during the process.

| 3. The new member may not be recompressed.

3.6 LOG OFF VSE/ICCF

Use the following steps to logoff VSE/ICCF:

1. Enter: **/LOGOFF.**
2. Press the ENTER key.

A screen will be displayed, saying that you are now logged off.

3.7 LIGHT PEN USE

The light pen, if available, can be used to select choices on menu panels and to select options shown on the service line of all panels.

You can see which fields are light-pen detectable by pressing the tip of the light pen with your finger when a panel is displayed. A bright horizontal line will appear in the fields that are detectable.

3.8 PROGRAM FUNCTION (PF) KEY USE

When you are working with panels being displayed by the Interactive Productivity Facility, the following PF keys can be used to select the service shown:

Menu Panels

PF1 = EXPLAIN
PF3 = RETURN
PF4 = ICCF
PF6 = INITIAL

Data Entry Panels

PF1 = EXPLAIN
PF3 = CANCEL
PF5 = RETRY

Explain Panels

PF1 = OVERVIEW
PF3 = END
PF7 = BACK
PF8 = FORWARD

Information Menu Panels

PF1 = OVERVIEW
PF3 = END
PF6 = INITIAL

3.9 INTERACTIVE PRODUCTIVITY FACILITY USER OPTIONS FILE

The dialogue manager, when initiated, searches for a user option file (DTR$OPT) that controls four Interactive Productivity Facility parameters. The table is optional and if none is found, defaults are taken that are assembled within the dialogue manager. The user option file controls a number of system defaults, including the name of the display table. The display table in turn, controls a number of items

that appear on the Interactive Productivity Facility panels. The display table is not optional if invoked by the user option file and must be in a library to which the user has read access. The Interactive Productivity Facility Dialogue Manager Program Logic Manual explains in detail the procedures for activating and altering the user options file and the display table.

The most significant reason for changing the options is to change the language of the panels and the corresponding responses.

The items that can be specified in the user option file are:

1. Whether messages displayed should have the message number and environment identity. Default is no.

2. Name of the default initial panel. Default is DTR$.

3. Case in which to display panels (either mixed or upper case). Mixed can only be displayed if the terminal has the hardware feature. Default is upper case.

4. Name of the display table containing the tables to be used by the display service function of the dialogue manager. Default is no. If NO is specified, constants within the dialogue manager are used.

The display table controls the following Interactive Productivity Facility items:

1. The content of the direction lines for all the panels

2. The content of the selection lines for all the panels

3. A synonym table of up to 70 synonyms for Interactive Productivity Facility responses

4. Program function key settings for Interactive Productivity Facility responses for all panels

5. A connection table that relates Interactive Productivity Facility member prefixes with the VSE/ICCF library in which they reside. (The dialogue manager uses the connect table to connect to a particular library to retrieve an item.)

A sample user option table and a display table are shipped in VSE/ICCF library 58. The name of the supplied options file is DTR$OPT. The name of the supplied display table is DTR$DTBL. Both tables can be altered and activated to change any of the above items.

The following example illustrates how to move the user option table and the display table to a user's library. This will alter the options to those in the supplied default display table.

Note that options will only be changed for the ID associated with the library into which the two tables are placed. If the change is to be system wide, the tables would have to be placed in all the user libraries for which the changes are desired.

After logging on to VSE/ICCF, enter the following commands:

```
/CONNect 58                        (Connect to library 58)

@COPYFILE DTR$OPT DTR$OPT          (Put into your library)

@COPYFILE DTR$DTBL DTR$DTBL        (Put into your library)

/CONNect OFF                       (Disconnect from library 58)

@ED DTR$OPT                        (Edit the option file) (at sign)ED
```

Now change the line DSPTABLE = NO to DSPTABLE = DTR$DTBL.

3.10 INTERACTIVE PRODUCTIVITY FACILITY NAMING CONVENTIONS

Interactive Productivity Facility member names are prefixed according to environments. Every member also has the symbol $ in the fourth position of the name. An example is INS$CORS which is in the installation environment.

The following list shows all the prefixes in the Interactive Productivity Facility. This list includes both core image and relocatable library members and VSE/ICCF members, such as panels, messages, skeletons, and tables.

ADM	DSF	PDV	TCI
AMS	DTR	RPT	TCO
CAT	DTS	SPC	TEP
CUS	ERR	SRV	TPL
DBL	INS	SUB	TPW
DEL	IPF	SYI	TRJ
DFH	LIB	SYM	TSA
DLI	OPN	SYU	UTL
DMS	PLI	TAS	VER

If you create a program that has the same name as one used by the Interactive Productivity Facility, the first one encountered in a concatenated library search is the one that is executed. System IPO/E concatenates the Interactive Productivity Facility functions last in the search sequence.

When creating new programs, if you do not put a $ in the fourth position of the name, you will not conflict with Interactive Productivity Facility functions.

If you execute the VSE library maintenance program, MAINT, using the "delete XYZ$.all" command, for service relocatable library a, where XYZ can be any three characters, you may unintentionally delete Interactive Productivity Facility modules. Care should be taken when using this command.

Listed below are the three character prefixes for the Interactive Productivity Facility functions that are in the core image library:

ADM	IPF	SUB	TEP
CAT	LIB	SYI	TPL
CUS	OPN	SYM	TPW
DBL	PDV	SYU	TRJ
DSF	RPT	TAS	TSA
DTR	SPC	TCI	UTL
INS	SRV	TCO	VER

3.11 RESPONSE TIME CONSIDERATIONS

Some Interactive Productivity Facility dialogues contain extremely complex processing logic, perform a considerable number of I/O operations, and create large job streams. While actual response time is a function of all the work being done on your system, a response time of one or two minutes on a lightly loaded system would not be unusual.

These longer running dialogues are generally the ones you run infrequently, or only once. They include:

* Dialogues which update your system profile, such as:
  - First Time Installation
  - Installation of optional VSE System IPO/E components

- Standard label tailoring
- ASI procedure tailoring

* Verification of large components, such as CICS/VS or DL/I DOS/VS
* Service dialogues

The dialogues you run more frequently, such as CICS/VS table updates, VSE/VSAM, or VSE librarian functions, should not have such long response times.

If a dialogue has been running a long time, and you are not certain that it is still running, or whether the system is down, you can do the following:

1. Press the RESET key.
2. Press the ENTER key.

If the system is down, your SYSTEM AVAILABLE light will go off.

If the dialogue is still running, you will receive a VSE/ICCF message:

```
*BG IN PROGRESS, INPUT IGNORED
```

At this time, you can enter the asynchronous mode by entering the VSE/ICCF command /ASYNC. You can then do other online work while Interactive Productivity Facility continues processing. You can check dialogue status by entering /SH EX. If Interactive Productivity Facility is ready to display another panel, a message will indicate that you should enter /SYNC to synchronize your terminal back to Interactive Productivity Facility; then press ENTER, and the panel will be displayed. You must not access any Interactive Productivity Facility members for update while in asynchronous mode. If you do and the dialogue attempts to update the same member, the dialogue will fail.

When the dialogue completes, another Interactive Productivity Facility panel will be displayed. The above process applies only to local terminals.

3.12 TERMINAL COMMUNICATION

The following characteristics apply to user interaction with the Interactive Productivity Facility:

1. Display terminals are the only means of communication with the user.

2. Responses to menus can be initiated by light pen selection or keyboard data entry.

3. Program function keys, light pen, or keyboard input can be used for the selections available on the service line of the panel.

A uniform definition for the use of program function keys within Interactive Productivity Facility environments is supplied with that component. Certain other software components distributed with VSE System IPO/E may also provide their own program function key definitions.

3.13 INITIALIZATION

The Interactive Productivity Facility is initialized by invoking a VSE/ICCF macro supplied by the Interactive Productivity Facility. This is accomplished by entering '@IPF' after logging on to VSE/ICCF.

3.14 DIALOGUE COMPONENTS

Interactive Productivity Facility dialogues communicate via several different screen formats, called panels. These panels are distributed as members of various VSE/ICCF libraries. They are displayed on 3270-type terminals, using the full screen display capability, and are generated for a 24 X 80 matrix of characters. A description of the panels and the dialogue manager may be found elsewhere in this document.

3.15 MENU HIERARCHY OVERVIEW

The Interactive Productivity Facility provides the control for the presentation of a hierarchy of menu panels through which a specific activity can be selected and performed. This control is performed by the menu manager, which displays menu panels and analyzes your responses.

If your response corresponds to a lower level menu panel, the selected menu panel is displayed. If your response corresponds to a dialogue, the dialogue is invoked. When it completes, the menu manager redisplays the menu panel which was used to invoke the dialogue.

If your response is ICCF, the menu manager saves the name of the menu panel from which the ICCF exit is invoked. This panel is displayed by default when you re-enter the Interactive Productivity Facility. You are then returned to VSE/ICCF.

Figure 1 provides an overview of the system management menu hierarchy.

Figure 2 provides a similar overview of the system use menu hierarchy.

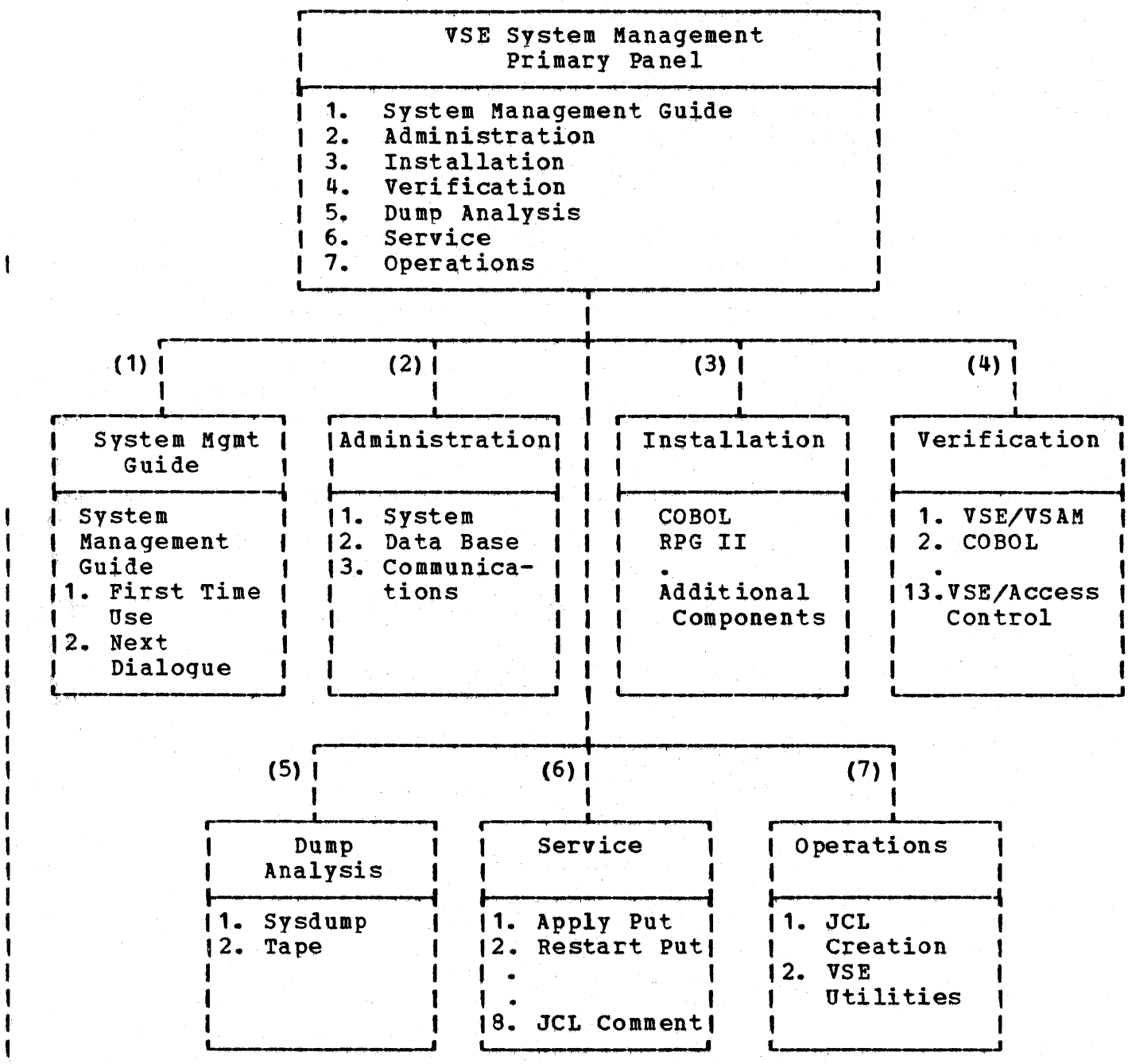


Figure 1. System management menu hierarchy

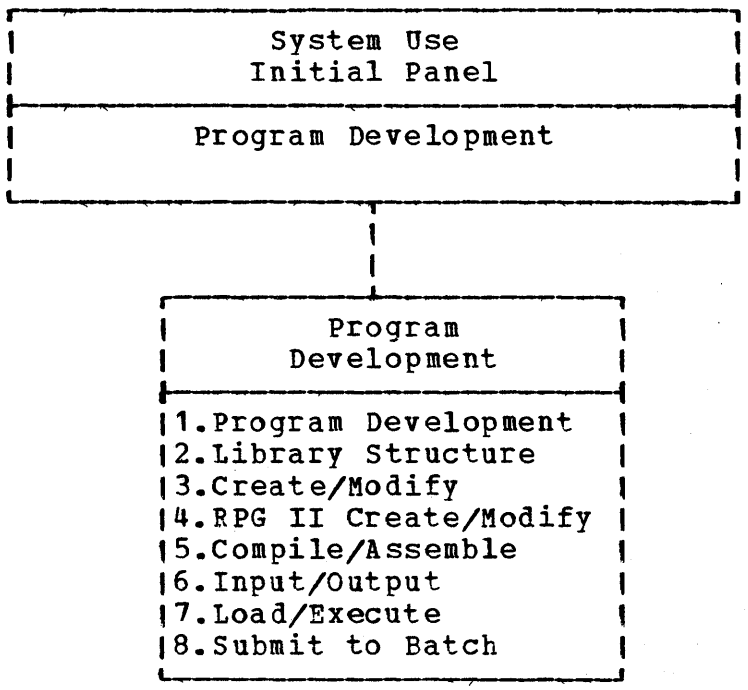


Figure 2. System use menu hierarchy

3.16 MENU HIERARCHY DETAIL

This chart is designed to assist you in locating information concerning the dialogue you wish to run. For an overview of the dialogue, refer to the page under the General column. For detailed information on the function for a dialogue, refer to the page under the Detail column.

Menu Hierarchy Information	General	Detail
System Use	page 123	
Program Development	page 124	page 383
System Management	page 68	
System Management Guide	page 69	
Administration	page 69	
System Administration	page 70	
System Profile	page 70	
First Time Use		page 339
I/O Configuration	page 71	page 341
Software Products	page 72	page 351
Library Information	page 73	page 345
Label Information	page 73	page 344
Logons/Passwords	page 73	
Add VSE/ICCF User	page 73	page 353
Delete VSE/ICCF User	page 73	page 338
Change VSE/ICCF User	page 73	page 335
Add CICS/VS User	page 73	page 331
Delete CICS/VS User	page 73	page 337
Change CICS/VS User	page 73	page 334
Assemble/Catalog SNT	page 73	page 346
Librarian	page 74	
Display Library Members	page 74	page 380
Delete Library Members	page 74	page 379
Rename Library Members	page 74	page 381
Catalog Library Members	page 74	page 376
Create Libraries	page 74	page 378
Copy/Merge Libraries	page 74	page 377
Backup Library Sets	page 74	page 332
Restore Library Sets	page 74	page 332
System Tailoring	page 76	
Supervisor Tailoring	page 76	page 459
ASI Procedure Tailoring	page 76	page 431
VSE/POWER Tailoring	page 76	page 456
VSE/ICCF Tailoring	page 76	page 342
	page 153	
TTF Tailoring	page 76	page 347
	page 134	
COBOL Option Card	page 76	page 452

Menu Hierarchy Information	General	Detail
PL/I Option Card	page 76	page 455
Modify VSE/ICCF Tables	page 76	page 343
Modify Security Table	page 76	page 350
Run Security Reports	page 76	page 349
Dialogue Customization	page 79	page 360
Utility Aids	page 80	
Retrieve Job From SYSIN	page 80	page 362
Print Panels	page 80	page 361
Data Base Administration	page 80	
Interactive Macro Facility	page 81	
VSE/VSAM	page 84	
Catalog Management	page 84	
Define Catalog	page 84	page 355
Delete Catalog	page 84	page 356
Copy Out Catalog	page 84	page 354
Copy In Catalog	page 84	page 358
Transport Catalog	page 84	page 359
List Catalog	page 84	page 357
Space Management	page 84	
Define Space	page 84	page 385
Delete Space	page 84	page 386
Data Set Management	page 84	
Define Cluster	page 84	page 365
Delete Cluster	page 84	page 367
Alter Cluster	page 84	page 363
Copy File	page 84	page 364
Export File	page 84	page 369
Import File	page 84	page 370
Print File	page 84	page 371
Verify File	page 84	page 373
Display File	page 84	page 368
Communication Administration	page 84	
CICS/VS Tables	page 84	
CICS Programs	page 84	
Add Program	page 84	page 434
Delete Program	page 84	page 445
Change Program	page 84	page 440
Assemble/Catalog PPT	page 84	page 450
CICS Transactions	page 84	
Add Transactions	page 84	page 433
Delete Transactions	page 84	page 444
Change Transactions	page 84	page 439
Assemble/Catalog PCT	page 84	page 449
CICS Terminals, Lines	page 84	
Add Terminal	page 84	page 435
Delete Terminal	page 84	page 446
Change Terminal	page 84	page 441
Assemble/Catalog TCT	page 84	page 451
CICS Data Sets, Data Bases	page 84	
Add Data Set	page 84	page 432

Menu Hierarchy Information	General	Detail
Delete Data Set	page 84	page 443
Change Data Set	page 84	page 438
Assemble/Catalog FCT	page 84	page 448
VSE/POWER RJE	page 87	page 457
EP/VS	page 87	page 453
Installation	page 88	page 374
Verification	page 98	page 467
Dump Analysis	page 102	page 384
Service	page 106	
Apply PUT	page 112	page 405
Restart PUT	page 116	page 409
Apply Selective PUT	page 116	page 411
Apply PTF	page 117	
Print Cover Letters	page 117	page 392
Apply PTF from PUT Tape	page 117	page 399
Apply Cumulative PTF	page 117	page 401
Apply Backout PTF	page 117	page 403
Apply APAR/Local	page 118	
Pre Service	page 119	page 398
Corrective Service	page 119	
Alter Core Image	page 119	page 393
Alter Relocatable	page 119	page 394
Alter Source	page 119	page 395
Undo Core Image	page 119	page 416
Undo Relocatable	page 119	page 417
Post Service	page 120	page 397
Archive Fix		
History Function	page 120	
Retrace History	page 120	page 414
Remove History Record	page 120	page 413
Condense History	page 120	page 391
Backup History File	page 120	page 389
Restore History	page 120	page 415
JCL Comments	page 122	page 390
Operations	page 122	
JCL Creation	page 122	page 382
VSE Utilities	page 123	
Backup Restore Utilities	page 123	page 461
		page 465
Fast Copy Utilities	page 123	page 464
		page 462
		page 466
Copy Diskette Utilities	page 123	page 460
Display VTOC Utilities	page 123	page 463
First Use Tutorial	page 125	
Introduction	page 125	page 418
Adjusting Screen	page 125	page 419
Exiting	page 125	page 420
Cursor Movement	page 125	page 421
Indicators	page 125	page 422

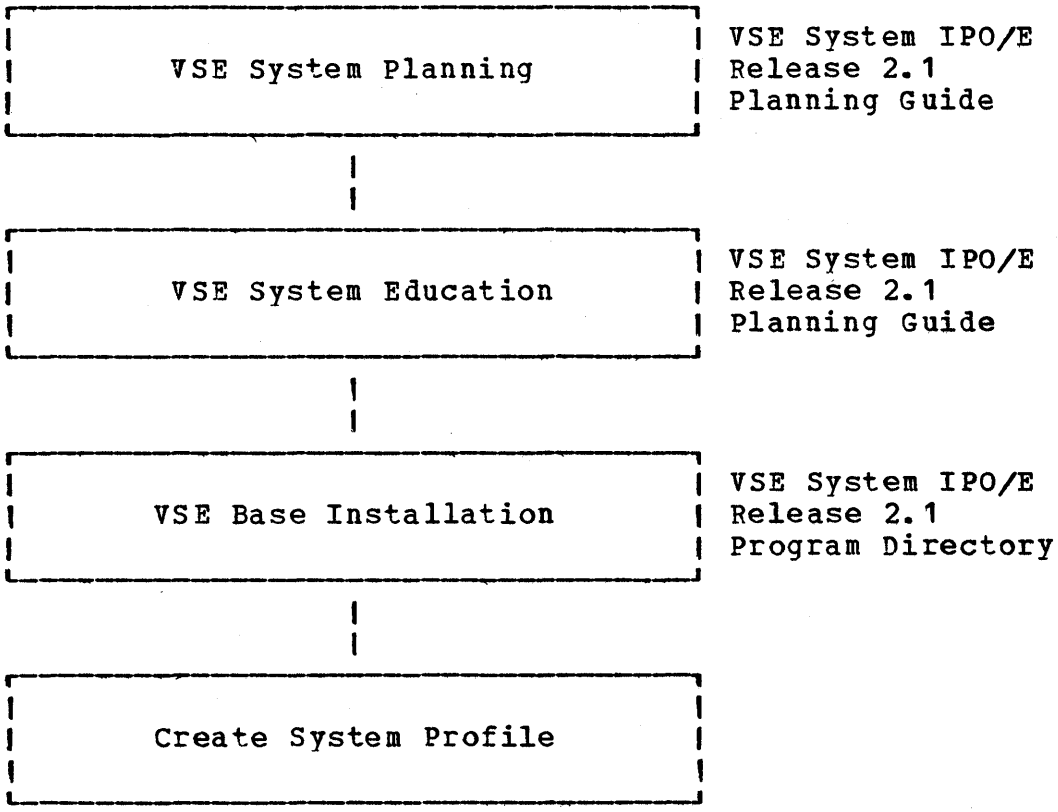
Menu Hierarchy Information	General	Detail
Management/Use	page 125	page 423
Menu Panel	page 125	page 424
Data Entry Panel	page 125	page 425
Explain Panel	page 125	page 426
Insert/Delete and Erase	page 125	page 427
Other Keys	page 125	page 428
Lightpen	page 125	page 429
Fast Path	page 125	page 430

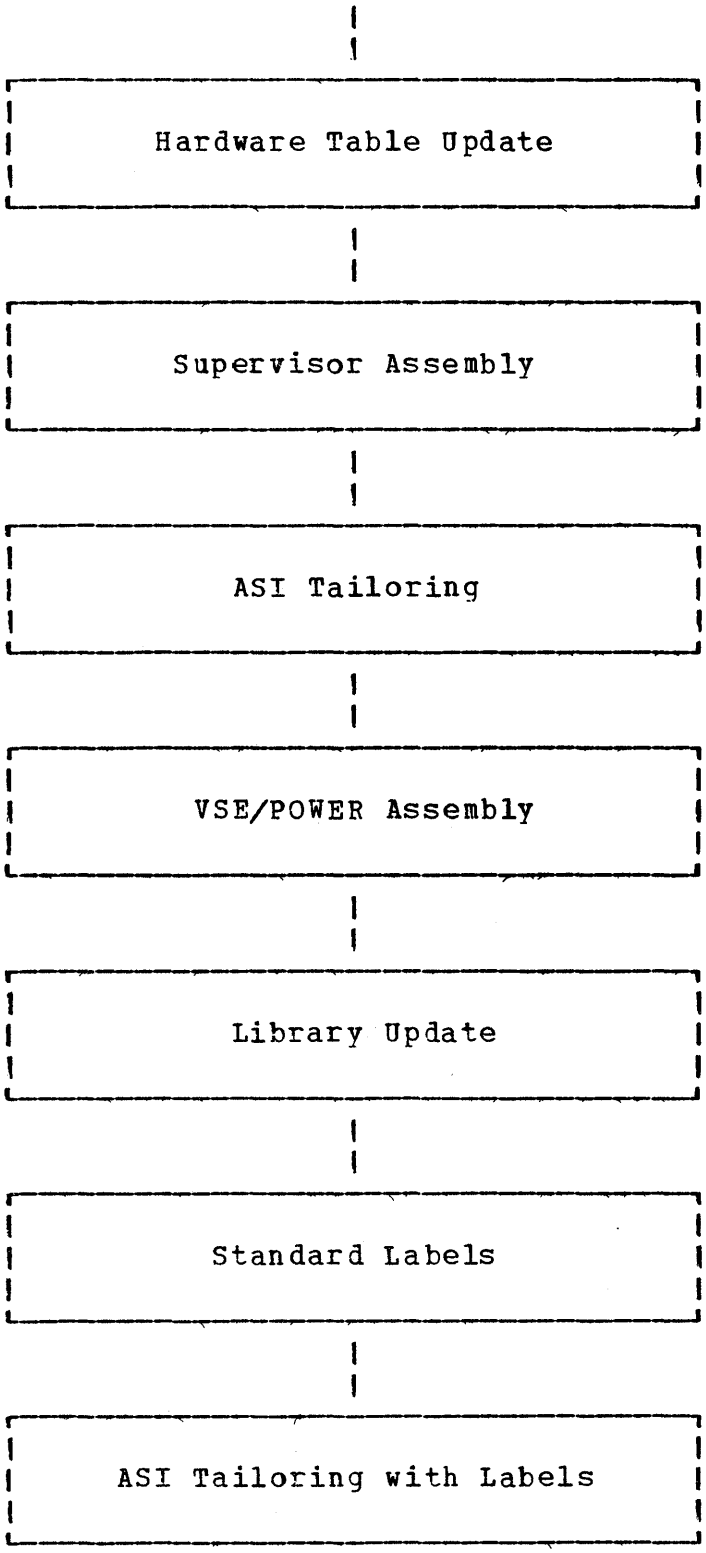
4.0 SYSTEM MANAGEMENT GUIDE CHECKLIST

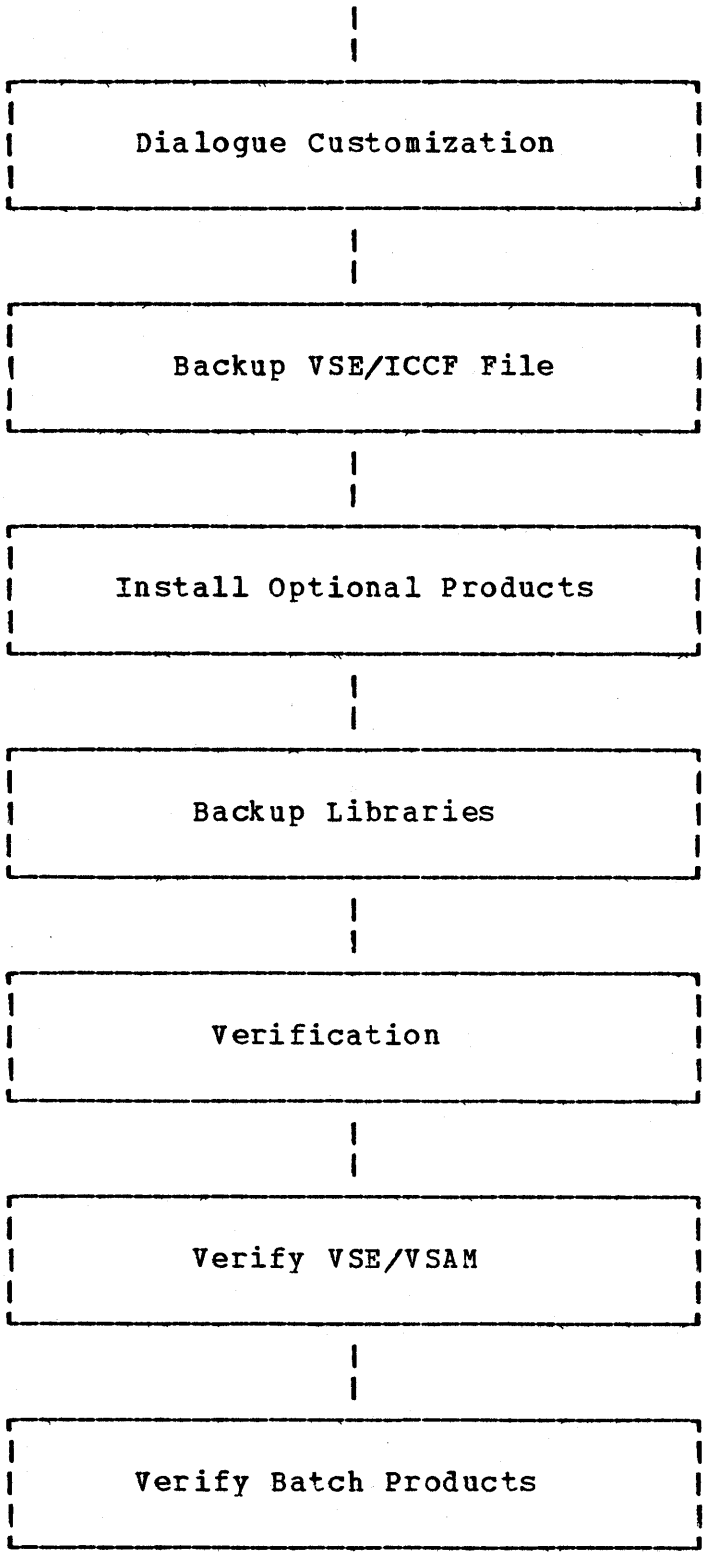
This checklist is designed to help you complete the activities associated with the System Management Guide of the Interactive Productivity Facility. Use the checklist while running the on-line dialogues.

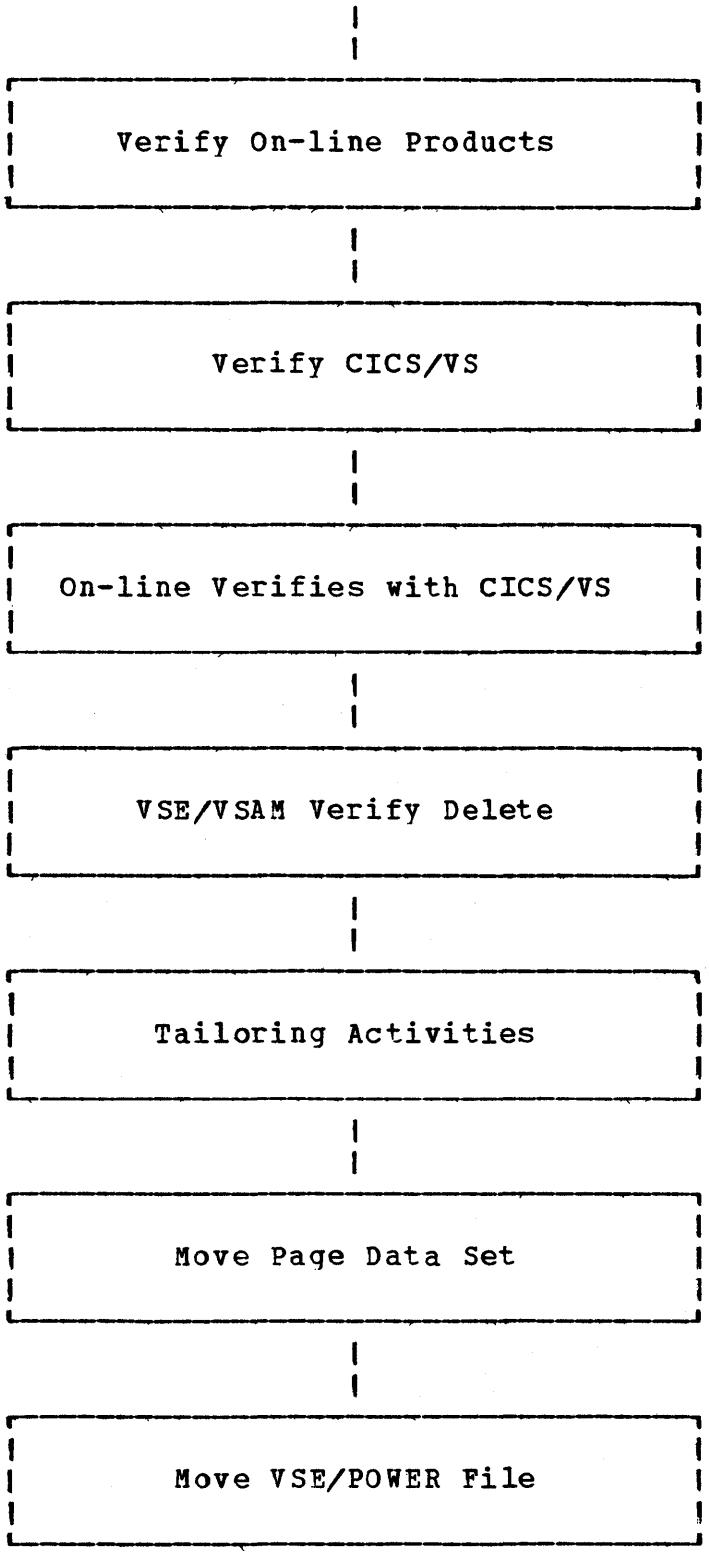
4.1 VSE SYSTEM MANAGEMENT GUIDE FLOW

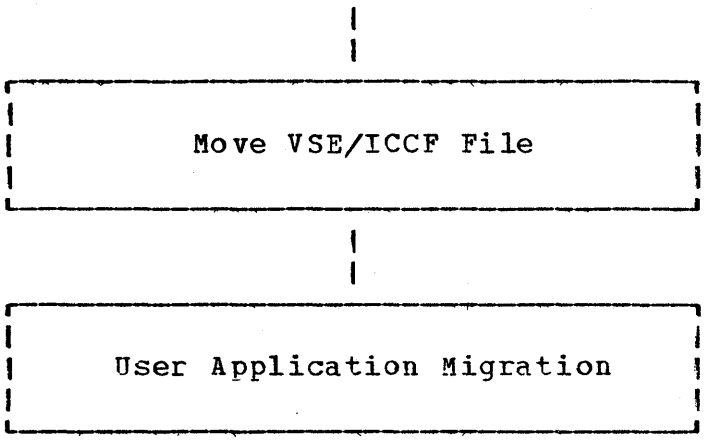
The following flow describes the building of the VSE system that is supported by the Interactive Productivity Facility. The System Management Guide Checklist assists you in completing these activities. Where documents other than this one should be reviewed, they are listed to the right of the activity.




Hardware Table Update
Supervisor Assembly
ASI Tailoring
VSE/POWER Assembly
Library Update
Standard Labels
ASI Tailoring with Labels


Dialogue Customization
Backup VSE/ICCF File
Install Optional Products
Backup Libraries
Verification
Verify VSE/VSAM
Verify Batch Products


Verify On-line Products
Verify CICS/VS
On-line Verifies with CICS/VS
VSE/VSAM Verify Delete
Tailoring Activities
Move Page Data Set
Move VSE/POWER File



4.2 VSE SYSTEM MANAGEMENT GUIDE PANEL SEQUENCE

To start the System Management Guide, logon to VSE/ICCF using the System Administrator ID, AAAA. Enter @ipf to enter the Interactive Productivity Facility. Enter =sym$ on the first panel displayed and press enter. Select 1, System Management Guide. This will display the first panel of the System Management Guide.

Note: As you continue through the System Management Guide, some activities require you to leave the Guide in order to complete the activity, and you will not be returned to a System Management Guide panel. Follow the instructions above, or those associated with the specific activity below, to return to the Guide.

4.2.1 CREATE SYSTEM PROFILE

```
          SYSTEM MANAGEMENT GUIDE: CREATE SYSTEM PROFILE   SYM$G1

  The First Time Use dialogue creates your System Profile.  You will
  be prompted to provide information concerning your hardware and
  software configuration.  You will need to know what ASI procedure
  you used to IPL the system during the base installation process,
  what DASD types and addresses you will be using, and what System
  IPO/E products you plan on installing.  Be sure to specify all
  products that will be installed on your system now, or in the
  future.  A jobstream will be created and filed under the default
  name of FIRSTUSE.  This jobstream will create production libraries
  based on the products you plan to install.

  After completing the dialogue, submit the JCL produced to VSE.
  Review the printed output of the job execution before continuing.

   1  FIRST TIME USE              Create System Profile Tables
   2  NEXT DIALOGUE               Continue to Next Dialogue
```

This dialogue sets up your System Profile. The existence of the System Profile is essential for the execution of many other dialogues. For this reason, you cannot proceed beyond the initial panel of the System Management Guide until this dialogue has been run to completion.

If you re-run this dialogue for any reason, a panel will be displayed indicating which items may be lost if you re-run the dialogue. If you proceed beyond this panel, you must allow the dialogue to complete, or your profile will be incomplete.

1. Select 1 to enter the dialogue.
2. Refer to page 339 for dialogue information.
3. Make sure you select all products that will be installed on your system now, or in the future, so that enough DASD space will be allocated. The dialogue allocates 'IBM' production library space based on the sizes of the products you select. If you later decide to add products, and do not reserve space now, you may have to backup, recreate, and restore several libraries in order to obtain enough space to install them.
4. When the dialogue completes, return to VSE/ICCF (select ICCF).
5. Enter IPFSUB FIRSTUSE to submit the created JCL to VSE.

6. If the job has a disposition of H or L, release the job from the reader queue by entering R RDR,FIRSTUSE on the VSE console.

7. Review the printed output to ensure proper execution.

8. Re-enter the Interactive Productivity Facility (@IPF). Enter =sym$g1 if panel SYM$G1 is not displayed.

9. Select 2 to continue to the next dialogue.

4.2.2 HARDWARE TABLE UPDATE

```
          SYSTEM MANAGEMENT GUIDE: HARDWARE TABLE UPDATE   SYM$G2
The I/O Table dialogue updates the I/O Configuration table created
by the First Time Use dialogue.  The initial table contains
entries based on the hardware contained in the IPL procedure you
specified.  You will need to have information concerning the
hardware attached to your system locally (that is, all hardware to
be included in your ASI procedure) in order to update your table.

After entering the dialogue, we recommend you first 'browse' the
existing entries and note what changes and additions must be made.
You can then 'edit' the entire table, or 'update' a single entry.
Note that certain 'pseudo' devices are needed for VSE/ICCF.  If
you have VSE/ICCF installed you should not delete these entries.
They may, however, be modifed if you have real devices at those
addresses.  No JCL is created by this dialogue.

  1  I / O TABLE                 Update Hardware I/O Table
  2  NEXT DIALOGUE               Continue to Next Dialogue
  3  PRIOR DIALOGUE              Return to Previous Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 341 for dialogue information.
3. Select 'BROWSE', and note changes required to existing entries.
4. Select 'UPDATE' to make changes to existing devices, add new devices, or delete devices.
5. After completing all updates, select 'BROWSE' to verify the table accurately reflects your configuration.
6. When control returns from the dialogue, select 2 to continue to the next dialogue.

4.2.3 SUPERVISOR ASSEMBLY

```
          SYSTEM MANAGEMENT GUIDE: SUPERVISOR ASSEMBLY    SYM$G3
The System IPO/E ships four pre assembled supervisors. Most users
will find they can use one of these. If you require a customized
supervisor, the Supervisor dialogue will help you create one. The
dialogue also enables you to delete unwanted supervisors. We
recommend you do this, because all supervisors defined in the
system will be re assembled during the application of a PUT tape.
You should delete neither the supervisor you are currently using,
nor the one in your default ASI procedure. To see what parameters
were used in the shipped supervisors, use the display facility
provided in this dialogue. If you generate a new supervisor, a
service library will be required. You will be asked to give
information required to restore this library. The dialogue will
create JCL with the default name of SUPVRGEN which you must then
submit to VSE. If you are a BTAM-ES user, you must tailor your
supervisor at this time.
 1  SUPERVISOR                 Create/Delete/Display Supervisors
 2  NEXT DIALOGUE              Continue to Next Dialogue
 3  PRIOR DIALOGUE             Return to Previous Dialogue
 4  INITIAL DIALOGUE           Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.

2. Refer to page 459 for dialogue information.

3. Delete all supervisors you will not be using. This is accomplished by selecting the supervisor to be deleted, and specifying YES on the DELETE line. Be sure to modify the default job names if you create more than one jobstream. If you wish to delete three supervisors, you must run the dialogue three times, and create three separate jobstreams.

4. Display the parameters of the supervisor you are using, noting any changes you want to make. If you do not use VTAM as a TP access method, you must tailor your supervisor at this time. You should change the SUPVR macro TP parameter from VTAM to BTAM.

5. You will be asked if you want to backup work packs during the running of the dialogue to create a new supervisor. Since you don't have the VSE/Fast Copy program product installed (and it is also not necessary at this point to backup the libraries), respond NO.

6. Make any changes required to the parameters.

7. When the dialogue completes, return to VSE/ICCF (select ICCF).

8. Enter IPFSUB FILENAME to submit the created JCL to VSE, where FILENAME is the name of a jobstream created by the dialogue. If you created four jobstreams, issue IPFSUB four times.

9. The created job will save the old supervisor under the name $$A$SAVx (where x is A, B, C, or D) in the system core image library.

10. If the job has a disposition of H or L, release the job from the reader queue by entering R RDR,FILENAME on the VSE console. The JCL will catalog your new supervisor to an IBM library.

11. Review the printed output to ensure proper execution.

12. The new supervisor, if you assembled one, will be effective the next time you IPL.

13. Re-enter the Interactive Productivity Facility by entering @IPF. Enter =sym$g3 if panel SYM$G3 is not displayed.

14. Select 2 to continue to the next dialogue.

4.2.4 ASI TAILORING

```
                SYSTEM MANAGEMENT GUIDE: ASI TAILORING        SYM$G4
  The ASI Tailoring dialogue creates a 'standard' ASI procedure that
  can be used to IPL your system without operator intervention.  The
  dialogue is based on the hardware profile table you created in the
  previous dialogue, and additional information the dialogue will
  request.  Through the dialogue you can specify changes to IPL
  commands, VSE/POWER startup parameters, and partition standard
  assignments.  The dialogue also enables you to include system
  standard labels in the created JCL.  We recommend you include
  standard labels so that the labels will be reset each time the
  system is IPL'ed.  Note:  You have the capability of creating
  multiple ASI procedures for IPLing different environments by
  specifying a unique save name when requested by the dialogue.  The
  dialogue creates a jobstream with the default name of ASIPROC
  which you must submit to VSE.
    1  ASI TAILORING              Create Tailored ASI Procedure
    2  NEXT DIALOGUE              Continue to Next Dialogue
    3  PRIOR DIALOGUE             Return to Previous Dialogue
    4  INITIAL DIALOGUE           Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 431 for dialogue information.
3. Note: The default name on the first panel is used to save user response information, not the output JCL.
4. When the dialogue completes, return to VSE/ICCF (select ICCF).
5. Enter IPFSUB ASIPROC to submit the created JCL to VSE.
6. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,ASIPROC on the VSE console.
7. The job will save the old ASI procedure under the name $IPLSAV, and the old JCL procedures under the name $xJCLSAV (where x is the partition ID) in the system procedure library.
8. Review the printed output to ensure proper execution.
9. You do not have to re-IPL at this time. However, the next time you IPL, your new ASI procedure will be used.

10. Re-enter the Interactive Productivity Facility by entering @IPF. If panel SYM$G4 is not displayed, enter =sym$g4.

11. Select 2 to continue to the next dialogue.

4.2.5 VSE/POWER ASSEMBLY

```
            SYSTEM MANAGEMENT GUIDE: VSE/POWER ASSEMBLY     SYM$G5

  The System IPO/E ships a pre assembled VSE/POWER phase, DTRPOWER,
  that most users can use.  If you require a customized VSE/POWER
  system, the VSE/POWER dialogue will help you create one.  If you
  assemble a new phase, use the name you specified in the ASI
  procedure for VSE/POWER (the default is DTRPOWER).  You will be
  asked if you want to tailor POWER/RJE.  Since you have not
  installed POWER/RJE at this point, respond NO.  If you assemble a
  new phase, a service library will be required.  You will be asked
  to give information required to restore this library.  The
  dialogue creates JCL with the default name of DTRPOWER.  We
  recommend you change this to the name of the phase specified in
  your ASI procedure.  Then, submit the job to VSE.

    1  VSE / POWER                 Assemble VSE/POWER
    2  NEXT DIALOGUE               Continue to Next Dialogue
    3  PRIOR DIALOGUE              Return to Previous Dialogue
    4  INITIAL DIALOGUE            Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.

2. Refer to page 456 for dialogue information.

3. You will be asked if you want to backup work packs during the running of the dialogue to create a new VSE/POWER phase. Since you don't have the VSE/Fast Copy product installed (and it is also not necessary at this point to backup the libraries), respond NO.

4. When the dialogue completes, return to VSE/ICCF (select ICCF).

5. Submit the created JCL to VSE by entering IPFSUB FILENAME where FILENAME is the name under which you filed the jobstream.

6. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,FILENAME on the VSE console.

7. Review the printed output to ensure proper execution.

8. The new VSE/POWER phase will be effective the next time you initiate VSE/POWER.

9. Re-enter the Interactive Productivity Facility by entering @IPF. If panel SYM$G5 is not displayed, enter =sym$g5.

10. Select 2 to continue to the next dialogue.

4.2.6 LIBRARY UPDATE

```
                SYSTEM MANAGEMENT GUIDE: LIBRARY UPDATE       SYM$G6

  The Library Update dialogue helps you maintain libraries on your
  system.  Information on libraries you have created thus far, is
  contained in your profile.  There are several types of libraries
  controlled by this dialogue.  'IBM' production and service
  libraries contain System IPO/E supported program products
  installed on your system.  Production libraries are kept online
  and are subsets of the service libraries which are normally kept
  on tape.  'User' libraries contain your own programs.  Initially,
  one user library is defined for use by the dialogues.  PUT/PTF
  libraries are temporary libraries used during the installation of
  optional products, and the application of service.

  This dialogue creates no JCL.  However, numerous other dialogues
  use this library information when creating JCL, so it is crucial
  to keep the table current.  IBM and User libraries controlled by
  the dialogue will be concatenated through the creation of LIBDEF
  chains.
```

Press ENTER to continue with the Library Update dialogue.

```
                SYSTEM MANAGEMENT GUIDE: LIBRARY UPDATE      SYM$G6A

  You should not have to make any changes at this time.  However, we
  recommend you enter the dialogue and browse the current entries.

  If you wish to keep your service libraries on disk, make the
  appropriate changes as to the volume serial number and starting
  location.  Make sure you don't overlap an IPO/E required area.
  Refer to the Program Directory for the System IPO/E defined DASD
  layouts.

    1  LIBRARY UPDATE              Update Library Information
    2  NEXT DIALOGUE               Continue to Next Dialogue
    3  PRIOR DIALOGUE              Return to Previous Dialogue
    4  INITIAL DIALOGUE            Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.

2. Refer to page 345 for dialogue information.

3. Browse the current entries.

4. If you make any changes to allocations for libraries that currently reside on disk, it is your responsibility to relocate the libraries to reside on the correct volume serial, at the correct starting address. You may wish to use the librarian dialogues under System Administration to assist you in doing this.

5. When the dialogue completes, enter =sym$g6a to return to the System Management Guide.

6. Select 2 to continue to the next dialogue.

4.2.7 STANDARD LABELS

```
                SYSTEM MANAGEMENT GUIDE: STANDARD LABELS      SYM$G7

  The Label Processing dialogue helps you establish your own
  standard labels.  All of the labels for the System IPO/E defined
  files are included in your profile.  This dialogue allows you to
  update, add, or delete entries.  When you first begin the
  dialogue, we recommend you select standard labels, and browse
  through the existing entries.  Note:  You may not change labels
  for libraries with this dialogue.  All changes to libraries must
  be made using the previous dialogue (Library Update).  Labels for
  the libraries are included in JCL generated from the tables.
  Labels should be added for all user data sets you want kept in the
  standard labels.  This dialogue will generate JCL with the default
  name of STDLABEL which you must then submit to VSE.

    1  LABEL PROCESSING          Add Additional Standard Labels
    2  NEXT DIALOGUE             Continue to Next Dialogue
    3  PRIOR DIALOGUE            Return to Previous Dialogue
    4  INITIAL DIALOGUE          Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 344 for dialogue information.
3. First, browse the current entries. All System IPO/E system labels reflect the shipped values. User labels migrated from prior releases will also be shown.
4. Enter any additional labels you want in your standard labels.
5. You may wish to file this jobstream with a disposition of K, or L, so that it will remain in the reader queue after execution.
6. When the dialogue completes, select ICCF.
7. Submit the created JCL to VSE by entering IPFSUB STDLABEL (for standard labels) or IPFSUB PARLABEL (for partition labels).
8. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,FILENAME on the VSE console.
9. Review the printed output to ensure proper execution.

10. Re-enter the Interactive Productivity Facility. Enter =sym$g7 if panel SYM$G7 is not displayed.

11. Select 2 to continue to the next dialogue.

4.2.8 ASI TAILORING WITH STANDARD LABELS

```
                SYSTEM MANAGEMENT GUIDE: ASI TAILORING        SYM$G8

We recommend at this point that you re run the ASI tailoring
dialogue in order to include the changes you made to your
libraries, and your new standard labels.  Note:  When you run the
dialogue, all your entries from the previous run are retained.
You should not have to make any changes to the dialogue entries.
Review the generated jobstream, then submit it to VSE.  This job
will update the procedure library.  If your new ASI procedure will
not IPL for any reason, the old ASI procedures are named $IPLSAV
and $xJCLSAV (where x is the partition ID).

  1  ASI TAILORING              Add Additional Standard Labels to
                                ASI
  2  NEXT DIALOGUE              Continue to Next Dialogue
  3  PRIOR DIALOGUE             Return to Previous Dialogue
  4  INITIAL DIALOGUE           Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 431 for dialogue information.
3. When the dialogue completes, select ICCF.
4. Enter IPFSUB ASIPROC to submit the created JCL to VSE.
5. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,ASIPROC on the VSE console.
6. Review the printed output to ensure proper execution.
7. You do not have to re-IPL at this time. However, the next time you IPL, your new ASI procedure will be used.
8. Re-enter the Interactive Productivity Facility. Enter =sym$g8 if panel SYM$G8 is not displayed.
9. Select 2 to continue to the next dialogue.

4.2.9 DIALOGUE CUSTOMIZATION

```
          SYSTEM MANAGEMENT GUIDE: DIALOGUE CUSTOMIZATION   SYM$G9

The Dialogue Customization dialogue helps you delete members from
the VSE/ICCF DTSFILE, or CMS file, that you do not need.  The
reason for doing this, is to free DASD space for your own use.
You will be asked to select items you wish to delete.  For
example, if you are a Batch/Interactive user, you may not want to
run dialogues that create CICS/VS tables.  VSE/ICCF or CMS members
that are used in CICS/VS tailoring may then be deleted.  If you
attempt to run a dialogue for which you have deleted members, you
will receive an error message stating that some item could not be
found.  This dialogue should be used with care.  If you delete
items you need, you will have to reload those members from the
original VSE/ICCF DTSFILE tape that came with the System IPO/E.

  1  DIALOGUE CUSTOMIZATION      Delete Members
  2  NEXT DIALOGUE               Continue to Next Dialogue
  3  PRIOR DIALOGUE              Return to Previous Dialogue
  4  INITIAL DIALOGUE            Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 360 for dialogue information.
3. Make sure you select only those items you wish to delete from your system.
4. When the dialogue completes, select ICCF.
5. Enter IPFSUB CUSVJOB to submit the created JCL to VSE.
6. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,CUSVJOB on the VSE console.
7. Review the printed output to ensure proper execution.
8. Delete the VSE/ICCF members by entering CUS$PROC on the VSE/ICCF terminal. This procedure will switch to the proper sublibraries and delete the requested members.
9. Re-enter the Interactive Productivity Facility. Enter =sym$g9 if panel SYM$G9 is not displayed.
10. Select 2 to continue to the next dialogue.

4.2.10 BACKUP VSE/ICCF FILE

```
          SYSTEM MANAGEMENT GUIDE: BACKUP VSE/ICCF FILE   SYM$G10
  If you are a VSE/ICCF user, you should make a practice of backing
  up and restoring the VSE/ICCF file on a regular basis.  As members
  are added and deleted, you will notice that it takes longer to
  process the file.  Restoring the file will 'reset' the disk
  pointers.  If you deleted members in the last dialogue, you should
  backup and restore your file now.  There are no dialogues to do
  this.  However, we have supplied the required jobstreams in
  SAMPLIB.  Connect to sublibrary 59 and submit the following three
  jobs:
     A. ICCFBACK backs up the file to tape.
     B. ICCFFMAT formats the disk file area.
     C. ICCFREST restores the file to disk.
  Send these jobs to VSE with a disposition of HOLD, terminate the
  VSE/ICCF partition, then release the jobs to execute in sequence.
  These jobs will not execute properly while VSE/ICCF is active.
   1  RETURN TO MENU              Return to System Management Menu
   2  NEXT DIALOGUE               Continue to Next Dialogue
   3  PRIOR DIALOGUE              Return to Previous Dialogue
```

1. Return to VSE/ICCF (enter ICCF).
2. Enter /CONNECT 59
3. Review sample jobstreams ICCFBACK, ICCFFMAT, and ICCFREST. If you have relocated the VSE/ICCF DTSFILE to a volume other than DOSRES, the statement: // ASSGN SYS010,DISK,TEMP,VOL=DOSRES,SHR must be modified to reflect that change.
4. Enter IPFSUB ICCFBACK
5. Enter IPFSUB ICCFFMAT
6. Enter IPFSUB ICCFREST
7. Enter /CONNECT OFF
8. Terminate the VSE/ICCF partition.
9. On the VSE console, enter R RDR,ICCFBACK
10. Review the printed output to ensure proper execution.
11. On the VSE console, enter R RDR,ICCFFMAT

12. Review the printed output to ensure proper execution.

13. On the VSE console, enter R RDR,ICCFREST

14. Review the printed output to ensure proper execution.

15. Startup the VSE/ICCF partition.

16. Re-enter the Interactive Productivity Facility. Enter =sym$g10 if panel SYM$G10 is not displayed.

17. Select 2 to continue to the next dialogue.

4.2.11 INSTALL PRODUCTS

```
                SYSTEM MANAGEMENT GUIDE: INSTALL PRODUCTS      SYM$G11
  The Optional Product Install Dialogue:  You are now ready to
  install System IPO/E supported Optional Products into your IBM
  production and service libraries.  All the IBM production
  libraries you will need were created when you ran the jobstream
  produced by the FIRST TIME USE dialogue.  Your Service A library
  exists on tape.  If you ordered CICS/VS with your System IPO/E,
  you also have Service libraries B (CICS/VS Primary and Secondary
  libraries) and E (CICS/VS Tertiary and Macro libraries) on tape.
  If you require service libraries C, D, or F, they will be created.
  If you want to keep your service libraries on line (and changed
  the label information through the Library Update dialogue), the
  JCL created will use the areas you specified.  NOTE:  The default
  allocations of the service libraries overlay the same area.  If
  you are using the default allocations, and are installing products
  into more than one library, you must backup all but the last
  service library processed to tape.

  The install dialogue creates JCL to install any number of products
  at one time.  The dialogue groups the products to be installed
  together by library.
```

Press ENTER to continue with the Install dialogue.

```
            SYSTEM MANAGEMENT GUIDE: INSTALL PRODUCTS    SYM$G11A
All products going to Library A will be installed first, then B,
and so on.  The dialogue will request information supplied on the
external tape label of the optional tapes you received.  We
recommend you do the following.  Take all the tapes that contain
optional products (including DL/I, BTAM ES, VTAM, and VTAME).
Write a volume number on each tape starting with 1.  The dialogue
will request the volume number and file number for each product.
A panel will be diplayed for each product that requires entries in
CICS/VS tables requesting whether the product should be included
in the CICS/VS tailoring procedures.  If you reply YES, required
entries will be included each time you assemble CICS/VS tables
using the CICS/VS tailoring dialogues.  This dialogue will create
JCL with the default names of INSTALL, which you must submit to
VSE.

  1  INSTALL                    Install Optional Products
  2  NEXT DIALOGUE              Continue to Next Dialogue
  3  PRIOR DIALOGUE             Return to Previous Dialogue
  4  INITIAL DIALOGUE           Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.

2. Refer to page 374 for dialogue information.

3. Select the products you wish to install at this time. This dialogue creates JCL to install all products for which you enter file and volume numbers. The FILE number refers to the number of the first file on the tape containing that product. The file number is obtained from the external label on the tape as you received it. Note: The VOLUME on the product selection panel refers to the physical tape volume. Each physical tape volume that contains optional products, DL/I, BTAM-ES, VTAM, or VTAME must have a different volume number. This is a number you assign. If the physical tape volume has only one product on it, use a file number of 1. It is extremely important that information be entered correctly, since the dialogue generates JCL to mount and dismount tape volumes, as well as tape forward space commands based on this information.

4. NOTE: BTAM-ES, ACF/VTAM, and ACF/VTAME must be installed by this dialogue in order to install the product into the production libraries. This is necessary even if you installed the starter system of one of these products during the Base Installation process.

5. If you decide to break this activity up into several steps, be sure to execute the JCL in the sequence in which the Interactive Productivity Facility creates it. This is essential to the proper creation of your production libraries.

6. When the dialogue completes, select ICCF.

7. Enter IPFSUB INSTALL to submit the created JCL to VSE.

8. Note: If the execution of the INSTALL jobstream fails for any reason, PFLUSH BG rather than CANCELing it. This will prevent the remainder of the jobstream from executing.

9. All LIBDEFs are dropped at the beginning of the Install jobstream, and re-established at the end. If the job does not run to completion, perform the following steps to re-establish the system LIBDEFs:

   a. Release the job PAUSEBG from the system reader - R RDR,PAUSEBG

   b. Issue - 0 ASSGN SYSCLB,UA

   c. Issue - 0 // EXEC PROC=LIBDEF

   d. End the job by responding - 0

10. If the job fails and you have not merged any products to the core image library, you may restart the jobstream.

11. If the job fails and you have merged product(s) to the core image library, you should delete those members that were merged and condense the library before restarting the INSTALL jobstream. This procedure will keep you from running out of library space.

12. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,INSTALL on the VSE console.

13. Review the printed output to ensure proper execution.

14. Re-enter the Interactive Productivity Facility. Enter =sym$g11a if panel SYM$G11A is not displayed.

15. Select 2 to continue to the next dialogue.

4.2.12 BACKUP LIBRARIES

```
              SYSTEM MANAGEMENT GUIDE: BACKUP LIBRARIES     SYM$G12

  Now that you have installed your optional products, we recommend
  you backup your production libraries.  You should backup your
  libraries on a regular basis.  The Backup Library Sets dialogue
  helps you do this.

  This dialogue creates JCL under the default name of BACKUP which
  you must submit to VSE.

    1  BACKUP LIBRARIES            Backup Production/Service
                                   Libraries
    2  NEXT DIALOGUE               Continue to Next Dialogue
    3  PRIOR DIALOGUE              Return to Previous Dialogue
    4  INITIAL DIALOGUE            Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 332 for dialogue information.
3. Create the jobstream to backup your production libraries by specifying all.
4. When the dialogue completes, select ICCF.
5. Enter IPFSUB BACKUP to submit the created JCL to VSE.
6. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,BACKUP on the VSE console.
7. Review the printed output to ensure proper execution.
8. Re-enter the Interactive Productivity Facility. Enter =sym$g12 if panel SYM$G12 is not displayed.
9. Select 2 to continue to the next dialogue.

4.2.13 VERIFICATION

```
                SYSTEM MANAGEMENT GUIDE: VERIFICATION        SYM$G13

  Verification:  The next few menus of the System Management Guide
  will lead you through the verification of the products you have
  just installed.  Each time you elect to verify a product off a
  menu within the Guide (with the exception of VSE/VSAM), you will
  be returned to the Verification menu, VER$, at the completion of
  the dialogue.  To re enter the Guide, select RETURN, or enter
  '=sym$', and select 1, System Management Guide.

  The purpose of the verification programs is to ensure that
  products have been installed to the proper libraries, not to
  exercise all of the functions of the individual products.  We
  recommend very strongly that you use a separate DASD spindle for
  the 'VERIFY' spindle, if one is available.  It does not matter
  what device type is used for the verify spindle.
```

Press ENTER to continue with the Verification dialogues.

4.2.14 VERIFY VSE/VSAM

```
                SYSTEM MANAGEMENT GUIDE: VERIFY VSE/VSAM    SYM$G13A

  VSAM is required by many of the product verifies.  For this
  reason, you should run the VSAM verify first.  A user VSAM catalog
  is created on the verify spindle to control all verify VSAM data
  sets.  An entry is made in your master catalog as well.  If you
  'scratch' the verify spindle, you should remove the master catalog
  entry for the user catalog.

  This dialogue creates JCL with the default name VERVSAM which you
  must submit to VSE.  Once the VSAM data space is defined, return
  to the Guide and proceed through the other verifies.

   1  VERIFY VSAM                  Define VSAM User Catalog and Data
                                   Space
   2  NEXT DIALOGUE                Continue to Next Dialogue
   3  PRIOR DIALOGUE               Return to Previous Dialogue
   4  INITIAL DIALOGUE             Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 467 for dialogue information.
3. When the dialogue completes, select ICCF.
4. Enter IPFSUB VERVSAM to submit the created JCL to VSE.
5. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,VERVSAM on the VSE console.
6. Review the printed output to ensure proper execution.
7. If you need to remove the user catalog entry from the master catalog, run the delete option for the VSE/VSAM verify.
8. Re-enter the Interactive Productivity Facility. Enter =sym$g13 if panel SYM$G13 is not displayed.
9. Select 2 to continue the verify process.

4.2.15 VERIFY BATCH PRODUCTS

```
          SYSTEM MANAGEMENT GUIDE: VERIFY BATCH PRODUCTS  SYM$G14

 Now that you have the VSAM space created, you should run the
 verifies for each of the following products that you have
 installed.  The default jobstream name is listed for each.  You
 must submit each of these jobstreams to VSE.

          COBOL      (VERCOBOL)        VSE/DITTO       (VERDITTO)
          EP/VS      (VEREPVS)         SORT/MERGE II   (VERSORT)
          RPG II     (VERRPGII)        ACCESS CONTROL  (VERLOG)
          POWER/RJE  (VERPOWER)        PL/I OPTIMIZER  (VERPLI)

  1  VERIFY                      Verify Batch Products
  2  NEXT DIALOGUE               Continue to Next Dialogue
  3  PRIOR DIALOGUE              Return to Previous Dialogue
  4  INITIAL DIALOGUE            Return to Initial Dialogue
```

1. Select 1 to display the Verification menu, VER$.
2. Refer to page 467 for dialogue information.
3. Refer to the product section of this document for additional verify information on individual products.
4. For each product you wish to verify:
   a. Select the product from the Verification menu, VER$.
   b. When the dialogue completes, select ICCF.
   c. Enter IPFSUB FILENAME to submit the created JCL to VSE, where FILENAME is the appropriate product verify default job name, or the job name you entered on the job submission panel.
   d. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,FILENAME on the VSE console.
   e. Review the printed output to ensure proper execution.
   f. Re-enter the Interactive Productivity Facility. Enter =ver$ if panel VER$ is not displayed.
5. After verifying all installed batch products,re-enter the System Management Guide by entering =sym$g14, and select 2 to continue with the verify process.

4.2.16 VERIFY ON-LINE PRODUCTS

```
          SYSTEM MANAGEMENT GUIDE: VERIFY ONLINE PRODUCTS    SYM$G15

 You should now run the batch jobs for the products you plan to
 verify with CICS/VS.  Run the verify dialogue for each of the
 following products you have installed.  The default jobstream name
 is listed for each.  You must submit each of these jobstreams to
 VSE.  These jobs build data sets used during the on line
 verification jobs.

                    DMS              (VERDMS)
                    DL/I             (VERDLI)
                    DATA DICTIONARY  (VERDICT)

   1  VERIFY                        Verify Online Products
   2  NEXT DIALOGUE                 Continue to Next Dialogue
   3  PRIOR DIALOGUE                Return to Previous Dialogue
   4  INITIAL DIALOGUE              Return to Initial Dialogue
```

1. Select 1 to display the Verification menu, VER$.

2. Refer to page 467 for dialogue information.

3. Refer to the product section of this document for additional verify information on individual products.

4. NOTE: The DL/I, Data Dictionary, and DMS verify JCL create two VSE/POWER jobs in addition to a job that is punched to the internal reader and which will execute automatically. Both must be released from the reader queue if submitted with a disposition of H or L. The first job moves data into the USRSL1 source statement library to be accessed via the source statement library inclusion (SLI) function of VSE/POWER. The VSE/POWER source statement library is set up by executing the output of the ASI Tailoring dialogue, and initializing VSE/POWER. Initializing VSE/POWER opens the source statement library for SLI. The second job (DLI2, DCT2, and DMS2), respectively is the actual verify job, and loads DL/I, Data Dictionary, and DMS files respectively.

5. For each product to be verified:

   a. Select the product from the Verification menu, VER$.

   b. When the dialogue completes, select ICCF.

c. Enter IPFSUB FILENAME to submit the created JCL to VSE, where FILENAME is the product verify default job name, or the job name you entered on the dialogue job submission panel.

d. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,FILENAME on the VSE console. After the first job executes, release the second job, where filename is DLI2, DCT2, or DMS2.

e. Review the printed output to ensure proper execution.

f. Re-enter the Interactive Productivity Facility. Enter =ver$ if panel VER$ is not displayed.

6. After verifying all online products, return to the System Management Guide by entering =sym$g15, and select 2 to continue with the verify process.

4.2.17 VERIFY CICS/VS

```
                SYSTEM MANAGEMENT GUIDE: CICS/VS VERIFY      SYM$G16

  The CICS/VS standalone verify can now be executed.  Run the verify
  dialogue and select CICS/VS.  When asked which products you wish
  to verify with CICS/VS, leave all entries NO.  A jobstream will be
  created with the default name of VERCICS.  This job will run in
  the F2 partition.  After submitting the job, terminate ICCF, and
  release the job.  Data sets will be created which you may use in
  future verifies.

    1  VERIFY                    Verify CICS/VS
    2  NEXT DIALOGUE             Continue to Next Dialogue
    3  PRIOR DIALOGUE            Return to Previous Dialogue
    4  INITIAL DIALOGUE          Return to Initial Dialogue
```

1. Select 1 to display the Verification menu, VER$.
2. Refer to page 467 for dialogue information.
3. Refer to the product section of this document for additional verify information on individual products.
4. Select CICS/VS for verification.
5. When the dialogue completes, select ICCF.
6. Enter IPFSUB VERCICS to submit the created JCL to VSE.
7. Logoff VSE/ICCF.
8. Terminate the VSE/ICCF partition.
9. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,FILENAME on the VSE console.
10. The jobstream starts CICS/VS in the F2 partition.
11. Refer to the product section of this document for CICS/VS transactions that can be run.
12. After completing the online test, terminate the CICS/VS test partition. There are additional jobs in the verify JCL that will print CICS/VS data sets. Note: The pauses are included within these jobs to allow you to cancel the ones that are not applicable to you.

13. Restart the VSE/ICCF partition using the startup selected during the base installation process.

    a. Re-enter the Interactive Productivity Facility. Enter =sym$g16.

14. Select 2 to continue the verify process.

4.2.18 ON-LINE VERIFIES WITH CICS/VS

```
                SYSTEM MANAGEMENT GUIDE: ON LINE VERIFIES     SYM$G17

  You are now ready to verify products under CICS/VS.  Select each
  product individually with CICS/VS, or the product combination of
  DL/I and DMS.  This is the only product combination supported by
  the System IPO/E.

  Run the verify dialogue, selecting CICS/VS, for each product or
  combination of products you wish to verify.  Refer to the User's
  Guide to determine partition size requirements and on line
  transactions that can be run.  Be sure to specify the local
  terminal you wish to use for the verify procedures.

    1  VERIFY                    Verify Online Products
    2  NEXT DIALOGUE             Continue to Next Dialogue
    3  PRIOR DIALOGUE            Return to Previous Dialogue
    4  INITIAL DIALOGUE          Return to Initial Dialogue
```

1. Select 1 to display the Verification menu, VER$.
2. Refer to page 467 for dialogue information.
3. Refer to the product section of this document for additional verify information on individual products.
4. For each product to be verified with CICS/VS:
   a. Select CICS for verification.
   b. A screen will be displayed asking which products you wish to verify with CICS/VS. Select the product, or products, to be verified.
   c. When the dialogue completes, select ICCF.
   d. Enter IPFSUB FILENAME to submit the created JCL to VSE.
   e. If verifying CICS/VS with Data Dictionary, edit the job DDICT found in VSE/ICCF library 59 to modify the VOLSER, if necessary. Submit this job to VSE to start the execution of Data Dictionary.
   f. Logoff VSE/ICCF.

g. Terminate the VSE/ICCF partition.

h. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,FILENAME on the VSE console. If verifying Data Dictionary, do the same for the job DDICT.

i. The jobstream will start CICS/VS in the F2 partition.

j. Refer to the product section of this document for CICS/VS transactions that can be run.

k. After completing the online test, terminate the CICS/VS partition and complete the verification jobstream.

l. Restart the VSE/ICCF partition using the startup selected during the base installation process.

m. Re-enter the Interactive Productivity Facility. Enter =sym$q16.

5. Select 2 to continue with the verify process.

4.2.19 VSE/VSAM VERIFY DELETE

```
          SYSTEM MANAGEMENT GUIDE: VSAM VERIFY DELETE    SYM$G18

Now that you have completed the verification of your products, you
should run the verify dialogue and select VSAM with the DELETE
option.  The job created will remove all verify VSAM data sets,
VSAM space, and the user catalog entry from the master catalog.
The JCL will have the default name of DELVSAM which you should
then submit to VSE.  You may choose to delete the VSAM data sets
for one product at a time, if you wish.

 1  VERIFY                    Delete VSAM Catalog and Space
 2  NEXT DIALOGUE             Continue to Next Dialogue
 3  PRIOR DIALOGUE            Return to Previous Dialogue
 4  INITIAL DIALOGUE          Return to Initial Dialogue
```

1. Select 1 to enter the dialogue.
2. Refer to page 467 for dialogue information.
3. Select the delete option for VSE/VSAM. This will remove the VSE/VSAM space and catalog from the VERIFY spindle.
4. When the dialogue completes, select ICCF.
5. Enter IPFSUB DELVSAM to submit the created JCL to VSE.
6. If the JCL has a disposition of H or L, release the job from the reader queue by entering R RDR,DELVSAM on the VSE console.
7. Review the printed output to ensure proper execution.
8. Re-enter the Interactive Productivity Facility. Enter =sym$g18.
9. Select 2 to continue to the next dialogue.

4.2.20 SYSTEM MANAGEMENT GUIDE COMPLETION

```
                SYSTEM MANAGEMENT GUIDE: COMPLETION        SYM$G19

  You have now completed the installation and verification of all
  your products, and are ready to begin modifying your environment
  for production.  There are a number of dialogues available to
  assist you in performing additional tailoring.  We recommend you
  review the Interactive Productive Facility User's Guide for
  further information, or browse through the menu hierarchy.  On the
  next panel are typical activities you may wish to execute
  depending on the products you have installed.

    1  SYSTEM MANAGEMENT          Return to System Management Menu
    2  ADDITIONAL ACTIVITIES      Additional Tailoring Activities
    3  PRIOR DIALOGUE             Return to Previous Dialogue
    4  INITIAL DIALOGUE           Return to Initial Dialogue
```

Select 2 to obtain information on additional tailoring activities.

4.2.21 ADDITIONAL TAILORING ACTIVITIES

```
          SYSTEM MANAGEMENT GUIDE: ADDITIONAL ACTIVITIES    SYM$G20

  You may wish to review the following activities:

     A.  System Tailoring              accessed from panel ADM$4.
     B.  Database Tailoring            accessed from panel SYM$2.
     C.  TP Tailoring                  accessed from panel SYM$33.
     D.  User Library Definition       accessed from panel ADM$15.
     E.  User Library Creation         accessed from panel LIB$.

  The following informational panels can be viewed without leaving
  the Guide.

    1  MOVE PAGE DATA SET          Tips for Moving Page Data Set
    2  MOVE VSE / POWER FILES      Tips for Moving VSE/POWER Files
    3  MOVE VSE / ICCF FILE        Tips for Moving VSE/ICCF File
    4  RETURN TO GUIDE             Return to System Management Guide
```

To access the activities listed above, use the fast path facility to arrive at the appropriate menu panel. For example, enter =adm$4 to obtain the System Tailoring menu panel.

4.2.22 MOVE PAGE DATA SET STEPS

```
            SYSTEM MANAGEMENT GUIDE: MOVE PAGE DATA SET    SYM$PDS

  If you wish to move the Page Data Set for performance reasons, or
  change its size, execute the following steps:

     A.  Execute the ASI Tailoring dialogue, and specify the new
         area, or areas, to be used in your IPL procedure.  You may
         want to place the Page Data Set under fixed head areas on
         multiple spindles.  This is now possible because the Page
         Data Set may occupy up to 15 extents.

     B.  Submit the JCL created to catalog the new procedure.

     C.  The next time you IPL the system, the new area will be
         used.

    1  RETURN                      Return to Additional Activities
                                   menu
```

Select 1 to return to the System Management Guide.

4.2.23 MOVE VSE/POWER FILE STEPS

```
          SYSTEM MANAGEMENT GUIDE: MOVE VSE/POWER FILES   SYM$PWR
If you wish to move the VSE/POWER Files for performance reasons,
or to change its size, execute the following steps:

 A.  Modify the standard labels for the files using the Label
     Processing dialogue, specifying the new area to be used.

 B.  Execute the ASI Tailoring dialogue to pick up the new labels,
     and specify 'OP' to allow operator to format files during the
     next IPL.

 C.  Submit both jobs with a disposition of HOLD.

 D.  Terminate the VSE/ICCF partition.

 E.  Execute both jobs.

 1  CONTINUE VSE/POWER          Continue Move VSE/POWER Files
                                Instructions
```

```
        SYSTEM MANAGEMENT GUIDE: MOVE VSE/POWER FILES     SYM$PWRA
 F.  PSTOP all VSE/POWER controlled partitions.

 G.  POFFLOAD VSE/POWER reader, printer, and punch queues.

 H.  Terminate VSE/POWER.

 I.  IPL the system to use the new labels.

 J.  During VSE/POWER startup, format the new file areas.

 K.  POFFLOAD LOAD the VSE/POWER reader, printer, and punch
     queues.

 L.  Execute the ASI Tailoring dialogue to remove the 'OP' entry
     introduced in step B, above.

 1  RETURN                      Return to Additional Activities
                                menu
```

Select 1 to return to the System Management Guide.

4.2.24 MOVE VSE/ICCF FILE STEPS

```
            SYSTEM MANAGEMENT GUIDE: MOVE VSE/ICCF FILE    SYM$ICF
  If you have VSE/ICCF installed, and wish to move the VSE/ICCF file
  for performance reasons, or to change its size, execute the
  following steps:
   A.  Modify standard labels for the files using the Label
       Processing dialogue specifying the new area to be used.
   B.  Execute the ASI Tailoring dialogue to pick up the new labels.
   C.  Submit both jobs with a disposition of HOLD.
   D.  Submit from sublibrary 59, the jobs ICCFBACK, ICCFFMAT, and
       ICCFREST, with a dispostion of HOLD.
   E.  Terminate the VSE/ICCF partition.
   F.  Execute ICCFBACK to backup the file.
   G.  Execute the standard label and ASI jobs.
   H.  Re IPL the system, or execute procedure STDLABEL.
   I.  Execute ICCFFMAT to format the new area.
   J.  Execute job ICCFREST to restore the file from tape to the new
       area.
   K.  Startup the VSE/ICCF partition.
   1  RETURN                      Return to Additional Activities
                                  menu
```

Select 1 to return to the System Management Guide.

5.0 SYSTEM MANAGEMENT

System management consists of activities that keep a computer system operational. The following categories of system management activities have been defined:

*	System Management Guide	Perform Initial System Activities
*	Administration	Perform Administrator Functions
*	Installation	Install Optional Features
*	Verification	Verify Optional Feature Install
*	Dump Analysis	Analyze VSE/IPCS Dump
*	Service	Apply Service to DOS/VSE via MSHP
*	Operation	Select an Operations Utility

5.1 SYSTEM MANAGEMENT GUIDE

The system management guide is online documentation which guides you through the dialogues generally required when installing the system. The panels which compose the guide are actually menu panels which call a system management dialogue or menu. In most cases, the system management guide calls a function directly. When the function completes, control is returned to the calling menu within the system management guide. However, in a few instances it displays the system management menu panel. After making selections from the menu panel, you must return to the guide. This may easily be done by typing =sym$ and then entering 1. Processing will be returned to where you left off.

The section, "System Management Guide Checklist," shows the panels that are displayed and gives additional information. Although it is possible to install the system by going directly to the menu panels for the functions, we strongly recommend using the system management guide to insure proper sequence and no accidental omissions. The functions executed within the system management guide are the same as those accessed from the regular menu structure. The system management guide simply provides an alternative, more structured path to those functions.

5.2 ADMINISTRATION

The Interactive Productivity Facility generates JCL. To have this JCL match the extents of data sets on your system, information is contained in internal tables. The administration environment builds and updates these tables in addition to creating JCL. There are three subdivisions of administration: system administration, data base administration, and communication administration.

5.2.1 SYSTEM ADMINISTRATION

These dialogues are used to create tables and JCL for:

* System Profile
* Logons and Passwords
* Using the Librarian Programs
* System Tailoring Functions
* VSE/ICCF Tables
* Dialogue Customization
* Utility Aids

Each of the above items is further explained below.

5.2.1.1 System Profile

The system profile tables define:

1. What software components are installed on your system
2. What hardware is installed on your system
3. The locations and names of your libraries
4. The locations and names of various system and user files

The first time use dialogue initializes your profiles based on the VSE System IPO/E supplied IPL procedure used (if any), your DASD type and addresses, and the VSE System IPO/E optional products you specify for installation on your system. Note: It is very important to select all products you plan to install now or in the future. Library sizes are

allocated based on the sizes of the products you select. An omission at this point can cause a great deal of extra work later.

These profiles are used when performing many system management functions. Dialogues are provided to help you maintain these profiles. They are also updated by other dialogues, where appropriate. If you change your software, hardware, libraries, or file labels, you must update your profiles with the new information. If your profiles do not accurately reflect your environment, dialogues which depend on this information will not work properly.

The profile tables are created on your user library. They should not be removed. Any activity which affects these profiles must be performed under the VSE/ICCF System Administrator user ID, "AAAA." If multiple users execute dialogues which create or modify profiles, multiple profiles will be created which may not accurately reflect the status of your system.

The following sections describe the various profiles, and the information they contain.

I/O CONFIGURATION PROFILE

The I/O configuration profile table, ADM$HDWT, is created during the first time Use dialogue based on the pregenerated IPL procedure you used. If you did not use a System IPO/E supplied IPL procedure, a default table will be created containing only the VSE/ICCF required dummy devices and the DASD you describe for DOSRES, SYSWK1, etc. You must enter the remaining entries yourself.

If you have already created an ADM$HDWT table using Release 1 or Release 2 of Interactive Productivity Facility, or during a previous execution of the first time use dialogue, a panel will be displayed asking whether or not you want to recreate your hardware table based on the IPL procedure you select. If you choose to save your existing table, the entries will be converted to the System IPO/E Release 2.1 format, if necessary, and saved. It is used when applying service to determine the DASD type on which libraries reside. It is also used to tailor your automated system initialization (ASI) procedures.

The I/O configuration profile table contains the following information:

1. Device address (in 'cuu' format)
2. Device type
3. Device mode
4. DASD switching

5. DASD sharing

6. DASD volume serial number

Note that when you add a new device to the I/O configuration profile table, you must rerun the ASI tailoring dialogue. The new device will have an IPL ADD command automatically generated. However, the new device may affect some other ASI IPL commands. For example, a new disk may be used in the DPD command. You will have to evaluate the impact of adding the new device on your ASI procedure.

SOFTWARE PRODUCT PROFILE

Initially, the software product profile tables contain only the components which comprise the VSE System IPO/E base you have installed. As you install various optional components using the dialogues provided in the installation environment, they are updated with new information.

The software profile tables contain the following information for each software component you have installed:

1. Product number
2. Component number
3. Product name
4. Release, version, and modification level
5. Component level code
6. The libraries to use when applying service to the component
7. Whether this component requires entries in CICS/VS management tables
8. What modules and macros are in the production libraries
9. Other information required for installation process

This information is used by the service environment in order to apply service to the correct libraries.

When updating these tables, CICS/VS support can be added or deleted. The next time CICS/VS tables are assembled, support for the component will be appropriately added or deleted from the table being assembled. For example, if CICS/VS support is added for DMS/CICS/VS, and the CICS/VS processing program table (PPT) is reassembled, all programs required to run DMS/CICS/VS under CICS/VS will be added to the PPT. (You must reassemble and catalog your CICS/VS tables to activate the new support.)

The names of the tables created are ADM$PROD and ADM$SHIP.

LIBRARY PROFILE

The library profile table, ADM$LTAB, describes all libraries distributed with the VSE System IPO/E, including production and service libraries. It is used in the service environment to establish library sizes and allocations for the application of PUT tapes.

The library profile table contains the following information:

1. Library label
2. Library size, including directories
3. Library location

DISK LABEL PROFILE

The disk label profile table, ADM$DTAB, contains information about your VSE standard labels. It initially contains label information for all files distributed with System IPO/E with the exception of partition standard labels, which are in the tables ADM$PARx, where x corresponds to 0, 1, ..., A, B depending upon which partitions have standard labels defined. Dialogues are provided to help you update this profile with label information for your own files. The disk label profile is used during PUT tape application, and also to create system standard label and partition standard label job streams.

The disk label profile table contains the following information:

1. Library and file labels for VSE standard labels
2. Library and file labels for the service process

Note: System work files (SYSLNK, SYS001, SYS002, SYS003, SYS004) are provided only for the background partition, in the BG partition labels created using the default disk label profile. If you need system work areas in other partitions, create similar work labels (in a different area), and define your work areas in foreground partition standard labels, using the disk label profile update dialogue.

If you have already created an ADM$DTAB table, using Release 1 or Release 2 of Interactive Productivity Facility, any user entries that have been added to the table will be copied into the Release 2.1 table during the execution of the first time use dialogue.

5.2.1.2 Logons/Passwords

Dialogues are provided to help you add, change, or delete entries in VSE/ICCF user profile records and the CICS/VS sign-on table. These profile records identify authorized users of the VSE/ICCF system.

Based on your responses, a job stream is created to update the user profile records or the appropriate table with your changes.

Note that this job stream must be run when VSE/ICCF is down, since the user profile records cannot be updated while VSE/ICCF is operational.

5.2.1.3 Librarian

Dialogues are provided to help you create job streams to manage system and private libraries. Using these dialogues, you can create, copy, or merge libraries. You can also display, delete, rename, or catalog library members.

The create libraries dialogue generates job streams to create a private library.

The copy/merge library dialogue generates a job stream to copy or merge members between libraries.

The display library dialogues generate job streams to display library directories, display library members, or de-edit and display the E sublibrary of a source library.

The delete library members dialogue generates a job stream to delete library members from any library.

The rename library members dialogue generates a job stream to rename library members in any library.

The catalog library members dialogue generates a job stream to catalog to one of the four library types.

BACKUP LIBRARY SETS

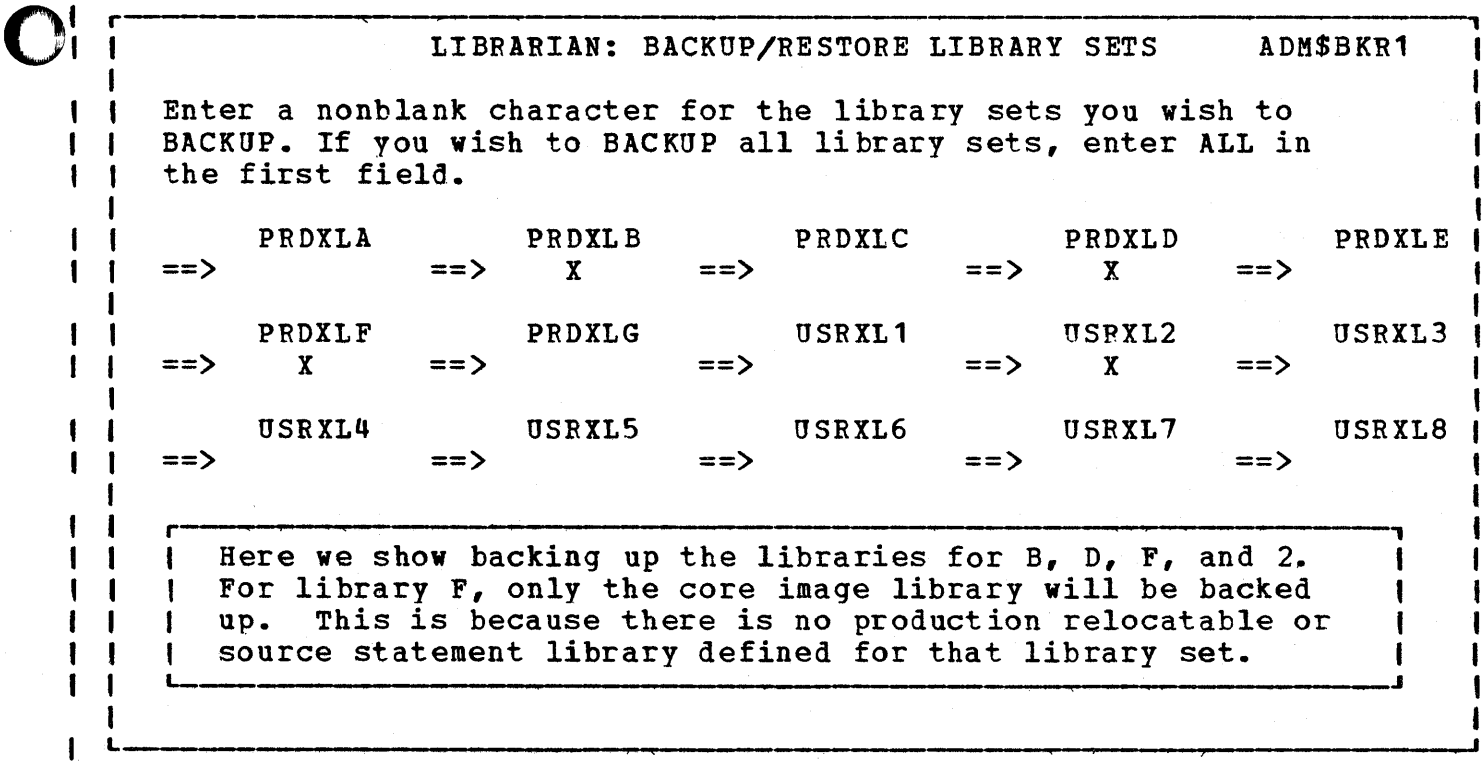
This dialogue produces the JCL needed to back up all of your production and user library sets or any combination that you desire. The panel used to control the backup has the library sets identified as PRDXLa for production libraries, and USRXLn for user libraries, where a has a range of A-G, and n has a range of 1-8. The XL shows that the entire set of core image, relocatable, and source statement libraries is used.

If you reply ALL in the PRDXLA field, all of the libraries defined in your system profile tables will be backed up.

The backup of libraries is controlled by a comparison between the entries in the system profile table and the entries on the panel. Therefore, if you make an entry for a library that does not exist, no JCL will be produced for that library.

When you back up your system, you should include the POWER SLI library as part of that backup. The VSE System IPO/E POWER SLI library is USRSL1, which is part of the USRXL1 library set on panel ADM$BKR1. In order to restore your full system, you will have to use two steps. In step one, standalone restore SYSRES. In step two, use the online version of RESTORE from SYSRES of step one to restore all your private libraries. You must use the online version to restore the private libraries because the standalone version of RESTORE will not restore private libraries which have been backed up with the new assign method used for multiple private library backup. For details on how to use the online restore process with an UPSI of 1 for operator prompting, see the VSE/Advanced Functions System Utilities Manual, (SC33-6100).

An example of what the panel looks like is shown below:



RESTORE LIBRARY SET

This function is the exact reverse of the backup described above. It uses the same dialogue and panel. The only change on the panel is that the word BACKUP is replaced by RESTORE.

The libraries will be restored to the location described in the system profile table, ADM$DTAB, and will use the library and directory sets that are defined in table ADM$LTAB.

Hint: It is possible to use the BACKUP/RESTORE to reallocate your libraries. This is done by a three-step process.

* Back up the libraries to tape. This would include any library sets following the one that you wish to expand.

* Change the allocations and locations in the system profile tables.

* Run the RESTORE dialogue to create the JCL for the restore, using the new allocations.

Caution: Should you accidentally change the allocations in the system profile tables prior to creating the JCL for the backup, you may have a problem. Since we do not include the extent information for the backup, it is only a problem if you actually move the library to another disk volume.

Warning: Use care when changing the system profile tables. It is easy to make a mistake in arithmetic and have libraries and/or data sets overlay each other. When you finish the restore of the library sets, it is best to execute LVTOC and check that all of your libraries and data sets are there.

5.2.1.4 System Tailoring

These dialogues generate and update tables containing the parameters needed for assembling your supervisor, ASI procedures, and POWER startup table. Also provided are dialogues which will alter the standard defaults of the VSE/ICCF system and regenerate the TTF system. If you have installed either COBOL or PL/I, it will prompt you in tailoring the OPTION cards for the compilers.

We strongly recommend that you delete any of the default supervisors that you are not going to use. During the application of service, all supervisors found in the tables will be reassembled. Naturally, this is time-consuming and unnecessary.

5.2.1.5 VSE/ICCF and VSE/Access Control Security Tables

1. VSE/ICCF Security

VSE/ICCF provides facilities which protect libraries, library members, files, and core image phases against unauthorized access from interactive partitions. The security provided by VSE/ICCF is done in several ways.

a. User identification code

b. Log On password

c. Shared versus owned libraries

d. Primary and connected libraries

e. Public versus private data

f. Normal security versus alternate security

g. Common data

h. Member passwords

i. Protection for user files and programs

Refer to the VSE/ICCF Installation and Operations Reference Manual (SC33-6067) for information about the types of security.

VSE/ICCF provides tables in which restricted files and programs may be defined, and to which only authorized users have access.

Via the system program table and the load protection table, core image library phases are protected against unauthorized usage. User files are protected via the system file table. To modify the security tables, select MODIFY VSE/ICCF TABLES from the ADM$ panel. Function ADM$IST will assist you with modifying the security tables.

VSE/ICCF can also make use of the access control facility of VSE/Advanced Functions. This function is made available by the SEC parameter in the supervisor macro FOPT.

The VSE/ICCF access control tables are books in the VSE source statement library. These tables become valid for your VSE/ICCF system when you assemble the modules DTSSUBMT and DTSCJENT with your version of the tables.

The difference between VSE/ICCF access control and access control in VSE/Advanced Functions is the point in time when access control takes place. For files, the access violation is detected under VSE/ICCF only when referencing the file via a /FILE card. With VSE/Advanced

Functions access control, the violation is detected at the time the file is opened. Programs listed in the system program table are rejected when the /LOAD statement is encountered; whereas phases listed in the program load table are rejected when the corresponding FETCH/LOAD is executed.

Note: With VSE/ICCF access control, it is not possible to detect access violations when a file is accessed without a /FILE card; that is, the label information for that file has been provided at VSE/ICCF startup time, or it is in the standard label area.

The system program and system file tables also contain information that is not security related.

If SEC=VSE/YES/n has been specified in the FOPT supervisor generation macro, ICCF's access control will be BYPASSED, and the VSE/ Access Control will be used instead.

2. VSE/Access Control Security Tables

Protection for core image phases and files used in jobs submitted to a VSE/POWER controlled partition can also be provided if the VSE/Access Control function is made available at VSE/ICCF initialization time.

VSE/Access Control Logging and Reporting is available to extend these facilities. Refer to: Data Security Under the VSE System (GC33-6077) and VSE/Access Control Logging and Reporting General Information Manual (GH12-5130).

The function ADM$SEC will help you with the security table and will build a job to assemble a new table, if you modify the current table. To use this function, select from the ADM$ panel MODIFY SECURITY TABLE. There are four activities for the security table. You can ADD, CHANGE, DELETE, and DISPLAY information about the tables.

The access control table, "DTSECTAB", contains all the information necessary for the system to perform access authorization checking. This information is stored in two types of entries: user profile and resource profile entries.

The information stored in a user profile entry includes the user identifier and the password for identification and authentication checking, and the access control class(es) and update indication for authorization checking.

The information stored in a resource profile entry includes the resource name, the access control class(es) for authorization checking, and the logging option(s) for recording either all accesses to this resource or only the violations.

Normally, it is the security administrator who personally defines and updates the access control table of his system. The table gives the security administrator a centralized view of access control within the entire system

Note: VSE/ICCF uses its own table, called user profile (located in the VSE/ICCF library), for the identification and authentication check during the VSE/ICCF log on procedure. A VSE/ICCF user submitting jobs for processing in a batch partition of the system must also be defined in the access control table (DTSECTAB).

3. VSE/Access Control Logging and Reporting

VSE/Access Control Logging and Reporting consists of two parts:

* The Logger

* The Reporting Module

The logger is used to activate the logging of security events. The reporting module has five activities. It is used to initialize, dump, restore, selectively print, and reset the log data set.

To use the VSE/Access Control Logging and Reporting activities select from ADM$ panel RUN SECURITY REPORTS.

5.2.1.6 Dialogue Customization

The Interactive Productivity Facility dialogue customization activity provides the ability to remove unwanted Interactive Productivity Facility dialogues from the system to save DASD space and improve performance.

Dialogue customization creates a VSE job that removes core image library members of the Interactive Productivity Facility dialogues. This job must be submitted to VSE for the deletions to occur. A VSE/ICCF procedure is also created that purges the Interactive Productivity Facility VSE/ICCF members for the dialogues selected to be deleted. This procedure must be executed for the deletions to occur.

Dialogues should be deleted if you do not plan to use them. For example, the batch interactive user probably has no requirement for CICS/VS tailoring dialogues or for the verification jobs for CICS/VS related products.

Furthermore, the first use tutorial should be eliminated if it has been taken, and there is no desire to refer to it again. The first use tutorial has about 100 panels so the savings in DASD space will be substantial if it is removed.

5.2.1.7 Utility Aids

The Utility Aids provide the following capabilities:

1. Selective job retrieval from a VSE SYSIN tape

This dialogue creates a VSE job stream which will read the SYSIN tape, select the job or jobs you specify, and punch them into the VSE/POWER punch queue. When the execution is complete, you can then read them from the VSE/POWER punch queue with VSE/ICCF. By running the VSE/ICCF procedure named CUS$JOB, you can copy the job or jobs from the punch queue into a VSE/ICCF member. If several VSE jobs with the same job name are present on the tape, all of them will be placed in the same VSE/ICCF member, imbedded between * $$ JOB and * $$ EOJ VSE/POWER JECL control statements.

2. Printing of Interactive Productivity Facility panels

This dialogue provides the ability to print any Interactive Productivity Facility panel. The panel can be printed in upper or lower case characters, but may vary depending on the character set of the printer used. In addition to printing any menu, entry, or dmenu panel, you can also request printing of the accompanying explain panels. The dialogue creates a job stream which, when submitted to a VSE partition, will print the panel or panels specified on SYSLST. During dialogue execution you must enter the name, or generic name, of each panel of which a printed copy is desired. The generic name should consist of at least the first three characters of the panel set name preceeded by an asterisk; for example, *ADM, *ADM$, or *ADM$LAB.

5.2.2 DATA BASE ADMINISTRATION

Interactive Productivity Facility data base administration dialogues are available to assist you in administering your data bases.

The first of these dialogues provide for access method services management. This includes the management of catalogs, spaces, and datasets.

The DL/I user has available the Interactive Macro Facility (IMF), which provides for DL/I control block definition and generation. For further information on IMF, consult the section in the System IPO/E Users Guide on IMF and the DL/I DOS/VS IMF User's Guide (SH24-5007).

The following DL/I capabilities are available:

1. DBD definition and modification
2. DBD generations
3. PSB definition and modification
4. PSB generations and block builds
5. ACT definition and modification
6. ACT generation

5.2.2.1 Interactive Macro Facility

IMF is an easy-to-use tool that reduces the complex task of defining and generating DL/I control blocks. It provides formatted displays on a 3270-type terminal and prompts the user. You can then choose either the appropriate activity and enter the required information in interactive mode or accept defaults. IMF has three major functions: DBD generation, PSB generation, and ACT generation.

1. DBDGEN gathers information required to create or update a DBD (data base description). Describing a data base normally is the first activity a new IMF user will do. A DBD is a DL/I control block describing the contents of the data base, the names of the segments, their hierarchical relationship, and the physical organization and characteristics of the file.
2. PSBGEN gathers information required to create or update a PSB (program specification block). A PSB is a DL/I control block used to determine what parts of a data base specific application programs are allowed to access. There are one or more PSBs for each application program.
3. ACTGEN gathers information required to create or update an ACT (application control table). An ACT is a DL/I control block used to associate online application programs with one or more DL/I data bases.

SOURCE MODULES

If you intend to assemble any of the modules found in the source

statement library, an assembly error (Msg IPK001) will result. The error does not affect the assembler output in any way, but rather is caused by an extra END card. (The source book has an END card, and the assembly job stream has an END card.)

The error flag may be removed by deleting the END card in the source statement library, prior to the assembly.

If the END card removed contains an entry point address, that entry point must be included in the LNKEDT step.

The DL/I libraries contain the DL/I core image library, the DL/I relocatable library and the DL/I source statement library which contains the DTRPANELs, DTRSKELs, and DTRMSG files catalogued as I.Books. The I. books have been deleted from the production source statement library D in the course of loading library 63. If you have CMS on your system, use the VMFPLC2 load and dump commands analogous to the CMS commands tape load, and tape dump.

The file after the DL/I history file on the tape for DL/I contains a VMFPLC2 dump of the TEXT, DTRPANNEL, DTRSKEL, and DTRMSG files for VMFPLC2 load on to a CMS mini-disk.

FUNCTIONS

The following functions (PHASES) are in a separate CMS file. The CMS user must LOAD and GENMOD these (except $$$COIBM) as described.

$$$COIBM	DLZ$ACT	DLZ$DBG	DLZ$PSG
DLZ$ACG	DLZ$DBD	DLZ$PSB	

Item count = 7

The following FUNCTIONS (MODULES) are deleted during the installation of DL/I. These modules can be obtained by restoring DL/I to an available DASD area from the DL/I relocatable library. With the exception of $$$COIBM, they are also contained in the CMS VMFPLC2 LOAD File with a file type of TEXT.

$$$COIBM	DLZ$DA2	DLZ$LC1	DLZ$SE1
DLZ$ACG	DLZ$DA3	DLZ$PC1	DLZ$SE2
DLZ$ACT	DLZ$DBD	DLZ$PIN	DLZ$SE3
DLZ$AIN	DLZ$DBG	DLZ$PR1	DLZ$SF1
DLZ$BU1	DLZ$DB1	DLZ$PSB	DLZ$SS1
DLZ$BU2	DLZ$DIN	DLZ$PSG	DLZ$VF1
DLZ$CO1	DLZ$FI1	DLZ$PS1	DLZ$XD1
DLZ$DA1	DLZ$FI2	DLZ$RP1	DLZ$XF1

Item count = 32

DTRPANELS

The following DTRPANELs are deleted from the DL/I production library during installation, they are loaded into library 63 for use through VSE/ICCF They are also contained in the VMFPLC2 LOAD File with a file type of DTRPANEL.

DLZ$	DLZ$DBD1	DLZ$PSG1	DLZ$VF11
DLZ$ACG1	DLZ$DBG1	DLZ$PS11	DLZ$XD11
DLZ$ACT1	DLZ$DB11	DLZ$RP11	DLZ$XD12
DLZ$BU11	DLZ$FI11	DLZ$SE11	DLZ$INFO
DLZ$BU21	DLZ$FI21	DLZ$SE12	DLZ$INF1
DLZ$CO11	DLZ$LC11	DLZ$SE13	DLZ$INF2
DLZ$DA11	DLZ$LC12	DLZ$SE21	DLZ$INF3
DLZ$DA21	DLZ$PC11	DLZ$SE31	DLZ$INF4
DLZ$DA22	DLZ$PR11	DLZ$SF11	DLZ$INF5
DLZ$DA31	DLZ$PSB1	DLZ$SS11	

Item count = 39

DTRSKELS

The following DTRSKELs are deleted during installation of DL/I from the production library. They are loaded into library 63 for use through VSE/ICCF. They are also in the VMFPLC2 LOAD File with a file type of DTRSKEL.

DLZ$ACGA	DLZ$ACGX	DLZ$DBGE	DLZ$PSGC
DLZ$ACGB	DLZ$ACGY	DLZ$DBGF	DLZ$PSGD
DLZ$ACGC	DLZ$DBGA	DLZ$DBGX	DLZ$PSGE
DLZ$ACGD	DLZ$DBGB	DLZ$DBGY	DLZ$PSGF
DLZ$ACGE	DLZ$DBGC	DLZ$PSGA	DLZ$PSGX
DLZ$ACGF	DLZ$DBGD	DLZ$PSGB	

Item Count = 23

DTRMSG

The following DTRMSGs are deleted during the installation of DL/I. They exist in SYSIN file to DTSUTIL for ICCF Sublib #63, and in the VMFPLC2 LOAD File with a file type of DTRMSG.

DLZ$MSG

Item Count = 1

5.2.2.2 VSE/VSAM

Dialogues are provided to help you create VSE/VSAM access method services job streams. These job streams can be used on catalogs, space, and data sets to perform many of the VSE/VSAM functions.

CATALOG MANAGEMENT

The catalog management dialogues will help you DEFINE, DELETE, BACKUP, RESTORE, TRANSPORT, and LIST the VSE/VSAM catalog.

SPACE MANAGEMENT

The space management dialogues will help you DEFINE and DELETE VSE/VSAM space in the catalog.

DATA SET MANAGEMENT

The data set management dialogues will help you DEFINE, DELETE, ALTER, COPY, EXPORT, IMPORT, PRINT, VERIFY, and DISPLAY data set information.

You can also use these dialogues to COPY and PRINT sequential files.

5.2.3 COMMUNICATION ADMINISTRATION

These dialogues are used for creating and updating tables for CICS, VSE/POWER RJE and EP/VS.

For CICS four tables are maintained: processing program table (DFHPPT), program control table (DFHPCT), terminal control table (DFHTCT), and file control table (DFHFCT).

5.2.3.1 CICS/VS Tables

Dialogues are provided to help you maintain the following CICS/VS tables:

* Processing program table (PPT)
* Program control table (PCT)
* Terminal control table (TCT)
* File control table (FCT)
* Sign-on table (SNT)

All of these tables are updated within the communication administration environment, except the SNT, which is updated within the system administration environment. Note that the dialogues make certain restrictions on which table parameters may be specified, and that not all CICS/VS tables are supported.

The dialogues provide for the following activities for each table:

* Add entries
* Delete entries
* Change entries
* Assemble/catalog the selected table

You are prompted for the input required to perform the above activities. Each parameter is explained, examples are provided, and recommendations are made regarding appropriate parameter values. It is suggested that you refer to the explain panels when using these dialogues for the first time.

After modifying one of the tables, you have the following options available to you:

* Cancel all changes made during the current session.
* Update the table without assembling the new version.
* Update the table and assemble the new version.

Note that CICS/VS table information is maintained within internal tables maintained by the dialogues. For your changes to take effect, you must assemble the new table version.

The VSE System IPO/E ships a number of preassembled CICS/VS tables in the core image library which are used for the ICCF/CICS/VS startup or the CICS/VS verify startups. Interactive Productivity Facility does not ship any pregenerated internal tables for tailoring CICS/VS tables. It is therefore necessary to do an add to a CICS/VS table before trying to delete, change, or assemble. The source for the preassembled CICS/VS tables have been catalogued in the service library B source statement library as G.macros. You must use a suffix that does not contain a dollar sign ($) or a pound sign (#) when adding a CICS/VS table because CICS/VS Release 1.5 will reject these characters and give you an unsuffixed table. Please note that table suffix T1 is reserved for the use of the Interactive Productivity Facility.

NOTES FOR EXISTING CICS/VS USERS

If you have existing CICS/VS tables, with entries you wish to use, you have two options:

1. Add all the entries in your old tables via the dialogues.

2. Create a VSE/ICCF file with a unique name which contains only user table entries (that is, no JCL, IBM entries, TYPE=INITIAL, or TYPE=FINAL). If you want to include this file in your CICS/VS table assembly, you will be asked in the dialogues for the name of this file. The job stream created will then include your table entries before the DFHxxx TYPE=FINAL macro where xxx is FCT, PCT, PPT, or TCT.

   If you use this method, be sure to remove any entries for CICS/VS (including FERS) and any other component you installed using Interactive Productivity Facility installation dialogues. Support for these components is automatically included by the dialogues.

The second method is faster but has some disadvantages. Entries included in this manner are included in the table as is. They are not checked by the table preparation dialogues for validity. Since the individual entries in this file cannot be examined, the dialogues cannot check that any further entry you make via the dialogue is not in conflict with an entry defined in the data you included. Also, the entry delete and modify dialogues cannot update entries in your included file. You will get the full benefit of the table preparation dialogues only if you use the dialogues exclusively to add entries to your table.

Be sure to read the section on "CICS/VS Conversion" in the VSE System IPO/E Planning Guide (GC20-1875).

HINTS AND TIPS

1. The PPT dialogue automatically creates an application load table (ALT) assembly job stream. If you have an ALT of your own, modify the dialogue-created job stream to delete this job.

2. You do not have the option of ordering your tables. Your user entries always come first, in the order they were entered via the dialogue, followed by any entries required by CICS/VS and any optional components installed via the Installation dialogues.

3. The TCT dialogue only supports 3270-class devices, and the system console. You will have to add support for other devices yourself.

4. The FCT dialogue only supports VSE/VSAM and DL/I. If you have BDAM or ISAM files, you will have to add entries for them yourself.

5.2.3.2 VSE/POWER RJE

The VSE/POWER RJE dialogues help you generate a remote job entry system suitable for your operating environment. Each VSE/POWER RJE parameter is explained, and appropriate parameter values are recommended. Interdependent parameter definitions are indicated, and acceptable values suggested.

The system-supplied VSE/POWER RJE and user-defined specifications can be displayed for use in creating new specifications, should you need multiple RJE systems. VSE/POWER/RJE tailoring requires that you tailor VSE/POWER first and reply RJE=YES to that dialogue.

To facilitate updating a VSE/POWER RJE system, the following subsets of parameters are provided:

* BSC Line Definitions
* SNA Terminal Definitions
* BSC Terminal Definitions
* 3780 Definition
* 2770, 2780 Definition

5.2.3.3 EP/VS

A tailoring dialogue for EP/VS (TEP$ASM) is located in the communication administration environment. Using the dialogue, you can create an EP/VS specifically tailored to your environment. Three job streams are created by the dialogue. The first job stream will catalog source macros to a user source statement library. The second will submit those macros to the first stage of a two-stage generation procedure. The third job stream will complete the two-stage generation procedure. You will be able to edit the job streams after they have been created by the

tailoring dialogue. This will allow you to change the job streams if you need to so that they will suit your environment.

5.3 INSTALLING OPTIONAL COMPONENTS

5.3.1 INTRODUCTION

An Interactive Productivity Facility dialogue is provided to help you install optional software components distributed with the VSE System IPO/E. You can create the JCL to install all or any subset of products during a single execution of the install dialogue. The products you select will be installed by library. If you do not have your service libraries disk resident, selecting all the products to be installed in a single library at a time can save you backup/restore time. Installing those products and performing any tailoring and assemblies required before installing products in a different library will eliminate having to restore the service library at a later time.

When you select a component for installation, you are prompted for information about its location on the distribution tape and the tape volume number on which it resides. The external label of the distribution tape lists each component and a corresponding file number. You must know this number to respond to the installation dialogue.

5.3.2 SERVICE LIBRARIES

The installation dialogue obtains information from the system profile tables. These tables identify the labels and volume serial numbers of the service libraries to be used when a component is installed. Listed below are the components and the service libraries into which they are installed.

SERVICE LIBRARY A	
VSE	5745-030
VSE/ADVANCED FUNCTIONS	5746-XE8
VSE/IPCS	5746-SA1
VSE/ICCF	5746-TS1
VSE/POWER	5746-XE3
VSE/VSAM	5746-AM2
INTERACTIVE PRODUCTIVITY FACILITY	5748-MS1
VSE/POWER/RJE	5746-XE3

SERVICE LIBRARY B	
CICS/DOS/VS	5746-XX3

SERVICE LIBRARY C	
BTAM SCP	5747-CG1
BTAM-ES	5746-RC5
VSE/Fast Copy	5746-AM4
VSE/DITTO	5746-UT3
DOS/VS COBOL	5746-CB1
DOS/VS RPG II	5746-RG1
DOS PL/I COMPILER/LIBS	5736-PL1
DOS PL/I OPTIMIZER COMPILER	5736-PL3
DOS PL/I RESIDENT LIBRARY	5736-LM4
DOS PL/I TRANSIENT LIBRARY	5736-LM5
VTAM SCP for ACF/VTAME	5747-CG2
ACF/VTAME for DOS/VSE	5746-RC7
VTAM SCP for ACF/VTAM	5747-CF1
ACF/VTAM for DOS/VSE	5746-RC3
SORT/MERGE II	5746-SM2
EP/VS - DOS/VS	5747-AG1
VSE/ACCESS CONTROL - LOGGING and REPORTING	5746-XE7

SERVICE LIBRARY D	
DMS/CICS/VS-DOS	5746-XC4
DMS App. Gen. Feature 608X	5746-XC4
DB/DC DATA DICTIONARY	5746-XXC
DL/I DOS/VS	5746-XX1

SERVICE LIBRARY E	
CICS/VS TERTIARY and MACRO LIBRARY	5746-XX3

SERVICE LIBRARY F	
ACF/NCP/VS	5735XX1
SSP for ACF/NCP/VS	5735XX3
NCP/SSP SCP	5747CH1
NCP/SSP SCP with PEP	5747CH1

The default system profile tables define which components go into which service libraries, as shown above.

You may change the location of the service libraries by modifying your disk label and library profiles. If you have enough DASD to make the service libraries disk-resident, you may save a substantial amount of backup/restore activity during installation and service.

5.3.3 DATA SET CONSIDERATIONS

If you have backed up one or more disks to tape in order to do the installation, do not run jobs that require files that have been backed up. Not only will the jobs not run, but in the case of VSAM data sets, catalog pointers could become mismatched.

If you choose not to back up the contents of your disks to tape, and restore the service libraries to their default locations, you will overlay the dump data set area. Prior to using these areas, you must recreate and reformat them. To accomplish this, follow the instructions provided in the VSE System IPO/E Program Directory describing how to format the VSE system dump files.

5.3.4 INSTALLATION JOB STREAM

The optional install dialogue creates a job stream containing the steps described below. Mixed architecture does not imply the overall configuration has DASD of mixed architectures, but rather that the libraries currently being used are on a split of FBA and CKD devices. Job sequence numbers are provided for each VSE job. They are found on a comment statement following each VSE // JOB statement. This feature provides you with a means of cross-referencing your original job stream with the console listings produced during the execution of those jobs.

1. If mixed architecture exists, a private core image library is created.

2. If the job to create the appropriate service libraries has previously been generated, you are given the option of recreating this job, or including a job to restore the already created libraries. If a job to create these libraries has never been generated, one is included. Note: If you have not relocated your service libraries and now choose to restore one, it may well be restored to an area that is currently occupied by a different service library. In order to allow this to occur, you must previously have backed up the service library that is about to be overlaid, and respond '0 DELETE' to messages that tell you an unexpired file is about to be overlaid, or that there is an equal file ID in the VTOC.

3. A job is included that uses MSHP to restore the component distribution libraries and associated history file from the distribution tape to temporary restore areas. The same restore areas are used for the installation of multiple products.

4. If the product currently being installed has VSE/ICCF members that must be restored to the DTSFILE, the jobs required to perform this task are included here. The VSE/ICCF members are supplied as I.books in the distribution source statement library. They are punched into the internal reader along with a DTSUTIL job to merge them into the DTSFILE. They are then deleted from the restored component source statement library. VSE/ICCF must be terminated before the DTSUTIL job can be executed. The job is generated with a job class of 2, the same partition in which VSE/ICCF is executed.

5. A job is included that uses MSHP to install the restored component libraries to the system. This single job performs the following functions:

   a. Merges all the component's core image library phases to the appropriate production core image library if mixed architecture does not exist, and into the private core image library created in the first step above if mixed architecture does exist.

b. Merges all the component's relocatable and source members to the appropriate service libraries.

c. Updates the system history file with information contained in the component history file.

6. A job is included to modify the retention period of the MSHP temporary restore areas created above to make them expired files. This eliminates the need to respond '0 delete' to messages that tell you there is an overlap on an unexpired file or an equal file in the VTOC for files MSHP.RESTORE.SYSCLB.FILE, MSHP.RESTORE.SYSRLB.FILE, MSHP.RESTORE.SYSSLB.FILE, and DOS.AUXILIARY.HISTORY.FILE.

7. A job is included to retrace the MSHP system history information for the component. If the component is classified as a feature by MSHP, such as POWER/RJE, a retrace is made of all the features installed.

8. A job is included to perform a DSERV that displays the contents of the restored distribution libraries for the component. Save this for reference purposes.

9. The steps above are repeated for each product selected to be installed that resides in the current service library.

10. If mixed architecture exists, the distribution tape is removed, a scratch tape mounted, and the private core image library created in the first step above is backed up to tape. If the service libraries were just created, the tape is restored overlaying the production core image library. Otherwise, the tape is restored to a newly created private core image library residing on DASD of different architecture than the one created in the first step above, and merged into the production core image library.

11. If mixed architecture exists, a private relocatable library is created, and the relocatable production members are merged in. The library is backed up to tape and restored into the production relocatable library. This step is repeated for the source statement library.

12. If mixed architecture does not exist, all members it the production relocatable library are deleted. A subset of the relocatable modules is then copied from the relocatable service library to the relocatable production library. This step is repeated for the source statement library.

13. You are now given the option of backing up the service library to tape. This job should be run if you do not wish to keep the service libraries disk-resident.

14. The default location for all service libraries is the same. Thus, if you are installing products in more than one library and have not modified the library default allocations, you must back up the service libraries of one library set before proceeding to the next. If you fail to do this, the service libraries corresponding to the next library set having products installed will be created or restored over the service libraries of the library set currently being processed.

15. The steps outlined above are repeated for each service library that has products to be installed.

16. The last job to be executed is one that reestablishes the system LIBDEFs. If, for some reason, the install job stream does not run to completion, and this job is not executed, you must perform the following steps to reestablish the system LIBDEFs. Release the job PAUSEBG from the system reader queue. Respond 0 ASSGN SYSCLB,UA and 0 // EXEC PROC=LIBDEF. Enter 0 to end the job. This procedure can be executed in any partition any time the system LIBDEFs are lost. Simply release the appropriate PAUSE job and, in place of 0, supply the corresponding partition number.

Additional jobs may be required to completely install some components. In some cases, there will be further instructions in the installation JCL itself. For example, you may have to use tailoring or verification dialogues to finish installing certain components.

It is important to run the install job stream from beginning to end. Products are not completely installed until their associated libraries have been processed to completion. There is no restart facility supported in the optional product install environment.

It is also required that you execute the install job streams in the exact sequence in which you create them. If this requirement is not followed, your production libraries may not contain all of the modules or source books of products which you believe to be installed.

5.3.5 INSTALLATION OF SYSTEM IPO/E PRODUCTS NOT SELECTED IN FIRST TIME USE

During the execution of the first time use dialogue, you should select all products you plan to ever install on your system. Failure to do so will result in extra effort to install that product later. Libraries are created only if products are selected to be installed in them. In addition, libraries C and D sizes are allocated based on the sum of the sizes of the products you indicate will be installed there. Thus, to add a product after this dialogue has been run, you may have to create a library or increase the size of an existing one.

5.3.5.1 Rerunning the First Time Use Dialogue

One method of adding a product to be installed is to rerun the first time use dialogue. This approach can cause several problems and is generally not recommended. Based on the products you select, libraries may be reallocated and re-created. Products residing in libraries that are recreated must be reinstalled. In addition, your system profile will be reinitialized, causing any changes that have been made to be lost with two exceptions: an existing hardware configuration table will be preserved, and any non-System IPO/E supplied entries in an existing disk standard labels table will be saved in the newly created one.

5.3.5.2 Creation or Reallocation of a Library

A preferable approach is to reallocate an existing library to make it large enough to accommodate the additional product, or to create the library if it does not exist.

An Interactive Productivity Facility dialogue is available to aid in the creation of private libraries. If you wish to add a product that resides in a library set that does not exist, the libraries must be created, and the library set information added to the system library profile. The latter is accomplished through the LIBRARY INFORMATION selection, off the ADMINISTRATION: SYSTEM PROFILE menu. From the LIBRARY INFORMATION menu, select PRODUCTION/SERVICE LIBRARIES, and then select the entry ADD NEW LIBRARY SET.

If you wish to add a product to a library set that already exists, but is not large enough to accommodate the additional product, the libraries must be backed up, redefined with the new larger allocations, and restored. The system library profile must be updated to reflect the new library locations and sizes. This is accomplished as outlined above, selecting the UPDATE LIBRARY entry instead of ADD NEW LIBRARY SET.

5.3.5.3 Modifying Product Library Defaults

Production libraries are generally laid out on contiguous DASD space. Thus, increasing the size of one library could result in having to relocate several additional libraries. For this reason, if adding a product to be installed, you may choose to modify the default library into which the product is to be installed.

5.3.5.4 Software Product Profile Update

The last step in adding a product to be installed that was not selected during the first time use dialogue is to update the product entry in the system software product profile. This is accomplished through the SOFTWARE PRODUCTS selection off the ADMINISTRATION: SYSTEM PROFILE menu. Continue to select the ADDITIONAL PRODUCTS entry until the product you wish to install appears. You are given the opportunity to modify the default library set into which the product is to be installed at this time. Enter YES in the INSTALLED field. You can now install the product using the optional product install dialogues providing you have made the library modifications described above.

5.4 INSTALLATION OF NON-SYSTEM IPO/E PRODUCTS

It is possible to have non-System IPO/E supported products serviced using the Interactive Productivity Facility dialogues provided certain procedures are followed concerning the installation of these products.

| The following information is provided to assist you in planning the installation of non-System IPO/E products via the VSE System IPO/E. This information should serve only as a guide for planning the details for installing and implementing the products described in this section. It is recommended that you set up a planning session with your IBM Representatives to review the detailed VSE System IPO/E and product requirements to meet the needs of your individual installation.

| The Field Engineering (FE) Division provides program support for the SCP components and licensed programs that are supported by FE and are contained in the VSE System IPO/E. The Data Processing (DP) Division provides assistance for licensed programs that are supported by DP, for example, FDPs, IUPs, and programs previously known as class B. Service related activities with the VSE System IPO/E package deliverables, for example, documentation support samples and examples, will be provided by the IBM Support Center, and DP will continue to provide installation and program support for these licensed programs.

Additional information about the following products and features may be found in the VSE System IPO/E Planning Guide.

* VSE/VSAM Space Management for SAM Feature
* VSE/VSAM Backup/Restore Feature
* VSE/POWER Shared Spooling Feature
* VSE/PT
* CICS/VS PAII
* DOS/VSE RJE Workstation

5.4.1 CREATION OF LIBRARIES

It is your responsibility to create the production and service libraries into which the non-System IPO/E supported products are to be placed. An Interactive Productivity Facility dialogue is available to aid in the creation of private libraries. This dialogue is accessed through the CREATE LIBRARIES selection on panel LIB$, the OPERATIONS: VSE LIBRARIAN menu. If you wish to place a product in a library set that does not exist, the libraries must be created, and the library set information added to the system library profile. The latter is accomplished through the LIBRARY INFORMATION selection on panel ADM$1, the ADMINISTRATION: SYSTEM PROFILE menu. From the LIBRARY INFORMATION menu, select PRODUCTION/SERVICE LIBRARIES, and then select the entry ADD NEW LIBRARY SET.

If you wish to place a product in a library set that already exists, but is not large enough to accomodate the additional product, the libraries must be backed up, redefined with the new larger allocations, and restored. The system library profile must be updated to reflect the new library locations and sizes. This is accomplished as outlined above, selecting the UPDATE LIBRARY entry instead of ADD NEW LIBRARY SET.

5.4.2 CREATION OF COPY FILES

Non-System IPO/E products that have relocatable modules or source statement books that are to reside in the relocatable or source statement production libraries must have corresponding copy files. Any product that resides in a library with products that will be installed or serviced using the Interactive Productivity Facility dialogues must have copy files. JCL created by these dialogues contain jobs that perform a DELETx ALL (where x is R or S) on production libraries. If

copy files do not exist for an installed product, the relocatable modules and source statement members that are placed in the relocatable and source statement production libraries initially, will not be copied back.

These files have names of the form INS$xxxR and INS$xxxS, where xxx is a three-character string unique to that product, and should be placed in library 1, the primary library for the ID AAAA.

INS$xxxR contains the COPYR statements required to merge the desired members from the relocatable service library to the relocatable production library. This file need not exist if no COPYR statements are required. The file must consist of statements of the form: &COPY (starting in column 4), followed by one blank and a list of relocatable library modules separated by commas with no imbedded blanks. Columns 71 through 80 must be blank. You must not specify &COPY ALL.

INS$xxxS contains the COPYS statements required to merge the desired members from the source statement service library to the source statement production library. This file need not exist if no COPYS statements are required. The file must consist of statements of the form: &COPY (starting in column 4), followed by one blank and a list of source statement library members separated by commas with no imbedded blanks. Columns 71 through 80 must be blank. You must not specify &COPY ALL.

5.4.3 INSTALLATION

It is also your responsibility to install the non-System IPO/E product into its libraries. When installing a non-System IPO/E product, all of the product core image phases should be placed in the production core image library. Similarly, all of the product relocatable and source statement members should be placed in the service relocatable and service source statement libraries, respectively. Lastly, the members listed within the copy files INS$xxxR and INS$xxxS, if they exist, should be merged to the relocatable and source statement production libraries, respectively.

| It is recommended that non-System IPO/E products be installed into the
| appropriate service library. If you are installing a non-System IPO/E
| product feature which is at a lower service level than the related
| product component, MSHP downlevel checking will prevent affected phases
| from being merged into the designated core image library. You should
| use the procedure outlined below to install a product feature falling
| into this category. To assist you in completing this procedure sample
| jobstreams that will require minor modifications before use are provided
| in the sample library (SAMPLIB) as SAMPLIB member FEATINST.

Install Steps for Downlevel Product Features

1. Create private libraries for use by MSHP. See the section below on creation of libraries for details.
2. Install the product feature into the newly created libraries.
   a. Check for downlevel conflicts.
   b. Remove those PTFs from the system history file causing the conflicts using the MSHP REMOVE statement.
   c. Reinstall the product feature.
   d. Archive PTFs to the system history file using the MSHP ARCHIVE statement.
3. Apply service to the product feature.
   a. Create a new AUX HIST file.
   b. Merge the system history file to this new AUX HIST file.
   c. Apply the PUT for the affected product feature.
   d. Merge updated AUX HIST file to the system history file.
4. Use CORGZ to install the serviced product feature into the appropriate service library.

5.4.4 SOFTWARE PRODUCT PROFILE UPDATE

The last step in the installation of a non-System IPO/E product is the update of the system software product profile. This is accomplished through the SOFTWARE PRODUCTS selection on panel ADM$1, the ADMINISTRATION: SYSTEM PROFILE menu. Continue to select the ADDITIONAL PRODUCTS entry until OTHER is displayed. Choose OTHER to enter information about a non-System IPO/E supported product. This procedure should be followed only for products you have installed, or plan to install immediately.

5.5 VERIFYING OPTIONAL COMPONENTS

The purpose of the verification programs is to ensure that products have been installed to the proper libraries, not to exercise all of the functions of the individual products (verify option). They are also

used to delete the data sets used during verification (delete option).

You are prompted for the verify or delete option and for the DASD type and volume serial number of the disk to be used for verification.

Many of the verifies require that USRSL1 be defined in the LIBDEF for F1 so that VSE/POWER SLI capability is active. This can be accomplished by running the ASI tailoring dialogue, executing the job stream created, and IPLing the system.

See the "Product Section" of this document for required verify information on particular products.

5.5.1 DASD REQUIREMENTS

We recommend very strongly that you use a separate DASD spindle for the verify spindle, if one is available. It does not matter what device type is used for the verify spindle. If you do not have an additional spindle available, you may run the verify job streams using one of the VSE System IPO/E-provided minimum required disks. However, be aware that these job streams will overlay any files present on the disk. Therefore, they must be recreated or restored after the job streams complete.

If you do not have a scratch disk, we recommend you use the following chart to determine what minimum required disk to use.

DASD TYPE	SUGGESTED VERIFY VOLUME
3310	SYSWK3
3330	SYSWK3
3340	SYSWK3
3350	SYSWK2
3370	SYSWK2

No data-secured files may exist on the verify volume. If the volume you select for verification contains any such files (for example, VSE/VSAM catalogs), you must initialize the disk or remove the files before running any verification job streams.

Some of the verification job streams create VSE/VSAM catalogs and clusters. When you have verified all your components, you must remove the data-secured files from the verify volume before attempting to use it for other purposes. This may be accomplished by selecting VSE/VSAM on the verification menu and selecting the delete option on the next data entry panel.

5.5.2 VSE/VSAM CONSIDERATIONS

Most of the verify job streams require VSE/VSAM. Therefore, the verify for VSE/VSAM should be the first one you run. This will define a user catalog on the verify disk and allocate data space for the verification of other components. This user catalog will contain entries only from the verify job streams, not from any other Interactive Productivity Facility dialogues. The verification job streams assume that the verify volume is completely available for use. The files created on this volume have been mapped out in order not to overlay one another regardless of which components you are verifying.

The VSE/VSAM verify job stream is created with a default VSE/POWER disposition of H, which means it will not execute until you release it from the VSE/POWER reader queue. You should make sure that this job stream has run successfully before submitting other verify job streams.

5.5.3 CONTROLLING EXECUTION SEQUENCE OF VERIFICATION JOB STREAMS

Verify job streams for all components have a default VSE/POWER disposition of H, which means they will not execute until you release them from the VSE/POWER reader queue. You may change the disposition on the job disposition panel before filing the jobstream, or edit the job stream in your VSE/ICCF library.

You should review the output of each verify job stream to ensure proper execution.

5.5.4 PRODUCT CONSIDERATIONS

Refer to the individual product sections in this document for required information on verification job streams. You should not run the verifies before reviewing this information. Online transactions for CICS/VS and related products are described in the individual product sections.

5.5.5 VERIFICATION OF CICS/VS-DEPENDENT COMPONENTS

Batch verification of optional components which depend upon CICS/VS should be done before verifying CICS/VS itself, because these job streams load data files needed to verify such components with CICS/VS.

An example of the verify sequence to be followed for a DB/DC user who has installed COBOL, SORT, and DMS/CICS/VS would be:

* VSE/VSAM verify batch
* COBOL verify batch
* SORT verify batch
* DL/I DOS/VS verify batch
* DMS/CICS/VS verify batch
* CICS/VS online
* CICS/VS-DL/I DOS/VS online
* CICS/VS-DMS/CICS/VS online

The following components require the verify for CICS/VS to ensure correct installation:

* DMS/CICS/VS
* DL/I DOS/VS
* Data Dictionary

The partition sizes necessary for the online verification of CICS/VS with the optional components are:

* CICS/VS alone - 900K
* CICS/VS with DL/I DOS/VS - 1700K
* CICS/VS with DMS/CICS/VS - 1700K
* CICS/VS with DL/I DOS/VS and DMS/CICS/VS - 2000K
* CICS/VS with Data Dictionary - 1800K

If you have CICS/VS under VTAM, you will need to bring down your VSE/ICCF CICS/VS partition before doing the online verification of CICS/VS. This may be done with the CICS/VS transaction CSMT SHUT,YES.

Since the job stream created for online verification has a disposition of H (unless changed before filing), the disposition will have to be changed before execution.

If you have CICS/VS under BTAM, you may elect to execute the online verification of CICS/VS in the F3 partition. This may be done by changing the CLASS=2 to CLASS=3 in the power reader queue or before filing the job stream. The disposition must also be changed. The online

verification of CICS/VS under BTAM may also be done as described above for VTAM.

5.6 DUMP ANALYSIS

The analyze dump dialogues provide an interface to the VSE/Interactive Problem Control System (VSE/IPCS) that allows you to:

* Process a dump from either disk or tape
* Optionally print an APAR report and save the dump on tape
* Print a formatted or unformatted dump
* Select options for formatted printing

Each parameter is explained, and valid input indicated, along with recommendations to assist you.

We recommend that new users initially accept the system-provided defaults to gain quick access to VSE/IPCS.

```
                ANALYZE DUMP: PROCESS VSE/IPCS DUMP        RPT$DMP1

  IPCS will accept input from either the SYSDMP data set or from a
  tape that has been previously processed by IPCS or the MIGRATE
  utility program. Select below the source of the input for the dump
  you wish to process.

  1  SYSDMP                          Input is from SYSDMP data set.

  2  TAPE                            Input is from tape.

     ┌──────────────────────────────────────────────────────┐
     | Here we indicate that the dump that we will process is |
     | still in the SYSDMP data set.                        |
     └──────────────────────────────────────────────────────┘
```

```
                ANALYZE DUMP: GETDUMP PROCESSING          RPT$DMP2

Enter the DUMPID of the dump on SYSDMP that you wish to process.
If you do not know the DUMPID, reply DISP for the SYSDMP DUMPID to
invoke VSE/IPCS and print a report listing all of the dumps on
SYSDMP.

SYSDMP DUMPID          ===> g001        Enter in the form Fnnn or
                                        Gnnn, or DISP.

SYSDMP ERASE           ===> yes         Enter YES to erase the
                                        dump on completion of
                                        IPCS processing.

Upon completion of this panel, you will be requested to supply
VSE/IPCS option information.

  Because we knew that the number of the dump that we wished
  to process was g001, we entered the number. Had we not
  known the number, we would have typed "disp", which would
  then submit a job to print the identifiers of the dumps on
  the SYSDMP data set.

  We are going to save the dump on tape so we entered "yes"
  to have it erased from the SYSDMP data set upon completion
  of our JCL.
```

```
                    ANALYZE DUMP: VSE/IPCS OPTIONS          RPT$DMP3

  PUT DUMP ON TAPE        ===> yes          Enter YES to put the dump
                                            you are processing on
                                            tape when you have
                                            completed processing it.

  APAR REPORT             ===> NO           Enter YES if you wish to
                                            print an APAR report.

  PRINT DUMP              ===> YES          Enter NO if you do not
                                            wish to print a dump.

  PRINT FORMATTED DUMP    ===> YES          If you replied YES to
                                            PRINT DUMP, and want only
                                            an unformatted dump,
                                            enter NO.

   We entered "yes" to save the dump on tape after we finished
   processing it. Later on we may use the dump saved on tape
   as input, and create an APAR report.
```

```
                ANALYZE DUMP: FORMAT PRINT OPTIONS        RPT$DMP4

PRINT PDS               ===> YES          Enter NO to suppress
                                          printing of pages
                                          retrieved from the page
                                          data set.

PRINT SUPERVISOR        ===> NO           Enter YES to print the
                                          virtual storage
                                          containing the
                                          supervisor.

PRINT SDAREA            ===> YES          Enter NO to suppress the
                                          printing of the service
                                          aids area.

PRINT SVA               ===> NO           Enter YES to print the
                                          shared virtual area.

FORMAT CONTROL BLOCK    ===> YES          Enter NO to suppress
                                          formatting and printing
                                          of all the control
                                          blocks.

  We took the defaults on this panel. Should we later decide
  that we need the supervisor or SVA, we can use the dump
  saved on tape as input, re-run this dialogue, and produce a
  new dump listing.
```

```
                    ANALYZE DUMP: OUTPUT TAPE              RPT$DMP6

  Because you indicated that you wish to save the dump that you are
  processing, the tape unit address and the external serial number
  of the tape are requested.

  TAPE UNIT ADDRESS      ===> 280          Enter as cuu.

  TAPE EXTERNAL SERIAL   ===> 071544       Enter up to 6 characters
                                           for the external serial
                                           of the tape.

    This is the final panel of our example, and we entered the
    tape unit address and the external serial of the tape.
    Don't confuse the external serial number with the volume
    serial in standard labels. This tape is an unlabeled tape
    and the number shown is just a number assigned to the
    physical reel.
```

5.7 SERVICE

The following section contains information on applying service to the program products contained in the VSE System IPO/E.

Basically, there are two types of service:

* Corrective service - Applying some type of fix to your libraries to resolve a problem you have experienced.

* Preventive service - Applying fixes to your system prior to experiencing a problem.

Naturally, preventive service is preferred.

Preventive service can be broken down further to voluntary and involuntary service.

* Voluntary preventive service: taking an overt action to uplevel your system on the current release. The application of a program update tape (PUT) is the normal means for accomplishing this.

* Involuntary preventive service: upgrading your system as a result of another action. When you installed the system IPO/E, you received a system which we upgraded prior to sending it to you. Your intentions may have been to go from Release 1 of Advanced Functions

to Release 2. However, you also received preventive service.

Let us now look at some of the aspects of preventive service. These are presented in a question and answer format. Some of the questions are actual ones received during the Release 1 time frame; others are purely fictional and used for instructional purposes.

* Question: My system is working fine, why should I spend the time and effort to apply a PUT tape?

  - Answer: Good question! Theoretically, if you were never to write a new program, change a JCL statement, or have a hardware error, there would not be any need for applying a program update tape. However, any changes can open up paths to previously undiscovered errors. Some errors can have severe repercussions, especially when dealing with any type of file or data base structure.

* Question: The last time I applied a PUT tape there was an error in one of the PTFs. Doesn't IBM ever test anything?

  - Answer: The tapes are tested. Not only do we test the tapes internally, we also test them in customer accounts before making them available for general use. Sometimes problems still slip through. This is why you should always call the support center prior to the application of the PUT tape for a list of any known problems.

* Question: I had a problem with a tape I/O module and called the support center. They told me the problem was fixed on the PUT tape that I received last month. I had already applied the tape, what happened?

  - Answer: This is difficult to answer without additional information. A couple of things could have caused the problem.

    The most logical reason is that the fix affected either the DTFMT macro or the MTMOD I/O module. If the fix was to the DTFMT macro, or the I/O module is assembled in your source program, it would be necessary to reassemble your program to incorporate the fix. Otherwise, you would have to re-link-edit your program to include the I/O module.

    Another possibility is that the PTF was not applied because of an APAR fix on your system that is not picked up by the PTF, or that the PTF was rejected due to a missing prerequisite. If you check the printed output from the PUT application, you should see if the PTF was actually applied or not.

* Question: When running one of the verify programs, the job cancelled. I called the support center and told them that the VSE System IPO/E doesn't work. They told me that it wasn't supported, and that I should talk to my Systems Engineer (SE). I talked to my

SE the next day and told him about the problem with the verify, and that the support center would not talk to me. He called the support center and found out that it was a bug in VSAM. How come the support center would help the IBM SE and not me?

- Answer: The root of your problem was ... failure to identify to the support center exactly what the problem was. Proper problem diagnosis should have identified VSAM as the culprit. You should have then called the support center and told them you were experiencing a problem with VSAM. We have had instances where we thought that the problem was with the Interactive Productivity Facility generated JCL, when indeed it was the program that was being executed by the JCL. Admittedly, sometimes it is difficult to tell which is at fault, but the support center is there to help you.

5.7.1 SERVICE DIALOGUES

The service dialogues provide a means for applying service to your system. This service may be in the form of program update tapes (PUTs), program temporary fixes (PTFs), or authorized program analysis report (APAR) fixes.

The service dialogues support only those components with service information distributed in MSHP format.

The service dialogues generate VSE, JCL, and MSHP control statements to perform each of the service functions. Before applying service to your system, you must ensure that the system profile tables accurately reflect your system. The tables must describe the names and actual DASD locations of your libraries, as well as the work libraries which are required for the service process. See the section "System Profile", page &pgsdial. for more detailed information on this subject.

Some of these dialogues contain extremely complex processing logic, perform a considerable number of I/O operations, and create large job streams. While actual response time is a function of all the work being done on your system, a response time of one or two minutes on a lightly loaded system would not be unusual.

5.7.2 PROGRAM UPDATE TAPES

A program update tape (PUT) has a standard format for applying service to the system control program (SCP) and most IBM licensed program products that have Field Engineering local service.

The PUT is produced by IBM Field Engineering and tested on a system that has all components installed. It is then tested in various user locations before being made available for general use. Consult the IBM Customer Support Center before applying a PUT for any problems that may be outstanding. The service dialogues allow rejection of any PTF on the PUT should the need arise.

Refer to the directions sent with the PUT for information on printing the PUT documentation. Be sure to follow any special instructions in the PUT document for the PUT level that you are applying. This could include reassemblies, link-edits, etc.

5.7.3 PROGRAM TEMPORARY FIXES

Program Temporary Fixes (PTFs) are created to provide immediate relief to certain programming errors. Errors of a less severe nature will not have PTFs created, but will be fixed in the next release of the product.

Basically, the distribution of PTFs can be made in four ways:

1. Included in the preventive service files on a PUT tape
2. As part of the corrective service files on a PUT tape
3. A single PTF on tape, card, or diskette
4. Two or more PTFs as a cumulative PTF file on tape

The second item listed, corrective service files on a PUT, is actually the same as the fourth item, a cumulative PTF file. A nice feature is that even though there are multiple corrective service files, the MSHP pre-processor knows where the PTFs are and will forward space the tape to the correct file.

The service dialogues support all of the above with one exception; they do not permit applying a PTF from cards or diskette. However, it is a very simple matter to copy the PTF from cards or diskette to a tape blocked 3440. You may then use the apply cumulative PTF dialogue to apply the PTF. (By definition, a cumulative PTF file contains two or more PTFs, but neither the dialogue nor MSHP knows that you only have one PTF, so it works!).

To copy the single PTF file to tape you may use the program product VSE/DITTO, or the OBJMAINT program. Since everyone has the OBJMAINT program, this is a sample of what the JCL would look like:

```
* $$ JOB JNM=PTFTOTAP,CLASS=3,DISP=K
// JOB PTFTOTAP COPY A SINGLE PTF TO TAPE
* THIS JOB WILL COPY FROM A DISKETTE TO TAPE
// DLBL UIN,'PTFINPUT.FILE.1',07/021,DU
// EXTENT SYS004
// ASSGN SYS004,3540
* IF INPUT IS FROM CARD SUBSTITUTE
* THE ABOVE 3 STATEMENTS WITH
* // ASSGN SYS004,SYSIPT
// ASSGN SYS005,TAPE
// EXEC OBJMAINT
./ ACTION JOBTYPE=DOS,DATA=SYS004
./ BLOCK BLKSIZE=3440
* THE FOLLOWING STATEMENT SHOULD BE
* USED FOR PTFS IN CARD FORMAT AND
* A CARD WITH $$ IN COLUMNS 1 AND 2
* SHOULD BE PLACED AFTER THE DECK.
./ CARD DELIM=$$
./ COPY
* IF THE PTF IS ON CARDS IT FOLLOWS THIS STATEMENT
          .
          .
          .
          .
$$
/*
/&
* $$ EOJ
```

5.7.3.1 Backout PTFs

Backout PTFs may be created by replying YES to the SRV$UPG1 or SRV$UPG6 panel. The backout PTFs will be punched to tape as cumulative PTF files. Only PTFs that affect the relocatable and source statement libraries will produce good backout PTFs. PTFs which affect the core image library will not have backout phases punched, and you will receive error messages on SYSLST.

Backout PTFs have the same format as regular PTFs except they contain your original modules and books. They are produced as a cumulative PTF file, and may be applied using the apply PTF dialogue for cumulative PTF files. These backout PTFs then can be used to remove a PTF which is later found to be in error.

Since the backout PTFs may not be complete, and it takes additional processing time to create them, we do not recommend that you use this option. Instead, keep a backup of your system prior to the application of the service.

5.7.4 DASD FILE REQUIREMENTS

System files used by the Interactive Productivity Facility generally have an internal name which is used to locate them in the system profile tables. These names are referred to as generic names (for lack of a better term). A list of the names for the files used in the service process is provided below.

The service process requires the following work areas:

PUTCL1 - Composite PUT core image library

PUTRL1 - Composite PUT relocatable library

PUTSL1 - Composite PUT source statement library

PUTHST1 - Composite PUT history file

SYSNRS - New SYSRES containing the applied service

PUTCL2 - Intermediate PUT core image library

PUTRL2 - Intermediate PUT relocatable library

PUTSL2 - Intermediate PUT source statement library

PUTHST2 - Intermediate PUT history file

PUTNRS - Intermediate staging area for core image library

WORKHST - Intermediate systems history file

In addition to the work areas, the service process requires a volume for the service libraries. These libraries may be retained on disk and the requested volume mounted, or they may reside on tape. The service dialogues ask if the service libraries are on tape or disk. They will generate a restore job, if on tape, or a mount message if on disk.

It is assumed that the service volumes are on tape and that the disk that will contain the service libraries contains user data. Therefore, jobstreams can be produced to copy those disks to tape, using the VSE/Fast Copy utility. After a disk is copied, it will be initialized, with the VTOC in the SYSRES location on the pack.

The allocations for the above work areas have been predefined in the System Profile tables. The allocations will only have to be changed if there have been changes to the library sizes.

Some of the service functions will require the use of quite a few tapes. For example, the application of a PUT tape will generally require two tapes for the backup of your system, a new tape for each service

library, a tape for the new SYSRES that is created, a scratch tape for servicing VSE/ICCF members, and a tape for each service library if you create backout PTFs. If you have a mixed architecture or mixed DASD environment, you will require a few more scratch tapes.

5.7.5 APPLY PUT

CAUTION

* During execution of the job streams, you will receive messages - "M069A SYSCLB is assigned, do you intend to upgrade a private core image library? If so, press END/ENTER. Otherwise, enter CANCEL." This is normal, and you should press END/ENTER.

* Also during execution you will receive messages - "M094A Existing History file is going to be overwritten. Enter DELETE if you agree. Otherwise, enter CANCEL." This is normal, and you should enter DELETE.

* If you indicate to the service dialogues that you want your user volumes backed up to tape, job streams will be generated to back up your volumes and then to initialize them. If you use a scratch volume which you do not copy to tape, you should initialize it with the VTOC in the SYSRES position before running the service process. If the VTOC is already in the SYSRES position, and there are no data secured files on the disk, you may omit the initialize disk step.

* When servicing library A, all of the supervisors contained in the system profile tables will be reassembled. If there are supervisors that you don't need, remove them from the tables. Do not try to bypass the assembly of the supervisors. The only way that the supervisors get into the new SYSRES is from the assembly. Ensure that the supervisors have assembled and link-edited correctly before doing an IPL of the new SYSRES tape.

* It is difficult to predict exactly how large a partition and GETVIS area are required. Based on early tests, it is wise to allocate at least 1 megabyte to the background partition.

The job stream execution is a multi-stage operation. All of the jobs prior to the first execution of the MSHP preprocessor are the first stage. The MSHP preprocessor, a program supplied with the PUT tape, will produce JCL that must run before the remainder of the Interactive

Productivity Facility JCL. This is accomplished by executing the preprocessor to read the Interactive Productivity Facility JCL and create the stage two Interactive Productivity Facility JCL following its own. If CICS/VS is to be serviced along with other products, the stage 2 JCL will include a second execution of the preprocessor in order to service CICS/VS. Due to the size of CICS/VS, this product can not be serviced in the same pass as the other products. Thus, CICS/VS is excluded during the first pass of the preprocessor in order to service all other products. This second execution of the preprocessor will produce a third stage JCL job stream which will execute the preprocessor a third time to handle the CICS/VS MACLIB library. This is necessary due to the limited space available for the PUT libraries.

A large amount of JCL is produced. This is primarily due to the need for multiple service libraries. You should not attempt to acquire an indepth knowledge of the JCL that is produced. If you experience any difficulties with its execution, please call your IBM support center.

One of the jobs in the JCL produced by the service dialogues cannot execute while VSE/ICCF is running, because it catalogs data into the VSE/ICCF library. The job contains comment statements that will instruct the operator at the appropriate time.

After the job stream has completed, if you applied service to components residing in library A, a new standalone SYSRES tape will be produced. You must IPL from this tape and restore the libraries to your DOSRES volume.

5.7.5.1 Checkpoints

Throughout the JCL there are checkpoint messages that appear on the console. If you should have a problem, and the job has to be canceled, it is possible to restart from the last successful checkpoint. You should not attempt to restart from a point other than one of the checkpoints.

The restart dialogue will create the necessary JCL to restart from a checkpoint number that you specify. It assumes that all of the history files and work areas have been left intact from the aborted PUT run.

5.7.5.2 Dialogue Flow Chart Diagrams

It is possible to obtain a dynamic flow diagram based on your system configuration and the responses you give during the execution of the PUT (and PTF) dialogues. The flow diagram will be saved as a file with the name SRV$FLOW in your user library. If a file by this name already exists, it will be overwritten. This diagram will be most useful when

printed in hard copy form. This file details the creation and manipulation of files and data. It will help give you a better idea of what steps are actually taking place within the JCL which the dialogue has produced.

5.7.5.3 Supervisor Assemblies

The table created and/or modified by the tailoring dialogues is used as input to the service dialogues to determine what supervisors need to be reassembled. Therefore, to save needless reassemblies, use the tailoring dialogues to delete any supervisors that you do not need for your system.

You will be given the option of whether or not you want a listing and cross reference for the supervisor assemblies. Although a listing uses a lot of paper, if there are any problems with the system, listings are very valuable for trouble shooting.

5.7.5.4 Questions and Answers on PUT

* Question: If PUT stands for program update tape, why do you say PUT tape? Aren't you actually saying program update tape tape?

  - Answer: Yes, it is redundant, but much easier to say. Therefore, you will find PUT tape used in most cases in this document.

* Question: After running the dialogue to produce the PUT JCL, I edited it and saw that there were Vs at the start of the JCL. What's wrong?

  - Nothing is wrong. Here is a brief explanation of how the PUT JCL works.

    The first part of the JCL does not contain a V. It runs normally until we invoke the MSHP pre-processor from the PUT tape. At that point, the output JCL from the pre-processor must run before the remainder of the JCL we created. Therefore, the pre-processor first punches its JCL and then starts reading from the reader. As it reads the statements, it shifts them one position to the left. It does this until it reaches a /*.

    Effectively, the pre-processor's JCL gets inserted right in the middle of our JCL, and we have achieved a stage one, stage two operation without you being aware of it. You may find it interesting that with this release you will have VVs in front of some of the JCL if you are servicing CICS/VS, and VVVs in front

of other JCL if you are servicing CICS/VS in addition to other products. Now we have made it a possible stage one, stage two, stage three, and stage four operation.

* Question: When applying the PUT tape, I received several messages M119I REVOKE PTF IS INCOMPLETE DUE A FAILING SERV. What causes this?

  - Answer: As you were running the dialogue you replied YES to panel SRV$UPG1 to produce backout PTFs. (backout and revoke are synonymous.) Due to the way that we update the core image library, you do not get backout PTFs for that library. Therefore, you receive the message. We strongly recommend that you keep a backup of your system libraries should the need for removing a PTF arise.

* Question: When applying the PUT JCL, the target library is always an empty private core image library. Why don't you just upgrade the normal core image library and save some steps?

  - Answer: You are certainly right that we would save some steps in doing so, but let me explain the process first and why we do it that way.

The target library is an empty core image library.

After the upgrade is complete, this library contains all of the service that was applied from the PUT tape.

The CORGZ program is used with a COPYC NEW statement that copies everything from your old library into the private work library.

Everything in your old library is then deleted which resets all internal pointers.

The work library is then copied to your old library.

Now to answer your question concerning the gyrations we go through.

When MSHP does the upgrade, it will check to see if there is enough available room in the core image, relocatable, and source statement libraries. If there is insufficient room in either the relocatable or source statement libraries, it can do a delete of the modules (or macros) that will be replaced, and then condense the library. It can not do this for the core image library. Therefore, all that it does is give you a warning message and cancel the job. It is then up to you to determine what can be deleted from the core image library, delete it, condense the library, and restart the job. By the steps that we go through, we eliminate that possibility. There will always be adequate room for the upgrade.

* Question: I understand the need for getting the serviced modules into the production libraries, but why don't you just merge them in instead of moving the libraries all around?

- Answer: This is similar to the above question. We move the libraries around to eliminate the need for doing a condense, or just not having enough room to do the merge. The current process is less complicated than it was for Release 1. In Release 2 we specify that your user modules, macros, etc. should be in your own libraries. We then do a two-step process:

  Delete all of the members in the production library.

  Merge all of the production members from the service library into the production library.

* Question: When applying a PUT tape, it tried to punch all of the I. members from the service library. There weren't any there so why did it try to punch them?

- Answer: Members that are in the I. library are fixes to VSE/ICCF DTSFILE members. Generally these are PTFs for the Interactive Productivity Facility itself. The dialogue does not know if there are any PTFs, so it goes through the steps anyway.

5.7.6 RESTART PUT

During the execution of the JCL produced by the APPLY PUT dialogue there may be reasons for aborting the run, such as an unrecoverable I/O error on tape, power failures, or programming failures. Whatever the reason, this dialogue will produce the JCL necessary for a restart from the last good checkpoint.

During the execution of the JCL, checkpoint messages containing a sequence number will appear on the console. To restart, you supply the dialogue with the last number you successfully passed. The dialogue will pick up from there and repeat the panels. Naturally, the dialogue assumes that files created during the execution of previous steps still exist. If for some reason they do not, you will have to use the APPLY PUT dialogue.

This dialogue depends on the successful completion of the APPLY PUT dialogue. The dialogue saves a table, SRV$LIB, which contains a list of the libraries to be serviced. The RESTART PUT facility does not function properly for the SELECTIVE PUT dialogue. It functions properly only for the APPLY PUT dialogue.

You should not execute any other dialogues between APPLY PUT and RESTART PUT. For example, if you ran APPLY PUT, and got as far as checkpoint 2, flushed the job, and ran APPLY PTF. When the PTF application finished, files needed for the RESTART PUT would no longer exist.

5.7.7 APPLYING SELECTIVE PUT LIBRARIES

The PUT tape consists of stacked libraries in RESTORE format. Each optional component is in a separate library on the tape. It is possible to apply one or more components by using the apply selective dialogue. Components are identified by a three character identifier that is given in the PUT tape documentation. A list of all of the components in the VSE System IPO/E is found on page 327.

You may find this dialogue useful for applying preventive service in a corrective mode. If you are having problems with a product, a fix exists on the PUT, and time does not permit the installation of the entire PUT at this time, you may use this dialogue.

5.7.8 APPLY PTF

PTF application requires the use of the PUT areas as described above. PTFs may be in multiple files, but may be applied to only one service library at a time. Therefore, applying (multiple) PTFs to two service libraries will require two invocations of the PTF dialogues.

The PTF process will update your production libraries as well as the service libraries. However, it will not automatically assemble your supervisors. If you apply PTFs to any supervisor macros, you must reassemble the supervisors affected.

5.7.8.1 Print Coverletters

The coverletters, that describe the contents and purpose of the PTFs are machine readable and supplied on a separate file. On the PUT tape, this is generally file 4. Although you do not need the coverletter information for the application of a PTF, you may print the coverletters for your own information.

5.7.8.2 Apply PTF (from PUT)

This dialogue is used to apply a PTF from the corrective service files on the PUT tape. The PTFs contained in these files are documented in the machine readable cross reference on the PUT tape. The PUT documentation gives instructions on how to print the cross reference.

Note especially any information in the PUT document concerning prerequisite PTFs that should be applied prior to applying the PUT tape. You may use this dialogue for applying those PTFs. Generally, these will be PTFs to system products, such as MSHP or the CORGZ program.

5.7.8.3 Apply PTF (from cumulative PTF tape)

If you emergency order any PTFs, you will generally receive them on tape. This dialogue is used to apply them from that tape. It is similar to the apply PTF above with the exception of the input tape. It will be your responsibility to properly position the tape to the file that contains the PTFs.

5.7.8.4 Apply Backout PTF

During the application of a PUT tape or a PTF, you may have created backout PTFs. This dialogue will create the necessary JCL to apply the backout PTF to your system. This effectively removes the PTF that was on your system and returns your libraries to their original state.

Note: This will not work for PTFs that only affect the core image library. VSE/POWER is an example of this type of PTF. PTFs that are contained in the relocatable library and link-edited into the core image library will work correctly.

5.7.9 APPLYING APAR/LOCAL CORRECTIVE SERVICE

Release 2 of MSHP supports the application of corrective service to the core image, relocatable, and source statement libraries, for APAR and local fixes. It also provides a means for removing the fixes, if they were applied as revokable.

All changes using the APAR/LOCAL fix dialogues will be recorded in the system history file. Core image and relocatable fixes that were applied as revokable have the information for removing the fix recorded in the history file. For the source statement library, the revokable option will cause a "backout" deck to be punched on SYSPCH. This deck may be used later should it be necessary to remove a fix.

APAR/LOCAL fix changes to the core image library may be done without having a service library online. For the relocatable and source statement libraries, the service library must be mounted.

Two dialogues are provided for the restoring of the service libraries, merging into the production relocatable and source libraries, and backing up the service libraries. These dialogues, preservice and postservice, should be run before and after applying or removing any corrective service.

After applying corrective service to the service libraries, you may want to perform additional steps, such as assembling a program, prior to backing the library up to tape. Any such steps must be performed prior to running the output from the postservice dialogue.

You may find the pre and postservice dialogues handy for your own activities that need the service libraries. There are only two requirements for using them: you must give the 11 character component ID for a product in the libraries (see table on page 327.), and you must run the preservice dialogue prior to running the postservice dialogue.

Hint 1: There are some examples on the explain panels for many of the panels. If you have any doubts about what to enter, refer to the explain panels first, and then the MSHP Users Guide.

Hint 2: Currently the MSHP manual does not mention it, but you may only "expand" a core image phase that is self relocating, i.e. linkedited to zero. These are generally transients (phases starting with $$). It is possible to expand a phase that is not self relocating by using absolute addresses rather than relative. However, once you do so, you will not be able to remove the fix.

5.7.9.1 Pre-Service

This dialogue should be run prior to applying any corrective service (other than PTFs) to either the relocatable or source library. It will restore the service library you require and build a LIBDEF chain.

You may find it useful to use this dialogue to generate JCL for a random library. You may then change the JCL to point to a non-Interactive Productivity Facility supported library.

5.7.9.2 Corrective Service

This dialogue is used for applying an APAR/LOCAL fix to the core image, relocatable, or source statement libraries.

We recommend you specify that the fix is revokable. In the case of the core image and relocatable library fixes, the original data is contained in the history file and may be removed by the UNDO function. For the source statement library, the revokable option causes the original

source book to be punched on SYSPCH as a backout book. Unfortunately, we have no way of inserting any of the necessary LIBDEF statements for cataloging it back into the proper source statement library. Therefore, should you need to remove a fix, you will have to modify the deck to add the necessary LIBDEF statements.

CAUTION
When making entries that require the data in certain columns, be sure to use the space bar rather than the cursor positioning keys.

Hint: Save the JCL that was produced by this dialogue and use the LIBDEF and JCL statements to insert into the backout book.

5.7.9.3 Post Service

When finished with the corrective service dialogue, you should run this dialogue, if you ran the pre-service dialogue.

This dialogue will recreate the appropriate production relocatable and source statement libraries, if you serviced a component that has modules or macros in the production libraries. It will also backup your service libraries to tape, fast copy user data from tape, and reestablish your normal production LIBDEF search chain.

5.7.10 ARCHIVING CHANGES

Service dialogues are provided to allow you to archive PTFs or APAR fixes into the MSHP History file. You will be prompted to supply all of the necessary information for PTFs which are not in MSHP format. The information required should be found in the cover letter supplied with the PTF.

All APAR fixes or local fixes applied to your system must be recorded in the history file. This is to ensure integrity of your system when applying PUTs or PTFs.

A local fix is recorded by using a prefix of ##, followed by a unique five-digit number; for example, ##05013, which could be the month and day that you applied the fix.

5.7.11 HISTORY FUNCTION

MSHP records all changes that are made to the system in a unique file, the system history file, which must reside on the same disk volume as SYSREC. MSHP uses this file to insure that the service being applied does not invalidate any service already on the system.

The service dialogues allow easy access to the system history file for the purpose of:

* Retrieving information
* Backing up the file to tape
* Updating the file
* Restoring the file from tape

Normally, the system history file is updated automatically by MSHP. However, if you are applying an APAR fix or a PTF which is not in MSHP format, the dialogues prompt you for the required information and then produce a jobstream for updating the history file.

When there is service for VSE/ICCF, the pregenerated system is included with the service. This means trouble if you have tailored your VSE/ICCF system. Basically you have two options:

* You may enter =SRV$523 after running pre-service to restore the service library and set up the LIBDEFs. Then, on panel SRV$523 select the DTSSG assembly. You may then enter the options that you altered when originally tailoring the VSE/ICCF system, and the dialogue will reassemble and catalog the necessary phases. To aid you in remembering what options you changed, display the member ADM$OPT. It contains a history of everything that you have ever changed from the default values.

* You may rerun the VSE/ICCF tailoring dialogue after first purging the tables that it uses. The tables are named ADM$ICFT and ADM$ICFU. When you rerun the dialogue, the original default tables will be used, and your changes will then cause reassembly of the affected phases.

Caution: If you do not perform one of the above steps, you may find that you may not be able to start up VSE/ICCF. Since the Interactive Productivity Facility program requires VSE/ICCF, you will not be able to run it either. As an example, the default system allows you to have up to five extents for the DTSFILE. You feel that you need more, so you alter it to seven. After applying service from the PUT tape, the pregenerated system is in the core image library of the IPL tape. You IPL the tape which comes down over your existing SYSRES, and then try to bring up VSE/ICCF. There will be problems handling your seven extents when it is pregenerated for five.

Here is a suggestion. After creating the JCL to apply the PUT tape, perform the necessary steps listed above to do your reassemblies. Submit the JCL created to VSE/POWER with a disposition of L. This will leave it in the reader queue. After you IPL the tape, and before trying to bring up VSE/ICCF, release the jobs from the queue. If this fails, you can fall back to your system backup that we recommended earlier.

5.7.12 JCL COMMENTS

Some of the service dialogues generate a substantial amount of JCL. For example, the application of a PUT to an IPO/E System with all optional products, mixed architecture, and service on the tape for all products, would produce around 3500 JCL statements. Assuming an error rate of 1/20 of 1% would mean two statements would be incorrect. How will you find them? Perhaps more pertinent, how will you ever figure out what the JCL is doing? The answer is to select JCL comments on the SRV$ menu and turn on the JCL comments feature. Then, rerun the service dialogue. It will take longer to run the dialogue, and it will produce more JCL. Using the printed output from the failure and the JCL comments you should be able to determine the problem. If not, call the support center for assistance.

5.8 OPERATIONS

This section describes the facilities provided by the Interactive Productivity Facility to aid you in the operation of your system after it has been installed. The facilities discussed here are directed toward the VSE system itself. They include JCL creation and VSE utilities.

5.8.1 JCL CREATION

This dialogue helps you create the job control statements required to run jobs under VSE or in a VSE/ICCF interactive partition. Job streams are produced to execute compilers, utilities, or application programs.

The output from jobs that execute in a VSE/ICCF interactive partition is directed to disk files or the terminal. Input comes from disk files, the terminal, or the job stream itself. The output for jobs that execute in a VSE batch partition is directed to the system printer (or to the terminal if you submit it with the return option). Other I/O devices supported include disk, tape, or diskette.

If creating a VSE/ICCF job in the VM/VSE System IPO/E environment, the VSE/ICCF job created will be contained within a VSE job stream. This VSE job will execute DTSUTIL to add the newly created VSE/ICCF job as a file to the VSE/ICCF common library.

5.8.2 UTILITIES

Dialogues are provided to help you create job streams and to backup and restore libraries, fast copy files and volumes, copy diskettes, and display volume table of contents. These utilities are a conversion of the release 1 ICCF prompts (@AID) and do not interface with the System IPO/E profile tables. The concatenation method is recommended since it is compatible with the library structure while the assign method may conflict with library definitions (LIBDEF) in the System IPO/E.

5.8.2.1 Backup and Restore Utilities

Note: For restore of any system or user library, you should use the library information dialogue to add or change information and use the restore system libraries dialogue to restore your libraries.

The backup dialogue generates a job stream to backup libraries by the assign or concatenation method.

The restore dialogue generates a job stream to restore libraries by the assign or concatenation method.

5.8.2.2 Fast Copy Utility

The fast copy dialogue generates a job stream to copy files or volumes from disk to tape, tape to disk, or disk to disk.

The copy diskette dialogue generates a job stream to copy diskettes.

5.8.2.3 Display VTOC

The display volume table of contents (VTOC) displays information concerning all files in the VTOC.

6.0 SYSTEM USE

System use consists of activities that interface directly with an end user to help create a work product.

The following category of system use activity has been defined:

Program Development	Develop programs under VSE/ICCF and review VSE/ICCF usage

6.1 PROGRAM DEVELOPMENT

The program development environment provides information required to create, modify, compile, and execute programs under VSE/ICCF. It consists of a series of explain panels accessed through an information menu. This structure allows you to examine the information relating to a specific topic of interest. Information is available on the topics described below.

* Program Development - Purpose and scope of program development under VSE/ICCF. The VSE/ICCF command language is also described.

* Library Structure - Use and structure of libraries under VSE/ICCF. This topic includes a description of the library file and types of user libraries.

* Create/Modify - Creation and modification of program source statements. Included are sections on temporary work/storage areas, invoking the VSE/ICCF full screen editor, and full screen editor commands. In addition, a VSE/ICCF common library member, IPF$EXP, containing full screen editor command and general use information, is provided to make this information more readily available when needed.

* RPG II Create/Modify - Creation and modification of RPG II source programs. Describes how to invoke the RPG II source entry facility (RSEF).

* Compile/Assemble - Compilation and assembly of source programs. This topic describes the ASSEMBLE, COBOL, PL/I, and RPG II procedures, the LINKNGO program, and the /DATA job entry statement.

* Input/Output - Definition of program input and output files. This topic describes how to specify normal VSE files and VSE/ICCF member files. The /FILE and /OPTION job entry statements are also described.

* Load/Execute - Loading and execution of a program. Foreground vs. Background tasks, the /LOAD job entry statement, and the /EXEC and /RUN Commands are included under this topic.

* Submit to Batch - Submission of jobs for batch execution. Described are jobs eligible for submission and the method of submission.

Further information about program development under VSE/ICCF, and VSE/ICCF in general may be found in the VSE/Interactive Computing and Control Facility Terminal User's Guide (SC33-6068).

7.0 FIRST USE TUTORIAL

This tutorial covers the following topics:

* Introduction - Brief overview of both the first use tutorial and the Interactive Productivity Facility

* Adjusting Screen - How to adjust the brightness and contrast

* Exiting - How to exit from the Interactive Productivity Facility and return to VSE/ICCF

* Cursor Movement - How to use the arrow and tab keys to position the cursor to a desired location on the screen

* Indicators - Describes the meaning and use of the input inhibited, system available, and insert mode indicators for the 3277 terminal, and similar functions for the 3278

* Management/Use - Describes these two basic areas of system activity and shows examples

* Menu Panel - Describes the use of menu panels in dialogues, and what their service line options will do if selected

* Data Entry Panel - Describes the use of data entry panels in dialogues, and what their service line options will do if selected

* Explain Panel - Describes the use of explain panels in dialogues, and what their service line options will do if when selected The OVERVIEW option is also explained, and examples shown.

* Insert/Delete/Erase - How to use the INS MODE, DEL, and ERASE keys

* Other Keys - How to use the CLEAR, RESET, program function (PF), program attention (PA), test request, and APL keys

* Light Pen - How to use the light pen when responding to panels that contain pen-detectable fields

* Fast Path - How to use the fast path to go directly to any menu from a menu

After completing these topics you should be able to:

* Briefly describe the System IPO/E
* Briefly describe the Interactive Productivity Facility
* Adjust the screen of the display terminal
* Move the cursor to any position on the screen
* Correct keying errors
* Use the CLEAR, RESET, PF, PA, and APL keys
* Describe the services provided on the bottom line of panels
* Move quickly through the menu structure to locate a desired panel
* Locate additional explanatory material for a given panel

8.0 PRODUCT INFORMATION

This section is provided to assist you in determining what special factors you should consider when dealing with a product to be installed via the VSE System IPO/E. Included is special information on installation, verification, Interactive Productivity Facility dialogue support, and product hints and tips.

Assistance in the installation of non-System IPO/E supported products is possible using the Interactive Productivity Facility dialogues. Refer to the section earlier in this manual entitled 'Installation of Non-System IPO/E Products'. Also note that specific information regarding the installation of these products is included at the end of this chapter. For additional information pertaining to the installation of non-System IPO/E products refer to the VSE System IPO/E Planning Guide.

8.1 VSE/ADVANCED FUNCTIONS

8.1.1 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

* Supervisor tailoring
* ASI procedure tailoring
* Creation of VSE utilities job streams provided via operations prompters:
  - Backup
  - Restore
  - Fast Copy
  - Copy Diskette
  - Display VTOC
* Create job control statement prompters provided
* VSE librarian JCL creation provided via system administration prompters:
  - Display/punch library members
  - Delete library members
  - Rename library members
  - Catalog library members
  - Create libraries
  - Copy/Merge libraries

8.1.2 HINTS AND TIPS

1. Many of the DOS/VSE and VSE Advanced Functions Release 1 system generation parameters have been omitted in VSE Release 2. The functions of most of these parameters either have been automatically included in the supervisor or have been provided as parameters for the ASI procedures.

a. EU=YES is no longer a supervisor parameter. This means that 1400 emulation will not support mixed parity tapes.

b. PSLD (private second level directory) has been moved from the supervisor to the SVA IPL command.

c. For details on deleted, added, or changed supervisor macros/parameters and ASI procedure commands/parameters see:

   1) The Interactive Productivity Facility supervisor tailoring explain panels

   2) The Interactive Productivity Facility ASI tailoring explain panels

   3) VSE/Advanced Functions System Management Guide (GC33-6094)

   4) VSE/Advanced Functions System Generation (GC33-6096)

   5) VSE/Advanced Functions System Control Statements (SC33-6095)

2. In previous DOS releases, when exec proc=$$nnnnnn was executed in the background partition, the procedure named $Bnnnnnn was invoked. In VSE Release 2, when exec proc=$$nnnnnn is executed in the background partition, the procedure named $0nnnnnn is invoked. The procedure named $Bnnnnnn is invoked in VSE Release 2 when exec proc=$$nnnnnn is executed in the FB partition. Therefore, your previous $Bnnnnnn procedures must be renamed $0nnnnnn to run under VSE. This change was necessary due to the increased partition support from 7 to 12 partitions: BG, F1-F9, FA, FB.

3. Do not mix assigns for SYSCLB/SYSRLB/SYSSLB and LIBDEFS. SYSCLB, SYSRLB, and SYSSLB must be unassigned when a LIBDEF is issued. All LIBDEFS must be dropped before an ASSGN for SYSCLB, SYSRLB, or SYSSLB is issued. Since you will want the capability of concatenating libraries, and since it will be easier to stay with one method, it is recommended to use LIBDEFs.

8.2 VSE/VSAM

8.2.1 VERIFICATION CONSIDERATIONS

Most of the verify job streams require VSE/VSAM. Therefore, the verify for VSE/VSAM should be the first one you run. This will define a user catalog on the verify disk and allocate data space for the verification of other components.

The VSE/VSAM verify job stream is created with a default VSE/POWER disposition of H, which means it will not execute until you release it from the VSE/POWER reader queue. You should make sure that this job stream runs successfully before creating the verify job streams for additional components.

8.2.2 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

There are Interactive Productivity Facility dialogues in support of VSE/VSAM in the installation, verification, and data base administration environments.

8.3 VSE/POWER

8.3.1 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

The VSE/POWER dialogue helps you tailor VSE/POWER to your installation's requirements. (All the supplied parameters are listed in the appendix.) These are the default values that are supplied with the program product except the SPOOL and SUBLIB parameters, which are required for the Interactive Productivity Facility.

The dialogue presents the name(s) of responses and default values saved in the system. You may create, modify, or delete saved responses from the system. The default values may not be changed or deleted.

The values saved may be used to create a new set of VSE/POWER parameter values. You may use a set of responses that you created the last time you went through the the dialogues, or any of the sets of responses listed on the first panel.

The dialogue also optionally invokes the VSE/POWER RJE tailoring dialogue, after the tailoring of VSE/POWER has been completed.

The macro's needed to compile VSE/POWER reside in service library A. Panels are presented to allow you to backup a work pack and restore service library A. This may be necessary if you have nonremovable DASD. After VSE/POWER compilation, you will be prompted to restore the pack used for service library A. You may omit this restore if you have removable DASD and the service library is already mounted.

8.4 IPCS

8.4.1 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

IPCS : Report Dump Environment

The dialogue to create the IPCS job streams may be entered on the system management panel (panel SYM$) by selecting DUMP ANALYSIS option.

8.4.2 HINTS AND TIPS.

Restriction when using IPCS.

IPCS jobs should be run under VSE one at time because only one IPCS dump buffer is allocated for the entire system; otherwise, unpredictable results may occur. This means that only one (either ICCF interactive partition or VSE partition) may run IPCS at the same time.

8.5 VSE/INTERACTIVE COMPUTING AND CONTROL FACILITY

8.5.1 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

There are Interactive Productivity Facility dialogues to help you modify the user logon/passwords. From the system administrator menu select LOGONS/PASSWORDS. This will then allow you to ADD, DELETE, and CHANGE VSE/ICCF user information.

8.5.1.1 TTF Regeneration

TTF (terminal transaction facility) is a small terminal monitor supplied by VSE/ICCF for users who do not need the full terminal support provided by CICS/VS. It uses BTAM-ES (5746-RC5) to support 3270-type terminals only.

The supplied System IPO/E defaults for TTF (part of VSE/ICCF) support three display terminals. If you have more terminals, you should execute this dialogue to regenerate the TTF system and create a new startup deck.

This dialogue is unique in that it has two outputs. The first job stream produced will assemble the necessary macros, set up the LIBDEFs, and catalogue the needed phases. The second job stream will be the startup deck that you will use to daily start up your VSE/ICCF system. Caution: If you intend to tailor your VSE/ICCF system, do it before running this dialogue, since input from the VSE/ICCF produced tables is used.

This dialogue does impose some limitations:

* Only a total of 144 terminals and printers may be defined. (If you have anything approaching this number, you should be using CICS/VS.)

* There is no support for changing the wait interval.

* Control units that have more than 16 terminals must be identified to the dialogue as two control units.

* The system logical units (SYSnnn) assigned to the terminals must be contiguous. Caution: Watch out for the system logical units that are used by VSE/ICCF. In particular, SYS031 which is used for POWRPCH can be easily duplicated. For example, if you specified that the starting number was for SYS020, and you had 13 terminals, the range would be SYS020-SYS032, and you would be in trouble.

After you tell the dialogue how many control units and terminals on each control unit, it will then display a listing of the terminals and permit changing the default terminal identifier. You may also specify if the terminal is a printer, or if you want the terminal to be able to use the master terminal function (TSMT).

For each printer that you define, it will be necessary to supply a DLBL and EXTENT for an area that will be used for hardcopy routing. For example, if terminals L027 and L033 are printers, you would need DLBL and EXTENT cards for TTFL027 and TTFL033. You should add these cards to the standard label or partition standard label startups. When you have reassembled your new table, you still have to link-edit the TTF system to get your new table included. There should be no unresolved 'EXTRN' references in the link map. If VSE/ICCF was active at the time you did the link-edits, you must bring it down and back up to put the new TTF modules in use.

8.5.2 HINTS AND TIPS

8.5.2.1 VSE/ICCF Startup Procedures

The startup jobs for VSE/ICCF are designed so that you can select the one closest to your operating environment. You can retrieve the startup job from the VSE/POWER SYSIN tape and place it in your VSE/ICCF library.

The startup jobs depend on several factors. For example, are you using CICS or TTF? If CICS, are you using BTAM or VTAM? Another variable is the placement of the DTSFILE. Is the DTSFILE file on a CKD or FBA device?

Use the following tables to select the startup job closest to your system.

VSE/ICCF TTF users select the job by the DOSRES (DTSFILE) type and the supervisor generation parameters.

VSE/ICCF TTF TABLE

DOSRES	E MODE	370 MODE
3310	1ICFTFE	(N/A)
3330	3ICFTFE	3ICFTF7
3340	4ICFTFE	4ICFTF7
3350	5ICFTFE	5ICFTF7
3370	7ICFTFE	(N/A)

VSE/ICCF CICS users select the DASD type by the CICS files used. For 3310, 3330, and 3340 users, this is SYSWK4. For 3350 and 3370 users this is SYSWK1. E MODE users must also select the column that matches your DOSRES (DTSFILE) device type.

VSE/ICCF CICS BTAM-ES TABLE

DASD	E MODE(CKD)	E MODE(FBA)	370 MODE
3310	1ICFCBEC	1ICFCBEF	(N/A)
3330	3ICFCBEC	3ICFCBEF	3ICFCB7
3340	4ICFCBEC	4ICFCBEF	4ICFCB7
3350	5ICFCBEC	5ICFCBEF	5ICFCB7
3370	7ICFCBEC	7ICFCBEF	(N/A)

VSE/ICCF CICS ACF/VTAM or ACF/VTAME TABLE

DASD	E MODE(CKD)	E MODE(FBA)	370 MODE
3310	1ICFCVEC	1ICFCVEF	(N/A)
3330	3ICFCVEC	3ICFCVEF	3ICFCV7
3340	4ICFCVEC	4ICFCVEF	4ICFCV7
3350	5ICFCVEC	5ICFCVEF	5ICFCV7
3370	7ICFCVEC	7ICFCVEF	(N/A)

NOTE: Some combinations are not possible. You cannot have a supervisor generated for 370 mode and use FBA devices, so the job names for 370 operation do not have a C or F at the end. These jobs must have the DTSFILE on a CKD device. These jobs also do not have any that start with a 1 or a 7 for the same reason.

If you have changed the supervisor(s) that will be used when you are starting VSE/ICCF, the parameters that are coded in the startup job streams may need to be changed.

If you have generated the supervisor with RPS=NO then you must change the startup jobs for CKD jobs to remove the reply that would answer the question for RPS. All jobstreams have the replies documented at the right of the responses.

Refer to the VSE/ICCF Installation and Operations Reference Manual (SC33-6067), Operation chapter, "Messages Received During Initialization" for further information about responses.

8.5.2.2 VSE/ICCF Passwords

All VSE/ICCF users have a password associated with their logon ID. The VSE/ICCF system supplied with VSE System IPO/E has a default set of logons and passwords. You will probably not use these logons once your system is installed, since you will want logons that mean something to the users of your system.

As system administrator, you may add, delete, or change any of the logons or passwords by using DTSUTIL interactively. The one thing you cannot do interactively is look at the passwords. To do this you must run DTSUTIL in batch mode when VSE/ICCF is not active.

The default system administrator logon is AAAA, and the password is ICCF. One of the first things you should do is change the password. You may do this either by running DTSUTIL or by the command:

/PASSWRD "password"

This command will change your password from whatever it was at the time you issued the command to "password." Be sure to make the password something you can easily remember.

From time to time, users may forget their passwords. Since you cannot display passwords interactively, you should run the DTSTUIL program periodically to obtain a listing of user logon information. This listing will contain, among other things, the passwords.

When you define new user logons to the system, one of the options you may select for the users is the ability to change their password with the /PASSWRD command. If you give the user this capability, you cannot guarantee that the last DTSUTIL listing contains the correct password.

8.5.2.3 System Management Using VSE/ICCF

1. Introduction

This section is intended for the system programmer designated as the VSE/ICCF system administrator. The topics discussed relate to functions that only the system administrator can perform.

When properly used, VSE/ICCF can be a powerful tool to help you manage your system. You may use it to perform most of the day to day system management functions that you are doing now, plus a few things that are only possible via an interactive system.

With VSE/ICCF, you can keep all your VSE utility jobs in the VSE/ICCF library, and run them interactively. Some may be run in an VSE/ICCF interactive partition. Others can be routed to a batch partition. You may create library members to keep track of information that you now keep on scratch pads or chalk boards. DASD layouts and production schedules are two notable examples.

In order to do these things, you must first become familiar with VSE/ICCF and its use. This section assumes that you have already read the "Introduction" section of the VSE/Interactive Computing and Control Facility Terminal User's Guide (SC33-6068).

2. VSE/ICCF Library Management

In order to manage the libraries of VSE/ICCF, you must understand the types of libraries, the types of users, and the types of commands and parameters that affect access.

Within ICCF, there are three types of libraries: COMMON, PRIVATE, and PUBLIC. Only one library can be defined as the COMMON library. All other libraries must be either PUBLIC or PRIVATE. All of these libraries are contained in one physical file called DTSFILE.

VSE/ICCF supplies a library management program called DTSUTIL. The program's FORMAT command is used to specify the number of library header records and user profile records that are contained in the DTSFILE. DTSUTIL also has two commands that ADD or ALTER the library header records and the user profile records that are created by the FORMAT statement. The ADD LIBRARY or ALTER LIBRARY statement is also used to declare whether the library is to be private or public (PUBLIC|NOPUBLIC).

The COMMON library is indicated via the ICCF system generation parameter (DTSOPTNS COMLIB = NO | n). If the default is NO, however, the pregenerated ICCF system specifies library 2 as the COMMON library.

All users have access to all public libraries and the common library. However, user access to members of a library is controlled by several parameters. The first is the system generation parameter ALTSEC. If ALTSEC=NO, which is the default, is specified, then the following table indicates the type access.

USER ACCESS TO MEMBERS IN LIBRARIES

	READ	SAVE	UPDATE/PURGE
COMMON LIBRARY	YES	NO	NO
PUBLIC LIBRARY	YES	YES, MEMBER WILL HAVE YOUR USER ID AND WILL BE EITHER PRIVATE OR PUBLIC	YES, IF MEMBER IS EITHER PUBLIC OR IF MEMBER IS PRIVATE AND HAS YOUR OWN USER ID
PRIVATE LIBRARIES SHARED BY USERS	YES		
PRIVATE LIBRARIES OWNED BY ONE USER	YES	YES	YES

If ALTSEC=YES is specified (as it is in the pregenerated ICCF system), then the following table indicates the type access.

USER ACCESS TO MEMBERS IN LIBRARIES

	READ	SAVE	UPDATE/PURGE
COMMON LIBRARY	YES	NO	NO
PUBLIC LIBRARY	YES, IF MEMBER IS EITHER PUBLIC OR IF MEMBER IS PRIVATE AND HAS YOUR OWN USER ID	YES, MEMBER WILL HAVE YOUR USER ID AND WILL BE EITHER PRIVATE OR PUBLIC	YES, IF MEMBER HAS YOUR OWN USER ID
PRIVATE LIBRARIES SHARED BY USERS			
PRIVATE LIBRARIES OWNED BY ONE USER	YES	YES	YES

Additionally, each member may be password protected.

The second parameter that controls access to a library is the ADD/ALTER USER command of the DTSUTIL utility. This command contains two parameters that affect access. One is the LIBRARY parameter which indicates the main or primary library to which the user will be automatically assigned at logon time. The other parameter is the ALTLIB(N) which can indicate up to eight additional private library numbers.

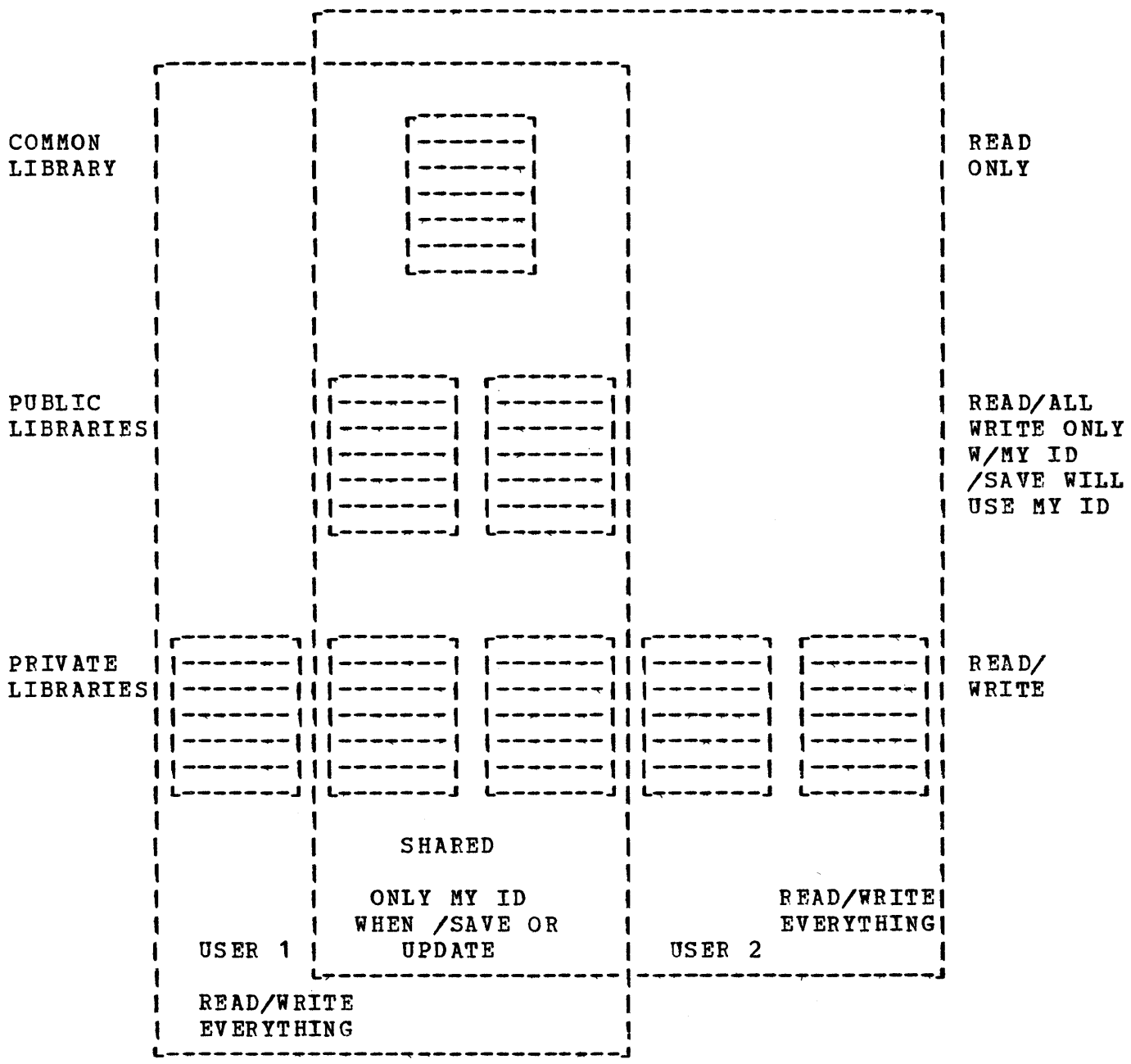
The user can change his primary or main library via the /SWITCH command, and he can access a secondary library via the /CONNECT command. The connected library can be any library number which is a public library or it can be a private library to which the user's profile record allows him access. Members are always saved into a user's primary library, never a connected library.

At logon time, the user always has access to the common library. This access can be terminated with a /SET COM OFF and reconnected with /SET COM ON.

A private library, that is accessed by two or more users is called a shared private library.

The last command that affects library member access is the /SAVE command. This command causes a member to be saved in a library. At the time the member is saved, it is flagged with the user's ID (as defined in the user's profile record). It also flags the member as either PRIVATE, PUBLIC, or PASSWORD, depending on what is specified in the /SAVE command. If nothing is specified, the member is saved as either PUBLIC or PRIVATE, according to the default specification indicated in the users profile record.

USER ACCESS TO THE LIBRARY SYSTEM



Normally, users fall into three categories:

* Administrator

* Programmers

* End Users

The administrator's capability is granted by setting bit three of the OPTB PARAMETER in the ADD/ALTER user command. With this capability, the administrator is granted read/write access to all members in all libraries, including the common library.

Programmers and end users normally will be granted or denied privileges depending upon the setting of the OPTA or OPTB bit switches of their user profile record.

You should carefully study the access privileges to determine the standard for your installation.

The VSE System IPO/E is shipped with 100 libraries defined as follows:

Library Number	Type
1	PRIVATE (Administrator)
2	COMMON
3-9	PUBLIC
10-49	PRIVATE
50-80	PUBLIC (Reserved for Interactive Productivity Facility)
81-100	PUBLIC

How they can be used depends on your installation, but considerations for their use are:

* There should be only one user with the administrative privilege or, at most, the administrator and the systems programmer.

* One of the public libraries should be reserved for operations.

An example of how these libraries could be used follows:

User ID Assigned	Library	Type	Usage	Alternate
YES		1	PRIV	Administra
NO		2	COMM	Common NO
YES		3	PUBL	Out for Ma
NO		4	PUBL	Out for Ma
NO		5	PUBL	Out for Ma
NO		6	PUBL	Out for Ma
NO		7	PUBL	Out for Ma
NO		8	PUBL	Out for Ma
YES		9	PUBL	Operation
YES		10-29	PRIV	Programmin
YES		30-39	PRIV	User Depar
NO		40-49	PRIV	Programmin
YES		50	PUBL	IPF Tables
NO		51-80	PUBL	IPF Reserv

Library 1 and 2 have already been discussed and should be used as specified in the ICCF manuals.

Libraries 3-8 are defined as public libraries. They could be used to pass members from one user on the system to another, as temporary storage libraries in case a private library becomes full, or by the administrator as a library by which, using a MVLIB procedure, a member program in the production library can be moved and flagged as PUBLIC. A programmer can read the PUBLIC copy into his input area or into another program for maintenance. When testing of the changes is complete, the administrator would then move the program back to the production library and purge the old copy out of the public library. A manager or lead programmer can determine what programs are out for maintenance by examining the directories of the PRIVATE library and the PUBLIC OUT FOR MAINTENANCE libraries. You should consider how you will handle items, such as flagging changes and auditing, before using this approach.

All members do not have to be in the common library to be common. A member may also be flagged as common by using the DTSUTIL SHARE command. Such members can reside in any library. This member name would then appear in the directory of any library which had been specified with the parameter COMMON in the ADD/ALTER command.

Operations library 9 is a public library into which job streams could be placed by the programming staff. The operator then could submit the jobs for batch execution using the SUBMIT procedure. These members would be flagged as read only. The only way a job could be altered would be for the operator to edit it and save it under another name. In this case, should an altered job be submitted to a batch partition, the new name under which the altered job was saved would appear as * $$ JOB JNM = NEWNAME on the system console.

Development libraries 10-29 could be divided by giving each programmer a library and then using the remaining libraries as project libraries.

User/Department libraries 30-39 could be used to give a single library to a user or department or multiple users access to a single library, making them a shared private library.

Production libraries should be private libraries used only as a place to store programs that are in production. You should use the /SQUEEZE command for all of these members in order to conserve disk space.

The layout in the example shows library 50 containing Interactive Productivity Facility tables. These tables are generated by the Interactive Productivity Facility dialogues. They will be saved on the library assigned to the user who is running the dialogue. Since the Interactive Productivity Facility is normally run by the system administrator, these tables usually reside on library 1. If you make extensive use of the Interactive Productivity Facility, you may want to devote an entire library for these tables. Library 50 is available for such a use.

If you choose to use library 50 you must rerun the first time use dialogue and the optional product install and verify dialogues after you have switched to library 50. This will put a copy of the Interactive Productivity Facility system tables with all the proper product entries on the new library.

If disk space becomes a problem, you should consider using the DTSUTIL backup, restore, archive facility. A member program can be placed on the backup tape and then purged from the library. The backup tape could then be used as input to DTSUTIL at the next backup. The member which had been purged after the last backup would then be carried forward to the new backup tape. In this way, a member can be carried on the backup tape without having to be maintained on disk. This member could then be restored whenever

the need arises.

3. VSE/ICCF Context Editor

The primary VSE/ICCF facility you will be using is the context editor. The editor exists in two forms: full screen and line at a time. The full screen format is the easiest to use and will be the form of the editor referred to in this discussion. To invoke the editor, enter @ED on the command line, followed by the name of the file you wish to edit. If you do not enter a file name, the editor places you in input mode, and sets you up to edit an empty file in your VSE/ICCF terminal input area. If you find that data is already in the input area, ignore it. It is something that VSE/ICCF put there, and it has already been used. (VSE/ICCF uses its own facilities.)

When you have created such a new file, you must give it a a name and save it with either the FILE or SAVE editor commands; otherwise it will be lost. Once you have issued the SAVE command, however, you are no longer in input mode. You are editing the file you saved. This may not be what you want when you are using a single file as a model for creating others.

Once you have your file in edit mode, you may enter any of the VSE/ICCF editor commands to add, delete, or change records. Effective use of the editor is really a question of practice. There are many commands, but after a few uses you will be able to remember what most of them do. The best way to learn is to experiment with the commands until you are familiar with them.

4. Library Manipulation

There are many other commands in VSE/ICCF with which you should become familiar. These are commands that manipulate the libraries and control VSE/ICCF itself. The following example is typical of something you might do using these commands.

Suppose you wanted to keep your DASD layouts on a VSE/ICCF library so that you could refer to them whenever you needed to add a new file to your system. These layouts can be kept in chart form similar to the layouts provided in the VSE System IPO/E Planning Guide (GC20-1875). To create this chart, you first edit a new file by entering:

```
@ED
```

This invokes the editor, and allows you to create new records in the input area.

Since you know you want to put in several new lines, your first step is to use the editor Type III command (A) to add these lines to the file. Type III commands are those entered directly on the edited line in the far right margin. Now you have a screen with a lot of blank lines. You may now enter all the information required to create your chart. Since you are in full screen mode, you may enter data anywhere on the screen between the column marker line and the line that marks the end of the file. If you need more lines, you may add them with more Type III commands.

When you have finished entering the information, you must save your chart on your library. To do this, enter:

```
FILE DASD
```

This saves your chart on your library under the name DASD. Of course, you may use any name you like as long as it is eight characters or less. The FILE command also takes you out of edit mode and back into command mode.

After creating your chart, you will probably need to refer to it again. If all you want to do is look at it, you can enter:

```
/L DASD
```

This command will list the file called DASD on your screen. If you want to update your chart, you must enter:

```
@ED DASD
```

This will invoke the editor to edit the file DASD. This is similar to the process you went through to create the file, but there is an important difference: when you make a change on the screen and press ENTER, the change is made on the library. If you make a mistake, you must correct it. You cannot simply quit and start over with the file as it was originally.

To avoid this problem, do the following:

* Enter the @ED command without a file name.

  This will place you in input area editing mode.

* Delete any statement you find in the input area.

* Enter the GETFILE command for the file you wish to edit.

  This will place a copy of your file in the input area.

* Edit your file.

  No changes will be made to the copy of the file in your library.

* When changes are complete, enter the FILE command to place the updated copy of your file on the library.

  You may also FILE your file under another name to allow you to keep multiple versions of your file.

5. Updating the COMMON Library

Suppose you wanted to make your new DASD chart available to everyone who has access to the system. Since you saved the chart in your library, you are the only user who can get to it. If you want it to be available to everyone, you must put it in the COMMON library. To do this, you just copy it from your library to the COMMON library by:

```
CPYLIB DASD 1 2
```

The CPYLIB command is really a VSE/ICCF procedure. That is why there is no / as the first character. What this command says is to copy member DASD from library 1 to library 2. Library 1 is your library. Library 2 is the COMMON library. Only the system administrator is permitted to copy into the COMMON library. If other users in your installation want things put in the COMMON library, you will have to do it for them.

6. Submitting Jobs to VSE

- SUBMIT

Now that you know how to put a file in your library, you can create files that contain JCL. These files can be submitted to VSE for execution; and you can examine the output on your terminal. This is especially useful for utility programs that are run frequently. To do this, first create a file with the required JCL just as you would do if you were creating a card deck. If you called the job DSERV, for example, you would then enter:

```
SUBMIT DSERV RETURN
```

This command sends your file to VSE/POWER and puts it in the reader queue. The RETURN part of the command tells VSE/ICCF to force the print class and print disposition of the job so that you may use another command to look at the output.

Note: Using SUBMIT to send a job to VSE/POWER may change the class of the job. This depends on the system defaults setup at initialization time. The standard is to make the class = A. There are no class A partitions supplied. Use of IPFSUB does not override the JCL parameters.

- IPFSUB

The SUBMIT function of VSE/ICCF will modify the VSE/POWER JECL to conform to predefined system standards. For some jobs, particularly those created by the Interactive Productivity Facility, this modification prevents the job from doing what was intended. The function IPFSUB has been included in the VSE/ICCF library to handle jobs which are to be submitted without any VSE/POWER JECL modification.

The format and parameters of IPFSUB are the same as SUBMIT. When submitting jobs created by an Interactive Productivity Facility dialogue always use IPFSUB instead of SUBMIT.

7. VSE/POWER Queue Manipulation

Sometimes when you submit a job, it may not run for quite a while. This can be for a number of reasons, but the most likely is that the partition you requested already has a job in it. You could go to the system console to verify this, but you may also use VSE/ICCF. Enter the command:

```
$DA
```

This will produce a display at your terminal that shows the partitions in order of dispatching priority, low to high. This way you can see what is running in the system without going to the system console. If you press ENTER without keying any data, the display will be updated and presented again. If you enter any data and press ENTER, you will be returned to command mode.

By issuing the $DA command you can tell if a job is using the partition that you need. To find out if there are any other jobs in the reader queue, enter:

```
/DQ RDR
```

This displays a list of all the jobs in the reader queue. You may also use this command to list the entries in the list (LST) and punch (PUN) queues.

You may check the status of the job with a command that allows you to control VSE/POWER functions. If the VSE/POWER job name were LIBLIST (* $$ JOB JNM=LIBLIST,...), enter:

```
/CTLP PDISPLAY LIBLIST
```

You will be returned a display that indicates if the job is awaiting execution, is executing, or has completed execution. Note that in this example the job name was LIBLIST, but the JCL for the job was stored in your library under the name DSERV. If you had asked for the status of

DSERV, the command would have told you that it could not find a job by that name. The name in the JOB statement is the only one that counts with the /CTLP command.

If you discovered that your job was far back in the queue and wanted to change its priority, you could also do this through VSE/ICCF. Here, you use the /CTLP command again, but this time with a different option. Enter:

```
/CTLP PALTER RDR,LIBLIST,PRI=9
```

This form of the /CTLP command passes the command (in this case, to alter the priority of job LIBLIST to 9) directly to VSE/POWER. The commands, however, must be VSE/POWER commands. VSE console commands cannot be issued.

Besides the alter and the display commands you can use cancel, delete, and release commands.

When your job has completed, you may look at the output at your terminal by entering:

```
/LISTP LIBLIST
```

This command allows you to look at any job in the VSE/POWER list queue. The job must have a list disposition so that it is left in the queue after processing. Otherwise, it will be spooled to the system printer.

After you have examined the output from your job, you may dispose of it with either the /PURGEP or /ROUTEP command. If you want the job printed on the system printer, enter:

```
/ROUTEP LST LIBLIST A
```

If you want to remove the output from the system, enter:

```
/PURGEP LST LIBLIST
```

In this example, several common systems programming functions were performed: A system information document was created and made available to system users; JCL was created to list the members in a library; a job was put in the system; a listing was examined; a job's priority was changed; and output was routed to the printer. All of this was done from a terminal. No intervention was required by the console operator.

The commands used in the example were the ones you will use most often in performing system management functions with VSE/ICCF. You should become familiar with each of these commands and all their functions. The example covered only a few of the facilities available to you.

8. Putting Production Jobs into VSE/ICCF Libraries

There are probably many jobs in your installation that are run on a recurring basis. Many of these jobs never require changes to the JCL. The JCL to run these jobs can be kept in the VSE/ICCF library and submitted to VSE when required. Not only is it more convenient to submit jobs from a terminal than from cards, it also keeps your JCL from being lost or damaged, and makes it easier to keep track of your jobs.

If you want to make absolutely sure that the JCL you put in the library is exactly the same as what you have in you card decks, you can add your jobs in batch form. This will save you from having to rekey all the JCL, and eliminate the risk of keying errors. A VSE/ICCF utility program, DTSUTIL, adds members to your VSE/ICCF libraries from cards. DTSUTIL is described in VSE/Interactive Computing and Control Facility Installation and Operations Reference (SC33-6067).

This utility performs many functions. The one you want here is the ADD MEMBER function. Before you start adding members to your library, a little preparation is required.

First, make a list of all the jobs you want to put in the library. Next, decide what names to give them. These names do not have to be the same as the name in the JOB card, but it is easier to remember which member contains which job if they are. Members in VSE/ICCF libraries must have unique names, so if you have jobs with unique jobnames, you can use the jobname as the member name. If not, you will have to come up with unique names for the members.

Once you have decided what to put in the library, you must decide which library to put it in. You can split the jobs up into groups and put them into several different libraries if you like. You may find this technique convenient, but if you use it, you will have to keep track of which jobs are in which library.

In the VSE System IPO/E there are 100 libraries. Libraries numbered 50 through 80 are reserved for Interactive Productivity Facility use. Library 1 is the system administrator's library and library 2 is the COMMON library. Do not use any of these libraries for production jobs. The Interactive Productivity Facility depends on the contents of libraries 50 through 80. As system administrator, you will constantly be working with members from your library, so putting production jobs in library one can be cumbersome. Library two, the COMMON library, should only contain items that are truly common to all users of the system.

One choice for a place to put your production jobs is a public library. The VSE System IPO/E system has set up libraries 3, 4, 5, and 6 as public. If you put jobs in a private library, only the user who has been assigned that library or the system administrator may have access to them. If the jobs are placed in a public library, all users may have access to them, and thus may submit them. Make your library

selections based on who you want to be able to access the member.

Once you have decided which members are to go where, you can make up the DTSUTIL control statements. You can supply more information to the utility other than member name and library number, so check the manual before proceeding. You will need one control statement for each member to be added. When you have finished making the control statements, make up cards with ../* and ../& in the first four columns. You will need as many of these as you have /* and /& cards in your jobs. The DTSUTIL program will end processing if it encounters a /* or /& card in the input stream. The only way to get these statements on the library is to substitute ../* and ../& statements in their place. DTSUTIL will convert them to /* and /& as it writes them to the library. You will also need a card for each member that has END OF MEMBER in the first 13 columns.

When you have all the control statements prepared, merge the job stream together as follows:

```
// JOB ADD TO LIBRARY 3
// EXEC DTSUTIL
ADD MEMBER (3,JOB1)
        .
        .
    (first job)
        .
        .
../*
../&
END OF MEMBER
ADD MEMBER (3,JOB2)
        .
        .
    SECOND JOB
        .
        .
../*
../&
END OF MEMBER
        .
       ETC
        .
/*
/&
```

Since this job updates the VSE/ICCF libraries, it cannot be run while VSE/ICCF is active. When the DTSUTIL job has completed, you can reinitialize &iccf, and run your newly loaded jobs from a VSE/ICCF terminal.

8.5.2.4 VSE/ICCF @AID MACRO

Use of the macro @AID can cause creation of jobs with the use of // ASSGN cards for libraries. The system supplied by Interactive Productivity Facility has LIBDEF statements. Trying to use these jobs may cause them to cancel.

The best way to create jobs is to use the prompters supplied by Interactive Productivity Facility.

8.5.2.5 VSE/ICCF SYSTEM GENERATION

The VSE/ICCF system supplied by VSE System IPO/E is the default system as distributed by VSE/ICCF. If you want your system to have different options, you must regenerate the system. Refer to VSE/Interactive Computing and Control Facility Installation and Operations Reference (SC33-6067) for further detailed information on how to perform the generation.

When doing a VSE/ICCF generation , there is only one generation macro, DTSOPTNS. The DTSOPTNS macro distributed with the VSE System IPO/E has the default options for CICS/VS. These options are the ones described in the VSE/ICCF reference manual noted above.

Many of the VSE/ICCF options can be overridden at startup time. In the VSE/ICCF system supplied by VSE System IPO/E, some of these startup time overrides are used. When tailoring VSE/ICCF for your installation, you may change any of these overrides. The only critical parameter specified is the size of the interactive partitions. The Interactive Productivity Facility requires that at least one interactive partition be at least 768K. This is the minimum size required to run the Interactive Productivity Facility dialogues. If you change the DTSOPTNS macro, you will need to run a generation of VSE/ICCF. To be able to generate a new VSE/ICCF the first step is to restore the service A libraries. Please refer to the LIBRARIAN function of VSE System IPO/E to do this.

After the service libraries are restored, you can use this sample job to generate the entire VSE/ICCF system. You must change the EXTENT card to contain the correct DASD on which your service library is located.

It is not necessary to generate the entire system.

```
* $$ JOB JNM=ICCFGEN,CLASS=0,DISP=D
// JOB ICCF GENERATION STAGE ONE.
// DLBL SRVSLA,'SERVICE.SYSRLB.A'
// EXTENT       ,dddddd
// LIBDEF SL,SEARCH=SRVSLA,TEMP
// OPTION DECK
// EXEC ASSEMBLY
   COPY DTSSG
   DTSSG TYPE=INITIAL,IPB=200K,DEV=(TAPE,280)
   DTSSG PGM=ALL
   DTSSG TYPE=FINAL
   END
/*
/&
* $$ EOJ
```

The punched deck from this job will be a job stream for the second stage. You will need to make some changes to this punched job. Power JCL needs to be put around the job to start. DLBL, EXTENT, and LIBDEF information must be added for service library A, both the relocatable and the source statement. A LIBDEF statement for the core image library needs to be included as CL,TO=IJSYSRS,TEMP. The LIBDEF statements for the relo and source libraries should be RL,SEARCH=SRVRLA,FROM=SRVRLA,TO=SRVRLA,TEMP and SL,SEARCH=SRVSLA,FROM=SRVSLA,TO=SRVSLA,TEMP.

The first several steps will assemble and link new phases to the core image library. You may want to change the PRINT ON statements to PRINT OFF because the output generated is large.

The next several steps will assemble and punch to tape new modules to be cataloged to the relocatable library. After all the modules are put to tape the job will use MAINT to catalog them to the relocatable library. You may find an /& after the // EXEC MAINT card, if you do, remove it. This will cause the LIBDEF information to be dropped. The next steps will link-edit the new relocatable modules and put them in the core image library. You may find another /& after the first // EXEC LINKEDT card, also remove it.

During the assembly of the new phases you may get one or two MNOTES. The MNOTES should all be warnings that no size was specified.

After the generation of VSE/ICCF, be sure to backup the service libraries. Refer to the LIBRARIAN function of VSE System IPO/E for the backup procedures.

Note: During the generation of VSE/ICCF, the parameter IPB= must have a value equal to or greater than 200K if you plan on using VSE/Access Control Logging and Reporting.

The VSE/ICCF tailoring dialogue may be used to alter the standard defaults of the VSE/ICCF system. This is accomplished by changing the operands of the DTSOPTNS macro and cataloging it as a new DTSGENER book

in user source statement library one.

Although we supply this dialogue to assist you in tailoring the VSE/ICCF system, we do not recommend that you use it for the following reasons:

* The default DTSOPTNS provide a good compromise for most users.

* Many of the defaults may be altered at execution time, such as: changing a partition size or class, decreasing the number of interactive partitions, or PFIXing additional pages.

1. Should you apply a program update tape (PUT) that has service for VSE/ICCF, that service is for both the macros and the pregenerated system. Therefore, your tailoring would have to be redone.

However, should you find that the standard pregenerated system does not meet your needs, this dialogue will be very helpful in tailoring VSE/ICCF to your needs. The dialogue performs the following:

* Gives you the option of FASTCOPYing your user data to tape (3310, 3340, and 3330).

* Restores your service A library from tape to disk.

* Provides online selection of the VSE/ICCF options.

* Catalogues a new DTSGENER book in USRSL1.

* Reassembles the VSE/ICCF macros that are affected by the options that you changed from their default values.

* Provides appropriate LIBDEFs for the Stage 2 VSE/ICCF assembly and catalogue of the affected phases.

* If you FASTCOPYed your user data to tape, provides the option of restoring it from tape.

8.6 VSE/ACCESS CONTROL LOGGING AND REPORTING

8.6.1 VERIFICATION CONSIDERATIONS

The verification of the log data set takes a long time. If you can reduce the size of the log data set, it will initialize much faster. To start with, use a small log data set, until you have decided what type of information you want to keep. The verify job only tells if the VSE/Access Control Logging and Reporting has been installed correctly. The log data set is not intended for permanent use. You will need to place the log data set on an area of disk that does not get overlayed. You must then initialize the new log data sets before you can start to use them. You may modify the job used for verification to initialize your permanent log file.

8.6.2 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

There are two Interactive Productivity Facility dialogues provided.

ADM$SEC is used to ADD, CHANGE, DELETE, and DISPLAY the security table.

ADM$REP is used to INITIALIZE, DUMP, RESTORE, Selectively PRINT, and RESET the log data set.

8.6.3 HINTS AND TIPS

If you are going to reassemble &iccf, be sure to read the section on VSE/ICCF generation. The VSE/ICCF generation parameter IPB= must have a value of 200K or greater if you plan to use VSE/Access Control Logging and Reporting.

The phase (DTSECTAB) supplied in the core image library was assembled from the following parameters.

```
TITLE 'DUMMY DOS/VSE ACCESS CONTROL RESOURCE TABLE'
DTSECTAB TYPE=USER,                                              X
      NAME=AAAA,                                                 X
      ACC=(1-32,U),                                              X
      PASSWRD=ICCF,                                              X
      AUTH=YES,                                                  X
      SUBTYPE=INITIAL
DTSECTAB TYPE=USER,                                              X
      ACC=(1-8,25-32,U),                                         X
      NAME=HUGO,                                                 X
      PASSWRD=SECRET,                                            X
      SUBTYPE=FINAL
END
```

8.7 SORT/MERGE II

8.7.1 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

The VSE System IPO/E ASI tailoring environment allows you to include the Sort/Merge II SVA eligible phases to be loaded into the SDL and/or SVA.

8.7.2 HINTS AND TIPS

If you need to tailor the Sort/Merge II default values, refer to pages 10 through 13 of the Sort/Merge II Installation Reference Manual (SC33-4045-2) for the defaults. If you change the defaults to suit your installation, modify the job stream to include LIBDEF statements for PRDSLC, PRDCLC and PRDRLC as follows:

```
// JOB DEFAULTS
// LIBDEF SL,FROM=PRDSLC

 RUN THE TAILORING JOB
// LIBDEF CL,FROM=PRDCLC,TO=PRDCLC,SEARCH=PRDCLC
// LIBDEF RL,FROM=PRDRLC,TO=PRDRLC,SEARCH=PRDRLC
// LIBDEF SL,FROM=PRDSLC,TO=PRDSLC,SEARCH=PRDSLC
```

If you need to tailor the Sort/Merge II SVA list, refer to pages 13 and 14 of the Sort/Merge II Installation Reference Manual (SC33-4045-2) to determine which phases can be deleted. Use the Interactive Productivity Facility ASI tailoring environment to delete selected phases from the ASI procedure. You must re-IPL to execute the newly catalogued procedure.

8.8 DOS/VS COBOL COMPILER AND LIBRARY

8.8.1 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

There are Interactive Productivity Facility dialogues within the Installation, Verification, and system administration environments in support of DOS/VS COBOL.

8.8.2 HINTS AND TIPS

All significant production programs written in DOS/VS COBOL should be recompiled with the OPTIMIZE option. This will significantly reduce the size of these programs and result in fewer CPU cycles being used to execute the same logic.

When testing programs, however, you should not use the OPTIMIZE option, since it makes your compiles take longer. When you have fully tested your program, recompile it with the OPTIMIZE option, test it once again (since different code is generated); and, if the test succeeds, put the program into production.

The CBL COUNT option causes a summary report to be produced on SYSLST at end of job. This report indicates frequency of execution by source statement and verb, and what percentage of the total this represents. This identifies which portion of the source program should be carefully examined and optimized. It also identifies procedures, paragraphs, or sections that should be located physically adjacent to each other in order to reduce paging activity and working set.

8.9 DOS/VS PL/I OPTIMIZING COMPILER

8.9.1 VERIFICATION CONSIDERATIONS

The PL/I verify job stream requires that the PL/I Resident and Transient Libraries be available at link-edit and execution time respectively.

8.9.2 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

There are Interactive Productivity Facility dialogues within the installation, verification, and administration environments in support of PL/I.

8.9.3 HINTS AND TIPS

All significant production programs written in PL/I should be recompiled with the OPTIMIZE option. This will significantly reduce the size of these programs and result in fewer CPU cycles being used to execute the same logic.

When testing programs, however, you should not use the OPTIMIZE option, since your compiles will take longer. When you have fully tested your program, recompile it with the OPTIMIZE option, test it once again (since different code is generated); and, if the test succeeds, put the program into production.

The PL/I COUNT option causes a summary report to be produced on SYSLST at end of job. This report indicates frequency of execution by source statement or group of statements in the program. This identifies which portion of the source program should be carefully examined and optimized. It also identifies procedures, paragraphs, or sections that should be located physically adjacent to each other in order to reduce paging activity and working set.

8.10 RPG II

8.10.1 HINTS AND TIPS

If you are using the VSE System IPO/E batch interactive base, and do not have CICS/VS installed, you must relink the online RPG II Source Entry Facility program (RSEF). For more information, refer to the section on IBM-Supplied Installation Files in the DOS/VS RPG II Installation Reference manual (SC33-6032).

8.11 DL/I DOS/VS

8.11.1 INSTALLATION CONSIDERATIONS

During the installation of DL/I, members are punched from the source statement library to the internal reader. These members are the panels for IMF. The job that is sent to the internal reader by the punching can run only when ICCF is not running; therefore, it runs in the F2 partition. This prevents it from running while ICCF is up which would necessitate the job being rerun. You must bring down ICCF after finishing the DL/I install to allow IMF to be loaded. This load will generate a large number of error messages that you can ignore because they are caused by the BKEND and CATALS that are generated on each member punched from the source library.

8.11.2 VERIFICATION CONSIDERATIONS

8.11.2.1 Processing DL/I Data Bases

The VSE System IPO/E contains pregenerated and tested support for DL/I data base processing. Included are the tables and test transactions necessary to access the sample data bases for the verification process. The CICS/VS tables provided for the DL/I environment contain the specifications necessary for a full function DL/I environment: dynamic transaction backout, journalling, program isolation, and batch shared data base operation.

DL/I product knowledge is mandatory for the installation of a production DL/I System. This guide DOES NOT replace the DL/I manuals listed in the bibliography.

Before you run the verify for DL/I, you must have run the ASI tailoring dialogues, executed the job stream it built, and re-IPLed the system. This is needed to use POWER SLI inclusion. Two power jobs are created by the verify for DL/I; the first loads the library USRSL1 for POWER SLI inclusion; the second, called DLI2, consists of VSAM defines, loads, and lists.

8.11.2.2 DL/I Verification Procedure

The DL/I Batch verification consists of:

* VERDLI - This loads USRSL1 for SLI inclusion.

* DLI2 - This is the acutal verify job stream that must be run.

The CICS/VS DL/I verification consists of:

* VERCICS - A CICS/VS/VS execute job with DL/I

* TDLI - DL/I online test transaction

* DLZZ - DL/I online test transaction

The verification is executed by first running the DL/I verify and then starting up CICS/VS, using the CICS/VS verify. The transactions TDLI and DLZZ are used for an online test.

All tables and modules required for CICS/VS operation are included in the production B core image library.

The TDLI transaction is used against the sample data base. These data bases represent a variety of DL/I data base implementations which can be tested in the CICS/VS environment with this transaction.

Note that if a DBD is not specified to TDLI, the first DBD defined in the PSB will be used as the default. A detailed description of the TDLI program is contained in a later section of this document.

A suggested test sequence follows:

1. Start CICS/VS by submitting the verify CICS/VS DL/I job.

2. Clear the screen and enter the transaction tdli. The response will request a PSB name.

3. Specify the PSB tdlipsb and press ENTER. The response will be the tdli function enter screen requesting the desired function and DBD name.

4. Without entering data, press ENTER. The DBD name will default to the first DBD in the PSB and the function will default to GN. The response will be the first root segment in the data base. Note that since this is the first access to this data base, time is required to open the data base.

5. Without entering data, press ENTER to return to the function enter screen.

6. Without entering data, press enter. The function will default to a GN based on the current position in the data base. The response will be the first dependent segment under the root.

7. By continuing to repeat step 5 and 6, a sequential retrieval of all segments may be performed. Remember that, when sequentially retrieving segments from an HDAM data base, the root segments will be retrieved in physical sequence as opposed to key sequence. To end the processing for this PSB, press CLEAR.

The verification function for DL/I contains the sample programs you should use for the initial testing of your system.

The initial job of the verification job stream consists of punching members from the production source library D into the internal reader for cataloging into the user source library one. This step is necessary because later in the verify process POWER SLI inclusion is done from this library. Therefore, you must be sure that the members punched were cataloged properly. Four series of sample programs are provided that cover most of the DL/I features. The first three of the series supplied in the Verification job stream are batch DL/I jobstreams doing the load, list and update on HIDAM, HISAM and HDAM data bases.

Additional VSAM defines, DBDs and PSBs have been written to support HISAM and HDAM for the same sample program data.

Two additional programs to load and list one or all of the data bases are included. The load program is written in assembler, so any user may execute it. The DLZSAM15 program loads the sample data bases, and the DLZSAM30 program updates them.

The fourth series is a set of batch DL/I programs and utilities to load and list HDAM data bases. These programs will demonstrate various DL/I Batch utilities. DLZSAM40 is the load program for the data bases for the online program DLZSAM60. DLZSAM50 is the print program that will print the data bases loaded by DLZSAM40. The source code for equivalent programs written in COBOL, PL/I, and RPG II is available in the DL/I optional source statement library tape as A.Books. The programs names are:

COBOL	PL/I	RPG II
DLZCBL40	DLZPLI40	DLZRPG40
DLZCBL50	DLZPLI50	DLZRPG50
DLZCBL60	DLZPLI60	DLZRPG60
DLZCBMAP	DLZPLMAP	DLZRGMAP

Using a job stream built under CICS/VS verification users can then use an online DL/I program (DLZSAM60), to access the data bases and do online processing on the data bases. This sample uses the DL/I logical relationship and secondary indexing in its data bases. In addition, a sample compression/expansion routine(DLZSAMCP) is included to demonstrate the segment edit/compression facility of DL/I for variable length segments.

The transaction can be started by entering 'DLZZ'. The DL/I manual Guide for New Users (SH24-5001) contains a complete description on how to use the sample program initiated by DLZZ. It will be found under DLZSAM60 screen formats.

DLZSAM60 allows the terminal user to enter and query information about a customer order. Using DL/I facilities, the data bases are connected so that they are automatically updated.

8.11.2.3 DL/I operation in a CICS/VS Environment

In designing a CICS/VS system to support the processing of DL/I data bases, the decisions to be made fall into five areas:

1. Basic DL/I processing capability
2. Online updating of DL/I data bases
3. Dynamic transaction backout
4. Program isolation
5. Batch shared data base operations

The source for the DL/I oriented tables is in the CICS/VS service library.

8.11.2.4 FCT

The FCT specified must contain an entry for each physical and logical data base in the CICS/VS/VS system. During CICS/VS operation, the FCT contains the status (open,enabled) of all data bases. This status can be changed by CSMT commands.

8.11.2.5 DL/I Application Implementation Checklist

When adding online or batch shared DL/I applications to an established CICS DL/I system, the following considerations should be observed. For a more detailed description of the DL/I pools and blocks, see the Utilities and Guide for the System Programmer.

* For the DL/I data base -

  - Perform the DBD generations. The ACB generations for the program PSBs will automatically generate the required DMBs.
  - Create an FCT entry for each data base (physical, logical, and secondary index) used in a PSB.
  - Perform the PSBGEN and ACBGEN.
  - The following parameter should be evaluated to insure a minimal impact on the performance of data base processing:
    The DL/I buffer pool specifications in the ACT

* For the DL/I application programs (online and batch shared data base) -

  - Perform the PSB and ACB generations.
  - Create the ncessary PPT and PCT for the programs and transactions if these are online programs.
  - The following parameters should be reevaluated: The enq/deq pool size as specified in the SIT if program isolation is used
    The space allocation of the disk journals if the system journal is on disk and if the new programs modify protected resources

As a check on the above definitions, a test transaction such as TDLI should be used to access the application data bases through the application PSBs. This use of a test transaction will verify the FCTs,

DMBs, PSBs entries.

8.11.3 HINTS AND TIPS

SOURCE MODULES

If you intend to assemble any of the modules found in the source statement library, an assembly error (Msg IBK001) will result. The error does not affect the assembler output in any way, but rather is caused by an extra END card. (The source book has an END card, and the assembly job stream has an END card.)

The error flag may be removed by deleting the END card in the source statement library, prior to the assembly.

If the END card removed contains an entry point address, that entry point must be included in the LNKEDT step.

The production relocatable library D which contains DL/I has all of the DL/I relocatable modules except those used by IMF which were deleted during the installation of DL/I. The production source library D which contains DL/I E.books, C.DLIUIB, P.DLIUIB, R.DLIUIB, and selected copy books contains all the modules needed for DL/I assemblies, such as DBDs and PCBs and so on.

APPLYING CORRECTIVE SERVICE

Corrective service, as differentiated from preventive service is the application of an APAR (Authorized Program Analysis Report).

If a fix is to be applied to a macro in the DL/I secondary source statement library, then restore service library D. This library contains the DL/I primary and secondary source macros and may be restored using the Interactive Productivity Facility dialogue to apply APAR/LOCAL fixes. Select the PRE-SERVICE identifier. You will be asked to supply the component identifier which will be for DL/I 5746-XX-100. The job stream that is created will allow you to back up the appropriate disk packs and restore your service library D.

8.12 CICS/VS

8.12.1 INSTALLATION CONSIDERATIONS

CICS/VS product knowledge is mandatory for the installation of a production CICS/VS system. This guide DOES NOT replace the CICS/VS manuals listed in the bibliography.

Many additional CICS/VS management tables have been preassembled and cataloged into the production library B for ICCF/CICS startup and for CICS/VS verify. The source for the tables are cataloged as G.books in service library B and production source library B. The source for the regularly preassembled tables are also in service library B and production source library B as Z.books.

This CICS/VS product does not have any additional management modules. The starter system is the same as a non-VSE System IPO/E CICS/VS product. It may be useful for the new user of CICS/VS to review Appendix A of the CICS/VS System Programmer's Guide (SC33-0070) for more detail on the pregenerated starter system and contents of the source statement library.

Three BTMOD modules (BTML32T, BTMLR32T, and BTMR32T) have been reassembled with BTAM-ES and cataloged into the relocatable library.

The CICS/VS phases DFHDBP2$, DFHTDLI, and DFHTBP2$ have been reassembled with DL/I 1.5.5.

The CICS/VS core image library phase DFHTBP1$ has been renamed to DFHTBP.

The PL/I release 5.1 version of DFHSAP has been cataloged in the CICS/VS core image library.

8.12.2 VERIFICATION CONSIDERATIONS

When CICS/VS has been selected for verification, the dialogue will give you the chance to select other products to verify online with CICS/VS. We recommend that you DO NOT select any other products to verify with CICS/VS for the first test. This will give you a base from which to start for problem determination. When you do select other products to verify online with CICS/VS, you must select only one product at a time with the exception of DL/I which may be selected with DMS.

The job stream that is created by the CICS/VS verify dialogue contains several jobs before the CICS/VS startup. These jobs will define, load, or format any files that will be needed by CICS/VS and need to be

executed only once if you are verifying CICS/VS multiple times to test other products online with CICS/VS. These jobs may also be used as examples when building your production system.

The CICS/VS startup job has a number of SIT overrides to accommodate the possible combinations of products and DASD types.

The verify dialogue also creates a number of jobs after the CICS/VS startup. These jobs will allow you to print various files, such as the dump data set, auxiliary trace data set, or the automatic statistics data set. Again, these jobs may be used as examples for your production system.

The transaction identifiers to verify CICS/VS are listed below.

Sample application programs, written in command level PL/I, COBOL, assembler language, and RPG II, are catalogued in the production core image library B, and are specified in several of the supplied sample CICS/VS management tables. The source code for the sample application programs is in the service library B source statement library book Z.DFHSTAP, and that for the maps is in Z.DFHSTMP.

Four sets of sample applications using the command-level interface are provided, one set for each of the programming languages supported. There are seven programs in each set. Six of these are for use with IBM 3270 display terminals; the other is for use with IBM 2740 typewriter terminals. The six programs for the 3270 cover eight functions:

Menu (displays other functions)
File Update
File Add
File Inquiry
File Browse
Order Entry
Order Entry Queue Print
Report

OPERATOR INSTRUCTION SAMPLE PROGRAM (3270)

The instruction program displays a map containing operator instructions. This map lists some of the transaction identifiers that can be used to invoke the other sample applications.

Language	Trans. ID
Assembler	AMNU
COBOL	MENU
PL/I	PMNU
RPG II	RMNU

UPDATE SAMPLE PROGRAM (3270)

The update program includes file inquiry, file add, and file update operations. The transaction identifiers used are:

Language	Trans. ID
Assembler	AINQ,AADD,AUPD
COBOL	INQY,ADDS,UPDT
PL/I	PINQ,PADD,PUPD
RPG II	RINQ,RADD,RUPD

BROWSE SAMPLE PROGRAM (3270)

The browse program sequentially retrieves a page or set of records for display, starting at a point specified by the terminal operator and continuing either forward or backward through the file. Although browse permits paging forward to the end of the file, paging backward is limited to two pages. The transaction identifiers used are:

Language	Trans. ID
Assembler	ABRW
COBOL	BRWS
PL/I	PBRW
RPG II	RBRW

ORDER ENTRY PROGRAM (3270)

The order entry sample application program accepts input simulating the ordering of parts. The entries are sent to a transient data queue called L860. When a specific number of order entries have accumulated, the list is automatically sent to another location to be processed by the Order Entry Queue Print sample program. The transaction identifiers used are:

Language	Trans. ID
Assembler	AORD
COBOL	OREN
PL/I	PORD
RPG II	RORD

ORDER ENTRY QUEUE PRINT PROGRAM (3270)

This program reads the order entry queue at specified intervals, and prints the queue items on a 3270 printer. If there are no items in the queue it prints a message indicating that the queue is empty. The transaction identifiers used are:

Language	Trans. ID
Assembler	ACOM
COBOL	CCOM
PL/I	PCOM
RPG II	RCOM

REPORT SAMPLE PROGRAM (3270)

The report sample program produces a list of all entries in the sample file that are less than or equal to a specified amount. The transaction identifiers used are:

Language	Trans. ID
Assembler	AREP
COBOL	REPT
PL/I	PREP
RPG II	RREP

INQUIRY SAMPLE PROGRAM (2740)

The 2740 inquiry sample program retrieves and displays a specified record from the sample file. The program terminates after the record has been displayed. The transaction identifiers used are:

Language	Trans. ID
COBOL	INQH
PL/I	PINH

CICS/VS MONITORING FACILITIES

CICS/VS monitoring facilities provide accounting, performance, and exception data for the CICS/VS system. The data collected can be processed by a user written analysis program or by IBM supplied analysis programs, such as the PARS family of field developed programs.

The CICS/VS monitoring control table (DFHMCTE$) supplied with the VSE System IPO/E has entries for collecting accounting and performance data. A CICS/VS sample program (DFHMOLS) using the command level interface is supplied to list the data set produced and it can be used as a model for reaching the data. The transaction identifier MOLS and the following

steps must be performed.

* CSSN - Sign on to CICS/VS, using the operator name and password in the sample sign on table (NAME terminal PASSWORD mast).

* CSTT MONITOR,OFF=ALL - Turn off monitoring and close the monitoring data sets.

* CEMT SET Q(MOI1) OPEN - Open extrapartition queues.

* CEMT SET Q(MOI2) OPEN

* MOLS - Execute the program.

To continue monitoring, reverse the process.

* CEMT SET Q(MOI1) CLOSE

* CEMT SET Q(MOI2) CLOSE

* CSTT MONITOR,ON=ALL

Terminate CICS/VS by using the transaction CSMT SHUT,YES, but first you must sign on to CICS/VS using the transaction CSSN and give the operator name and password in the sample sign-on table (NAME terminal PASSWORD mast). All master terminal transactions are defined with a security key in the CICS/VS program control tables suppled for CICS/VS verifies.

8.12.3 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

The Interactive Productivity Facility support for CICS/VS is contained in the tailoring dialogues TCI$nnn. These dialogues allow you to tailor the CICS/VS management tables for file control table (FCT), program control table (PCT), processing program table (PPT), sign on table (SNT), and terminal control table (TCT).

8.13 DMS/CICS/VS

8.13.1 INSTALLATION CONSIDERATIONS

The DMS/CICS/VS Operations Guide (SH20-2211) should be read before and used during the installation and testing of DMS/CICS/VS. DMS/CICS/VS product knowledge is mandatory for the installation of a production DMS/CICS/VS System. This guide DOES NOT replace the DMS/CICS/VS manuals listed in the bibliography. The AID file for DMS/CICS/VS is contained in the service library in book G.DMSNEW1.

The DMS/CICS/VS component is distributed with sample problems that are documented in the DMS/CICS/VS Operations Guide.

Three sample problems are supplied with DMS/CICS/VS to assist in verifying the installation. The three sample problems are described in the Operations Guide.

All panels, file description tables, user exits, translate tables, etc. required to run these applications are supplied, pregenerated.

* Sample Problem 1: A Retail Application that includes the online data entry and update of data and several types of information retrieval. The data file organizations used are KSDS VSAM, DMS/CICS/VS Indexed, Group Indexed (ESDS VSAM) and Sequential

* Sample Problem 2: An inventory application that includes online data entry, update, delete, and search on a DL/I-VS data base.

* Sample Problem 3: An application that accesses an ISAM file for inquiry, update, browse and add functions. This is a DMS/CICS/VS implementation of the CICS/VS ISAM application supplied with that program product.

Decide which DMS/CICS/VS options you want.

Refer to "DMS/CICS/VS Options" in this documentation for details on the pregenerated options supplied and the alternatives available.

The core image library contains pregenerated modules. These were generated with certain selected options. The generation options and the

default values used are described in "DMS/CICS/VS Options" in this document.

If you wish to change these options, the DMS/CICS/VS Operations Guide provides information on the necessary steps.

Change DMS/CICS/VS option, &EXOPT.

Default value is SHRT, may change to LONG. The CICS/VS PCT CLASS option may be changed to correspond, but is generated as LONG in the CICS/VS System IPO/E. This is the recommended CICS/VS option.

1. Change DMS/CICS/VS option, &MAXUPDT.

   Default value is 4, may change as appropriate.

2. Change DMS/CICS/VS option, &MAXPOOL.

   Default value is 4, may change as appropriate.

3. Change DMS/CICS/VS option, &MAXTS.

   Default value is 255, may change to a lower value but not a higher one.

8.13.2 VERIFICATION CONSIDERATIONS

Three sample problems are provided to help you verify the installation. These are described below. Use them. The value of the sample problems is often underestimated. If you cannot run them, there is a very good chance that your own applications will not run. Because the verify job stream uses VSE/POWER SLI inclusion, you must run the ASI tailoring dialoques, executing the job stream created and IPLing the system. The verify for DMS/CICS/VS consists of two VSE/POWER jobs. The first will punch the books needed for SLI inclusion into the USRSL1 library. The second, DMS2, is the actual verify job stream itself which defines and loads VSAM files.

To verify the installation using the pregenerated applications, a CICS/VS startup job stream will be built from the CICS entry on the verification menu. The job stream created will allow either DL/I support or nonsupport depending on whether that product has been installed. Using the CICS/VS startup JCL provided in the CICS/VS Verification, start up CICS/VS.

To invoke DMS/CICS/VS, enter the six characters:

in the top left corner of an active 3270 terminal and depress the ENTER key. A menu panel will be displayed to allow you to select the application desired.

8.13.2.1 DMS/CICS/VS Batch Verification

The batch DMS/CICS/VS verification consists of the following:

* VERDMS - This loads USRSL1 for SLI inclusion.

* DMS2 - This is the actual verify job stream that must be run.

8.13.2.2 DMS/CICS/VS CICS/VS Verification

Release the CICS/VS DMS startup job.

8.13.2.3 Sample Problem 1

Description

This pregenerated sample problem provides a demonstration of DMS/CICS/VS in an application environment and a means of verifying the installation.

The application used in the sample problem is a retail operation. The demonstration includes the online entry and update of data and several types of information retrieval.

Files used in the sample program are:

Name	Description	Type	No. of Records
CMSTR	Customer Account Master File	DMS/CICS/VS Indexed Group	10
CSALES	Customer Sales Transaction File	Key-Sequenced VSAM	12
CORDERS	Customer Open Order File	Indexed	14
SKUNV	Big Ticket Inventory File	Indexed	99
CAHS	Credit Authorization Refusal File	Sequential	-

Panels used:

Small (480 character) 3270 display:
  DMX00001, DMX00002
  DMSSPnnn, nnn = 600, 610, 620, 630, 640
                  700, 710, 720, 730, 740
                  800, 810, 820, 830, 840

Large (1920 character) 3270 display:
  DMX00001,
  DMSSPnnn, nnn = 010, 020, 030, 050,
                  100, 110, 120, 130, 140
                  200, 210, 220, 230, 240
                  300, 310, 320, 330, 340
                  400, 410, 420, 430
                  500, 510, 520, 530, 540

Translate Tables:
  DMXTT1, DMXTT2, DMXTT3, DMXTT4, DMXTT5, DMXTT6

Program Function Key Load Tables:
  DMSSPPF1, DMSSPPF2.

User Exit Programs:
  DMSSPUX1, DMSSPUX2

Online Operation

To invoke Sample Problem 1, start up CICS/VS, then enter:

```
DMSS01
```

as the first six characters in the top left portion of the screen, and depress the ENTER key. This will cause the following panel (DMX00001) to be displayed.

```
+-------------------------------------------------+
| 1  SAMPLE SELECTION MENU                        |
|  FUNCTION 1 - 1920 CHARACTER SCREEN SAMPLE      |
|  FUNCTION 2 -  480 CHARACTER SCREEN SAMPLE      |
|  FUNCTION 3 - DL/I SAMPLE                       |
|  FUNCTION 4 - ISAM SAMPLE (VSE)                 |
+-------------------------------------------------+
```

The desired function (1 or 2) can be chosen by entering the corresponding number in the top left corner of the screen and depressing the ENTER key. Alternatively, the corresponding program function key can be depressed (that is, PF1 for function 1, PF2 for function 2).

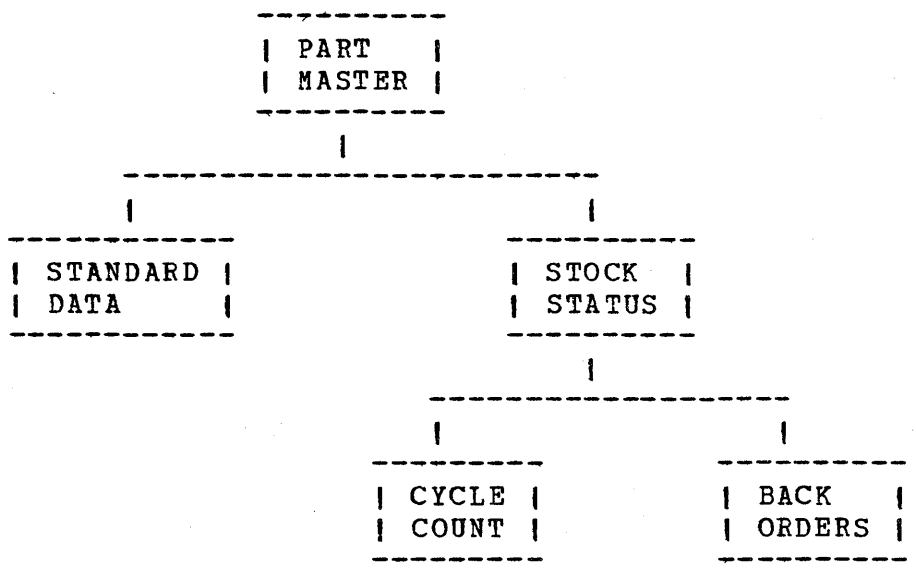
Thereafter, the displays are self-explanatory.

8.13.2.4 Sample Problem 2

Description

This pregenerated sample problem illustrates the operations necessary to maintain a DL/I inventory data base. The demonstration includes online entry and update of data as well as delete and search.

The data base used in this sample problem is an inventory data base, with DBD name of DMSDB01.



The data base contains approximately 70 data base records.

Panels used in this sample problem support large (1920 character) 3270 displays only. They are:

```
DMX00001, DMXDLI01,
      DMXDBnnn, nnn = 020, 030, 040
                      100, 110, 120, 130
                      200, 210, 220, 230
                      300, 310, 320
                      400, 410, 420, 430, 440
                      500, 510, 520
```

The JCL used for creating the data base should be created by running the job stream created under verification menu for DMS/CICS/VS .

Online Operation

To invoke Sample Problem 2, start up CICS/VS enter:

DMSS01

as the first six characters in the top left portion of the screen, and depress the ENTER key. This will cause the following panel DMX00001 to be displayed:

```
-------------------------------------------------
| 1  SAMPLE SELECTION MENU                      |
|  FUNCTION 1 - 1920 CHARACTER SCREEN SAMPLE    |
|  FUNCTION 2 -  480 CHARACTER SCREEN SAMPLE    |
|  FUNCTION 3 - DL/I SAMPLE                     |
|  FUNCTION 4 - ISAM SAMPLE (VSE)               |
-------------------------------------------------
```

The desired function (3) can be chosen by entering the corresponding number in the top left corner of the screen and depressing the ENTER key. Alternatively, the corresponding program function key (PF3 for function 3) can be depressed.

Thereafter, the displays are self-explanatory.

8.13.2.5 Sample Problem 3

Description

This pregenerated sample problem illustrates how DMS/CICS/VS users can access ISAM files. The functions illustrated are:

- inquiry
- browse
- update
- add

ISAM File Layout

File name: FILEA
Organization: ISAM
Record size: 80
Blocking factor: 2
Key: NUMB

DESCRIPTION	FIELD NAME	POSITION	LENGTH (Bytes)	MODE C=Character P=Packed
Status	STAT	1	1	C
Number	NUMB	2	6	C
Name	NAME	8	20	C
Address	ADDR	28	20	C
Phone number	PHONE	48	7	C
Date	DATE	55	6	C
Amount ($)	AMOUNT	61	7	C
Comments	COMMENT	68	3	C

Note that the ISAM file must be:

- fixed length
- blocked

if it is to be accessed by DMS/CICS/VS .

The panels used in this sample problem are:

DMX00001, DMXISnnn, nnn=001, 010, 020, 030, 040

Online Operation

To invoke Sample Problem 3, start up CICS/VS using DFHV2UP, then enter:

DMSS01

as the first six characters in the top left portion of the screen and

depress the ENTER key. This will cause the following panel, DMX00001, to be displayed.

```
-------------------------------------------------
| 1  SAMPLE SELECTION MENU                      |
|  FUNCTION 1 - 1920 CHARACTER SCREEN SAMPLE    |
|  FUNCTION 2 -  480 CHARACTER SCREEN SAMPLE    |
|  FUNCTION 3 - DL/I SAMPLE                     |
|  FUNCTION 4 - ISAM SAMPLE (VSE)               |
-------------------------------------------------
```

The desired function (4) can be chosen by entering the corresponding number in the top left corner of the screen and depressing the ENTER key. Alternatively, the corresponding program function key can be depressed (that is, PF4 for function 4).

This will cause the following panel (DMXIS001) to be displayed.

```
-------------------------------------------------
| 1            OPERATOR INSTRUCTIONS            |
| FILE BROWSE - ENTER 1 AND NUMBER              |
| FILE INQUIRY - ENTER 2 AND NUMBER             |
| FILE ADD - ENTER 3                            |
| FILE UPDATE - ENTER 4 AND NUMBER              |
| ENTER NUMBER:                                 |
| PRESS CLEAR TO EXIT                           |
-------------------------------------------------
```

Valid numbers are:

000111, 000762, 000983, 001222, 001781,
003210, 003214, 003890, 004004, 004445,
004878, 005005, 005444, 005581, 006016,
006670, 006968, 007007, 007248, 007779.

To perform browse, enter the number, a 1 in the top left corner of the screen and depress the ENTER key. The following panel (DMXIS010) is then displayed:

```
-------------------------------------------
| 2            FILE BROWSE                |
| NUMBER         NAME            AMOUNT   |
| XXXXXX   XXX----------------x  XXXXXXX   |
| XXXXXX   XXX----------------x  XXXXXXX   |
| XXXXXX   XXX----------------x  XXXXXXX   |
| XXXXXX   XXX----------------x  XXXXXXX   |
| ENTER       1 TO RETURN                 |
|             2 TO CONTINUE               |
-------------------------------------------
```

Respond 1 to return to panel DMXIS001 or 2 to continue browsing.

To perform inquiry from panel DMXIS001, enter the number, a 2 in the top left corner of the screen and depress the ENTER key. The following panel (DMXIS020) is then displayed:

```
-------------------------------------------
| 1              FILE INQUIRY             |
| NUMBER     XXXXXX                       |
| NAME       XXX----------------x         |
| ADDRESS    XXX----------------x         |
| PHONE      XXXXXXX                      |
| DATE       MMDDYY                       |
| AMOUNT     XXXXXXX                      |
| COMMENT    XXX---------x                |
| ENTER 1 TO RETURN                       |
-------------------------------------------
```

Respond 1 to return to panel DMXIS001.

To add a record from panel DMXIS001, enter the number, a 3 in the top left corner of the screen and depress the ENTER key. The following panel (DMXIS030) for data entry is displayed. Be sure to enter a number that does not already exist on the file to avoid a DMS/CICS/VS error message. To add the record, fill in the blanks on this panel and depress the ENTER key, with 2 in the top left corner of the screen.

```
-----------------------------------------------
| 2                FILE ADD                     |
| NUMBER      xxxxxx                            |
| NAME        xxx----------------x              |
| ADDRESS     xxx----------------x              |
| PHONE       xxxxxxx                           |
| DATE        MMDDYY                            |
| AMOUNT      xxxxxxx                           |
| COMMENT     xxx---------x                     |
| ENTER       1 TO RETURN                       |
|             2 TO ADD                          |
-----------------------------------------------
```

Respond 1 to return to panel DMXIS001.

To update a record from panel DMXIS001, enter the number, a 4 in the top left corner of the screen and depress the ENTER key. The following panel (DMXIS040) is displayed. You may update any field you wish, except the NUMBER. Then enter a 2 in the top left corner and depress the ENTER key.

```
-----------------------------------------------
| 2                FILE UPDATE                  |
| NUMBER       xxxxxx                           |
| NAME         xxx----------------x             |
| ADDRESS      xxx----------------x             |
| PHONE        xxxxxxx                          |
| DATE         MMDDYY                           |
| AMOUNT       xxxxxxx                          |
| COMMENT      xxx---------x                    |
| ENTER      1 TO RETURN                        |
|            2 TO UPDATE                        |
-----------------------------------------------
```

Respond 1 to return to panel DMXIS001. The DMS/CICS/VS system is pregenerated with the following options specified:

* &MAXUPDT = 4

This variable sets the maximum number of records allowed to be out for update at any given time. If a DMS/CICS/VS transaction

attempts to get a record for update when this table is full, a message will be written to the terminal, and if variable &EXOPT has been set to SHRT, control will be returned to the DMS/CICS/VS supervisor to return to CICS/VS with a TRANSID awaiting the operator response. If &EXOPT is set to LONG, the DMS/CICS/VS message writer will issue the read for the operator response. The size of the resident module DMXCE is increased by 46 bytes for each update allowed. The maximum value of this parameter is 600.

* &EXOPT = SHRT

This variable sets the execution characteristics of DMS/CICS/VS . The valid settings of this variable are LONG and SHRT. These are defined to DMS/CICS/VS as a long running transaction or a short running transaction. When the variable is set to LONG, a DMS/CICS/VS transaction will terminate (RETURN to CICS/VS) only on terminal operator request. When the variable is set to SHRT, a DMS/CICS/VS transaction will issue a RETURN to CICS/VS with the TRANSID option whenever a terminal write is issued in the DMS/CICS/VS supervisor, except under the following conditions.

- The transaction was automatically initiated.
- An inquiry for update is outstanding.

The following displays are not written by the DMS/CICS/VS supervisor and therefore the transaction is not terminated when they are written:

- Error messages
- Count results displayed as the result of a DMS/CICS/VS indexed file search
- Data routing prompting panel
- Message and image switching prompting panel
- Get message data panel

When the short running transaction is selected, the data necessary to restart the transaction is written to temporary storage prior to returning to CICS/VS. If an invalid request return code is received from this write, the record is split in half, and an attempt is made to write the smaller records. If an invalid request return code is received for this short record, a message is written to the destination set in DEST1 and DMS/CICS/VS reverts to the long running transaction for this function. Transaction termination will be attempted again on the next possible terminal write.

* &MAXPOOL = 4

  This variable sets the maximum number of simultaneous non-DMS/CICS/VS updates to be allowed during online operations. The maximum value of the parameter is 600.

8.13.2.6 DMS/CICS/VS Panel Generation

DMS/CICS/VS panel generation may be performed in one of two ways:

* by using the VSE/POWER internal reader
* by using intermediate work areas on disk

  Both methods provide a means of assembling the output of DMXPANG. The first method, which is used in all DMS/CICS/VS System IPO/E examples, uses the VSE/POWER internal punch to punch the deck produced by DMXPANG to the VSE/POWER internal reader. It is then read as the next job, and the panel is assembled.

  The second method makes use of a temporary disk file to hold the output of DMXPANG. This output is then assembled in the next step in the panel generation job. An example of the JCL required for this method is described on page 21 of the DMS/CICS/VS Operations Guide (SH20-1864).

  You should review both of these methods, and determine which one best suits your operating environment.

8.13.3 HINTS AND TIPS

This section provides recommendations for using DMS/CICS/VS effectively. Consider the following information as a guide.

8.13.3.1 DMS/CICS/VS Aids File

Located after the history file for DMS/CICS/VS is a file that contains the Aid file that is supplied with DMS/CICS/VS. If you wish to use this file or examine it, you must use the VMFPLC2 dump command analogous to tape dump (this is for CMS users only.)

8.13.3.2 Applying Corrective Service

Corrective service, as differentiated from preventive service is the application of an APAR (Authorized Program Analysis Fix). When a DMS/CICS/VS problem occurs, an APAR is sent to IBM. Then, IBM analyzes the problem; providing a fix if it is valid. This fix is then tested by the PSR that reported the problem. The fix is made available in order to provide a solution to any other installation that has the problem. Any APAR fix has only had a limited amount of testing; thus, if your installation has not had the problem occur, a fix should not be applied.

If a fix is to be applied to a macro in the DMS/CICS/VS source statement library, then restore service library D. This library contains the DMS/CICS/VS source macros. This library may be restored through using the Interactive Productivity Facility dialogue to apply APAR/LOCAL fixes. Select the PRE SERVICE identifier. You will be asked to supply the component identifier which will be for DMS/CICS/VS 5746-xc-400. The job stream that is created will allow you to back up the appropriate disk packs and restore your service library D.

All modules needed for the assembly of panels, user exits, DMS/CICS/VS DBD's etc. are available in the production libraries. The service libraries are only required if you need to service DMS/CICS/VS itself. Consult the DMS/CICS/VS Operations Guide referred to earlier in this section for a complete listing of the CICS/VS requirements for DMS/CICS/VS.

8.13.3.3 Application Development Process

The development process and its sequence are very important, especially for new users of DMS/CICS/VS. The following guidelines may be of help in establishing this process.

* Select an online application for DMS/CICS/VS. Not all online applications are suited to DMS/CICS/VS. An important step in developing online systems must be to qualify the required application; will it be DMS, command-level CICS, or some reasonable combination for the two?

* Design the application and its panel hierarchy with the user's assistance.

  DMS/CICS/VS application designs are best developed using a hierarchical approach. This approach is similar to data base design or structured design. Each module, or panel, of the design represents a screen display to the user. The top panel is usually a

menu which provides a list of options to the user. The user selects an option and DMS/CICS/VS transfers control to the appropriate next panel in the hierarchy. Usually, when an application function is completed, control will return to the menu panel. Each panel performs a unique function for the user(i.e., inquiry panel etc.). This design approach provides an application that is:

- User oriented - Structured - Interactive - Responsive

Design of DMS/CICS/VS applications will go smoothly if a few basic rules are followed:

1. Use a hierarchical approach to panel linkup.

2. Initialize functions from a menu or sub-menu.

3. Terminate functions by returning to the menu or sub-menu.

4. Control panel functions with program funtion keys (PF), if available.

5. Minimize operator instructions. If required, provide linkage to help panels.

* Establish the project schedule and develop resource requirements.

Many experienced users have followed the rule of thumb that states One panel per day, one exit per week. This is the amount of time required to design, code, test and debug panels or exits. Not all users will find this rule to be exact, but at least it is a place to start.

* Assemble CICS tables to support the DMS/CICS/VS application design.

Prepare the PPT table entries: one per panel (lang=assem) and one per exit (LANG=?). Prepare FCT table entries: one for each file or data base allocated to CICS. Prepare FCT table entries: one may be required for data routing, message switching, etc.

* Prototype the application for the user's review.

One of the significant benefits of DMS/CICS/VS is the ability to preview an application transaction online only hours after initial design. This is called prototyping. It is primarily intended to orient the end user to the flow of his application soon after definition, and allows for design changes where required. The approach is simple. Once a panel hierarchy has been developed with the user, the DMS/CICS/VS development team prepares basic panel descriptions. No file or data base access takes place during a prototype execution. In addition, no exits or edit/calcs are

performed. While no data is actually processed, the prototype effectively demonstrates the flow of panels for each user and the layout of where the data will be displayed on each screen image.

Next, the user is invited to review the application at a display terminal. The DMS/CICS/VS application analyst or developer may wish to present this prototyped flow of the application.

After the user has previewed the prototypes, the analyst and developers can make appropriate modifications in the design and panel descriptions, reassemble the prototypes, and run follow-up user sessions to validate the changes. In a relatively short period of time, the design and panel flow can be approved by the end user.

* Prepare file and data base definitions.

  Before a DMS/CICS/VS panel can be generated, its associated file or data base definitions must be generated (if used on the panel). The process, although simple, is very important. Always verify that the file definition table assemblies or DMXDBD generation were executed correctly and that no errors were encountered.

  Some of the more common mistakes in file description generation are:

  1. Miscounting record size relative to sum of field sizes

  2. Indicating wrong REC/BLK. Enter a 1 for unblocked files and enter the number of records per block for blocked files.

  3. Ignoring sequence field of the source statements

  4. Using duplicate data names

  5. Wrong field length for data format

  6. Not indicating last card

Remember that multiple file descriptions can be generated in one stream.

* Load files and data bases as required.

  Before any file can be processed online in CICS, it must contain at least one data record. Therefore, a file load must be performed on every file or data base used by CICS before CICS is initialized. Either valid data, or dummy records, may be used to prime the files.

* Prepare panels for file and data base access. Use the prototype panels and modify the appropriate fields of the panel definition for data access. It is best not to include edit/calcs or exit functions until later in the process. This way, fewer errors will be

encountered at each step of development.

* Test the panels with file/data base access.

* Revise the application design and/or panels as required.

* Implement edit/calcs and exits.

* Run full user test for acceptance.

* Establish recovery/restart mechanism.

* Complete the documentation for the application and turn over to user.
  DMS/CICS/VS applications are relatively self-documenting. However,
  consider the following contents of a DMS/CICS/VS application package:

  -Application narrative
  -Panel hierarchy (general and detailed)
  -File/data base layouts
  -Panel generation listings

8.13.3.4 Application Design

The user is responsible for defining the requirments and scope of any data processing application. The same is true for DMS/CICS/VS except that the user's function extends even further. The user, through the simplicity of DMS, can assist directly with the design of the application.

The first step is to translate the user's requirements into a general hierarchy of DMS/CICS/VS functions, starting with a menu. Ofter, DMS/CICS/VS menus are invoked from security systems, such as described in the DMS/CICS/VS Application Program Design Guide (SH20-1246).

The series of DMS/CICS/VS processes, begun when a terminal user enters a response, and resulting in the display of a panel are sometimes called a cycle. The processes generally occur in a fixed order, although some may be omitted. This fixed order is dictated primarily by DMS/CICS/VS design. A through understanding of this order is necessary before good DMS/CICS/VS applications can be designed. The normal order is:

* DMS/CICS/VS updates communication fields.

* DMS/CICS/VS identifies selected function identifier, and selects first associated supervisor function.

* DMS/CICS/VS calls any post-response user exit, if required. If this function involves a file read, DMS/CICS/VS extracts the record key information for all files from the input message areas. If the function is file update, DMS/CICS/VS checks record keys against ENQs previously established by a get-for-update function. If it is a file operation, DMS/CICS/VS processes the current function for each eligible file in turn (ignoring, for example, files defined as output only for file inquiry). As each file is processed, DMS/CICS/VS develops variable data for the next display as required and calls any user exits as appropriate for the operation.

* After finishing the last function in the chain, DMS/CICS/VS calls any pre- display user exit appropriate to the target panel. DMS/CICS/VS writes the new display to the screen.

* Edit/Calculations specifications are invoked exactly where the user exits are invoked. Note that the processing order is rigidly defined. Some facilities are available in the user exits to modify this, but even the exits for example, cannot cause File 2 to be processed before File 1, except by taking over all the work DMS/CICS/VS would do, and doing it in the user exit instead.

  Because of this relatively rigid cycle structure, DMS/CICS/VS is best used for applications which easily fit this framework. Many applications can be reorganized into a suitable form. For applications which do not readily fit this structure, it may be possible to bend DMS/CICS/VS to suit the application, but it will almost invariably be counter productive. Instead, consider modifying the design to suit the DMS/CICS/VS process cycle.

8.13.3.5 Panel (MAP) Definition

Panel, or map, definition comprises the most work in DMS/CICS/VS application development. If the detail panel hierarchy is a good one, panel definition will proceed smoothly. It has been said that "DMS/CICS/VS designing is everything, panel coding is nothing."

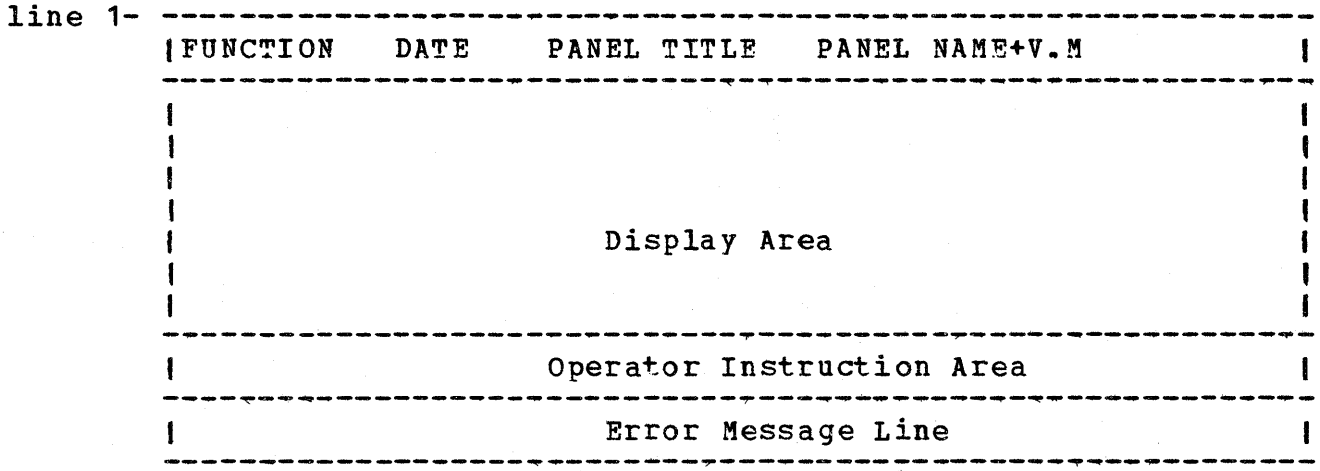
The use of standards will be most effective in this phase of DMS/CICS/VS application development. The following sections relate to the use of

the panel description form in the Offline Application Definition Facility, and apply to the Interactive Application Definition Facility as well.

8.13.3.6 Display Screen Layout

Establish a standard screen layout, or model, for all DMS/CICS/VS applications (CICS maps as well). The following example is recommended. In addition, there are some excellent screen design techniques described in the IBM publication 3270 Screen Design" (SR20-4441).

Model DMS Screen Layout



8.13.3.7 Panel Header Statement

Panel Name - Establish a naming convention for panel names (exits, files, data bases, etc.). The following is an example application:

SSFTnnn

Where: SS = subsystem identifier (eg: CO for customer order) F = function (eg: M for menu; I for inquiry) T = Type of component (eg: P for panel; D for data) nnn = Sequence Number

Example:

SSFTnnn COMP000 = Customer Order Menu Panel COAP010 = Customer Order Add Panel

File name - Always enter the same names in each position for a path of thehierarchy. If only the third file, say, is used on a panel, be sure to code files 1 and 2 as well.

Key Field - If a file access function requires that a key field be present (i.e. inquire, add, update), enter the key field location. If a key field is not specified, then no file retrieval, update, or insertion will take place from the current panel.

Mode - Always code a Mode Field.

Use:

I = for input functions from this panel (no add or update will occur)

O = for output functions from this panel (no inquiry, search or set/end sequential will occur) B = all I/O operations can be invoked, if key fields are present

Next Panel Name - Enter the name of the next panel, when it is a logical continuation of this panel within a multipage display resulting from an inquiry.

Calc/Edit Indicator - Always code a Y to indicate presence of edit/calc statements to at least allow for comments to define the function of the panel in the panel source.

Total Cards - Always enter 999. This will cause an error message during assembly which may be ignored. It will allow for easy maintenance of the panel eliminating the need to recount the number of statements in the panel source.

8.13.3.8 DL/I Description Statement

Fill in the following fields when using DL/I:

PSB Name - This PSB should contain all PCBs necessary to process all data bases listed in the header statements. Also, for performance enhancements, generate each PCB with PROCOPT=GP and POS=M. This will provide path calls, multiple positioning, and inquiring only from the primary PSB. If DMS/CICS/VS cannot satisfy its DL/I processing request with these options, the optional PSB will be used.

Optional PSB - This PSB should be identical to the primary PSB (above), except that appropriate update PROCOPTs should be specified in the PCB macro or in the SENSEG macro. Again, be sure to specify path call processing and POS=M.

8.13.3.9 Display Description Statement

Model - Enter the 3270 Display Model for the application.

If the size of the display to be used is not known, enter Model 2. This will allow for compatible display on large screen models.

Controllable FIs - This is used to establish an additional security function in DMS/CICS/VS.

Inquiry Repeat - Used to control the results of non-DL/I browse/search operations. This field is mutually exclusive with Next Panel Name in panel header. If both are coded, Next Panel Name takes precedence.

PF Key Equivalents - Use these indicators to control application flow PF keys. Use PF1-24 = A-X as a standard.

Display Line Cards - Always enter the maximum number of display lines for a 3270 model being used. Maintenance is easier if all display lines are available for modification.

8.13.3.10 Display Line Statements

Always enter the maximum line statements for the appropriate 3270 model being used, even if there will be some blank lines. This improves productivity during maintenance and does not effect response time because blanks are not transmitted.

Use the line indicator in cc 1 for all lines, including blank ones. Also, be sure they are in sequence when converted to matching readable form.

8.13.3.11 Response Specification Statements

Complete one statement per function identifier (FI).

FI - Establish standards for FIs and use them throughout all applications. For example, a return to main menu is always designated by L (PF12); Help panels are invoked with FI I (PF9), etc.

8.13.3.12 User Exit Statements

Enter one statement per FI. Put the statements in FI sequence.

8.13.3.13 Data Definition Statements

Always use one statement line per data field (unless statement line count reaches 999). During prototyping, enter file fields as user or communication fields (U in cc 1).

When not prototyping, place file fields before user and communication fields to update communication fields with file data. Reverse the order to establish file fields from communication fields.

8.13.3.14 Edit/Calc Statements

The last statements prepared for a panel are edit/calc specifications. Generally, the statement layout is free-form with few coding rules. (See the DMSPRM for details.) One good practice is to use the edit/calc comment facility (an asterisk in cc 1). Use edit/calc comments to describe the panel function even if no other ediit/calc operations are used. Comments are indicated by an asterisk (*) in cc 1.

8.13.3.15 Panel Generation

The next step is to generate the panels that have been designed and coded. The process is clearly defined in the DMS/CICS/VS Operations Guide in the chapter entitled "Installation of User Applications".

The most common mistakes in panel generation are:

* Missing file mode.
* Misinterpreting warning about File defined with no field definitions (DMXPNG28). It simply means something might have been missed.
* Invalid display line count - panel not built.
* Unexpected end of panel - this is a warning only, the panel was built OK.

* Overlapping data fields. Usually a user or communication field has been placed over a file field. Check each field definition length to be sure they do not overlap.

It often expedites panel generation to establish a model panel in the development library and tailor it to each new panel required. This process is extremely productive. Some organizations have modeled entire applications for this purpose.

8.13.3.16 Application Implementation

Because of DMSs hierarchical approach to application design, it is easy to take advantage of structured application development techniques, such as top-down implementation and testing.

Start at the top - the menu - test every FI as it is implemented. Many DMS users have found it valuable to document test session objectives and results:

* What panels will be tested?
* Which FIs will be tested? In what order?
* What results are expected?
* If ABENDs occured, what condition codes were displayed?
* Comment on unexpected results.

If there are multiple panels in a leg of the hierarchy, test, debug and implement one panel at a time, proceeding from top to bottom.

As functions of the hierarchy are tested and corrected they can be validated by the end user. Actually, the end user should be part of the testing process from the beginning. This approach improves the user's understanding of the system as it is being developed. The feedback from the user can greatly enhance the quality of the end result.

Since the application theoretically worked in its prototype form, most bugs encountered during testing with the live files will relate to file implementation, as opposed to design errors. This usually means that the scope of your debugging effort will be reduced by fewer things going wrong.

Ensure that the user documents the acceptance criteria for the application test. Consider the following elements to include in the criteria:

* Application menus

  Do the menus list all functions required? Are the instructions and abbreviations clearly understood? Are appropriate fields of data or instruction highlighted? Is the screen image easy to use and and read?

* Application functions

  Do the functions work the way they were expected to? Is the sequence of functions correct? Do instructions or abbreviations mislead the user? Are error messages clear to the user?

* File access

  Is all data required by the function provided for on an appropriate panel. Are data fields properly protected or unprotected? Is highlighting used properly? Is it consistant? Are all data fields displayed correctly?

* Screen Layout

  Have the standards been maintained for all panels in the application? Is the screen overloaded with data? Has line spacing been used effectively? Are titles centered? Is the image well balanced?

Next, schedule a test session with multiple user representatives. Give the user time to prepare for the test. The user should have a well documented list of functions to select, and acceptance criteria for each. If possible, document the functions tested and obtain the user's sign-off for each.

8.14 DB/DC DATA DICTIONARY

8.14.1 INSTALLATION CONSIDERATIONS

The VSE System IPO/E contains support for the IBM DB/DC Data Dictionary, Program Product 5746-XXC. This support includes CICS installation experiences, the procedures developed for operation, the necessary CICS tables, and an Installation Verification Procedure for the DB/DC Data Dictionary online Interactive Display Forms facility.

This document uses the term, Dictionary, when referring to DB/DC Data Dictionary unless otherwise noted. Dictionary product knowledge is mandatory for the installation of a production Dictionary system. This guide does not replace the Dictionary manuals listed in the bibliography. The user should understand the basic concepts of the Dictionary system. A knowledge of CICS/VS concepts and facilities with DL/I applications, along with DL/I access methods, is needed.

8.14.1.1 Dictionary Installation Considerations

BMSMAPS

The Dictionary installation tape contains the required BMS maps in both aligned and unaligned formats. The VSE System IPO/E contains BMS maps renamed for unaligned formats. If you wish to use aligned BMS maps, a rename will have to be done to create required aliases for the aligned maps, using the JCL contained in the production source library B, in book A.DBDAINST

Pregenerated CICS tables (PCT, PPT, ALT, TCT, FCT and DCT) for the operation of the Dictionary are included in the production B libraries with the following suffixes:

	ALT	DCT	FCT	PCT	PPT	TCT BTAM	TCT VTAM
FBA	1$	E$	U$	U$	U$	E$	F$
3330	1$	M$	U$	U$	U$	E$	F$
3340	1$	N$	U$	U$	U$	E$	F$
3350	1$	H$	U$	U$	U$	E$	F$

The source for these tables is in the service library B as G.DFHxxxxx books.

8.14.2 VERIFICATION CONSIDERATIONS

Before you attempt the online verify of the Dictionary, you must run the batch verify which loads the VSAM data files and executes a batch sample program which is explained in the DB/DC Data Dictionary Installation Guide (SH20-9084). Before you run the verify, you must run the ASI tailoring dialogue, execute the job stream built, and re-IPL the system. This is needed to provide for POWER SLI inclusion. Two POWER jobs are built for the batch verify. The first loads USRSL1 for SLI inclusion. The second, called DCT2, runs the Dictionary sample program. The second job stream will run in the F2 partition, so that you would need to bring down ICCF to run this. If your BG partition is at least 1800k, you may edit the resulting job to run in that partition. Test the Dictionary CICS DL/I batch capability by executing the job that is created under Verification for the Dictionary.

This job is the Dictionary batch sample job stream, modified to execute in a CICS DL/I batch environment. This job should not be executed while the Dictionary partition is in operation. In order to run the batch Dictionary job stream you will need a partition of at least 1800k. You may have to modify your system in order to do so. To bring up Dictionary for operation with CICS, two jobs must be executed at the same time, one for the CICS partition and one for the Dictionary partition. The job to start CICS for the Dictionary will be created in the verification panel for CICS by specifying the Dictionary. Then submit job DDICT to start the Dictionary partition, which after initiation will wait for terminal input through CICS. This job will be found in the Samplib library VSE/ICCF library 59. It contains all the proper entries; the VOLID of the pack you are using as a verify pack will have to be entered here, replacing the existing VOLID DBDC01.

8.14.2.1 Data Dictionary Batch Verification

The batch verify for Data Dictionary consists of the following:

* VERDICT - This loads the USRSL1 for SLI inclusion.

* DCT2 - This is the actual verify job stream that must be run.

8.14.2.2 Data Dictionary Online Verification

The online verify for Data Dictionary consists of the following:

* DDICT - This job is located in Samplib, library 59. It must have the volser renamed for your system and it must be started in order

for CICS/VS and Data Dictionary to communicate.

* VERCICS - This job is be the Data Dictionary - CICS/VS startup job that must be run with DDICT.

The batch sample program:

* Adds subjects and relationships between subjects to create a complete hierarchy of subjects from system objects.

* Generates reports on the data in the Dictionary.

* Copies the data base and its segments to test status and modifies the data within its structure.

* Generates reports on the modified data base.

* Deletes all entries made in the Dictionary data bases during execution of the sample problem.

If no problems are encountered your output should be exactly as listed in Appendix F of the DB/DC Data Dictionary Installation Guide.

In this program, the definitions of subjects will not be complete, and does not need to be complete in order to enter information into the Dictionary.

If you have PF key capabilities, you can enter the corresponding PF key number for ACT instead of placing the cursor to the ACT location and entering the number.

At your terminal, initiate Dictionary operation by pressing CLEAR and entering the master transaction DDSU. The response will be message DBD5410 indicating a successful startup.

Press clear and start a Dictionary session by entering the transaction DICT MOD=HDRMOD. This transaction initiates a long running CICS task which interfaces between the online user and the Dictionary partition. The response to this transaction will be the primary Dictionary menu, HEADER.

Display the Dictionary defaults. Key in:

```
ACT:        5            For COMMANDS
```

Press ENTER, and you will receive the Dictionary COMMAND FORM screen. Key in:

```
DEFAULTS
```

Press ENTER, and you will receive the current Dictionary defaults.

Return to the original HDRMOD screen. Key in:

```
ACT:        10          For HDR
```

Define a test data base IPODB. Key in:

```
CATEGORY:   1
SUBJECT:    IPODB
ACT:        1
```

Press ENTER, and you will receive the PHYSICAL DATA BASE screen to enter more information about the data base. You will also receive the following message:

```
DBD2600 I SUBJECT DATABASE NOT DEFINED IN DICTIONARY
```

Add additional information about IPODB.

```
DESC:       THIS IS A TEST DATA BASE
ACT:        1
```

Press ENTER, and the entered data will be displayed with message:

```
DBD2400 I PROCESSING COMPLETED SUCCESSFULLY
```

Define the segment structure in IPODB. Key in:

```
ACT:        5           For STRUC
```

Press ENTER, and you will receive the PHYSICAL DATA BASE STRUCTURE screen.

Key in:

```
IPOSEGA (in the SEGMENT column)
```

Press ENTER (the default ACT is PROC), and the entered data will be displayed with message:

```
DBD2400 I PROCESSING COMPLETED SUCCESSFULLY
```

Return to the original HDRMOD screen. Key in:

```
ACT:        10          For HDR
```

Define a test segment IPOSEGA. Key in:

```
CATEGORY:   2
SUBJECT :   IPOSEGA
ACT:        1
```

Press ENTER, and you will receive the SEGMENT screen to enter more information about the segment.

Add additional information about IPOSEGA. Key in:

```
DESC:        THIS IS A TEST SEGMENT
DATE:        081076
(MAX) BYTE:  8
MIN BYTES:   5
ACT:         5
```

Press ENTER, and you will get the SEGMENT-FIELDS screen to define a field to a segment. Add a field to the IPOSEGA. Key in:

```
IPOFLDA  under the FIELD column.
ACT:         1
```

Press ENTER, and the entered data will be displayed (highlighted) with the message:

```
DBD2400 I PROCESSING COMPLETED SUCCESSFULLY
```

Return to the original HDRMOD screen. Key in:

```
ACT:         10      For HDR
```

Further define IPOFLDA. Key in:

```
CATEGORY:  3
SUBJECT:   IPOFLDA
ACT:       1
```

Press ENTER, and you will get the FIELD-SEGMENT screen to enter more information about the field. Insert additional field data. Key in:

```
DESC:      THIS IS A TEST FIELD
BYTE:      6
TYPE:      X
ACT:       1
```

Press ENTER, and you will receive the message:

```
DBD2400 I  PROCESSING COMPLETED SUCCESSFULLY
```

Return to the HDRMOD screen. Key in:

```
ACT:       10
```

Display the field IPOFLDA. Key in:

```
CATEGORY:  3
SUBJECT:   IPOFLDA
ACT:       3
```

Press ENTER, and you will receive the FIELD screen with the data that was defined for IPOFLDA. Display the segment data for this field. Key in:

```
ACT:        5       This will give you the FIELD-SEGMENTS
                    screen and display field-segment
                    relationship.
```

Return to the original HDRMOD screen. Key in:

```
ACT:        10      For HDR.
```

Now delete the data base IPODB. Key in:

```
CATEGORY:   1
SUBJECT:    IPODB
ACT:        2
```

Press ENTER, and the screen will display the data base and data that were created. Key in:

```
ACT:        1
```

Press ENTER, and this will delete the data base entry. The original HDRMOD format will appear on the screen. Now delete the segment IPOSEGA. Key in:

```
CATEGORY:   2
SUBJECT:    IPOSEGA
ACT:        2
```

Press ENTER, and the screen will display the segment and data that were created. Key in:

```
ACT:        1
```

Press ENTER, and this will delete the segment entry. The original HDRMOD format will appear on the screen. Delete field IPOFLDA. Key in:

```
CATEGORY:   3
SUBJECT:    IPOFLDA
ACT:        2
```

Press ENTER, and the screen will display the field and data that were originally created. Key in:

```
ACT:        1
```

Press ENTER, and this will delete the field entry. The original HDRMOD format will appear on the screen. End the Dictionary session. Key in:

```
ACT:  4
```

Press ENTER, and the following message will appear:

```
DBD2599I          DB/DC DATA DICTIONARY FACILITY
                  PROCESSING COMPLETE
```

To terminate the availability of Dictionary online, clear the screen and enter the transaction DDSD MODE=NORMAL. This will cause the CICS long running task to terminate and notifies the Dictionary partition to terminate normally as soon as all current online users of the Dictionary have ended their session.

8.14.2.3 Dictionary Modes of Operation

When operating in a CICS online environment, the Dictionary executes in a separate Dictionary partition and interfaces with the terminal user through a Dictionary CICS application program, DBDHDICT. Communication between the Dictionary partition and DBDHDICT is through the DOS/VSE Cross-Partition Communication facilities. The Dictionary partition is initiated by submitting a batch long running job which is terminated by a Dictionary CICS transaction, DDSD.

The Dictionary data bases can be allocated either to the Dictionary partition (Mode D) or to the CICS partition (Mode C). These two modes of operation and the implication of each are presented in the following discussion.

The IPO supplied procedures and CICS tables are based on Mode D operation.

8.14.2.4 Mode C

In this mode of operation, the Dictionary data bases are allocated to the CICS partition and the Dictionary partition operates as a CICS batch program. See Figure 1.

Production considerations:

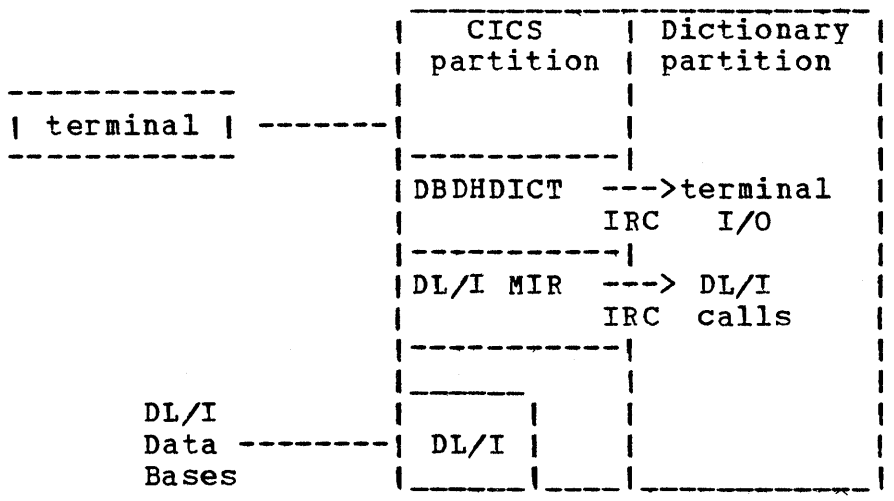


Figure 1. Under Mode C, all DL/I data base processing, including that for the Dictionary partition, is performed in the CICS partition.

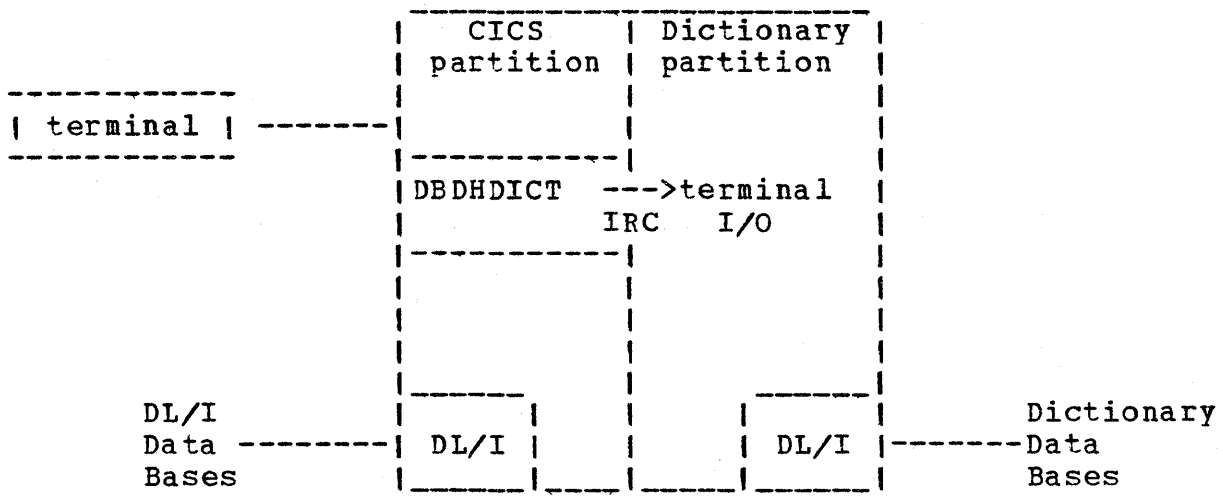


Figure 2. Under Mode D, the Dictionary DL/I data base processing is performed in the Dictionary partition, separate and apart from other CICS DL/I processing.

* The PCT, PPT, XLT, and PLT must contain entries for the Dictionary transactions and programs.

* The FCT, DMB directory and PSB directory must contain entries for the Dictionary data bases and PSB.

* The number of buffers specified for the data base buffer pool subpool size used by the Dictionary data bases should be reviewed and probably increased to accommodate the Dictionary data bases

online without performance problems.

Operating considerations:

* If mode C is used, batch Dictionary jobs can be executed while the Dictionary partition is in operation. They must be executed as batch shared data base jobs.

* This mode includes the Dictionary data base processing with other CICS DL/I activity and consequently may have an impact on the other CICS DL/I applications. If response time of either Dictionary or other DL/I applications is unacceptable, and the system can not be tuned satisfactorily, then Mode D of operation should be used.

* Since the Dictionary data bases are processed as normal CICS DL/I data bases, their integrity will be maintained through the normal CICS emergency restart processing in the cases of a system crash or CICS abend. Note: The Dictionary partition is a batch shared data base application and consequently emergency restart will back out all data base processing performed since the last batch checkpoint. The frequency of the checkpoints is controlled by the CKPT parameter in the default module, DBDGFALT. This parameter, which defaults to 0, should be increased to a value which is acceptable in your installation environment. Checkpoints can also be invoked manually by using the CKPT Dictionary command. The use of this command can be in place of or in addition to the default table specified checkpoints.

  In the cases of a CICS abend or immediate shutdown (CSMT SHUT,Y) the Dictionary partition will have to be terminated using a DOS/VSE cancel.

8.14.2.5 Mode D

In this mode of operation, the Dictionary partition is an DOS/VSE batch job and the Dictionary data bases are allocated to it. (See Figure 2.)

Installations considerations:

* The PCT, PPT, XLT, and PLT must contain entries for the Dictionary transactions and programs.

* The log tape must be allocated to the Dictionary partition if the Dictionary data bases are updated online.

Operating considerations:

* If this mode is used, batch Dictionary jobs cannot be executed while the Dictionary partition is in operation.

* This mode isolates the Dictionary data base processing from the other CICS DL/I activity and consequently has little impact on the other CICS DL/I applications. This is because the Dictionary data base processing is being performed in a separate partition which should have a lower dispatching priority than CICS.

* Specific procedures must be implemented to protect the integrity of the Dictionary data bases for those cases in which the Dictionary partition cannot terminate normally - a system crash; operator cancel or abend of the Dictionary partition; or an abend or immediate shutdown of CICS (CSMT SHUT,Y). For a CICS/VS immediate shutdown, the Dictionary partition will not terminate and a DOS/VSE cancel will have to be used. In these instances the Dictionary data base buffers are not flushed, and the DL/I backout utility must be run to ensure the integrity of the data bases. Backout will backout the Dictionary data base processing performed since the last checkpoint. The frequency of the checkpoints is controlled by the CKPTP parameter in the default module, DBDGFALT. This parameter, which defaults to), should be increased to a value which is acceptable in your installation environment. Checkpoints can also be invoked manually by using the CKPT Dictionary command. The use of this command can be in place of or in addition to the default table specified checkpoints.

8.14.2.6 Miscellaneous Information

Only one online Dictionary partition can be in operation at a time, and only one CICS partition can be accessing the Dictionary partition at a time. The connection between CICS and the Dictionary partition is made from the CICS partition when the DICT transaction is entered. If Mode C of operation is used, the application ID specified in the Dictionary execution statement parameters (CICS=) must be that of the CICS partition which will be using Dictionary.

8.15 EP/VS

8.15.1 INSTALLATION CONSIDERATIONS

8.15.1.1 EP/VS and ACF/NCP/VS Special Considerations

If you are planning on installing both EP/VS and ACF/NCP/VS on your system, you will have to take special precautions to maintain the integrity of your system history file. Failure to do so will render the first of these two products installed unserviceable.

Refer to the ACF/NCP/VS sections of this document and to the Systems IPO/E Communications Guide.

8.15.2 VERIFICATION CONSIDERATIONS

A verification job stream is created for EP/VS. This job stream contains instructions for generating and loading a working EP/VS control program. You should follow these instructions carefully to ensure that you have installed and generated EP/VS correctly.

8.15.3 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

An Interactive Productivity Facility dialogue (TEP$ASM) to tailor EP/VS is located in the communication administration environment.

8.15.4 HINTS AND TIPS

The tailoring dialogue for EP/VS creates three job streams. The first job stream will catalog EP/VS macros to the USRSL1 source statement library. The second job stream will complete Stage 1 of EP/VS generation. The third job stream will complete Stage 2 of EP/VS generation. After you run the EP/VS tailoring dialogue, check each job stream to be sure it fits your environment. For example, you should be sure that the macros in the first job stream match the resources in your environment. The EP/VS verification job mentioned above will give you specific information about what you will need to change in the third job stream. Make sure that you have followed all of the instructions in the verification job stream before you submit the third EP/VS job stream for execution.

8.16 ACF/VTAM

8.16.1 INSTALLATION CONSIDERATIONS

8.16.1.1 Installation of Base Optional Products

All VSE System IPO/E optional features must be installed using the Interactive Productivity Facility product installation dialogues.

Additionally, VSE System IPO/E users must install portions of a teleprocessing (TP) access method as a part of the base installation process as documented in the VSE System IPO/E Program Directory.

The TP access method support provided in the base install process is one of the following;

BTAM/ES Supports one to eight local displays for use with VSE/ICCF and Interactive Productivity Facility

ACF/VTAME Supports one local display for use with VSE/ICCF and Interactive Productivity Facility in a DC or DBDC environment

ACF/VTAM Supports one local display for use with VSE/ICCF and Interactive Productivity Facility in a DC or DBDC environment

Additional telecommunications support requires that you:

* Complete the Interactive Productivity Facility optional product install dialogues.

* Tailor the appropriate products that support or are accessed by your telecommunications software and hardware.

After you have completed the base install processes, you must reinstall the TP access method that you will be using as your production TP access method. After doing this, you must delete the portions of the TP access method installed during base install. There are two jobs provided in SAMPLIB: (DELBTAM - to delete BTAM or DELVTAM - to delete either ACF/VTAM or ACF/VTAME) to accomplish this function.

For complete information on &vtam, refer to the System IPO/E Communications Guide.

8.17 ACF/NCP/VS

8.17.1 INSTALLATION CONSIDERATIONS

8.17.1.1 EP/VS and ACF/NCP/VS Special Considerations

If you are planning to install both EP/VS and ACF/NCP/VS on your system, you will have to take special precautions to maintain the integrity of your system history file. Failure to do so will render the first of these two products installed unserviceable.

In order to circumvent this problem it will be necessary to install ACF/NCP/VS last. Also, you will have to provide a separate history file for ACF/NCP/VS. A procedure to this follows:

1. Install all the products you plan on installing except for ACF/NCP/VS.

2. Backup the system history file to tape. You can use the Interactive Productivity Facility Service dialogues to build the job to do this. Retain this tape for future use.

3. Define a new system history file in the same location as the old one. This system history file will contain only the history information from the ACF/NCP/VS install process. The following example shows the JCL needed to create a system history file.

```
* $$ JOB JNM=SYSHSCRT,CLASS=0,PRI=9
// JOB INSTALL (Z36DEJ,ECHO=YES)
* BE SURE TO ENTER THE CORRECT EXTENT INFORMATION FOR THE 'EXT'
* PARAMETER OF THE 'DEF' STATEMENT CODED BELOW.
// OPTION LOG,CATAL,PARTDUMP
// ASSGN SYS002,DISK,VOL=DOSRES,SHR
// EXEC MSHP
CREATE HIST SYS
DEF HIST SYS UNIT=SYS002,EXT=7278:190 -
ID= 'SYSTEM.HISTORY.FILE'
/*
/&
* $$ EOJ
```

Figure 1. SYSTEM HISTORY FILE CREATION EXAMPLE

4. Install ACF/NCP/VS using the normal Interactive Productivity Facility install process.

5. Backup the ACF/NCP/VS history file to a second tape. You can use the backup job you created for step 2 to do this. Retain this tape for future use.

6. Restore the history file from the history tape created in step 2 and retain this tape. Again, use the Service Dialogue to create the job to do this. Note: You will be required to restore this tape in order to apply service to ACF/NCP/VS.

This procedure will require that you apply service to EP/VS or ACF/NCP/VS but not both at the same time. In order to perform service on these products follow the following procedure:

1. Apply service to all products (excluding ACF/NCP/VS, which must be serviced separately). You will use the System IPO/E service dialoques to perform this operation.

2. Backup the system history file to tape. Use the backup job created during the install process to do this. Also use the ACF/NCP/VS history tape created during the install process.

3. Restore the ACF/NCP/VS history file. Use the restore job created during the install process to do this.

4. Apply service to ACF/NCP/VS. You will use the System IPO/E Service dialogues to do this.

5. Backup the ACF/NCP/VS history file to tape.

6. Restore the system history file from the tape created in step 2.

For complete information on ACF/NCP/VS refer to the System IPO/E Communications Guide.

8.18 ACF/VTAME

8.18.1 INSTALLATION CONSIDERATIONS

8.18.1.1 Installation of Base Optional Products

All VSE System IPO/E optional features must be installed using the Interactive Productivity Facility product installation dialogues.

Additionally, VSE System IPO/E users must install portions of a Teleprocessing (TP) access method as a part of the base installation process as documented in the VSE System IPO/E Program Directory.

The TP access method support provided in the base install process is one of the following;

BTAM/ES Supports one to eight local displays for use with VSE/ICCF and Interactive Productivity Facility

ACF/VTAME Supports one local display for use with VSE/ICCF and Interactive Productivity Facility in a DC or DBDC environment

ACF/VTAM Supports one local display for use with VSE/ICCF and Interactive Productivity Facility in a DC or DBDC environment

Additional Telecommunications support requires that you:

* Complete the Interactive Productivity Facility optional product install dialogues

* Tailor the appropriate products that support or are accessed by your telecommunications software and hardware.

After you have completed the base install processes, you must reinstall the TP access method that you will be using as your production TP access method. After doing this, you must delete the portions of the TP access method installed during base install. There are two jobs provided in SAMPLIB: (DELBTAM - to delete BTAM or DELVTAM - to delete either ACF/VTAM or ACF/VTAME) to accomplish this function.

For complete information on ACF/VTAME refer to the System IPO/E Communications Guide.

8.19 BTAM/ES

8.19.1 INSTALLATION CONSIDERATIONS

All VSE System IPO/E optional features must be installed using the Interactive Productivity Facility product installation dialogues.

Additionally, VSE System IPO/E users must install portions of a teleprocessing (TP) access method as a part of the base installation process as documented in the VSE System IPO/E Program Directory.

The TP access method support provided in the base install process is one of the following;

BTAM/ES — Supports one to eight local displays for use with VSE/ICCF and Interactive Productivity Facility

ACF/VTAME — Supports one local display for use with VSE/ICCF and Interactive Productivity Facility in a DC or DBDC environment

ACF/VTAM — Supports one local display for use with VSE/ICCF and Interactive Productivity Facility in a DC or DBDC environment

Additional telecommunications support requires that you:

* Complete the Interactive Productivity Facility optional product install dialogues

* Tailor the appropriate products that support or are accessed by your telecommunications software and hardware.

After you have completed the base install processes you must reinstall the TP access method that you will be using as your production TP access method. Prior to doing this you must delete the portions of the TP access method installed during base install. There are two jobs provided in SAMPLIB: (DELBTAM - to delete BTAM or DELVTAM - to delete either ACF/VTAM or ACF/VTAME) to accomplish this function.

For complete information on BTAM/ES refer to the System IPO/E Communications Guide.

8.20 VSE/POWER RJE

8.20.1 INSTALLATION CONSIDERATIONS

VSE/POWER RJE requires that VSE/POWER be installed on your system. The Interactive Production Facility install dialogues will install VSE/POWER RJE in service library A which is the same library in which VSE/POWER is installed. The assembly of your VSE/POWER RJE system will be done from that library.

8.20.2 VERIFICATION CONSIDERATIONS

To verify VSE/POWER RJE, the Interactive Productivity Facility Verification dialoques will create a job stream that will print a tutorial which will provide information needed to operate and control your VSE/POWER RJE system. Note: Prior to actually tailoring or executing VSE/POWER RJE you must have installed and tailored VSE/POWER.

8.20.3 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE SUPPORT

The Interactive Productivity Facility support for VSE/POWER RJE is contained in the tailoring dialogue TRJ$ASM. It will allow you to create new VSE/POWER RJE definition job streams or update existing VSE/POWER RJE definitions.

8.20.4 HINTS AND TIPS

In order to allow a complete VSE/POWER RJE system to be generated, the VSE/POWER and VSE/POWER RJE dialogues uses each other's saved parameters. Note: Prior to executing your VSE/POWER RJE tailoring dialogues you must have executed the VSE/POWER tailor dialogues.

The Interactive Productivity facility allows you to generate your VSE/POWER RJE system in either of two ways:

* You can generate the system completely. This is done by first running the VSE/POWER dialogue; then running the VSE/POWER RJE dialogue. In the VSE/POWER dialogue, you are asked if you are going to generate the RJE portion of VSE/POWER. If you answer YES to this question, the VSE/POWER RJE dialogue will automatically be invoked when you complete your VSE/POWER definition. After you complete

your RJE definitions, a job stream will be generated that contains both the VSE/POWER and VSE/POWER RJE definitions just generated.

* You can generate a VSE/POWER RJE system and use a previously defined VSE/POWER definition. This is done by executing the VSE/POWER RJE dialogue, specifying the name of a previously defined set of VSE/POWER specifications to be used in assembling your VSE/POWER RJE system.

Most of the VSE/POWER RJE facilities are supported by the Interactive Productivity Facility options. All other options are defaulted as described in VSE/POWER Installation and Operations Guide manual (SH12-5329). If you wish to use any option not supported, you can:

* Edit the job stream generated by the tailoring dialogues.

* Modify that job stream to include the option you wish to use.

* File and submit the job stream to VSE/Advanced Function for execution.

8.21 NON-SYSTEM IPO/E PRODUCT FEATURES

8.21.1 VSE/POWER SHARED SPOOLING

8.21.1.1 Installation Considerations

It is recommended that you install the VSE/POWER Shared Spooling feature into service library A. The following Sample Library (SAMPLIB) member PSSINST provides a jobstream to do this. Some modifications in this jobstream will be required to reflect the configuration of your system.

```
* $$ JOB JNM=PSSINST,CLASS=0,DISP=D
// JOB PSSINST INSTALL POWER SHARED SPOOLING FEATURE IN SERVICE LIB A
* * *
* * *   ADDR - REPLACE WITH ADDRESSES OF THE I/O DEVICES
* * *   XXXX - STARTING LOCATION FOR TEMPORARY LIBRARY AND MSHP
* * *          AUXILIARY HISTORY FILE (USE 'BG.WORK.FOUR')
* * *   YYYY - ALLOCATION SIZE FOR TEMPORARY LIBRARY MSHP HISTORY FILE
* * *   ZZ   - NUMBER OF DIRECTORY BLOCKS
* * *
// DLBL SRVRLA,'SERVICE.SYSRLB.A'
// EXTENT ,SRVRES
// LIBDEF CL,TO=IJSYSRS
// LIBDEF RL,TO=SRVRLA,SEARCH=SRVRLA
// ASSGN SYS007,DISK,VOL=SYSWK1,SHR        TEMP MSHP PCL
// ASSGN SYS008,DISK,VOL=SYSWK1,SHR        TEMP MSHP PRL
// ASSGN SYS002,SYS008                     AUX HIST FILE ASSGN
// ASSGN SYS006,ADDR                       TAPE ASSGN
// MTC REW,SYS006
// OPTION CATAL
// EXEC MSHP,SIZE=600K
INSTALL FEATURE FROMTAPE MERGE
DEF CL PRIV EXT=XXXX:YYYY DIR=ZZ ID='PWRSS.FEATURE.CL'
DEF RL PRIV EXT=XXXX:YYYY DIR=ZZ ID='PWRSS.FEATURE.RL'
DEF HIST AUX EXT=XXXX:YYYY
/*
// MTC REW,SYS006
/&
* $$ EOJ
```

For specific information on allocation sizes for the jobstream above, refer to the Program Directory for VSE/POWER Shared Spooling shipped with the product.

To allow for automatic application of service for the VSE/POWER Shared Spooling, select 'SOFTWARE PRODUCTS' from panel ADM$1 and select 'ADDITIONAL PRODUCTS' until 'OTHER' appears. Now select 'OTHER'. Enter the information below on panel ADM$SFT4 to update the system profile table for this product:

NAME OR DESCRIPTION	POWER---	SHARED--	SPOOLING
COMPONENT NUMBER	5745 sc	pwr	
PRODUCT NUMBER & IDENTIFIER	5746 xe3	g35	
FEATURE	yes		
INCLUDE	yes		
RELEASE NUMBER	2.0		
RELOCATABLE LIBRARY	SRVRLA		
SOURCE LIBRARY			
COPYR STATEMENTS			
COPYS STATEMENTS			

8.21.1.2 Interactive Productivity Facility Dialogue Support

System Management dialogues that can be used to set up system requirements for this feature are described below.

VSE/POWER Shared Spooling system specification requirements are grouped by Interactive Productivity Facility function. The following worksheet format is designed to facilitate your use of these functions in developing a shared spooling environment. The information requirements for each function are given in this format for use both as a planning aid and a checklist. The menu from which a function can be selected is indicated in parenthesis next to the function name. Use the Fast Path facility to access the menus directly.

Note: It is important to refer to the section 'DASD Sharing by Multiple Systems' in VSE/Advanced Functions System Management Guide (SC33-6094) for information required to implement VSE/POWER Shared Spooling among sharing systems which are virtual machines running under VM/370.

CPU1 SPECIFICATIONS FOR SHARED SPOOL FILES OR SHARED SYSRES

1. I/O Configuration Profile Table Update (=ADM$1)

   Modify this table to indicate the shared DASD devices.

FILE	DEVTYPE	ADDR	VOLSER
POWER DATA FILE	_____	____	_____
POWER QUEUE FILE	_____	____	_____
SYSTEM LOCK FILE	_____	____	_____
_____	_____	____	_____
_____	_____	____	_____

   For performance reasons, it is better not to share the account file. The POWER files and the lock file must not be placed on the same volume; otherwise, a serious performance degradation could result. The lock file should be placed on the least active DASD and the POWER files should not be placed on a volume which contains other highly active files. Remember, the system lock file can not be made switchable.

2. Supervisor Tailoring (=ADM$4)

Base your supervisor tailoring on the most appropriate supervisor available. Modify this default supervisor as indicated below.

DEFAULT SUPERVISOR NAME _____

CPU1 SHARED SPOOLING SUPERVISOR NAME _____

SUPERVISOR GENERATION JOB NAME _____

The last character in the supervisor name becomes the 'ID=' parameter in the SUPVR macro. When entering the supervisor save name for the shared spooling supervisor, specifiy 'Q' in the position shown: for example, $$A$SUPQ.

MACRO	PARAMETER	ENTER
FOPT	DASDSHR	YES
FOPT	USERID	_____
IOTAB	NRES	_____ (default is 512)

You should establish an appropriate USERID, for example: 'SHR.SPOOL.CPU.1'

3. VSE/POWER Tailoring (=ADM$4)

Generate a new VSE/POWER phase. Enter the name of the appropriate POWER default specifications for modification as indicated below.

DEFAULT POWER NAME _____

CPU1 SHARED SPOOLING VSE/POWER NAME _____

VSE/POWER GENERATION JOB NAME _____

The following parameters should probably be reviewed.

	DEFAULTS	ENTER
DATA BLOCK SIZE	0	___
TRACK GROUP NUMBER	0	___
BLOCK GROUP NUMBER	0	___

You should consider increasing the size of the track group parameter. An increase in size will result in fewer lock requests to the spool files. VSE/POWER Shared Spooling only needs to issue a lock request for the spool files when it updates the control information. The other parameters are not affected by POWER Shared Spooling.

	ENTER
SHARED POWER FILES	YES
SHARED SYSTEM ID	1

The following parameters should be reviewed.

	DEFAULTS	ENTER
ACTIVE TIME	5	___
IDLE TIME	1	___
POLLING TIME	60	___

It is recommended that the ACTIVE TIME and POLLING TIME defaults be used initially although it may be necessary to fine tune the system at a later time.

The IDLE TIME parameter is the critical one. This value should be increased for a fast CPU and decreased for a slow one. This parameter determines the time during which no VSE/POWER task may update the Queue File or the Account File. An increased value will prevent a busy CPU from keeping the Queue File continually locked.

4. Label Information (=ADM$1)

Modify the standard labels to show the new positions for the VSE/POWER files and any other system files you plan to move.

CPU1 LABEL GENERATION JOB NAME _____

NAME	FILEID	DASD SERIAL	EXTENT INFORMATION
IJQFILE	POWER.QUEUE.FILE	_____	_____
IJDFILE	POWER.DATA.FILE	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

5. ASI PROCEDURE Tailoring (=ADM$4)

Enter the name of the newly-generated DASD sharing supervisor. Define the lock file and modify the foreground procedure in accordance with conventions established at your installation.

CPU1 SHARED SPOOLING ASIPROC NAME _____

CPU1 IPL/JCL NAME _____

CPU1 ASI PROC GENERATION JOB NAME _____

SYSTEM LOCK FILE

UNIT ADDRESS _____

STARTING LOCATION _____

DATA SECURITY _____

FOREGROUND PROCEDURE

SYS001 VOLID _____

SYS002 VOLID _____

POWER PHASE NAME _____

FORMAT OP

When 'OP' is specified for the FORMAT parameter, the operator is prompted to format the VSE/POWER files.

CPU2 SPECIFICATIONS FOR SHARED SPOOL FILES OR SHARED SYSRES

1. I/O Configuration Profile Table Update (=ADM$1)

   Modify this table to indicate the shared DASD devices.

FILE	DEVTYPE	ADDR	VOLSER
POWER DATA FILE	_____	___	_____
POWER QUEUE FILE	_____	___	_____
SYSTEM LOCK FILE	_____	___	_____
_____	_____	___	_____
_____	_____	___	_____

   For performance reasons, it is better not to share the account file. The POWER files and the lock file must not be placed on the same volume; otherwise, a serious performance degradation could result. The lock file should be placed on the least active DASD and the POWER files should not be placed on a volume which contains other highly active files. Remember, the system lock file can not be made switchable.

2. Supervisor Tailoring (=ADM$4)

Use the shared spooling supervisor created for CPU1 and change the USERID for CPU2.

CPU2 SHARED SPOOLING SUPERVISOR NAME _____

USERID FOR CPU2 _____

You should establish an appropriate USERID, for example: 'SHR.SPOOL.CPU.2'.

SUPERVISOR GENERATION JOB NAME _____

3. VSE/POWER Tailoring (=ADM$4)

Use the Shared Spooling POWER phase specified for CPU1. You may need to make certain modifications for CPU2 but generally, there is no need to generate a new POWER phase for CPU2 since only the 'SYSID' parameter will be different. This parameter can be set up at VSE/POWER initialization by including the 'set sysid=2' startup command in your foreground procedure just prior to the 'FORMAT=' command.

CPU2 SHARED SPOOLING VSE/POWER NAME _____

CPU2 VSE/POWER GENERATION JOB NAME _____

4. Label Information (=ADM$1)

Modify the standard labels to show the new positions for the VSE/POWER files and any other system files you plan to move.

CPU2 LABEL GENERATION JOBNAME _____

NAME	FILEID	DASD SERIAL	EXTENT INFORMATION
IJQFILE	POWER.QUEUE.FILE	_____	_____
IJDFILE	POWER.DATA.FILE	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

In a shared SYSRES environment, the recorder file, the hardcopy file, the system label areas, and the linkage editor work file can not be shared between CPUs. It is recommended that these files reside on a non-shared DASD. Also in a shared SYSRES environment separate dump files are required. The dump files for both CPUs can reside on a shared DASD and it is suggested that the dump files for CPU2 be moved to a position past the dump files for CPU1 with perhaps '.CPU.2' appended to the file id.

5. ASI Procedure Tailoring (=ADM$4)

Base your ASI procedure tailoring on the supervisor prepared for CPU1. You will have to modify some commands: for example, the DPD command to indicate the correct addresses for CPU2. In a shared SYSRES environment you will have to add the DLA command.

CPU2 SHARED SPOOLING SUPERVISOR NAME _____

CPU2 IPL/JCL NAME _____

CPU2 ASI PROC GENERATION JOB NAME _____

SYSTEM LOCK FILE

UNIT ADDRESS _____

STARTING LOCATION _____

DATA SECURITY _____

FOREGROUND PROCEDURE

SYS001 VOLID _____

SYS002 VOLID _____

POWER PHASE NAME _____

FORMAT OP

In a shared SYSRES environment you will have to add the DLA command. When two systems have a common SYSRES, it is mandatory that each CPU define its own label area during IPL. For performance reasons, it is recommended that the label area not be located on the SYSRES device.

DLA COMMAND

DLA NAME _____

DLA DISK ADDRESS _____

START ADDRESS _____

LABEL AREA SIZE _____

SECURED DATA SET _____

8.21.2 VSE/VSAM SPACE MANAGEMENT FOR SAM FEATURE

8.21.2.1 Installation Considerations

Since the Space Management feature consists of replacement phases for VSAM, it must reside in the system core image library. The relocatable modules therefore must reside in service library A.

There are no source modules on the Space Management tape and the relocatable modules are not needed for production, therefore there are no copy files required.

To allow for automatic application of service for the Space Management feature, you should choose SOFTWARE PRODUCTS from panel ADM$1 and choose ADDITIONAL PRODUCTS until OTHER appears. Then you should choose OTHER to update the appropriate information for the product on panel ADM$SFT4 as shown below:

```
NAME OR DESCRIPTION              vsam-spa   ce-manag   ement---
COMPONENT NUMBER                 5745  sc   vsm
PRODUCT NUMBER & IDENTIFIER      5746  am2  g19
FEATURE                          yes
INCLUDE                          yes
RELEASE NUMBER                   2.0
RELOCATABLE LIBRARY              SRVRLA
SOURCE LIBRARY
COPYR STATEMENTS
COPYS STATEMENTS
```

The Sample Library (SAMPLIB) member VSMINST provides a sample jobstream for installing the Space Management feature. This jobstream, shown below, will require modifications to meet requirements specific to your installation.

```
* $$ JOB JNM=SPACE,CLASS=0,DISP=D
// JOB SPACE INSTALL VSAM SPACE MANAGEMENT FEATURE IN SERVICE LIB A
*
*    ADDR - REPLACE WITH ADDRESS OF YOUR TAPE DRIVE
*    XXXX - STARTING LOCATION OF MSHP TEMPORARY LIBRARY OR HISTORY FILE
*           (USE 'BG.WORK.FOUR')
*    YYY  - ALLOCATION OF MSHP WORK LIBRARY OR HISTORY FILE
*    ZZ   - NUMBER OF DIRECTORY TRACKS FOR MSHP TEMPORARY LIBRARY
*
// DLBL SRVRLA,'SERVICE.SYSRLB.A'
// EXTENT ,SRVRES
// LIBDEF CL,TO=IJSYSRS
// LIBDEF RL,TO=SRVRLA,SEARCH=SRVRLA
// ASSGN SYS008,DISK,VOL=SYSWK1,SHR
// ASSGN SYS002,SYS008
// ASSGN SYS006,ADDR
```

```
// MTC REW,SYS006
// OPTION CATAL
// EXEC MSHP,SIZE=512K
INSTALL FEATURE FROMTAPE MERGE
DEF RL PRIV EXT=XXXX:YYY DIR=ZZ ID='VSAM.FEATURE.RL'
DEF HIST AUX EXT=XXXX:YYY
/*
// MTC REW,SYS006
/&
* $$ EOJ
```

The minimum sizes for the temporary relocatable library and history file required by MSHP is documented by a table in the installation guide shipped with the product.

8.21.2.2 Hints and Tips

The MSHP history file that is shipped with the VSE/VSAM Space Management contains a module list which includes generic names, IKQS... and IDCS... When installing the Space Management feature, MSHP will perform down-level checking for modules listed in the history file shipped with the feature. If a PTF has been applied to a base module which starts with the same characters specified in the feature history file (IKQC and IDCS), the Space Management installation will fail. For example, if an APAR had been applied to IKQSCAT (a base VSAM module) prior to the feature installation, it will fail since IKQS is used for the down-level checking.

This problem will be fixed in a future PUT tape. In the interim, use the following procedure to bypass the problem:

* Before installation of the Space Management feature, list the history file for the installed VSAM program product.

* Check to see if any PTFs have been applied to base modules whose names begin with IKQS or IDCS.

* If there are modules that do begin with those characters, use the MSHP REMOVE statement to remove the PTF entries, install the Space Management feature, and use the MSHP ARCHIVE to add the PTF entries back.

* If no fixes have been applied to these modules, the feature may be installed without manipulating the history file.

8.21.3 VSE/VSAM BACKUP/RESTORE

8.21.3.1 Installation Considerations

The Backup/Restore feature like VSE/VSAM should reside in the system core image library. The relocatable modules should reside in service library A. There are no source modules on the Backup/Restore tape and the relocatable modules are not needed for production, therefore, no copy files are required.

To allow for automatic application of service for the Space Management feature, you should choose SOFTWARE PRODUCTS from panel ADM$1 and choose ADDITIONAL PRODUCTS until OTHER appears. Then you should choose OTHER to update the appropriate information for the product on panel ADM$SFT4 as shown below:

```
NAME OR DESCRIPTION             vsam-bac   kup-rest   ore-----
COMPONENT NUMBER                5745  sc   vsm
PRODUCT NUMBER & IDENTIFIER     5746  am2  g74
FEATURE                         yes
INCLUDE                         yes
RELEASE NUMBER                  1.0
RELOCATABLE LIBRARY             SRVRLA
SOURCE LIBRARY
COPYR STATEMENTS
COPYS STATEMENTS
```

The Sample Library (SAMPLIB) member VBRINST provides a sample jobstream for installing the Backup/Restore feature. This jobstream, shown below, will require modifications to meet requirements specific to your installation.

```
* $$ JOB JNM=BACK,CLASS=0,DISP=D
// JOB BACK INSTALL VSAM BACKUP RESTORE FEATURE IN SERVICE LIB A
*
*    ADDR - REPLACE WITH ADDRESS OF YOUR TAPE DRIVE
*    XXXX - STARTING LOCATION OF MSHP TEMPORARY LIBRARY OR HISTORY FILE
*           (USE 'BG.WORK.FOUR')
*    YYY  - ALLOCATION OF MSHP WORK LIBRARY OR HISTORY FILE
*    ZZ   - NUMBER OF DIRECTORY TRACKS FOR MSHP TEMPORARY LIBRARY
*
// DLBL SRVRLA,'SERVICE.SYSRLB.A'
// EXTENT ,SRVRES
// LIBDEF CL,TO=IJSYSRS
// LIBDEF RL,TO=SRVRLA,SEARCH=SRVRLA
// ASSGN SYS008,DISK,VOL=SYSWK1,SHR
// ASSGN SYS002,SYS008
// ASSGN SYS006,ADDR
// MTC REW,SYS006
// MTC FSF,SYS006
```

```
// MTC BSR,SYS006
// OPTION CATAL
// EXEC MSHP,SIZE=512K
INSTALL FEATURE FROMTAPE MERGE
DEF RL PRIV EXT=XXXX:YYY DIR=ZZ ID='RLL.FILENAME'
DEF HIST AUX EXT=XXXX:YYY
/*
// MTC REW,SYS006
/&
* $$ EOJ
```

The minimum sizes for the temporary relocatable library and history file required by MSHP is documented by a table in the installation guide shipped with the product.

A.0 INTERACTIVE PRODUCTIVITY FACILITY PANELS AND DIALOGUE MANAGER

The following types of panels may be displayed:

* Menu panels

  Present lists of selectable activities. When you select a menu item, another panel is displayed, continuing the activity you selected. For example, the first menu panel you see when you invoke the Interactive Productivity Facility lists the first use tutorial as a selectable item. This tutorial covers the features provided with the System IPO/E. If you select this item, the first panel in the first use tutorial will be displayed.

* Data Entry panels

  Prompt you for keyed input necessary for a given function to be performed. For example, if you want to apply a Program Update (PUT) tape to your system, you are prompted for the device address on which the PUT tape will be mounted.

* Explain panels

  Provide additional information about a menu or data entry panel, and the activity you are performing.

* Information Menu panels

  Present lists of topics on which explanatory material is available. When you select a topic number, one or more explain panels, or additional information menu panels are displayed, giving you further information. Such panels may be used to provide an overview of a major activity, or to explain data entry panels which contain many items to be keyed.

For more information on these panel types, see the section, "Sample Interactive Productivity Facility Panels".

Other components of the Interactive Productivity Facility are:

* Tables

  These are files which reside in VSE/ICCF libraries. They are used to hold information about your system or to save responses entered via dialogues.

* Skeletons

  These are files which reside in VSE/ICCF libraries. They are used to create job streams. They are not job streams themselves, but contain rules for creating job streams. Data entered from panels is merged with data in the skeleton to produce a completed job stream.

* Function Routines

  These are modules which reside in the system core image library, and contain the logic to perform a given activity.

The dialogues do not modify the components to which they interface. You can exit from the Interactive Productivity Facility and communicate with the system in traditional ways.

The program that controls these dialogues is called the dialogue manager. It is composed of the following subfunctions:

* Menu Manager

  - Analyzes user responses to menu panels
  - Determines the sequence of panels and the path of users through the system
  - Saves the name of the last user menu panel for redisplay when you re-enter after exiting the Interactive Productivity Facility

* Display Service

  - Substitutes variables supplied by the calling routine
  - Writes panel to display device
  - Reads response from display device
  - Handles selection line requests such as EXPLAIN

* Explain Service

  - Displays one or more panels that further explain the items on a menu or data entry panel In some situations, this service will display a menu panel that lists the categories of general information
  - Lets you review the information and then return to the point in the dialogue where EXPLAIN was requested

* Additional Services
  - Full-screen display
  - Restart capability
  - Set messages to be displayed on the next screen
  - Save and restore variables between terminal sessions
  - Create tailored JCL for execution in a batch environment

B.0 SAMPLE LIBRARY CONTENTS

SAMPLIB (VSE/ICCF library 59) contains JCL samples which can be used as models for coding similar jobs. These jobs are optionally loaded as separate VSE/ICCF members during the base installation process.

The names of the jobs, and the functions they perform, are listed below.

JOBNAME	DESCRIPTION
	- General -
EXPDIS	An export disconnect for the verify user catalog.
	- ICCF -
ICCFBACK	Backups up the file to tape for ICCF.
ICCFFMAT	Formats the disk file area for ICCF.
ICCFREST	Restores the file to disk for ICCF.
	- DOS/COBOL -
CBLIOCR	Catalogs a 3886 COBOL copy member into a source library.
CBLSMPLB	A sample COBOL program using tape.
CBLVMSG	Produces a list of all COBOL compiler diagnostics.
CBLVPGT	For COBOL users: Creates an output file on tape and reads it back.
	- PAII -
PAIICGEN	Generation of PAII CICS/VS options
PAIIDLI1	Punching of DLZODP modifications for PAII
PAIIDLI2	Updating of DLZODP for PAII
PAIIFMT	Formating of PAII history file
PAIIGEN	Generation of PAII
PAIILIST	Production of PAII list format

JOBNAME	DESCRIPTION
PAIINST	Install of PAII
	- VSE/PT -
PTRPT$D	Creating report from disk via VSE/PT
PTRPT$T	Creating report from tape via VSE/PT
PTSTOP$D	Terminating VSE/PT monitor session to disk
PTSTOP$T	Terminating VSE/PT monitor session to tape
PTSTRT$D	Initiating VSE/PT monitor session to disk
PTSTRT$T	Initiating VSE/PT monitor session to tape
	- VSE RJE Workstation -
WRKINST	Wrkstation installation
WRKSTSTRT	Wrkstation startup
WKSTGEN	Generation of wrkstation
	- Features -
FEATINST	Sample install of a feature
PSSINST	Sample install of VSE/POWER Shared Spooling
	- CICS/VS -
DDICT	The startup for Data Dictionary with CICS/VS
DFHALT	Sample CICS/VS Application Load Table assembly.
DFHDASM	Deletes Assembler members from CICS/VS libraries.
DFHDCML	Deletes macro-level members from CICS/VS libraries.
DFHDCOB	Deletes COBOL members from CICS/VS libraries.
DFHDCT	Sample CICS/VS Destination Control Table assembly.
DFHDPLI	Deletes PL/I members from CICS/VS libraries.
DFHDPML	Deletes CICS/VS PL/I macro level SLB books.

JOBNAME	DESCRIPTION
DFHDRPG	Deletes RPG members from CICS/VS libraries.
DFHFCT	Sample CICS/VS File Control Table assembly.
DFHIDEL	Deletes all sample CICS/VS programs.
DFHIDLI	Renames DFHTBP2$ to DFHTBP for DL/I.
DFHJCT	Sample CICS/VS Journal Control Table assembly.
DFHMCT	Sample CICS/VS Monitoring Control Table assembly.
DFHNLT	Sample CICS/VS Nucleus Load Table assembly.
DFHPCT	Sample CICS/VS Program Control Table assembly.
DFHPLT	Sample CICS/VS Program List Table assembly.
DFHPPT	Sample CICS/VS Processing Program Table assembly.
DFHSIT	Sample CICS/VS System Initialization Table assembly.
DFHSNT	Sample CICS/VS Sign On Table assembly.
DFHSRT	Sample CICS/VS System Recovery Table assembly.
DFHTCTA$	VSE IPO/E default for TCT for local BTAME support
DFHTCT$O	VSE IPO/E default TCT for local SNA support
DFHTST	Sample CICS/VS Temporary Storage Table assembly.
DFHXLT	Sample CICS/VS Transaction List Table assembly.
DFHVLOG	Formats CICS/VS system log.
DFHVTS	Defines DFHTEMP CICS/VS temporary storage.
DTS$DCTI	Required CICS/VS DCT entries for VSE/ICCF.
DTS$PCTI	Required CICS/VS PCT entries for VSE/ICCF.
DTS$PPTI	Required CICS/VS PPT entries for VSE/ICCF.
	- DL/I -
DLZSPSB	Sample DL/I HISAM PSBGEN.

JOBNAME	DESCRIPTION
DLZEORG3	DL/I reorganization utility for 3330 DASD.
DLZFINV	Defines inventory customer and index data bases for DL/I sample programs.
DLZGACB	Generates the VSAM ACBs used by the CICS/VS online sample program.
DLZLIST	Lists inventory and customer data bases for DL/I sample programs.
DLZLOAD3	Loads inventory and customer data bases for DL/I sample program - 3330 DASD.
DLZLOGD	Generates a sample logical DL/I DBD.
DLZOACB	Generates ACBs used by the TDLI sample program.
DLZPSBG	Sample DL/I HIDAM PSBGEN for sample programs.
DLZDPSB	Sample DL/I HDAM PSBGEN.
DLZVHDA3	Sample DL/I HDAM DBDGEN FOR 3330 DASD.
DLZVHID3	Sample DL/I HIDAM DBDGEN for 3330 DASD.
DLZVHIS3	Sample DL/I HISAM DBDGEN for 3330 DASD.
DLZVOL	Catalogs DL/I nucleus modules and ACTs for sample programs.
PSBS	Sample CICS/VS online programs for DL/I DBD and PSB generation.
	- Telecommunications -
CRLOAD	Example of a job to create an ACF/NCP load file.
DELBTAM	Deletes BTAM access method from temporary library
DELVTAM	Deletes SNA access method from temporary library
INSECHO	Assembles and link-edits ECHO program
ISTARTUP	Defines an Interactive Productivity Facility SNA terminal.
LOCALBSC	Sample of ACF/VTAM or ACF/VTAME non-SNA definition.

JOBNAME	DESCRIPTION
LOCALSNA	Sample of ACF/VTAM or ACF/VTAME SNA definition.
NCP	Example of ACF/NCP source macros.
NCPDIAG	Creates NCP load file
NCPLOAD	Example of a job to load ACF/NCP in the 3705.
NCPSTG1	Sample of NCP stage 1 input to generate NCP
STRECHO	Start ECHO program
SXTNBSC	ACF/NCP/VS definition for 16 BSC 3271 lines
SXTNMXD	ACF/NCP/VS definition for 16 SDLC 3767 and 3270 lines
SXTN3270	ACF/NCP/VS definition for 16 SDLC lines
USSTAM	Unformatted support service assemble and link-edit
VTAMBOOK	VTAM start list.
VTAMEBUF	Catalog of ACF/VTAM buffer definitions.
VTAMENET	VTAME network definitions for local and remote terminals
VTEECHO	ACF/VTAME - Definition for 3274-1c with various terminals attached.
VTMINST3	Installs SNA Access Method in User Library One
VTMSTRT	Starts up VTAM or VTAME using production libraries

C.0 SAMPLE PUT DIALOGUE

The following pages show an example of a hypothetical application of a PUT. The sample panels shown are reformatted for this document, and may not contain the exact wording of the actual panels. Additional information for most of the panels shown below is available via the online explain panels.

The box at the bottom of each sample panel describes the activity taking place.

This example is for a 4331 using five spindles.

```
                SYSTEM MANAGEMENT: SERVICE MENU                SRV$

   1  APPLY PUT                  Apply Program Update Tape

   2  RESTART PUT                Restart Aborted PUT Run

   3  APPLY SELECTIVE PUT        Apply Selected PUT Features

   4  APPLY PTF                  Apply Program Temporary Fix Tape

   5  APPLY APAR/LOCAL           Apply/Remove Corrective Fix

   6  ARCHIVE FIX                Archive a PTF or an APAR Fix

   7  HISTORY FUNCTION           Select System History File
                                 Function

   8  JCL COMMENTS               Turn JCL comments ON or OFF

   +-------------------------------------------------------------+
   | For this example we select the APPLY PUT function,          |
   | indicating that we want to create the JCL for applying a    |
   | Program Update Tape (PUT) to the system.                    |
   +-------------------------------------------------------------+
```

```
                    APPLY PUT: PRINT PUT DOCUMENT          SRV$PUT2

  If you have not previously printed the PUT documentation, a reply
  of YES below will print the document and/or PTF cross reference.

  If you want to print the PTF coverletters, the dialogue is
  reference from Apply PTF. A reply of YES below will cause the exit
  from this dialogue to the apply PTF panel.

  After you have referenced the document, re-enter the Apply PUT
  dialogue and reply NO to this panel.

  PRINT PUT DOCUMENT      ===> NO          Enter YES to print the
                                           document.

  PRINT XREF              ===> NO          Enter YES to print the
                                           cross reference.

    Enter NO in both fields to continue with APPLY PUT
    dialogue.
```

```
                          JOB DISPOSITION                    SUB$PRO5

JOB NAME                  ===> PUT          Enter the name under
                                            which the job will be
                                            submitted or saved.

POWER PRIORITY            ===> 3            Priority 1-9 for this
                                            job.

POWER CLASS               ===> A            If an asterisk is shown,
                                            no change can be made.

POWER DISPOSITION         ===> D            Enter disposition as
                                            D,H,K, or L.

POWER ACCOUNTING          ===> 07154479     ===> 112979

   This is the standard job submission panel which describes
   the disposition of this job. The information submitted will
   be entered into the VSE/POWER Job statement and into the
   VSE Job statement.  The POWER ACCOUNTING field consists of
   two 8-byte fields which will appear as one contiguous
   16-byte field.
```

```
                    CREATE DIALOGUE FLOW DIAGRAM             SRV$FLO1

A diagram depicting the flow of the JCL produced by this dialogue
can be created.  The flow diagram will be saved as a file with the
name SRV$FLOW.  If you elect to have a flow diagram created, and a
file with the name SRV$FLOW already exists, it will be
overwritten.

CREATE FLOW DIAGRAM       ===> YES          Enter YES to create a
                                            flow diagram describing
                                            the JCL produced by this
                                            dialogue.

   To obtain a flow diagram describing the job stream produced
   by this dialogue, enter YES.  This flow diagram is tailored
   to your particular installation, and to the responses you
   provide within the dialogue.
```

```
                    APPLY PUT: SERVICED COMPONENTS          SRV$DET1


5746     XE8           G13           VSE ADVANCED FUNCTIONS


ANY SERVICE ?          ===> YES          Enter NO if you do not
                                         have any service on the
                                         PUT tape for any of the
                                         above components for
                                         service library A.

  From the documentation sent with the PUT tape, we know what
  components will be serviced. Since there is service for the
  component on this panel, we reply YES.
```

```
                    APPLY PUT: SERVICED COMPONENTS          SRV$DET1

5746 XX 300           N31           CICS/VS


ANY SERVICE ?          ===> NO           Enter NO if you do not
                                         have any service on the
                                         PUT tape for any of the
                                         above components for
                                         service library B.

  Since there is no service for CICS/VS on this PUT, we reply
  NO.
```

```
                    APPLY PUT: SERVICED COMPONENTS          SRV$DET1

  5746 CB 100          032          COBOL
  5746 RG 100          042          RPG II
  5746 SM 200          N83          SORT/MERGE II
  5745 UT 300          G32          VSE/DITTO









  ANY SERVICE ?          ===> YES          Enter NO if you do not
                                           have any service on the
                                           PUT tape for any of the
                                           above components for
                                           service library C.

  +-------------------------------------------------------------+
  | Since there is service for SORT/MERGE II on this PUT, we    |
  | reply YES.                                                  |
  +-------------------------------------------------------------+
```

```
                              BACKUP SYSRES                 SRV$PPT1

  If you do not have a current backup of the system, this activity
  will create one. Enter NO for the tape unit address if you do not
  want a backup.

  TAPE UNIT ADDRESS      ===> 300          Enter address as cuu, or
                                           NO.

  NOTE: The tape unit address supplied above will be used for the
  remainder of this PUT/PTF process.

  +-------------------------------------------------------------+
  | We want to take a backup of the system first, so we entered |
  | the address of the tape drive that we will be using. This   |
  | is defined in our I/O configuration profile table,          |
  | ADM$HDWT, as an 8809 tape drive.                            |
  +-------------------------------------------------------------+
```

```
                        FAST COPY DISK TO TAPE                SRV$FCD1

This activity will create the necessary JCL to fast copy your
SYSWK3 disk volume to tape, and re initialize the volume.  In the
case of non removable DASD, this step may be necessary to provide
the work areas needed for this activity.


FAST COPY VOLUME       ===> YES          Enter NO to omit the copy
                                         step, or YES to perform
                                         the copy.


  Our disk label profile table, ADM$DTAB, indicates that the
  data on this volume will be replaced during the service
  process. Therefore, we press ENTER to create the JCL to
  fast copy the volume to tape and initialize the VTOC. The
  VTOC will be cleared and moved to the SYSRES position on
  the volume.
```

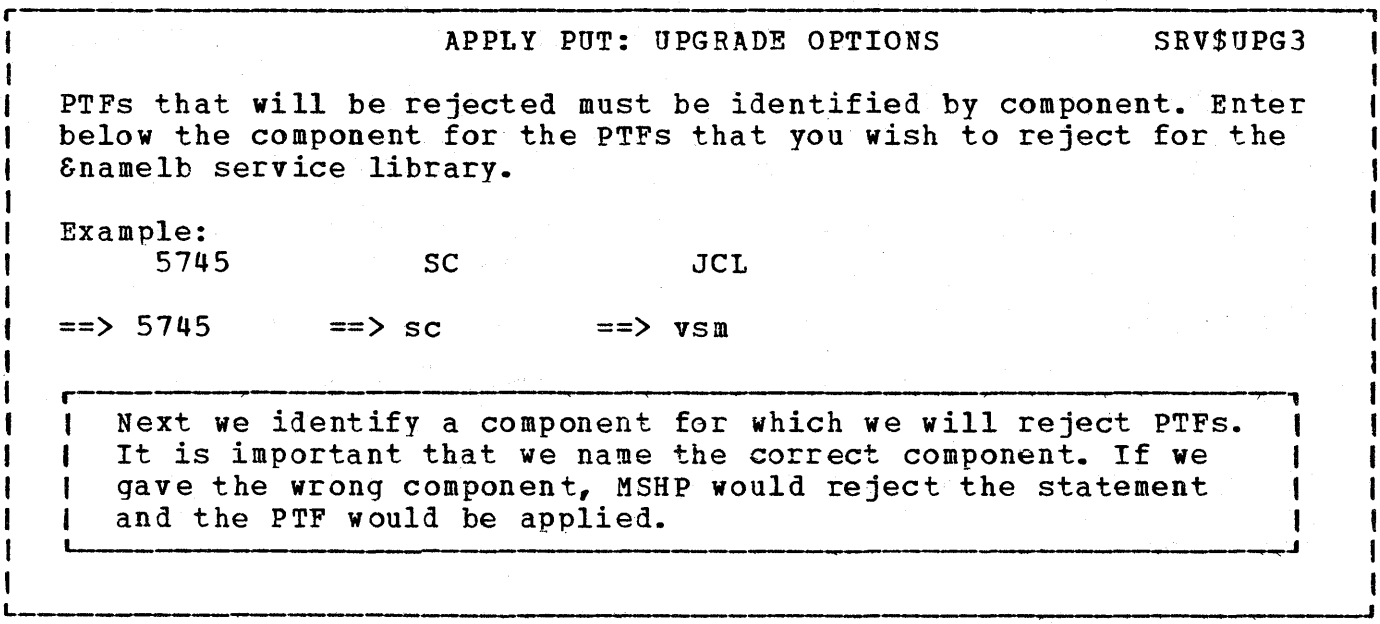
```
                        FAST COPY DISK TO TAPE                SRV$FCD1

This activity will create the necessary JCL to fast copy your
SYSWK4 disk volume to tape, and reinitialize the volume.  In the
case of nonremovable DASD, this step may be necessary to provide
the work areas needed for this activity.


FAST COPY VOLUME       ===> YES          Enter NO to omit the copy
                                         step, or YES to perform
                                         the copy.


  Same as above.
```

```
                    APPLY PUT: FEATURE EXCLUDE              SRV$MPR1

Enter below the numbers of any features that you wish to exclude
from this PUT application.

FEATURE CODE          ===>              Enter CLC number
                                        (EXAMPLE: G13).

FEATURE CODE          ===>              Enter CLC number
                                        (EXAMPLE: G13).

FEATURE CODE          ===>              Enter CLC number
                                        (EXAMPLE: G13).

FEATURE CODE          ===>              Enter CLC number
                                        (EXAMPLE: G13).

This panel will be repeated as long as you continue to make
entries. A blank entry in the list will terminate the list.

  This panel allows exclusion of service for a component or
  feature that is on the PUT tape. Exclusion is accomplished
  by the 3-character code which describes the product. Making
  an entry on this panel will omit the product when the
  libraries are restored from the PUT tape.
```

```
                    RESTORE SERVICE LIBRARIES               SRV$RST1

This panel creates the JCL to restore  your "A" service
library from tape to disk.

You may omit this step if the library is already on disk.

RESTORE LIBRARY A     ===> YES          Enter NO to bypass
                                        restoring service library
                                        A.

  We do not keep the service libraries on disk, so we must
  restore them from tape. After updating them with the PTFs
  from the PUT, we will back them up to tape for later use.
```

```
                    APPLY PUT: UPGRADE OPTIONS          SRV$UPG1

Your "A" service libraries will be updated by MSHP. If you
wish to reject an individual PTF, or all the PTFs for a component,
or create backout PTFs, reply YES below in the appropriate field.

EXCLUDE COMPONENTS     ===> YES          Enter YES to exclude
                                         components.

REJECT PTFS            ===> YES          Enter YES to reject PTFs.

REVOKABLE              ===> NO           Enter YES to create
                                         backout PTFs.

If you replied YES to Exclude Components or Reject PTFs, a detail
panel requesting the component ID and the PTF number will be
presented next.

  Just to show you what the panels look like, we have entered
  YES to both the EXCLUDE COMPONENTS and REJECT PTFS entries.
  Normally, we would not reject any PTFs or exclude any
  components unless directed to do so by the Customer Support
  Center.
```

```
                    APPLY PUT: UPGRADE OPTIONS          SRV$UPG2

Enter below the IDs of the components that you wish to exclude.

Example:
     5745          SC            JCL

==> 5745       ==> sc        ==> sup

This panel will be repeated as long as you continue to make
entries.

  Here we show that we do not want to apply any service for
  the supervisor component. This would really be an
  exceptional incident.  Normally, you would want to apply
  service for all components, because the total service has
  been tested together as a package.
```


APPLY PUT: UPGRADE OPTIONS SRV$UPG3
PTFs that will be rejected must be identified by component. Enter below the component for the PTFs that you wish to reject for the &namelb service library.
Example:
5745 SC JCL
==> 5745 ==> sc ==> vsm
Next we identify a component for which we will reject PTFs. It is important that we name the correct component. If we gave the wrong component, MSHP would reject the statement and the PTF would be applied.

```
                    APPLY PUT: UPGRADE OPTIONS              SRV$UPG4

Enter below the numbers of the PTFs for component 5745-SC-VSM
which you do not want applied to your system.

PTF NUMBER              ===> UD16445      Enter PTF number
                                          (EXAMPLE: UD12345).

PTF NUMBER              ===> UD16488      Enter PTF number
                                          (EXAMPLE: UD12345).

PTF NUMBER              ===>              Enter PTF number
                                          (EXAMPLE: UD12345).

PTF NUMBER              ===>              Enter PTF number
                                          (EXAMPLE: UD12345).

PTF NUMBER              ===>              Enter PTF number
                                          (EXAMPLE: UD12345).

This panel will be repeated as long as you continue to make
entries. A blank as the last entry in the list will terminate the
list.
```

Now we enter the PTF numbers for VSAM that we will be rejecting. This would happen when there were known problems with the PTFs, and we did not want to apply them to our system.

```
                    APPLY PUT: UPGRADE OPTIONS              SRV$UPG5

You may reject PTFs for components other than 5745-SC-VSM.
However, the rejected PTFs must be for the "A" service
libraries.

1  ADDITIONAL COMPONENTS            Select this item if you have
                                    more PTFs to reject.

2  CONTINUE                         Select this item to continue
                                    with the upgrade.

   If there were PTFs for other components we would select
   number 1.  Because we do not have any others to reject, we
   selected CONTINUE.
```

```
                VSE SUPERVISOR: GENERATION OPTIONS          TSA$GEN1
The VSE/Advanced Functions supervisor assembly will generate a
jobstream with OPTION NOXREF and PRINT NOGEN.  OPTION XREF causes
the assembler to print the symbolic cross reference. The PRINT GEN
instruction will print all statements generated by the processing
of a macro instruction.  OPTION NOXREF suppresses the printing of
the symbolic cross reference.  PRINT NOGEN suppresses printing of
the statements generated by the processing of macro instructions.
If you want a full listing (OPTION XREF and PRINT GEN), enter YES.

FULL LISTING          ===> NO       Generate full listing for
                                    supervisor assembly.
                                    Enter YES or NO.

NOTE: A full listing produces a large amount of paper. It is
normally used for debugging.
```

```
                    BACKUP SERVICE LIBRARIES              SRV$BKP1

This panel creates the JCL to back up your "A"  service library
from disk to tape.

You may omit this step if you are going to keep the library on
disk.

BACKUP LIBRARY A       ===> YES          Enter NO to omit backing
                                         up service library A.

 ┌──────────────────────────────────────────────────────────────┐
 | We have now produced all of the JCL and MSHP control        |
 | statements necessary to apply service to the service A       |
 | libraries. We will now create the JCL to back up the         |
 | libraries to tape. Just to be on the safe side, it is best   |
 | to use a physical tape other than the one that previously    |
 | contained the libraries. That way, if anything goes wrong    |
 | you will still have the old tape available.                  |
 └──────────────────────────────────────────────────────────────┘
```

```
                    RESTORE SERVICE LIBRARIES             SRV$RST1

This panel creates the JCL to restore  your "C"  service
library from tape to disk.

You may omit this step if the library is already on disk.

RESTORE LIBRARY C      ===> YES          Enter NO to bypass
                                         restoring service library
                                         C.

 ┌──────────────────────────────────────────────────────────────┐
 | This panel shows that we are now going to restore the        |
 | service library for C.                                       |
 └──────────────────────────────────────────────────────────────┘
```

```
                    APPLY PUT: UPGRADE OPTIONS              SRV$UPG1

Your "C" service libraries will be updated by MSHP. If you
wish to reject an individual PTF, or all the PTFs for a component,
or create backout PTFs, reply YES below in the appropriate field.

EXCLUDE COMPONENTS     ===> NO          Enter YES to exclude
                                        components.

REJECT PTFS            ===> NO          Enter YES to reject PTFs.

REVOKABLE              ===> NO          Enter YES to create
                                        backout PTFs.

If you replied YES to Exclude Components or Reject PTFs, a detail
panel requesting the component ID and the PTF number will be
presented next.

  This is a normal case and we do not want to exclude any
  components or reject any PTFs.
```

```
                    BACKUP SERVICE LIBRARIES                SRV$BKP1

This panel creates the JCL to back up your "C"  service library
from disk to tape.

You may omit this step if you are going to keep the library on
disk.

BACKUP LIBRARY C       ===> YES         Enter NO to omit backing
                                        up service library C.

  As before with the service libraries A, we now back up the
  service libraries C.
```

```
                        FAST COPY TAPE TO DISK                SRV$FCT1

Because you copied disk volume SYSWK2  to tape, this panel
will create the necessary JCL to recreate  your disk volume from
tape.

FAST COPY TAPE          ===> YES          Enter YES to copy the
                                          tape to disk, or NO to
                                          bypass this step.

This panel will be repeated for the number of volumes that you've
previously copied.

  We previously fast copied this volume to tape so we will
  now create the JCL to restore it from tape.
```

```
                        FAST COPY TAPE TO DISK                SRV$FCT1

Because you copied disk volume SYSWK3 to tape, this panel
will create the necessary JCL to recreate  your disk volume from
tape.

FAST COPY TAPE          ===> YES          Enter YES to copy the
                                          tape to disk, or NO to
                                          bypass this step.

This panel will be repeated for the number of volumes that you've
previously copied.

  Same as above.
```

The following is a sample of the corrective service activities. Panels that involve the backup and restore of the service libraries depend on the system being used, and if the libraries are online. Panels that inquire as to whether or not you want to FAST COPY off and back volumes depend on what information you have stored on those volumes.

Job submission panels are not shown. They require no additional input except to rename some JOB NAMEs to produce job streams with unique names.

```
                    SYSTEM MANAGEMENT: SERVICE MENU                SRV$

   1  APPLY PUT                    Apply Program Update Tape

   2  RESTART PUT                  Restart Aborted PUT Run

   3  APPLY SELECTIVE PUT          Apply Selected PUT Features

   4  APPLY PTF                    Apply Program Temporary Fix Tape

   5  APPLY APAR/LOCAL             Apply/Remove Corrective Fix

   6  ARCHIVE FIX                  Archive a PTF or an APAR Fix

   7  HISTORY FUNCTION             Select System History File
                                   Function

   8  JCL COMMENTS                 Turn JCL comments ON or OFF

   The selection of number 5 will take us to the APAR/LOCAL
   service menu.
```

```
            SERVICE: APPLY APAR/LOCAL FUNCTION SELECTION     SRV$5

If you are going to apply a corrective APAR/LOCAL fix to the
relocatable or source libraries, it will be necessary to first
select the PRE SERVICE function.  After it has completed, you may
then select the CORRECTIVE SERVICE function.  When you have
finished with the corrective service function, select POST SERVICE
to restore your system to normal.

 1  PRE SERVICE                 Create JCL to prepare the system
                                for applying corrective service.

 2  CORRECTIVE SERVICE          Go to the menu panel for affected
                                library selection.

 3  POST SERVICE                Create JCL to merge libraries and
                                restore system to production.

  Select number 1.  The following panels will generate the
  JCL to perform the preprocessing required for corrective
  service.  It will produce a job stream named PRESRV.
```

```
                          BACKUP SYSRES                  SRV$PPT1

If you do not have a current backup of the system, this activity
will create one. Enter NO for the tape unit address if you do not
want a backup.

TAPE UNIT ADDRESS      ===> 300          Enter address as cuu, or
                                         NO.

NOTE: The tape unit address supplied above will be used for the
remainder of this activity.

  Enter the address of the actual tape drive that you will
  use. The tape drive must be defined in the ADM$HDWT
  hardware table.
```

```
                        TAPE UNIT ADDRESS                    SRV$FCD2

This activity may require the use of a tape drive.  Enter the
address of a tape unit that may be used.

TAPE UNIT ADDRESS      ===> 300          Enter as cuu.

  This panel is displayed only if you do not want a backup of
  your system.
```

```
                      FAST COPY DISK TO TAPE                 SRV$FCD1

This activity will create the necessary JCL to fast copy your
SYSWK2 disk volume to tape, and re initialize the volume.  In the
case of non removable DASD, this step may be necessary to provide
the work areas needed for this activity.

FAST COPY VOLUME       ===> YES          Enter NO to omit the copy
                                         step, or YES to perform
                                         the copy.

  This panel is only displayed for DASD device types of 3310,
  3330, or 3340.  It may be repeated for SYSWK3.
```

```
                          COMPONENT ID                    SRV$PTF2

Enter the component identifier for the component to receive the
fixes.

Example:
     5745          SC            JCL

==> 5745      ==> SC        ==> SUP

  Here we enter the component identifier. These identifiers
  are listed starting on page 327. For this example we show a
  change in the supervisor.
```

```
                APPLY APAR/LOCAL: ADDITIONAL LIBRARY      SRV$APR2
You are going to restore library A for component
5745-SC-SUP.  If you require another service library,
select the library from the list below.

1  NO ADDITIONAL LIBRARY            Select to continue with only
                                    library A.

2  SERVICE LIBRARY                  B

3  SERVICE LIBRARY                  C

4  SERVICE LIBRARY                  E

5

6

7
```

A unique feature of this function is the ability to restore an additional service library. A dynamic panel is built based on the component ID you supply and the number of service libraries that exist on your system. Selection number 3 as shown above would restore service library C as well as A. However, when the libraries are backed up to tape, only service library A may be backed up.

In this instance only service library A is needed, but we selected service library C just as an example.

```
                    RESTORE SERVICE LIBRARIES              SRV$RST1

This panel creates the JCL to restore your "A"  service library
from tape to disk.

You may omit this step if the library is already on disk.

RESTORE LIBRARY A      ===> YES          Enter NO to bypass
                                         restoring service library
                                         A.

  This panel is presented because service library A is where
  5745-SC-SUP resides.
```

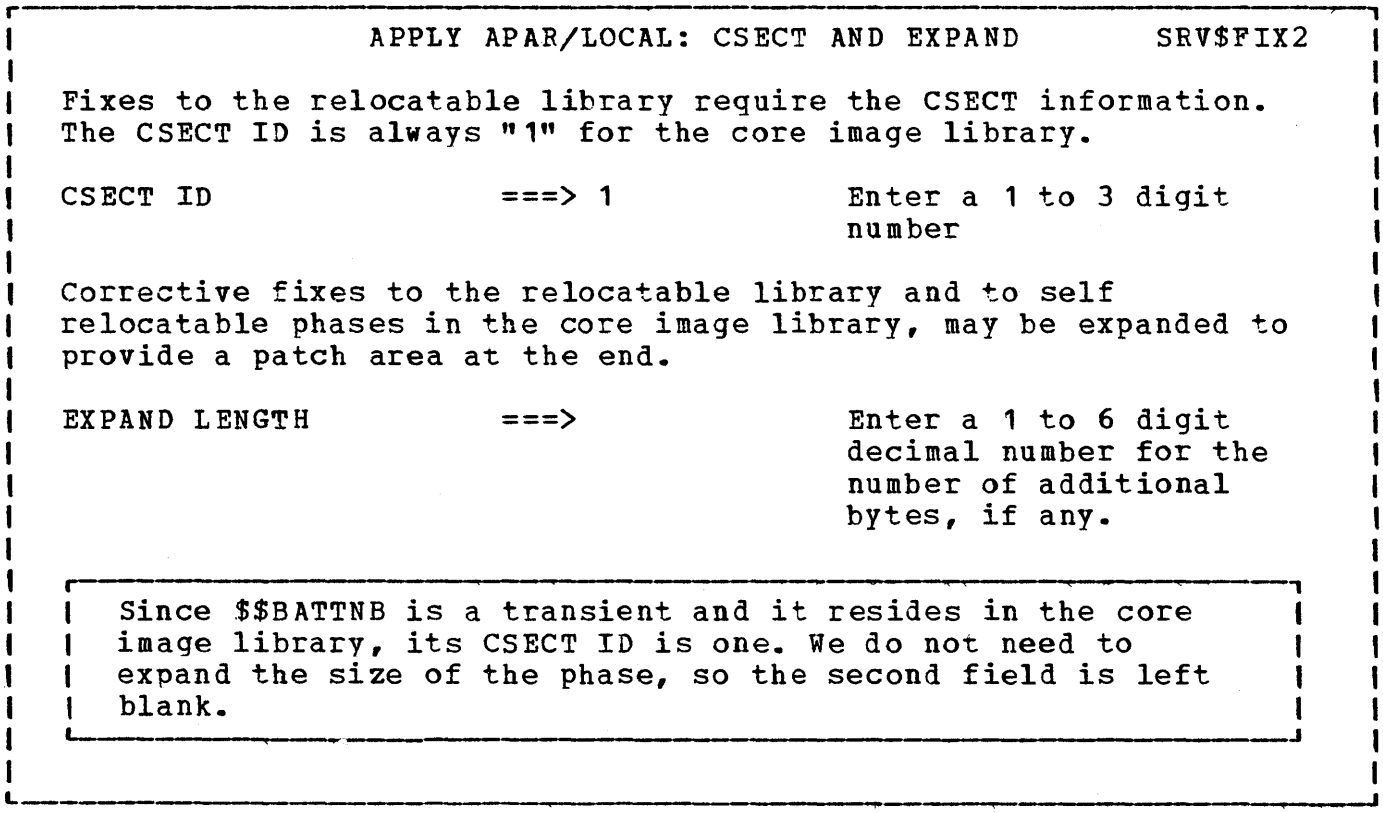
```
                    RESTORE SERVICE LIBRARIES              SRV$RST1

This panel creates the JCL to restore your "C"  service library
from tape to disk.

You may omit this step if the library is already on disk.

RESTORE LIBRARY C      ===> YES          Enter NO to bypass
                                         restoring service library
                                         C.

  This panel is presented because we selected 3 back on panel
  SRV$APR2.
```

```
          SERVICE: APPLY APAR/LOCAL FUNCTION SELECTION     SRV$5

If you are going to apply a corrective APAR/LOCAL fix to the
relocatable or source libraries, it will be necessary to first
select the PRE SERVICE function.  After it has completed, you may
then select the CORRECTIVE SERVICE function.  When you have
finished with the corrective service function, select POST SERVICE
to restore your system to normal.

 1  PRE SERVICE                 Create JCL to prepare the system
                                for applying corrective service.

 2  CORRECTIVE SERVICE          Go to the menu panel for affected
                                library selection.

 3  POST SERVICE                Create JCL to merge libraries and
                                restore system to production.

 ┌──────────────────────────────────────────────────────────────┐
 │ Select number 2.  Preservice has now completed, and we       │
 │ select the corrective service function to actually apply     │
 │ the service.                                                 │
 └──────────────────────────────────────────────────────────────┘
```

```
          SERVICE: APPLY APAR/LOCAL LIBRARY SELECTION     SRV$52

MSHP will apply or remove corrective APAR/LOCAL fixes to one type
of library at a time. Select from the list below the lowest level
library you want a fix applied to.

  1  ALTER CORE IMAGE          Core image library corrective fix

  2  ALTER RELOCATABLE         Relocatable library corrective fix

  3  ALTER SOURCE              Source statement library
                               corrective fix

  4  UNDO CORE IMAGE           Remove core image library
                               corrective fix.

  5  UNDO RELOCATABLE          Remove relocatable library
                               corrective fix.

  ┌──────────────────────────────────────────────────────────┐
  | First we will show the application of a change to a member |
  | in the core image library. Actually, we did not need to  |
  | previously run preservice for this step. However, the    |
  | output from preservice will be used in a later step.     |
  └──────────────────────────────────────────────────────────┘
```

```
                APPLY APAR/LOCAL: CORRECT MSHP STATEMENT    SRV$FIX1

  The information requested below will identify the component that
  the corrective fix is for, and the APAR/LOCAL fix number assigned
  to the fix.

  APAR/LOCAL NUMBER      ===> ##07021      Enter a 2 character
                                           prefix followed by a 5
                                           digit number.

  REVOKABLE              ===> YES          Do you want to be able to
                                           remove the fix ?

  Enter the affected component. Example:
       5745           SC             JCL

  ==> 5745       ==> SC         ==> AIT

  ┌──────────────────────────────────────────────────────────────┐
  │ Here we indicate the LOCAL fix number and that we wish to    │
  │ have the fix revokable. By having it revokable we will be    │
  │ able to remove it via the undo dialogue. We also indicate    │
  │ that we will service the attention, initiator, terminator    │
  │ component.                                                   │
  └──────────────────────────────────────────────────────────────┘
```

```
                APPLY APAR/LOCAL: AFFECTS MSHP STATEMENT    SRV$FIXD

  The information requested below will identify the PHASE that the
  corrective fix is for. In the case of a macro, enter the
  sublibrary prefix.

  AFFECTED MEMBER        ===> $$BATTNB     Enter the PHASE that
                                           will be affected by this
                                           corrective fix.

  SUBLIBRARY PREFIX      ===>              For macros, enter the
                                           sublibrary prefix.

  ┌──────────────────────────────────────────────────────────────┐
  │ The member that we are going to change in the core image     │
  │ library is named $$BATTNB. We leave the second field blank   │
  │ as it only pertains to macros.                               │
  └──────────────────────────────────────────────────────────────┘
```


APPLY APAR/LOCAL: CSECT AND EXPAND SRV$FIX2
Fixes to the relocatable library require the CSECT information.
The CSECT ID is always "1" for the core image library.
CSECT ID ===> 1
Enter a 1 to 3 digit number
Corrective fixes to the relocatable library and to self relocatable phases in the core image library, may be expanded to provide a patch area at the end.
EXPAND LENGTH ===>
Enter a 1 to 6 digit decimal number for the number of additional bytes, if any.
Since $$BATTNB is a transient and it resides in the core image library, its CSECT ID is one. We do not need to expand the size of the phase, so the second field is left blank.

```
                APPLY APAR/LOCAL: MSHP ALTER STATEMENT     SRV$FIX3

  This panel will be repeated until you reply /END in the address
  field.

  RELATIVE ADDRESS       ===> D6          Enter a 1 to 6 digit hex
                                          number where the new text
                                          will replace the old
                                          text.

  VERIFY OLD TEXT        ===> C1C7C54B    Enter the hex data which
                                          is currently at the
                                          relative address entered
                                          above.

  REPLACEMENT NEW TEXT   ===> E24B4040    Enter the new hex data
                                          which is to replace the
                                          old text.

    The relative address is the displacement from the start of
    the phase to where the data is located. In the case of
    transients, which are always link-edited to zero, this is
    easy as it is also the absolute address. We show the
    address as 0000D6. Left zeros are not required.  The old
    data to be found at that address is given first and then
    the replacement data.
```

```
                APPLY APAR/LOCAL: MSHP ALTER STATEMENT     SRV$FIX3

This panel will be repeated until you reply /END in the address
field.

RELATIVE ADDRESS       ===> /END          Enter a 1 to 6 digit hex
                                          number where the new text
                                          will replace the old
                                          text.

VERIFY OLD TEXT        ===>               Enter the hex data which
                                          is currently at the
                                          relative address entered
                                          above.

REPLACEMENT NEW TEXT   ===>               Enter the new hex data
                                          which is to replace the
                                          old text.

  When the panel displayed, it had DA in the relative address
  field. The address is automatically incremented based on
  the number of bytes entered in the previous panel. In this
  case, we have no more data so we enter /END.
```

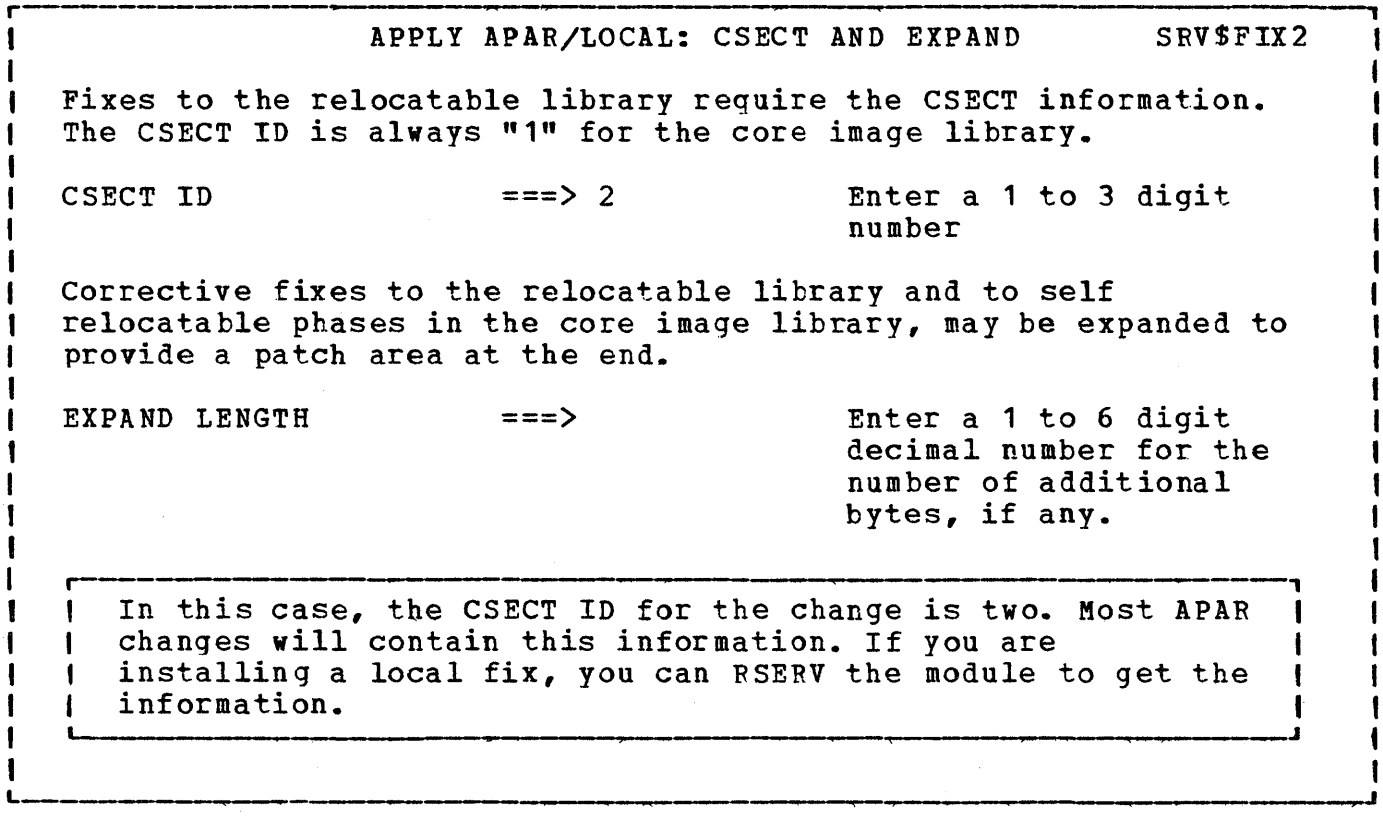
```
            APPLY APAR/LOCAL: ADDITIONAL PHASES/MODULES   SRV$FIXF

You may change additional PHASEs for ##07021. If this fix is
for the relocatable library, all additional modules must be link
edited by the same link book.

ADDITIONAL PHASE       ===> NO            Enter YES if you have
                                          additional PHASEs.

  If we had additional phases to change, we would reply YES
  in the field shown.  Since we do not, we take the default
  of NO.
```

```
                APPLY APAR/LOCAL: MSHP RESOLVES STATEMENT    SRV$FIX4

   The MSHP resolves statement will put a comment in the history
   file pertaining to the change you are making.

   Its use is option, you may press enter without making
   any entries.

   Enter your comment below within single quotes. Only 37 bytes
   are permitted.

   Example:
    'This is a corrective fix to ijbjc2'

             1         2         3      3
    1        0         0         0      7

   'This is a local fix to $$BATTNB'

     The information entered will be placed into the history
     file and shown when executing an MSHP LOOKUP command. Be
     sure to enter the single quotes around the comment. There
     is no way that the Interactive Productivity Facility can
     check to see if the quotes are missing. However, MSHP will
     check, and the job will fail if they are missing.

     Note: There is no dialogue support for the MSHP LOOKUP
     command. Its use is documented in the MSHP Users Guide
     (SC33-6101). It is basically an interactive command and
     prints the output on SYSLOG.
```

```
          SERVICE: APPLY APAR/LOCAL LIBRARY SELECTION     SRV$52

MSHP will apply or remove corrective APAR/LOCAL fixes to one type
of library at a time. Select from the list below the lowest level
library you want a fix applied to.

 1  ALTER CORE IMAGE            Core image library corrective fix

 2  ALTER RELOCATABLE           Relocatable library corrective fix

 3  ALTER SOURCE                Source statement library
                                corrective fix

 4  UNDO CORE IMAGE             Remove core image library
                                corrective fix.

 5  UNDO RELOCATABLE            Remove relocatable library
                                corrective fix.

  Now we will show an example of applying a local fix to the
  relocatable library.
```

```
                APPLY APAR/LOCAL: CORRECT MSHP STATEMENT    SRV$FIX1

The information requested below will identify the component that
the corrective fix is for, and the APAR/LOCAL fix number assigned
to the fix.

APAR/LOCAL NUMBER       ===> ##09001       Enter a 2 character
                                           prefix followed by a 5
                                           digit number.

REVOKABLE               ===> YES           Do you want to be able to
                                           remove the fix ?

Enter the affected component. Example:
     5745           SC             JCL

==> 5745       ==> SC         ==> JCL

  We enter the local fix number (all local fixes start with
  ##), and again say that the fix is revokable.

  Note: Generally, you will always want to have the fixes
  revokable so in case things do not go well, you can back
  them off. However, you should also have a standalone backup
  of the system.
```

```
                APPLY APAR/LOCAL: AFFECTS MSHP STATEMENT    SRV$FIXD

The information requested below will identify the MODULE that the
corrective fix is for. In the case of a macro, enter the
sublibrary prefix.

AFFECTED MEMBER         ===> IJBJC3        Enter the MODULE that
                                           will be affected by this
                                           corrective fix.

SUBLIBRARY PREFIX       ===>               For macros, enter the
                                           sublibrary prefix.

  Here we identify the member in the relocatable library as
  IJBJC3.
```


APPLY APAR/LOCAL: CSECT AND EXPAND SRV$FIX2
Fixes to the relocatable library require the CSECT information.
The CSECT ID is always "1" for the core image library.
CSECT ID ===> 2
Enter a 1 to 3 digit number
Corrective fixes to the relocatable library and to self relocatable phases in the core image library, may be expanded to provide a patch area at the end.
EXPAND LENGTH ===>
Enter a 1 to 6 digit decimal number for the number of additional bytes, if any.
In this case, the CSECT ID for the change is two. Most APAR changes will contain this information. If you are installing a local fix, you can RSERV the module to get the information.

```
                APPLY APAR/LOCAL: MSHP ALTER STATEMENT     SRV$FIX3

This panel will be repeated until you reply /END in the address
field.

RELATIVE ADDRESS        ===> 65E          Enter a 1 to 6 digit hex
                                          number where the new text
                                          will replace the old
                                          text.

VERIFY OLD TEXT         ===> 40D9C5C1     Enter the hex data which
                                          is currently at the
                                          relative address entered
                                          above.

REPLACEMENT NEW TEXT    ===> 40C1E5C1     Enter the new hex data
                                          which is to replace the
                                          old text.

  This is the same panel as used for the example above.
```

```
                APPLY APAR/LOCAL: MSHP ALTER STATEMENT     SRV$FIX3

This panel will be repeated until you reply /END in the address
field.

RELATIVE ADDRESS        ===> 662          Enter a 1 to 6 digit hex
                                          number where the new text
                                          will replace the old
                                          text.

VERIFY OLD TEXT         ===> C4E8         Enter the hex data which
                                          is currently at the
                                          relative address entered
                                          above.

REPLACEMENT NEW TEXT    ===> C9D3         Enter the new hex data
                                          which is to replace the
                                          old text.

  We have additional data, so we enter it. Since it is
  contiguous with the previous data, the location is updated
  automatically and we do not have to change it.
```

```
                APPLY APAR/LOCAL: MSHP ALTER STATEMENT     SRV$FIX3

  This panel will be repeated until you reply /END in the address
  field.

  RELATIVE ADDRESS        ===> /END          Enter a 1 to 6 digit hex
                                             number where the new text
                                             will replace the old
                                             text.

  VERIFY OLD TEXT         ===>               Enter the hex data which
                                             is currently at the
                                             relative address entered
                                             above.

  REPLACEMENT NEW TEXT    ===>               Enter the new hex data
                                             which is to replace the
                                             old text.

    The address was updated to 664 since we only entered 2
    bytes of data in the previous panel. We have completed the
    changes so we enter /END.
```

```
              APPLY APAR/LOCAL: ADDITIONAL PHASES/MODULES   SRV$FIXF

  You may change additional MODULEs for ##09001. If this fix is
  for the relocatable library, all additional modules must be link
  edited by the same link book.

  ADDITIONAL MODULE       ===> NO            Enter YES if you have
                                             additional MODULEs.
```

```
                APPLY APAR/LOCAL: INVOLVES MSHP STATEMENT    SRV$FIXE

The information requested below will identify the linkedit book
required to linkedit the corrective fix into the core image
library.

INCLUDE LINK BOOK      ===> IJBJC        Enter the name of the
                                         link book that will
                                         linkedit this fix or
                                         press enter if there is
                                         no linkedit required.

  The module we changed must be link-edited into the core
  image library to become effective. IJBJC is the name of the
  link book that includes all of the necessary linkedit
  statements.
```

```
                APPLY APAR/LOCAL: MSHP RESOLVES STATEMENT    SRV$FIX4

The MSHP resolves statement will put a comment in the history
file pertaining to the change you are making.

Its use is option, you may press enter without making
any entries.

Enter your comment below within single quotes. Only 37 bytes
are permitted.

Example:
 'This is a corrective fix to ijbjc2'

          1         2         3      3
 1        0         0         0      7

 'This is a corrective fix to IJBJC3'
```

```
                SERVICE: APPLY APAR/LOCAL LIBRARY SELECTION     SRV$52

  MSHP will apply or remove corrective APAR/LOCAL fixes to one type
  of library at a time. Select from the list below the lowest level
  library you want a fix applied to.

   1  ALTER CORE IMAGE              Core image library corrective fix

   2  ALTER RELOCATABLE             Relocatable library corrective fix

   3  ALTER SOURCE                  Source statement library
                                    corrective fix

   4  UNDO CORE IMAGE               Remove core image library
                                    corrective fix.

   5  UNDO RELOCATABLE              Remove relocatable library
                                    corrective fix.

     Next we will show an example of updating books in the
     source statement library.
```

```
                APPLY APAR/LOCAL: CORRECT MSHP STATEMENT    SRV$FIX1

  The information requested below will identify the component that
  the corrective fix is for, and the APAR/LOCAL fix number assigned
  to the fix.

  APAR/LOCAL NUMBER      ===> ##08022      Enter a 2 character
                                           prefix followed by a 5
                                           digit number.

  REVOKABLE              ===> YES          Do you want to be able to
                                           remove the fix ?

  Enter the affected component. Example:
       5745           SC             JCL

  ==> 5745       ==> SC         ==> SUP
```

```
                APPLY APAR/LOCAL: AFFECTS MSHP STATEMENT    SRV$FIXD

The information requested below will identify the MACRO that the
corrective fix is for. In the case of a macro, enter the
sublibrary prefix.

AFFECTED MEMBER        ===> CCB          Enter the MACRO that
                                         will be affected by this
                                         corrective fix.

SUBLIBRARY PREFIX      ===> E            For macros, enter the
                                         sublibrary prefix.

  Here we indicate that we are going to update the E.CCB
  macro.
```

```
                  APPLY APAR/LOCAL: SOURCE SELECTION       SRV$FIX5

Select from the list below the next statement that you want for
inclusion in your corrective fix to the source statement library.

1  VERIFY                          Verify existing data.

2  INSERT                          Insert new data.

3  REPLACE                         Replace existing data with
                                   new.

4  DELETE                          Delete existing data.

5  NEW MACRO                       Change an additional macro.

6  CONTINUE                        Finish processing.

  First we will verify a location with in the macro to make
  sure that we will be updating the correct information.
```

```
                APPLY APAR/LOCAL: VERIFY LOCATION          SRV$FIX6

In updating E.macros in the source statement library, you may
verify the location of a statement. This would insure that the
macro is at the level that you expect. Enter the sequence number
for the statement that you wish to verify. You may specify a base
number, and then in the VERIFY INCREMENT field, give a relative
increment to the base number. The sequence numbers are in cols 73
to 78.

VERIFY LOCATION        ===> 260000       Enter a 1 to 6 digit
                                         number.

VERIFY INCREMENT       ===>              Enter a 1 to 2 digit
                                         number, or leave blank.

Note: There are examples of the use of verify on the explain
panel.

  260000 is the sequence number in the macro in columns 73 -
  78.
```

```
                APPLY APAR/LOCAL: VERIFY DATA                SRV$FIX7

Enter the statement that you expect to find at location
260000 + 0.

The statement you enter must correspond to the original, column
by column.

You need not enter the entire statement, truncation occurs to
the right.

Example:
 CLEAR    SR    R0,R0

          1     1   2         3         4         5         6
 1        0     6   0         0         0         0         0
 &CLASS   SETA  255
```

Here we enter the statement that we expect to find at location 260000. The columns are critical. If we entered the 255 in column 17 instead of 16, the verify would fail.

```
                APPLY APAR/LOCAL: SOURCE SELECTION        SRV$FIX5

Select from the list below the next statement that you want for
inclusion in your corrective fix to the source statement library.

1  VERIFY                          Verify existing data.

2  INSERT                          Insert new data.

3  REPLACE                         Replace existing data with
                                   new.

4  DELETE                          Delete existing data.

5  NEW MACRO                       Change an additional macro.

6  CONTINUE                        Finish processing.

   Now that we have verified the correct level of the macro,
   we will now add a new statement.
```

```
                APPLY APAR/LOCAL: INSERT LOCATION          SRV$FIX8

This panel identifies the location in the macro where you wish to
add additional lines, and the number of lines to add.  The
statements will be added after the sequence number you supply in
the field INSERT LOCATION.  For E.macros you may supply an offset,
as an increment to the INSERT LOCATION, in the field INSERT
INCREMENT.  The sequence numbers are in cols 73   78.

INSERT LOCATION        ===> 420000       Enter a 1 - 6 digit
                                         number.

INSERT INCREMENT       ===>              Enter a 1 - 2 digit
                                         number, or leave blank.

NUMBER ADDITIONAL      ===> 1            Enter the number of
                                         additional lines that you
                                         wish to add after the
                                         location identified
                                         above.

  We are going to add one statement directly after the
  existing statement numbered 420000. Actually, what we are
  doing is poor practice. We should have verified statement
  420000 rather than 260000 since there could have been
  statements added between 260000 and 420000, and then our
  update would be incorrect.
```

```
                APPLY APAR/LOCAL: INSERT DATA              SRV$FIX9

 Enter a statement that you wish to add.

 Example:
  INCR1    LA    R1,255(R1)     INCREMENT R1 BY 255

           1     1   2          3          4          5          6
  1        0     6   0          0          0          0          0
           MNOTE 3,'THE THIRD OPERAND IS INVALID'

  The MNOTE is the statement that we are adding.
```

```
                APPLY APAR/LOCAL: SOURCE SELECTION        SRV$FIX5

Select from the list below the next statement that you want for
inclusion in your corrective fix to the source statement library.

1  VERIFY                          Verify existing data.

2  INSERT                          Insert new data.

3  REPLACE                         Replace existing data with
                                   new.

4  DELETE                          Delete existing data.

5  NEW MACRO                       Change an additional macro.

6  CONTINUE                        Finish processing.

   Next we will replace an existing statement with a new one.
```

```
                APPLY APAR/LOCAL: REPLACE LOCATION        SRV$FIXA

This panel identifies the location in the macro of lines you wish
to replace. If it is a single line, enter it in the REPLACE TO
field.  For E.macros you may supply an offset, as an increment to
the FROM or TO locations, in the field FROM/TO OFFSET.  The
sequence numbers are in cols 73 - 78.

REPLACE FROM            ===>              Enter a 1 to 6 digit
                                          number.

REPLACE FROM OFFSET     ===>              Enter a 1 to 2 digit
                                          number increment, or
                                          leave blank.  blank.
REPLACE TO              ===> 340000       Enter a 1 to 6 digit
                                          number.

REPLACE TO OFFSET       ===>              Enter a 1 to 2 digit
                                          number increment, or
                                          leave blank.
NUMBER REPLACEMENT      ===> 1            Enter the number of
                                          replacement lines that
                                          you wish to input as
                                          replacement for the lines
                                          identified above.

  We are going to replace line number 340000. This panel
  provides a lot of flexibility. It allows you to replace a
  range of statements with one or more statements, and
  replace a single statement with one or more statements.
```

```
                APPLY APAR/LOCAL: REPLACEMENT DATA        SRV$FIX8

 Enter a statement that you wish to use as a replacement.

 Example:
  REPL1    SR    R1,R1          CLEAR REGISTER 1

           1     1   2          3          4          5          6
  1        0     6   0          0          0          0          0
           MNOTE 0,'THERE IS A POSSIBLE ERROR'

 ┌──────────────────────────────────────────────────────────────┐
 │ Here we replace the existing MNOTE with the one shown        │
 │ above.                                                       │
 └──────────────────────────────────────────────────────────────┘
```

```
                APPLY APAR/LOCAL: SOURCE SELECTION        SRV$FIX5

 Select from the list below the next statement that you want for
 inclusion in your corrective fix to the source statement library.

 1  VERIFY                          Verify existing data.

 2  INSERT                          Insert new data.

 3  REPLACE                         Replace existing data with
                                    new.

 4  DELETE                          Delete existing data.

 5  NEW MACRO                       Change an additional macro.

 6  CONTINUE                        Finish processing.

 ┌──────────────────────────────────────────────────────────────┐
 │ Next we will delete a statement.                             │
 └──────────────────────────────────────────────────────────────┘
```

```
                APPLY APAR/LOCAL: DELETE LOCATION          SRV$FIXC

This panel identifies the location in the macro of lines you wish
to delete. If it is a single line, enter it in the DELETE TO
field.  For E.macros you may supply an offset, as an increment to
the FROM or TO locations, in the field FROM/TO OFFSET.  The
sequence numbers are in cols 73 to 78.

DELETE FROM            ===>                 Enter a 1 to 6 digit
                                            number.

DELETE FROM OFFSET     ===>                 Enter a 1 to 2 digit
                                            number increment, or
                                            leave blank.  blank.
DELETE TO              ===> 430000          Enter a 1 to 6 digit
                                            number.

DELETE TO OFFSET       ===>                 Enter a 1 to 2 digit
                                            number increment, or
                                            leave blank.

  Above, we added a statement after statement 420000. Now we
  delete statement 430000. We could have used the replace
  function and specified 430000. It would have accomplished
  the same thing.
```

```
                APPLY APAR/LOCAL: MSHP RESOLVES STATEMENT    SRV$FIX4

  The MSHP resolves statement will put a comment in the history
  file pertaining to the change you are making.

  Its use is option, you may press enter without making
  any entries.

  Enter your comment below within single quotes. Only 37 bytes
  are permitted.

  Example:
   'This is a corrective fix to ijbjc2'

            1         2         3      3
   1        0         0         0      7

   'This is a corrective fix to E.CCB'
```

```
                  APPLY APAR/LOCAL: SOURCE SELECTION       SRV$FIX5

  Select from the list below the next statement that you want for
  inclusion in your corrective fix to the source statement library.

  1  VERIFY                          Verify existing data.

  2  INSERT                          Insert new data.

  3  REPLACE                         Replace existing data with
                                     new.

  4  DELETE                          Delete existing data.

  5  NEW MACRO                       Change an additional macro.

  6  CONTINUE                        Finish processing.

     We have finished with E.CCB. If we had another macro to
     change for this APAR/LOCAL fix, we would select 5. We do
     not, so we select 6 to continue processing.
```

```
          SERVICE: APPLY APAR/LOCAL LIBRARY SELECTION     SRV$52

MSHP will apply or remove corrective APAR/LOCAL fixes to one type
of library at a time. Select from the list below the lowest level
library you want a fix applied to.

 1  ALTER CORE IMAGE            Core image library corrective fix

 2  ALTER RELOCATABLE           Relocatable library corrective fix

 3  ALTER SOURCE                Source statement library
                                corrective fix

 4  UNDO CORE IMAGE             Remove core image library
                                corrective fix.

 5  UNDO RELOCATABLE            Remove relocatable library
                                corrective fix.

  We now select number 4 to generate a job stream to remove a
  core image library corrective fix.
```

```
              APPLY APAR/LOCAL: UNDO MSHP STATEMENT      SRV$UND1

The information requested below will identify the component
APAR/LOCAL fix number assigned to the fix that you wish to remove
from your system.

APAR/LOCAL NUMBER      ===> ##07021      Enter a 2 character
                                         prefix followed by a 5
                                         digit number.

Enter the affected component. Example:
     5745          SC            JCL

==> 5745      ==> SC        ==> AIT

  Since we applied local fix ##07021 as a revokable fix, we
  can now remove it. We do not have to supply the original
  data, as MSHP has kept it in the system history file for us
  (that's what revokable does).
```

```
          SERVICE: APPLY APAR/LOCAL LIBRARY SELECTION     SRV$52

MSHP will apply or remove corrective APAR/LOCAL fixes to one type
of library at a time. Select from the list below the lowest level
library you want a fix applied to.

 1  ALTER CORE IMAGE            Core image library corrective fix

 2  ALTER RELOCATABLE           Relocatable library corrective fix

 3  ALTER SOURCE                Source statement library
                                corrective fix

 4  UNDO CORE IMAGE             Remove core image library
                                corrective fix.

 5  UNDO RELOCATABLE            Remove relocatable library
                                corrective fix.

  Next we will remove a fix from the relocatable library.
```

```
              APPLY APAR/LOCAL: UNDO MSHP STATEMENT      SRV$UND1

The information requested below will identify the component
APAR/LOCAL fix number assigned to the fix that you wish to remove
from your system.

APAR/LOCAL NUMBER      ===> ##09001      Enter a 2 character
                                         prefix followed by a 5
                                         digit number.

Enter the affected component. Example:
     5745          SC            JCL

==> 5745       ==> SC        ==> JCL

  This will remove the fix from the relocatable library.  It
  then relink-edits the module into the core image library.
```

```
            SERVICE: APPLY APAR/LOCAL LIBRARY SELECTION     SRV$52

MSHP will apply or remove corrective APAR/LOCAL fixes to one type
of library at a time. Select from the list below the lowest level
library you want a fix applied to.

 1  ALTER CORE IMAGE            Core image library corrective fix

 2  ALTER RELOCATABLE           Relocatable library corrective fix

 3  ALTER SOURCE                Source statement library
                                corrective fix

 4  UNDO CORE IMAGE             Remove core image library
                                corrective fix.

 5  UNDO RELOCATABLE            Remove relocatable library
                                corrective fix.

  Enter RETURN to return to the initial corrective service
  menu.
```

```
SERVICE: APPLY APAR/LOCAL FUNCTION SELECTION     SRV$5

If you are going to apply a corrective APAR/LOCAL fix to the
relocatable or source libraries, it will be necessary to first
select the PRE SERVICE function.  After it has completed, you may
then select the CORRECTIVE SERVICE function.  When you have
finished with the corrective service function, select POST SERVICE
to restore your system to normal.

 1  PRE SERVICE                 Create JCL to prepare the system
                                for applying corrective service.

 2  CORRECTIVE SERVICE          Go to the menu panel for affected
                                library selection.

 3  POST SERVICE                Create JCL to merge libraries and
                                restore system to production.

  Next we do postservice.  This dialogue will ask which
  libraries you wish to backup, if any, and which volumes you
  wish to FAST COPY back.  It will produce a job stream to
  perform any backups you requested, and re-establish your
  system LIBDEFs.  It is filed under the name POSSRV.
```

```
                    BACKUP SERVICE LIBRARIES          SRV$BKP1

This panel creates the JCL to back up your "A"  service library
from disk to tape.

You may omit this step if you are going to keep the library on
disk.

BACKUP LIBRARY A       ===> YES          Enter NO to omit backing
                                         up service library A.
```

```
                    FAST COPY TAPE TO DISK                SRV$FCT1

Because you copied disk volume SYSWK2 to tape, this panel
will create the necessary JCL to recreate  your disk volume from
tape.

FAST COPY TAPE          ===> YES          Enter YES to copy the
                                          tape to disk, or NO to
                                          bypass this step.

This panel will be repeated for the number of volumes that you've
previously copied.

  This panel may be repeated for SYSWK3.
```

D.0 SUPPLIED CICS/VS MANAGEMENT MODULES AND TABLES

Many CICS/VS management modules and tables are supplied in pregenerated form with VSE System IPO/E. The stage 1 source deck used for the generation of the following management modules is catalogued in the service library B source statement library as A.DFHSPSG.

D.1 MANAGEMENT MODULES

ATP - ASYNCHRONOUS TRANSACTION PROCESSOR

Standard

BFP - BUILT-IN FUNCTIONS

1$	BASIC + WTRET
2$	BASIC
3$	WTRET

BMS - BASIC MAPPING SUPPORT

1$	3270 minimum options, MAPALGN=NO
2$	3270 with printer, 2740/41, CRLP, DASD, TAPE, minimum options, MAPALGN=NO
3$	3270 with printer, full options, MAPALGN=NO
4$	2740/41, CRLP, disk
5$	2$ with full options
6$	3$ with MAPALGN=YES
S$	All devices, full options, MAPALGN=NO

CSA - COMMON SYSTEM AREA

Standard

DBP - DYNAMIC TRANSACTION BACKOUT

1$	CICS/VS Files
2$	CICS/VS Files + DL/I Databases

DCP - DUMP CONTROL

1$	on 3340
2$	on 3330
3$	on 2314
4$	on TAPE SYS010
5$	on 3350
F$	on FBA

DIP - DATA INTERCHANGE

1$ Standard

DUP - DUMP UTILITY

Standard

EXP - COMMAND LEVEL INTERFACE

1$ COBOL, PL/I, ASSEMBLER, and RPG

FCP - FILE CONTROL (all have EXCTL, LOCATE, and VLR)

1$ ISAM update, add, browse, AUTOJRN=NO
2$ DAM update, add, hexad, decad, actad, dablkng,dbrowse, AUTOJRN=NO
3$ VSAM update, add, browse, delete, AUTOJRN=NO
4$ 1$ + 2$
5$ 1$ + 3$
6$ 2$ + 3$
7$ 1$ + 2$ + 3$
8$ 1$ + AUTOJRN=YES
9$ 2$ + AUTOJRN=YES
A$ 3$ + AUTOJRN=YES
B$ 4$ + AUTOJRN=YES
C$ 5$ + AUTOJRN=YES
D$ 6$ + AUTOJRN=YES
E$ 7$ + AUTOJRN=YES
S$ All Options + AUTOJRN=YES

ICP - INTERVAL CONTROL

Standard

ISC - INTERSYSTEM COMMUNICATION

Standard

JCP - JOURNAL CONTROL

1$ AUTOJRN,NOTE=YES,DTB=MAIN
2$ AUTOJRN,NOTE=NO,DTB=NO

KCP - TASK CONTROL

Standard

KPP - KEY POINT

1$ on 3340
2$ on 3330
3$ on 2314
4$ on 3350
F$ on FBA

MTP - MASTER TERMINAL

Standard

OCP - OPEN CLOSE

Standard

PCP - PROGRAM CONTROL

1$ Assembler, PL/I, RPG, HLLTRACE
2$ Assembler, COBOL, RPG, HLLTRACE
3$ 1$ + 2$

PEP - PROGRAM ERROR PROGRAM

Standard PC RETURN

PRPR - PREPROCESSOR

COBOL and PL/I

SCP - STORAGE CONTROL

1$ With Recovery
2$ No Recovery

SRP - SYSTEM RECOVERY

1$ Standard

STUP - STATISTICS UTILITY

Standard

TACP - TERMINAL ABNORMAL CONDITION

Standard

TBP - TRANSACTION BACKOUT

1$ CICS/VS Files
2$ CICS/VS Files + DL/I Databases

TCP AND ZCP - TERMINAL CONTROL

1$	Console, local 3270
2$	Console, remote 3270
3$	Console, local and remote 3270
4$	Console, CRLP, DASD
5$	Console, 2740
E$	CONSOLE, VTAMDEV 3270/3600/3790
S$	All Devices

TDP - TRANSIENT DATA

1$	EXTRA Only
2$	EXTRA, DAM INTRA (with ATI support), DESTRCV=NO
4$	EXTRA, DAM INTRA (with ATI support), DESTRCV=YES
6$	EXTRA, VASM INTRA, DESTRCV=NO
7$	EXTRA, VSAM INTRA, DESTRCV=YES

TEP and TEPT - TERMINAL ERROR PROGRAM

Standard defaults

TRP - TRACE CONTROL

1$	Main Stor + Auxiliary on 3340
2$	Main Stor + Auxiliary on 3330
3$	Main Stor + Auxiliary on 2314
4$	Main Stor + Auxiliary on TAPE SYS009
5$	Main Stor Only
6$	Main Stor + Auxiliary on 3350
F$	Main Stor + Auxiliary on FBA

TSP - TEMPORARY STORAGE

1$	Main Storage Only
2$	Main + VSAM
3$	Main + VSAM + Recovery

TUP - TRACE UTILITY

Standard

D.2 NOTES ON SELECTION

From the above list of modules you should select only what you need to satisfy your present environment, and what you intend to use in the near future. If you are not using an option now and do not intend to use it in the near future, do not select a management module that includes it. By keeping your CICS/VS system as small as possible, you should achieve better performance.

MANAGEMENT MODULES - Numerous sample modules are supplied.

BFP Built-in Functions. All combinations are generated.

BMS If you only have 3270-type terminals, you should select a set of BMS options according to the following criteria:

* If you use only BMS IN, OUT, and MAP requests and have only one 3270 screen size, select the 1$ BMS modules.

* If you have two screen sizes, and you want BMS to handle this via device dependent mapset suffixes and dynamic field relocation, use the 3$ BMS modules.

* If you use the PAGEBLD function or the CMSG message-switching transaction, select the 3$ BMS Modules.

* Map Alignment: In CICS/VS Version 1 Release 4.1, the default is MAPALGN=NO, which means that the BMS binary-length fields are not aligned to half-word addresses in your program's terminal I/O areas. If you want the length fields to be aligned to half-word addresses, use the BMS 6$ modules.

Note If you use the 6$ modules, you must use the // OPTION SYSPARM=AMAP or ADSECT each time you assemble a BMS map or DSECT. Bear in mind that it will be an easier operational environment to choose MAPALGN=NO, since you will not have to use the SYSPARM option in your map and DSECT assemblies.

If you change from aligned to unaligned BMS length fields, you should be aware that this changes the placement of the BMS fields in the terminal I/O area. If your program depends on such placement, perhaps because of an overlay define or redefine, you will have to change that part of your program.

Using MAPALGN=NO, each BMS field that has a name on it in your DSECT will appear in the terminal I/O area as 2 bytes of a binary length, 1 attribute byte, followed by the data field itself.

Using MAPALGN=YES, you get the same as the above except that each binary-length field is shifted to a half-word boundary, and a filler or slack byte is inserted after every data field that has an even number of bytes.

CSA The WORKAREA and DATFORM operands are no longer supported but are available as operands on the DFHSIT macro and as startup overrides.

CSO The DFHSG PROGRAM=CSO NSD operand is no longer supported but is available as an operand on the DFHSIT macro and as a start-up override.

CSU DEVICE and TRDEV operands are no longer needed, since CICS/VS 1.4.

DBP DFHDBP1$ is supplied without DL/I support. In addition, DFHDBP2$ is supplied in the core image library with DL/I support. DFHDBP2$ was prepared using DL/I version 1.5.5.

DCP The CICSDMP option has been removed. CICSDMP is always supported.

DUP The Dump Utility Program is always generated with support for all valid input devices. The device to be used is normally specified in the job stream that invokes the utility.

EXP The CICS-DL/I translator is available by specifying DL/I = YES. The DL/I supplied application link-edit step (DFHPL1I) must be used. It is no longer generated by CICS/VS.

FCP All combinations of VSAM, DAM, and ISAM have been generated, with exclusive control and locate, both with and without automatic journaling support.

ISC PROGRAM=ISC has been added to generate inter systems coupling programs.

KPP Five key point programs have been generated, including one which supports FBA devices. Also, the restart data set block sizes have been changed to make better use of the available space. KPP is required during journaling if you specify ABKPOPT=YES and/or AKPFREQ=a number in your SIT or SIT overrides. It is also required during warm or emergency restart.

MTP Master and supervisory terminals support terminal list tables. The TLT operand has been removed from PROGRAM=MTP, since TLT is no longer a SYSGEN option. TLT support is always provided. A sample TLT has been provided.

PCP All combinations are generated to include support for COBOL, PL/I, ASSEMBLER, and RPG.

PEP The standard CICS/VS program error program (unsuffixed) is a dummy module that simply returns to the calling program.

PRPR The preprocessor for high-level languages supports ASSEMBLER, COBOL, PL/I, and RPG.

SCP Versions with and without recovery have been generated. You should always use the 1$ module for production, since you wish to keep your CICS/VS system in operation as much as possible. Recovery does not contribute to the CICS/VS working set except when storage violations occur.

For testing, use the 2$ module (without recovery) to be sure your application programs contain no storage violations. If a storage violation occurs, CICS/VS will be abnormally terminated, and you will get a VSE dump, which should help you correct the problem.

STUP The statistics utility program is always generated with support for all valid input devices with CICS/VS 1.4.1. The device to be used is normally specified in the job stream that invokes the utility.

TBP DFHTBP1$ is supplied without DL/I support. In addition, DFHTBP2$ is supplied in the core image library with DL/I support. DFHTBP2$ was prepared using DL/I version 1.5.5. Since DFHTBP must be non-suffixed to startup CICS/VS, DFHTBP1$ has been renamed to DFHTBP in the VSE System IPO/E. The DL/I user should rename DFHTBP2$ to DFHTBP.

| TCP Generic names for the 3270 family of terminals are available.

BTMLR32T, BTML32T, and BTMR32T BTAM logic modules are supplied in the VSE System IPO/E production library B relocatable library for your use in installation verification. If you wish to use these, specify MODNAME=name in the DFHTCT TYPE=INITIAL macro of your Terminal Control Table. Source for these BTAM logic modules is found in the Z.DFHSTLM book.

All BTAM terminal control tables supplied have been reassembled and cataloged to include VSE BTAM-ES logic modules.

TDP Intrapartition transient data may now be supported via DAM or VSAM (but not both simultaneously). The DEVICE operand is no longer a SYSGEN operand for PROGRAM=TDP. If it is intended to use DAM Intrapartition, the device type must now be specified in the destination control table (DFHDCT) TYPE=INITIAL macro. TDP3$ and TDP5$ are no longer distributed since these would duplicate TDP2$ and TDP4$. TDP6$ and TDP7$ have been added supporting VSAM intrapartition transient data. TDP7$ supports recovery and TDP6$ does not. Users who previously used TDP3$ or TDP5$ should

1. Rename TDP2$ or TDP4$ as appropriate, or
2. change the TDP suffix in your SIT, or
3. change the TDP suffix in your startup overrides.

TRP Six of the modules generated include auxiliary trace support because of the great amount of additional assistance it offers in difficult debugging situations and for performance analysis. In the SIT, a small trace table is allocated in main storage which you can increase in your SIT or SIT override statements. Each 128 entries you specify will cost you one additional page of working set while trace is active. The supplied SIT tables have trace turned off so that you may turn it on by CSMT or by a SIT override.

If you wish to activate auxiliary trace, do the following;

1. CSMT TRACE,ON	Main Storage Trace
2. CSMT RUN,0	Runaway Task Control off
3. CSMT ATR,ON	Activates Auxiliary Trace

While auxiliary trace is active, it will write its data to the DFHAUXT file. When you are finished using auxiliary trace, you can turn it off with a CSMT ATR,ATC request and print it using one of the DFHTUP utilities that are described in the CICS/VS System Programmer's Guide.

Note: While running your production CICS/VS system, it is often advantageous to have available both dump and trace facilities of CICS/VS. You can run with DCP active, since it will only be part of the working set while it is writing a dump. (This presupposes you have removed all DFHDC requests from the production version of your programs.) Trace should be specified in your SIT or SIT override statements as OFF with a very small trace table of 30 or less entries. If it is required for a brief period, it may be turned ON. Each management module that uses trace first checks the OFF switch in the CSA. Therefore, trace is not part of the working set if it is turned off. If you specify TRP=DY in your SIT, be sure to specify TRP=(DY,OFF) since ON is the default causing the dummy trace program to be a highly referenced module.

TSP All three options are generated. Note: If you wish to use TSP with recovery, it requires you have a temporary storage table and a PPT entry for DFHTSRP, the recovery program used during restart.

D.3 MANAGEMENT TABLES

The tables are used primarily to run the sample jobs generated by the verification dialogues. They cannot be updated by the CICS/VS table tailoring dialogues.

An asterisk shown at the left of a management table indicates that this is supplied or modified by the System IPO/E group.

The source code for these tables are catalogued in the service library B source statement library and the production source library B as G.macros if they are supplied or changed by &sipo, and as Z.macros if they are supplied by CICS/VS.

ACT - DL/I APPLICATION CONTROL (DLZNUC -- in DL/I SIPO)

	$	Sample DL/I ACT to use with DL/I test programs

ALT - APPLICATION LØAD

	1$	CICS/VS + Sample Programs in COBOL and PL/I
	3$	CICS/VS + DL/I Sample
	4$	CICS/VS + DL/I ENTRY Sample
*	A$	CICS/VS + ICCF
*	E$	CICS/VS + DL/I
*	I$	CICS/VS + DMS/VS
*	Y$	CICS/VS + DMS/VS + DL/I

DCT - DESTINATION CONTROL

```
   1$   EXTRA on 3340 for sample applications
   2$   EXTRA on SYSLST for sample applications
   3$   1$ + INTRA TRIGLVL task to printer + AUTO STATS on 3330
   4$   3$ for 3340
   5$   3$ for 3350
   6$   4$ with DESTRCV
   7$   3$ with DESTRCV
*  A$   EXTRA on FBA and SYSLST with INTRA to local printer for ICCF
*  B$   EXTRA on 3330 and SYSLST with INTRA to local printer for ICCF
*  C$   EXTRA on 3340 and SYSLST with INTRA to local printer for ICCF
*  D$   EXTRA on 3350 and SYSLST with INTRA to local printer for ICCF
*  E$   6$ for FBA
   F$   3$ for FBA
*  H$   6$ for 3350
*  I$   6$ for FBA + DMS/VS & DL/I
*  J$   6$ for 3330 + DMS/VS & DL/I
*  K$   6$ for 3340 + DMS/VS & DL/I
*  L$   6$ for 3350 + DMS/VS & DL/I
*  M$   6$ for 3330
*  N$   6$ for 3340
   S$   For sample sequential terminal job stream
```

FCT - FILE CONTROL

```
   1$   ISAM Sample FILEA on 3340
   2$   ISAM Sample FILEA on 3330
   3$   VSAM Sample FILEA
   4$   DL/I ENTRY Sample Data bases
   5$   DL/I Sample Data bases
   6$   Sample DAM and ISAM files on 3340
   7$   Sample DAM and ISAM files on 3340
   8$   1$ + logging
   9$   2$ + logging
*  $C   VSAM Sample FILEA
*  E$   VSAM Sample FILEA+ DL/I
*  I$   VSAM Sample FILEA + DMS/VS
*  U$   VSAM Sample FILEA + Data Dictionary
*  Y$   VSAM Sample FILEA + DL/I + DMS/VS
```

JCT - JOURNAL CONTROL

```
   1$   2 System Logs on 3340 (SYS008,SYS006)
   2$   2 System Logs on 3330 (SYS008,SYS006)
*  A$   4 System Logs on FBA  (SYS042,SYS043,SYS044,SYS045)
*  B$   4 System Logs on 3330 (SYS042,SYS043,SYS044,SYS045)
*  C$   4 System Logs on 3340 (SYS042,SYS043,SYS044,SYS045)
*  D$   4 System Logs on 3350 (SYS042,SYS043,SYS044,SYS045)
   F$   2 System Logs on FBA  (SYS008,SYS006)
```

MCT - MONITORING CONTROL TABLE

* E$ Class = Account and Perform

NLT - NUCLEUS LOAD

1$ CICS/VS smaller users
2$ CICS/VS larger users with journaling

PCT - PROGRAM CONTROL

1$ CICS/VS + Sample PGMS in COBOL, PL/I, RPG II, and Assembler
2$ 1$ + Journaling
3$ CICS/VS + DL/I sample
4$ CICS/VS + DL/I ENTRY sample
* $G 2$ + Sample FILEA
* A$ CICS/VS + ICCF
* E$ $G + DL/I
* I$ $G + DMS/VS
* U$ $G + Data Dictionary
* Y$ $G + DL/I + DMS/VS

PLT - PROGRAM LIST

1$ CICS/VS Shutdown includes BTAM Statistics Logging
2$ 1$ + DL/I Shutdown
3$ DL/I Initialization for Multiple Partition Support
4$ 1$ + DL/I Shutdown for Multiple Partition Support

PPT - PROCESSING PROGRAM

1$ CICS/VS + Sample Programs in COBOL, PL/I, RPG II, and Assembler
2$ 1$ + Journaling
3$ CICS/VS + DL/I Sample + Journaling
4$ CICS/VS + DL/I ENTRY Sample + Journaling
* $G 2$ + Sample FILEA
* A$ CICS/VS + ICCF
* E$ $G + DL/I
* I$ $G + DMS/VS
* U$ $G + Data Dictionary
* Y$ $G + DL/I + DMS/VS

SIT - SYSTEM INITIALIZATION

```
*  $O   ICCF/CICS/VS startup with VTAM access method
   1$   CICS basic users
   2$   CICS larger users
   3$   CICS + DL/I ENTRY
   4$   Previous entry level system users
   5$   Supports sequential terminal job stream
*  A$   ICCF/CICS/VS startup with BTAM access method
*  E$   CICS/VS verify startups with BTAM access method
*  F$   CICS/VS verify startups with VTAM access method
   S$   Maximum function system
```

SNT - SIGN ON TABLE

```
        Sample for all users
```

SRT - SYSTEM RECOVERY

```
   1$   CICS Default Entries
```

TCT - TERMINAL CONTROL

```
*  $O   Console + 7 X L3277-2 + 1 X L3284 (L1T0-6,L86P,SYS020-27) + VTAM
   1$   Console + 1 X L3277-2 (L77A, SYS011)
   2$   Console + 1 X 3277-2 Remote (R77A, SYS014)
   3$   Console + CRLP + 3330 + 3340
   4$   Console + 2740 (H1A, SYS016)
   5$   Console + 2 X L3277-2 + 1 X L3286 (L77A/B,L86O,SYS011/2/3)
   6$   Console + 2 X 3277-2 + 1 X 3286 (R77A/B,R86O,SYS014)
   7$   5$ + 6$ (and R86P)
   8$   Console + 1 X 3275 with 3284 (R75A,SYS014)
   9$   Console + 1 X 3275 Dial (R75D,SYS015)
*  A$   Console + 7 X L3277-2 + 1 X L3284 (L1T0-6,L86P,SYS020-27) + BTAM
*  E$   Console + 1 X 13277-2 + 1 X L3286 (L77A,L86P,SYS011/13) + BTAM
*  F$   Console + 1 X 13277-2 + 1 X L3286 (L77A,L86P,SYS011/13) + VTAM
   S$   Simulated terminal for Operations Guide sample program
```

TLT - TERMINAL LIST

```
   1$   L77A, L77B Local 3270 Displays
```

TST - TEMPORARY STORAGE

```
   1$   Sample Entry L86P
```

XLT - TRANSACTION LIST TABLE

```
   1$   CSMT, CSSF
*  4$   CSMT, CSSF and CSDD for DL/I MPS Shutdown
```

D.4 NOTES ON SELECTION

From the above list of tables, you should select only what you need to satisfy your present environment, and what you intend to use in the near future. If you are not using an option now, and do not intend to use it in the near future, do not select a management table that includes it. By keeping your CICS/VS system as small as possible, you should achieve better performance.

The tables have been organized to provide optimal performance in most environments. You can use them as a base to create your own tables. Use the comments they contain to help you establish the best order for optimal performance.

Each table contains comments to help you when you add entries for your application programs. Tables have been organized using the latest rules for best performance; therefore, if you decide to use your old tables, at least print the pertinent new tables and review them. You may find a few tips that will help you.

E.0 INTERACTIVE PRODUCTIVITY FACILITY DEBUGGING INFORMATION

E.1 PROBLEM DETERMINATION

If an Interactive Productivity Facility prompter should fail, there are some steps you can take to aid in problem determination. The first thing to do is to carefully record everything you entered on the screen, any message that appeared on the screen, and the name of the panel being displayed. The name of the panel can be found in the upper righthand corner. It is in the form XXX$YYY. Where XXX is three alphabetic characters and YYY is zero to three alphanumeric characters. Save this information. You may need it later.

Failures which create an error log entry or abend condition are obvious when they happen. It is possible that a dialogue may appear to complete successfully but not produce the correct output. There is one such condition that could occur which you can correct. That is the case when VSE/ICCF is abnormally terminated or cancelled while a dialogue is still running. When this termination takes place while the Interactive Productivity Facility is in the process of updating a file, the VSE/ICCF "update in progress" indicator is left set on. If this should occur, the dialogue will appear to complete successfully, but no output will be written in your library. If this happens, use the VSE/ICCF /PROTECT command to reset the indicator. The error log will contain the name of the member which needs to be reset, even though no message was sent to indicate that the error log was written.

This type of condition can only occur if VSE/ICCF is terminated at exactly the right (or, in this case, wrong) time. If VSE/ICCF is terminated normally, this situation will not occur. If incorrect or incomplete output is produced under any other condition, you should report the problem to IBM service.

If a message appeared telling you that an error had been logged, you will next want to look in the error log. You will note that the error log will tell you what happened, but not why.

E.2 ERROR LOG RECORD

When an Interactive Productivity Facility service routine returns to the dialogue manager, the dialogue manager checks for an error return code. If there is an error, the dialogue manager logs the error and returns to the dialogue with a return code of 999.

If such an error occurs, you will receive the following message on your terminal:

```
FUNCTION ABENDED.  REFER TO ERROR LOG RECORD DESCRIBED IN USER'S GUIDE.
```

and a file will be created on your VSE/ICCF user library containing information about the error. The name of the file is DTR$ELOG. The error information contained in this file should be used to attempt to diagnose the problem.
Note: In previous versions of Interactive Productivity Facility the error message shown above was displayed with the text

```
ERROR HAS BEEN LOGGED WHILE EXECUTING A FUNCTION.
```

Every time the Interactive Productivity Facility dialogue manager is initialized, all error log output from any previous session is purged. You should copy the error information on a sheet of paper, or save DTR$ELOG in your library under another name, before reinitializing the Interactive Productivity Facility.

The record written to the error log is taken from the user communications area (UCA) of the dialogue manager. This record is set up by the service manager on each call from a dialogue, and contains:

* The name of the service currently executing
* The name of the dialogue invoking the service manager
* The line number in the dialogue corresponding to the call

At the time an error occurs, the following information is added to the error log:

* The name of the routine logging the error
* A unique code describing the error

If the error involves a disk I/O operation, the name of the file in question is also logged.

The following is a full description of the format and contents of the error log:

ERROR LOG RECORD FORMAT		
FIELD DESCRIPTION	RCD POS	FIELD NAME
NAME OF CURRENT SERVICE	1-8	UCASERV
NAME OF INVOKING FUNCTION	10-17	UCAFUNCT
LINE NUMBER OF INVOKING FUNCTION	18-21	UCAERLNO
NAME OF ROUTINE DETECTING ERROR	23-30	UCAERRTN
ERROR CODE UNIQUE TO DIALOGUE MANAGER	32-35	UCAERCD
CURRENT LINE NUMBER OF DISPLAY PANEL	37-38	UCAERCL
CURRENT COLUMN NUMBER OF DISPLAY PANEL	40-41	UCAERCC
VARIABLE VALUE FROM DISPLAY PANEL	43-50	UCAERVV
CURRENT RECORD NUMBER OF FILE IN ERROR	51-54	UCAERCR
ERROR CODE OF INTERACTIVE SUBSYSTEM	56-59	UCAERSYS
FILE NAME OF FILE IN ERROR	61-68	UCAERFN
FILE TYPE OF FILE IN ERROR	70-77	UCAERFT
FILE MODE IF CMS IMPLEMENTATION	79-80	UCAERFM

E.3 ABEND CONDITIONS

Certain errors cause the dialogue manager to terminate itself rather than return to the dialogue. This action is taken only if continued operation is unfeasible. If a dialogue abends, you will have to address the problem in a slightly different manner from a logged error. In the case of an abend, you may or may not have an error log entry depending on what caused the failure. If the abend was accompanied by an Interactive Productivity Facility abend code in the form DMnn, then the abend was controlled (i.e., the CANCEL macro was issued), and an attempt was made to write the error log. If the abend was uncontrolled, or a controlled abend was unable to write the error log, no error log record is available to help you.

If the Interactive Productivity Facility was unable to write the error log, you may still find the error log record it was attempting to write by looking in the dump. The record can be found x'F8' bytes into the user control area (UCA). Register 10 should be pointing to the UCA.

Where there is no error log or the UCA has been damaged, or the contents of register 10 has been lost, debugging must proceed as with any other program. The first step is to identify the failing component.

The Interactive Productivity Facility is made up of a dialogue manager and a number of accompanying function routines. The dialogue manager is always present in storage. The function routine involved is determined by what was selected from the last menu panel prior to the failure. When an item from a menu is selected, the dialogue manager either displays another menu or loads a function routine and branches to it. If the failure occurred while a function routine was active, both the

function routine and the dialogue manager will be in storage.

All working storage is allocated dynamically. All program storage is static. If the dialogue manager attempts to load a function routine that is too large to fit into the statically allocated program storage the Interactive Productivity Facility will abend with a code of DM02. The VSE System IPO/E system has set the static storage allocation so that it is large enough to hold any Interactive Productivity Facility function routine. This allocation is determined by the /OPTION statement in the VSE/ICCF procedure IPFPROC. If a function routine is made larger for any reason (service for example), it is possible that the static limit will be exceeded. If this occurs, the limit must be raised. Normally, you will be notified via the appropriate service documentation if this change needs to be made.

The dynamic storage requirement, however, is a function of the use being made of the Interactive Productivity Facility and the sizes of the internal tables being handled by the function routine. If the dynamic storage limit is exceeded, the Interactive Productivity Facility may or may not abend depending on the conditions under which the attempt to get more storage failed. In most cases, this error will be logged. Some cases, however, will result in an abend code DM02. This happens when the dialogue manager cannot proceed without more storage. If this occurs, you will have to give the dialogue manager more storage.

Since most dialogues result in one or more members being expanded or added to the library, there is always the possibility that you will run out of library or directory space. If this happens the dialogue manager will abend with a code of DM08. In this case you must either delete something in the library, run a backup/restore, or allocate more space. If you run out of space shortly after your last backup/restore, you should start planning to allocate more space.

If you do encounter an abend condition, take the following action prior to calling the service center:

* Record all the information you can.
  - The name of the dialogue you were running
  - The name of the last panel that appeared (if you know it)
  - The abend code
  - Any other information that appears on the screen
* Try to save something in your library to make sure your library or directory isn't full. If not,
  - Record the contents of the error log. (if any)
  - List the procedure IPFPROC and record the contents of the /OPTION statement.

* From the VSE System IPO/E system console, execute the /MAP command and record the pseudo partition information displayed.

If there is no error log record, you will need a dump. You can specify that you want a dump in the /OPTION statement in IPFPROC. Add ,DUMP after the last parameter already on the /OPTION statement. The next abend will produce a dump on your VSE/ICCF terminal. If you want to save the dump, you may do so with the SAVE command of the VSE/ICCF dump program. If you use this command, remember to put in some identifier information so that you can locate the dump later. Use the the VSE System IPO/E DOSVSDMP utility program to print the dump.

It is very important that you have as much information as possible about your problem prior to calling the service center. The more information you are able to give them, the sooner they will be able to find an answer for you.

E.4 INTERACTIVE PRODUCTIVITY FACILITY ERROR CODES

The following error codes may be encountered when running Interactive Productivity Facility dialogues. See the Interactive Productivity Facility Program Logic microfiche (LYB0-2477) for more detailed information.

Interactive Productivity Facility Error Codes (VSE Feature)

AT01	Initial Getvis for the FCB failed.
AT02	Getvis for the initial PCB failed.
AT03	The root phase (first phase to be loaded) was too large for the allocated problem program storage area.
AT04	Insufficient storage to build I/O area for error message. Forces system dump.
AT05	The called phase (phase to be loaded) was too large for allocated problem program storage area.
CL01	Recursive call. Program attempted to call itself.
CL02	Called program was not found.
DP01	Invalid call to display service.
DP02	A panel display request was made, but the panel file, or a valid header record within the panel file, could not be found. The name of the panel file in error is in UCAERFN.
DP03	Invalid panel file format found while building output. The line and column being built for the 3270 are in fields UCAERCL and UCAERCC. Field UCAERCR points to the current record number.
DP04	Error substituting a variable from the function routine into the panel. The variable value in error is in field UCAERVV.
DP05	Error processing synonym table for MOREINFO synonym.
DP06	Error decoding panel.
DP07	Error analyzing panel.
FT02	The output work file has not been initialized with SKEDIT.

FT03 The file specified via SKINCL or)IM control statement does not exist.

FT04)ENDSEL encountered without a corresponding)SEL.

FT05 The generated output record is too long.

FT06 A control statement with an invalid control word has been encountered.

FT07 A control statement with an invalid parameter has been encountered.

FT08 An invalid variable name was encountered.

FT09 More than 3)IM levels encountered.

FT10 More than 8)SEL levels encountered.

FT11 End of input file was detected after an input record with ? in column 72 (i.e., the continuation record is missing).

FT12 A syntax error has been detected in a conditional substitution strung.

FT13 An incorrect parameter list was passed to a file tailoring service routine.

FT14 An input file ended in a different)SEL block from the one that existed when the input file began.

FT15 An input file ended in a different)DOT block from the one that existed when the input file began.

FT16)ENDSEL encountered in a different input file from the one in which the corresponding)SEL appeared.

FT17)ENDSEL encountered in a different)DOT block from the one in which the corresponding)SEL appeared.

FT18 More than 4)DOT levels encountered.

FT19)ENDDOT encountered without a corresponding)DOT.

FT20)ENDDOT encountered in a different)IM file from the one in which the corresponding)DOT occurred.

FT21)ENDDOT encountered in a different)SEL block from the one in which the corresponding)DOT occurred.

FT22 Table specified in)DOT statement does not exist.

FT23 Invalid relational operator encountered in)SEL statement.

FT24 Invalid boolean operator encountered in)SEL statement.

FT25 Invalid operator encountered in)VASSGN statement.

FT26 An attempt has been made, via the)DOT statement, to process a table recursively.

GV01 Variable not found in function routine.

IO01 Command list ABEND. The file is closed, and the dialogue manager is terminated.

IO02 File not open.

IO03 A READ request was issued for an update file that has not been created yet; or a WRITE request was issued for a file that was opened for input only. In either case, the file is closed.

IO04 Invalid file name.

IO05 A WRITE request, other than a sequential WRITE request, was issued. The file is closed.

IO06 No free file I/O control blocks available.

IO08 A WRITE request was issued for a blank output record.

IO10 Library directory is full. The file is closed.

IO11 Library file is full. The file is closed.

IO12 VSE/ICCF "Input full - Input Ignored" condition encountered. The file is closed.

IO13 VSE/ICCF "Input Ignored" condition encountered. The file is closed.

IO14 VSE/ICCF "Update in Progress" condition encountered. The file is closed.

IO15 VSE/ICCF "Invalid User Access" condition encountered. The file is closed.

IO99 Catastrophic error. The file is closed, and the dialogue manager is terminated.

LE01 Invalid calling sequence.

MG01 Invalid calling sequence to SETMSG routine.

MG02 Message file does not exist.

MG03 Message record does not exist.

MG04 Completed message more than 70 characters.

MG05 Message record read is invalid.

MG06 Unrecoverable logic error in SETMSG routine.

MN01 Invalid calling sequence to SETMENU service.

OP01 Error encountered while processing the options file. The record number in error is in field UCAERCR. The dialogue manager is terminated.

OP02 Input file for TEST option was not found. The dialogue manager is terminated.

OP03 Error encountered reading the initial panel file, or file not found. The dialogue manager is terminated.

OP04 DSPTABLE file not found. The dialogue manager is terminated.

SC10 Invalid input buffer length

SC11 GETVIS request failed.

SM01 Invalid call to service manager. Number of parameters exceeded allowable maximum of 18.

SM02 Service requested is not a valid dialogue manager service. The invalid service is logged in field UCASERV.

SP01 A special variable was not found in the synonym table. The special variable not found is logged in field UCAERVV. The dialogue manager is terminated.

ST01 Error obtaining virtual storage.

SV01 Variable cannot be set. This error can occur in VSE/ICCF if the variable overflow area has been completely used.

TB01 Twenty tables are already being processed. There is no room to process another one.

TB02 An invalid table name has been passed as a parameter to a table processing service routine.

TB03 An invalid descriptor row was read while preparing a table for processing.

TB04 An invalid data row was read while preparing a table for processing.

TB05 An invalid variable name encountered while processing a table.

TB06 Table does not exist.

TB07 The specified table has not had the TEDIT service issued in order to prepare it for processing.

TB08 An incorrect parameter list was passed to a table processing service routine.

TB10 Invalid descriptor value was specified for TCREATE service.

TB11 Invalid skip parameter specified for TSKIP service.

XX01 Invalid operand in arithmetic statement.

XX02 Result of arithmetic operation is invalid.

XX03 Invalid length or index in SUBSTR request.

XX04 Variable could not be found.

XX05 A function routine could not load module DTSCLPRC.

E.5 INTERACTIVE PRODUCTIVITY FACILITY ABEND CODES

The following codes are not logged in the error log record. They are typed on the user's terminal to indicate the cause of the dialogue manager abnormal termination.

Interactive Productivity Facility Abend Codes (VSE Feature)

DM01 Requested service was not initialized, and there is no UCA.

DM02 An error occurred while attempting to log an error.

DM03 An error occurred while attempting to use the system message file (DTR MSG).

DM04 An unrecoverable error occurred. Refer to the error log.

DM05 No free storage available for required dialogue manager control blocks.

DM06 Unrecoverable logic error occurred.

DM07 The dialogue manager could not load module DTSCLPRC.

DM08 The VSE/ICCF library (DTSFILE) is full.

F.0 DISPLAY TERMINAL CONSIDERATIONS

F.1 INTRODUCTION

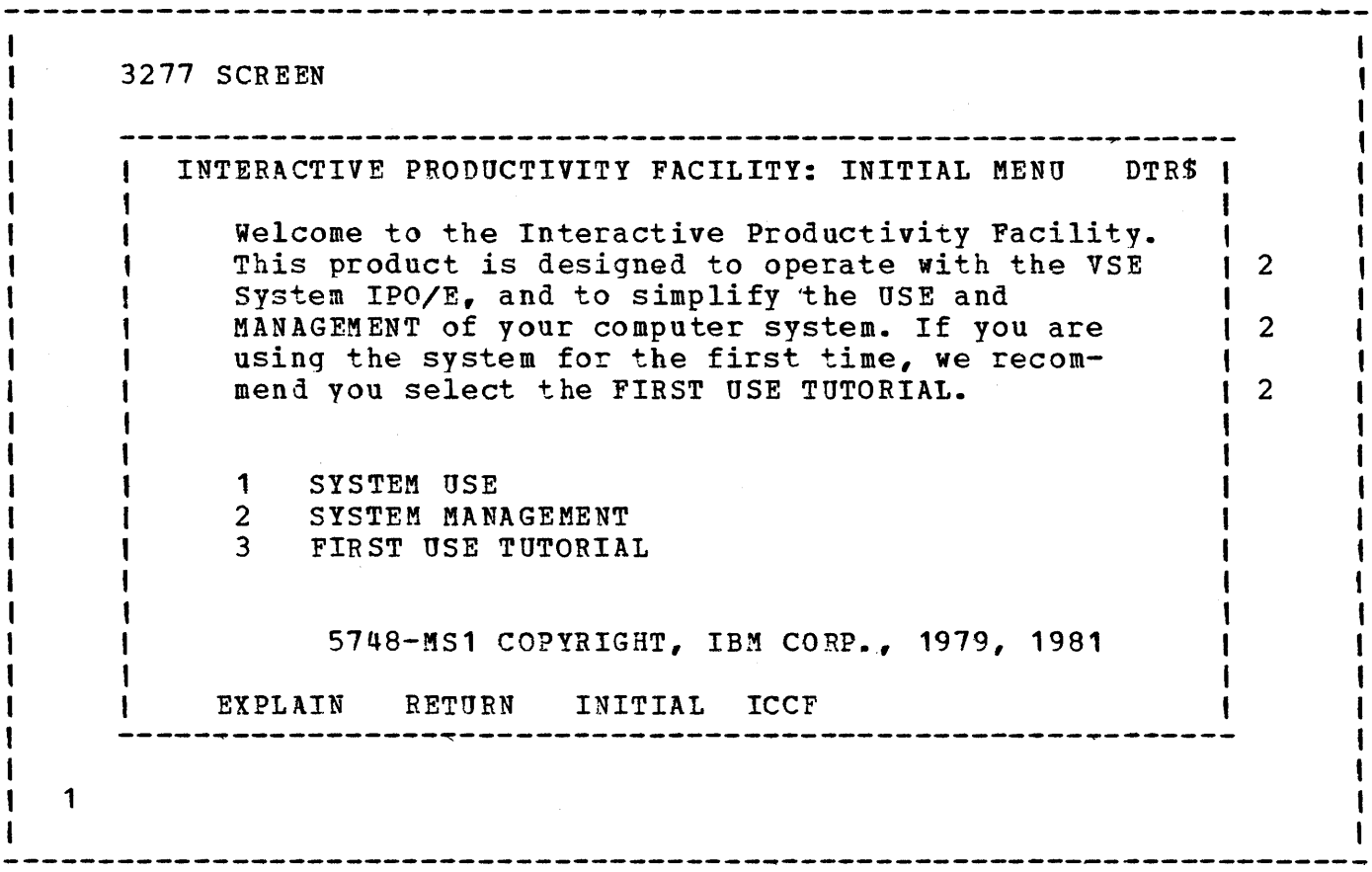
This section should be read by people who have never used a 3270-type terminal before. It includes basic information about how to use such terminals, and how these terminals are used to access the Interactive Productivity Facility.

F.2 3277/3278 TERMINAL DIAGRAMS

The following diagrams show where the various keys and indicators are located on the 3277 and 3278 SCREEN and KEYBOARD.

The numbers in the diagrams correspond to the numbered items that follow.

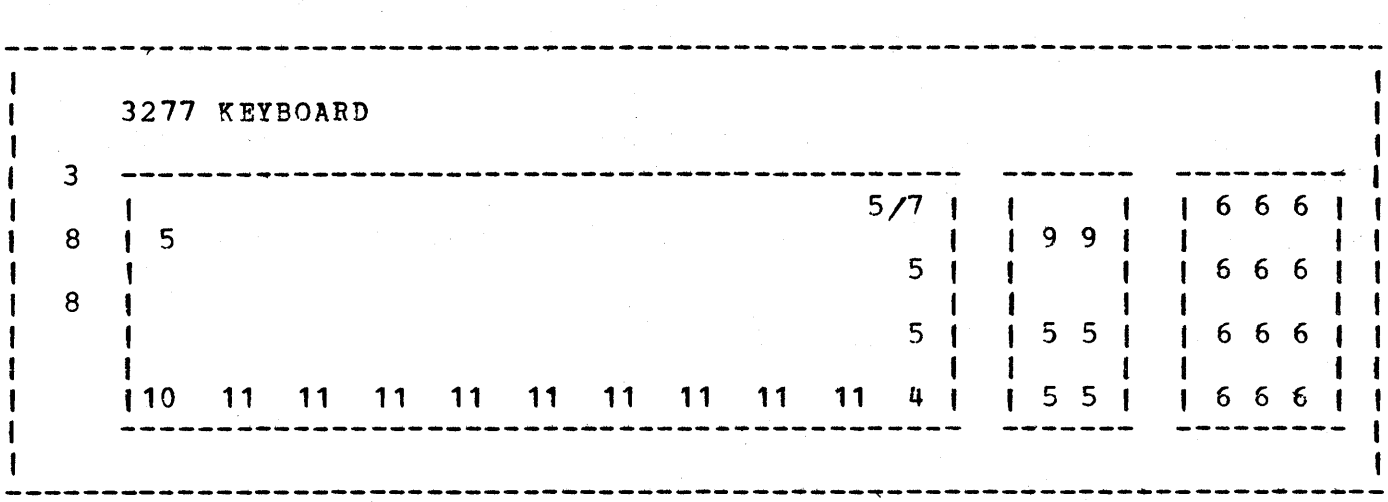
3277 Terminal Screen and Keyboard



The following numbered items correspond to the numbers appearing in the diagrams of the SCREEN and KEYBOARD.

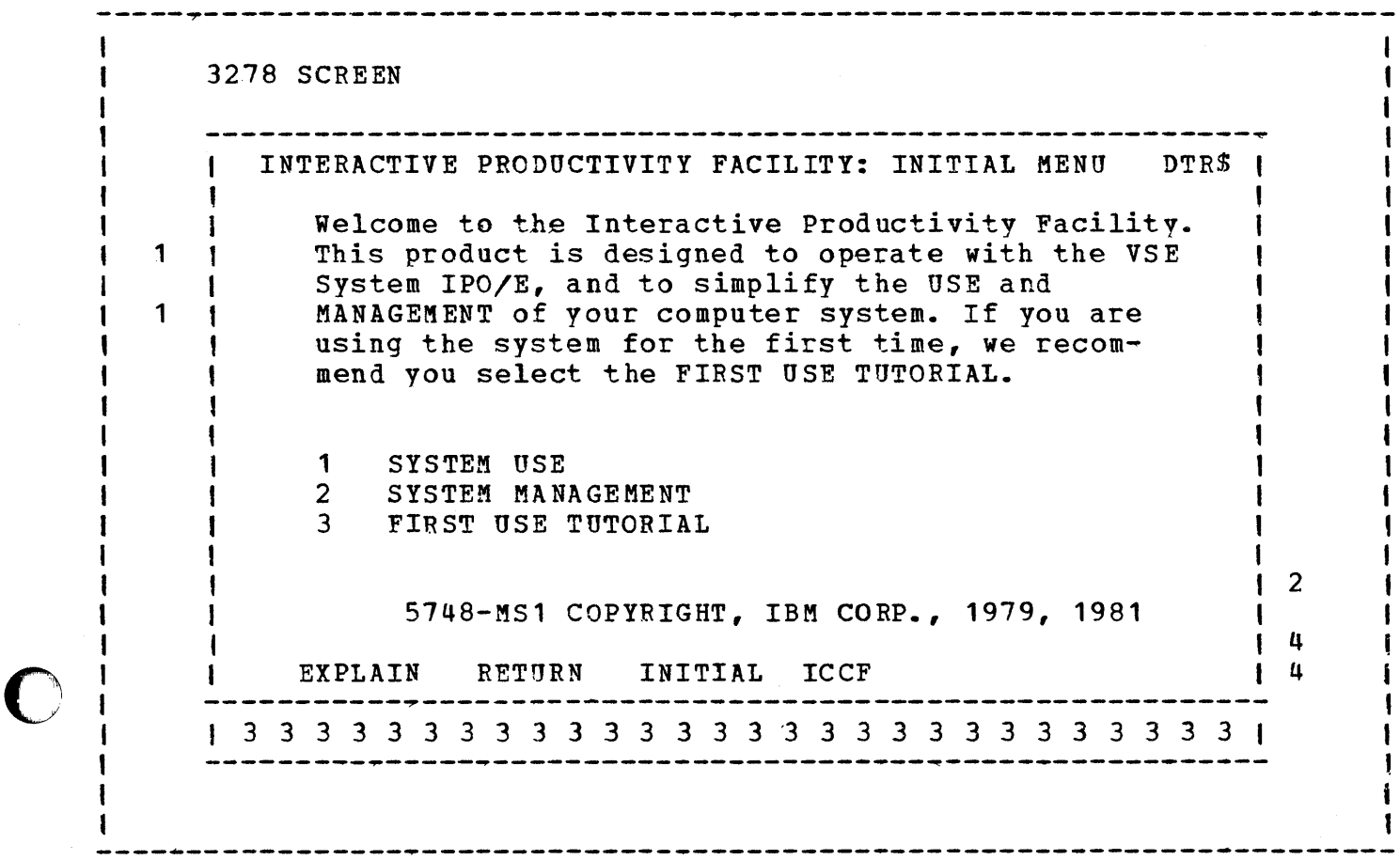
1. OFF-PUSH Switch

2. System Available, Insert Mode, and Input Inhibited indicators



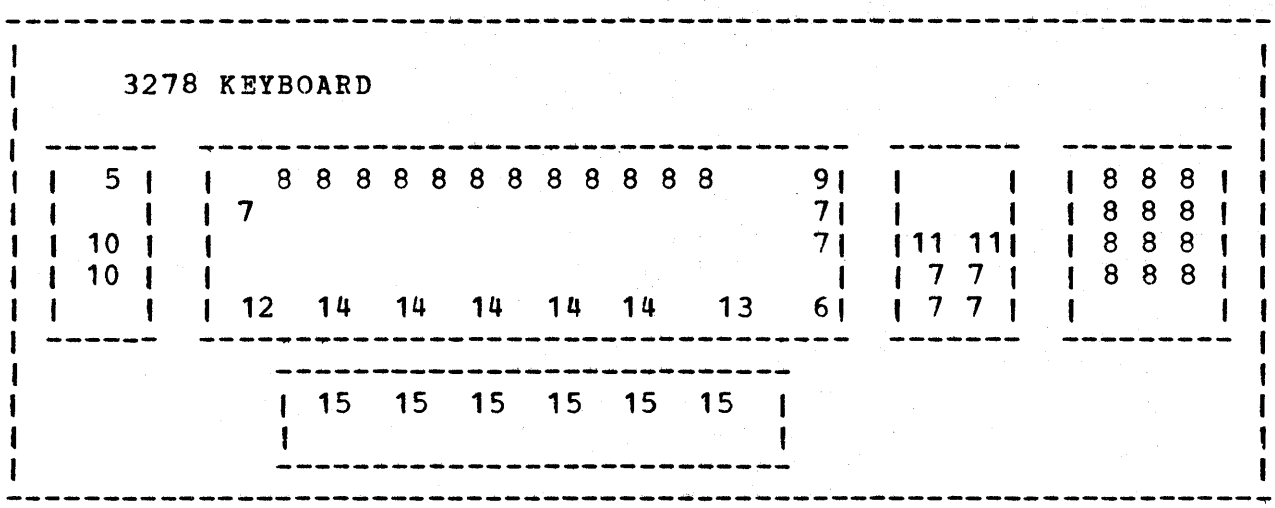
3. CLEAR key
4. ENTER key
5. Cursor moving keys
6. PF keys
7. APL key (if present)
8. Erase Input, Erase EOF keys
9. Insert Mode/Delete keys
10. Reset key.
11. Space bar

3278 Terminal Screen and Keyboard



The following numbered items correspond to the numbers appearing in the diagrams of the SCREEN and KEYBOARD.

1. ON-OFF (I/O)
2. Normal/Test
3. Operator communication line
4. Contrast/brightness control



5. CLEAR key
6. ENTER key
7. Cursor moving keys
8. PF keys
9. APL key
10. Erase Input, Erase EOF keys
11. Insert/Delete keys
12. Reset key
13. ALT key
14. Space bar
15. Reference pocket

F.3 INITIAL STEPS

1. Turn on the terminal.

   3277:

   Pull out the OFF-PUSH switch located at the lower left of the display screen. It is a round, circular, serrated knob.

   3278:

   Press the upper part of the orange On/Off switch (marked I/O) located on the left side of the screen. On the right side of the screen are two blue switches. The one marked Normal/Test should be in the Normal position.

   Once the terminal warms up, the screen should display information indicating that it is connected to a running system. This requires a minute or so. If this does not happen, try adjusting the brightness.

2. Adjust the brightness:

   3277:

   Turn the OFF-PUSH switch serrated knob clockwise.

   3278:

   Turn the knob on the lower right side of the screen clockwise. It has a picture on it resembling the sun.

3. Clear the screen.

   3277:

   Press the CLEAR key at the upper left of the keyboard.

   3278:

   Press the CLEAR key while holding down the ALT key. The CLEAR key is labeled on the forward face of the top left side of the keyboard and the ALT key is located to the right of the long space bar at the bottom of the keyboard.

   The information currently on the screen should be cleared. If it does not clear, try pressing the RESET key (lower left of main keyboard), and then the CLEAR key (3277), or the ALT and CLEAR keys (3278).

At this point, refer to the section, "How to Get Started," page 10, for information on how to logon to VSE/ICCF and the Interactive Productivity Facility.

G.0 MENU AND DIALOGUE CROSS REFERENCE

The following cross reference is useful in quickly locating a desired menu or dialogue. There are two cross references. The first is arranged in order by menu, and the second by the description of the dialogue or menu item.

Each entry shows the menu panel that the description is found on. It will also show either the next menu or the dialogue that will be called for each selection on the menu panel.

MENU	SEL	NEXT MENU	DIALOGUE	DESCRIPTION
ADM$	1	ADM$1		SYSTEM PROFILE
ADM$	2	ADM$2		LOGONS/PASSWORDS
ADM$	3	LIB$		LIBRARIAN
ADM$	4	ADM$4		SYSTEM TAILORING
ADM$	5		ADM$IST	MODIFY VSE/ICCF TABLES
ADM$	6		ADM$SEC	MODIFY SECURITY TABLE
ADM$	7		ADM$REP	RUN SECURITY REPORTS
ADM$	8		CUS$DIA	DIALOGUE CUSTOMIZATION
ADM$	9	CUS$		UTILITY AIDS
ADM$1	1		ADM$FST	FIRST TIME USE
ADM$1	2		ADM$HDW	I/O CONFIGURATION
ADM$1	3		ADM$SFT	SOFTWARE PRODUCTS
ADM$1	4	ADM$15		LIBRARY INFORMATION
ADM$1	5		ADM$LAB	LABEL INFORMATION
ADM$15	1		ADM$LBR	USER LIBRARIES
ADM$15	2		ADM$LBR	PRODUCTION/SERVICE LIBRARIES
ADM$15	3		ADM$LBR	PUT/PTF LIBRARIES
ADM$151	1		ADM$ADD	ADD NEW LIBRARY SET
ADM$151	2		ADM$BRW	BROWSE LIBRARIES
ADM$151	3		ADM$UPT	UPDATE LIBRARY
ADM$151	4		ADM$DEL	DELETE LIBRARY
ADM$153	1		ADM$BRW	BROWSE LIBRARIES
ADM$153	2	ADM$1532		UPDATE LIBRARY
ADM$1532	1		ADM$PUT	UPDATE PUTCL1
ADM$1532	2		ADM$PUT	UPDATE PUTRL1
ADM$1532	3		ADM$PUT	UPDATE PUTSL1
ADM$1532	4		ADM$PUT	UPDATE PUTHST1
ADM$1532	5		ADM$PUT	UPDATE PUTCL2
ADM$1532	6		ADM$PUT	UPDATE PUTRL2
ADM$1532	7		ADM$PUT	UPDATE PUTSL2
ADM$1532	8		ADM$PUT	UPDATE PUTHST2
ADM$1532	9		ADM$PUT	UPDATE WORKHST
ADM$1532	10		ADM$PUT	UPDATE SAVEHST
ADM$1532	11		ADM$PUT	UPDATE SYSHST
ADM$1532	12		ADM$PUT	UPDATE SYSNRS

MENU	SEL	NEXT MENU	DIALOGUE	DESCRIPTION
ADM$1532	13		ADM$PUT	UPDATE PUTNRS
ADM$2	1		ADM$USR	ADD VSE/ICCF USER
ADM$2	2		ADM$DSR	DELETE VSE/ICCF USER
ADM$2	3		ADM$CSR	CHANGE VSE/ICCF USER
ADM$2	4		ADM$ASN	ADD CICS/VS USER
ADM$2	5		ADM$DSN	DELETE CICS/VS USER
ADM$2	6		ADM$CSN	CHANGE CICS/VS USER
ADM$2	7		ADM$MSN	ASSEMBLE/CATALOG SNT
ADM$4	1		TSA$MAS	SUPERVISOR TAILORING
ADM$4	2		TAS$MAS	ASI PROCEDURE TAILORING
ADM$4	3		TPW$ASM	VSE/POWER TAILORING
ADM$4	4		ADM$ICF	VSE/ICCF TAILORING
ADM$4	5		ADM$MTC	TTF TAILORING
ADM$4	6		TCO$OPT	COBOL OPTION CARD
ADM$4	7		TPL$OPT	PL/I OPTION CARD
AMS$	1	CAT$		CATALOG MANAGEMENT
AMS$	2	SPC$		SPACE MANAGEMENT
AMS$	3	DSF$		DATA SET MANAGEMENT
CAT$	1		CAT$DEF	DEFINE CATALOG
CAT$	2		CAT$DEL	DELETE CATALOG
CAT$	3		CAT$BAC	COPY OUT CATALOG
CAT$	4		CAT$RES	COPY IN CATALOG
CAT$	5		CAT$TPT	TRANSPORT CATALOG
CAT$	6		CAT$LST	LIST CATALOG
CUS$	1		CUS$SEL	RETRIEVE JOB OFF SYSIN
CUS$	2		CUS$PPN	PRINT PANELS
DSF$	1		DSF$DEF	DEFINE CLUSTER
DSF$	2		DSF$DEL	DELETE CLUSTER
DSF$	3		DSF$ALT	ALTER CLUSTER
DSF$	4		DSF$COP	COPY FILE
DSF$	5		DSF$EXP	EXPORT FILE
DSF$	6		DSF$IMP	IMPORT FILE
DSF$	7		DSF$PRT	PRINT FILE
DSF$	8		DSF$VER	VERIFY FILE
DSF$	9		DSF$DSP	DISPLAY FILE
DTR$	1		SYU$MEN	SYSTEM USE
DTR$	2	SYM$		SYSTEM MANAGEMENT
DTR$	3	SYI$		FIRST USE TUTORIAL
LIB$	1		LIB$DSP	DISPLAY LIBRARY MEMBERS
LIB$	2		LIB$DEL	DELETE LIBRARY MEMBERS
LIB$	3		LIB$REN	RENAME LIBRARY MEMBERS
LIB$	4		LIB$CAT	CATALOG LIBRARY MEMBERS
LIB$	5		LIB$CRT	CREATE LIBRARIES
LIB$	6		LIB$COP	COPY/MERGE LIBRARIES
LIB$	7		ADM$BKR	BACKUP LIBRARY SETS
LIB$	8		ADM$BKR	RESTORE LIBRARY SETS
OPN$	1		OPN$JCL	JCL CREATION
OPN$	2	UTL$		VSE UTILITIES
SPC$	1		SPC$DEF	DEFINE SPACE
SPC$	2		SPC$DEL	DELETE SPACE

MENU	SEL	NEXT MENU	DIALOGUE	DESCRIPTION
SRV$	1		SRV$PUT	APPLY PUT
SRV$	2		SRV$PUT	RESTART PUT
SRV$	3		SRV$PUT	APPLY SELECTIVE PUT
SRV$	4	SRV$2		APPLY PTF
SRV$	5	SRV$5		APPLY APAR/LOCAL
SRV$	6	SRV$3		ARCHIVE FIX
SRV$	7	SRV$4		HISTORY FUNCTION
SRV$	8	SRV$8		JCL COMMENTS
SRV$2	1		SRV$CVL	PRINT COVERLETTERS
SRV$2	2		SRV$PTF	APPLY PTF
SRV$2	3		SRV$PTF	APPLY CUMULATIVE PTF
SRV$2	4		SRV$PTF	APPLY BACKOUT PTF
SRV$3	1		SRV$AAP	ARCHIVE APAR FIX
SRV$3	2		SRV$APT	ARCHIVE PTF
SRV$4	1		SRV$RET	RETRACE HISTORY
SRV$4	2		SRV$REM	REMOVE HISTORY RECORD
SRV$4	3		SRV$CON	CONDENSE HISTORY
SRV$4	4		SRV$BAC	BACKUP HISTORY FILE
SRV$4	5		SRV$RHS	RESTORE HISTORY
SRV$5	1		SRV$PRE	PRE SERVICE
SRV$5	2	SRV$52		CORRECTIVE SERVICE
SRV$5	3		SRV$POS	POST SERVICE
SRV$52	1		SRV$FIX	ALTER CORE IMAGE
SRV$52	2		SRV$FIX	ALTER RELOCATABLE
SRV$52	3		SRV$FIX	ALTER SOURCE
SRV$52	4		SRV$UND	UNDO CORE IMAGE
SRV$52	5		SRV$UND	UNDO RELOCATABLE
SRV$523	1	SRV$52		CONTINUE SERVICE
SRV$523	2		SRV$GEN	CREATE DFHGEN JCL
SRV$523	3		SRV$GEN	CREATE E.BOOK
SRV$523	4		SRV$GEN	CREATE DTSSG JCL
SRV$523	5		SRV$POS	POST SERVICE
SRV$8	1		SRV$CMN	TURN COMMENTS ON
SRV$8	2		SRV$CMN	TURN COMMENTS OFF
SYM$	1		SYM$GUI	SYSTEM MANAGEMENT GUIDE
SYM$	2	SYM$1		ADMINISTRATION
SYM$	3		INS$CAR	INSTALLATION
SYM$	4	VER$		VERIFICATION
SYM$	5		RPT$DMP	DUMP ANALYSIS
SYM$	6	SRV$		SERVICE
SYM$	7	OPN$		OPERATIONS
SYM$1	1	ADM$		SYSTEM ADMINISTRATION
SYM$1	2	SYM$2		DATA BASE ADMINISTRATION
SYM$1	3	SYM$33		COMMUNICATION ADMINISTRATION
SYM$2	1	DLZ$		INTERACTIVE MACRO FACILITY
SYM$2	2	AMS$		VSE/VSAM
SYM$33	1	TCI$		CICS/VS TABLES
SYM$33	2		TRJ$ASM	VSE/POWER RJE
SYM$33	3		TEP$ASM	EP/VS
SYU$	1		PDV$EXP	PROGRAM DEVELOPMENT

MENU	SEL	NEXT MENU	DIALOGUE	DESCRIPTION
SYU$1	1		PDV$EXP	PROGRAM DEVELOPMENT
TCI$	1	TCI$1		CICS PROGRAMS
TCI$	2	TCI$2		CICS TRANSACTIONS
TCI$	3	TCI$3		CICS TERMINALS, LINES
TCI$	4	TCI$4		CICS DATA SETS, DATA BASES
TCI$1	1		TCI$APP	ADD PROGRAM
TCI$1	2		TCI$DPP	DELETE PROGRAM
TCI$1	3		TCI$CPP	CHANGE PROGRAM
TCI$1	4		TCI$MPP	ASSEMBLE/CATALOG PPT
TCI$2	1		TCI$APC	ADD TRANSACTION
TCI$2	2		TCI$DPC	DELETE TRANSACTION
TCI$2	3		TCI$CPC	CHANGE TRANSACTION
TCI$2	4		TCI$MPC	ASSEMBLE/CATALOG PCT
TCI$3	1		TCI$ATC	ADD TERMINAL
TCI$3	2		TCI$DTC	DELETE TERMINAL
TCI$3	3		TCI$CTC	CHANGE TERMINAL
TCI$3	4		TCI$MTC	ASSEMBLE/CATALOG TCT
TCI$4	1		TCI$AFC	ADD DATA SET
TCI$4	2		TCI$DFC	DELETE DATA SET
TCI$4	3		TCI$CFC	CHANGE DATA SET
TCI$4	4		TCI$MFC	ASSEMBLE/CATALOG FCT
UTL$	1	UTL$1		BACKUP RESTORE UTILITIES
UTL$	2	UTL$2		FAST COPY UTILITIES
UTL$	3		UTL$COP	COPY DISKETTE UTILITIES
UTL$	4		UTL$DSP	DISPLAY VTOC UTILITIES
UTL$1	1		UTL$CRE	LIBRARY BACKUP
UTL$1	2		UTL$RES	LIBRARY RESTORE
UTL$2	1		UTL$FCY	COPY DISK TO DISK
UTL$2	2		UTL$DMP	DUMP DISK TO TAPE
UTL$2	3		UTL$RST	RESTORE TAPE TO DISK
VER$	1		VER$IFY	VSE/VSAM
VER$	2		VER$IFY	COBOL
VER$	3		VER$IFY	RPG
VER$	4		VER$IFY	PL/I OPTIMIZER
VER$	5		VER$IFY	SORT/MERGE II
VER$	6		VER$IFY	CICS/VS
VER$	7		VER$IFY	DMS/CICS/VS
VER$	8		VER$IFY	VSE/DITTO
VER$	9		VER$IFY	VSE/POWER/RJE
VER$	10		VER$IFY	EP/VS (3705)
VER$	11		VER$IFY	DL/I
VER$	12		VER$IFY	DATA DICTIONARY
VER$	13		VER$IFY	VSE/ACCESS CONTROL

DESCRIPTION	MENU	SEL	DIALOGUE	NEXT MENU
ADD CICS/VS USER	ADM$2	4	ADM$ASN	
ADD DATA SET	TCI$4	1	TCI$AFC	
ADD NEW LIBRARY SET	ADM$151	1	ADM$ADD	
ADD PROGRAM	TCI$1	1	TCI$APP	
ADD TERMINAL	TCI$3	1	TCI$ATC	
ADD TRANSACTION	TCI$2	1	TCI$APC	
ADD VSE/ICCF USER	ADM$2	1	ADM$USR	
ADMINISTRATION	SYM$	2		SYM$1
ALTER CLUSTER	DSF$	3	DSF$ALT	
ALTER CORE IMAGE	SRV$52	1	SRV$FIX	
ALTER RELOCATABLE	SRV$52	2	SRV$FIX	
ALTER SOURCE	SRV$52	3	SRV$FIX	
APPLY APAR/LOCAL	SRV$	5		SRV$5
APPLY BACKOUT PTF	SRV$2	4	SRV$PTF	
APPLY CUMULATIVE PTF	SRV$2	3	SRV$PTF	
APPLY PTF	SRV$	4		SRV$2
APPLY PTF	SRV$2	2	SRV$PTF	
APPLY PUT	SRV$	1	SRV$PUT	
APPLY SELECTIVE PUT	SRV$	3	SRV$PUT	
ARCHIVE APAR FIX	SRV$3	1	SRV$AAP	
ARCHIVE FIX	SRV$	6		SRV$3
ARCHIVE PTF	SRV$3	2	SRV$APT	
ASI PROCEDURE TAILORING	ADM$4	2	TAS$MAS	
ASSEMBLE/CATALOG SNT	ADM$2	7	ADM$MSN	
ASSEMBLE/CATALOG PPT	TCI$1	4	TCI$MPP	
ASSEMBLE/CATALOG PCT	TCI$2	4	TCI$MPC	
ASSEMBLE/CATALOG TCT	TCI$3	4	TCI$MTC	
ASSEMBLE/CATALOG FCT	TCI$4	4	TCI$MFC	
BACKUP HISTORY FILE	SRV$4	4	SRV$BAC	
BACKUP LIBRARY SETS	LIB$	7	ADM$BKR	
BACKUP RESTORE UTILITIE	UTL$	1		UTL$1
BROWSE LIBRARIES	ADM$151	2	ADM$BRW	
BROWSE LIBRARIES	ADM$153	1	ADM$BRW	
CATALOG LIBRARY MEMBERS	LIB$	4	LIB$CAT	
CATALOG MANAGEMENT	AMS$	1		CAT$
CHANGE CICS/VS USER	ADM$2	6	ADM$CSN	
CHANGE DATA SET	TCI$4	3	TCI$CFC	
CHANGE PROGRAM	TCI$1	3	TCI$CPP	
CHANGE TERMINAL	TCI$3	3	TCI$CTC	
CHANGE TRANSACTION	TCI$2	3	TCI$CPC	
CHANGE VSE/ICCF USER	ADM$2	3	ADM$CSR	
CICS DATA SETS, DATA BA	TCI$	4		TCI$4
CICS PROGRAMS	TCI$	1		TCI$1
CICS TERMINALS, LINES	TCI$	3		TCI$3
CICS TRANSACTIONS	TCI$	2		TCI$2
CICS/VS	VER$	6	VER$IFY	
CICS/VS TABLES	SYM$33	1		TCI$
COBOL	VER$	2	VER$IFY	

DESCRIPTION	MENU	SEL	DIALOGUE	NEXT MENU
COBOL OPTION CARD	ADM$4	6	TCO$OPT	
COMMUNICATION ADMINISTR	SYM$1	3		SYM$33
CONDENSE HISTORY	SRV$4	3	SRV$CON	
CONTINUE SERVICE	SRV$523	1		SRV$52
COPY DISK TO DISK	UTL$2	1	UTL$FCY	
COPY DISKETTE UTILITIES	UTL$	3	UTL$COP	
COPY FILE	DSF$	4	DSF$COP	
COPY IN CATALOG	CAT$	4	CAT$RES	
COPY OUT CATALOG	CAT$	3	CAT$BAC	
COPY/MERGE LIBRARIES	LIB$	6	LIB$COP	
CORRECTIVE SERVICE	SRV$5	2		SRV$52
CREATE DFHGEN JCL	SRV$523	2	SRV$GEN	
CREATE DTSSG JCL	SRV$523	4	SRV$GEN	
CREATE E.BOOK	SRV$523	3	SRV$GEN	
CREATE LIBRARIES	LIB$	5	LIB$CRT	
DATA BASE ADMINISTRATIO	SYM$1	2		SYM$2
DATA DICTIONARY	VER$	1	VER$IFY	
DATASET MANAGEMENT	AMS$	3		DSF$
DEFINE CATALOG	CAT$	1	CAT$DEF	
DEFINE CLUSTER	DSF$	1	DSF$DEF	
DEFINE SPACE	SPC$	1	SPC$DEF	
DELETE CATALOG	CAT$	2	CAT$DEL	
DELETE CICS/VS USER	ADM$2	5	ADM$DSN	
DELETE CLUSTER	DSF$	2	DSF$DEL	
DELETE DATA SET	TCI$4	2	TCI$DFC	
DELETE LIBRARY	ADM$151	4	ADM$DEL	
DELETE LIBRARY MEMBERS	LIB$	2	LIB$DEL	
DELETE PROGRAM	TCI$1	2	TCI$DPP	
DELETE SPACE	SPC$	2	SPC$DEL	
DELETE TERMINAL	TCI$3	2	TCI$DTC	
DELETE TRANSACTION	TCI$2	2	TCI$DPC	
DELETE VSE/ICCF USER	ADM$2	2	ADM$DSR	
DIALOGUE CUSTOMIZATION	ADM$	8	CUS$DIA	
DISPLAY FILE	DSF$	9	DSF$DSP	
DISPLAY LIBRARY MEMBERS	LIB$	1	LIB$DSP	
DISPLAY VTOC UTILITIES	UTL$	4	UTL$DSP	
DL/I	VER$	1	VER$IFY	
DMS/CICS/VS	VER$	7	VER$IFY	
DUMP ANALYSIS	SYM$	5	RPT$DMP	
DUMP DISK TO TAPE	UTL$2	2	UTL$DMP	
EP/VS	SYM$33	3	TEP$ASM	
EP/VS (3705)	VER$	1	VER$IFY	
EXPORT FILE	DSF$	5	DSF$EXP	
FAST COPY UTILITIES	UTL$	2		UTL$2
FIRST TIME USE	ADM$1	1	ADM$FST	
FIRST USE TUTORIAL	DTR$	3		SYI$
HISTORY FUNCTION	SRV$	7		SRV$4
I/O CONFIGURATION	ADM$1	2	ADM$HDW	
IMPORT FILE	DSF$	6	DSF$IMP	
INSTALLATION	SYM$	3	INS$CAR	

DESCRIPTION	MENU	SEL	DIALOGUE	NEXT MENU
INTERACTIVE MACRO FACIL	SYM$2	1		DLZ$
JCL COMMENTS	SRV$	8		SRV$8
JCL CREATION	OPN$	1	OPN$JCL	
LABEL INFORMATION	ADM$1	5	ADM$LAB	
LIBRARIAN	ADM$	3		LIB$
LIBRARY BACKUP	UTL$1	1	UTL$CRE	
LIBRARY INFORMATION	ADM$1	4		ADM$15
LIBRARY RESTORE	UTL$1	2	UTL$RES	
LIST CATALOG	CAT$	6	CAT$LST	
LOGONS/PASSWORDS	ADM$	2		ADM$2
MODIFY SECURITY TABLE	ADM$	6	ADM$SEC	
MODIFY VSE/ICCF TABLES	ADM$	5	ADM$IST	
OPERATIONS	SYM$	7		OPN$
PL/I OPTIMIZER	VER$	4	VER$IFY	
PL/I OPTION CARD	ADM$4	7	TPL$OPT	
POST SERVICE	SRV$5	3	SRV$POS	
POST SERVICE	SRV$523	5	SRV$POS	
PRE SERVICE	SRV$5	1	SRV$PRE	
PRINT COVERLETTERS	SRV$2	1	SRV$CVL	
PRINT FILE	DSF$	7	DSF$PRT	
PRINT PANELS	CUS$	2	CUS$PPN	
PRODUCTION/SERVICE LIBR	ADM$15	2	ADM$LBR	
PROGRAM DEVELOPMENT	SYU$	1	PDV$EXP	
PROGRAM DEVELOPMENT	SYU$1	1	PDV$EXP	
PUT/PTF LIBRARIES	ADM$15	3	ADM$LBR	
REMOVE HISTORY RECORD	SRV$4	2	SRV$REM	
RENAME LIBRARY MEMBERS	LIB$	3	LIB$REN	
RESTART PUT	SRV$	2	SRV$PUT	
RESTORE HISTORY	SRV$4	5	SRV$RHS	
RESTORE LIBRARY SETS	LIB$	8	ADM$BKR	
RESTORE TAPE TO DISK	UTL$2	3	UTL$RST	
RETRACE HISTORY	SRV$4	1	SRV$RET	
RETRIEVE JOB OFF SYSIN	CUS$	1	CUS$SEL	
RPG	VER$	3	VER$IFY	
RUN SECURITY REPORTS	ADM$	7	ADM$REP	
SERVICE	SYM$	6		SRV$
SOFTWARE PRODUCTS	ADM$1	3	ADM$SFT	
SORT/MERGE II	VER$	5	VER$IFY	
SPACE MANAGEMENT	AMS$	2		SPC$
SUPERVISOR TAILORING	ADM$4	1	TSA$MAS	
SYSTEM ADMINISTRATION	SYM$1	1		ADM$
SYSTEM MANAGEMENT	DTR$	2		SYM$
SYSTEM MANAGEMENT GUIDE	SYM$	1	SYM$GUI	
SYSTEM PROFILE	ADM$	1		ADM$1
SYSTEM TAILORING	ADM$	4		ADM$4
SYSTEM USE	DTR$	1	SYU$MEN	
TRANSPORT CATALOG	CAT$	5	CAT$TPT	
TTF TAILORING	ADM$4	5	ADM$MTC	
TURN COMMENTS ON	SRV$8	1	SRV$CMN	
TURN COMMENTS OFF	SRV$8	2	SRV$CMN	

DESCRIPTION	MENU	SEL	DIALOGUE	NEXT MENU
UNDO CORE IMAGE	SRV$52	4	SRV$UND	
UNDO RELOCATABLE	SRV$52	5	SRV$UND	
UPDATE LIBRARY	ADM$151	3	ADM$UPT	
UPDATE LIBRARY	ADM$153	2		ADM$1532
UPDATE PUTCL1	ADM$1532	1	ADM$PUT	
UPDATE PUTRL1	ADM$1532	2	ADM$PUT	
UPDATE PUTSL1	ADM$1532	3	ADM$PUT	
UPDATE PUTHST1	ADM$1532	4	ADM$PUT	
UPDATE PUTCL2	ADM$1532	5	ADM$PUT	
UPDATE PUTRL2	ADM$1532	6	ADM$PUT	
UPDATE PUTSL2	ADM$1532	7	ADM$PUT	
UPDATE PUTHST2	ADM$1532	8	ADM$PUT	
UPDATE PUTNRS	ADM$1532	1	ADM$PUT	
UPDATE SAVEHST	ADM$1532	1	ADM$PUT	
UPDATE SYSHST	ADM$1532	1	ADM$PUT	
UPDATE SYSNRS	ADM$1532	1	ADM$PUT	
UPDATE WORKHST	ADM$1532	9	ADM$PUT	
USER LIBRARIES	ADM$15	1	ADM$LBR	
UTILITY AIDS	ADM$	9		CUS$
VERIFICATION	SYM$	4		VER$
VERIFY FILE	DSF$	8	DSF$VER	
VSE UTILITIES	OPN$	2		UTL$
VSE/ACCESS CONTROL	VER$	1	VER$IFY	
VSE/DITTO	VER$	8	VER$IFY	
VSE/ICCF TAILORING	ADM$4	4	ADM$ICF	
VSE/POWER TAILORING	ADM$4	3	TPW$ASM	
VSE/POWER RJE	SYM$33	2	TRJ$ASM	
VSE/POWER/RJE	VER$	9	VER$IFY	
VSE/VSAM	SYM$2	2		AMS$
VSE/VSAM	VER$	1	VER$IFY	

H.0 PRODUCT CROSS REFERENCE

The following table shows the names of the products as they appear in the ADM$SHIP table. It also contains: the PID order number for the product, the three character component level code, the MSHP required component identifiers for the product, and the identifier for the service and production libraries that contain the product.

Description	Product	Code	Component ID	Library
PUT SERVICE LEVEL	5746XE8	351	5745-SV-LVL	A
VSE ATTEN, INIT, TERMIN.	5745030	G13	5745-SC-AIT	A
VSE ASSEMBLER	5745030	G13	5745-SC-ASM	A
VSE CHECKPOINT RESTART	5745030	G13	5745-SC-CKR	A
VSE DIRECT ACCESS METHOD	5745030	G13	5745-SC-DAM	A
VSE DYNAMIC DUMP UTILITY	5745030	G13	5745-SC-DDU	A
VSE DISKETTE IOCS	5745030	G13	5745-SC-DIO	A
VSE DISTRIBUTION PROGRAM	5745030	G13	5745-SC-DIS	A
VSE DISK ERROR RECOVERY	5745030	G13	5745-SC-DKE	A
VSE DOC SUPPORT	5745030	G13	5745-SC-DOC	A
VSE SEQUENTIAL DISK IOCS	5745030	G13	5745-SC-DSK	A
VSE ENVIRON EDIT RECORD.	5745030	G13	5745-SC-ER1	A
VSE COMPILER I/O MODULES	5745030	G13	5745-SC-IOM	A
VSE IOCS DEVICE IND. I/O	5745030	G13	5745-SC-IOX	A
VSE IPL AND BUFFER LOAD	5745030	G13	5745-SC-IPL	A
VSE ISAM	5745030	G13	5745-SC-ISM	A
VSE JOB CONTROL	5745030	G13	5745-SC-JCL	A
VSE LIBRARY:MAIN,SERVICE	5745030	G13	5745-SC-LBR	A
VSE LINKAGE EDITOR	5745030	G13	5745-SC-LNK	A
VSE MAGNET.CHAR REC.IOCS	5745030	G13	5745-SC-MCR	A
VSE OPTICL.CHAR REC.IOCS	5745030	G13	5745-SC-OCR	A
VSE ON LINE TEST PROGRAM	5745030	G13	5745-SC-OLT	A
VSE PROBLEM DETERM. AIDS	5745030	G13	5745-SC-PDA	A
VSE PAPER TAPE IOCS	5745030	G13	5745-SC-PTP	A
VSE RECOVERY MANAGEMENT	5745030	G13	5745-SC-RMS	A
VSE SPECIAL DEVICE SUPPT	5745030	G13	5745-SC-SDS	A
VSE SUPERVISOR	5745030	G13	5745-SC-SUP	A
VSE MAGNETIC TAPE IOCS	5745030	G13	5745-SC-TAP	A
VSE TAPE ERROR RECOVERY	5745030	G13	5745-SC-TPE	A
VSE SYS. UTILITY PROGRAM	5745030	G13	5745-SC-UTL	A
VSE MSHP	5745030	G13	5745-SC-UTS	A
VSE/IPCS	5746SA1	G83	5745-SC-IPC	A
VSE/ICCF	5746TS1	G73	5746-TS-100	A
VSE/POWER	5746XE3	G34	5745-SC-PWR	A
VSE/POWER/RJE	5746XE3	G36	FEAT- -G36	A
VSE/VSAM	5746AM2	G18	5745-SC-VSM	A
VSE/VSAM SERVICE PROGRAM	5746AM2	G18	5745-SC-AMS	A
VSAM/VTAM COMMON MODULES	5746AM2	G18	5745-SC-VCM	A

Description	Product	Code	Component ID	Library
INTERACT.PRODUC.FACILITY	5748MS1	E23	5745-MS-100	A
CICS/VS CORE IMAGE LIB	5746XX3	N33	5746-XX-300	B
CICS/VS RELO/PRIM/SOURCE	5746XX3	N34	5746-XX-300	B
CICS/VS SECOND/LIBRARY	5746XX3	N35	5746-XX-300	B
CICS/VS TERTIARY/LIBRARY	5746XX3	N36	5746-XX-300	E
CICS/VS MACRO/LIBRARY	5746XX3	N37	5746-XX-300	E
DL/1 DOS/VS	5746XX1	N54	5746-XX-100	D
DL/1 DOS/VS SECOND LIB	5746XX1	N55	5746-XX-100	D
PL/I OPTIMIZING COMPILER	5736PL1	N74	5736-PL-161	C
PL/I RESIDENT LIBRARY	5736LM4	N72	5736-LM-461	C
PL/I TRANSIENT LIBRARY	5736LM5	N73	5736-LM-561	C
VSE/FAST COPY	5746AM4	G55	5745-AM-400	C
COBOL	5746CB1	032	5746-CB-100	C
RPG II	5746RG1	042	5746-RG-100	C
SORT/MERGE II	5746SM2	N83	5746-SM-200	C
DMS/CICS/VS DOS	5746XC4	P12	5746-XC-400	D
DMS APPLICATION GENERAT.	5746XC4	D01	FEAT- -D01	D
VSE/DITTO	5746UT3	G32	5745-UT-300	C
EP/VS (3705)	5747AG1	514	5747-AG-100	C
EP/VS SCP	5747AG1	782	5735-SC-100	C
DATA DICTIONARY	5746XXC	P22	5746-XX-C00	D
VSE/ACCESS CONTROL	5746XE7	G37	5746-XE-700	C
BTAM ES PP	5746RC5	G08	5745-SC-BTM	C
BTAM ES SCP	5747CG1	723	5745-SC-BTM	C
ACF/VTAM PP FOR VSE	5746RC3	G14	5745-SC-VTM	C
ACF/VTAM SCP/TOLTEP VSE	5747CF1	729	5745-SC-TLT	C
ACF/VTAME PP FOR VSE	5746RC7	G11	5745-SC-VTM	C
ACF/VTAME SCP/TOLTEP VSE	5747CG2	730	5745-SC-TLT	C
ACF/NCP/VS PP	5735XX1	G79	5735-SC-300	F
ACF/NCP/VS SCP	5747CH1	778	5735-SC-300	F
ACF/NCP/VS EP FEAT 6004	5747CH1	782	5747-SC-100	F
SSP PP	5735XX3	G81	5747-AG-100	F
SSP SCP	5747CH1	780	5747-AG-100	F

I.0 INTERACTIVE PRODUCTIVITY FACILITY DIALOGUE DESCRIPTIONS

This appendix describes at a detail level the dialogues of the Interactive Productivity Facility. The following information is provided for each dialogue:

DIALOGUE: This is the name of the dialogue as contained in the core image library.

DIALOGUE NAME: This is the title of the dialogue as contained on the menu panel that invokes the dialogue.

PREREQUISITE DIALOGUES: This is a list of any Interactive Productivity Facility dialogues that must be run before this one will work correctly. Note: ADM$FST is required for most Interactive Productivity Facility dialogues and is not listed individually on each dialogue description.

DEFAULT JOBNAME CREATED: This is the name that the output JCL will be filed under in the user area.

OTHER VSE/ICCF MEMBERS CREATED: Some of the Interactive Productivity Facility dialogues create internal members that are filed on the user's disk. These members are listed here. If they are in parenthesis, they may or may not be generated, depending on user responses.

DIALOGUE DESCRIPTION: This is a description of the dialogue function.

JCL DESCRIPTION: This is a description of the JCL that the dialogue produces and what functions it will perform when executed.

DIALOGUE: ADM$ADD

DIALOGUE NAME: Add New Library Set

PREREQUISITE DIALOGUES: ADM$LBR

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to add a new library set to the administrative tables. A list of the current library sets and their current libraries will be shown and the names of the new library set will be entered in the data entry fields. A library set is a logical group of libraries, and is composed of a core image, relocatable, and source statement library. Library sets for user libraries may consist of any combination of the above. Library sets for IBM libraries must have a core image library if they will be serviced by the PUT tapes.

After determining which libraries you wish to add to the new library set, you will be asked to supply additional information for each library. The information required is the file identification, library allocation, directory allocation, starting address of the library, device type, and volume serial number of the pack where the library will be located.

JCL DESCRIPTION: None

DIALOGUE: ADM$ASN

DIALOGUE NAME: Add CICS Users

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SNT$AST

OTHER VSE/ICCF MEMBERS CREATED: TCI$SNT1

DIALOGUE DESCRIPTION:

This dialogue is used to add users to your CICS/VS system. You may add various CICS/VS sign-on table parameters based on the congfiguration of your system. When you complete the adds for as many users as desired, they are filed into TCI$SNT. You should consult the CICS/VS System Programmers Reference Manual (SC33-0069) for a full explanation of what each parameter means since the explanation provided is only a summary of the information in the manual.

JCL DESCRIPTION:

The JCL created by this dialogue consists of one job that will add as many users as you have entered, plus those that are already in the table TCI$SNT1 from previous entries. This table is non-suffixed so that only one sign-on table can exist on your system. The phase will be cataloged into the USRCL1(user core image library one).

DIALOGUE: ADM$BKR

DIALOGUE NAME: BACKUP/RESTORE Library Sets

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: BACKUP/RESTORE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to either backup or restore your library sets. Which use (backup or restore) depends on the menu item selected. You may use this dialogue to backup/restore all of your production and user library sets, or any combination of individual sets. The term set is used to describe core image, relocatable, and source statement libraries. Example: The library set for library C is: production core image library C, production relocatable library C, and source statement library C.

The panel, ADM$BKR1, contains entries for all of the possible library sets that can be defined in the system profile tables. The first entry, PRDXLA, defines the production library set for A. If you enter ALL in this field, all of the library sets that exist on your system and are described in you system profile will be backed up or restored.

The restore feature of this dialogue may also be used to restore a library set from a backup taken by the service dialogues.

JCL DESCRIPTION:

A single job is produced that contains either a backup or restore statement for each library.

DIALOGUE: ADM$BRW

DIALOGUE NAME: Browse Libraries

PREREQUISITE DIALOGUES: ADM$LBR

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to display information about currently defined USER or IBM libraries. The dialogue will display one library at a time. The information displayed will be the library name, library file ID, library description, library allocation, directory allocation, device type and volume serial of the pack containing the library, starting address of the library, and the number of tracks (or blocks for FBA devices).

JCL DESCRIPTION: None

DIALOGUE: ADM$CSN

DIALOGUE NAME: Change CICS/VS Users

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SNT$AST

OTHER VSE/ICCF MEMBERS CREATED: TCI$SNT1

DIALOGUE DESCRIPTION:

This dialogue is used to change sign on parameters in your CICS/VS system. You may change or add various CICS/VS sign-on table parameters based on the configuration of your system. When you complete as many changes or additions as desired, they are filed into TCI$SNT to preserve them. You should consult the CICS/VS System Programmers Guide for a full explanation of the meaning of each parameter, because the explanation provided in the dialogue is only a summary of the information in the manual.

JCL DESCRIPTION:

The JCL created by this dialogue consists of one job that makes all the changes you have entered plus retains those entries that were in table TCI$SNT1 previously. This table is non-suffixed so that only one sign-on table can exist on your system. The library into which the phase is catalogued is USRCL1 (user core image library one).

DIALOGUE: ADM$CSR

DIALOGUE NAME: Change ICCF Users

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ICCF

OTHER VSE/ICCF MEMBERS CREATED: ADM$USRT

DIALOGUE DESCRIPTION:

This dialogue is used to change users and libraries in the VSE/ICCF system. You may change various VSE/ICCF parameters based on the configuration of your system. You enter an existing user and change the parameters for that user as they are presented to you. When you complete the changes for as many users as desired, they are filed into ADM$USRT. Four panels are presented to you for the insertion of changes; you should consult the VSE/ICCF Installation and Operations Reference manual for a full explanation of what each parameter means since he explanation provided is only a summary of the information in the manual.

JCL DESCRIPTION:

The JCL created by this dialogue consists of one DTSUTIL job that will change as many users as you have entered. In order to run this job you must insure that VSE/ICCF is not running; otherwise, it will not enter the changes onto the system.

DIALOGUE: ADM$DEL

DIALOGUE NAME: Delete Library

PREREQUISITE DIALOGUES: ADM$LBR

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to delete a currently defined USER or IBM library from the administrative tables. The dialogue will display the current library names and allow you to select the library you wish to delete. After selecting the library to delete, the dialogue will display the library name, file ID, description, device type, serial number, starting address, and number of tracks/blocks, and ask you if this is the library you wish to delete.

JCL DESCRIPTION: None

DIALOGUE: ADM$DSN

DIALOGUE NAME: Delete CICS Users

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SNT$AST

OTHER VSE/ICCF MEMBERS CREATED: TCI$SNT1

DIALOGUE DESCRIPTION:

This dialogue is used to delete users from your CICS/VS system. You are asked the ID of the user you wish to delete from the sign-on table. Then a second panel asks you to enter yes or no to delete that user. When you complete the deletes for as many users as desired, they are filed into TCI$SNT. You should consult the CICS/VS System Programmers Guide (SC33-0069) for a full explanation of what each parameter means since the explanation provided is only a summary of the information in the manual.

JCL DESCRIPTION:

The JCL created by this dialogue consists of one job that will assemble a new SNT with the users deleted and create a new sign-on table that has those entries that were not deleted. This table is non-suffixed so that only one Sign On Table can exist on your system. This table is cataloged to the USRCL (user core image library one).

DIALOGUE: ADM$DSR

DIALOGUE NAME: Delete ICCF Users

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ICCF

OTHER VSE/ICCF MEMBERS CREATED: ADM$USRT

DIALOGUE DESCRIPTION:

This dialogue is used to delete users and libraries in the VSE/ICCF system. First, a panel will be presented to you that asks the user you wish to delete; then the next panel asks if you want to actually delete that user to which you respond yes or no. You may enter an existing user and delete that user. You may then complete the deletion for as many users as desired.

JCL DESCRIPTION:

The JCL created by this dialogue consists of one DTSUTIL job that will delete as many users as you have entered for deletion. In order to run this job, you must ensure that VSE/ICCF is not running; otherwise, it will not delete the users from the system.

DIALOGUE: ADM$FST

DIALOGUE NAME: First Time Use

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: FIRSTUSE

OTHER VSE/ICCF MEMBERS CREATED: (ADM$FSTU), (ADM$HDWT), (TAS$SD11-25),
ADM$DTAB, ADM$JCL0, ADM$LIB,
ADM$LTAB, ADM$PAR0, ADM$PAR2,
ADM$PROD, ADM$SHIP, ADM$ULIB,
DTR$PCTI, DTR$PPTI, LIB$$ASI,
LIB$$DEF, TAS$AR21, TAS$ASGX,
TAS$PDSX, TAS$PWR, TAS$PWRX,
TASSYS, TASSYSX

DIALOGUE DESCRIPTION:

This dialogue is the first dialogue to be run after the base install procedure has been completed, and the Interactive Productivity Facility has been brought up. It is used to create your system profile. Tables are created that establish initial defaults for your software products, hardware configuration, disk standard labels, and libraries. If an I/O configuration table already exists, it can be preserved. If a disk standard labels table already exists, it is scanned, and non-System IPO/E supplied entries are added to the newly created labels table.

A series of panels is used to determine which optional products you plan to install on your system. This information is used to dynamically calculate the amount of DASD space required for certain production libraries. These libraries are created based on the calculated sizes.

If you wish to install PL/I Optimizing Compiler and Libraries (5736-PL3), select the entries corresponding to each of PL/I Optimizing Compiler (5736-PL1), PL/I Resident Library (5736-LM4), and PL/I Transient Library (5736-LM5). CICS/VS should be selected only if it is currently installed (that is, installed as part of the base installation process).

A number of System IPO/E supplied tables are tailored during the execution of this dialogue based on the IPL procedure chosen. The additional time required to perform this editing now results in faster execution times for later dialogues.

The following is a list of tables and skeletons produced during the execution of the first time use dialogue, along with a brief description of each:

ADM$SHIP - System Software Product Profile Table
ADM$PROD - System Software Product Profile Table
ADM$HDWT - System I/O Configuration Profile Table
ADM$DTAB - System Disk Label and Extent Profile Table
ADM$PAR0 - System Partition Disk Label and Extent Profile Table for BG

| ADM$PAR2 - System Partition Disk Label and Extent Profile Table for F2
ADM$LTAB - System Library Profile Table
ADM$LIB - System Production/Service Library Table
ADM$ULIB - User Library Table
| TAS$AR21 - Master ASI Directory Table
| TAS$ASGX - Programmer Logical Unit Assignment Table
| TAS$PDSX - Page Data Set Parameter Table
TAS$PWRX - Power Device and Startup Parameter Table
TAS$PWR - Dummy Power Device and Startup Parameter Table
| TAS$SYSX - Miscellaneous ASI Parameter Table
TAS$SYS - Dummy Miscellaneous ASI Parameter Table
| TAS$SDLnn - System Directory List Tables
| ADM$FSTU - Table indicating First Time Use dialogue has been executed
ADM$JCL0 - Skeleton of DLBL and EXTENT expansion for Standard Labels
LIB$$ASI - Skeleton of System LIBDEFs
LIB$$DEF - Skeleton of System LIBDEFs with DLBL/EXTENT information
DTR$PCTI - Skeleton containing DFHPCT entries for VSE/ICCF
DTR$PPTI - Skeleton containing DFHPPT entries for VSE/ICCF

JCL DESCRIPTION:

The JCL created by the first time use dialogue contains a job to personalize the system history file. This job uses the MSHP PERSONALIZE statement to supply user identification information to the general header record of the history file. Another job is created to define the required production optional product libraries based on the products you indicated will be installed on your system. Finally, a job is included to catalogue into the system procedure library and execute a procedure to establish system LIBDEFs. This procedure defines the sequence in which production libraries are to be concatenated and accessed, and opens the newly created libraries. It can be executed at any time to reset the system LIBDEFs by releasing the pause job held in the system reader queue for the desired partition (for example, r rdr,PAUSEBG for the background partition), and issuing // EXEC PROC=LIBDEF preceded by the appropriate partition identification (0 // EXEC PROC=LIBDEF for background). If SYSCLB, SYSRLB, or SYSSLB are assigned, they must be unassigned prior to executing the proc (0 ASSGN SYSCLB,UA for SYSCLB assigned in background). The job is concluded by entering the partition identification (again, 0 for background).

DIALOGUE: ADM$HDW

DIALOGUE NAME: I/O Configuration

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: (ADM$HDWT)

DIALOGUE DESCRIPTION:

This dialogue is used to examine and maintain a profile of the local I/O devices attached to your system. It is possible to add, update, or delete a single entry in your I/O configuration profile table through the UPDATE activity based on the DEVICE ADDRESS you provide. If an entry presently exists with that address, the current definition is displayed. You can then modify or delete that entry. An EDIT activity exists that displays the current entries sequentially, allowing you to change or delete any of them. To examine a listing of the entries without making any changes to them, there is a BROWSE activity. The END activity returns you to the SYSTEM PROFILE menu.

JCL DESCRIPTION: None

DIALOGUE: ADM$ICF

DIALOGUE NAME: VSE/ICCF Tailoring

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ICCFGEN

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to alter the standard defaults of the VSE/ICCF system. This is accomplished by changing the operands of the DTSOPTNS macro and cataloging it as a new DTSGENER book in user source statement library one.

The default values shown are for the CICS/VS version rather than the TTF version. If you reply TTF for the system, it will change all of the defaults prior to displaying the remaining panels. If you are using TTF, you should run this dialogue prior to running the TTF tailoring dialogue. (Of course, this is not necessary if you plan on using the default ICCF parameters.)

JCL DESCRIPTION:

The JCL produced by this dialogue performs the following steps:

1. Gives you the option of FASTCOPYing your user data to tape (3310, 3340, and 3330).

2. Restores your service library A from tape to disk.

3. Provides online selection of the VSE/ICCF options.

4. Catalogues a new DTSGENER book in USRSL1.

5. Provides appropriate LIBDEFs for the Stage 2 VSE/ICCF assembly and catalogue of the affected phases.

6. Reassembles and catalogues phases for the VSE/ICCF macros that are affected by the options that you changed from their default values.

7. If you FASTCOPYed your user data to tape, provides the option of restoring it from tape.

DIALOGUE: ADM$IST

DIALOGUE NAME: Modify VSE/ICCF Tables

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PHASETAB or LOADTAB

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in modifying the system file table, system program table, and load protection table. In the system file table you can modify the space, volume, and file entries. You will be able to add, change, delete, and display information in the system program table. In the load protection table, you also can add, delete and display information.

JCL DESCRIPTION:

The JCL generated will catalog to the source statement library (USRSL1) a book (A.DTSSYSPG) to be used in the assembly of DTSCJENT and DTSSUBMT. The second step of this job will assemble the new phases and put them in the system core image library (IJSYSRS).

DIALOGUE: ADM$LAB

DIALOGUE NAME: Label Information

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: STDLABEL (for System Standard Labels)
PARLABEL (for Partition Labels)

OTHER VSE/ICCF MEMBERS CREATED: ADM$JCL0 (for Standard Labels)
ADM$PARx (for Partition Labels,
x is partition number)

DIALOGUE DESCRIPTION:

You will need this dialogue when you make changes to DASD files delivered with the System IPO/E or when you add or change your own DASD files. Files pertaining to libraries are not addressed by this dialogue but by the LIBRARY INFORMATION dialogue. Summary information for several labels is presented, and you may choose the one you wish to view by selecting the proper number. When one is selected, a panel displaying all the fields of the DLBL statement is presented. Existing data may now be changed and blank fields added. You may also delete the entire DLBL-EXTENT(s) set by overlaying the FILE NAME with DELETE. Select the proper ACTION CODE to view the EXTENT(s) for this DLBL or add another DLBL-EXTENT set. You may also add label sets at the end of the file by selecting a blank line from the selection menu. Select menu item 12 to create the JCL and end your Label Information session.

Partition labels for background (BG) are supplied with the System IPO/E for background work files. If you wish to create labels for other partitions you may do so and the data will be saved automatically.

JCL DESCRIPTION:

The JCL created will catalogue a procedure to the procedure library for the system standard labels or the specified partition labels. The procedures must be executed to load the labels in the label area. You may also load the background labels at IPL time if you tailor the ASI procedures after updating standard labels.

DIALOGUE: ADM$LBR

DIALOGUE NAME: Library Information

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to determine what type of library you want to reference; USER, IBM, or PUT library.

JCL DESCRIPTION: None

DIALOGUE: ADM$MSN

DIALOGUE NAME: CICS Tailoring: Assemble/Catalog Sign-On Table

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SNT$ASN

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

JCL is generated to assemble and catalog the sign-on table. If the table does not exist, an error message is displayed. No changes are made to any of the table entries.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS SNT in the IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

DIALOGUE: ADM$MTC

DIALOGUE NAME: TTF Tailoring

PREREQUISITE DIALOGUES: (ADM$ICF)

DEFAULT JOB NAME CREATED: TTFGEN

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue regenerates the TTF system and creates a new startup deck.

You must supply the number of control units that you have, the starting SYSnnn number for the terminals, what dump option you want as a default, and whether or not you want TP balancing. You will then be asked for the starting address of the first terminal on each control unit, and how many terminals are on each control unit. Next, each terminal address will be displayed, and you must identify any printers, or if the terminal is to be allowed to use the master terminal program. Finally, you must identify the supervisor that you are using as a 370 or E mode supervisor.

JCL DESCRIPTION:

This dialogue is unique in that it has two outputs. The first job stream produced will assemble the necessary macros, set up the LIBDEFs, and catalogue the needed phases. The second job stream will be the startup deck that you will use to daily start up your VSE/ICCF system. Caution: If you intend to tailor your VSE/ICCF system, do it before running this dialogue, since input from the VSE/ICCF produced tables is used.

DIALOGUE: ADM$PUT

DIALOGUE NAME: PUT Library/History Update

PREREQUISITE DIALOGUES: ADM$LBR

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to change the administrative tables to reflect a change in the description of a PUT library or history file. The current PUT library or history file names will be displayed, and you may select the one you wish to change. The dialogue will then display the current information for this library or file and allow you to change the library or file ID, library or file allocation, directory allocation, device type of the pack the library or file is on, volume serial number of that pack, or the starting address of the library or file.

JCL DESCRIPTION: None

DIALOGUE: ADM$REP

DIALOGUE NAME: Run Security Reports

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SECREP

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in using the report function of VSE/Access Control Logging and Reporting. You will be able to initialize, dump, restore, select, or reset the datasets of VSE/Access Control Logging and Reporting.

JCL DESCRIPTION:

The JCL generated is a VSE job stream to perform the function selected on the VSE/Access Control Logging and Reporting security data sets.

DIALOGUE: ADM$SEC

DIALOGUE NAME: Modify Security Table

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SECTAB

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in modifying the security table. You will be able to add, change, delete, and display users, groups, libraries, files, and phases.

JCL DESCRIPTION:

The JCL generated will assemble a new security table (DTSECTAB) and put the table in the USRCL1 core image library.

DIALOGUE: ADM$SFT

DIALOGUE NAME: Software Products

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: (DLI$PCT), (DLI$PPT), (DLI$ALT), (DMS$PCT), (DMS$PPT), (DMS$ALT), (DTR$PCT), (DTR$PPT), (PLI$ALT), (PLI$PPT)

DIALOGUE DESCRIPTION:

This dialoque is used to maintain a profile of the software products installed on your system. Select the software product whose software product table entry requires updating. If the product you wish to update does not appear on the screen, select the ADDITIONAL PRODUCTS entry to continue to page through the existing entries. The last entry displayed, OTHER, provides the opportunity to add an entry to the table corresponding to a non-IPO/E supported product. It is possible to service such a product using the service process if the appropriate information is supplied to the software product table.

A table update is required if a product is installed on, or removed from, the current system, the release or identifier number is changed, or the product is to be included or deleted from the CICS/VS Tailoring procedure.

If you indicate the product should be included in the CICS/VS tailoring procedure, the necessary system entries for this product will be included in the appropriate CICS/VS management tables. The VSE/ICCF members listed above contain these entries. Tables that may be affected include the Processing Program Table (PPT), the Program Control Table (PCT), and the File Control Table (FCT).

If you wish to update information concerning PL/I Optimizing Compiler and Libraries (5736-PL3), select and update the entries corresponding to PL/I Optimizing Compiler (5735-PL1), PL/I Resident Library (5736-LM4), and PL/I Transient Library (5736-LM5) individually.

JCL DESCRIPTION: None

DIALOGUE: ADM$UPT

DIALOGUE NAME: Update Library

PREREQUISITE DIALOGUES: ADM$LBR

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to change the administrative tables to reflect a change in the description of a current USER or IBM library. The current library names will be displayed, and you may select the library you wish to change. The dialogue will then display the current information for this library, and allow you to change the library file ID, library allocation, directory allocation, device type of the pack the library is on, volume serial number of that pack, or the starting address of the library.

JCL DESCRIPTION: None

DIALOGUE: ADM$USR

DIALOGUE NAME: Add ICCF Users

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ICCF

OTHER VSE/ICCF MEMBERS CREATED: ADM$USRT

DIALOGUE DESCRIPTION:

This dialogue is used to add users and libraries to the VSE/ICCF system. You will be asked to add various VSE/ICCF parameters based on the configuration of your system. When you complete the adds for as many users as desired, they are filed into table ADM$USRT. Four panels are presented to you for the insertion of adds. You should consult the VSE/ICCF Installation and Operations Reference manual for a full explanation of what each parameter means since the explanation provided is only a summary of the information in the manual.

JCL DESCRIPTION:

The JCL created by this dialogue consists of one DTSUTIL job that will add as many users as you have entered. In order to run this job you must ensure that VSE/ICCF is not running; otherwise, it will not enter the adds onto the system.

DIALOGUE: CAT$BAC

DIALOGUE NAME: Copy Out Catalog

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: BKUPCAT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in backing up either a master catalog or user catalog to tape or disk. You will need to know the name of the user catalog if that is what you are backing up. You will also be asked for information about the back up device.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to backup the desired catalog to tape or disk.

DIALOGUE: CAT$DEF

DIALOGUE NAME: Define Catalog

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DEFCATLG

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in creating either a VSE/VSAM master catalog or user catalog. You will be asked which you wish to create and then for information on DASD placement and other catalog information.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to create the desired catalog.

DIALOGUE: CAT$DEL

DIALOGUE NAME: Delete Catalog

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DELCATLG

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in deleting a VSE/VSAM user catalog. You will be asked the name of the user catalog that you are deleting.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to delete the desired user catalog.

DIALOGUE: CAT$LST

DIALOGUE NAME: List Catalog

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: LISTJOB

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in listing all or selected volumes owned by the master catalog or a user catalog. Listing of pointers to all the user catalogs in the system can also be done by this dialogue.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to list the disk volumes or files owned by the master catalog or a user catalog. The job can also be used to list the system pointers.

DIALOGUE: CAT$RES

DIALOGUE NAME: Copy in Catalog

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: RESTCAT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in restoring a master catalog or user catalog from tape or disk. You will need to know information about the restore device.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to restore the desired catalog from tape or disk.

DIALOGUE: CAT$TPT

DIALOGUE NAME: Transport Catalog

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: TPTUCAT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in exporting or importing a user catalog. You will need to know the name of the user catalog, the volume serial on which the catalog resides, and the type of DASD.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to export or import a user catalog.

DIALOGUE: CUS$DIA

DIALOGUE NAME: Dialogue Customization

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: CUSVJOB

OTHER VSE/ICCF MEMBERS CREATED: CUS$PROC

DIALOGUE DESCRIPTION:

Dialogue customization allows you to specify which dialogues you want to delete from the Interactive Productivity Facility. You can delete tailoring for products you do not have, or functions for which you have no further, use such as the first use tutorial. Verification jobs that you do not plan to run can be deleted also. The reason for deleting dialogues is to save library space and improve performance.

JCL DESCRIPTION:

The output of this dialogue consists of a VSE job and a VSE/ICCF procedure. The VSE job deletes the core image library phases for the dialogues to be removed. The VSE/ICCF procedure contains purges for the VSE/ICCF members to be deleted. Both must be run to completely remove the dialogues selected for deletion.

DIALOGUE: CUS$PPN

DIALOGUE NAME: Print Panels

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PANELIST

DIALOGUE DESCRIPTION:

This activity helps you to create the job stream required to print Interactive Productivity Facility panels. It runs in a VSE partition. The output from the job is directed to the VSE/POWER punch queue with the disposition I and the same priority and class. When this new job is executed, it prints the panel list you requested on the logical unit SYSLST.

JCL DESCRIPTION:

This dialogue will produce a job stream to be submitted to VSE.

| DIALOGUE: CUS$SEL

| DIALOGUE NAME: Select Job From a SYSIN Tape

| PREREQUISITE DIALOGUES: None

| DEFAULT JOB NAME CREATED: GETJOB

| OTHER VSE/ICCF MEMBERS CREATED: CUS$JOB

| DIALOGUE DESCRIPTION:

| This activity helps you to create the job stream required to select a
| job from a SYSIN tape. It will run in a VSE partition. The output from
| the job is directed to the VSE/POWER punch queue. When the job is
| completed, you can read and edit the selected job by issuing the
| VSE/ICCF macro: @CUS$JOB; then, it will be ready for modification.

| JCL DESCRIPTION:

| This dialogue will produce:

| * a job stream to be submitted to VSE

| * a VSE/ICCF macro

DIALOGUE: DSF$ALT

DIALOGUE NAME: Alter Cluster

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ALTER

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in altering a VSE/VSAM cluster. You can alter the file name, accessability, freespace amounts, retention period, and shareoptions. The information needed to alter a cluster is:

1. The name of the VSE/VSAM file
2. The type of file (KSDS, ESDS, or RRDS)
3. Whether the file is owned by the master or a user catalog
4. What you want to alter

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to alter a VSE/VSAM cluster.

DIALOGUE: DSF$COP

DIALOGUE NAME: Copy File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: COPY

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in copying a VSE/VSAM or sequential file. The sequential file can be on either tape or disk. The copy dialogue generates job streams to copy a VSE/VSAM file to another VSE/VSAM file or to a sequential file. You can also copy a sequential file to either a VSE/VSAM or another sequential file. The information that you need is:

1. Type of VSE/VSAM file (KSDS, ESDS, or RRDS)
2. Starting point of the input file
3. Stopping point of the input file
4. Output device type
5. Starting point of the output device
6. Number of tracks (or blocks) in the output file
7. Output volume serial
8. Output record format
   a. Fixed length records
   b. Variable length unblocked records
   c. Variable length blocked records
9. Output block size
10. Output record size

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to copy a VSE/VSAM or sequential file.

DIALOGUE: DSF$DEF

DIALOGUE NAME: Define Cluster

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: FILEDEF

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in defining a VSE/VSAM cluster. You will need to know the name and characteristics of the file. You are prompted to provide the following information:

1. Cluster type (KSDS, ESDS, or RRDS).
2. Cluster name.
3. Volume serial number of the disk where the cluster will be located.
4. Retention date format (JULIAN or DAYS).
5. Retention period.
6. Whether this volume is owned by the master catalog or by a user catalog.
7. User catalog name.
8. Volume serial number of the disk where the user catalog is located.
9. How much space the cluster will occupy.
10. Primary and secondary disk space allocations.
11. Percentage of control interval free space.
12. Percentage of control area free space.
13. Whether or not the cluster is reusable.
14. Average record size.
15. Maximum record size.
16. Relative key position within the record.
17. Key length.
18. Data class.

19. Index class.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to define a VSE/VSAM cluster.

DIALOGUE: DSF$DEL

DIALOGUE NAME: Delete Cluster

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DELETE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in deleting a VSE/VSAM cluster.

The information needed to delete a cluster is:

1. Cluster name.
2. Whether the cluster should be deleted even if its retention period has not expired.
3. Whether information about the cluster is in the master catalog or a user catalog.
4. User catalog name.
5. Volume serial number of the disk where the user catalog is located.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to delete a VSE/VSAM cluster.

DIALOGUE: DSF$DSP

DIALOGUE NAME: Display File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DISPLAY

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in displaying a VSE/VSAM data set.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to display a VSE/VSAM dataset.

DIALOGUE: DSF$EXP

DIALOGUE NAME: Export File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: EXPORT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in backing up a VSE/VSAM data set.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to export a VSE/VSAM data set.

DIALOGUE: DSF$IMP

DIALOGUE NAME: Import File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: IMPORT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in restoring your VSE/VSAM data sets.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to import a VSE/VSAM data sets.

DIALOGUE: DSF$PRT

DIALOGUE NAME: Print File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: AMSPRINT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in printing VSE/VSAM or sequential files.

The print dialogues generate job streams to print VSAM clusters and sequential files. You can print each type in either character or hexadecimal format, or in both.

To print a VSAM cluster, you must provide the following information:

1. Cluster name.
2. Volume serial number of the disk where the cluster will be located.
3. Whether information about the cluster is in the master catalog or a user catalog.
4. User catalog name.
5. Volume serial number of the disk where the user catalog is located.
6. Whether you want to print selected records.
7. How you want to specify print start and stop.
8. Start and stop keys.
9. Number of records to be skipped.

Sequential files may be on tape or disk. If you are printing a sequential file, some of the the following information will be needed:

1. The device the file is on.
2. Volume serial number.
3. File name.
4. For tape files:
   a. Whether the tape is labelled or unlabelled.

b. Whether you want label checking.

c. Rewind options.

d. Tape address.

5. Record format.

6. Block size.

7. Record size.

8. Whether you want to print selected records.

9. How you want to specify print start and stop.

10. Number of records to be skipped.

11. Record count.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to print your VSE/VSAM or sequential data sets.

DIALOGUE: DSF$VER

DIALOGUE NAME: Verify File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: VERIFY

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in displaying system information about your VSE/VSAM data sets.

The information needed to verify a cluster is:

1. Cluster name.
2. Volume serial number of the disk where the cluster is located.
3. Whether information about the cluster is in the master catalog or a user catalog.
4. User catalog name.
5. Volume serial number of the disk where the user catalog is located.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to display system information about your VSE/VSAM data sets. The verify cluster dialogues generate job streams to check if a VSE/VSAM cluster was closed properly the last time it was used. If it was not closed correctly, the verify function will update the catalog to allow the cluster to be used again.

DIALOGUE: INS$CAR

DIALOGUE NAME: Installation

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: INSTALL

OTHER VSE/ICCF MEMBERS CREATED: (DLI$PCT), (DLI$PPT), (DLI$ALT), (DMS$PCT), (DMS$PPT), (DMS$ALT), (PLI$ALT), (PLI$PPT)

DIALOGUE DESCRIPTION:

This dialogue is used to install VSE System IPO/E supported products. You can install one or multiple products by library.

The products you flagged during the first time use dialogue as products that would eventually be installed on your system are displayed, grouped by library. Indicate which of these products you want to install at this time by supplying the tape file and volume numbers corresponding to these products. The tape file number specifies the file number corresponding to the first file of the product found on the distribution tape. If the tape is stacked (contains more than one product), this value is obtained from the label on the distribution tape. If the tape is nonstacked, enter the value 1. The install dialogue supports the installation of products obtained from more than one tape volume. In order to communicate to you which tape volume must be mounted during execution of the install function, a unique volume number must be assigned to each tape. Number the first tape one (1), and assign sequentially increasing numbers to each of the others. After selecting which products corresponding to a particular library you wish to install at this time, and being asked about possible support under CICS/VS of those products to which it applies, you will be queried about the status of that library's service libraries. With the exception of service libraries A and B (if CICS/VS is installed) which are created during the base install process, JCL to create a particular service library is generated the first time the optional product install dialogue is run to install a product in that library. Successive runs of the dialogue will ask whether you want to reproduce that JCL (and possibly recreate the service library), whether you want to restore an existing service library, and whether you want to back up that service library. These steps are repeated for as many libraries as you indicated would have products installed in them. If you have selected all the products you plan to install at this time, you can bypass the display of products residing in additional libraries by entering END in the TAPE FILE field of the first product displayed corresponding to a library in which you have no products to install. This will cause the dialogue to complete processing without the display of any additional products.

JCL DESCRIPTION:

The JCL created by the optional product install dialogue contains the

following set of jobs for each library in which you have requested products to be installed at this time.

Jobs to create/restore the current service library set as described in the dialogue description above are included first. Next, a set of six possible jobs are included for each product to be installed in this library. An MSHP RESTORE DTAPE job is provided to restore the product libraries and history file from the product distribution tape to temporary restore areas. A job is then included optionally, depending on whether or not the product has VSE/ICCF members that must be copied to the VSE/ICCF DTSFILE. If it does, as in the case of DL/1 DOS/VS, a DTSUTIL job is created and the VSE/ICCF members stored as I.books in the product source statement library are punched from the temporary restore area to the internal reader. This job is executed later, after VSE/ICCF has been brought down, copying the members into the VSE/ICCF DTSFILE. The I.books are then deleted from the restore area. An MSHP INSTALL COMPONENT FROMDISK MERGE job is executed to merge the restored libraries into the production core image library, and the service relocatable and source statement libraries. A job is included to modify the retention period of the MSHP restore area created above. They are given a zero retention period which causes them to become expired files. This eliminates the need to respond 0 delete when installing multiple products. Jobs are also included to perform an MSHP RETRACE COMPONENT against the product just installed and a DSERV of the restored product libraries.

To complete the processing of this library, jobs are included to delete all the relocatable modules from the production relocatable library, and copy from the service relocatable library modules corresponding to all those products that have been installed in this library to date, that are required for day-to-day production use. Similar jobs are included for the source statement production and service libraries.

With mixed architecture, if the temporary restore areas and the current library's production libraries are on a split of FBA and CKD devices, the JCL produced will differ from that described above. A private core image library is created, and the MSHP INSTALL COMPONENT FROMDISK MERGE job mentioned above will merge the core image library phases into this library. After all products to be installed in this library have been restored and merged, this newly created library is backed up to tape, and restored either directly to the production core image library, or to another newly created core image library and merged into the production core image library. Next, a private relocatable library is created and the relocatable production members are merged in. This library is backed up to tape and restored into the production relocatable library. The same procedure is followed for the source statement library.

After all the libraries have been processed as described above, a job to re-establish the system LIBDEFs is executed. If for any reason, the install job stream does not run to completion, you must perform the following steps to re-establish your system LIBDEFs. Release the PAUSEBG job from the system reader. Issue 0 ASSGN SYSCLB,UA and 0 // EXEC PROC=LIBDEF before responding 0 to end the job.

DIALOGUE: LIB$CAT

DIALOGUE NAME: Catalog Library Members

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: CATALOG

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue allows the user to generate JCL statements to catalog members to any system or private library. Modules saved in the VSE/ICCF library may be specified to be included.

This dialogue requests the following information:

1. Library type (core image, relocatable, source, or procedure).
2. Whether the library is system or private.
3. The catalog member name (phase, module, book,or procedure).
4. The ICCF member name.
5. If a source library, the sublibrary desired.
6. If private, the file name, volume serial number, and file ID.
7. If a core image library:
   a. whether more relocatable or ICCF members are to be included in the link-edit.
   b. whether a LIBDEF statement should be generated for relocatable libraries and the names for the LIBDEF statement.
   c. whether DLBL and EXTENT(s) be generated.
      1) file name
      2) volume serial
      3) file ID

JCL DESCRIPTION:

The JCL created will link-edit to core image libraries or execute MAINT to catalogue to relocatable, source, or procedure libraries.

DIALOGUE: LIB$COP

DIALOGUE NAME: Copy Library Members

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: COPY

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue allows you to copy any system or private library or part of any library.

The information needed to copy or merge between libraries is:

1. Library type (core image, relocatable, source, or procedure).
2. Whether the TO library is residence, nonresidence, or private.
3. Whether the FROM library is residence, nonresidence, or private.
4. Volume serial number.
5. File name for the FROM and TO library.
6. Volume serial number of the FROM and TO library.
7. File ID of the FROM and TO library.
8. Member(s) to be copied.

JCL DESCRIPTION:

The JCL created consists of an execution of CORGZ and associated parameters.

DIALOGUE: LIB$CRT

DIALOGUE NAME: Create Libraries

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: CREATE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue allows you to create libraries.

You are prompted to provide the following information:

1. Library type (core image, relocatable, source, or procedure).
2. DASD type.
3. Start location.
4. Library size.
5. Directory size.
6. File name.
7. Serial number.
8. Retention date.
9. File ID.

JCL DESCRIPTION:

The JCL created consists of an execution of CORGZ and associated parameters.

DIALOGUE: LIB$DEL

DIALOGUE NAME: Delete Library Members

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DELETE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue allows you to DELETE library members from any system or private library.

This dialogue requests the following:

1. Library type (core image, relocatable, source, or procedure).
2. Whether the library is system or private.
3. If private, the file name, volume serial number, and file ID.
4. The member(s) to be deleted.

JCL DESCRIPTION:

The JCL created consists of an execution of MAINT and associated parameters.

DIALOGUE: LIB$DSP

DIALOGUE NAME: Display Library Members

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DISPLAY

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue allows you to DISPLAY or PUNCH library members from any system or private library or to display the directories of any library.

The display directory dialogue requests the following information:

1. Whether the library is a system or private library.
2. Library type (core image, relocatable, source, procedure) or directory type (transient or second level).
3. Whether a sorted or nonsorted listing is desired.
4. If a private library, the file name, volume serial, and file ID.

JCL DESCRIPTION:

The JCL created consists of an execution of DSERV, CSERV, RSERV, PSERV, SSERV, or ESERV parameters.

DIALOGUE: LIB$REN

DIALOGUE NAME: Rename Library Members

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: RENAME

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue allows you to RENAME library members in any system or private library.

This dialogue requests the following:

1. Library type (core image, relocatable, source, or procedure).
2. Whether the library is system or private.
3. If private, the file name, volume serial number, and file ID.
4. The OLD and NEW library member(s).

JCL DESCRIPTION:

The JCL created consists of an execution of MAINT and associated parameters.

DIALOGUE: OPN$JCL

DIALOGUE NAME: JCL Creation

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: JCL

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This activity helps you create the job control statements required to run jobs under VSE or in a VSE/ICCF interactive partition. The output from jobs that execute in a VSE/ICCF interactive partition is directed to disk files or the terminal. Input comes from disk files, the terminal, or the job stream itself. The output for jobs that execute in a VSE batch partition is directed to the system printer (or to the terminal if you submit it with the return option). Other I/O devices may include disk, tape, or diskette.

If creating a VSE/ICCF job in the VM/VSE System IPO/E Environment, the VSE/ICCF job created will be contained within a VSE job stream. This VSE job will execute DTSUTIL to add the newly created VSE/ICCF job as a file to the VSE/ICCF common library.

JCL DESCRIPTION:

This dialogue will produce a job stream to execute a compiler, utility, or application program.

DIALOGUE: PDV$EXP

DIALOGUE NAME: Program Development

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

The program development environment provides explain panels on the following topics:

* Program development
* Library structure
* Create/modify
* RPG II create/modify
* Compile/assemble
* Input/output
* Load/execute
* Submit to batch

JCL DESCRIPTION:

No JCL is created from this environment.

DIALOGUE: RPT$DMP

DIALOGUE NAME: Dump Analysis.

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: IPCS

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in creating either a VSE job stream to execute the MIGRATE program, or a VSE job stream to execute the IPCS program.

JCL DESCRIPTION:

The JCL generated is either to list the identification of all dumps contained in the VSE system dump files, or to format a specified dump printout.

DIALOGUE: SPC$DEF

DIALOGUE NAME: Define Space

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SPACEDEF

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in defining space for VSE/VSAM. You will be asked which catalog (master or user) will own the space, information on DASD placement, and size of the space.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to define the VSE/VSAM space in the catalog.

DIALOGUE: SPC$DEL

DIALOGUE NAME: Delete Space

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SPACEDEL

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in deleting VSE/VSAM space from a master or user catalog. You will be asked which catalog owns the space that you are deleting.

JCL DESCRIPTION:

The JCL generated is a VSE/VSAM Access Method Services utility to delete VSE/VSAM space from the catalog.

DIALOGUE: SRV$AAP

DIALOGUE NAME: Archive APAR Fix

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ARCHIVE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to archive an APAR fix into your system history file. You will be asked for the APAR number and affected macros, modules, and phases.

JCL DESCRIPTION:

The JCL invokes MSHP passing control statements built from your input.

DIALOGUE: SRV$APT

DIALOGUE NAME: Archive PTF

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ARCHIVE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to archive a program temporary fix (PTF) into your system history file. You will be asked for the PTF number, APAR number, prerequisite, corequisite, and negative prerequisite PTF numbers, affected macros, modules, and phases, link-edit information, and the space required to apply the fix in the respective libraries.

JCL DESCRIPTION:

The JCL invokes MSHP passing control statements built from your input.

DIALOGUE: SRV$BAC

DIALOGUE NAME: Backup History File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: BACKUP

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to invoke the backup history file feature of MSHP. It will copy your existing history file, defined by your standard labels, to tape.

JCL DESCRIPTION:

The JCL invokes MSHP passing control statements built from your input.

DIALOGUE: SRV$CMN

DIALOGUE NAME: JCL Comments

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue turns an internal switch on or off to indicate if optional comments are desired. Normally, enough comments are in the JCL to properly run the service dialogues. However, if you have a problem or would like additional information about the JCL, using this option will insert additional comments in the JCL. Caution: Creating the additional comments will make the actual running of the dialogue take longer.

JCL DESCRIPTION:

None

DIALOGUE: SRV$CON

DIALOGUE NAME: Condense History

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: CONDENSE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to invoke the remove obsolete feature of MSHP. This is used to remove entries that have been flagged as obsolete by the installation of a later release level. During normal installation and the application of service, it is not necessary to run this dialogue.

JCL DESCRIPTION:

The JCL invokes MSHP passing control statements built from your input.

DIALOGUE: SRV$CVL

DIALOGUE NAME: Print Cover Letters

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: Print

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to print coverletters from a tape. You will need to supply the file number for the file that contains the coverletters. You will have the option of printing them continuously, or one to a page. You may print all of the coverletters or just selected ones.

JCL DESCRIPTION:

JCL is produced for invoking MSHP to print the coverletters.

DIALOGUE: SRV$FIX

DIALOGUE NAME: Alter Core Image

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SRV

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This is a common dialogue called by the alter relocatable, and alter source dialogues. It will invoke MSHP and apply a ZAP directly to the core image library. It will also record the information in the system history file. You will need to know the phase names that are to be altered, the data that is at the location you wish to change, and if the phase needs to be expanded.

JCL DESCRIPTION:

A single job is produced. It invokes MSHP and passes it control statements generated from your input.

DIALOGUE: SRV$FIX

DIALOGUE NAME: Alter Relocatable

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SRV

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This is a common dialogue called by the alter core image, and alter source dialogues. It will invoke MSHP and apply a REP directly to the relocatable library. It will also record the information in the system history file. You will need to know the module names that are to be altered, the data that is at the location you wish to change, if the module needs to be expanded, and the name of the link book used to link edit the fix into the core image library (if necessary).

JCL DESCRIPTION:

A single job is produced. It invokes MSHP and passes it control statements generated from your input.

DIALOGUE: SRV$FIX

DIALOGUE NAME: Alter Source

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SRV

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This is a common dialogue called by the alter core image, and alter relocatable dialogues. It will invoke MSHP and apply a single statement update directly to the source statement library. It will also record the information in the system history file. You will need to know the book names that are to be altered, the data used to verify that you are at the correct location (E.books only), and the sublibrary that the books are in. If you choose the revokable option, a deck will be punched which can be used to remove the alteration should the need arise. If you need to use the deck, it will be necessary to edit it and insert the JCL for directing it to the proper service libraries.

JCL DESCRIPTION:

A single job is produced. It invokes MSHP and passes it control statements generated from your input.

DIALOGUE: SRV$GEN

DIALOGUE NAME: Post Assemblies

PREREQUISITE DIALOGUES: SRVPRE, SRVFIX

DEFAULT JOB NAME CREATED: Variable

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to perform assemblies of CICS/VS management modules, CICS/VS A.macros, and VSE/ICCF modules. It is accessed from menu panel SRV$523. This menu is not in the normal menu hierarchy, but is called at the completion of the SRV$FIX dialogue, if either CICS/VS or VSE/ICCF were serviced. However, if you have run the pre-service dialogue, you could go directly to the menu panel for this dialogue by typing =SRV$523.

The three functions of this dialogue are:

1. Support of the DFHGEN macro for CICS/VS to allow you to reassemble management modules.

2. Assembly of serviced A.macros into E.macros and cataloging them into service library B.

3. Support of the DTSSG macro for VSE/ICCF to allow you to reassemble the ICCF modules.

JCL DESCRIPTION:

The JCL produced by this dialogue will establish necessary to and from LIBDEF statements for the stage 1 and stage 2 of either VSE/ICCF or CICS/VS. It will then produce the necessary assembly statements and route the output into the VSE/POWER internal reader (DISP=I). It then produces JCL for OBJMAINT that places cleanup JCL into the VSE/POWER internal reader.

DIALOGUE: SRV$POS

DIALOGUE NAME: Post Service

PREREQUISITE DIALOGUES: (SRV$CMN)

DEFAULT JOB NAME CREATED: POSTSRV

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used for restoring your system to normal after using the SRV$PRE and SRV$FIX dialogues. Based on the component you identified during the execution of the SRV$PRE dialogue, the members in the service libraries that are copied into the production libraries are merged into the proper production libraries. You will have the option of backing up the service libraries to tape, and, if the pack was copied to tape, you will be asked if you would like it restored from tape.

JCL DESCRIPTION:

JCL is produced for the merge to the production libraries, providing that there are production library members for the component. JCL is optionally produced for fast copy, and backup of the service libraries. At the conclusion of this dialogue, your normal LIBDEF library chain for the production libraries will be restored.

DIALOGUE: SRV$PRE

DIALOGUE NAME: Pre-Service

PREREQUISITE DIALOGUES: (SRV$CMN)

DEFAULT JOB NAME CREATED: PRESRV

OTHER VSE/ICCF MEMBERS CREATED: (SRV$FCDT)

DIALOGUE DESCRIPTION:

This dialogue is used to prepare for applying an APAR/LOCAL fix to either the relocatable or source statement libraries. It gives you the option of fast copying your user disks to tape prior to restoring the service libraries. You will need to know the address of the tape drive that can be used and the component identifier for the component that you have the fix for. Based on the component identifier, the dialogue lets you restore the correct service library. You will also be allowed to restore an additional service library, and it will be concatenated to the first. However, do not make any changes to the second library since it will not be backed up to tape.

JCL DESCRIPTION:

JCL is optionally produced for fast copy, initialize disk, and restore of the service libraries. At the end of the JCL, the service libraries that you restored, or mounted, will be concatenated to your production library chain for searches.

DIALOGUE: SRV$PTF

DIALOGUE NAME: Apply PTF

PREREQUISITE DIALOGUES: (SRV$CMN)

DEFAULT JOB NAME CREATED: PTF

OTHER VSE/ICCF MEMBERS CREATED: (SRV$FCDT)

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to apply a program temporary fix (PTF). The PTF to be applied must be on a corrective service file on the PUT tape.

The dialogue will request the following information:

* What the component ID of the product you are going to apply service to is.

* If you wish to create backout PTFs.

* If your service libraries are on disk or tape.

* If you will restore your service libraries from tape, do you want to fast copy user data to tape.

* If you want a backup of your production libraries prior to service.

* If you wish to produce a dialogue flow diagram describing the creation and manipulation of files and data with the produced JCL.

JCL DESCRIPTION:

If all options are taken the JCL produced will:

* Back up your production libraries via the backup program.

* Fast Copy your user data on the packs that will be used to tape. (This is for device types of 3310, 3330, and 3340 only.)

* Initialize the volumes that were backed up to tape.

* Create a private system library (PUTNRS) and then delete any members copied by the create.

* Create a work history file (SAVEHST) and establish residence for the product you are going to apply service to.

* Establish ownership for the product in the system history file.

* Create a set of private libraries that will be the target for selecting the PTF from the PUT tape (PUTCL1, PUTRL1, and PUTSL1).

* Select the PTF from the corrective service files on the PUT tape and apply it to the libraries that the MSHP pre-processor creates.

* Merge the PTF from the files built by the last step into the private libraries created above (PUTCL1, PUTRL1, and PUTSL1).

* Restore the service library from tape.

* Perform the MSHP upgrade to the PUTNRS area and the service libraries.

* Merge from the production library into the PUTNRS library all of the members that were not affected by service.

* Delete all of the members in the production core image library.

* Copy everything in PUTNRS to the production core image library.

* If the component you are applying a PTF for has members in either the production relocatable or source statement library, they will be updated at this point as in the Apply PUT dialogue.

* User exit prior to backup of the service library.

* Back up the service library to tape.

* If any volumes were copied to tape, they will be restored at this time.

* The permanent LIBDEF chain is restored.

DIALOGUE: SRV$PTF

DIALOGUE NAME: Apply Cumulative PTF

PREREQUISITE DIALOGUES: (SRV$CMN)

DEFAULT JOB NAME CREATED: PTF

OTHER VSE/ICCF MEMBERS CREATED: (SRV$FCDT)

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to apply a program temporary fix (PTF). The PTF to be applied must be on a cumulative PTF tape.

The dialogue will request the following information:

* What the component ID of the product you are going to apply service to is.

* If you wish to create backout PTFs.

* If your service libraries are on disk or tape.

* If you will restore your service libraries from tape, do you want to fast copy user data to tape.

* If you want a backup of your production libraries prior to service.

* If you wish to produce a dialogue flow diagram describing the creation and manipulation of files and data with the produced JCL.

JCL DESCRIPTION:

The following description is for a product that resides in production library A. Therefore, it is in the system core image library.

If all options are taken the JCL produced will:

* Back up your production libraries via the backup program.

* Fast copy your user data on the packs that will be used to tape. (This is for device types of 3310, 3330, and 3340 only.)

* Initialize the volumes that were backed up to tape.

* Create a private system library (PUTNRS), and then delete any members copied by the create.

* Create a work history file (SAVEHST), and establish residence for the product that you are going to apply service to.

* Establish ownership for the product in the system history file.

* Create a set of private libraries that will be the target for selecting the PTF from the PUT tape (PUTCL1, PUTRL1, and PUTSL1).

* Select the PTF from the cumulative PTF file, and apply it to the libraries created above.

* Restore the service library from tape.

* Perform the MSHP upgrade to the PUTNRS area and the service library.

* Copy everything in PUTNRS to the production core image library.

* If the component you are applying a PTF for has members in either the production relocatable or source statement library, they will be updated at this point as in the apply PUT dialogue.

* User exit prior to backup of the service library.

* Back up the service library to tape.

* If any volumes were copied to tape, they will be restored at this time.

* The permanent LIBDEF chain is restored.

DIALOGUE: SRV$PTF

DIALOGUE NAME: Apply Backout PTF

PREREQUISITE DIALOGUES: (SRV$CMN)

DEFAULT JOB NAME CREATED: PTF

OTHER VSE/ICCF MEMBERS CREATED: (SRV$FCDT)

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to apply a backout PTF to your system. It is used to remove a PTF that is found to be in error after it has been installed on your system.

The dialogue will request the following information:

* What the component ID of the product is.
* If your service libraries are on disk or tape.
* If you will restore your service libraries from tape, do you want to fast copy user data to tape.
* If you want a backup of your production libraries prior to service.
* If you wish to produce a dialogue flow diagram describing the creation and manipulation of files and data with the produced JCL.

JCL DESCRIPTION:

If all options are taken the JCL produced will:

* Back up your production libraries via the backup program.
* Fast copy your user data on the packs that will be used to tape. (This is for device types of 3310, 3330, and 3340 only.)
* Initialize the volumes that were backed up to tape.
* Create a private system (PUTNRS), and then delete any members copied by the create.
* Establish ownership for the product in the system history file.
* Copy the system history file to the save history file (SAVEHST).
* Restore the proper service library from tape.
* Select the PTF from the backout PTF files.

* Merge from the production library into the PUTNRS library all of the members that were not affected by service.

* Delete all of the members in the production core image library.

* Copy everything in PUTNRS to the production core image library.

* If the component you are applying a PTF for has members in either the production relocatable or source statement library, they will be updated at this point as in the Apply PUT dialogue.

* User exit prior to back up of the service library.

* Back up the service library to tape.

* If any volumes were copied to tape, they will be restored at this time.

* The permanent LIBDEF chain is restored.

DIALOGUE: SRV$PUT

DIALOGUE NAME: Apply PUT

PREREQUISITE DIALOGUES: (SRV$CMN)

DEFAULT JOB NAME CREATED: PUT

OTHER VSE/ICCF MEMBERS CREATED: SRV$LIB, (SRV$FCDT)

DIALOGUE DESCRIPTION:

This is a common dialogue and is called by the restart PUT and apply selective dialogues. Just the apply PUT is being described here. This dialogue creates the JCL to apply a program update tape (PUT).

The dialogue will request the following information:

* What service libraries will be serviced (identified by product contents).

* What products you wish to exclude from service.

* What PTFs you wish to reject.

* If you wish to create backout PTFs.

* If your service libraries are on disk or tape.

* If you will restore your service libraries from tape, do you want to fast copy user data to tape.

* If you want a backup of your production libraries prior to service.

* If you wish to produce a dialogue flow diagram describing the creation and manipulation of files and data with the produced JCL.

JCL DESCRIPTION:

If all options are taken the JCL produced will:

* Back up your production libraries via the backup program.

* Fast copy your user data on the packs that will be used to tape. (This is for device types of 3310, 3330, and 3340 only.)

* Initialize the volumes that were backed up to tape.

* Copy your system history file (SYSHST) to the work history file (WRKHST). This is done to ensure integrity of your system history file in case the PUT job stream abnormally terminates for some reason.

* Execute the MSHP preprocessor to restore the PUT libraries from tape to the PUTxL2 areas and then merge them into the PUTxL1 areas. The history file (PUTHST1) is created during the execution of this job.

* Move the PUTRL1 relocatable library to its normal area.

From this point on, we will loop through the service libraries applying service. We will explain library A first since it is a bit different due to the system core image library.

* Restore service library A from tape using the allocations found in the system profile tables.

* Create a system new residence file on another disk using the allocations for PUTNRS.

* Clear out all of the entries in this library. This is done to eliminate all of the $$ phases that were merged during the allocation.

* Copy the PUT history file (PUTHST1) to the PUT save history file (SAVEHST). Upgrades will be done from the save history file as the upgrade manipulates the from history file.

* Remove all of the components that are in the other service libraries from the PUT save history file. This is to eliminate multiple processing of the same PTFs by MSHP, and printing a lot of error messages that really are not errors.

* Establish library ownership for the work libraries and the service libraries using the MSHP residence statement.

* Upgrade the service libraries and the new system residence file. If you selected the backout PTF option, the backout PTFs are punched to tape at this time.

* Compile the supervisors that are found in the system profile tables. These supervisors will be catalogued into the new system residence file.

* Copy all phases which have not been changed from your system residence library to the new system residence file.

* Merge the procedure library into the new system residence file.

* Delete all modules in the production relocatable library for library A. This will make room for recreating this library with all of the newly serviced members. It also eliminates the possible need for a condense.

* Merge all of the production members from service relocatable library A into the production library.

* Repeat the same steps for the production source statement library.

* Punch any I. books from the service library A source statement library to tape. This will be members for the VSE/ICCF DTSFILE.

* Remove any I. books from the service library A source statement library.

* Execute the DTSUTIL program reading the input from the tape we just created. This will catalogue the VSE/ICCF members into the DTSFILE. Ignore any error messages on SYSLST for the CATALS and BKEND statements.

* Pause on user exit. This allows you to perform any additional steps you wish on service library A prior to backing it up to tape. Of course you will have to do it from another partition.

* Back up service library A to tape.

* Back up the new system residence file to tape. You will later IPL this tape and restore it over your old system residence file.

For the rest of the service libraries the steps are the same with the exception of service library B. Service library B contains CICS and is rather large. Therefore, it is done last, and requires a second invocation of the MSHP preprocessor. The following describes libraries C - G.

* Restore the service library from tape.

* Accessing the system residence file that was created before as a private core image library (WORKCL) delete all of the entries in the library.

* Copy the PUT history file (PUTHST1) to the save history file (SAVEHST).

* Remove all of the components that are in the other service libraries from the PUT save history file.

* Establish library ownership for the work libraries and the service libraries using the MSHP residence statement.

* Upgrade the service libraries and the private core image library (WORKCL). If you selected the backout PTF option, the backout PTFs are punched to tape at this time.

* Copy all phases which have not been changed from your production core image library to the new private library (WORKCL).

* Delete all of the members in the production core image library. This sets the pointers back to zero and eliminates the need for a condense.

* Copy all of the members from the private core image library (WORKCL) to the now empty production core image library.

* Delete all modules in the production relocatable library.

* Merge all of the production members from the service relocatable library into the production library.

* Repeat the same steps for the production source statement library.

* If there are any products in the library that could have service for members in the VSE/ICCF DTSFILE, punch any I.books from the service library source statement library to tape. This will be members for the VSE/ICCF DTSFILE.

* If you executed the above step, remove any I. books from the service library source statement library.

* If you executed the above steps, execute the DTSUTIL program reading the input from the tape we just created. This will catalogue the VSE/ICCF members into the DTSFILE. Ignore any error messages on SYSLST for the CATALS and BKEND statements.

* Pause on user exit. This allows you to perform any additional steps you wish on service the service library prior to backing it up to tape. Of course, you will have to do it from another partition

* Back up the service library to tape.

The above steps will be repeated for each service library with the exception of library B, which contains CICS. The steps for servicing library B are explained under the explanation for the restart PUT dialogue.

* Copy the work history file (WORKHST) to the system history file (SYSHST).

* If any volumes were copied to tape they will be restored at this time.

* Retrace the system history file.

* The permanent LIBDEF chain is restored.

At this point, it is necessary to IPL the standalone tape that was created. This will replace your existing system residence file.

DIALOGUE: SRV$PUT

DIALOGUE NAME: Restart PUT

PREREQUISITE DIALOGUES: SRV$PUT, (SRV$CMN)

DEFAULT JOB NAME CREATED: PUT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This is a common dialogue and is called by the apply PUT and apply selective dialogues. Just the restart PUT is being described here. This dialogue creates the JCL to restart the application of a PUT from a successful checkpoint. You will need to know the last checkpoint that was successfully passed. You will also need to re-enter all information originally supplied to the apply PUT dialogues after the checkpoint. See the apply PUT dialogue description for the information required.

Correct execution of this dialogue depends upon information passed from the apply PUT dialogue.

JCL DESCRIPTION:

Correct execution of this JCL requires that the files generated during the execution of the Apply PUT JCL are intact.

The following description is for service library B. It was run on a system that had all service libraries and was restarted at checkpoint 6.

* Execute the MSHP preprocessor including all of the products that are in library B.

* Move the relocatable library to its normal position (PUTRL1).

* Restore service library B.

* Create a private core image library that will be used as a target during the upgrade step.

* Delete anything in the library that was copied as a result of the previous allocate step.

* Copy the PUT history file (PUTHST1) to the PUT save history file (SAVEHST).

* Remove all of the entries in the save history file (SAVEHST) that are not for products that are in service library B.

* Establish residence for the products in service library B.

* Upgrade the private core image library (WORKCL) and service library B.

* Copy all of the phases from the original production library B that have not been affected by the application of service.

* Delete all of the members in production core image library B.

* Copy all members from the work core image library (WORKCL) into the production core image library B.

* Delete all modules in the production relocatable library.

* Merge all of the production members from the service relocatable library into the production library.

* Repeat the same steps for the production source statement library.

* Pause on user exit. This allows you to perform any additional steps you wish on service library B prior to backing it up to tape. Of course, you will have to do it from another partition.

* Back up updated service library to tape.

* If any volumes were copied to tape they will be restored at this time.

* Copy the work history file (WORKHST) to the system history file (SYSHST).

* Retrace the system history file.

* The permanent LIBDEF chain is restored.

DIALOGUE: SRV$PUT

DIALOGUE NAME: Apply Selective PUT

PREREQUISITE DIALOGUES: (SRV$CMN)

DEFAULT JOB NAME CREATED: PUT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This is a common dialogue and is called by the apply PUT and restart PUT dialoques. Just the apply selective PUT is being described here. This dialogue creates the JCL to apply one or more selected products from the PUT tape. You will need to know the three-digit component level code (CLC). This information is available with the machine readable PUT documentation on the PUT tape. You will also need to input the standard PUT information, i.e. should the service library be restored etc.

JCL DESCRIPTION:

The following description is for application of the PUT files to service library B. It describes the JCL produced for a mixed architecture environment. In this particular case, DOSRES, SYSWK1, and SYSWK4 were 3310s, and SYSWK2 and SYSWK3 were 3340 device types.

If all options are taken the JCL produced will:

* Back up your production libraries via the backup program.

* Fast copy your user data on the packs that will be used to tape.

* Initialize the volumes that were backed up to tape.

* Copy your system history file (SYSHST) to the work history file (WORKHST). This is done to insure integrity of your system history file in case the PUT jobstream abnormally terminates.

* Execute the MSHP preprocessor to restore the PUT libraries from tape to the PUTxL2 areas and then merge them into the PUTxL1 areas. The history file (PUTHST1) is created during the execution of this job.

* Move the PUTRL1 relocatable library to its normal area.

* Restore service library B from tape.

* Create private core image library (PUTNRS)

* Copy the PUT history file (PUTHIST1) to the save history file (SAVEHST).

```
*   Remove all of the entries in the save history file (SAVEHST) for
    components in other service libraries.

*   Establish residence in work history file (WORKHST) for the products
    in service library B.

*   MSHP upgrade with target of private core image library (PUTNRS) and
    service library B.

*   Backup the private core image library to tape (PUTNRS).

*   Restore the library to SYSWK1 as a private core image library
    (SYSNRS).

*   Copy all of the members from production library B (PRDCLB) that were
    not affected by service to the private core image library (SYSNRS).

*   Delete all of the members in production library B (PRDCLB).

*   Copy all of the original and serviced phases from the private work
    library (SYSNRS) to production core image library B (PRDCLB).

*   Create a private relocatable library on SYSWK3 (WORKRL) overlaying
    the PUTNRS area.

*   Copy all of the relocatable modules that reside in production
    relocatable library B (PRDRLB) from service relocatable library B
    (SRVRLB). This includes any modules that were serviced.

*   Backup the work library (WORKRL) to tape.

*   Restore this tape over the top of production relocatable library B
    (PRDRLB).

*   Repeat the above four steps for the source statement library.

*   Pause for a user exit on service library B.

*   Back up and retain service library B to tape.

*   Copy the work history file (WORKHST) to the system history file
    (SYSHST).

*   Fast copy from tape the user data for SYSWK2 and SYSWK3.

*   Retrace the system history file (SYSHST).

*   Restore the permanent LIBDEF search chain.
```

DIALOGUE: SRV$REM

DIALOGUE NAME: Remove History Record

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: REMOVE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to invoke the remove feature of MSHP. You may use it for removing the history file entry for an APAR/LOCAL fix or for a PTF entry. Note: This dialogue only removes the entry from the history file. The actual code for the APAR/LOCAL fix or PTF is still on your system.

JCL DESCRIPTION:

The JCL invokes MSHP passing control statements built from your input.

DIALOGUE: SRV$RET

DIALOGUE NAME: Retrace History

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: RETRACE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialoque creates the JCL to invoke the retrace feature of MSHP. There are several options of what information to print. Details of what will be printed for each option are provided on the explain panels.

JCL DESCRIPTION:

The JCL invokes MSHP passing control statements built from your input.

DIALOGUE: SRV$RHS

DIALOGUE NAME: Restore History File

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: RESTORE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue creates the JCL to invoke the restore history file feature of MSHP. It will copy your existing history file, defined by your standard labels, from tape to disk.

JCL DESCRIPTION:

The JCL invokes MSHP passing control statements built from your input.

DIALOGUE: SRV$UND

DIALOGUE NAME: Undo Core Image

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: UNDO

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This is a common dialogue called by the undo relocatable dialogue as well. It will invoke MSHP to remove a ZAP that was applied to the core image library. It will also remove the information from the system history file. It is necessary that the fix have been applied with the revokable option in order to use this function.

JCL DESCRIPTION:

A single job is produced. It invokes MSHP and uses the information stored in the system history file.

DIALOGUE: SRV$UND

DIALOGUE NAME: Undo Relocatable

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: UNDO

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This is a common dialogue called by the undo core image dialogue as well. It will invoke MSHP to remove a REP that was applied to the core image library. It will also remove the information from the system history file, and, if the fix was link-edited into the core image library, it will cause a new link-edit to remove the fix from the core image library. It is necessary that the fix have been applied with the revokable option in order to use this function.

JCL DESCRIPTION:

A single job is produced. It invokes MSHP and uses the information stored in the system history file.

DIALOGUE: SYI$1

DIALOGUE NAME: Introduction

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

Brief overview of both the first use tutorial and the Interactive Productivity Facility.

JCL DESCRIPTION: None

DIALOGUE: SYI$2

DIALOGUE NAME: Adjusting Screen

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

How to adjust the brightness and contrast.

JCL DESCRIPTION: None

DIALOGUE: SYI$3

DIALOGUE NAME: Exiting

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

How to exit from the Interactive Productivity Facili
ty and return to the underlying system (CMS for VM or ICCF for VSE).

JCL DESCRIPTION: None

DIALOGUE: SYI$4

DIALOGUE NAME: Cursor Movement

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

How to use the arrow and tab keys to position the cursor to a desired location on the screen.

JCL DESCRIPTION: None

DIALOGUE: SYI$5

DIALOGUE NAME: Indicators

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

Describes the meaning and use of the input inhibited, system available, and insert mode indicators for the 3277 and similar indicators for the 3278.

JCI DESCRIPTION: None

DIALOGUE: SYI$6

DIALOGUE NAME: Management/Use

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

Describes these two basic areas of system activity and shows examples.

JCL DESCRIPTION: None

DIALOGUE: SYI$7

DIALOGUE NAME: Menu Panel

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

Describes the use of the menu panel in dialogues and what the service line of options will do for you when selected.

JCL DESCRIPTION: None

DIALOGUE: SYI$8

DIALOGUE NAME: Data Entry Panel

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

Describes the use of the data entry panel in dialogues and what the service line of options will do for you when selected.

JCL DESCRIPTION: None

DIALOGUE: SYI$9

DIALOGUE NAME: Explain Panel

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

Describes the use of the explain panel in dialogues and what the service line of options will do for you when selected. The OVERVIEW option is also explained and examples shown.

JCL DESCRIPTION: None

DIALOGUE: SYI$10

DIALOGUE NAME: Insert/Delete

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

How to use the INS MODE, DEL, and ERASE keys.

JCL DESCRIPTION: None

DIALOGUE: SYI$11

DIALOGUE NAME: Other Keys

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

How to use the CLEAR, program function (PF) and APL ON/OFF keys.

JCL DESCRIPTION: None

DIALOGUE: SYI$12

DIALOGUE NAME: Lightpen

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

How to use the lightpen in responding to panels that contain detectable fields.

JCL DESCRIPTION: None

DIALOGUE: SYI$13

DIALOGUE NAME: Fast Path

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: None

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

How to use the =panelname command to move quickly to any menu.

JCL DESCRIPTION: None

DIALOGUE: TAS$MAS

DIALOGUE NAME: ASI Procedure Tailoring

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: ASIPROC

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to prepare automated system initialation (ASI) procedures to make it easy to start up your system. You will choose one of fifteen ASI procedures during the first use dialogue. The ASI procedure chosen will be used by this dialogue as a prototype for building your own ASI procedure. Even if you will not make any changes to the prototype, you should still execute this dialogue as several commands needed at initial install will be deleted here.

JCL DESCRIPTION:

The JCL created by this dialogue consists of one IPL procedure and several JCL procedures that will be cataloged to the procedure library. If a procedure by the same name is already in the library, it will be renamed to save it. After the JCL is submitted to VSE/POWER, the procedure catalogued, and you have verified that there were no errors, you should perform another initial program load (IPL). The IPL will also set up USRSL1 as the source library that VSE/POWER will use for source library inclusion (SLI). Some verification job streams require SLI for proper execution.

DIALOGUE: TCI$AFC

DIALOGUE NAME: CICS Tailoring: Add Data Set

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: FCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$FCnn, TCI$SGnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist, a new table is initialized. The user is then asked to enter the name of the file, its type, and allowable modes of access. If the file is a DL/1 file, only the name and type are used. If the file already exists in the table, the old entry will not be overlaid. When all the descriptive information has been entered a test is made for the presence of segmented records or an indirect access data set. If an indirect access data set is specified, the user is prompted for indirect access specifications. No test is made for the presence of the specified object data set. If segmented records are specified, the user is prompted to enter segment specifications until the last segment has been described. Indirect access and segmented records are mutually exclusive specifications. When all the information about the data set has been entered, the user is given the opportunity to enter another data set or end the function. When the last entry has been made, entries for the FCT are generated. JCL is generated to assemble and catalog the table. Entries required for installed optional products are picked up automatically. There are no required FCT entries for CICS or ICCF.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS FCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$APC

DIALOGUE NAME: CICS Tailoring: Add Transaction

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$PCnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist a new table is initialized. The user is then asked to enter the name of the transaction, its associated program, and how it will be used. If the transaction already exists in the table, the old entry will not be overlaid. When the last entry has been made, entries for the PCT are generated. JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link_edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$APP

DIALOGUE NAME: CICS Tailoring: Add Program

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PPT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$PPnn, TCI$ALnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist a new table is initialized. The user is then asked to enter the name of the program, the language, and the frequency of use. If the program already exists in the table, the old entry will not be overlaid. When the last entry has been made, entries for both the PPT and ALT are generated. JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PPT and ALT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$ATC

DIALOGUE NAME: Add Terminal

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: TCT$ASnn (Where nn is the suffix of the table.)

OTHER VSE/ICCF MEMBERS CREATED: TCI$FEAT, TCI$FTnn, TCI$LUnn, TCI$RMnn, TCI$SDnn, TCI$TCnn, TCI$TRnn (Where nn is the suffix of the table.)

DIALOGUE DESCRIPTION:

This dialogue will allow you to create and add terminals to your terminal control table (TCT). You will need to know the characterictics of your terminals and lines before tailoring the TCT.

The terminals you will be adding to your TCT may be attached to a BTAM network only.

You will be asked to supply a suffix for this TCT which will be be reflected in the VSE/ICCF members, as well as the phase name of the TCT which will be cataloged into the core image library. This suffix is not related to the preassembled TCTs as supplied in the CICS/VS core image library.

The type of terminals which may be added to your TCT using this tailoring dialogue are 3277, 3276, 3278, 3284, 3286, 3287, 3288, and 3289.

The type of remote line to which the above terminals may be attached is a binary synchronous transmission line (BISYNC) with the transmission in extended binary coded decimal interchange code (EBCDIC). The line connection must be dedicated (nonswitched). For local attachment, the above terminals may attach to a 3272, 3274, or 3276. The access method used is the Basic Telecommunications Access Method (BTAM-ES).

You will add terminals to the TCT according to the line to which they will be attached. For example, if you have five terminals to be attached to a local control unit, and six terminals to be attached to a remote line, you will add all the terminals associated with either the local control unit or the remote line and then add the other group of terminals.

You will be asked for a DATASET CONTROL NAME to be associated with each group of terminals. This name must be unique for each group of terminals. You may enter this dialogue at a later date and add terminals to an existing group in which case you would need to know the data set control name you had provided. To assist you with the selection of a data set control name, the names that have already been

defined for your system are displayed. VTAM is a reserved word and may not be used as the data set control name for a group of terminals.

You will be asked the type of line for the group of terminals being added. Your response will be either LOCAL or REMOTE . If the response is remote, you will be asked to provide the PROGRAMMER LOGICAL UNIT to be assigned to the line. This is in the format of SYSNNN where NNN is a number which will appear in the // ASSGN SYSNNN card of the CICS/VS startup job stream. You will also be asked to provide a relative control unit number for each remote control unit on each line. This dialogue allows you to add 32 terminals to each remote control unit and allows you to have fout control units for each remote line. Each local control unit may also have 32 terminals.

At this point, the dialogue will ask you for specific information about each terminal to be added to the terminal group.

The dialogue will ask you for a unique four-character identification for each terminal. The previously used terminal ids will be displayed for you at this time.

The dialogue will then ask you for the type and model of terminal to be added to the TCT. Valid terminal types are 3276, 3277, 3278, 3284, 3286, 3287, 3288, or 3289. The valid models are either 1 or 2, except for the 3276 and 3278 which may also be model 3 or 4, and the 3288 which may only be a model 2. Note that model 3 or 4 will be generated in the created job stream as a model 2.

If you are adding to a local line group, the dialogue will ask for the programmer logical unit which will be assigned to this terminal.

You are now asked for the features that are on the terminal you are adding. For the display terminals (3277, 3276, or 3278), the features that are possible are selector pen, audible alarm, copy, typewriter and/or operator console keyboard, translate lowercase to uppercase, APL text, APL keyboard, and text keyboard. For the printer terminals (3284, 3286, 3287, 3288, or 3288), the features are copy, print, and text print.

After entering all your responses correctly for the first terminal, you will have the chance to enter the same information for each additional terminal you wish to add to the same line group.

When finished with adding all the terminals for one terminal group, you may continue to add a second terminal group with its associated terminals.

You will have the option of specifying an existing VSE/ICCF member to be inserted into the generated TCT assembly. This inserted VSE/ICCF member would include TCT entries that are in addition to the entries you have entered via the dialogue.

After adding all your terminals, the dialogue will give you a choice of

cancelling all changes, updating the table without assembling, or updating the table and assembling the new TCT.

If at any point you type or probe CANCEL on the command line, none of the responses will be saved.

JCL DESCRIPTION:

The JCL created by this dialogue will assemble and catalogue a TCT to the users core image library with a phase name of DFHTCT(suffix). The TCT entries for this assembly will be generated using the supplied information from the dialogue. To test the new TCT you must reassemble the currently used DFHSIT table with TCT=nn, where nn is the suffix supplied in the dialogue or have a DFHSIT override of TCT=nn.

If you have selected to insert an VSE/ICCF member within the TCT assemble, you may have assembly errors. The entries included in this manner are included in the table as is. They are not checked by the dialogue for validity. Since the individual entries in this file cannot be examined, the dialogue cannot check that any further entry you make via the dialogue is not in conflict with an entry defined in the VSE/ICCF member you included. Also, the delete and modify dialogues cannot update entries in your included file. You will get the full benefit of the table preparation dialogues only if you use the dialogues exclusively to add entries to your table.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$CFC

DIALOGUE NAME: CICS Tailoring: Change Data Set

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: FCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$FCnn, TCI$SGnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist an error message is displayed. The user is asked for the name of the file specification to be changed. If the file does not exist in the table, an error message is displayed. If the file already exists in the table, the user is then asked to enter the name of the file, its type, and allowable modes of access. If the file is a DL/1 file, only the name and type are used. If the name of the file is changed, a new entry with that name will be created. The old entry is not overlaid. All other changes affect the file entry selected. When all the descriptive information has been entered, a test is made for the presence of segmented records or an indirect access data set. If an indirect access data set is specified, the user is prompted for indirect access specifications. No test is made for the presence of the specified object data set. If segmented records are specified, the user is prompted to enter segment specifications. When the last segment of the current specification has been displayed the user is given the opportunity to enter additional segment specifications. Note: Indirect access and segmented records are mutually exclusive specifications. When all the information about the data set has been entered the user user is given the opportunity to change another data set or end the function. When the last entry has been made, entries for the FCT are generated. JCL is generated to assemble and catalog the table. Entries required for installed optional products are picked up automatically. There are no required FCT entries for CICS or ICCF.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS FCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$CPC

DIALOGUE NAME: CICS Tailoring: Change Transaction

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$PCnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist, an error message is displayed. The user is then asked to enter the name of the transaction. If the transaction already exists in the table, the old entry will be displayed, and the user may then modify the parameters. When the last change has been made, entries for the PPT are generated. JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$CPP

DIALOGUE NAME: CICS Tailoring: Change Program

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PPT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$PPnn, TCI$ALnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist, an error message is displayed. The user is then asked to enter the name of the program. If the program already exists in the table, the old entry will be displayed, and the user may then modify the parameters. When the last change has been made, entries for both the PPT and ALT are generated. JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PPT and ALT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$CTC

DIALOGUE NAME: Change Terminal

PREREQUISITE DIALOGUES: TCI$ATC

DEFAULT JOB NAME CREATED: TCT$ASnn (Where nn is the suffix of the table.)

OTHER VSE/ICCF MEMBERS CREATED: TCI$FEAT, TCI$FTnn, TCI$LUnn, TCI$RMnn, TCI$SDnn, TCI$TCnn, TCI$TRnn (Where nn is the suffix of the table.)

DIALOGUE DESCRIPTION:

This dialogue will allow you to change the characterictics of your terminals that have been added to your terminal control table (TCT).

You will be asked to supply the suffix for the TCT which contains the terminals you want to change. This suffix is the same suffix you supplied when you added to the TCT and is not related to the preassembled TCTs as supplied in the CICS/VS core image library.

The dialogue will ask you for the unique four-character identification of the terminal you want to change. The terminal IDs used when the terminals were added will be displayed.

The dialogue will then display the terminal type and terminal model as it was supplied when the terminal was added and give you a chance to change either the type or model. Valid terminal types are 3276, 3277, 3278, 3284, 3286, 3287, 3288, or 3289. The valid models are either 1 or 2, except for the 3276 and 3278 which may also be model 3 or 4, and the 3288 which may only be a model 2. Note that model 3 or 4 will be generated in the created job stream as a model 2.

The dialogue will then display the features for this terminal and allow them to be changed. For the display terminals (3277, 3276, or 3278), the features that are possible are selector pen, audible alarm, copy, typewriter and/or operator console keyboard, translate lowercase to uppercase, APL text, APL keyboard, and text keyboard. For the printer terminals (3284, 3286, 3287, 3288, or 3288), the features are copy, print, and text print.

If the terminal you are changing is attached to a local control unit, the dialogue will display the associated programmer logical unit and allow a different programmer logical unit to be entered.

After making all necessary changes to the first terminal, you will have the chance to enter the same information for each additional terminal you wish to change.

As with adding to the TCT, you have the option of specifying an existing

VSE/ICCF member to be inserted into the generated TCT assembly. This inserted VSE/ICCF member would include TCT entries that are in addition to the entries you have changed via the dialogue.

After changing all your terminals, the dialogue will give you a choice of cancelling all changes, updating the table without assembling, or updating the table and assembling the new TCT.

If at any point you type or probe CANCEL on the command line, none of the responses will be saved.

JCL DESCRIPTION:

The JCL created by this dialogue will assemble and catalogue a TCT to the users core image library with a phase name of DFHTCT(suffix). The TCT entries for this assembly will be generated using the supplied information from the dialogue. To test the new TCT, you must reassemble the currently used DFHSIT table with TCT=nn where nn is the suffix supplied in the dialogue, or have a DFHSIT override of TCT=nn.

If you have selected to insert an VSE/ICCF member within the TCT assemble, you may have assembly errors. The entries included in this manner are included in the table as is. They are not checked by the dialogue for validity. Since the individual entries in this file cannot be examined, the dialogue cannot check that any further entry you make via the dialogue is not in conflict with an entry defined in the VSE/ICCF member you included.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$DFC

DIALOGUE NAME: CICS Tailoring: Delete Data Set

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: FCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$FCnn, TCI$SGnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist, an error message is displayed. The user is then asked to enter the name of the file If the file specification already exists in the table, the old entry will be deleted. If the transaction does not exist, an error message is displayed. When the last deletion has been made, entries for the FCT are generated. JCI is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target Core Image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$DPC

DIALOGUE NAME: CICS Tailoring: Delete Transaction

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$PCnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist, an error message is displayed. The user is then asked to enter the name of the transaction. If the transaction already exists in the table, the old entry will be deleted. If the transaction does not exist, an error message is displayed. When the last deletion has been made, entries for the PCT are generated. JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target Core Image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$DPP

DIALOGUE NAME: CICS Tailoring: Delete Program

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PPT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: TCI$PPnn, TCI$ALnn (Where nn is the suffix of the table).

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, the table is opened. If the table does not exist, an error message is displayed. The user is then asked to enter the name of the program. If the program already exists in the table, the old entry will be deleted. If the program does not exist, an error message is displayed. When the last deletion has been made, entries for both the PPT and ALT are generated. JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PPT and ALT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$DTC

DIALOGUE NAME: Delete Terminal

PREREQUISITE DIALOGUES: TCI$ATC

DEFAULT JOB NAME CREATED: TCT$ASnn (Where nn is the suffix of the table.)

OTHER VSE/ICCF MEMBERS CREATED: TCI$FEAT, TCI$FTnn, TCI$LUnn, TCI$RMnn, TCI$sdnn, TCI$TCnn, TCI$TRnn (Where nn is the suffix of the table.)

DIALOGUE DESCRIPTION:

This dialogue will allow you to delete terminals from your terminal control table (TCT).

You will be asked to supply the suffix of the TCT from which you want to delete the terminals. This suffix is the same suffix you supplied when you added to the TCT and is not related to the preassembled TCTs as supplied in the CICS/VS core image library.

The dialogue gives you a choice of deleting an entire group of terminals or one terminal at a time.

If you select to delete an entire group of terminals, the dialogue will ask you to supply the dataset control name for the group to be deleted. This is the same name you used when the terminals were added, and the dialogue will display all the data set control names used for this TCT.

To delete an individual terminal you will need to know the terminal ID you supplied when the terminal was added to the TCT. Again the dialogue will display all the terminal ID's used. You may delete more than one terminal if you select to delete one terminal at a time.

As with adding to the TCT, you have the option of specifying an existing VSE/ICCF member to be inserted into the generated TCT assembly. This inserted VSE/ICCF member would include TCT entries that are in addition to the entries you have not deleted via the dialogue.

After deleting all your terminals, the dialogue will give you a choice of cancelling all changes, updating the table without assembling, or updating the table and assembling the new TCT.

If at any point you type or probe CANCEL on the command line, none of the responses will be saved.

JCL DESCRIPTION:

The JCL created by this dialogue will assemble and catalogue a TCT to the users core image library with a phase name of DFHTCT(suffix). The

TCT entries for this assembly will be generated using the supplied information from the dialogue. To test the new TCT, you must reassemble the currently used DFHSIT table with TCT=nn, where nn is the suffix supplied in the dialogue or have a DFHSIT override of TCT=nn.

If you have selected to insert an VSE/ICCF member within the TCT assemble, you may have assembly errors. The entries included in this manner are included in the table as is. They are not checked by the dialogue for validity. Since the individual entries in this file cannot be examined, the dialogue cannot check that any further entry you make via the dialogue is not in conflict with an entry defined in the VSE/ICCF member you included.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$MFC

DIALOGUE NAME: CICS Tailoring: Assemble/Catalog File Table

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: FCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, JCL is generated to assemble and catalog the table. Entries required for installed optional products are picked up automatically. If the table does not exist, an error message is displayed. No changes are made to any of the table entries.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS FCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$MPC

DIALOGUE NAME: CICS Tailoring: Assemble/Catalog Transaction Table

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PCT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically. If the table does not exist, an error message is displayed. No changes are made to any of the table entries.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PCT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$MPP

DIALOGUE NAME: CICS Tailoring: Assemble/Catalog Program Table

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PPT$ASnn (Where nn is the suffix of the table).

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

The user is asked for the table suffix. If a table with the specified suffix already exists, JCL is generated to assemble and catalog the table. Entries required for CICS, ICCF, and other installed optional products are picked up automatically. If the table does not exist, an error message is displayed. No changes are mad to any of the table entries.

JCL DESCRIPTION:

The generated JCL is that required to assemble and catalogue a CICS PPT and ALT in the System IPO/E supplied system. If the job should fail, first ensure that the CICS macro library and the target core image library are available.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCI$MTC

DIALOGUE NAME: Assemble/Catalog Terminal

PREREQUISITE DIALOGUES: TCI$ATC

DEFAULT JOB NAME CREATED: TCT$ASnn (Where nn is the suffix of the table.)

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will allow you to assemble and catalogue a previously tailored terminal control table (TCT).

You will be asked to supply the suffix of the TCT you want to assemble and catalogue. This suffix is the same suffix you supplied when you added to the TCT and is not related to the preassembled TCTs as supplied in the CICS/VS core image library.

As with adding to the TCT, you have the option of specifing an existing VSE/ICCF member to be inserted into the generated TCT assembly. This inserted VSE/ICCF member would include TCT entries that are in addition to the entries you have added, deleted, or changed via the dialogues.

JCL DESCRIPTION:

The JCL created by this dialogue will assemble and catalogue a TCT to the users core image library with a phase name of DFHTCT(suffix). The TCT entries for this assembly will be generated using the supplied information from the previous TCT tailoring dialogues. To test the new TCT, you must reassemble the currently used DFHSIT table with TCT=nn, where nn is the suffix supplied in the dialogue or have a DFHSIT override of TCT=nn.

If you have selected to insert an VSE/ICCF member within the TCT assemble, you may have assembly errors. The entries included in this manner are included in the table as is. They are not checked by the dialogue for validity.

All CICS/VS tables are link-edited into user core image library 1 (USRCL1). The assembly JCL assumes that the ASI procedure has set up a permanent search to point to a source statement library containing CICS/VS macros. In the VSE System IPO/E system, the standard ASI procedure sets up a search for production source statement library B which contains the necessary macros.

DIALOGUE: TCO$OPT

DIALOGUE NAME: COBOL Option Card (CBL)

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: CBLIOPT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to change the specifications of the COBOL Language Compiler supplied with the system. To change a default, type the desired option in place of the existing one. Explanations of the keywords, parameters, and acceptable responses are provided.

JCL DESCRIPTION:

After the tailoring activity has been completed, a job stream is created to catalog the source statement library member C.CBLOPTNS in USRSL1. This member modifies the system supplied option defaults. When this member is catalogued, the modified specifications will then be used as new defaults for the tailoring dialogues. For reference purposes, the original system supplied specifications are located in the DOS/VSE COBOL service library.

If changes are required at compile time, the modified specifications can be overridden by including CBL or LST statements in the source program. For more information about these statements, refer to the IBM DOS/VS COBOL Compiler and Library Programmer's Guide (SC28-6478).

DIALOGUE: TEP$ASM

DIALOGUE NAME: EP/VS

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: EPIPF
EPSTG1
EPSTG2

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in building the job streams necessary to generate an EP/VS control program. You will be asked for information about your 370X and the lines attached to it.

JCL DESCRIPTION:

The EP/VS dialogue builds three job streams.

The first job stream, with a default name of EPIPF, catalogs the EP/VS generation macros (which are created based on your responses to the EP/VS panels) to user source statement library USRSL1.

The second job stream, with a default name of EPSTG1, submits the EP/VS generation macros to stage one of the EP/VS generation procedure. Stage one of the generation procedure produces an object module and an assembler listing. This job stream will catalog the object module to a user relocatable library. Check the assembler listing for error messages. If there are any errors, you must correct them before continuing with the generation procedure.

The third job stream, with a default name of EPSTG2, submits EP/VS to stage two of the EP/VS generation procedure. In the third job stream, you will find some include statements. Make sure that these include statements match the ones in your assembler listing from stage 1 of the generation procedure. If the statements do not match, change the third job stream to match your assembler listing.

In stage two of the generation procedure, the object module which was created and cataloged in stage one of the generation procedure is link-edited to produce a load module. Then this load module is moved from the core image library to a file where the EP/VS loader will be able to find it. At the end of the third job stream you will find the statements needed to move this module from the core image library. Finish the dlbl and extent statements by assigning them to two available cylinders from a disk pack.

When you have finished generating EP/VS, you will need to load EP/VS in your 370X controller. See the EP/VS Generation and Utilities Manual (SC30-3116) for further information on loading EP/VS.

DIALOGUE: TPL$OPT

DIALOGUE NAME: PL/I Option Card

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: PLIOPT

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

The PL/I tailoring dialogue allows modification of the specifications for the PL/I Optimizing Compiler supplied with the system.

To change a system supplied specification, type the desired option in place of the existing one. An explanation of the keywords, parameters, and acceptable values are provided to guide you in your selections.

JCL DESCRIPTION:

After the tailoring activity has been completed, the PL/I compiler options macro PLIXOPD is generated and catalogued in USRCL1. This macro is used to reset the system supplied defaults of the compile time option. These options may be overriden at compile time by using the PROCESS statement. Refer to the DOS PL/I Optimizing Compiler Programmer's Guide (SC33-0008) for more information about this macro.

DIALOGUE: TPW$ASM

DIALOGUE NAME: VSE/POWER Tailoring

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DTRPOWER

OTHER VSE/ICCF MEMBERS CREATED: TPW$ASME, TPW$ASMF (temporary)

DIALOGUE DESCRIPTION:

This dialogue is used to change certain VSE/POWER parameters from their current or initial values.

JCL DESCRIPTION:

The JCL created will:

1. Back up work pack, if required.
2. Restore service library A, if required.
3. Assemble new VSE/POWER phase and catalogue in user core image library 1.
4. Restore work pack, if required.

DIALOGUE: TRJ$ASM

DIALOGUE NAME: VSE/POWER RJE Tailoring

PREREQUISITE DIALOGUES: TPW$ASM

DEFAULT JOB NAME CREATED: TRJxxxx (where xxxx is generated from the system definition name provided by you during VSE/POWER RJE tailoring.

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

The system supplied VSE/POWER RJE and user defined specifications can be displayed for use in creating new specifications, should you need multiple RJE systems.

To facilitate creating an updating of a VSE/POWER RJE system, the Interactive Productivity Facility tailoring dialogues supports the following subsets of parameters:

* BSC Line Definitions
* SNA Terminal Definitions
* BSC Terminal Definitions
* 3780 Definition
* 2770, 2780 Definition

You may select a saved set of specifications, and edit only the parameters requiring change.

The VSE/POWER RJE dialogues provide the following functions:

* Create a completely new VSE/POWER RJE definition.
* Update an existing VSE/POWER RJE definition.
* Add additional lines and terminals to your present RJE system.
* Modify an existing entry in your present RJE system.
* Delete an existing entry from your present RJE system.
* Delete a complete RJE system definition.

Panel TRJ$ASM1 is the key to using the VSE/POWER RJE dialogues. It specifies what RJE definition is to be used as the default for this iteration, and what the name of the new definition (SAVE NAME) will be.

If the DEFAULT NAME is different from the SAVE NAME and the SAVE NAME is not blank, the create function will be executed. If the SAVE NAME is the same as the DEFAULT NAME, or the SAVE NAME is blank, the update function will be executed. At no time are you allowed to create a definition with the same name as the VSE/POWER RJE default definition (POW001); nor can you update that definition.

The POW001 default should be used as an example. However, if you wish to assemble the default, you must perform the ADD function of VSE/POWER RJE using all the default parameters. This will create a new definition containing the same definition as the default.

JCL DESCRIPTION:

The JCL generated is a VSE/Advanced Function job stream which contains the VSE/POWER and VSE/POWER RJE definition parameters and JCL to assemble your VSE/POWER RJE system and link edit it into user library A.

DIALOGUE: TSA$MAS

DIALOGUE NAME: Generate VSE Supervisor Assembly

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: SUPVRGEN
SUPVRDEL

OTHER VSE/ICCF MEMBERS CREATED: TSA$SUP, (TSA$TAW)

DIALOGUE DESCRIPTION:

This dialogue presents a series of panels to generate a job stream to assemble a supervisor tailored to your installation. The assembly may produce a full listing with cross reference based on the option chosen. This dialogue also allows you to delete set(s) of supervisor specifications from Interactive Productivity Facility and the core image library. You should delete all specifications which you do not use

JCL DESCRIPTION:

The JCL created will assemble a supervisor with the parameters you selected from the panels. The supervisor will be link-edited into your system core image library (PROD.CORE.IMAGE.A).

DIALOGUE: UTL$COP

DIALOGUE NAME: Copy Diskette Utilities

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: COPY

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to help you use the COPY DISKETTE utilities by prompting you for the proper information to generate the appropriate JCL.

The copy diskette dialogue requests the following information:

1. Input diskette address.
2. Output diskette address.
3. Volume serial number (optional).

JCL DESCRIPTION:

The JCL created by this dialogue consists of COPY DISKETTE utility statements and required assignments.

DIALOGUE: UTL$CRE

DIALOGUE NAME: Library Backup

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: CREATE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to assist you in creating JCL to backup your system and private libraries to tape. Either the assign control or concatenation method of assigning libraries may be used.

Note: For backup of any system or user library you should use the library information dialogue to add or change information and use the backup library sets dialogue of the librarian function to back up the libraries. You are prompted to provide the following information:

1. Whether you will use the assign or concatenation method of backup.
2. Which library type you wish to back up.
3. Tape unit address and optional alternate tape address.
4. Whether you will use streaming mode for 8809 tape drives.
5. Whether you wish to create a standalone restore tape.
6. Whether you wish the core image library sorted.
7. File ID and volume serial of your DASD.
8. For catenation method:
   a. Whether you will back up by name, chain, or both ways.
   b. Name(s) of the libraries you wish backed up by name or chain.

JCL DESCRIPTION:

The JCL created by this dialogue consists of BACKUP utility statements and required ASSGN or LIBDEF statements.

DIALOGUE: UTL$DMP

DIALOGUE NAME: Fastcopy - Backup Disk To Tape

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: DUMP

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in creating JCL to back up files or volumes from disk to tape. The backup will be performed by the Fast Copy utility.

The information needed to use fast copy is:

1. Whether you wish to copy a volume or a file.
2. Tape and dasd address.
3. DASD type.
4. Volume serial of tape and DASD.
5. Whether you will use streaming mode for tape.
6. Whether you wish a labeled tape.
7. Whether you will exclude certain files.

JCL DESCRIPTION:

The JCL created by this dialogue consists of FCOPY utility statements and required ASSGN statements.

DIALOGUE: UTL$DSP

DIALOGUE NAME: Display Vtoc Utilities

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: LVTOC

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialoque is used to help you use the DISPLAY VTOC utility by prompting you for the proper information to generate the appropriate JCL.

The display VTOC dialogue requests the following information:

1. Address of Disk.
2. Printer address (optional).

JCL DESCRIPTION:

The JCL created by this dialogue consists of DISPLAY VTOC utility statements and required assignments.

DIALOGUE: UTL$FCY

DIALOGUE NAME: Fast Copy - Copy Disk To Disk

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: FCOPY

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialoque is used to assist you in creating JCL to copy volumes or files from disk to disk.

The information needed to use fast copy is:

1. DASD address.
2. DASD type.
3. Volume serial.
4. Start location
5. For file copy:
    a. Start location
    b. File length

JCL DESCRIPTION:

The JCL created by this dialogue consists of Fast Copy utility statements and required ASSGN statements.

DIALOGUE: UTL$RES

DIALOGUE NAME: Library Restore

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: RESTORE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue is used to assist you in creating JCL to restore your system and private libraries from a tape that was created by the BACKUP program. Either the assign control or concatenation method of assigning libraries may be used.

Note: For restore of any system or user library you should use the library information dialogue to add or change information and use the restore library sets dialogue of the librarian function to restore your libraries.

You are prompted to provide the following information:

1. Whether you will use the assign or concatenation method of backup.
2. Which library type you wish to back up.
3. Tape unit address and optional alternate tape address.
4. Whether you will use streaming mode for 8809 tape drives.
5. Whether you wish to create a standalone restore tape.
6. Whether you wish the core image library sorted.
7. File ID and volume serial of your DASD.
8. For catenation method:
    a. Whether you will back up by name, chain, or both ways.
    b. Name(s) of the libraries you wish backed up by name or chain.

JCL DESCRIPTION:

The JCL created by this dialogue consists of RESTORE utility statements and required ASSGN or LIBDEF statements.

DIALOGUE: UTL$RST

DIALOGUE NAME: Fastcopy - Restore Tape To Disk

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: RESTORE

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will assist you in creating JCL to restore files or volumes from tape to disk. The backup will be performed by the Fast Copy utility from tapes dumped by the same utility.

The information needed to use fast copy is:

1. Whether you wish to copy a volume or a file.
2. Tape and DASD address.
3. DASD type.
4. Volume serial of tape and DASD.
5. Whether you will use streaming mode for tape.
6. Whether you wish a labeled tape.
7. Whether you will exclude certain files.

JCL DESCRIPTION:

The JCL created by this dialogue consists of FCOPY utility statements and required ASSGN statements.

DIALOGUE: VER$IFY

DIALOGUE NAME: Verification Menu

PREREQUISITE DIALOGUES: None

DEFAULT JOB NAME CREATED: VERVSAM, DELVSAM, VERCOBOL, DELCOBOL, VERRPGII, DELRPGII, VERPLI, DELPLI, VERSORT, DELSORT, VERCICS, DELCICS, VERDMS, DELDMS, VERDITTO, DELDITTO, VERPOWER, DELPOWER, VEREPVS, DELEPVS, VERDLI, DELDLI, VERDICT, DELDICT VERLOG, OR DELLOG

OTHER VSE/ICCF MEMBERS CREATED: None

DIALOGUE DESCRIPTION:

This dialogue will allow you to create job streams to verify your optional products. The same dialogue will allow you to delete any VSE/VSAM clusters that may have been defined during the verify of a product.

You will be asked to supply the type of disk (3310, 3330, 3340, 3350, or 3370) the verify files are to be created on and the volume serial number of that disk pack. You must use the same disk pack for the verification of all products.

The verify of VSAM must be the first job executed since many other products depend on the user catalog and free space that is created by this job. Be sure to execute the delete for VSAM when you have finished with all other verifies.

JCL DESCRIPTION:

The JCL created will depend on what product you selected to verify or delete.

J.0 BIBLIOGRAPHY

Listed below are the form numbers and titles of publications to which the reader can refer for detailed information. Some of the publications below are referred to throughout this document and should be used in conjunction with this document.

J.1 HARDWARE

GA22-7070 IBM 4300 Processors Principles of Operation for ECPS:VSE Mode
GA24-3667 IBM 4300 Processors Physical Planning
GA24-3669 IBM 4341 Operating Procedures and Problem Determination Guide
GA24-3671 IBM 4341 Channel Characteristics
GA24-3672 IBM 4341 Functional Characteristics and Processor Complex
GA23-1523 IBM 4300 Processors Summary and I/O and Data Communications Configurator
GA23-1524 IBM 4331 Communications Adaptor Configurator
GA23-1525 IBM 4331 Operating Procedures and Problem Determination Guide
GA23-1526 IBM 4331 Functional Characteristics and Processor Complex
GA23-1527 IBM 4331 Channel Characteristics
GA23-1528 IBM 4331 Processor Compatibility Features
GC20-1878 A Guide to the 4300 Processors
GC20-1879 Fixed Block DASD Installation/Conversion Guide

J.2 SYSTEM/370 GENERAL

GA22-6822 IBM System/360 and System/370 Bibliography
GA22-7000 IBM System/370 Principles of Operation
GC20-1763 IBM System/370 Advanced Functions Bibliography

J.3 VSE SYSTEM IPO/E (5750-AAA, 5750-AAB, 5750-AAC)

GC20-1889 General Information Manual
GC20-1875 Planning Guide
GX20-2343 Reference Summary Card
SYB0-2540 VSE Supervisor Assembly Listing Microfiche

J.4 INTERACTIVE PRODUCTIVITY FACILITY (5748-MS1)

| LYBO-2485 Dialogue Manager Program Logic Microfiche
| LYBO-2486 Dialogue Manager Source Assembly Listings Microfiche
| GX20-2043 Template Plastic Holder
| GH20-4641 Programming Specifications
SX20-2346 Program Function Key Template 3277
SX20-2355 Program Function Key Template 3276/3278

J.5 VSE/ADVANCED FUNCTIONS (5746-XE9)

GC33-6108 Introduction to the VSE System
SC33-6094 System Management Guide
GC33-4010 OS/VS DOS/VSE VM/370 Assembler Language
SC33-4024 Guide to the DOS/VSE Assembler
GC24-5209 VSE System Data Management Concepts
SC24-5210 Macro User's Guide
SC24-5211 Macro Reference
SC24-5212 Tape Labels
SC24-5213 DASD Labels
SC33-6095 System Control Statements
SC33-6096 System Generation
GC33-6097 Operating Procedures
SC33-6098 Messages
SC33-6099 Serviceability Aids and Debugging Procedures
SC33-6100 System Utilities
GC35-0033 Device Support Facilities
GC33-5383 OLTEP
SC33-6101 Maintain System History Program (MSHP) User's Guide
GC33-6077 Data Security under VSE System
LY33-9080 Handbook
GC28-0772 OS/VS, DOS/VSE, VM/370 EREP Program
GC38-1045 OS/VS DOS/VSE VM/370 Message Library: EREP Messages
SC33-6112 Diagnosis Guide
LY33-9091 Diagnosis Reference: Supervisor
LY33-9084 Diagnosis Reference: IPL and Job Control
LY33-9092 Diagnosis Reference: Error Recovery and Recording Transients
LY33-9085 Diagnosis Reference: Linkage Editor
LY33-9083 Diagnosis Reference: Logical Transients and $IJBSxxx Phases
LY33-9087 Diagnosis Reference: Librarian
LY33-9086 Diagnosis Reference: Serviceability Aids
LY33-9088 Diagnosis Reference: System Utilities
LY33-9089 Diagnosis Reference: Maintain System History Program (MSHP)
LY24-5209 Diagnosis Reference: LIOCS Volume 1 General Information and Imperative Macros
LY24-5210 Diagnosis Reference: LIOCS Volume 2 SAM Logic
LY24-5211 Diagnosis Reference: LIOCS Volume 3 DAM and ISAM Logic
LY24-5212 Diagnosis Reference: LIOCS Volume 4 SAM for DASD
SY33-8567 DOS/VSE Assembler Logic

SY33-8568 OLTEP Logic
SY28-0773 OS/VS, DOS/VSE, VM/370 EREP Logic
SY35-0030 Device Support Facilities Logic

Microfiche

LYC7-2010 5745-SC-AIT Attention Routines
LYC7-2011 5745-SC-ASM Assembler
LYC7-2012 5745-SC-CKR Checkpoint Restart
LYC7-2013 5745-SC-DAM Direct Access Method
LYC7-2014 5745-SC-DDU Dynamic Dump Utility
LYC7-2015 5745-SC-DIO Diskette IOCS
LYC7-2016 5745-SC-DIS Distribution Program
LYC7-2017 5745-SC-DKE Disk Error Recovery Procedures
LYC7-2018 5745-SC-DOC Display Operator Console
LYC7-2019 5745-SC-DSF Device Support Facilities
LYC7-2020 5745-SC-DSK Sequential Disk IOCS
LYC7-2021 5745-SC-ER1 EREP1
LYC7-2022 5745-SC-IOM Compiler I/O Modules
LYC7-2023 5745-SC-IOX IOCS and Device Independent I/O
LYC7-2024 5745-SC-IPL IPL and Buffer Load
LYC7-2025 5745-SC-ISM ISAM
LYC7-2026 5745-SC-JCL Job Control
LYC7-2027 5745-SC-LBR Librarian
LYC7-2028 5745-SC-LNK Linkage Editor
LYC7-2029 5745-SC-MCR MICR IOCS
LYC7-2030 5745-SC-OCR OCR IOCS
LYC7-2031 5745-SC-OLT OLTEP
LYC7-2032 5745-SC-PDA Problem Determination Aids
LYC7-2033 5745-SC-PTP Paper Tape IOCS
LYC7-2034 5745-SC-RMS Recovery Management Support
LYC7-2035 5745-SC-SDS Specific Device Support
LYC7-2036 5745-SC-SUP Supervisor
LYC7-2037 5745-SC-TAP Magnetic Tape IOCS
LYC7-2038 5745-SC-TPE Tape Error Recovery Procedures
LYC7-2039 5745-SC-UTL System Utilities
LYC7-2040 5745-SC-UTS Maintain System History Program (MSHP)

J.6 VSE/VSAM (5746-AM2)

| GC24-5189 Licensed Program Design Objectives
| GC24-5190 Licensed Program Specifications
GC24-5143 General Information
G320-5774 VSAM Primer and Reference
G320-6029 VSAM Tuning and ISAM to VSAM Conversion Guide
LYB4-6102 Microfiche
| LY24-5191 VSAM Logic Volume 1
| LY24-5192 VSAM Logic Volume 2
LY24-5195 Access Method Services Logic
SC24-5144 Using VSE/VSAM Commands and Macros

SC24-5145 Programmer's Reference
SC24-5146 Messages and Codes
SC24-5191 VSE/VSAM Documentation Subset

J.7 VSE/POWER (5746-XE3)

GH12-5031 Licensed Program Design Objectives
GH12-5128 Release 1 General Information
GH12-5131 Release 2 General Information
LY12-5027 Logic Part 1
LY12-5028 Logic Part 2
LY12-5034 Logic Part 3
SH12-5328 RJE User's Guide
SH12-5329 Installation and Operations Guide
SH12-5330 Shared Spooling User's Guide
SH12-5434 Reference Summary: Remote Processing
SH12-5435 Reference Summary: Local Processing
SH12-5520 Messages

J.8 VSE/IPCS (5746-SA1)

GC34-2016 Program Summary
GC34-2017 General Information
GC34-2021 Specifications
LY25-0004 Logic
SC34-2015 User's Guide and Reference

J.9 VSE/ICCF (5746-TS1)

GC33-6065 Specifications
GC33-6066 General Information
GX33-9006 Reference Summary Card
LY33-9081 Logic Volume 1
LY33-9093 Logic Volume 2
SC33-6067 Installation and Operations Reference
SC33-6068 Terminal User's Guide
SC33-6069 Messages

J.10 VSE/ACCESS CONTROL LOGGING AND REPORTING (5746-XE7)

GC33-6077 Data Security Under the VSE System
GH12-5045 Design Objectives
GH12-5130 General Information
LY12-5032 Program Logic
SH12-5336 Program Reference and Operations Guide

J.11 VSE/DITTO (5746-UT3)

GH19-6070 Design Objectives
GH19-6071 Specifications
GH19-6072 General Information
LDJ3-6000 Microfiche
LY19-6061 Logic
SH19-6073 Program Reference and Operations

J.12 VSE/FAST COPY (5746-AM4)

GC33-6081 General Information Manual
SC33-6082 Data Set Installation Reference

J.13 BTAM-ES (5746-RC5) AND BTAM-SCP (5747-CG1)

GC38-0291 BTAM-ES Specifications
GC38-0292 BTAM-ES General Information
GC38-0296 BTAM-SCP Specifications
LY27-8030 BTAM-ES Logic
SC38-0293 BTAM-ES Programming Guide
SC38-0294 BTAM-ES Installation Reference
SC38-0295 BTAM-ES Messages

J.14 SORT/MERGE II (5746-SM2)

GC33-4042 Design Objectives
GC33-4043 General Information
GC33-4047 Specifications
GX33-8002 Reference Card
LYC7-0905 Microfiche
LY33-8044 Program Logic

SC33-4045 Installation Reference Manual
SC33-4044 Programmer's Guide

J.15 DOS/VS COBOL COMPILER AND LIBRARY (5746-CB1)

GC20-1873 Introduction to Structured Programming in COBOL
GC28-6394 DOS Full ANS COBOL Reference
GC28-6473 General Information
GC28-6487 Specifications
LJD3-3911 Microfiche
LYC7-5050 Microfiche
LY28-6423 Program Logic
SC28-6469 CMS User's Guide for COBOL
SC28-6478 Programmers Guide
SC28-6479 Installation Reference

J.16 DOS PL/I OPTIMIZING COMPILER(5736-PL1, 5736-PL3, 5736-LM4, 5736-LM5

GC20-1777 Introduction to Structured Programming in PL/I
GC33-0004 General Information
GC33-0016 Compiler Specifications
GC33-0017 Resident Library Specifications
GC33-0019 Transient Library Specifications
GC33-0046 Design Objectives
LYC7-2501 Microfiche: Resident Library
LYC7-2502 Microfiche: Transient Library
LYC7-2503 Microfiche: Compiler
LY25-7724 Debugging Guide
LY33-6010 Program Logic: Compiler
LY33-6011 Program Logic: Resident Library
LY33-6012 Program Logic: Transient Library
SC33-0005 Language Reference Manual
SC33-0008 Programmer's Guide
SC33-0019 Execution logic
SC33-0020 Installation Reference
SC33-0021 Messages
SC33-0035 Transient Library Messages
SC33-0051 CMS User's Guide for PL/I
SX33-6001 Reference Card

J.17 RPG II (5746-RG1)

GC21-7514 Introduction to RPG II
GC33-6029 Specifications

GC33-6030 General Information
GH20-4582 Design Objectives
LJD3-3800 Microfiche
LJD3-3805 Microfiche
LYB1-0450 Microfiche
LY33-9062 Program Logic
SC33-6031 Language
SC33-6032 Installation Reference
SC33-6033 Messages
SC33-6034 Auto Report
SC33-6074 RSEF User's Guide

J.18 DL/I DOS/VS (5746-XX1)

GH20-4555 Specifications
LY12-5016 Logic Manual
SH12-5411 Application Programming Reference
SH12-5412 Utilities and Guide for the System Programmer
SH12-5413 System/Application Design Guide
SH12-5414 Operators Reference and Messages and Codes
SH12-5700 Master Index
SH20-1246 General Information
SH20-9046 Low Level Code/Continuity Check PDOM
SH24-5001 Guide for New Users
SH24-5002 Diagnostic Guide
SX24-5103 Application Programmer's Reference Summary
SX24-5104 System Programmer's Reference Summary

J.19 CICS/DOS/VS (5746-XX3)

GA27-2774 Guide to RFT Feature 3270
GC33-0066 General Information
GH20-4496 Design Objectives
GH20-4548 Specifications
GX33-6012 Application Programmer Summary (Command Level)
G229-7031 FERS Facility Error Recognition System
LC33-0105 Diagnosis Reference
LY33-6032 Program Logic (Description)
LY33-6033 Program Logic (Data Areas)
SC33-0067 Introduction to Program Logic
SC33-0068 System Application Design Guide
SC33-0069 System Programmer Reference
SC33-0070 System Programmer Guide
SC33-0072 IBM 3600/3630 Guide
SC33-0073 IBM 3650/3680 Guide
SC33-0074 IBM 3767/3770/6670 Guide
SC33-0075 IBM 3790/3730 Guide

SC33-0077 Application Programmer Reference (Command Level)
SC33-0079 Application Programmer Reference (Macro Level)
SC33-0080 Operator's Guide
SC33-0081 Messages and Codes
SC33-0085 Application Programmer Reference (RPG II)
SC33-0086 CICS/DOS/VSE ELS User's Guide
SC33-0089 Problem Determination Guide
SC33-0095 Master Index
SC33-0096 IBM 3270 Guide
SX33-6010 Reference Summary: Program Debugging
SX33-6011 Reference Summary: Master Terminal Operator

J.20 DMS/CICS/VS (5746-XC4)

GH20-2195 General Information
GH20-4570 Design Objectives
GX20-1998 Data Transfer Form
GX20-1999 File Description Form
GX20-2000 Panel Description Form
GX20-2339 Panel Description Overlay
LY20-2456 Logic Manual
SH20-2211 Operations Guide
SH20-2209 Program Reference

J.21 DB/DC DATA DICTIONARY (5746-XXC)

GH20-4578 Design Objectives
GH20-9104 General Information
G320-5780 Implementation Primer
SH20-9073 Application Guide
SH20-9083 Terminal User's Guide and Command Reference
SH20-9084 Installation Guide

J.22 EP/VS (5747-AG1)

GA27-3086 IBM 3704 Control Panel Guide
GA27-3087 IBM 3705 Control Panel Guide
SC30-3116 Generation and Utilities Manual

J.23 ACF/VTAM (5747-CF1, 5746-RC3)

GC27-0457 Program Summary
GC27-0463 General Information: Concepts
SC27-0465 Pre-Installation Planning
SC27-0464 Installation
SC27-0449 Programming
SC27-0467 Messages and Codes
SC27-0466 Operation
SY38-3020 Diagnostic Techniques
SY27-0003 Reference Summary

J.24 ACF/NCP/VS (5735-XX1, 5735-XX3, 5747-CH1)

GC30-9529 Program Product Specifications
SC30-3142 System Support Programs Installation
SC30-3143 System Support Programs Utilities
SC30-3145 System Support Programs Messages
GA27-3087 Guide to Using the IBM 3705 Communications Control Panel
GC30-3020 Teleprocessing Pre-Installation Guide for IBM 3704 and 3705 Communications Controllers
GC30-3021 Teleprocessing Installation Record for IBM 3704 and 3705 Communications ControllerS
GC30-3004 IBM 3704 and 3705 Communications Controller's Principles of Operation
GC30-3003 IBM 3704 and 3705 Communications Controllers Assembler Language

J.25 ACF/VTAME (5747-CG2, 5746-RC7)

GC27-0451 General Information Concepts
SC27-0442 Programming
SC27-0443 Operation
SC27-0439 Installation
SY38-3012 Diagnostic Technigues
LY38-3013 Logic: Overview
LY38-3014 Logic
LY38-3016 Data Areas
SX27-3032 Reference Summary

K.0 USER RESPONSE REPORT - VSE SYSTEM IPO/E RELEASE 2.1

Hardware Information

Processor: Model _____ Size (MB) _____

DASD Type: (enter number of spindles)

3310	_____	3344	_____
3330	_____	3350	_____
3340	_____	3370	_____

Tape Drives: (enter number of drives, and model type if not listed)

3420	_____		
8809	_____		
_____	_____		
_____	_____		

Teleprocessing Controller: (enter number)

3704	___	ICA	___
3705	___	ICA/SDLC	___

Terminals: (enter the number of terminals in each category)

	CHANNEL	BSC	SDLC
3271	_____	_____	_____
3272	_____	_____	_____
3274	_____	_____	_____
3275	_____	_____	_____
3276	_____	_____	_____

USER RESPONSE REPORT - VSE SYSTEM IPO/E RELEASE 2.1 AND INTERACTIVE PRODUCTIVITY FACILITY RELEASE 3.0

Software Information

Check the VSE System IPO/E Base you have installed; enter the release level number (Rel) and the PUT level number (PUT).

Base	Rel	PUT
___ 5750-AAA: Data Base and Data Communications	___	___
___ 5750-AAB: Data Communications	___	___
___ 5750-AAC: Batch/Interactive	___	___

Feature Products: (check the products you have installed)

___ COBOL	___ VSE/POWER/RJE
___ RPG II	___ DMS/CICS/VS/DOS
___ PL/I Optimizer	___ EP/VS DOS/VS
___ Sort/Merge II	___ Data Dictionary
___ VSE/DITTO	___ VSE/Access Control
___ BTAM	___ VSE/Fast Copy
___ ACF/VTAM	___ ACF/VTAME

List below any products you installed without using the Interactive Productivity Facility:

_____ _____ _____

_____ _____ _____

USER RESPONSE REPORT - VSE SYSTEM IPO/E RELEASE 2.1 AND INTERACTIVE PRODUCTIVITY FACILITY RELEASE 3.0

System Management Environments

Check the environments that you have used.

_____ System Management Guide

_____ Administration

_____ Installation

_____ Verification

_____ Dump Analysis

_____ Service

_____ Operation

Enter your comments on these environments.

System Use Environment

Check the environment that you have used.

_____ Program Development

Enter your comments on this environment.

USER RESPONSE REPORT - VSE SYSTEM IPO/E RELEASE 2.1 AND INTERACTIVE PRODUCTIVITY FACILITY RELEASE 3.0

Documentation

Enter your comments on documentation for the System IPO/E or the Interactive Productivity Facility.

Machine Readable Information

Enter your comments on System IPO/E product or service tapes.

General Comments:

What changes would you like to see?

USER RESPONSE REPORT - VSE SYSTEM IPO/E RELEASE 2.1 AND INTERACTIVE PRODUCTIVITY FACILITY RELEASE 3.0

Name: (Optional) _____

Title: _____ Date: _____

Company: _____

Address: _____

_____

_____

_____

Your IBM Contact: _____

Branch Office: _____

All comments and suggestions become the property of IBM. Please forward the completed form to the address below or hand your comments to any IBM representative who will pass them on to the System IPO/E group.

International Business Machines Corporation
Department Z42, Building 985-1
P.O. Box 390
Poughkeepsie, New York 12602
U.S.A.

___ Check here if you wish a reply to your comments.

INDEX

[A]

abend codes 311
ADM$ADD 330
ADM$ASN 331
ADM$BKR 332
ADM$BRW 333
ADM$CSN 334
ADM$CSR 335
ADM$DEL 336
ADM$DSN 337
ADM$DSR 338
ADM$FST 339
ADM$HDW 341
ADM$ICF 342
ADM$IST 343
ADM$LAB 344
ADM$LBR 345
ADM$MSN 346
ADM$MTC 347
ADM$PUT 348
ADM$REP 349
ADM$SEC 350
ADM$SFT 351
ADM$UPT 352
ADM$USR 353
administering the DB environment 80
administering the DC environment 84
administration 69
administration environment 69
APAR 102, 120
apply PTF 117
apply PUT 112, 116
applying APAR/LOCAL corrective service 118
applying selective PUT libraries 116
archive 120
archiving changes 120
ASI procedures 344, 431
assemblies 76, 88, 114
assembly 124, 152

[B]

backout PTFs 110
BTAM-ES 294
BTAM/ES 212

[C]

CAT$BAC 354
CAT$DEF 355
CAT$DEL 356
CAT$IST 357
CAT$RES 358
CAT$TPT 359
checkpoint 113
checkpoint/restart 116, 470
CICS/VS 167, 288
CICS/VS dependent components 9 98
CICS/VS mgt modules and tables 288
COBOL 158, 452
communication administration 84
concatenated libraries 18
copy files 96
core image library 17, 91
corrective service 119
creation of libraries 96
CUS$DIA 360
CUS$PPN 361
CUS$SEL 362

D

DASD file requirements 111
Data Dictionary 196
data entry panel 230
data security 78, 469
DB administration 80
DB/DC Data Dictionary 196
DC administration 84
debugging information 306
dialogue components 20
dialogue cross reference 319
dialogue flow chart diagrams 113
dialogue manager 15, 230
disk label profile 73
display service 16, 231
display table 16
display terminal
 considerations 312
DL/I 161
  DOS/VS 474
DMS/CICS 172
DMS/CICS/VS-VSE 172
documentation 468
   See also reference material
DSF$ALT 363
DSF$COP 364
DSF$DEF 365
DSF$DEL 367
DSF$DSP 368
DSF$EXP 369
DSF$IMP 370
DSF$PRT 371
DSF$VER 373
DTSFILE 91, 116
dump analysis 102

E

EP/VS 87, 206
error codes 306
error log record 302
EXPLAIN 15
explain panels 230
explain service 231

F

fast path 127
file description 475
first time installation 18
first use tutorial 79, 126
full-screen 231
functions 18
  ADM$ADD 330
  ADM$ASN 331
  ADM$BKR 332
  ADM$BRW 333
  ADM$CSN 334
  ADM$CSR 335
  ADM$DEL 336
  ADM$DSN 337
  ADM$DSR 338
  ADM$FST 339
  ADM$HDW 341
  ADM$ICF 342
  ADM$IST 343
  ADM$LAB 344
  ADM$LBP 345
  ADM$MSN 346
  ADM$MTC 347
  ADM$PUT 348
  ADM$PFP 349
  ADM$SEC 350
  ADM$SFT 351
  ADM$UPT 352
  ADM$USR 353
  CAT$BAC 354
  CAT$DEF 355, 365
  CAT$DEL 356, 367
  CAT$LST 357
  CAT$RES 358
  CAT$TPT 359
  CUS$DIA 360
  CUS$PPN 361
  CUS$SEL 362
  DSF$ALT 363
  DSF$COP 364
  DSF$EXP 369
  DSF$IMP 370
  DSF$PRT 371
  DSF$VER 373

INS$CAR 374
LIB$ 368
LIB$CAT 376
LIB$COP 377
LIB$CRT 378
LIB$DEL 379
LIB$DSP 380
LIB$REN 381
OUW$ 382
PDV$EXP 383
RPT$DMP 384
SPC$DEF 385
SPC$DEL 386
SRV$ 397
SRV$AAP 387
SRV$APT 388
SRV$BAC 389
SRV$CMN 390
SRV$CON 391
SRV$CVL 392
SRV$FIX 393, 394, 395
SRV$GEN 396
SRV$POS 397
SRV$PRE 398
SRV$PTF 399, 401, 403
SRV$PUT 405, 409, 411
SRV$REM 413
SRV$RET 414
SRV$RHS 415
SRV$UND 416, 417
SYI$1 418
SYI$10 427
SYI$11 428
SYI$12 429
SYI$13 430
SYI$2 419
SYI$3 420
SYI$4 421
SYI$5 422
SYI$6 423
SYI$7 424
SYI$8 425
SYI$9 426
TCI$AFC 432
TCI$APC 433
TCI$APP 434
TCI$ATC 435
TCI$CFC 438
TCI$CPC 439
TCI$CPP 440
TCI$CTC 441
TCI$DFC 443
TCI$DPC 444
TCI$DPP 445
TCI$DTC 446
TCI$MFC 448
TCI$MPC 449
TCI$MPP 450
TCI$MTC 451
TCO$OPT 452
TPA$ASM 453
TPL$OPT 455
TPW$ASM 456
TRJ$ASM 457
TSA$MAS 431, 459
UTL$COP 460
UTL$CRE 461
UTL$DMP 462
UTL$DSP 463
UTL$FCY 464
UTL$RES 465
UTL$RST 466
VER$IFY 467

H

hardware configurations 339
history function 120

I

I/O configuration profile 339, 341
INS$CAR 374
installation
  of non-System IPO/E products 95, 97
  of optional components 88
installation environment 72
installation job stream 90
Interactive Productivity Facilit 10
IPCS 133

J

JCL comments 122
JCL creation 122
job streams 12

L

LIB$CAT 376
LIB$COP 377
LIB$CRT 378
LIB$DEL 379
LIB$DSP 380
LIB$REN 381
library
  concatenated 18
  core image 17, 91
  relocatable 17, 92
  service 88
library sets 76, 94, 330, 332
local fix 120

M

Maintain System History Program (MSHP) 108, 120
menu cross reference 319
menu hierarchy 20
menu manager 21, 231
menu panel 11, 230
mixed architecture 91, 375

N

naming conventions 17

O

operations 122
operations utilities 123
OPN$JCL 382
optional components 88

P

PDV$EXP 383
PL/I 159
preventive service 106
product information 128
production libraries 332, 339
profile
  disk label 73
  I/O configuration 71
  library 73
  software product 72
  system 70
profile update 73
program development 24, 124
program temporary fixes 108
program update tapes 108

R

recommended service libraries 88
relocatable library 17, 92, 332
restart 26, 113
restart PUT 116
restore 24, 358, 456
RPG II 160
RPT$DMP 384

S

sample PUT dialogue 238
selectable activities 230
service 106
service dialogues 108
service libraries 88, 118
software profile 72
Sort/Merge II 157
source statement libraries 332
source statement library 330, 332, 343
SPC$DEF 385
SPC$DEL 386
SRV$AAP 387
SRV$APT 388
SRV$BAC 389
SRV$CMN 390
SRV$CON 391
SRV$CVL 392
SRV$FIX 393, 394, 395
SRV$GEN 396
SRV$POS 397
SRV$PRE 397, 398
SRV$PTF 399, 401, 403
SRV$PUT 405, 409, 411
SRV$REM 413
SRV$RET 414
SRV$RHS 415
SRV$UND 416, 417
supervisor assemblies 114
supervisor assembly 459
SYI$1 418
SYI$10 427
SYI$11 428
SYI$12 429
SYI$13 430
SYI$2 419
SYI$3 420
SYI$4 421
SYI$5 422
SYI$6 423
SYI$7 424
SYI$8 425
SYI$9 426
system administration 70
system files 13 111
system history file 120
system library 340
system management 28, 69
System Management Guide 28, 69, 469
system management hierarchy 22
system profile tables 70
system use 24
system use hierarchy 23

T

tailoring 24, 76
tape volume number 88
TAS$MAS 431
TCI$AFC 432
TCI$APC 433
TCI$APP 434
TCI$ATC 435
TCI$CFC 438
TCI$CPC 439
TCI$CPP 440
TCI$CTC 441
TCI$DFC 443
TCI$DPC 444
TCI$DPP 445
TCI$DTC 446
TCI$MFC 448
TCI$MPC 449
TCI$MPP 450
TCI$MTC 451
TCO$OPT 452
TFP$ASM 453
TPL$OPT 455
TPW$ASM 456
TRJ$ASM 457
TSA$MAS 459

U

user libraries 17
user options file 15
utilities 123
utility aids 80

UTL$CRE 461
UTL$COP 460
UTL$DMP 462
UTL$DSP 463
UTL$FCY 464
UTL$RES 465
UTL$RST 466

V

VER$IFY 467
verification 98
verification jobstreams 8
98
verifying optional components 98
VSE/Access Control Logging and
Reporting 155
VSE/Advanced Functions 129
VSE/DITTO 89, 109
VSE/Fast Copy 89
VSE/ICCF 134
VSE/IPCS 102
VSE/POWER 132
VSE/POWER/RJE 132
VSE/VSAM 84, 99, 131
VSE/VSAM considerations 6
98

SH20-4083-0

Interactive Productivity Facility VSE Feature: Release 3 User's Guide Printed in U.S.A. SH20-4083-0

International Business Machines Corporation
Data Processing Division
1133 Westchester Avenue, White Plains, N.Y. 10604

IBM World Trade Americas/Far East Corporation
Town of Mount Pleasant, Route 9, North Tarrytown, N.Y., U.S.A. 10591

IBM World Trade Europe/Middle East/Africa Corporation
360 Hamilton Avenue, White Plains, N.Y., U.S.A. 10601

Interactive Productivity Facility VSE Feature: Release 3
User's Guide

SH20-4083-0

READER'S COMMENT FORM

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

Your comments will be sent to the author's department for whatever review and action, if any, is deemed appropriate. Comments may be written in your own language; use of English is not required.

Note: *Copies of IBM publications are not stocked at the location to which this form is addressed. Please direct any requests for copies of publications, or for assistance in using your IBM system, to your IBM representative or to the IBM branch office serving your locality.*

Possible topics for comment are:

Clarity Accuracy Completeness Organization Coding Retrieval Legibility

If you wish a reply, give your name, company, mailing address, and date:

_____

_____

_____

_____

Note: Staples can cause problems with automated mail sorting equipment. Please use pressure sensitive or other gummed tape to seal this form.

What is your occupation? _____

Number of latest Newsletter associated with this publication: _____

Thank you for your cooperation. No postage stamp necessary if mailed in the U.S.A. (Elsewhere, an IBM office or representative will be happy to forward your comments or you may mail directly to the address in the Edition Notice on the back of the title page.)

Reader's Comment Form

Fold and tape | Please Do Not Staple | Fold and tape

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 40 ARMONK, N.Y.

POSTAGE WILL BE PAID BY ADDRESSEE:

International Business Machines Corporation
Department Z42, Bldg. 985
P.O. Box 390
Poughkeepsie, New York 12602

Fold and tape | Please Do Not Staple | Fold and tape

International Business Machines Corporation
Data Processing Division
1133 Westchester Avenue, White Plains, N.Y. 10604

IBM World Trade Americas/Far East Corporation
Town of Mount Pleasant, Route 9, North Tarrytown, N.Y., U.S.A. 10591

IBM World Trade Europe/Middle East/Africa Corporation
360 Hamilton Avenue, White Plains, N.Y., U.S.A. 10601

Cut or Fold Along Line

Interactive Productivity Facility VSE Feature: Release 3 User's Guide Printed in U.S.A. SH20-4083-0