IBM

Program Directory for

DEVICE SUPPORT FACILITIES

ICKDSF

Release 16

Program Number 5684-042

CMS0G14

for Use with
VM/ESA

Document Date: April 1998

GI10-4514-00

┌─ **Note!** ───┐

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

└──┘

This program directory, dated April 1998, applies to Release 16 of DEVICE SUPPORT FACILITIES (ICKDSF), Program Number 5684-042 for the following:

COMPID	Feature Numbers	System Name
565899201	5800/5801/5802	VM/ESA

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Notices

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VMSES/E
SFS

| Summary of Changes

| The following describes the different revision indicators used and the timeframe when they were inserted:

| • Lines flagged with revision indicator of '|' indicate changes made between September 1994 and April
| 1998.

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1.0 Introduction

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

The program directory contains the following sections:

- 2.0, "Program Materials" on page 2 identifies the basic and optional program materials and documentation for ICKDSF.

- 3.0, "Program Support" on page 5 describes the IBM support available for ICKDSF.

- 4.0, "Program and Service Level Information" on page 6 lists the APARs (program level) and PTFs (service level) incorporated into ICKDSF.

- 5.0, "Installation Requirements and Considerations" on page 7 identifies the resources and considerations for installing and using ICKDSF.

- 6.0, "Installation Instructions" on page 10 provides detailed installation instructions for ICKDSF.

- 7.0, "Service Instructions" on page 21 provides detailed servicing instructions for ICKDSF.

- 8.0, "The Stand-alone Program" on page 29 provides detailed Stand-alone instructions for ICKDSF.

Before installing ICKDSF, read 3.1, "Preventive Service Planning" on page 5. This section tells you how to find any updates to the information and procedures in this program directory.

2.0 Program Materials

An IBM program is identified by a program number. The program number for DEVICE SUPPORT FACILITIES is 5684-042.

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

The following sections identify:

- basic and optional program materials available with this program
- publications useful during installation.

2.1 Basic Machine-Readable Material

The distribution medium for this program is 9-track magnetic tape (written at 1600 or 6250 BPI), or 3480 tape cartridge. The tape or cartridge contains all the programs and data needed for installation. See 6.0, "Installation Instructions" on page 10 for more information about how to install the program. Figure 1 describes the tape or cartridge. Figure 2 describes the file content of the program tape or cartridge.

Figure 1. Basic Material: Program Tape

Feature Number	Medium	Physical Volume	Tape Content	External Tape Label
5800	1600 tape	1	ICKDSF R16	CMS0G14OBJR16M0
5801	6250 tape	1	ICKDSF R16	CMS0G14OBJR16M0
5802	3480 cart.	1	ICKDSF R16	CMS0G14OBJR16M0

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

Tape File	Content
1	Tape Header
2	Tape Header
3	Product Header
4	Product Memo
5	Service Apply Lists
6	PTFPARTs
7	ICKDSF Service

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

Tape File	Content
8	ICKDSF Service
9	ICKDSF Base Code
10	ICKDSF Customization Files
11	ICKDSF Executable Code
12	ICKDSF Help Files

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for ICKDSF.

2.3 Program Publications

The following sections identify the basic and optional publications for ICKDSF.

2.3.1 Basic Program Publications

One copy of the following publication is included when you order the basic materials for ICKDSF. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
Device Support Facilities Reference Summary	GX26-3813
Device Support Facilities System control Program Specifications	GC26-3946
Device Support Facilities: User's Guide and Reference	GC35-0033

2.4 Publications Useful During Installation

The publications listed in Figure 4 may be useful during the installation of ICKDSF. To order copies, contact your IBM representative.

Figure 4 (Page 1 of 2). Publications Useful During Installation / Service

Publication Title	Form Number
VMSES/E Introduction and Reference	SC24-5444 / SC24-5747(V2.1.0/V2.2.0) / GC24-5837(V2.3.0)
VM/ESA Service Guide	SC24-5527 / SC24-5749(V2.1.0/V2.2.0) / GC24-5838(V2.3.0)

Figure 4 (Page 2 of 2). Publications Useful During Installation / Service

Publication Title	Form Number
VM/ESA CP Planning and Administration	SC24-5521
VM/ESA CMS Command Reference	SC24-5461
VM/ESA SFS and CRR Planning, Administration, and Operation	SC24-5649
VM/ESA System Messages and Codes	SC24-5529 / SC24-5784(V2.1.0/V2.2.0) / GC24-5841(V2.3.0)
VMSES/E 370 Feature Introduction and Reference Licensed Products	SC24-5659

2.5 Microfiche Support

There is no microfiche for ICKDSF.

3.0 Program Support

This section describes the IBM support available for ICKDSF.

3.1 Preventive Service Planning

Before installing ICKDSF, check with your IBM Support Center or use IBMLink (ServiceLink) to see whether there is additional Preventive Service Planning (PSP) information. To obtain this information, specify the following UPGRADE and SUBSET values:

Figure 5. PSP Upgrade and Subset ID

	Retain		
COMPID	**Release**	**Upgrade**	**Subset**
565899201	G14	ICKDSF016	CMS0G14

If you have received ICKDSF only from IBM Software Company, before installing ICKDSF, you should also check with your IBM Support Center or use either Information/Access or SoftwareXcel Extended to see if there is additional PSP information that you should know.

3.2 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 6 identifies the component ID (COMPID), Retain Release and Field Engineering Service Number (FESN) for ICKDSF.

Figure 6. Component IDs

	Retain		
COMPID	**Release**	**Component Name**	**FESN**
565899201	G14	ICKDSF R16	5X99201

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of ICKDSF. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs shipped with this product. Information about the cumulative service tape is also provided.

4.1 Program Level Information

The following APAR fixes against previous releases of ICKDSF have been incorporated into this release.

PN16284	PN38719	PN38879	PN41231	PN44673	PN50156
PN34612	PN38721	PN38880	PN42058	PN46282	PN54876
PN35451	PN38874	PN38990	PN42388	PN46283	PN55873
PN37212	PN38876	PN38991	PN43137	PN47604	PN55909
PN37357	PN38877	PN39070	PN43782	PN49552	PN56217
PN37679	PN38878	PN40905	PN43854	PN49992	PN58832

4.2 Service Level Information

Check the ICKDSF016 PSP bucket for any additional PTFs that should be installed or any additional install information.

4.3 Cumulative Service Tape

Cumulative service for ICKDSF Release 16 is available through a monthly corrective service tape, Expanded Service Option, ESO.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating ICKDSF.

5.1 Hardware Requirements

There are no special hardware requirements for ICKDSF.

5.2 Program Considerations

The following sections list the programming considerations for installing ICKDSF and activating its functions.

5.2.1 Operating System Requirements

ICKDSF supports the following VM operating systems:

- VM/ESA 2.0 (or later)
- VM/ESA Release 1.1 + SPE APAR VM54804
- VM/ESA 1.0 370 Feature + VMSES/E for Licensed Programs Feature 7806
- VM/ESA 1.5 370 Feature
- **RSU9405 service level** or above must be applied to VMSES/E on **VM/ESA 2.0, 2.1 or 1.1** prior to installing ICKDSF
- **RSU9403 service level** or above must be applied to VMSES/E on **VM/ESA 2.2 or 1.5** prior to installing ICKDSF

5.2.2 Other Program Product Requirements

No other products are required for ICKDSF.

5.2.3 Program Installation/Service Considerations

This section describes items that should be considered before you install or service ICKDSF.

- VMSES/E is required to install and service this product.
- If multiple users install and maintain licensed products on your system, there may be a problem getting the necessary access to MAINT's 51D disk. If you find that there is contention for write access to the 51D disk, you can eliminate it by converting the Software Inventory from minidisk to Shared File System (SFS). See the *VMSES/E Introduction and Reference* manual, section 'Changing the Software Inventory to an SFS Directory', for information on how to make this change.

- Customers will no longer install and service ICKDSF strictly using the MAINT user ID, but will use a new user ID--P684042H. This is the IBM suggested user ID name. You are free to change this to any user ID name you wish, however, a PPF override must be created.

   Note: It may be easier to make the changes during the installation procedure 6.2, "Plan Your Installation For ICKDSF" step 6 on page 12, then after you have installed this product.

5.3 DASD Storage and User ID Requirements

Figure 7 lists the user IDs and minidisks that are used to install and service ICKDSF.

Important Installation Notes:

- User ID(s) and mindisks will be defined in 6.2, "Plan Your Installation For ICKDSF" on page 11 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.

- P684042H is a default user ID and can be changed. If you choose to change the name of the installation user ID you need to create a Product Parameter Override (PPF) to change the name. This can be done in 6.2, "Plan Your Installation For ICKDSF" step 6 on page 12.

   Note: If you choose to install ICKDSF on a common user ID the default minidisk addresses for ICKDSF may already be defined. If any of the default minidisks required by ICKDSF are already in use you will have to create an override to change the default minidisks for ICKDSF so they are unique.

Figure 7 (Page 1 of 2). Estimated DASD Storage Requirements for Target Minidisks						
Minidisk owner (user ID)	**Default Address**	**Storage in Cylinders**		**FB-512 Blocks**	**SFS 4K Blocks**	**Usage**
		DASD	**CYLS**			**Default SFS Directory Name**
P684042H	2B2	3390 3380 9345	7 9 9	10800	1350	Contains all the base code shipped with ICKDSF **VMSYS:P684042H.ICKDSF.OBJECT**
P684042H	2C2	3390 3380 9345	2 2 2	2400	300	Contains customization files. This disk may also be used for local modifications. **VMSYS:P684042H.ICKDSF.LOCAL**
P684042H	2D2	3390 3380 9345	9 10 10	12000	1500	Contains serviced files **VMSYS:P684042H.ICKDSF.DELTA**
P684042H	2A6	3390 3380 9345	2 2 2	2400	300	Contains AUX files and software inventory tables that represent the test service level of ICKDSF **VMSYS:P684042H.ICKDSF.ALTAPPLY**
Note: Cylinder values defined in this table are based on a 4k block size. FB-512 block and SFS values are derived from the 3380 cylinder values in this table. 6,150 4K blocks are needed for SFS install.						

Figure 7 (Page 2 of 2). Estimated DASD Storage Requirements for Target Minidisks						
Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			Default SFS Directory Name
P684042H	2A2	3390 3380 9345	2 2 2	2400	300	Contains AUX files and software inventory tables that represent the service level of ICKDSF that is currently in production. **VMSYS:P684042H.ICKDSF.PRDAPPLY**
P684042H	29E	3390 3380 9345	8 10 10	12000	1500	Test build disk. This code will be copied to a production disk, (e.g. MAINT 19E) so the production disk will also require this amount of free space. **VMSYS:P684042H.ICKDSF.TEST**
P684042H	191	3390 3380 9345	8 10 10	12000	1500	P684042H user ID's 191 minidisk **VMSYS:P684042H**
P684042H	29D	3390 3380 9345	2 2 2	2400	300	P684042H user ID's HELP minidisk **VMSYS:P684042H.ICKDSF.BUILDHLP**
Note: Cylinder values defined in this table are based on a 4k block size. FB-512 block and SFS values are derived from the 3380 cylinder values in this table. 6,150 4K blocks are needed for SFS install.						

6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to install and activate ICKDSF.

The step-by-step procedures are in two column format. The steps to be performed are in bold large numbers. Commands for these steps are on the left hand side of the page in bold print. Additional information for a command may exist to the right of the command. For more information about the two column format see 'Understanding Dialogs with the System' in the *VM/ESA Installation Guide*.

Each step of the installation instructions must be followed. Do not skip any step unless directed otherwise.

Throughout these instructions, the use of IBM-supplied default minidisk addresses and user IDs is assumed. If you use different user IDs, minidisk addresses, or SFS directories to install ICKDSF, adapt these instructions as needed for your environment.

Note!

The sample console output presented throughout these instructions was produced on a VM/ESA R2.0 system. If you're installing ICKDSF on a different VM/ESA system, the results obtained for some commands may differ from those depicted here.

6.1 VMSES/E Installation Process Overview

The following is a brief description of the main steps in installing ICKDSF using VMSES/E.

- Planning Your Installation

  Use the VMFINS command to load several VMSES/E files from the product tape and to obtain ICKDSF resource requirements.

- Allocation Resources

  The information obtained from the previous step is used to allocate the appropriate minidisks (or SFS directories) and user IDs needed to install and use ICKDSF.

- Install the ICKDSF Product

  Use the VMFINS command to load the ICKDSF product files from tape to the test BUILD and BASE minidisks/directories. VMFINS is then used to update the VM SYSBLDS file used by VMSES/E for software inventory management.

- Performing Post-installation Tasks

  Information about file tailoring and initial activation of the program is presented in 6.2, "Plan Your Installation For ICKDSF" on page 11.

- Placing the ICKDSF Files into Production

Once the product files have been tailored and the operation of ICKDSF is satisfactory, the product files are copied from the test BUILD disk(s) to production BUILD.

For a complete description of all VMSES/E installation options refer to:

| • *VMSES/E Introduction and Reference*

  OR

• *VMSES/E 370 Feature Introduction and Reference for Licensed Products* (SC24-5659)

6.2 Plan Your Installation For ICKDSF

The VMFINS command will be used to plan the installation. This section has 2 main steps that will:

• load the first tape file, containing installation files
• generate a 'PLANINFO' file listing
  – all user ID/mdisks requirements
  – required products

To obtain planning information for your environment:

1 Log on as ICKDSF installer planner.

This user ID can be any ID that has read access to MAINT's 5E5 minidisk (or the SESELPS EE5 minidisk, if installing on VM/ESA R1.0 370 Feature) and write access to the MAINT (or SESELPS) 51D minidisk.

For VM/ESA R1.0 370 Feature systems, the installation planning user ID must have an OPTION ECMODE statement in its directory entry, so that the SESELPS EE5 minidisk can be linked.

2 Mount the ICKDSF installation tape and attach it to the user ID at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

3 Establish read access to the VMSES/E code.

link MAINT 5e5 5e5 rr
access 5e5 b

Note: If installing on VM/ESA Release 1.0 370 Feature link to **seselps** and access **EE5**.

The 5E5|EE5 disk contains the VMSES/E code.

4 Establish write access to the Software Inventory disk.

link MAINT 51d 51d mr
access 51d d

Note: If installing on VM/ESA Release 1.0 370 Feature link to **seselps** and access **51D**.

The MAINT 51D disk is where the VMSES/E system-level Software Inventory and other dependent files reside.

Note: If another user already has the MAINT 51D mindisk (or SESELPS 51D for VM/ESA R1.0 370 Feature) linked in write mode (R/W), you'll only obtain read access (R/O) to this minidisk. If this occurs, you'll need to have that user re-link the 51D in read-only mode (RR), and then re-issue the above LINK and ACCESS commands. Do not continue with these procedures until a R/W link is established to the 51D minidisk.

5 Load the ICKDSF product control files to the 51D minidisk.

vmfins install info (nomemo

The NOMEMO option will load the memos from the tape but will not issue a prompt to send them to the system printer. Specify the MEMO option if you want to be prompted for printing the memo.

This command will perform the following:

- load Memo-to-Users

- load various product control files, including the Product Parameter File (PPF) and the PRODPART files

- create VMFINS PRODLIST on your A-disk. The VMFINS PRODLIST contains a list of products on the installation tape.

```
VMFINS2760I VMFINS processing started
VMFINS1909I VMFINS PRODLIST created on your A-disk
VMFINS2760I VMFINS processing completed successfully
Ready;
```

6 Obtain resource planning information for ICKDSF.

Notes:

    a. The product will **not** be loaded by the VMFINS command at this time.

    b. If ICKDSF is being installed on a VM/ESA Release 1.1 or VM/ESA Release 1.0 370 Feature, you'll need to use the **PROD** keyword instead of the **PPF** keyword, in the following VMFINS command *IF* you want to have the opportunity to change the installation defaults.

vmfins install ppf 5684042H {ickdsf | ickdsfsfs} (plan nomemo

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

The PLAN option indicates that VMFINS will perform requisite checking, plan system resources, and provide an opportunity to override the defaults in the product parameter file.

You can override any of the following:

- the name of the product parameter file

- the default user IDs

- minidisk/directory definitions

Notes:

    a. If you change the PPF name, a default user ID, or other parameters via a PPF override, you'll need to use your changed values instead of those indicated (when appropriate), throughout the rest of the installation instructions, as well as those provide for servicing ICKDSF. For example, you'll need to specify your PPF override file name instead of 5684042H for certain VMSES/E commands. For more information about using changing the VMSYS file pool name see see Appendix A, "Overriding the VMSYS File Pool Name" on page 31.

    b. If you're not familiar with creating PPF overrides using VMFINS, you should review the 'Using the Make Override Panel' section in Chapter 3 of the *VMSES/E Introduction and Reference* before you continue.

```
VMFINS2760I VMFINS processing started
VMFREQ2805I Product 5684042H component ICKDSF passed requisite checking
Do you want to create an override for 5684042H ICKDSF (prodid 5684042H)?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFPLA1909I 5684042H PLANINFO created on your A-disk
VMFINS2760I VMFINS processing completed successfully
```

7 Review the install message log ($VMFINS $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see *VM/ESA: System Messages and Codes*, or use on-line HELP.

vmfview install

6.3 Allocate Resources for Installing ICKDSF

Use the planning information in the 5684042H PLANINFO file, created in the **PLAN** step, to:

- Create the P684042H user directory for minidisk install

  OR

- Create the P684042H user directory for SFS install

6.3.1 Installing ICKDSF on Minidisk

1 Obtain the user directory from the 5684042H PLANINFO file.

Note: The user directory entry is located at the bottom of the PLANINFO file of the resource section; these entries will contain all of the links and privilege classes necessary for the P684042H user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

2 Add the MDISK statements to the directory entry for P684042H. Use Figure 7 on page 8 to obtain the minidisk requirements.

3 If you're installing ICKDSF on a VM/ESA 370 system, the following directory entry changes must be made:

- For the P684042H directory entry:

  – Add an `OPTION ECMODE` statement prior to the `CONSOLE` statement.

  – (VM/ESA 1.0 370 Feature systems only)

    Modify the `LINK` statements for the MAINT 5E5 and 51D minidisks so that the SESELPS EE5 and 51D minidisks are linked instead.

4 Add the P684042H directory to the system directory. Change the passwords for P684042H from xxxxx to a valid password, in accordance with your security guidelines.

5 Place the new directories on-line using VM/Directory Maintenance
(DIRMAINT) or an equivalent CP directory maintenance method.

> ─── **Note** ───
>
> All minidisks for the P684042H user ID must be formatted before installing
> ICKDSF.

6.3.2 Installing ICKDSF in SFS Directories

1 Obtain the user directory from the 5684042H PLANINFO file.

Note: The user directory entry is located at the bottom of the PLANINFO file
of the resource section; these entries will contain all of the links and privilege
classes necessary for the P684042H user ID. Use the directory entry found
in PLANINFO as a model as input to your system directory.

2 If you're installing ICKDSF on a VM/ESA 370 Feature system, the following
directory entry changes must be made:

- For the P684042H directory entry:

   – Add an `OPTION ECMODE` statement prior to the `CONSOLE` statement.

   – (VM/ESA 1.0 370 Feature systems only)

     Modify the `LINK` statements for the MAINT 5E5 and 51D minidisks so
     that the SESELPS EE5 and 51D minidisks are linked instead.

3 Add the P684042H directory to the system directory. Change the passwords
for P684042H from xxxxx to a valid password, in accordance with your
security guidelines.

4 Place the new directories on-line using VM/Directory Maintenance
(DIRMAINT) or an equivalent CP directory maintenance method.

5 An SFS install will also require the following steps:

   a Determine the number of 4k blocks that are required for SFS directories
   by adding up the 4K blocks required for each SFS directory you plan to
   use.

   If you intend to use all of the default ICKDSF SFS directories, the 4K
   block requirements for each ICKDSF are summarized in Figure 7 on
   page 8.

   This information will be used when enrolling the P684042H to the
   VMSYS filepool.

   b Enroll user P684042H in the VMSYS filepool using the ENROLL USER
   command:

ENROLL USER P684042H VMSYS: (BLOCKS *blocks*

where *blocks* is the number of 4k blocks that you calculated in the previous step.

Note: This must be done from a user ID that is an administrator for VMSYS: filepool.

c Determine if there are enough blocks available in the filepool to install ICKDSF. This information can be obtained from the QUERY FILEPOOL STATUS command. Near the end of the output from this command is a list of minidisks in the filepool and the number of blocks free. If the number of blocks free is smaller than the total 4k blocks needed to install ICKDSF you will need to add space to the filepool. See the *VM/ESA SFS and CRR Planning, Administration, and Operation* manual for information on adding space to a filepool.

d Create the necessary subdirectories listed in the 5684042H PLANINFO file using the CREATE DIRECTORY command. A complete list of default ICKDSF SFS directories is provided in Figure 7 on page 8.

set filepool vmsys:
create directory *dirid*

dirid is the name of the SFS directory you're creating, such as:

```
create directory vmsys:P684042H.ickdsf
create directory vmsys:P684042H.ickdsf.object
  :
```

If necessary, see the *VM/ESA CMS Command Reference* manual for more information about the CREATE DIRECTORY command.

e If you intend to use an SFS directory as the work space for the P684042H used ID, include the following IPL control statement in the P684042H directory entry:

```
IPL CMS PARM FILEPOOL VMSYS
```

This will cause CMS to automatically access the P684042H's top directory as file mode A.

6.4 Install ICKDSF

1 Logon to the installation user ID **P684042H**.

2 Create a PROFILE EXEC that will contain the ACCESS commands for MAINT 5E5 and 51D minidisks.

xedit profile exec a
===> input /**/
===> input 'access 5e5 b'
===> input 'access 51d d'
===> file

Note: If installing on VM/ESA Release 1.0 370 Feature specify **EE5** instead of 5E5 for the first ACCESS command.

3 Execute the profile to access MAINT's minidisks.

profile

4 Establish write access to the Software Inventory disk, if it is not already linked R/W.

Note: If the MAINT 51D (SESELPS 51D for VM/ESA 1.0) minidisk was accessed R/O, you will need to have the user who has it linked R/W link it as R/O. You then can issue the following commands to obtain R/W access to it.

link MAINT 51d 51d mr
access 51d d

Note: If installing on VM/ESA Release 1.0 370 Feature link and access **seselps 51D** minidisk.

5 Have the ICKDSF installation tape mounted and attached to P684042H at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

6 Install ICKDSF.

Notes:

If you've not yet created a PPF override file (but need to) and ICKDSF is being installed on either VM/ESA Release 1.1 or VM/ESA Release 1.0 370 Feature you'll need to use the **PROD** keyword instead of the **PPF** keyword in the following VMFINS command, so you'll have the opportunity to change the installation defaults.

If you've already created a PPF override file, you should specify your override file name after the **PPF** keyword for the following VMFINS command. The **PROD** keyword should *not* be used.

You may be prompted for additional information during VMFINS INSTALL processing depending on your installation environment. If you're unsure how to respond to a prompt, refer to the 'Installing Products with VMFINS' and "Install Scenarios' chapters in the *VMSES/E Introduction and Reference* to decide how to proceed.

vmfins install ppf 5684042H {ickdsf | ickdsfsfs} (nomemo nolink

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

The NOLINK option indicates that you don't want VMFINS to link to the appropriate minidisks, only access them if not accessed.

```
VMFINS2760I VMFINS processing started
VMFREQ2805I Product 5684042H component ICKDSF passed requisite checking
Do you want to create an override for 5684042H ICKDSF (prodid 5684042H)?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINT2760I VMFINST processing started
VMFLDP2706I 5684042H ICKDSF (prodid 5684042H) will be processed as a PDI
            product
VMFSET2760I VMFSETUP processing started
VMFUTL2205I Minidisk|Directory Assignments:
            String   Mode  Stat  Vdev  Label/Directory
VMFUTL2205I LOCALSAM E     R/W   2C2   SES2C2
VMFUTL2205I APPLY    F     R/W   2A6   SES2A6
VMFUTL2205I          G     R/W   2A2   SES2A2
VMFUTL2205I DELTA    H     R/W   2D2   SES2D2
VMFUTL2205I BUILD0   I     R/W   29E   SES29E
VMFUTL2205I BUILD2   J     R/W   29D   SES29D
VMFUTL2205I BASE1    K     R/W   2B2   SES2B2
VMFUTL2205I --------  A     R/W   191   SES191
VMFUTL2205I --------  B     R/O   5E5   MNT5E5
VMFUTL2205I --------  D     R/W   51D   SES51D
VMFUTL2205I --------  S     R/O   190   MNT190
VMFUTL2205I --------  Y/S   R/O   19E   MNT19E
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE 9400
VMFREC1851I (1 of 8) VMFRCAXL processing AXLIST
VMFRCX2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 8) VMFRCPTF processing PARTLST
VMFRCP2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (3 of 8) VMFRCCOM processing DELTA
VMFRCC2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (4 of 8) VMFRCALL processing APPLY
VMFRCA2159I Loading part(s) to APPLY 2A6 (F)
VMFRCA2159I Loaded 1 part(s) to APPLY 2A6 (F)
VMFREC1851I (5 of 8) VMFRCALL processing BASE
VMFRCA2159I Loading part(s) to BASE1 2B2 (K)
VMFRCA2159I Loaded 124 part(s) to BASE1 2B2 (K)
VMFREC1851I (6 of 8) VMFRCALL processing SAMPLE
VMFRCA2159I Loading part(s) to LOCALSAM 2C2 (E)
VMFRCA2159I Loaded 1 part(s) to LOCALSAM 2C2 (E)
VMFREC1851I (7 of 8) VMFRCALL processing BUILD
VMFRCA2159I Loading part(s) to BUILD0 29E (I)
VMFRCA2159I Loaded 8 part(s) to BUILD0 29E (I)
VMFREC1851I (8 of 8) VMFRCALL processing BUILDHLP
VMFRCA2159I Loading part(s) to BUILD2 29D (J)
VMFRCA2159I Loaded 24 part(s) to BUILD2 29D (J)
VMFREC2760I VMFREC processing completed successfully
VMFINT2760I VMFINST processing completed successfully
VMFINS2760I VMFINS processing completed successfully
```

7 Review the install message log ($VMFINS $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see *VM/ESA: System Messages and Codes*, or use on-line HELP.

6.4.1 Update Build Status Table for ICKDSF

1 Update the VM SYSBLDS software inventory file for ICKDSF.

vmfins build ppf 5684042H {ickdsf | ickdsfsfs} (serviced nolink

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

The SERVICED option will build any parts that were not built on the installation tape (if any) and update the Software Inventory build status table showing that the product 5684042H has been built.

6.4.2 Copy ICKDSF Files Into Production

1 Logon to MAINT if you plan to put ICKDSF general use code on the 'Y' disk (MAINT's 19E disk). Or logon to the owner of the disk that will contain the 'production' level of the ICKDSF code.

link P684042H 29e 29e rr
access 29e e
access 19e f
vmfcopy * * e = = f (prodid 5684042H%ickdsf olddate replace

The VMFCOPY command will update the VMSES PARTCAT file on the 19E disk.

Note: When installing in Shared File System directories you do not have to issue the **link** and you need to replace the **access 29e e** with **access P684042H.ickdsf.test e** .

2 Logon to MAINT if you plan to put ICKDSF help files on MAINT's 19D disk; to make them generally available.

link P684042H 29d 29d rr
access 29d e
access 19d f
vmfcopy * * e = = f (prodid 5684042H%ickdsf olddate replace

The VMFCOPY command will update the VMSES PARTCAT file on the 19D disk.

Note: When installing in Shared File System directories you do not have to issue the **link** and you need to replace the **access 29d e** with **access P684042H.ickdsf.buildhlp e** .

3 Re-save the appropriate CMS shared segments, to return the 19E minidisk (Y-disk) and the 19D minidisk to 'shared' status. See the 'Placing (Serviced) Components into Production' section of the *VM/ESA Service Guide* for detailed information about how these segments should be saved on your system.

ICKDSF is now installed and built on your system.

7.0 Service Instructions

This section of the Program Directory contains the procedure to install CORrective service to ICKDSF. VMSES/E is used to install service for ICKDSF.

To become more familiar with service using VMSES/E, you should read the introductory chapters in:

- *VMSES/E Introduction and Reference*

  OR.

- *VMSES/E 370 Feature Introduction and Reference for Licensed Products* (SC24-5659)

These manuals also contain the command syntax for the VMSES/E commands listed in the procedure.

Note: Each step of the servicing instructions must be followed. Do not skip any step unless otherwise directed. All instructions showing accessing of disks assume the use of default minidisk addresses. If different minidisk addresses are used, or if using a shared file system, change the instructions appropriately.

7.1 VMSES/E Service Process Overview

The following is a brief description of the main steps in servicing ICKDSF using VMSES/E.

- Merging Service

  Use the VMFMRDSK command to clear the alternate apply disk before receiving new service. This allows you to easily remove the new service if a serious problem is found.

- Receiving Service

  The VMFREC command receives service from the delivery media and places it on the Delta disk.

- Applying Service

  The VMFAPPLY command updates the version vector table (VVT), which identifies the service level of all the serviced parts. In addition, AUX files are generated from the VVT for parts that require them.

- Reapplying Local Service (if applicable)

  All local service (mods) must be entered into the software inventory to allow VMSES/E to track the changes and build them into the system. Refer to Chapter 7 in the *VM/ESA Service Guide* for this procedure. If you are running VM/ESA Release 1.0 370 Feature refer to *VMSES/E 370 Feature Introduction and Reference for Licensed Products*.

- Building New Levels

  The build task generates the serviced level of an object and places the new object on a test BUILD disk.

- Placing the New Service into Production

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Once the service is satisfactorily tested it should be put into production by copying the new service to the production disk, re-saving the NSS (Named Saved System) or DCSS (Discontiguous Saved Segments), etc.

7.2 Servicing ICKDSF

7.2.1 Prepare to Receive Service

1 Log onto ICKDSF service user ID **P684042H**

2 Establish access to the software inventory disk.

Note: If the MAINT 51D (SESELPS 51D for VM/ESA Release 1.0 370 Feature) minidisk was accessed R/O, you will need to have the user that has it accessed R/W link it R/O. You then can issue the following commands to obtain R/W access to it.

link MAINT 51d 51d mr
access 51d d

If installing on VM/ESA Release 1.0 370 Feature link to **seselps** and access 51D.

The 51D minidisk is where the VMSES/E Software Inventory files and other product dependent files reside.

3 Have the ICKDSF CORrective service tape mounted and attached to **P684042H**.

4 Establish the correct minidisk access order.

vmfsetup 5684042H {ickdsf | ickdsfsfs}

5684042H is the PPF that was shipped with the product. If you have your own PPF override you should substitute your PPF name for 5684042H.

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

Electronic Service

If you are receiving service from ServiceLink (electronic service) see Appendix A, 'Receiving Service for VMSES Envelopes', section Receive Service Documentation, in the *VM/ESA Service Guide*. Then return back to this program directory and continue with step 7 on page 23 below.

---

5 Receive the documentation. VMFREC with the INFO option loads the documentation and displays a list of all the products on the tape.

vmfrec info   This command will load the service memo to the 191 disk.

6 Check the receive message log ($VMFREC $MSGLOG) for warning and error messages.

vmfview receive

Also make note of which products and components have service on the tape. To do this, use the PF5 key to show all status messages which identify the products on the tape.

7 Clear the alternate APPLY disk to ensure that you have a clean disk for new service.

vmfmrdsk 5684042H {ickdsf | ickdsfsfs} apply

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

This command clears the alternate APPLY disk.

8 Review the merge message log ($VMFMRD $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see *VM/ESA: System Messages and Codes*, or use on-line HELP.

vmfview mrd

7.2.2 Receive the Service

> **Electronic Service**
>
> If you are receiving service from Servicelink (electronic service) see Appendix A, 'Receiving Service for VMSES Envelopes', section Receive the Service, in the *VM/ESA Service Guide*. Then return back to this program directory and continue with section 7.2.3, "Apply the Service" on page 24.

1 Receive the service.

vmfrec ppf 5684042H {ickdsf | ickdsfsfs}

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

This command receives service from your service tape. All new service is loaded to the alternate DELTA disk.

2 Review the receive message log ($VMFREC $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see *VM/ESA: System Messages and Codes*, or use on-line HELP.

vmfview receive

7.2.3 Apply the Service

1 Apply the new service.

vmfapply ppf 5684042H {ickdsf | ickdsfsfs}

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

This command applies the service that you just received. The version vector table (VVT) is updated with all serviced parts and all necessary AUX files are generated.

2 Review the apply message log ($VMFAPP $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see *VM/ESA: System Messages and Codes*, or use on-line HELP.

vmfview apply

> **Note**
>
> If you get the message VMFAPP2120W then re-apply any local modifications before building the new ICKDSF. Refer to chapter 7 in the *VM/ESA Service Guide*. Follow the steps that are applicable to your local modification.
>
> The following substitutions need to be made:
>
> - **esalcl** should be **5684042H**
>
> - **esa** should be **5684042H**
>
> - *compname* should be **ickdsf** or **ickdsfsfs** (minidisk or SFS)
>
> - *appid* should be **5684042H**
>
> - *fm-local* should be the fm of 2C2
>
> - *fm-applyalt* should be the fm of 2A6
>
> Keep in mind that when you get to the "Rebuilding Objects" step in the *VM/ESA Service Guide*, you should return back to this program directory at 7.2.4, "Update the Build Status Table" on page 25.
>
> **Note:** If you are running VM/ESA 1.0 370 feature you still need to refer to the *VM/ESA Service Guide* for VM/ESA 1.1 or higher.

7.2.4 Update the Build Status Table

1 Update the Build Status Table with serviced parts.

vmfbld ppf 5684042H {ickdsf | ickdsfsfs} (status

Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

This command updates the Build Status Table.

> **2** Use VMFVIEW to review the build status messages, and see what objects need to be built.

vmfview build

7.2.5 Build Serviced Objects

> **1** Rebuild ICKDSF serviced parts.

vmfbld ppf 5684042H {ickdsf | ickdsfsfs} (serviced

> Use **ickdsf** for installing on minidisks or **ickdsfsfs** for installing in Shared File System directories.

> **2** Review the build message log ($VMFBLD $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see *VM/ESA: System Messages and Codes*, or use on-line HELP.

vmfview build

7.3 Place the New ICKDSF Service Into Production

7.3.1 Copy the New ICKDSF Serviced Files Into Production

> **1** Logon to MAINT if you plan to put ICKDSF general use code on the 'Y' disk (MAINT's 19E disk). Or logon to the owner of the disk that will contain the 'production' level of the ICKDSF code.

link P684042H 29e 29e rr
access 29e e
access 19e f
vmfcopy * * e = = f (prodid 5684042H%ickdsf olddate replace

> The VMFCOPY command will update the VMSES PARTCAT file on the 19E disk.

> **Note:** When installing in Shared File System directories you do not have to issue the **link** and you need to replace the **access 29e e** with **access P684042H.ickdsf.test e** .

> **2** Logon to MAINT if you plan to put ICKDSF help files on MAINT's 19D disk; to make them generally available.

```
link P684042H 29d 29d rr
access 29d e
| access 19d f
vmfcopy * * e = = f (prodid 5684042H%ickdsf olddate replace
```

The VMFCOPY command will update the VMSES PARTCAT file on the 19D disk.

| **Note:** When installing in Shared File System directories you do not have to issue the **link** and you need to replace the **access 29d e** with **access P684042H.ickdsf.buildhlp e** .

3 Re-save the appropriate CMS shared segments, to return the 19E minidisk (Y-disk) and the 19D minidisk to 'shared' status. See the 'Placing (Serviced) Components into Production' section of the *VM/ESA Service Guide* for detailed information about how these segments should be saved on your system.

You have finished servicing ICKDSF.

8.0 The Stand-alone Program

After this program has been applied to your system, the CMS file ICKSADSF COREIMAG on your product disk is the stand-alone version of ICKDSF.

The stand-alone ICKDSF can be executed by punching the ICKSADSF COREIMAG to a virtual card reader and IPLing the file from the virtual reader. The stand-alone ICKDSF can also be copied to a tape with which you may also IPL.

8.1.1 Creating the Stand-alone Tape

The following is a sample EXEC with which you can copy the stand-alone program code to an unlabeled tape.

```
/* THIS EXEC COPIES THE STAND-ALONE DEVICE SUPPORT FACILITIES */
/* FROM CMS FILE 'ICKSADSF COREIMAG' TO AN IPLABLE TAPE.      */
/* THE TAPE MUST BE ATTACHED AS VIRTUAL ADDRESS '181'.        */
Address 'COMMAND'
'CP REWIND 181'
If rc = 0 then
  Do
    'FILEDEF INMOVE DISK ICKSADSF COREIMAG A (LRECL 80 RECFM F'
    'FILEDEF OUTMOVE TAP1 (LRECL 80 RECFM F BLOCK 80'
    'MOVEFILE'
   If rc = 0 then
     Do
       Say '*** STAND-ALONE ICKDSF SUCCESSFULLY GENERATED ***'
       Exit 0
     End
   Else
     Do
       Say 'ERROR LOADING CMS FILE TO TAPE'
       Exit 10
     End
  End
Else
  Do
    Say 'TAPE 181 NOT ATTACHED OR NOT READY'
    Exit 20
  End
```

8.1.2 Loading the Stand-alone Tape

Refer to the section 'Executing Device Support Facilities in the Stand-alone Environment' in the 'Device Support Facilities: User's Guide and Reference' for additional information.

8.1.3 Verifying the Stand-alone Tape

Enter the following command after the tape has been IPL'd:

```
ANALYZE UNIT(ccuu) NODRIVE NOSCAN
```

8.1.4 Maintenance of the Stand-alone Program

Periodically, PTFs containing the lastest Stand-alone ICKDSF will be issued. Maintenance for Stand-alone ICKDSF is cumulative and will always involve complete replacement of the product. Corrective maintenance will consist of a tape with the Stand-alone ICKDSF product in IPL-able form.

Appendix A. Overriding the VMSYS File Pool Name

This section provides information to help you change the name of the file pool where ICKDSF files will reside when ICKDSF is installed using SFS directories.

During the VMFINS installation process, you're presented with an opportunity to override the default installation parameters defined in the 5684042H $PPF file. If you choose to do this, the 'Make Override Panel' will be displayed, from which you can then change various installation parameters, including the SFS directory names used to organize the ICKDSF files. However, this panel does not support changing the name of the file pool with which these directories are associated—VMSYS.

VMSYS is the IBM default name for a file pool that's intended to be used for system data and programs that are to be shared among users. See the *VM/ESA Planning and Administration* for more information about the VMSYS file pool and its characteristics.

If you intend change *only* the VMSYS file pool name, you'll need to manually create a PPF override for the :DCL. section of the 5684042H $PPF file *before* you install ICKDSF, as described in 6.4, "Install ICKDSF" on page 16.

If you intend to change the VMSYS file pool name in addition to other installation parameters, you should first create a PPF override file during the installation process to change those parameters, then modify the resulting $PPF override file to account for the VMSYS-related changes.

Note: Do **not** modify the product supplied 5684042H $PPF or 5684042H PPF files to change the VMSYS file pool name or any other installation parameters. If the 5684042H $PPF file is serviced, the existing $PPF file will be replaced, and any changes to that file will be lost; by creating your own $PPF override, your updates will be preserved.

The following process describes changing the default file pool name, VMSYS to MYPOOL1:

1 Create a new $PPF override file, or edit the override file created via the 'Make Override Panel' function.

xedit *overname* **$PPF** *fm***2**

overname is the PPF override file name (such as "myickdsf") that you want to use.

fm is an appropriate file mode. If you create this file yourself, specify a file mode of A.

If you modify an existing override file, specify a file mode of A or D, based on where the file currently resides (A being the file mode of a R/W 191 minidisk, or equivalent; D, that of the MAINT 51D minidisk).

2 Create (or modify as required) the Variable Declarations (:DCL.) section for the ickdsfsfs override area, so that it resembles the :DCL. section shown below. This override will be used for the installation of ICKDSF. Modifications needed are denoted in **bold** print.

```
:OVERLST. ickdsfsfs
*
* ==================================================================== *
* Override Section for Initial Installation (Using SFS Directories)   *
* ==================================================================== *
:ICKDSFSFS ICKDSFSFS 5684042H
:DCL. REPLACE
&191     DIR MYPOOL1:P684042H.
&BAS1Z   DIR MYPOOL1:P684042H.ICKDSF.OBJECT
&SAMPZ   DIR MYPOOL1:P684042H.ICKDSF.LOCAL
&DELTZ   DIR MYPOOL1:P684042H.ICKDSF.DELTA
&APPLX   DIR MYPOOL1:P684042H.ICKDSF.ALTAPPLY
&APPLZ   DIR MYPOOL1:P684042H.ICKDSF.PRDAPPLY
&BLD0Z   DIR MYPOOL1:P684042H.ICKDSF.TEST
&DISK9   DIR MYPOOL1:P684042H.ICKDSF.BUILDHLP
&ICKID1  USER  P684042H
:EDCL.
:END.
*
```

(This override will replace the :DCL. section of the ickdsfsfs override area of the 5684042H $PPF file.)

3 If your $PPF override file was created at file mode A, copy it to file mode D—the Software Inventory minidisk (MAINT 51D).

file
copyfile *overname* **$PPF** *fm* **= = d (olddate**

4 Compile your changes to create the usable *overname* PPF file.

vmfppf *overname* **ickdsfsfs**   where *overname* is the file name of your $PPF override file.

Now that the *overname* PPF file has been created, you should specify *overname* instead of 5684042H as the PPF name to be used for those VMSES/E commands that require a PPF name.

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DEVICE SUPPORT FACILITIES Release 16

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very satisfied				very dissatisfied	not applicable
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	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Time required to install the product	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Installation verification procedure	1	2	3	4	5	N
Ease of customizing the product	1	2	3	4	5	N
Ease of migrating the product from a previous release	1	2	3	4	5	N
Ease of putting the system into production after installation	1	2	3	4	5	N
Ease of installing service	1	2	3	4	5	N

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